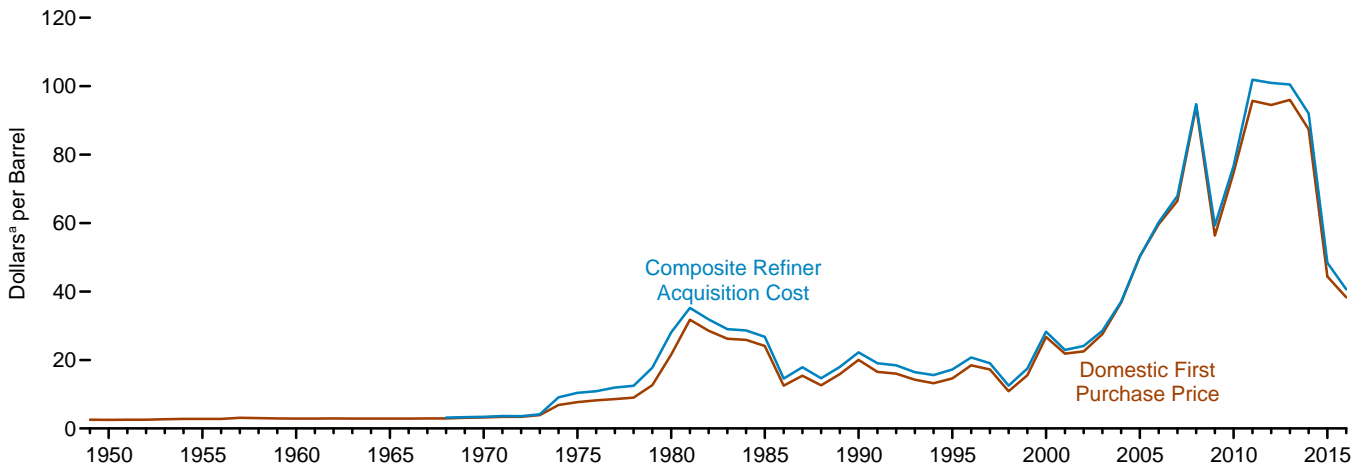


## **9. Energy Prices**

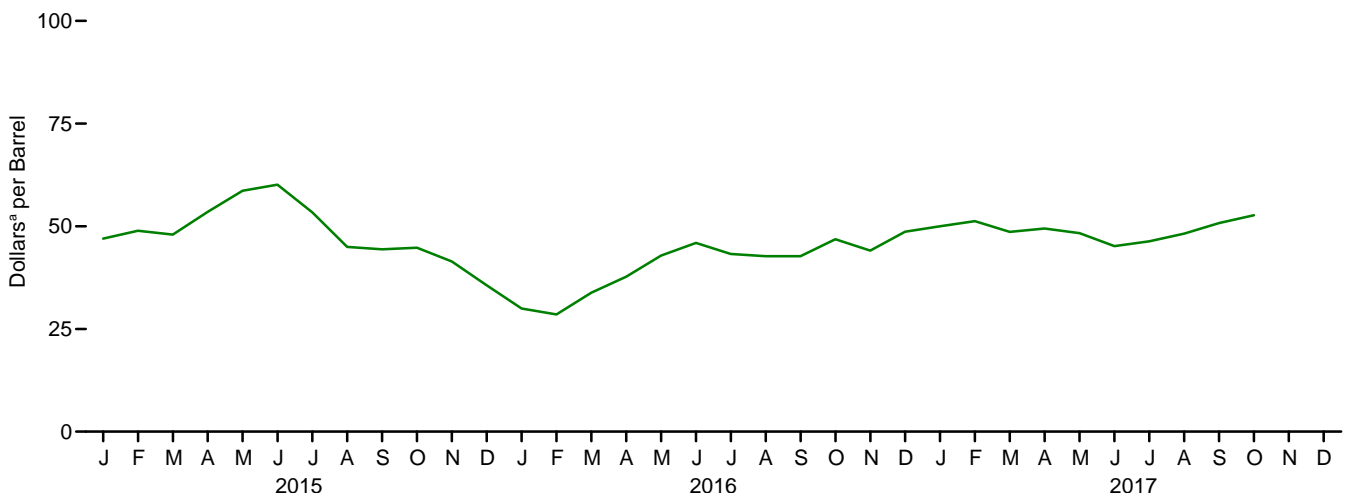
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## Figure 9.1 Petroleum Prices

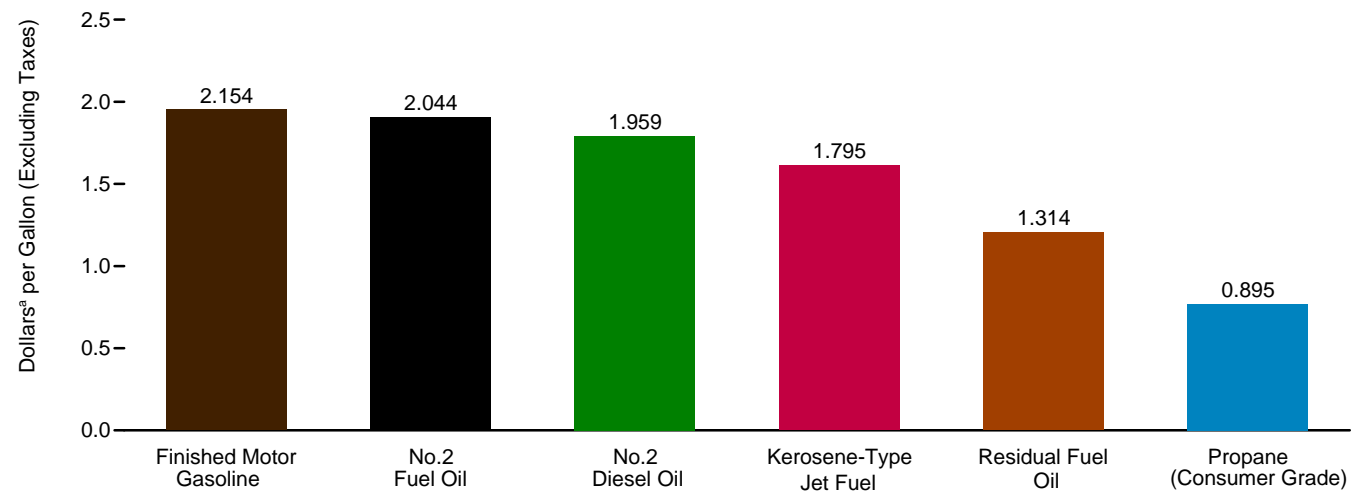
### Crude Oil Prices, 1949–2016



### Composite Refiner Acquisition Cost, Monthly



### Refiner Prices to End Users: Selected Products, September 2017



<sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

Web Page: <http://www.eia.gov/totalenergy/data/monthly/#prices>.  
Sources: Tables 9.1, 9.5, and 9.7.

**Table 9.1 Crude Oil Price Summary**  
(Dollars<sup>a</sup> per Barrel)

	Domestic First Purchase Price <sup>c</sup>	F.O.B. Cost of Imports <sup>d</sup>	Landed Cost of Imports <sup>e</sup>	Refiner Acquisition Cost <sup>b</sup>		
				Domestic	Imported	Composite
1950 Average	2.51	NA	NA	NA	NA	NA
1955 Average	2.77	NA	NA	NA	NA	NA
1960 Average	2.88	NA	NA	NA	NA	NA
1965 Average	2.86	NA	NA	NA	NA	NA
1970 Average	3.18	NA	NA	E 3.46	E 2.96	E 3.40
1975 Average	7.67	11.18	12.70	8.39	13.93	10.38
1980 Average	21.59	32.37	33.67	24.23	33.89	28.07
1985 Average	24.09	25.84	26.67	26.66	26.99	26.75
1990 Average	20.03	20.37	21.13	22.59	21.76	22.22
1995 Average	14.62	15.69	16.78	17.33	17.14	17.23
2000 Average	26.72	26.27	27.53	29.11	27.70	28.26
2001 Average	21.84	20.46	21.82	24.33	22.00	22.95
2002 Average	22.51	22.63	23.91	24.65	23.71	24.10
2003 Average	27.56	25.86	27.69	29.82	27.71	28.53
2004 Average	36.77	33.75	36.07	38.97	35.90	36.98
2005 Average	50.28	47.60	49.29	52.94	48.86	50.24
2006 Average	59.69	57.03	59.11	62.62	59.02	60.24
2007 Average	66.52	66.36	67.97	69.65	67.04	67.94
2008 Average	94.04	90.32	93.33	98.47	92.77	94.74
2009 Average	56.35	57.78	60.23	59.49	59.17	59.29
2010 Average	74.71	74.19	76.50	76.50	75.86	76.69
2011 Average	95.73	101.66	102.92	100.71	102.63	101.87
2012 Average	94.52	99.78	101.00	100.72	101.09	100.93
2013 Average	95.99	96.56	96.99	102.91	98.11	100.49
2014 Average	87.39	85.65	88.16	94.05	89.56	92.02
<b>2015</b> January	43.06	40.16	44.42	48.90	44.74	47.00
February	44.35	43.94	47.32	50.23	47.18	48.92
March	42.66	43.64	47.25	48.60	47.22	47.99
April	49.30	48.42	52.00	54.86	51.62	53.51
May	54.38	54.05	57.17	59.48	57.51	58.65
June	55.88	53.83	56.73	61.06	58.89	60.12
July	47.70	45.88	49.79	54.15	52.42	53.40
August	39.98	37.17	41.39	46.30	43.23	44.97
September	41.60	36.90	40.02	46.68	41.12	44.38
October	42.34	37.21	40.38	47.02	42.03	44.77
November	38.19	33.56	37.13	43.30	39.05	41.43
December	32.26	28.23	31.56	37.76	33.16	35.63
<b>Average</b>	<b>44.39</b>	<b>41.91</b>	<b>45.38</b>	<b>49.94</b>	<b>46.38</b>	<b>48.39</b>
<b>2016</b> January	27.02	23.67	27.36	32.17	27.48	29.99
February	25.52	24.68	27.04	30.28	26.66	28.53
March	31.87	29.74	32.06	35.29	32.24	33.82
April	35.59	32.73	35.43	39.30	35.90	37.71
May	41.02	38.31	40.73	44.77	40.88	42.88
June	43.96	41.92	43.55	47.57	44.13	45.96
July	40.71	38.76	41.05	44.88	41.48	43.26
August	40.46	38.26	40.40	44.18	41.21	42.70
September	40.55	38.28	40.81	44.47	40.86	42.73
October	45.00	42.36	43.97	48.66	44.76	46.85
November	41.65	40.12	42.59	46.10	41.80	44.06
December	47.12	44.52	46.74	50.45	46.72	48.66
<b>Average</b>	<b>38.29</b>	<b>36.37</b>	<b>38.56</b>	<b>42.41</b>	<b>38.75</b>	<b>40.66</b>
<b>2017</b> January	48.19	44.63	47.05	51.81	48.12	49.99
February	49.41	45.88	48.10	53.15	49.38	51.24
March	46.39	44.08	46.22	50.60	46.53	48.65
April	47.23	43.58	46.00	51.34	47.47	49.47
May	45.19	43.74	46.13	49.58	46.94	48.34
June	42.19	41.35	43.82	46.17	43.93	45.17
July	43.42	R 42.09	R 44.70	47.44	45.02	46.32
August	44.96	R 44.05	R 46.60	48.71	47.61	48.19
September	R 47.17	R 46.40	R 48.91	R 51.14	R 50.33	R 50.77
October	NA	NA	NA	E 52.98	E 52.34	E 52.68

<sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

<sup>b</sup> See Note 1, "Crude Oil Refinery Acquisition Costs," at end of section.

<sup>c</sup> See Note 2, "Crude Oil Domestic First Purchase Prices," at end of section.

<sup>d</sup> See Note 3, "Crude Oil F.O.B. Costs," at end of section.

<sup>e</sup> See Note 4, "Crude Oil Landed Costs," at end of section.

R=Revised, NA=Not available, E=Estimate.

Notes: • Domestic first purchase prices and refinery acquisition costs for the current two months are preliminary. F.O.B. and landed costs for the current three months are preliminary. • Through 1980, F.O.B. and landed costs reflect the

period of reporting; beginning in 1981, they reflect the period of loading. • Annual averages are the averages of the monthly prices, weighted by volume. • Geographic coverage is the 50 states, the District of Columbia, Puerto Rico, the Virgin Islands, and all U.S. Territories and Possessions.

Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#prices> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

**Table 9.2 F.O.B. Costs of Crude Oil Imports From Selected Countries**  
(Dollars<sup>a</sup> per Barrel)

	Selected Countries							Persian Gulf Nations <sup>b</sup>	Total OPEC <sup>c</sup>	Total Non-OPEC <sup>c</sup>
	Angola	Colombia	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela			
1973 Average <sup>d</sup> .....	W	W	–	7.81	3.25	–	5.39	3.68	5.43	4.80
1975 Average .....	10.97	–	11.44	11.82	10.87	–	11.04	10.88	11.34	10.62
1980 Average .....	33.45	W	31.06	35.93	28.17	34.36	24.81	28.92	32.21	32.85
1985 Average .....	26.30	–	25.33	28.04	22.04	27.64	23.64	23.31	25.67	25.96
1990 Average .....	20.23	20.75	19.26	22.46	20.36	23.43	19.55	18.54	20.40	20.32
1995 Average .....	16.58	16.73	15.64	17.40	W	16.94	13.86	W	15.36	16.02
2000 Average .....	27.90	29.04	25.39	28.70	24.62	27.21	24.45	24.72	25.56	26.77
2001 Average .....	23.25	24.25	18.89	24.85	18.98	23.30	18.01	18.89	19.73	21.04
2002 Average .....	24.09	24.64	21.60	25.38	23.92	24.50	20.13	23.38	22.18	22.93
2003 Average .....	28.22	28.89	24.83	29.40	25.03	28.76	23.81	25.17	25.36	26.21
2004 Average .....	37.26	37.73	31.55	38.71	34.08	37.30	31.78	33.08	33.95	33.58
2005 Average .....	52.48	51.89	43.00	55.95	47.96	54.48	46.39	47.21	49.60	45.79
2006 Average .....	62.23	59.77	52.91	65.69	56.09	66.03	55.80	56.02	59.18	55.35
2007 Average .....	67.80	67.93	61.35	76.64	W	69.96	64.10	69.93	69.58	62.69
2008 Average .....	95.66	91.17	84.61	102.06	93.03	96.33	88.06	91.44	93.15	87.15
2009 Average .....	57.07	57.90	56.47	64.61	57.87	65.63	55.58	59.53	58.53	57.16
2010 Average .....	78.18	72.56	72.46	80.83	76.44	W	70.30	75.65	75.23	73.24
2011 Average .....	111.82	100.21	100.90	115.35	107.08	–	97.23	106.47	105.34	98.49
2012 Average .....	111.23	106.43	101.84	114.51	106.65	–	100.15	105.45	104.39	95.71
2013 Average .....	107.71	101.24	98.40	110.06	101.16	W	97.52	100.62	100.57	93.67
2014 Average .....	W	80.75	86.55	W	95.60	–	84.51	94.03	89.76	82.95
2015 January .....	–	42.49	41.19	–	48.14	–	37.99	52.21	42.64	38.89
February .....	W	50.79	48.12	W	47.92	–	45.85	47.70	47.31	42.43
March .....	W	47.25	46.89	–	50.64	–	43.51	49.75	45.54	42.63
April .....	W	54.95	50.49	–	58.95	–	49.03	53.33	50.55	47.41
May .....	W	56.30	56.80	–	61.80	–	51.99	59.55	54.95	53.59
June .....	W	56.42	56.78	–	58.31	–	50.34	58.57	54.06	53.70
July .....	W	46.62	50.71	–	W	–	44.44	50.42	46.61	45.55
August .....	W	42.35	40.40	–	43.38	–	35.47	43.01	38.21	36.62
September .....	W	W	40.50	–	44.50	–	36.23	43.87	39.81	35.06
October .....	W	41.56	40.18	–	42.51	–	37.77	40.68	39.33	36.02
November .....	–	W	36.16	–	39.87	–	31.68	38.17	33.98	33.30
December .....	W	28.98	30.12	W	34.75	–	24.91	33.79	29.35	27.57
Average .....	W	47.52	44.90	W	47.53	–	40.73	46.95	43.25	41.19
2016 January .....	W	W	24.12	W	26.24	–	20.73	25.73	25.05	22.66
February .....	W	24.91	24.50	37.83	27.46	–	22.57	26.58	27.01	23.35
March .....	35.33	30.47	29.01	W	34.14	–	27.31	32.32	31.37	28.35
April .....	W	33.57	30.79	W	37.13	–	29.07	35.67	34.08	31.92
May .....	W	39.00	39.04	W	42.44	W	36.65	40.55	40.51	37.04
June .....	49.56	41.64	42.27	48.79	45.16	–	39.33	43.77	43.73	40.22
July .....	45.00	36.91	39.99	W	42.11	–	35.69	40.91	39.61	38.09
August .....	W	36.80	38.73	W	42.48	–	37.56	40.44	40.44	36.78
September .....	W	40.36	38.44	W	42.31	–	36.95	40.37	40.01	37.18
October .....	W	40.59	42.91	W	47.10	–	40.38	45.17	44.66	40.37
November .....	W	39.80	39.55	W	42.50	W	38.39	41.40	42.31	38.33
December .....	W	45.27	45.34	W	48.79	W	44.75	47.95	47.44	42.34
Average .....	42.68	35.28	36.22	46.20	39.30	W	34.71	38.76	38.51	34.81
2017 January .....	–	47.92	45.50	W	W	–	45.94	47.61	47.30	43.27
February .....	W	46.97	45.91	W	51.21	–	45.69	50.06	49.11	43.63
March .....	W	46.05	42.10	W	48.54	–	42.47	47.83	46.85	41.73
April .....	W	46.76	44.32	W	50.00	W	43.59	48.93	47.09	41.47
May .....	W	44.70	44.85	W	47.95	–	41.08	47.14	45.58	42.66
June .....	W	41.30	41.86	48.88	45.41	–	39.16	44.41	43.52	40.28
July .....	W	44.44	44.33	50.26	<sup>R</sup> 46.94	–	41.72	<sup>R</sup> 45.95	<sup>R</sup> 45.40	<sup>R</sup> 40.39
August .....	W	47.16	<sup>R</sup> 46.36	<sup>R</sup> 52.13	<sup>R</sup> 49.00	–	<sup>R</sup> 45.41	<sup>R</sup> 47.56	<sup>R</sup> 48.06	<sup>R</sup> 41.40
September .....	–	W	47.67	W	52.43	–	48.78	50.80	50.77	44.09

<sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

<sup>b</sup> Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, and the Neutral Zone (between Kuwait and Saudi Arabia).

<sup>c</sup> See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary for exact years of each country's membership. On this table, "Total OPEC" for all years includes Algeria, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela; Angola is included in "Total OPEC" 2007 forward; Gabon is included in "Total OPEC" 1974–1992 and July 2016 forward; Ecuador is included in "Total OPEC" 1973–1992 and 2008 forward; Indonesia is included in "Total OPEC" 1973–2008 and 2016.

<sup>d</sup> Based on October, November, and December data only.

<sup>R</sup> = Revised. – = No data reported. W = Value withheld to avoid disclosure of individual company data.

Notes: • The Free on Board (F.O.B.) cost at the country of origin excludes all

costs related to insurance and transportation. See "F.O.B. (Free on Board)" in Glossary, and Note 3, "Crude Oil F.O.B. Costs," at end of section. • Values for the current two months are preliminary. • Through 1980, prices reflect the period of reporting; beginning in 1981, prices reflect the period of loading. • Annual averages are averages of the monthly prices, including prices not published, weighted by volume. • Cargoes that are purchased on a "netback" basis, or under similar contractual arrangements whereby the actual purchase price is not established at the time the crude oil is acquired for importation into the United States, are not included in the published data until the actual prices have been determined and reported. • U.S. geographic coverage is the 50 states and the District of Columbia.

Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#prices> (Excel and CSV files) for all available annual and monthly data beginning in 1973.

Sources: See end of section.

**Table 9.3 Landed Costs of Crude Oil Imports From Selected Countries**  
(Dollars<sup>a</sup> per Barrel)

	Selected Countries								Persian Gulf Nations <sup>b</sup>	Total OPEC <sup>c</sup>	Total Non-OPEC <sup>c</sup>
	Angola	Canada	Colombia	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela			
1973 Average <sup>d</sup> .....	W	5.33	W	–	9.08	5.37	–	5.99	5.91	6.85	5.64
1975 Average .....	11.81	12.84	–	12.61	12.70	12.50	–	12.36	12.64	12.70	12.70
1980 Average .....	34.76	30.11	W	31.77	37.15	29.80	35.68	25.92	30.59	33.56	33.99
1985 Average .....	27.39	25.71	–	25.63	28.96	24.72	28.36	24.43	25.50	26.86	26.53
1990 Average .....	21.51	20.48	22.34	19.64	23.33	21.82	22.65	20.31	20.55	21.23	20.98
1995 Average .....	17.66	16.65	17.45	16.19	18.25	16.84	17.91	14.81	16.78	16.61	16.95
2000 Average .....	29.57	26.69	29.68	26.03	30.04	26.58	29.26	26.05	26.77	27.29	27.80
2001 Average .....	25.13	20.72	25.88	19.37	26.55	20.98	25.32	19.81	20.73	21.52	22.17
2002 Average .....	25.43	22.98	25.28	22.09	26.45	24.77	26.35	21.93	24.13	23.83	23.97
2003 Average .....	30.14	26.76	30.55	25.48	31.07	27.50	30.62	25.70	27.54	27.70	27.68
2004 Average .....	39.62	34.51	39.03	32.25	40.95	37.11	39.28	33.79	36.53	36.84	35.29
2005 Average .....	54.31	44.73	53.42	43.47	57.55	50.31	55.28	47.87	49.68	51.36	47.31
2006 Average .....	64.85	53.90	62.13	53.76	68.26	59.19	67.44	57.37	58.92	61.21	57.14
2007 Average .....	71.27	60.38	70.91	62.31	78.01	70.78	72.47	66.13	69.83	71.14	63.96
2008 Average .....	98.18	90.00	93.43	85.97	104.83	94.75	96.95	90.76	93.59	95.49	90.59
2009 Average .....	61.32	57.60	58.50	57.35	68.01	62.14	63.87	57.78	62.15	61.90	58.58
2010 Average .....	80.61	72.80	74.25	72.86	83.14	79.29	80.29	72.43	78.60	78.28	74.68
2011 Average .....	114.05	89.92	102.57	101.21	116.43	108.83	118.45	100.14	108.01	107.84	98.64
2012 Average .....	114.95	84.24	107.07	102.45	116.88	108.15	W	101.58	107.74	107.56	95.05
2013 Average .....	110.81	84.41	103.00	99.06	112.87	102.60	111.23	99.34	102.53	102.98	91.99
2014 Average .....	99.25	81.30	88.29	87.48	102.16	94.91	W	86.88	95.30	93.10	84.67
<b>2015</b> January .....	W	40.45	45.47	41.68	W	50.12	–	40.08	53.01	48.17	42.31
February .....	W	42.39	53.40	48.29	W	52.44	–	47.93	52.20	51.44	44.86
March .....	W	41.71	51.25	47.62	W	55.23	W	45.90	54.30	51.13	44.82
April .....	W	46.67	57.48	52.13	–	59.92	W	52.17	56.99	55.39	49.79
May .....	60.84	54.06	59.92	57.32	W	62.06	W	53.78	60.92	59.11	55.97
June .....	61.45	55.42	58.21	57.46	W	58.40	–	52.43	58.17	56.79	56.69
July .....	53.22	47.98	51.58	51.25	W	51.62	–	46.74	51.93	50.45	49.42
August .....	54.02	38.29	43.87	41.94	–	45.24	W	38.75	45.70	43.17	40.41
September .....	53.46	35.29	42.87	40.71	W	44.89	–	37.91	44.94	43.31	37.82
October .....	47.49	37.64	42.37	40.67	W	42.09	W	39.55	41.81	41.57	39.41
November .....	47.56	35.67	39.70	36.73	W	39.62	–	33.79	39.43	37.86	36.68
December .....	38.54	30.25	32.50	30.54	W	34.13	W	26.73	34.33	32.60	30.91
<b>Average .....</b>	<b>51.73</b>	<b>41.99</b>	<b>49.53</b>	<b>45.51</b>	<b>54.70</b>	<b>49.78</b>	<b>W</b>	<b>42.87</b>	<b>49.43</b>	<b>47.44</b>	<b>44.09</b>
<b>2016</b> January .....	34.83	26.32	26.23	24.82	W	30.96	–	21.64	30.85	28.94	26.33
February .....	33.04	24.62	26.32	25.19	39.44	31.86	W	23.49	30.91	29.63	25.43
March .....	36.68	29.31	33.38	29.65	42.86	36.19	W	28.83	34.84	34.02	30.35
April .....	40.91	34.19	36.71	31.91	W	39.75	–	31.20	38.00	36.80	34.42
May .....	49.14	38.43	42.28	39.67	W	43.46	W	38.14	42.56	42.48	39.55
June .....	49.06	41.97	43.88	42.50	51.05	45.90	–	40.04	44.70	44.70	42.65
July .....	47.04	39.41	40.90	40.30	48.46	43.80	W	37.00	42.77	41.78	40.48
August .....	49.43	37.84	40.78	39.34	50.20	43.67	W	38.66	42.74	42.46	39.01
September .....	46.15	38.62	43.43	38.86	49.91	44.22	–	38.11	43.31	42.62	39.60
October .....	48.88	41.79	43.44	43.44	W	46.95	–	41.61	45.50	45.65	42.64
November .....	49.08	39.81	42.97	40.20	52.80	47.04	W	39.53	45.68	44.98	40.52
December .....	53.63	43.34	48.83	45.84	55.62	50.38	W	45.69	49.38	49.07	44.83
<b>Average .....</b>	<b>44.65</b>	<b>36.27</b>	<b>38.86</b>	<b>36.64</b>	<b>48.11</b>	<b>42.14</b>	<b>W</b>	<b>35.50</b>	<b>41.20</b>	<b>40.54</b>	<b>37.09</b>
<b>2017</b> January .....	–	44.70	49.17	46.35	54.74	50.40	W	47.53	49.35	49.22	45.77
February .....	W	44.97	49.66	46.57	54.42	52.34	–	46.28	51.09	50.57	46.26
March .....	W	43.00	48.29	42.97	W	50.36	W	43.91	49.61	48.93	43.96
April .....	W	43.05	48.38	44.65	W	50.18	W	44.55	49.04	48.47	44.31
May .....	W	44.26	45.86	45.51	51.83	49.06	W	43.50	47.26	47.30	45.25
June .....	50.74	41.75	44.89	42.36	50.36	47.88	W	40.88	46.76	45.71	42.67
July .....	50.20	R 41.59	46.72	R 45.17	R 50.89	R 47.79	–	R 42.25	R 46.99	R 46.65	R 43.38
August .....	R 52.23	R 43.20	R 48.51	R 46.93	R 52.93	R 49.86	R W	R 46.16	R 48.20	R 48.87	R 45.41
September .....	W	45.63	52.26	49.05	56.95	53.16	W	50.56	50.94	51.77	47.34

<sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

<sup>b</sup> Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, United Arab Emirates, and the Neutral Zone (between Kuwait and Saudi Arabia).

<sup>c</sup> See "Organization of the Petroleum Exporting Countries (OPEC)" in Glossary for exact years of each country's membership. On this table, "Total OPEC" for all years includes Algeria, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela; Angola is included in "Total OPEC" 2007 forward; Gabon is included in "Total OPEC" 1974–1995 and July 2016 forward; Ecuador is included in "Total OPEC" 1973–1992 and 2008 forward; Indonesia is included in "Total OPEC" 1973–2008 and 2016.

<sup>d</sup> Based on October, November, and December data only.

R=Revised. –=No data reported. W=Value withheld to avoid disclosure of individual company data.

Notes: • See "Landed Costs" in Glossary, and Note 4, "Crude Oil Landed Costs," at end of section. • Values for the current two months are preliminary. • Through 1980, prices reflect the period of reporting; beginning in 1981, prices

reflect the period of loading. • Annual averages are averages of the monthly prices, including prices not published, weighted by volume. • Cargoes that are purchased on a "netback" basis, or under similar contractual arrangements whereby the actual purchase price is not established at the time the crude oil is acquired for importation into the United States, are not included in the published data until the actual prices have been determined and reported. • U.S. geographic coverage is the 50 states and the District of Columbia.

Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#prices> (Excel and CSV files) for all available annual and monthly data beginning in 1973.

Sources: • **October 1973–September 1977:** Federal Energy Administration, Form FEA-F701-M-0, "Transfer Pricing Report." • **October 1977–December 1977:** U.S. Energy Information Administration (EIA), Form FEA-F701-M-0, "Transfer Pricing Report." • **1978–2007:** EIA, *Petroleum Marketing Annual 2008*, Table 22. • **2008 forward:** EIA, *Petroleum Marketing Monthly*, December 2017, Table 22.

**Table 9.4 Retail Motor Gasoline and On-Highway Diesel Fuel Prices**  
(Dollars<sup>a</sup> per Gallon, Including Taxes)

	Platt's / Bureau of Labor Statistics Data				U.S. Energy Information Administration Data			
	Motor Gasoline by Grade				Regular Motor Gasoline by Area Type			On-Highway Diesel Fuel
	Leaded Regular	Unleaded Regular	Unleaded Premium <sup>b</sup>	All Grades <sup>c</sup>	Conventional Gasoline Areas <sup>d</sup>	Reformulated Gasoline Areas <sup>e</sup>	All Areas	
1950 Average	0.268	NA	NA	NA	--	--	--	--
1955 Average	.291	NA	NA	NA	--	--	--	--
1960 Average	.311	NA	NA	NA	--	--	--	--
1965 Average	.312	NA	NA	NA	--	--	--	--
1970 Average	.357	NA	NA	NA	--	--	--	--
1975 Average	.567	NA	NA	NA	--	--	--	--
1980 Average	1.191	1.245	NA	1.221	--	--	--	--
1985 Average	1.115	1.202	1.340	1.196	--	--	--	--
1990 Average	1.149	1.164	1.349	1.217	NA	NA	NA	NA
1995 Average	--	1.147	1.336	1.205	1.103	1.163	1.111	1.109
2000 Average	--	1.510	1.693	1.563	1.462	1.543	1.484	1.491
2001 Average	--	1.461	1.657	1.531	1.384	1.498	1.420	1.401
2002 Average	--	1.358	1.556	1.441	1.313	1.408	1.345	1.319
2003 Average	--	1.591	1.777	1.638	1.516	1.655	1.561	1.509
2004 Average	--	1.880	2.068	1.923	1.812	1.937	1.852	1.810
2005 Average	--	2.295	2.491	2.338	2.240	2.335	2.270	2.402
2006 Average	--	2.589	2.805	2.635	2.533	2.654	2.572	2.705
2007 Average	--	2.801	3.033	2.849	2.767	2.857	2.796	2.885
2008 Average	--	3.266	3.519	3.317	3.213	3.314	3.246	3.803
2009 Average	--	2.350	2.607	2.401	2.315	2.433	2.353	2.467
2010 Average	--	2.788	3.047	2.836	2.742	2.864	2.782	2.992
2011 Average	--	3.527	3.792	3.577	3.476	3.616	3.521	3.840
2012 Average	--	3.644	3.922	3.695	3.552	3.757	3.618	3.968
2013 Average	--	3.526	3.843	3.584	3.443	3.635	3.505	3.922
2014 Average	--	3.367	3.713	3.425	3.299	3.481	3.358	3.825
<b>2015</b> January	--	2.110	2.497	2.170	2.046	2.262	2.116	2.997
February	--	2.249	2.621	2.308	2.152	2.351	2.216	2.858
March	--	2.483	2.867	2.544	2.352	2.697	2.464	2.897
April	--	2.485	2.868	2.545	2.369	2.679	2.469	2.782
May	--	2.775	3.166	2.832	2.578	3.014	2.718	2.888
June	--	2.832	3.218	2.889	2.700	3.014	2.802	2.873
July	--	2.832	3.252	2.893	2.666	3.061	2.794	2.788
August	--	2.679	3.120	2.745	2.522	2.876	2.636	2.595
September	--	2.394	2.860	2.463	2.275	2.555	2.365	2.505
October	--	2.289	2.749	2.357	2.230	2.414	2.290	2.519
November	--	2.185	2.640	2.249	2.088	2.304	2.158	2.467
December	--	2.060	2.532	2.125	1.946	2.230	2.038	2.310
<b>Average</b>	--	<b>2.448</b>	<b>2.866</b>	<b>2.510</b>	<b>2.334</b>	<b>2.629</b>	<b>2.429</b>	<b>2.707</b>
<b>2016</b> January	--	1.967	2.455	2.034	1.843	2.170	1.949	2.143
February	--	1.767	2.248	1.833	1.681	1.936	1.764	1.998
March	--	1.958	2.411	2.021	1.895	2.124	1.969	2.090
April	--	2.134	2.585	2.196	2.027	2.293	2.113	2.152
May	--	2.264	2.710	2.324	2.199	2.413	2.268	2.315
June	--	2.363	2.807	2.422	2.303	2.497	2.366	2.423
July	--	2.225	2.702	2.287	2.157	2.411	2.239	2.405
August	--	2.155	2.629	2.218	2.119	2.300	2.178	2.351
September	--	2.208	2.682	2.269	2.161	2.339	2.219	2.394
October	--	2.243	2.719	2.304	2.186	2.382	2.249	2.454
November	--	2.187	2.675	2.246	2.105	2.343	2.182	2.439
December	--	2.230	2.698	2.289	2.192	2.385	2.254	2.510
<b>Average</b>	--	<b>2.142</b>	<b>2.610</b>	<b>2.204</b>	<b>2.070</b>	<b>2.296</b>	<b>2.143</b>	<b>2.304</b>
<b>2017</b> January	--	2.351	2.815	2.409	2.285	2.482	2.349	2.580
February	--	2.299	2.793	2.360	2.227	2.467	2.304	2.568
March	--	2.323	2.827	2.386	2.243	2.498	2.325	2.554
April	--	2.418	2.909	2.479	2.340	2.579	2.417	2.583
May	--	2.386	2.894	2.448	2.303	2.577	2.391	2.560
June	--	2.337	2.859	2.400	2.257	2.536	2.347	2.511
July	--	2.281	2.800	2.344	2.211	2.486	2.300	2.496
August	--	2.374	2.883	2.436	2.297	2.557	2.380	2.595
September	--	2.630	3.120	2.688	2.570	2.802	2.645	2.785
October	--	2.484	2.996	2.545	2.430	2.663	2.505	2.794
November	--	2.548	3.056	2.608	2.474	2.751	2.564	2.909

<sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.  
<sup>b</sup> The 1981 average (available in Web file) is based on September through December data only.  
<sup>c</sup> Also includes grades of motor gasoline not shown separately.  
<sup>d</sup> Any area that does not require the sale of reformulated gasoline.  
<sup>e</sup> "Reformulated Gasoline Areas" are ozone nonattainment areas designated by the U.S. Environmental Protection Agency that require the use of reformulated gasoline (RFG). Areas are reclassified each time a shift in or out of an RFG program occurs due to federal or state regulations.  
 NA=Not available. --=Not applicable.  
 Notes: • See Note 5, "Motor Gasoline Prices," at end of section. • See "Motor Gasoline Grades," "Motor Gasoline, Conventional," "Motor Gasoline, Oxygenated," and "Motor Gasoline, Reformulated" in Glossary. • Geographic coverage: for columns 1-4, current coverage is 85 urban areas; for columns 5-7, coverage is the 50 states and the District of Columbia; for column 8, coverage is the 48 contiguous

states and the District of Columbia.  
 Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#prices> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.  
 Sources: • **Motor Gasoline by Grade, Monthly Data: October 1973 forward**—U.S. Department of Labor, Bureau of Labor Statistics (BLS), *U.S. City Average Gasoline Prices*. • **Motor Gasoline by Grade, Annual Data: 1949-1973**—*Platt's Oil Price Handbook and Oilmanac, 1974*, 51st Edition. **1974 forward**—calculated by the U.S. Energy Information Administration (EIA) as simple averages of the BLS monthly data. • **Regular Motor Gasoline by Area Type:** EIA, calculated as simple averages of weighted weekly estimates from "Weekly U.S. Retail Gasoline Prices, Regular Grade." • **On-Highway Diesel Fuel:** EIA, calculated as simple averages of weighted weekly estimates from "Weekly Retail On-Highway Diesel Prices."

**Table 9.5 Refiner Prices of Residual Fuel Oil**  
(Dollars<sup>a</sup> per Gallon, Excluding Taxes)

	Residual Fuel Oil Sulfur Content Less Than or Equal to 1%		Residual Fuel Oil Sulfur Content Greater Than 1%		Average	
	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users
1978 Average .....	0.293	0.314	0.245	0.275	0.263	0.298
1980 Average .....	.608	.675	.479	.523	.528	.607
1985 Average .....	.610	.644	.560	.582	.577	.610
1990 Average .....	.472	.505	.372	.400	.413	.444
1995 Average .....	.383	.436	.338	.377	.363	.392
2000 Average .....	.627	.708	.512	.566	.566	.602
2001 Average .....	.523	.642	.428	.492	.476	.531
2002 Average .....	.546	.640	.508	.544	.530	.569
2003 Average .....	.728	.804	.588	.651	.661	.698
2004 Average .....	.764	.835	.601	.692	.681	.739
2005 Average .....	1.115	1.168	.842	.974	.971	1.048
2006 Average .....	1.202	1.342	1.085	1.173	1.136	1.218
2007 Average .....	1.406	1.436	1.314	1.350	1.350	1.374
2008 Average .....	1.918	2.144	1.843	1.889	1.866	1.964
2009 Average .....	1.337	1.413	1.344	1.306	1.342	1.341
2010 Average .....	1.756	1.920	1.679	1.619	1.697	1.713
2011 Average .....	2.389	2.736	2.316	2.257	2.336	2.401
2012 Average .....	2.548	3.025	2.429	2.433	2.457	2.592
2013 Average .....	2.363	2.883	2.249	2.353	2.278	2.482
2014 Average .....	2.153	2.694	1.996	2.221	2.044	2.325
2015 January .....	.936	NA	1.038	1.192	1.023	1.264
February .....	1.150	NA	1.124	1.342	1.126	1.376
March .....	1.093	NA	1.131	1.436	1.126	1.465
April .....	1.124	1.704	1.114	1.465	1.114	1.516
May .....	1.198	NA	1.242	1.443	1.234	1.543
June .....	1.175	W	1.239	1.474	1.233	1.549
July .....	1.080	W	1.130	1.245	1.122	1.363
August .....	.797	W	.928	1.150	.918	1.207
September .....	.819	W	.856	1.063	.852	1.107
October .....	.812	NA	.840	1.041	.836	1.094
November .....	.766	W	.791	1.001	.787	1.043
December .....	.552	W	.639	.861	.633	.919
Average .....	.971	1.529	.999	1.227	.996	1.285
2016 January .....	.477	W	.502	.641	.499	.710
February .....	.475	NA	.508	.606	.504	.632
March .....	.582	NA	.555	.672	.558	.693
April .....	.633	W	.614	.734	.616	.782
May .....	.729	W	.722	.868	.723	.922
June .....	.850	W	.823	.911	.825	.983
July .....	.876	W	.834	.948	.835	1.030
August .....	.842	W	.811	.924	.815	.990
September .....	.846	W	.855	1.059	.854	1.076
October .....	.961	W	.935	1.091	.938	1.115
November .....	.920	NA	.907	1.040	.908	1.106
December .....	1.024	W	1.031	1.206	1.030	1.230
Average .....	.736	1.138	.746	.897	.745	.945
2017 January .....	1.099	W	1.121	1.249	1.119	1.309
February .....	1.174	W	1.115	1.243	1.121	1.291
March .....	1.103	W	1.075	1.186	1.077	1.239
April .....	1.038	W	1.039	1.147	1.039	1.201
May .....	.986	W	1.047	1.153	1.043	1.213
June .....	.937	W	.995	1.129	.991	1.195
July .....	1.026	W	1.040	1.154	1.039	1.211
August .....	1.042	W	1.081	1.142	1.079	1.204
September .....	1.150	W	1.136	1.295	1.137	1.314

<sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.  
NA=Not available. W=Value withheld to avoid disclosure of individual company data.

Notes: • Sales for resale are those made to purchasers other than ultimate consumers. Sales to end users are those made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and commercial consumers. • Values for the current month are preliminary.  
• Through 1982, prices are U.S. Energy Information Administration (EIA)

estimates. See Note 6, "Historical Petroleum Prices," at end of section.

• Geographic coverage is the 50 states and the District of Columbia.  
Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#prices> (Excel and CSV files) for all available annual data beginning in 1978 and monthly data beginning in 1982.

Sources: • 1978–2007: EIA, *Petroleum Marketing Annual 2007*, Table 17.  
• 2008 forward: EIA, *Petroleum Marketing Monthly*, December 2017, Table 16.

**Table 9.6 Refiner Prices of Petroleum Products for Resale**  
(Dollars<sup>a</sup> per Gallon, Excluding Taxes)

	Finished Motor Gasoline <sup>b</sup>	Finished Aviation Gasoline	Kerosene-Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consumer Grade)
1978 Average .....	0.434	0.537	0.386	0.404	0.369	0.365	0.237
1980 Average .....	.941	1.128	.868	.864	.803	.801	.415
1985 Average .....	.835	1.130	.794	.874	.776	.772	.398
1990 Average .....	.786	1.063	.773	.839	.697	.694	.386
1995 Average .....	.626	.975	.539	.580	.511	.538	.344
2000 Average .....	.963	1.330	.880	.969	.886	.898	.595
2001 Average .....	.886	1.256	.763	.821	.756	.784	.540
2002 Average .....	.828	1.146	.716	.752	.694	.724	.431
2003 Average .....	1.002	1.288	.871	.955	.881	.883	.607
2004 Average .....	1.288	1.627	1.208	1.271	1.125	1.187	.751
2005 Average .....	1.670	2.076	1.723	1.757	1.623	1.737	.933
2006 Average .....	1.969	2.490	1.961	2.007	1.834	2.012	1.031
2007 Average .....	2.182	2.758	2.171	2.249	2.072	2.203	1.194
2008 Average .....	2.586	3.342	3.020	2.851	2.745	2.994	1.437
2009 Average .....	1.767	2.480	1.719	1.844	1.657	1.713	.921
2010 Average .....	2.165	2.874	2.185	2.299	2.147	2.214	1.212
2011 Average .....	2.867	3.739	3.014	3.065	2.907	3.034	1.467
2012 Average .....	2.929	3.919	3.080	3.163	3.031	3.109	1.033
2013 Average .....	2.812	3.869	2.953	3.084	2.966	3.028	1.048
2014 Average .....	2.618	3.687	2.763	2.882	2.741	2.812	1.165
<b>2015</b> January .....	1.366	2.324	1.612	1.900	1.669	1.616	.713
February .....	1.637	2.529	1.722	2.233	1.850	1.861	.748
March .....	1.770	2.801	1.731	2.098	1.847	1.815	.689
April .....	1.835	2.827	1.709	1.800	1.740	1.805	.566
May .....	2.080	3.050	1.933	1.929	1.852	1.973	.475
June .....	2.121	3.259	1.813	1.871	1.813	1.881	.404
July .....	2.072	3.217	1.655	1.701	1.654	1.729	.405
August .....	1.838	2.980	1.479	1.494	1.461	1.562	.402
September .....	1.609	2.586	1.443	1.509	1.438	1.551	.469
October .....	1.558	2.475	1.451	1.555	1.411	1.572	.524
November .....	1.426	2.385	1.400	1.554	1.356	1.456	.505
December .....	1.356	2.252	1.207	1.275	1.126	1.176	.499
<b>Average .....</b>	<b>1.726</b>	<b>2.764</b>	<b>1.592</b>	<b>1.735</b>	<b>1.565</b>	<b>1.667</b>	<b>.555</b>
<b>2016</b> January .....	1.187	2.122	1.022	1.183	.976	1.015	.460
February .....	1.046	1.908	1.017	1.155	.948	1.043	.470
March .....	1.335	2.230	1.100	1.208	1.070	1.189	.497
April .....	1.476	2.457	1.155	1.193	1.113	1.251	.458
May .....	1.613	2.528	1.311	1.327	1.291	1.432	.511
June .....	1.643	2.591	1.428	1.445	1.404	1.531	.497
July .....	1.490	2.505	1.354	1.297	1.305	1.426	.476
August .....	1.508	2.405	1.313	1.408	1.307	1.440	.453
September .....	1.514	2.506	1.366	1.402	1.341	1.471	.494
October .....	1.568	2.551	1.471	1.580	1.443	1.592	.608
November .....	1.427	2.433	1.406	1.485	1.386	1.469	.588
December .....	1.585	2.462	1.511	1.685	1.507	1.606	.703
<b>Average .....</b>	<b>1.454</b>	<b>2.404</b>	<b>1.295</b>	<b>1.383</b>	<b>1.239</b>	<b>1.378</b>	<b>.523</b>
<b>2017</b> January .....	1.627	2.614	1.561	1.761	1.560	1.636	.788
February .....	1.625	2.592	1.592	1.657	1.553	1.641	.792
March .....	1.634	2.618	1.520	1.580	1.495	1.581	.671
April .....	1.723	2.724	1.545	1.572	1.499	1.627	.641
May .....	1.668	2.620	1.459	1.481	1.447	1.552	.631
June .....	1.574	2.552	1.378	1.360	1.375	1.465	.585
July .....	1.621	2.608	1.436	1.468	1.392	1.533	.634
August .....	1.711	2.710	<sup>R</sup> 1.587	1.630	1.522	<sup>R</sup> 1.681	.742
September .....	1.826	2.898	1.771	1.809	1.669	1.847	.864

<sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

<sup>b</sup> See Note 5, "Motor Gasoline Prices," at end of section.

R=Revised.

Notes: • Sales for resale are those made to purchasers other than ultimate consumers. Sales to end users are shown in Table 9.7; they are sales made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and residential and commercial consumers. • Values for the current month are preliminary. • Through 1982, prices are U.S. Energy

Information Administration (EIA) estimates. See Note 6, "Historical Petroleum Prices," at end of section. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#prices> (Excel and CSV files) for all available annual data beginning in 1978 and monthly data beginning in 1982.

Sources: • **1978–2007:** EIA, *Petroleum Marketing Annual 2007*, Table 4. • **2008 forward:** EIA, *Petroleum Marketing Monthly*, December 2017, Table 4.



**Table 9.7 Refiner Prices of Petroleum Products to End Users**  
(Dollars<sup>a</sup> per Gallon, Excluding Taxes)

	Finished Motor Gasoline <sup>b</sup>	Finished Aviation Gasoline	Kerosene-Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consumer Grade)
1978 Average .....	0.484	0.516	0.387	0.421	0.400	0.377	0.335
1980 Average .....	1.035	1.084	.868	.902	.788	.818	.482
1985 Average .....	.912	1.201	.796	1.030	.849	.789	.717
1990 Average .....	.883	1.120	.766	.923	.734	.725	.745
1995 Average .....	.765	1.005	.540	.589	.562	.560	.492
2000 Average .....	1.106	1.306	.899	1.123	.927	.935	.603
2001 Average .....	1.032	1.323	.775	1.045	.829	.842	.506
2002 Average .....	.947	1.288	.721	.990	.737	.762	.419
2003 Average .....	1.156	1.493	.872	1.224	.933	.944	.577
2004 Average .....	1.435	1.819	1.207	1.160	1.173	1.243	.839
2005 Average .....	1.829	2.231	1.735	1.957	1.705	1.786	1.089
2006 Average .....	2.128	2.682	1.998	2.244	1.982	2.096	1.358
2007 Average .....	2.345	2.849	2.165	2.263	2.241	2.267	1.489
2008 Average .....	2.775	3.273	3.052	3.283	2.986	3.150	1.892
2009 Average .....	1.888	2.442	1.704	2.675	1.962	1.834	1.220
2010 Average .....	2.301	3.028	2.201	3.063	2.462	2.314	1.481
2011 Average .....	3.050	3.803	3.054	3.616	3.193	3.117	1.709
2012 Average .....	3.154	3.971	3.104	3.843	3.358	3.202	1.139
2013 Average .....	3.049	3.932	2.979	3.842	3.335	3.122	1.028
2014 Average .....	2.855	3.986	2.772	W	3.329	2.923	1.097
<b>2015</b> January .....	1.673	W	1.633	W	NA	1.819	.566
February .....	1.858	W	1.747	W	2.204	1.979	.671
March .....	2.054	W	1.766	W	2.141	1.962	.619
April .....	2.058	W	1.739	W	NA	1.939	.575
May .....	2.322	W	1.979	W	2.308	2.090	.465
June .....	2.374	W	1.855	W	2.321	2.021	.393
July .....	2.338	W	1.694	W	2.207	1.913	.405
August .....	2.218	W	1.516	W	2.046	1.737	.387
September .....	1.920	W	1.465	2.996	1.949	1.693	.468
October .....	1.849	W	1.473	W	NA	1.702	.479
November .....	1.711	W	1.424	W	1.814	1.603	.447
December .....	1.604	W	1.232	W	1.695	1.365	.422
<b>Average .....</b>	<b>2.003</b>	<b>W</b>	<b>1.629</b>	<b>W</b>	<b>2.016</b>	<b>1.819</b>	<b>.481</b>
<b>2016</b> January .....	1.505	W	1.038	W	1.450	1.198	.377
February .....	1.332	W	1.032	W	1.407	1.185	.409
March .....	1.552	W	1.133	W	1.555	1.317	.481
April .....	1.725	W	1.187	W	1.631	1.386	.472
May .....	1.869	W	1.342	W	1.733	1.555	.533
June .....	1.961	W	1.464	W	1.861	1.661	.514
July .....	1.804	W	1.393	W	1.814	1.577	.491
August .....	1.754	W	1.330	W	NA	1.577	.460
September .....	1.788	W	1.394	W	1.805	1.601	.507
October .....	1.819	W	1.506	W	1.941	1.706	.599
November .....	1.759	W	1.426	W	1.787	1.599	.557
December .....	1.849	W	1.539	W	1.997	1.718	.666
<b>Average .....</b>	<b>1.730</b>	<b>W</b>	<b>1.319</b>	<b>W</b>	<b>1.716</b>	<b>1.511</b>	<b>.498</b>
<b>2017</b> January .....	1.900	W	1.584	W	NA	1.747	.774
February .....	1.862	W	1.615	W	2.033	1.755	.814
March .....	1.904	W	1.554	W	1.909	1.699	.657
April .....	1.997	W	1.595	W	2.081	1.747	.652
May .....	1.963	W	1.492	2.637	NA	1.693	.650
June .....	1.906	W	1.434	2.600	1.739	1.618	.611
July .....	1.871	W	1.478	2.621	1.728	1.665	.667
August .....	<sup>R</sup> 1.952	W	1.613	2.579	<sup>R</sup> 1.904	1.792	.768
September .....	2.154	W	1.795	2.703	2.044	1.959	.895

<sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

<sup>b</sup> See Note 5, "Motor Gasoline Prices," at end of section.

R=Revised. NA=Not available. W=Value withheld to avoid disclosure of individual company data.

Notes: • Sales to end users are those made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and residential and commercial consumers. Sales for resale are shown in Table 9.6; they are sales made to purchasers other than ultimate consumers. • Values for the current month are preliminary. • Through 1982, prices are U.S. Energy

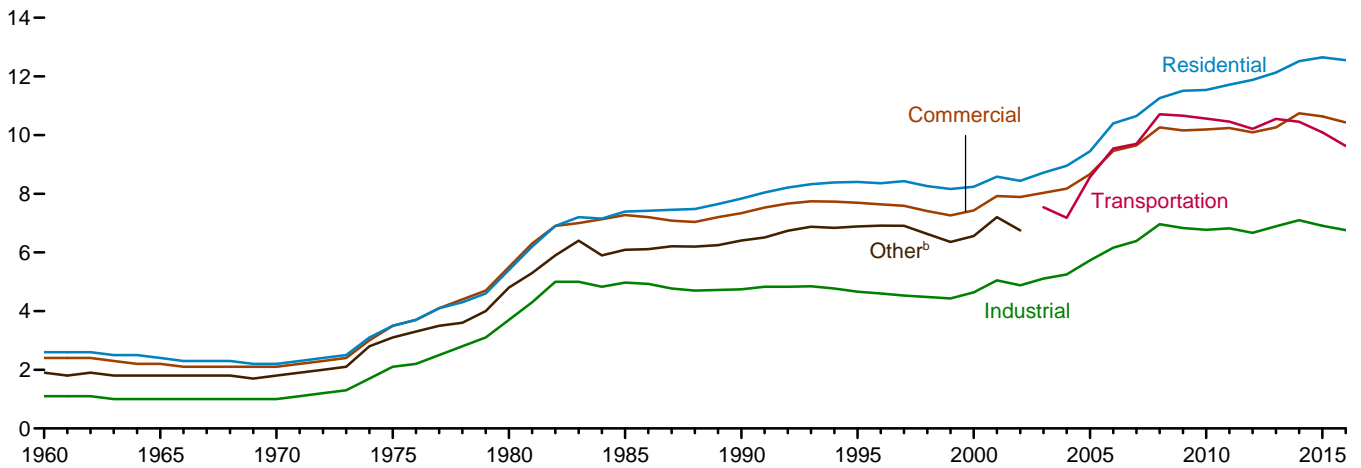
Information Administration (EIA) estimates. See Note 6, "Historical Petroleum Prices," at end of section. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#prices> (Excel and CSV files) for all available annual data beginning in 1978 and monthly data beginning in 1982.

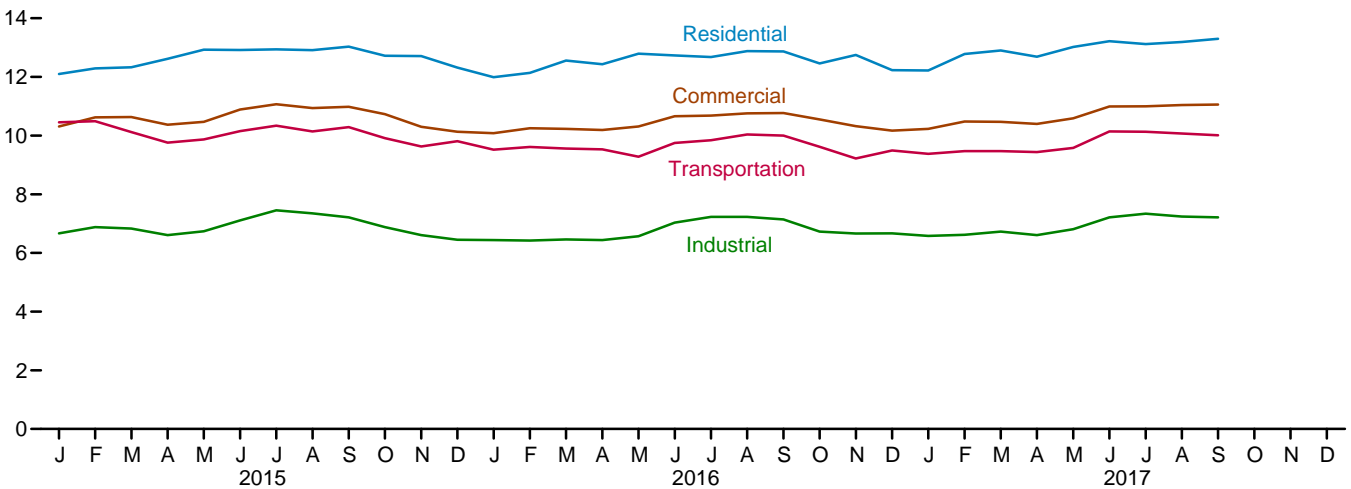
Sources: • **1978–2007:** EIA, *Petroleum Marketing Annual 2007*, Table 2. • **2008 forward:** EIA, *Petroleum Marketing Monthly*, December 2017, Table 2.

**Figure 9.2 Average Retail Prices of Electricity**  
(Cents<sup>a</sup> per Kilowatthour)

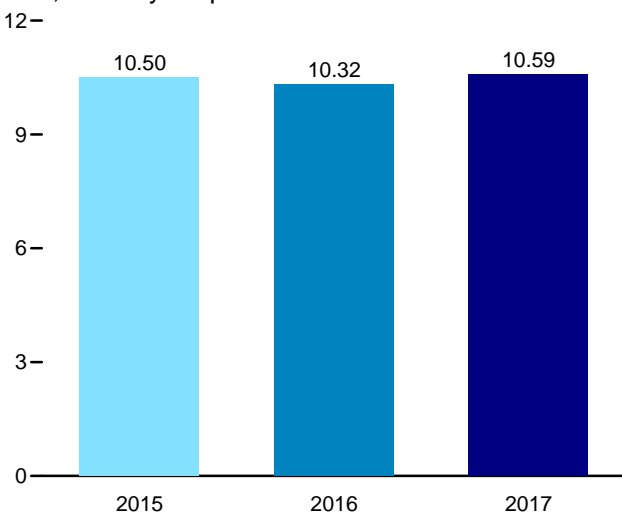
By Sector, 1960–2016



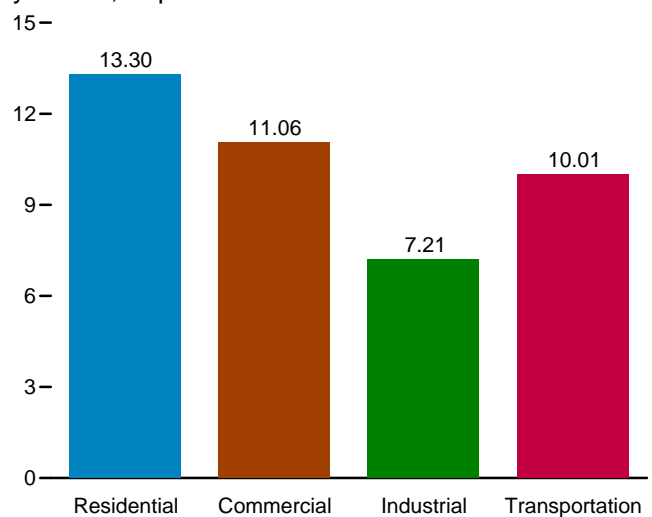
By Sector, Monthly



Total, January–September



By Sector, September 2017



<sup>a</sup> Prices are not adjusted for inflation. See “Nominal Price” in Glossary.

<sup>b</sup> Public street and highway lighting, interdepartmental sales, other sales to public authorities, agricultural and irrigation, and transportation including railroads and railways.

Note: Includes taxes.

Web Page: <http://www.eia.gov/totalenergy/data/monthly/#prices>.

Source: Table 9.8.

**Table 9.8 Average Retail Prices of Electricity**  
(Cents<sup>a</sup> per Kilowatthour, Including Taxes)

	Residential	Commercial <sup>b</sup>	Industrial <sup>c</sup>	Transportation <sup>d</sup>	Other <sup>e</sup>	Total
1960 Average	2.60	2.40	1.10	NA	1.90	1.80
1965 Average	2.40	2.20	1.00	NA	1.80	1.70
1970 Average	2.20	2.10	1.00	NA	1.80	1.70
1975 Average	3.50	3.50	2.10	NA	3.10	2.90
1980 Average	5.40	5.50	3.70	NA	4.80	4.70
1985 Average	7.39	7.27	4.97	NA	6.09	6.44
1990 Average	7.83	7.34	4.74	NA	6.40	6.57
1995 Average	8.40	7.69	4.66	NA	6.88	6.89
2000 Average	8.24	7.43	4.64	NA	6.56	6.81
2001 Average	8.58	7.92	5.05	NA	7.20	7.29
2002 Average	8.44	7.89	4.88	NA	6.75	7.20
2003 Average	8.72	8.03	5.11	7.54	---	7.44
2004 Average	8.95	8.17	5.25	7.18	---	7.61
2005 Average	9.45	8.67	5.73	8.57	---	8.14
2006 Average	10.40	9.46	6.16	9.54	---	8.90
2007 Average	10.65	9.65	6.39	9.70	---	9.13
2008 Average	11.26	10.26	6.96	10.71	---	9.74
2009 Average	11.51	10.16	6.83	10.66	---	9.82
2010 Average	11.54	10.19	6.77	10.56	---	9.83
2011 Average	11.72	10.24	6.82	10.46	---	9.90
2012 Average	11.88	10.09	6.67	10.21	---	9.84
2013 Average	12.13	10.26	6.89	10.55	---	10.07
2014 Average	12.52	10.74	7.10	10.45	---	10.44
<b>2015</b> January	12.10	10.31	6.67	10.45	---	10.18
February	12.29	10.62	6.88	10.49	---	10.36
March	12.33	10.63	6.83	10.12	---	10.29
April	12.62	10.37	6.61	9.76	---	10.01
May	12.93	10.47	6.74	9.87	---	10.21
June	12.92	10.89	7.11	10.15	---	10.64
July	12.94	11.07	7.45	10.34	---	10.95
August	12.91	10.94	7.35	10.14	---	10.85
September	13.03	10.98	7.21	10.29	---	10.79
October	12.72	10.73	6.88	9.91	---	10.31
November	12.71	10.30	6.61	9.63	---	10.05
December	12.32	10.13	6.45	9.81	---	9.98
<b>Average</b>	<b>12.65</b>	<b>10.64</b>	<b>6.91</b>	<b>10.09</b>	---	<b>10.41</b>
<b>2016</b> January	R 11.99	R 10.08	R 6.44	R 9.52	---	R 9.97
February	12.14	R 10.25	R 6.42	R 9.61	---	10.00
March	R 12.56	R 10.23	R 6.46	R 9.56	---	R 10.00
April	12.43	R 10.19	R 6.44	R 9.53	---	9.83
May	12.79	R 10.31	R 6.57	R 9.28	---	R 10.06
June	R 12.73	R 10.66	7.03	R 9.75	---	R 10.52
July	12.68	R 10.68	7.23	R 9.84	---	R 10.70
August	R 12.88	R 10.76	7.23	R 10.04	---	R 10.81
September	12.87	R 10.77	R 7.14	R 10.00	---	R 10.68
October	12.46	R 10.55	R 6.73	R 9.62	---	10.15
November	12.75	R 10.32	6.66	R 9.22	---	R 10.10
December	R 12.23	R 10.17	R 6.67	R 9.49	---	R 10.09
<b>Average</b>	<b>12.55</b>	<b>R 10.43</b>	<b>R 6.76</b>	<b>R 9.63</b>	---	<b>R 10.27</b>
<b>2017</b> January	12.22	R 10.23	R 6.58	R 9.38	---	R 10.16
February	R 12.78	10.48	R 6.62	9.47	---	R 10.31
March	12.90	R 10.47	R 6.73	R 9.47	---	R 10.33
April	R 12.69	10.40	R 6.61	9.44	---	10.10
May	13.02	R 10.59	6.81	9.58	---	10.37
June	13.22	10.99	R 7.21	R 10.14	---	10.87
July	13.12	11.00	R 7.34	R 10.13	---	11.02
August	13.19	11.04	R 7.24	10.07	---	10.98
September	13.30	11.06	7.21	10.01	---	10.93
<b>9-Month Average</b>	<b>12.95</b>	<b>10.72</b>	<b>6.94</b>	<b>9.74</b>	---	<b>10.59</b>
<b>2016 9-Month Average</b>	<b>12.58</b>	<b>10.46</b>	<b>6.79</b>	<b>9.69</b>	---	<b>10.32</b>
<b>2015 9-Month Average</b>	<b>12.67</b>	<b>10.72</b>	<b>6.99</b>	<b>10.19</b>	---	<b>10.50</b>

<sup>a</sup> Prices are not adjusted for inflation. See "Nominal Price" in Glossary.

<sup>b</sup> Commercial sector. For 1960–2002, prices exclude public street and highway lighting, interdepartmental sales, and other sales to public authorities.

<sup>c</sup> Industrial sector. For 1960–2002, prices exclude agriculture and irrigation.

<sup>d</sup> Transportation sector, including railroads and railways.

<sup>e</sup> Public street and highway lighting, interdepartmental sales, other sales to public authorities, agriculture and irrigation, and transportation including railroads and railways.

R=Revised. NA=Not available. --=Not applicable.

Notes: • Beginning in 2003, the category "Other" has been replaced by "Transportation," and the categories "Commercial" and "Industrial" have been redefined. • Prices are calculated by dividing revenue by sales. Revenue may not correspond to sales for a particular month because of energy service provider billing and accounting procedures. That lack of correspondence could result in uncharacteristic increases or decreases in the monthly prices. • Prices include state and local taxes, energy or demand charges, customer service charges, environmental surcharges, franchise fees, fuel adjustments, and other miscellaneous charges applied to end-use customers during normal billing operations. Prices do not include deferred charges, credits, or other adjustments, such as fuel or revenue from purchased power, from previous reporting periods. • Through 1979, data are for Classes A and B privately owned electric utilities only.

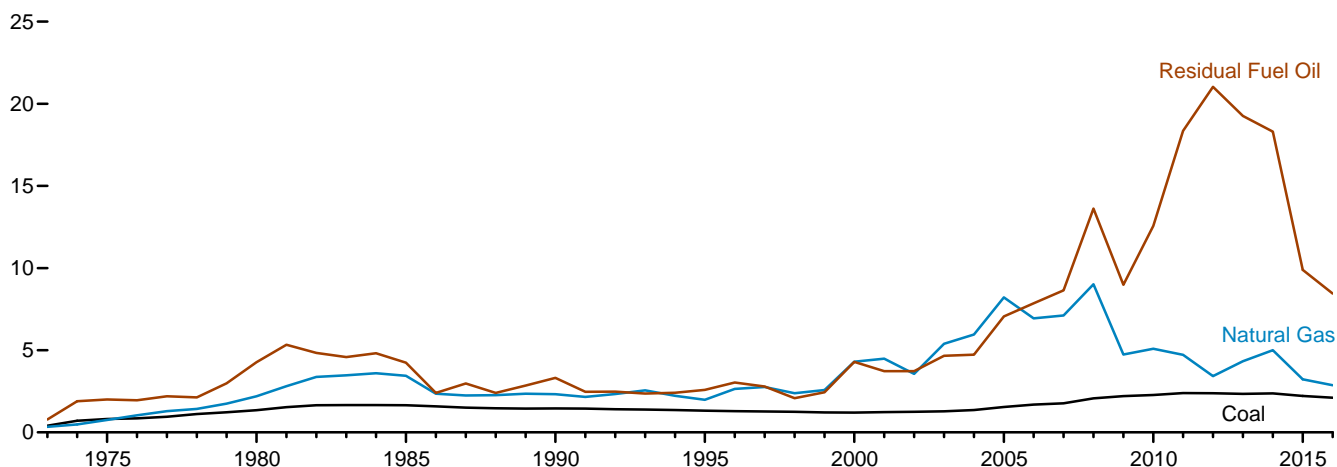
(Class A utilities are those with operating revenues of \$2.5 million or more; Class B utilities are those with operating revenues between \$1 million and \$2.5 million.) For 1980–1982, data are for selected Class A utilities whose electric operating revenues were \$100 million or more during the previous year. For 1983, data are for a selected sample of electric utilities. Beginning in 1984, data are for a census of electric utilities. Beginning in 1996, data also include energy service providers selling to retail customers. • See Note 7, "Electricity Retail Prices," at end of section for plant coverage, and for information on preliminary and final values. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#prices> (Excel and CSV files) for all available annual data beginning in 1960 and monthly data beginning in 1976.

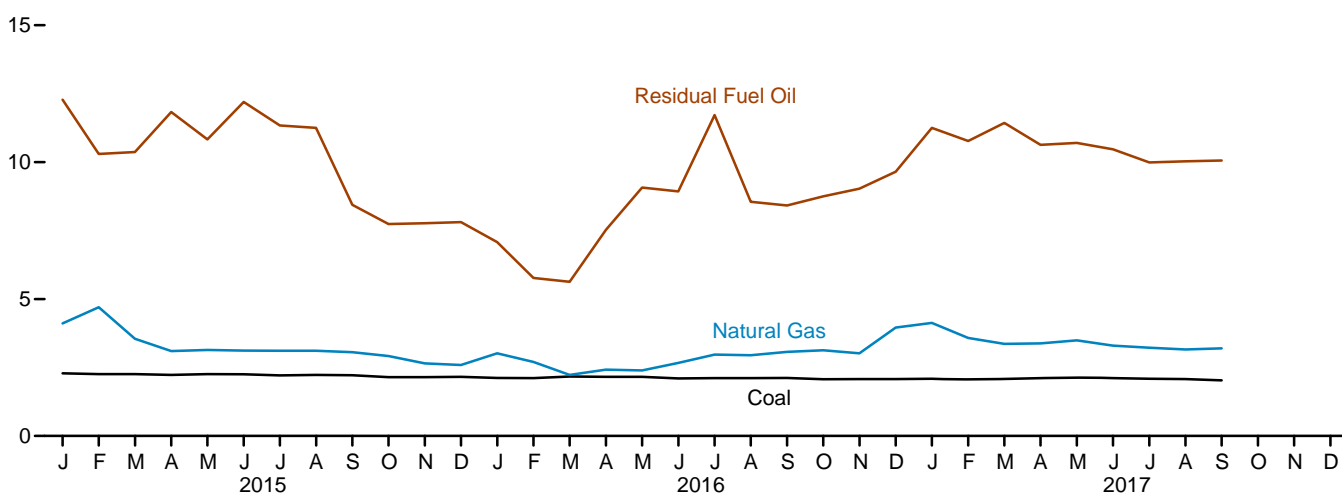
Sources: • **1960–September 1977:** Federal Power Commission, Form FPC-5, "Monthly Statement of Electric Operating Revenues and Income." • **October 1977–February 1980:** Federal Energy Regulatory Commission (FERC), Form FPC-5, "Monthly Statement of Electric Operating Revenues and Income." • **March 1980–1982:** FERC, Form FERC-5, "Electric Utility Company Monthly Statement." • **1983:** U.S. Energy Information Administration (EIA), Form EIA-826, "Electric Utility Company Monthly Statement." • **1984–2010:** EIA, Form EIA-861, "Annual Electric Power Industry Report." • **2011 forward:** EIA, *Electric Power Monthly*, November 2017, Table 5.3.

**Figure 9.3 Cost of Fossil-Fuel Receipts at Electric Generating Plants**  
(Dollars<sup>a</sup> per Million Btu, Including Taxes)

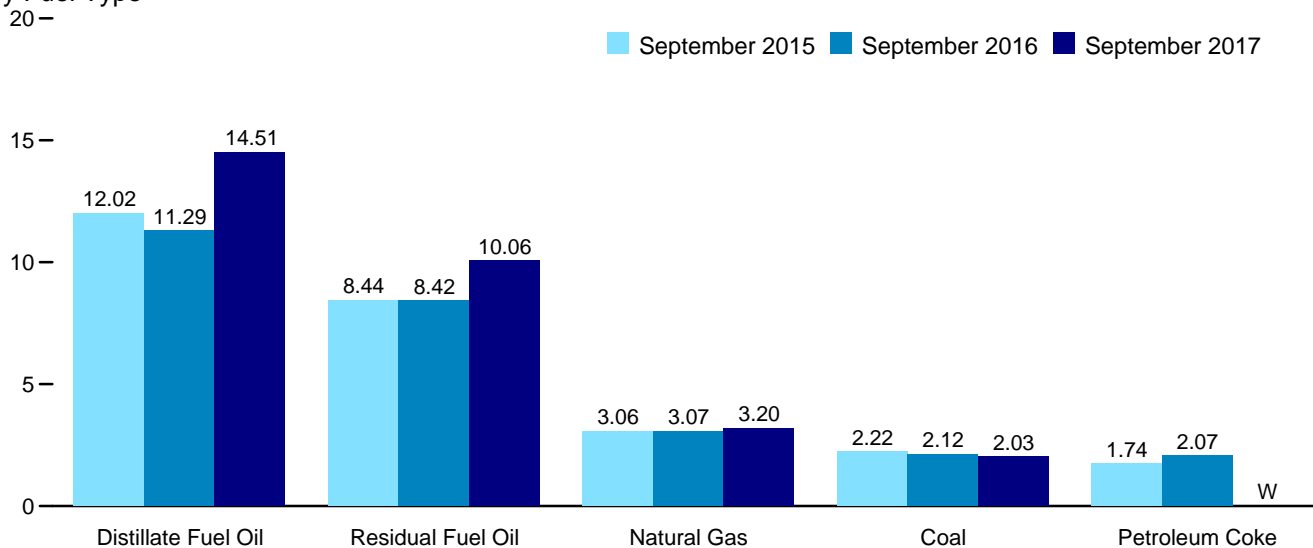
Costs, 1973–2016



Costs, Monthly



By Fuel Type



<sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.  
W=Value withheld to avoid disclosure of individual company data.

Web Page: <http://www.eia.gov/totalenergy/data/monthly/#prices>.  
Source: Table 9.9.

**Table 9.9 Cost of Fossil-Fuel Receipts at Electric Generating Plants**  
(Dollars<sup>a</sup> per Million Btu, Including Taxes)

	Coal	Petroleum				Natural Gas <sup>e</sup>	All Fossil Fuels <sup>f</sup>
		Residual Fuel Oil <sup>b</sup>	Distillate Fuel Oil <sup>c</sup>	Petroleum Coke	Total <sup>d</sup>		
1973 Average	0.41	0.79	NA	NA	0.80	0.34	0.48
1975 Average	.81	2.01	NA	NA	2.02	.75	1.04
1980 Average	1.35	4.27	NA	NA	4.35	2.20	1.93
1985 Average	1.65	4.24	NA	NA	4.32	3.44	2.09
1990 Average	1.45	3.32	5.38	.80	3.35	2.32	1.69
1995 Average	1.32	2.59	3.99	.65	2.57	1.98	1.45
2000 Average	1.20	4.29	6.65	.58	4.18	4.30	1.74
2001 Average	1.23	3.73	6.30	.78	3.69	4.49	1.73
2002 Average <sup>g</sup>	1.25	3.73	5.34	.78	3.34	3.56	1.86
2003 Average	1.28	4.66	6.82	.72	4.33	5.39	2.28
2004 Average	1.36	4.73	8.02	.83	4.29	5.96	2.48
2005 Average	1.54	7.06	11.72	1.11	6.44	8.21	3.25
2006 Average	1.69	7.85	13.28	1.33	6.23	6.94	3.02
2007 Average	1.77	8.64	14.85	1.51	7.17	7.11	3.23
2008 Average	2.07	13.62	21.46	2.11	10.87	9.01	4.12
2009 Average	2.21	8.98	13.22	1.61	7.02	4.74	3.04
2010 Average	2.27	12.57	16.61	2.28	9.54	5.09	3.26
2011 Average	2.39	18.35	22.46	3.03	12.48	4.72	3.29
2012 Average	2.38	21.03	23.49	2.24	12.48	3.42	2.83
2013 Average	2.34	19.26	23.03	2.18	11.57	4.33	3.09
2014 Average	2.37	18.30	21.88	1.98	11.60	5.00	3.31
2015 January	2.29	12.28	13.37	2.00	7.07	4.11	2.92
February	2.26	10.30	16.46	1.76	8.97	4.70	3.19
March	2.26	10.37	15.60	2.00	8.20	3.55	2.78
April	2.23	11.83	14.82	1.96	6.85	3.10	2.58
May	2.26	10.83	15.34	2.02	7.17	3.14	2.64
June	2.25	12.20	15.29	1.87	7.78	3.12	2.66
July	2.21	11.34	14.37	1.90	6.03	3.11	2.63
August	2.23	11.25	13.05	1.82	6.38	3.11	2.62
September	2.22	8.44	12.02	1.74	5.68	3.06	2.57
October	2.15	7.74	12.44	1.83	5.75	2.92	2.47
November	2.15	7.77	12.38	1.59	5.55	2.65	2.38
December	2.16	7.81	10.57	1.57	4.97	2.59	2.36
Average	2.22	9.89	14.06	1.84	6.74	3.23	2.65
2016 January	2.12	R 7.08	8.90	1.38	R 4.56	R 3.02	2.52
February	2.11	R 5.77	8.78	1.30	R 3.66	R 2.70	R 2.36
March	R 2.17	R 5.63	9.46	1.41	R 3.62	2.23	R 2.21
April	2.16	R 7.53	9.97	1.35	R 4.53	2.42	2.31
May	2.16	R 9.07	R 10.76	1.32	R 5.70	R 2.39	2.31
June	2.10	R 8.93	12.22	1.41	R 6.13	2.67	R 2.39
July	2.11	R 11.72	12.08	1.47	R 6.38	2.97	R 2.55
August	2.11	R 8.55	11.41	1.75	R 5.24	R 2.95	R 2.52
September	2.12	R 8.42	R 11.29	R 2.07	R 5.23	R 3.07	R 2.55
October	R 2.07	R 8.75	R 12.04	1.98	R 5.85	3.13	2.51
November	R 2.08	R 9.03	R 12.30	2.26	R 6.30	3.02	2.47
December	2.08	R 9.65	R 12.22	2.07	R 5.93	3.96	R 2.82
Average	R 2.11	R 8.45	R 10.93	1.65	R 5.25	R 2.87	2.47
2017 January	2.09	11.25	12.95	2.14	7.68	R 4.13	R 2.82
February	2.07	10.77	12.92	2.00	6.29	3.58	2.60
March	2.08	11.43	12.34	2.06	7.62	3.36	2.62
April	2.11	10.63	12.99	2.00	6.95	R 3.38	R 2.62
May	2.13	10.70	12.21	2.05	6.63	3.49	W
June	2.11	10.47	11.48	W	6.08	R 3.30	W
July	2.09	9.99	11.79	W	R 5.88	3.22	W
August	2.08	10.03	12.95	W	6.24	3.16	W
September	2.03	10.06	14.51	W	6.36	3.20	W
9-Month Average	2.09	10.72	12.63	W	6.68	3.39	W
2016 9-Month Average	2.13	8.22	10.48	1.50	4.99	2.74	2.43
2015 9-Month Average	2.25	10.77	14.62	1.90	7.17	3.39	2.72

<sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

<sup>b</sup> For 1973–2001, electric utility data are for heavy oil (fuel oil nos. 5 and 6, and small amounts of fuel oil no. 4).

<sup>c</sup> For 1973–2001, electric utility data are for light oil (fuel oil nos. 1 and 2).

<sup>d</sup> For all years, includes residual fuel oil and distillate fuel oil. For 1990 forward, also includes petroleum coke. For 1973–2012, also includes jet fuel, kerosene, and waste oil. For 1983–2012, also includes other petroleum, such as propane and refined motor oil.

<sup>e</sup> Natural gas, plus a small amount of supplemental gaseous fuels. For 1973–2000, data also include a small amount of blast furnace gas and other gases derived from fossil fuels.

<sup>f</sup> Weighted average of costs shown under "Coal," "Petroleum," and "Natural Gas."

<sup>g</sup> Through 2001, data are for electric utilities only. Beginning in 2002, data also include independent power producers, and electric generating plants in the

commercial and industrial sectors.

R=Revised. NA=Not available. W=Value withheld to avoid disclosure of individual company data.

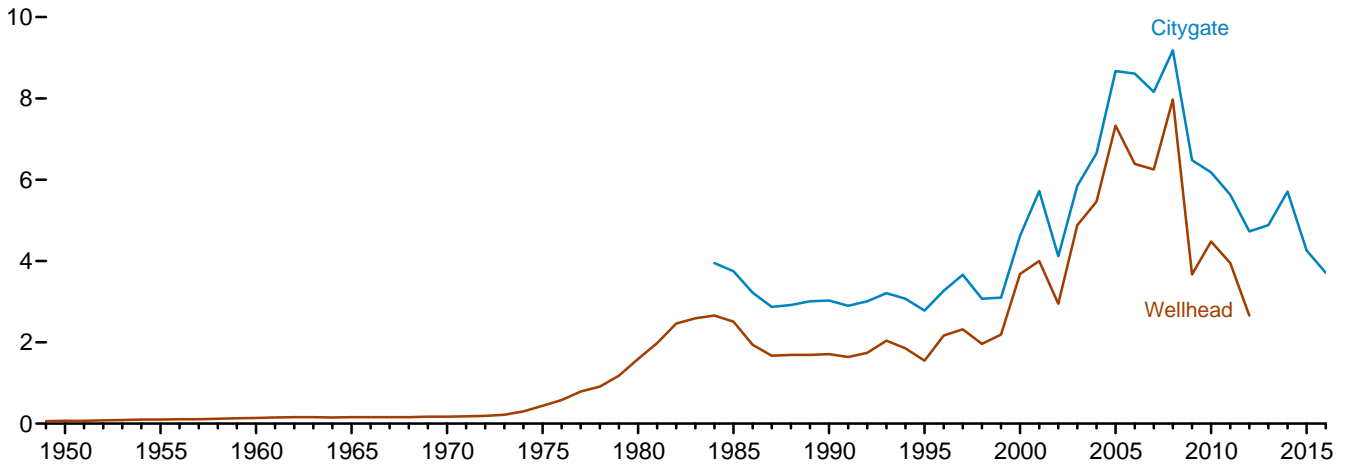
Notes: • Receipts are purchases of fuel. • Yearly costs are averages of monthly values, weighted by quantities in Btu. • For this table, there are several breaks in the data series related to what plants and fuels are covered. Beginning in 2013, data cover all regulated generating plants; plus unregulated plants whose total fossil-fueled nameplate generating capacity is 50 megawatts or more for coal, and 200 megawatts or more for natural gas, residual fuel oil, distillate fuel oil, and petroleum coke. For data coverage before 2013, see EIA, *Electric Power Monthly*, Appendix C, Form EIA-923 notes, "Receipts and cost and quality of fossil fuels" section. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#prices> (Excel and CSV files) for all available annual and monthly data beginning in 1973.

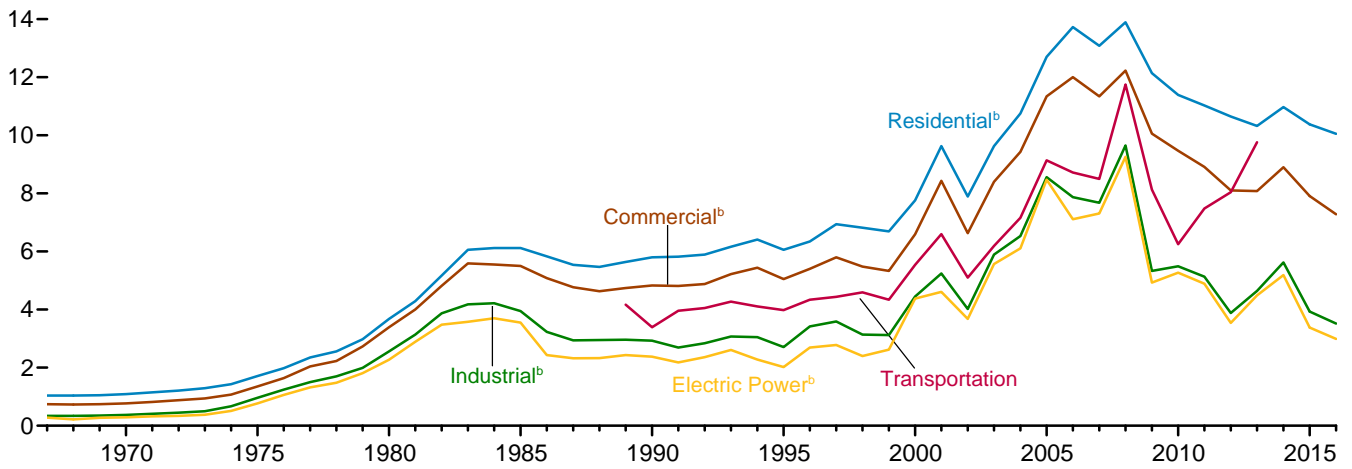
Sources: See end of section.

**Figure 9.4 Natural Gas Prices**  
(Dollars<sup>a</sup> per Thousand Cubic Feet)

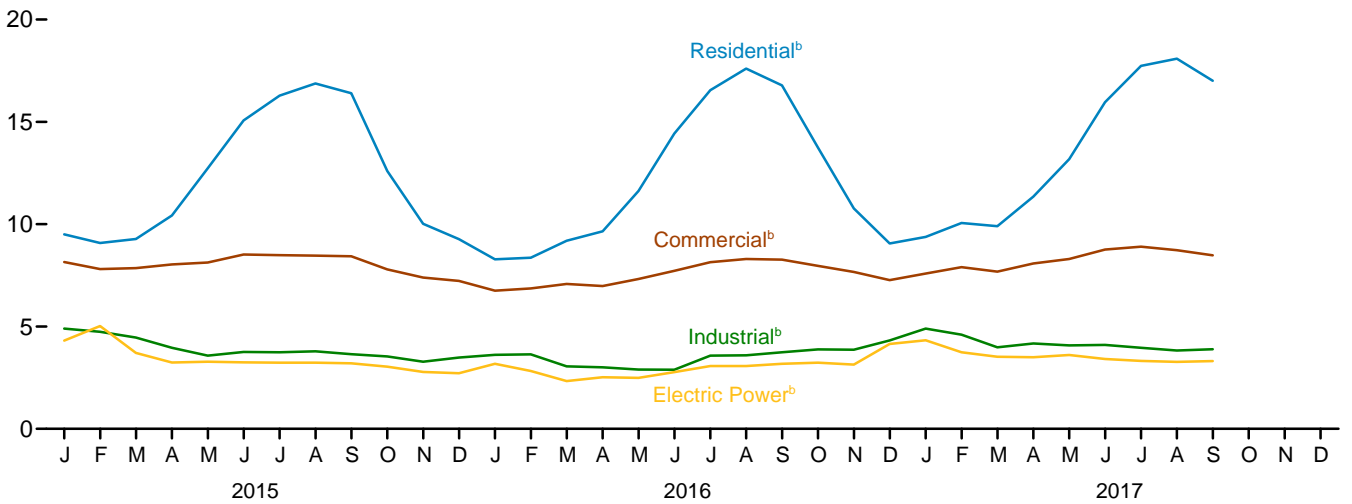
Wellhead and Citygate, 1949–2016



Consuming Sectors, 1967–2016



Consuming Sectors, Monthly



<sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.  
<sup>b</sup> Includes taxes.

Web Page: <http://www.eia.gov/totalenergy/data/monthly/#prices>.  
Source: Table 9.10.

**Table 9.10 Natural Gas Prices**  
(Dollars<sup>a</sup> per Thousand Cubic Feet)

	Wellhead Price <sup>f</sup>	City-gate Price <sup>g</sup>	Consuming Sectors <sup>b</sup>									
			Residential		Commercial <sup>c</sup>		Industrial <sup>d</sup>		Transportation	Electric Power <sup>e</sup>		
			Price <sup>h</sup>	Percentage of Sector <sup>i</sup>	Price <sup>h</sup>	Percentage of Sector <sup>i</sup>	Price <sup>h</sup>	Percentage of Sector <sup>i</sup>	Vehicle Fuel Price <sup>h</sup>	Price <sup>h</sup>	Percentage of Sector <sup>i,k</sup>	
1950 Average	0.07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1955 Average	.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1960 Average	.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1965 Average	.16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1970 Average	.17	NA	1.09	NA	.77	NA	.37	NA	NA	.29	NA	NA
1975 Average	.44	NA	1.71	NA	1.35	NA	.96	NA	NA	.77	96.1	96.1
1980 Average	1.59	NA	3.68	NA	3.39	NA	2.56	NA	NA	2.27	96.9	96.9
1985 Average	2.51	3.75	6.12	NA	5.50	NA	3.95	68.8	NA	3.55	94.0	94.0
1990 Average	1.71	3.03	5.80	99.2	4.83	86.6	2.93	35.2	3.39	2.38	76.8	76.8
1995 Average	1.55	2.78	6.06	99.0	5.05	76.7	2.71	24.5	3.98	2.02	71.4	71.4
2000 Average	3.68	4.62	7.76	92.6	6.59	63.9	4.45	19.8	5.54	4.38	50.5	50.5
2001 Average	4.00	5.72	9.63	92.4	8.43	66.0	5.24	20.8	6.60	4.61	40.2	40.2
2002 Average	2.95	4.12	7.89	97.9	6.63	77.4	4.02	22.7	5.10	3.68	83.9	83.9
2003 Average	4.88	5.85	9.63	97.5	8.40	78.2	5.89	22.1	6.19	5.57	91.2	91.2
2004 Average	5.46	6.65	10.75	97.7	9.43	78.0	6.53	23.6	7.16	6.11	89.8	89.8
2005 Average	7.33	8.67	12.70	98.1	11.34	82.1	8.56	24.0	9.14	8.47	91.3	91.3
2006 Average	6.39	8.61	13.73	98.1	12.00	80.8	7.87	23.4	8.72	7.11	93.4	93.4
2007 Average	6.25	8.16	13.08	98.0	11.34	80.4	7.68	22.2	8.50	7.31	92.2	92.2
2008 Average	7.97	9.18	13.89	97.5	12.23	79.7	9.65	20.4	11.75	9.26	101.1	101.1
2009 Average	3.67	6.48	12.14	97.4	10.06	77.8	5.33	18.8	8.13	4.93	101.1	101.1
2010 Average	4.48	6.18	11.39	97.4	9.47	77.5	5.49	18.0	6.25	5.27	100.8	100.8
2011 Average	3.95	5.63	11.03	96.3	8.91	67.3	5.13	16.3	7.48	4.89	101.2	101.2
2012 Average	E 2.66	4.73	10.65	95.8	8.10	65.2	3.88	16.2	8.04	3.54	95.5	95.5
2013 Average	NA	4.88	10.32	95.7	8.08	65.8	4.64	16.6	9.76	4.49	94.9	94.9
2014 Average	NA	5.71	10.97	95.5	8.90	65.8	5.62	15.9	NA	5.19	94.6	94.6
2015 January	NA	4.48	9.50	95.7	8.15	70.8	4.90	14.8	NA	4.31	93.6	93.6
February	NA	4.57	9.08	95.6	7.81	71.0	4.74	15.2	NA	5.02	93.7	93.7
March	NA	4.35	9.28	95.4	7.85	69.9	4.46	15.4	NA	3.71	94.4	94.4
April	NA	3.93	10.43	95.4	8.03	64.8	3.96	14.6	NA	3.24	95.6	95.6
May	NA	4.25	12.73	95.5	8.13	61.2	3.58	15.1	NA	3.28	95.5	95.5
June	NA	4.44	15.07	95.5	8.52	57.9	3.76	14.6	NA	3.25	94.9	94.9
July	NA	4.65	16.28	95.7	8.49	56.9	3.74	14.6	NA	3.23	94.9	94.9
August	NA	4.59	16.88	95.4	8.46	55.6	3.79	14.3	NA	3.23	94.7	94.7
September	NA	4.56	16.40	95.8	8.43	55.8	3.65	14.5	NA	3.20	94.4	94.4
October	NA	4.00	12.60	95.5	7.79	59.5	3.54	14.7	NA	3.04	94.6	94.6
November	NA	3.69	10.02	96.0	7.39	63.8	3.28	14.8	NA	2.78	94.8	94.8
December	NA	3.75	9.27	96.0	7.23	67.6	3.48	14.9	NA	2.72	94.2	94.2
Average	NA	4.26	10.38	95.6	7.91	65.7	3.93	14.8	NA	3.38	94.6	94.6
2016 January	NA	3.39	8.28	96.0	6.75	70.4	3.62	15.2	NA	R 3.18	R 95.1	R 95.1
February	NA	3.48	8.36	95.8	6.86	69.4	3.64	15.3	NA	2.83	R 95.2	R 95.2
March	NA	3.49	9.19	95.6	7.08	66.7	3.05	15.3	NA	2.33	95.7	95.7
April	NA	3.22	9.65	95.6	6.98	65.0	3.01	14.5	NA	2.52	R 95.9	R 95.9
May	NA	3.44	11.62	95.4	7.32	60.2	2.90	14.6	NA	2.49	R 96.0	R 96.0
June	NA	3.84	14.43	95.7	7.72	58.0	2.89	14.6	NA	2.77	R 95.7	R 95.7
July	NA	4.42	16.55	95.9	8.14	56.9	3.58	14.2	NA	3.07	R 95.4	R 95.4
August	NA	4.33	17.60	95.8	8.30	54.7	3.59	14.6	NA	3.07	R 95.6	R 95.6
September	NA	4.60	16.78	96.0	8.27	56.2	3.74	14.6	NA	R 3.18	R 95.7	R 95.7
October	NA	4.19	13.74	95.9	7.96	59.9	3.88	14.4	NA	R 3.23	R 95.4	R 95.4
November	NA	3.90	10.77	96.0	7.67	63.5	3.87	14.5	NA	3.14	R 95.5	R 95.5
December	NA	3.96	9.06	96.0	7.27	68.2	4.32	14.7	NA	R 4.15	R 95.4	R 95.4
Average	NA	3.71	10.05	95.8	7.28	64.8	3.52	14.7	NA	2.99	R 95.6	R 95.6
2017 January	NA	4.21	9.38	96.0	7.59	70.5	R 4.90	15.0	NA	R 4.33	R 81.7	R 81.7
February	NA	4.13	10.06	95.9	7.90	69.1	R 4.60	15.0	NA	3.74	R 83.2	R 83.2
March	NA	3.83	9.90	95.7	7.68	67.9	R 3.98	14.9	NA	3.52	R 75.0	R 75.0
April	NA	4.17	11.35	95.3	8.08	65.1	4.17	14.5	NA	R 3.50	R 80.8	R 80.8
May	NA	4.39	13.18	95.6	8.30	61.0	4.08	13.8	NA	R 3.61	R 81.1	R 81.1
June	NA	4.78	15.96	94.5	8.76	58.1	4.10	14.4	NA	R 3.41	R 80.0	R 80.0
July	NA	4.67	R 17.74	95.8	8.90	56.9	3.96	14.5	NA	3.32	R 77.6	R 77.6
August	NA	R 4.57	18.09	95.7	8.73	55.6	3.83	14.2	NA	3.27	R 76.6	R 76.6
September	NA	4.55	17.01	96.1	8.48	56.2	3.89	13.6	NA	3.31	78.4	78.4
9-Month Average	NA	4.22	11.28	95.7	8.02	64.9	4.19	14.4	NA	3.52	79.0	79.0
2016 9-Month Average	NA	3.59	10.00	95.8	7.19	64.7	3.34	14.8	NA	2.85	95.6	95.6
2015 9-Month Average	NA	4.43	10.48	95.6	8.07	66.1	4.10	14.8	NA	3.54	94.6	94.6

<sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.

<sup>b</sup> See Note 8, "Natural Gas Prices," at end of section.

<sup>c</sup> Commercial sector, including commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7.

<sup>d</sup> Industrial sector, including industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7.

<sup>e</sup> The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 2001, data are for electric utilities only; beginning in 2002, data also include independent power producers.

<sup>f</sup> See "Natural Gas Wellhead Price" in Glossary.

<sup>g</sup> See "Citygate" in Glossary.

<sup>h</sup> Includes taxes.

<sup>i</sup> The percentage of the sector's consumption in Table 4.3 for which price data are available. For details on how the percentages are derived, see Table 9.10 sources at end of section.

<sup>j</sup> Much of the natural gas delivered for vehicle fuel represents deliveries to fueling stations that are used primarily or exclusively by fleet vehicles. Thus, the prices are often those associated with the cost of gas in the operation of fleet vehicles.

<sup>k</sup> Percentages exceed 100% when reported natural gas receipts are greater than reported natural gas consumption—this can occur when combined-heat-and-power plants report fuel receipts related to non-electric generating activities.

R=Revised. NA=Not available. E=Estimate.

Notes: • Prices are for natural gas, plus a small amount of supplemental gaseous fuels. • Prices are intended to include all taxes. See Note 8, "Natural Gas Prices," at end of section. • Wellhead annual and year-to-date prices are simple averages of the monthly prices; all other annual and year-to-date prices are volume-weighted averages of the monthly prices. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#prices> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1976.

Sources: See end of section.

## Energy Prices

**Note 1. Crude Oil Refinery Acquisition Costs.** Beginning with January 1981, refiner acquisition costs of crude oil are from data collected on U.S. Energy Information Administration (EIA) Form EIA-14, “Refiners’ Monthly Cost Report.” Those costs were previously published from data collected on Economic Regulatory Administration (ERA) Form ERA-49, “Domestic Crude Oil Entitlements Program Refiners Monthly Report.” Form ERA-49 was discontinued with the decontrol of crude oil on January 28, 1981. Crude oil purchases and costs are defined for Form EIA-14 in accordance with conventions used for Form ERA-49. The respondents for the two forms are also essentially the same. However, due to possible different interpretations of the filing requirements and a different method for handling prior period adjustments, care must be taken when comparing the data collected on the two forms.

The refiner acquisition cost of crude oil is the average price paid by refiners for crude oil booked into their refineries in accordance with accounting procedures generally accepted and consistently and historically applied by the refiners concerned. Domestic crude oil is that oil produced in the United States or from the outer continental shelf as defined in 43 USC Section 1331. Imported crude oil is either that oil reported on Form ERA-51, “Transfer Pricing Report,” or any crude oil that is not domestic oil. The composite cost is the weighted average of domestic and imported crude oil costs.

Crude oil costs and volumes reported on Form ERA-49 excluded unfinished oils but included the Strategic Petroleum Reserve (SPR). Crude oil costs and volumes reported on Federal Energy Administration (FEA) Form FEA-P110-M-1, “Refiners’ Monthly Cost Allocation Report,” included unfinished oils but excluded SPR. Imported averages derived from Form ERA-49 exclude oil purchased for SPR, whereas the composite averages derived from Form ERA-49 include SPR. None of the prices derived from Form EIA-14 include either unfinished oils or SPR.

**Note 2. Crude Oil Domestic First Purchase Prices.** The average domestic first purchase price represents the average price at which all domestic crude oil is purchased. Crude oil domestic first purchase prices were derived as follows: for 1949–1973, weighted average domestic first purchase values as reported by state agencies and calculated by the Bureau of Mines; for 1974 and 1975, weighted averages of a sample survey of major first purchasers’ purchases; for 1976 forward, weighted averages of all first purchasers’ purchases. The data series was previously called “Actual Domestic Wellhead Price.”

**Note 3. Crude Oil F.O.B. Costs.** F.O.B. literally means “Free on Board.” It denotes a transaction whereby the seller makes the product available with an agreement on a given port at a given price; it is the responsibility of the buyer to arrange for the transportation and insurance.

**Note 4. Crude Oil Landed Costs.** The landed cost of imported crude oil from selected countries does not represent the total cost of all imported crude. Prior to April 1975, imported crude costs to U.S. company-owned refineries in the Caribbean were not included in the landed cost, and costs of crude oil from countries that export only small amounts to the United States were also excluded. Beginning in April 1975, however, coverage was expanded to include U.S. company-owned refineries in the Caribbean. Landed costs do not include supplemental fees.

**Note 5. Motor Gasoline Prices.** Several different series of motor gasoline prices are published in this section. U.S. city average retail prices of motor gasoline by grade are calculated monthly by the Bureau of Labor Statistics during the development of the Consumer Price Index (CPI). These prices include all federal, state, and local taxes paid at the time of sale. Prior to 1977, prices were collected in 56 urban areas. From 1978 forward, prices are collected from a new sample of service stations in 85 urban areas selected to represent all urban consumers—about 80 percent of the total U.S. population. The service stations are selected initially, and on a replacement basis, in such a way that they represent the purchasing habits of the CPI population. Service stations in the current sample include those providing all types of service (i.e., full-, mini-, and self-serve).

Regular motor gasoline prices by area type are determined by EIA in a weekly survey of retail motor gasoline outlets (Form EIA-878, “Motor Gasoline Price Survey”). Prices include all federal, state, and local taxes paid at the time of sale. A representative sample of outlets by geographic area and size is randomly selected from a sampling frame of approximately 115,000 retail motor gasoline outlets. Monthly and annual prices are simple averages of weighted weekly estimates from “Weekly U.S. Retail Gasoline Prices, Regular Grade.” For more information on the survey methodology, see EIA, *Weekly Petroleum Status Report*, Appendix B, “Weekly Petroleum Price Surveys” section.

Refiner prices of finished motor gasoline for resale and to end users are determined by EIA in a monthly survey of refiners and gas plant operators (Form EIA-782A). The prices do not include any federal, state, or local taxes paid at the time of sale. Estimates of prices prior to January 1983 are based on Form FEA-P302-M-1/EIA-460, “Petroleum Industry Monthly Report for Product Prices,” and also exclude all federal, state, or local taxes paid at the time of sale. Sales for resale are those made to purchasers who are other-than-ultimate consumers. Sales to end users are sales made directly to the consumer of the product, including bulk consumers (such as agriculture, industry, and utilities) and residential and commercial consumers.

**Note 6. Historical Petroleum Prices.** Starting in January 1983, Form EIA-782, “Monthly Petroleum Product Sales Report,” replaced 10 previous surveys. Every attempt was made to continue the most important price series. However, prices published through December 1982 and those



published since January 1983 do not necessarily form continuous data series due to changes in survey forms, definitions, instructions, populations, samples, processing systems, and statistical procedures. To provide historical data, continuous series were generated for annual data 1978–1982 and for monthly data 1981 and 1982 by estimating the prices that would have been published had Form EIA-782 survey and system been in operation at that time. This form of estimation was performed after detailed adjustment was made for product and sales type matching and for discontinuity due to other factors. An important difference between the previous and present prices is the distinction between wholesale and resale and between retail and end user. The resale category continues to include sales among resellers. However, sales to bulk consumers, such as utility, industrial, and commercial accounts previously included in the wholesale category, are now counted as made to end users. The end-user category continues to include retail sales through company-owned and operated outlets but also includes sales to the bulk consumers such as agriculture, industry, and electric utilities. Additional information may be found in “Estimated Historic Time Series for the EIA-782,” a feature article by Paula Weir, printed in the December 1983 [3] *Petroleum Marketing Monthly*, published by EIA.

**Note 7. Electricity Retail Prices.** Average annual retail prices of electricity have the following plant coverage: Through 1979, annual data are for Classes A and B privately owned electric utilities only. For 1980–1982, annual data are for selected Class A utilities whose electric operating revenues were \$100 million or more during the previous year. For 1983, annual data are for a selected sample of electric utilities. Beginning in 1984, data are for a census of electric utilities. Beginning in 1996, annual data also include energy service providers selling to retail customers.

Average monthly retail prices of electricity have the following plant coverage: Through 1985, monthly data are derived from selected privately owned electric utilities and, therefore, are not national averages. Beginning in 1986, monthly data are based on a sample of publicly and privately owned electric utilities. Beginning in 1996, monthly data also include energy service providers selling to retail customers.

Preliminary monthly data are from Form EIA-861M (formerly Form EIA-826), “Monthly Electric Power Industry Report,” which is a monthly collection of data from approximately 450 of the largest publicly and privately owned electric utilities as well as a census of energy service providers with retail sales in deregulated states; a model is then applied to the collected data to estimate for the entire universe of U.S. electric utilities. Preliminary annual data are the sum of the monthly revenues divided by the sum of the monthly sales. When final annual data become available each year from Form EIA-861, “Annual Electric Power Industry Report,” their ratios to the

preliminary Form EIA-861M values are used to derive adjusted final monthly values.

**Note 8. Natural Gas Prices.** Natural gas prices are intended to include all taxes. Instructions on the data collection forms specifically direct that all federal, state, and local taxes, surcharges, and/or adjustments billed to consumers are to be included. However, sales and other taxes itemized on more than 3,000 consumers’ bills are sometimes excluded by the reporting utilities. Delivered-to-consumers prices for 1987 forward represent natural gas delivered and sold to residential, commercial, industrial, vehicle fuel, and electric power consumers. They do not include the price of natural gas delivered on behalf of third parties to residential, commercial, industrial, and vehicle fuel customers except for certain states in the residential and commercial sectors for 2002 forward. Volumes of natural gas delivered on behalf of third parties are included in the consumption data shown in Table 4.3. Additional information is available in EIA, *Natural Gas Monthly*, Appendix C.

## Table 9.1 Sources

### Domestic First Purchase Price

1949–1976: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook*, “Crude Petroleum and Petroleum Products” chapter.

1977: Federal Energy Administration, based on Form FEA-P124, “Domestic Crude Oil Purchaser’s Monthly Report.”

1978–2009: U.S. Energy Information Administration (EIA), *Petroleum Marketing Annual 2009*, Table 1.

2010 forward: EIA, *Petroleum Marketing Monthly*, December 2017, Table 1.

### F.O.B. and Landed Cost of Imports

October 1973–September 1977: Federal Energy Administration, Form FEA-F701-M-0, “Transfer Pricing Report.”

October–December 1977: EIA, Form FEA-F701-M-0, “Transfer Pricing Report.”

1978–2009: EIA, *Petroleum Marketing Annual 2009*, Table 1.

2010 forward: EIA, *Petroleum Marketing Monthly*, December 2017, Table 1.

### Refiner Acquisition Cost

1968–1973: EIA estimates. The cost of domestic crude oil was derived by adding estimated transportation costs to the reported average domestic first purchase price. The cost of imported crude oil was derived by adding an estimated ocean transport cost based on the published “Average Freight Rate Assessment” to the average “Free Alongside Ship” value published by the U.S. Census Bureau.

1974–1976: DOI, BOM, *Minerals Yearbook*, “Crude Petroleum and Petroleum Products” chapter.

1977: January–September, FEA, based on Form FEA-P110-M-1, “Refiners’ Monthly Cost Allocation Report.”

1977: October–December, EIA, based on Form FEA-P110-M-1, “Refiners’ Monthly Cost Allocation Report.”

1978–2009: EIA, *Petroleum Marketing Annual 2009*, Table 1.

2010 forward: EIA, *Petroleum Marketing Monthly*, December 2017, Table 1.

### Table 9.2 Sources

October 1973–September 1977: Federal Energy Administration, Form FEA-F701-M-0, “Transfer Pricing Report.”  
October 1977–December 1977: U.S. Energy Information Administration (EIA), Form FEA-F701-M-0, “Transfer Pricing Report.”

1978–2009: EIA, *Petroleum Marketing Annual 2009*, Table 21.

2010 forward: EIA, *Petroleum Marketing Monthly*, December 2017, Table 21.

### Table 9.9 Sources

1973–September 1977: Federal Power Commission, Form FPC-423, “Monthly Report of Cost and Quality of Fuels for Electric Utility Plants.”

October 1977–December 1977: Federal Energy Regulatory Commission, Form FERC-423, “Monthly Report of Cost and Quality of Fuels for Electric Utility Plants.”

1978 and 1979: U.S. Energy Information Administration (EIA), Form FERC-423, “Monthly Report of Cost and Quality of Fuels for Electric Utility Plants.”

1980–1989: EIA, *Electric Power Monthly*, May issues.

1990–2000: EIA, *Electric Power Monthly*, March 2003, Table 26.

2001–2007: EIA, *Electric Power Monthly*, October 2008, Table 4.1; Federal Energy Regulatory Commission, Form FERC-423, “Monthly Report of Cost and Quality of Fuels for Electric Utility Plants”; and EIA, Form EIA-423, “Monthly Cost and Quality of Fuels for Electric Plants Report.”

2008 forward: EIA, *Electric Power Monthly*, November 2017, Table 4.1; and Form EIA-923, “Power Plant Operations Report.”

### Table 9.10 Sources

#### All Prices Except Vehicle Fuel and Electric Power

1949–2014: U.S. Energy Information Administration (EIA), *Natural Gas Annual (NGA)*, annual reports and unpublished revisions.

2015 forward: EIA, *Natural Gas Monthly (NGM)*, November 2017, Table 3.

#### Vehicle Fuel Price

1989–2015: EIA, NGA, annual reports.

#### Electric Power Sector Price

1967–1972: EIA, NGA, annual reports.

1973–1998: EIA, NGA 2000, Table 96.

1999–2002: EIA, NGM, October 2004, Table 4.

2003–2007: Federal Energy Regulatory Commission, Form FERC-423, “Monthly Report of Cost and Quality of Fuels for Electric Utility Plants,” and EIA, Form EIA-423 “Monthly Cost and Quality of Fuels for Electric Plants Report.”

2008 forward: Form EIA-923, “Power Plant Operations Report.”

#### Percentage of Residential Sector

1989–2013: EIA, Form EIA-176, “Annual Report of Natural and Supplemental Gas Supply and Disposition.” Calculated as the total amount of natural gas delivered to residential consumers minus the amount delivered for the account of others, and then divided by the total amount delivered to residential consumers.

2014 forward: EIA, Form EIA-857, “Monthly Report of Natural Gas Purchases and Deliveries to Consumers.”

#### Percentage of Commercial Sector

1987–2014: EIA, NGA, annual reports. Calculated as the total amount of natural gas delivered to commercial consumers minus the amount delivered for the account of others, and then divided by the total amount delivered to commercial consumers.

2015 forward: EIA, NGM, November 2017, Table 3.

#### Percentage of Industrial Sector

1982–2014: EIA, NGA, annual reports. Calculated as the total amount of natural gas delivered to industrial consumers minus the amount delivered for the account of others, and then divided by the total amount delivered to industrial consumers.

2015 forward: EIA, NGM, November 2017, Table 3.

#### Percentage of Electric Power Sector

1973–2001: Calculated by EIA as the quantity of natural gas receipts by electric utilities reported on Form FERC-423, “Monthly Report of Cost and Quality of Fuels for Electric Utility Plants” (and predecessor forms) divided by the quantity of natural gas consumed by the electric power sector (for 1973–1988, see *Monthly Energy Review (MER)*, Table 7.3b; for 1989–2001, see MER, Table 7.4b).

2002–2007: Calculated by EIA as the quantity of natural gas receipts by electric utilities and independent power producers reported on Form FERC-423, “Monthly Report of Cost and Quality of Fuels for Electric Utility Plants,” and EIA-423, “Monthly Cost and Quality of Fuels for Electric Plants Report,” divided by the quantity of natural gas consumed by the electric power sector (see MER, Table 7.4b).

2008 forward: Calculated by EIA as the quantity of natural gas receipts by electric utilities and independent power producers reported on Form EIA-923, “Power Plant Operations Report,” divided by the quantity of natural gas consumed by the electric power sector (see MER, Table 7.4b).