State Energy Price and Expenditure Report 1997

The *State Energy Price and Expenditure Report 1997* presents energy price and expenditure estimates for the 50 States, the District of Columbia, and the United States for 1970 through 1997. The estimates are presented by energy source (e.g., petroleum, natural gas, coal, and electricity) and by major consuming sector. This publication is an enhanced update of the *State Energy Price and Expenditure Report 1995* (published August 1998).

Publication of this report is in keeping with responsibilities given the Energy Information Administration (EIA) in Public Law 95–91 (Department of Energy Organization Act), which states, in part, in Section 205(a)(2), that:

The Administrator shall be responsible for carrying out a central, comprehensive, and unified energy data and information program which will collect, evaluate, assemble, analyze and disseminate data and information....

The *State Energy Price and Expenditure Report* is a part of EIA's historical integrated energy data program and is intended to provide historical energy information to Members of Congress, Federal and State agencies, and the general public.

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State Energy Price and Expenditure Report

1997

July 2000

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Introduction

The *State Energy Price and Expenditure Report (SEPER)* presents energy price and expenditure estimates individually for the 50 States and the District of Columbia and in aggregate for the United States. The estimates developed in the Combined State Energy Data System (CSEDS) are provided by energy source and economic sector and are published for the years 1970, 1975, and 1980 through 1997. Data for all years are available on a CD-ROM and via Internet. (See inside front cover.)

Consumption estimates used to calculate expenditures and the documentation for those estimates are taken from the *State Energy Data Report 1997, Consumption Estimates (SEDR),* published in September 1999. Expenditures are calculated by multiplying the price estimates by the consumption estimates, which are adjusted to remove process fuel; intermediate petroleum products; other consumption that has no direct fuel costs, i.e., hydroelectric, geothermal, wind, solar, and photovoltaic energy sources; and wood and waste obtained at no cost. See Section 7, "Consumption Adjustments for Calculating Expenditures," on page 417.

All expenditures are consumer expenditures; that is, they represent estimates of money spent directly by consumers to purchase energy, generally including taxes. (See box on page 2.)

The documentation in Appendix A describes how the price estimates are developed, including sources of data, methods of estimation, and conversion factors applied. Appendix B provides metric and other physical conversion factors for measures used in energy analyses.

This report is an update of the last edition, the *State Energy Price and Expenditure Report 1995,* published in August 1998. Two years of new data, 1996 and 1997, appear in this edition, along with numerous revisions to previously published data. Many small revisions are rounding differences caused by the conversion from a mainframe database to a personal computer database system. Prices and expenditures for wood and waste used in the residential, commercial, and industrial sectors for 1970 through 1989 have been incorporated into this edition, adding as much as $1.7 billion to total U.S. expenditures for energy in 1989. Kerosene prices in the residential, commercial, and industrial sectors for 1983 forward are revised to use Energy Information Administration (EIA) data in place of non-EIA data. These and other revisions since the last edition of this report are explained in detail in Appendix C.

Reliable data for State-level prices rarely exist, especially as series that are consistent over a long period. Estimates and assumptions are applied to fill data gaps and to maintain consistent definitions in the data series over time. CSEDS incorporates the most consistent series and procedures possible. Users of this report (and the electronic data files) should recognize the limitations imposed on the system due to changing and inadequate data sources. Estimates often are based on a variety of surrogate measures that are selected on the basis of availability, applicability as indicators, continuity over time, and consistency among the various energy commodities. Original source documents for data used in CSEDS (cited in the *SEPER* documentation) include descriptions of collection methodologies, universes, imputation or adjustment techniques (if any), and errors associated with the individual processes. Due to the numerous collection forms and procedures associated with these reports, it is not possible to develop a meaningful numerical estimate of the overall statistical errors of the material published in *SEPER*.

It is also important to note that, even within a State, a single average price may have limited meaning in that it represents a consumption-weighted average over a whole State. For example, urban and rural

Note: Throughout this report, the term "State" includes the District of Columbia.

electricity prices can vary significantly from a State's weighted average, and prices in one region of a State may differ from those in another because of access to less expensive hydroelectricity. Differences within a State may also be greater than differences among adjacent States. Thus, the principal value of the estimates in this report lies in general comparisons among the States, interstate comparisons for a given year, and the analysis of trends over several years.

The five economic sectors used in *SEPER* correspond to those used in *SEDR* as follows:

Taxes in *SEPER*

While the objective is to provide price estimates that include all taxes, the data sources used in *SEPER* do not treat taxes uniformly. In general, where taxes are included in the source data, they are also included in *SEPER*. Where taxes are not included but can be separately estimated, they are generally added. In many cases, States and even some localities provide tax exemptions for various kinds of activities or classes of end users, and readers of this report should be careful to consider these exceptions when making detailed comparisons. The Energy Information Administration (EIA) is continuing to analyze these cases to see if a better representation can be made. A comprehensive and detailed study of taxes in EIA data is available in the report *End-Use Taxes: Current EIA Practices,* DOE/EIA-0583 (Washington, DC, August 1994). The status of tax data in this edition of *SEPER* is summarized below and described more fully in the Appendix A documentation for each energy source and sector.

End-Use Sectors

Coal. All steam coal and coking coal prices include taxes in all years. Appropriately, coal imports and exports in the industrial sector do not include end-user taxes.

Natural Gas. Natural gas prices are intended to include all Federal, State, and local taxes, surcharges, and adjustments billed to consumers. However, sales and other taxes itemized directly on customers' bills are frequently not reported as revenues and, therefore, are not included in calculating the prices.

Petroleum. Motor gasoline and diesel fuel prices include excise and other per-gallon taxes but do not include general sales taxes due to wide variation at the local level. Liquefied petroleum gases, distillate fuel oil, kerosene, and residual fuel oil prices include sales taxes in all years. Jet fuel, aviation gasoline, asphalt and road oil, lubricants and other petroleum products do not include taxes. Other petroleum products are miscellaneous products, petrochemical feedstocks (naphtha, other oils, and still gas), industrial petroleum coke, special naphthas, and waxes.

Wood and Waste. Wood and waste prices for the residential, commercial, and industrial sectors include taxes.

Electricity. Taxes paid directly by electric utilities (rather than end users) are considered operating costs and are passed on to the end users as part of the price. Depending on jurisdiction, taxes collected from end users and turned over directly to a government authority are not generally included in the reported revenues and, therefore, are not included in the calculation of the prices.

Electric Utility Sector

Coal, natural gas, petroleum coke, nuclear, and wood and waste prices include all taxes, transportation, and handling costs. There are no direct fuel costs (or taxes) for hydroelectric, geothermal, centralized solar, or wind energy. Capital, operation, and maintenance costs and related taxes associated with these energy sources are included indirectly because electricity prices reflect their presence in the rate base.

The **residential sector** is considered to consist of all private residences, whether occupied or vacant, owned or rented, including single-family homes, multifamily housing units, and mobile homes. Secondary homes, such as summer homes, are also included. Institutional housing, such as school dormitories, hospitals, and military barracks, generally are not included in the residential sector; they are included in the commercial sector.

The **commercial sector**, as defined economically, consists of business establishments that are not engaged in transportation or in manufacturing or other types of industrial activity (agriculture, mining, or construction). Commercial establishments include hotels, motels, restaurants, wholesale businesses, retail stores, laundries, and other service enterprises; religious and nonprofit organizations; health, social, and educational institutions; and Federal, State, and local governments. Street lights, pumps, bridges, and public services are also included if the establishment operating them is considered commercial.

The **industrial sector** comprises manufacturing industries, which make up the largest part of the sector, along with mining, construction, agriculture, fisheries, and forestry. Establishments in the sector range from steel mills to small farms to companies assembling electronic components.

The **transportation sector** consists of private and public vehicles that move people and commodities. Included are automobiles, trucks, buses, motorcycles, railroads and railways (including streetcars), aircraft, ships, barges, and natural gas pipelines.

The **electric utility** sector consists of privately and publicly owned establishments that generate, transmit, distribute, or sell electricity primarily for use by the public and meet the definition of an electric utility. Nonutility power producers are not included in the electric utility sector.

Although end-use allocations of energy consumption and expenditures follow those guidelines as closely as possible, some data are collected by using different classifications. For example, electric utilities often classify commercial and industrial users by the quantity of electricity purchases rather than by the business activity of the purchaser. Agricultural use of natural gas is collected and reported in the commercial sector through 1995 and in the industrial sector for 1996 forward. Since agricultural use of natural gas cannot be identified separately, the discrepancy cannot be reconciled. Another example is master-metered condominiums, apartments, and buildings with a combination of residential and commercial units. In many cases, billing and metering practices cause residential energy usage of electricity, natural gas, or fuel oil to be included in the commercial sector. In those cases, there is no basis for separating residential from commercial use. Readers are advised to consult the *SEDR* documentation for specific assumptions regarding the consumption estimates.

Where prices for an energy source and sector are not available, comparable prices are substituted. For example, the transportation sector motor gasoline prices are also applied to the commercial and industrial sectors. In some cases, the average of adjacent States' prices is assigned to a missing State price. The documentation elaborates on these price assumptions.

Except where specified, it is generally not possible to describe the prices in this report as "wholesale" or "retail." The prices paid in each consuming sector are actually a combination of both sets of prices, depending on a number of closely interrelated factors, and the data reflect the combination of prices actually paid by each sector. Almost all residential sector prices are close to retail prices, reflecting the relatively small quantities of individual purchases and the increased costs of extensive, diffuse, and multilayered distribution systems. Similarly, in the transportation sector almost everyone pays the same retail-like price for motor gasoline, regardless of volume purchased or location of purchase. Conversely, residual fuel oil prices in the transportation sector are certainly more wholesale-like as a result of large deliveries to bulk facilities in major ports. In the same manner, most large industrial and many large commercial expenditures can be thought of as near wholesale, frequently involving direct access to a producer or bulk distribution facility for very large quantities. Many smaller industrial and commercial facilities pay something much closer to retail prices as a result of the small quantities involved and their institutional distance from primary suppliers. Notable exceptions to these relationships include natural gas and electric utilities, which typically establish fixed rates for each of several classes of service, depending on representative quantities, service factors, and distribution expenses.

State Rankings

Table 1. Energy Prices and Expenditures Ranked by State, 1997

Rank	Prices		Expenditures		Expenditures per Person	
	State	Dollars per Million Btu	State	Million Dollars	State	Dollars
1	Hawaii	13.34	California	55,187	Wyoming	3,902
2	District of Columbia	12.84	Texas	55,070	Alaska	3,575
3	Connecticut	12.56	New York	34,089	Louisiana	3,473
4	Arizona	11.75	Pennsylvania	25,810	Texas	2,841
5	New Hampshire	11.58	Ohio	25,556	North Dakota	2,651
6	Vermont	11.36	Florida	25,117	Maine	2,543
7	Massachusetts	11.35	Illinois	25,089	District of Columbia	2,518
8	New York	11.18	Michigan	19,758	Montana	2,471
9	Rhode Island	11.04	New Jersey	18,764	Indiana	2,405
10	Florida	10.99	North Carolina	15,823	Iowa	2,330
11	Maryland	10.27	Georgia	15,642	New Jersey	2,328
12	California	10.27	Louisiana	15,120	Vermont	2,324
13	North Carolina	10.11	Indiana	14,106	Kentucky	2,313
14	Delaware	9.98	Virginia	13,451	Arkansas	2,304
15	Nevada	9.81	Massachusetts	13,087	Nebraska	2,302
16	New Jersey	9.46	Tennessee	11,604	Delaware	2,301
17	New Mexico	9.45	Missouri	11,532	Ohio	2,283
18	Pennsylvania	9.32	Washington	10,330	Alabama	2,271
19	Virginia	9.32	Wisconsin	10,156	Kansas	2,249
20	Missouri	9.15	Minnesota	9,869	Connecticut	2,218
21	Illinois	9.03	Alabama	9,816	South Dakota	2,208
22	Ohio	9.01	Maryland	9,583	Oklahoma	2,208
23	South Dakota	8.98	Kentucky	9,045	West Virginia	2,204
24	Georgia	8.86	Arizona	8,574	Mississippi	2,183
25	Maine	8.82	South Carolina	8,177	Nevada	2,166
26	South Carolina	8.77	Oklahoma	7,333	Tennessee	2,160
27	Kansas	8.77	Connecticut	7,248	South Carolina	2,159
28	Colorado	8.68	Colorado	6,881	New Hampshire	2,154
29	Arkansas	8.65	Iowa	6,649	Pennsylvania	2,149
30	Tennessee	8.60	Oregon	6,058	Massachusetts	2,140
31	Mississippi	8.59	Mississippi	5,963	Missouri	2,132
32	Nebraska	8.47	Kansas	5,850	North Carolina	2,129
33	Minnesota	8.46	Arkansas	5,812	Idaho	2,109
34	Montana	8.41	West Virginia	4,002	Minnesota	2,105
35	Oregon	8.40	Nebraska	3,814	Illinois	2,093
36	Wisconsin	8.25	Utah	3,708	Georgia	2,088
37	Michigan	8.18	Nevada	3,637	Rhode Island	2,070
38	Iowa	8.10	New Mexico	3,427	Michigan	2,020
39	Oklahoma	8.07	Maine	3,158	Virginia	1,996
40	Idaho	8.01	Idaho	2,550	New Mexico	1,988
41	Alabama	7.81	New Hampshire	2,525	Wisconsin	1,953
42	Kentucky	7.72	Hawaii	2,288	Hawaii	1,920
43	Washington	7.64	Alaska	2,180	Arizona	1,883
44	Utah	7.58	Montana	2,171	Maryland	1,881
45	West Virginia	7.33	Rhode Island	2,044	New York	1,879
46	Indiana	7.31	Wyoming	1,873	Oregon	1,868
47	Texas	6.94	North Dakota	1,699	Washington	1,840
48	Alaska	6.69	Delaware	1,692	Utah	1,795
49	Wyoming	6.51	South Dakota	1,629	Colorado	1,768
50	North Dakota	6.25	Vermont	1,368	California	1,715
51	Louisiana	5.81	District of Columbia	1,334	Florida	1,711
	United States	8.82	United States	[a] 567,318	United States	2,119

[a] Includes $72 million for coal coke net imports, which are not allocated to the States.
Note: Rankings are based on unrounded data.
Source: Combined State Energy Data System 1997.

Table 2. Motor Gasoline Prices and Expenditures Ranked by State, 1997

Rank	Prices		Expenditures		Expenditures per Person	
	State	Dollars per Million Btu	State	Million Dollars	State	Dollars
1	Hawaii	12.16	California	17,266	Wyoming	781
2	Alaska	11.91	Texas	11,163	Montana	744
3	Connecticut	11.84	Florida	7,712	South Dakota	727
4	Oregon	11.05	New York	6,853	Maine	701
5	Montana	10.84	Pennsylvania	6,124	Vermont	696
6	Rhode Island	10.79	Ohio	6,035	North Dakota	680
7	Massachusetts	10.64	Illinois	5,880	New Hampshire	663
8	Arizona	10.51	Michigan	5,329	New Mexico	662
9	Nevada	10.50	North Carolina	4,538	Idaho	657
10	Idaho	10.46	New Jersey	4,404	Nevada	655
11	Colorado	10.45	Georgia	4,314	Kentucky	650
12	Utah	10.39	Virginia	4,095	Minnesota	648
13	Washington	10.39	Missouri	3,422	Alaska	648
14	Minnesota	10.37	Massachusetts	3,406	Arkansas	639
15	Maine	10.36	Indiana	3,341	Delaware	634
16	Delaware	10.34	Washington	3,340	Missouri	633
17	District of Columbia	10.28	Tennessee	3,329	Alabama	632
18	Vermont	10.26	Minnesota	3,038	Mississippi	630
19	Maryland	10.26	Wisconsin	2,926	Connecticut	627
20	West Virginia	10.22	Maryland	2,888	Tennessee	620
21	California	10.18	Alabama	2,730	Colorado	617
22	Pennsylvania	10.16	Arizona	2,698	Iowa	617
23	New Mexico	10.11	Kentucky	2,540	North Carolina	611
24	New Hampshire	10.08	Colorado	2,402	Virginia	608
25	South Dakota	10.04	Louisiana	2,363	Oklahoma	602
26	Wisconsin	10.00	South Carolina	2,271	Oregon	601
27	New York	9.96	Connecticut	2,049	Nebraska	600
28	Illinois	9.88	Oklahoma	2,000	South Carolina	600
29	Ohio	9.71	Oregon	1,950	Washington	595
30	Kentucky	9.64	Iowa	1,761	Arizona	593
31	North Dakota	9.61	Mississippi	1,722	West Virginia	584
32	Louisiana	9.59	Arkansas	1,612	Utah	582
33	Tennessee	9.58	Kansas	1,495	Georgia	576
34	Virginia	9.57	Utah	1,203	Texas	576
35	Nebraska	9.55	New Mexico	1,142	Kansas	574
36	North Carolina	9.50	Nevada	1,100	Indiana	570
37	New Jersey	9.44	West Virginia	1,061	Maryland	567
38	Texas	9.44	Nebraska	995	Wisconsin	563
39	Iowa	9.42	Maine	870	Massachusetts	557
40	Wyoming	9.39	Idaho	795	New Jersey	547
41	Alabama	9.33	New Hampshire	777	Michigan	545
42	Kansas	9.27	Montana	654	Louisiana	543
43	Mississippi	9.26	Hawaii	598	Ohio	539
44	Arkansas	9.24	South Dakota	536	California	537
45	Missouri	9.23	Rhode Island	521	Rhode Island	528
46	Indiana	9.11	Delaware	466	Florida	525
47	Florida	9.07	North Dakota	436	Pennsylvania	510
48	Michigan	9.03	Vermont	410	Hawaii	502
49	Oklahoma	8.92	Alaska	395	Illinois	490
50	South Carolina	8.74	Wyoming	375	District of Columbia	414
51	Georgia	8.09	District of Columbia	220	New York	378
	United States	9.73	United States	149,549	United States	559

Note: Rankings are based on unrounded data.
Source: Combined State Energy Data System 1997.

Table 3. Petroleum and Natural Gas Prices and Expenditures Ranked by State, 1997

Rank	Petroleum				Natural Gas			
	Prices		Expenditures		Prices		Expenditures	
	State	Dollars per Million Btu	State	Million Dollars	State	Dollars per Million Btu	State	Million Dollars
1	Arizona	9.27	Texas	30,027	Hawaii	[a] 15.88	Texas	10,365
2	Colorado	9.08	California	25,651	District of Columbia	8.15	California	8,879
3	Rhode Island	9.04	Florida	12,121	New Hampshire	6.94	New York	7,913
4	Idaho	9.00	New York	12,117	Maine	6.86	Illinois	5,382
5	New Mexico	8.98	Pennsylvania	10,656	Massachusetts	6.79	Ohio	5,139
6	Vermont	8.95	Ohio	10,321	Connecticut	6.75	Pennsylvania	4,314
7	District of Columbia	8.88	Illinois	9,879	Pennsylvania	6.50	Michigan	4,264
8	Wisconsin	8.88	Michigan	8,499	New York	6.32	Louisiana	3,751
9	Utah	8.77	New Jersey	8,382	Virginia	6.07	New Jersey	3,532
10	Oregon	8.70	Louisiana	7,643	North Carolina	5.95	Indiana	2,743
11	Nevada	8.68	North Carolina	7,332	Missouri	5.79	Massachusetts	2,622
12	Illinois	8.56	Georgia	7,017	Maryland	5.78	Wisconsin	2,014
13	Minnesota	8.53	Virginia	6,544	Ohio	5.69	Georgia	1,995
14	South Dakota	8.52	Indiana	6,257	Rhode Island	5.62	Florida	1,928
15	Arkansas	8.51	Missouri	5,884	Georgia	5.62	Oklahoma	1,884
16	Pennsylvania	8.49	Massachusetts	5,871	New Jersey	5.61	Missouri	1,615
17	Maryland	8.48	Washington	5,806	Tennessee	5.12	Minnesota	1,537
18	Iowa	8.44	Tennessee	5,507	Wisconsin	5.11	Virginia	1,448
19	Ohio	8.43	Minnesota	5,176	Indiana	5.08	Tennessee	1,340
20	California	8.42	Wisconsin	4,908	Illinois	5.03	Alabama	1,298
21	Nebraska	8.35	Kentucky	4,755	Arizona	5.00	North Carolina	1,275
22	Kansas	8.31	Maryland	4,471	Iowa	4.97	Maryland	1,220
23	Michigan	8.30	Alabama	4,312	Kentucky	4.97	Iowa	1,220
24	North Carolina	8.29	Arizona	4,005	Delaware	4.90	Colorado	1,097
25	Montana	8.27	Connecticut	3,605	Vermont	4.90	Kansas	1,083
26	Connecticut	8.23	South Carolina	3,545	California	4.88	Kentucky	1,036
27	New Hampshire	8.20	Colorado	3,521	South Dakota	4.79	Arkansas	981
28	Alabama	8.15	Oklahoma	3,390	Nebraska	4.79	Connecticut	932
29	Virginia	8.13	Oregon	3,200	Montana	4.76	Washington	909
30	Oklahoma	8.12	Iowa	3,166	South Carolina	4.76	Mississippi	749
31	Wyoming	8.11	Mississippi	3,091	Alabama	4.69	South Carolina	741
32	Missouri	8.09	Kansas	2,802	Minnesota	4.58	Nebraska	612
33	Tennessee	8.09	Arkansas	2,625	Nevada	4.57	Oregon	610
34	New York	7.95	Utah	2,125	West Virginia	4.57	Nevada	590
35	North Dakota	7.93	West Virginia	2,062	Michigan	4.52	Arizona	574
36	Kentucky	7.92	Nebraska	1,999	Kansas	4.48	West Virginia	568
37	Massachusetts	7.89	Maine	1,923	Arkansas	4.29	Utah	529
38	West Virginia	7.85	New Mexico	1,824	Colorado	4.22	New Mexico	512
39	Indiana	7.68	Nevada	1,812	Oklahoma	4.22	Rhode Island	473
40	South Carolina	7.65	Alaska	1,520	Washington	4.07	District of Columbia	281
41	Delaware	7.62	Idaho	1,471	New Mexico	3.88	Montana	258
42	Mississippi	7.42	Hawaii	1,338	Florida	3.85	Alaska	252
43	Washington	7.37	New Hampshire	1,328	Utah	3.83	Wyoming	250
44	Maine	7.35	Montana	1,290	North Dakota	3.73	Delaware	232
45	New Jersey	7.28	Wyoming	1,075	Mississippi	3.70	Idaho	226
46	Georgia	7.25	South Dakota	981	Oregon	3.67	North Dakota	163
47	Florida	7.18	Rhode Island	941	Idaho	3.55	South Dakota	158
48	Alaska	6.93	North Dakota	894	Wyoming	3.54	New Hampshire	146
49	Hawaii	6.71	Delaware	822	Texas	3.08	Maine	43
50	Texas	6.52	Vermont	794	Louisiana	2.80	Hawaii	42
51	Louisiana	6.12	District of Columbia	306	Alaska	2.07	Vermont	40
	United States	7.82	United States	266,595	United States	4.62	United States	91,769

[a] Based on small quantities of liquefied natural gas.
Note: Rankings are based on unrounded data.
Source: Combined State Energy Data System 1997.

Table 4. Coal and Electricity Prices and Expenditures Ranked by State, 1997

Rank	Coal				Electricity			
	Prices		Expenditures		Prices		Expenditures	
	State	Dollars per Million Btu	State	Million Dollars	State	Dollars per Million Btu	State	Million Dollars
1	Vermont	3.74	Pennsylvania	2,113	Hawaii	36.71	California	21,568
2	Rhode Island	3.50	Texas	1,900	New Hampshire	34.17	Texas	17,386
3	Maine	2.56	Ohio	1,898	New York	32.61	New York	14,682
4	Alaska	2.18	Indiana	1,782	Rhode Island	31.37	Florida	12,588
5	Idaho	1.97	Illinois	1,492	New Jersey	30.93	Pennsylvania	10,157
6	District of Columbia	1.97	Alabama	1,345	Connecticut	30.83	Ohio	9,831
7	Connecticut	1.92	Georgia	1,234	Massachusetts	30.70	Illinois	9,688
8	California	1.78	Florida	1,205	Alaska	29.57	North Carolina	7,068
9	Hawaii	1.78	West Virginia	1,119	Vermont	28.99	New Jersey	6,925
10	New Jersey	1.76	Kentucky	1,107	California	28.06	Michigan	6,806
11	Florida	1.73	Michigan	1,102	Maine	27.86	Georgia	6,484
12	Massachusetts	1.71	North Carolina	1,067	Pennsylvania	23.48	Virginia	5,349
13	Washington	1.69	Tennessee	789	Illinois	22.65	Massachusetts	4,993
14	Arkansas	1.64	Missouri	635	District of Columbia	21.65	Indiana	4,668
15	New Hampshire	1.64	Wisconsin	562	Arizona	21.63	Tennessee	4,587
16	Georgia	1.60	South Carolina	539	Florida	21.08	Louisiana	4,442
17	Alabama	1.57	Arizona	534	Michigan	20.68	Arizona	4,019
18	Mississippi	1.55	Virginia	525	Delaware	20.56	Missouri	4,002
19	Illinois	1.55	New York	463	Maryland	20.46	Maryland	3,928
20	Delaware	1.55	Maryland	432	New Mexico	20.11	Alabama	3,884
21	New York	1.51	North Dakota	411	North Carolina	19.00	South Carolina	3,771
22	Maryland	1.49	Arkansas	406	Georgia	18.72	Washington	3,531
23	South Carolina	1.49	Iowa	402	Kansas	18.53	Wisconsin	3,113
24	Louisiana	1.48	Minnesota	391	Ohio	18.40	Minnesota	3,090
25	North Carolina	1.45	Wyoming	389	South Dakota	18.23	Kentucky	3,067
26	Pennsylvania	1.45	New Mexico	385	Texas	18.23	Connecticut	2,991
27	Arizona	1.45	Utah	374	Arkansas	18.17	Oklahoma	2,398
28	Michigan	1.42	Colorado	362	Virginia	18.02	Mississippi	2,326
29	Nevada	1.39	Oklahoma	349	Missouri	17.86	Colorado	2,244
30	Virginia	1.37	Louisiana	333	Louisiana	17.70	Arkansas	2,216
31	Ohio	1.35	Kansas	318	Colorado	17.50	Oregon	2,197
32	New Mexico	1.34	Nevada	232	Iowa	17.49	Iowa	2,157
33	Oregon	1.27	Massachusetts	211	Mississippi	17.46	Kansas	2,025
34	Texas	1.26	Mississippi	205	North Dakota	16.59	Nevada	1,338
35	Indiana	1.25	Washington	136	Nevada	16.49	West Virginia	1,308
36	West Virginia	1.21	New Jersey	132	Minnesota	16.48	Nebraska	1,196
37	Tennessee	1.17	Nebraska	120	South Carolina	16.13	New Mexico	1,172
38	Minnesota	1.15	Montana	113	Oklahoma	15.93	Hawaii	1,152
39	Wisconsin	1.15	California	87	Alabama	15.76	Maine	1,137
40	Kentucky	1.12	Delaware	75	Tennessee	15.60	New Hampshire	1,059
41	North Dakota	1.06	New Hampshire	73	Indiana	15.55	Utah	1,042
42	Iowa	1.03	Connecticut	54	Nebraska	15.53	Idaho	821
43	Colorado	1.02	South Dakota	42	Wisconsin	15.35	District of Columbia	747
44	Utah	1.02	Alaska	26	Montana	15.31	Rhode Island	716
45	Kansas	1.02	Oregon	21	Utah	15.25	Delaware	704
46	South Dakota	1.00	Idaho	13	West Virginia	14.75	Montana	611
47	Missouri	0.95	Maine	12	Oregon	13.52	Vermont	525
48	Oklahoma	0.95	Hawaii	6	Wyoming	12.78	Wyoming	499
49	Wyoming	0.83	District of Columbia	2	Washington	11.90	Alaska	485
50	Montana	0.70	Rhode Island	(s)	Kentucky	11.86	South Dakota	483
51	Nebraska	0.62	Vermont	(s)	Idaho	11.33	North Dakota	466
	United States	1.31	United States	27,522	United States	20.15	United States	213,645

(s)=Value less than 0.5 million dollars.
Note: Rankings are based on unrounded data.
Source: Combined State Energy Data System 1997.

United States Tables

Table 5. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, United States

Year	Primary Energy																Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Coal Coke		Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total	Exports	Imports		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																		
1970	0.45	0.35	0.37	1.27	0.93	0.59	1.16	0.73	1.46	2.85	0.42	R 1.38	R 1.72	0.18	R 1.29	1.08	0.32	R 4.98	1.65
1975	1.65	0.90	1.03	2.37	3.47	1.18	2.60	2.05	2.97	4.65	1.93	R 2.92	R 3.35	0.24	R 1.50	2.19	0.96	8.61	3.33
1980	2.10	1.38	1.47	2.54	3.19	2.86	6.70	6.36	5.64	9.84	3.88	R 7.02	R 7.40	0.43	R 2.26	R 4.57	1.75	13.95	R 6.89
1981	2.34	1.57	1.65	2.55	3.28	3.43	8.03	7.57	6.18	10.94	4.91	R 8.63	R 8.68	0.48	R 2.53	R 5.24	2.00	16.14	R 8.03
1982	2.43	1.68	1.73	2.49	3.10	4.23	7.78	7.23	6.66	10.39	4.65	R 7.83	R 8.39	0.54	R 2.54	R 5.32	2.01	18.16	R 8.46
1983	2.14	1.68	1.71	2.76	2.25	4.72	7.32	6.53	7.17	9.12	4.50	R 7.58	R 7.77	0.58	R 2.43	R 5.11	1.98	18.62	R 8.39
1984	2.09	1.68	1.71	2.68	3.27	4.75	7.36	6.25	6.93	8.89	4.75	R 7.64	R 7.67	0.67	R 2.50	R 5.02	1.97	18.50	R 8.28
1985	2.03	1.67	1.70	2.76	2.99	4.61	7.18	5.91	6.54	9.01	4.30	R 7.52	R 7.62	0.71	R 2.40	R 4.90	1.85	19.05	R 8.36
1986	1.90	1.60	1.62	2.63	3.11	4.07	5.66	3.92	6.42	6.79	2.37	R 5.77	R 5.72	0.70	R 2.09	R 3.95	1.55	R 19.05	R 7.30
1987	1.74	R 1.52	1.54	3.37	2.40	3.77	5.94	4.03	6.06	7.22	2.86	R 5.59	R 6.03	0.71	R 2.06	R 3.97	1.51	18.74	R 7.33
1988	1.79	1.48	1.50	2.85	2.90	3.78	5.80	3.80	5.86	7.32	2.35	R 5.23	R 5.90	0.73	R 2.07	R 3.87	1.45	18.68	R 7.26
1989	1.78	1.47	1.49	2.98	3.79	3.85	6.45	4.39	5.53	8.01	2.72	R 5.47	R 6.42	0.70	e R 1.85	e R 4.09	1.48	18.98	e R 7.61
1990	1.79	1.48	1.49	3.53	3.80	3.85	7.70	5.68	6.75	9.12	3.16	R 5.80	R 7.47	0.67	R 1.95	R 4.50	1.46	19.33	R 8.29
1991	1.83	1.47	1.49	2.74	3.40	3.78	7.28	4.83	6.79	8.93	2.62	R 5.72	R 7.19	0.63	R 1.96	4.32	1.37	19.85	R 8.24
1992	1.83	1.44	R 1.45	2.78	3.32	3.89	7.11	4.52	6.19	8.96	2.27	R 5.49	R 7.07	0.59	R 1.88	4.29	1.34	R 20.06	R 8.17
1993	1.79	1.41	1.43	2.88	3.04	4.16	7.10	4.29	6.20	8.82	2.25	R 5.47	R 7.01	0.56	R 1.74	R 4.31	1.35	20.38	R 8.27
1994	1.73	1.38	R 1.39	2.46	3.31	4.15	7.03	3.95	6.61	8.91	2.32	R 5.46	R 7.05	0.56	R 1.84	4.32	1.30	20.34	R 8.31
1995	1.76	1.35	1.37	2.71	R 3.43	3.81	7.02	4.00	6.54	9.14	2.46	R 5.72	R 7.26	0.54	R 1.84	4.29	1.23	20.30	R 8.29
1996	1.77	1.31	1.33	2.20	3.87	4.33	7.90	4.82	7.91	9.77	2.79	6.22	7.99	0.51	1.86	4.70	1.28	20.17	8.77
1997	1.62	1.30	1.31	2.64	3.25	4.62	7.70	4.53	7.42	9.73	2.83	5.71	7.82	0.51	1.79	4.72	1.30	20.15	8.82
	Expenditures in Million Nominal Dollars																		
1970	R 1,175	R 3,419	R 4,594	R -78	R 4	R 10891	R 6,253	R 1,441	R 2,446	31,596	R 2,046	R 4,159	R 47,942	R 44	R 438	R 63,833	R -4,316	R 23,345	R 82,862
1975	R 3,692	R 9,356	R 13,047	R -75	R 156	R 20061	R 15,680	R 4,193	R 5,231	R 59,446	R 10,374	R 8,448	R 103,372	R 448	R 534	R 137,544	R -16,396	R 50,680	R 171,828
1980	R 3,753	R 18,895	22,648	R -130	R 52	R 51061	R 40,797	R 13923	R 10926	R 124,408	R 21,573	R 26,001	R 237,628	R 1,189	R 1,251	R 313,699	R -37,435	R 98,095	R 374,359
1981	R 3,831	R 22,399	R 26,231	-74	R 43	R 60544	R 48,200	R 15607	R 11900	R 138,138	R 22,668	R 28,445	R 264,957	R 1,436	R 1,452	R 354,589	-43,275	R 116,455	R 427,769
1982	R 2,661	R 23,765	R 26,426	R -61	R 9	R 68292	R 44,087	R 14974	R 12925	R 130,305	R 17,632	R 22,355	R 242,279	R 1,684	R 1,475	R 340,105	-41,311	R 127,393	R 426,187
1983	R 2,128	R 24,923	27,051	R -46	2	R 72000	R 41,846	R 13979	R 14083	115,816	R 14,099	R 21,536	R 221,359	R 1,859	R 1,504	R 323,728	R -41,336	R 134,731	R 417,124
1984	R 2,461	R 26,632	R 29,093	R -69	R 47	R 77169	44,580	R 15097	R 14143	R 114,438	R 14,410	R 22,576	R 225,243	R 2,384	R 1,552	R 335,418	R -43,378	R 142,420	R 434,460
1985	R 2,228	R 27,495	R 29,723	R -77	R 43	R 72938	R 43,759	R 14747	R 13545	R 118,043	R 11,493	R 22,004	R 223,591	R 2,930	R 1,471	R 330,618	R -42,558	R 149,233	R 437,292
1986	R 1,825	R 26,070	R 27,895	R -66	R 25	R 59702	R 34,995	R 10505	R 12694	R 91,526	R 7,486	R 17,579	R 174,785	R 3,125	R 1,299	R 266,765	R -35,793	R 151,793	R 382,766
1987	R 1,718	R 25,849	R 27,566	-48	R 55	R 58019	R 37,587	R 11448	R 12859	R 99,803	R 8,062	R 17,581	R 187,340	R 3,486	R 1,278	R 277,696	-36,692	R 154,685	R 395,689
1988	R 2,006	R 26,360	R 28,365	R -77	R 194	R 61089	R 38,593	R 11318	R 12775	R 103,206	R 7,259	R 16,674	R 189,824	R 4,111	R 1,334	R 284,841	R -37,435	R 162,063	R 409,468
1989	R 1,934	R 26,172	R 28,105	R -80	R 217	R 65383	R 43,246	R 13434	R 12154	R 112,586	R 8,354	R 16,965	R 206,739	R 3,992	e R 1,670	e R 306,125	R -38,995	R 169,332	e R 436,463
1990	1,862	R 26,510	R 28,372	R -50	R 72	R 64102	R 49,430	R 17784	R 13680	R 126,454	R 8,707	R 19,169	R 235,224	R 4,142	R 1,628	R 333,325	R -38,276	R 176,737	R 471,786
1991	R 1,660	R 26,211	R 27,871	R -50	R 93	R 64697	45,181	14,609	R 14922	R 123,048	R 6,786	R 18,160	R 222,706	R 4,172	R 1,703	R 321,225	R -36,534	R 184,814	R 469,505
1992	R 1,587	R 25,822	R 27,409	R -44	R 143	R 68400	R 45,110	13,559	R 14161	R 125,156	R 5,575	R 18,267	R 221,829	R 3,878	R 1,711	R 323,378	R -35,817	R 186,954	R 474,515
1993	R 1,505	R 26,258	R 27,763	R -60	R 116	R 75941	R 45,885	R 13002	R 13961	R 126,401	R 5,439	R 18,250	R 222,936	R 3,658	R 1,621	R 332,016	R -36,692	R 196,579	R 491,904
1994	R 1,473	R 25,713	R 27,186	R -40	R 132	R 77716	R 47,240	R 12474	R 16253	R 129,897	R 5,288	R 18,654	R 229,804	3,858	R 1,934	R 340,801	R -36,166	R 200,883	R 505,518
1995	R 1,558	R 25,303	R 26,861	R -50	R 155	R 74150	R 47,845	R 12525	R 16250	R 136,475	R 4,667	R 19,175	R 236,937	R 3,865	R 2,143	R 344,199	R -34,810	R 205,932	R 515,321
1996	1,507	25,861	27,368	-61	107	85,634	56,675	15,770	20,898	148,230	5,297	21,202	268,071	3,666	2,215	387,076	-36,614	211,011	561,473
1997	1,312	26,211	27,522	-55	126	91,769	56,199	15,000	19,865	149,549	5,036	20,946	266,595	3,396	1,986	391,489	-37,815	213,645	567,318

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 6. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, United States

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.13	1.06	1.39	1.54	2.12	1.56	0.66	R 1.23	6.51	R 2.11
1975	2.47	1.67	2.74	3.14	4.02	3.04	1.31	R 2.12	10.29	R 3.81
1980	2.90	3.60	7.02	8.32	7.92	7.26	3.08	R 4.51	15.71	R 7.44
1981	3.55	4.19	8.63	10.53	8.34	8.68	3.79	R 5.24	18.17	R 8.79
1982	3.64	5.05	8.38	10.47	9.24	8.69	3.67	R 5.79	20.11	R 9.74
1983	3.15	5.88	8.11	R 7.64	9.46	R 8.43	3.56	R 6.32	21.04	R 10.63
1984	3.40	5.95	8.24	R 7.90	9.45	R 8.48	3.85	R 6.37	20.96	R 10.69
1985	3.25	5.94	7.92	R 7.90	9.10	R 8.18	3.70	R 6.36	21.66	R 10.93
1986	3.11	5.67	6.35	R 6.37	8.57	R 6.85	2.97	R 5.82	21.75	R 10.78
1987	2.76	5.39	6.05	R 6.44	8.64	R 6.70	2.87	R 5.59	21.82	R 10.75
1988	2.64	5.32	6.11	R 6.31	8.45	R 6.66	2.89	R 5.53	21.92	R 10.70
1989	2.67	5.47	6.76	R 6.19	10.38	R 7.65	3.20	c R 5.87	22.41	c R 11.05
1990	3.02	5.63	8.01	R 7.46	10.94	R 8.82	3.59	R 6.19	22.96	R 11.91
1991	3.07	5.66	7.65	R 7.09	10.94	R 8.61	3.43	R 6.15	23.57	R 12.09
1992	2.88	5.72	7.00	R 6.36	10.39	R 7.96	3.14	R 6.04	24.06	R 12.00
1993	3.00	5.99	6.84	R 5.89	10.25	R 7.77	3.03	R 6.22	24.40	R 12.29
1994	2.69	6.23	6.64	R 6.05	10.89	R 7.87	2.94	R 6.42	24.57	R 12.63
1995	R 2.59	5.89	6.52	R 5.74	10.85	R 7.76	2.88	R 6.13	24.63	R 12.57
1996	2.56	6.16	7.47	6.33	12.30	8.85	3.30	6.58	24.50	12.68
1997	2.50	6.75	7.43	6.29	12.22	8.83	3.29	7.05	24.71	13.24
	Expenditures in Million Nominal Dollars									
1970	R 173	R 5,272	R 2,603	R 459	R 1,225	R 4,286	68	R 9,799	R 10,352	R 20,151
1975	R 209	R 8,410	R 4,954	504	R 2,124	7,582	143	R 16,344	R 20,644	R 36,988
1980	R 175	R 17,497	R 9,234	R 887	R 2,575	R 12,695	698	R 31,065	R 38,458	R 69,523
1981	R 249	R 19,502	R 9,902	R 899	R 2,593	R 13,394	869	R 34,014	R 44,780	R 78,795
1982	R 275	R 23,987	R 8,796	R 995	R 2,735	12,526	909	R 37,697	50,045	R 87,742
1983	239	R 26,564	7,500	R 652	R 3,334	R 11,486	869	R 39,158	R 53,918	R 93,076
1984	R 280	R 27,873	R 7,910	R 695	R 2,738	R 11,344	897	R 40,393	R 55,777	R 96,170
1985	R 225	R 27,136	R 7,910	R 1,252	R 2,974	R 12,136	840	R 40,338	R 58,672	R 99,009
1986	R 215	R 25,147	R 6,428	R 773	2,770	R 9,971	656	R 35,989	R 60,776	R 96,766
1987	R 181	R 23,926	R 6,236	R 765	3,107	R 10,108	627	R 34,842	R 63,318	R 98,160
1988	R 174	R 25,332	R 6,497	R 906	R 3,011	R 10,413	657	R 36,576	R 66,793	R 103,369
1989	R 156	R 26,953	R 7,038	R 726	4,170	R 11,933	754	c R 39,797	R 69,243	c R 109,040
1990	R 187	R 25,442	R 6,703	R 477	R 3,992	R 11,172	878	R 37,678	R 72,379	R 110,057
1991	R 173	R 26,508	R 6,361	R 513	R 4,260	R 11,134	884	R 38,699	76,828	R 115,527
1992	R 163	R 27,598	R 6,054	R 413	R 3,974	R 10,441	851	R 39,054	R 76,848	R 115,902
1993	R 170	R 30,536	6,245	R 445	R 4,084	R 10,774	726	R 42,205	R 82,814	R 125,019
1994	R 148	R 31,028	R 5,843	R 393	R 4,308	R 10,543	691	R 42,410	R 84,552	R 126,963
1995	R 138	R 29,360	R 5,751	R 426	R 4,386	R 10,563	752	R 40,814	R 87,610	R 128,423
1996	139	33,222	6,947	562	5,395	12,904	861	47,127	90,501	137,628
1997	145	34,590	6,687	584	5,368	12,638	623	47,996	90,694	138,691

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 7. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, United States

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.45	0.75	1.10	0.77	1.24	2.86	0.45	0.90	0.66	0.79	R 6.09	R 1.96
1975	1.31	1.32	2.42	2.32	2.60	4.66	1.91	2.39	1.31	1.67	10.11	4.09
1980	1.55	3.32	6.45	6.46	5.15	9.77	4.12	5.64	3.08	4.02	16.06	7.88
1981	1.81	3.91	7.96	7.48	5.95	10.96	5.12	7.00	3.79	4.75	R 18.44	9.55
1982	1.88	4.70	7.68	7.31	6.32	10.44	4.67	6.65	3.67	5.14	20.11	R 10.43
1983	1.75	5.43	6.61	R 7.10	6.83	9.13	4.51	R 6.51	3.56	5.64	20.57	R 11.01
1984	1.80	5.40	6.58	R 6.96	6.82	8.94	4.94	R 6.47	3.85	R 5.61	R 20.89	R 11.20
1985	R 1.77	5.34	6.31	R 8.18	8.97	9.01	4.50	R 6.37	NA	R 5.53	R 21.30	11.71
1986	R 1.69	4.94	4.16	R 5.21	8.58	6.77	2.71	R 4.31	NA	R 4.65	21.10	R 11.30
1987	R 1.53	4.64	4.42	R 5.11	8.02	R 7.21	3.10	R 4.63	NA	R 4.55	R 20.44	R 11.04
1988	1.54	4.51	4.15	R 6.11	8.16	7.33	2.53	R 4.37	NA	4.39	20.34	10.90
1989	1.54	4.61	4.87	R 6.01	7.67	8.03	2.92	R 4.97	NA	4.63	20.77	11.38
1990	R 1.64	4.70	5.94	R 7.31	9.01	9.15	3.41	R 5.92	NA	4.92	R 21.19	12.02
1991	R 1.60	4.69	5.42	R 6.67	9.45	8.98	2.61	R 5.42	NA	4.79	21.73	12.20
1992	R 1.61	4.75	5.07	R 5.96	8.82	9.07	2.68	5.22	NA	4.78	22.15	R 12.31
1993	R 1.62	5.08	4.91	R 5.64	9.19	9.13	2.75	4.99	3.03	R 4.96	R 22.40	R 12.68
1994	R 1.58	5.35	4.71	R 5.94	9.01	9.14	2.90	R 4.87	2.94	R 5.16	R 22.35	R 12.87
1995	R 1.56	4.94	4.69	R 5.55	9.11	9.30	3.14	4.96	2.88	R 4.86	R 22.28	R 12.75
1996	1.52	5.26	5.62	6.40	10.04	10.20	3.75	5.92	3.30	5.30	22.16	12.88
1997	1.52	5.67	5.29	6.18	10.33	9.93	3.27	5.83	3.29	5.60	22.03	13.15
	Expenditures in Million Nominal Dollars											
1970	R 98	R 1,844	R 646	R 47	R 127	R 247	R 323	R 1,391	1	R 3,334	R 7,319	R 10,654
1975	R 162	R 3,385	R 1,423	R 114	R 242	R 415	R 939	R 3,133	3	R 6,682	R 16,157	R 22,839
1980	R 135	R 8,858	R 3,337	R 262	R 296	R 1,046	R 2,325	R 7,267	17	R 16,277	R 30,611	R 46,888
1981	R 175	R 10,085	R 3,641	R 519	R 327	R 1,003	R 2,138	R 7,628	21	R 17,909	R 37,484	R 55,393
1982	R 210	R 12,565	R 3,378	R 222	R 330	R 914	R 1,862	R 6,706	22	R 19,502	R 41,759	R 61,261
1983	R 205	R 13,602	R 4,304	R 790	R 424	934	R 939	R 7,392	21	R 21,219	R 43,529	R 64,748
1984	R 228	R 14,012	4,480	R 649	R 348	R 957	R 1,311	R 7,746	21	R 22,008	R 47,304	R 69,312
1985	R 189	R 13,368	R 3,942	R 268	R 517	R 866	R 1,025	R 6,618	NA	R 20,175	R 50,092	R 70,267
1986	R 180	R 11,770	R 2,477	R 260	R 489	720	R 786	R 4,732	NA	R 16,683	R 51,449	R 68,132
1987	R 152	R 11,601	R 2,626	R 249	509	R 799	R 814	R 4,997	NA	R 16,750	R 51,900	R 68,650
1988	R 158	R 12,377	R 2,379	R 160	R 513	R 809	R 666	R 4,526	NA	R 17,061	R 54,411	R 71,472
1989	R 135	R 12,909	R 2,604	R 166	R 544	R 819	R 672	R 4,804	NA	R 17,848	R 57,460	R 75,308
1990	R 153	R 12,681	R 2,894	R 87	R 581	R 1,017	R 796	R 5,374	NA	R 18,208	R 60,620	R 78,828
1991	R 135	R 13,176	2,612	R 81	R 649	R 764	557	R 4,663	NA	R 17,974	R 63,399	R 81,373
1992	R 138	R 13,686	R 2,351	R 66	R 595	R 722	512	R 4,246	NA	R 18,070	R 64,226	R 82,296
1993	R 139	R 14,966	R 2,277	R 79	R 647	270	481	R 3,754	58	R 18,858	R 67,616	R 86,474
1994	R 131	R 15,926	R 2,187	R 116	R 629	R 232	R 505	R 3,668	58	R 19,782	R 69,627	R 89,409
1995	R 126	R 15,386	R 2,156	R 123	R 650	R 170	R 452	R 3,550	57	R 19,118	R 72,469	R 91,587
1996	124	17,111	2,674	135	777	273	524	4,383	71	21,689	74,109	95,798
1997	132	18,768	2,360	152	800	428	371	4,110	60	23,071	77,138	100,209

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.
NA=Not available.

Table 8. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, United States

Year	Primary Energy																	Electricity	Total Energy [c]
	Coal			Coal Coke		Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total	Exports	Imports		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																		
1970	0.45	0.44	0.45	1.27	0.93	0.38	0.68	0.72	0.77	1.10	5.08	2.86	0.46	R 1.06	R 0.98	—	R 0.61	2.99	R 0.98
1975	1.65	1.28	1.50	2.37	3.47	0.95	1.89	2.23	2.34	2.51	7.48	4.65	1.91	R 2.66	R 2.45	R 1.60	1.67	6.07	R 2.12
1980	2.10	1.56	1.87	2.54	3.19	2.52	3.68	5.54	6.30	5.18	14.36	9.82	3.69	R 7.29	R 5.74	R 1.67	R 3.76	10.81	R 5.15
1981	2.34	1.75	2.06	2.55	3.28	3.07	5.02	6.52	7.22	5.76	18.00	10.89	4.48	R 8.51	R 6.83	R 1.67	R 4.38	12.57	R 5.74
1982	2.43	1.84	2.09	2.49	3.10	3.80	4.24	6.61	7.41	6.19	17.25	10.43	4.46	R 7.68	R 6.49	R 1.67	R 4.64	14.51	R 6.46
1983	2.14	1.75	1.91	2.76	2.25	4.10	4.32	6.58	R 6.92	6.66	16.98	9.25	4.38	R 7.52	R 6.56	R 1.67	R 4.68	14.54	R 6.52
1984	2.09	R 1.79	R 1.91	2.68	3.27	4.13	4.54	6.53	R 6.89	6.49	17.63	8.98	4.73	R 7.38	R 6.54	—	R 4.66	14.16	R 6.31
1985	2.03	1.81	R 1.90	2.76	2.99	3.87	4.77	6.24	R 6.86	5.91	17.61	9.07	4.24	R 7.09	R 6.28	R 1.67	R 4.45	14.57	R 6.27
1986	1.90	R 1.74	1.80	2.63	3.11	3.20	4.34	4.01	R 4.77	5.87	15.59	6.80	2.47	R 4.56	R 4.89	R 1.65	R 3.64	14.45	R 5.62
1987	1.74	R 1.63	R 1.67	3.37	2.40	2.88	3.56	4.48	R 4.66	5.41	13.58	7.25	2.86	R 5.14	R 4.93	R 1.65	R 3.50	13.98	R 5.03
1988	1.79	1.61	1.68	2.85	2.90	2.90	3.39	4.10	R 4.34	5.22	14.62	7.32	2.34	R 4.31	R 4.59	R 1.65	R 3.34	13.78	R 4.51
1989	1.78	1.61	1.68	2.98	3.79	2.93	2.95	4.80	R 5.25	4.27	14.48	8.05	2.75	R 5.08	R 4.66	—	d R 3.32	13.85	d R 4.64
1990	1.79	R 1.62	1.69	3.53	3.80	2.95	3.02	5.89	R 6.61	5.66	14.60	9.15	3.10	R 5.73	R 5.45	R 1.30	R 3.65	13.92	R 5.25
1991	1.83	1.62	1.69	2.74	3.40	2.80	3.14	5.28	R 5.75	5.71	16.80	8.95	2.44	R 5.13	R 5.29	R 1.31	R 3.53	14.18	R 5.13
1992	1.83	1.62	1.69	2.78	3.32	2.91	2.50	5.15	R 5.00	5.18	18.32	8.94	2.46	R 4.93	R 4.97	R 0.68	R 3.48	14.18	R 4.87
1993	1.79	R 1.54	R 1.63	2.88	3.04	3.14	2.90	5.05	R 4.84	5.14	18.96	8.81	2.41	R 4.56	R 4.88	1.36	R 3.51	14.22	R 4.99
1994	1.73	R 1.57	R 1.62	2.46	3.31	3.11	2.93	4.85	R 5.00	5.62	19.11	8.91	2.50	R 4.40	R 5.00	R 1.73	R 3.55	14.00	R 4.92
1995	1.76	R 1.56	R 1.63	2.71	R 3.43	2.83	3.18	4.87	R 4.55	5.55	R 19.41	9.10	2.75	R 4.69	R 5.16	R 0.80	R 3.45	13.68	R 4.74
1996	1.77	1.54	1.62	2.20	3.87	3.34	3.29	5.80	5.62	6.91	20.08	9.76	3.25	5.51	6.01	1.43	4.01	13.49	5.49
1997	1.62	1.54	1.57	2.64	3.25	3.58	3.54	5.46	5.12	6.32	17.86	9.72	3.03	4.82	5.58	1.47	3.98	13.29	5.20
	Expenditures in Million Nominal Dollars																		
1970	R 1,175	R 907	R 2,082	R -78	R 4	R 2,625	R 731	R 866	R 142	R 1,046	R 786	R 824	R 635	R 1,025	R 6,056	R 366	R 11,054	R 5,624	R 16,678
1975	R 3,692	R 1,806	R 5,498	R -75	R 156	R 5,844	R 1,914	R 2,907	R 278	2,760	R 1,119	1,039	R 2,367	R 3,114	R 15,499	R 386	R 27,308	R 13,760	R 41,068
1980	R 3,753	R 2,135	R 5,888	R -130	R 52	R 16,350	R 3,543	R 7,232	R 1,143	R 7,967	R 2,613	1,553	R 4,175	R 14,491	R 42,717	R 528	R 65,405	R 28,863	R 94,268
1981	R 3,831	R 2,610	6,441	-74	R 43	R 20,432	R 4,156	R 8,983	R 779	R 8,789	3,142	R 1,741	R 4,086	R 15,368	R 47,045	R 558	R 74,444	R 34,007	R 108,451
1982	R 2,661	R 2,640	5,301	R -61	R 9	R 20,504	R 3,514	R 8,599	R 1,044	R 9,656	R 2,745	R 1,442	R 4,025	R 10,724	R 41,749	R 540	R 68,042	R 35,364	R 103,406
1983	R 2,128	R 2,606	R 4,735	R -46	2	R 21,461	R 3,902	R 7,477	R 458	10,064	R 2,830	1,039	R 2,908	R 9,723	R 38,400	R 610	R 65,162	R 37,017	R 102,179
1984	R 2,461	R 2,959	R 5,420	R -69	R 47	R 23,763	R 4,501	R 7,727	R 399	R 10,782	R 3,134	R 1,436	R 3,647	R 9,778	R 41,403	R 622	R 71,185	R 39,050	R 110,235
1985	R 2,228	R 3,024	R 5,252	R -77	R 43	R 21,615	R 4,916	R 7,379	R 304	R 9,804	R 2,916	1,977	R 2,815	R 9,082	R 39,193	R 619	R 66,645	R 40,190	R 106,835
1986	R 1,825	R 2,920	R 4,745	R -66	R 25	R 16,479	R 4,717	R 4,772	R 153	R 9,218	R 2,525	R 1,402	R 1,574	R 6,261	R 30,622	R 639	R 52,444	R 39,271	R 91,716
1987	R 1,718	R 2,730	R 4,448	-48	R 55	15,909	R 4,018	R 5,472	R 132	9,079	R 2,486	R 1,490	R 1,436	R 7,229	R 31,342	R 636	R 52,342	R 39,109	R 91,451
1988	R 2,006	R 2,738	R 4,744	R -77	R 194	R 17,257	R 3,848	R 4,991	R 130	R 9,071	R 2,580	R 1,412	R 1,082	R 6,239	R 29,352	R 662	R 52,132	R 40,507	R 92,639
1989	R 1,934	R 2,716	R 4,650	R -80	R 217	R 18,770	R 3,228	R 5,497	R 155	R 7,274	R 2,623	R 1,600	R 934	R 7,183	R 28,492	d R 902	d R 52,951	R 42,255	d R 95,205
1990	1,862	R 2,774	R 4,636	R -50	R 72	R 19,348	R 3,529	R 6,938	R 81	R 8,916	R 2,720	R 1,695	R 1,087	R 9,266	R 34,233	R 740	R 58,978	R 43,358	R 102,336
1991	R 1,660	R 2,740	R 4,399	R -50	R 93	R 18,912	R 3,382	R 6,002	R 65	R 9,828	R 2,800	R 1,730	R 658	R 8,294	R 32,759	R 808	R 56,921	44,201	R 101,122
1992	R 1,587	R 2,658	R 4,245	R -44	R 143	R 20,555	R 2,755	R 5,873	R 49	R 9,433	R 3,113	R 1,737	R 804	R 8,561	R 32,324	R 848	R 58,071	R 45,474	R 103,545
1993	R 1,505	R 2,554	R 4,060	R -60	R 116	R 23,426	R 3,336	R 5,540	R 63	R 9,062	3,281	R 1,582	R 930	R 7,617	R 31,411	R 884	R 59,837	R 45,726	R 105,563
1994	R 1,473	R 2,587	R 4,060	R -40	R 132	R 23,949	R 3,438	5,359	R 85	11,028	3,457	R 1,723	R 909	R 7,584	R 33,582	R 1,173	R 62,856	R 46,257	R 109,112
1995	R 1,558	R 2,510	R 4,068	R -50	R 155	R 22,927	R 3,748	R 5,202	R 70	R 11,060	R 3,451	R 1,834	R 793	R 7,752	R 33,910	R 1,321	R 62,330	R 45,402	R 107,732
1996	1,507	2,409	3,917	-61	107	27,949	3,870	6,510	103	14,596	3,465	1,964	931	9,434	40,873	1,270	74,054	45,951	120,005
1997	1,312	2,401	3,713	-55	126	30,043	4,331	6,174	96	13,583	3,256	2,076	751	9,042	39,308	1,293	74,428	45,358	119,786

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.

R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 9. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, United States

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.41	—	2.17	1.31	0.73	1.11	5.08	2.85	0.38	2.31	2.31	4.65	2.31
1975	1.26	—	3.45	2.80	2.05	2.51	7.48	4.64	1.72	4.02	4.02	11.72	4.02
1980	—	—	9.02	7.19	6.36	5.20	14.36	9.84	3.31	8.60	8.60	14.71	8.61
1981	—	—	10.84	8.55	7.57	5.92	18.00	10.94	4.44	9.83	9.83	16.90	9.84
1982	—	—	10.92	8.14	7.23	6.37	17.25	10.39	4.54	9.42	9.42	20.42	9.43
1983	—	—	10.44	7.56	6.53	6.85	16.98	9.12	4.42	8.44	8.44	21.06	8.44
1984	—	—	10.27	7.61	6.25	6.87	17.63	8.89	4.60	8.25	8.25	20.29	8.25
1985	—	—	9.99	7.50	5.91	9.03	17.61	9.01	4.36	8.25	8.25	19.74	8.26
1986	—	—	8.41	6.36	3.92	8.40	15.59	6.79	2.11	6.21	6.21	19.63	6.22
1987	—	—	7.55	6.75	4.03	7.97	13.58	7.22	2.64	6.57	6.57	23.03	6.58
1988	—	—	7.41	6.59	3.80	8.13	14.62	7.32	2.22	6.55	6.55	22.05	6.56
1989	—	—	8.28	7.16	4.39	7.65	14.48	8.01	2.47	7.16	7.16	22.99	7.17
1990	—	3.29	9.32	8.46	5.68	8.87	14.60	9.12	2.98	8.26	8.26	23.50	8.27
1991	—	3.84	8.71	8.11	4.83	9.23	16.80	8.93	2.83	7.97	7.97	23.79	R 7.99
1992	—	3.91	8.54	8.01	4.52	8.72	18.32	8.96	1.98	7.90	7.90	25.25	7.91
1993	—	4.17	8.24	8.05	4.29	8.86	18.96	8.82	1.98	7.86	7.86	25.99	7.87
1994	—	4.10	7.96	8.01	3.95	8.95	19.11	8.91	2.06	7.87	7.87	26.25	7.88
1995	—	4.07	8.36	7.97	4.00	9.19	R 19.41	9.14	2.18	8.03	8.03	26.59	8.04
1996	—	4.23	9.29	8.81	4.82	8.85	20.08	9.77	2.33	8.48	8.71	26.73	8.72
1997	—	4.35	9.39	8.57	4.53	8.54	17.86	9.73	2.72	8.42	8.63	27.12	8.65
	Expenditures in Million Nominal Dollars												
1970	R 3	—	218	R 2,058	R 1,441	R 49	R 745	R 30,525	R 291	R 35,327	35,330	R 49	R 35,379
1975	R 1	—	R 245	R 5,938	R 4,150	R 105	R 1,158	R 57,992	R 1,226	R 70,813	R 70,814	R 119	R 70,933
1980	—	—	R 580	R 20,090	R 13,856	R 88	2,468	R 121,809	R 4,626	R 163,517	R 163,517	R 163	R 163,680
1981	—	—	610	R 24,798	R 15,575	R 191	R 2,968	R 135,394	R 5,411	R 184,946	R 184,946	R 184	R 185,130
1982	—	—	R 513	R 22,709	R 14,955	R 205	R 2,593	127,949	R 4,630	R 173,553	R 173,553	R 225	R 173,778
1983	—	—	R 498	R 21,968	R 13,979	R 261	R 2,673	R 113,843	R 3,632	R 156,854	R 156,854	R 267	R 157,121
1984	—	—	R 450	23,913	R 15,097	R 275	R 2,960	R 112,044	R 3,714	R 158,453	R 158,453	R 290	R 158,743
1985	—	—	R 503	R 24,027	R 14,747	R 250	R 2,754	R 115,199	R 3,422	R 160,903	R 160,903	R 279	R 161,182
1986	—	—	R 496	R 21,012	R 10,505	R 217	R 2,384	R 89,404	R 1,838	R 125,856	R 125,856	R 296	R 126,152
1987	—	—	R 344	R 22,879	R 11,448	R 164	R 2,348	R 97,514	R 2,373	R 137,070	R 137,070	R 358	R 137,429
1988	—	—	R 363	R 24,310	R 11,318	R 180	2,437	R 100,986	R 2,042	R 141,637	R 141,637	R 351	R 141,988
1989	—	—	394	R 27,475	R 13,434	R 167	R 2,477	R 110,168	R 2,420	R 156,535	R 156,535	R 374	R 156,909
1990	—	R 1	R 419	R 32,409	R 17,784	R 192	R 2,569	R 123,742	R 3,067	R 180,183	R 180,184	R 381	R 180,565
1991	—	R 1	R 363	29,818	14,609	R 184	R 2,644	R 120,554	R 2,922	R 171,095	R 171,096	R 386	R 171,482
1992	—	2	R 351	R 30,512	13,559	R 160	R 2,940	R 122,697	R 2,145	R 172,365	R 172,367	R 405	R 172,772
1993	—	R 4	R 316	R 31,479	R 13,002	R 169	R 3,099	R 124,549	R 1,806	R 174,420	R 174,424	R 423	R 174,847
1994	—	R 7	R 304	R 33,457	R 12,474	R 288	R 3,265	R 127,942	R 1,849	R 179,579	R 179,587	R 447	R 180,034
1995	—	R 11	331	R 34,357	R 12,525	154	R 3,260	R 134,471	R 2,019	R 187,116	R 187,127	R 451	R 187,578
1996	—	13	347	40,047	15,770	130	3,272	145,993	2,020	207,579	207,592	449	208,041
1997	—	20	373	40,575	15,000	114	3,075	147,046	1,975	208,158	208,178	454	208,632

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.5 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 10. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years, 1970-1997, United States

Year	Coal	Natural Gas	Petroleum: Heavy Oil	Petroleum: Light Oil	Petroleum: Petroleum Coke	Petroleum: Total	Nuclear Fuel	Wood and Waste	Total Energy [a]
	Prices in Nominal Dollars per Million Btu								
1970	0.31	0.28	0.41	0.57	0.29	0.42	0.18	0.65	0.32
1975	0.82	0.75	1.99	2.22	0.53	2.00	0.24	0.92	0.96
1980	1.35	2.20	4.25	5.75	2.61	4.34	0.43	1.74	1.75
1981	1.53	2.80	5.32	7.32	0.95	5.43	0.48	1.24	2.00
1982	1.65	3.37	4.83	6.99	1.15	4.94	0.54	1.28	2.01
1983	1.66	3.47	4.60	6.20	1.27	4.68	0.58	1.12	1.98
1984	1.66	3.58	4.82	6.22	1.25	4.90	0.67	1.28	1.97
1985	1.65	3.43	4.24	5.89	1.27	4.35	0.71	0.79	1.85
1986	1.58	2.35	2.42	3.67	1.04	2.48	0.70	0.32	1.55
1987	1.51	2.24	2.97	4.17	1.04	3.04	0.71	0.95	1.51
1988	1.47	2.26	2.41	3.81	0.99	2.49	0.73	0.87	1.45
1989	1.45	2.36	2.85	4.26	0.86	2.95	0.70	0.67	1.48
1990	1.45	2.32	3.30	5.62	0.83	3.41	0.67	0.46	1.46
1991	1.45	2.14	2.46	4.84	0.82	2.59	0.63	0.50	1.37
1992	1.41	2.32	2.48	4.77	0.62	2.58	0.59	0.51	1.34
1993	1.39	2.55	2.37	4.48	0.36	2.45	0.56	0.55	1.35
1994	1.35	2.23	2.39	4.14	0.51	2.51	0.56	0.56	1.30
1995	1.32	1.99	2.58	4.19	0.64	2.73	0.54	0.70	1.23
1996	1.29	2.65	3.01	5.04	0.69	3.22	0.51	0.59	1.28
1997	1.27	2.76	2.80	4.57	0.88	2.90	0.51	0.49	1.30
	Expenditures in Million Nominal Dollars								
1970	R 2,237	R 1,151	797	R 80	R 6	R 882	R 44	R 2	R 4,316
1975	R 7,178	R 2,422	R 5,842	R 502	R 1	R 6,345	R 448	R 2	R 16,396
1980	R 16,450	R 8,357	R 10,446	R 972	R 14	R 11,432	R 1,189	R 8	R 37,435
1981	19,365	R 10,524	R 11,032	R 908	4	R 11,944	R 1,436	R 5	43,275
1982	R 20,641	R 11,236	R 7,116	R 624	R 5	R 7,745	R 1,684	R 4	41,311
1983	R 21,873	R 10,373	R 6,620	R 596	10	R 7,226	R 1,859	R 4	R 41,336
1984	R 23,165	R 11,521	R 5,737	R 550	R 9	R 6,296	R 2,384	R 12	R 43,378
1985	R 24,056	10,819	R 4,232	R 502	R 9	R 4,742	R 2,930	R 11	R 42,558
1986	R 22,755	R 6,305	R 3,288	R 306	R 10	R 3,603	R 3,125	R 4	R 35,793
1987	22,785	R 6,583	R 3,439	R 373	R 11	R 3,823	R 3,486	R 15	36,692
1988	R 23,290	R 6,123	R 3,468	R 416	R 12	R 3,896	R 4,111	15	R 37,435
1989	R 23,165	R 6,750	R 4,328	R 632	R 13	R 4,974	R 3,992	R 14	R 38,995
1990	R 23,396	R 6,631	R 3,757	R 485	R 20	R 4,263	R 4,142	R 10	R 38,276
1991	R 23,164	R 6,099	R 2,649	R 387	R 18	R 3,055	R 4,172	R 11	R 36,534
1992	R 22,863	R 6,559	R 2,114	R 321	R 19	R 2,454	R 3,878	11	R 35,817
1993	R 23,395	7,009	R 2,222	R 343	R 13	2,578	R 3,658	R 11	R 36,692
1994	R 22,847	R 6,806	R 2,025	R 394	R 13	R 2,432	3,858	R 12	R 36,166
1995	R 22,529	R 6,466	R 1,404	R 380	R 15	R 1,799	R 3,865	R 12	R 34,810
1996	23,188	7,339	1,822	496	14	2,333	3,666	12	36,614
1997	23,532	8,349	1,939	404	37	2,380	3,396	10	37,815

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

State Tables

Table 11. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Alabama

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	0.42	0.26	0.32	0.52	1.10	0.73	2.00	2.82	0.41	R 1.09	R 2.07	—	R 1.29	0.84	0.26	3.51	R 1.36
1975	1.50	0.94	1.10	0.96	2.60	2.03	3.83	4.26	1.59	R 2.35	R 3.28	0.14	R 1.47	R 1.81	0.88	6.87	R 2.82
1980	1.96	1.63	1.70	2.90	6.58	6.39	6.62	9.89	2.99	R 5.52	R 7.82	0.33	R 1.65	R 3.34	1.17	12.52	R 6.29
1981	2.07	1.90	1.93	3.49	8.00	7.67	7.26	11.24	3.86	R 6.90	R 9.14	0.43	R 1.72	R 3.96	1.37	14.56	R 7.44
1982	2.18	2.03	2.05	4.39	7.67	7.42	7.69	10.61	3.80	R 6.57	R 8.66	0.42	R 1.74	R 4.01	1.31	16.86	R 7.90
1983	2.03	2.01	2.01	4.89	6.80	6.74	8.34	9.07	3.90	R 6.67	R 7.91	0.45	R 1.69	R 3.82	1.40	17.59	R 7.89
1984	2.03	R 2.01	R 2.01	4.84	6.68	6.52	8.28	8.98	4.48	R 6.44	R 7.82	0.64	R 2.01	R 3.83	1.51	17.81	R 7.76
1985	2.02	2.00	2.01	4.73	6.40	6.17	7.07	9.15	3.80	R 6.20	R 7.77	0.77	R 1.95	R 3.92	1.74	16.59	R 7.63
1986	1.81	1.89	1.89	4.50	5.51	4.45	7.15	6.99	1.98	R 5.47	R 6.20	0.70	R 1.81	R 3.44	1.68	16.66	R 6.97
1987	1.71	1.89	1.87	4.27	5.97	4.39	7.29	7.27	2.18	R 4.71	R 6.35	0.69	R 1.74	R 3.53	1.69	16.48	R 6.94
1988	1.70	1.90	1.87	4.03	5.67	4.07	7.04	7.21	2.49	R 4.44	R 6.21	0.65	R 1.74	R 3.44	1.66	16.34	R 6.74
1989	1.74	1.84	1.83	3.92	6.36	4.64	8.73	7.96	2.20	4.96	6.87	0.60	e R 1.53	e R 3.66	1.63	16.43	e R 7.05
1990	1.83	1.83	1.83	4.07	7.35	5.99	10.25	8.96	2.18	5.51	7.76	0.56	R 1.62	3.96	1.60	16.47	7.62
1991	1.80	1.79	1.80	4.08	6.86	5.03	11.39	8.69	1.74	R 5.34	7.47	0.71	R 1.66	3.72	1.56	16.69	7.53
1992	1.78	1.71	1.72	4.06	6.92	4.73	10.39	8.67	1.68	R 4.89	7.40	0.75	R 1.62	3.57	1.48	16.47	R 7.30
1993	1.77	1.75	1.75	4.28	6.99	4.41	9.93	8.62	1.65	R 4.93	7.41	0.67	R 1.46	3.59	1.53	16.78	R 7.51
1994	1.77	1.66	1.68	4.33	6.79	4.11	8.80	8.56	1.73	R 4.98	7.28	0.70	R 1.52	R 3.56	1.43	16.30	R 7.33
1995	1.81	1.56	1.59	3.85	6.99	4.06	8.80	8.85	1.97	R 5.25	7.56	0.51	R 1.53	R 3.45	1.31	16.26	R 7.32
1996	1.84	1.55	1.58	4.51	7.66	4.81	10.42	9.28	2.36	5.62	8.08	0.53	1.42	3.48	1.25	15.84	7.62
1997	1.78	1.54	1.57	4.69	7.60	4.54	10.14	9.33	2.76	5.32	8.15	0.58	1.49	3.53	1.26	15.76	7.81
	Expenditures in Million Nominal Dollars																
1970	99.4	115.9	215.3	143.2	54.6	7.2	57.0	547.6	8.0	54.2	728.5	—	R 11.5	R 1,098.5	-103.4	411.6	R 1,406.7
1975	269.2	431.7	700.9	227.1	221.6	19.1	91.9	1,010.7	127.4	108.6	1,579.3	4.2	R 14.3	R 2,525.7	-385.8	940.2	R 3,080.0
1980	254.7	866.3	1,121.0	676.5	579.2	72.3	116.3	2,301.3	135.2	281.0	3,485.3	85.2	R 38.5	R 5,406.5	-849.4	2,120.5	R 6,677.6
1981	214.1	999.1	1,213.2	827.1	834.3	74.6	120.8	2,540.2	105.4	509.6	4,184.9	112.4	R 42.2	R 6,379.8	-1,005.3	2,369.1	R 7,743.5
1982	143.8	903.2	1,047.1	930.0	687.9	64.9	122.3	2,392.7	139.7	457.7	3,865.2	128.1	R 41.6	R 6,012.0	-896.2	2,499.6	R 7,615.5
1983	100.9	970.9	1,071.8	946.8	608.9	61.3	134.0	2,067.0	81.8	R 406.6	R 3,359.6	123.6	R 45.2	R 5,547.1	-961.8	2,618.3	R 7,203.6
1984	158.7	R 1,015.7	R 1,174.5	986.1	628.7	134.9	100.7	2,084.8	73.6	R 409.8	R 3,432.5	168.3	R 60.4	R 5,821.8	-1,044.3	2,909.0	R 7,686.5
1985	156.1	1,172.4	1,328.5	923.7	607.2	121.6	92.8	R 2,090.8	53.6	R 361.2	R 3,327.1	118.7	R 58.1	R 5,756.2	-1,174.9	2,735.9	R 7,317.2
1986	129.4	R 1,116.0	R 1,245.3	796.7	528.3	93.5	104.6	1,705.0	29.3	R 299.8	R 2,760.4	87.5	R 52.8	R 4,942.7	-1,088.6	2,818.4	R 6,672.5
1987	144.5	R 1,089.8	R 1,234.3	763.9	651.7	95.2	124.0	R 1,852.9	31.4	R 299.9	R 3,055.1	83.3	R 49.3	R 5,185.9	-1,063.7	2,950.9	R 7,073.2
1988	154.0	R 1,069.3	R 1,223.3	826.2	674.8	42.2	114.0	R 1,846.8	51.1	R 274.4	R 3,003.3	90.1	R 51.4	R 5,194.3	-1,046.7	3,039.7	R 7,187.3
1989	154.7	1,079.3	1,234.0	839.3	914.6	52.7	153.1	R 2,068.1	49.1	R 288.1	R 3,525.7	74.4	e R 71.8	e R 5,745.3	-1,065.0	3,139.7	e R 7,820.0
1990	160.8	R 1,077.1	R 1,238.0	841.6	1,089.3	63.1	154.5	R 2,316.7	52.6	R 328.5	R 4,004.8	71.7	R 66.8	R 6,222.8	-1,066.3	3,237.2	R 8,393.7
1991	153.0	R 1,139.3	R 1,292.3	871.7	955.4	63.6	156.7	R 2,261.1	38.5	R 328.9	R 3,804.2	120.9	R 72.5	R 6,161.6	-1,172.3	3,356.5	R 8,345.8
1992	157.6	R 1,169.9	1,327.5	932.1	984.3	55.4	149.3	R 2,304.3	39.0	R 292.0	R 3,824.3	154.4	74.8	R 6,313.2	-1,206.8	3,362.8	R 8,469.1
1993	152.3	R 1,262.3	R 1,414.6	1,049.6	935.6	48.5	180.2	R 2,351.8	39.6	R 296.2	R 3,851.9	127.7	R 79.0	R 6,522.8	-1,315.1	3,567.6	R 8,775.3
1994	154.3	R 1,136.8	R 1,291.1	1,052.2	1,005.0	80.6	164.0	R 2,392.0	34.6	R 305.1	R 3,981.4	153.2	R 104.6	R 6,582.5	-1,211.0	3,561.0	R 8,932.5
1995	157.7	R 1,155.0	R 1,312.7	1,033.0	940.2	88.3	163.0	2,579.1	37.6	R 314.3	R 4,122.5	112.7	R 122.0	R 6,702.9	-1,195.7	3,685.5	R 9,192.7
1996	160.3	1,240.5	1,400.8	1,244.0	1,030.4	95.7	187.1	2,681.8	44.8	364.9	4,404.7	166.8	118.8	7,335.1	-1,328.8	3,818.4	9,824.6
1997	141.1	1,204.2	1,345.3	1,297.6	946.8	56.2	184.0	2,730.4	41.2	353.9	4,312.4	183.7	108.2	7,247.1	-1,315.2	3,883.9	9,815.8

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 12. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Alabama

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	0.81	1.10	1.24	1.62	2.22	2.17	0.85	R 1.36	4.62	R 2.43
1975	1.82	1.52	2.53	3.31	4.32	4.22	1.69	R 2.12	8.05	R 4.43
1980	2.97	3.91	6.83	9.13	7.75	7.89	4.31	R 4.52	14.44	R 8.99
1981	3.71	4.61	8.55	11.14	8.02	8.32	5.31	5.24	16.17	R 10.19
1982	3.30	5.31	8.16	10.98	9.01	9.50	5.15	R 6.04	18.60	R 11.77
1983	3.56	6.00	4.93	R 7.83	9.26	R 8.82	4.99	R 6.50	19.40	R 12.26
1984	3.27	6.06	7.89	R 7.60	8.90	R 8.40	5.07	R 6.34	20.32	R 12.68
1985	3.19	6.18	7.68	R 6.93	8.49	R 8.39	4.87	R 6.32	18.74	R 12.50
1986	2.89	6.30	5.33	R 4.74	8.08	R 7.89	3.91	R 6.30	18.95	R 12.68
1987	2.88	6.43	5.13	R 5.95	8.68	8.54	3.72	R 6.56	18.92	R 12.70
1988	2.62	6.33	4.93	R 8.55	8.21	R 8.16	3.76	R 6.40	19.06	R 12.74
1989	2.64	6.09	5.52	R 7.26	9.25	R 9.11	4.16	R 6.48	19.31	R 12.97
1990	2.70	6.38	6.70	R 8.97	11.05	R 10.94	3.53	6.79	19.32	R 13.39
1991	2.81	6.86	6.16	R 6.35	12.45	R 12.13	3.37	R 7.25	19.61	R 13.89
1992	2.69	6.56	5.52	R 9.12	11.08	R 11.00	3.08	R 6.72	19.60	R 13.42
1993	2.73	6.89	5.38	R 5.72	10.18	R 10.04	3.02	R 7.08	20.00	R 13.91
1994	2.83	7.19	5.35	R 7.40	11.08	R 10.98	2.93	R 7.47	19.61	R 14.06
1995	2.61	6.66	4.83	R 10.22	11.04	R 10.99	2.87	R 7.05	19.66	R 14.01
1996	2.62	6.99	5.80	4.47	12.66	12.36	3.29	7.49	19.44	13.92
1997	2.72	8.02	5.53	6.15	12.57	12.28	3.27	8.40	19.77	14.79
	Expenditures in Million Nominal Dollars									
1970	0.9	63.0	R (s)	2.2	41.4	43.8	1.6	R 109.3	181.7	R 291.0
1975	R (s)	82.0	1.1	2.5	62.8	66.4	3.2	R 152.0	368.5	R 520.5
1980	5.7	211.7	0.5	10.2	73.7	84.5	8.0	R 309.9	811.2	R 1,121.2
1981	2.8	239.6	0.8	11.7	78.4	90.9	10.0	R 343.3	877.8	R 1,221.1
1982	3.5	262.4	2.6	33.3	74.7	110.5	10.5	R 386.8	1,001.7	R 1,388.5
1983	4.0	300.4	1.3	R 26.7	91.2	R 119.2	10.0	R 433.6	1,046.7	R 1,480.4
1984	4.0	316.5	2.0	R 32.9	64.5	R 99.4	24.2	R 444.0	1,179.7	R 1,623.7
1985	3.4	280.1	1.5	R 2.9	63.8	R 68.2	22.7	R 374.3	1,098.4	R 1,472.7
1986	3.2	291.3	1.2	R 1.7	70.3	R 73.2	17.7	R 385.4	1,180.4	R 1,565.9
1987	3.4	325.9	0.9	2.0	90.0	92.9	14.3	R 436.4	1,245.2	R 1,681.7
1988	3.5	318.4	1.2	R 6.3	83.2	R 90.7	15.0	R 427.6	1,277.0	R 1,704.6
1989	1.6	301.7	1.1	R 3.3	103.5	R 107.9	17.2	R 428.4	1,307.0	R 1,735.5
1990	2.4	298.4	1.0	R 1.9	107.6	R 110.6	20.9	R 432.2	1,366.1	R 1,798.3
1991	R (s)	325.4	0.7	R 2.2	104.0	R 106.8	21.0	R 453.6	1,424.7	R 1,878.3
1992	2.0	334.6	R (s)	R 1.6	88.9	R 90.8	20.2	R 447.7	1,413.4	R 1,861.1
1993	0.9	364.7	R (s)	R 1.4	105.1	R 106.9	14.9	R 487.5	1,544.2	R 2,031.7
1994	R (s)	368.6	R (s)	R 1.2	112.7	R 114.3	14.2	R 497.4	1,549.9	R 2,047.3
1995	R (s)	340.1	R (s)	R 3.8	114.0	R 118.1	15.5	R 473.8	1,630.9	R 2,104.6
1996	1.0	408.1	(s)	1.6	133.6	135.6	17.7	562.3	1,700.4	2,262.7
1997	1.7	404.9	0.9	2.0	132.9	135.8	12.8	555.3	1,678.8	2,234.1

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 13. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Alabama

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.28	0.58	0.97	0.75	1.58	2.82	0.38	1.53	0.85	0.75	5.39	1.98
1975	1.07	1.04	2.22	2.24	3.07	4.26	1.69	2.96	1.69	1.46	8.98	3.97
1980	1.73	3.27	6.22	5.91	5.28	9.89	3.39	6.61	4.31	3.78	16.19	R 8.43
1981	1.98	3.93	7.79	7.15	6.18	11.24	—	7.99	5.31	4.84	17.81	R 10.64
1982	2.02	4.59	7.32	7.03	6.25	10.61	3.93	7.19	5.15	4.96	19.90	11.93
1983	1.93	5.22	6.13	R 7.83	6.90	9.07	4.15	R 6.76	4.99	R 5.41	20.45	R 12.20
1984	R 1.83	5.27	6.14	R 7.60	7.38	8.98	4.54	R 6.82	5.07	R 5.41	22.26	R 12.51
1985	1.86	5.27	6.13	R 6.93	5.16	9.15	4.02	R 5.83	NA	5.29	20.01	11.41
1986	1.76	5.21	3.59	R 4.74	5.77	6.99	2.16	3.84	NA	4.62	20.03	11.41
1987	1.63	5.31	4.04	R 5.95	5.11	7.27	2.67	R 4.33	NA	4.77	19.36	11.66
1988	1.60	5.13	3.63	R 8.55	5.08	7.21	1.99	R 3.65	NA	R 4.44	19.29	11.10
1989	1.65	5.01	4.15	R 7.26	7.80	7.96	2.38	4.62	NA	R 4.80	19.65	11.85
1990	R 1.64	5.28	5.47	R 8.97	8.81	8.96	2.65	5.45	NA	5.18	19.53	12.32
1991	1.64	5.59	4.77	R 6.35	9.75	8.69	2.13	5.47	NA	5.52	19.81	13.29
1992	1.61	5.55	4.43	R 9.12	9.52	8.67	—	R 5.74	NA	R 5.44	19.91	13.05
1993	1.59	6.01	4.30	R 5.72	9.61	8.62	—	5.74	3.02	R 5.80	20.15	R 13.51
1994	R 1.57	6.19	3.98	R 7.40	8.59	8.56	2.97	R 5.12	2.93	R 5.88	19.73	R 13.47
1995	1.59	5.63	4.07	R 10.22	8.99	8.85	2.40	R 6.05	2.87	R 5.65	19.80	R 13.75
1996	1.62	5.99	4.88	4.47	9.58	9.28	3.05	6.83	3.29	5.99	19.06	13.42
1997	1.63	6.70	4.66	6.15	9.79	9.33	—	7.10	3.27	6.56	18.61	13.73
	Expenditures in Million Nominal Dollars											
1970	0.5	21.8	1.5	1.8	5.2	5.8	(s)	14.2	(s)	36.6	94.6	131.2
1975	R (s)	35.9	7.1	3.1	7.9	10.1	(s)	28.2	(s)	R 64.5	199.0	263.4
1980	6.2	96.5	23.2	5.9	8.9	13.4	R (s)	51.5	(s)	R 154.4	397.2	R 551.5
1981	2.7	109.4	45.2	2.3	10.7	15.8	—	74.0	(s)	R 186.3	555.0	R 741.3
1982	3.9	124.8	10.1	13.2	9.1	14.9	4.0	51.3	(s)	R 180.3	631.8	R 812.1
1983	4.0	144.5	34.1	R 4.2	12.0	12.1	0.6	R 62.9	(s)	R 211.6	658.5	R 870.2
1984	R 4.1	150.0	33.5	R 5.6	9.4	10.8	R (s)	R 59.8	0.6	R 214.5	642.0	R 856.4
1985	3.6	141.3	46.0	R 0.6	6.9	12.1	13.0	R 78.6	NA	R 223.5	601.1	R 824.7
1986	3.6	135.7	20.3	0.8	8.9	9.3	7.6	46.8	NA	186.1	635.2	R 821.2
1987	3.5	122.7	27.1	1.6	9.4	9.9	6.4	R 54.4	NA	R 180.6	656.1	R 836.7
1988	4.0	135.0	23.8	R 0.6	9.1	9.2	8.8	R 51.5	NA	R 190.5	674.0	R 864.5
1989	1.9	136.6	29.7	R 0.6	15.4	9.3	7.5	R 62.6	NA	R 201.0	745.0	R 946.0
1990	2.8	131.9	34.6	R 0.6	15.1	12.1	10.2	R 72.7	NA	R 207.4	772.3	R 979.6
1991	R (s)	136.1	27.3	R 0.5	14.4	7.3	3.3	52.8	NA	189.3	807.6	996.9
1992	2.2	144.1	26.6	R 0.9	13.5	6.3	—	R 47.3	NA	R 193.6	785.0	R 978.6
1993	1.0	159.2	23.0	R (s)	17.5	1.9	—	42.8	1.2	R 203.0	818.7	1,021.7
1994	R (s)	162.9	24.8	R (s)	15.4	1.9	(s)	R 42.6	1.2	R 206.9	841.8	R 1,048.6
1995	R (s)	152.1	12.6	R 0.6	16.4	1.9	(s)	R 31.5	1.2	R 185.0	867.8	R 1,052.8
1996	1.1	179.5	13.9	(s)	17.8	2.0	(s)	34.0	1.5	216.1	907.0	1,123.1
1997	1.9	225.9	10.4	(s)	18.3	2.0	—	31.0	1.2	260.0	1,082.2	1,342.2

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 14. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Alabama

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	0.42	0.28	0.40	0.32	0.65	0.69	0.75	1.58	5.08	2.82	0.51	R 0.38	R 0.86	R 1.41	R 0.45	2.24	0.63
1975	1.50	1.07	1.39	0.73	1.85	2.04	2.24	3.07	7.48	4.26	1.74	R 0.84	R 1.95	R 1.41	R 1.32	5.40	R 1.82
1980	1.96	1.73	1.89	2.46	3.02	5.28	5.91	5.28	14.36	9.89	3.05	R 4.76	R 4.50	R 1.41	R 2.60	10.29	R 3.87
1981	2.07	1.98	2.03	3.05	4.85	6.53	7.15	6.18	18.00	11.24	4.04	R 6.33	R 6.12	R 1.41	R 3.38	12.11	R 4.66
1982	2.18	2.02	2.10	4.03	4.58	6.42	7.03	6.25	17.25	10.61	3.95	R 5.59	R 5.62	R 1.41	R 3.69	13.82	R 5.06
1983	2.03	1.93	1.97	4.34	4.56	6.40	R 7.12	6.90	16.98	9.07	3.85	R 6.11	R 5.97	R 1.41	R 3.75	14.56	R 5.40
1984	2.03	R 1.83	R 1.93	4.23	4.41	6.41	R 7.20	7.38	17.63	8.98	4.54	R 5.40	R 5.94	R 1.41	R 3.54	14.22	R 5.29
1985	2.02	1.86	1.95	4.09	4.72	6.09	R 6.95	5.16	17.61	9.15	4.02	R 5.10	R 5.79	R 1.41	R 3.48	13.60	R 5.21
1986	1.81	1.76	1.78	3.54	4.90	3.67	R 4.78	5.77	15.59	6.99	2.16	R 3.69	R 4.55	R 1.42	R 2.95	13.34	R 4.80
1987	1.71	1.63	R 1.68	3.01	3.37	4.29	R 4.33	5.11	13.58	7.27	2.67	R 4.10	R 4.31	R 1.42	R 2.70	13.23	R 4.55
1988	1.70	1.60	1.65	2.92	3.07	3.81	R 3.74	5.08	14.62	7.21	1.99	R 3.42	R 3.89	R 1.42	R 2.54	12.96	R 4.33
1989	1.74	1.65	1.71	2.93	2.86	4.51	R 5.12	7.80	14.48	7.96	2.38	5.07	R 4.64	d R 1.27	d R 2.71	12.72	d R 4.42
1990	1.83	R 1.64	1.76	3.07	2.94	5.78	R 7.15	8.81	14.60	8.96	2.65	6.12	5.44	R 1.30	3.05	12.73	4.73
1991	1.80	1.64	1.74	2.92	3.31	5.03	R 6.00	9.75	16.80	8.69	2.13	5.64	5.12	R 1.37	2.87	12.81	4.60
1992	1.78	1.61	1.70	2.99	2.03	4.79	R 5.02	9.52	18.32	8.67	2.13	5.65	R 4.72	1.37	R 2.74	12.57	R 4.42
1993	1.77	1.59	1.70	3.18	2.38	4.67	R 4.68	9.61	18.96	8.62	2.08	5.05	4.72	1.31	2.84	12.72	R 4.57
1994	1.77	R 1.57	1.69	3.16	2.44	4.41	R 4.85	5.03	19.11	8.56	2.24	4.90	4.36	R 1.41	R 2.73	12.07	R 4.32
1995	1.81	1.59	1.72	2.88	2.60	4.39	R 4.63	4.92	R 19.41	8.85	2.40	5.30	R 4.59	R 1.42	R 2.63	11.88	R 4.20
1996	1.84	1.62	1.75	3.52	3.12	5.29	5.82	6.29	20.08	9.28	3.05	6.16	5.19	1.28	2.98	11.42	4.44
1997	1.78	1.63	1.71	3.51	3.23	5.02	5.25	5.59	17.86	9.33	2.72	5.22	4.95	1.37	2.95	10.86	4.34
	Expenditures in Million Nominal Dollars																
1970	99.4	15.8	115.2	54.2	13.7	11.4	2.7	9.9	12.0	3.0	4.4	4.4	61.6	R 9.9	R 240.9	135.3	R 376.2
1975	269.2	63.6	332.8	102.4	33.2	52.4	3.8	20.1	20.0	4.4	61.1	14.1	209.1	R 11.0	R 655.4	372.7	R 1,028.0
1980	254.7	99.2	353.9	364.1	62.8	100.8	29.5	32.8	44.1	5.4	70.5	74.8	420.7	R 30.3	R 1,169.0	912.1	R 2,081.1
1981	214.1	110.8	324.9	472.2	120.6	171.2	11.5	28.8	53.0	9.7	54.7	247.2	696.7	R 32.0	R 1,525.9	936.2	R 2,462.1
1982	143.8	135.0	278.8	538.3	108.9	143.8	34.5	34.8	46.3	3.9	84.0	167.6	623.8	R 30.9	R 1,471.9	866.1	R 2,338.0
1983	100.9	131.3	232.2	500.1	112.6	159.5	R 12.6	26.0	47.8	3.2	30.8	147.5	R 540.0	R 34.9	R 1,307.3	913.0	R 2,220.3
1984	158.7	R 135.5	R 294.2	518.4	106.0	156.9	R 12.1	20.9	52.9	16.6	24.1	140.6	R 530.2	R 35.6	R 1,378.5	1,087.3	R 2,465.8
1985	156.1	116.1	272.2	498.5	117.7	130.2	R 0.8	19.1	49.2	24.4	2.2	134.2	R 477.7	R 35.5	R 1,283.9	1,036.4	R 2,320.2
1986	129.4	R 112.2	R 241.5	366.8	113.5	87.4	1.0	22.3	42.6	15.8	6.0	90.7	R 379.3	R 35.2	R 1,022.9	1,002.8	R 2,025.7
1987	144.5	R 107.2	R 251.7	312.1	102.0	111.4	R 0.7	22.7	42.0	R 16.8	7.0	105.8	R 408.5	R 35.0	R 1,007.3	1,049.6	R 2,056.9
1988	154.0	R 114.5	R 268.5	367.2	84.1	97.4	R (s)	20.1	43.6	14.6	6.6	91.7	R 358.4	R 36.4	R 1,030.5	1,088.7	R 2,119.3
1989	154.7	94.5	249.2	397.0	85.0	135.9	R 0.5	31.7	44.3	R 20.8	3.5	106.4	428.1	d R 54.6	d R 1,128.9	1,087.7	d R 2,216.6
1990	160.8	R 90.8	R 251.6	402.3	84.3	226.8	R 0.6	28.7	45.9	R 20.9	5.4	145.7	R 558.2	R 45.9	R 1,258.0	1,098.8	R 2,356.8
1991	153.0	R 99.8	R 252.8	402.4	116.0	158.8	R 0.7	35.0	47.3	18.6	0.6	112.0	R 489.0	R 51.5	R 1,195.7	1,124.1	R 2,319.9
1992	157.6	124.7	282.3	445.8	66.6	150.4	R 1.0	44.0	52.5	19.8	2.2	114.4	R 451.0	R 54.6	R 1,233.7	1,164.3	R 2,398.0
1993	152.3	R 88.5	R 240.8	513.4	78.6	124.7	R 0.6	53.6	55.4	26.4	6.9	102.4	R 448.5	R 64.1	R 1,266.8	1,204.7	R 2,471.5
1994	154.3	R 92.7	R 247.1	511.6	81.9	131.2	R 0.9	30.0	58.4	28.5	11.7	101.9	R 444.5	R 89.2	R 1,292.4	1,169.4	R 2,461.8
1995	157.7	R 90.4	R 248.1	526.0	86.3	92.7	R 1.2	29.7	R 58.3	31.3	5.8	104.2	R 409.5	R 105.4	R 1,288.9	1,186.9	R 2,475.8
1996	160.3	102.2	262.5	638.3	118.1	137.2	1.6	33.0	58.5	33.0	10.2	124.4	515.9	99.7	1,516.4	1,211.0	2,727.4
1997	141.1	103.1	244.2	638.2	117.3	91.7	1.8	30.4	55.0	35.3	6.6	120.0	458.0	94.1	1,434.5	1,122.8	2,557.3

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.

R=Revised data.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 15. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Alabama

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.28	—	2.17	1.33	0.73	1.58	5.08	2.82	0.34	2.46	2.45	—	2.45
1975	1.07	—	3.45	2.92	2.03	3.07	7.48	4.26	1.47	3.67	3.67	—	3.67
1980	—	—	9.02	6.99	6.39	5.28	14.36	9.89	2.93	8.78	8.78	—	8.78
1981	—	—	10.84	8.56	7.67	6.18	18.00	11.24	3.69	10.27	10.27	—	10.27
1982	—	—	10.92	8.10	7.42	6.25	17.25	10.61	3.55	9.72	9.72	—	9.72
1983	—	—	10.44	7.05	6.74	6.90	16.98	9.07	3.93	8.48	8.48	—	8.48
1984	—	—	10.27	6.83	6.52	7.38	17.63	8.98	4.46	8.33	8.33	—	8.33
1985	—	—	9.99	6.54	6.17	5.16	17.61	9.15	3.72	8.34	8.34	—	8.34
1986	—	—	8.41	6.35	4.45	5.77	15.59	6.99	1.85	6.65	6.65	—	6.65
1987	—	—	7.55	6.73	4.39	5.11	13.58	7.27	1.92	6.89	6.89	—	6.89
1988	—	—	7.41	6.41	4.07	5.08	14.62	7.21	2.79	R 6.84	R 6.84	—	R 6.84
1989	—	—	8.28	7.06	4.64	7.80	14.48	7.96	2.15	7.41	7.41	—	7.41
1990	—	0.72	9.32	8.09	5.99	8.81	14.60	8.96	2.02	8.37	8.37	—	8.37
1991	—	—	8.71	7.57	5.03	9.75	16.80	8.69	1.71	7.98	7.98	—	7.98
1992	—	6.28	8.54	7.72	4.73	9.52	18.32	8.67	1.65	7.99	7.99	—	7.99
1993	—	4.47	8.24	7.76	4.41	9.61	18.96	8.62	1.58	8.01	8.01	—	8.01
1994	—	4.12	7.96	7.62	4.11	8.36	19.11	8.56	1.55	7.94	7.94	—	7.94
1995	—	3.41	8.36	7.61	4.06	8.66	R 19.41	8.85	1.91	8.11	8.11	21.54	8.11
1996	—	2.83	9.29	8.38	4.81	8.86	20.08	9.28	2.21	8.67	8.67	20.00	8.67
1997	—	2.32	9.39	8.18	4.54	8.97	17.86	9.33	2.77	8.77	8.77	—	8.77
	Expenditures in Million Nominal Dollars												
1970	R (s)	—	3.8	41.3	7.2	0.6	13.0	538.8	3.5	608.3	608.4	—	608.4
1975	(s)	—	4.3	154.6	19.1	1.0	27.6	996.1	65.2	1,268.0	1,268.0	—	1,268.0
1980	—	—	11.3	449.8	72.3	0.9	42.3	2,282.5	64.6	2,923.8	2,923.8	—	2,923.8
1981	—	—	12.4	612.7	74.6	3.0	50.9	2,514.7	50.7	3,318.9	3,318.9	—	3,318.9
1982	—	—	9.5	528.7	64.9	3.7	44.4	2,373.9	51.7	3,076.9	3,076.9	—	3,076.9
1983	—	—	9.3	409.4	61.3	4.9	45.8	2,051.7	50.4	2,632.8	2,632.8	—	2,632.8
1984	—	—	8.9	433.6	134.9	R 5.8	50.7	2,057.4	49.1	2,740.5	2,740.5	—	2,740.5
1985	—	—	8.7	426.4	121.6	3.0	47.2	R 2,054.3	38.4	R 2,699.5	R 2,699.5	—	R 2,699.5
1986	—	—	8.7	418.0	93.5	3.1	40.9	1,679.9	15.7	2,259.7	2,259.7	—	2,259.7
1987	—	—	5.4	510.9	95.2	1.9	40.3	R 1,826.3	18.0	R 2,497.9	R 2,497.9	—	R 2,497.9
1988	—	—	5.9	548.8	42.2	1.7	41.8	R 1,823.0	35.7	R 2,499.0	R 2,499.0	—	R 2,499.0
1989	—	—	5.5	742.6	52.7	R 2.6	42.5	R 2,038.0	38.1	R 2,922.0	R 2,922.0	—	R 2,922.0
1990	—	(s)	5.4	822.6	63.1	3.1	44.0	R 2,283.7	36.9	R 3,258.9	R 3,258.9	—	R 3,258.9
1991	—	—	4.8	763.8	63.6	3.3	45.3	R 2,235.2	34.7	R 3,150.7	R 3,150.7	—	R 3,150.7
1992	—	(s)	4.6	803.2	55.4	2.9	50.4	R 2,278.2	36.8	R 3,231.4	R 3,231.4	—	R 3,231.4
1993	—	(s)	4.3	784.2	48.5	4.0	53.1	R 2,323.6	32.7	R 3,250.4	R 3,250.5	—	R 3,250.5
1994	—	(s)	4.4	843.4	80.6	5.9	56.0	R 2,361.6	22.8	R 3,374.8	R 3,374.8	—	R 3,374.8
1995	—	(s)	4.1	830.7	88.3	2.9	R 55.9	R 2,545.8	31.8	3,559.5	3,559.5	(s)	3,559.5
1996	—	(s)	4.4	871.2	95.7	2.6	56.1	2,646.8	34.6	3,711.5	3,711.5	(s)	3,711.5
1997	—	(s)	4.9	838.4	56.2	2.4	52.7	2,693.1	34.5	3,682.3	3,682.3	—	3,682.3

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 16. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Alabama

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.26	0.26	—	0.81	0.17	0.20	—	—	0.26
1975	0.92	1.08	1.69	2.16	—	2.08	0.14	—	0.88
1980	1.61	2.62	—	6.35	—	6.35	0.33	—	1.17
1981	1.89	2.90	—	7.80	—	7.80	0.43	—	1.37
1982	2.03	3.00	—	R 7.11	—	R 7.11	0.42	—	1.31
1983	2.02	3.13	—	6.28	—	6.28	0.45	—	1.40
1984	2.04	3.26	—	6.15	—	6.15	0.64	—	1.51
1985	2.02	3.17	—	6.00	—	6.00	0.77	—	1.74
1986	1.91	2.47	—	3.49	—	3.49	0.70	—	1.68
1987	1.92	2.10	—	4.03	—	4.03	0.69	—	1.69
1988	1.95	2.07	—	3.67	—	3.67	0.65	—	1.66
1989	1.87	2.21	—	4.14	—	4.14	0.60	—	1.63
1990	1.84	2.16	—	5.57	—	5.57	0.56	—	1.60
1991	1.81	1.87	—	5.12	—	5.12	0.71	—	1.56
1992	1.73	2.23	—	4.60	—	4.60	0.75	—	1.48
1993	1.76	2.60	—	4.25	—	4.25	0.67	—	1.53
1994	1.67	2.34	—	4.02	—	4.02	0.70	—	1.43
1995	1.56	1.98	—	3.76	—	3.76	0.51	—	1.31
1996	1.54	2.88	—	4.46	—	4.46	0.53	—	1.25
1997	1.54	2.77	—	4.05	—	4.05	0.58	—	1.26
	Expenditures in Million Nominal Dollars								
1970	98.6	4.2	—	R (s)	R (s)	0.6	—	—	103.4
1975	367.5	6.7	1.0	6.5	—	7.5	4.2	—	385.8
1980	755.2	4.1	—	4.8	—	4.8	85.2	—	849.4
1981	882.7	5.8	—	4.4	—	4.4	112.4	—	1,005.3
1982	760.9	4.5	—	2.6	—	2.6	128.1	—	896.2
1983	831.5	1.9	—	4.7	—	4.7	123.6	—	961.8
1984	872.1	1.3	—	2.6	—	2.6	168.3	—	1,044.3
1985	1,049.4	3.8	—	3.1	—	3.1	118.7	—	1,174.9
1986	996.9	2.8	—	1.4	—	1.4	87.5	—	1,088.6
1987	975.7	3.3	—	1.4	—	1.4	83.3	—	1,063.7
1988	947.4	5.5	—	3.7	—	3.7	90.1	—	1,046.7
1989	981.4	4.0	—	5.2	—	5.2	74.4	—	1,065.0
1990	981.2	9.1	—	4.3	—	4.3	71.7	—	1,066.3
1991	1,038.7	7.8	—	4.9	—	4.9	120.9	—	1,172.3
1992	1,041.0	7.7	—	3.8	—	3.8	154.4	—	1,206.8
1993	1,171.9	12.3	—	3.2	—	3.2	127.7	—	1,315.1
1994	1,043.5	9.1	—	5.1	—	5.1	153.2	—	1,211.0
1995	1,064.3	14.8	—	4.0	—	4.0	112.7	—	1,195.7
1996	1,136.1	18.1	—	7.8	—	7.8	166.8	—	1,328.8
1997	1,097.5	28.6	—	5.4	—	5.4	183.7	—	1,315.2

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 17. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Alaska

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.92	0.92	0.67	1.15	0.73	2.09	3.18	1.37	1.68	1.33	—	R 1.36	1.12	0.66	9.02	1.39
1975	—	1.40	1.40	0.89	2.88	2.04	3.80	5.15	2.34	3.30	3.00	—	R 1.52	R 2.20	0.95	9.61	R 2.70
1980	—	1.91	1.91	0.62	6.82	6.21	6.88	10.20	4.07	7.24	7.06	—	R 2.36	4.04	1.25	15.09	R 5.05
1981	—	4.11	4.11	0.73	8.40	7.56	7.88	11.58	8.37	9.15	8.60	—	R 2.65	R 5.20	1.94	18.49	R 6.42
1982	—	4.02	4.02	0.92	7.33	7.37	8.63	11.35	5.15	7.68	8.11	—	R 2.68	R 4.78	1.54	21.01	R 6.04
1983	—	3.50	3.50	1.19	7.56	6.72	10.84	10.46	6.38	R 7.89	7.67	—	R 2.53	R 4.71	2.04	22.35	R 6.01
1984	—	R 3.42	R 3.42	1.24	7.48	6.47	11.05	10.07	5.88	R 7.57	7.39	—	R 2.71	R 4.81	1.96	24.07	R 6.14
1985	—	R 3.30	R 3.30	1.23	7.62	6.07	13.62	9.83	4.53	R 7.34	R 7.03	—	R 2.61	R 4.68	1.71	24.52	R 5.95
1986	—	R 3.50	R 3.50	1.48	6.35	4.16	11.59	7.86	2.50	R 5.25	R 4.90	—	R 2.99	R 3.81	1.48	24.89	R 4.98
1987	—	2.00	2.00	1.42	6.28	4.13	11.33	7.90	3.15	R 4.77	R 5.13	—	R 3.04	R 3.81	1.87	26.64	R 5.07
1988	—	2.64	2.64	1.70	6.64	4.14	11.37	8.14	4.33	R 5.75	5.52	—	R 3.06	R 4.08	2.13	26.36	R 5.46
1989	—	1.95	1.95	1.82	7.54	4.69	14.88	8.65	3.90	R 7.28	6.21	—	e R 2.07	e R 4.67	1.86	27.06	e R 6.19
1990	—	R 4.08	R 4.08	1.96	8.38	6.17	15.10	10.03	5.29	7.86	R 7.57	—	R 2.42	R 5.48	2.37	27.81	R 6.97
1991	—	R 4.24	R 4.24	1.83	7.52	5.50	15.64	8.99	3.17	R 7.93	R 6.71	—	R 2.44	R 4.81	1.81	28.77	R 6.40
1992	—	R 3.68	R 3.68	1.75	7.31	5.15	14.68	9.95	3.16	7.76	6.75	—	R 2.36	R 4.71	1.91	29.20	R 6.28
1993	—	R 3.81	R 3.81	1.87	7.44	4.96	14.53	9.98	2.99	R 10.05	6.70	—	R 2.26	R 4.75	1.89	29.70	R 6.43
1994	—	R 2.30	R 2.30	1.86	7.01	4.53	13.72	10.46	2.83	R 10.59	6.39	—	R 2.62	R 4.60	1.86	30.07	R 6.40
1995	—	R 2.05	R 2.05	1.88	7.25	4.54	13.10	10.80	2.78	9.82	6.60	—	R 2.15	R 4.77	R 1.96	29.84	R 6.42
1996	—	2.05	2.05	1.91	7.78	5.22	14.30	11.65	2.93	13.20	7.07	—	2.29	5.00	2.15	30.04	6.72
1997	—	2.18	2.18	2.07	8.14	4.97	14.95	11.91	3.06	10.58	6.93	—	2.51	5.08	2.39	29.57	6.69
	Expenditures in Million Nominal Dollars																
1970	—	12.1	12.1	26.2	33.3	27.5	1.1	43.8	8.7	8.3	122.7	—	R 2.9	R 163.9	-9.9	33.9	R 188.0
1975	—	21.4	21.4	54.5	116.6	85.0	2.5	113.0	15.7	21.2	354.0	—	R 3.1	R 433.1	-26.9	65.9	R 472.0
1980	—	8.2	8.2	64.5	264.0	335.7	4.2	196.9	9.4	43.4	853.7	—	R 2.9	R 929.3	-48.3	129.5	R 1,010.6
1981	—	51.4	51.4	69.1	319.9	462.7	3.7	271.7	12.7	50.6	1,121.3	—	R 3.4	R 1,245.2	-75.6	179.8	R 1,349.4
1982	—	53.0	53.0	111.2	269.0	478.5	5.8	303.4	9.8	95.8	1,162.3	—	R 3.4	R 1,329.9	-64.3	228.6	R 1,494.3
1983	—	43.4	43.4	138.7	321.4	461.6	7.4	261.2	15.7	R 42.7	R 1,110.0	—	R 3.5	R 1,295.5	-86.0	259.5	R 1,469.1
1984	—	R 44.0	R 44.0	146.0	345.3	553.3	10.1	281.7	18.8	R 47.9	1,257.1	—	R 4.1	R 1,451.2	-83.9	299.0	R 1,666.4
1985	—	R 38.2	R 38.2	162.4	459.1	520.3	15.2	R 291.3	82.1	R 53.9	R 1,421.8	—	R 3.9	R 1,626.2	-77.0	331.5	R 1,880.6
1986	—	R 42.5	R 42.5	165.5	277.5	379.8	10.3	224.1	102.3	R 181.2	R 1,175.1	—	R 2.3	R 1,385.3	-66.3	339.3	R 1,658.4
1987	—	8.7	8.7	158.4	291.8	345.6	10.4	R 216.0	64.8	R 146.2	R 1,074.9	—	R 3.0	R 1,244.9	-73.8	353.4	R 1,524.5
1988	—	11.5	11.5	187.1	330.2	394.0	10.6	R 227.4	19.4	R 48.6	R 1,030.3	—	R 3.2	R 1,232.1	-84.0	358.8	R 1,506.8
1989	—	9.2	9.2	187.4	485.3	491.0	14.7	R 230.8	8.5	36.4	R 1,266.7	—	e R 5.1	e R 1,468.4	-78.4	380.1	e R 1,770.1
1990	—	R 50.5	R 50.5	223.7	565.5	604.3	20.6	R 308.4	13.0	R 39.2	R 1,551.1	—	R 6.2	R 1,831.5	-102.1	401.1	R 2,130.4
1991	—	R 53.8	R 53.8	212.4	429.1	528.3	22.3	R 241.2	10.0	R 43.7	R 1,274.6	—	R 6.5	R 1,547.3	-73.6	415.0	R 1,888.7
1992	—	R 46.0	R 46.0	210.6	442.6	426.9	20.6	307.3	13.3	36.7	R 1,247.3	—	R 6.3	R 1,510.2	-72.1	429.5	R 1,867.6
1993	—	R 52.0	R 52.0	213.5	404.3	412.5	12.2	R 313.4	11.7	30.6	1,184.8	—	R 5.1	R 1,455.4	-71.2	440.5	R 1,824.6
1994	—	R 28.9	R 28.9	195.1	327.0	413.3	11.1	R 359.4	10.8	R 21.8	R 1,143.3	—	R 4.8	R 1,372.0	-71.3	462.2	R 1,763.0
1995	—	R 26.3	R 26.3	210.9	436.9	435.6	11.4	405.6	11.7	31.4	1,332.5	—	R 6.2	R 1,575.9	R -77.5	468.4	R 1,966.8
1996	—	22.9	22.9	228.1	385.8	552.3	12.6	412.1	12.8	20.5	1,396.1	—	6.4	1,653.5	-89.9	487.3	2,050.8
1997	—	25.5	25.5	252.0	469.5	594.6	13.4	394.8	15.2	33.0	1,520.5	—	4.7	1,802.7	-108.2	485.2	2,179.7

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 18. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Alaska

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	2.47	1.51	1.40	1.61	2.93	1.46	0.82	R 1.47	9.29	R 2.30
1975	2.87	1.62	2.80	3.23	6.07	2.90	1.62	R 2.24	10.16	R 3.24
1980	—	1.73	7.05	—	12.23	7.21	4.15	R 4.30	16.18	R 6.62
1981	9.62	1.95	8.51	—	12.98	8.63	5.10	R 5.47	17.65	R 7.95
1982	10.15	1.80	8.46	—	13.97	8.67	4.95	R 5.26	21.01	R 8.25
1983	7.90	2.33	7.84	R 8.01	14.54	8.20	4.79	5.15	24.04	R 8.78
1984	7.93	2.48	7.71	R 7.92	14.33	R 8.14	4.87	R 5.20	24.78	R 8.88
1985	7.75	2.79	7.81	R 10.64	13.97	8.32	4.68	R 5.19	25.96	R 9.11
1986	7.99	3.22	6.84	R 4.75	13.14	7.36	3.75	R 5.08	26.48	R 9.35
1987	—	3.18	6.24	R 4.47	13.02	6.63	3.58	R 4.68	28.75	R 9.17
1988	—	3.45	6.27	R 4.84	12.85	6.76	3.61	R 4.71	28.39	R 9.49
1989	—	3.64	6.95	R 5.13	15.85	7.63	4.00	R 5.25	28.72	R 9.70
1990	7.96	4.00	7.94	R 7.09	16.66	8.78	4.75	R 6.30	29.64	R 10.19
1991	10.99	4.17	7.57	R 5.55	17.04	R 8.61	4.54	R 6.54	31.28	R 10.60
1992	7.92	3.78	6.78	R 4.98	15.84	7.77	4.15	R 5.66	31.73	R 9.91
1993	7.96	3.99	6.93	R 5.45	15.66	7.67	4.06	R 5.63	32.67	R 10.42
1994	2.95	3.60	6.24	R 4.76	15.44	R 6.87	3.94	R 4.51	33.17	R 9.63
1995	R 2.04	3.61	6.01	R 4.81	14.86	6.55	3.86	R 4.42	32.93	R 9.29
1996	2.05	3.46	6.55	5.02	15.17	7.28	4.43	4.50	33.30	9.62
1997	2.18	3.77	7.02	4.67	16.11	7.71	4.41	4.93	33.53	9.93
	Expenditures in Million Nominal Dollars									
1970	R (s)	9.4	11.1	R (s)	0.9	12.1	(s)	R 22.3	16.7	R 39.0
1975	R (s)	16.9	26.4	1.7	1.5	29.6	0.7	R 47.6	31.1	R 78.7
1980	—	13.8	48.2	—	2.6	50.8	1.6	R 66.2	60.3	R 126.4
1981	25.1	15.4	45.1	—	1.9	47.0	2.0	R 89.6	73.9	R 163.5
1982	28.0	19.0	55.5	—	3.5	58.9	2.1	R 108.0	100.9	R 208.9
1983	20.3	24.4	54.6	R (s)	5.6	60.3	2.0	R 107.0	119.2	R 226.2
1984	22.0	29.4	60.6	R (s)	8.0	68.7	2.6	R 122.7	135.1	R 257.7
1985	18.7	37.3	59.6	R (s)	9.6	69.3	2.4	R 127.7	148.3	R 276.0
1986	21.9	39.3	42.4	(s)	7.3	49.7	1.9	R 112.9	146.8	R 259.7
1987	—	39.3	58.6	(s)	7.5	R 66.1	2.6	R 108.1	151.9	R 260.0
1988	—	43.4	46.9	R (s)	7.9	54.9	2.8	R 101.0	154.0	R 255.0
1989	—	49.3	61.5	(s)	11.6	73.0	3.2	R 125.5	161.0	R 286.6
1990	21.7	53.7	80.7	R (s)	18.1	98.9	4.3	178.7	168.0	346.7
1991	30.6	56.7	70.4	R (s)	19.9	R 90.6	4.4	R 182.2	171.1	R 353.3
1992	22.5	54.4	63.4	(s)	18.3	81.7	4.2	R 162.9	177.5	R 340.4
1993	24.8	54.9	51.5	(s)	10.9	62.4	3.3	R 145.4	181.6	R 327.0
1994	8.5	53.6	45.6	R (s)	8.5	R 54.3	3.2	R 119.6	191.1	R 310.7
1995	R 5.9	55.3	52.3	(s)	8.4	60.8	3.4	R 125.4	192.5	R 317.8
1996	5.4	55.3	50.1	(s)	10.7	60.8	3.9	125.4	200.7	326.1
1997	6.1	57.1	59.4	(s)	11.3	70.7	2.9	136.8	197.5	334.2

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 19. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Alaska

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	1.01	0.68	1.21	—	1.10	3.18	1.49	1.66	0.82	1.08	9.46	1.67
1975	1.57	0.97	2.60	—	2.32	5.15	2.52	3.21	1.62	1.81	10.83	2.60
1980	—	1.06	6.75	—	3.96	10.20	4.31	7.69	4.15	2.54	18.02	4.16
1981	3.44	1.40	8.06	—	5.46	11.58	—	9.09	5.10	3.13	19.64	4.52
1982	3.52	1.59	8.01	7.57	5.54	11.35	5.06	9.23	4.95	2.96	21.96	4.32
1983	2.99	1.94	7.23	R 8.01	6.05	10.46	6.46	7.81	4.79	3.27	24.10	4.77
1984	R 2.55	2.06	6.91	R 7.92	5.99	10.07	5.12	7.35	4.87	R 3.26	24.12	R 6.07
1985	R 2.45	2.35	6.93	R 10.64	13.07	9.83	—	7.63	NA	R 3.51	24.36	R 7.03
1986	R 2.49	2.50	4.68	R 4.75	9.06	7.86	2.83	R 4.38	NA	R 3.68	24.90	R 5.51
1987	—	2.39	5.34	R 4.47	8.52	7.90	3.26	R 4.29	NA	R 3.71	25.78	R 5.66
1988	—	2.59	5.85	R 4.84	8.58	8.14	3.04	R 5.18	NA	R 3.34	25.88	R 7.43
1989	—	2.57	5.83	R 5.13	12.13	8.65	—	6.14	NA	3.26	26.62	8.08
1990	R 3.45	2.77	6.81	R 7.09	9.03	10.03	—	6.99	NA	R 3.82	27.33	R 8.08
1991	R 2.71	2.88	6.73	R 5.55	9.29	8.99	—	6.98	NA	R 3.66	27.86	R 8.18
1992	R 2.79	2.63	6.03	R 4.98	9.26	9.95	—	6.24	NA	R 3.53	28.72	R 7.96
1993	R 2.97	2.80	6.30	R 5.45	9.21	9.98	—	6.37	4.06	R 3.61	28.75	R 8.35
1994	R 2.10	2.48	5.65	R 4.76	10.10	10.46	—	5.74	3.94	R 3.11	28.97	R 8.12
1995	R 2.05	2.26	5.92	R 4.81	10.22	10.80	—	6.13	3.86	R 2.74	28.75	R 7.60
1996	2.05	2.35	6.70	5.02	11.50	11.65	—	8.00	4.43	3.25	28.88	7.81
1997	2.18	2.44	6.37	4.67	11.70	11.91	—	6.93	4.41	2.99	29.03	7.65
	Expenditures in Million Nominal Dollars											
1970	R (s)	8.6	3.0	—	R (s)	4.1	7.5	14.7	(s)	23.5	15.4	39.0
1975	R (s)	14.0	7.6	—	R (s)	11.2	8.9	27.8	(s)	R 42.2	24.3	66.4
1980	—	17.5	22.7	—	R (s)	13.8	R (s)	36.8	(s)	R 54.3	44.8	99.0
1981	16.7	22.7	25.0	—	R (s)	15.2	—	40.3	(s)	R 79.8	46.3	126.0
1982	18.0	38.6	22.4	1.0	R (s)	20.8	R (s)	44.6	(s)	101.2	57.8	R 159.1
1983	14.2	47.9	43.8	R (s)	R (s)	14.3	(s)	58.8	(s)	121.0	69.4	R 190.4
1984	R 13.1	50.9	47.3	R (s)	0.6	11.7	(s)	59.9	(s)	R 124.0	142.2	R 266.2
1985	R 11.0	48.1	37.4	R (s)	1.6	13.8	—	R 53.0	NA	R 112.1	157.7	R 269.8
1986	R 12.7	52.7	22.8	R 134.1	0.9	8.3	29.4	R 195.4	NA	R 260.8	166.3	R 427.2
1987	—	48.7	32.8	R 121.5	0.9	2.1	40.2	R 197.6	NA	R 246.3	166.6	R 412.9
1988	—	54.2	29.8	R 5.2	0.9	2.2	5.9	R 44.0	NA	R 98.2	168.9	R 267.1
1989	—	55.9	28.0	(s)	1.6	2.4	—	32.0	NA	87.8	186.0	273.8
1990	R 17.5	56.9	46.7	(s)	1.7	2.7	—	51.1	NA	R 125.5	198.9	R 324.5
1991	R 14.0	60.4	38.2	(s)	1.9	4.1	—	44.3	NA	R 118.7	207.9	R 326.6
1992	R 14.7	56.2	48.3	(s)	1.9	3.0	—	53.2	NA	R 124.2	215.0	R 339.2
1993	R 17.2	55.6	44.5	(s)	1.1	R (s)	—	46.0	(s)	R 118.8	220.2	R 338.9
1994	R 11.2	51.3	38.9	(s)	1.0	0.6	—	40.5	(s)	R 103.3	230.7	R 334.0
1995	R 11.0	56.7	26.3	(s)	1.0	1.2	—	28.5	(s)	R 96.5	232.8	R 329.3
1996	10.0	63.4	31.4	(s)	1.4	18.0	—	50.8	(s)	124.5	239.4	363.9
1997	11.3	65.7	27.6	(s)	1.5	4.4	—	33.5	(s)	110.7	233.6	344.3

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 20. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Alaska

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	1.01	1.01	0.43	0.57	0.66	0.76	1.10	5.08	3.18	0.36	0.43	0.75	R 1.49	R 0.74	5.36	R 0.78
1975	—	1.57	1.57	0.81	1.80	2.68	3.02	2.32	7.48	5.15	1.85	1.31	2.65	R 1.49	R 1.65	6.79	R 1.83
1980	—	—	—	0.39	3.62	6.27	7.29	3.96	14.36	10.20	3.59	4.04	5.96	R 1.49	R 1.60	10.32	1.91
1981	—	—	—	0.36	4.44	6.98	7.91	5.46	18.00	11.58	4.29	4.46	6.69	R 1.49	R 2.00	18.76	R 2.88
1982	—	—	—	0.58	4.00	5.61	7.57	5.54	17.25	11.35	—	2.72	6.03	R 1.49	R 2.26	20.27	R 3.01
1983	—	—	—	0.67	4.19	7.09	R 6.79	6.05	16.98	10.46	—	3.67	R 6.25	R 1.49	1.49	18.79	R 2.53
1984	—	—	—	0.66	4.30	6.90	R 6.58	5.99	17.63	10.07	—	3.62	R 6.03	R 1.49	1.56	20.21	R 1.89
1985	—	—	—	0.71	4.47	6.72	R 6.59	13.07	17.61	9.83	4.40	R 3.39	R 5.60	R 1.49	R 2.33	19.13	R 2.55
1986	—	—	—	0.80	4.49	4.41	R 4.59	9.06	15.59	7.86	2.34	—	3.20	R 1.49	R 1.91	18.53	2.20
1987	—	—	—	0.73	4.25	4.78	R 4.59	8.52	13.58	7.90	2.70	—	4.52	R 1.49	1.65	22.97	2.14
1988	—	—	—	1.07	3.93	5.03	R 4.74	8.58	14.62	8.14	—	—	4.90	R 1.49	2.10	21.63	R 2.60
1989	—	—	—	1.08	3.19	5.78	R 5.25	12.13	14.48	8.65	—	—	5.62	d R 1.17	d R 2.28	22.80	d R 2.86
1990	—	—	—	1.28	3.14	6.72	R 6.84	9.03	14.60	10.03	3.46	—	6.22	R 1.12	2.27	23.17	R 2.77
1991	—	—	—	1.18	3.28	5.91	R 5.79	9.29	16.80	8.99	2.53	—	5.49	R 1.24	2.13	24.08	2.61
1992	—	—	—	1.18	2.80	5.75	R 4.92	9.26	18.32	9.95	2.45	—	5.30	R 1.26	2.03	22.70	2.48
1993	—	R 2.97	R 2.97	1.30	2.95	6.12	R 4.89	9.21	18.96	9.98	2.28	—	5.82	R 1.29	R 2.06	24.01	2.60
1994	—	2.10	2.10	1.42	3.13	5.76	R 4.76	10.13	19.11	10.46	2.71	—	5.60	R 1.40	R 2.30	24.52	2.98
1995	—	—	—	1.44	3.21	5.34	R 5.01	9.61	R 19.41	10.80	2.74	—	5.23	R 1.29	2.46	24.56	3.09
1996	—	2.05	2.05	1.43	3.39	6.07	5.73	9.24	20.08	11.65	2.86	—	6.05	1.16	2.61	24.81	3.26
1997	—	2.18	2.18	1.54	3.46	6.18	5.73	8.87	17.86	11.91	2.99	—	6.23	1.34	2.80	21.93	3.50
	Expenditures in Million Nominal Dollars																
1970	—	8.6	8.6	5.1	1.0	6.9	R (s)	R (s)	(s)	1.8	R (s)	R (s)	10.2	R 2.6	R 26.5	1.7	R 28.3
1975	—	16.5	16.5	13.5	3.8	30.8	0.5	0.8	1.1	2.9	R (s)	0.5	40.7	R 2.4	R 73.1	10.6	R 83.6
1980	—	—	—	19.5	7.4	64.0	0.8	1.3	1.8	5.9	R (s)	2.5	84.0	R 1.2	R 104.8	24.5	R 129.2
1981	—	—	—	15.0	7.8	83.3	1.6	1.6	2.2	0.7	R (s)	1.5	99.2	R 1.3	R 115.5	59.6	R 175.1
1982	—	—	—	31.7	9.8	78.7	53.1	2.1	1.9	0.8	—	1.1	147.4	R 1.2	R 180.3	69.8	R 250.2
1983	—	—	—	33.5	9.6	37.7	R (s)	1.3	1.9	0.8	—	1.8	R 53.4	R 1.4	R 88.3	70.9	R 159.2
1984	—	—	—	32.5	12.5	41.1	R (s)	1.2	2.2	R (s)	—	2.4	59.9	R 1.4	R 93.8	21.8	R 115.6
1985	—	—	—	45.2	14.4	68.6	R (s)	3.3	2.0	21.0	66.0	R 3.3	R 178.6	R 1.4	R 225.3	25.5	R 250.7
1986	—	—	—	34.9	11.1	28.1	R (s)	1.9	1.7	15.9	61.8	—	120.7	R (s)	R 156.0	26.2	R 182.3
1987	—	—	—	35.5	7.2	27.3	(s)	1.9	1.7	R 16.7	15.1	—	69.9	R (s)	R 105.8	34.9	R 140.7
1988	—	—	—	48.3	18.2	57.8	(s)	1.6	1.8	2.7	—	—	82.2	R (s)	R 130.9	35.8	R 166.7
1989	—	—	—	37.7	5.8	61.4	(s)	1.2	1.8	2.9	—	—	73.2	d R 2.0	d R 112.8	33.0	d R 145.9
1990	—	—	—	58.5	5.6	61.7	(s)	0.6	1.9	2.9	1.8	—	74.4	R 1.8	R 134.7	34.1	R 168.8
1991	—	—	—	59.1	5.6	66.9	(s)	R (s)	1.9	2.7	3.0	—	80.5	R 2.1	R 141.7	36.0	R 177.7
1992	—	—	—	65.9	4.9	65.5	(s)	R (s)	2.1	3.0	3.2	—	79.0	R 2.1	R 147.0	37.0	R 184.0
1993	—	R (s)	R (s)	67.9	0.8	55.3	R (s)	R (s)	2.3	2.1	2.9	—	R 63.6	R 1.8	R 133.4	38.7	R 172.1
1994	—	R (s)	R (s)	57.4	1.4	50.0	(s)	1.5	2.4	3.1	3.9	—	62.2	R 1.3	R 121.1	40.4	R 161.5
1995	—	—	—	60.5	1.8	70.0	(s)	1.9	2.4	3.5	5.1	—	84.6	R 2.5	R 147.5	43.2	R 190.7
1996	—	(s)	(s)	64.3	0.6	88.4	(s)	(s)	2.4	3.9	3.1	—	98.8	2.1	165.3	47.2	212.5
1997	—	(s)	(s)	71.0	1.3	99.9	(s)	0.5	2.2	3.4	1.2	—	108.5	1.5	181.0	54.2	235.2

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 21. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Alaska

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	1.01	—	2.17	1.46	0.73	1.10	5.08	3.18	1.11	1.39	1.39	—	1.39
1975	1.57	—	3.45	3.13	2.04	—	7.48	5.15	2.14	3.06	3.06	—	3.06
1980	—	—	9.02	7.39	6.21	3.96	14.36	10.20	—	7.31	7.31	—	7.31
1981	—	—	10.84	8.86	7.56	—	18.00	11.58	8.13	8.76	8.76	—	8.76
1982	—	—	10.92	8.77	7.37	5.54	17.25	11.35	—	8.59	8.59	—	8.59
1983	—	—	10.44	7.50	6.72	6.05	16.98	10.46	5.29	7.72	7.72	—	7.72
1984	—	—	10.27	7.70	6.47	5.99	17.63	10.07	4.80	7.47	7.47	—	7.47
1985	—	—	9.99	8.00	6.07	13.07	17.61	9.83	4.55	7.27	7.27	—	7.27
1986	—	—	8.41	7.33	4.16	9.06	15.59	7.86	2.42	5.45	5.45	—	5.45
1987	—	—	7.55	6.58	4.13	8.52	13.58	7.90	3.23	R 5.32	R 5.32	—	R 5.32
1988	—	—	7.41	7.50	4.14	8.58	14.62	8.14	4.61	5.48	5.48	—	5.48
1989	—	—	8.28	8.51	4.69	12.13	14.48	8.65	3.34	6.20	6.20	—	6.20
1990	—	—	9.32	9.03	6.17	9.03	14.60	10.03	5.00	R 7.57	R 7.57	—	R 7.57
1991	—	—	8.71	8.35	5.50	9.29	16.80	8.99	2.96	R 6.70	R 6.70	—	R 6.70
1992	—	—	8.54	8.49	5.15	9.26	18.32	9.95	3.24	6.86	6.86	—	6.86
1993	—	—	8.24	8.43	4.96	9.21	18.96	9.98	2.88	6.78	6.78	—	6.78
1994	—	—	7.96	8.23	4.53	9.28	19.11	10.46	2.80	6.48	6.48	—	6.48
1995	—	—	8.36	8.62	4.54	9.51	R 19.41	10.80	2.83	6.77	6.77	—	6.77
1996	—	—	9.29	9.97	5.22	9.39	20.08	11.65	2.94	7.20	7.20	—	7.20
1997	—	—	9.39	10.11	4.97	9.16	17.86	11.91	3.03	7.03	7.03	—	7.03
	Expenditures in Million Nominal Dollars												
1970	(s)	—	5.1	8.5	27.5	(s)	1.8	37.9	0.9	81.7	81.8	—	81.8
1975	(s)	—	8.1	39.3	85.0	—	5.5	98.9	6.5	243.3	243.3	—	243.3
1980	—	—	22.7	112.1	335.7	R (s)	8.2	177.1	—	655.9	655.9	—	655.9
1981	—	—	27.6	128.4	462.7	—	9.9	255.7	R (s)	884.7	884.7	—	884.7
1982	—	—	20.3	86.9	478.5	R (s)	8.6	281.7	—	876.1	876.1	—	876.1
1983	—	—	19.8	155.0	461.6	R (s)	8.9	246.1	1.8	893.3	893.3	—	893.3
1984	—	—	20.3	171.6	553.3	R (s)	9.8	269.7	1.7	1,026.8	1,026.8	—	1,026.8
1985	—	—	24.7	272.2	520.3	0.7	9.1	R 256.5	0.5	R 1,084.1	R 1,084.1	—	R 1,084.1
1986	—	—	26.2	173.5	379.8	R (s)	7.9	199.9	1.7	789.3	789.3	—	789.3
1987	—	—	7.9	149.8	345.6	R (s)	7.8	R 197.2	2.4	R 710.9	R 710.9	—	R 710.9
1988	—	—	15.2	173.9	394.0	R (s)	8.1	R 222.5	4.1	R 818.1	R 818.1	—	R 818.1
1989	—	—	20.5	315.8	491.0	R (s)	8.2	R 225.6	2.5	R 1,063.9	R 1,063.9	—	R 1,063.9
1990	—	—	23.1	347.1	604.3	R (s)	8.5	R 302.7	4.4	R 1,290.4	R 1,290.4	—	R 1,290.4
1991	—	—	27.2	231.0	528.3	R (s)	8.8	R 234.3	1.4	R 1,031.1	R 1,031.1	—	R 1,031.1
1992	—	—	19.8	239.7	426.9	R (s)	9.8	301.3	6.4	R 1,004.0	R 1,004.0	—	R 1,004.0
1993	—	—	17.1	233.6	412.5	R (s)	10.3	R 310.9	2.2	R 986.6	R 986.6	—	R 986.6
1994	—	—	6.9	168.2	413.3	R (s)	10.8	R 355.7	1.8	R 956.8	R 956.8	—	R 956.8
1995	—	—	16.4	263.1	435.6	R (s)	10.8	400.9	2.1	1,129.0	1,129.0	—	1,129.0
1996	—	—	6.6	188.1	552.3	(s)	10.9	390.2	(s)	1,148.4	1,148.4	—	1,148.4
1997	—	—	19.3	254.7	594.6	(s)	10.2	387.0	(s)	1,266.0	1,266.0	—	1,266.0

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 22. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Alaska

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.68	0.37	1.35	1.68	—	1.68	—	—	0.66
1975	0.96	0.51	2.86	3.10	—	3.10	—	—	0.95
1980	1.91	0.48	4.08	5.48	—	4.90	—	—	1.25
1981	1.90	0.55	8.68	11.74	—	10.83	—	—	1.94
1982	1.33	0.71	5.15	7.49	—	6.66	—	—	1.54
1983	1.75	1.04	6.55	8.72	—	7.90	—	—	2.04
1984	1.80	1.04	6.01	7.64	—	6.88	—	—	1.96
1985	1.80	0.92	5.18	7.06	—	6.12	—	—	1.71
1986	1.82	1.11	2.82	4.15	—	3.40	—	—	1.48
1987	2.00	1.13	3.68	9.50	—	6.94	—	—	1.87
1988	2.64	1.33	5.70	8.81	—	7.56	—	—	2.13
1989	1.95	1.35	4.19	6.31	—	5.61	—	—	1.86
1990	2.46	1.58	6.38	10.36	—	9.27	—	—	2.37
1991	1.94	1.16	3.73	7.31	—	6.14	—	—	1.81
1992	1.99	1.18	3.97	7.25	—	6.57	—	—	1.91
1993	2.11	1.25	3.48	6.22	—	5.18	—	—	1.89
1994	2.10	1.13	2.93	7.28	—	5.78	—	—	1.86
1995	R 2.05	1.29	2.81	7.28	—	5.85	—	—	R 1.96
1996	2.05	1.45	2.96	7.28	—	5.30	—	—	2.15
1997	2.18	1.74	3.07	8.00	—	5.21	—	—	2.39
	Expenditures in Million Nominal Dollars								
1970	2.9	3.1	(s)	3.9	—	3.9	—	—	9.9
1975	4.3	10.1	(s)	12.5	—	12.6	—	—	26.9
1980	8.2	13.8	9.1	17.2	—	26.3	—	—	48.3
1981	9.6	16.0	11.9	38.1	—	50.0	—	—	75.6
1982	7.0	22.0	9.7	25.6	—	35.2	—	—	64.3
1983	8.9	32.9	13.9	30.3	—	44.2	—	—	86.0
1984	8.9	33.2	17.1	24.8	—	41.8	—	—	83.9
1985	8.4	31.8	15.5	21.3	—	36.8	—	—	77.0
1986	7.8	38.5	9.4	10.6	—	19.9	—	—	66.3
1987	8.7	34.8	7.1	23.3	—	30.4	—	—	73.8
1988	11.5	41.3	9.4	21.7	—	31.2	—	—	84.0
1989	9.2	44.5	6.1	18.6	—	24.6	—	—	78.4
1990	11.3	54.6	6.9	29.4	—	36.2	—	—	102.1
1991	9.1	36.3	5.6	22.6	—	28.2	—	—	73.6
1992	8.7	34.0	3.7	25.7	—	29.3	—	—	72.1
1993	9.9	35.1	6.7	19.5	—	26.2	—	—	71.2
1994	9.0	32.8	5.2	24.3	—	29.5	—	—	71.3
1995	R 9.5	38.4	4.5	25.1	—	29.6	—	—	R 77.5
1996	7.4	45.1	9.6	27.8	—	37.4	—	—	89.9
1997	8.1	58.3	13.9	27.9	—	41.8	—	—	108.2

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 23. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Arizona

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.21	0.21	0.54	1.10	0.76	2.08	2.80	0.48	1.06	1.96	—	R 1.05	1.29	0.33	5.32	1.97
1975	—	0.23	0.23	1.01	2.49	2.12	4.06	4.62	2.08	2.83	3.45	—	R 1.44	2.25	0.84	9.65	3.87
1980	—	1.01	1.01	2.86	6.57	6.59	6.85	9.68	3.92	6.13	8.14	—	R 2.10	R 4.47	1.35	15.68	R 8.37
1981	—	1.09	1.09	3.18	7.75	7.67	8.76	10.83	4.97	7.98	9.51	—	R 2.32	R 4.65	1.37	16.88	R 9.33
1982	—	1.27	1.27	4.43	7.50	7.38	9.56	10.34	5.13	7.55	9.20	—	R 2.35	R 4.77	1.46	19.84	R 9.89
1983	—	1.31	1.31	4.99	6.93	6.71	10.00	8.87	5.28	R 7.37	8.13	—	R 2.23	R 4.72	1.48	20.16	R 9.52
1984	—	1.29	1.29	5.10	6.77	6.41	9.13	8.94	4.66	7.09	8.01	—	R 2.46	R 4.66	1.50	20.56	R 9.53
1985	—	1.36	1.36	4.92	6.90	6.20	10.19	9.06	3.79	R 7.03	8.17	0.65	R 2.37	R 4.61	1.60	21.15	R 10.02
1986	—	R 1.42	R 1.42	4.12	5.63	4.25	9.76	7.24	2.36	R 6.28	6.52	0.65	R 1.91	R 3.67	1.26	21.87	R 9.09
1987	—	1.33	1.33	4.10	6.49	4.36	10.00	7.77	2.33	5.23	6.95	0.82	R 1.74	R 3.77	1.21	21.31	R 9.69
1988	—	1.42	1.42	4.45	6.04	4.15	9.26	7.31	2.37	5.27	6.56	0.77	R 1.74	R 3.35	1.18	21.73	R 9.67
1989	—	1.38	1.38	3.92	6.76	4.80	11.73	8.19	2.76	5.21	7.35	0.85	e R 1.71	e R 3.95	1.38	22.10	e R 10.31
1990	—	1.45	1.45	4.52	7.80	6.04	11.93	9.22	3.31	5.24	8.30	0.72	R 3.18	R 3.96	1.21	22.81	R 11.16
1991	—	1.43	1.43	4.58	7.48	5.03	12.41	8.57	2.65	6.24	7.76	0.70	R 3.11	3.63	1.13	23.09	R 10.90
1992	—	1.40	1.40	4.57	7.53	4.72	10.70	9.23	2.53	5.67	8.11	0.55	R 2.86	R 3.67	1.08	23.94	R 11.45
1993	—	1.38	1.38	4.86	8.41	4.69	10.59	9.58	2.43	6.27	8.58	0.58	R 2.72	3.98	1.12	24.05	R 11.70
1994	—	1.40	1.40	4.69	8.12	4.24	11.86	9.54	3.08	R 6.21	8.51	0.57	R 2.73	R 3.92	1.11	23.23	R 11.51
1995	—	1.42	1.42	4.73	8.02	4.34	11.39	9.57	2.82	6.01	8.50	0.49	R 2.73	R 4.00	1.00	22.32	R 11.27
1996	—	1.47	1.47	4.94	8.97	5.11	11.83	10.48	3.32	6.91	9.41	0.49	3.02	4.38	1.05	22.11	11.89
1997	—	1.45	1.45	5.00	8.54	4.90	12.49	10.51	2.87	6.44	9.27	0.49	2.78	4.28	1.06	21.63	11.75
	Expenditures in Million Nominal Dollars																
1970	—	1.8	1.8	96.8	31.3	27.5	10.2	316.9	R (s)	31.4	417.7	—	R 0.7	R 517.0	-23.5	250.1	R 743.7
1975	—	21.1	21.1	148.4	147.1	82.9	16.9	671.9	77.7	60.4	1,056.8	—	R 1.2	R 1,227.5	-129.6	697.1	R 1,795.0
1980	—	247.0	247.0	434.0	412.0	289.7	40.0	1,555.4	33.0	118.0	2,448.1	—	R 7.6	R 3,136.6	-398.7	1,431.6	R 4,169.5
1981	—	348.3	348.3	502.5	450.4	319.0	37.9	1,753.0	8.0	129.0	2,697.3	—	R 8.7	R 3,556.8	-489.4	1,622.3	R 4,689.7
1982	—	426.9	426.9	525.9	360.5	314.1	53.1	1,707.6	10.2	107.6	2,553.1	—	R 8.8	R 3,514.8	-496.4	1,782.4	R 4,800.7
1983	—	388.4	388.4	536.5	361.0	262.5	59.8	1,537.5	17.8	111.7	R 2,350.1	—	R 9.1	R 3,284.0	-429.6	1,917.9	R 4,772.3
1984	—	417.8	417.8	573.4	396.0	283.6	49.7	1,624.3	16.0	149.6	2,519.1	—	R 11.4	R 3,521.7	-477.7	2,086.4	R 5,130.4
1985	—	R 465.7	R 465.7	580.6	409.0	244.4	63.2	R 1,720.1	4.2	R 150.5	R 2,591.4	8.0	R 10.8	R 3,656.4	-580.5	2,381.4	R 5,457.4
1986	—	R 421.1	R 421.1	379.7	371.0	181.0	60.5	R 1,438.4	0.6	R 135.2	R 2,186.8	69.8	R 12.8	R 3,070.2	-490.6	2,536.2	R 5,115.9
1987	—	R 376.1	R 376.1	426.6	402.2	202.5	71.1	R 1,603.2	1.8	113.0	R 2,393.7	118.4	R 10.5	R 3,325.3	-539.1	2,664.5	R 5,450.6
1988	—	439.6	439.6	487.9	368.3	195.0	58.2	R 1,544.4	0.8	R 119.5	R 2,286.2	190.6	R 10.9	R 3,415.2	-671.5	2,886.0	R 5,629.7
1989	—	493.8	493.8	510.6	448.9	217.4	62.6	R 1,748.2	2.6	R 108.8	R 2,588.5	71.8	e R 11.4	e R 3,676.1	-664.3	3,030.3	e R 6,042.1
1990	—	498.5	498.5	464.2	546.4	285.9	58.8	R 1,903.9	R (s)	R 108.0	R 2,903.4	158.1	R 21.1	R 4,045.3	R -696.1	3,181.1	R 6,530.3
1991	—	497.6	497.6	468.8	451.3	270.2	64.5	R 1,827.7	2.4	122.4	R 2,738.5	188.9	R 21.5	R 3,916.9	R -712.9	3,249.4	R 6,453.4
1992	—	515.3	515.3	492.8	494.6	219.1	64.9	R 2,014.1	1.2	R 140.3	R 2,934.2	149.6	R 21.4	R 4,113.3	-713.0	3,516.4	R 6,916.7
1993	—	536.1	536.1	486.5	663.7	207.4	70.4	R 2,164.4	2.9	127.5	R 3,236.3	136.0	R 20.0	R 4,414.9	-706.9	3,644.6	R 7,352.6
1994	—	562.7	562.7	523.0	621.3	177.7	80.4	R 2,264.4	3.9	R 137.4	R 3,285.2	141.1	R 22.2	R 4,534.2	R -731.3	3,747.3	R 7,550.1
1995	—	485.7	485.7	497.5	682.8	186.7	80.0	2,370.9	1.5	R 154.7	R 3,476.5	140.7	23.8	R 4,628.5	R -640.5	3,700.4	7,688.4
1996	—	502.8	502.8	515.1	850.9	229.6	71.3	2,721.0	2.3	147.2	4,022.2	150.1	26.1	5,216.2	-688.3	3,929.6	8,457.5
1997	—	534.0	534.0	574.1	860.6	221.4	76.1	2,698.3	(s)	148.6	4,005.2	151.4	21.3	5,285.3	-730.6	4,019.2	8,573.9

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 24. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Arizona

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	—	1.13	1.27	2.88	2.65	2.48	0.72	R 1.28	6.99	R 2.95
1975	—	1.46	2.82	4.65	5.55	4.52	1.43	1.72	11.67	R 5.27
1980	—	3.88	7.27	—	8.46	8.46	3.66	R 4.19	18.28	R 11.09
1981	—	4.39	7.95	—	10.43	10.42	4.51	R 4.84	20.21	R 12.70
1982	4.59	5.62	—	—	11.84	11.84	4.37	R 6.09	22.63	R 14.04
1983	—	6.35	7.37	R 8.41	11.74	R 11.72	4.23	R 6.79	22.82	R 14.87
1984	4.21	6.85	6.61	R 8.31	10.67	R 10.65	4.30	R 7.03	23.47	R 15.80
1985	3.85	6.69	4.00	R 11.18	10.25	R 10.13	4.14	R 6.93	24.18	R 16.31
1986	—	6.06	4.74	R 4.99	9.97	R 9.84	3.32	R 6.34	25.37	R 17.33
1987	2.62	5.89	3.74	R 4.70	10.81	R 10.59	3.16	R 6.39	25.09	R 17.19
1988	2.63	6.76	4.98	R 5.09	9.52	R 9.44	3.19	R 6.92	25.65	R 18.19
1989	—	6.66	4.98	R 5.38	14.20	14.07	3.53	R 7.28	25.93	R 18.80
1990	3.02	6.64	7.57	R 7.44	13.79	R 13.65	4.75	7.00	26.49	R 18.36
1991	3.06	6.82	7.36	R 5.83	14.13	R 14.06	4.54	R 7.20	26.80	R 18.53
1992	2.80	7.02	6.97	R 5.23	11.46	R 11.40	4.15	R 7.13	28.08	R 19.75
1993	2.47	7.00	7.33	R 5.72	11.72	R 11.66	4.06	R 7.09	28.27	R 20.13
1994	2.28	7.34	6.88	R 5.00	13.43	R 13.36	3.94	R 7.51	27.25	R 19.86
1995	2.21	7.54	6.86	R 5.05	12.57	R 12.51	3.86	R 7.62	26.64	R 19.69
1996	2.20	7.44	7.56	5.27	13.93	13.80	4.43	7.63	26.22	19.88
1997	2.72	7.66	8.03	4.90	15.72	15.58	4.41	8.02	25.85	19.66
	Expenditures in Million Nominal Dollars									
1970	—	35.6	0.7	1.1	8.4	10.2	(s)	R 46.1	103.3	R 149.3
1975	—	58.2	3.6	2.0	11.2	16.8	0.6	R 75.5	284.3	R 359.8
1980	—	119.6	R (s)	—	20.4	20.5	3.8	R 143.9	601.2	R 745.0
1981	—	121.8	(s)	—	24.1	24.1	4.7	R 150.6	657.2	R 807.9
1982	(s)	174.5	—	—	34.3	34.3	4.9	R 213.7	733.9	R 947.6
1983	—	194.2	(s)	R (s)	39.0	R 39.1	4.7	R 238.0	812.0	R 1,050.0
1984	(s)	197.7	(s)	R (s)	28.0	R 28.1	6.8	R 232.6	889.6	R 1,122.2
1985	(s)	200.5	R (s)	R (s)	35.3	R 35.8	6.4	R 242.7	1,010.5	R 1,253.2
1986	—	159.6	R (s)	R (s)	33.3	R 33.6	5.0	R 198.3	1,085.5	R 1,283.7
1987	(s)	173.7	R (s)	R (s)	43.6	44.1	2.7	R 220.4	1,183.1	R 1,403.5
1988	(s)	197.2	R (s)	R (s)	29.8	R 30.0	2.8	R 230.0	1,289.0	R 1,519.0
1989	—	188.0	R (s)	(s)	43.0	R 43.2	3.2	R 234.4	1,349.0	R 1,583.4
1990	(s)	207.7	R (s)	(s)	38.6	39.1	16.4	263.2	1,390.1	1,653.3
1991	(s)	219.2	R (s)	R (s)	44.5	44.8	16.5	R 280.5	1,430.3	R 1,710.7
1992	R (s)	205.5	R (s)	R (s)	39.0	R 39.2	15.9	R 260.8	1,555.1	R 1,815.8
1993	(s)	202.8	R (s)	R (s)	34.9	35.2	14.8	R 252.8	1,611.4	R 1,864.1
1994	(s)	223.8	R (s)	R (s)	41.2	R 41.4	14.1	R 279.3	1,693.5	R 1,972.8
1995	R (s)	210.3	R (s)	R (s)	44.2	R 44.5	15.3	R 270.2	1,639.5	R 1,909.7
1996	(s)	208.4	(s)	(s)	39.5	39.8	17.5	265.8	1,766.6	2,032.4
1997	(s)	243.2	(s)	(s)	44.6	44.9	12.7	300.8	1,824.0	2,124.8

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 25. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Arizona

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	—	0.60	1.12	0.77	1.05	2.80	0.63	1.51	0.72	0.69	5.57	2.51
1975	—	1.10	2.62	2.35	2.67	4.62	2.08	2.95	1.43	1.33	10.03	4.68
1980	—	3.00	6.94	—	5.72	9.68	—	7.63	3.66	3.44	16.68	R 9.99
1981	—	3.35	7.59	6.55	6.85	10.83	5.04	8.65	4.51	3.71	18.08	11.05
1982	2.14	4.64	7.73	6.59	7.08	10.34	5.09	8.07	4.37	5.01	20.71	R 12.96
1983	—	5.31	6.28	R 8.41	7.82	8.87	R 5.13	7.45	4.23	R 5.51	21.15	R 13.85
1984	1.88	5.36	6.02	R 8.31	7.70	8.94	4.72	7.17	4.30	5.52	21.26	14.43
1985	R 1.80	5.33	5.94	R 11.18	10.11	9.06	4.13	R 7.13	NA	5.57	22.33	15.25
1986	—	4.47	3.53	R 4.99	9.51	7.24	—	R 5.35	NA	R 4.59	22.87	R 15.71
1987	R 1.95	4.38	4.16	R 4.70	8.94	7.77	—	R 5.93	NA	4.64	21.20	14.35
1988	1.84	4.81	3.83	R 5.09	9.01	7.31	2.30	5.14	NA	4.85	21.80	15.09
1989	—	4.57	4.79	R 5.38	8.49	8.19	—	6.05	NA	4.72	22.05	15.43
1990	1.97	4.64	5.63	R 7.44	9.49	9.22	—	R 7.03	NA	4.98	23.08	16.13
1991	2.01	4.95	5.24	R 5.83	9.75	8.57	2.53	7.27	NA	5.26	23.60	16.69
1992	2.02	5.04	4.96	R 5.23	9.72	9.23	—	7.72	NA	5.34	24.34	17.48
1993	2.03	4.92	5.19	R 5.72	9.67	9.58	—	7.88	4.06	R 5.11	24.47	R 17.63
1994	2.05	5.13	4.76	R 5.00	10.60	9.54	—	6.59	3.94	R 5.22	23.39	R 17.05
1995	2.03	5.06	5.06	R 5.05	10.74	9.57	—	R 6.92	3.86	R 5.18	22.58	R 16.74
1996	1.98	4.97	6.00	5.27	11.50	10.48	3.14	7.13	4.43	5.17	22.47	16.78
1997	1.99	5.20	5.39	4.90	11.70	10.51	—	6.50	4.41	5.33	21.79	16.33
	Expenditures in Million Nominal Dollars											
1970	—	14.3	1.4	R (s)	0.6	2.2	R (s)	4.3	(s)	18.7	89.1	107.8
1975	—	37.8	7.4	R (s)	0.9	4.3	1.1	13.9	(s)	R 51.8	245.1	296.9
1980	—	86.2	11.3	—	2.4	9.1	—	22.9	(s)	R 109.2	519.3	R 628.5
1981	—	94.5	2.6	0.7	2.8	10.5	1.1	17.8	(s)	R 112.4	571.5	R 683.9
1982	(s)	127.8	1.0	R (s)	3.6	16.5	5.1	26.7	(s)	R 154.6	656.4	R 811.0
1983	—	136.6	7.9	R (s)	4.6	7.8	(s)	20.4	(s)	R 157.2	688.8	R 846.0
1984	(s)	141.8	8.5	R (s)	3.6	7.1	R (s)	19.4	(s)	R 161.4	810.2	R 971.6
1985	(s)	141.3	16.5	R (s)	6.1	6.7	(s)	29.4	NA	170.7	936.7	R 1,107.4
1986	—	111.6	7.8	R 0.5	5.6	6.3	—	R 20.2	NA	R 131.9	1,021.0	R 1,152.9
1987	(s)	125.6	12.8	0.5	6.4	R 14.6	—	34.3	NA	159.9	1,036.0	1,195.9
1988	(s)	140.6	10.8	(s)	5.0	5.3	(s)	21.1	NA	161.8	1,110.0	1,271.8
1989	—	136.1	10.4	R (s)	4.5	5.5	—	20.6	NA	156.7	1,187.0	1,343.7
1990	(s)	136.0	16.7	R (s)	4.7	12.4	—	R 34.0	NA	R 170.0	1,264.5	R 1,434.5
1991	(s)	139.9	9.3	R (s)	5.4	16.7	R (s)	R 31.7	NA	171.6	1,272.6	1,444.2
1992	R (s)	140.9	6.5	(s)	5.8	14.9	—	27.3	NA	168.3	1,359.0	R 1,527.2
1993	(s)	139.5	5.1	(s)	5.1	9.6	—	19.8	1.2	159.3	1,395.5	1,554.8
1994	(s)	153.8	7.0	(s)	5.7	1.7	—	14.5	1.2	R 169.5	1,417.8	R 1,587.3
1995	R (s)	148.1	7.7	(s)	6.7	1.8	—	16.2	1.2	R 165.6	1,429.9	R 1,595.5
1996	(s)	145.5	14.1	(s)	5.7	1.9	(s)	21.9	1.4	168.9	1,499.1	1,668.0
1997	(s)	160.3	16.2	(s)	5.9	1.9	—	24.1	1.2	185.6	1,525.9	1,711.5

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.

(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 26. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Arizona

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	0.63	0.63	0.41	0.60	0.72	0.77	1.05	5.08	2.80	0.36	—	0.86	R 1.46	0.58	3.56	1.00
1975	—	0.98	0.98	0.72	1.87	2.19	2.35	2.67	7.48	4.62	1.87	1.31	2.38	R 1.46	1.42	7.16	R 2.54
1980	—	1.58	1.58	2.57	3.63	5.15	5.45	5.72	14.36	9.68	3.95	4.04	5.19	R 1.46	R 3.54	11.39	R 5.26
1981	—	1.61	1.61	3.01	4.48	6.22	6.55	6.85	18.00	10.83	3.86	4.46	6.41	R 1.46	R 3.73	12.31	R 5.78
1982	—	2.14	2.14	3.83	4.19	6.14	6.59	7.08	17.25	10.34	4.76	2.72	6.22	R 1.46	R 3.90	15.24	R 6.47
1983	—	2.20	2.20	3.96	4.16	6.49	R 7.13	7.82	16.98	8.87	4.78	—	6.29	R 1.46	R 4.01	15.45	R 6.59
1984	—	1.88	1.88	4.17	4.58	6.31	R 6.91	7.70	17.63	8.94	4.72	—	6.18	R 1.46	R 3.98	15.18	R 6.15
1985	—	R 1.80	R 1.80	4.25	4.76	6.20	R 6.91	10.11	17.61	9.06	4.13	—	6.35	R 1.46	R 3.89	15.05	R 6.54
1986	—	R 1.74	R 1.74	3.77	4.33	3.85	R 4.81	9.51	15.59	7.24	2.29	—	R 4.96	R 1.50	R 3.17	15.07	R 5.83
1987	—	R 1.95	R 1.95	3.62	3.21	4.43	R 4.81	8.94	13.58	7.77	2.88	—	4.73	R 1.50	R 3.73	15.37	R 7.01
1988	—	1.84	1.84	3.66	3.28	4.08	R 4.98	9.01	14.62	7.31	2.30	—	R 4.65	R 1.50	R 3.68	15.41	R 7.04
1989	—	1.92	1.92	3.52	2.84	4.99	R 5.51	8.49	14.48	8.19	2.51	—	4.83	d R 1.42	d R 3.73	15.80	d R 7.16
1990	—	1.97	1.97	3.60	2.71	5.69	R 7.19	9.49	14.60	9.22	3.18	—	5.25	R 1.48	4.11	16.36	R 7.86
1991	—	2.01	2.01	3.43	3.34	5.38	R 6.07	9.75	16.80	8.57	2.53	12.63	5.41	R 1.52	R 4.07	16.35	R 8.01
1992	—	2.02	2.02	4.03	2.99	5.39	R 5.16	9.72	18.32	9.23	2.41	15.91	5.21	R 1.50	R 4.19	16.88	R 8.28
1993	—	2.03	2.03	3.91	2.95	5.63	R 5.13	9.67	18.96	9.58	2.33	13.75	5.62	R 1.53	R 4.24	17.01	R 8.61
1994	—	2.05	2.05	3.47	2.96	5.24	R 4.99	10.64	19.11	9.54	2.60	17.18	5.63	R 1.63	R 4.05	16.49	R 8.09
1995	—	2.03	2.03	3.67	3.29	5.38	R 5.26	10.09	R 19.41	9.57	2.78	17.23	5.52	R 1.65	R 4.23	15.42	R 7.73
1996	—	1.98	1.98	3.76	3.55	6.34	6.01	9.71	20.08	10.48	3.14	17.16	6.31	1.63	4.57	15.22	8.18
1997	—	1.99	1.99	3.52	3.57	5.73	6.01	9.31	17.86	10.51	2.83	17.82	5.93	1.64	4.37	14.80	7.83
	Expenditures in Million Nominal Dollars																
1970	—	R (s)	R (s)	25.2	14.6	5.8	R (s)	1.0	3.6	6.7	R (s)	—	32.1	R (s)	R 57.8	57.8	R 115.6
1975	—	2.6	2.6	38.5	28.9	39.6	1.6	4.3	9.3	10.7	1.2	(s)	95.6	R 0.6	R 137.3	167.7	R 305.0
1980	—	20.6	20.6	101.5	49.6	107.1	2.3	15.5	23.0	15.7	3.8	R (s)	217.1	R 3.7	R 343.0	311.1	R 654.1
1981	—	39.7	39.7	124.4	48.7	107.9	3.3	7.4	27.7	15.4	R (s)	(s)	210.8	R 3.9	R 378.9	393.5	R 772.4
1982	—	65.9	65.9	103.9	42.3	77.4	R (s)	12.3	24.2	11.6	R (s)	(s)	168.4	R 3.8	R 341.9	392.0	R 734.0
1983	—	66.8	66.8	123.1	45.5	83.9	R (s)	12.4	24.9	8.6	R (s)	—	175.6	R 4.3	R 369.8	417.0	R 786.8
1984	—	R 68.7	R 68.7	127.2	75.6	92.2	R (s)	14.5	27.6	11.7	R (s)	—	222.1	R 4.4	R 422.5	386.7	R 809.1
1985	—	R 69.7	R 69.7	73.4	81.0	66.8	R (s)	18.4	25.7	19.2	0.8	—	212.4	R 4.4	R 359.8	434.2	R 794.1
1986	—	R 80.6	R 80.6	33.2	72.7	62.4	R 0.9	18.7	22.2	15.9	0.5	—	R 193.5	R 7.8	R 315.2	429.7	R 744.9
1987	—	R 25.9	R 25.9	66.6	53.1	62.9	0.7	19.2	21.9	R 16.6	R (s)	—	R 174.7	R 7.8	R 274.9	445.3	R 720.3
1988	—	22.7	22.7	91.4	58.4	48.3	R 1.5	21.3	22.7	R 15.5	R (s)	—	R 168.2	R 8.1	R 290.4	487.0	R 777.4
1989	—	27.4	27.4	68.5	45.0	89.0	R 1.5	13.0	23.1	R 18.1	R (s)	—	R 189.7	d R 8.2	d R 293.9	494.3	d R 788.2
1990	—	26.1	26.1	61.0	42.6	102.3	R 0.7	13.6	24.0	R 24.4	R (s)	—	R 207.9	R 4.7	R 299.6	526.5	R 826.1
1991	—	27.6	27.6	61.6	48.3	81.4	R 1.2	12.5	24.7	16.6	1.9	7.6	R 194.1	R 5.0	R 288.4	546.5	R 834.9
1992	—	25.9	25.9	75.7	59.1	74.8	(s)	18.1	27.4	16.8	1.0	10.8	208.0	R 5.4	R 315.0	602.3	R 917.4
1993	—	27.3	27.3	85.1	45.5	55.9	(s)	28.3	28.9	17.0	2.6	9.7	188.0	R 5.2	R 305.6	637.7	R 943.4
1994	—	30.1	30.1	92.4	50.6	54.5	(s)	30.5	30.5	18.4	0.7	10.6	195.8	R 6.9	R 325.1	635.9	R 961.0
1995	—	26.6	26.6	105.4	68.5	83.0	(s)	27.2	30.4	20.6	1.2	9.9	R 241.0	R 7.4	R 380.3	630.9	R 1,011.2
1996	—	26.5	26.5	102.5	57.9	102.2	(s)	24.8	30.5	24.1	1.6	11.2	252.4	7.1	388.6	663.8	1,052.4
1997	—	27.3	27.3	100.3	64.1	111.0	(s)	24.5	28.7	25.2	(s)	10.8	264.6	7.4	399.6	669.3	1,068.9

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 27. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Arizona

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.63	—	2.17	1.26	0.76	1.05	5.08	2.80	—	2.20	2.20	—	2.20
1975	0.98	—	3.45	2.74	2.12	2.67	7.48	4.62	—	3.93	3.93	—	3.93
1980	—	—	9.02	7.34	6.59	5.72	14.36	9.68	—	8.79	8.79	—	8.79
1981	—	—	10.84	8.46	7.67	6.85	18.00	10.83	—	9.96	9.96	—	9.96
1982	—	—	10.92	8.02	7.38	7.08	17.25	10.34	—	9.54	9.54	—	9.54
1983	—	—	10.44	7.14	6.71	7.82	16.98	8.87	—	8.35	8.35	—	8.35
1984	—	—	10.27	6.98	6.41	7.70	17.63	8.94	—	8.29	8.29	—	8.29
1985	—	—	9.99	7.15	6.20	10.11	17.61	9.06	—	8.40	8.40	—	8.40
1986	—	—	8.41	6.42	4.25	9.51	15.59	7.24	—	6.73	6.73	—	6.73
1987	—	—	7.55	7.44	4.36	8.94	13.58	7.77	—	7.23	7.23	—	7.23
1988	—	—	7.41	6.74	4.15	9.01	14.62	7.31	—	6.79	6.79	—	6.79
1989	—	—	8.28	7.62	4.80	8.49	14.48	8.19	—	7.64	7.64	—	7.64
1990	—	—	9.32	8.79	6.04	9.49	14.60	9.22	—	8.69	8.69	—	8.69
1991	—	3.73	8.71	8.38	5.03	9.75	16.80	8.57	—	7.98	7.98	—	7.98
1992	—	3.52	8.54	8.23	4.72	9.72	18.32	9.23	—	8.46	8.46	—	8.46
1993	—	3.47	8.24	8.89	4.69	9.67	18.96	9.58	—	8.85	8.85	—	8.85
1994	—	3.82	7.96	8.69	4.24	9.74	19.11	9.54	—	8.79	8.79	—	8.79
1995	—	3.62	8.36	8.72	4.34	9.98	R 19.41	9.57	—	8.84	8.84	—	8.84
1996	—	3.42	9.29	9.65	5.11	9.39	20.08	10.48	—	9.73	9.73	—	9.73
1997	—	3.41	9.39	9.38	4.90	9.16	17.86	10.51	—	9.65	9.65	—	9.65
	Expenditures in Million Nominal Dollars												
1970	(s)	—	4.7	23.4	27.5	R (s)	7.1	308.1	—	370.9	370.9	—	370.9
1975	(s)	—	6.2	75.8	81.7	0.5	12.1	656.9	—	833.4	833.4	—	833.4
1980	—	—	12.8	277.0	289.7	1.6	30.2	1,530.5	—	2,141.9	2,141.9	—	2,141.9
1981	—	—	12.3	327.1	319.0	3.6	36.3	1,727.1	—	2,425.6	2,425.6	—	2,425.6
1982	—	—	8.6	271.2	314.1	2.9	31.7	1,679.5	—	2,308.1	2,308.1	—	2,308.1
1983	—	—	8.2	261.2	262.5	3.8	32.7	1,521.1	—	2,089.5	2,089.5	—	2,089.5
1984	—	—	9.8	288.8	283.6	3.6	36.2	1,605.4	—	2,227.5	2,227.5	—	2,227.5
1985	—	—	9.3	317.7	244.4	3.3	33.7	R 1,694.3	—	R 2,302.7	R 2,302.7	—	R 2,302.7
1986	—	—	9.6	295.3	181.0	2.9	29.2	R 1,416.2	—	1,934.4	1,934.4	—	1,934.4
1987	—	—	7.9	317.7	202.5	2.0	28.7	R 1,572.1	—	R 2,130.9	R 2,130.9	—	R 2,130.9
1988	—	—	7.0	304.1	195.0	2.1	29.8	R 1,523.5	—	R 2,061.6	R 2,061.6	—	R 2,061.6
1989	—	—	8.8	343.7	217.4	2.0	30.3	R 1,724.6	—	R 2,326.8	R 2,326.8	—	R 2,326.8
1990	—	—	9.1	420.9	285.9	1.9	31.5	R 1,867.1	—	R 2,616.4	R 2,616.4	—	R 2,616.4
1991	—	R (s)	8.3	356.2	270.2	2.0	32.4	R 1,794.3	—	R 2,463.4	R 2,463.6	—	R 2,463.6
1992	—	R (s)	6.8	409.7	219.1	2.0	36.0	R 1,982.4	—	R 2,656.0	R 2,656.2	—	R 2,656.2
1993	—	R (s)	5.3	599.7	207.4	2.0	37.9	R 2,137.8	—	R 2,990.2	R 2,990.3	—	R 2,990.3
1994	—	R (s)	5.7	558.0	177.7	3.0	40.0	R 2,244.4	—	R 3,028.7	R 3,029.0	—	R 3,029.0
1995	—	R (s)	5.9	588.7	186.7	1.8	39.9	2,348.5	—	3,171.5	3,171.9	—	3,171.9
1996	—	(s)	7.2	731.2	229.6	1.3	40.1	2,695.0	—	3,704.3	3,704.7	—	3,704.7
1997	—	0.5	7.1	729.8	221.4	1.1	37.6	2,671.1	—	3,668.2	3,668.7	—	3,668.7

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 28. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Arizona

Year	Coal	Natural Gas	Petroleum: Heavy Oil	Petroleum: Light Oil	Petroleum: Petroleum Coke	Petroleum: Total	Nuclear Fuel	Wood and Waste	Total Energy [a]
	Prices in Nominal Dollars per Million Btu								
1970	0.21	0.35	0.60	0.68	—	0.61	—	—	0.33
1975	0.21	0.73	2.08	2.27	—	2.12	—	—	0.84
1980	0.98	2.41	3.92	6.48	—	4.57	—	—	1.35
1981	1.05	2.66	5.05	7.32	—	6.36	—	—	1.37
1982	1.18	3.64	5.21	7.31	—	6.51	—	—	1.46
1983	1.21	4.12	5.28	6.24	—	5.54	—	—	1.48
1984	1.21	4.01	4.66	6.08	—	5.00	—	—	1.50
1985	1.31	3.74	3.71	6.22	—	5.15	0.65	—	1.60
1986	1.36	2.35	3.51	3.64	—	3.64	0.65	—	1.26
1987	1.30	2.20	2.24	4.34	—	3.80	0.82	—	1.21
1988	1.41	2.24	2.47	4.27	—	4.07	0.77	—	1.18
1989	1.36	2.24	2.77	4.50	—	3.76	0.85	—	1.38
1990	1.43	2.37	3.48	5.11	—	5.03	0.72	—	1.21
1991	1.41	2.01	3.86	4.99	—	4.89	0.70	—	1.13
1992	1.37	2.21	3.23	4.67	—	4.53	0.55	—	1.08
1993	1.35	2.81	3.55	5.11	—	4.87	0.58	—	1.12
1994	1.37	2.18	3.22	4.28	—	3.53	0.57	—	1.11
1995	1.39	1.73	2.99	5.10	—	4.87	0.49	—	1.00
1996	1.44	2.98	3.97	5.39	—	5.11	0.49	—	1.05
1997	1.43	2.94	4.09	5.32	—	5.31	0.49	—	1.06
	Expenditures in Million Nominal Dollars								
1970	1.8	21.7	R (s)	(s)	—	R (s)	—	—	23.5
1975	18.5	13.9	75.4	21.8	—	97.2	—	—	129.6
1980	226.3	126.7	29.2	16.5	—	45.7	—	—	398.7
1981	308.6	161.7	6.4	12.6	—	19.1	—	—	489.4
1982	361.0	119.8	4.7	10.9	—	15.6	—	—	496.4
1983	321.6	82.5	17.6	7.9	—	25.5	—	—	429.6
1984	349.0	106.8	15.5	6.4	—	21.9	—	—	477.7
1985	396.0	165.5	3.4	7.7	—	11.0	8.0	—	580.5
1986	340.5	75.2	R (s)	5.1	—	5.1	69.8	—	490.6
1987	350.2	60.7	1.5	8.3	—	9.8	118.4	—	539.1
1988	416.9	58.7	R (s)	4.9	—	5.2	190.6	—	671.5
1989	466.4	118.0	2.6	5.6	—	8.2	71.8	—	664.3
1990	472.4	59.5	R (s)	6.0	—	6.2	158.1	—	R 696.1
1991	470.0	47.9	R (s)	4.2	—	4.5	188.9	—	R 712.9
1992	489.2	70.6	R (s)	3.3	—	3.6	149.6	—	713.0
1993	508.7	59.0	R (s)	2.8	—	3.2	136.0	—	706.9
1994	532.6	52.8	3.2	1.7	—	4.9	141.1	—	R 731.3
1995	458.9	33.3	R (s)	3.2	—	3.4	140.7	—	R 640.5
1996	476.3	58.3	0.6	3.2	—	3.7	150.1	—	688.3
1997	506.8	69.8	(s)	3.4	—	3.4	151.4	—	730.6

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 29. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Arkansas

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	—	—	0.38	0.98	0.72	1.63	2.74	0.43	R 1.31	R 1.98	—	R 1.20	1.03	0.26	4.78	R 1.51
1975	—	1.22	1.22	0.79	2.39	2.01	3.12	4.60	1.72	R 2.71	R 3.32	0.24	R 1.43	R 2.10	0.72	7.80	R 2.96
1980	—	1.44	1.44	2.27	6.04	6.34	6.97	9.93	3.23	R 6.02	R 7.59	0.54	R 1.99	R 4.35	1.46	12.77	R 6.61
1981	—	1.59	1.59	2.81	7.29	7.47	6.58	11.04	4.25	R 7.44	R 8.89	0.65	R 2.17	R 4.74	1.49	13.77	R 7.43
1982	—	1.77	1.77	3.40	7.50	7.09	7.46	10.39	3.88	R 6.94	R 8.67	0.67	R 2.20	R 4.90	1.56	15.74	R 7.84
1983	—	1.74	1.74	3.75	6.56	6.52	7.95	8.82	3.88	R 7.27	R 7.78	0.75	R 2.09	R 4.46	1.62	17.01	R 7.79
1984	—	R 1.83	R 1.83	3.92	6.57	6.25	7.97	8.55	4.60	R 7.34	R 7.68	0.78	R 1.83	R 4.38	1.54	17.13	R 7.81
1985	—	1.60	1.60	3.83	6.33	5.96	8.69	8.80	4.01	R 8.24	R 7.79	0.77	R 1.79	R 4.16	1.36	18.24	R 8.02
1986	—	1.58	1.58	3.53	5.10	3.93	7.67	6.84	2.37	R 8.58	R 6.29	0.71	R 1.63	R 3.54	1.32	19.61	R 7.42
1987	—	1.57	1.57	3.34	5.73	4.07	7.42	7.28	2.74	R 7.79	R 6.71	0.75	R 1.65	R 3.60	1.28	19.00	R 7.87
1988	—	1.60	1.60	3.43	5.31	3.66	7.84	7.13	3.08	R 7.10	R 6.46	0.74	R 1.65	R 3.65	1.34	18.74	R 7.36
1989	—	1.64	1.64	3.39	6.06	4.27	7.30	7.69	2.95	R 8.47	R 7.06	0.75	e R 1.43	e R 3.84	1.39	19.04	e R 7.48
1990	—	1.62	1.62	3.27	7.24	5.90	10.32	8.86	2.55	R 9.33	R 8.33	0.73	1.47	R 4.08	1.32	19.78	R 8.40
1991	—	1.61	1.61	3.36	7.04	5.01	11.42	8.81	2.30	R 9.36	R 8.28	0.70	R 1.53	R 3.99	1.27	19.76	R 8.55
1992	—	1.66	1.66	3.44	6.77	4.52	10.35	8.69	2.00	R 8.01	R 8.00	0.64	R 1.52	4.02	1.31	19.81	R 8.35
1993	—	1.71	1.71	3.78	6.82	4.45	9.77	8.56	2.08	R 7.58	R 7.90	0.56	R 1.45	4.07	1.28	19.60	R 8.39
1994	—	1.61	1.61	3.68	6.80	4.30	7.93	8.58	2.37	R 8.73	R 7.81	0.48	R 1.56	3.95	1.19	18.86	R 8.15
1995	—	1.62	1.62	3.06	6.75	4.28	7.80	8.69	2.23	R 8.50	R 7.90	0.52	R 1.54	R 3.86	1.27	18.62	R 7.90
1996	—	1.51	1.51	3.78	7.75	5.13	9.34	9.35	2.43	9.64	8.70	0.51	1.46	4.14	1.26	18.19	8.50
1997	—	1.64	1.64	4.29	7.48	4.69	8.62	9.24	2.83	8.86	8.51	0.49	1.49	4.27	1.29	18.17	8.65
	Expenditures in Million Nominal Dollars																
1970	—	—	—	133.8	31.1	8.5	62.4	323.7	2.4	R 40.1	R 468.2	—	R 11.6	R 613.6	-29.3	217.4	R 801.8
1975	—	1.1	1.1	185.8	133.2	21.7	109.4	666.5	97.6	R 100.6	R 1,129.0	12.7	R 14.5	R 1,343.0	-82.2	480.4	R 1,741.3
1980	—	52.6	52.6	581.7	376.2	70.0	123.7	1,381.9	100.3	R 264.4	R 2,316.5	46.0	R 19.6	R 3,016.3	-286.3	1,149.8	R 3,879.8
1981	—	161.7	161.7	672.1	554.7	70.7	90.1	1,525.5	64.1	R 302.0	R 2,607.0	65.5	R 22.4	R 3,528.7	-379.5	1,053.1	R 4,202.2
1982	—	221.2	221.2	678.9	571.7	77.6	109.3	1,415.6	40.0	R 243.4	R 2,457.7	55.7	R 22.5	R 3,436.1	-368.4	1,159.4	R 4,227.1
1983	—	309.4	309.4	697.9	501.4	56.5	117.7	1,204.7	17.2	R 327.6	R 2,225.1	62.6	R 23.4	R 3,318.4	-465.2	1,306.4	R 4,159.7
1984	—	R 300.0	R 300.0	728.4	532.7	68.5	90.9	1,227.2	12.7	R 286.7	R 2,218.6	91.7	R 18.4	3,357.2	-460.8	1,388.6	R 4,284.9
1985	—	351.1	351.1	636.9	550.0	65.7	114.9	R 1,230.3	17.0	R 179.3	R 2,157.3	82.8	R 17.9	R 3,245.9	-451.4	1,440.1	R 4,234.6
1986	—	354.7	354.7	613.0	393.8	41.1	106.0	1,001.9	11.1	R 133.6	R 1,687.5	68.0	R 22.5	R 2,745.7	-454.4	1,490.5	R 3,781.8
1987	—	330.7	330.7	486.6	448.4	45.8	95.0	R 1,092.1	3.4	R 127.4	R 1,812.2	91.6	R 23.3	R 2,744.3	-459.1	1,521.8	R 3,806.9
1988	—	349.4	349.4	632.7	438.6	44.5	101.6	R 1,106.7	5.8	R 130.4	R 1,827.7	70.4	R 24.3	R 2,904.5	-445.9	1,570.6	R 4,029.2
1989	—	332.8	332.8	724.6	512.6	45.2	101.7	R 1,188.2	5.5	R 121.6	R 1,974.8	71.4	e R 36.6	e R 3,140.2	-448.2	1,644.7	e R 4,336.6
1990	—	344.9	344.9	665.3	601.3	54.5	129.5	R 1,349.6	2.7	R 120.5	R 2,258.1	88.3	R 32.8	R 3,389.4	-476.2	1,789.8	R 4,703.0
1991	—	346.9	346.9	635.2	552.5	48.8	136.5	R 1,342.6	1.1	R 110.3	R 2,191.9	95.4	R 35.7	R 3,305.1	-473.8	1,859.5	R 4,690.8
1992	—	366.3	366.3	675.5	604.6	28.0	112.9	R 1,342.3	R (s)	R 129.7	R 2,217.7	77.7	R 36.7	R 3,373.8	-475.8	1,863.5	R 4,761.5
1993	—	342.5	342.5	762.8	621.8	25.2	122.4	R 1,370.4	2.0	R 137.2	R 2,279.0	81.5	R 37.8	R 3,503.5	-460.9	2,041.2	R 5,083.9
1994	—	357.3	357.3	790.7	679.8	39.0	97.4	R 1,391.4	3.9	R 138.6	R 2,350.1	72.0	R 44.2	R 3,614.3	-464.3	2,003.1	R 5,153.2
1995	—	384.0	384.0	731.7	650.6	28.5	91.2	1,466.5	2.4	R 143.0	R 2,382.2	65.2	R 51.8	R 3,614.9	-494.4	2,102.9	R 5,223.4
1996	—	393.5	393.5	910.0	748.0	44.6	107.8	1,575.8	2.6	144.0	2,622.8	72.8	50.0	4,049.2	-540.8	2,174.7	5,683.1
1997	—	405.9	405.9	980.9	730.7	40.9	100.6	1,611.5	0.7	140.1	2,624.5	73.7	48.3	4,133.2	-537.1	2,216.1	5,812.3

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 30. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Arkansas

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	—	0.75	0.93	1.40	1.84	1.81	0.71	R 1.06	6.82	R 1.88
1975	—	1.12	2.40	2.80	3.51	3.44	1.39	R 1.80	9.35	R 3.82
1980	2.97	2.49	6.54	—	8.77	8.54	3.57	3.45	15.58	R 8.02
1981	2.74	3.06	8.06	9.38	7.17	7.26	4.39	R 3.66	16.55	R 8.27
1982	3.30	3.84	7.61	9.33	8.75	8.76	4.26	R 4.44	19.15	R 9.65
1983	2.54	4.32	5.07	R 7.61	8.94	R 8.39	4.13	R 5.15	21.20	R 10.60
1984	3.27	4.29	7.55	R 6.78	8.61	R 7.87	4.19	R 4.95	21.12	R 10.38
1985	3.19	4.35	10.33	R 7.18	8.46	R 8.43	4.03	R 4.97	21.91	R 11.40
1986	—	4.77	4.38	R 4.74	7.36	7.31	3.23	R 5.17	22.68	R 12.05
1987	2.88	4.57	5.30	R 5.10	7.42	R 7.38	3.08	R 4.93	22.46	R 11.97
1988	2.62	4.78	4.71	R 4.45	7.93	R 7.85	3.11	R 5.14	22.31	R 11.93
1989	2.64	4.83	4.95	R 4.45	6.97	R 6.91	3.44	R 5.09	22.78	R 12.08
1990	2.70	5.06	7.69	R 6.75	10.78	R 10.71	3.53	5.80	23.64	R 13.43
1991	2.81	4.90	7.11	R 6.38	12.15	R 12.07	3.37	5.73	23.75	R 13.50
1992	2.69	5.07	4.99	R 5.82	10.66	R 10.55	3.08	R 5.62	24.27	R 13.62
1993	2.73	5.31	5.68	R 5.75	9.91	9.87	3.02	R 5.76	24.24	R 13.62
1994	2.83	5.59	5.38	R 4.29	10.00	R 9.96	2.93	R 6.02	23.66	R 13.80
1995	—	5.06	5.20	R 3.97	10.26	R 10.16	2.87	R 5.51	23.40	R 13.53
1996	—	5.77	5.84	4.49	12.14	12.04	3.29	6.30	22.78	13.63
1997	2.72	6.58	5.56	6.18	11.29	11.19	3.27	6.99	22.86	14.45
	Expenditures in Million Nominal Dollars									
1970	—	45.1	R (s)	1.2	45.6	47.2	2.3	R 94.5	100.5	R 195.1
1975	—	54.2	2.2	2.0	67.4	71.7	4.6	R 130.5	247.4	R 377.8
1980	R (s)	115.9	5.8	—	69.0	74.8	8.7	R 199.5	543.7	R 743.3
1981	(s)	130.2	0.9	2.2	45.4	48.6	10.9	R 189.6	475.9	R 665.5
1982	R (s)	171.7	0.6	2.7	52.3	55.6	11.4	R 238.7	563.1	R 801.8
1983	(s)	188.6	(s)	R 38.1	63.5	R 101.6	10.9	R 301.1	636.5	R 937.6
1984	R (s)	200.7	(s)	R 29.9	56.1	R 86.0	5.7	292.6	631.6	R 924.1
1985	(s)	177.9	(s)	R 1.3	63.5	R 64.8	5.4	R 248.2	667.9	R 916.0
1986	—	186.2	(s)	0.7	61.6	62.3	4.2	R 252.7	716.2	R 968.9
1987	(s)	185.5	(s)	R 0.6	52.1	52.8	5.1	R 243.3	743.8	R 987.1
1988	(s)	206.2	(s)	R 0.6	54.3	R 55.0	5.3	R 266.5	757.0	R 1,023.5
1989	R (s)	205.2	(s)	R 0.7	52.4	R 53.2	6.1	R 264.5	774.0	R 1,038.5
1990	(s)	199.9	(s)	R 0.8	72.3	R 73.1	6.8	R 279.8	851.7	R 1,131.4
1991	(s)	202.4	(s)	R 0.5	73.5	R 74.0	6.8	R 283.3	891.6	R 1,174.8
1992	R (s)	201.3	R (s)	R (s)	57.9	58.5	6.6	R 266.4	864.6	R 1,131.1
1993	(s)	245.0	(s)	R (s)	61.0	61.4	5.7	R 312.1	972.8	R 1,284.9
1994	(s)	237.1	(s)	R (s)	60.6	R 60.8	5.4	R 303.4	939.9	R 1,243.3
1995	—	225.3	R (s)	R (s)	55.7	R 56.0	5.9	R 287.2	991.4	R 1,278.5
1996	—	274.0	(s)	(s)	65.3	65.7	6.8	346.5	1,005.3	1,351.7
1997	(s)	283.0	(s)	0.7	60.9	61.5	4.9	349.4	1,013.1	1,362.6

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 31. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Arkansas

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	—	0.52	0.86	0.77	1.23	2.74	0.42	1.37	0.71	0.64	6.07	1.58
1975	—	0.90	2.29	2.32	2.64	4.60	1.75	2.23	1.39	1.25	8.60	3.08
1980	1.89	2.29	6.25	5.51	5.54	9.93	3.33	5.24	3.57	2.80	14.74	6.73
1981	2.07	2.83	7.71	6.53	6.08	11.04	3.58	7.00	4.39	3.38	13.91	6.92
1982	2.13	3.64	7.28	8.19	6.57	10.39	3.96	7.14	4.26	4.06	16.34	R 8.22
1983	2.19	4.09	6.07	R 7.61	7.03	8.82	3.74	R 6.85	4.13	R 5.27	18.15	R 8.61
1984	R 2.21	4.10	6.14	R 6.78	7.12	8.55	4.61	R 6.53	4.19	R 5.12	18.79	R 8.84
1985	2.12	4.06	6.13	R 7.18	9.00	8.80	—	R 6.77	NA	R 4.75	19.06	R 9.81
1986	—	4.33	3.59	R 4.74	8.15	6.84	2.42	6.29	NA	4.55	19.70	10.83
1987	2.02	4.21	4.04	R 5.10	7.41	7.28	—	5.63	NA	4.41	19.06	10.55
1988	2.04	4.31	3.63	R 4.45	7.75	7.13	—	R 5.78	NA	4.47	19.11	10.51
1989	1.98	4.36	4.15	R 4.45	7.70	7.69	—	5.66	NA	4.54	19.64	10.77
1990	1.99	4.43	5.47	R 6.75	9.80	8.86	—	7.17	NA	4.84	20.40	11.58
1991	1.86	4.28	4.79	R 6.38	10.67	8.81	—	7.08	NA	4.61	20.34	11.55
1992	1.86	4.35	4.45	R 5.82	10.05	8.69	2.00	R 6.38	NA	4.60	20.76	11.74
1993	1.88	4.37	4.32	R 5.75	9.63	8.56	2.08	6.04	3.02	R 4.53	20.60	R 11.41
1994	1.78	4.48	4.00	R 4.29	8.63	8.58	—	R 5.50	2.93	R 4.59	20.07	R 11.45
1995	R 1.82	3.77	4.09	R 3.97	9.04	8.69	—	R 6.19	2.87	R 3.96	19.96	R 11.16
1996	—	4.56	4.91	4.49	9.58	9.35	2.79	6.85	3.29	4.73	19.71	11.36
1997	1.80	5.16	4.68	6.18	9.79	9.24	—	7.16	3.27	5.29	19.84	12.06
	Expenditures in Million Nominal Dollars											
1970	—	20.6	R (s)	R (s)	5.4	2.6	R (s)	8.7	(s)	29.3	57.8	87.1
1975	—	29.7	1.2	1.0	8.9	3.5	11.9	26.5	(s)	56.2	128.6	R 184.8
1980	R (s)	69.9	4.1	4.1	7.7	8.5	9.2	33.5	(s)	R 103.7	267.8	R 371.5
1981	(s)	79.6	7.9	2.1	6.8	10.0	3.3	30.1	(s)	R 110.0	228.5	R 338.5
1982	R (s)	106.8	5.9	3.5	6.9	9.1	3.5	28.9	(s)	R 136.1	280.6	R 416.6
1983	(s)	115.8	53.6	R 74.2	8.8	6.1	2.7	R 145.4	(s)	R 261.5	315.8	R 577.2
1984	R (s)	121.1	53.3	R 72.5	8.2	4.1	2.2	R 140.2	(s)	R 261.6	358.4	R 620.0
1985	(s)	110.5	41.8	R 3.4	11.9	5.5	—	R 62.7	NA	R 173.2	380.4	R 553.5
1986	—	109.5	3.9	R (s)	12.0	4.2	R (s)	20.4	NA	129.9	397.5	527.4
1987	(s)	104.8	8.5	R (s)	9.2	5.0	—	22.8	NA	127.6	398.8	R 526.3
1988	(s)	119.2	5.4	R (s)	9.4	4.6	—	R 19.6	NA	138.8	417.0	555.8
1989	R (s)	119.4	10.6	R (s)	10.2	4.4	—	25.3	NA	144.8	440.0	584.8
1990	(s)	112.1	14.0	R (s)	11.6	6.6	—	R 32.3	NA	144.3	465.1	R 609.5
1991	(s)	113.0	9.5	R (s)	11.4	3.7	—	24.7	NA	137.8	480.4	618.2
1992	(s)	110.9	9.8	R (s)	9.6	R 3.2	R (s)	22.9	NA	133.8	478.8	612.6
1993	(s)	128.2	10.7	R (s)	10.5	1.3	(s)	22.7	(s)	R 150.8	512.5	663.4
1994	(s)	125.5	10.1	R (s)	9.2	1.3	—	20.8	(s)	R 146.8	510.2	R 656.9
1995	—	112.1	5.9	R (s)	8.6	1.3	—	R 16.0	(s)	R 128.6	529.4	R 657.9
1996	—	145.1	7.3	(s)	9.1	1.4	(s)	17.9	0.6	163.6	542.4	706.0
1997	(s)	154.0	5.3	(s)	9.3	1.4	—	16.1	(s)	170.6	557.4	728.0

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.

(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 32. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Arkansas

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	—	—	0.28	0.68	0.67	0.77	1.23	5.08	2.74	0.45	R 0.95	R 1.00	R 1.45	R 0.49	2.78	R 0.72
1975	—	1.22	1.22	0.68	1.81	2.09	2.32	2.64	7.48	4.60	1.63	R 2.40	R 2.19	R 1.45	R 1.29	5.18	R 1.63
1980	—	1.89	1.89	2.24	3.58	4.87	5.51	5.54	14.36	9.93	2.95	R 6.42	R 4.99	R 1.45	R 3.20	9.15	R 4.10
1981	—	2.07	2.07	2.78	4.77	5.83	6.53	6.08	18.00	11.04	4.63	R 6.98	R 6.06	R 1.45	R 3.95	11.14	R 4.90
1982	—	2.13	2.13	3.25	4.12	7.14	8.19	6.57	17.25	10.39	3.87	R 6.25	R 6.22	R 1.45	R 4.34	11.66	R 5.30
1983	—	2.19	2.19	3.56	4.28	6.34	R 6.58	7.03	16.98	8.82	3.92	R 6.53	R 6.17	R 1.45	R 4.41	12.04	R 5.58
1984	—	R 2.21	R 2.21	3.81	4.23	6.41	R 6.73	7.12	17.63	8.55	4.61	R 5.84	R 6.47	R 1.45	R 4.56	12.42	R 5.89
1985	—	2.12	2.12	3.65	4.21	6.09	R 6.36	9.00	17.61	8.80	4.01	R 7.98	R 6.53	R 1.45	R 4.58	13.74	R 5.91
1986	—	2.04	2.04	3.40	4.62	3.67	R 4.33	8.15	15.59	6.84	2.42	R 8.71	R 4.88	R 1.46	R 3.69	15.53	R 5.31
1987	—	2.02	2.02	3.10	3.33	4.29	R 4.55	7.41	13.58	7.28	2.74	R 9.13	R 5.32	R 1.46	R 3.79	14.56	R 5.79
1988	—	2.04	2.04	3.04	3.27	3.81	R 4.05	7.75	14.62	7.13	2.49	R 8.17	R 4.88	R 1.46	R 3.47	14.14	R 5.05
1989	—	1.98	1.98	3.08	2.90	4.51	R 5.04	7.70	14.48	7.69	2.68	R 9.53	R 5.73	d R 1.28	d R 3.38	14.34	d R 4.92
1990	—	1.99	1.99	2.86	3.01	5.78	R 5.71	9.80	14.60	8.86	2.54	R 8.99	R 6.86	R 1.27	R 3.53	14.94	R 5.32
1991	—	1.86	1.86	3.01	3.22	5.06	R 5.39	10.67	16.80	8.81	2.30	R 7.61	R 6.73	1.36	R 3.50	14.79	R 5.51
1992	—	1.86	1.86	3.11	2.23	4.81	R 5.04	10.05	18.32	8.69	2.00	R 9.17	R 5.86	R 1.37	R 3.54	14.71	R 5.40
1993	—	1.88	1.88	3.27	2.70	4.69	R 4.61	9.63	18.96	8.56	2.08	R 7.86	R 5.69	R 1.34	R 3.55	14.21	R 5.45
1994	—	1.78	1.78	3.21	2.72	4.43	R 4.03	5.05	19.11	8.58	2.31	R 8.74	R 5.31	R 1.45	3.36	13.48	R 5.11
1995	—	1.82	1.82	2.57	2.92	4.41	R 4.08	4.94	R 19.41	8.69	2.26	R 9.06	R 5.34	R 1.45	2.91	13.22	R 4.68
1996	—	1.80	1.80	3.20	3.11	5.31	5.20	6.32	20.08	9.35	2.79	9.97	6.36	1.33	3.42	13.09	5.26
1997	—	1.80	1.80	3.66	3.17	5.04	4.48	5.62	17.86	9.24	2.74	8.90	6.05	1.39	3.68	13.03	5.50
	Expenditures in Million Nominal Dollars																
1970	—	—	—	40.7	9.4	7.7	2.6	8.2	7.1	4.2	R (s)	R 7.0	R 46.6	R 9.3	R 96.6	59.1	R 155.7
1975	—	1.1	1.1	82.3	27.4	34.5	6.3	26.4	14.0	4.1	36.7	R 31.5	R 180.9	R 9.8	R 274.0	104.4	R 378.4
1980	—	12.0	12.0	265.8	65.9	100.5	13.7	42.8	23.3	2.7	25.9	R 107.1	R 381.9	R 10.7	R 670.3	338.3	R 1,008.6
1981	—	15.9	15.9	311.4	66.8	155.0	9.5	33.1	28.1	2.2	44.6	R 134.5	R 473.8	R 11.2	R 812.3	348.7	R 1,161.0
1982	—	15.8	15.8	297.1	52.3	187.8	17.7	42.3	24.5	1.4	33.6	R 92.4	R 452.1	R 10.9	R 776.0	315.7	R 1,091.7
1983	—	20.4	20.4	282.9	52.1	184.1	R 10.1	35.5	25.3	0.7	13.4	R 76.4	R 397.7	R 12.3	R 713.3	354.2	R 1,067.4
1984	—	R 18.6	R 18.6	319.2	21.3	182.9	R 9.0	21.7	28.0	21.8	10.4	R 75.2	R 370.2	R 12.5	R 720.6	398.6	R 1,119.2
1985	—	17.0	17.0	314.5	35.3	214.2	R 1.5	34.7	26.0	29.1	16.8	R 65.5	R 423.1	R 12.5	R 767.1	391.8	R 1,158.9
1986	—	15.8	15.8	270.6	30.1	112.4	R (s)	29.7	22.6	17.3	10.5	R 38.6	R 261.7	R 18.3	R 566.4	376.8	R 943.1
1987	—	13.6	13.6	146.0	22.5	116.3	R (s)	31.7	22.2	R 18.0	3.4	R 42.2	R 256.6	R 18.2	R 434.6	379.1	R 813.7
1988	—	11.7	11.7	276.7	29.8	110.3	R (s)	35.8	23.0	16.9	2.6	R 35.4	R 254.2	R 19.0	R 561.6	396.7	R 958.2
1989	—	11.8	11.8	350.3	15.0	95.1	R (s)	37.1	23.4	14.5	2.7	R 39.9	R 228.1	d R 30.5	d R 620.7	430.7	d R 1,051.4
1990	—	11.6	11.6	303.0	9.9	120.0	R 0.5	R 42.6	24.3	R 19.4	2.5	R 39.9	R 259.1	R 26.0	R 599.8	472.9	R 1,072.7
1991	—	R 12.7	R 12.7	279.7	11.4	78.7	R 0.6	48.6	25.0	21.0	1.1	R 26.1	R 212.6	R 28.9	R 533.8	487.5	R 1,021.4
1992	—	13.2	13.2	320.8	17.4	123.0	R (s)	43.1	27.8	20.0	R (s)	R 32.5	R 264.2	R 30.1	R 628.4	520.1	R 1,148.4
1993	—	14.6	14.6	341.5	26.1	103.8	R (s)	48.5	29.3	17.7	1.9	R 28.2	R 255.8	R 32.1	R 644.0	555.9	R 1,199.9
1994	—	15.3	15.3	381.4	19.2	92.7	R (s)	23.7	30.9	19.2	3.0	R 31.8	R 220.8	R 38.3	R 655.9	553.1	R 1,209.0
1995	—	14.1	14.1	337.4	24.1	85.6	R (s)	25.3	30.8	20.5	2.2	R 31.4	R 220.4	R 45.5	R 617.5	582.2	R 1,199.6
1996	—	15.1	15.1	405.0	20.1	91.9	(s)	31.8	30.9	22.3	1.5	36.7	235.6	42.7	698.4	627.0	1,325.4
1997	—	12.6	12.6	477.0	21.3	83.6	(s)	29.1	29.1	22.9	(s)	35.4	221.8	42.9	754.3	645.6	1,399.9

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 33. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Arkansas

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	—	—	2.17	1.16	0.72	1.23	5.08	2.74	0.40	2.38	2.38	—	2.38
1975	1.22	—	3.45	2.53	2.01	2.64	7.48	4.60	1.57	4.06	4.06	—	4.06
1980	—	—	9.02	6.70	6.34	5.54	14.36	9.93	—	9.11	9.11	—	9.11
1981	—	—	10.84	8.10	7.47	6.08	18.00	11.04	—	10.23	10.23	—	10.23
1982	—	—	10.92	7.70	7.09	6.57	17.25	10.39	—	9.61	9.61	—	9.61
1983	—	—	10.44	6.83	6.52	7.03	16.98	8.82	—	8.41	8.41	—	8.41
1984	—	—	10.27	6.75	6.25	7.12	17.63	8.55	—	8.14	8.14	—	8.14
1985	—	—	9.99	6.56	5.96	9.00	17.61	8.80	—	8.24	8.24	—	8.24
1986	—	—	8.41	6.09	3.93	8.15	15.59	6.84	—	6.63	6.63	—	6.63
1987	—	—	7.55	6.59	4.07	7.41	13.58	7.28	—	7.02	7.02	—	7.02
1988	—	—	7.41	6.21	3.66	7.75	14.62	7.13	—	6.81	6.81	—	6.81
1989	—	—	8.28	6.71	4.27	7.70	14.48	7.69	—	7.35	7.35	—	7.35
1990	—	—	9.32	7.87	5.90	9.80	14.60	8.86	—	8.54	8.54	—	8.54
1991	—	—	8.71	7.64	5.01	10.67	16.80	8.81	—	8.42	8.42	—	8.42
1992	—	—	8.54	7.69	4.52	10.05	18.32	8.69	—	8.41	8.41	—	8.41
1993	—	—	8.24	7.65	4.45	9.63	18.96	8.56	—	8.32	8.32	—	8.32
1994	—	4.20	7.96	7.58	4.30	8.40	19.11	8.58	—	8.23	8.23	—	8.23
1995	—	3.64	8.36	7.43	4.28	8.70	R 19.41	8.69	—	8.31	8.31	—	8.31
1996	—	3.76	9.29	8.37	5.13	8.86	20.08	9.35	—	9.01	9.01	—	9.01
1997	—	5.14	9.39	8.04	4.69	8.97	17.86	9.24	—	8.82	8.82	—	8.82
	Expenditures in Million Nominal Dollars												
1970	—	—	3.2	22.8	8.5	3.2	9.2	316.9	(s)	363.9	363.9	—	363.9
1975	(s)	—	4.4	94.4	21.7	6.7	14.0	658.9	R (s)	800.2	800.2	—	800.2
1980	—	—	12.5	261.3	70.0	4.2	37.6	1,370.7	—	1,756.4	1,756.4	—	1,756.4
1981	—	—	13.6	389.6	70.7	4.8	45.2	1,513.2	—	2,037.2	2,037.2	—	2,037.2
1982	—	—	10.6	376.3	77.6	7.7	39.5	1,405.1	—	1,916.9	1,916.9	—	1,916.9
1983	—	—	10.6	261.9	56.5	9.8	40.8	1,197.9	—	1,577.4	1,577.4	—	1,577.4
1984	—	—	5.8	296.0	68.5	4.9	45.1	1,201.3	—	1,621.6	1,621.6	—	1,621.6
1985	—	—	4.4	293.5	65.7	4.8	42.0	R 1,195.7	—	R 1,606.1	R 1,606.1	—	R 1,606.1
1986	—	—	4.7	277.1	41.1	2.7	36.4	980.4	—	1,342.4	1,342.4	—	1,342.4
1987	—	—	3.5	323.4	45.8	2.0	35.8	R 1,069.2	—	R 1,479.8	R 1,479.8	—	R 1,479.8
1988	—	—	3.7	319.1	44.5	2.1	37.2	R 1,085.1	—	R 1,491.7	R 1,491.7	—	R 1,491.7
1989	—	—	4.3	403.2	45.2	2.0	37.8	R 1,169.4	—	R 1,661.9	R 1,661.9	—	R 1,661.9
1990	—	—	5.9	463.2	54.5	R 2.9	39.2	R 1,323.6	—	R 1,889.3	R 1,889.3	—	R 1,889.3
1991	—	—	6.3	460.0	48.8	3.0	40.3	R 1,317.9	—	R 1,876.4	R 1,876.4	—	R 1,876.4
1992	—	—	6.6	468.8	28.0	R 2.2	44.8	R 1,319.0	—	R 1,869.4	R 1,869.4	—	R 1,869.4
1993	—	—	5.6	503.9	25.2	2.4	47.2	R 1,351.4	—	R 1,935.7	R 1,935.7	—	R 1,935.7
1994	—	(s)	6.3	574.1	39.0	3.8	49.8	R 1,370.9	—	R 2,043.9	R 2,043.9	—	R 2,043.9
1995	—	(s)	6.0	556.7	28.5	1.6	49.7	1,444.7	—	R 2,087.3	2,087.3	—	2,087.3
1996	—	(s)	5.7	646.2	44.6	1.5	49.9	1,552.1	—	2,299.9	2,300.0	—	2,300.0
1997	—	(s)	6.4	639.0	40.9	1.4	46.9	1,587.2	—	2,321.9	2,321.9	—	2,321.9

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 34. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Arkansas

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	—	0.25	0.42	0.46	—	0.42	—	—	0.26
1975	—	0.61	1.78	2.22	—	1.79	0.24	—	0.72
1980	1.34	2.16	3.34	4.34	—	3.39	0.54	—	1.46
1981	1.55	2.69	3.56	6.18	—	3.67	0.65	—	1.49
1982	1.75	2.99	3.98	6.74	—	4.53	0.67	—	1.56
1983	1.72	3.21	3.75	6.68	—	5.12	0.75	—	1.62
1984	1.81	3.37	3.79	6.44	—	5.93	0.78	—	1.54
1985	1.58	2.82	3.84	5.86	—	4.99	0.77	—	1.36
1986	1.56	1.56	1.65	4.43	—	2.20	0.71	—	1.32
1987	1.55	1.52	2.76	3.86	—	3.86	0.75	—	1.28
1988	1.59	1.35	3.81	5.12	—	4.43	0.74	—	1.34
1989	1.63	1.65	3.26	4.36	—	3.81	0.75	—	1.39
1990	1.61	1.54	2.75	4.94	—	4.72	0.73	—	1.32
1991	1.60	1.41	2.72	5.64	—	5.61	0.70	—	1.27
1992	1.65	1.53	2.16	4.81	—	4.81	0.64	—	1.31
1993	1.70	2.21	2.07	4.58	—	4.47	0.56	—	1.28
1994	1.60	1.82	2.62	4.04	—	3.58	0.48	—	1.19
1995	1.61	1.70	1.90	4.18	—	3.83	0.52	—	1.27
1996	1.50	2.47	2.04	4.53	—	3.35	0.51	—	1.26
1997	1.64	2.62	2.87	4.70	—	4.29	0.49	—	1.29
	Expenditures in Million Nominal Dollars								
1970	—	27.4	1.8	(s)	—	1.9	—	—	29.3
1975	—	19.7	49.0	0.8	—	49.8	12.7	—	82.2
1980	40.3	130.1	65.3	4.5	—	69.8	46.0	—	286.3
1981	145.8	150.9	16.1	1.2	—	17.3	65.5	—	379.5
1982	205.3	103.3	2.9	1.2	—	4.1	55.7	—	368.4
1983	289.0	110.6	1.2	1.8	—	3.0	62.6	—	465.2
1984	281.2	87.3	R (s)	0.5	—	0.6	91.7	—	460.8
1985	334.0	34.0	R (s)	R (s)	—	0.6	82.8	—	451.4
1986	338.9	46.7	0.5	R (s)	—	0.8	68.0	—	454.4
1987	317.0	50.3	(s)	R (s)	—	R (s)	91.6	—	459.1
1988	337.7	30.7	3.2	3.9	—	7.1	70.4	—	445.9
1989	320.8	49.7	2.8	3.6	—	6.4	71.4	—	448.2
1990	333.3	50.3	R (s)	4.0	—	4.3	88.3	—	476.2
1991	334.2	40.1	(s)	4.2	—	4.2	95.4	—	473.8
1992	353.1	42.4	(s)	2.7	—	2.7	77.7	—	475.8
1993	327.9	48.1	R (s)	3.4	—	3.4	81.5	—	460.9
1994	341.9	46.6	0.9	2.9	—	3.8	72.0	—	464.3
1995	369.9	56.9	R (s)	2.3	—	2.5	65.2	—	494.4
1996	378.5	85.9	1.0	2.6	—	3.6	72.8	—	540.8
1997	393.3	66.8	(s)	2.7	—	3.2	73.7	—	537.1

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 35. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, California

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	0.43	0.83	0.45	0.56	1.26	0.73	1.84	2.80	0.38	R 1.52	R 1.80	0.19	R 1.39	R 1.21	0.34	4.76	R 1.74
1975	1.38	0.92	1.32	1.25	2.97	2.04	3.08	4.84	2.38	R 2.82	R 3.55	0.21	R 1.55	2.61	1.82	8.71	R 3.46
1980	1.97	1.82	1.91	3.54	6.62	6.21	6.09	10.19	4.49	R 6.60	R 7.42	0.49	R 2.98	5.95	3.99	17.16	R 7.71
1981	2.26	2.06	2.16	3.88	7.64	7.56	6.53	11.33	5.94	R 8.97	R 8.83	0.85	R 3.46	R 6.85	4.64	18.89	R 8.84
1982	2.07	2.31	2.19	4.70	7.41	7.37	7.94	10.82	6.03	R 8.24	R 8.85	0.77	R 3.48	R 7.10	5.02	21.85	R 9.29
1983	—	2.37	2.37	5.31	6.88	6.61	8.68	8.96	R 5.57	R 8.17	R 7.80	1.07	R 3.29	R 6.75	4.79	20.79	R 8.84
1984	—	2.41	2.41	5.42	6.68	6.28	7.76	8.74	5.31	R 7.97	R 7.50	1.11	R 3.39	R 6.51	4.34	20.94	R 8.74
1985	—	R 2.27	R 2.27	5.01	6.67	6.01	9.67	8.68	4.75	R 7.98	R 7.45	0.96	R 3.25	R 6.19	3.70	22.90	R 8.89
1986	—	2.26	2.26	4.02	5.34	3.99	9.84	6.68	2.71	R 7.20	R 5.71	0.97	R 3.01	R 4.84	2.16	23.21	R 7.74
1987	—	2.09	2.09	3.77	5.89	4.04	9.86	6.95	2.61	R 7.23	R 5.89	0.99	R 3.04	R 4.79	2.02	22.70	R 7.61
1988	—	R 1.94	R 1.94	4.05	5.82	3.84	9.71	7.08	2.31	R 6.77	R 5.83	0.90	R 3.07	R 4.88	2.17	23.42	R 7.82
1989	—	1.93	1.93	4.10	6.57	4.50	9.13	7.66	2.68	R 6.21	R 6.33	0.85	e R 2.48	e R 5.15	R 2.19	24.91	e R 8.27
1990	—	2.01	2.01	4.31	7.47	5.76	10.51	8.57	3.66	R 6.41	R 7.26	0.72	R 2.38	R 5.75	R 2.16	R 25.98	R 8.98
1991	—	1.99	1.99	4.49	7.36	4.80	11.24	8.18	2.57	R 6.66	R 6.93	0.67	2.40	R 5.55	R 1.93	27.70	R 9.09
1992	—	1.83	1.83	4.11	7.64	4.53	11.01	9.19	1.86	R 7.05	R 7.61	0.55	R 2.32	R 5.71	R 1.86	28.39	R 9.59
1993	—	R 1.89	R 1.89	4.11	7.95	4.50	11.70	9.08	2.03	R 7.12	R 7.52	0.44	R 2.13	R 5.69	R 1.92	28.51	R 9.46
1994	—	R 1.91	R 1.91	4.27	7.78	4.03	11.47	9.07	2.03	R 7.56	R 7.32	0.47	R 2.12	R 5.61	R 1.74	R 28.78	R 9.50
1995	—	1.80	1.80	4.43	7.91	4.15	11.20	9.19	2.14	R 7.70	R 7.42	0.43	R 2.23	R 5.82	1.43	29.16	R 9.56
1996	—	1.76	1.76	4.50	8.77	4.96	11.33	9.95	2.10	8.09	8.13	0.44	2.31	6.27	1.51	27.86	9.86
1997	—	1.78	1.78	4.88	8.52	4.71	11.20	10.18	2.08	7.81	8.42	0.45	2.09	6.56	1.85	28.06	10.27
	Expenditures in Million Nominal Dollars																
1970	25.6	2.3	27.9	1,126.7	283.0	242.7	99.5	3,149.1	161.1	R 258.6	R 4,194.0	6.7	R 55.8	R 5,411.0	-282.1	R 1,886.6	R 7,015.5
1975	67.7	6.9	74.6	2,148.2	719.4	716.0	169.8	6,137.9	1,628.1	R 521.8	R 9,892.9	14.4	R 67.6	R 12,197.6	-1,553.7	R 4,328.7	R 14,972.6
1980	79.8	46.8	126.7	6,063.2	2,390.8	2,199.3	365.8	13,579.1	4,131.7	R 1,582.3	R 24,248.9	26.1	R 122.4	R 30,587.2	-4,018.4	R 9,559.9	R 36,128.7
1981	87.4	81.9	169.3	6,969.3	3,003.0	2,503.6	346.8	15,046.4	4,804.8	R 1,462.2	R 27,166.8	30.2	R 146.9	R 34,482.4	-4,709.7	R 10,774.8	R 40,547.5
1982	72.0	80.1	152.1	7,886.9	2,898.2	2,335.6	409.5	14,207.8	3,049.3	R 1,257.7	R 24,158.1	31.6	R 151.2	R 32,380.0	-3,541.3	12,131.1	R 40,969.8
1983	—	75.8	75.8	8,039.1	2,720.9	2,124.1	432.7	12,054.2	R 2,298.6	R 1,345.2	R 20,975.7	65.3	R 149.4	R 29,305.4	-2,965.4	R 11,491.9	R 37,831.9
1984	—	89.6	89.6	8,931.0	2,955.8	2,346.1	485.0	12,173.7	2,474.7	R 1,628.5	R 22,063.8	170.4	R 163.4	R 31,418.2	-3,408.1	R 12,564.8	R 40,574.9
1985	—	R 102.8	R 102.8	9,251.8	2,809.0	2,257.8	605.5	R 12,195.2	1,953.0	R 1,510.3	R 21,330.7	204.0	R 152.3	R 31,041.6	-3,498.6	R 14,143.0	R 41,686.0
1986	—	R 96.1	R 96.1	6,011.6	2,317.0	1,685.3	569.1	R 9,816.2	957.7	R 1,315.2	R 16,660.5	273.7	R 120.4	R 23,162.3	-1,694.0	R 14,219.7	R 35,688.0
1987	—	94.0	94.0	7,109.8	2,528.4	1,811.7	674.4	R 10,690.6	1,064.4	R 1,402.9	R 18,172.4	322.6	R 151.5	R 25,850.3	-2,060.3	R 14,332.6	R 38,122.7
1988	—	R 98.7	R 98.7	7,145.3	2,851.3	1,784.5	656.3	R 11,285.6	984.3	R 1,232.7	R 18,794.6	297.0	R 158.5	R 26,494.0	-2,131.0	R 15,572.7	R 39,935.7
1989	—	R 111.7	R 111.7	7,426.4	3,126.0	2,286.8	676.6	R 12,510.1	1,123.1	R 1,111.8	R 20,834.3	295.9	e R 212.2	e R 28,911.4	R -2,198.8	R 17,083.4	e R 43,795.9
1990	—	R 131.2	R 131.2	7,830.2	3,586.6	3,081.3	633.5	R 13,778.7	1,479.4	R 1,161.7	R 23,721.2	251.9	R 190.2	R 32,148.3	R -1,906.0	R 18,417.6	R 48,659.9
1991	—	R 127.3	R 127.3	8,242.8	3,227.9	2,438.9	588.5	R 12,833.9	727.3	R 1,076.4	R 20,892.9	226.9	R 197.5	R 29,717.5	R -1,602.3	R 19,410.4	R 47,525.7
1992	—	R 118.6	R 118.6	7,897.5	2,987.8	2,219.3	575.3	R 15,245.6	398.9	R 1,123.5	R 22,550.3	207.7	R 192.9	R 30,990.6	R -1,825.9	R 20,375.6	R 49,540.3
1993	—	R 107.4	R 107.4	7,758.5	2,732.0	2,273.1	491.5	R 14,726.7	473.4	R 1,080.9	R 21,777.7	147.8	R 171.3	R 29,982.4	R -1,640.2	R 20,161.9	R 48,504.1
1994	—	R 110.9	R 110.9	8,703.0	2,938.0	2,257.2	R 555.7	R 14,652.9	537.6	R 1,130.8	R 22,072.2	167.6	R 184.3	R 31,257.4	R -1,764.3	R 20,657.9	R 50,151.1
1995	—	R 109.8	R 109.8	8,066.2	3,159.8	2,241.5	472.3	R 15,127.1	627.3	R 1,132.5	R 22,760.4	137.1	R 192.3	R 31,281.8	R -1,066.8	R 20,827.4	R 51,042.4
1996	—	95.0	95.0	7,711.8	3,435.3	2,915.8	393.4	16,641.7	538.0	1,211.2	25,135.4	159.1	206.3	33,312.7	-1,055.9	20,484.6	52,741.4
1997	—	87.4	87.4	8,878.9	3,753.8	2,755.2	431.9	17,266.0	285.6	1,158.3	25,650.8	145.2	174.7	34,941.3	-1,321.9	21,567.9	55,187.3

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 36. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, California

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.31	0.93	1.27	2.57	2.67	2.49	0.82	0.99	6.53	R 1.91
1975	—	1.49	2.80	5.08	4.45	4.17	1.62	1.55	10.68	R 3.19
1980	5.13	3.37	6.92	13.04	8.15	8.14	4.15	R 3.55	17.18	R 6.69
1981	5.43	3.58	7.90	15.34	7.53	7.73	5.10	R 3.77	19.09	R 7.55
1982	5.68	4.24	7.85	15.22	10.00	9.98	4.95	R 4.43	22.47	R 8.52
1983	4.62	5.20	7.91	R 8.39	11.00	R 10.85	4.79	R 5.38	20.88	R 9.20
1984	4.63	5.62	7.67	R 8.29	9.64	R 9.50	4.87	R 5.71	20.73	R 9.70
1985	4.54	5.51	5.25	R 11.15	8.66	R 8.57	4.68	R 5.58	22.80	R 9.85
1986	—	4.95	7.58	R 4.97	10.95	R 10.32	3.75	R 5.08	23.26	R 10.03
1987	3.76	5.13	6.05	R 4.69	12.37	R 11.71	3.58	R 5.28	23.55	R 10.11
1988	3.37	5.48	5.84	R 5.07	11.39	R 10.91	3.61	R 5.58	25.02	R 11.00
1989	3.66	5.40	7.63	R 5.37	11.65	R 11.27	4.00	R 5.56	27.69	R 11.52
1990	3.77	5.60	5.70	R 7.44	12.45	R 11.94	4.75	5.81	29.26	R 12.41
1991	5.21	6.11	5.60	R 5.88	12.75	R 12.33	4.54	R 6.32	31.61	R 13.41
1992	3.76	5.81	7.04	R 5.28	13.39	R 12.92	4.15	R 5.97	32.46	R 13.93
1993	3.77	6.00	7.40	R 5.78	14.24	R 13.75	4.06	R 6.18	33.13	R 13.96
1994	3.74	6.26	6.95	R 5.05	12.90	R 12.47	3.94	R 6.36	33.49	R 14.21
1995	3.77	6.34	6.92	R 5.10	12.50	R 12.10	3.86	R 6.41	34.02	R 14.87
1996	4.03	6.23	7.64	5.32	13.16	12.67	4.43	6.33	33.20	14.75
1997	3.71	6.69	8.10	4.95	13.73	13.06	4.41	6.80	33.71	15.47
	Expenditures in Million Nominal Dollars									
1970	1.1	544.3	3.7	2.4	52.1	58.2	6.2	R 609.7	797.6	R 1,407.3
1975	—	993.8	8.0	6.1	44.7	58.9	13.9	R 1,066.6	1,612.8	R 2,679.3
1980	R (s)	1,861.6	3.8	1.3	147.2	152.4	91.7	R 2,105.8	3,049.5	R 5,155.4
1981	R (s)	1,824.2	3.3	6.2	120.5	130.0	114.2	R 2,068.4	3,438.3	R 5,506.7
1982	R (s)	2,384.7	3.3	1.6	160.4	165.2	119.5	R 2,669.5	3,976.6	R 6,646.1
1983	R (s)	2,698.7	5.9	R 2.6	208.4	R 216.8	114.3	R 3,029.9	3,838.9	R 6,868.8
1984	1.3	2,755.4	6.4	R 4.9	153.1	R 164.5	127.3	R 3,048.5	3,998.6	R 7,047.1
1985	2.0	3,016.1	4.5	R 4.6	167.0	R 176.1	119.3	R 3,313.6	4,472.8	R 7,786.4
1986	—	2,384.7	10.6	R 5.2	164.0	R 179.8	93.1	R 2,657.6	4,565.8	R 7,223.3
1987	(s)	2,648.3	10.0	R 2.2	237.7	R 249.9	124.1	R 3,022.3	4,850.8	R 7,873.2
1988	R (s)	2,803.9	7.8	R 2.9	241.2	R 251.9	130.2	R 3,186.1	5,518.0	R 8,704.1
1989	R (s)	2,874.8	10.7	R 3.3	268.9	R 282.9	149.4	R 3,307.4	6,080.0	R 9,387.4
1990	0.8	2,973.8	7.5	R 3.7	259.4	R 270.6	126.9	R 3,372.1	6,646.5	R 10,018.6
1991	1.9	3,189.5	6.5	R 2.7	320.4	R 329.6	127.8	R 3,648.7	7,120.4	R 10,769.1
1992	(s)	2,862.8	8.2	R 1.0	233.1	R 242.3	123.0	R 3,228.1	7,543.7	R 10,771.8
1993	4.4	3,121.0	6.7	R 2.2	258.5	R 267.3	101.9	R 3,494.6	7,613.1	R 11,107.7
1994	5.1	3,328.9	6.0	R 1.9	232.2	R 240.1	97.0	R 3,671.1	7,868.9	R 11,540.0
1995	4.1	3,065.5	5.2	R 2.3	221.1	R 228.7	105.6	R 3,403.9	7,983.3	R 11,387.2
1996	5.8	3,048.1	4.5	3.1	194.0	201.6	120.9	3,376.4	8,088.0	11,464.4
1997	3.3	3,261.3	5.9	3.8	202.5	212.2	87.5	3,564.2	8,405.4	11,969.6

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 37. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, California

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.63	0.69	1.12	0.78	1.37	2.80	0.40	0.76	0.82	0.71	5.02	2.09
1975	—	1.22	2.60	2.50	2.77	4.84	2.45	2.93	1.62	1.48	8.73	4.36
1980	1.82	3.82	6.60	6.38	5.21	10.19	4.90	6.02	4.15	4.30	17.99	R 9.57
1981	2.06	4.19	7.54	7.27	6.10	11.33	6.50	7.09	5.10	5.07	19.30	10.68
1982	2.31	5.08	7.49	6.89	7.01	10.82	6.62	7.39	4.95	5.60	21.78	12.31
1983	2.37	6.08	6.27	R 8.39	7.26	8.96	5.97	R 6.77	4.79	6.22	21.41	R 12.79
1984	2.39	6.70	6.00	R 8.29	7.12	8.74	4.49	R 6.24	4.87	6.57	22.03	R 13.96
1985	R 2.25	6.39	5.93	R 11.15	10.11	8.68	3.93	R 7.33	NA	R 6.51	23.61	R 15.09
1986	—	5.65	3.52	R 4.97	9.45	6.68	2.16	R 4.25	NA	5.35	24.19	15.04
1987	2.09	5.28	4.15	R 4.69	8.87	6.95	2.60	4.85	NA	5.18	23.47	14.05
1988	R 1.94	4.55	3.82	R 5.07	8.94	7.08	2.09	4.56	NA	4.55	24.15	13.76
1989	R 1.93	4.71	4.78	R 5.37	7.99	7.66	2.30	5.41	NA	4.81	25.33	14.60
1990	2.00	4.96	5.63	R 7.44	9.49	8.57	3.00	6.26	NA	5.14	26.32	15.08
1991	1.97	5.36	5.29	R 5.88	9.84	8.18	2.24	5.99	NA	5.43	28.12	15.95
1992	1.83	5.01	5.01	R 5.28	9.82	9.19	2.25	7.05	NA	5.16	29.06	16.80
1993	R 1.85	5.81	5.24	R 5.78	9.77	9.08	2.14	R 6.62	4.06	R 5.78	29.27	R 17.88
1994	R 1.87	6.98	4.81	R 5.05	10.70	9.07	2.41	6.60	3.94	R 6.89	30.37	R 18.70
1995	R 1.76	6.13	5.11	R 5.10	10.84	9.19	2.70	R 6.37	3.86	R 6.10	30.08	R 17.87
1996	1.70	5.77	6.05	5.32	11.50	9.95	2.95	7.33	4.43	5.80	28.22	17.81
1997	1.74	6.32	5.44	4.95	11.70	10.18	2.78	6.86	4.41	6.31	28.57	18.14
	Expenditures in Million Nominal Dollars											
1970	1.0	152.9	4.3	2.3	4.7	21.8	21.8	54.8	(s)	R 208.8	R 696.1	R 905.0
1975	—	309.6	9.8	9.2	4.9	41.2	67.4	132.6	(s)	R 442.4	R 1,723.0	R 2,165.4
1980	R (s)	1,027.9	124.0	8.0	16.6	96.1	209.9	454.6	2.2	R 1,484.9	R 3,894.7	R 5,379.6
1981	R (s)	1,037.2	164.0	22.8	17.2	92.8	466.1	762.9	2.7	R 1,803.0	R 4,465.9	R 6,268.8
1982	R (s)	1,256.1	191.7	12.7	19.8	82.4	228.5	535.1	2.9	R 1,794.2	R 4,936.6	R 6,730.7
1983	R (s)	1,367.2	250.1	R 5.4	24.3	81.6	20.2	R 381.5	2.7	R 1,751.6	R 4,596.7	R 6,348.3
1984	1.2	1,333.6	270.8	R 12.5	20.0	69.3	38.2	R 410.8	3.0	R 1,748.7	R 5,364.8	R 7,113.5
1985	1.8	1,359.7	121.3	R 22.3	34.4	80.2	0.9	R 259.1	NA	R 1,620.6	R 5,928.2	R 7,548.8
1986	—	1,070.4	115.9	R 3.2	25.0	61.6	13.0	R 218.7	NA	R 1,289.0	R 6,167.8	R 7,456.8
1987	(s)	1,153.9	166.2	R 4.5	30.1	R 92.0	15.5	R 308.3	NA	R 1,462.3	R 6,228.1	R 7,690.4
1988	R (s)	1,162.5	140.6	R 2.5	33.4	R 65.9	10.8	R 253.3	NA	R 1,415.9	R 6,653.8	R 8,069.8
1989	R (s)	1,264.5	128.5	1.3	32.6	71.7	10.8	244.9	NA	R 1,509.7	R 7,252.9	R 8,762.6
1990	0.8	1,459.7	150.3	R 0.8	34.9	R 86.8	16.9	R 289.7	NA	R 1,750.1	R 7,929.5	R 9,679.6
1991	1.3	1,581.8	137.1	0.8	43.6	R 70.8	10.7	263.0	NA	R 1,846.1	R 8,261.4	R 10,107.5
1992	(s)	1,467.8	58.2	R 0.6	30.1	R 71.7	0.6	R 161.2	NA	R 1,629.0	R 8,710.5	R 10,339.5
1993	4.0	1,509.2	48.5	R 0.6	31.3	12.5	R (s)	93.2	8.2	R 1,606.3	R 8,643.2	R 10,249.5
1994	4.7	1,865.4	42.1	R (s)	34.0	10.8	R (s)	R 87.4	8.1	R 1,965.6	R 8,758.6	R 10,724.2
1995	3.6	1,731.1	69.4	R 0.8	33.8	11.4	R (s)	R 115.5	8.0	R 1,858.1	R 8,828.9	R 10,687.1
1996	4.5	1,401.0	61.4	2.1	29.9	12.1	(s)	105.7	10.0	1,521.2	8,532.1	10,053.3
1997	2.8	1,632.7	62.0	1.2	30.4	12.5	(s)	106.1	8.5	1,750.1	8,997.5	10,747.6

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 38. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, California

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	0.43	0.63	0.43	0.38	0.49	0.68	0.78	1.37	5.08	2.80	0.35	R 1.37	R 0.96	R 1.54	R 0.61	2.90	R 0.90
1975	1.38	0.92	1.32	1.05	1.62	2.21	2.50	2.77	7.48	4.84	1.66	R 2.77	R 2.35	R 1.54	1.52	6.70	R 2.25
1980	1.97	1.82	1.91	3.64	3.78	5.49	6.38	5.21	14.36	10.19	3.16	R 8.10	R 5.46	R 1.54	R 4.36	16.04	R 6.25
1981	2.26	2.06	2.16	3.88	4.59	6.42	7.27	6.10	18.00	11.33	4.02	R 9.51	R 6.74	R 1.54	R 4.89	18.11	R 7.11
1982	2.07	2.31	2.19	4.66	3.98	6.27	6.89	7.01	17.25	10.82	4.25	R 8.81	R 6.49	R 1.54	R 5.18	21.24	R 7.95
1983	—	2.37	2.37	5.28	4.40	6.47	R 7.12	7.26	16.98	8.96	4.27	R 8.60	R 6.60	R 1.54	R 5.64	19.83	R 8.37
1984	—	2.39	2.39	5.01	4.56	6.29	R 6.89	7.12	17.63	8.74	4.49	R 8.84	R 6.21	R 1.54	R 5.45	19.59	R 7.67
1985	—	R 2.25	R 2.25	4.54	4.78	6.19	R 6.90	10.11	17.61	8.68	3.93	R 8.26	R 6.32	R 1.54	R 5.23	22.00	R 7.93
1986	—	2.26	2.26	3.46	5.08	3.84	R 4.80	9.45	15.59	6.68	2.16	R 7.05	R 5.21	R 1.83	R 4.19	21.63	R 7.11
1987	—	2.09	2.09	3.39	5.36	4.42	R 4.80	8.87	13.58	6.95	2.60	R 7.74	R 5.53	R 1.83	R 4.23	20.38	R 6.53
1988	—	R 1.94	R 1.94	3.65	4.53	4.07	R 4.97	8.94	14.62	7.08	2.09	R 6.76	R 5.30	R 1.83	R 4.21	20.15	R 6.84
1989	—	R 1.93	R 1.93	3.62	3.10	4.98	R 5.50	7.99	14.48	7.66	2.30	R 7.47	R 5.56	d R 1.31	d 4.08	20.89	d R 6.87
1990	—	2.00	2.00	3.79	3.13	5.69	R 7.19	9.49	14.60	8.57	3.00	R 7.66	R 6.01	R 1.19	R 4.28	21.35	R 6.96
1991	—	1.97	1.97	3.86	3.18	5.43	R 6.13	9.84	16.80	8.18	2.24	R 7.92	R 5.86	R 1.29	R 4.15	22.22	R 7.06
1992	—	1.83	1.83	3.57	2.74	5.44	R 5.03	9.82	18.32	9.19	2.25	R 8.93	R 6.23	R 1.31	R 4.05	22.25	R 7.06
1993	—	R 1.85	R 1.85	2.72	2.60	5.68	R 5.07	9.77	18.96	9.08	2.14	R 8.08	R 6.10	R 1.30	R 3.37	21.49	R 6.26
1994	—	R 1.87	R 1.87	3.18	2.95	5.29	R 4.92	10.74	19.11	9.07	2.41	R 8.51	R 6.46	R 1.32	R 3.76	20.79	R 6.62
1995	—	R 1.76	R 1.76	3.65	3.09	5.43	R 4.99	10.19	R 19.41	9.19	2.70	R 8.74	R 6.44	R 1.39	R 4.03	21.59	R 6.81
1996	—	1.70	1.70	3.65	3.41	6.40	5.55	9.80	20.08	9.95	2.95	9.46	7.00	1.27	4.11	20.41	6.76
1997	—	1.74	1.74	4.11	3.51	5.79	5.40	9.40	17.86	10.18	2.78	8.60	6.75	1.30	4.42	20.38	7.07
	Expenditures in Million Nominal Dollars																
1970	25.6	R (s)	25.8	209.3	39.0	31.2	1.5	41.1	46.6	28.6	21.3	R 67.2	R 276.4	R 49.2	R 560.6	392.2	R 952.9
1975	67.7	6.9	74.6	539.6	141.0	126.2	16.5	116.1	56.6	34.0	62.4	R 155.6	R 708.3	R 53.2	1,375.7	988.9	2,364.7
1980	79.8	46.5	126.4	1,248.7	462.2	489.1	67.9	191.9	183.1	90.9	204.4	R 602.5	R 2,292.1	R 28.1	R 3,695.3	2,607.7	R 6,303.0
1981	87.4	81.7	169.2	1,347.9	299.5	659.9	19.1	185.1	220.2	83.4	224.9	R 593.6	R 2,285.7	R 29.6	R 3,832.4	2,860.2	R 6,692.6
1982	72.0	79.9	151.9	1,422.5	259.4	751.9	7.5	204.4	192.4	71.6	185.6	R 464.6	R 2,137.4	R 28.7	R 3,740.5	3,201.9	R 6,942.4
1983	—	75.6	75.6	1,499.2	324.9	637.3	R 4.8	169.6	198.4	50.8	159.5	R 483.2	R 2,028.4	R 32.4	R 3,635.6	3,043.4	R 6,679.0
1984	—	87.1	87.1	1,781.3	461.7	694.3	R 20.9	R 267.9	219.6	86.0	553.7	R 561.7	R 2,865.8	R 33.0	R 4,767.3	3,188.1	R 7,955.4
1985	—	R 99.0	R 99.0	1,745.8	439.0	655.0	R 19.2	359.5	204.4	139.8	428.9	R 480.0	R 2,725.8	R 32.9	R 4,603.4	3,725.4	R 8,328.9
1986	—	R 96.1	R 96.1	1,252.1	517.9	321.4	R 5.3	348.1	176.9	111.5	179.2	R 314.0	R 1,974.3	R 27.2	R 3,349.7	3,469.7	R 6,819.3
1987	—	94.0	94.0	1,637.5	585.1	459.2	R 11.8	R 379.4	174.2	R 118.9	208.4	R 351.4	R 2,288.5	R 27.1	R 4,047.1	3,241.7	R 7,288.7
1988	—	R 98.3	R 98.3	1,557.2	461.6	398.2	1.0	352.2	180.8	R 110.7	99.2	R 293.5	R 1,897.3	R 28.2	R 3,581.1	3,387.0	R 6,968.1
1989	—	R 111.1	R 111.1	1,712.8	308.2	469.3	R 1.3	R 349.0	183.8	R 130.1	25.5	R 314.5	R 1,781.7	d R 62.8	d R 3,668.4	3,738.1	d R 7,406.5
1990	—	R 129.7	R 129.7	1,967.7	308.8	631.3	R 1.6	R 307.5	190.7	R 142.4	24.1	R 349.9	R 1,956.3	R 63.3	R 4,116.9	3,827.3	R 7,944.2
1991	—	R 124.1	R 124.1	2,147.0	301.0	450.1	1.3	197.5	196.2	R 140.6	16.8	R 264.9	R 1,568.3	R 69.8	R 3,909.2	4,011.2	R 7,920.5
1992	—	R 118.6	R 118.6	1,981.9	246.7	349.0	R 0.6	R 289.0	218.2	R 159.2	18.4	R 319.9	R 1,600.9	R 69.9	R 3,771.4	4,100.0	R 7,871.3
1993	—	R 99.1	R 99.1	1,704.7	214.7	286.1	R 1.3	R 178.6	229.9	127.1	13.6	R 291.6	R 1,342.9	R 69.4	R 3,216.0	3,885.0	R 7,101.0
1994	—	R 101.2	R 101.2	1,969.0	239.3	274.9	R 1.1	253.6	242.3	131.4	13.4	R 290.9	R 1,446.7	R 79.3	R 3,596.2	4,009.2	R 7,605.3
1995	—	R 102.2	R 102.2	2,363.8	250.3	268.3	R 1.6	196.7	R 241.9	137.5	19.5	R 279.1	R 1,394.9	R 78.8	R 3,939.6	3,986.7	R 7,926.3
1996	—	84.6	84.6	2,382.5	280.9	296.2	3.8	152.3	242.8	143.3	2.5	318.6	1,440.5	75.4	3,983.1	3,836.8	7,819.9
1997	—	81.3	81.3	2,811.5	268.1	366.4	5.6	183.6	228.2	155.6	0.8	307.6	1,516.0	78.7	4,487.5	4,129.2	8,616.6

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 39. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, California

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.63	—	2.17	1.42	0.73	1.37	5.08	2.80	0.36	2.07	2.07	2.88	2.07
1975	0.92	—	3.45	3.22	2.04	2.77	7.48	4.84	2.12	4.02	4.02	4.34	4.02
1980	—	—	9.02	7.07	6.21	5.21	14.36	10.19	4.14	8.22	8.22	11.39	8.22
1981	—	—	10.84	8.14	7.56	6.10	18.00	11.33	5.62	9.49	9.49	13.07	9.49
1982	—	—	10.92	7.97	7.37	7.01	17.25	10.82	5.99	9.34	9.34	18.38	9.34
1983	—	—	10.44	7.13	6.61	7.26	16.98	8.96	5.61	8.01	8.01	15.15	8.02
1984	—	—	10.27	6.94	6.28	7.12	17.63	8.74	5.61	7.79	7.79	15.64	R 7.80
1985	—	—	9.99	6.90	6.01	10.11	17.61	8.68	5.02	7.67	7.67	18.29	7.68
1986	—	—	8.41	5.93	3.99	9.45	15.59	6.68	2.86	5.82	5.82	18.21	5.83
1987	—	—	7.55	6.70	4.04	8.87	13.58	6.95	2.60	5.95	5.95	13.47	5.95
1988	—	—	7.41	6.51	3.84	8.94	14.62	7.08	2.26	5.97	5.97	14.99	5.98
1989	—	—	8.28	7.14	4.50	7.99	14.48	7.66	2.57	6.50	6.50	13.15	6.51
1990	—	4.69	9.32	8.21	5.76	9.49	14.60	8.57	3.59	R 7.43	R 7.43	13.26	7.43
1991	—	5.62	8.71	8.02	4.80	9.84	16.80	8.18	2.58	7.01	7.01	14.80	7.02
1992	—	6.26	8.54	8.19	4.53	9.82	18.32	9.19	1.84	7.71	7.71	16.23	7.72
1993	—	4.59	8.24	8.46	4.50	9.77	18.96	9.08	2.00	7.64	7.64	14.79	7.64
1994	—	4.99	7.96	8.29	4.03	9.83	19.11	9.07	2.02	7.39	7.39	14.64	7.39
1995	—	5.47	8.36	8.40	4.15	10.08	R 19.41	9.19	2.13	7.48	7.48	19.72	7.48
1996	—	4.60	9.29	9.19	4.96	9.39	20.08	9.95	2.09	8.20	8.20	18.90	8.20
1997	—	4.42	9.39	9.11	4.71	9.16	17.86	10.18	2.08	8.54	8.54	21.99	8.55
	Expenditures in Million Nominal Dollars												
1970	R (s)	—	23.9	243.7	242.7	1.6	75.7	3,098.8	63.3	3,749.7	3,749.8	R 0.6	R 3,750.4
1975	(s)	—	28.5	573.4	714.6	4.0	108.3	6,062.6	267.8	7,759.2	7,759.2	R 3.9	7,763.2
1980	—	—	13.0	1,720.6	2,166.4	10.0	244.2	13,392.0	1,736.6	19,282.8	19,282.8	R 7.9	R 19,290.7
1981	—	—	7.2	2,130.1	2,502.9	24.0	293.6	14,870.1	2,240.9	22,068.9	22,068.9	R 10.4	R 22,079.3
1982	—	—	63.1	1,939.1	2,335.6	24.9	256.5	14,053.8	1,961.5	20,634.5	20,634.5	R 16.0	R 20,650.5
1983	—	—	61.5	1,818.9	2,124.1	30.4	264.5	11,921.8	1,701.7	R 17,923.0	R 17,923.0	R 12.9	R 17,935.8
1984	—	—	54.3	1,975.2	2,346.1	R 44.0	292.8	12,018.4	1,714.8	R 18,445.7	R 18,445.7	R 13.2	R 18,458.9
1985	—	—	68.3	2,017.9	2,257.8	44.6	272.5	R 11,975.2	1,369.0	R 18,005.3	R 18,005.3	R 16.6	R 18,021.9
1986	—	—	56.8	1,859.4	1,685.3	32.0	235.9	R 9,643.1	659.5	R 14,172.0	R 14,172.0	R 16.5	R 14,188.5
1987	—	—	41.3	1,884.6	1,811.7	27.2	232.3	R 10,479.7	781.5	R 15,258.3	R 15,258.3	R 12.0	R 15,270.4
1988	—	—	49.1	2,300.8	1,784.5	29.4	241.1	R 11,109.0	665.9	R 16,179.9	R 16,179.9	R 13.9	R 16,193.8
1989	—	—	54.4	2,511.1	2,286.8	R 26.1	245.1	R 12,308.3	795.3	R 18,227.1	R 18,227.1	R 12.3	R 18,239.5
1990	—	(s)	52.0	2,792.5	3,081.3	R 31.7	254.2	R 13,549.5	1,241.9	R 21,003.1	R 21,003.2	R 14.3	R 21,017.4
1991	—	R (s)	48.0	2,631.2	2,438.9	27.0	261.6	R 12,622.5	681.8	R 18,711.1	R 18,711.2	R 17.4	R 18,728.6
1992	—	R (s)	45.7	2,569.2	2,219.3	R 23.1	290.9	R 15,014.6	373.3	R 20,536.0	R 20,536.2	R 21.4	R 20,557.6
1993	—	1.2	34.1	2,387.2	2,273.1	R 23.2	306.6	R 14,587.1	412.8	R 20,024.1	R 20,025.3	R 20.6	R 20,045.9
1994	—	2.8	31.9	2,613.4	2,257.2	R 36.0	323.0	R 14,510.8	485.3	R 20,257.6	R 20,260.4	R 21.2	R 20,281.6
1995	—	4.7	34.1	2,814.1	2,241.5	20.6	R 322.5	R 14,978.3	597.7	R 21,008.7	R 21,013.4	R 28.5	R 21,041.9
1996	—	6.0	36.0	3,069.1	2,915.8	17.3	323.8	16,486.2	521.9	23,370.1	23,376.1	27.7	23,403.8
1997	—	9.5	39.6	3,311.7	2,755.2	15.4	304.2	17,097.9	284.1	23,808.1	23,817.6	35.9	23,853.5

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 40. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, California

Year	Coal	Natural Gas	Petroleum: Heavy Oil	Petroleum: Light Oil	Petroleum: Petroleum Coke	Petroleum: Total	Nuclear Fuel	Wood and Waste	Total Energy [a]
	Prices in Nominal Dollars per Million Btu								
1970	—	0.33	0.40	0.36	—	0.40	0.19	0.65	0.34
1975	—	1.05	2.50	2.43	—	2.50	0.21	0.92	1.82
1980	—	3.53	5.03	5.84	—	5.06	0.49	1.74	3.99
1981	—	3.99	6.62	7.46	—	6.64	0.85	1.24	4.64
1982	—	5.02	6.77	6.71	—	6.77	0.77	1.28	5.02
1983	—	5.08	6.06	6.57	—	6.07	1.07	1.12	4.79
1984	—	5.09	5.97	5.95	—	5.97	1.11	1.28	4.34
1985	—	4.47	5.31	5.69	—	5.33	0.96	0.79	3.70
1986	—	2.81	3.16	4.79	—	3.26	0.97	0.32	2.16
1987	—	2.50	2.82	4.10	—	2.93	0.99	0.95	2.02
1988	—	2.83	2.66	4.03	—	2.67	0.90	0.87	2.17
1989	—	2.92	3.08	3.64	—	3.09	0.85	([b])	R 2.19
1990	—	3.03	4.36	4.57	—	4.36	0.72	([b])	R 2.16
1991	—	2.87	3.06	4.90	—	3.23	0.67	([b])	R 1.93
1992	—	2.72	2.18	4.57	—	2.64	0.55	([b])	R 1.86
1993	—	2.96	2.31	5.39	—	2.40	0.44	([b])	R 1.92
1994	—	2.48	2.16	2.68	—	2.18	0.47	([b])	R 1.74
1995	—	2.22	2.16	4.62	—	2.44	0.43	([b])	1.43
1996	—	2.68	2.16	5.09	—	2.50	0.44	([b])	1.51
1997	—	3.02	2.16	4.94	—	4.53	0.45	([b])	1.85
	Expenditures in Million Nominal Dollars								
1970	—	220.1	54.7	R (s)	—	54.9	6.7	R (s)	282.1
1975	—	305.2	1,230.5	3.4	—	1,234.0	14.4	R (s)	1,553.7
1980	—	1,925.0	1,980.8	86.2	—	2,067.0	26.1	R (s)	4,018.4
1981	—	2,760.0	1,872.9	46.4	—	1,919.2	30.2	R (s)	4,709.7
1982	—	2,823.6	673.6	12.2	—	685.9	31.6	R (s)	3,541.3
1983	—	2,474.0	417.2	8.8	—	426.0	65.3	R (s)	2,965.4
1984	—	3,060.6	168.0	9.1	—	177.1	170.4	(s)	3,408.1
1985	—	3,130.1	154.2	10.2	—	164.4	204.0	(s)	3,498.6
1986	—	1,304.4	106.1	9.7	—	115.8	273.7	R (s)	1,694.0
1987	—	1,670.1	58.9	8.4	—	67.3	322.6	R (s)	2,060.3
1988	—	1,621.7	208.3	3.9	—	212.2	297.0	R (s)	2,131.0
1989	—	1,574.3	291.5	6.3	—	297.8	295.9	([b])	R 2,198.8
1990	—	1,429.0	196.4	5.0	—	201.4	251.9	([b])	R 1,906.0
1991	—	1,324.3	18.0	3.0	—	20.9	226.9	([b])	R 1,602.3
1992	—	1,584.8	6.6	3.3	—	9.9	207.7	([b])	R 1,825.9
1993	—	1,422.4	46.8	3.4	—	50.2	147.8	([b])	R 1,640.2
1994	—	1,536.9	38.7	1.6	—	40.4	167.6	([b])	R 1,764.3
1995	—	901.1	10.0	2.7	—	12.7	137.1	([b])	R 1,066.8
1996	—	874.1	13.3	4.1	—	17.4	159.1	([b])	1,055.9
1997	—	1,163.9	0.6	7.9	—	8.5	145.2	([b])	1,321.9

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[b] Utilities used biomass fuels at no charge or received a fee for accepting them.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 41. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Colorado

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	0.43	0.30	0.33	0.48	1.04	0.76	1.60	2.72	0.44	R 1.12	1.88	—	R 1.55	1.03	0.25	6.09	R 1.52
1975	1.38	0.53	0.68	0.98	2.30	2.12	3.02	4.67	1.59	R 2.85	R 3.55	—	R 1.67	2.02	0.60	7.95	2.92
1980	1.97	0.89	1.00	2.98	6.45	6.59	5.88	9.36	3.88	R 6.13	R 7.94	0.21	R 2.92	R 4.32	1.12	12.94	R 6.48
1981	2.26	0.98	1.10	3.84	7.36	7.67	7.12	10.23	4.25	R 7.85	R 9.16	0.18	R 3.41	4.86	1.08	15.13	R 7.86
1982	2.07	1.12	1.15	4.56	6.75	7.38	7.76	10.15	4.44	R 7.65	R 8.98	0.21	R 3.38	5.04	1.14	17.69	8.39
1983	—	1.13	1.13	5.05	6.68	6.47	7.78	9.02	4.36	R 7.33	R 8.06	0.23	R 3.22	R 4.93	1.16	17.75	8.20
1984	—	1.15	1.15	4.86	6.75	6.30	7.88	8.99	4.60	R 6.83	R 7.92	0.26	R 3.44	4.78	1.19	17.53	8.03
1985	—	1.17	1.17	4.71	6.55	5.94	6.46	9.28	3.80	R 6.84	R 8.06	—	R 3.28	4.74	1.21	17.88	8.21
1986	—	1.18	1.18	4.54	5.75	3.92	6.26	6.76	2.34	R 6.09	R 6.12	0.27	R 2.70	3.95	1.21	17.69	R 7.24
1987	—	R 1.13	R 1.13	4.26	6.13	4.05	4.85	7.59	2.63	R 4.92	R 6.54	0.28	R 2.50	4.03	1.15	17.12	7.37
1988	—	1.08	1.08	3.95	5.80	3.78	3.33	7.34	2.80	R 4.92	R 6.32	0.29	R 2.51	3.79	1.09	17.32	7.16
1989	—	1.08	1.08	3.85	6.83	4.30	6.07	8.13	1.96	R 4.88	R 7.17	0.28	e R 2.68	e 3.99	1.08	17.48	e 7.59
1990	—	1.07	1.07	3.92	7.97	5.59	6.63	9.29	2.64	R 4.70	R 8.16	—	R 3.96	R 4.41	1.08	17.31	R 8.11
1991	—	1.10	1.10	3.74	7.31	4.87	8.03	9.23	3.86	R 5.57	R 8.02	—	R 3.66	4.38	1.11	17.49	R 7.92
1992	—	1.11	1.11	3.68	7.19	4.47	8.14	9.56	3.22	R 5.60	R 8.07	—	R 3.49	4.39	1.11	17.69	R 8.01
1993	—	1.11	1.11	3.75	7.52	4.25	7.05	9.61	2.04	R 5.48	R 8.03	—	R 3.18	R 4.45	1.12	17.78	R 7.92
1994	—	1.07	1.07	3.99	7.37	3.99	8.41	9.83	2.88	R 5.10	R 8.16	—	R 3.38	R 4.55	1.07	17.86	R 8.19
1995	—	1.06	1.06	3.99	7.56	4.04	8.29	9.71	2.99	R 5.63	R 8.27	—	R 3.38	4.65	1.06	18.00	R 8.26
1996	—	1.03	1.03	3.63	8.26	4.87	10.11	10.39	3.97	5.88	8.97	—	3.79	4.87	1.05	17.80	8.50
1997	—	1.02	1.02	4.22	7.89	4.64	10.01	10.45	4.02	6.70	9.08	—	3.60	4.96	1.05	17.50	8.68
	Expenditures in Million Nominal Dollars																
1970	12.0	26.3	38.3	128.2	30.9	32.0	27.5	372.5	3.9	R 36.3	R 503.1	—	R 4.0	R 673.5	-30.6	222.3	R 865.2
1975	39.5	69.0	108.4	262.9	118.1	85.7	55.7	782.3	32.7	R 62.9	R 1,137.4	—	R 4.4	R 1,513.1	-105.4	426.0	R 1,833.7
1980	50.2	197.9	248.2	706.8	422.1	175.9	83.3	1,685.6	43.6	R 166.1	R 2,576.6	1.5	R 5.3	R 3,538.3	-272.5	918.2	R 4,184.0
1981	54.8	250.5	305.3	733.8	374.2	238.0	95.6	1,861.5	2.7	R 163.6	R 2,735.7	1.5	R 6.3	R 3,782.7	-281.5	1,203.8	R 4,705.1
1982	19.7	298.6	318.3	901.2	363.0	231.7	128.5	1,872.1	R (s)	R 142.2	R 2,737.8	1.3	R 6.5	R 3,965.2	-299.1	1,414.6	R 5,080.7
1983	—	288.1	288.1	976.3	425.3	224.2	131.8	1,592.9	6.3	R 150.7	R 2,531.3	1.9	R 6.5	R 3,803.9	-290.6	1,415.3	R 4,928.6
1984	—	330.6	330.6	1,010.2	446.2	302.9	62.8	1,586.8	2.5	R 194.7	R 2,595.8	R (s)	R 8.6	R 3,945.3	-322.7	1,522.0	R 5,144.6
1985	—	R 349.8	R 349.8	931.2	364.4	264.1	51.9	R 1,742.8	3.7	R 188.2	R 2,615.1	—	R 7.9	R 3,904.0	-342.6	1,608.3	R 5,169.7
1986	—	349.5	349.5	810.9	338.9	178.8	47.7	1,297.1	1.1	R 156.5	R 2,020.1	R (s)	R 8.9	R 3,189.6	-340.8	1,621.9	R 4,470.7
1987	—	R 336.6	R 336.6	793.7	352.2	192.0	39.9	R 1,442.6	(s)	R 129.6	R 2,156.3	0.5	R 6.3	R 3,293.4	-332.3	1,622.8	R 4,583.9
1988	—	337.3	337.3	817.3	378.3	138.0	31.0	R 1,403.0	R (s)	R 143.2	R 2,093.9	2.1	R 6.6	R 3,257.1	-337.3	1,716.9	R 4,636.8
1989	—	349.0	349.0	837.0	405.7	129.8	80.1	R 1,513.4	R (s)	R 126.5	R 2,255.7	1.6	e R 6.4	e R 3,449.6	-350.7	1,775.2	e R 4,874.0
1990	—	R 353.1	R 353.1	820.8	481.4	193.0	71.3	R 1,735.8	(s)	R 127.5	R 2,609.0	—	R 16.0	R 3,798.8	-344.7	1,800.4	R 5,254.5
1991	—	355.4	355.4	854.2	502.9	179.5	97.4	R 1,730.6	1.1	R 144.1	R 2,655.8	—	R 16.4	R 3,881.7	-345.8	1,858.1	R 5,394.0
1992	—	R 369.1	R 369.1	823.3	520.1	186.0	90.0	R 1,797.8	0.7	R 148.3	R 2,743.0	—	R 15.7	R 3,951.1	-357.3	1,903.2	R 5,496.9
1993	—	374.7	374.7	927.8	565.8	215.6	86.3	R 1,913.6	(s)	R 153.6	R 2,934.9	—	R 14.5	R 4,251.8	-364.0	1,978.9	R 5,866.7
1994	—	374.3	374.3	943.1	569.2	178.8	102.4	R 2,034.6	(s)	R 169.4	R 3,054.5	—	R 15.8	R 4,387.8	-360.1	2,075.6	R 6,103.2
1995	—	356.2	356.2	979.5	591.2	169.9	117.7	2,108.7	R (s)	R 168.6	R 3,156.2	—	R 16.9	R 4,508.8	-343.8	2,142.0	R 6,307.0
1996	—	349.7	349.7	973.0	713.7	214.5	145.7	2,349.3	(s)	183.0	3,606.7	—	19.2	4,948.6	-353.7	2,224.3	6,819.2
1997	—	362.4	362.4	1,097.4	634.2	188.6	145.8	2,401.7	(s)	151.1	3,521.5	—	14.8	4,996.4	-359.9	2,244.2	6,880.7

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 42. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Colorado

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	0.90	0.74	1.28	1.51	1.79	1.74	0.72	0.88	7.73	1.71
1975	1.58	1.29	2.84	2.96	3.33	3.26	1.43	1.53	9.94	2.76
1980	2.54	3.26	6.96	7.98	7.32	7.31	3.66	3.53	15.00	R 5.70
1981	3.42	4.19	8.32	9.78	7.68	7.79	4.51	4.54	17.20	R 7.77
1982	3.18	4.89	7.94	9.78	9.24	9.25	4.37	R 5.30	19.61	R 8.78
1983	2.91	5.48	5.82	R 7.94	8.46	R 8.23	4.23	R 5.79	19.72	R 9.24
1984	2.92	5.23	6.84	R 7.90	9.06	R 8.61	4.30	R 5.41	19.76	R 8.62
1985	2.83	5.11	6.91	R 8.54	6.55	R 6.68	4.14	R 5.16	20.28	R 8.70
1986	2.78	4.99	4.32	R 4.62	6.81	R 6.58	3.32	R 5.04	20.60	R 8.98
1987	2.40	4.74	3.49	R 4.62	5.19	5.07	3.16	R 4.73	20.01	R 8.58
1988	2.12	4.39	3.47	R 4.31	2.51	R 2.62	3.19	4.27	20.31	R 8.19
1989	2.43	4.57	5.09	R 4.51	6.11	R 6.01	3.53	R 4.65	20.56	R 8.56
1990	2.41	4.55	6.19	R 5.87	7.02	R 6.98	4.75	4.70	20.57	R 8.60
1991	2.36	4.46	5.90	R 7.18	7.32	R 7.29	4.54	R 4.63	20.72	R 8.44
1992	2.43	4.46	4.82	R 6.75	7.66	R 7.58	4.15	R 4.63	21.11	R 8.67
1993	2.16	4.47	4.75	R 6.84	6.13	R 6.11	4.06	R 4.55	21.22	R 8.49
1994	2.25	4.90	2.93	R 5.84	9.21	R 8.96	3.94	R 5.12	21.56	R 9.28
1995	2.24	4.71	3.94	R 6.04	8.97	R 8.78	3.86	R 4.97	21.75	R 9.10
1996	2.14	4.29	4.46	6.79	11.04	10.69	4.43	4.70	21.95	8.92
1997	2.14	4.75	6.96	7.10	10.82	10.58	4.41	5.10	21.74	9.20
	Expenditures in Million Nominal Dollars									
1970	1.6	59.4	1.3	1.0	20.9	23.1	(s)	R 84.4	101.8	R 186.2
1975	R (s)	115.6	4.7	0.6	35.4	40.7	0.8	R 157.3	174.4	R 331.7
1980	1.9	290.6	3.2	1.0	44.9	49.1	4.0	R 345.6	342.5	R 688.1
1981	2.5	313.2	2.6	3.3	57.7	63.6	4.9	R 384.2	498.7	R 882.9
1982	3.0	414.8	2.7	9.4	75.7	87.8	5.2	R 510.8	606.6	R 1,117.4
1983	1.8	464.3	4.6	R 10.1	84.8	R 99.5	4.9	R 570.5	640.0	R 1,210.5
1984	2.8	490.0	5.6	R 7.0	42.1	R 54.7	6.9	R 554.5	584.4	R 1,138.9
1985	3.3	459.9	4.3	R 2.4	32.8	R 39.5	6.5	R 509.2	613.3	R 1,122.5
1986	2.2	406.6	1.6	R 0.8	33.6	R 35.9	5.1	R 449.8	623.0	R 1,072.9
1987	1.5	408.9	1.2	0.7	27.9	29.8	2.5	R 442.7	629.5	R 1,072.1
1988	1.5	410.6	1.1	0.8	12.9	R 14.7	2.6	R 429.4	662.0	R 1,091.4
1989	1.2	424.0	1.2	R 1.1	35.9	R 38.2	3.0	R 466.3	673.0	R 1,139.4
1990	1.0	420.1	1.0	R 0.7	43.2	R 44.9	14.6	R 480.6	687.1	R 1,167.7
1991	1.2	447.2	0.9	R 1.0	50.3	R 52.2	14.7	R 515.3	713.8	R 1,229.2
1992	1.0	431.4	0.6	R 1.4	47.0	R 49.0	14.2	R 495.7	735.8	R 1,231.4
1993	0.6	480.0	0.9	R 1.3	39.1	R 41.3	13.0	R 534.9	771.5	R 1,306.4
1994	R (s)	489.6	R (s)	R 1.3	58.8	R 60.6	12.3	R 562.9	804.6	R 1,367.5
1995	R (s)	500.6	0.9	R 0.7	71.1	R 72.7	13.4	R 587.0	839.0	R 1,426.0
1996	(s)	487.0	1.6	0.8	83.7	86.1	15.4	588.7	889.2	1,477.8
1997	0.9	556.0	2.8	0.8	82.1	85.7	11.1	653.6	909.6	1,563.2

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 43. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Colorado

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.39	0.59	1.06	0.89	1.18	2.72	0.38	1.28	0.72	0.62	5.97	1.66
1975	0.81	1.10	2.49	2.11	2.59	4.67	1.93	2.73	1.43	1.20	7.95	2.73
1980	1.20	3.03	6.48	5.65	4.79	9.36	4.35	7.08	3.66	3.26	14.37	6.09
1981	1.17	3.86	7.82	6.11	6.40	10.23	4.37	8.16	4.51	4.12	16.38	7.87
1982	1.42	4.56	7.35	4.82	6.31	10.15	4.70	8.01	4.37	4.68	18.09	8.94
1983	1.38	5.01	6.46	R 7.94	6.78	9.02	4.51	R 7.01	4.23	5.18	17.64	9.26
1984	1.31	4.76	6.29	R 7.90	6.22	8.99	4.60	R 6.96	4.30	4.89	18.10	9.23
1985	1.31	4.61	5.93	R 8.54	6.30	9.28	4.07	R 6.55	NA	4.67	18.34	9.50
1986	1.24	4.41	3.69	R 4.62	5.25	6.76	2.34	4.51	NA	4.35	17.73	9.49
1987	R 1.37	4.15	4.13	R 4.62	4.21	7.59	—	R 4.60	NA	4.15	17.05	8.93
1988	1.36	3.83	3.82	R 4.31	4.34	7.34	—	4.30	NA	3.84	17.03	8.73
1989	1.34	4.00	4.55	R 4.51	6.04	8.13	1.80	R 5.30	NA	R 4.07	17.17	R 9.19
1990	R 1.28	3.97	5.70	R 5.87	6.11	9.29	—	R 6.77	NA	R 4.13	16.89	9.29
1991	1.39	3.92	5.03	R 7.18	8.94	9.23	—	R 6.93	NA	R 4.14	17.07	R 9.17
1992	1.51	3.91	4.87	R 6.75	8.75	9.56	1.75	R 6.08	NA	4.08	17.21	9.33
1993	1.37	4.00	4.88	R 6.84	8.05	9.61	2.04	5.66	4.06	R 4.09	17.36	R 9.36
1994	1.35	4.35	4.57	R 5.84	8.52	9.83	—	5.26	3.94	4.44	17.89	R 9.65
1995	R 1.21	4.15	4.70	R 6.04	8.26	9.71	—	5.71	3.86	4.28	18.13	R 9.74
1996	1.08	3.58	5.56	6.79	9.89	10.39	—	7.04	4.43	3.95	17.72	9.39
1997	1.17	4.01	5.46	7.10	10.37	10.45	—	6.35	4.41	4.23	17.28	9.45
	Expenditures in Million Nominal Dollars											
1970	1.3	33.7	0.9	0.7	2.4	1.8	R (s)	5.9	(s)	40.9	93.5	134.4
1975	R (s)	75.5	3.4	0.6	4.9	2.7	0.9	12.4	(s)	88.2	170.3	258.5
1980	1.7	201.9	12.8	R (s)	5.2	15.4	R (s)	33.6	(s)	R 237.2	356.8	594.0
1981	1.5	226.1	14.2	R (s)	8.5	15.5	R (s)	38.5	(s)	R 266.3	467.2	R 733.5
1982	2.5	305.9	6.4	0.6	9.1	16.8	R (s)	33.1	(s)	R 341.6	614.0	R 955.6
1983	1.6	325.9	30.7	R 1.2	12.0	13.4	R (s)	R 57.5	(s)	R 385.0	638.5	R 1,023.5
1984	2.3	343.2	30.6	0.8	5.1	16.9	R (s)	R 53.5	(s)	R 399.1	720.6	R 1,119.7
1985	2.8	317.8	23.5	R 0.8	5.6	8.6	(s)	R 38.4	NA	R 359.1	772.2	R 1,131.3
1986	1.8	272.8	8.7	R (s)	4.6	6.8	1.1	21.5	NA	296.2	753.0	1,049.2
1987	R 1.5	267.1	23.1	R 0.7	4.0	7.6	—	35.4	NA	R 304.0	735.1	1,039.1
1988	1.8	264.5	22.6	R (s)	3.9	6.8	—	R 33.7	NA	300.0	784.0	1,084.0
1989	1.2	273.3	14.3	R 4.0	6.3	7.0	R (s)	R 31.6	NA	R 306.1	827.0	R 1,133.1
1990	1.0	264.5	14.5	R (s)	6.6	12.9	—	34.4	NA	299.9	831.2	1,131.1
1991	1.3	278.5	17.3	R (s)	10.8	16.3	—	R 44.8	NA	R 324.6	851.0	R 1,175.6
1992	1.2	265.7	23.7	R (s)	9.5	8.1	(s)	41.5	NA	R 308.4	866.7	1,175.0
1993	0.7	289.5	21.6	R (s)	9.1	1.8	(s)	R 32.7	1.0	R 322.9	905.1	1,227.9
1994	R (s)	287.9	32.4	R (s)	9.6	2.7	—	R 44.8	1.0	R 334.2	851.0	R 1,185.1
1995	R (s)	281.9	22.3	R (s)	11.6	3.0	—	37.0	1.0	R 320.2	884.5	R 1,204.7
1996	(s)	252.9	32.0	(s)	13.2	14.5	—	59.9	1.3	314.3	922.0	1,236.2
1997	0.9	280.4	37.7	(s)	13.9	2.0	—	53.8	1.1	336.2	914.2	1,250.5

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 44. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Colorado

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	0.43	0.39	0.42	0.29	0.58	0.83	0.89	1.18	5.08	2.72	0.47	R 1.30	R 0.98	R 1.73	R 0.55	3.50	R 0.67
1975	1.38	0.81	1.17	0.72	2.01	1.96	2.11	2.59	7.48	4.67	1.43	R 2.61	R 2.21	R 1.73	R 1.41	5.55	1.74
1980	1.97	1.20	1.66	2.65	3.40	5.33	5.65	4.79	14.36	9.36	3.82	R 7.58	R 5.18	R 1.73	R 3.43	9.40	4.19
1981	2.26	1.17	1.84	3.42	4.21	5.81	6.11	6.40	18.00	10.23	4.24	R 9.21	R 6.32	R 1.73	R 3.87	10.79	R 4.90
1982	2.07	1.42	1.66	3.98	4.12	4.50	4.82	6.31	17.25	10.15	4.14	R 8.48	R 5.74	R 1.73	R 4.07	12.87	R 5.16
1983	—	1.38	1.38	4.26	4.13	6.51	R 7.14	6.78	16.98	9.02	4.26	R 8.24	R 6.37	R 1.73	R 4.74	12.33	R 5.49
1984	—	1.31	1.31	4.25	4.48	6.57	R 7.07	6.22	17.63	8.99	4.60	R 8.39	R 6.22	R 1.73	R 4.66	12.44	R 5.74
1985	—	1.31	1.31	4.01	4.73	6.33	R 7.01	6.30	17.61	9.28	4.07	R 8.01	R 6.20	R 1.73	R 4.49	12.67	R 5.78
1986	—	1.24	1.24	3.82	4.30	4.03	R 5.23	5.25	15.59	6.76	2.34	R 10.73	R 4.75	R 2.22	R 3.80	12.95	R 5.31
1987	—	R 1.37	R 1.37	3.60	3.03	4.34	R 5.24	4.21	13.58	7.59	2.68	R 10.73	R 4.32	R 2.22	R 3.52	12.78	R 5.25
1988	—	1.36	1.36	3.43	3.19	4.14	R 4.14	4.34	14.62	7.34	1.82	R 10.84	R 4.21	R 2.22	R 3.51	13.22	R 5.10
1989	—	1.34	1.34	2.50	2.73	4.93	R 4.91	6.04	14.48	8.13	1.80	R 10.00	R 4.68	d R 2.21	d R 3.28	13.32	d R 4.87
1990	—	R 1.28	R 1.28	2.77	2.59	6.19	R 6.44	6.11	14.60	9.29	2.46	R 9.71	R 4.90	R 1.41	R 3.43	13.16	R 5.07
1991	—	1.39	1.39	2.27	3.24	5.40	R 5.91	8.94	16.80	9.23	2.26	R 13.59	R 5.39	R 1.34	R 3.46	13.37	R 5.02
1992	—	1.51	1.51	2.15	2.89	5.30	R 5.55	8.75	18.32	9.56	1.75	R 18.11	R 5.28	R 1.39	R 3.45	13.45	R 4.97
1993	—	1.37	1.37	2.32	2.87	5.34	R 5.65	8.05	18.96	9.61	2.04	R 15.12	R 5.22	R 1.39	R 3.35	13.25	R 4.80
1994	—	1.35	1.35	2.37	2.73	5.22	R 4.80	7.24	19.11	9.83	2.20	R 19.33	R 4.91	R 1.90	R 3.23	13.42	R 5.09
1995	—	R 1.21	R 1.21	2.81	3.09	5.37	R 5.06	7.17	R 19.41	9.71	2.26	R 19.21	R 5.24	R 1.95	R 3.55	13.23	R 5.36
1996	—	1.08	1.08	2.84	3.39	6.24	6.00	8.89	20.08	10.39	3.25	18.96	5.95	1.96	4.01	12.74	5.58
1997	—	1.17	1.17	3.62	3.51	6.00	5.80	8.87	17.86	10.45	2.17	19.88	6.30	1.95	4.31	12.55	5.93
	Expenditures in Million Nominal Dollars																
1970	12.0	5.4	17.4	23.1	12.3	10.1	2.8	3.6	4.2	14.8	3.0	R 2.7	R 53.6	R 3.6	R 97.8	26.9	R 124.7
1975	39.5	14.0	53.4	40.9	29.8	38.6	2.3	13.6	7.1	21.1	19.8	R 4.2	R 136.4	R 3.6	R 234.3	81.3	R 315.6
1980	50.2	21.1	71.3	131.6	51.6	123.7	12.3	32.4	20.8	34.2	38.8	R 33.1	R 346.9	R 1.2	R 551.0	218.8	R 769.9
1981	54.8	18.0	72.9	151.5	51.1	100.4	5.1	27.0	25.0	31.9	2.5	R 22.7	R 265.6	R 1.3	R 491.2	237.9	R 729.1
1982	19.7	22.9	42.6	159.4	44.2	70.8	1.9	42.1	21.8	31.1	R (s)	R 17.0	R 229.1	R 1.2	R 432.4	194.0	R 626.4
1983	—	21.5	21.5	167.2	51.5	137.2	0.7	32.8	22.5	23.8	4.3	R 17.3	R 290.1	R 1.4	R 480.2	136.8	R 617.0
1984	—	24.2	24.2	158.8	91.8	141.2	R (s)	13.2	24.9	23.8	2.0	R 20.2	R 317.6	R 1.4	R 502.0	217.0	R 719.0
1985	—	R 22.3	R 22.3	136.3	97.5	84.5	1.1	12.0	23.2	28.3	(s)	R 17.0	R 263.5	R 1.4	R 423.6	222.7	R 646.3
1986	—	R 20.6	R 20.6	117.6	88.2	81.0	R 0.6	8.4	20.1	19.7	(s)	R 5.2	R 223.2	R 3.8	R 365.2	245.8	R 611.0
1987	—	R 21.5	R 21.5	100.0	62.6	67.3	R 0.9	7.4	19.8	R 21.2	(s)	R 5.8	R 185.0	R 3.8	R 310.4	258.3	R 568.7
1988	—	19.6	19.6	123.2	75.2	88.9	R 0.9	13.3	20.5	18.4	(s)	R 4.6	R 221.8	R 4.0	R 368.5	270.9	R 639.4
1989	—	17.9	17.9	121.1	53.1	81.1	R 0.8	36.6	20.8	21.6	(s)	R 4.0	R 217.9	d R 3.4	d R 360.3	275.1	d R 635.4
1990	—	R 19.6	R 19.6	124.4	55.9	96.7	0.7	19.8	21.6	R 19.9	(s)	R 3.9	R 218.5	R 1.3	R 363.9	282.1	R 646.0
1991	—	21.6	21.6	116.1	66.8	111.0	0.6	33.7	22.2	24.4	(s)	R 8.7	R 267.4	R 1.6	R 406.8	293.3	R 700.1
1992	—	22.3	22.3	115.3	61.1	134.3	R (s)	31.4	24.7	24.8	(s)	R 12.9	R 289.6	R 1.5	R 428.8	300.7	R 729.5
1993	—	22.3	22.3	146.0	65.1	112.8	R (s)	35.8	26.1	25.4	(s)	R 11.2	R 276.8	R 1.5	R 446.7	302.3	R 749.0
1994	—	24.9	24.9	154.7	75.8	95.1	R (s)	R 30.0	27.5	30.1	(s)	R 13.1	R 271.7	R 2.4	R 453.7	419.9	R 873.6
1995	—	R 19.1	R 19.1	190.4	76.2	99.6	R (s)	33.2	27.4	27.6	(s)	R 12.5	R 276.5	R 2.5	R 488.4	418.3	R 906.7
1996	—	8.6	8.6	221.6	87.9	149.7	(s)	46.4	27.5	34.5	(s)	14.1	360.3	2.5	593.1	412.9	1,005.9
1997	—	19.7	19.7	243.5	60.0	142.1	(s)	47.9	25.9	37.4	(s)	13.6	327.1	2.6	592.8	420.1	1,012.9

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 45. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Colorado

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.39	—	2.17	1.20	0.76	1.18	5.08	2.72	0.38	2.17	2.17	—	2.17
1975	0.81	—	3.45	2.49	2.12	2.59	7.48	4.67	1.86	3.99	3.99	—	3.99
1980	—	—	9.02	7.13	6.59	4.79	14.36	9.36	—	8.75	8.75	—	8.75
1981	—	—	10.84	8.22	7.67	6.40	18.00	10.23	—	9.73	9.73	—	9.73
1982	—	—	10.92	7.75	7.38	6.31	17.25	10.15	—	9.52	9.52	—	9.52
1983	—	—	10.44	6.83	6.47	6.78	16.98	9.02	4.53	8.41	8.41	—	8.41
1984	—	—	10.27	6.93	6.30	6.22	17.63	8.99	4.51	8.27	8.27	—	8.27
1985	—	—	9.99	6.70	5.94	6.30	17.61	9.28	3.79	8.43	8.43	—	8.43
1986	—	—	8.41	6.91	3.92	5.25	15.59	6.76	2.01	6.38	6.38	—	6.38
1987	—	—	7.55	7.28	4.05	4.21	13.58	7.59	—	R 6.99	R 6.99	—	R 6.99
1988	—	—	7.41	7.13	3.78	4.34	14.62	7.34	—	6.88	6.88	—	6.88
1989	—	—	8.28	7.85	4.30	6.04	14.48	8.13	—	7.70	7.70	—	7.70
1990	—	3.46	9.32	8.80	5.59	6.11	14.60	9.29	—	8.77	8.77	—	8.77
1991	—	3.34	8.71	8.39	4.87	8.94	16.80	9.23	—	8.56	8.56	—	8.56
1992	—	3.37	8.54	8.62	4.47	8.75	18.32	9.56	—	8.71	8.70	—	8.70
1993	—	2.67	8.24	8.70	4.25	8.05	18.96	9.61	—	8.62	8.62	—	8.62
1994	—	3.53	7.96	8.53	3.99	7.78	19.11	9.83	3.06	8.82	8.81	21.77	8.81
1995	—	1.48	8.36	8.58	4.04	7.61	R 19.41	9.71	—	8.82	8.82	23.07	8.82
1996	—	2.07	9.29	9.43	4.87	8.63	20.08	10.39	3.82	9.54	9.54	22.54	9.54
1997	—	2.42	9.39	9.17	4.64	8.12	17.86	10.45	—	9.57	9.57	23.45	9.57
	Expenditures in Million Nominal Dollars												
1970	(s)	—	3.7	18.6	32.0	0.6	8.8	356.0	R (s)	419.8	419.9	—	419.9
1975	(s)	—	4.6	62.3	85.7	1.8	13.7	758.5	1.2	927.9	927.9	—	927.9
1980	—	—	12.1	272.1	175.9	0.8	35.1	1,636.1	—	2,131.9	2,131.9	—	2,131.9
1981	—	—	14.1	248.8	238.0	2.4	42.1	1,814.1	—	2,359.5	2,359.5	—	2,359.5
1982	—	—	10.4	276.5	231.7	1.7	36.8	1,824.2	—	2,381.3	2,381.3	—	2,381.3
1983	—	—	9.4	247.5	224.2	2.2	38.0	1,555.7	R (s)	2,077.5	2,077.5	—	2,077.5
1984	—	—	7.4	265.9	302.9	2.3	42.0	1,546.1	R (s)	2,167.0	2,167.0	—	2,167.0
1985	—	—	7.1	248.2	264.1	1.5	39.1	R 1,706.0	3.5	R 2,269.6	R 2,269.6	—	R 2,269.6
1986	—	—	7.5	245.7	178.8	1.1	33.9	1,270.6	(s)	1,737.6	1,737.6	—	1,737.6
1987	—	—	5.8	258.6	192.0	0.6	33.3	R 1,413.8	—	R 1,904.1	R 1,904.1	—	R 1,904.1
1988	—	—	6.2	264.4	138.0	0.9	34.6	R 1,377.8	—	R 1,821.9	R 1,821.9	—	R 1,821.9
1989	—	—	7.6	307.5	129.8	1.3	35.2	R 1,484.9	—	R 1,966.2	R 1,966.2	—	R 1,966.2
1990	—	(s)	7.8	367.7	193.0	1.7	36.5	R 1,703.0	—	R 2,309.6	R 2,309.6	—	R 2,309.6
1991	—	R (s)	6.8	372.6	179.5	2.7	37.6	R 1,689.9	—	R 2,289.1	R 2,289.2	—	R 2,289.2
1992	—	R (s)	5.9	360.2	186.0	R 2.1	41.8	R 1,764.9	—	R 2,360.9	R 2,361.0	—	R 2,361.0
1993	—	(s)	5.1	429.7	215.6	2.4	44.0	R 1,886.4	—	R 2,583.3	R 2,583.3	—	R 2,583.3
1994	—	R (s)	5.1	440.6	178.8	3.9	46.4	R 2,001.9	(s)	R 2,676.7	R 2,676.9	R (s)	R 2,677.0
1995	—	(s)	5.2	467.8	169.9	1.9	46.3	R 2,078.1	—	2,769.2	R 2,769.3	R (s)	R 2,769.6
1996	—	(s)	5.8	529.4	214.5	2.3	46.5	2,300.4	(s)	3,098.8	3,098.9	(s)	3,099.2
1997	—	(s)	6.8	450.4	188.6	2.0	43.7	2,362.3	—	3,053.8	3,053.8	(s)	3,054.2

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 46. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Colorado

Year	Coal	Natural Gas	Petroleum: Heavy Oil	Petroleum: Light Oil	Petroleum: Petroleum Coke	Petroleum: Total	Nuclear Fuel	Wood and Waste	Total Energy [a]
	Prices in Nominal Dollars per Million Btu								
1970	0.26	0.24	0.36	0.45	—	0.37	—	—	0.25
1975	0.48	0.59	1.94	2.56	—	2.18	—	—	0.60
1980	0.86	2.64	4.38	6.50	—	5.65	0.21	—	1.12
1981	0.96	3.25	4.38	7.31	—	7.24	0.18	—	1.08
1982	1.09	3.62	4.77	5.86	—	5.85	0.21	1.28	1.14
1983	1.11	4.22	4.62	6.21	—	5.78	0.23	1.12	1.16
1984	1.13	3.75	4.64	6.03	—	5.94	0.26	1.28	1.19
1985	1.15	3.53	4.00	5.92	—	5.79	—	0.79	1.21
1986	1.18	3.00	—	3.37	—	3.37	0.27	0.32	1.21
1987	1.12	2.29	2.35	3.86	—	3.86	0.28	0.95	1.15
1988	1.07	2.29	2.80	3.88	—	3.52	0.29	0.87	1.09
1989	1.06	2.28	2.74	4.10	—	4.07	0.28	0.80	1.08
1990	1.06	2.17	3.09	5.35	—	5.34	—	0.80	1.08
1991	1.09	2.15	3.86	5.13	—	4.39	—	0.80	1.11
1992	1.09	2.14	3.23	4.79	—	4.08	—	—	1.11
1993	1.09	2.50	—	4.81	—	4.81	—	—	1.12
1994	1.06	2.13	3.22	4.58	—	4.58	—	—	1.07
1995	1.05	1.73	2.99	4.77	—	4.28	—	—	1.06
1996	1.03	2.10	3.97	5.52	—	5.01	—	—	1.05
1997	1.01	3.18	4.09	5.33	—	5.33	—	—	1.05
	Expenditures in Million Nominal Dollars								
1970	18.0	12.0	0.6	R (s)	—	0.6	—	—	30.6
1975	54.5	30.9	10.8	9.2	—	20.0	—	—	105.4
1980	173.3	82.7	4.7	10.3	—	15.1	1.5	—	272.5
1981	228.5	43.1	R (s)	8.3	—	8.4	1.5	—	281.5
1982	270.1	21.1	(s)	6.5	—	6.6	1.3	(s)	299.1
1983	263.2	18.9	1.4	5.2	—	6.7	1.9	(s)	290.6
1984	301.3	18.1	R (s)	2.9	—	3.1	R (s)	(s)	322.7
1985	321.3	17.2	R (s)	3.9	—	4.1	—	(s)	342.6
1986	324.9	13.9	—	1.9	—	1.9	R (s)	(s)	340.8
1987	312.0	17.7	(s)	2.0	—	2.0	0.5	(s)	332.3
1988	314.3	19.1	R (s)	1.3	—	1.8	2.1	(s)	337.3
1989	328.7	18.7	(s)	1.7	—	1.7	1.6	(s)	350.7
1990	331.4	11.8	(s)	1.6	—	1.6	—	(s)	344.7
1991	331.4	12.2	1.1	1.1	—	2.2	—	(s)	345.8
1992	344.5	10.7	0.7	1.3	—	2.1	—	—	357.3
1993	351.0	12.3	—	0.8	—	0.8	—	—	364.0
1994	348.6	10.8	(s)	0.7	—	0.7	—	—	360.1
1995	336.5	6.6	R (s)	0.6	—	0.8	—	—	343.8
1996	340.7	11.5	(s)	1.1	—	1.5	—	—	353.7
1997	341.0	17.5	(s)	1.2	—	1.2	—	—	359.9

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 47. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Connecticut

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.48	0.48	1.57	1.29	0.75	1.98	2.96	0.40	1.23	1.37	0.13	R 0.86	1.26	0.35	6.27	R 2.08
1975	—	2.09	2.09	2.86	2.73	2.11	3.63	4.61	2.04	3.08	3.06	0.29	R 1.22	2.68	1.35	13.15	R 4.51
1980	—	3.35	3.35	4.97	6.82	6.50	6.85	10.10	4.66	7.72	7.09	0.38	R 2.41	R 5.61	2.60	19.10	R 8.95
1981	—	3.87	3.87	5.86	8.55	7.80	7.72	11.38	5.58	9.48	8.68	0.45	R 2.85	R 6.56	2.76	23.69	R 11.14
1982	—	3.86	3.86	7.17	8.39	7.51	9.09	10.30	4.76	8.70	7.98	0.53	R 2.82	R 6.16	2.31	25.79	R 11.15
1983	—	3.30	3.30	7.73	8.25	7.13	8.90	9.56	4.54	R 8.30	7.48	0.76	R 2.69	R 6.12	2.63	25.97	R 11.22
1984	—	3.45	3.45	7.00	8.44	6.61	8.81	9.11	4.91	R 8.40	R 7.44	0.90	R 2.63	R 5.89	2.70	26.94	R 11.04
1985	—	2.40	2.40	7.20	8.22	6.29	11.38	9.37	4.32	R 7.45	R 7.44	0.91	R 2.53	R 5.90	2.38	26.62	R 11.03
1986	—	R 2.33	R 2.33	6.86	6.57	4.50	11.07	7.45	2.56	R 6.11	R 5.66	0.91	R 1.98	R 4.41	1.54	24.65	R 9.49
1987	—	2.45	2.45	5.94	6.28	4.34	10.42	7.93	2.97	R 5.55	6.00	0.92	R 1.85	R 4.44	1.61	24.27	R 9.48
1988	—	2.31	2.31	6.04	6.48	4.00	11.20	8.91	2.42	R 5.38	R 6.13	0.86	R 1.67	R 4.47	1.42	24.55	R 9.82
1989	—	2.16	2.16	6.35	7.15	4.67	11.46	9.30	2.88	R 5.53	R 6.60	0.89	e R 1.46	e R 4.94	R 1.63	25.68	e R 10.33
1990	—	2.15	2.15	6.40	8.49	5.91	12.71	10.06	3.04	R 6.20	7.62	0.84	R 1.57	R 5.34	1.53	26.83	R 11.44
1991	—	2.19	2.19	6.49	8.05	5.10	14.24	10.04	2.49	R 5.62	R 7.48	0.80	R 1.57	R 5.77	1.50	28.14	R 11.60
1992	—	1.99	1.99	6.85	7.27	4.68	11.77	10.19	2.43	R 5.99	R 7.60	0.71	R 1.55	R 5.53	R 1.18	29.42	R 11.43
1993	—	1.75	1.75	6.99	7.13	4.41	11.47	10.09	2.44	R 6.18	R 7.69	0.60	R 1.44	R 5.19	R 0.94	30.07	R 11.50
1994	—	1.81	1.81	7.03	6.91	4.15	13.00	10.33	2.69	R 6.41	R 7.88	0.56	R 1.49	R 5.33	R 0.94	29.83	R 11.73
1995	—	1.91	1.91	6.52	6.77	4.09	12.38	11.05	2.77	R 6.39	R 8.12	0.56	1.53	R 5.43	R 1.03	30.78	R 12.08
1996	—	1.92	1.92	7.08	7.71	4.99	14.02	11.69	3.33	7.08	8.62	0.56	1.68	7.04	1.82	30.81	12.49
1997	—	1.92	1.92	6.75	7.51	4.73	14.58	11.84	2.94	6.91	8.23	—	1.49	7.43	2.54	30.83	12.56
	Expenditures in Million Nominal Dollars																
1970	—	23.5	23.5	96.4	181.0	12.3	13.9	445.2	89.3	60.7	802.3	5.3	R 3.4	R 930.9	-76.1	345.0	R 1,199.8
1975	—	2.7	2.7	183.6	343.5	25.4	29.8	770.2	417.5	55.0	1,641.3	26.4	R 5.1	R 1,859.0	-311.5	829.8	R 2,377.2
1980	—	1.2	1.2	368.3	885.8	72.5	37.8	1,602.8	859.2	154.7	3,612.9	49.1	R 23.2	R 4,054.8	-688.1	1,381.4	R 4,748.0
1981	—	3.5	3.5	461.0	982.3	69.7	37.6	1,808.1	755.4	217.1	3,870.2	63.2	R 28.1	R 4,426.0	-704.3	1,815.5	R 5,537.3
1982	—	2.9	2.9	571.4	1,002.5	45.6	46.6	1,625.7	637.6	168.8	3,526.7	80.6	R 29.1	R 4,210.8	-602.0	1,945.0	R 5,553.8
1983	—	2.3	2.3	590.7	811.9	38.5	45.9	1,533.8	665.9	R 152.6	R 3,248.5	95.5	R 28.5	R 3,965.6	-659.2	2,038.6	R 5,345.0
1984	—	5.1	5.1	582.7	917.9	37.5	44.4	1,477.3	774.5	R 161.6	R 3,413.2	138.8	R 24.5	R 4,164.3	-775.5	2,123.3	R 5,512.1
1985	—	51.1	51.1	577.0	905.1	38.5	52.6	R 1,525.9	571.4	R 217.4	R 3,310.8	125.5	R 22.8	R 4,087.3	-634.9	2,132.6	R 5,585.0
1986	—	R 49.4	R 49.4	553.0	788.9	31.9	45.7	R 1,247.1	358.2	R 156.9	R 2,628.7	182.7	R 22.9	R 3,436.7	-521.1	2,062.9	R 4,978.5
1987	—	52.4	52.4	556.8	775.5	43.7	59.4	R 1,351.1	353.4	R 144.6	R 2,727.7	203.0	R 18.7	R 3,558.7	-561.8	2,130.0	R 5,126.8
1988	—	53.3	53.3	546.3	867.2	48.8	62.1	R 1,537.8	332.8	R 134.0	R 2,982.6	205.2	R 21.7	R 3,809.1	-541.4	2,255.1	R 5,522.8
1989	—	51.1	51.1	620.3	1,068.0	59.2	67.0	R 1,576.4	401.7	R 133.5	R 3,305.8	186.1	e R 21.1	e R 4,185.0	R -588.8	2,398.0	e R 5,994.2
1990	—	55.1	55.1	642.2	1,008.7	78.4	73.3	R 1,645.5	317.3	R 134.3	R 3,257.6	177.5	R 20.6	R 4,153.6	R -513.0	2,489.1	R 6,129.8
1991	—	49.5	49.5	678.4	930.5	64.7	76.4	R 1,681.2	227.4	R 139.5	R 3,119.8	105.5	R 19.3	R 3,972.9	R -367.8	2,609.0	R 6,214.1
1992	—	44.4	44.4	779.4	941.5	60.7	80.4	R 1,744.1	166.0	R 133.7	R 3,126.4	126.3	R 19.0	R 4,098.7	R -310.6	2,722.6	R 6,510.7
1993	—	36.1	36.1	796.6	918.0	57.8	69.6	R 1,754.3	135.8	R 135.3	R 3,070.7	139.9	R 19.1	R 4,065.9	R -285.0	2,795.1	R 6,576.0
1994	—	40.8	40.8	864.2	819.4	57.6	70.3	R 1,772.7	128.3	R 145.4	R 2,993.6	121.6	R 21.1	R 4,046.6	R -271.8	2,852.7	R 6,627.6
1995	—	R 45.3	R 45.3	879.2	827.2	57.7	63.2	1,776.3	118.7	R 151.9	R 2,995.0	111.6	R 23.0	R 4,061.0	R -296.3	2,937.7	R 6,702.4
1996	—	46.8	46.8	920.8	1,012.6	76.8	75.1	2,005.7	218.3	152.5	3,541.0	37.1	25.8	4,575.7	-300.7	2,987.4	7,262.4
1997	—	53.6	53.6	932.3	1,001.0	63.5	79.0	2,048.9	271.0	141.4	3,605.0	—	20.4	4,617.9	-360.2	2,990.6	7,248.4

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 48. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Connecticut

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.30	1.88	1.48	1.70	2.70	1.53	0.56	R 1.60	7.21	R 2.44
1975	2.62	3.28	2.84	3.16	5.01	2.93	1.11	R 2.98	14.49	R 5.06
1980	4.47	5.72	7.07	8.15	9.21	7.14	2.85	R 6.52	20.27	R 9.10
1981	5.40	6.68	8.77	10.54	9.24	8.81	3.51	R 7.90	25.36	R 11.33
1982	5.46	8.29	8.53	10.79	12.27	8.68	3.40	R 8.23	27.93	R 12.16
1983	5.02	9.43	8.46	R 7.67	10.55	R 8.53	3.30	R 8.43	28.23	R 13.10
1984	4.76	8.56	8.69	R 8.23	11.28	R 8.77	3.35	R 8.36	29.35	R 13.15
1985	4.39	8.88	8.37	R 7.66	10.41	R 8.41	3.22	R 8.26	29.24	R 12.95
1986	4.19	8.57	6.90	R 5.22	10.52	R 6.95	2.58	R 7.24	27.20	R 11.50
1987	3.85	7.96	6.46	R 6.00	9.13	R 6.56	2.46	R 6.86	26.82	R 11.33
1988	4.24	7.63	6.61	R 5.66	10.96	R 6.73	2.48	R 6.88	27.03	R 11.26
1989	4.21	7.98	7.23	R 5.33	12.74	R 7.39	2.75	R 7.42	28.09	R 11.77
1990	4.37	8.31	8.55	R 6.75	13.60	R 8.74	2.83	R 8.29	29.33	R 13.23
1991	4.08	8.48	8.27	R 6.00	14.99	R 8.57	2.70	R 8.21	30.81	R 13.57
1992	4.17	8.72	7.24	R 4.96	12.43	R 7.48	2.47	R 7.63	32.45	R 12.87
1993	3.96	9.18	7.02	R 5.00	11.98	R 7.22	2.42	R 7.60	33.40	R 13.03
1994	4.07	9.84	6.80	R 5.41	15.15	R 7.15	2.35	R 7.81	33.62	R 13.65
1995	4.01	9.71	6.60	R 4.70	14.73	R 6.93	2.30	R 7.60	35.04	R 13.86
1996	4.30	9.80	7.54	5.65	16.09	7.90	2.64	8.25	35.32	14.12
1997	4.12	10.05	7.36	5.76	15.96	7.73	2.62	8.26	35.56	14.34
	Expenditures in Million Nominal Dollars									
1970	0.8	59.6	122.7	5.1	8.2	136.0	1.4	R 197.7	157.3	R 355.0
1975	0.8	105.8	214.5	5.2	14.3	234.0	3.0	R 343.6	368.2	R 711.8
1980	1.0	187.4	554.3	10.8	20.1	585.3	18.7	R 792.3	568.4	R 1,360.7
1981	2.8	228.4	661.8	11.6	19.9	693.4	23.2	R 947.8	745.4	R 1,693.1
1982	2.3	281.5	608.2	16.1	25.6	649.9	24.3	R 957.9	810.6	R 1,768.5
1983	1.6	300.0	457.8	R 8.5	26.1	R 492.4	23.3	R 817.2	844.3	R 1,661.6
1984	2.9	291.1	482.4	R 8.9	22.5	R 513.8	19.2	R 827.0	859.8	R 1,686.8
1985	2.2	299.8	475.8	R 26.3	24.0	R 526.0	18.0	R 846.0	861.9	R 1,707.9
1986	2.2	309.8	465.2	R 12.5	21.5	R 499.3	14.0	R 825.4	842.6	R 1,668.0
1987	1.5	296.7	437.3	R 13.8	26.5	R 477.7	9.8	R 785.6	884.9	R 1,670.6
1988	0.7	310.7	505.9	R 12.9	29.7	R 548.6	10.3	R 870.3	950.0	R 1,820.4
1989	0.8	335.7	599.6	R 8.7	39.4	R 647.7	11.8	R 995.9	1,005.0	R 2,000.9
1990	0.8	321.3	569.1	R 7.5	42.2	R 618.8	16.5	R 957.5	1,038.5	R 1,995.9
1991	0.8	325.0	541.2	R 5.9	51.5	R 598.7	16.7	R 941.1	1,097.4	R 2,038.5
1992	1.0	379.9	566.4	R 5.5	55.0	R 626.8	16.0	R 1,023.8	1,162.3	R 2,186.0
1993	0.7	398.1	565.1	R 6.0	45.4	R 616.4	16.1	R 1,031.4	1,207.4	R 2,238.8
1994	0.7	421.8	497.8	R 5.0	51.8	R 554.6	15.3	R 992.5	1,250.3	R 2,242.8
1995	1.0	408.2	466.5	R 3.3	46.7	R 516.5	16.7	R 942.5	1,286.2	R 2,228.7
1996	(s)	441.1	587.9	4.0	58.8	650.7	19.1	1,111.3	1,318.6	2,429.9
1997	(s)	419.0	572.9	4.7	58.4	635.9	13.8	1,069.2	1,317.5	2,386.7

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 49. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Connecticut

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.79	1.45	1.09	0.79	1.42	2.96	0.42	1.00	0.56	1.13	7.15	R 2.59
1975	2.00	2.64	2.44	2.67	2.89	4.61	1.97	2.47	1.11	2.53	13.70	5.93
1980	1.67	4.67	6.37	6.29	5.31	10.10	4.59	6.06	2.85	5.43	19.84	R 10.29
1981	1.89	5.46	8.04	7.62	6.52	11.38	5.49	7.69	3.51	R 6.55	24.36	R 12.77
1982	1.99	6.78	7.80	8.82	6.91	10.30	4.67	7.32	3.40	R 7.01	26.43	R 13.87
1983	1.98	7.24	7.46	R 7.67	7.37	9.56	4.51	R 6.63	3.30	R 6.87	26.50	R 13.63
1984	2.68	6.49	7.41	R 8.23	7.19	9.11	5.25	6.64	3.35	R 6.54	27.83	R 13.43
1985	R 2.39	6.59	7.07	R 7.66	12.34	9.37	4.68	R 6.42	NA	6.47	27.30	13.51
1986	R 2.58	6.24	4.97	R 5.22	11.61	7.45	2.79	4.42	NA	5.21	25.26	12.29
1987	R 2.74	5.59	4.88	R 6.00	11.77	7.93	3.12	R 4.62	NA	5.09	24.53	12.26
1988	R 2.55	5.45	4.65	R 5.66	11.42	8.91	2.57	4.27	NA	4.86	24.74	12.51
1989	2.61	5.88	5.51	R 5.33	10.03	9.30	3.04	R 4.95	NA	R 5.41	25.99	R 12.86
1990	R 2.58	6.10	6.80	R 6.75	11.67	10.06	3.25	R 6.12	NA	R 6.10	27.09	R 14.38
1991	R 2.69	6.69	6.09	R 6.00	12.90	10.04	2.69	R 6.34	NA	R 6.51	28.21	R 15.41
1992	R 2.64	7.00	5.45	R 4.96	10.56	10.19	2.53	R 6.28	NA	6.62	29.31	15.02
1993	R 2.33	6.84	5.22	R 5.00	10.62	10.09	2.66	R 6.62	2.42	R 6.67	29.82	R 15.62
1994	R 2.20	7.17	5.01	R 5.41	10.42	10.33	3.16	6.01	2.35	R 6.68	29.67	R 15.13
1995	R 2.26	7.35	4.94	R 4.70	10.69	11.05	3.38	5.25	2.30	R 6.53	30.67	R 15.81
1996	2.30	7.20	5.77	5.65	11.17	11.69	3.90	6.69	2.64	6.96	30.54	15.66
1997	2.53	7.03	5.54	5.76	11.00	11.84	3.15	6.74	2.62	6.89	30.53	15.41
	Expenditures in Million Nominal Dollars											
1970	R (s)	21.3	29.5	R (s)	0.8	1.5	2.6	34.4	(s)	56.1	113.5	169.6
1975	R (s)	42.3	59.7	R (s)	1.5	5.8	8.1	75.2	(s)	R 118.0	280.4	R 398.4
1980	R (s)	96.1	107.8	R (s)	2.0	14.6	33.8	158.4	(s)	R 255.3	476.4	R 731.7
1981	0.7	127.5	137.4	R (s)	2.5	16.8	27.2	184.3	0.6	R 313.1	625.4	R 938.5
1982	0.5	161.0	135.1	R (s)	2.5	15.9	22.4	175.9	0.6	R 338.1	695.9	R 1,034.0
1983	R (s)	165.9	140.7	3.0	3.2	9.6	41.0	197.4	0.6	R 364.3	738.8	R 1,103.1
1984	1.1	165.6	143.2	1.4	2.5	6.9	65.1	219.2	(s)	R 386.3	785.9	R 1,172.2
1985	0.8	166.9	146.1	2.8	5.0	7.0	49.4	210.3	NA	378.0	813.3	1,191.3
1986	R 0.9	158.9	102.0	R 2.0	4.2	5.7	28.2	R 142.1	NA	R 301.9	798.8	R 1,100.7
1987	0.7	158.9	89.2	R 3.8	6.0	7.2	25.6	R 131.8	NA	R 291.4	820.1	R 1,111.6
1988	R (s)	154.0	81.9	R 2.1	5.5	7.7	22.0	R 119.3	NA	R 273.6	871.0	R 1,144.6
1989	R (s)	187.1	110.1	R 4.4	5.5	9.3	29.6	R 158.8	NA	R 346.3	944.0	R 1,290.3
1990	R (s)	185.3	116.0	R 2.0	6.4	R 10.8	21.4	R 156.6	NA	R 342.1	990.0	R 1,332.2
1991	R (s)	185.2	105.9	R 5.7	7.8	34.6	9.0	R 162.9	NA	R 348.4	1,050.0	R 1,398.5
1992	0.7	214.8	93.4	R 1.3	8.2	84.3	14.2	R 201.5	NA	R 416.9	1,085.2	R 1,502.2
1993	R (s)	220.6	78.0	R 1.3	7.1	84.2	6.9	R 177.4	1.3	R 398.3	1,123.6	R 1,521.9
1994	R (s)	288.8	72.1	1.6	6.3	56.5	13.0	R 149.4	1.3	R 439.8	1,135.0	R 1,574.8
1995	R 0.8	286.7	84.0	R 0.7	6.0	14.5	9.7	R 114.9	1.3	R 403.7	1,182.1	R 1,585.8
1996	(s)	294.8	100.9	2.3	7.2	50.6	11.3	172.3	1.6	468.8	1,203.1	1,671.8
1997	(s)	308.2	97.8	3.4	7.1	61.2	6.5	175.9	1.3	485.6	1,213.9	1,699.4

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
(s)=Value less than 0.05 million nominal dollars.

NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 50. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Connecticut

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	0.79	0.79	1.03	0.68	0.73	0.79	1.42	5.08	2.96	0.43	0.91	0.69	R 1.40	R 0.73	4.27	1.06
1975	—	2.00	2.00	2.24	1.91	2.41	2.67	2.89	7.48	4.61	2.12	2.97	2.30	R 1.40	R 2.28	10.51	R 3.43
1980	—	—	—	4.08	3.67	5.75	6.29	5.31	14.36	10.10	4.55	7.68	5.40	R 1.40	R 5.03	16.60	R 6.91
1981	—	1.89	1.89	4.97	5.40	6.93	7.62	6.52	18.00	11.38	5.74	9.43	7.32	R 1.40	R 6.36	20.63	R 9.68
1982	—	1.99	1.99	5.86	4.08	7.74	8.82	6.91	17.25	10.30	4.88	8.66	6.54	R 1.40	R 6.12	21.87	R 9.52
1983	—	1.98	1.98	5.76	4.24	7.42	R 7.26	7.37	16.98	9.56	4.67	8.11	R 6.62	R 1.40	R 6.01	22.00	R 10.06
1984	—	2.68	2.68	5.47	4.63	6.95	R 7.85	7.19	17.63	9.11	5.25	8.19	6.60	R 1.40	R 5.96	22.42	R 9.95
1985	—	R 2.39	R 2.39	5.38	5.20	6.75	R 7.29	12.34	17.61	9.37	4.68	7.94	6.44	R 1.40	R 5.89	21.93	R 9.58
1986	—	R 2.58	R 2.58	4.53	4.86	4.43	R 5.00	11.61	15.59	7.45	2.79	5.46	4.79	R 1.45	R 4.42	20.00	R 8.05
1987	—	R 2.74	R 2.74	4.08	3.58	4.88	R 4.66	11.77	13.58	7.93	3.12	6.30	R 4.82	R 1.45	R 4.34	19.93	R 7.83
1988	—	R 2.55	R 2.55	3.92	3.39	4.67	R 4.66	11.42	14.62	8.91	2.57	5.31	R 4.52	R 1.45	R 4.07	20.17	R 7.78
1989	—	2.61	2.61	4.36	3.20	5.54	R 5.46	10.03	14.48	9.30	3.04	6.14	R 4.94	d R 1.36	d R 4.42	21.11	d R 8.32
1990	—	R 2.58	R 2.58	4.65	3.38	6.77	R 6.51	11.67	14.60	10.06	3.25	6.78	R 5.59	R 1.39	R 5.03	22.13	R 9.14
1991	—	R 2.69	R 2.69	4.69	3.05	5.93	R 5.93	12.90	16.80	10.04	2.69	6.23	R 5.10	R 1.69	R 4.84	23.23	R 8.83
1992	—	R 2.64	R 2.64	4.79	2.80	5.11	R 5.07	10.56	18.32	10.19	2.53	6.67	4.98	R 1.58	R 4.79	24.09	R 8.81
1993	—	R 2.33	R 2.33	4.64	3.30	5.06	R 4.95	10.62	18.96	10.09	2.66	5.91	R 4.94	R 1.58	R 4.68	24.30	R 8.63
1994	—	R 2.20	R 2.20	4.36	3.66	4.78	R 5.10	8.85	19.11	10.33	3.16	6.00	5.11	R 1.74	R 4.61	23.15	R 8.78
1995	—	2.30	2.30	4.26	3.79	4.77	R 4.55	7.58	R 19.41	11.05	3.38	6.38	R 5.36	R 1.67	R 4.67	23.26	R 8.82
1996	—	—	—	4.67	3.82	5.91	5.77	8.59	20.08	11.69	3.90	7.26	5.96	1.72	5.14	23.03	9.23
1997	—	—	—	4.60	4.01	5.49	4.75	12.46	17.86	11.84	3.15	6.26	6.18	1.60	5.10	22.74	9.23
	Expenditures in Million Nominal Dollars																
1970	—	2.7	2.7	15.3	4.6	8.3	1.0	4.8	10.2	4.2	37.0	31.0	101.1	R 2.0	R 121.1	74.3	R 195.4
1975	—	1.4	1.4	34.9	16.0	27.2	4.3	13.8	9.1	0.9	121.7	9.7	202.7	R 2.1	R 241.1	181.2	R 422.3
1980	—	—	—	84.7	15.3	108.4	9.0	15.3	18.1	3.5	191.1	75.8	436.4	R 4.1	R 525.3	336.6	R 861.9
1981	—	(s)	(s)	105.1	28.1	60.5	9.0	14.6	21.8	3.1	91.2	116.0	344.2	R 4.3	R 453.6	444.7	R 898.4
1982	—	R (s)	R (s)	129.0	21.3	68.7	5.9	17.9	19.0	2.9	96.8	80.5	313.0	R 4.2	R 446.3	438.5	R 884.8
1983	—	R (s)	R (s)	124.7	20.7	53.2	R 1.4	15.8	19.6	2.2	51.9	72.7	R 237.3	R 4.7	R 367.2	455.5	R 822.7
1984	—	R (s)	R (s)	117.5	28.7	51.1	0.6	18.3	21.7	3.6	79.6	71.1	274.8	R 4.8	R 397.4	477.7	R 875.1
1985	—	R (s)	R (s)	105.0	72.2	42.2	R 1.8	22.2	20.2	11.1	64.8	66.5	R 301.0	R 4.8	R 411.0	457.4	R 868.4
1986	—	R 0.5	R 0.5	82.6	68.6	27.2	R 2.0	19.1	17.5	9.3	40.8	30.4	214.9	R 8.9	R 306.9	421.5	R 728.5
1987	—	R (s)	R (s)	83.4	50.9	48.2	R 1.6	25.9	17.2	9.8	38.9	34.6	R 227.2	R 8.9	R 319.6	424.9	R 744.5
1988	—	1.0	1.0	78.7	41.7	36.2	R 6.7	25.6	17.9	12.5	33.9	29.5	R 204.0	R 9.2	R 293.0	434.0	R 727.0
1989	—	R (s)	R (s)	89.0	38.2	46.9	R 7.4	20.9	18.2	13.5	32.4	33.4	R 210.8	d R 9.2	d R 309.1	449.0	d R 758.1
1990	—	R (s)	R (s)	122.2	35.6	40.2	R 2.5	23.2	18.9	R 13.9	29.3	41.1	R 204.5	R 4.1	R 330.8	460.6	R 791.4
1991	—	R (s)	R (s)	158.1	40.0	37.3	R 1.3	15.2	19.4	12.6	16.8	42.9	R 185.5	R 2.6	R 346.3	461.5	R 807.8
1992	—	0.8	0.8	179.0	31.2	27.7	R (s)	16.0	21.6	12.9	19.5	47.0	176.1	R 3.0	R 358.9	475.1	R 834.0
1993	—	1.7	1.7	175.7	34.5	24.2	R 0.7	15.9	22.7	10.4	24.1	41.8	R 174.3	R 3.0	R 354.8	464.0	R 818.8
1994	—	1.6	1.6	137.6	40.7	21.2	R 1.3	10.6	24.0	10.6	26.1	43.2	R 177.6	R 4.5	R 321.3	467.4	R 788.7
1995	—	(s)	(s)	145.3	48.0	22.9	R 2.4	9.7	23.9	11.3	16.3	43.4	R 178.1	R 5.0	R 328.4	469.4	R 797.8
1996	—	—	—	155.8	39.8	28.3	0.8	8.4	24.0	13.7	24.0	51.2	190.3	5.1	351.2	465.7	817.0
1997	—	—	—	163.4	32.4	27.9	1.0	13.0	22.6	14.4	7.8	49.4	168.7	5.2	337.3	459.3	796.6

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 51. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Connecticut

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.79	—	2.17	1.39	0.75	1.42	5.08	2.96	0.38	2.63	2.63	—	2.63
1975	2.00	—	3.45	2.90	2.09	2.89	7.48	4.61	1.72	4.30	4.30	—	4.30
1980	—	—	9.02	7.40	6.51	5.31	14.36	10.10	3.88	9.69	9.69	—	9.69
1981	—	—	10.84	9.02	7.80	6.52	18.00	11.38	4.74	11.08	11.08	—	11.08
1982	—	—	10.92	8.71	7.51	6.91	17.25	10.30	4.22	10.07	10.07	—	10.07
1983	—	—	10.44	8.80	7.13	7.37	16.98	9.56	4.22	9.39	9.39	—	9.39
1984	—	—	10.27	9.16	6.61	7.19	17.63	9.11	4.50	9.08	9.08	—	9.08
1985	—	—	9.99	9.19	6.29	12.34	17.61	9.37	4.06	9.29	9.29	—	9.29
1986	—	—	8.41	7.60	4.50	11.61	15.59	7.45	2.32	7.42	7.42	—	7.42
1987	—	—	7.55	7.35	4.34	11.77	13.58	7.93	2.73	7.71	7.71	—	7.71
1988	—	—	7.41	7.78	4.00	11.42	14.62	8.91	2.20	8.49	8.49	—	8.49
1989	—	—	8.28	8.33	4.67	10.03	14.48	9.30	2.63	8.89	8.89	—	8.89
1990	—	—	9.32	9.74	5.91	11.67	14.60	10.06	2.74	9.76	9.76	—	9.76
1991	—	—	8.71	9.42	5.10	12.90	16.80	10.04	2.29	9.68	9.68	—	9.68
1992	—	12.11	8.54	8.90	4.68	10.56	18.32	10.19	2.21	9.70	9.70	—	9.70
1993	—	8.73	8.24	8.85	4.41	10.62	18.96	10.09	2.28	9.62	9.62	—	9.62
1994	—	7.51	7.96	8.70	4.15	8.57	19.11	10.33	2.40	9.76	9.76	—	9.76
1995	—	5.90	8.36	8.65	4.09	8.66	R 19.41	11.05	2.54	10.28	10.28	—	10.28
1996	—	6.47	9.29	9.59	4.99	8.54	20.08	11.69	3.14	10.95	10.95	—	10.95
1997	—	5.52	9.39	9.33	4.73	7.56	17.86	11.84	2.84	11.05	11.05	—	11.05
	Expenditures in Million Nominal Dollars												
1970	(s)	—	1.4	18.3	12.3	R (s)	7.3	439.6	0.9	479.8	479.8	—	479.8
1975	(s)	—	1.6	40.5	23.8	R (s)	8.9	763.5	6.3	844.8	844.8	—	844.8
1980	—	—	4.1	111.2	70.7	R (s)	21.5	1,584.7	1.3	1,793.8	1,793.8	—	1,793.8
1981	—	—	4.2	120.2	68.0	0.6	25.9	1,788.2	R (s)	2,007.3	2,007.3	—	2,007.3
1982	—	—	3.3	187.4	45.5	0.6	22.6	1,606.9	R (s)	1,866.5	1,866.5	—	1,866.5
1983	—	—	3.5	157.7	38.5	0.7	23.3	1,522.1	11.9	1,757.7	1,757.7	—	1,757.7
1984	—	—	3.2	236.7	37.5	1.1	25.8	1,466.8	6.9	1,778.1	1,778.1	—	1,778.1
1985	—	—	3.6	238.2	38.5	1.4	24.0	R 1,507.8	3.9	R 1,817.4	R 1,817.4	—	R 1,817.4
1986	—	—	3.1	192.0	31.9	0.9	20.8	R 1,232.1	0.5	1,481.4	1,481.4	—	1,481.4
1987	—	—	2.1	197.6	43.7	0.9	20.5	R 1,334.1	1.2	R 1,600.2	R 1,600.2	—	R 1,600.2
1988	—	—	1.8	238.3	48.8	1.3	21.3	R 1,517.6	1.8	R 1,830.8	R 1,830.8	—	R 1,830.8
1989	—	—	1.7	306.5	59.2	1.2	21.6	R 1,553.6	1.1	R 1,944.9	R 1,944.9	—	R 1,944.9
1990	—	—	4.4	281.2	78.4	1.5	22.4	R 1,620.9	1.5	R 2,010.3	R 2,010.3	—	R 2,010.3
1991	—	—	1.2	243.0	64.7	1.9	23.1	R 1,634.1	1.3	R 1,969.3	R 1,969.3	—	R 1,969.3
1992	—	(s)	1.2	252.1	60.7	1.2	25.7	R 1,646.9	0.6	R 1,988.5	R 1,988.5	—	R 1,988.5
1993	—	(s)	1.2	248.9	57.8	R 1.3	27.1	R 1,659.7	R (s)	R 1,996.4	R 1,996.4	—	R 1,996.4
1994	—	(s)	1.1	226.4	57.6	1.6	28.5	R 1,705.7	R (s)	R 2,021.2	R 2,021.2	—	R 2,021.2
1995	—	R (s)	1.7	250.8	57.7	0.8	R 28.5	1,750.4	R (s)	2,090.1	2,090.1	—	2,090.1
1996	—	(s)	1.7	293.5	76.8	0.7	28.6	1,941.4	0.7	2,343.5	2,343.7	—	2,343.7
1997	—	(s)	1.1	299.5	63.5	0.5	26.8	1,973.3	(s)	2,365.3	2,365.6	—	2,365.6

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 52. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Connecticut

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.45	0.34	0.38	0.37	—	0.38	0.13	—	0.35
1975	1.24	1.36	2.02	2.36	—	2.02	0.29	—	1.35
1980	—	—	4.70	6.13	—	4.71	0.38	—	2.60
1981	—	—	5.56	7.78	—	5.57	0.45	—	2.76
1982	—	—	4.75	7.31	—	4.76	0.53	—	2.31
1983	—	—	4.54	6.28	—	4.54	0.76	—	2.63
1984	2.26	3.71	4.84	6.21	—	4.85	0.90	—	2.70
1985	2.35	3.39	4.24	5.88	—	4.25	0.91	—	2.38
1986	2.27	2.09	2.51	3.59	—	2.51	0.91	—	1.54
1987	2.42	2.37	2.93	4.01	—	2.94	0.92	—	1.61
1988	2.29	2.17	2.40	3.64	—	2.41	0.86	0.87	1.42
1989	2.14	2.51	2.85	4.26	—	2.87	0.89	([b])	[R] 1.63
1990	2.13	2.70	3.01	5.67	—	3.02	0.84	([b])	1.53
1991	2.17	2.09	2.47	4.92	—	2.49	0.80	([b])	1.50
1992	1.95	2.66	2.40	4.82	—	2.42	0.71	([b])	[R] 1.18
1993	1.70	3.78	2.39	4.12	—	2.40	0.60	([b])	[R] 0.94
1994	1.77	1.96	2.52	3.82	—	2.54	0.56	([b])	[R] 0.94
1995	1.88	1.98	2.63	3.82	—	2.66	0.56	([b])	[R] 1.03
1996	1.91	2.71	3.24	4.76	—	3.25	0.56	([b])	1.82
1997	1.91	2.42	2.92	4.88	—	2.94	—	([b])	2.54
	Expenditures in Million Nominal Dollars								
1970	19.7	[R] (s)	48.8	2.2	—	51.0	5.3	—	76.1
1975	[R] (s)	[R] (s)	281.4	3.1	—	284.6	26.4	—	311.5
1980	—	—	633.0	6.0	—	639.0	49.1	—	688.1
1981	—	—	636.9	4.2	—	641.1	63.2	—	704.3
1982	—	—	518.2	3.1	—	521.4	80.6	—	602.0
1983	—	—	561.1	2.5	—	563.6	95.5	—	659.2
1984	0.8	8.5	622.9	4.5	—	627.4	138.8	—	775.5
1985	47.8	5.4	453.2	2.9	—	456.1	125.5	—	634.9
1986	45.7	1.6	288.7	2.4	—	291.1	182.7	—	521.1
1987	50.0	17.9	287.7	3.2	—	290.9	203.0	—	561.8
1988	51.3	2.8	275.1	4.9	—	280.0	205.2	2.2	541.4
1989	49.9	8.5	338.7	4.9	—	343.6	186.1	([b])	[R] 588.8
1990	54.0	13.5	265.2	2.3	—	267.4	177.5	([b])	[R] 513.0
1991	48.2	10.2	200.3	3.1	—	203.4	105.5	([b])	[R] 367.8
1992	41.9	5.8	131.7	1.8	—	133.5	126.3	([b])	[R] 310.6
1993	33.4	2.2	104.3	1.8	—	106.1	139.9	([b])	[R] 285.0
1994	38.2	16.0	88.9	1.9	—	90.7	121.6	([b])	[R] 271.8
1995	43.5	38.8	92.5	2.9	—	95.4	111.6	([b])	[R] 296.3
1996	46.3	28.8	182.2	2.1	—	184.2	37.1	([b])	300.7
1997	52.9	41.4	256.3	2.9	—	259.2	—	([b])	360.2

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[b] Utilities used biomass fuels at no charge or received a fee for accepting them.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 53. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Delaware

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.39	0.39	0.91	1.16	0.73	1.25	2.86	0.45	R 0.77	R 1.29	—	R 0.16	1.06	0.39	4.94	R 1.70
1975	—	1.16	1.16	1.80	2.53	2.03	3.60	4.54	1.92	R 2.27	R 2.78	—	R 0.32	R 2.48	1.63	11.69	R 3.90
1980	—	1.57	1.57	3.37	6.77	6.46	5.20	9.60	4.23	R 6.92	R 6.07	—	R 3.70	R 5.17	3.35	18.84	R 7.37
1981	—	1.98	1.98	4.25	8.13	7.61	7.67	10.66	5.12	R 7.67	R 7.53	—	R 4.56	R 5.73	3.36	20.51	R 8.96
1982	—	2.08	2.08	4.84	7.75	7.18	7.75	10.02	4.60	R 6.99	R 7.26	—	R 4.42	R 5.57	3.06	22.35	R 9.12
1983	—	1.96	1.96	4.81	7.50	8.00	9.12	9.39	R 4.38	R 6.26	R 7.24	—	R 4.28	R 5.07	2.66	21.42	R 9.06
1984	—	1.93	1.93	4.82	7.64	7.12	8.01	8.95	4.70	R 6.41	R 7.18	—	R 4.35	R 5.06	2.73	21.04	R 8.78
1985	—	1.87	1.87	4.87	7.54	6.63	10.65	9.39	4.16	R 6.34	R 7.37	—	R 4.18	R 5.15	2.48	21.42	R 9.12
1986	—	1.87	1.87	4.43	5.87	4.87	10.76	6.97	2.32	R 4.58	R 5.22	—	R 3.35	R 4.05	2.01	19.09	R 7.63
1987	—	1.78	1.78	3.93	5.69	4.03	10.36	7.61	2.73	R 4.42	R 5.55	—	R 3.20	R 4.09	2.05	18.79	R 7.49
1988	—	1.77	1.77	4.04	5.63	4.16	10.14	8.07	2.24	R 4.41	R 5.36	—	R 3.23	R 4.08	1.96	19.54	R 7.90
1989	—	1.75	1.75	4.06	6.28	4.80	11.49	8.88	2.68	R 4.57	R 6.06	—	e R 3.57	e R 4.55	2.12	18.47	e R 8.35
1990	—	1.76	1.76	3.82	7.52	6.33	12.14	10.26	2.71	R 3.56	R 6.98	—	R 3.03	R 4.92	1.97	18.97	R 9.13
1991	—	1.75	1.75	3.43	6.98	5.51	13.06	9.51	2.25	R 3.75	R 6.28	—	R 2.93	R 4.58	1.92	19.71	R 8.78
1992	—	1.70	1.70	3.82	6.73	5.14	12.05	9.16	2.28	R 3.37	R 6.03	—	R 2.72	R 4.63	1.85	19.69	R 8.74
1993	—	1.67	1.67	4.04	6.68	4.88	11.58	8.98	2.24	R 6.14	R 6.13	—	R 2.53	R 4.49	1.93	20.52	R 8.68
1994	—	1.60	1.60	3.95	6.64	4.72	10.50	9.50	2.44	R 5.91	R 6.53	—	R 2.60	R 4.67	1.96	19.94	R 8.93
1995	—	1.58	1.58	3.30	6.64	4.74	11.25	10.06	2.58	R 6.19	R 7.39	—	R 2.57	R 4.80	1.95	20.30	R 9.31
1996	—	1.57	1.57	4.35	7.43	5.26	11.82	10.47	3.07	6.52	7.52	—	2.85	5.36	2.26	20.23	9.65
1997	—	1.55	1.55	4.90	7.41	4.94	11.84	10.34	2.73	6.12	7.62	—	2.73	5.53	2.09	20.56	9.98
	Expenditures in Million Nominal Dollars																
1970	—	14.5	14.5	24.4	29.1	8.1	10.6	93.8	18.6	R 11.5	R 171.7	—	R (s)	R 210.8	-23.1	75.7	R 263.4
1975	—	26.6	26.6	34.0	62.2	18.0	34.9	168.4	123.3	R 24.8	R 431.7	—	R 0.5	R 492.8	-106.3	202.1	R 588.5
1980	—	44.1	44.1	102.9	146.5	54.6	56.7	333.5	335.5	R 125.1	R 1,052.0	—	R 1.9	R 1,200.9	-239.3	368.7	R 1,330.3
1981	—	99.5	99.5	133.0	147.4	60.6	24.1	385.5	270.3	R 100.6	R 988.6	—	R 2.4	R 1,223.5	-291.0	359.5	R 1,291.9
1982	—	99.4	99.4	137.2	123.6	57.2	24.5	348.5	177.0	R 83.5	R 814.4	—	R 2.5	R 1,053.4	-224.5	383.1	R 1,212.0
1983	—	142.9	142.9	166.3	147.2	59.1	28.9	356.0	R 135.0	R 64.8	R 791.1	—	R 2.4	R 1,102.6	-263.9	402.6	R 1,241.3
1984	—	R 140.4	R 140.4	205.7	156.9	60.8	37.4	350.0	140.3	R 63.4	R 808.7	—	R 3.5	R 1,158.4	-266.9	442.8	R 1,334.3
1985	—	133.3	133.3	188.6	150.0	56.0	37.9	R 372.6	92.7	R 106.6	R 815.8	—	R 3.2	R 1,140.9	-229.9	457.9	R 1,368.8
1986	—	124.1	124.1	145.4	113.0	35.2	34.2	282.7	72.6	R 59.1	R 596.7	—	R 2.5	R 868.8	-179.4	440.0	R 1,129.5
1987	—	125.1	125.1	144.1	126.8	27.9	37.9	R 315.3	79.3	R 54.7	R 642.0	—	R 2.0	R 913.1	-186.2	446.3	R 1,173.2
1988	—	121.8	121.8	118.9	126.3	30.5	37.0	R 346.8	87.1	R 48.7	R 676.4	—	R 2.1	R 919.2	-185.6	499.4	R 1,233.1
1989	—	106.4	106.4	143.4	154.2	32.4	39.3	R 380.5	94.4	R 52.0	R 752.9	—	e R 2.4	e R 1,005.0	-191.6	504.3	e R 1,317.8
1990	—	R 104.6	R 104.6	150.9	140.9	44.4	44.7	R 431.8	63.4	R 64.6	R 789.8	—	R 2.6	R 1,047.8	-171.0	532.6	R 1,409.5
1991	—	99.1	99.1	145.9	139.1	70.9	51.3	R 389.4	67.1	R 63.5	R 781.3	—	R 2.6	R 1,028.9	-175.9	568.2	R 1,421.2
1992	—	78.4	78.4	153.5	126.9	40.1	40.2	R 392.4	67.3	R 63.0	R 729.9	—	R 2.5	R 964.3	-145.2	567.6	R 1,386.7
1993	—	105.8	105.8	170.6	138.6	37.8	42.1	R 392.3	84.4	R 54.6	R 749.7	—	R 2.7	R 1,028.8	-170.3	632.5	R 1,491.0
1994	—	91.7	91.7	196.0	137.8	14.4	47.4	R 414.3	82.0	R 59.4	R 755.3	—	R 3.0	R 1,046.1	-170.9	626.8	R 1,502.0
1995	—	82.9	82.9	204.5	131.2	2.0	54.8	447.6	59.4	R 55.9	R 750.7	—	R 3.3	R 1,041.4	-164.8	657.5	R 1,534.1
1996	—	79.7	79.7	240.1	165.7	1.9	71.1	464.7	98.9	68.9	871.3	—	3.7	1,194.7	-187.4	660.0	1,667.4
1997	—	75.1	75.1	232.1	148.6	2.0	72.4	466.4	71.9	61.1	822.4	—	2.9	1,132.6	-145.4	704.3	1,691.5

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 54. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Delaware

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.13	1.55	1.42	1.34	2.40	1.51	0.73	R 1.51	7.53	R 2.37
1975	2.73	2.39	2.71	3.37	4.73	2.99	1.45	R 2.76	13.93	R 5.10
1980	3.38	4.16	6.88	8.55	8.53	7.34	3.70	R 5.99	21.76	R 10.06
1981	4.16	5.35	8.46	10.80	8.98	8.93	4.56	R 7.27	25.02	R 11.31
1982	4.22	5.85	8.03	10.56	9.61	8.83	4.42	R 7.36	28.57	R 12.42
1983	3.73	6.49	7.64	R 6.90	11.35	R 8.10	4.28	R 7.40	28.24	R 12.16
1984	4.07	6.55	7.90	R 8.03	10.16	R 8.31	4.35	R 7.48	27.19	R 12.53
1985	3.76	6.91	7.54	R 8.27	10.37	R 8.19	4.18	R 7.63	27.29	R 12.36
1986	3.75	6.97	6.13	R 6.91	11.18	R 7.08	3.35	R 6.86	24.88	R 12.17
1987	3.50	6.26	5.72	R 5.87	10.86	R 6.55	3.20	R 6.28	24.21	R 11.45
1988	3.65	5.90	5.78	R 6.01	10.04	R 6.53	3.23	R 6.16	24.65	R 11.67
1989	3.51	6.33	6.36	R 6.51	13.10	R 7.59	3.57	R 6.93	23.91	R 12.22
1990	3.75	6.04	7.63	R 7.64	13.54	R 9.07	3.53	R 7.46	24.60	R 13.48
1991	3.60	5.72	7.19	R 5.73	14.48	R 8.86	3.37	R 7.26	25.25	R 13.69
1992	3.74	5.93	6.66	R 5.33	13.31	R 8.17	3.08	R 6.94	25.38	R 13.25
1993	3.65	6.47	6.48	R 5.17	12.71	R 7.97	3.02	R 7.02	26.42	R 13.79
1994	3.52	7.18	6.45	R 4.99	11.82	R 7.74	2.93	R 7.26	26.11	R 13.83
1995	3.34	6.37	6.27	R 4.70	12.60	R 8.12	2.87	R 7.12	26.63	R 14.03
1996	3.33	6.87	7.09	5.58	14.17	9.05	3.29	7.80	26.29	14.09
1997	3.37	8.08	7.09	5.56	13.67	9.21	3.27	8.46	27.03	15.27
	Expenditures in Million Nominal Dollars									
1970	R (s)	12.4	16.8	2.8	3.8	23.4	(s)	R 36.1	30.0	R 66.2
1975	R (s)	16.9	29.4	4.1	6.9	40.4	0.5	R 58.1	77.9	R 136.0
1980	R (s)	29.7	52.7	13.3	11.7	77.8	1.9	R 109.5	138.6	R 248.1
1981	R (s)	37.7	50.7	15.7	14.8	81.2	2.3	R 121.3	123.2	R 244.5
1982	0.5	40.4	41.8	19.4	13.1	74.3	2.4	R 117.6	142.9	R 260.5
1983	R (s)	41.0	60.8	R 9.3	18.4	R 88.5	2.3	R 132.0	149.0	R 280.9
1984	R (s)	45.7	64.4	R 7.9	19.6	R 92.0	3.4	R 141.3	176.6	R 317.9
1985	R (s)	43.9	58.5	R 30.4	22.1	R 111.0	3.2	R 158.4	179.1	R 337.5
1986	R (s)	48.6	37.7	R 12.5	16.8	R 67.0	2.5	R 118.5	180.1	R 298.6
1987	1.3	44.7	44.7	R 11.2	19.5	R 75.4	2.0	R 123.4	192.4	R 315.8
1988	0.6	45.5	46.9	R 10.3	20.0	R 77.2	2.1	R 125.4	213.0	R 338.4
1989	0.6	48.8	48.9	R 9.9	26.4	R 85.3	2.4	R 137.0	214.0	R 351.0
1990	0.7	44.6	43.0	R 6.3	28.1	R 77.3	2.2	R 124.8	222.5	R 347.4
1991	0.6	42.1	42.6	R 5.4	33.0	R 81.0	2.2	R 125.9	243.3	R 369.3
1992	(s)	50.2	40.4	R 4.3	29.8	R 74.5	2.1	R 126.9	241.3	R 368.2
1993	1.5	55.6	42.9	R 3.1	30.8	R 76.8	2.2	R 136.1	274.4	R 410.5
1994	0.9	63.6	44.3	R 2.7	30.1	R 77.1	2.1	R 143.7	276.8	R 420.5
1995	(s)	56.1	39.4	R 3.2	39.2	R 81.8	2.3	R 140.3	287.8	R 428.1
1996	(s)	69.7	45.7	5.7	44.6	96.0	2.7	168.6	293.4	462.0
1997	(s)	75.0	38.6	3.8	43.0	85.5	1.9	162.6	300.4	463.0

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 55. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Delaware

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.28	1.22	1.12	0.85	0.99	2.86	0.46	0.68	0.73	0.76	6.56	1.55
1975	1.20	1.87	2.39	2.36	3.40	4.54	1.95	2.17	1.45	2.11	12.76	4.54
1980	1.20	3.92	6.30	6.36	4.72	9.60	4.24	4.54	3.70	4.47	20.78	6.60
1981	1.39	5.01	7.93	7.56	6.21	10.66	5.14	5.88	4.56	R 5.70	22.35	8.89
1982	1.37	5.41	7.48	7.82	6.34	10.02	4.64	5.50	4.42	R 5.42	22.74	R 9.84
1983	1.34	5.99	6.53	R 6.90	6.79	9.39	4.43	6.03	4.28	5.96	24.39	R 13.86
1984	R 1.30	6.06	6.55	R 8.03	6.49	8.95	4.76	R 5.92	4.35	5.97	22.89	R 13.01
1985	1.33	6.30	6.27	R 8.27	11.06	9.39	4.35	R 6.93	NA	R 6.54	22.97	R 14.08
1986	1.33	6.26	4.58	R 6.91	10.37	6.97	2.68	R 4.70	NA	R 5.47	20.37	R 12.75
1987	1.30	5.12	4.36	R 5.87	9.88	7.61	2.87	R 4.63	NA	R 4.61	19.77	R 11.48
1988	R 1.33	4.84	4.26	R 6.01	10.26	8.07	2.31	R 4.50	NA	R 4.56	20.53	R 11.97
1989	1.28	5.32	4.75	R 6.51	9.19	8.88	2.81	R 4.65	NA	4.86	19.78	R 12.06
1990	R 1.15	5.04	5.62	R 7.64	10.33	10.26	3.13	R 5.58	NA	R 5.12	20.47	12.74
1991	R 1.34	4.69	4.95	R 5.73	11.09	9.51	2.38	5.66	NA	4.98	20.85	13.01
1992	R 1.30	4.78	4.67	R 5.33	9.50	9.16	2.43	5.13	NA	4.91	20.79	12.95
1993	1.27	5.27	4.38	R 5.17	9.32	8.98	2.35	4.26	3.02	R 4.55	21.54	R 12.62
1994	1.27	5.96	4.23	R 4.99	10.46	9.50	2.46	4.64	2.93	R 5.27	20.78	R 13.08
1995	1.26	5.10	4.06	R 4.70	10.21	10.06	2.62	4.86	2.87	R 5.00	21.03	R 13.38
1996	1.29	5.62	5.06	5.58	11.40	10.47	3.08	5.28	3.29	5.45	20.82	12.69
1997	1.29	6.47	5.01	5.56	10.95	10.34	2.80	5.22	3.27	5.96	21.35	13.55
	Expenditures in Million Nominal Dollars											
1970	(s)	3.5	5.1	R (s)	R (s)	R (s)	5.0	11.0	(s)	14.5	19.9	34.4
1975	(s)	5.6	10.0	R (s)	0.9	0.8	14.7	26.8	(s)	32.5	58.0	90.5
1980	R (s)	13.1	23.3	R (s)	1.1	2.3	113.8	140.8	(s)	154.0	107.3	R 261.4
1981	(s)	19.6	29.2	R (s)	1.8	2.9	63.4	97.7	(s)	R 117.4	108.8	226.2
1982	R (s)	20.0	18.0	0.5	1.5	3.1	35.4	58.7	(s)	78.9	113.4	192.3
1983	R (s)	20.8	11.5	R (s)	1.9	2.0	5.1	20.9	(s)	R 41.9	128.6	170.5
1984	(s)	23.6	11.8	R (s)	2.2	1.3	7.6	23.1	(s)	R 46.9	128.1	R 175.0
1985	R (s)	22.0	12.2	R 2.4	4.2	1.9	1.9	R 22.6	NA	R 44.7	133.0	R 177.7
1986	R (s)	22.4	6.5	R 0.7	2.8	1.4	2.6	R 14.0	NA	R 36.5	129.6	R 166.1
1987	0.8	19.3	9.2	R 0.6	3.1	1.7	3.0	R 17.5	NA	R 37.7	133.9	R 171.6
1988	R (s)	19.9	9.7	R 0.9	3.6	1.7	2.6	R 18.5	NA	R 38.8	151.0	R 189.8
1989	R (s)	22.6	8.2	R (s)	3.3	1.8	4.1	R 17.7	NA	40.6	154.0	R 194.7
1990	R (s)	20.7	11.1	R (s)	3.8	1.9	3.6	R 20.7	NA	41.8	164.9	R 206.7
1991	R (s)	20.5	12.7	R (s)	4.5	1.7	0.8	20.0	NA	40.9	175.7	216.6
1992	(s)	24.5	9.5	(s)	3.8	1.7	1.4	16.3	NA	40.9	177.2	218.1
1993	1.0	28.4	8.5	R (s)	4.0	R (s)	3.3	16.4	(s)	45.7	195.5	241.2
1994	0.6	33.7	6.4	R (s)	4.7	R (s)	2.5	14.2	(s)	R 48.6	194.6	R 243.3
1995	(s)	30.3	6.4	R (s)	5.6	R (s)	2.2	14.7	(s)	R 45.2	208.1	R 253.4
1996	(s)	39.0	11.4	(s)	6.3	(s)	4.4	22.8	(s)	62.0	211.0	273.1
1997	(s)	44.3	10.2	(s)	6.1	(s)	3.5	20.7	(s)	65.3	227.6	292.8

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
(s)=Value less than 0.05 million nominal dollars.

NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 56. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Delaware

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	0.28	0.28	0.57	0.66	0.78	0.85	0.99	5.08	2.86	0.46	R 0.43	R 0.70	—	R 0.64	3.10	R 1.02
1975	—	1.20	1.20	1.37	1.76	2.19	2.36	3.40	7.48	4.54	1.87	R 2.50	R 2.39	—	R 2.13	9.25	R 3.16
1980	—	1.20	1.20	2.72	3.58	5.71	6.36	4.72	14.36	9.60	4.19	R 7.53	R 5.52	—	R 4.50	15.28	R 5.89
1981	—	1.39	1.39	3.54	4.87	6.83	7.56	6.21	18.00	10.66	5.14	R 8.93	R 6.90	—	R 5.01	16.49	R 6.94
1982	—	1.37	1.37	4.43	4.06	7.11	7.82	6.34	17.25	10.02	4.46	R 7.78	R 5.99	—	R 4.91	17.72	R 7.05
1983	—	1.34	1.34	4.22	4.05	6.16	R 6.36	6.79	16.98	9.39	4.31	R 7.16	R 6.11	—	R 4.66	15.16	R 6.54
1984	—	R 1.30	R 1.30	4.24	4.51	6.16	R 6.68	6.49	17.63	8.95	4.76	R 6.90	R 6.14	—	R 4.64	15.42	R 6.39
1985	—	1.33	1.33	4.38	4.97	6.12	R 5.75	11.06	17.61	9.39	4.35	R 6.71	R 6.15	—	R 4.72	16.15	R 6.65
1986	—	1.33	1.33	3.41	4.16	4.15	R 4.13	10.37	15.59	6.97	2.68	R 3.95	R 4.63	—	R 3.61	13.80	R 5.52
1987	—	1.30	1.30	3.27	3.17	4.21	R 4.24	9.88	13.58	7.61	2.87	R 4.85	R 4.54	—	R 3.54	13.27	R 5.33
1988	—	R 1.33	R 1.33	3.16	3.13	3.84	R 4.14	10.26	14.62	8.07	2.31	R 4.00	R 4.07	—	R 3.27	14.17	R 5.49
1989	—	1.28	1.28	3.40	2.90	4.44	R 5.35	9.19	14.48	8.88	2.81	R 4.86	R 4.37	[d] —	[d] R 3.54	12.89	[d] R 5.65
1990	—	R 1.15	R 1.15	3.39	2.90	5.71	R 6.39	10.33	14.60	10.26	3.13	R 5.98	R 5.19	1.69	R 3.82	13.23	R 5.92
1991	—	R 1.34	R 1.34	3.02	3.06	5.10	R 5.55	11.09	16.80	9.51	2.38	R 5.56	R 5.26	1.69	R 3.74	13.85	R 6.01
1992	—	R 1.30	R 1.30	3.14	2.24	4.84	R 4.82	9.50	18.32	9.16	2.43	R 5.45	R 4.70	1.69	R 3.63	13.80	R 5.88
1993	—	1.27	1.27	3.28	3.02	4.67	R 4.55	9.32	18.96	8.98	2.35	R 4.93	R 4.25	1.69	R 3.51	14.32	R 5.76
1994	—	1.27	1.27	3.31	2.83	4.59	R 6.16	8.29	19.11	9.50	2.46	R 4.66	R 4.33	R 1.91	R 3.58	13.55	R 5.65
1995	—	1.26	1.26	2.84	3.21	4.91	R 4.22	8.24	R 19.41	10.06	2.62	R 5.06	R 4.62	R 1.91	R 3.41	13.82	R 5.65
1996	—	1.29	1.29	4.17	3.34	5.77	5.24	8.74	20.08	10.47	3.08	5.89	5.38	1.91	4.51	13.72	6.54
1997	—	1.29	1.29	4.25	3.53	5.50	4.82	9.66	17.86	10.34	2.80	4.98	5.27	1.91	4.42	14.13	6.75
	Expenditures in Million Nominal Dollars																
1970	—	R (s)	R (s)	7.0	2.3	3.6	R (s)	6.5	1.3	1.4	7.3	R (s)	R 22.8	—	R 30.1	25.7	R 55.8
1975	—	0.8	0.8	9.5	7.6	12.7	R (s)	26.7	1.4	1.5	21.7	R 7.6	R 79.7	—	R 90.0	66.1	R 156.0
1980	—	5.4	5.4	34.8	8.3	20.5	0.6	43.6	6.6	1.8	45.1	R 77.7	R 204.1	—	R 244.3	122.9	R 367.1
1981	—	6.0	6.0	51.1	13.5	15.7	R (s)	7.3	7.9	1.9	32.8	R 54.2	R 133.4	—	R 190.5	127.5	R 317.9
1982	—	5.7	5.7	54.9	11.9	16.4	R (s)	9.7	6.9	1.5	31.7	R 36.1	R 114.4	—	R 175.0	126.8	R 301.7
1983	—	5.0	5.0	82.7	5.6	14.7	R 0.8	8.3	7.1	1.2	18.7	R 32.1	R 88.7	—	R 176.4	125.0	R 301.5
1984	—	6.1	6.1	103.9	7.1	14.9	R (s)	15.4	7.9	2.7	26.5	R 30.0	R 104.8	—	R 214.8	138.1	R 352.9
1985	—	7.0	7.0	93.5	27.3	14.8	R (s)	11.4	7.3	2.7	16.1	R 29.4	R 109.1	—	R 209.6	145.7	R 355.3
1986	—	6.7	6.7	69.7	16.8	10.0	R (s)	13.0	6.3	2.2	9.6	R 13.7	R 71.6	—	R 148.0	130.3	R 278.3
1987	—	R 7.1	R 7.1	57.7	12.1	10.3	R (s)	15.2	6.2	R 2.4	14.3	R 16.1	R 76.9	—	R 141.7	119.9	R 261.6
1988	—	8.1	8.1	46.2	8.5	9.9	R (s)	13.1	6.5	2.4	13.6	R 14.1	R 68.4	—	R 122.6	135.4	R 258.0
1989	—	6.5	6.5	50.2	10.0	11.6	R (s)	9.5	6.6	3.0	14.3	R 16.8	R 72.1	[d] —	[d] R 128.9	136.3	[d] R 265.2
1990	—	R 6.1	R 6.1	56.4	10.3	14.4	R (s)	12.6	6.8	2.6	12.6	R 23.6	R 83.0	R (s)	R 145.9	145.2	R 291.1
1991	—	R 6.9	R 6.9	47.5	2.9	13.1	R (s)	13.5	7.0	2.5	10.3	R 34.2	R 83.8	R (s)	R 138.7	149.1	R 287.8
1992	—	R 4.6	R 4.6	56.1	1.2	9.6	R (s)	6.5	7.8	2.5	14.9	R 34.3	R 76.7	R (s)	R 137.9	149.0	R 286.9
1993	—	5.5	5.5	63.3	2.2	9.9	R 0.8	7.1	8.2	3.0	19.9	R 31.0	R 82.1	R (s)	R 151.3	162.6	R 313.9
1994	—	6.0	6.0	56.5	3.1	9.1	R 5.2	12.4	8.7	3.2	22.2	R 29.9	R 93.7	R 0.7	R 156.9	155.4	R 312.3
1995	—	6.1	6.1	54.7	3.7	9.1	R (s)	9.8	8.7	3.4	18.7	R 30.6	R 84.2	R 0.8	R 145.7	161.5	R 307.3
1996	—	5.3	5.3	58.3	6.6	17.0	1.5	20.1	8.7	3.9	21.6	36.5	115.8	0.8	180.2	155.5	335.7
1997	—	5.6	5.6	62.1	3.3	14.8	(s)	23.1	8.2	3.8	17.1	35.2	105.6	0.8	174.1	176.4	350.5

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 57. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Delaware

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.28	—	2.17	1.24	0.73	0.99	5.08	2.86	0.42	2.13	2.13	—	2.13
1975	1.20	—	3.45	2.81	2.03	3.40	7.48	4.54	1.72	3.74	3.74	—	3.74
1980	—	—	9.02	7.72	6.46	4.72	14.36	9.60	3.93	8.41	8.41	—	8.41
1981	—	—	10.84	8.53	7.61	6.21	18.00	10.66	4.44	9.79	9.79	—	9.79
1982	—	—	10.92	7.94	7.18	6.34	17.25	10.02	4.36	9.23	9.23	—	9.23
1983	—	—	10.44	8.22	8.00	6.79	16.98	9.39	R 4.23	R 8.81	R 8.81	—	R 8.81
1984	—	—	10.27	8.29	7.12	6.49	17.63	8.95	4.55	8.44	8.44	—	8.44
1985	—	—	9.99	8.52	6.63	11.06	17.61	9.39	3.99	8.78	8.78	—	8.78
1986	—	—	8.41	6.56	4.87	10.37	15.59	6.97	2.12	6.42	6.42	—	6.42
1987	—	—	7.55	6.53	4.03	9.88	13.58	7.61	2.57	6.53	6.53	—	6.53
1988	—	—	7.41	6.66	4.16	10.26	14.62	8.07	2.00	6.96	6.96	—	6.96
1989	—	—	8.28	7.27	4.80	9.19	14.48	8.88	2.35	7.68	7.68	—	7.68
1990	—	—	9.32	8.71	6.33	10.33	14.60	10.26	2.33	R 8.93	R 8.93	—	R 8.93
1991	—	—	8.71	8.26	5.51	11.09	16.80	9.51	2.04	7.79	7.79	—	7.79
1992	—	—	8.54	7.97	5.14	9.50	18.32	9.16	2.06	7.87	7.87	—	7.87
1993	—	—	8.24	7.92	4.88	9.32	18.96	8.98	2.02	7.69	7.69	—	7.69
1994	—	3.63	7.96	8.04	4.72	8.52	19.11	9.50	2.37	8.23	8.23	—	8.23
1995	—	2.90	8.36	8.00	4.74	8.17	R 19.41	10.06	2.61	8.96	8.96	—	8.96
1996	—	2.93	9.29	9.08	5.26	8.59	20.08	10.47	3.09	8.89	8.89	—	8.89
1997	—	2.75	9.39	8.92	4.94	8.57	17.86	10.34	2.71	8.91	8.91	—	8.91
	Expenditures in Million Nominal Dollars												
1970	(s)	—	R (s)	2.8	8.1	R (s)	2.1	92.1	1.8	107.0	107.0	—	107.0
1975	(s)	—	R (s)	8.4	18.0	R (s)	2.3	166.2	10.4	206.0	206.0	—	206.0
1980	—	—	R (s)	43.3	54.6	R (s)	5.5	329.4	20.1	453.7	453.7	—	453.7
1981	—	—	R (s)	46.6	60.6	R (s)	6.7	380.6	8.1	503.3	503.3	—	503.3
1982	—	—	0.8	43.9	57.2	R (s)	5.8	343.9	5.5	457.4	457.4	—	457.4
1983	—	—	0.9	55.5	59.1	R (s)	6.0	352.8	R 13.9	R 488.4	R 488.4	—	R 488.4
1984	—	—	0.7	61.0	60.8	R (s)	6.6	346.0	13.3	488.5	488.5	—	488.5
1985	—	—	0.8	61.3	56.0	R (s)	6.2	R 368.0	5.8	R 498.4	R 498.4	—	R 498.4
1986	—	—	0.8	56.5	35.2	1.7	5.4	279.0	7.8	R 386.4	R 386.4	—	R 386.4
1987	—	—	0.6	59.6	27.9	R (s)	5.3	R 311.3	19.4	R 424.1	R 424.1	—	R 424.1
1988	—	—	0.7	56.3	30.5	R (s)	5.5	R 342.8	11.0	R 446.9	R 446.9	—	R 446.9
1989	—	—	0.7	79.1	32.4	R (s)	5.6	R 375.7	13.1	R 506.9	R 506.9	—	R 506.9
1990	—	—	3.6	69.6	44.4	R (s)	5.8	R 427.3	13.4	R 564.3	R 564.3	—	R 564.3
1991	—	—	0.8	67.6	70.9	R (s)	5.9	R 385.1	16.9	R 547.5	R 547.5	—	R 547.5
1992	—	—	0.8	64.1	40.1	R (s)	6.6	R 388.3	13.4	R 513.5	R 513.5	—	R 513.5
1993	—	—	2.1	75.0	37.8	R (s)	7.0	R 388.8	14.5	R 525.4	R 525.4	—	R 525.4
1994	—	(s)	2.3	72.1	14.4	R (s)	7.3	R 410.7	18.9	R 525.9	R 525.9	—	R 525.9
1995	—	(s)	2.2	72.8	2.0	R (s)	7.3	443.7	17.2	545.3	545.3	—	545.3
1996	—	(s)	2.4	84.9	1.9	(s)	7.3	460.4	39.5	596.6	596.6	—	596.6
1997	—	(s)	3.0	81.9	2.0	(s)	6.9	462.2	29.0	585.2	585.2	—	585.2

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 58. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Delaware

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.39	0.37	0.46	0.47	0.29	0.40	—	—	0.39
1975	1.15	1.02	1.97	2.18	0.49	1.92	—	—	1.63
1980	1.64	3.47	4.27	6.21	4.32	4.33	—	—	3.35
1981	2.03	4.19	5.15	7.44	0.93	4.96	—	—	3.36
1982	2.14	4.08	4.65	7.07	1.14	4.47	—	—	3.06
1983	1.99	4.18	4.41	6.05	1.27	4.20	—	—	2.66
1984	1.97	4.44	4.70	5.94	1.25	4.44	—	—	2.73
1985	1.91	3.88	4.13	5.51	1.27	3.86	—	—	2.48
1986	1.91	2.53	2.29	3.50	1.09	2.20	—	—	2.01
1987	1.81	2.75	2.75	3.99	1.05	2.59	—	—	2.05
1988	1.81	2.42	2.28	3.51	1.02	2.23	—	—	1.96
1989	1.79	2.54	2.72	3.90	0.94	2.66	—	—	2.12
1990	1.82	2.58	2.71	4.58	0.90	2.05	—	—	1.97
1991	1.78	2.37	2.31	4.62	0.84	1.92	—	—	1.92
1992	1.73	2.60	2.32	4.44	0.78	1.80	—	—	1.85
1993	1.69	2.61	2.26	3.96	—	2.30	—	—	1.93
1994	1.62	2.34	2.46	4.19	—	2.61	—	—	1.96
1995	1.62	2.27	2.53	3.73	—	2.65	—	—	1.95
1996	1.59	3.03	3.04	5.13	—	3.26	—	—	2.26
1997	1.57	3.05	2.70	4.41	—	2.84	—	—	2.09
	Expenditures in Million Nominal Dollars								
1970	14.2	1.4	4.5	0.8	2.2	7.5	—	—	23.1
1975	25.6	1.9	76.4	1.7	0.7	78.8	—	—	106.3
1980	38.5	25.3	156.5	6.8	12.2	175.6	—	—	239.3
1981	93.3	24.7	166.1	5.2	1.8	173.0	—	—	291.0
1982	92.9	21.9	104.4	3.4	1.8	109.7	—	—	224.5
1983	137.6	21.7	97.3	4.7	2.7	104.6	—	—	263.9
1984	134.1	32.6	93.0	4.8	2.5	100.2	—	—	266.9
1985	125.9	29.3	68.8	3.2	2.7	74.7	—	—	229.9
1986	116.9	4.8	52.6	2.3	2.8	57.7	—	—	179.4
1987	115.9	22.3	42.6	3.1	2.4	48.0	—	—	186.2
1988	112.8	7.3	60.0	3.5	2.0	65.5	—	—	185.6
1989	98.8	21.9	62.8	6.3	1.8	70.9	—	—	191.6
1990	97.3	29.3	33.9	2.9	7.6	44.4	—	—	171.0
1991	91.1	35.8	39.1	3.2	6.7	49.0	—	—	175.9
1992	73.7	22.6	37.6	3.3	7.9	48.8	—	—	145.2
1993	97.9	23.4	46.7	2.4	—	49.1	—	—	170.3
1994	84.2	42.3	38.4	6.0	—	44.4	—	—	170.9
1995	76.8	63.3	21.3	3.5	—	24.7	—	—	164.8
1996	74.2	73.1	33.4	6.6	—	40.1	—	—	187.4
1997	69.2	50.7	22.3	3.1	—	25.4	—	—	145.4

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

—No consumption.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 59. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, District of Columbia

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.29	0.29	1.27	1.09	0.73	1.49	2.86	0.50	3.04	1.19	—	R 0.73	1.06	0.43	5.39	1.72
1975	—	1.32	1.32	2.13	2.61	—	3.37	4.85	1.97	4.18	3.30	—	R 1.45	2.85	1.92	10.74	4.33
1980	—	1.76	1.76	4.36	7.18	6.46	6.00	9.97	4.46	9.33	7.86	—	R 3.70	R 6.35	4.59	R 14.91	R 8.72
1981	—	2.19	2.19	5.20	7.93	7.61	6.44	11.16	4.90	11.09	9.14	—	R 4.56	R 7.28	5.13	16.68	R 9.88
1982	—	2.23	2.23	6.33	8.15	7.18	6.39	10.54	4.19	13.32	8.35	—	R 4.42	R 7.33	4.72	19.11	R 10.22
1983	—	2.05	2.05	7.66	7.84	6.44	6.95	10.46	R 4.25	R 11.87	R 8.45	—	R 4.28	R 7.86	4.58	19.62	R 11.06
1984	—	R 2.10	R 2.10	7.55	7.84	6.16	6.78	10.27	5.00	R 13.75	8.50	—	R 4.35	R 7.90	4.82	R 19.87	R 11.23
1985	—	2.01	2.01	7.30	7.89	5.80	11.99	10.19	4.36	R 11.16	8.73	—	R 4.18	R 7.78	4.24	R 20.88	R 11.60
1986	—	2.00	2.00	6.77	6.14	4.01	11.60	8.11	2.95	R 10.57	6.29	—	R 3.35	R 6.37	2.28	R 20.13	R 10.31
1987	—	R 1.94	R 1.94	6.06	6.23	4.01	11.26	8.36	3.27	R 9.41	6.80	—	R 3.20	R 6.36	3.04	R 18.83	R 10.19
1988	—	1.94	1.94	6.00	6.02	3.75	11.50	8.80	2.41	R 9.67	6.97	—	R 3.23	R 6.47	2.40	R 17.99	R 10.39
1989	—	1.97	1.97	6.36	6.39	—	10.67	9.50	2.79	R 8.59	7.28	—	e R 3.57	e R 6.75	2.89	R 17.21	e R 10.48
1990	—	R 1.92	R 1.92	6.40	8.11	5.47	11.36	10.66	3.22	R 10.17	8.75	—	3.53	7.54	3.12	R 17.39	11.22
1991	—	R 1.95	R 1.95	6.08	7.06	—	12.25	10.14	2.61	R 12.07	8.47	—	R 3.37	7.18	2.46	R 18.32	R 11.20
1992	—	R 1.93	R 1.93	6.46	6.72	—	10.62	9.73	2.79	R 13.02	8.36	—	R 3.08	7.28	2.81	R 18.97	R 11.30
1993	—	1.96	1.96	7.01	6.37	4.16	10.68	9.62	2.42	R 12.59	7.95	—	R 2.79	R 7.36	2.31	19.86	R 11.75
1994	—	1.96	1.96	7.19	6.20	—	R 10.18	9.57	2.41	R 12.95	7.78	—	R 2.93	R 7.37	2.50	R 20.85	R 12.24
1995	—	R 1.90	R 1.90	6.95	5.93	3.89	R 10.53	9.85	2.65	R 8.76	R 8.04	—	R 2.87	R 7.46	2.67	20.87	R 12.17
1996	—	1.96	1.96	8.23	7.04	—	11.28	10.40	2.92	10.06	8.81	—	3.29	8.42	3.11	21.52	12.89
1997	—	1.97	1.97	8.15	7.06	4.47	11.64	10.28	2.84	8.09	8.88	—	3.27	8.38	3.24	21.65	12.84
	Expenditures in Million Nominal Dollars																
1970	—	8.4	8.4	33.5	31.4	(s)	(s)	85.4	35.1	2.2	154.1	—	R (s)	195.9	-18.0	99.2	277.2
1975	—	13.4	13.4	55.7	48.1	—	R (s)	146.4	51.6	4.7	250.8	—	R (s)	R 320.0	-31.7	212.3	R 500.6
1980	—	5.8	5.8	121.8	95.6	12.1	R (s)	203.3	45.2	18.6	374.9	—	R 2.2	R 504.6	-45.1	R 356.4	R 815.9
1981	—	5.3	5.3	153.1	68.1	24.4	R (s)	233.3	33.1	9.9	368.9	—	R 2.7	R 530.0	-27.7	R 400.2	R 902.5
1982	—	6.8	6.8	186.3	94.9	13.7	R (s)	222.4	44.5	6.4	382.0	—	R 2.8	R 578.0	-7.4	472.4	R 1,043.0
1983	—	6.2	6.2	224.0	105.2	3.9	R (s)	218.5	R 35.0	7.0	R 369.9	—	R 2.7	R 602.9	-16.3	R 509.9	R 1,096.5
1984	—	5.2	5.2	222.0	109.6	1.4	R (s)	227.5	46.0	7.2	391.8	—	R 3.9	R 622.9	-22.0	R 538.2	R 1,139.1
1985	—	7.0	7.0	211.5	102.5	R (s)	R (s)	R 203.5	20.3	10.1	336.7	—	R 3.6	R 558.8	-8.3	R 585.2	R 1,135.7
1986	—	2.7	2.7	200.6	85.7	11.4	R (s)	165.2	27.5	6.5	R 296.4	—	R 2.8	R 502.5	-6.7	R 590.0	R 1,085.8
1987	—	3.4	3.4	188.7	70.2	(s)	R (s)	R 186.4	27.9	R 6.1	R 290.8	—	R 2.0	R 485.0	-11.7	R 578.7	R 1,052.0
1988	—	1.5	1.5	197.1	65.5	R (s)	R (s)	R 201.6	17.7	R 6.4	R 291.5	—	R 2.1	R 492.2	-16.4	R 575.9	R 1,051.7
1989	—	2.9	2.9	213.1	68.6	—	R (s)	R 209.5	25.4	R 7.6	R 311.2	—	e R 2.4	e R 529.7	-26.8	R 566.9	e R 1,069.8
1990	—	R 3.3	R 3.3	184.5	72.6	R (s)	R (s)	R 226.4	20.7	6.5	R 326.6	—	2.1	R 516.5	-17.0	R 584.5	R 1,084.0
1991	—	3.2	3.2	188.5	63.7	—	R (s)	214.2	10.9	R 6.4	R 295.4	—	R 2.1	R 489.3	-7.6	R 637.4	R 1,119.1
1992	—	2.4	2.4	212.5	60.8	—	R (s)	R 205.6	8.3	R 6.9	R 281.9	—	R 2.0	R 498.9	-4.4	R 650.1	R 1,144.6
1993	—	2.5	2.5	231.7	60.6	2.4	R (s)	211.5	9.9	7.6	292.2	—	R 2.0	R 528.4	-6.9	R 702.9	R 1,224.4
1994	—	2.3	2.3	222.3	67.3	—	R (s)	R 206.1	11.2	R 7.9	R 292.7	—	R 2.1	R 519.4	-10.3	R 732.4	R 1,241.5
1995	—	R (s)	R (s)	228.9	62.9	(s)	R (s)	214.4	8.9	R 11.5	R 297.9	—	R 2.2	R 529.4	-7.9	R 734.4	R 1,255.9
1996	—	1.1	1.1	279.4	83.7	—	(s)	211.0	6.2	11.1	312.2	—	2.6	595.3	-5.6	744.3	1,334.0
1997	—	1.9	1.9	281.4	62.5	6.4	(s)	219.5	2.9	14.5	306.1	—	1.9	591.3	-3.9	746.6	1,334.0

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 60. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, District of Columbia

	Primary Energy									
			Petroleum							
Year	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]	Electricity	Total Energy [b]
	Prices in Nominal Dollars per Million Btu									
1970	1.05	1.43	1.42	1.50	2.57	1.42	0.73	1.42	7.02	2.01
1975	1.75	2.30	2.71	3.37	4.61	2.71	1.45	2.44	12.65	3.79
1980	3.18	4.56	7.40	8.55	9.81	7.41	3.70	R 5.11	17.32	R 7.04
1981	3.76	5.42	9.19	10.80	8.68	9.20	4.56	R 5.68	19.34	R 8.14
1982	3.82	6.53	8.98	10.56	8.65	8.99	4.42	R 6.71	18.75	R 8.81
1983	3.37	8.02	8.94	R 7.36	9.39	8.94	4.28	R 7.78	19.50	R 9.96
1984	3.57	7.95	9.07	R 8.34	10.85	9.07	4.35	R 7.81	18.84	R 9.53
1985	3.28	7.80	8.74	R 8.50	13.53	8.74	4.18	R 7.53	20.31	R 9.59
1986	3.22	7.42	7.12	R 6.44	13.81	R 7.11	3.35	R 7.13	19.97	R 9.39
1987	3.10	6.99	7.02	R 5.93	13.84	R 7.00	3.20	R 6.76	19.15	R 9.10
1988	3.07	6.88	7.00	R 5.55	14.13	R 6.97	3.23	R 6.72	18.41	R 9.03
1989	3.25	7.37	7.54	R 5.16	14.13	R 7.41	3.57	R 7.13	17.59	R 9.24
1990	3.36	7.12	8.24	R 6.49	12.58	R 8.22	3.53	R 6.92	17.88	R 9.39
1991	3.09	7.03	8.58	R 6.08	13.46	R 8.54	3.37	R 6.85	19.29	R 9.77
1992	3.10	7.56	8.08	R 5.65	13.03	R 8.05	3.08	R 7.32	19.38	R 9.88
1993	3.23	8.28	7.99	R 5.48	13.36	R 7.94	3.02	R 7.96	21.04	R 10.95
1994	3.23	8.20	7.66	R 5.31	13.75	R 7.63	2.93	R 7.87	21.88	R 11.10
1995	3.11	7.98	7.70	R 4.97	14.19	R 7.67	2.87	R 7.74	22.35	R 11.12
1996	3.19	9.11	8.98	5.90	15.54	8.95	3.29	8.83	22.77	11.81
1997	3.23	9.20	8.95	5.88	15.15	8.91	3.27	8.89	23.07	12.04
	Expenditures in Million Nominal Dollars									
1970	R (s)	20.2	13.4	R (s)	(s)	13.6	(s)	34.1	19.9	54.0
1975	R (s)	30.7	18.3	R (s)	(s)	18.5	(s)	R 49.5	39.2	R 88.7
1980	3.0	62.8	32.3	R (s)	(s)	32.6	2.1	R 100.5	64.1	R 164.6
1981	3.0	75.3	15.1	R (s)	(s)	15.2	2.7	R 96.2	71.9	R 168.0
1982	4.1	86.7	26.6	R (s)	(s)	26.9	2.8	R 120.4	71.2	R 191.6
1983	3.6	105.4	28.9	(s)	(s)	28.9	2.7	R 140.6	80.3	R 220.9
1984	3.1	139.9	30.0	(s)	(s)	30.1	3.8	R 176.8	78.9	R 255.7
1985	4.0	131.4	25.2	R (s)	(s)	R 25.7	3.6	R 164.7	85.4	R 250.1
1986	1.5	130.0	16.5	R (s)	(s)	17.0	2.8	R 151.3	90.7	R 242.0
1987	1.9	118.6	16.7	R (s)	(s)	R 17.1	2.0	R 139.7	92.1	R 231.8
1988	0.8	121.6	12.0	R (s)	(s)	R 12.3	2.1	R 136.9	92.0	R 228.9
1989	1.7	129.7	6.4	R (s)	R (s)	R 6.8	2.4	R 140.6	88.0	R 228.6
1990	2.0	108.7	7.2	R (s)	(s)	R 7.3	2.1	120.2	90.3	210.5
1991	1.8	108.1	8.2	R (s)	R (s)	R 8.4	2.1	R 120.4	104.0	R 224.4
1992	1.4	126.2	8.0	R (s)	R (s)	8.2	2.0	R 137.8	98.4	R 236.2
1993	1.5	138.4	7.6	R (s)	R (s)	7.9	2.0	R 149.7	117.3	R 267.0
1994	1.3	131.5	6.0	R (s)	R (s)	6.2	1.9	R 140.9	117.3	R 258.3
1995	R (s)	126.0	12.3	R (s)	R (s)	R 12.6	2.1	R 140.9	122.6	R 263.5
1996	0.6	158.9	16.0	(s)	(s)	16.3	2.4	178.3	125.4	303.7
1997	1.1	148.4	13.9	(s)	(s)	14.2	1.7	165.5	122.3	287.7

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 61. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, District of Columbia

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.11	1.09	1.12	1.33	1.03	2.86	0.46	0.61	0.73	0.71	6.86	1.40
1975	1.25	1.96	2.39	2.70	2.75	4.85	2.02	2.28	1.45	2.11	12.49	4.63
1980	1.19	4.21	6.55	8.50	5.13	9.97	4.43	6.60	3.70	4.45	18.41	R 8.61
1981	1.39	5.05	8.28	6.89	5.91	11.16	4.92	7.87	4.56	5.11	20.77	9.85
1982	1.37	6.17	7.94	8.31	6.00	10.54	4.33	7.46	4.42	5.95	21.72	10.53
1983	1.33	7.37	7.19	R 7.36	6.43	10.46	4.32	6.30	4.28	6.57	22.19	R 10.56
1984	R 1.30	6.95	6.83	R 8.34	6.13	10.27	5.48	6.58	4.35	6.41	21.89	R 12.08
1985	1.33	6.62	6.53	R 8.50	11.53	10.19	5.16	R 6.33	NA	5.95	22.82	R 12.91
1986	1.33	5.84	4.76	R 6.44	11.00	8.11	3.34	4.10	NA	4.84	21.78	R 11.26
1987	R 1.31	4.94	4.82	R 5.93	10.48	8.36	3.50	4.11	NA	4.46	20.19	R 10.74
1988	1.33	4.98	4.43	R 5.55	10.87	8.80	3.23	4.19	NA	4.70	19.29	R 11.32
1989	1.28	5.25	5.11	R 5.16	9.74	9.50	3.70	R 4.97	NA	R 5.01	18.37	R 11.05
1990	R 1.14	5.59	6.64	R 6.49	10.95	10.66	3.91	6.15	NA	5.47	18.55	R 11.74
1991	1.34	5.14	5.62	R 6.08	11.75	10.14	3.38	R 5.17	NA	4.96	19.41	R 11.60
1992	R 1.30	5.32	5.04	R 5.65	10.07	9.73	3.11	4.54	NA	R 4.99	20.16	R 11.90
1993	1.27	5.71	4.93	R 5.48	9.88	9.62	2.92	R 4.64	3.02	R 5.26	20.88	R 12.28
1994	1.27	6.09	4.80	R 5.31	11.11	9.57	2.92	4.76	2.93	R 5.52	20.91	R 14.10
1995	1.25	6.00	4.60	R 4.97	10.80	9.85	3.16	R 4.88	2.87	R 5.66	20.88	R 13.88
1996	1.29	7.30	5.47	5.90	11.40	10.40	3.11	5.38	3.29	6.64	21.60	14.66
1997	1.30	7.23	5.50	5.88	10.95	10.28	3.38	5.76	3.27	6.77	21.71	14.82
	Expenditures in Million Nominal Dollars											
1970	R (s)	12.9	8.5	R (s)	(s)	1.0	14.8	24.3	(s)	37.4	45.3	82.6
1975	R (s)	24.4	13.0	R (s)	(s)	2.0	13.4	28.4	(s)	53.1	100.4	153.4
1980	2.1	58.0	24.7	(s)	(s)	2.1	1.0	27.9	(s)	88.0	R 154.3	R 242.3
1981	2.1	76.8	13.5	(s)	(s)	2.6	2.4	18.6	(s)	R 97.6	R 171.9	R 269.5
1982	2.7	99.7	20.8	(s)	(s)	3.1	3.0	26.9	(s)	R 129.4	193.7	R 323.0
1983	2.6	118.6	41.6	R (s)	(s)	2.3	13.3	57.5	(s)	178.8	R 207.0	R 385.9
1984	2.1	82.2	40.5	R (s)	(s)	8.6	23.1	72.3	(s)	R 156.7	R 309.3	R 465.9
1985	3.0	80.1	28.5	2.6	(s)	1.5	9.3	R 41.9	NA	124.9	R 336.2	R 461.1
1986	1.2	70.6	27.4	(s)	(s)	2.1	21.0	50.5	NA	122.2	R 335.6	R 457.8
1987	1.5	70.1	18.2	(s)	(s)	R 1.0	18.1	37.3	NA	108.9	R 327.3	R 436.2
1988	0.7	75.5	14.1	R (s)	(s)	1.0	4.5	19.8	NA	96.0	R 326.7	R 422.7
1989	1.2	83.4	16.1	R 1.4	(s)	1.1	3.0	R 21.6	NA	R 106.2	R 320.9	R 427.1
1990	R 1.3	75.9	19.4	R (s)	(s)	4.0	5.4	29.1	NA	R 106.2	R 332.3	R 438.5
1991	1.4	80.4	19.2	R (s)	(s)	1.9	4.7	R 25.9	NA	107.8	R 358.8	R 466.6
1992	1.1	86.3	16.2	R (s)	(s)	1.5	5.3	23.1	NA	R 110.4	R 372.6	R 483.0
1993	1.1	93.3	23.0	R (s)	(s)	1.6	3.8	28.6	(s)	122.9	R 399.2	R 522.2
1994	1.0	90.8	25.4	R (s)	(s)	3.3	3.1	32.1	(s)	R 124.0	R 591.6	R 715.6
1995	R (s)	102.9	21.5	R 3.6	(s)	5.2	2.6	R 33.0	(s)	R 136.2	R 589.6	R 725.8
1996	(s)	120.5	31.1	3.4	(s)	1.1	1.9	37.5	(s)	158.6	597.5	756.1
1997	0.8	132.9	16.7	6.7	(s)	2.6	0.7	26.9	(s)	160.8	602.4	763.1

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
(s)=Value less than 0.05 million nominal dollars.

NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 62. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, District of Columbia

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	0.11	0.11	0.67	0.67	1.22	1.33	1.03	5.08	—	0.59	—	0.66	—	0.49	3.80	1.19
1975	—	1.25	1.25	1.36	1.80	2.50	2.70	2.75	7.48	—	1.82	—	2.08	—	1.63	8.42	4.29
1980	—	1.20	1.20	2.45	3.58	7.63	8.50	5.13	14.36	—	3.97	—	7.60	—	6.16	11.65	10.20
1981	—	1.39	1.39	2.97	4.83	6.23	6.89	5.91	18.00	—	5.00	—	6.38	—	5.89	12.97	11.35
1982	—	—	—	—	4.14	7.54	8.31	6.00	17.25	—	5.03	—	7.07	—	7.07	17.25	16.06
1983	—	—	—	—	4.06	7.10	R 7.09	6.43	16.98	—	4.86	—	6.71	—	6.71	17.70	17.33
1984	—	—	—	—	4.54	6.78	R 7.55	6.13	17.63	—	5.48	—	7.13	—	7.13	17.02	16.59
1985	—	—	—	—	4.95	7.51	R 7.04	11.53	17.61	10.19	5.16	—	R 8.52	—	R 8.52	17.86	17.10
1986	—	—	—	—	4.18	4.62	R 4.79	11.00	15.59	8.11	—	—	6.09	—	6.09	17.34	16.15
1987	—	—	—	—	3.22	5.29	R 4.64	10.48	13.58	8.36	—	—	R 6.96	—	R 6.96	16.37	15.65
1988	—	—	—	—	3.16	5.16	R 4.34	10.87	14.62	8.80	—	—	R 7.09	—	R 7.09	15.55	15.03
1989	—	—	—	—	2.88	5.05	R 5.26	9.74	14.48	9.50	3.70	—	7.85	[d] —	[d] 7.85	15.00	[d] 14.57
1990	—	—	—	—	2.94	5.64	R 6.49	10.95	14.60	10.66	3.91	—	8.69	—	8.69	15.14	14.70
1991	—	—	—	—	3.10	7.88	R 5.76	11.75	16.80	10.14	3.38	—	8.52	—	8.52	15.93	15.57
1992	—	—	—	—	2.35	5.35	R 4.93	10.07	18.32	9.73	3.11	—	7.89	—	7.89	16.64	16.16
1993	—	—	—	—	2.87	4.54	R 4.80	9.88	18.96	9.62	—	—	7.07	—	7.07	17.33	16.83
1994	—	—	—	—	2.85	5.05	R 5.07	8.81	19.11	9.57	2.92	—	7.89	—	7.89	13.58	11.17
1995	—	—	—	—	3.23	5.05	R 4.47	8.72	R 19.41	9.85	3.16	—	7.72	—	7.72	12.78	R 10.87
1996	—	—	—	—	3.31	4.92	5.55	9.24	20.08	10.40	3.11	—	7.97	—	7.97	12.77	10.99
1997	—	—	—	—	3.54	5.58	5.10	10.21	17.86	10.28	—	—	7.72	—	7.72	12.97	10.67
	Expenditures in Million Nominal Dollars																
1970	—	1.1	1.1	R (s)	R (s)	2.7	R (s)	(s)	R (s)	—	12.2	—	15.2	—	16.6	34.1	50.6
1975	—	8.7	8.7	0.6	R (s)	2.2	1.5	(s)	0.6	—	7.9	—	12.4	—	21.7	72.7	94.4
1980	—	0.7	0.7	0.9	R (s)	8.5	12.6	R (s)	0.6	—	1.3	—	23.6	—	25.2	133.4	158.6
1981	—	R (s)	R (s)	1.0	0.6	14.4	2.7	R (s)	0.8	—	0.6	—	19.1	—	20.3	150.3	170.5
1982	—	—	—	—	0.5	8.2	(s)	R (s)	0.7	—	1.3	—	10.8	—	10.8	200.0	210.8
1983	—	—	—	—	0.7	1.0	R (s)	R (s)	0.7	—	R (s)	—	2.9	—	2.9	215.4	218.3
1984	—	—	—	—	0.6	1.0	R (s)	R (s)	0.7	—	R (s)	—	2.7	—	2.7	142.7	145.4
1985	—	—	—	—	0.9	1.6	R (s)	R (s)	0.7	3.1	(s)	—	6.6	—	6.6	154.4	161.0
1986	—	—	—	—	0.9	2.1	(s)	R (s)	0.6	2.7	—	—	R 6.4	—	R 6.4	154.2	R 160.6
1987	—	—	—	—	0.7	R (s)	R (s)	R (s)	0.6	3.5	—	—	5.3	—	5.3	151.2	156.5
1988	—	—	—	—	0.7	R (s)	R (s)	R (s)	0.6	2.9	—	—	4.4	—	4.4	149.0	153.4
1989	—	—	—	—	0.5	R (s)	—	R (s)	0.6	3.7	(s)	—	5.1	[d] —	[d] 5.1	150.0	[d] 155.1
1990	—	—	—	—	0.6	R (s)	—	R (s)	0.7	5.0	(s)	—	R 6.5	—	R 6.5	153.7	R 160.2
1991	—	—	—	—	R (s)	R (s)	(s)	R (s)	0.7	3.1	(s)	—	4.4	—	4.4	165.9	170.3
1992	—	—	—	—	R (s)	R (s)	—	R (s)	0.7	3.0	(s)	—	4.7	—	4.7	169.6	174.3
1993	—	—	—	—	0.5	R (s)	—	R (s)	0.8	1.8	—	—	3.7	—	3.7	176.0	179.7
1994	—	—	—	—	R (s)	R (s)	—	R (s)	0.8	3.5	(s)	—	5.3	—	5.3	12.4	17.7
1995	—	—	—	—	0.5	R (s)	—	R (s)	0.8	2.3	(s)	—	4.2	—	4.2	11.4	15.6
1996	—	—	—	—	(s)	0.5	(s)	(s)	0.8	2.1	(s)	—	4.1	—	4.1	11.0	15.0
1997	—	—	—	—	0.8	0.7	(s)	(s)	0.8	3.0	—	—	5.4	—	5.4	11.6	17.0

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 63. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, District of Columbia

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.11	—	—	1.32	0.73	1.03	5.08	2.86	0.45	2.74	2.74	—	2.74
1975	1.25	—	—	2.81	—	2.75	7.48	4.85	1.81	4.43	4.43	—	4.43
1980	—	—	—	7.70	6.46	5.13	14.36	9.97	4.20	9.40	9.40	12.62	9.44
1981	—	—	—	8.52	7.61	5.91	18.00	11.16	4.64	10.32	10.32	14.79	10.38
1982	—	—	—	7.93	7.18	6.00	17.25	10.54	4.13	8.59	8.59	18.57	8.70
1983	—	—	—	8.28	6.44	6.43	16.98	10.46	R 4.09	R 9.64	R 9.64	19.09	9.76
1984	—	—	—	8.82	6.16	6.13	17.63	10.27	4.40	9.86	9.86	19.45	R 9.99
1985	—	—	—	8.78	5.80	11.53	17.61	10.19	3.75	9.68	9.68	20.73	R 9.86
1986	—	—	—	7.67	4.01	11.00	15.59	8.11	2.05	7.59	7.59	20.40	R 7.80
1987	—	—	—	7.25	4.01	10.48	13.58	8.36	—	8.23	8.23	17.14	R 8.38
1988	—	—	—	7.19	3.75	10.87	14.62	8.80	2.12	8.56	8.56	16.91	R 8.70
1989	—	—	—	7.49	—	9.74	14.48	9.50	2.57	9.10	9.10	16.91	R 9.23
1990	—	—	—	9.33	5.47	10.95	14.60	10.66	2.88	10.45	10.45	16.95	R 10.58
1991	—	—	—	8.05	—	11.75	16.80	10.14	—	9.86	9.86	17.80	R 10.01
1992	—	—	—	7.83	—	10.07	18.32	9.73	2.27	9.49	9.49	18.26	R 9.66
1993	—	—	8.24	8.00	4.16	9.88	18.96	9.62	—	9.39	9.39	18.95	R 9.58
1994	—	—	7.96	8.03	—	9.05	19.11	9.57	—	9.44	9.44	19.70	R 9.67
1995	—	2.05	8.36	7.08	3.89	8.64	R 19.41	9.85	—	9.55	9.55	18.55	R 9.75
1996	—	4.90	9.29	8.61	—	8.59	20.08	10.40	—	10.22	10.22	18.78	10.41
1997	—	2.95	9.39	7.90	4.47	8.57	17.86	10.28	—	9.72	9.72	19.16	9.91
	Expenditures in Million Nominal Dollars												
1970	(s)	—	—	3.8	(s)	(s)	1.6	84.4	(s)	89.9	89.9	—	89.9
1975	(s)	—	—	13.4	—	(s)	2.1	144.4	4.0	164.0	164.0	—	164.0
1980	—	—	—	26.3	12.1	(s)	4.7	201.2	1.6	245.8	245.8	R 4.6	R 250.3
1981	—	—	—	22.3	24.4	(s)	5.6	230.7	5.3	288.3	288.3	R 6.1	R 294.4
1982	—	—	—	37.7	13.7	(s)	4.9	219.4	34.3	310.0	310.0	R 7.5	R 317.5
1983	—	—	—	30.0	3.9	(s)	5.1	216.2	R 9.1	R 264.3	R 264.3	R 7.1	R 271.4
1984	—	—	—	33.7	1.4	(s)	5.6	218.9	5.1	264.7	264.7	R 7.3	R 272.0
1985	—	—	—	45.1	R (s)	(s)	5.2	R 198.9	4.8	R 254.3	R 254.3	R 9.2	R 263.4
1986	—	—	—	38.5	11.4	(s)	4.5	160.4	1.0	215.9	215.9	R 9.4	R 225.3
1987	—	—	—	33.1	(s)	(s)	4.5	R 181.9	—	R 219.4	R 219.4	R 8.0	R 227.4
1988	—	—	—	35.9	R (s)	(s)	4.6	R 197.7	R (s)	R 238.5	R 238.5	R 8.1	R 246.6
1989	—	—	—	40.9	—	(s)	4.7	R 204.7	0.6	R 251.0	R 251.0	R 8.0	R 259.0
1990	—	—	—	44.1	R (s)	(s)	4.9	R 217.4	R (s)	R 266.7	R 266.7	R 8.2	R 274.9
1991	—	—	—	34.7	—	(s)	5.0	209.2	—	R 249.0	R 249.0	R 8.8	R 257.8
1992	—	—	—	34.8	—	(s)	5.6	R 201.1	R (s)	R 241.6	R 241.6	R 9.5	R 251.1
1993	—	—	R (s)	28.7	2.4	(s)	5.9	R 208.1	—	R 245.2	R 245.2	R 10.3	R 255.5
1994	—	—	R (s)	33.3	—	(s)	6.2	R 199.3	—	R 238.9	R 238.9	R 11.1	R 250.0
1995	—	(s)	R (s)	27.0	(s)	(s)	6.2	206.9	—	240.2	240.2	R 10.8	R 251.0
1996	—	(s)	(s)	34.8	—	(s)	6.2	207.8	—	248.7	248.8	10.4	259.2
1997	—	(s)	(s)	29.5	6.4	(s)	5.8	213.9	—	255.8	255.8	10.4	266.1

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 64. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, District of Columbia

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.39	—	0.47	0.46	—	0.47	—	—	0.43
1975	1.50	—	2.01	2.11	—	2.01	—	—	1.92
1980	—	—	4.49	5.95	—	4.59	—	—	4.59
1981	—	—	4.96	7.31	—	5.13	—	—	5.13
1982	—	—	4.36	7.05	—	4.72	—	—	4.72
1983	—	—	4.31	5.85	—	4.58	—	—	4.58
1984	—	—	4.64	5.71	—	4.82	—	—	4.82
1985	—	—	3.94	5.43	—	4.24	—	—	4.24
1986	—	—	2.16	2.98	—	2.28	—	—	2.28
1987	—	—	2.93	3.83	—	3.04	—	—	3.04
1988	—	—	2.22	3.47	—	2.40	—	—	2.40
1989	—	—	2.71	4.08	—	2.89	—	—	2.89
1990	—	—	3.02	4.29	—	3.12	—	—	3.12
1991	—	—	2.22	4.56	—	2.46	—	—	2.46
1992	—	—	2.38	4.45	—	2.81	—	—	2.81
1993	—	—	2.19	3.98	—	2.31	—	—	2.31
1994	—	—	2.26	4.01	—	2.50	—	—	2.50
1995	—	—	2.48	3.77	—	2.67	—	—	2.67
1996	—	—	2.85	4.49	—	3.11	—	—	3.11
1997	—	—	2.68	4.29	—	3.24	—	—	3.24
	Expenditures in Million Nominal Dollars								
1970	6.8	—	8.1	3.1	—	11.2	—	—	18.0
1975	4.2	—	26.4	1.1	—	27.5	—	—	31.7
1980	—	—	41.3	3.8	—	45.1	—	—	45.1
1981	—	—	24.9	2.8	—	27.7	—	—	27.7
1982	—	—	5.9	1.5	—	7.4	—	—	7.4
1983	—	—	12.6	3.7	—	16.3	—	—	16.3
1984	—	—	17.7	4.3	—	22.0	—	—	22.0
1985	—	—	6.2	2.1	—	8.3	—	—	8.3
1986	—	—	5.5	1.2	—	6.7	—	—	6.7
1987	—	—	9.8	1.9	—	11.7	—	—	11.7
1988	—	—	13.1	3.3	—	16.4	—	—	16.4
1989	—	—	21.7	5.1	—	26.8	—	—	26.8
1990	—	—	15.2	1.8	—	17.0	—	—	17.0
1991	—	—	6.2	1.4	—	7.6	—	—	7.6
1992	—	—	2.9	1.5	—	4.4	—	—	4.4
1993	—	—	6.1	0.8	—	6.9	—	—	6.9
1994	—	—	8.1	2.3	—	10.3	—	—	10.3
1995	—	—	6.3	1.6	—	7.9	—	—	7.9
1996	—	—	4.3	1.3	—	5.6	—	—	5.6
1997	—	—	2.1	1.8	—	3.9	—	—	3.9

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

—No consumption.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 65. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Florida

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.31	0.31	0.49	1.08	0.73	2.61	2.81	0.33	1.58	1.53	—	R 1.87	R 1.21	0.33	5.67	R 2.34
1975	—	1.01	1.01	1.00	2.53	2.03	5.14	4.39	1.84	3.16	3.02	0.17	R 1.98	R 2.43	1.35	10.46	R 4.59
1980	—	1.80	1.80	2.19	6.91	6.46	7.48	9.80	3.61	6.94	6.66	0.35	R 3.09	R 5.11	2.40	16.24	R 8.78
1981	—	2.01	2.01	2.54	8.52	7.61	8.64	10.94	4.68	8.46	7.94	0.37	R 3.57	R 6.05	3.03	20.48	R 10.67
1982	—	2.15	2.15	3.02	8.04	7.18	9.43	10.51	4.24	7.48	7.89	0.51	R 3.55	R 5.81	2.57	20.40	R 10.78
1983	—	2.17	2.17	3.27	7.27	6.44	10.04	9.13	4.23	R 7.07	7.25	0.49	R 3.40	R 5.45	2.66	20.86	R 10.28
1984	—	2.16	2.16	3.78	7.18	6.24	9.88	8.92	4.64	R 7.16	7.48	0.60	R 3.65	R 5.28	2.46	21.95	R 10.56
1985	—	2.12	2.12	3.73	6.93	5.90	11.13	9.03	3.90	R 7.32	7.48	0.65	R 3.51	R 5.17	2.21	22.59	R 10.76
1986	—	1.93	1.93	2.76	5.63	4.19	10.47	6.70	2.15	R 5.62	R 5.28	0.73	R 2.80	R 3.92	1.76	21.37	R 9.18
1987	—	1.82	1.82	3.21	5.96	4.07	11.15	7.11	2.90	R 5.24	5.81	0.69	R 2.66	R 4.17	1.96	20.55	R 9.25
1988	—	1.78	1.78	2.80	5.70	3.82	11.43	7.12	2.17	R 5.26	5.48	0.94	R 2.68	3.91	1.72	20.70	R 9.14
1989	—	1.79	1.79	3.02	6.13	4.43	10.37	7.68	2.64	R 5.49	5.96	0.66	e R 1.97	e R 4.20	1.90	20.45	e R 9.52
1990	—	1.85	1.85	3.21	7.57	5.64	11.91	8.85	2.92	R 5.53	R 6.93	0.64	R 1.33	R 4.77	1.98	20.62	R 10.38
1991	—	1.86	1.86	2.84	7.09	4.93	12.41	8.48	2.20	R 5.50	6.40	0.66	R 1.46	4.40	1.81	20.99	R 10.45
1992	—	1.83	1.83	3.00	7.23	4.56	14.36	8.29	2.36	R 5.34	R 6.38	0.62	R 1.42	4.34	1.79	20.50	R 10.13
1993	—	1.78	1.78	3.41	6.89	4.23	15.12	8.42	2.16	R 5.30	6.17	0.63	R 1.39	4.30	1.73	21.09	R 10.36
1994	—	1.78	1.78	3.11	7.49	3.93	12.48	8.29	2.25	R 5.55	6.21	0.62	R 1.51	4.30	1.71	20.40	R 10.04
1995	—	1.79	1.79	2.90	7.32	3.91	11.81	8.46	2.51	R 6.15	6.71	0.53	R 1.52	R 4.38	1.73	20.55	R 10.24
1996	—	1.74	1.74	3.80	8.19	4.73	13.19	9.11	2.85	6.48	7.34	0.51	1.38	4.86	1.96	21.05	10.90
1997	—	1.73	1.73	3.85	8.05	4.49	13.02	9.07	2.70	5.51	7.18	0.49	1.35	4.87	1.96	21.08	10.99
	Expenditures in Million Nominal Dollars																
1970	—	35.8	35.8	170.1	98.0	96.6	77.1	1,125.2	112.8	122.4	1,632.1	—	R 19.5	R 1,857.5	-196.0	971.7	R 2,633.2
1975	—	135.0	135.0	283.6	343.6	275.6	142.5	2,319.6	915.2	172.4	4,168.9	15.8	R 20.9	R 4,624.1	-1,114.2	2,532.9	R 6,042.8
1980	—	405.4	405.4	693.8	1,183.7	1,302.3	294.6	5,627.4	2,193.5	449.8	11,051.3	63.8	R 50.5	R 12,264.7	-2,439.2	5,029.8	R 14,855.3
1981	—	474.4	474.4	870.1	1,484.9	1,522.2	312.5	6,428.1	2,660.4	598.5	13,006.6	58.7	R 60.1	R 14,469.8	-3,152.6	6,510.9	R 17,828.1
1982	—	515.8	515.8	977.3	1,073.5	1,358.3	303.0	6,299.2	1,720.6	492.6	11,247.2	108.2	R 61.7	R 12,910.1	-2,503.1	6,442.7	R 16,849.8
1983	—	692.6	692.6	1,004.3	1,184.8	1,089.0	324.3	5,677.4	1,560.0	R 499.1	R 10,334.6	78.9	R 61.5	R 12,171.9	-2,548.3	6,866.4	R 16,490.0
1984	—	R 818.4	R 818.4	1,153.2	1,222.6	845.9	309.8	5,693.8	1,237.6	R 542.5	R 9,852.3	157.8	R 87.5	R 12,069.2	-2,449.6	7,755.2	R 17,374.8
1985	—	999.9	999.9	1,081.0	1,225.8	762.5	395.9	R 5,948.9	911.5	R 618.5	R 9,863.1	165.1	R 81.4	R 12,190.5	-2,244.7	8,548.0	R 18,493.8
1986	—	R 887.6	R 887.6	787.7	1,039.5	587.3	401.7	R 4,613.9	767.6	R 513.4	R 7,923.4	172.9	R 69.8	R 9,841.4	-1,980.3	8,480.2	R 16,341.2
1987	—	R 1,066.5	R 1,066.5	964.7	1,142.0	604.7	358.9	R 5,144.2	831.7	R 444.6	R 8,526.1	138.6	R 60.6	R 10,756.5	-2,256.9	8,586.9	R 17,086.5
1988	—	1,088.2	1,088.2	825.1	1,142.6	685.3	334.8	R 5,303.8	735.4	R 460.5	R 8,662.4	265.0	R 63.4	R 10,904.1	-2,200.2	9,197.0	R 17,900.9
1989	—	1,128.3	1,128.3	976.6	1,261.8	835.0	306.2	R 5,734.3	888.0	R 420.2	R 9,445.4	148.5	e R 95.3	e R 11,794.1	-2,433.9	9,661.0	e R 19,021.2
1990	—	1,155.6	1,155.6	1,081.4	1,516.4	1,013.5	334.4	R 6,619.5	1,001.8	R 425.1	R 10,910.7	149.2	R 37.6	R 13,334.5	-2,516.8	10,097.9	R 20,915.5
1991	—	1,194.6	1,194.6	1,004.3	1,295.4	693.5	356.9	R 6,302.8	826.2	R 414.6	R 9,889.4	146.2	R 37.5	R 12,272.0	-2,424.6	10,479.4	R 20,326.8
1992	—	1,191.7	1,191.7	1,077.9	1,460.9	626.4	415.8	R 6,235.9	888.0	R 391.6	R 10,018.6	166.0	R 38.1	R 12,492.4	-2,452.6	10,281.2	R 20,320.9
1993	—	1,158.2	1,158.2	1,181.3	947.2	635.8	440.0	R 6,644.8	951.5	R 436.2	R 10,055.5	174.8	R 40.3	R 12,610.2	-2,443.6	R 10,994.1	R 21,160.6
1994	—	1,144.2	1,144.2	1,198.4	1,470.9	636.6	337.0	R 6,634.9	947.3	R 418.5	R 10,445.2	175.7	R 47.9	R 13,011.3	-2,418.4	11,102.8	R 21,695.8
1995	—	1,168.7	1,168.7	1,516.6	1,701.5	621.8	333.7	7,005.7	750.3	R 435.9	R 10,848.8	162.6	R 56.5	R 13,753.2	-2,546.6	R 11,745.5	R 22,952.1
1996	—	1,210.4	1,210.4	1,905.8	1,869.1	787.5	376.8	7,607.6	853.5	444.0	11,938.4	138.5	57.5	15,250.5	-2,848.8	12,343.5	24,745.2
1997	—	1,205.5	1,205.5	1,927.9	2,010.7	776.5	376.1	7,711.6	847.1	399.5	12,121.4	120.1	55.2	15,430.0	-2,901.6	12,588.1	25,116.5

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 66. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Florida

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	—	2.42	1.25	1.63	3.11	2.35	0.73	R 2.31	6.10	R 4.54
1975	—	2.54	2.62	3.27	6.32	5.10	1.45	R 4.03	10.92	R 8.91
1980	3.12	4.49	6.92	8.92	10.34	9.24	3.70	R 6.81	16.74	R 14.16
1981	3.59	4.80	8.69	11.23	11.44	10.81	4.56	R 7.67	21.17	R 17.73
1982	3.72	6.10	8.38	11.20	13.10	11.95	4.42	R 8.26	21.88	R 18.82
1983	3.35	6.25	7.25	R 7.53	12.88	R 11.67	4.28	R 8.20	22.80	R 19.43
1984	3.45	6.52	6.97	R 7.61	12.01	R 11.10	4.35	R 7.76	23.80	R 19.87
1985	3.31	6.72	6.73	R 7.25	10.70	R 9.69	4.18	R 7.48	24.73	R 20.44
1986	3.00	6.70	7.67	R 4.95	10.35	R 9.52	3.35	R 7.18	23.36	R 19.58
1987	2.96	6.83	6.75	R 6.49	12.01	R 10.51	3.20	R 7.77	22.73	R 19.48
1988	2.95	6.94	7.17	R 9.61	12.01	R 11.05	3.23	R 7.88	22.91	R 19.93
1989	3.05	7.42	6.56	R 9.54	10.81	R 10.28	3.57	R 7.61	22.67	R 19.99
1990	3.10	7.79	9.59	R 8.50	12.55	R 12.18	3.53	R 9.77	22.78	R 21.02
1991	2.94	8.18	8.95	R 9.11	13.05	R 12.58	3.37	R 10.13	23.18	R 21.42
1992	2.92	8.25	11.11	R 8.42	16.37	R 15.38	3.08	R 11.55	22.71	R 21.11
1993	3.10	9.12	7.05	R 6.81	18.07	R 16.45	3.02	R 12.33	23.41	R 21.92
1994	3.10	8.88	12.02	R 5.48	14.91	R 14.33	2.93	R 10.93	22.80	R 21.34
1995	3.00	9.20	7.12	R 9.19	15.13	R 14.09	2.87	R 10.68	22.93	R 21.57
1996	2.94	9.69	13.25	9.04	17.04	16.04	3.29	11.68	23.43	22.08
1997	—	11.29	7.19	7.87	16.98	15.79	3.27	12.69	23.68	22.59
	Expenditures in Million Nominal Dollars									
1970	—	37.0	7.4	22.3	66.9	96.6	1.6	R 135.2	512.1	R 647.2
1975	—	41.7	16.7	13.4	121.0	151.1	4.1	R 196.9	1,295.3	R 1,492.2
1980	R (s)	72.7	49.0	39.1	168.4	256.5	35.2	R 364.6	2,555.0	R 2,919.6
1981	(s)	86.8	49.7	36.5	196.7	282.9	43.8	R 413.6	3,332.2	R 3,745.8
1982	R (s)	89.9	35.3	14.4	182.4	232.1	45.8	R 367.9	3,368.3	R 3,736.3
1983	R (s)	105.4	20.9	R 13.2	213.2	R 247.2	43.8	R 396.8	3,677.8	R 4,074.7
1984	2.1	106.7	20.6	R 10.6	223.9	R 255.1	68.8	R 432.6	4,086.5	R 4,519.2
1985	3.2	100.9	22.3	R 35.5	231.1	R 288.9	64.5	R 457.5	4,566.8	R 5,024.2
1986	2.5	99.9	20.7	R 15.6	241.8	R 278.1	50.3	R 430.7	4,596.6	R 5,027.3
1987	1.5	109.0	28.3	R 23.2	240.9	R 292.4	41.2	R 444.0	4,683.9	R 5,127.9
1988	R (s)	111.5	21.8	R 35.7	213.6	R 271.0	43.2	R 425.9	5,001.0	R 5,426.9
1989	(s)	105.5	13.9	R 20.6	192.8	R 227.3	49.6	R 382.4	5,273.0	R 5,655.4
1990	R (s)	109.9	13.1	R 7.4	227.0	R 247.4	11.8	R 369.3	5,527.2	R 5,896.5
1991	(s)	115.9	12.4	R 10.1	243.5	R 265.9	11.9	R 393.7	5,759.4	R 6,153.2
1992	R (s)	130.6	20.0	R 13.1	307.7	R 340.8	11.4	R 483.2	5,671.2	R 6,154.4
1993	R (s)	139.7	13.1	R 8.4	329.3	R 350.8	12.1	R 503.0	6,137.0	R 6,640.1
1994	0.6	138.3	17.4	R 3.9	251.1	R 272.4	11.5	R 422.7	6,270.5	R 6,693.3
1995	(s)	143.2	9.1	R 11.0	216.1	R 236.3	12.5	R 392.0	6,711.3	R 7,103.3
1996	(s)	175.0	16.7	13.5	236.6	266.7	14.3	456.1	7,059.9	7,516.0
1997	—	156.1	6.3	9.0	235.9	251.2	10.4	417.6	7,097.3	7,514.9

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 67. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Florida

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	—	0.89	0.98	0.61	1.27	2.81	0.33	1.23	0.73	1.07	6.24	3.53
1975	—	1.58	2.26	2.38	2.51	4.39	1.85	2.52	1.45	2.03	11.44	7.13
1980	1.77	3.21	6.30	6.41	5.46	9.80	3.71	6.24	3.70	R 4.67	17.38	R 12.26
1981	1.97	3.39	7.91	7.59	6.11	10.94	4.75	7.65	4.56	5.23	21.24	R 15.08
1982	2.03	4.32	7.51	7.63	6.63	10.51	4.28	7.65	4.42	R 5.31	20.14	R 15.79
1983	1.96	4.60	6.56	R 7.53	7.06	9.13	4.28	R 6.81	4.28	R 5.69	20.11	14.96
1984	R 2.03	4.73	6.64	R 7.61	6.75	8.92	4.83	R 6.70	4.35	R 5.64	21.77	R 16.11
1985	2.04	4.80	6.22	R 7.25	11.80	9.03	4.08	R 6.57	NA	R 5.79	22.03	R 15.80
1986	1.98	4.11	3.86	R 4.95	10.66	6.70	2.27	R 4.35	NA	R 4.22	20.45	R 14.20
1987	R 1.86	4.28	4.19	R 6.49	9.74	7.11	2.98	R 4.83	NA	R 4.56	19.57	R 14.12
1988	1.84	4.20	3.83	R 9.61	10.53	7.12	2.29	R 4.65	NA	R 4.44	19.75	R 14.62
1989	1.86	4.47	4.44	R 9.54	9.69	7.68	2.75	R 5.10	NA	R 4.79	19.40	R 15.00
1990	1.89	4.64	5.57	R 8.50	10.76	8.85	3.09	R 5.69	NA	R 5.20	19.57	R 15.14
1991	1.89	4.48	5.02	R 9.11	11.22	8.48	2.37	R 5.08	NA	4.76	19.86	15.36
1992	1.93	4.53	4.81	R 8.42	10.64	8.29	2.49	R 5.04	NA	R 4.75	19.33	14.99
1993	1.94	5.32	4.59	R 6.81	10.17	8.42	2.30	R 5.40	3.02	R 5.31	19.66	R 16.04
1994	1.87	4.93	4.36	R 5.48	9.41	8.29	2.34	R 5.26	2.93	R 4.99	18.70	R 15.57
1995	1.86	4.98	4.36	R 9.19	9.67	8.46	2.71	R 5.15	2.87	R 5.02	18.80	R 15.69
1996	1.82	5.82	5.24	9.04	10.31	9.11	3.07	6.15	3.29	5.89	19.47	16.49
1997	1.80	6.50	5.07	7.87	10.53	9.07	2.92	6.20	3.27	6.39	19.43	16.98
	Expenditures in Million Nominal Dollars											
1970	—	24.9	11.7	R (s)	4.8	20.4	3.1	40.4	(s)	R 65.4	345.9	411.3
1975	—	53.9	29.3	0.5	8.5	23.9	18.0	80.3	(s)	R 134.3	894.1	1,028.4
1980	R (s)	103.6	70.7	1.0	15.7	69.0	34.4	190.9	0.8	R 295.6	1,626.2	R 1,921.8
1981	(s)	126.4	118.5	2.8	18.6	52.6	24.4	216.8	1.1	R 344.3	2,241.4	R 2,585.7
1982	R (s)	139.3	28.4	9.6	16.3	41.3	10.3	105.9	1.1	R 246.4	2,251.5	R 2,497.8
1983	R (s)	147.4	82.8	R 27.6	20.6	61.6	26.9	R 219.5	1.1	R 368.5	2,345.3	R 2,713.8
1984	R 2.3	158.6	85.9	R 9.7	22.2	62.2	41.4	R 221.4	1.6	R 384.0	R 2,747.1	R 3,131.1
1985	3.6	163.4	132.4	R 43.0	45.0	64.9	55.7	R 341.0	NA	R 508.0	R 3,103.2	R 3,611.2
1986	3.1	158.6	76.9	R 23.8	44.0	50.2	39.9	R 234.7	NA	R 396.3	R 3,069.1	R 3,465.5
1987	1.6	175.8	94.1	R 17.2	34.5	R 51.2	38.0	R 234.9	NA	R 412.3	R 3,109.8	R 3,522.1
1988	R (s)	171.8	73.9	R 22.8	33.1	R 48.7	30.3	R 208.7	NA	R 380.5	R 3,360.4	R 3,741.0
1989	(s)	170.3	71.9	R 19.3	30.5	R 49.2	34.4	R 205.2	NA	R 375.5	R 3,522.0	R 3,897.4
1990	R (s)	183.0	105.2	R 6.0	34.3	R 65.7	46.6	R 257.8	NA	R 440.9	R 3,723.4	R 4,164.4
1991	(s)	193.2	87.8	R 1.5	36.9	41.3	32.0	R 199.5	NA	R 392.7	R 3,861.1	R 4,253.8
1992	R (s)	207.8	84.1	R 1.4	35.3	35.6	28.2	R 184.6	NA	R 392.9	R 3,778.5	4,171.3
1993	R (s)	240.3	82.3	R 2.1	32.7	4.2	2.1	R 123.4	1.0	R 364.2	R 3,996.3	R 4,360.5
1994	0.6	221.2	55.6	R 2.4	28.0	4.2	2.0	R 92.2	1.0	R 315.0	R 3,981.4	R 4,296.3
1995	(s)	215.2	72.3	R 5.0	24.4	4.4	2.4	R 108.5	0.9	R 324.7	R 4,181.4	R 4,506.1
1996	(s)	269.7	65.6	5.4	25.3	4.8	1.9	103.0	1.2	373.9	4,401.2	4,775.1
1997	—	251.4	54.4	2.4	25.8	11.5	2.3	96.4	1.0	348.8	4,567.4	4,916.2

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.

(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 68. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Florida

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	—	—	0.37	0.67	0.56	0.61	1.27	5.08	2.81	0.37	1.35	0.69	R 2.18	R 0.61	3.56	R 0.97
1975	—	0.53	0.53	0.95	1.78	2.20	2.38	2.51	7.48	4.39	1.75	3.11	2.18	R 2.18	R 1.66	7.57	R 2.70
1980	—	1.77	1.77	2.61	3.57	5.75	6.41	5.46	14.36	9.80	3.44	7.97	4.71	R 2.18	R 3.84	13.38	R 5.43
1981	—	1.97	1.97	2.96	4.84	6.86	7.59	6.11	18.00	—	4.59	9.52	6.19	R 2.18	R 4.59	17.06	R 6.61
1982	—	2.03	2.03	3.76	4.05	6.92	7.63	6.63	17.25	10.51	4.02	8.84	5.96	R 2.18	R 4.76	16.46	R 6.89
1983	—	1.96	1.96	3.74	4.05	6.83	R 7.29	7.06	16.98	9.13	3.87	8.40	5.82	R 2.18	R 4.69	16.45	R 6.85
1984	—	R 2.03	R 2.03	3.87	4.51	6.69	R 7.24	6.75	17.63	8.92	4.83	8.65	R 6.00	R 2.18	R 4.87	16.65	R 7.03
1985	—	2.04	2.04	3.71	4.99	6.49	R 6.91	11.80	17.61	9.03	4.08	8.30	R 6.29	R 2.18	R 5.00	16.63	R 7.06
1986	—	1.98	1.98	2.85	4.16	4.43	R 5.23	10.66	15.59	6.70	2.27	5.32	4.89	R 1.96	R 3.97	16.29	R 6.18
1987	—	R 1.86	R 1.86	3.01	3.20	4.52	R 4.57	9.74	13.58	7.11	2.98	6.18	4.76	R 1.96	R 3.80	14.99	R 5.93
1988	—	1.84	1.84	2.63	3.13	4.18	R 4.37	10.53	14.62	7.12	2.29	5.21	4.28	R 1.96	R 3.39	14.93	R 5.48
1989	—	1.86	1.86	2.88	2.87	4.97	R 5.50	9.69	14.48	7.68	2.75	5.86	4.70	d R 1.32	d R 3.37	14.84	d R 5.46
1990	—	1.89	1.89	3.29	2.91	5.94	R 7.15	10.76	14.60	8.85	3.09	6.62	5.05	R 1.04	R 3.71	14.90	R 5.67
1991	—	1.89	1.89	2.83	3.06	5.36	R 5.94	11.22	16.80	8.48	2.37	6.50	4.87	R 1.15	R 3.48	15.21	R 5.60
1992	—	1.93	1.93	2.93	2.25	5.08	R 5.13	10.64	18.32	8.29	2.49	6.97	4.48	R 1.16	R 3.35	14.72	R 5.30
1993	—	1.94	1.94	3.53	2.86	4.91	R 4.88	10.17	18.96	8.42	2.30	6.24	4.38	R 1.14	R 3.56	15.42	R 5.36
1994	—	1.87	1.87	3.12	2.82	4.73	R 4.72	8.01	19.11	8.29	2.34	6.30	4.36	R 1.29	R 3.33	15.04	R 5.03
1995	—	1.86	1.86	3.06	3.21	4.59	R 4.59	8.12	R 19.41	8.46	2.71	6.64	4.74	R 1.33	R 3.47	15.11	R 5.08
1996	—	1.82	1.82	3.80	3.27	5.50	5.57	9.43	20.08	9.11	3.07	7.48	5.49	1.14	3.98	14.97	5.55
1997	—	1.80	1.80	4.18	3.53	5.24	5.15	9.16	17.86	9.07	2.92	6.50	5.63	1.17	4.11	14.76	5.82
	Expenditures in Million Nominal Dollars																
1970	—	—	—	35.8	18.0	14.7	3.9	4.4	12.9	3.0	19.1	9.8	85.8	R 17.8	R 139.5	113.7	R 253.2
1975	—	R (s)	R (s)	85.1	43.3	60.0	1.6	11.5	25.7	2.1	81.0	26.1	251.2	R 16.7	R 353.3	343.4	R 696.7
1980	—	30.2	30.2	259.6	106.4	236.8	5.5	107.2	52.6	4.5	294.2	114.0	921.3	R 14.4	R 1,225.6	848.6	R 2,074.2
1981	—	26.7	26.7	336.5	161.0	191.9	4.7	90.3	63.3	—	228.0	183.6	922.8	R 15.3	R 1,301.3	937.3	R 2,238.6
1982	—	22.0	22.0	342.4	134.6	118.8	25.0	95.8	55.3	16.2	112.2	131.5	689.5	R 14.8	R 1,068.5	822.9	R 1,891.4
1983	—	30.5	30.5	304.5	153.9	180.4	1.7	79.7	57.0	13.6	106.2	123.2	715.9	R 16.7	R 1,067.5	843.2	R 1,910.8
1984	—	R 41.4	R 41.4	302.3	208.2	181.1	1.3	R 50.7	63.1	19.5	181.0	129.0	R 833.9	R 17.0	R 1,194.6	920.9	R 2,115.5
1985	—	45.4	45.4	272.5	220.8	171.9	R 24.3	103.3	58.7	48.5	146.6	115.5	R 889.6	R 16.9	R 1,224.4	876.6	R 2,101.0
1986	—	R 38.0	R 38.0	174.5	227.3	129.4	R 1.1	99.0	50.8	36.1	44.3	83.7	R 671.6	R 19.5	R 903.6	811.6	R 1,715.2
1987	—	46.4	46.4	199.3	160.8	133.1	1.1	R 76.6	50.1	R 37.3	33.5	95.9	588.2	R 19.4	R 853.3	789.9	R 1,643.2
1988	—	49.2	49.2	214.5	164.6	102.1	2.0	79.7	52.0	35.2	57.5	81.4	574.4	R 20.2	R 858.2	833.0	R 1,691.2
1989	—	53.2	53.2	236.3	123.5	107.1	R 3.6	75.2	52.8	41.6	49.9	89.3	R 543.0	d R 45.7	d R 878.1	863.0	d R 1,741.1
1990	—	57.0	57.0	304.1	131.3	120.8	R 2.0	R 64.8	54.8	R 49.7	63.4	112.6	R 599.4	R 25.8	R 986.2	844.1	R 1,830.3
1991	—	R 53.7	R 53.7	259.4	148.5	96.2	R (s)	69.2	56.4	43.0	39.0	91.2	544.0	R 25.6	R 882.7	855.6	R 1,738.3
1992	—	64.4	64.4	273.1	103.7	107.1	R (s)	66.3	62.7	R 42.6	64.5	101.4	548.6	R 26.7	R 912.9	828.4	R 1,741.3
1993	—	63.1	63.1	389.4	158.2	119.0	R (s)	72.0	66.1	R 42.9	76.1	91.2	625.6	R 28.2	R 1,106.3	857.5	R 1,963.8
1994	—	60.7	60.7	445.3	136.5	104.1	R (s)	49.4	69.6	44.9	68.3	92.0	565.0	R 35.4	R 1,106.5	847.6	R 1,954.1
1995	—	61.8	61.8	437.8	141.1	149.8	R (s)	88.5	R 69.5	51.0	86.0	91.4	R 677.4	R 43.0	R 1,220.0	849.5	R 2,069.5
1996	—	58.0	58.0	575.6	128.4	183.7	1.0	111.1	69.8	54.5	76.7	106.9	732.0	41.9	1,407.6	879.0	2,286.6
1997	—	60.8	60.8	576.9	82.4	180.6	1.5	111.1	65.6	54.5	64.4	103.1	663.3	43.8	1,344.8	920.0	2,264.8

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 69. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Florida

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	—	—	2.17	1.44	0.73	1.27	5.08	2.81	0.29	2.19	2.19	—	2.19
1975	0.53	—	3.45	2.89	2.03	2.51	7.48	4.39	1.60	3.79	3.79	—	3.79
1980	—	—	9.02	7.72	6.46	5.46	14.36	9.80	3.14	8.39	8.39	—	8.39
1981	—	—	10.84	9.16	7.61	6.11	18.00	10.94	4.11	9.75	9.75	—	9.75
1982	—	—	10.92	8.27	7.18	6.63	17.25	10.51	3.87	9.36	9.36	—	9.36
1983	—	—	10.44	7.50	6.44	7.06	16.98	9.13	4.02	8.34	8.34	—	8.34
1984	—	—	10.27	7.40	6.24	6.75	17.63	8.92	4.46	8.25	8.25	21.19	8.25
1985	—	—	9.99	7.24	5.90	11.80	17.61	9.03	3.76	8.19	8.19	22.04	8.19
1986	—	—	8.41	6.24	4.19	10.66	15.59	6.70	2.00	6.12	6.12	19.81	6.12
1987	—	—	7.55	6.66	4.07	9.74	13.58	7.11	2.82	R 6.43	R 6.43	19.74	6.43
1988	—	—	7.41	6.25	3.82	10.53	14.62	7.12	1.94	6.28	6.28	19.83	6.28
1989	—	—	8.28	6.64	4.43	9.69	14.48	7.68	2.33	6.79	6.79	19.67	6.79
1990	—	2.50	9.32	8.21	5.64	10.76	14.60	8.85	2.56	7.94	7.94	20.02	7.94
1991	—	4.31	8.71	7.75	4.93	11.22	16.80	8.48	1.95	7.64	7.64	20.08	7.64
1992	—	4.04	8.54	7.91	4.56	10.64	18.32	8.29	2.12	7.45	7.45	19.97	7.45
1993	—	4.05	8.24	8.20	4.23	10.17	18.96	8.42	1.96	7.44	7.44	20.39	7.44
1994	—	3.88	7.96	8.28	3.93	8.34	19.11	8.29	2.18	7.40	7.40	19.71	7.40
1995	—	3.61	8.36	8.27	3.91	8.66	R 19.41	8.46	2.54	7.62	7.62	19.62	7.62
1996	—	4.39	9.29	9.07	4.73	8.51	20.08	9.11	2.85	8.29	8.28	19.94	8.29
1997	—	4.81	9.39	8.88	4.49	8.01	17.86	9.07	2.70	8.18	8.18	19.93	8.18
	Expenditures in Million Nominal Dollars												
1970	—	—	34.4	63.0	96.6	0.9	20.6	1,101.8	4.2	1,321.5	1,321.5	—	1,321.5
1975	(s)	—	33.4	171.1	275.3	1.6	28.2	2,293.5	22.3	2,825.4	2,825.4	—	2,825.4
1980	—	—	61.0	719.9	1,302.3	3.2	70.1	5,553.9	229.2	7,939.6	7,939.6	—	7,939.6
1981	—	—	62.3	1,030.6	1,522.2	7.0	84.3	6,375.5	176.2	9,258.1	9,258.1	—	9,258.1
1982	—	—	48.5	854.7	1,358.3	8.6	73.6	6,241.7	138.8	8,724.2	8,724.2	—	8,724.2
1983	—	—	46.5	863.9	1,089.0	10.8	75.9	5,602.2	102.5	7,790.8	7,790.8	—	7,790.8
1984	—	—	36.5	902.3	845.9	13.1	84.1	5,612.1	114.4	7,608.4	7,608.4	R 0.6	R 7,609.0
1985	—	—	42.4	857.8	762.5	16.6	78.2	R 5,835.5	162.9	R 7,755.9	R 7,755.9	R 1.4	R 7,757.3
1986	—	—	43.4	792.2	587.3	17.0	67.7	R 4,527.6	95.1	R 6,130.4	R 6,130.4	R 2.8	R 6,133.2
1987	—	—	29.6	862.6	604.7	R 7.0	66.7	R 5,055.8	163.6	R 6,789.9	R 6,789.9	R 3.3	R 6,793.2
1988	—	—	33.0	923.5	685.3	8.4	69.2	R 5,219.8	100.1	R 7,039.3	R 7,039.3	R 2.6	R 7,041.9
1989	—	—	40.8	1,008.4	835.0	7.6	70.4	R 5,643.5	118.5	R 7,724.1	R 7,724.1	R 3.1	R 7,727.2
1990	—	(s)	38.0	1,221.9	1,013.5	R 8.3	73.0	R 6,504.1	162.4	R 9,021.2	R 9,021.2	R 3.2	R 9,024.3
1991	—	(s)	31.3	1,050.3	693.5	7.2	75.1	R 6,218.5	102.2	R 8,178.2	R 8,178.2	R 3.2	R 8,181.4
1992	—	(s)	25.6	1,212.7	626.4	6.4	83.5	R 6,157.6	138.4	R 8,250.7	R 8,250.8	R 3.1	R 8,253.9
1993	—	R (s)	21.9	698.2	635.8	6.0	88.0	R 6,597.7	145.3	R 8,192.9	R 8,193.1	R 3.2	R 8,196.3
1994	—	R (s)	21.1	1,263.7	636.6	8.5	92.7	R 6,585.8	140.0	R 8,748.5	R 8,748.8	R 3.3	R 8,752.0
1995	—	R (s)	25.3	1,438.3	621.8	4.7	R 92.6	R 6,950.2	136.8	9,269.6	9,269.9	R 3.3	R 9,273.2
1996	—	(s)	24.3	1,558.6	787.5	3.8	92.9	7,548.3	148.1	10,163.7	10,164.1	3.4	10,167.6
1997	—	(s)	26.8	1,730.4	776.5	3.3	87.3	7,645.6	146.9	10,416.8	10,417.2	3.4	10,420.6

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 70. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Florida

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.31	0.35	0.33	0.36	—	0.33	—	—	0.33
1975	1.01	0.72	1.85	2.21	—	1.88	0.17	—	1.35
1980	1.80	1.53	3.72	5.76	—	3.80	0.35	—	2.40
1981	2.01	1.84	4.74	7.19	—	4.81	0.37	—	3.03
1982	2.15	2.19	4.30	7.27	—	4.34	0.51	1.28	2.57
1983	2.18	2.53	4.27	6.30	—	4.31	0.49	1.12	2.66
1984	2.17	3.32	4.62	6.01	—	4.66	0.60	1.28	2.46
1985	2.12	3.25	3.87	5.71	—	3.96	0.65	—	2.21
1986	1.93	2.08	2.15	3.41	—	2.18	0.73	—	1.76
1987	1.82	2.71	2.91	3.93	—	2.94	0.69	—	1.96
1988	1.78	2.10	2.20	3.54	—	2.23	0.94	—	1.72
1989	1.79	2.46	2.69	4.27	—	2.77	0.66	—	1.90
1990	1.85	2.53	2.99	5.09	—	3.08	0.64	—	1.98
1991	1.86	2.14	2.23	4.63	—	2.31	0.66	—	1.81
1992	1.82	2.28	2.40	4.46	—	2.46	0.62	—	1.79
1993	1.77	2.34	2.19	4.18	—	2.24	0.63	—	1.73
1994	1.78	2.16	2.25	3.94	—	2.29	0.62	—	1.71
1995	1.79	2.24	2.48	3.98	—	2.53	0.53	—	1.73
1996	1.74	3.10	2.83	4.82	0.92	2.89	0.51	—	1.96
1997	1.73	3.04	2.68	4.44	1.06	2.61	0.49	—	1.96
	Expenditures in Million Nominal Dollars								
1970	35.8	72.4	86.5	1.3	—	87.8	—	—	196.0
1975	134.7	102.9	794.0	66.8	—	860.8	15.8	—	1,114.2
1980	374.6	257.9	1,635.7	107.3	—	1,743.0	63.8	—	2,439.2
1981	447.6	320.3	2,231.7	94.2	—	2,326.0	58.7	—	3,152.6
1982	493.6	405.8	1,459.2	36.2	—	1,495.5	108.2	(s)	2,503.1
1983	661.2	447.0	1,324.3	36.9	—	1,361.2	78.9	(s)	2,548.3
1984	772.6	585.6	900.8	32.7	—	933.5	157.8	(s)	2,449.6
1985	947.7	544.2	546.2	41.5	—	587.7	165.1	—	2,244.7
1986	844.1	354.8	588.3	20.3	—	608.6	172.9	—	1,980.3
1987	1,017.1	480.6	596.7	23.9	—	620.6	138.6	—	2,256.9
1988	1,038.9	327.3	547.5	21.4	—	568.9	265.0	—	2,200.2
1989	1,075.1	464.5	685.2	60.6	—	745.8	148.5	—	2,433.9
1990	1,098.4	484.4	729.4	55.4	—	784.9	149.2	—	2,516.8
1991	1,140.8	435.8	653.0	48.8	—	701.8	146.2	—	2,424.6
1992	1,126.4	466.3	656.9	37.0	—	693.9	166.0	—	2,452.6
1993	1,094.2	411.9	728.1	34.6	—	762.7	174.8	—	2,443.6
1994	1,082.2	393.3	737.0	30.1	—	767.2	175.7	—	2,418.4
1995	1,106.9	720.1	525.1	32.0	—	557.1	162.6	—	2,546.6
1996	1,152.3	885.1	626.7	44.5	1.7	672.9	138.5	—	2,848.8
1997	1,144.7	943.2	633.4	39.0	21.3	693.7	120.1	—	2,901.6

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 71. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Georgia

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.39	0.39	0.58	1.06	0.73	2.01	2.80	0.38	1.70	1.94	—	R 1.29	1.24	0.35	4.58	R 1.85
1975	—	0.95	0.95	1.02	2.71	2.03	3.58	4.73	1.70	2.97	3.65	0.13	R 1.46	R 2.26	0.91	8.93	R 3.64
1980	—	1.50	1.50	3.06	7.00	6.46	6.40	9.91	3.27	6.89	8.02	0.45	R 2.15	R 4.53	1.38	12.75	R 7.28
1981	—	1.71	1.71	3.83	8.31	7.61	7.18	11.04	4.15	8.88	9.44	0.39	R 2.38	R 5.21	1.58	14.01	R 8.42
1982	—	1.86	1.86	4.50	7.73	7.18	7.48	10.42	3.79	7.95	8.93	0.43	R 2.41	R 5.22	1.70	16.42	R 8.73
1983	—	1.89	1.89	5.08	6.93	6.27	8.17	8.91	4.15	R 7.31	7.84	0.52	R 2.29	R 4.84	1.73	16.44	R 8.24
1984	—	1.92	1.92	5.24	6.76	6.01	8.89	8.59	4.86	R 7.64	7.67	0.60	R 2.56	R 4.78	1.82	17.06	R 8.34
1985	—	R 1.88	R 1.88	5.25	6.64	5.66	9.60	8.76	4.13	R 7.97	R 7.55	0.72	R 2.47	R 4.60	1.73	17.09	R 8.39
1986	—	1.81	1.81	4.95	5.53	3.51	8.93	6.29	2.23	6.14	5.74	0.84	R 2.11	R 3.88	1.71	16.91	R 7.36
1987	—	1.79	1.79	4.78	5.77	3.77	8.87	6.66	2.90	R 5.65	5.97	0.94	R 2.01	R 3.84	1.63	17.44	R 7.50
1988	—	1.75	1.75	4.72	5.42	3.54	8.48	6.51	2.29	R 5.38	R 5.76	1.01	R 2.02	R 3.80	1.61	18.29	R 7.49
1989	—	1.75	1.75	4.77	5.91	4.12	9.23	7.12	2.61	R 5.89	6.39	1.00	e R 1.60	e R 3.88	1.53	18.70	e R 7.94
1990	—	1.79	1.79	4.80	7.29	5.45	10.33	8.24	2.52	R 5.64	7.37	0.87	1.58	R 4.24	1.53	19.25	8.68
1991	—	1.80	1.80	4.65	6.87	4.61	10.77	7.95	2.11	R 5.82	R 7.16	0.73	R 1.56	4.13	1.46	19.29	8.53
1992	—	1.80	1.80	4.69	6.56	4.39	9.10	7.66	2.55	R 5.81	6.79	0.59	R 1.54	R 4.00	1.39	19.60	8.41
1993	—	1.78	1.78	5.18	6.44	4.13	8.92	7.55	2.16	5.57	6.68	0.54	R 1.50	R 4.09	1.40	19.71	R 8.50
1994	—	1.70	1.70	5.22	6.45	3.80	10.14	7.55	2.38	R 5.67	R 6.69	0.58	R 1.57	4.03	1.34	R 19.31	R 8.42
1995	—	1.68	1.68	4.53	6.39	3.80	10.18	7.78	2.50	R 5.91	6.83	0.55	R 1.58	R 3.96	1.32	19.44	R 8.41
1996	—	1.59	1.59	5.30	7.13	4.58	11.35	8.29	2.98	6.39	7.44	0.51	1.52	4.38	1.25	18.89	8.83
1997	—	1.60	1.60	5.62	6.84	4.33	11.09	8.09	2.95	5.95	7.25	0.48	1.52	4.24	1.26	18.72	8.86
	Expenditures in Million Nominal Dollars																
1970	—	75.7	75.7	195.4	79.1	42.8	56.5	795.3	24.5	72.4	1,070.5	—	R 23.5	R 1,365.1	-88.1	491.7	R 1,768.8
1975	—	295.9	295.9	336.1	254.0	147.4	108.2	1,628.9	115.5	142.2	2,396.2	4.3	R 29.0	R 3,061.5	-372.6	1,265.9	R 3,954.8
1980	—	784.3	784.3	970.9	792.6	598.1	175.0	3,409.4	185.0	478.0	5,638.0	41.7	R 30.8	R 7,465.7	-837.7	2,227.3	R 8,855.3
1981	—	942.1	942.1	1,197.7	929.3	636.1	175.9	3,803.0	141.6	538.7	6,224.6	30.9	R 35.6	R 8,430.9	-966.8	2,489.9	R 9,954.1
1982	—	994.6	994.6	1,313.9	823.6	609.9	170.5	3,616.7	114.4	442.4	5,777.5	31.5	R 36.0	R 8,153.5	-997.2	2,927.5	R 10,083.8
1983	—	1,102.4	1,102.4	1,475.5	875.6	582.7	186.9	3,181.6	107.6	R 468.0	R 5,402.4	44.5	R 37.0	R 8,061.9	-1,104.3	R 3,022.3	R 9,979.9
1984	—	R 1,309.0	R 1,309.0	1,583.3	928.8	567.3	195.8	3,223.9	151.5	R 520.5	R 5,587.9	35.7	R 48.2	R 8,564.2	-1,281.6	R 3,490.2	R 10,772.8
1985	—	R 1,360.0	R 1,360.0	1,467.5	918.3	518.0	234.5	R 3,356.9	285.0	R 479.5	R 5,792.3	79.4	R 45.5	R 8,744.6	-1,379.9	R 3,690.1	R 11,054.8
1986	—	R 1,249.3	R 1,249.3	1,370.2	790.1	351.4	205.4	R 2,543.7	46.8	R 420.7	R 4,358.1	66.0	R 44.9	R 7,088.5	-1,256.5	R 3,916.6	R 9,748.6
1987	—	R 1,268.5	R 1,268.5	1,437.2	874.2	419.2	204.9	R 2,803.0	53.7	R 399.5	R 4,754.6	154.6	R 40.6	R 7,655.5	-1,347.1	4,236.8	R 10,545.2
1988	—	1,220.7	1,220.7	1,508.1	881.8	405.8	205.1	R 2,855.4	40.8	R 385.4	R 4,774.2	164.6	R 42.4	R 7,710.0	-1,305.3	4,608.9	R 11,013.6
1989	—	1,182.3	1,182.3	1,489.8	966.8	405.7	245.8	R 3,123.9	38.9	R 376.4	R 5,157.6	267.5	e R 67.8	e R 8,165.0	-1,372.2	R 4,885.2	e R 11,677.9
1990	—	R 1,282.4	R 1,282.4	1,466.3	1,210.2	567.9	220.0	R 3,601.0	51.4	R 423.4	R 6,073.9	230.0	R 57.4	R 9,110.0	-1,425.9	R 5,254.2	R 12,938.3
1991	—	1,161.0	1,161.0	1,471.1	1,077.4	375.5	259.5	R 3,494.9	32.8	R 452.4	R 5,692.4	205.1	R 68.2	R 8,597.9	-1,280.3	R 5,318.1	R 12,635.7
1992	—	1,107.8	1,107.8	1,575.5	1,037.8	307.3	235.3	R 3,376.0	98.4	R 444.9	R 5,499.8	176.5	R 69.0	R 8,428.6	-1,212.4	R 5,528.7	R 12,744.9
1993	—	1,175.2	1,175.2	1,788.2	1,172.2	354.0	242.3	R 3,691.6	66.5	R 445.6	R 5,972.2	156.8	R 73.2	R 9,165.6	-1,274.5	R 5,947.5	R 13,838.6
1994	—	1,175.9	1,175.9	1,757.8	1,182.4	364.4	273.6	R 3,706.8	62.8	R 455.5	R 6,045.6	180.1	R 82.7	R 9,242.1	-1,278.0	R 5,872.8	R 13,836.9
1995	—	1,220.0	1,220.0	1,650.4	1,307.8	397.5	264.1	R 3,991.4	53.5	R 471.1	R 6,485.5	178.5	R 94.8	R 9,629.3	-1,341.5	R 6,328.7	R 14,616.5
1996	—	1,153.0	1,153.0	1,987.5	1,725.9	448.8	297.5	4,401.7	74.9	511.9	7,460.7	161.1	92.0	10,854.2	-1,257.6	6,481.6	16,078.2
1997	—	1,233.8	1,233.8	1,994.8	1,484.5	374.3	295.1	4,314.2	67.8	481.7	7,017.5	156.6	85.0	10,487.6	-1,330.0	6,483.9	15,641.6

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 72. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Georgia

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.00	1.02	1.24	1.48	2.35	2.22	0.73	R 1.20	5.18	R 2.29
1975	3.23	1.46	2.61	3.35	4.40	4.20	1.45	R 1.87	9.01	R 4.27
1980	3.12	3.57	6.92	8.77	7.64	7.53	3.70	R 4.16	13.85	R 7.78
1981	3.59	4.23	8.62	11.05	8.26	8.33	4.56	4.73	15.10	R 8.67
1982	3.72	5.18	8.35	11.03	8.73	8.77	4.42	R 5.53	17.86	R 10.39
1983	3.35	5.95	6.49	R 7.38	9.10	R 8.78	4.28	R 6.23	18.36	R 10.92
1984	3.45	6.25	6.97	R 7.13	9.83	R 9.50	4.35	R 6.52	18.62	R 11.25
1985	3.31	6.42	7.51	R 6.84	9.23	R 8.83	4.18	R 6.66	18.91	R 11.79
1986	3.00	6.46	5.43	R 6.73	9.26	R 8.58	3.35	R 6.58	19.67	R 12.27
1987	2.96	6.18	5.45	R 8.10	9.23	R 8.71	3.20	R 6.37	19.80	R 12.05
1988	2.95	6.07	5.54	R 8.77	8.36	R 8.13	3.23	R 6.19	20.58	R 12.15
1989	3.05	6.09	5.34	R 8.20	10.21	R 9.67	3.57	R 6.46	21.18	R 12.73
1990	3.10	6.64	6.70	R 8.66	10.17	R 9.75	3.53	6.88	21.87	R 13.99
1991	2.94	6.52	6.25	R 9.25	10.57	R 10.21	3.37	R 6.82	21.98	R 13.82
1992	2.92	6.28	6.01	R 9.14	8.07	R 7.98	3.08	R 6.33	22.66	R 13.48
1993	3.10	6.62	6.07	R 6.93	8.09	R 7.87	3.02	R 6.59	22.84	R 13.85
1994	3.10	7.11	3.84	R 8.81	11.62	R 11.23	2.93	R 7.40	22.62	R 14.38
1995	3.00	6.02	4.36	R 8.28	11.63	R 11.07	2.87	R 6.42	23.01	R 14.10
1996	2.94	6.54	7.16	9.06	13.01	12.47	3.29	6.99	22.44	14.05
1997	2.95	7.21	7.06	8.47	12.72	12.33	3.27	7.62	22.69	14.80
	Expenditures in Million Nominal Dollars									
1970	1.1	91.6	1.8	1.0	36.9	39.7	3.2	R 135.5	220.7	R 356.2
1975	1.4	130.5	4.5	0.7	63.7	68.9	6.5	R 207.2	505.9	R 713.1
1980	0.6	332.0	23.3	4.5	99.7	127.6	15.9	R 476.0	946.6	R 1,422.7
1981	1.0	399.2	9.2	2.1	99.7	111.0	19.7	R 531.0	1,041.2	R 1,572.2
1982	R (s)	463.1	7.9	3.9	87.7	99.5	20.7	R 583.7	1,227.7	R 1,811.5
1983	R (s)	558.2	8.5	R 4.3	108.6	R 121.4	19.7	R 699.5	1,298.6	R 1,998.1
1984	2.2	610.7	9.4	R 2.5	127.5	R 139.3	30.3	R 782.5	1,434.2	R 2,216.7
1985	1.1	555.0	15.5	R 10.0	131.3	R 156.8	28.4	R 741.4	1,516.4	R 2,257.7
1986	R (s)	591.3	11.5	R 7.7	119.6	R 138.9	22.2	R 752.5	1,732.3	R 2,484.8
1987	1.0	638.0	10.9	R 6.0	124.9	R 141.8	18.0	R 798.7	1,823.2	R 2,622.0
1988	0.7	672.5	8.3	R 10.2	113.6	R 132.2	18.9	R 824.3	1,939.0	R 2,763.3
1989	R (s)	648.0	8.3	R 8.2	153.9	R 170.5	21.7	R 840.5	2,049.0	R 2,889.5
1990	0.6	615.6	9.8	R 5.5	125.3	R 140.5	19.9	R 776.6	2,233.3	R 3,009.9
1991	R (s)	647.6	6.5	R 5.9	139.5	R 151.9	20.1	R 819.8	2,264.0	R 3,083.8
1992	1.0	696.9	6.2	R 5.6	117.5	R 129.3	19.3	R 846.6	2,360.6	R 3,207.1
1993	0.6	786.5	8.3	R 5.4	122.3	R 136.0	20.6	R 943.7	2,639.6	R 3,583.3
1994	0.8	771.8	2.5	R 4.0	178.1	R 184.6	19.6	R 976.8	2,527.0	R 3,503.8
1995	1.6	708.7	4.0	R 5.9	168.6	R 178.6	21.4	R 910.2	2,811.1	R 3,721.2
1996	(s)	850.0	6.4	7.4	182.5	196.2	24.5	1,070.8	2,891.7	3,962.6
1997	(s)	847.6	3.4	6.5	178.6	188.4	17.7	1,054.1	2,851.7	3,905.8

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 73. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Georgia

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.50	0.72	0.97	0.63	1.58	2.80	0.32	1.44	0.73	0.84	5.85	2.60
1975	1.31	1.07	2.25	2.22	2.83	4.73	1.73	2.85	1.45	1.36	10.79	R 4.97
1980	1.60	3.12	6.31	6.06	5.27	9.91	3.44	7.00	3.70	3.47	14.64	7.69
1981	1.76	3.88	7.85	6.97	6.13	11.04	4.24	8.10	4.56	4.55	16.10	R 8.96
1982	1.82	4.60	7.48	7.36	6.49	10.42	3.70	7.90	4.42	5.13	18.20	R 10.42
1983	1.70	5.28	6.44	R 7.38	7.16	8.91	4.41	6.45	4.28	5.58	18.00	R 10.24
1984	R 1.81	5.51	6.51	R 7.13	7.54	8.59	4.73	6.44	4.35	5.71	19.99	R 11.40
1985	R 1.82	5.57	6.10	R 6.84	10.13	8.76	4.20	6.65	NA	5.79	19.94	12.21
1986	1.76	5.46	3.79	R 6.73	8.51	6.29	2.46	R 4.26	NA	R 5.16	18.17	11.34
1987	R 1.75	5.26	4.11	R 8.10	8.36	6.66	2.90	R 4.63	NA	R 5.09	19.81	12.07
1988	1.75	5.32	3.72	R 8.77	8.65	6.51	2.37	R 4.47	NA	R 5.11	20.90	12.79
1989	1.73	5.33	4.36	R 8.20	7.95	7.12	2.72	R 5.50	NA	R 5.35	21.33	R 13.83
1990	R 1.79	5.61	5.47	R 8.66	10.56	8.24	3.04	R 6.90	NA	R 5.85	21.57	14.61
1991	1.79	5.52	4.93	R 9.25	11.01	7.95	2.26	R 7.06	NA	R 5.75	21.68	R 14.83
1992	1.80	5.41	4.72	R 9.14	10.44	7.66	2.40	R 6.70	NA	R 5.59	22.10	14.78
1993	1.80	5.68	4.51	R 6.93	9.98	7.55	2.47	R 6.15	3.02	R 5.68	21.93	R 14.79
1994	1.82	6.00	4.27	R 8.81	9.23	7.55	2.54	R 6.18	2.93	R 5.97	21.64	R 15.05
1995	1.77	5.07	4.27	R 8.28	9.49	7.78	2.76	R 5.61	2.87	R 5.09	21.60	R 14.68
1996	1.76	5.76	5.14	9.06	10.31	8.29	3.15	6.59	3.29	5.85	21.21	14.83
1997	1.79	6.26	4.97	8.47	10.53	8.09	3.04	7.16	3.27	6.36	21.05	15.20
	Expenditures in Million Nominal Dollars											
1970	1.0	28.6	4.0	R (s)	4.4	5.1	R (s)	13.9	(s)	R 43.6	163.1	206.7
1975	1.0	54.2	11.2	R (s)	7.2	9.2	0.9	28.6	(s)	R 84.0	413.2	R 497.1
1980	0.6	189.1	11.6	R (s)	12.1	18.9	R (s)	43.2	(s)	R 233.3	597.5	R 830.8
1981	0.9	227.4	56.1	0.7	13.1	23.8	R (s)	93.9	(s)	R 322.6	705.0	R 1,027.6
1982	R (s)	259.5	45.4	6.0	11.5	23.1	R (s)	86.1	(s)	R 346.5	836.9	R 1,183.4
1983	R (s)	304.9	81.1	R 1.2	15.1	18.8	14.4	R 130.5	(s)	R 435.9	R 844.6	R 1,280.6
1984	2.1	316.2	84.1	0.6	17.3	16.7	21.1	139.7	0.7	R 458.7	R 1,063.9	R 1,522.7
1985	1.1	295.1	54.9	R 1.8	25.5	14.2	12.4	108.7	NA	R 405.0	R 1,157.1	R 1,562.1
1986	R (s)	282.6	21.9	R 2.8	19.4	11.9	16.1	R 72.1	NA	R 354.9	R 1,131.4	R 1,486.3
1987	R 1.1	294.8	24.0	R 1.6	20.0	14.3	18.2	R 78.0	NA	R 373.9	R 1,311.3	1,685.2
1988	0.8	305.0	26.1	R 1.1	20.8	15.5	11.4	R 74.8	NA	R 380.6	R 1,475.0	R 1,855.6
1989	R (s)	290.4	24.7	R 3.4	21.1	15.1	4.4	R 68.8	NA	R 359.5	R 1,619.3	R 1,978.9
1990	0.6	285.0	40.5	R 3.1	23.0	R 22.5	1.3	R 90.4	NA	R 376.0	R 1,745.6	R 2,121.7
1991	R (s)	289.4	24.7	R 2.8	25.6	13.8	R (s)	R 67.3	NA	R 356.9	R 1,781.9	R 2,138.8
1992	1.1	298.9	28.5	R 1.9	26.8	16.7	R (s)	R 74.0	NA	R 374.1	R 1,854.8	2,228.8
1993	0.6	335.4	29.8	R 2.5	26.7	2.6	R (s)	R 61.6	1.7	R 397.6	R 1,958.1	R 2,355.8
1994	0.8	334.0	25.8	R 7.4	25.0	6.8	R (s)	R 65.1	1.6	R 401.6	R 2,004.8	R 2,406.4
1995	1.7	294.0	35.0	R 1.7	24.3	2.5	R (s)	R 63.7	1.6	R 361.0	R 2,121.8	R 2,482.8
1996	(s)	361.5	35.1	1.6	25.5	2.7	(s)	65.1	2.0	428.8	2,190.9	2,619.6
1997	(s)	367.9	26.0	1.3	26.1	26.8	(s)	80.4	1.7	450.5	2,251.6	2,702.0

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
(s)=Value less than 0.05 million nominal dollars.

NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 74. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Georgia

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	0.50	0.50	0.40	0.76	0.58	0.63	1.58	5.08	2.80	0.40	2.53	0.81	R 1.46	R 0.63	2.91	R 0.88
1975	—	1.31	1.31	0.82	1.74	2.05	2.22	2.83	7.48	4.73	1.69	3.33	2.23	R 1.46	1.43	7.33	R 2.26
1980	—	1.60	1.60	2.75	3.72	5.44	6.06	5.27	14.36	9.91	3.44	8.56	5.36	R 1.46	R 3.73	10.43	R 4.88
1981	—	1.76	1.76	3.59	4.99	6.30	6.97	6.13	18.00	11.04	4.70	10.05	7.16	R 1.46	R 4.54	11.45	R 5.81
1982	—	1.82	1.82	4.05	4.07	6.69	7.36	6.49	17.25	10.42	4.21	9.73	6.56	R 1.46	R 4.56	13.57	R 6.28
1983	—	1.70	1.70	4.40	4.09	6.70	R 6.81	7.16	16.98	8.91	4.10	9.33	R 6.33	R 1.46	R 4.63	13.28	R 6.27
1984	—	R 1.81	R 1.81	4.46	4.50	6.56	R 6.83	7.54	17.63	8.59	4.73	9.54	6.61	R 1.46	R 4.78	13.34	R 6.46
1985	—	R 1.82	R 1.82	4.41	4.97	6.36	R 6.55	10.13	17.61	8.76	4.20	9.22	6.14	R 1.46	R 4.77	13.09	R 6.32
1986	—	1.76	1.76	3.80	4.19	4.34	R 4.74	8.51	15.59	6.29	2.46	6.42	R 5.32	R 1.55	R 3.93	12.95	R 5.89
1987	—	R 1.75	R 1.75	3.57	3.21	4.43	R 4.47	8.36	13.58	6.66	2.90	7.16	5.12	R 1.55	R 3.72	13.01	R 5.71
1988	—	1.75	1.75	3.52	3.15	4.06	R 4.18	8.65	14.62	6.51	2.37	6.11	4.81	R 1.55	R 3.57	13.68	R 5.71
1989	—	1.73	1.73	3.64	2.85	4.87	R 5.16	7.95	14.48	7.12	2.72	7.32	5.28	d R 1.27	d R 3.61	13.72	d R 5.68
1990	—	R 1.79	R 1.79	3.50	2.86	5.83	R 6.64	10.56	14.60	8.24	3.04	7.50	R 5.51	R 1.22	3.69	14.16	5.76
1991	—	1.79	1.79	3.25	3.18	5.26	R 5.73	11.01	16.80	7.95	2.26	6.08	5.58	1.28	3.57	14.02	R 5.63
1992	—	1.80	1.80	3.41	2.38	4.99	R 4.92	10.44	18.32	7.66	2.40	6.31	5.23	R 1.29	R 3.58	13.94	R 5.67
1993	—	1.80	1.80	3.99	2.63	4.81	R 4.65	9.98	18.96	7.55	2.47	5.67	5.05	R 1.27	3.79	13.89	5.88
1994	—	1.82	1.82	3.79	2.68	4.64	R 4.69	7.86	19.11	7.55	2.54	5.59	4.88	R 1.36	R 3.60	13.39	R 5.61
1995	—	1.77	1.77	3.46	3.04	4.50	R 4.38	7.97	R 19.41	7.78	2.76	5.96	5.09	R 1.38	R 3.50	13.24	R 5.49
1996	—	1.76	1.76	4.30	3.13	5.40	5.45	9.25	20.08	8.29	3.15	6.81	5.64	1.24	4.05	12.57	5.84
1997	—	1.79	1.79	4.44	3.13	5.14	5.08	8.99	17.86	8.09	3.04	5.85	5.37	1.31	4.03	12.10	5.79
	Expenditures in Million Nominal Dollars																
1970	—	6.0	6.0	58.0	19.7	13.5	1.1	14.5	14.6	1.8	21.0	12.4	98.6	R 20.3	R 182.8	107.9	R 290.8
1975	—	13.3	13.3	122.1	48.4	42.2	2.5	36.2	27.7	1.5	66.2	32.4	257.1	R 22.4	R 414.9	346.8	R 761.7
1980	—	26.5	26.5	440.0	118.2	126.4	15.4	61.7	55.0	1.4	115.4	212.9	706.5	R 14.6	R 1,187.6	682.6	R 1,870.2
1981	—	43.7	43.7	561.2	124.4	103.3	8.7	58.4	66.2	1.2	67.5	253.9	683.6	R 15.4	R 1,303.9	743.0	R 2,046.9
1982	—	47.4	47.4	585.0	106.1	88.5	4.5	66.5	57.8	0.9	63.5	194.2	582.0	R 14.9	R 1,229.3	861.7	R 2,091.0
1983	—	59.0	59.0	605.5	142.0	114.7	0.9	57.0	59.6	0.9	61.6	190.2	626.9	R 16.8	R 1,308.3	877.9	R 2,186.2
1984	—	R 68.5	R 68.5	653.7	168.2	113.5	R (s)	42.5	66.0	23.7	91.1	207.0	712.3	R 17.1	R 1,451.6	990.2	R 2,441.8
1985	—	R 70.1	R 70.1	613.4	151.2	132.8	2.4	70.0	61.4	57.5	249.9	182.0	907.2	R 17.1	R 1,607.8	1,013.9	R 2,621.7
1986	—	R 77.7	R 77.7	484.3	156.7	98.9	R 1.7	60.6	53.2	38.3	19.5	135.9	564.7	R 22.7	R 1,149.6	1,049.8	R 2,199.4
1987	—	R 84.7	R 84.7	501.3	127.4	92.1	R 1.4	56.0	52.4	R 42.7	22.7	151.4	R 546.1	R 22.7	R 1,154.6	1,097.7	R 2,252.4
1988	—	91.6	91.6	526.1	126.4	80.2	2.6	66.4	54.3	R 39.4	21.4	129.2	520.0	R 23.6	R 1,161.3	1,189.8	R 2,351.1
1989	—	88.0	88.0	549.2	93.9	112.1	R 1.9	67.3	55.2	R 48.6	24.2	151.1	554.2	d R 46.1	d R 1,237.6	1,211.1	d R 2,448.6
1990	—	R 99.6	R 99.6	559.8	121.2	137.2	R 0.9	67.7	57.3	R 55.8	33.1	170.2	R 643.4	R 37.5	1,340.3	1,269.2	2,609.5
1991	—	93.4	93.4	531.8	109.6	104.0	0.9	89.9	59.0	49.0	18.0	208.6	R 639.0	R 48.1	R 1,312.2	1,265.8	R 2,578.1
1992	—	R 79.8	R 79.8	576.4	77.3	80.2	R (s)	86.8	65.6	49.2	40.7	223.0	623.0	R 49.7	R 1,328.9	1,307.0	R 2,635.9
1993	—	76.9	76.9	656.4	93.0	106.9	0.6	R 89.0	69.1	28.2	33.4	200.5	620.8	R 52.6	R 1,406.6	1,343.5	R 2,750.1
1994	—	87.4	87.4	648.6	93.3	93.1	R (s)	63.2	72.8	30.8	36.1	200.0	589.8	R 61.4	R 1,387.2	1,333.5	R 2,720.7
1995	—	86.0	86.0	625.9	111.5	122.9	0.9	66.9	R 72.7	33.9	32.7	200.8	642.2	R 71.9	R 1,426.0	1,387.8	R 2,813.8
1996	—	86.7	86.7	762.3	112.8	172.8	1.1	85.8	73.0	39.5	52.3	236.8	774.1	65.5	1,688.6	1,390.4	3,079.0
1997	—	90.7	90.7	759.3	101.7	148.7	0.7	87.2	68.6	37.8	46.7	228.5	719.7	65.5	1,635.3	1,370.7	3,006.0

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 75. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Georgia

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.50	—	2.17	1.32	0.73	1.58	5.08	2.80	0.28	2.33	2.33	—	2.33
1975	1.31	—	3.45	3.02	2.03	2.83	7.48	4.73	1.52	4.11	4.11	—	4.11
1980	—	—	9.02	7.48	6.46	5.27	14.36	9.91	2.91	8.73	8.73	10.06	8.73
1981	—	—	10.84	8.75	7.61	6.13	18.00	11.04	3.67	9.94	9.94	12.10	9.94
1982	—	—	10.92	7.92	7.18	6.49	17.25	10.42	3.35	9.36	9.36	12.87	9.36
1983	—	—	10.44	7.05	6.27	7.16	16.98	8.91	4.14	8.14	8.14	12.30	8.14
1984	—	—	10.27	6.84	6.01	7.54	17.63	8.59	5.28	7.87	7.87	13.58	7.87
1985	—	—	9.99	6.74	5.66	10.13	17.61	8.76	3.38	7.90	7.90	12.92	7.90
1986	—	—	8.41	5.88	3.51	8.51	15.59	6.29	1.67	5.79	5.79	13.59	5.79
1987	—	—	7.55	6.09	3.77	8.36	13.58	6.66	2.81	6.09	6.09	21.39	6.09
1988	—	—	7.41	5.74	3.54	8.65	14.62	6.51	1.95	5.89	5.89	21.42	5.90
1989	—	—	8.28	6.18	4.12	7.95	14.48	7.12	2.34	6.50	6.50	22.70	6.51
1990	—	—	9.32	7.67	5.45	10.56	14.60	8.24	1.85	7.66	7.66	23.76	7.67
1991	—	—	8.71	7.21	4.61	11.01	16.80	7.95	1.94	7.37	7.37	25.03	R 7.38
1992	—	—	8.54	6.85	4.39	10.44	18.32	7.66	2.65	7.05	7.05	25.50	7.06
1993	—	3.45	8.24	6.80	4.13	9.98	18.96	7.55	1.90	6.94	6.94	24.91	6.94
1994	—	3.95	7.96	6.81	3.80	8.18	19.11	7.55	2.19	6.89	6.89	25.54	6.90
1995	—	3.76	8.36	6.85	3.80	8.50	R 19.41	7.78	2.17	7.05	7.05	25.20	7.06
1996	—	3.77	9.29	7.52	4.58	8.51	20.08	8.29	2.65	7.67	7.67	26.26	7.68
1997	—	4.03	9.39	7.19	4.33	8.01	17.86	8.09	2.76	7.48	7.48	26.52	7.49
	Expenditures in Million Nominal Dollars												
1970	(s)	—	6.6	59.6	42.8	0.6	16.9	788.3	R (s)	915.2	915.2	—	915.2
1975	(s)	—	6.9	181.7	147.4	1.1	23.4	1,618.2	4.1	1,982.8	1,982.9	—	1,982.9
1980	—	—	17.6	616.2	598.1	1.5	53.8	3,389.1	54.8	4,731.1	4,731.1	R 0.6	4,731.6
1981	—	—	18.0	743.9	636.1	4.7	64.7	3,778.0	61.2	5,306.6	5,306.6	0.7	5,307.3
1982	—	—	13.5	670.7	609.9	4.8	56.5	3,592.7	48.8	4,996.9	4,996.9	1.1	4,998.0
1983	—	—	11.6	663.5	582.7	6.2	58.3	3,161.8	29.8	4,513.9	4,513.9	R 1.2	R 4,515.1
1984	—	—	11.4	716.2	567.3	R 8.6	64.5	3,183.6	38.2	R 4,589.8	R 4,589.8	R 1.9	R 4,591.7
1985	—	—	10.7	707.4	518.0	7.7	60.0	R 3,285.2	21.5	R 4,610.6	R 4,610.6	R 2.7	R 4,613.2
1986	—	—	10.8	654.4	351.4	5.8	52.0	R 2,493.5	7.1	3,575.0	3,575.0	R 3.1	R 3,578.1
1987	—	—	8.3	743.7	419.2	4.0	51.2	R 2,746.1	8.8	R 3,981.2	R 3,981.2	R 4.5	R 3,985.7
1988	—	—	8.5	761.0	405.8	4.3	53.1	R 2,800.4	5.5	R 4,038.6	R 4,038.6	R 5.0	R 4,043.6
1989	—	—	8.8	813.3	405.7	3.4	54.0	R 3,060.2	9.8	R 4,355.2	R 4,355.2	R 5.7	R 4,360.9
1990	—	—	9.2	1,015.9	567.9	R 4.0	56.0	R 3,522.8	15.4	R 5,191.2	R 5,191.2	R 6.1	R 5,197.3
1991	—	—	8.0	936.8	375.5	4.5	57.6	R 3,432.1	14.2	R 4,828.6	R 4,828.6	R 6.3	R 4,834.9
1992	—	—	7.2	917.4	307.3	4.2	64.1	R 3,310.1	56.3	R 4,666.6	R 4,666.6	R 6.3	R 4,673.0
1993	—	(s)	7.0	1,018.9	354.0	4.2	67.5	R 3,660.8	30.7	R 5,143.2	R 5,143.2	R 6.2	R 5,149.5
1994	—	(s)	6.4	1,054.1	364.4	7.4	71.2	R 3,669.2	25.8	R 5,198.5	R 5,198.5	R 7.6	R 5,206.1
1995	—	(s)	6.6	1,136.9	397.5	4.3	71.0	R 3,955.0	19.2	5,590.6	5,590.6	R 8.1	R 5,598.7
1996	—	(s)	7.9	1,496.2	448.8	3.7	71.3	4,359.5	21.0	6,408.4	6,408.4	8.6	6,417.0
1997	—	(s)	7.4	1,296.7	374.3	3.2	67.0	4,249.6	19.6	6,017.7	6,017.8	9.9	6,027.7

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 76. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Georgia

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.38	0.29	0.31	0.39	—	0.31	—	—	0.35
1975	0.93	0.71	1.74	2.30	—	1.85	0.13	—	0.91
1980	1.50	2.56	3.47	6.22	—	4.48	0.45	—	1.38
1981	1.71	3.44	4.23	7.78	—	5.72	0.39	—	1.58
1982	1.86	4.06	3.74	7.27	—	6.31	0.43	—	1.70
1983	1.90	4.18	4.51	6.23	—	5.81	0.52	—	1.73
1984	1.93	4.44	5.44	5.81	—	5.75	0.60	—	1.82
1985	1.88	4.31	3.59	5.65	—	5.22	0.72	—	1.73
1986	1.81	2.00	1.82	3.46	—	2.32	0.84	—	1.71
1987	1.79	3.72	3.09	R 3.90	—	3.42	0.94	—	1.63
1988	1.75	2.73	2.24	3.39	—	2.95	1.01	—	1.61
1989	1.75	3.16	2.77	4.52	—	4.37	1.00	—	1.53
1990	1.79	2.97	2.18	5.44	—	4.26	0.87	—	1.53
1991	1.80	2.76	2.22	4.74	—	4.49	0.73	—	1.46
1992	1.80	2.82	3.05	4.66	—	4.22	0.59	—	1.39
1993	1.78	3.24	2.15	4.24	—	3.50	0.54	—	1.40
1994	1.69	3.21	2.26	3.96	—	3.65	0.58	—	1.34
1995	1.67	2.72	2.15	3.98	—	3.56	0.55	—	1.32
1996	1.58	2.81	2.67	4.75	—	4.46	0.51	—	1.25
1997	1.59	2.66	2.79	4.54	—	4.21	0.48	—	1.26
	Expenditures in Million Nominal Dollars								
1970	67.7	17.3	3.0	R (s)	—	3.1	—	—	88.1
1975	280.1	29.3	44.3	14.4	—	58.7	4.3	—	372.6
1980	756.7	9.7	14.6	15.1	—	29.7	41.7	—	837.7
1981	896.5	9.8	12.7	16.9	—	29.5	30.9	—	966.8
1982	946.3	6.3	2.1	11.0	—	13.1	31.5	—	997.2
1983	1,043.2	7.0	1.8	7.8	—	9.6	44.5	—	1,104.3
1984	1,236.3	2.8	1.1	5.7	—	6.8	35.7	—	1,281.6
1985	1,287.7	3.9	1.3	7.7	—	9.0	79.4	—	1,379.9
1986	1,171.2	11.9	4.1	3.4	—	7.5	66.0	—	1,256.5
1987	1,181.8	3.1	4.0	3.5	—	7.5	154.6	—	1,347.1
1988	1,127.6	4.4	2.5	6.2	—	8.7	164.6	—	1,305.3
1989	1,093.6	2.2	R (s)	8.4	—	8.9	267.5	—	1,372.2
1990	1,181.5	5.9	1.6	6.9	—	8.5	230.0	—	1,425.9
1991	1,067.1	2.4	R (s)	5.3	—	5.6	205.1	—	1,280.3
1992	1,025.8	3.4	1.3	5.4	—	6.7	176.5	—	1,212.4
1993	1,097.1	10.0	2.3	8.3	—	10.6	156.8	—	1,274.5
1994	1,086.8	3.4	0.9	6.8	—	7.7	180.1	—	1,278.0
1995	1,130.7	21.8	1.5	8.9	—	10.4	178.5	—	1,341.5
1996	1,066.1	13.6	1.4	15.4	—	16.8	161.1	—	1,257.6
1997	1,142.2	20.0	1.4	9.8	—	11.2	156.6	—	1,330.0

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 77. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Hawaii

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	—	—	—	1.04	0.73	2.53	3.32	0.40	R 1.26	1.09	—	R 1.07	1.09	0.41	6.98	R 1.74
1975	—	—	—	—	2.30	2.04	3.77	5.44	1.59	R 2.85	2.53	—	R 1.54	R 2.53	1.58	12.80	R 3.97
1980	—	—	—	13.06	6.58	6.21	6.32	10.81	3.80	R 6.75	R 6.19	—	R 4.06	6.25	3.97	22.01	R 8.70
1981	—	—	—	15.76	8.13	7.56	6.23	12.47	6.24	R 9.19	R 8.01	—	R 3.89	R 8.05	6.64	33.69	R 11.84
1982	—	2.07	2.07	15.02	8.60	7.37	6.43	12.28	6.02	R 8.52	R 7.91	—	R 3.78	R 7.92	6.33	35.55	R 12.33
1983	—	2.11	2.11	15.10	7.82	6.90	7.35	11.72	5.48	R 7.77	R 7.37	—	R 3.78	R 7.39	5.59	31.60	R 11.47
1984	—	R 1.87	R 1.87	16.91	7.52	6.55	11.59	11.60	5.38	R 8.35	R 7.16	—	R 3.81	7.20	5.46	31.34	R 11.03
1985	—	R 2.30	R 2.30	14.20	7.86	6.21	13.88	11.14	4.81	R 7.50	R 6.80	—	R 3.79	6.82	4.94	29.81	R 10.22
1986	—	R 2.36	R 2.36	11.96	6.29	4.36	13.08	9.63	2.83	R 7.48	R 5.05	—	R 4.06	R 5.12	2.98	23.66	R 8.46
1987	—	1.95	1.95	11.89	6.05	4.30	12.85	9.47	3.41	R 6.36	R 5.22	—	R 4.06	R 5.27	3.54	24.49	R 8.62
1988	—	R 1.80	R 1.80	11.52	6.13	4.04	12.69	9.55	2.80	R 6.46	R 4.84	—	R 4.06	R 4.89	2.95	22.53	R 7.82
1989	—	1.76	1.76	11.41	6.79	4.59	15.02	10.42	3.20	R 6.65	R 5.38	—	e R 2.42	e 5.40	3.32	23.76	e R 8.54
1990	—	1.82	1.82	12.24	7.97	5.99	15.66	11.71	4.01	R 6.53	R 6.50	—	R 0.88	R 6.50	4.33	26.56	R 9.94
1991	—	1.80	1.80	14.16	7.87	5.17	15.53	10.40	3.21	R 6.64	R 5.93	—	R 0.82	R 5.99	3.44	27.14	R 9.90
1992	—	R 1.69	R 1.69	13.33	7.24	4.90	14.81	10.95	2.82	R 6.34	R 5.64	—	R 0.71	R 5.68	3.26	27.79	R 9.74
1993	—	R 1.73	R 1.73	13.05	7.36	4.79	10.86	11.09	2.99	R 6.22	R 6.01	—	R 0.68	R 6.03	3.49	31.37	R 11.12
1994	—	R 2.02	R 2.02	12.68	7.14	4.31	11.56	11.27	2.68	R 6.64	R 5.83	—	R 1.52	R 5.86	3.03	31.44	R 10.83
1995	—	R 1.91	R 1.91	13.30	7.11	4.44	11.40	11.40	2.98	R 6.64	R 6.01	—	R 1.48	R 5.99	3.28	33.24	R 11.28
1996	—	1.84	1.84	14.66	7.62	5.24	11.20	12.07	3.53	7.11	6.83	—	1.60	6.81	3.92	35.65	13.18
1997	—	1.78	1.78	15.88	6.37	5.03	10.91	12.16	3.63	6.86	6.71	—	1.43	6.71	3.78	36.71	13.34
	Expenditures in Million Nominal Dollars																
1970	—	—	—	—	9.9	58.4	8.5	99.2	24.7	R 5.9	R 206.5	—	R (s)	R 206.9	-17.4	87.4	R 276.9
1975	—	—	—	—	25.6	170.3	10.3	193.5	108.5	R 12.6	R 520.8	—	R (s)	R 521.3	-92.4	225.3	R 654.2
1980	—	—	—	39.4	228.7	492.4	31.1	410.7	308.6	R 25.4	R 1,496.8	—	R 10.0	R 1,546.2	-275.8	456.9	R 1,727.3
1981	—	—	—	43.8	285.0	424.4	26.1	470.9	505.3	R 26.1	R 1,737.6	—	R 10.7	R 1,792.2	-463.5	739.2	R 2,067.9
1982	—	2.4	2.4	41.6	227.3	307.0	41.4	468.6	490.0	R 21.1	R 1,555.5	—	R 10.6	R 1,610.0	-421.7	762.1	R 1,950.4
1983	—	2.2	2.2	41.2	105.8	430.8	44.7	445.6	413.6	R 25.0	R 1,465.6	—	R 11.9	R 1,520.8	-382.4	686.1	R 1,824.6
1984	—	R 1.8	R 1.8	41.2	118.0	475.6	5.0	458.8	428.6	R 24.2	R 1,510.1	—	R 12.1	R 1,565.3	-382.4	682.6	R 1,865.4
1985	—	R 2.6	R 2.6	38.1	211.1	462.1	6.6	R 444.4	395.4	R 27.1	R 1,546.6	—	R 11.9	R 1,599.2	-342.5	654.7	R 1,911.4
1986	—	R 0.9	R 0.9	32.0	167.1	248.5	5.9	398.5	250.6	R 28.0	R 1,098.6	—	R 5.6	R 1,137.1	-215.9	538.6	R 1,459.8
1987	—	3.1	3.1	33.1	142.5	277.1	7.3	R 407.0	287.8	R 28.5	R 1,150.2	—	R 5.6	R 1,192.0	-269.6	570.6	R 1,493.1
1988	—	2.2	2.2	32.4	210.8	271.7	8.1	R 425.3	293.7	R 27.8	R 1,237.4	—	R 5.8	R 1,277.9	-240.5	565.5	R 1,602.9
1989	—	1.4	1.4	33.2	224.6	341.8	10.1	R 479.0	339.8	R 26.5	R 1,421.7	—	e R 6.2	e R 1,462.5	-282.8	629.6	e R 1,809.3
1990	—	1.3	1.3	36.5	316.5	425.3	9.9	R 533.4	425.7	R 29.3	R 1,740.0	—	2.1	R 1,779.9	-371.8	732.9	R 2,141.0
1991	—	1.7	1.7	41.2	331.8	323.4	10.9	R 490.1	299.3	R 29.5	R 1,485.0	—	R 1.1	R 1,529.0	-271.5	768.9	R 2,026.4
1992	—	2.0	2.0	38.5	235.4	276.6	31.8	R 510.0	281.2	R 29.6	R 1,364.7	—	R 1.0	R 1,406.2	-242.9	802.4	R 1,965.7
1993	—	3.1	3.1	37.2	207.0	241.2	19.6	R 527.7	225.7	R 28.3	R 1,249.5	—	R 0.9	R 1,290.7	-230.3	903.5	R 1,963.9
1994	—	3.7	3.7	37.0	210.6	231.5	41.4	R 553.3	210.8	R 29.1	R 1,276.6	—	R 2.2	R 1,319.6	-195.1	937.3	R 2,061.7
1995	—	R 7.9	R 7.9	38.7	207.6	250.5	35.8	563.9	227.0	R 30.7	R 1,315.6	—	R 2.5	R 1,364.7	-217.7	1,017.7	R 2,164.8
1996	—	6.7	6.7	41.4	195.8	299.9	41.4	594.1	218.3	29.2	1,378.8	—	2.5	1,429.3	-266.5	1,119.5	2,282.3
1997	—	5.8	5.8	42.2	158.8	291.4	48.7	597.9	214.9	26.6	1,338.2	—	2.3	1,388.5	-252.7	1,152.3	2,288.2

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 78. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Hawaii

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	—	—	1.27	—	4.12	4.11	—	4.11	8.22	7.07
1975	—	—	2.80	—	6.20	6.19	—	6.19	14.59	13.13
1980	—	13.50	6.92	—	11.63	11.61	—	12.48	23.64	20.08
1981	—	16.24	7.90	—	12.35	12.33	—	14.10	35.57	29.28
1982	—	15.88	—	—	13.28	13.28	—	14.48	38.60	31.60
1983	—	16.10	7.98	R 8.33	13.83	13.81	—	14.75	34.88	28.73
1984	—	16.91	7.61	R 8.24	13.63	13.55	—	16.12	34.57	31.18
1985	—	16.74	7.57	R 11.07	15.04	15.01	—	16.13	33.29	30.90
1986	—	14.82	5.86	R 4.94	14.16	14.06	—	14.55	27.17	25.56
1987	—	14.89	5.83	R 4.65	14.02	13.93	—	14.49	27.63	25.90
1988	—	14.55	5.77	R 5.04	13.84	13.67	—	14.16	25.89	24.35
1989	—	14.50	6.49	R 5.33	17.07	17.02	—	15.65	27.19	25.71
1990	—	15.37	7.69	R 7.37	17.94	17.90	—	16.47	30.07	R 28.45
1991	—	21.23	7.48	R 5.77	18.36	18.31	—	19.93	30.83	R 29.57
1992	—	16.80	6.91	R 5.18	17.06	17.05	—	16.98	31.95	R 28.95
1993	—	16.49	7.26	R 5.67	16.87	16.64	—	16.54	35.99	R 34.09
1994	—	16.01	6.82	R 4.95	21.85	R 21.54	—	17.97	36.49	R 34.69
1995	—	16.75	6.79	R 5.00	24.02	R 23.59	—	R 19.12	39.05	R 37.18
1996	—	18.74	7.49	5.22	24.42	24.37	—	21.02	41.79	39.82
1997	—	21.11	7.95	4.85	28.19	28.08	—	24.05	43.37	41.60
	Expenditures in Million Nominal Dollars									
1970	—	—	(s)	—	7.0	7.0	—	7.0	36.0	43.0
1975	—	—	(s)	—	7.4	7.4	—	7.4	82.8	90.1
1980	—	18.4	(s)	—	18.4	18.4	—	36.8	148.5	185.3
1981	—	20.1	(s)	—	18.3	18.3	—	38.4	233.5	271.9
1982	—	18.8	—	—	18.4	18.4	—	37.2	242.6	279.7
1983	—	18.5	(s)	—	22.6	22.6	—	41.1	220.7	261.8
1984	—	18.2	(s)	—	4.5	4.5	—	22.7	216.7	239.4
1985	—	11.3	(s)	—	5.5	5.5	—	16.8	213.4	230.2
1986	—	9.3	(s)	—	4.9	4.9	—	14.3	181.9	196.1
1987	—	9.4	(s)	—	6.1	6.2	—	15.6	195.4	211.0
1988	—	8.8	R (s)	—	6.8	6.8	—	15.7	190.0	205.7
1989	—	8.8	(s)	—	8.8	8.8	—	17.6	208.0	225.6
1990	—	9.3	(s)	—	8.3	8.3	—	17.6	238.4	256.0
1991	—	12.5	(s)	(s)	8.7	8.7	—	21.2	252.0	273.2
1992	—	9.9	(s)	(s)	25.5	25.5	—	35.5	265.8	301.3
1993	—	9.8	R (s)	(s)	5.3	5.4	—	15.2	303.2	318.3
1994	—	9.7	(s)	(s)	7.1	7.2	—	16.9	318.4	335.3
1995	—	10.1	R (s)	(s)	7.5	7.6	—	17.6	347.3	364.9
1996	—	10.7	(s)	(s)	9.4	9.5	—	20.2	381.5	401.7
1997	—	11.2	(s)	(s)	10.9	10.9	—	22.2	394.9	417.0

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 79. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Hawaii

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	—	—	1.12	0.85	0.91	3.32	0.42	1.55	—	1.55	9.92	5.65
1975	—	—	2.60	2.50	1.91	5.44	1.59	3.37	—	3.37	16.50	12.66
1980	—	12.70	6.60	—	3.81	10.81	3.86	6.60	—	8.75	26.40	17.85
1981	—	15.37	7.54	—	2.88	12.47	6.50	7.52	—	10.99	37.83	26.73
1982	—	14.37	7.49	—	4.56	12.28	6.18	7.41	—	10.95	39.53	28.26
1983	—	14.37	6.22	R 8.33	4.97	11.72	5.50	R 7.09	—	11.25	35.75	26.92
1984	—	16.92	5.96	R 8.24	4.93	11.60	5.27	R 7.01	—	12.51	35.75	28.54
1985	—	13.34	5.89	R 11.07	10.02	11.14	4.60	R 7.05	NA	R 10.94	34.41	25.69
1986	—	11.08	3.49	R 4.94	9.42	9.63	2.81	R 4.38	NA	7.95	27.29	19.93
1987	—	11.01	4.12	R 4.65	8.86	9.47	3.33	4.51	NA	7.00	27.52	18.10
1988	—	10.69	3.79	R 5.04	8.92	9.55	2.71	3.13	NA	4.10	25.60	10.37
1989	—	10.59	4.75	R 5.33	8.41	10.42	3.09	3.67	NA	4.75	26.97	12.12
1990	R 1.82	11.45	5.57	R 7.37	9.40	11.71	3.83	4.76	NA	6.21	29.77	15.91
1991	R 1.80	12.37	5.19	R 5.77	9.66	10.40	3.11	5.55	NA	8.05	30.23	20.44
1992	R 1.69	12.43	4.91	R 5.18	9.63	10.95	2.84	3.76	NA	5.42	30.81	15.75
1993	R 1.73	12.15	5.14	R 5.67	9.58	11.09	2.92	5.19	—	8.91	34.21	25.66
1994	R 2.02	11.80	4.72	R 4.95	10.50	11.27	2.66	3.57	—	6.43	34.19	22.29
1995	R 1.91	12.40	5.01	R 5.00	10.63	11.40	2.93	4.94	—	8.95	35.65	27.33
1996	—	13.62	5.94	5.22	11.50	12.07	3.51	6.43	—	11.27	38.05	31.14
1997	1.78	15.31	5.34	4.85	11.70	12.16	3.54	5.69	—	10.26	38.86	30.80
	Expenditures in Million Nominal Dollars											
1970	—	—	1.1	R (s)	R (s)	2.3	R (s)	4.2	—	4.2	26.1	30.3
1975	—	—	1.3	0.6	R (s)	2.8	R (s)	5.3	—	5.3	62.5	67.7
1980	—	21.0	15.3	—	1.1	3.1	0.6	20.0	—	41.0	131.7	172.7
1981	—	23.7	7.8	—	0.8	3.9	2.2	14.7	—	38.4	187.3	225.7
1982	—	22.8	2.4	—	1.1	3.8	4.1	11.4	—	34.2	189.9	224.1
1983	—	22.8	3.6	(s)	1.4	3.0	R (s)	8.4	—	31.2	175.7	206.9
1984	—	23.1	3.9	R (s)	R (s)	2.6	0.8	7.6	—	30.7	195.0	225.7
1985	—	26.8	4.7	R (s)	0.6	2.8	0.6	8.7	NA	R 35.6	189.3	R 224.9
1986	—	22.7	3.7	R (s)	0.6	2.3	1.2	7.8	NA	30.5	170.5	201.0
1987	—	23.7	11.6	R (s)	0.7	2.2	1.1	15.6	NA	39.4	182.4	221.7
1988	—	23.6	13.3	(s)	0.8	2.7	30.0	46.8	NA	70.4	181.0	251.4
1989	—	24.4	13.7	(s)	0.8	2.8	28.6	45.9	NA	70.2	198.0	268.2
1990	—	27.2	16.5	(s)	0.8	3.6	20.1	41.0	NA	68.2	228.8	297.0
1991	—	28.7	18.5	(s)	0.8	2.7	R (s)	22.4	NA	51.1	243.0	294.0
1992	—	28.6	12.5	(s)	2.5	2.6	19.0	36.6	NA	65.2	254.1	319.3
1993	—	27.4	8.4	(s)	0.5	0.6	0.6	10.2	—	37.6	282.4	320.0
1994	—	27.3	6.9	(s)	0.6	0.6	7.3	15.5	—	42.8	303.4	346.2
1995	—	28.6	7.4	(s)	0.6	0.7	1.2	9.8	—	38.4	337.9	376.4
1996	—	30.7	5.3	(s)	0.8	0.7	(s)	7.0	—	37.7	366.0	403.7
1997	—	27.6	9.6	(s)	0.8	0.7	(s)	11.3	—	39.0	376.3	415.3

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 80. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Hawaii

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	—	—	—	0.56	0.74	0.85	0.91	5.08	3.32	0.42	R 0.43	R 0.61	R 4.06	R 0.62	4.59	R 1.60
1975	—	—	—	—	1.77	2.22	2.50	1.91	7.48	5.44	1.92	R 1.31	R 2.10	R 4.06	R 2.11	9.84	R 4.94
1980	—	—	—	—	3.61	5.49	6.38	3.81	14.36	10.81	3.82	R 4.04	R 4.58	R 4.06	R 4.52	18.63	R 8.58
1981	—	—	—	—	4.58	6.42	—	2.88	18.00	12.47	4.53	R 4.46	R 5.29	R 4.06	R 5.15	30.55	R 13.19
1982	—	2.07	2.07	—	3.97	8.62	—	4.56	17.25	12.28	5.17	R 2.72	R 6.14	R 4.06	R 5.80	31.85	R 12.68
1983	—	2.11	2.11	—	4.16	6.43	R 7.06	4.97	16.98	11.72	5.19	R 3.67	R 5.40	R 4.06	R 4.88	27.67	R 14.67
1984	—	R 1.87	R 1.87	—	4.31	6.25	R 6.84	4.93	17.63	11.60	5.27	R 3.62	R 5.61	R 4.06	R 5.05	26.94	R 14.09
1985	—	R 2.30	R 2.30	—	4.47	6.14	R 6.85	10.02	17.61	11.14	4.60	R 3.39	R 5.25	R 4.06	R 4.86	25.08	R 12.23
1986	—	R 2.36	R 2.36	—	4.49	3.82	R 4.77	9.42	15.59	9.63	2.81	R —	R 3.50	R 4.06	R 3.52	18.96	R 8.96
1987	—	1.95	1.95	—	4.24	4.39	R 4.77	8.86	13.58	9.47	3.33	R —	R 4.12	R 4.06	R 3.93	20.08	R 9.54
1988	—	R 1.80	R 1.80	—	3.95	4.04	R 4.93	8.92	14.62	9.55	2.71	R —	R 3.55	R 4.06	R 3.48	18.20	R 8.66
1989	—	1.76	1.76	—	3.18	4.94	R 5.46	8.41	14.48	10.42	3.09	R —	R 4.14	d R 2.53	d R 3.75	19.42	d R 10.58
1990	—	1.82	1.82	—	3.15	5.64	R 7.12	9.40	14.60	11.71	3.83	R —	R 4.71	R 0.90	R 4.13	22.19	R 11.16
1991	—	1.80	1.80	—	3.29	5.32	R 6.02	9.66	16.80	10.40	3.11	R 16.33	R 4.28	R 0.82	R 3.88	22.60	R 11.53
1992	—	R 1.69	R 1.69	—	2.81	5.34	R 5.12	9.63	18.32	10.95	2.84	R 24.75	R 4.30	R 0.71	R 3.81	22.96	R 12.13
1993	—	R 1.73	R 1.73	—	2.94	5.57	R 5.08	9.58	18.96	11.09	2.92	R 19.10	R 5.21	R 0.68	R 4.44	26.22	R 13.85
1994	—	R 2.02	R 2.02	—	3.11	5.19	R 4.95	10.54	19.11	11.27	2.66	R 24.75	R 5.84	R 1.52	R 5.09	25.84	R 13.60
1995	—	R 1.91	R 1.91	—	3.20	5.33	R 5.21	9.99	R 19.41	11.40	2.93	R 23.89	R 5.68	R 1.48	R 4.56	27.17	R 13.06
1996	—	1.84	1.84	—	3.39	6.28	5.95	9.61	20.08	12.07	3.51	22.95	6.79	1.60	5.28	29.39	15.51
1997	—	1.78	1.78	10.48	3.46	5.68	5.95	9.22	17.86	12.16	3.54	24.62	6.74	1.43	5.47	30.25	15.51
	Expenditures in Million Nominal Dollars																
1970	—	—	—	—	1.4	2.8	R (s)	1.2	R (s)	0.9	3.5	R (s)	R 10.2	R (s)	R 10.4	25.3	R 35.7
1975	—	—	—	—	4.4	7.3	R (s)	2.4	1.3	1.5	11.7	R (s)	R 29.4	R (s)	R 29.7	80.1	R 109.8
1980	—	—	—	—	6.8	43.0	R (s)	11.3	1.7	2.8	29.4	R 1.0	R 96.3	R 10.0	R 106.3	176.7	R 283.0
1981	—	—	—	—	5.7	51.3	—	6.5	2.1	3.4	35.8	R 0.6	R 105.3	R 10.5	R 115.8	318.4	R 434.2
1982	—	2.4	2.4	—	4.5	64.7	—	21.3	1.8	3.3	58.5	R (s)	R 154.6	R 10.2	R 167.1	329.7	R 496.8
1983	—	2.2	2.2	—	7.2	12.3	(s)	19.8	1.9	2.4	9.9	R 0.7	R 54.0	R 11.5	R 67.8	289.7	R 357.5
1984	—	R 1.8	R 1.8	—	5.9	13.4	(s)	R (s)	2.1	3.2	33.3	R 0.8	R 58.7	R 11.8	R 72.2	270.9	R 343.1
1985	—	R 2.6	R 2.6	—	9.1	16.7	(s)	R (s)	1.9	6.1	36.0	R 0.8	R 70.9	R 11.7	R 85.2	252.0	R 337.2
1986	—	R 0.9	R 0.9	—	8.1	11.5	(s)	R (s)	1.7	5.1	30.3	R —	R 57.0	R 5.6	R 63.5	186.3	R 249.8
1987	—	3.1	3.1	—	11.2	19.4	(s)	R (s)	1.6	R 5.4	24.4	R —	R 62.1	R 5.6	R 70.8	192.9	R 263.7
1988	—	2.2	2.2	—	9.2	17.7	(s)	R (s)	1.7	5.5	25.9	R —	R 60.4	R 5.8	R 68.4	194.5	R 262.9
1989	—	1.4	1.4	—	6.3	14.7	(s)	R (s)	1.7	7.0	18.2	R —	R 48.3	d R 6.2	d R 55.9	223.6	d R 279.4
1990	—	1.3	1.3	—	8.0	26.5	(s)	R (s)	1.8	8.2	29.1	R —	R 74.1	2.1	R 77.4	265.7	R 343.1
1991	—	1.7	1.7	—	8.4	21.3	(s)	0.9	1.8	8.2	23.9	R 0.8	R 65.4	R 1.1	R 68.1	274.0	R 342.1
1992	—	2.0	2.0	—	8.0	18.6	(s)	2.5	2.0	8.7	16.8	R 1.3	R 58.0	R 1.0	R 61.0	282.5	R 343.5
1993	—	3.1	3.1	—	8.7	14.4	(s)	13.4	2.2	14.0	12.9	R 1.1	R 66.7	R 0.9	R 70.8	317.9	R 388.7
1994	—	3.7	3.7	—	8.4	10.4	(s)	33.1	2.3	14.5	13.1	R 1.4	R 83.3	R 2.2	R 89.2	315.5	R 404.7
1995	—	R 7.9	R 7.9	—	9.3	12.4	(s)	27.5	2.3	14.7	14.8	R 1.4	R 82.3	R 2.5	R 92.7	332.5	425.2
1996	—	6.7	6.7	—	9.0	11.6	(s)	31.1	2.3	16.4	9.5	1.6	81.5	2.5	90.7	372.0	462.6
1997	—	5.8	5.8	3.4	9.1	16.0	(s)	36.9	2.1	15.5	8.6	1.5	89.7	2.3	101.2	381.2	482.4

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 81. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Hawaii

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	—	—	2.17	1.37	0.73	0.91	5.08	3.32	0.37	1.34	1.34	—	1.34
1975	—	—	3.45	2.63	2.04	1.91	7.48	5.44	1.37	2.96	2.96	—	2.96
1980	—	—	9.02	7.39	6.21	3.81	14.36	10.81	3.27	7.40	7.40	—	7.40
1981	—	—	10.84	8.66	7.56	2.88	18.00	12.47	5.68	9.16	9.16	—	9.16
1982	—	—	10.92	8.51	7.37	4.56	17.25	12.28	5.68	9.29	9.29	—	9.29
1983	—	—	10.44	8.75	6.90	4.97	16.98	11.72	5.19	8.47	8.47	—	8.47
1984	—	—	10.27	8.66	6.55	4.93	17.63	11.60	5.20	8.18	8.18	—	8.18
1985	—	—	9.99	8.53	6.21	10.02	17.61	11.14	4.65	7.81	7.81	—	7.81
1986	—	—	8.41	7.31	4.36	9.42	15.59	9.63	2.62	6.41	6.41	—	6.41
1987	—	—	7.55	8.21	4.30	8.86	13.58	9.47	3.18	6.36	6.36	—	6.36
1988	—	—	7.41	7.95	4.04	8.92	14.62	9.55	2.49	6.22	6.22	—	6.22
1989	—	—	8.28	8.73	4.59	8.41	14.48	10.42	2.81	6.70	6.70	—	6.70
1990	—	—	9.32	9.69	5.99	9.40	14.60	11.71	3.51	7.93	7.93	—	7.93
1991	—	—	8.71	10.11	5.17	9.66	16.80	10.40	2.85	7.38	7.38	—	7.38
1992	—	—	8.54	9.63	4.90	9.63	18.32	10.95	2.56	7.01	7.01	—	7.01
1993	—	—	8.24	10.21	4.79	9.58	18.96	11.09	2.72	7.39	7.39	—	7.39
1994	—	—	7.96	10.15	4.31	9.65	19.11	11.27	2.59	7.20	7.20	—	7.20
1995	—	—	8.36	10.27	4.44	9.89	R 19.41	11.40	3.00	7.35	7.35	—	7.35
1996	—	—	9.29	11.02	5.24	9.39	20.08	12.07	3.48	8.43	8.43	—	8.43
1997	—	—	9.39	10.75	5.03	9.16	17.86	12.16	3.58	8.32	8.32	—	8.32
	Expenditures in Million Nominal Dollars												
1970	—	—	1.5	5.7	58.4	R (s)	2.1	96.0	4.1	167.9	167.9	—	167.9
1975	—	—	2.0	12.7	170.3	R (s)	3.4	189.2	8.7	386.6	386.6	—	386.6
1980	—	—	9.1	143.5	492.4	R (s)	6.5	404.9	29.7	1,086.3	1,086.3	—	1,086.3
1981	—	—	10.0	185.8	424.4	0.6	7.8	463.6	43.9	1,136.1	1,136.1	—	1,136.1
1982	—	—	7.5	128.4	307.0	0.7	6.8	461.5	37.8	949.8	949.8	—	949.8
1983	—	—	8.2	63.6	430.8	0.8	7.0	440.3	47.7	998.4	998.4	—	998.4
1984	—	—	7.5	70.1	475.6	R (s)	7.8	453.0	43.2	1,057.3	1,057.3	—	1,057.3
1985	—	—	7.8	161.7	462.1	R (s)	7.2	R 435.5	44.6	R 1,119.1	R 1,119.1	—	R 1,119.1
1986	—	—	11.8	129.4	248.5	R (s)	6.3	391.0	25.7	812.9	812.9	—	812.9
1987	—	—	9.5	82.7	277.1	R (s)	6.2	R 399.5	21.6	R 796.7	R 796.7	—	R 796.7
1988	—	—	10.5	151.3	271.7	R (s)	6.4	R 417.1	25.6	R 882.9	R 882.9	—	R 882.9
1989	—	—	12.0	166.8	341.8	R (s)	6.5	R 469.1	39.5	R 1,036.0	R 1,036.0	—	R 1,036.0
1990	—	—	12.8	218.5	425.3	R (s)	6.7	R 521.5	59.5	R 1,244.8	R 1,244.8	—	R 1,244.8
1991	—	—	11.5	248.7	323.4	R (s)	6.9	R 479.3	46.7	R 1,117.1	R 1,117.1	—	R 1,117.1
1992	—	—	10.5	145.7	276.6	1.2	7.7	R 498.7	61.0	R 1,001.6	R 1,001.6	—	R 1,001.6
1993	—	—	8.3	120.0	241.2	R (s)	8.1	R 513.0	46.0	R 936.9	R 936.9	—	R 936.9
1994	—	—	8.4	139.7	231.5	0.5	8.6	R 538.2	48.6	R 975.5	R 975.5	—	R 975.5
1995	—	—	9.2	129.9	250.5	R (s)	8.6	548.6	51.3	998.3	998.3	—	998.3
1996	—	—	7.7	105.3	299.9	(s)	8.6	577.0	15.6	1,014.3	1,014.3	—	1,014.3
1997	—	—	5.7	75.3	291.4	(s)	8.1	581.7	11.2	973.5	973.5	—	973.5

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 82. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Hawaii

Year	Coal	Natural Gas	Petroleum: Heavy Oil	Petroleum: Light Oil	Petroleum: Petroleum Coke	Petroleum: Total	Nuclear Fuel	Wood and Waste	Total Energy [a]
	Prices in Nominal Dollars per Million Btu								
1970	—	—	0.40	0.43	—	0.40	—	0.65	0.41
1975	—	—	1.57	1.71	—	1.58	—	0.92	1.58
1980	—	—	3.87	5.19	—	3.97	—	—	3.97
1981	—	—	6.51	8.80	—	6.66	—	1.24	6.64
1982	—	—	6.20	9.03	—	6.35	—	1.28	6.33
1983	—	—	5.53	7.00	—	5.61	—	1.12	5.59
1984	—	—	5.41	6.39	—	5.48	—	1.28	5.46
1985	—	—	4.86	6.40	—	4.95	—	0.79	4.94
1986	—	—	2.86	4.69	—	2.98	—	—	2.98
1987	—	—	3.44	4.63	—	3.54	—	—	3.54
1988	—	—	2.87	3.82	—	2.95	—	—	2.95
1989	—	—	3.29	3.61	—	3.32	—	([b])	3.32
1990	—	—	4.15	5.79	—	4.33	—	([b])	4.33
1991	—	—	3.31	4.34	—	3.44	—	—	3.44
1992	—	—	2.92	5.15	—	3.26	—	—	3.26
1993	—	—	3.09	5.27	—	3.49	—	—	3.49
1994	—	—	2.71	4.37	—	3.03	—	—	3.03
1995	—	—	2.98	4.55	—	3.28	—	—	3.28
1996	—	—	3.54	5.49	—	3.92	—	—	3.92
1997	—	—	3.64	4.35	—	3.78	—	—	3.78
	Expenditures in Million Nominal Dollars								
1970	—	—	17.0	[R] (s)	—	17.2	—	[R] (s)	17.4
1975	—	—	87.9	4.3	—	92.2	—	[R] (s)	92.4
1980	—	—	248.9	26.8	—	275.8	—	—	275.8
1981	—	—	423.4	40.0	—	463.3	—	[R] (s)	463.5
1982	—	—	389.6	31.8	—	421.4	—	[R] (s)	421.7
1983	—	—	355.7	26.4	—	382.1	—	[R] (s)	382.4
1984	—	—	351.3	30.7	—	382.0	—	[R] (s)	382.4
1985	—	—	314.2	28.0	—	342.3	—	[R] (s)	342.5
1986	—	—	193.4	22.5	—	215.9	—	—	215.9
1987	—	—	240.7	28.9	—	269.6	—	—	269.6
1988	—	—	212.2	28.3	—	240.5	—	—	240.5
1989	—	—	253.5	29.3	—	282.8	—	([b])	282.8
1990	—	—	316.8	55.0	—	371.8	—	([b])	371.8
1991	—	—	228.3	43.2	—	271.5	—	—	271.5
1992	—	—	184.3	58.6	—	242.9	—	—	242.9
1993	—	—	166.2	64.2	—	230.3	—	—	230.3
1994	—	—	141.7	53.5	—	195.1	—	—	195.1
1995	—	—	159.7	57.9	—	217.7	—	—	217.7
1996	—	—	192.9	73.6	—	266.5	—	—	266.5
1997	—	—	194.8	57.9	—	252.7	—	—	252.7

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[b] Utilities used biomass fuels at no charge or received a fee for accepting them.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 83. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Idaho

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.59	0.59	0.66	1.01	0.76	2.41	2.81	0.34	1.15	1.92	—	R 1.42	R 1.49	0.35	2.95	R 1.76
1975	—	0.98	0.98	1.43	2.55	2.12	3.81	4.81	2.01	2.73	3.64	—	R 1.48	R 2.77	1.89	4.11	R 3.00
1980	—	1.78	1.78	3.87	6.54	6.59	6.39	9.79	4.45	5.89	8.11	—	R 1.68	R 6.46	3.87	7.39	R 6.66
1981	—	1.92	1.92	4.10	7.77	7.67	8.22	11.29	4.93	7.86	9.74	—	R 1.75	R 7.46	4.58	7.91	R 7.58
1982	—	2.05	2.05	5.04	7.65	7.38	7.79	10.80	5.20	7.39	9.36	—	R 1.76	R 7.51	5.80	8.98	R 7.91
1983	—	2.11	2.11	5.51	7.67	7.42	8.49	9.46	5.13	R 6.84	8.60	—	R 1.72	R 7.27	6.25	9.22	R 7.79
1984	—	R 2.16	R 2.16	5.17	7.70	6.95	8.37	9.34	4.15	R 8.15	8.56	—	R 1.78	R 7.17	6.13	10.09	R 7.94
1985	—	R 1.85	R 1.85	5.07	7.68	6.68	9.67	9.31	3.67	R 7.46	8.52	—	R 1.76	R 7.10	5.60	10.66	R 8.04
1986	—	2.01	2.01	4.22	5.56	4.40	8.12	7.07	2.38	R 6.92	6.44	—	R 1.64	R 5.54	4.25	10.94	R 6.95
1987	—	1.97	1.97	5.86	5.81	4.39	9.29	7.26	2.57	R 6.09	6.56	—	R 1.56	R 5.98	2.78	10.81	R 7.24
1988	—	R 1.79	R 1.79	4.49	5.76	4.24	9.26	7.61	1.93	R 6.63	6.77	—	R 1.56	R 5.78	4.07	10.84	R 7.12
1989	—	1.82	1.82	3.57	6.66	4.93	10.12	8.21	1.66	R 4.87	R 7.33	—	e R 1.36	e R 5.84	R 2.29	11.10	e R 7.18
1990	—	R 1.77	R 1.77	3.43	7.84	6.07	10.29	9.15	2.51	R 4.16	8.13	—	1.67	6.37	R 1.63	11.14	7.58
1991	—	R 1.89	R 1.89	3.62	7.08	5.50	10.54	9.13	2.31	5.33	7.96	—	R 1.67	6.20	R 1.43	11.27	7.41
1992	—	1.89	1.89	3.62	7.21	5.44	10.28	9.52	1.78	4.61	8.14	—	R 1.63	R 6.32	R 1.38	11.33	R 7.61
1993	—	1.79	1.79	3.77	7.57	5.42	10.32	9.42	2.93	4.59	8.19	—	R 1.59	R 6.37	R 1.36	11.72	R 7.64
1994	—	1.87	1.87	4.25	7.34	5.01	8.82	9.63	2.24	R 4.39	8.09	—	R 1.60	R 6.47	R 1.30	11.74	R 7.75
1995	—	R 1.78	R 1.78	4.20	7.61	5.15	8.76	9.18	2.31	R 4.59	7.94	—	R 1.59	R 6.35	R 1.31	11.98	R 7.64
1996	—	1.98	1.98	3.60	8.54	6.06	9.44	10.19	1.79	4.93	8.94	—	1.55	6.94	1.30	11.59	8.02
1997	—	1.97	1.97	3.55	8.34	6.05	9.44	10.46	2.22	4.84	9.00	—	1.54	7.01	1.30	11.33	8.01
	Expenditures in Million Nominal Dollars																
1970	—	4.7	4.7	29.5	32.9	3.9	9.6	142.8	0.6	12.4	202.2	—	R 6.2	R 242.6	(s)	105.8	R 348.4
1975	—	13.1	13.1	84.6	112.3	11.0	16.7	285.0	8.6	22.5	456.2	—	R 6.0	R 560.0	R (s)	175.4	R 735.3
1980	—	17.1	17.1	182.6	215.6	44.9	23.3	570.0	17.1	42.5	913.5	—	R 6.5	R 1,119.6	R (s)	345.9	R 1,465.3
1981	—	18.9	18.9	179.9	215.6	51.4	26.3	624.0	1.7	41.9	960.9	—	R 7.1	R 1,166.7	R (s)	447.4	R 1,614.0
1982	—	21.3	21.3	199.2	199.7	42.0	29.0	582.7	7.0	38.0	898.6	—	R 7.0	R 1,126.0	(s)	493.8	R 1,619.8
1983	—	19.9	19.9	187.1	234.0	38.7	32.7	516.3	3.3	R 39.9	R 864.9	—	R 7.6	R 1,079.5	R (s)	497.5	R 1,576.9
1984	—	R 19.5	R 19.5	188.9	264.8	41.1	20.3	516.5	1.7	R 37.2	R 881.5	—	R 8.2	R 1,098.2	R (s)	554.4	R 1,652.6
1985	—	R 16.4	R 16.4	192.9	249.7	40.7	27.1	R 521.7	2.0	42.1	R 883.3	—	R 8.0	R 1,100.7	R (s)	596.4	R 1,696.9
1986	—	17.3	17.3	138.4	191.3	26.8	21.7	404.5	R (s)	R 35.1	R 679.7	—	R 8.9	R 844.3	(s)	589.5	R 1,433.7
1987	—	17.4	17.4	200.0	216.2	27.7	21.1	R 409.1	1.0	R 29.6	R 704.7	—	R 8.0	R 930.2	(s)	593.8	R 1,524.0
1988	—	R 17.4	R 17.4	167.7	218.4	27.3	25.3	R 448.1	0.7	R 26.9	R 746.7	—	R 8.4	R 940.1	(s)	635.1	R 1,575.1
1989	—	R 17.8	R 17.8	149.1	266.2	33.4	31.3	R 497.2	R (s)	33.7	R 862.2	—	e R 12.3	e R 1,041.5	R (s)	675.0	e R 1,716.3
1990	—	R 17.8	R 17.8	142.4	327.6	38.1	22.7	R 550.4	0.7	R 41.1	R 980.7	—	15.2	R 1,156.4	(s)	684.5	R 1,840.6
1991	—	R 23.2	R 23.2	173.8	351.0	28.9	31.0	R 556.6	0.6	R 42.0	R 1,010.2	—	R 16.9	R 1,224.5	(s)	693.8	R 1,917.9
1992	—	18.1	18.1	170.1	301.9	29.1	24.9	R 597.6	R (s)	R 50.1	R 1,003.9	—	R 17.5	R 1,210.6	R -0.9	734.7	R 1,944.4
1993	—	17.5	17.5	205.2	341.6	32.1	25.4	R 631.7	0.7	R 53.5	R 1,085.0	—	R 17.6	R 1,325.7	(s)	748.6	R 2,073.9
1994	—	18.1	18.1	230.2	345.9	33.1	20.7	R 654.3	R (s)	59.1	R 1,113.3	—	R 18.2	R 1,380.7	R -1.0	796.0	R 2,175.7
1995	—	R 15.9	R 15.9	248.1	370.5	44.3	24.1	R 651.9	R (s)	R 68.4	R 1,159.4	—	R 20.9	R 1,444.4	(s)	802.2	R 2,246.4
1996	—	14.5	14.5	226.4	470.4	29.8	93.0	758.4	(s)	74.2	1,425.8	—	20.2	1,687.7	-0.8	835.4	2,522.4
1997	—	12.6	12.6	226.1	480.9	26.1	94.0	794.6	(s)	75.0	1,470.6	—	19.1	1,729.4	-0.9	821.1	2,549.5

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 84. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Idaho

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	0.99	1.31	1.40	—	2.83	1.91	0.72	R 1.53	4.81	R 2.56
1975	1.78	2.07	2.82	—	4.17	3.25	1.43	R 2.43	5.27	R 3.41
1980	2.56	4.73	6.60	—	7.85	6.97	3.66	R 5.24	8.54	R 7.10
1981	2.85	5.21	7.96	—	10.67	8.78	4.51	R 6.14	9.21	R 7.98
1982	3.11	6.46	7.96	—	9.28	8.52	4.37	R 6.74	9.88	R 8.71
1983	2.04	7.05	7.67	R 7.79	9.88	R 8.32	4.23	R 7.21	9.91	R 8.78
1984	2.05	6.60	7.39	R 8.01	9.22	R 7.77	4.30	R 6.68	11.96	R 9.82
1985	1.97	6.57	7.29	R 8.62	9.55	7.84	4.14	R 6.81	12.60	R 10.21
1986	1.91	5.89	5.59	R 4.71	9.70	R 6.49	3.32	R 5.93	13.14	R 10.17
1987	1.54	5.41	5.21	R 4.71	10.64	R 6.36	3.16	R 5.65	13.45	R 10.33
1988	1.26	5.38	5.21	R 4.39	10.38	R 6.48	3.19	R 5.55	13.88	R 10.38
1989	1.56	4.92	5.89	R 4.60	12.49	R 7.94	3.53	R 5.73	14.11	R 10.52
1990	1.55	4.91	7.37	R 5.98	11.73	R 8.54	4.75	R 5.87	14.28	R 10.67
1991	1.49	5.02	7.20	R 7.32	12.24	R 8.44	4.54	R 5.96	14.32	R 10.46
1992	1.57	5.08	6.49	R 6.88	11.55	7.73	4.15	R 5.68	14.44	R 10.54
1993	1.29	5.18	6.53	R 6.98	11.50	R 7.75	4.06	R 5.71	14.64	R 10.42
1994	1.38	5.10	5.97	R 5.95	10.09	R 7.07	3.94	R 5.43	14.92	R 10.55
1995	1.37	5.43	6.35	R 6.16	10.03	R 7.48	3.86	R 5.76	15.61	R 10.93
1996	1.27	5.05	7.06	6.92	11.25	8.49	4.43	5.75	15.48	10.71
1997	1.27	4.97	7.21	7.24	11.31	8.54	4.41	5.73	15.09	10.51
	Expenditures in Million Nominal Dollars									
1970	1.5	10.7	6.8	—	7.6	14.4	(s)	R 26.9	38.6	R 65.5
1975	2.7	30.7	16.0	—	11.0	27.0	0.5	R 60.9	69.5	R 130.5
1980	2.3	36.8	18.7	—	9.1	27.8	1.2	R 68.0	143.8	R 211.8
1981	1.8	37.4	19.6	—	11.3	30.9	1.5	R 71.7	161.7	R 233.4
1982	1.7	47.5	12.8	—	10.9	23.7	1.6	R 74.5	185.3	R 259.8
1983	1.3	48.1	26.2	R (s)	14.2	40.6	1.5	R 91.5	176.2	R 267.6
1984	1.3	50.6	25.8	R (s)	8.5	R 34.5	2.1	R 88.5	233.0	R 321.5
1985	0.7	53.5	27.0	R (s)	11.3	38.3	1.9	R 94.4	248.5	R 343.0
1986	0.6	43.8	20.6	R (s)	10.2	R 30.9	1.5	R 76.8	243.5	R 320.4
1987	R (s)	38.5	17.4	R (s)	9.8	R 27.4	0.7	R 66.9	239.0	R 305.9
1988	0.8	42.2	18.7	R (s)	12.3	R 31.2	0.7	R 74.9	258.0	R 332.9
1989	1.0	44.4	19.1	R (s)	18.4	37.6	0.8	R 83.7	275.0	R 358.7
1990	0.7	43.3	22.7	R (s)	13.5	R 36.5	4.1	R 84.6	274.1	R 358.7
1991	0.8	53.1	29.5	R (s)	16.5	R 46.0	4.1	R 104.0	291.6	R 395.7
1992	0.6	50.5	21.5	R (s)	12.4	34.1	4.0	R 89.2	282.7	R 371.9
1993	R (s)	67.6	23.5	R (s)	13.6	37.2	3.7	R 108.9	311.9	R 420.8
1994	R (s)	65.0	18.2	R (s)	11.3	29.6	3.6	R 98.5	316.8	R 415.3
1995	R (s)	72.7	18.9	R 0.5	13.6	R 33.0	3.9	R 109.9	329.9	R 439.8
1996	(s)	77.7	21.7	(s)	18.3	40.4	4.4	122.8	343.8	466.6
1997	(s)	78.0	24.3	(s)	18.4	42.8	3.2	124.3	341.3	465.6

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 85. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Idaho

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.50	0.96	1.21	0.82	1.55	2.81	—	1.35	0.72	0.95	4.10	R 2.11
1975	0.87	1.47	2.62	2.59	3.25	4.81	—	3.01	1.43	1.66	4.88	2.91
1980	1.70	4.36	6.41	—	5.72	9.79	4.63	5.65	3.66	4.53	8.33	6.49
1981	1.86	4.67	7.63	—	7.01	11.29	5.43	8.77	4.51	5.12	8.72	7.48
1982	1.99	5.71	7.61	8.18	7.10	10.80	6.62	8.14	4.37	R 6.20	10.94	9.00
1983	2.11	5.95	6.62	R 7.79	7.66	9.46	5.24	7.18	4.23	5.91	11.30	9.05
1984	R 2.17	5.46	6.51	R 8.01	7.85	9.34	4.15	7.51	4.30	5.76	11.81	8.81
1985	R 1.85	5.42	6.22	R 8.62	9.76	9.31	3.67	7.01	NA	R 5.62	12.10	R 9.12
1986	R 2.02	4.68	4.00	R 4.71	7.10	7.07	2.38	R 5.05	NA	4.64	12.58	9.09
1987	1.98	4.44	4.51	R 4.71	8.38	7.26	2.57	R 5.25	NA	4.61	12.25	9.02
1988	1.82	4.43	4.30	R 4.39	8.39	7.61	1.93	5.84	NA	4.70	12.06	8.67
1989	1.84	4.09	5.08	R 4.60	7.96	8.21	1.66	6.48	NA	4.62	12.58	8.87
1990	R 1.78	4.07	5.69	R 5.98	8.71	9.15	2.51	6.64	NA	4.53	12.52	9.18
1991	R 1.91	4.28	5.19	R 7.32	9.12	9.13	2.31	6.95	NA	R 4.92	12.54	8.97
1992	1.90	4.27	5.22	R 6.88	9.26	9.52	1.78	6.96	NA	4.96	12.62	9.39
1993	R 1.81	4.48	5.29	R 6.98	9.23	9.42	2.93	5.76	4.06	R 4.57	13.04	R 9.27
1994	1.89	4.83	4.91	R 5.95	8.69	9.63	2.24	5.43	3.94	4.83	12.84	R 9.57
1995	R 1.79	4.73	5.25	R 6.16	8.42	9.18	2.31	R 5.72	3.86	4.83	13.23	R 9.61
1996	2.00	4.43	6.03	6.92	9.89	10.19	1.79	7.01	4.43	5.09	12.58	9.24
1997	1.99	4.36	5.97	7.24	10.37	10.46	2.22	6.65	4.41	4.76	12.29	9.13
	Expenditures in Million Nominal Dollars											
1970	1.4	5.9	2.1	0.5	0.7	1.0	—	4.3	(s)	11.7	29.2	40.9
1975	2.4	18.8	5.2	1.2	1.5	2.3	—	10.2	(s)	31.5	58.8	90.3
1980	2.8	26.4	8.1	—	1.2	5.1	14.2	28.6	(s)	57.8	113.0	170.8
1981	2.2	27.1	5.4	—	1.3	7.8	1.0	15.5	(s)	44.8	144.8	R 189.6
1982	2.0	35.1	20.8	R (s)	1.5	7.4	0.7	30.8	(s)	67.9	173.1	241.0
1983	2.5	35.9	15.3	R (s)	1.9	5.9	0.6	24.0	(s)	62.4	166.7	229.1
1984	2.6	48.5	15.4	R (s)	1.3	13.0	R (s)	30.1	(s)	81.2	169.4	R 250.7
1985	R 1.3	51.2	13.3	R (s)	2.0	6.6	0.6	22.6	NA	R 75.1	189.6	R 264.6
1986	1.1	40.9	6.6	(s)	1.3	5.0	(s)	13.1	NA	55.0	190.4	245.4
1987	0.7	34.4	11.1	R (s)	1.4	5.4	R (s)	18.0	NA	53.1	192.7	245.9
1988	2.0	37.3	10.8	(s)	1.8	R 15.0	R (s)	R 27.7	NA	67.1	202.0	269.1
1989	2.1	37.9	10.3	(s)	2.1	15.4	R (s)	28.0	NA	68.0	213.0	281.0
1990	1.6	35.7	11.3	R (s)	1.8	7.1	R (s)	20.5	NA	R 57.8	222.6	R 280.4
1991	1.9	42.4	13.1	(s)	2.2	16.5	(s)	R 31.9	NA	76.1	221.0	297.1
1992	1.4	39.3	12.6	(s)	1.8	15.6	R (s)	30.2	NA	70.9	246.3	317.2
1993	1.1	49.6	10.4	(s)	1.9	1.9	0.6	14.8	(s)	65.6	233.6	299.2
1994	1.1	50.5	12.6	R (s)	1.7	1.9	R (s)	16.4	(s)	R 68.3	263.4	R 331.7
1995	1.0	50.5	13.9	R (s)	2.0	1.8	R (s)	17.9	(s)	R 69.6	252.0	R 321.7
1996	0.8	52.5	21.5	(s)	2.8	8.9	(s)	33.5	(s)	87.1	267.4	354.5
1997	0.9	51.3	16.2	(s)	3.0	2.2	(s)	21.4	(s)	73.9	263.6	337.6

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 86. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Idaho

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	0.50	0.50	0.42	0.60	0.77	0.82	1.55	5.08	2.81	0.34	4.14	0.96	R 1.49	R 0.74	1.84	R 0.98
1975	—	0.87	0.87	1.11	1.88	2.40	2.59	3.25	7.48	4.81	2.01	—	2.60	R 1.49	R 1.80	2.70	R 1.95
1980	—	1.70	1.70	3.58	3.64	6.02	—	5.72	14.36	9.79	3.76	—	6.02	R 1.49	R 4.16	5.44	R 4.40
1981	—	1.86	1.86	3.73	4.34	7.39	7.78	7.01	18.00	11.29	4.37	—	7.34	R 1.49	R 4.55	6.29	R 5.00
1982	—	1.99	1.99	4.48	4.28	7.11	8.18	7.10	17.25	10.80	5.08	—	6.96	R 1.49	R 4.68	6.64	R 5.20
1983	—	2.11	2.11	4.89	4.19	6.91	R 7.12	7.66	16.98	9.46	5.11	—	6.67	R 1.49	R 4.93	7.23	R 5.58
1984	—	R 2.17	R 2.17	4.49	4.73	6.55	R 7.06	7.85	17.63	9.34	4.15	—	6.76	R 1.49	R 4.80	7.19	R 5.50
1985	—	R 1.85	R 1.85	4.32	4.78	6.46	R 6.70	9.76	17.61	9.31	3.67	—	6.79	R 1.49	R 4.63	7.69	R 5.51
1986	—	R 2.02	R 2.02	3.23	4.40	4.01	R 5.32	7.10	15.59	7.07	2.38	—	4.78	R 1.49	R 3.50	7.70	R 4.71
1987	—	1.98	1.98	6.59	3.43	4.63	R 5.29	8.38	13.58	7.26	2.57	—	4.99	R 1.49	R 4.77	7.56	R 5.57
1988	—	1.82	1.82	4.18	3.39	4.36	R 4.45	8.39	14.62	7.61	1.93	—	4.89	R 1.49	R 3.86	7.53	R 4.95
1989	—	1.84	1.84	2.84	2.79	5.28	R 5.09	7.96	14.48	8.21	1.66	—	5.21	d R 1.30	d R 3.41	7.67	d R 4.57
1990	—	R 1.78	R 1.78	2.65	2.64	6.32	R 6.75	8.71	14.60	9.15	2.51	—	5.49	1.35	R 3.52	7.68	4.61
1991	—	R 1.91	R 1.91	2.85	3.28	5.67	R 6.23	9.12	16.80	9.13	2.31	16.33	5.65	1.39	3.69	7.69	4.60
1992	—	1.90	1.90	2.88	2.93	5.61	R 5.65	9.26	18.32	9.52	1.78	24.75	5.27	R 1.39	R 3.46	7.98	R 4.64
1993	—	R 1.81	R 1.81	2.91	2.83	5.96	R 5.76	9.23	18.96	9.42	2.93	19.10	5.28	R 1.38	R 3.41	8.24	R 4.60
1994	—	1.89	1.89	3.71	2.75	5.44	R 5.14	7.38	19.11	9.63	2.24	24.75	4.89	R 1.38	R 3.65	8.27	R 4.79
1995	—	R 1.79	R 1.79	3.56	3.15	5.71	R 5.37	7.31	R 19.41	9.18	2.31	23.89	5.10	R 1.39	R 3.66	8.23	R 4.73
1996	—	2.00	2.00	2.70	3.46	6.49	6.37	9.06	20.08	10.19	1.79	22.95	6.32	1.29	4.03	7.84	4.91
1997	—	1.99	1.99	2.68	3.49	6.38	6.14	9.04	17.86	10.46	2.22	24.62	6.28	1.34	4.07	7.61	4.88
	Expenditures in Million Nominal Dollars																
1970	—	1.8	1.8	12.8	4.5	14.3	0.5	1.2	1.0	9.2	0.6	R (s)	31.8	R 5.9	R 52.4	37.9	R 90.3
1975	—	8.0	8.0	35.0	11.0	55.0	0.9	3.9	2.0	20.2	8.6	—	101.7	R 5.5	R 150.2	47.1	R 197.2
1980	—	12.0	12.0	119.2	19.2	77.5	—	12.6	3.8	32.9	3.0	—	149.0	R 5.2	R 285.5	89.1	R 374.6
1981	—	14.9	14.9	115.3	15.5	94.6	0.7	12.6	4.6	24.0	0.7	—	152.6	R 5.5	R 288.4	140.9	R 429.3
1982	—	17.5	17.5	116.6	15.4	59.6	1.1	14.7	4.0	22.2	6.3	—	123.2	R 5.3	R 262.6	135.4	R 398.1
1983	—	16.1	16.1	103.1	18.4	84.8	R (s)	14.6	4.1	14.8	2.7	—	139.6	R 6.0	R 264.8	154.6	R 419.4
1984	—	R 15.5	R 15.5	89.8	14.9	82.1	R (s)	8.1	4.6	21.7	1.3	—	R 132.8	R 6.1	R 244.4	152.0	R 396.4
1985	—	R 14.4	R 14.4	88.1	20.0	65.9	R (s)	11.7	4.3	25.0	1.4	—	128.4	R 6.1	R 237.1	158.3	R 395.4
1986	—	R 15.7	R 15.7	53.7	15.9	49.9	(s)	8.6	3.7	18.1	R (s)	—	96.4	R 7.4	R 173.1	155.6	R 328.7
1987	—	16.5	16.5	127.0	11.4	64.5	(s)	8.9	3.6	16.5	0.9	—	105.8	R 7.3	R 256.6	162.1	R 418.7
1988	—	R 14.6	R 14.6	88.2	9.0	62.4	(s)	9.9	3.8	16.3	0.6	—	102.1	R 7.6	R 212.5	175.0	R 387.5
1989	—	14.7	14.7	66.9	15.4	82.3	(s)	9.6	3.8	18.7	R (s)	—	130.0	d R 11.5	d R 223.1	187.0	d R 410.1
1990	—	R 15.5	R 15.5	63.4	22.4	100.4	R (s)	5.9	4.0	R 16.9	R (s)	—	R 150.2	11.1	R 240.3	187.8	R 428.1
1991	—	R 20.5	R 20.5	78.4	21.5	123.7	R (s)	11.1	4.1	21.1	0.6	1.6	183.8	12.8	R 295.4	181.2	R 476.6
1992	—	16.1	16.1	80.3	28.5	80.3	(s)	9.5	4.6	19.4	R (s)	2.6	145.1	R 13.6	R 255.0	205.7	R 460.7
1993	—	15.9	15.9	88.0	28.8	79.4	(s)	8.7	4.8	16.7	R (s)	2.2	140.8	R 13.9	R 258.7	203.1	R 461.7
1994	—	16.5	16.5	114.7	32.9	80.0	R (s)	6.3	5.1	19.2	R (s)	2.9	146.4	R 14.3	R 291.9	215.8	R 507.7
1995	—	R 14.5	R 14.5	124.9	42.0	87.2	R (s)	7.7	R 5.1	19.3	(s)	2.8	164.2	R 16.7	R 320.3	220.3	R 540.6
1996	—	13.4	13.4	96.1	46.7	110.4	(s)	71.2	5.1	22.0	(s)	3.2	258.7	15.4	383.7	224.2	607.9
1997	—	11.4	11.4	96.6	48.1	116.2	(s)	72.0	4.8	23.4	(s)	3.1	268.0	15.6	391.6	216.2	607.8

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 87. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Idaho

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.50	—	2.17	1.31	0.76	1.55	5.08	2.81	0.39	2.47	2.47	—	2.47
1975	0.87	—	3.45	2.68	2.12	3.25	7.48	4.81	—	4.25	4.25	—	4.25
1980	—	—	9.02	6.95	6.59	5.72	14.36	9.79	—	8.98	8.98	—	8.98
1981	—	—	10.84	8.15	7.67	7.01	18.00	11.29	—	10.51	10.51	—	10.51
1982	—	—	10.92	7.95	7.38	7.10	17.25	10.80	—	10.05	10.05	—	10.05
1983	—	—	10.44	8.61	7.42	7.66	16.98	9.46	—	9.25	9.25	—	9.25
1984	—	—	10.27	8.85	6.95	7.85	17.63	9.34	—	9.13	9.13	—	9.13
1985	—	—	9.99	8.70	6.68	9.76	17.61	9.31	—	9.06	9.06	—	9.06
1986	—	—	8.41	6.86	4.40	7.10	15.59	7.07	—	6.91	6.91	—	6.91
1987	—	—	7.55	7.06	4.39	8.38	13.58	7.26	—	7.06	7.06	—	7.06
1988	—	—	7.41	7.23	4.24	8.39	14.62	7.61	—	7.33	7.33	—	7.33
1989	—	—	8.28	8.08	4.93	7.96	14.48	8.21	—	R 7.98	R 7.98	—	R 7.98
1990	—	—	9.32	9.27	6.07	8.71	14.60	9.15	—	9.01	9.01	—	9.01
1991	—	—	8.71	8.74	5.50	9.12	16.80	9.13	—	8.87	8.87	—	8.87
1992	—	—	8.54	8.59	5.44	9.26	18.32	9.52	—	9.12	9.12	—	9.12
1993	—	—	8.24	8.70	5.42	9.23	18.96	9.42	—	9.06	9.06	—	9.06
1994	—	2.21	7.96	8.77	5.01	7.93	19.11	9.63	—	9.17	9.17	—	9.17
1995	—	3.26	8.36	9.02	5.15	7.75	R 19.41	9.18	—	8.89	8.89	—	8.89
1996	—	3.05	9.29	10.08	6.06	8.63	20.08	10.19	—	10.04	10.04	—	10.04
1997	—	4.06	9.39	9.71	6.05	8.12	17.86	10.46	—	10.12	10.12	—	10.12
	Expenditures in Million Nominal Dollars												
1970	(s)	—	1.7	9.7	3.9	R (s)	3.7	132.6	(s)	151.6	151.6	—	151.6
1975	(s)	—	2.1	36.0	11.0	R (s)	5.4	262.5	—	317.3	317.3	—	317.3
1980	—	—	7.4	111.3	44.9	R (s)	12.0	532.0	—	708.1	708.1	—	708.1
1981	—	—	6.6	96.0	51.4	1.1	14.5	592.2	—	761.8	761.8	—	761.8
1982	—	—	4.6	106.6	42.0	1.9	12.6	553.1	—	720.9	720.9	—	720.9
1983	—	—	3.9	107.6	38.7	2.0	13.0	495.6	—	660.8	660.8	—	660.8
1984	—	—	2.9	141.5	41.1	2.4	14.4	481.8	—	R 684.0	R 684.0	—	R 684.0
1985	—	—	4.0	143.5	40.7	2.1	13.4	R 490.2	—	R 693.9	R 693.9	—	R 693.9
1986	—	—	3.7	114.1	26.8	1.7	11.6	381.3	—	539.2	539.2	—	539.2
1987	—	—	2.9	123.1	27.7	1.1	11.4	R 387.2	—	R 553.5	R 553.5	—	R 553.5
1988	—	—	1.9	126.5	27.3	1.2	11.9	R 416.8	—	R 585.6	R 585.6	—	R 585.6
1989	—	—	2.3	154.3	33.4	1.2	12.1	R 463.2	—	R 666.5	R 666.5	—	R 666.5
1990	—	—	1.9	193.1	38.1	1.5	12.5	R 526.3	—	R 773.4	R 773.4	—	R 773.4
1991	—	—	1.7	184.7	28.9	1.3	12.9	R 519.0	—	R 748.5	R 748.5	—	R 748.5
1992	—	—	(s)	187.4	29.1	1.2	14.3	R 562.6	—	R 794.6	R 794.6	—	R 794.6
1993	—	—	2.6	228.2	32.1	1.1	15.1	R 613.1	—	R 892.2	R 892.2	—	R 892.2
1994	—	(s)	2.2	235.0	33.1	1.4	15.9	R 633.2	—	R 920.9	R 920.9	—	R 920.9
1995	—	R (s)	2.0	250.5	44.3	0.8	15.9	630.8	—	944.3	944.4	—	944.4
1996	—	(s)	2.6	316.8	29.8	0.7	15.9	727.5	—	1,093.2	1,093.3	—	1,093.3
1997	—	(s)	3.4	324.2	26.1	0.6	15.0	769.1	—	1,138.3	1,138.5	—	1,138.5

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 88. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Idaho

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	—	—	—	0.35	—	0.35	—	—	0.35
1975	—	1.38	—	2.20	—	2.20	—	—	1.89
1980	—	3.76	—	6.39	—	6.39	—	—	3.87
1981	—	4.21	—	R 7.32	—	R 7.32	—	—	4.58
1982	—	5.34	—	6.83	—	6.83	—	—	5.80
1983	—	6.26	—	6.21	—	6.21	—	—	6.25
1984	—	6.12	—	6.14	—	6.14	—	—	6.13
1985	—	5.44	—	6.07	—	6.07	—	—	5.60
1986	—	4.70	—	3.74	—	3.74	—	—	4.25
1987	—	2.31	—	R 4.24	—	R 4.24	—	—	2.78
1988	—	—	—	4.07	—	4.07	—	—	4.07
1989	—	—	—	4.45	—	4.45	—	—	R 2.29
1990	—	—	—	5.38	—	5.38	—	—	R 1.63
1991	—	—	—	R 5.03	—	R 5.03	—	—	R 1.43
1992	—	—	—	4.83	—	4.83	—	—	R 1.38
1993	—	—	—	4.99	—	4.99	—	—	R 1.36
1994	—	—	—	4.47	—	4.47	—	—	R 1.30
1995	—	—	—	R 4.81	—	R 4.81	—	—	R 1.31
1996	—	—	—	5.52	—	5.52	—	—	1.30
1997	—	—	—	5.33	—	5.33	—	—	1.30
	Expenditures in Million Nominal Dollars								
1970	—	—	—	(s)	—	(s)	—	—	(s)
1975	—	(s)	—	R (s)	—	R (s)	—	—	R (s)
1980	—	R (s)	—	(s)	—	(s)	—	—	R (s)
1981	—	R (s)	—	(s)	—	(s)	—	—	R (s)
1982	—	(s)	—	(s)	—	(s)	—	—	(s)
1983	—	R (s)	—	(s)	—	(s)	—	—	R (s)
1984	—	(s)	—	(s)	—	(s)	—	—	R (s)
1985	—	R (s)	—	(s)	—	(s)	—	—	R (s)
1986	—	(s)	—	(s)	—	(s)	—	—	(s)
1987	—	(s)	—	(s)	—	(s)	—	—	(s)
1988	—	—	—	(s)	—	(s)	—	—	(s)
1989	—	—	—	R (s)	—	R (s)	—	—	R (s)
1990	—	—	—	(s)	—	(s)	—	—	(s)
1991	—	—	—	(s)	—	(s)	—	—	(s)
1992	—	—	—	(s)	—	(s)	—	—	R 0.9
1993	—	—	—	(s)	—	(s)	—	—	(s)
1994	—	—	—	(s)	—	(s)	—	—	R 1.0
1995	—	—	—	(s)	—	(s)	—	—	(s)
1996	—	—	—	(s)	—	(s)	—	—	0.8
1997	—	—	—	(s)	—	(s)	—	—	0.9

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 89. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Illinois

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	0.42	0.35	0.36	0.72	1.11	0.74	1.39	3.05	0.60	R 1.48	R 1.88	0.15	R 2.74	1.08	0.32	5.98	R 1.70
1975	1.49	0.82	0.89	1.38	2.58	2.09	2.68	4.73	1.68	R 3.07	R 3.42	0.18	R 2.89	R 2.01	0.69	9.35	R 3.16
1980	1.93	1.63	1.64	3.33	6.88	6.38	5.16	9.81	4.92	R 7.57	R 7.77	0.33	R 3.23	R 4.33	1.60	15.33	R 6.71
1981	2.09	1.86	1.87	3.77	8.16	7.55	5.62	10.64	6.18	R 9.38	R 8.93	0.42	R 3.58	R 4.86	1.78	17.70	R 7.66
1982	2.23	1.98	1.99	4.43	7.97	7.23	5.79	10.32	6.00	R 9.30	R 8.86	0.51	R 3.52	R 5.00	1.81	20.07	R 8.20
1983	2.11	2.02	2.02	4.97	7.47	6.63	6.49	9.08	5.51	R 8.89	R 8.13	0.56	R 3.47	R 4.88	1.81	R 22.44	R 8.48
1984	2.09	1.96	R 1.98	4.84	7.72	6.42	6.27	8.82	5.64	R 9.19	R 8.22	0.56	R 3.51	R 4.68	1.63	21.10	R 8.14
1985	2.08	2.12	2.12	5.00	7.64	6.00	9.14	9.03	5.22	R 8.53	R 8.58	0.64	R 3.45	R 4.84	1.67	21.07	R 8.45
1986	2.05	2.06	2.06	4.59	5.73	4.22	7.61	6.78	4.10	R 7.07	R 6.56	0.64	R 2.83	R 4.05	1.61	22.37	R 7.73
1987	1.92	1.93	1.93	4.36	6.07	4.21	7.17	7.23	3.27	R 6.85	R 6.80	0.64	R 2.75	R 3.98	1.42	22.86	R 7.91
1988	2.02	1.82	1.84	4.10	6.00	3.84	7.27	7.27	2.63	R 6.65	R 6.79	0.66	R 2.76	R 3.77	1.23	21.49	R 7.54
1989	1.92	1.75	1.77	4.41	6.44	4.32	7.65	8.00	2.87	R 6.47	R 7.29	0.60	e R 2.88	e R 3.85	1.13	22.07	e R 7.95
1990	1.84	1.70	1.72	4.57	7.99	5.84	9.55	9.35	3.00	R 6.79	R 8.48	0.57	R 2.67	R 4.23	1.12	22.02	R 8.64
1991	1.99	1.67	1.70	4.40	7.40	4.75	8.55	9.13	2.71	R 6.56	R 8.08	0.49	R 2.59	R 4.02	1.06	22.41	R 8.51
1992	2.00	1.67	1.70	4.50	7.29	4.44	8.11	8.79	2.80	R 6.54	R 7.84	0.52	R 2.38	R 4.03	1.04	R 22.60	R 8.39
1993	1.95	1.65	1.67	4.97	7.40	4.12	8.89	8.57	2.69	R 6.89	R 7.84	0.52	R 1.89	R 4.09	1.07	22.76	R 8.64
1994	1.90	1.57	1.59	4.88	7.17	3.82	7.49	8.95	2.65	R 6.69	R 7.85	0.53	R 2.60	R 4.11	1.07	21.79	R 8.58
1995	1.97	1.59	1.62	4.10	7.23	3.86	7.75	9.42	2.71	R 6.87	R 8.16	0.51	R 2.49	R 3.96	1.04	22.61	R 8.56
1996	1.94	1.59	1.62	4.73	8.22	4.66	9.35	10.20	3.37	7.08	8.90	0.51	2.60	4.41	1.12	22.59	8.97
1997	1.83	1.53	1.55	5.03	7.82	4.37	9.19	9.88	3.15	6.54	8.56	0.51	2.27	4.55	1.19	22.65	9.03
	Expenditures in Million Nominal Dollars																
1970	41.6	287.8	329.4	831.7	287.9	95.2	148.4	1,715.3	89.2	R 248.3	R 2,584.3	4.1	R 21.9	R 3,771.5	-254.5	R 1,417.0	R 4,933.9
1975	120.7	629.8	750.5	1,512.9	770.9	292.9	329.8	2,945.6	223.0	R 450.8	R 5,013.0	45.2	R 24.4	R 7,346.0	-689.6	2,644.9	R 9,301.2
1980	93.7	1,294.5	1,388.1	3,601.8	1,464.6	710.2	702.6	5,622.7	764.2	R 1,055.0	R 10,319.2	99.4	R 52.9	R 15,461.5	-1,794.2	R 4,948.4	R 18,615.6
1981	97.1	1,392.2	1,489.3	3,970.1	1,639.0	723.0	689.9	5,999.4	727.1	R 1,148.6	R 10,927.0	135.3	R 60.6	R 16,582.3	-1,912.2	R 5,689.1	R 20,359.1
1982	105.5	1,447.5	1,553.0	4,355.7	1,511.7	680.5	550.2	5,703.9	510.5	R 930.3	R 9,887.2	157.4	R 61.1	R 16,014.4	-1,853.1	6,248.4	R 20,409.7
1983	114.9	1,600.0	1,714.9	4,720.4	1,512.2	598.1	625.7	5,103.4	393.5	R 952.8	R 9,185.7	171.2	R 63.3	R 15,855.4	-1,933.4	R 7,369.7	R 21,291.7
1984	140.2	R 1,505.3	R 1,645.5	5,059.4	1,635.6	96.4	576.3	4,867.9	276.2	R 1,052.5	R 8,504.8	213.8	R 62.5	R 15,486.0	-1,784.0	R 7,057.8	R 20,759.8
1985	131.6	R 1,588.6	R 1,720.3	4,873.0	1,431.3	92.2	874.5	R 5,273.5	157.5	R 1,035.8	R 8,864.8	270.5	R 59.9	R 15,788.4	-1,856.1	R 7,062.7	R 20,994.9
1986	122.9	1,531.1	1,654.0	4,234.0	1,171.4	48.4	880.3	R 3,869.3	181.9	R 867.8	R 7,019.0	294.6	R 44.1	R 13,245.7	-1,849.5	R 7,688.9	19,085.1
1987	129.3	R 1,378.7	R 1,508.0	3,771.4	1,205.7	46.8	1,073.6	R 4,195.8	126.4	R 857.1	R 7,505.3	347.5	R 45.2	R 13,177.5	-1,678.7	R 8,095.3	R 19,594.0
1988	141.7	R 1,230.0	R 1,371.7	3,933.5	1,175.6	85.3	1,176.0	R 4,430.5	82.2	R 795.8	R 7,745.4	488.7	R 47.2	R 13,586.5	-1,638.8	R 7,995.2	R 19,942.9
1989	131.2	1,130.1	1,261.3	4,376.3	1,297.3	109.3	336.8	R 4,855.4	60.6	R 874.6	R 7,534.0	484.5	e R 47.1	e R 13,703.2	-1,550.4	R 8,157.3	e R 20,310.0
1990	116.4	R 1,166.7	1,283.1	4,271.0	1,979.9	130.1	417.8	R 5,202.6	59.1	R 966.1	R 8,755.5	436.4	R 39.9	R 14,785.8	-1,548.3	R 8,306.5	R 21,544.0
1991	119.4	1,166.2	1,285.6	4,307.8	1,557.0	172.6	440.3	R 5,006.5	53.1	R 995.3	R 8,224.7	381.5	R 39.9	R 14,239.6	-1,486.4	R 8,856.3	R 21,609.5
1992	124.4	R 1,055.7	R 1,180.1	4,433.0	1,543.6	185.8	361.7	R 4,906.4	39.0	R 1,069.2	R 8,105.7	409.9	R 38.9	R 14,167.6	-1,410.0	R 8,597.1	R 21,354.7
1993	113.0	R 1,247.3	R 1,360.3	5,100.5	1,653.3	213.6	681.3	R 4,932.9	35.5	R 996.3	R 8,512.8	437.8	R 21.2	R 15,432.7	-1,637.6	R 9,064.6	R 22,859.7
1994	103.6	R 1,197.3	R 1,300.9	4,965.8	1,416.7	208.1	651.0	R 5,233.4	41.3	R 1,040.7	R 8,591.2	409.3	R 32.1	R 15,299.3	-1,593.0	R 8,952.6	R 22,658.9
1995	120.5	1,204.6	1,325.0	4,396.7	1,579.3	226.7	708.4	5,502.1	21.9	R 1,037.9	R 9,076.3	422.4	R 34.9	R 15,255.4	-1,611.0	R 9,656.0	R 23,300.4
1996	125.4	1,342.0	1,467.4	5,256.0	1,815.7	319.0	791.5	5,978.4	35.9	1,158.3	10,098.9	376.5	39.0	17,237.8	-1,711.1	9,599.4	25,126.0
1997	120.1	1,372.2	1,492.3	5,382.2	1,783.2	309.7	788.8	5,880.3	21.8	1,095.5	9,879.4	276.2	35.0	17,065.2	-1,664.3	9,688.3	25,089.2

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 90. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Illinois

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.03	1.02	1.21	1.65	2.02	1.48	0.57	1.11	7.97	1.91
1975	2.11	1.57	2.57	3.18	3.72	2.95	1.12	1.83	11.41	3.06
1980	2.15	3.53	6.91	8.71	7.07	7.02	2.87	R 3.76	17.78	R 6.00
1981	2.44	3.97	8.28	10.69	7.39	7.92	3.53	R 4.19	20.66	R 6.78
1982	2.77	4.63	8.00	10.63	7.78	8.06	3.43	R 4.81	23.06	R 7.73
1983	2.56	5.25	7.53	R 7.80	8.27	R 7.97	3.32	R 5.36	26.92	R 9.16
1984	2.47	5.16	7.58	R 7.09	7.70	R 7.60	3.37	R 5.23	25.67	R 8.55
1985	2.34	5.34	7.38	R 7.02	7.82	R 7.53	3.24	R 5.42	26.42	R 8.96
1986	2.05	4.96	5.47	R 5.26	6.55	R 5.94	2.60	R 4.96	27.74	R 9.06
1987	2.27	4.74	6.04	R 6.44	6.94	R 6.51	2.48	R 4.77	29.82	R 9.67
1988	2.08	4.52	5.87	R 4.90	6.77	R 6.23	2.50	R 4.55	28.54	R 9.02
1989	2.20	4.81	6.12	R 5.76	8.16	R 7.23	2.77	R 4.87	29.21	R 8.96
1990	2.26	4.95	7.36	R 7.24	7.90	R 7.68	3.56	5.02	29.07	R 9.55
1991	2.19	4.86	7.10	R 7.30	7.02	R 7.05	3.41	4.91	28.92	R 9.57
1992	2.16	5.00	6.71	R 6.85	7.61	R 7.33	3.12	R 5.03	30.17	R 9.46
1993	2.26	5.41	6.47	R 6.18	7.54	R 7.26	3.05	R 5.43	30.13	R 9.98
1994	2.27	5.39	6.01	R 6.25	8.45	R 7.79	2.96	5.44	29.26	R 10.03
1995	2.30	4.57	6.01	R 7.28	8.45	7.82	2.90	R 4.66	30.40	R 9.70
1996	2.13	5.18	6.84	8.22	9.88	9.22	3.33	5.31	30.31	9.84
1997	1.99	5.83	6.67	8.30	9.91	9.21	3.31	5.93	30.58	10.65
	Expenditures in Million Nominal Dollars									
1970	18.2	459.4	84.1	12.5	65.7	162.2	1.3	R 641.1	612.9	R 1,254.0
1975	12.7	772.0	185.3	22.1	126.3	333.7	2.8	R 1,121.2	1,026.4	R 2,147.5
1980	3.1	1,728.1	141.3	7.9	105.2	254.4	24.6	R 2,010.2	1,815.6	R 3,825.9
1981	4.9	1,890.9	126.3	9.0	109.0	244.4	30.6	R 2,170.7	2,000.1	R 4,170.8
1982	7.5	2,170.3	124.2	20.2	112.3	256.7	32.0	R 2,466.5	2,249.8	R 4,716.3
1983	9.3	2,354.3	84.5	R 8.1	141.9	R 234.5	30.6	R 2,628.7	2,823.3	R 5,452.0
1984	8.7	2,574.9	91.9	R 13.2	91.6	R 196.6	29.2	R 2,809.4	2,665.4	R 5,474.8
1985	4.9	2,480.4	97.1	R 22.6	99.1	R 218.8	27.4	R 2,731.5	2,702.2	R 5,433.7
1986	4.3	2,214.8	70.0	R 6.0	72.2	R 148.2	21.4	R 2,388.6	2,930.9	R 5,319.6
1987	5.2	1,961.9	67.1	R 5.5	83.3	R 155.8	22.5	R 2,145.4	3,254.9	R 5,400.3
1988	4.4	2,126.8	72.6	R 6.0	75.4	R 154.0	23.6	R 2,308.8	3,309.0	R 5,617.8
1989	5.4	2,459.9	56.4	R 6.8	105.4	R 168.5	27.1	R 2,660.9	3,227.0	R 5,887.9
1990	4.7	2,237.3	51.5	R 4.2	91.8	R 147.4	36.2	R 2,425.8	3,260.4	R 5,686.1
1991	4.5	2,311.5	50.8	R 4.8	96.3	R 151.9	36.5	R 2,504.3	3,549.1	R 6,053.4
1992	4.9	2,419.6	39.1	R 2.4	101.0	R 142.4	35.1	R 2,602.0	3,331.9	R 5,933.9
1993	4.7	2,734.1	27.9	R 2.8	105.5	R 136.3	17.5	R 2,892.5	3,621.7	R 6,514.2
1994	4.6	2,605.8	28.2	R 2.6	115.8	R 146.6	16.6	R 2,773.6	3,564.3	R 6,337.9
1995	4.1	2,333.7	28.8	3.5	118.5	150.8	18.1	R 2,506.6	3,981.8	R 6,488.4
1996	3.2	2,844.6	30.1	4.5	165.1	199.7	20.7	3,068.2	3,881.8	6,950.0
1997	4.7	2,958.5	29.1	5.1	165.7	200.0	15.0	3,178.2	3,886.3	7,064.5

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 91. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Illinois

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.46	0.73	1.04	0.82	1.11	3.05	0.60	0.85	0.57	0.73	6.61	1.90
1975	1.19	1.28	2.39	2.51	2.29	4.73	1.36	2.01	1.12	1.43	10.38	3.62
1980	1.71	3.27	6.49	5.93	4.93	9.81	5.51	6.41	2.87	3.68	16.70	R 7.36
1981	1.84	3.67	7.87	6.96	5.38	10.64	7.33	7.99	3.53	4.28	19.37	8.69
1982	1.92	4.34	7.53	7.57	5.44	10.32	7.06	7.76	3.43	4.73	21.71	R 9.84
1983	1.80	4.77	6.25	R 7.80	6.11	9.08	6.21	6.46	3.32	4.95	23.30	R 10.57
1984	R 1.76	4.67	6.38	R 7.09	6.06	8.82	4.85	6.34	3.37	4.83	22.51	R 9.93
1985	R 1.72	4.84	6.10	R 7.02	9.34	9.03	4.14	R 6.49	NA	4.99	22.36	R 10.23
1986	1.60	4.47	3.80	R 5.26	7.72	6.78	2.38	R 4.22	NA	R 4.40	23.72	10.72
1987	1.44	4.33	4.34	R 6.44	7.20	7.23	2.93	R 4.67	NA	4.30	22.95	R 10.98
1988	R 1.36	4.12	3.85	R 4.90	7.31	7.27	2.39	4.42	NA	4.10	21.38	10.08
1989	1.37	4.45	4.37	R 5.76	7.44	8.00	2.43	R 5.29	NA	R 4.45	22.24	R 11.05
1990	1.39	4.54	5.37	R 7.24	10.14	9.35	2.29	R 6.52	NA	4.62	22.18	R 11.16
1991	1.41	4.47	4.99	R 7.30	9.10	9.13	2.63	R 6.25	NA	4.54	22.68	11.65
1992	R 1.29	4.57	4.87	R 6.85	8.32	8.79	2.80	5.89	NA	4.60	23.06	R 11.54
1993	R 1.29	4.99	4.60	R 6.18	9.19	8.57	2.86	5.50	3.05	R 4.96	22.93	R 11.90
1994	R 1.29	5.01	4.49	R 6.25	8.24	8.95	2.69	R 5.24	2.96	R 4.96	21.86	R 11.73
1995	1.27	4.33	4.55	R 7.28	8.26	9.42	2.78	R 5.41	2.90	4.36	22.54	R 11.71
1996	1.30	4.83	5.59	8.22	9.45	10.20	3.28	6.46	3.33	4.89	22.76	11.89
1997	1.28	5.32	5.04	8.30	9.98	9.88	3.07	6.12	3.31	5.30	22.67	12.36
	Expenditures in Million Nominal Dollars											
1970	15.2	144.9	22.9	R (s)	6.4	8.5	28.8	66.8	(s)	226.9	R 505.6	R 732.6
1975	13.4	283.2	54.4	0.7	13.7	16.8	42.4	128.0	(s)	R 424.7	R 994.8	R 1,419.5
1980	4.5	761.8	79.4	0.5	12.9	51.9	91.1	236.0	0.6	R 1,002.9	R 1,799.3	2,802.2
1981	6.7	836.2	186.1	0.6	14.0	59.9	57.5	318.0	0.7	R 1,161.7	R 2,171.6	R 3,333.3
1982	9.6	971.1	137.3	R (s)	13.9	58.4	45.8	255.7	0.8	R 1,237.2	R 2,448.6	R 3,685.8
1983	12.0	1,017.1	172.0	0.8	18.5	28.1	40.9	260.3	0.7	R 1,290.2	R 2,679.9	R 3,970.2
1984	R 11.5	1,128.2	189.6	0.6	12.7	20.9	21.3	245.1	0.7	R 1,385.4	R 2,617.4	R 4,002.9
1985	6.7	1,073.9	141.3	R 3.8	20.9	26.1	8.9	R 201.0	NA	R 1,281.5	R 2,485.9	R 3,767.4
1986	6.2	934.7	43.9	R 2.9	15.0	20.5	13.3	R 95.7	NA	R 1,036.6	R 2,719.7	R 3,756.4
1987	6.1	838.7	41.6	R 1.5	15.2	21.0	16.8	R 96.2	NA	R 941.0	R 2,803.6	R 3,744.6
1988	5.3	901.9	43.8	1.6	14.4	R 20.8	8.7	R 89.4	NA	R 996.6	R 2,750.5	R 3,747.2
1989	6.2	892.6	35.9	R 2.1	16.9	19.7	3.5	R 78.1	NA	R 976.8	R 2,884.9	R 3,861.8
1990	5.4	929.2	48.4	R 1.1	20.8	R 27.5	3.0	R 100.8	NA	R 1,035.4	R 2,951.1	R 3,986.5
1991	5.3	883.9	49.2	R 1.6	22.0	R 19.2	0.6	R 92.6	NA	R 981.9	R 3,154.9	R 4,136.8
1992	5.4	915.9	51.1	R 1.3	19.5	17.3	0.8	R 90.0	NA	R 1,011.3	R 3,056.3	R 4,067.5
1993	4.9	1,036.1	53.5	1.1	22.7	5.9	1.0	84.2	1.4	R 1,125.3	R 3,278.9	R 4,404.1
1994	4.8	1,011.5	57.9	R 1.8	19.9	7.6	1.1	R 88.3	1.4	R 1,106.0	R 3,252.6	R 4,358.6
1995	4.1	900.8	53.6	R 3.3	20.5	6.8	0.8	R 85.0	1.4	R 991.3	R 3,475.7	R 4,467.0
1996	3.6	1,072.8	60.0	3.1	27.9	9.9	4.0	104.9	1.7	1,183.0	3,539.7	4,722.7
1997	5.6	1,101.5	68.6	5.1	29.4	11.6	2.6	117.3	1.5	1,225.8	3,588.7	4,814.5

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
(s)=Value less than 0.05 million nominal dollars.

NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 92. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Illinois

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	0.42	0.46	0.44	0.49	0.64	0.76	0.82	1.11	5.08	3.05	0.59	R 1.59	R 1.17	R 3.64	R 0.76	3.56	R 0.97
1975	1.49	1.19	1.33	1.19	1.99	2.33	2.51	2.29	7.48	4.73	2.14	R 2.91	R 2.60	R 3.64	R 1.80	6.43	R 2.26
1980	1.93	1.71	1.79	3.10	3.83	5.37	5.93	4.93	14.36	9.81	3.78	R 8.57	R 5.80	R 3.64	R 4.09	11.82	R 4.99
1981	2.09	1.84	1.94	3.54	4.59	6.37	6.96	5.38	18.00	10.64	4.58	R 9.80	R 6.78	R 3.64	R 4.64	13.49	R 5.74
1982	2.23	1.92	2.05	4.17	4.64	6.86	7.57	5.44	17.25	10.32	4.35	R 9.31	R 6.85	R 3.64	R 4.84	15.34	R 6.23
1983	2.11	1.80	1.94	4.64	4.47	6.73	R 7.43	6.11	16.98	9.08	4.46	R 8.98	R 6.96	R 3.64	R 4.99	17.20	R 6.70
1984	2.09	R 1.76	R 1.91	4.43	4.74	6.64	R 7.14	6.06	17.63	8.82	4.85	R 9.24	R 7.21	R 3.64	R 4.88	15.48	R 6.36
1985	2.08	R 1.72	1.88	4.57	4.91	6.16	R 6.61	9.34	17.61	9.03	4.14	R 8.77	R 7.97	R 3.64	R 5.22	15.35	R 6.75
1986	2.05	1.60	1.78	4.06	4.57	4.30	R 5.02	7.72	15.59	6.78	2.38	R 6.16	R 6.34	R 3.08	R 4.50	16.46	R 6.27
1987	1.92	1.44	1.64	3.77	3.34	4.69	R 4.80	7.20	13.58	7.23	2.93	R 6.94	R 6.29	R 3.08	R 4.41	16.54	R 6.11
1988	2.02	R 1.36	1.63	3.36	3.51	4.27	R 4.09	7.31	14.62	7.27	2.39	R 5.92	R 6.24	R 3.08	R 4.18	15.14	R 5.73
1989	1.92	1.37	1.61	3.65	2.92	4.43	R 5.23	7.44	14.48	8.00	2.43	R 6.85	R 5.72	d R 3.05	d R 3.82	15.75	d R 5.80
1990	1.84	1.39	1.58	4.01	3.20	5.72	R 6.85	10.14	14.60	9.35	2.29	R 7.22	R 6.58	R 0.76	R 4.29	15.82	R 6.24
1991	1.99	1.41	1.63	3.70	3.38	5.48	R 5.58	9.10	16.80	9.13	2.63	R 6.15	R 6.37	R 0.74	R 4.10	16.09	R 6.04
1992	2.00	R 1.29	1.59	3.68	3.02	5.69	R 4.80	8.32	18.32	8.79	2.80	R 6.34	R 6.18	R 0.74	R 4.08	16.04	R 6.07
1993	1.95	R 1.29	R 1.55	4.35	3.31	5.46	R 4.79	9.19	18.96	8.57	2.86	R 5.74	R 6.79	R 0.74	R 4.58	15.97	R 6.42
1994	1.90	R 1.29	1.51	4.30	3.36	5.39	R 4.86	7.22	19.11	8.95	2.69	R 5.60	R 6.22	R 2.26	R 4.42	15.19	R 6.16
1995	1.97	1.27	1.57	3.50	3.37	5.34	R 4.58	7.58	R 19.41	9.42	2.78	R 5.94	R 6.47	R 2.25	R 4.20	15.45	R 6.01
1996	1.94	1.30	1.57	4.04	3.33	6.30	5.66	9.22	20.08	10.20	3.28	6.77	7.12	2.25	4.65	15.36	6.35
1997	1.83	1.28	1.52	3.89	3.31	5.51	4.93	8.98	17.86	9.88	3.07	5.83	6.61	1.79	4.38	15.51	6.13
	Expenditures in Million Nominal Dollars																
1970	41.6	73.9	115.5	179.9	53.8	47.4	10.2	74.2	62.1	96.4	46.8	R 68.3	R 459.2	R 20.6	R 775.2	294.3	R 1,069.5
1975	120.7	109.5	230.2	418.0	135.0	150.9	19.2	185.6	75.7	106.5	117.0	R 130.8	R 920.8	R 21.6	R 1,590.6	618.3	R 2,208.9
1980	93.7	135.1	228.7	1,049.4	205.7	240.0	14.4	581.2	170.6	180.7	214.4	R 518.0	R 2,125.1	R 27.7	R 3,430.9	1,322.1	R 4,753.0
1981	97.1	128.4	225.5	1,187.4	185.5	254.8	19.8	559.7	205.1	168.2	226.6	R 555.2	R 2,174.9	R 29.3	R 3,617.1	1,503.5	R 5,120.6
1982	105.5	126.8	232.2	1,165.5	149.7	306.7	4.2	414.6	179.2	124.0	145.3	R 426.3	R 1,750.0	R 28.3	R 3,176.1	1,533.8	R 4,709.9
1983	114.9	127.1	241.9	1,283.9	159.2	259.1	R 18.4	452.7	184.7	98.0	124.3	R 426.5	R 1,722.8	R 32.0	R 3,280.6	1,847.9	R 5,128.5
1984	140.2	R 134.9	R 275.2	1,326.4	180.1	276.5	R 12.1	R 456.8	204.5	89.7	74.9	R 473.5	R 1,768.0	R 32.6	R 3,402.2	1,752.1	R 5,154.3
1985	131.6	R 135.5	R 267.1	1,287.4	244.5	227.9	R 3.4	740.2	190.4	82.5	44.3	R 413.3	R 1,946.4	R 32.5	R 3,533.4	1,849.8	R 5,383.2
1986	122.9	141.2	264.1	1,055.7	187.4	230.9	R 3.0	782.5	164.8	56.0	28.8	R 367.4	R 1,820.8	R 22.8	R 3,163.4	2,009.9	R 5,173.3
1987	129.3	R 131.0	R 260.3	959.0	140.1	261.4	R 3.0	R 966.9	162.3	R 59.6	35.2	R 413.1	R 2,041.7	R 22.7	R 3,283.7	2,008.4	R 5,292.1
1988	141.7	R 138.5	R 280.2	885.8	130.4	194.4	R 1.7	1,077.3	168.4	R 57.1	30.6	R 350.4	R 2,010.4	R 23.6	R 3,200.0	1,908.8	R 5,108.8
1989	131.2	119.8	251.0	1,000.6	156.0	178.0	R 2.8	207.2	171.2	59.6	23.6	R 395.4	R 1,193.8	d R 20.0	d R 2,465.5	2,016.8	d R 4,482.3
1990	116.4	121.6	237.9	1,079.6	176.9	253.7	R 1.8	R 293.1	177.6	R 62.1	18.0	R 459.7	R 1,442.9	R 3.6	R 2,764.0	2,067.8	R 4,831.8
1991	119.4	136.4	255.8	1,084.8	177.5	244.7	R 1.5	311.7	182.8	64.4	8.5	R 478.0	R 1,469.2	R 3.5	R 2,813.2	2,123.5	R 4,936.7
1992	124.4	109.2	233.6	1,076.7	186.1	281.2	R 1.3	231.6	203.2	56.0	4.1	R 510.3	R 1,473.7	R 3.7	R 2,787.7	2,180.5	R 4,968.2
1993	113.0	R 116.7	R 229.7	1,290.4	138.7	225.1	R 1.7	543.8	214.2	71.6	6.4	R 462.6	R 1,664.0	R 3.7	R 3,187.9	2,135.3	R 5,323.2
1994	103.6	R 121.9	R 225.5	1,277.8	174.0	239.9	R 2.2	497.5	225.7	71.3	6.4	R 451.9	R 1,668.8	R 14.1	R 3,186.3	2,109.6	R 5,295.9
1995	120.5	106.0	226.5	1,095.3	166.7	263.0	R 3.4	559.5	R 225.3	74.2	3.3	R 451.2	R 1,746.5	R 14.8	R 3,083.2	2,171.8	R 5,255.0
1996	125.4	111.0	236.4	1,271.0	201.8	285.7	7.6	591.2	226.2	78.4	6.0	529.9	1,926.6	15.4	3,449.4	2,148.7	5,598.1
1997	120.1	114.9	235.1	1,208.2	183.6	275.2	4.2	587.3	212.5	77.2	6.7	511.3	1,858.1	18.4	3,319.8	2,184.2	5,504.0

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 93. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Illinois

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.46	—	2.17	1.39	0.74	1.11	5.08	3.05	0.57	2.47	2.47	4.08	2.47
1975	1.19	—	3.45	2.84	2.08	2.29	7.48	4.73	1.61	4.06	4.06	6.11	4.07
1980	—	—	9.02	7.45	6.38	4.93	14.36	9.81	5.32	8.99	8.99	11.82	9.00
1981	—	—	10.84	8.81	7.55	5.38	18.00	10.64	7.32	10.05	10.05	13.88	10.06
1982	—	—	10.92	8.52	7.22	5.44	17.25	10.32	6.88	9.74	9.74	16.00	9.75
1983	—	—	10.44	8.00	6.63	6.11	16.98	9.08	R 5.86	8.70	8.70	18.26	R 8.72
1984	—	—	10.27	8.42	6.42	6.06	17.63	8.82	6.02	8.80	8.80	19.14	R 8.82
1985	—	—	9.99	8.52	6.00	9.34	17.61	9.03	5.88	8.99	8.99	19.14	9.00
1986	—	—	8.41	6.60	4.22	7.72	15.59	6.78	4.86	6.81	6.81	20.87	6.84
1987	—	—	7.55	6.89	4.21	7.20	13.58	7.23	3.32	7.20	7.20	20.31	R 7.23
1988	—	—	7.41	6.91	3.84	7.31	14.62	7.27	2.59	7.18	7.18	18.70	7.20
1989	—	—	8.28	7.20	4.32	7.44	14.48	8.00	2.90	7.81	7.81	19.82	7.83
1990	—	4.40	9.32	8.73	5.84	10.14	14.60	9.35	3.11	R 9.16	R 9.16	19.63	R 9.18
1991	—	3.35	8.71	8.21	4.75	9.10	16.80	9.13	2.39	8.82	8.82	20.05	8.84
1992	—	3.73	8.54	8.08	4.44	8.32	18.32	8.79	2.50	8.51	8.51	20.32	R 8.54
1993	—	3.96	8.24	8.16	4.12	9.19	18.96	8.57	2.39	8.31	8.31	20.60	R 8.33
1994	—	3.15	7.96	8.16	3.82	9.22	19.11	8.95	2.56	8.58	8.58	18.97	8.59
1995	—	2.83	8.36	8.17	3.86	9.57	R 19.41	9.42	2.73	8.88	8.88	19.94	8.90
1996	—	3.38	9.29	9.06	4.66	8.78	20.08	10.20	3.43	9.62	9.62	20.03	9.64
1997	—	2.95	9.39	8.88	4.37	8.28	17.86	9.88	3.21	9.30	9.30	20.05	9.32
	Expenditures in Million Nominal Dollars												
1970	R (s)	—	2.9	123.2	95.2	2.2	38.2	1,610.4	1.5	1,873.5	1,873.7	R 4.1	R 1,877.8
1975	(s)	—	1.4	338.4	285.7	4.1	65.9	2,822.2	2.2	3,519.9	3,519.9	5.5	R 3,525.4
1980	—	—	6.0	978.7	704.0	3.2	131.8	5,390.1	9.4	7,223.2	7,223.2	R 11.4	R 7,234.5
1981	—	—	14.9	1,046.8	721.6	7.2	158.5	5,771.2	R (s)	7,720.6	7,720.6	R 13.9	R 7,734.5
1982	—	—	11.9	920.7	678.3	9.5	138.5	5,521.5	1.1	7,281.5	7,281.5	R 16.2	R 7,297.7
1983	—	—	12.3	976.5	598.1	12.6	142.8	4,977.3	2.9	6,722.5	6,722.5	R 18.5	R 6,741.0
1984	—	—	10.4	1,062.2	96.4	R 15.2	158.1	4,757.3	5.2	R 6,104.9	R 6,104.9	R 22.8	R 6,127.8
1985	—	—	10.7	949.7	92.2	14.2	147.1	R 5,164.9	6.9	R 6,385.8	R 6,385.8	R 24.8	R 6,410.6
1986	—	—	8.9	816.9	48.4	10.6	127.4	3,792.9	2.6	R 4,807.6	R 4,807.6	R 28.4	R 4,835.9
1987	—	—	6.1	825.1	46.8	R 8.2	125.4	R 4,115.1	2.1	R 5,128.8	R 5,128.8	R 28.3	R 5,157.1
1988	—	—	7.0	852.6	85.3	9.0	130.2	R 4,352.5	5.7	R 5,442.3	R 5,442.3	R 26.8	R 5,469.1
1989	—	—	8.0	1,015.4	109.3	7.3	132.3	R 4,776.1	1.0	R 6,049.5	R 6,049.5	R 28.5	R 6,078.1
1990	—	(s)	7.7	1,611.3	130.1	R 12.0	137.3	R 5,113.0	1.0	R 7,012.3	R 7,012.4	R 27.3	R 7,039.7
1991	—	(s)	7.7	1,198.8	172.6	10.2	141.3	R 4,922.9	R (s)	R 6,453.7	R 6,453.8	R 28.9	R 6,482.6
1992	—	(s)	7.6	1,162.7	185.8	R 9.6	157.1	R 4,833.2	R (s)	R 6,356.5	R 6,356.6	R 28.5	R 6,385.1
1993	—	(s)	9.6	1,335.3	213.6	9.3	165.5	R 4,855.4	0.6	R 6,589.3	R 6,589.4	R 28.8	R 6,618.2
1994	—	R (s)	8.2	1,076.4	208.1	17.8	174.4	R 5,154.6	0.8	R 6,640.3	R 6,640.4	R 26.2	R 6,666.5
1995	—	R (s)	9.1	1,221.7	226.7	9.9	R 174.1	5,421.1	0.6	R 7,063.2	R 7,063.3	R 26.7	R 7,090.0
1996	—	(s)	9.5	1,424.5	319.0	7.4	174.8	5,890.1	0.7	7,825.9	7,826.0	29.2	7,855.2
1997	—	(s)	9.3	1,395.1	309.7	6.3	164.3	5,791.4	1.0	7,677.0	7,677.1	29.2	7,706.2

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 94. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Illinois

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.30	0.35	0.60	0.67	—	0.63	0.15	0.65	0.32
1975	0.75	1.13	1.35	2.21	—	1.63	0.18	—	0.69
1980	1.62	3.19	5.60	6.38	—	5.64	0.33	—	1.60
1981	1.86	4.13	7.35	7.84	—	7.37	0.42	—	1.78
1982	1.98	4.58	7.06	7.49	—	7.09	0.51	—	1.81
1983	2.04	5.29	6.18	6.33	—	6.19	0.56	—	1.81
1984	1.99	4.87	6.19	6.43	—	6.21	0.56	—	1.63
1985	2.18	5.19	6.03	6.05	—	6.03	0.64	—	1.67
1986	2.12	4.62	5.24	3.64	—	5.09	0.64	—	1.61
1987	2.00	3.66	3.56	4.22	—	3.63	0.64	—	1.42
1988	1.91	3.27	2.95	3.77	—	3.12	0.66	—	1.23
1989	1.81	3.26	3.36	4.39	—	3.59	0.60	—	1.13
1990	1.75	2.67	3.63	5.26	—	3.99	0.57	—	1.12
1991	1.71	2.10	2.73	4.72	—	3.03	0.49	—	1.06
1992	1.74	2.20	2.81	4.44	—	3.06	0.52	1.11	1.04
1993	1.70	2.44	2.66	4.19	—	2.97	0.52	—	1.07
1994	1.61	2.00	2.64	3.92	—	2.93	0.53	—	1.07
1995	1.63	1.68	2.70	3.87	0.62	2.60	0.51	0.87	1.04
1996	1.63	2.57	3.40	4.80	0.75	3.45	0.51	0.82	1.12
1997	1.55	2.51	3.20	4.76	0.95	3.88	0.51	0.89	1.19
	Expenditures in Million Nominal Dollars								
1970	180.2	47.7	12.2	10.3	—	22.5	4.1	(s)	254.5
1975	494.2	39.8	61.4	49.1	—	110.5	45.2	—	689.6
1980	1,151.8	62.5	449.3	31.3	—	480.6	99.4	—	1,794.2
1981	1,252.2	55.7	442.7	26.5	—	469.2	135.3	—	1,912.2
1982	1,303.7	48.8	318.3	25.0	—	343.2	157.4	—	1,853.1
1983	1,451.7	65.1	225.4	20.1	—	245.5	171.2	—	1,933.4
1984	1,350.1	30.0	174.7	15.5	—	190.2	213.8	—	1,784.0
1985	1,441.6	31.3	97.4	15.4	—	112.7	270.5	—	1,856.1
1986	1,379.4	28.8	137.1	9.7	—	146.8	294.6	—	1,849.5
1987	1,236.5	11.9	72.3	10.4	—	82.8	347.5	—	1,678.7
1988	1,081.7	19.0	37.2	12.1	—	49.3	488.7	—	1,638.8
1989	998.7	23.1	32.5	11.6	—	44.1	484.5	—	1,550.4
1990	1,035.1	24.8	37.0	15.0	—	52.1	436.4	—	1,548.3
1991	1,020.0	27.6	43.7	13.6	—	57.3	381.5	—	1,486.4
1992	936.2	20.8	33.7	9.5	—	43.1	409.9	R (s)	1,410.0
1993	1,121.0	39.8	27.6	11.4	—	39.0	437.8	—	1,637.6
1994	1,066.0	70.5	33.0	14.2	—	47.2	409.3	—	1,593.0
1995	1,090.3	66.8	17.2	12.2	1.4	30.8	422.4	0.6	1,611.0
1996	1,224.3	67.5	25.3	15.3	1.1	41.7	376.5	1.1	1,711.1
1997	1,247.0	113.9	11.6	15.3	(s)	27.0	276.2	(s)	1,664.3

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 95. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Indiana

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	0.44	0.32	0.36	0.68	1.03	0.74	1.86	2.98	0.57	R 1.41	R 2.04	—	R 2.19	R 0.94	0.26	5.15	R 1.44
1975	1.76	0.73	1.09	1.16	2.49	2.08	3.34	4.75	1.81	R 2.85	R 3.56	—	R 2.57	1.91	0.62	7.08	R 2.83
1980	2.13	1.31	1.53	2.88	6.85	6.38	6.08	10.00	3.63	R 6.38	R 7.89	—	R 3.13	R 3.68	1.30	12.32	5.65
1981	2.50	1.51	1.79	3.30	8.13	7.55	6.16	11.05	4.50	R 7.94	R 9.22	—	R 3.45	4.26	1.52	13.53	R 6.39
1982	2.59	1.60	1.81	3.98	7.90	7.22	7.27	10.46	4.16	R 6.96	R 8.83	—	R 3.41	4.36	1.64	15.58	R 6.87
1983	2.45	1.55	1.75	4.86	7.66	6.42	7.83	9.12	4.65	R 6.94	R 8.17	—	R 3.35	R 4.19	1.59	15.47	6.84
1984	2.30	R 1.61	1.75	4.88	7.69	6.14	7.77	8.74	4.60	R 7.08	R 7.84	—	R 3.38	4.13	1.62	16.67	6.81
1985	2.24	1.64	1.77	4.71	7.68	5.81	8.93	8.85	4.40	R 7.15	R 7.87	—	R 3.32	R 4.12	1.66	16.95	6.92
1986	2.05	1.58	1.67	4.59	5.78	3.80	8.03	6.48	2.62	R 5.59	R 5.77	—	R 2.82	3.49	1.59	17.74	R 6.27
1987	1.92	1.46	1.55	4.08	6.11	3.96	7.63	6.90	2.64	R 4.86	R 5.96	—	R 2.74	3.42	1.47	16.91	6.08
1988	2.02	1.44	1.57	4.31	5.75	3.74	7.63	6.94	2.10	R 4.81	R 5.92	—	R 2.75	3.36	1.44	16.53	R 6.04
1989	1.92	1.37	1.49	4.52	6.41	4.33	9.01	7.60	2.34	R 4.89	R 6.49	—	e R 2.87	e 3.54	1.37	15.92	e R 6.30
1990	1.84	R 1.38	1.46	4.26	7.56	5.62	9.93	8.74	2.66	4.73	R 7.40	—	R 2.43	3.72	1.38	15.75	R 6.69
1991	1.99	1.36	1.46	4.25	7.09	4.76	9.67	8.60	2.37	R 5.15	7.20	—	R 2.36	3.66	1.36	15.65	6.71
1992	2.00	1.32	1.42	4.18	6.79	4.41	9.15	8.28	2.46	R 5.02	R 6.89	—	R 2.20	R 3.56	1.32	15.59	R 6.58
1993	1.95	1.28	1.37	4.52	6.78	4.10	9.37	8.11	2.20	R 4.91	R 6.78	—	R 1.75	3.61	1.28	15.20	R 6.62
1994	1.90	1.28	1.35	5.13	6.87	3.82	8.74	8.21	2.25	R 4.85	6.76	—	R 2.42	3.76	1.29	15.42	R 7.00
1995	1.97	1.27	1.36	4.11	6.94	3.85	9.03	8.52	2.54	R 5.37	R 7.11	—	R 2.41	3.63	1.27	R 15.40	R 6.82
1996	1.94	1.21	1.30	4.37	7.90	4.70	10.80	9.05	3.00	5.35	7.83	—	2.57	3.83	1.21	15.38	7.13
1997	1.83	1.18	1.25	5.08	7.52	4.47	10.30	9.11	3.08	5.06	7.68	—	2.47	3.87	1.18	15.55	7.31
	Expenditures in Million Nominal Dollars																
1970	151.8	212.7	364.5	359.0	176.3	10.6	62.9	921.2	14.2	R 122.0	R 1,307.2	—	R 10.9	R 2,041.6	-136.5	657.3	R 2,562.3
1975	651.7	503.5	1,155.2	532.0	473.9	30.4	150.9	1,614.2	120.0	R 231.0	R 2,620.4	—	R 14.9	R 4,322.5	-372.6	1,252.3	R 5,202.1
1980	684.0	1,091.9	1,775.9	1,343.1	1,227.3	76.5	174.3	3,162.9	261.7	R 452.3	R 5,355.0	—	R 26.9	R 8,500.8	-951.4	2,524.5	R 10,073.8
1981	823.4	1,240.3	2,063.7	1,559.5	1,369.2	120.2	161.5	3,551.3	170.7	R 740.5	R 6,113.4	—	R 30.7	R 9,767.2	-1,077.3	2,752.3	R 11,442.2
1982	575.4	1,252.5	1,827.9	1,816.7	1,328.1	176.9	177.1	3,103.4	90.6	R 556.3	R 5,432.4	—	R 30.9	R 9,107.9	-1,098.3	3,078.3	R 11,087.9
1983	598.3	1,337.4	1,935.6	2,019.6	1,235.3	158.6	193.0	2,751.5	69.2	R 561.4	R 4,969.2	—	R 32.1	R 8,956.6	-1,174.4	3,218.6	R 11,000.7
1984	582.9	R 1,534.6	R 2,117.4	2,150.1	1,395.3	536.5	147.8	2,665.2	44.8	R 607.5	R 5,397.0	—	R 31.9	R 9,696.5	-1,350.6	3,346.7	R 11,692.6
1985	560.1	R 1,548.3	R 2,108.4	1,995.4	1,376.7	507.4	157.5	R 2,694.9	57.9	R 569.0	R 5,363.4	—	R 30.6	R 9,497.7	-1,359.6	3,647.8	R 11,786.0
1986	429.4	R 1,452.3	R 1,881.7	1,776.1	1,070.0	400.2	177.4	2,043.5	44.8	R 439.4	R 4,175.2	—	R 22.1	R 7,855.1	-1,270.9	3,846.6	R 10,430.9
1987	454.8	R 1,357.6	1,812.4	1,639.6	1,125.7	428.4	168.3	R 2,295.0	43.7	R 456.3	R 4,517.4	—	R 22.7	R 7,992.1	-1,194.4	3,848.9	R 10,646.6
1988	561.8	R 1,428.1	R 1,989.9	1,920.7	963.1	350.1	186.5	R 2,337.0	29.9	R 442.0	R 4,308.5	—	R 23.7	R 8,242.8	-1,261.8	3,993.9	R 10,974.9
1989	502.0	1,409.0	1,911.0	2,043.8	1,237.0	429.8	263.7	R 2,461.9	35.7	R 423.7	R 4,851.6	—	e R 23.7	e R 8,830.1	-1,254.3	3,912.8	e R 11,488.6
1990	437.9	R 1,545.9	R 1,983.9	1,875.6	1,440.5	569.3	335.2	R 2,843.4	47.7	R 509.3	R 5,745.5	—	R 21.7	R 9,626.7	-1,404.9	R 3,927.0	R 12,148.7
1991	438.9	1,519.2	1,958.1	1,903.3	1,338.5	463.5	327.1	R 2,770.4	31.0	R 530.0	R 5,460.4	—	R 21.9	R 9,343.7	-1,391.5	4,062.9	R 12,015.2
1992	384.2	R 1,460.3	1,844.5	1,976.6	1,264.6	399.7	231.4	R 2,696.6	40.9	R 514.8	R 5,148.0	—	R 21.4	R 8,990.5	-1,336.4	R 4,042.4	R 11,696.6
1993	344.6	R 1,460.5	1,805.1	2,280.5	1,306.7	380.3	260.1	R 2,790.1	28.5	R 583.3	R 5,349.0	—	R 12.8	R 9,447.5	-1,330.6	R 4,195.0	R 12,311.8
1994	246.4	1,502.3	1,748.7	2,597.0	1,433.6	374.5	223.3	R 2,883.0	28.3	R 611.7	R 5,554.5	—	R 19.0	R 9,919.2	-1,388.7	R 4,356.0	R 12,886.5
1995	310.2	1,507.9	1,818.2	2,145.3	1,427.2	378.8	220.0	3,138.5	17.4	R 558.9	R 5,740.8	—	R 20.2	R 9,724.5	-1,380.8	R 4,515.9	R 12,859.6
1996	302.4	1,475.9	1,778.3	2,423.5	1,640.9	335.4	301.2	3,308.0	15.3	628.0	6,228.8	—	22.1	10,452.6	-1,330.4	4,608.9	13,731.1
1997	280.7	1,501.3	1,782.0	2,743.2	1,681.1	278.8	290.6	3,341.1	18.6	646.6	6,256.9	—	19.4	10,801.5	-1,364.1	4,668.4	14,105.8

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 96. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Indiana

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.10	1.00	1.21	1.59	2.10	1.52	0.57	R 1.17	6.56	R 2.01
1975	2.52	1.47	2.57	3.11	3.92	3.02	1.12	R 1.99	8.55	R 3.19
1980	2.43	3.19	7.18	8.55	7.37	7.31	2.87	R 4.07	13.86	R 6.37
1981	2.75	3.63	8.54	10.50	7.94	8.51	3.53	R 4.55	15.36	R 7.17
1982	2.80	4.32	8.24	10.44	8.85	8.53	3.43	R 5.01	17.76	R 8.07
1983	2.75	5.46	7.62	R 7.47	9.01	R 8.21	3.32	R 5.75	17.92	R 9.03
1984	2.92	5.65	7.81	R 8.24	8.84	R 8.22	3.37	R 5.91	19.52	R 9.53
1985	2.77	5.50	7.50	R 9.50	8.76	R 8.11	3.24	R 5.76	20.37	R 9.72
1986	2.83	5.47	5.66	R 6.88	7.64	R 6.42	2.60	R 5.49	21.14	R 9.90
1987	2.57	4.91	5.71	R 7.39	7.32	R 6.44	2.48	R 5.04	21.38	R 9.75
1988	2.54	5.08	5.71	R 6.66	7.46	R 6.48	2.50	R 5.18	20.95	R 9.60
1989	2.46	5.41	6.30	R 6.14	9.78	R 7.94	2.77	R 5.69	20.31	R 9.73
1990	2.62	5.28	7.52	R 7.82	10.09	R 8.88	3.56	R 5.66	20.14	R 9.99
1991	2.62	5.38	6.95	R 7.55	8.97	R 7.98	3.41	R 5.64	19.73	R 10.02
1992	2.58	5.37	6.14	R 7.78	9.46	R 7.89	3.12	R 5.58	20.11	R 9.84
1993	2.53	5.69	6.13	R 8.07	9.01	R 7.66	3.05	5.88	19.55	R 9.98
1994	2.52	6.16	6.15	R 8.16	9.88	R 8.22	2.96	6.34	19.86	R 10.52
1995	2.43	5.31	6.18	R 8.75	10.07	R 8.50	2.90	R 5.63	19.75	R 10.15
1996	2.31	5.48	6.90	6.00	11.97	9.96	3.33	5.96	19.85	10.12
1997	2.28	6.30	6.55	5.62	11.17	9.40	3.31	6.60	20.35	10.86
	Expenditures in Million Nominal Dollars									
1970	6.3	160.3	56.3	16.6	50.2	123.1	1.2	R 290.8	301.8	R 592.6
1975	17.6	237.0	129.4	12.6	97.1	239.1	2.3	R 495.9	477.5	R 973.4
1980	4.1	516.3	225.8	23.8	90.8	340.4	12.0	R 872.9	910.8	R 1,783.6
1981	6.9	573.5	204.1	32.0	95.3	331.4	14.9	R 926.8	1,001.6	R 1,928.4
1982	12.7	702.6	202.7	20.3	91.9	314.9	15.6	R 1,045.7	1,170.1	R 2,215.9
1983	15.0	797.8	107.4	R 17.2	111.2	R 235.8	14.9	R 1,063.4	1,218.8	R 2,282.2
1984	14.8	862.3	118.7	R 25.1	87.3	R 231.0	14.3	R 1,122.5	1,344.7	R 2,467.2
1985	11.3	810.4	111.8	R 25.1	73.9	R 210.7	13.4	R 1,045.9	1,376.4	R 2,422.2
1986	12.2	772.9	95.1	R 15.3	72.4	R 182.8	10.5	R 978.4	1,479.4	R 2,457.8
1987	11.1	688.3	91.8	R 16.9	79.6	R 188.4	11.1	R 898.9	1,544.4	R 2,443.3
1988	12.7	792.6	92.9	R 19.6	92.3	R 204.7	11.7	R 1,021.8	1,607.0	R 2,628.8
1989	10.0	857.6	84.9	R 18.5	147.1	R 250.5	13.4	R 1,131.5	1,544.0	R 2,675.6
1990	11.4	755.8	75.3	R 12.3	127.9	R 215.5	18.1	R 1,000.7	1,519.3	R 2,520.0
1991	9.0	799.6	78.4	R 13.5	113.1	R 205.1	18.2	R 1,031.8	1,630.5	R 2,662.3
1992	8.4	829.1	67.8	R 8.2	117.3	R 193.4	17.5	R 1,048.4	1,567.0	R 2,615.4
1993	6.8	944.3	75.4	R 11.6	122.4	R 209.4	8.9	R 1,169.4	1,666.4	R 2,835.8
1994	7.2	982.6	65.4	R 12.7	132.8	R 210.9	8.4	R 1,209.1	1,697.3	R 2,906.4
1995	5.5	864.9	57.4	R 10.7	137.4	R 205.5	9.2	R 1,085.1	1,790.1	R 2,875.2
1996	6.5	996.9	59.0	9.8	194.0	262.8	10.5	1,276.7	1,819.3	3,096.0
1997	7.1	1,077.4	51.1	9.6	181.2	241.9	7.6	1,334.0	1,843.6	3,177.6

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 97. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Indiana

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.52	0.83	1.04	0.81	1.28	2.98	0.70	1.09	0.57	0.86	6.58	1.78
1975	1.36	1.26	2.39	2.41	2.63	4.75	1.74	2.27	1.12	1.56	8.53	3.03
1980	1.58	2.99	6.66	6.14	5.10	10.00	4.35	5.51	2.87	3.69	13.36	R 6.17
1981	1.68	3.41	8.03	7.03	4.65	11.05	5.94	7.58	3.53	3.82	14.29	6.97
1982	1.50	4.11	7.68	7.20	6.10	10.46	5.69	7.60	3.43	4.32	15.69	7.64
1983	1.43	5.14	6.36	R 7.47	6.65	9.12	5.12	R 6.35	3.32	R 5.14	15.10	R 7.80
1984	R 1.52	5.19	6.46	R 8.24	6.61	8.74	4.55	R 6.40	3.37	R 5.19	17.01	R 8.37
1985	R 1.61	5.00	6.06	R 9.50	9.09	8.85	4.40	R 6.44	NA	R 5.06	17.51	R 8.74
1986	1.53	4.90	3.62	R 6.88	8.32	6.48	2.61	R 4.56	NA	R 4.54	18.42	R 9.09
1987	1.38	4.41	4.19	R 7.39	7.93	6.90	2.61	R 5.01	NA	4.23	18.34	R 9.07
1988	R 1.48	4.53	3.73	R 6.66	7.81	6.94	2.08	R 4.80	NA	R 4.28	18.72	9.44
1989	1.46	4.70	4.44	R 6.14	8.20	7.60	2.31	R 5.35	NA	R 4.55	18.18	9.45
1990	R 1.45	4.52	5.31	R 7.82	9.83	8.74	2.64	R 6.94	NA	R 4.57	17.95	9.70
1991	1.44	4.55	4.91	R 7.55	10.09	8.60	2.38	R 6.18	NA	4.55	17.64	9.75
1992	1.38	4.52	4.62	R 7.78	8.85	8.28	2.47	R 5.92	NA	R 4.51	17.81	R 9.59
1993	1.35	4.93	4.44	R 8.07	9.71	8.11	2.16	R 5.78	3.05	R 4.85	17.35	R 9.59
1994	R 1.38	5.26	4.21	R 8.16	8.14	8.21	2.21	R 5.39	2.96	5.06	17.60	R 9.96
1995	1.44	4.33	4.20	R 8.75	8.17	8.52	2.49	R 5.58	2.90	R 4.34	17.61	R 9.53
1996	1.40	4.62	5.06	6.00	9.45	9.05	2.90	6.69	3.33	4.66	17.67	9.63
1997	1.28	5.38	4.81	5.62	9.98	9.11	3.04	6.52	3.31	5.27	17.96	10.28
	Expenditures in Million Nominal Dollars											
1970	5.5	64.5	16.9	0.8	5.4	3.9	3.7	30.7	(s)	100.8	146.4	247.2
1975	17.6	87.7	41.9	1.0	11.5	3.0	18.0	75.3	(s)	180.7	264.0	R 444.8
1980	5.0	206.9	77.0	1.1	11.1	11.7	66.5	167.4	(s)	R 379.6	475.1	R 854.7
1981	7.8	240.8	53.3	R (s)	9.9	12.9	2.9	79.3	(s)	R 328.3	528.2	R 856.5
1982	12.6	300.1	64.5	0.7	11.2	11.7	3.2	91.3	(s)	R 404.3	604.3	R 1,008.6
1983	14.4	338.2	114.6	R 15.8	14.5	17.2	34.6	R 196.6	(s)	R 549.6	587.4	R 1,137.0
1984	R 14.4	375.5	125.6	R 11.4	11.5	15.6	20.5	R 184.7	(s)	R 574.9	691.5	R 1,266.4
1985	R 12.2	350.9	93.1	R 7.2	13.5	R 16.4	10.7	R 141.0	NA	R 504.0	732.3	R 1,236.3
1986	12.1	320.3	38.8	R 5.4	13.9	16.6	4.0	R 78.6	NA	R 411.0	813.0	R 1,224.0
1987	11.0	288.8	34.1	R 2.1	15.2	16.8	4.6	R 72.8	NA	R 372.6	841.8	R 1,214.4
1988	13.7	329.9	29.1	R 3.0	17.1	16.5	3.1	R 68.7	NA	R 412.3	1,004.0	R 1,416.3
1989	11.0	351.9	29.9	R 1.4	21.8	17.1	5.1	R 75.3	NA	R 438.2	984.0	R 1,422.2
1990	11.6	309.2	33.1	R 1.5	22.0	R 25.7	1.0	R 83.4	NA	R 404.2	R 987.2	R 1,391.5
1991	9.1	315.2	33.7	R 1.8	22.5	16.0	3.1	R 77.0	NA	R 401.3	R 1,023.9	R 1,425.2
1992	8.2	332.3	38.1	R 2.6	19.4	14.5	R (s)	R 74.8	NA	R 415.4	R 1,014.0	R 1,429.4
1993	6.7	389.5	41.8	R 2.2	23.3	12.3	0.5	R 80.2	0.7	R 476.3	R 1,037.2	R 1,513.5
1994	7.2	404.1	37.7	R 3.1	19.3	11.2	0.6	R 71.8	0.7	R 483.9	R 1,079.8	R 1,563.7
1995	5.9	362.3	29.2	R 3.5	19.7	7.8	0.5	R 60.7	0.7	R 429.6	R 1,120.6	R 1,550.2
1996	7.1	408.4	28.9	2.3	27.0	7.6	(s)	66.0	0.9	482.5	1,134.8	1,617.3
1997	7.3	444.7	32.5	2.8	28.6	8.2	(s)	72.1	0.7	524.9	1,166.4	1,691.3

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
(s)=Value less than 0.05 million nominal dollars.

NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 98. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Indiana

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	0.44	0.52	0.47	0.47	0.76	0.74	0.81	1.28	5.08	2.98	0.50	R 0.96	R 1.09	R 3.38	R 0.59	3.52	R 0.76
1975	1.76	1.36	1.68	0.91	2.05	2.24	2.41	2.63	7.48	4.75	1.86	R 2.28	R 2.37	R 3.38	R 1.65	5.67	R 2.03
1980	2.13	1.58	1.99	2.63	3.72	5.57	6.14	5.10	14.36	10.00	3.43	R 6.16	R 4.96	R 3.38	R 2.77	11.00	R 3.69
1981	2.50	1.68	2.29	3.06	5.55	6.44	7.03	4.65	18.00	11.05	4.45	R 7.37	R 6.46	R 3.38	3.34	12.08	4.26
1982	2.59	1.50	2.24	3.70	4.35	6.52	7.20	6.10	17.25	10.46	4.11	R 6.50	R 6.11	R 3.38	3.49	14.00	4.74
1983	2.45	1.43	2.13	4.34	4.42	6.64	R 6.90	6.65	16.98	9.12	4.22	R 6.64	R 6.35	R 3.38	R 3.52	13.97	R 4.87
1984	2.30	R 1.52	2.06	4.23	4.65	6.53	R 7.16	6.61	17.63	8.74	4.55	R 6.24	R 6.47	R 3.38	R 3.47	14.37	R 4.72
1985	2.24	R 1.61	2.04	4.04	4.81	6.15	R 6.90	9.09	17.61	8.85	4.40	R 5.95	R 6.42	R 3.38	R 3.39	14.54	R 4.87
1986	2.05	1.53	1.87	3.79	3.94	3.97	R 5.05	8.32	15.59	6.48	2.61	R 4.02	R 4.78	R 3.05	R 3.02	15.13	R 4.71
1987	1.92	1.38	1.75	3.38	3.30	4.45	R 4.96	7.93	13.58	6.90	2.61	R 4.02	R 4.50	R 3.05	R 2.79	13.35	4.23
1988	2.02	R 1.48	1.87	3.69	3.33	3.99	R 4.39	7.81	14.62	6.94	2.08	R 3.37	R 4.35	R 3.05	R 2.85	12.43	4.11
1989	1.92	1.46	1.79	3.83	3.03	4.70	R 5.52	8.20	14.48	7.60	2.31	R 4.00	R 4.69	d R 3.01	d 2.93	11.98	d R 4.19
1990	1.84	R 1.45	1.72	3.57	3.14	5.89	R 6.98	9.83	14.60	8.74	2.64	R 4.43	R 5.18	R 0.95	3.04	11.94	4.29
1991	1.99	1.44	1.82	3.48	3.14	5.02	R 5.79	10.09	16.80	8.60	2.38	R 4.59	R 5.30	R 0.95	R 3.11	11.83	R 4.37
1992	2.00	1.38	1.79	3.35	2.62	4.91	R 5.00	8.85	18.32	8.28	2.47	R 4.24	R 4.73	R 0.95	R 2.99	11.73	R 4.33
1993	1.95	1.35	1.73	3.66	3.07	4.81	R 4.88	9.71	18.96	8.11	2.16	R 4.03	R 4.73	R 0.95	R 3.12	11.38	R 4.42
1994	1.90	R 1.38	1.68	4.54	3.06	4.66	R 4.93	7.14	19.11	8.21	2.21	R 3.92	R 4.46	R 2.07	R 3.53	11.64	R 4.90
1995	1.97	1.44	1.76	3.37	3.26	4.81	R 4.46	7.49	R 19.41	8.52	2.49	R 4.12	R 4.93	R 2.07	R 3.08	11.54	R 4.52
1996	1.94	1.40	1.71	3.58	3.21	5.90	5.67	9.11	20.08	9.05	2.90	4.74	5.34	2.07	3.24	11.50	4.63
1997	1.83	1.28	1.59	4.28	3.62	5.25	5.34	8.88	17.86	9.11	3.04	4.36	5.15	2.07	3.45	11.45	4.79
	Expenditures in Million Nominal Dollars																
1970	151.8	76.9	228.6	123.9	30.7	43.8	0.5	6.9	30.0	35.0	8.2	R 20.2	R 175.3	R 9.7	R 537.6	209.0	R 746.6
1975	651.7	125.1	776.8	198.3	82.5	121.5	0.8	41.0	38.2	31.5	84.2	R 57.5	R 457.2	R 12.6	R 1,444.9	510.8	R 1,955.7
1980	684.0	161.6	845.6	615.0	127.5	162.6	4.7	70.8	95.5	39.5	190.3	R 127.5	R 818.4	R 14.6	R 2,293.7	1,138.6	R 3,432.2
1981	823.4	197.0	1,020.3	729.2	213.7	217.6	6.5	53.3	114.8	47.0	161.3	R 290.5	R 1,104.6	R 15.4	R 2,869.6	1,222.5	R 4,092.1
1982	575.4	159.7	735.1	804.4	156.0	202.6	9.4	70.6	100.3	33.6	86.6	R 199.2	R 858.2	R 14.9	R 2,412.7	1,303.9	R 3,716.5
1983	598.3	158.4	756.6	871.4	169.6	165.9	R 9.0	63.4	103.4	24.3	31.9	R 173.1	R 740.7	R 16.9	R 2,385.6	1,412.4	R 3,798.0
1984	582.9	R 171.6	R 754.5	906.4	185.1	176.4	R 9.4	43.8	114.5	44.3	19.1	R 176.7	R 769.3	R 17.2	R 2,447.4	1,310.5	R 3,757.9
1985	560.1	R 184.1	R 744.2	829.5	170.2	160.8	5.1	65.2	106.5	41.9	46.2	R 167.8	R 763.8	R 17.1	R 2,354.6	1,539.1	R 3,893.7
1986	429.4	R 170.6	R 600.0	677.9	158.5	123.8	R 5.8	86.6	92.2	28.3	39.9	R 84.4	R 619.5	R 11.6	R 1,909.0	1,554.2	R 3,463.2
1987	454.8	155.0	609.8	658.8	166.4	147.1	R 4.2	69.7	90.8	R 30.4	36.9	R 102.6	R 648.0	R 11.6	R 1,928.1	1,462.6	R 3,390.8
1988	561.8	R 158.7	R 720.5	789.2	153.5	98.8	2.9	72.9	94.3	29.3	24.5	R 91.3	R 567.3	R 12.0	R 2,089.1	1,382.9	R 3,472.0
1989	502.0	155.7	657.8	823.2	128.4	131.8	R 2.5	90.2	95.8	30.2	27.0	R 102.6	R 608.5	d R 10.2	d R 2,099.7	1,384.8	d R 3,484.6
1990	437.9	R 151.9	R 589.8	793.3	178.1	156.2	R 2.2	179.9	99.4	R 28.7	43.2	R 134.7	R 822.4	R 3.7	R 2,209.2	1,419.5	R 3,628.7
1991	438.9	145.4	584.3	764.3	146.8	155.7	R 1.6	185.7	102.3	32.0	26.6	R 184.4	R 835.1	R 3.7	R 2,187.4	1,407.5	R 3,594.9
1992	384.2	134.6	R 518.9	795.7	108.0	156.7	R 1.5	89.5	113.7	27.8	37.5	R 196.8	R 731.6	R 3.9	R 2,050.0	1,460.3	R 3,510.2
1993	344.6	R 141.7	486.3	930.8	193.6	133.0	R 1.2	R 109.9	119.9	31.5	22.8	R 170.7	R 782.7	R 4.0	R 2,203.7	1,490.1	R 3,693.8
1994	246.4	133.0	379.4	1,185.5	207.8	139.6	R 2.4	63.5	126.3	R 36.0	24.1	R 173.6	R 773.4	R 9.9	R 2,348.3	1,577.6	R 3,925.8
1995	310.2	144.9	455.1	896.6	153.1	143.8	R 1.1	59.3	R 126.1	38.0	12.8	R 178.4	R 712.7	R 10.4	R 2,074.8	1,603.9	R 3,678.7
1996	302.4	158.3	460.7	1,002.2	181.8	162.3	2.7	76.6	126.6	38.4	9.1	215.4	813.0	10.8	2,286.7	1,653.3	3,940.1
1997	280.7	151.2	432.0	1,205.7	221.7	162.7	2.1	77.8	118.9	40.5	10.5	205.1	839.4	11.1	2,488.1	1,656.9	4,145.0

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.

R=Revised data.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 99. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Indiana

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.52	—	2.17	1.23	0.74	1.28	5.08	2.98	0.65	2.67	2.66	—	2.66
1975	1.36	—	3.45	2.69	2.08	2.63	7.48	4.75	1.53	4.35	4.35	—	4.35
1980	—	—	9.02	7.17	6.38	5.10	14.36	10.00	3.87	9.25	9.25	—	9.25
1981	—	—	10.84	8.63	7.55	4.65	18.00	11.05	5.43	10.41	10.41	—	10.41
1982	—	—	10.92	8.30	7.22	6.10	17.25	10.46	5.14	9.81	9.81	—	9.81
1983	—	—	10.44	8.17	6.42	6.65	16.98	9.12	4.82	8.80	8.80	—	8.80
1984	—	—	10.27	8.18	6.14	6.61	17.63	8.74	5.00	8.23	8.23	—	8.23
1985	—	—	9.99	8.28	5.81	9.09	17.61	8.85	4.85	8.27	8.27	—	8.27
1986	—	—	8.41	6.46	3.80	8.32	15.59	6.48	3.25	6.03	6.03	—	6.03
1987	—	—	7.55	6.76	3.96	7.93	13.58	6.90	3.22	6.35	6.35	—	6.35
1988	—	—	7.41	6.31	3.74	7.81	14.62	6.94	2.37	6.31	6.31	—	6.31
1989	—	—	8.28	6.89	4.33	8.20	14.48	7.60	2.66	6.89	6.89	—	6.89
1990	—	2.64	9.32	8.00	5.62	9.83	14.60	8.74	2.80	R 8.04	R 8.04	23.68	8.04
1991	—	4.64	8.71	7.71	4.76	10.09	16.80	8.60	2.29	7.76	7.76	23.19	7.76
1992	—	4.20	8.54	7.46	4.41	8.85	18.32	8.28	2.41	7.51	7.51	24.01	7.51
1993	—	5.16	8.24	7.42	4.10	9.71	18.96	8.11	2.42	7.35	7.35	26.37	7.36
1994	—	5.05	7.96	7.54	3.82	9.11	19.11	8.21	2.59	7.39	7.39	26.44	7.39
1995	—	7.05	8.36	7.54	3.85	9.46	R 19.41	8.52	2.72	7.60	7.60	26.71	7.60
1996	—	7.12	9.29	8.42	4.70	8.78	20.08	9.05	3.17	8.42	8.42	26.93	8.42
1997	—	5.47	9.39	8.09	4.47	8.28	17.86	9.11	3.14	8.37	8.37	27.68	8.38
	Expenditures in Million Nominal Dollars												
1970	R (s)	—	4.0	58.1	10.6	R (s)	18.8	882.2	1.3	975.5	975.9	—	975.9
1975	R (s)	—	3.8	175.3	30.4	1.2	34.6	1,579.7	3.2	1,828.1	1,828.2	—	1,828.2
1980	—	—	11.8	736.5	76.5	1.6	60.3	3,111.7	4.9	4,003.3	4,003.3	—	4,003.3
1981	—	—	10.3	861.4	120.2	3.0	72.5	3,491.4	6.5	4,565.3	4,565.3	—	4,565.3
1982	—	—	7.1	837.4	176.9	3.3	63.3	3,058.1	0.8	4,146.9	4,146.9	—	4,146.9
1983	—	—	7.9	834.9	158.6	3.9	65.3	2,710.0	2.8	3,783.5	3,783.5	—	3,783.5
1984	—	—	13.0	963.8	536.5	5.2	72.3	2,605.2	5.1	4,201.1	4,201.1	—	4,201.1
1985	—	—	19.8	996.8	507.4	4.8	67.3	R 2,636.7	0.9	R 4,233.8	R 4,233.8	—	R 4,233.8
1986	—	—	18.4	805.0	400.2	4.4	58.2	1,998.6	1.0	3,285.8	3,285.8	—	3,285.8
1987	—	—	14.4	844.2	428.4	3.8	57.3	R 2,247.7	2.3	R 3,598.1	R 3,598.1	—	R 3,598.1
1988	—	—	16.2	734.3	350.1	4.3	59.5	R 2,291.2	2.3	R 3,457.8	R 3,457.8	—	R 3,457.8
1989	—	—	12.0	981.3	429.8	4.6	60.5	R 2,414.5	3.5	R 3,906.3	R 3,906.3	—	R 3,906.3
1990	—	R (s)	14.2	1,163.3	569.3	R 5.4	62.7	R 2,788.9	3.5	R 4,607.5	R 4,607.6	R 1.0	R 4,608.6
1991	—	R (s)	13.3	1,060.6	463.5	5.8	64.6	R 2,722.4	1.3	R 4,331.4	R 4,331.7	R 1.0	R 4,332.7
1992	—	R (s)	10.9	995.2	399.7	5.2	71.8	R 2,654.3	3.1	R 4,140.2	R 4,140.5	R 1.0	R 4,141.5
1993	—	R (s)	8.4	1,046.9	380.3	4.5	75.7	R 2,746.3	5.2	R 4,267.1	R 4,267.4	R 1.3	R 4,268.7
1994	—	R (s)	6.0	1,181.5	374.5	R 7.8	79.7	R 2,835.7	3.7	R 4,488.9	R 4,489.3	R 1.3	R 4,490.5
1995	—	0.7	6.1	1,188.8	378.8	3.6	R 79.6	3,092.7	4.1	4,753.5	4,754.2	R 1.4	R 4,755.6
1996	—	0.8	8.0	1,380.7	335.4	3.6	79.9	3,262.0	5.9	5,075.5	5,076.3	1.4	5,077.7
1997	—	(s)	6.4	1,426.3	278.8	3.1	75.1	3,292.4	8.0	5,090.1	5,090.4	1.5	5,091.9

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 100. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Indiana

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.25	0.35	0.75	0.77	0.24	0.58	—	—	0.26
1975	0.59	0.82	1.74	2.12	—	1.83	—	—	0.62
1980	1.27	2.51	—	5.99	—	5.99	—	—	1.30
1981	1.48	3.00	—	7.59	—	7.59	—	—	1.52
1982	1.60	3.55	—	6.88	—	6.88	—	—	1.64
1983	1.57	4.24	—	6.06	—	6.06	—	—	1.59
1984	1.61	4.13	—	6.05	—	6.05	—	—	1.62
1985	1.64	4.15	—	5.87	—	5.87	—	—	1.66
1986	1.58	4.54	—	3.89	0.80	2.55	—	—	1.59
1987	1.47	2.82	—	4.12	0.99	2.71	—	—	1.47
1988	1.43	2.59	—	3.63	0.93	2.37	—	—	1.44
1989	1.36	2.70	—	4.22	0.74	2.30	—	—	1.37
1990	1.36	2.58	—	5.12	0.71	2.03	—	—	1.38
1991	1.34	2.38	—	4.94	0.81	2.86	—	—	1.36
1992	1.31	2.48	—	4.43	0.69	2.41	—	—	1.32
1993	1.27	2.74	—	4.21	—	4.21	—	—	1.28
1994	1.27	2.66	—	3.90	—	3.90	—	—	1.29
1995	1.26	2.44	—	4.01	0.69	3.35	—	—	1.27
1996	1.19	3.41	—	4.87	0.73	2.94	—	—	1.21
1997	1.16	3.16	—	4.53	0.89	1.82	—	—	1.18
	Expenditures in Million Nominal Dollars								
1970	123.7	10.3	1.0	1.2	R (s)	2.5	—	—	136.5
1975	343.1	9.0	14.7	5.9	—	20.6	—	—	372.6
1980	921.2	4.8	—	25.4	—	25.4	—	—	951.4
1981	1,028.5	15.9	—	32.8	—	32.8	—	—	1,077.3
1982	1,067.6	9.6	—	21.0	—	21.0	—	—	1,098.3
1983	1,149.6	12.2	—	12.6	—	12.6	—	—	1,174.4
1984	1,333.8	6.0	—	10.8	—	10.8	—	—	1,350.6
1985	1,340.7	4.7	—	14.2	—	14.2	—	—	1,359.6
1986	1,257.4	5.0	—	7.3	1.2	8.5	—	—	1,270.9
1987	1,180.5	3.7	—	8.5	1.7	10.1	—	—	1,194.4
1988	1,243.0	9.0	—	8.0	1.8	9.8	—	—	1,261.8
1989	1,232.3	11.0	—	9.1	2.0	11.1	—	—	1,254.3
1990	1,371.0	17.1	—	12.6	4.1	16.7	—	—	1,404.9
1991	1,355.8	23.9	—	10.1	1.7	11.8	—	—	1,391.5
1992	1,309.0	19.3	—	6.8	1.3	8.1	—	—	1,336.4
1993	1,305.3	15.7	—	9.6	—	9.6	—	—	1,330.6
1994	1,354.8	24.5	—	9.3	—	9.3	—	—	1,388.7
1995	1,351.6	20.8	—	8.0	R (s)	8.3	—	—	1,380.8
1996	1,303.9	15.2	—	10.0	1.3	11.3	—	—	1,330.4
1997	1,335.7	15.1	—	8.5	4.9	13.4	—	—	1,364.1

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 101. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Iowa

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.36	0.36	0.57	1.01	0.75	1.59	2.83	0.61	1.58	2.11	—	R 2.40	R 1.20	0.30	6.39	1.80
1975	—	0.95	0.95	1.00	2.45	2.09	3.00	4.59	1.88	3.18	3.74	0.25	R 2.74	2.16	0.75	9.11	3.12
1980	—	1.42	1.42	2.79	6.41	6.47	5.57	9.97	3.19	7.31	8.19	0.39	R 3.74	R 4.59	1.32	13.97	R 6.69
1981	—	1.54	1.54	3.42	7.50	7.60	5.88	11.07	3.81	8.93	9.36	0.53	R 3.91	R 5.11	1.44	15.92	R 7.74
1982	—	1.62	1.62	4.19	7.32	7.19	6.09	10.62	3.66	8.00	8.86	0.54	R 3.86	R 5.23	1.50	17.36	R 8.03
1983	—	1.64	1.64	4.76	6.94	6.73	6.81	9.49	3.73	R 8.18	8.34	0.68	R 3.80	R 5.07	1.56	18.43	R 8.22
1984	—	1.56	1.56	4.71	6.96	6.55	6.44	9.34	4.99	R 8.30	R 8.29	0.79	R 3.82	R 4.97	1.48	18.87	R 8.05
1985	—	1.52	1.52	4.60	6.53	6.28	7.54	9.47	4.07	R 8.00	8.27	0.94	R 3.74	R 4.90	1.46	19.02	R 8.03
1986	—	1.41	1.41	4.22	5.50	4.36	7.44	7.13	2.86	6.52	6.57	0.75	R 3.29	R 4.09	1.31	19.25	R 7.25
1987	—	1.31	1.31	3.63	5.93	4.27	6.00	7.36	2.48	6.45	6.72	0.71	R 3.35	3.87	1.21	18.30	R 7.03
1988	—	1.28	1.28	3.80	5.64	4.12	5.94	7.37	2.38	R 6.03	6.59	0.68	R 3.39	R 3.80	1.19	17.59	R 6.86
1989	—	1.25	1.25	3.57	6.46	4.57	6.95	8.40	2.25	R 6.37	7.52	0.67	e R 3.53	e 4.01	1.18	17.30	e R 7.13
1990	—	1.16	1.16	3.81	7.65	6.11	5.97	9.38	2.36	R 6.85	R 8.38	0.66	R 1.36	R 4.26	1.10	17.37	R 7.65
1991	—	1.15	1.15	3.65	6.98	5.21	7.62	9.11	2.24	R 7.34	8.20	0.66	R 1.32	R 4.05	1.07	17.41	R 7.44
1992	—	1.14	1.14	4.24	6.69	4.78	7.64	8.72	2.21	R 7.90	7.89	0.56	R 1.22	R 4.23	1.06	17.53	R 7.58
1993	—	1.07	1.07	4.49	6.58	4.52	8.61	8.42	2.18	R 8.18	7.85	0.60	R 1.04	R 4.34	1.00	17.49	R 7.70
1994	—	1.06	1.06	4.51	6.59	4.26	7.14	8.71	2.10	7.39	7.69	0.66	R 2.51	R 4.31	0.97	17.36	R 7.64
1995	—	1.06	1.06	3.99	6.61	4.22	7.39	8.69	2.38	R 8.12	7.76	0.74	R 2.51	R 4.18	0.98	17.68	R 7.53
1996	—	1.03	1.03	4.43	7.68	5.08	8.99	9.51	2.94	7.63	8.70	0.72	2.63	4.54	0.95	17.41	7.95
1997	—	1.03	1.03	4.97	7.31	4.79	8.76	9.42	3.05	6.86	8.44	0.64	2.54	4.55	0.94	17.49	8.10
	Expenditures in Million Nominal Dollars																
1970	—	47.5	47.5	190.2	80.7	3.0	66.2	530.1	1.5	49.0	730.5	—	R 3.7	R 971.8	-50.4	337.5	R 1,259.0
1975	—	125.4	125.4	332.4	207.6	9.8	152.2	942.1	7.2	84.6	1,403.5	6.3	R 5.1	R 1,872.7	-132.5	624.4	R 2,364.6
1980	—	333.3	333.3	719.9	594.5	29.6	228.5	1,853.2	8.3	315.3	3,029.5	10.9	R 37.8	R 4,131.4	-313.1	1,184.5	R 5,002.8
1981	—	388.0	388.0	831.7	633.8	30.6	212.0	1,993.7	2.4	283.4	3,155.9	12.9	R 40.8	R 4,429.2	-352.6	1,433.5	R 5,510.0
1982	—	394.5	394.5	963.8	692.1	25.6	263.0	1,843.2	7.7	227.3	3,058.9	13.5	R 40.2	R 4,470.9	-356.0	1,561.9	R 5,676.8
1983	—	415.2	415.2	1,025.3	569.6	22.3	295.9	1,615.3	4.9	R 198.6	R 2,706.5	17.0	R 44.1	R 4,208.2	-387.6	1,745.1	R 5,565.6
1984	—	R 392.8	R 392.8	1,071.6	622.8	22.5	170.1	1,580.8	4.4	R 219.7	R 2,620.3	23.0	R 44.1	R 4,151.8	-367.3	1,653.2	R 5,437.7
1985	—	R 407.7	R 407.7	1,003.4	588.8	20.9	231.0	R 1,566.0	4.7	R 214.1	R 2,625.4	19.6	R 43.2	R 4,099.3	-366.7	1,666.6	R 5,399.2
1986	—	370.6	370.6	851.8	510.9	14.5	237.5	1,174.7	9.1	150.1	2,096.9	24.4	R 28.1	R 3,371.8	-335.2	1,731.1	R 4,767.7
1987	—	R 375.3	R 375.3	713.4	544.8	18.7	133.9	R 1,225.7	1.8	139.7	R 2,064.7	19.3	R 27.6	R 3,200.3	-326.2	1,687.4	R 4,561.4
1988	—	R 390.7	R 390.7	874.1	524.2	16.5	143.4	R 1,258.9	3.9	R 146.9	R 2,093.7	23.0	R 28.5	R 3,410.1	-354.1	1,731.0	R 4,787.0
1989	—	397.8	397.8	777.2	562.6	19.3	183.7	R 1,436.5	2.6	R 131.5	R 2,336.2	22.6	e R 25.4	e R 3,559.1	-350.2	1,695.0	e R 4,903.9
1990	—	386.2	386.2	803.0	678.4	30.7	137.6	R 1,561.2	1.9	R 137.1	R 2,546.8	21.3	R 8.7	R 3,766.0	-340.8	1,744.6	R 5,169.8
1991	—	397.9	397.9	833.2	594.0	26.1	199.8	R 1,553.3	1.4	R 134.9	R 2,509.4	29.2	R 8.8	R 3,778.6	-353.3	1,829.0	R 5,254.3
1992	—	373.1	373.1	953.1	638.3	21.6	248.7	R 1,453.2	1.5	R 139.5	R 2,502.7	20.4	R 8.5	R 3,857.7	-330.5	1,807.2	R 5,334.4
1993	—	364.3	364.3	1,084.0	650.0	18.3	486.2	R 1,446.0	2.3	R 143.8	R 2,746.5	20.9	R 7.1	R 4,222.7	-328.9	1,915.5	R 5,809.4
1994	—	368.0	368.0	1,081.2	711.1	21.5	406.7	R 1,549.9	2.4	158.0	R 2,849.6	28.9	R 19.2	R 4,346.8	-330.2	1,957.5	R 5,974.1
1995	—	389.4	389.4	1,008.5	726.5	25.0	455.2	1,571.3	1.4	R 153.8	R 2,933.2	29.2	R 20.2	R 4,380.5	-347.6	2,069.2	R 6,102.1
1996	—	391.2	391.2	1,158.7	907.0	23.6	335.2	1,794.7	1.8	165.6	3,227.9	29.9	21.7	4,829.5	-336.1	2,078.5	6,571.8
1997	—	402.0	402.0	1,219.8	874.7	21.5	330.1	1,760.6	1.4	177.5	3,165.8	28.1	20.1	4,835.7	-343.3	2,156.8	6,649.2

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 102. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Iowa

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.27	0.96	1.22	1.57	1.85	1.63	0.61	1.16	7.75	2.06
1975	3.69	1.42	2.56	2.99	3.55	3.25	1.20	R 1.93	10.46	3.44
1980	3.31	3.18	6.79	8.10	6.86	6.84	3.06	R 4.08	16.13	R 6.82
1981	3.51	3.88	8.06	9.91	6.47	7.36	3.77	R 4.73	18.42	R 8.00
1982	3.84	4.66	7.90	9.91	7.20	7.68	3.66	R 5.34	19.87	R 8.68
1983	3.67	5.45	7.41	R 7.70	7.66	R 7.60	3.54	R 5.84	21.07	R 9.89
1984	3.07	5.48	7.37	R 7.93	7.01	R 7.18	3.60	R 5.70	21.90	R 9.71
1985	3.41	5.33	5.94	R 7.85	5.62	R 5.83	3.46	R 5.35	22.53	R 9.56
1986	3.12	5.07	5.32	R 6.32	5.51	R 5.45	2.77	R 5.07	22.56	R 9.55
1987	2.89	4.71	5.33	R 6.38	5.00	R 5.16	2.64	R 4.71	22.91	R 9.87
1988	2.51	4.76	4.80	R 6.26	5.31	R 5.15	2.67	R 4.73	22.23	R 9.43
1989	2.60	4.65	4.86	R 6.78	8.68	R 7.40	2.95	R 5.11	22.19	R 9.57
1990	2.41	4.96	5.73	R 8.20	7.19	R 6.74	3.56	5.15	22.89	R 10.17
1991	2.32	4.77	5.32	R 7.45	6.39	R 6.09	3.41	4.92	22.76	R 9.80
1992	2.25	5.21	5.38	R 7.10	6.92	6.51	3.12	R 5.37	23.51	R 10.26
1993	2.41	5.46	4.34	R 6.28	6.64	6.06	3.05	R 5.51	23.50	R 10.26
1994	2.35	5.36	4.91	R 6.00	6.90	6.33	2.96	R 5.49	23.72	R 10.44
1995	2.31	5.06	4.94	R 4.97	6.94	R 6.42	2.90	R 5.25	24.14	R 10.43
1996	2.42	5.46	7.07	6.00	8.80	8.42	3.33	5.93	23.93	10.53
1997	2.42	6.11	6.89	5.62	8.43	8.09	3.31	6.36	24.05	11.10
	Expenditures in Million Nominal Dollars									
1970	1.6	92.9	15.8	2.9	47.6	66.4	(s)	R 161.1	171.3	R 332.4
1975	3.3	134.7	26.9	2.3	89.5	118.8	(s)	R 257.2	297.5	R 554.7
1980	2.1	271.2	94.5	2.2	98.0	194.6	6.3	R 474.2	552.6	R 1,026.8
1981	5.1	299.9	94.4	13.2	84.9	192.5	7.8	R 505.3	619.2	R 1,124.5
1982	5.1	397.9	97.1	16.8	98.0	211.9	8.2	R 623.1	691.4	R 1,314.5
1983	5.3	427.1	43.8	R 2.4	124.1	R 170.2	7.8	R 610.4	795.6	R 1,406.0
1984	4.9	443.2	47.0	R 6.0	74.3	R 127.3	7.0	R 582.4	737.6	R 1,320.0
1985	7.1	424.1	49.7	R 5.1	60.6	R 115.4	6.6	R 553.2	757.4	R 1,310.6
1986	5.9	379.8	43.0	R 2.7	65.5	R 111.2	5.1	R 502.1	770.4	R 1,272.5
1987	7.1	309.9	37.8	2.1	46.1	R 86.0	4.2	R 407.3	785.1	R 1,192.3
1988	7.2	364.6	31.2	R 2.8	59.6	R 93.6	4.5	R 469.9	810.0	R 1,279.9
1989	3.7	363.8	30.2	R 1.6	107.8	R 139.5	5.1	R 512.1	787.0	R 1,299.2
1990	5.0	356.2	26.6	R 1.1	71.5	R 99.2	7.8	R 468.2	821.2	R 1,289.4
1991	4.4	379.0	27.5	R 1.4	77.6	R 106.5	7.9	R 497.8	866.4	R 1,364.2
1992	1.2	391.6	24.4	0.8	85.3	R 110.5	7.6	R 510.9	825.3	R 1,336.2
1993	1.5	457.2	20.7	R 1.2	94.7	R 116.6	6.1	R 581.4	890.1	R 1,471.5
1994	0.8	422.6	27.8	0.6	98.5	127.0	5.8	R 556.2	895.1	R 1,451.4
1995	1.8	418.6	24.3	R 0.7	99.6	R 124.6	6.4	R 551.4	958.7	R 1,510.0
1996	4.6	483.5	32.3	1.0	150.0	183.3	7.3	678.7	941.9	1,620.6
1997	7.5	504.1	30.8	0.9	143.8	175.5	5.3	692.2	958.1	1,650.3

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 103. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Iowa

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.41	0.68	1.05	0.81	1.16	2.83	0.66	1.30	0.61	0.77	7.68	1.80
1975	1.24	1.05	2.40	2.30	2.46	4.59	1.69	2.71	1.20	1.29	10.55	2.94
1980	1.59	2.84	6.44	5.52	4.88	9.97	3.80	6.57	3.06	3.38	15.93	R 6.32
1981	1.76	3.50	7.74	6.17	5.55	11.07	4.64	7.85	3.77	4.03	18.34	8.12
1982	1.84	4.28	7.52	6.16	5.58	10.62	4.03	7.59	3.66	4.64	19.76	R 8.73
1983	1.69	4.97	6.37	R 7.70	6.30	9.49	4.08	6.70	3.54	5.15	20.98	9.66
1984	R 1.71	4.98	6.37	R 7.93	6.06	9.34	5.05	6.61	3.60	5.10	21.91	9.40
1985	1.66	4.80	6.03	R 7.85	8.58	9.47	4.07	R 6.98	NA	4.95	21.88	9.32
1986	1.57	4.41	3.69	R 6.32	8.58	7.13	2.86	5.63	NA	4.40	21.81	9.41
1987	R 1.53	3.84	4.21	R 6.38	6.71	7.36	2.49	R 5.31	NA	3.85	19.95	8.88
1988	R 1.43	4.00	3.80	R 6.26	6.48	7.37	2.38	5.26	NA	3.95	19.06	8.40
1989	1.35	3.86	4.44	R 6.78	5.42	8.40	2.25	R 5.46	NA	3.93	18.63	8.47
1990	1.34	4.00	5.44	R 8.20	5.05	9.38	2.36	R 5.83	NA	R 4.01	18.30	8.62
1991	1.31	3.96	4.83	R 7.45	8.68	9.11	2.24	R 7.46	NA	4.35	18.24	8.68
1992	1.32	4.25	4.66	R 7.10	8.08	8.72	2.21	7.05	NA	R 4.64	18.63	9.14
1993	1.39	4.51	4.50	R 6.28	9.28	8.42	2.18	7.64	3.05	R 4.86	18.42	R 9.31
1994	1.42	4.47	4.29	R 6.00	8.14	8.71	2.10	R 6.39	2.96	R 4.61	18.38	R 9.51
1995	1.40	4.12	4.30	R 4.97	8.17	8.69	—	6.29	2.90	4.25	18.74	R 9.25
1996	1.38	4.56	5.24	6.00	9.45	9.51	2.94	8.07	3.33	4.73	18.88	9.16
1997	1.38	5.13	4.91	5.62	9.98	9.42	—	8.42	3.31	5.17	19.15	9.69
	Expenditures in Million Nominal Dollars											
1970	1.0	39.4	5.5	R (s)	5.3	4.0	R (s)	15.1	(s)	55.5	95.8	151.3
1975	2.0	71.1	10.1	R (s)	11.0	7.8	1.2	30.2	(s)	103.3	184.3	287.6
1980	1.9	144.0	28.2	R (s)	12.3	18.3	1.9	60.8	(s)	R 206.8	299.0	R 505.8
1981	4.7	164.1	28.1	R (s)	12.8	22.2	0.8	64.4	(s)	R 233.4	424.2	R 657.6
1982	4.4	222.3	28.3	1.3	13.4	21.3	0.7	65.0	(s)	R 291.8	461.8	R 753.6
1983	4.5	236.3	45.4	R (s)	18.0	12.0	R (s)	75.7	(s)	R 316.7	514.0	R 830.7
1984	5.0	242.9	49.0	R (s)	11.3	10.0	R (s)	70.6	(s)	R 318.7	469.9	R 788.5
1985	6.4	231.3	39.5	R (s)	16.3	11.8	(s)	R 68.0	NA	305.7	470.8	776.5
1986	5.5	194.7	14.6	(s)	18.0	10.2	0.7	43.6	NA	243.8	487.4	731.2
1987	6.9	147.3	18.6	R (s)	10.9	10.3	R (s)	R 40.3	NA	R 194.5	457.3	651.7
1988	7.2	181.2	15.2	R (s)	12.8	13.1	R (s)	41.6	NA	230.0	464.0	694.0
1989	3.5	180.0	12.7	R (s)	11.9	10.3	R (s)	35.5	NA	R 219.0	464.0	R 683.0
1990	5.1	177.1	15.7	R 1.8	8.9	R 7.0	R (s)	R 33.8	NA	R 216.0	470.2	R 686.2
1991	4.6	186.0	15.8	R (s)	18.6	34.8	R (s)	R 69.5	NA	260.0	494.0	754.0
1992	1.3	196.8	13.3	R (s)	17.6	29.6	0.5	R 61.1	NA	259.2	494.7	753.9
1993	1.4	227.5	9.3	R (s)	23.4	28.2	R (s)	R 61.2	(s)	R 290.2	536.5	826.6
1994	0.9	216.1	9.8	R (s)	20.5	1.6	(s)	R 32.3	(s)	R 249.8	548.9	R 798.7
1995	2.0	208.3	11.2	R (s)	20.7	1.6	—	33.6	(s)	R 244.4	568.5	R 813.0
1996	4.9	250.5	11.0	(s)	28.4	12.2	(s)	51.8	0.6	307.7	558.8	866.5
1997	7.9	260.0	9.7	(s)	30.0	22.0	—	62.0	0.5	330.5	584.4	914.9

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 104. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Iowa

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	0.41	0.41	0.36	0.72	0.75	0.81	1.16	5.08	2.83	0.57	2.15	1.48	R 4.00	R 0.84	3.87	R 1.05
1975	—	1.24	1.24	0.77	2.06	2.15	2.30	2.46	7.48	4.59	1.92	3.21	2.85	R 4.00	R 1.62	6.31	R 2.02
1980	—	1.59	1.59	2.51	3.77	5.28	5.52	4.88	14.36	9.97	2.88	7.65	6.27	R 4.00	R 3.97	10.47	R 4.67
1981	—	1.76	1.76	3.10	5.50	5.86	6.17	5.55	18.00	11.07	3.23	9.49	7.27	R 4.00	R 4.45	11.72	R 5.33
1982	—	1.84	1.84	3.71	4.42	5.82	6.16	5.58	17.25	10.62	3.59	8.79	6.54	R 4.00	R 4.61	12.85	R 5.66
1983	—	1.69	1.69	4.05	4.72	6.67	R 7.17	6.30	16.98	9.49	3.68	8.30	6.75	R 4.00	R 4.66	13.42	R 5.88
1984	—	R 1.71	R 1.71	3.95	4.92	6.61	R 7.28	6.06	17.63	9.34	5.05	8.46	6.96	R 4.00	R 4.61	13.71	R 5.86
1985	—	1.66	1.66	3.87	5.03	6.28	R 6.99	8.58	17.61	9.47	4.07	8.17	7.27	R 4.00	R 4.76	13.50	R 5.93
1986	—	1.57	1.57	3.36	3.89	4.06	R 4.85	8.58	15.59	7.13	2.86	6.44	5.53	R 3.82	3.93	14.16	R 5.37
1987	—	R 1.53	R 1.53	2.80	3.55	4.50	R 4.89	6.71	13.58	7.36	2.49	7.20	5.36	R 3.82	R 3.40	12.71	R 4.76
1988	—	R 1.43	R 1.43	3.09	3.46	4.16	R 4.39	6.48	14.62	7.37	2.38	6.21	4.97	R 3.82	R 3.39	12.15	R 4.67
1989	—	1.35	1.35	2.51	3.00	4.72	R 5.38	5.42	14.48	8.40	2.25	6.91	5.25	d R 3.82	d R 3.03	11.81	d R 4.36
1990	—	1.34	1.34	2.85	3.12	5.81	R 7.11	5.05	14.60	9.38	2.36	7.29	R 5.80	R 0.14	R 3.23	11.66	R 4.57
1991	—	1.31	1.31	2.63	3.15	5.17	R 6.26	8.68	16.80	9.11	2.24	8.98	6.30	R 0.14	R 3.23	11.75	R 4.52
1992	—	1.32	1.32	3.54	2.49	5.14	R 5.45	8.08	18.32	8.72	2.21	10.19	6.21	R 0.15	R 3.82	11.77	R 5.02
1993	—	1.39	1.39	3.75	2.89	5.00	R 4.88	9.28	18.96	8.42	2.18	9.31	R 7.04	R 0.15	R 4.45	11.50	R 5.47
1994	—	1.42	1.42	3.96	2.87	4.86	R 5.19	7.14	19.11	8.71	2.10	10.07	6.00	R 2.39	R 4.19	11.38	R 5.21
1995	—	1.40	1.40	3.21	3.22	4.87	R 5.16	7.49	R 19.41	8.69	2.38	10.25	6.36	R 2.39	R 3.96	11.53	R 5.05
1996	—	1.38	1.38	3.61	3.11	5.85	6.08	9.11	20.08	9.51	2.94	10.80	6.74	2.39	3.95	11.45	5.16
1997	—	1.38	1.38	4.07	3.44	5.37	5.83	8.88	17.86	9.42	3.05	10.17	6.31	2.36	4.09	11.59	5.33
	Expenditures in Million Nominal Dollars																
1970	—	17.8	17.8	36.3	13.9	25.8	0.7	13.0	6.8	80.0	0.9	7.1	148.2	R 3.2	R 205.6	70.5	R 276.1
1975	—	35.1	35.1	94.6	31.4	58.6	0.9	51.2	7.0	91.5	3.4	16.8	260.8	R 4.3	R 394.8	142.6	R 537.4
1980	—	51.6	51.6	288.2	42.5	144.4	3.7	117.6	16.7	136.7	5.0	196.2	662.9	R 30.8	R 1,033.5	332.9	R 1,366.4
1981	—	56.5	56.5	357.5	72.0	147.1	4.4	112.2	20.1	168.8	1.2	109.7	635.5	R 32.5	R 1,082.1	390.0	R 1,472.2
1982	—	57.4	57.4	334.5	56.2	155.6	4.0	149.5	17.6	120.6	6.3	77.6	587.5	R 31.5	R 1,010.9	408.8	R 1,419.7
1983	—	53.4	53.4	349.4	50.2	148.2	1.2	151.0	18.1	46.3	4.3	71.5	490.8	R 35.6	R 929.2	435.5	R 1,364.6
1984	—	R 55.1	R 55.1	373.8	60.1	158.6	1.7	81.3	20.0	85.4	3.9	72.5	483.5	R 36.3	R 948.7	445.8	R 1,394.5
1985	—	R 58.9	R 58.9	340.2	67.6	175.3	1.3	151.3	18.6	84.8	4.6	66.2	569.6	R 36.1	R 1,004.9	438.4	R 1,443.3
1986	—	55.6	55.6	272.6	52.6	138.2	R 1.1	149.6	16.1	56.5	8.4	27.2	R 449.7	R 22.8	R 800.7	473.2	R 1,273.9
1987	—	R 64.9	R 64.9	249.1	42.1	129.9	1.3	75.7	15.9	R 57.6	1.4	30.7	R 354.6	R 22.7	R 691.3	445.1	R 1,136.3
1988	—	R 59.5	R 59.5	317.3	50.8	124.5	0.6	69.9	16.5	R 54.5	3.6	25.8	R 346.1	R 23.6	R 746.4	457.0	R 1,203.4
1989	—	72.7	72.7	226.9	34.1	112.9	0.7	63.0	16.8	57.5	2.1	27.9	315.0	d R 19.9	d R 634.6	444.0	d R 1,078.6
1990	—	71.3	71.3	259.0	31.8	140.1	R 0.8	56.5	17.4	R 52.8	1.4	32.3	R 333.0	R 0.6	R 663.9	453.3	R 1,117.2
1991	—	77.9	77.9	258.2	32.6	138.8	0.5	102.1	17.9	55.5	1.2	30.0	R 378.6	R 0.6	R 715.4	468.6	R 1,183.9
1992	—	69.9	69.9	357.7	23.2	186.4	R 0.5	144.5	19.9	48.2	1.0	37.5	461.2	R 0.6	R 889.4	487.2	R 1,376.6
1993	—	70.0	70.0	385.9	25.9	179.3	R 0.9	366.3	21.0	35.3	2.2	34.6	R 665.5	R 0.6	R 1,122.1	488.9	R 1,611.0
1994	—	78.2	78.2	433.8	37.4	189.1	0.8	282.7	22.1	50.7	2.4	33.8	618.9	R 12.4	R 1,143.4	513.5	R 1,656.9
1995	—	80.9	80.9	371.7	35.0	172.7	1.2	332.8	R 22.1	47.4	1.4	31.8	644.3	R 13.0	R 1,110.0	541.9	R 1,651.9
1996	—	90.7	90.7	413.8	42.3	215.9	0.7	153.9	22.2	55.2	1.8	35.7	527.6	13.5	1,045.6	577.9	1,623.5
1997	—	91.3	91.3	441.7	59.8	214.4	0.9	153.8	20.8	54.0	1.4	34.5	539.7	14.0	1,086.6	614.2	1,700.8

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.

R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 105. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Iowa

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.41	—	2.17	1.27	0.75	1.16	5.08	2.83	0.66	2.60	2.60	—	2.60
1975	1.24	—	3.45	2.65	2.09	2.46	7.48	4.59	—	4.24	4.24	—	4.24
1980	—	—	9.02	6.97	6.47	4.88	14.36	9.97	—	9.34	9.34	—	9.34
1981	—	—	10.84	8.28	7.60	5.55	18.00	11.07	4.50	10.53	10.53	—	10.53
1982	—	—	10.92	7.96	7.19	5.58	17.25	10.62	—	10.02	10.02	—	10.02
1983	—	—	10.44	7.10	6.73	6.30	16.98	9.49	3.86	9.04	9.04	—	9.04
1984	—	—	10.27	7.18	6.55	6.06	17.63	9.34	4.42	8.90	8.90	—	8.90
1985	—	—	9.99	6.85	6.28	8.58	17.61	9.47	—	8.95	8.95	—	8.95
1986	—	—	8.41	6.76	4.36	8.58	15.59	7.13	—	7.13	7.13	—	7.13
1987	—	—	7.55	7.01	4.27	6.71	13.58	7.36	2.33	7.31	7.31	—	7.31
1988	—	—	7.41	6.77	4.12	6.48	14.62	7.37	—	7.27	7.27	—	7.27
1989	—	—	8.28	7.55	4.57	5.42	14.48	8.40	2.08	8.20	8.20	—	8.20
1990	—	6.43	9.32	8.74	6.11	5.05	14.60	9.38	1.82	9.22	9.22	—	9.22
1991	—	3.09	8.71	8.32	5.21	8.68	16.80	9.11	—	8.94	8.94	—	8.94
1992	—	3.97	8.54	8.05	4.78	8.08	18.32	8.72	—	8.61	8.61	—	8.61
1993	—	3.83	8.24	7.89	4.52	9.28	18.96	8.42	—	8.36	8.36	—	8.36
1994	—	3.48	7.96	8.00	4.26	9.11	19.11	8.71	—	8.57	8.57	—	8.57
1995	—	2.97	8.36	7.79	4.22	9.46	R 19.41	8.69	—	8.48	8.48	—	8.48
1996	—	2.68	9.29	8.73	5.08	8.78	20.08	9.51	—	9.34	9.34	—	9.34
1997	—	5.36	9.39	8.52	4.79	8.28	17.86	9.42	—	9.19	9.19	—	9.19
	Expenditures in Million Nominal Dollars												
1970	(s)	—	2.8	32.2	3.0	R (s)	14.8	446.0	R (s)	499.1	499.2	—	499.2
1975	(s)	—	3.3	105.7	9.8	R (s)	22.7	842.8	—	984.9	984.9	—	984.9
1980	—	—	8.4	321.6	29.6	0.6	45.4	1,698.2	—	2,103.8	2,103.8	—	2,103.8
1981	—	—	8.8	356.6	30.6	2.1	54.6	1,802.8	R (s)	2,255.7	2,255.7	—	2,255.7
1982	—	—	6.1	406.2	25.6	2.1	47.7	1,701.3	—	2,189.1	2,189.1	—	2,189.1
1983	—	—	5.8	327.2	22.3	2.8	49.2	1,557.0	R (s)	1,964.3	1,964.3	—	1,964.3
1984	—	—	4.6	364.4	22.5	3.1	54.5	1,485.4	R (s)	1,934.7	1,934.7	—	1,934.7
1985	—	—	4.2	320.9	20.9	2.8	50.7	R 1,469.4	—	R 1,868.9	R 1,868.9	—	R 1,868.9
1986	—	—	6.4	312.8	14.5	4.4	43.9	1,108.0	—	1,490.1	1,490.1	—	1,490.1
1987	—	—	4.2	355.8	18.7	1.2	43.2	R 1,157.8	R (s)	R 1,581.0	R 1,581.0	—	R 1,581.0
1988	—	—	5.4	350.6	16.5	1.1	44.9	R 1,191.3	—	R 1,609.8	R 1,609.8	—	R 1,609.8
1989	—	—	4.6	403.9	19.3	1.0	45.6	R 1,368.7	(s)	R 1,843.2	R 1,843.2	—	R 1,843.2
1990	—	(s)	4.7	492.3	30.7	0.8	47.3	R 1,501.4	(s)	R 2,077.1	R 2,077.1	—	R 2,077.1
1991	—	(s)	3.6	409.1	26.1	1.5	48.7	R 1,463.1	—	R 1,952.1	R 1,952.1	—	R 1,952.1
1992	—	(s)	3.2	412.1	21.6	1.3	54.1	R 1,375.4	—	R 1,867.7	R 1,867.7	—	R 1,867.7
1993	—	(s)	2.9	437.7	18.3	1.8	57.0	R 1,382.5	—	R 1,900.2	R 1,900.2	—	R 1,900.2
1994	—	(s)	2.8	480.2	21.5	5.0	60.1	R 1,497.6	—	R 2,067.2	R 2,067.2	—	R 2,067.2
1995	—	(s)	3.0	514.7	25.0	2.0	60.0	1,522.3	—	2,127.1	R 2,127.2	—	R 2,127.2
1996	—	(s)	3.4	643.8	23.6	2.9	60.2	1,727.3	—	2,461.2	2,461.2	—	2,461.2
1997	—	(s)	3.7	614.3	21.5	2.5	56.6	1,684.5	—	2,383.1	2,383.1	—	2,383.1

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 106. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Iowa

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.32	0.27	0.70	0.75	—	0.74	—	0.65	0.30
1975	0.85	0.68	1.93	2.11	—	2.05	0.25	0.92	0.75
1980	1.39	2.41	3.78	6.06	—	5.41	0.39	1.74	1.32
1981	1.49	2.97	4.63	7.39	—	7.29	0.53	1.24	1.44
1982	1.57	3.57	4.06	6.22	—	5.86	0.54	1.28	1.50
1983	1.62	3.75	4.20	6.18	—	5.96	0.68	1.12	1.56
1984	1.53	3.69	4.50	6.10	—	5.97	0.79	1.28	1.48
1985	1.48	3.61	3.99	5.93	—	5.88	0.94	0.79	1.46
1986	1.37	3.42	—	R 3.62	—	R 3.62	0.75	0.32	1.31
1987	1.25	2.15	—	4.06	—	4.06	0.71	0.95	1.21
1988	1.24	2.03	—	3.72	—	3.72	0.68	0.87	1.19
1989	1.22	2.67	—	4.45	—	4.45	0.67	1.47	1.18
1990	1.12	3.05	—	5.18	—	5.18	0.66	1.60	1.10
1991	1.10	2.69	—	4.38	—	4.38	0.66	1.67	1.07
1992	1.10	3.07	—	4.24	—	4.24	0.56	1.58	1.06
1993	1.01	3.10	—	4.08	—	4.08	0.60	1.50	1.00
1994	0.99	3.16	—	3.92	—	3.92	0.66	1.52	0.97
1995	0.99	2.71	—	4.09	—	4.09	0.74	1.50	0.98
1996	0.94	3.22	—	5.08	—	5.08	0.72	1.38	0.95
1997	0.94	3.40	—	4.45	—	4.45	0.64	1.38	0.94
	Expenditures in Million Nominal Dollars								
1970	27.0	21.5	R (s)	1.4	—	1.6	—	R (s)	50.4
1975	85.0	32.0	2.6	6.2	—	8.8	6.3	R (s)	132.5
1980	277.7	16.6	1.5	5.9	—	7.4	10.9	0.5	313.1
1981	321.8	10.0	R (s)	7.5	—	7.7	12.9	R (s)	352.6
1982	327.7	9.1	0.6	4.8	—	5.5	13.5	R (s)	356.0
1983	352.1	12.5	R (s)	5.0	—	5.4	17.0	0.5	387.6
1984	327.9	11.7	R (s)	3.9	—	4.1	23.0	0.6	367.3
1985	335.3	7.7	R (s)	3.5	—	3.6	19.6	R (s)	366.7
1986	303.6	4.7	—	2.2	—	2.2	24.4	R (s)	335.2
1987	296.4	7.1	—	2.7	—	2.7	19.3	0.7	326.2
1988	316.7	11.1	—	2.7	—	2.7	23.0	0.5	354.1
1989	317.9	6.5	—	2.9	—	2.9	22.6	R (s)	350.2
1990	304.8	10.7	—	3.7	—	3.7	21.3	R (s)	340.8
1991	311.1	9.9	—	2.8	—	2.8	29.2	R (s)	353.3
1992	300.7	7.0	—	2.2	—	2.2	20.4	R (s)	330.5
1993	291.4	13.4	—	2.9	—	2.9	20.9	R (s)	328.9
1994	288.1	8.6	—	4.2	—	4.2	28.9	R (s)	330.2
1995	304.7	9.8	—	3.5	—	3.5	29.2	R (s)	347.6
1996	291.1	10.9	—	4.0	—	4.0	29.9	(s)	336.1
1997	295.4	14.1	—	5.5	—	5.5	28.1	(s)	343.3

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 107. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Kansas

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.34	0.34	0.39	0.99	0.75	1.27	2.64	0.47	R 1.62	R 2.02	—	R 2.53	R 0.99	0.30	5.74	R 1.56
1975	—	0.68	0.68	0.67	2.43	2.09	2.65	4.50	1.60	R 3.16	R 3.48	—	R 2.76	R 1.90	0.72	7.72	R 2.89
1980	—	1.08	1.08	2.14	6.52	6.47	4.41	9.27	3.24	R 6.56	R 7.58	—	R 3.06	R 3.90	1.38	13.75	R 5.99
1981	—	1.20	1.20	2.77	7.64	7.60	5.51	10.11	4.28	R 9.51	R 8.81	—	R 3.75	R 4.54	1.51	15.55	R 7.09
1982	—	1.36	1.36	3.19	7.47	7.19	5.11	10.09	3.80	R 8.58	R 8.43	—	R 3.64	R 4.70	1.64	17.67	R 7.43
1983	—	1.43	1.43	3.91	6.81	6.60	5.64	8.99	4.04	R 9.05	R 7.79	—	R 3.53	R 4.71	1.72	19.63	R 7.85
1984	—	1.51	1.51	3.99	6.84	6.45	5.17	9.12	4.21	R 8.82	R 7.43	—	R 3.58	R 4.67	1.71	19.32	R 7.52
1985	—	1.41	1.41	3.58	6.56	5.94	4.40	9.28	3.91	R 8.92	R 7.27	0.84	R 3.45	R 4.32	1.44	19.07	R 7.26
1986	—	1.33	1.33	3.30	5.57	3.73	8.34	6.72	2.28	R 7.14	R 6.41	0.63	R 2.97	R 3.77	1.22	20.53	R 7.07
1987	—	1.27	1.27	3.15	6.06	4.01	7.80	7.05	2.36	R 6.98	R 6.68	0.51	R 2.90	R 3.78	1.16	20.06	R 7.02
1988	—	1.24	1.24	3.03	5.57	3.81	7.79	6.78	1.89	R 5.88	R 6.34	0.45	R 2.92	R 3.68	1.13	19.22	R 6.80
1989	—	1.24	1.24	3.36	6.25	4.27	7.52	7.66	2.06	R 6.45	R 6.95	0.32	e R 3.07	e R 3.82	1.04	18.83	e R 7.27
1990	—	1.24	1.24	3.30	7.62	5.57	4.56	8.90	2.10	R 6.00	R 7.38	0.30	R 2.87	R 3.98	1.08	19.31	R 7.58
1991	—	1.23	1.23	3.11	7.03	4.81	3.92	8.72	1.47	R 5.68	R 7.07	0.31	R 2.76	R 3.80	1.12	19.30	R 7.34
1992	—	1.18	1.18	3.38	6.88	4.36	8.07	8.49	2.20	R 5.71	R 7.45	0.29	R 2.54	R 4.00	0.99	19.26	R 7.54
1993	—	1.03	1.03	3.59	6.74	4.19	4.95	8.31	2.07	R 6.24	R 7.06	0.33	R 2.26	R 3.68	0.95	19.39	R 7.45
1994	—	1.03	1.03	3.43	6.53	4.13	7.16	8.29	2.16	R 5.82	R 7.22	0.35	R 2.76	R 3.65	0.94	19.41	R 7.33
1995	—	1.03	1.03	3.21	6.71	4.19	7.43	8.48	2.48	R 6.44	R 7.42	0.39	R 2.73	R 3.68	0.90	19.27	R 7.66
1996	—	1.00	1.00	4.15	7.58	4.76	9.06	9.29	2.53	6.69	8.34	0.49	3.03	4.20	0.97	19.16	8.50
1997	—	1.02	1.02	4.48	7.24	4.88	8.85	9.27	2.61	7.64	8.31	0.48	2.94	4.33	1.01	18.53	8.77
	Expenditures in Million Nominal Dollars																
1970	—	3.7	3.7	175.6	43.3	6.4	37.1	399.6	1.5	R 42.5	R 530.4	—	R 3.4	R 713.1	-53.9	259.0	R 918.3
1975	—	42.5	42.5	248.1	159.8	15.0	83.9	756.2	49.8	R 83.7	R 1,148.5	—	R 6.6	R 1,445.7	-159.5	444.0	R 1,730.1
1980	—	207.0	207.0	808.1	560.3	89.3	131.0	1,440.7	17.9	R 241.6	R 2,480.7	—	R 5.6	R 3,501.4	-394.3	986.7	R 4,093.7
1981	—	254.8	254.8	960.7	596.0	103.7	147.6	1,554.8	24.1	R 307.7	R 2,734.0	—	R 6.9	R 3,956.4	-431.6	1,167.3	R 4,692.1
1982	—	288.1	288.1	984.8	600.8	73.3	215.6	1,515.7	19.9	R 250.5	R 2,675.9	—	R 7.3	R 3,956.1	-436.4	1,300.3	R 4,820.0
1983	—	330.1	330.1	1,057.4	555.5	54.4	241.5	1,350.9	35.6	R 239.2	R 2,477.1	—	R 7.0	R 3,871.6	-468.9	1,500.4	R 4,903.0
1984	—	415.1	415.1	1,114.2	603.7	120.6	485.3	1,365.7	17.7	R 266.6	R 2,859.6	—	R 6.4	R 4,395.4	-513.3	1,520.2	R 5,402.3
1985	—	365.8	365.8	960.1	574.1	147.6	379.0	R 1,375.6	1.3	R 243.1	R 2,720.7	34.9	R 5.9	R 4,087.3	-453.4	1,520.6	R 5,154.6
1986	—	R 334.4	R 334.4	768.5	464.0	148.2	492.6	1,005.0	4.4	R 227.6	R 2,341.8	47.7	R 7.4	R 3,499.8	-412.3	1,656.3	R 4,743.8
1987	—	340.5	340.5	809.7	589.6	96.7	448.8	R 1,078.8	3.8	R 226.0	R 2,443.8	35.7	R 6.8	R 3,636.5	-405.4	1,658.4	R 4,889.4
1988	—	334.5	334.5	772.4	538.2	89.2	529.2	R 1,097.6	7.1	R 254.8	R 2,516.0	32.4	R 7.1	R 3,662.4	-404.4	1,680.9	R 4,938.9
1989	—	R 330.3	R 330.3	828.9	574.9	91.5	497.9	R 1,201.1	3.6	R 225.6	R 2,594.6	33.3	e R 7.2	e R 3,794.3	-400.5	1,646.7	e R 5,040.4
1990	—	338.3	338.3	871.6	735.4	115.4	246.3	R 1,338.4	2.4	R 242.1	R 2,679.9	25.3	R 7.5	R 3,922.6	-410.7	1,774.7	R 5,286.6
1991	—	329.6	329.6	889.5	643.4	88.2	183.4	R 1,284.9	0.8	R 199.2	R 2,399.9	19.4	R 7.6	R 3,645.9	-408.0	1,840.1	R 5,078.1
1992	—	300.3	300.3	875.1	606.7	101.0	481.5	R 1,240.9	1.7	R 202.3	R 2,634.1	26.7	R 7.3	R 3,843.5	-351.7	1,764.6	R 5,256.5
1993	—	310.0	310.0	1,035.9	638.0	84.7	144.8	R 1,243.7	3.5	R 218.6	R 2,333.3	28.0	R 6.0	R 3,713.2	-385.2	1,890.7	R 5,218.8
1994	—	308.8	308.8	1,133.3	599.7	45.4	195.1	R 1,266.2	1.7	R 247.8	R 2,355.9	31.5	R 7.6	R 3,837.1	-389.4	1,945.9	R 5,393.5
1995	—	R 297.0	R 297.0	896.1	759.4	57.2	130.2	1,309.0	R (s)	R 237.2	R 2,493.3	42.0	R 8.1	R 3,736.5	-380.7	1,980.7	R 5,336.6
1996	—	337.5	337.5	1,112.9	748.8	54.2	324.6	1,509.4	3.5	232.9	2,873.4	42.9	9.1	4,376.0	-432.3	2,030.0	5,973.6
1997	—	318.3	318.3	1,082.6	722.1	58.9	321.5	1,494.5	2.9	201.6	2,801.5	43.3	7.3	4,253.0	-428.0	2,024.5	5,849.6

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 108. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Kansas

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	0.91	0.69	1.19	1.40	1.53	1.52	0.61	0.82	7.17	1.68
1975	—	1.05	2.62	2.84	3.30	3.27	1.20	1.39	9.23	2.53
1980	2.15	2.38	6.85	7.68	6.83	6.83	3.06	2.79	15.75	R 5.45
1981	2.67	3.05	8.12	9.40	6.85	6.90	3.77	R 3.35	17.57	R 6.77
1982	2.20	4.03	7.84	9.40	7.51	7.58	3.66	R 4.29	20.17	R 7.86
1983	2.97	4.65	6.57	R 7.62	7.04	R 7.04	3.54	R 4.82	22.50	R 9.07
1984	2.72	4.52	7.43	R 7.85	7.26	R 7.30	3.60	R 4.63	22.03	R 8.98
1985	2.31	4.12	6.43	R 7.77	6.52	R 6.55	3.46	R 4.27	21.98	R 8.62
1986	2.33	3.95	5.45	R 6.32	5.37	5.39	2.77	R 4.01	24.01	R 9.47
1987	1.94	3.90	3.53	R 6.38	4.73	R 4.73	2.64	R 3.93	23.63	R 9.25
1988	1.80	4.08	3.55	R 6.26	4.84	R 4.83	2.67	R 4.10	22.94	R 9.27
1989	1.85	4.20	6.16	R 6.80	8.57	8.46	2.95	R 4.46	22.46	R 9.29
1990	1.88	4.48	6.22	R 8.22	7.86	R 7.81	3.56	4.65	22.95	R 10.04
1991	1.82	4.33	5.78	R 7.47	6.98	6.95	3.41	R 4.46	22.94	R 9.83
1992	1.63	4.76	5.86	R 7.11	7.83	7.73	3.12	R 4.87	23.15	R 10.03
1993	1.40	4.97	7.54	R 6.28	8.60	R 8.49	3.05	R 5.09	23.05	R 10.02
1994	1.38	5.11	5.90	R 6.00	6.85	R 6.80	2.96	R 5.14	23.12	R 10.55
1995	1.19	4.89	7.13	R 4.97	7.13	R 7.10	2.90	4.97	23.22	R 10.38
1996	1.21	5.60	6.91	6.00	8.84	8.76	3.33	5.74	23.03	10.56
1997	1.24	6.41	6.88	5.62	8.58	8.49	3.31	6.53	22.59	11.72
	Expenditures in Million Nominal Dollars									
1970	R (s)	66.7	R (s)	0.9	27.9	29.2	(s)	R 96.1	130.8	R 226.9
1975	—	101.2	1.5	1.0	55.9	58.3	(s)	R 159.9	179.4	R 339.2
1980	R (s)	201.9	6.0	R (s)	52.2	58.4	5.3	R 265.7	386.2	R 651.9
1981	R (s)	226.2	0.9	0.5	40.7	42.1	6.6	R 275.1	455.6	R 730.6
1982	R (s)	332.2	7.9	1.0	43.7	52.5	7.0	R 391.9	533.1	R 925.0
1983	R (s)	377.0	1.6	R 1.3	48.7	R 51.6	6.6	R 435.3	642.4	R 1,077.7
1984	R (s)	356.0	2.0	R 1.8	26.4	R 30.2	6.1	R 392.3	621.5	R 1,013.8
1985	(s)	322.7	2.5	R 1.2	34.5	R 38.2	5.7	R 366.6	614.6	R 981.2
1986	(s)	274.8	0.8	0.7	23.6	25.0	4.5	R 304.3	683.6	R 987.9
1987	(s)	284.9	R (s)	R 0.7	22.2	R 23.4	3.8	R 312.1	694.6	R 1,006.7
1988	(s)	307.2	0.6	R 0.7	25.4	R 26.7	4.0	R 337.9	714.0	R 1,051.9
1989	R (s)	317.1	1.1	0.7	45.8	47.7	4.6	R 369.4	682.0	R 1,051.4
1990	(s)	319.5	0.9	0.5	33.7	R 35.1	7.2	R 361.8	745.0	R 1,106.8
1991	(s)	327.7	0.8	R (s)	32.9	34.1	7.2	R 369.1	777.4	R 1,146.5
1992	(s)	336.2	1.0	0.5	30.6	32.1	6.9	R 375.2	700.7	R 1,075.9
1993	R (s)	416.8	1.2	R 0.7	33.8	R 35.7	5.6	R 458.5	785.3	R 1,243.8
1994	R (s)	378.9	0.9	R (s)	26.2	R 27.4	5.4	R 412.1	799.1	R 1,211.2
1995	R (s)	372.4	0.6	R (s)	37.9	R 38.9	5.8	R 417.5	820.4	R 1,238.0
1996	0.8	477.3	0.7	0.7	55.8	57.2	6.7	541.9	838.6	1,380.5
1997	(s)	445.6	1.5	(s)	54.2	56.1	4.8	506.6	837.3	1,343.8

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 109. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Kansas

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.45	0.46	1.03	0.69	0.83	2.64	0.50	1.22	0.61	0.53	6.02	1.56
1975	—	0.68	2.45	2.27	1.91	4.50	1.56	2.63	1.20	0.89	8.26	2.75
1980	1.32	1.91	6.49	5.22	3.58	9.27	—	6.51	3.06	2.27	14.81	5.62
1981	1.53	2.42	7.80	6.55	5.13	10.11	—	7.86	3.77	2.83	16.68	7.04
1982	1.72	3.22	7.46	6.87	4.73	10.09	3.69	7.70	3.66	3.46	18.12	7.76
1983	1.75	4.53	6.31	R 7.62	5.37	8.99	4.58	6.50	3.54	4.77	19.95	R 9.25
1984	1.76	3.48	6.31	R 7.85	5.09	9.12	4.12	6.53	3.60	3.83	20.09	8.63
1985	1.69	3.15	5.97	R 7.77	4.26	9.28	—	R 6.24	NA	R 3.45	19.87	8.51
1986	1.74	2.90	3.69	R 6.32	8.58	6.72	2.28	R 5.44	NA	3.07	21.03	8.94
1987	R 1.59	2.88	4.21	R 6.38	8.07	7.05	2.36	R 5.99	NA	3.06	20.37	8.74
1988	1.42	3.07	3.80	R 6.26	8.04	6.78	1.67	R 5.42	NA	3.22	19.25	8.40
1989	1.28	3.16	4.45	R 6.80	7.43	7.66	2.04	R 5.87	NA	R 3.33	19.17	8.62
1990	1.18	3.36	5.46	R 8.22	4.28	8.90	2.13	R 5.91	NA	3.51	19.65	9.22
1991	1.26	3.28	4.84	R 7.47	3.57	8.72	1.48	R 5.22	NA	3.40	19.57	9.06
1992	1.31	3.57	4.66	R 7.11	8.09	8.49	2.21	R 5.65	NA	3.73	19.79	9.60
1993	1.40	4.11	4.49	R 6.28	4.39	8.31	2.09	4.62	3.05	R 4.13	19.89	R 9.84
1994	1.35	4.12	4.28	R 6.00	8.13	8.29	2.22	R 5.33	2.96	4.18	19.97	R 10.27
1995	1.34	3.92	4.30	R 4.97	8.16	8.48	2.51	5.33	2.90	R 4.01	19.85	R 10.04
1996	1.27	4.62	5.23	6.00	9.45	9.29	2.70	6.61	3.33	4.71	19.77	10.43
1997	1.30	5.37	4.91	5.62	9.98	9.27	—	6.59	3.31	5.48	18.88	11.79
	Expenditures in Million Nominal Dollars											
1970	R (s)	23.9	0.7	R (s)	2.7	3.0	R (s)	6.6	(s)	30.6	81.4	112.0
1975	—	34.7	3.0	R (s)	5.7	6.3	R (s)	15.6	(s)	50.3	158.1	208.4
1980	R (s)	111.7	13.6	R (s)	4.8	13.6	—	32.3	(s)	R 144.3	343.9	R 488.1
1981	R (s)	125.2	13.5	R (s)	5.4	13.6	—	32.6	(s)	R 158.0	407.0	R 565.0
1982	R (s)	179.7	6.3	R (s)	4.9	14.1	R (s)	25.6	(s)	R 205.7	445.6	R 651.4
1983	R (s)	239.4	33.8	R (s)	6.6	8.7	R (s)	R 49.6	(s)	R 289.2	505.9	R 795.1
1984	R (s)	199.0	36.5	R (s)	3.3	7.9	R (s)	48.1	(s)	R 247.3	543.4	R 790.7
1985	(s)	178.0	24.3	R (s)	4.0	R 8.7	—	R 37.4	NA	R 215.4	554.2	769.6
1986	(s)	159.6	7.3	R (s)	6.7	6.2	R (s)	R 20.6	NA	R 180.2	599.8	R 780.0
1987	(s)	161.9	6.6	R 0.6	6.7	7.0	(s)	R 20.9	NA	R 182.8	593.9	R 776.8
1988	(s)	185.2	8.5	R (s)	7.4	5.9	(s)	22.2	NA	207.4	591.0	R 798.5
1989	R (s)	183.9	8.6	R 0.6	7.0	6.2	R (s)	R 22.6	NA	R 206.6	597.0	R 803.5
1990	(s)	188.3	9.0	R (s)	3.2	R 7.6	R (s)	R 20.5	NA	R 208.8	640.0	R 848.8
1991	(s)	194.5	10.2	R (s)	3.0	5.7	R (s)	19.1	NA	R 213.6	663.3	R 876.9
1992	(s)	190.5	13.6	R (s)	5.6	4.9	R (s)	24.5	NA	R 215.1	658.1	873.2
1993	R (s)	227.5	16.9	R (s)	3.0	2.4	R (s)	R 23.0	(s)	250.9	686.6	937.5
1994	0.7	215.3	12.4	R (s)	5.5	3.3	(s)	21.4	(s)	R 237.8	714.1	R 951.9
1995	R 0.8	208.8	15.2	R (s)	7.7	3.3	R (s)	26.5	(s)	R 236.5	720.8	R 957.4
1996	1.6	263.8	17.1	(s)	10.5	4.8	(s)	32.7	0.6	298.6	768.3	1,066.9
1997	(s)	221.8	14.3	0.9	11.1	4.4	—	30.7	(s)	253.1	775.6	1,028.7

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 110. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Kansas

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	0.45	0.45	0.27	0.74	0.64	0.69	0.83	5.08	2.64	0.43	R 1.47	R 1.35	R 3.00	R 0.62	3.50	R 0.81
1975	—	0.92	0.92	0.55	2.10	2.13	2.27	1.91	7.48	4.50	1.84	R 2.34	R 2.63	R 3.00	R 1.45	5.62	R 1.87
1980	—	1.32	1.32	2.35	4.02	4.99	5.22	3.58	14.36	9.27	2.53	R 7.15	R 5.13	R 3.00	R 3.31	10.68	R 4.02
1981	—	1.53	1.53	3.04	5.66	6.22	6.55	5.13	18.00	10.11	4.04	R 9.54	R 6.99	R 3.00	R 4.32	12.32	R 5.10
1982	—	1.72	1.72	2.92	4.50	6.48	6.87	4.73	17.25	10.09	3.87	R 9.07	R 6.19	R 3.00	R 4.28	14.24	R 5.24
1983	—	1.75	1.75	3.37	4.89	6.60	R 7.19	5.37	16.98	8.99	3.89	R 8.61	R 6.34	R 3.00	R 4.71	15.64	R 5.90
1984	—	1.76	1.76	4.11	4.96	6.54	R 7.17	5.09	17.63	9.12	4.12	R 8.46	R 5.90	R 3.00	R 5.04	15.18	R 5.86
1985	—	1.69	1.69	3.54	5.22	6.22	R 7.01	4.26	17.61	9.28	3.86	R 8.18	R 5.41	R 3.00	R 4.45	14.74	R 5.34
1986	—	1.74	1.74	3.17	3.88	4.06	R 4.62	8.58	15.59	6.72	2.28	R 8.63	R 6.76	R 3.32	R 5.04	15.76	R 6.11
1987	—	R 1.59	R 1.59	2.93	3.70	4.50	R 4.71	8.07	13.58	7.05	2.36	R 9.06	R 6.65	R 3.32	R 4.70	15.33	R 5.71
1988	—	1.42	1.42	2.39	3.49	4.16	R 4.18	8.04	14.62	6.78	1.67	R 8.12	R 6.23	R 3.32	R 4.52	14.68	R 5.50
1989	—	1.28	1.28	3.08	3.00	4.73	R 5.00	7.43	14.48	7.66	2.04	R 9.40	R 6.34	d R 3.32	d R 4.82	14.17	d R 5.82
1990	—	1.18	1.18	2.88	2.94	5.83	R 6.36	4.28	14.60	8.90	2.13	R 8.91	R 4.98	R 0.57	R 3.89	14.49	R 5.01
1991	—	1.26	1.26	2.64	2.98	5.19	R 5.74	3.57	16.80	8.72	1.48	R 6.20	R 4.43	R 0.57	R 3.44	14.51	R 4.65
1992	—	1.31	1.31	2.64	2.54	5.15	R 5.25	8.09	18.32	8.49	2.21	R 6.65	R 6.38	R 0.57	R 4.41	14.45	R 5.45
1993	—	1.40	1.40	2.67	3.16	5.00	R 5.54	4.39	18.96	8.31	2.09	R 5.86	R 4.88	R 0.57	R 3.55	14.49	R 4.80
1994	—	1.35	1.35	2.75	3.17	4.86	R 5.02	7.13	19.11	8.29	2.22	R 5.99	R 5.39	R 2.26	R 3.66	14.45	R 4.71
1995	—	1.34	1.34	2.22	3.41	4.86	R 5.26	7.48	R 19.41	8.48	2.51	R 6.37	R 5.51	R 2.26	R 3.47	14.12	R 4.88
1996	—	1.27	1.27	3.10	3.22	5.85	5.92	9.10	20.08	9.29	2.70	7.26	6.77	2.26	4.76	13.78	5.95
1997	—	1.30	1.30	3.31	3.51	5.36	5.97	8.87	17.86	9.27	2.98	6.25	6.84	2.26	4.85	13.23	5.98
	Expenditures in Million Nominal Dollars																
1970	—	1.0	1.0	35.5	10.7	9.4	0.6	5.4	6.4	38.5	R (s)	R 6.4	R 77.5	R 3.3	R 117.3	46.8	R 164.2
1975	—	2.5	2.5	51.5	30.1	43.8	R (s)	19.7	11.5	56.8	9.0	R 13.9	R 185.2	R 6.2	R 245.5	106.5	R 352.0
1980	—	9.4	9.4	322.0	80.5	101.0	14.1	72.5	35.5	58.3	6.1	R 48.4	R 416.4	R (s)	R 748.0	256.6	R 1,004.5
1981	—	11.6	11.6	442.3	70.2	127.5	8.4	97.1	42.7	71.7	13.5	R 110.9	R 542.0	R (s)	R 996.1	304.8	R 1,300.9
1982	—	13.7	13.7	328.0	56.4	148.4	7.8	163.0	37.3	56.9	13.0	R 82.0	R 565.0	R (s)	R 906.8	321.6	R 1,228.3
1983	—	10.7	10.7	308.1	47.1	131.3	R 5.8	180.8	38.5	39.8	25.6	R 80.0	R 548.8	R (s)	R 867.8	352.0	R 1,219.8
1984	—	11.7	11.7	458.0	63.5	140.7	3.7	453.8	42.6	62.5	15.1	R 83.6	R 865.5	R (s)	R 1,335.4	355.4	R 1,690.8
1985	—	R 13.2	R 13.2	400.3	58.9	141.3	0.8	339.0	39.6	51.9	0.8	R 76.6	R 708.9	R (s)	R 1,122.6	351.8	R 1,474.4
1986	—	9.7	9.7	297.7	68.4	107.6	1.2	459.2	34.3	32.8	4.0	R 65.0	R 772.7	R 3.0	R 1,083.1	372.9	R 1,456.0
1987	—	8.7	8.7	328.4	64.2	112.4	R 1.0	416.6	33.8	R 36.2	3.4	R 71.2	R 738.8	R 2.9	R 1,078.7	369.8	R 1,448.5
1988	—	6.5	6.5	241.3	101.4	107.7	R (s)	492.2	35.1	R 30.1	5.0	R 59.6	R 831.4	R 3.1	R 1,082.3	375.9	R 1,458.2
1989	—	5.2	5.2	291.2	61.9	108.0	0.6	440.0	35.6	33.7	2.7	R 66.8	R 749.3	d R 2.6	d R 1,048.3	367.7	d R 1,416.0
1990	—	4.5	4.5	316.4	75.7	132.6	R (s)	207.2	37.0	R 35.7	1.8	R 67.1	R 557.5	R (s)	R 878.8	389.7	R 1,268.5
1991	—	4.6	4.6	307.6	73.5	138.2	R (s)	146.1	38.1	34.6	0.7	R 25.0	R 456.5	R (s)	R 769.1	399.4	R 1,168.5
1992	—	5.1	5.1	321.3	62.7	136.1	R (s)	442.4	42.3	30.1	1.4	R 27.4	R 742.8	R (s)	R 1,069.6	405.8	R 1,475.4
1993	—	4.5	4.5	342.7	76.2	148.3	R (s)	106.3	44.6	R 39.0	2.6	R 24.3	R 441.7	R (s)	R 789.3	418.8	R 1,208.1
1994	—	4.4	4.4	487.6	99.6	152.1	R (s)	158.3	47.0	41.1	1.5	R 25.3	R 525.2	R 1.8	R 1,018.9	432.7	R 1,451.6
1995	—	4.5	4.5	270.8	88.4	147.1	R (s)	82.7	46.9	44.3	R (s)	R 25.5	R 435.4	R 1.8	R 712.5	439.5	R 1,152.0
1996	—	5.0	5.0	319.7	76.5	166.2	(s)	257.6	47.1	49.8	1.1	30.2	628.9	1.9	955.5	423.1	1,378.7
1997	—	4.4	4.4	349.9	49.2	174.0	0.6	255.5	44.3	51.4	1.6	29.1	605.7	2.0	961.9	411.6	1,373.5

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 111. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Kansas

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.45	—	2.17	1.18	0.75	0.83	5.08	2.64	0.49	2.34	2.34	—	2.34
1975	0.92	—	3.45	2.70	2.09	1.91	7.48	4.50	1.66	4.13	4.13	—	4.13
1980	—	—	9.02	7.05	6.47	3.58	14.36	9.27	3.82	8.58	8.58	—	8.58
1981	—	—	10.84	8.18	7.60	5.13	18.00	10.11	4.63	9.59	9.59	—	9.59
1982	—	—	10.92	7.90	7.19	4.73	17.25	10.09	—	9.48	9.48	—	9.48
1983	—	—	10.44	6.96	6.60	5.37	16.98	8.99	4.46	8.48	8.48	—	8.48
1984	—	—	10.27	7.02	6.45	5.09	17.63	9.12	4.84	8.47	8.47	—	8.47
1985	—	—	9.99	6.75	5.94	4.26	17.61	9.28	—	8.38	8.38	—	8.38
1986	—	—	8.41	6.43	3.73	8.58	15.59	6.72	2.34	6.30	6.30	—	6.30
1987	—	—	7.55	6.69	4.01	8.07	13.58	7.05	—	6.75	6.75	—	6.75
1988	—	—	7.41	6.21	3.81	8.04	14.62	6.78	—	6.47	6.47	—	6.47
1989	—	—	8.28	6.87	4.27	7.43	14.48	7.66	—	7.25	7.25	—	7.25
1990	—	—	9.32	8.28	5.57	4.28	14.60	8.90	—	8.51	8.51	—	8.51
1991	—	—	8.71	7.94	4.81	3.57	16.80	8.72	—	8.31	8.31	—	8.31
1992	—	—	8.54	7.80	4.36	8.09	18.32	8.49	—	8.04	8.04	—	8.04
1993	—	—	8.24	7.76	4.19	4.39	18.96	8.31	—	7.96	7.96	—	7.96
1994	—	3.18	7.96	7.61	4.13	9.10	19.11	8.29	—	8.09	8.09	—	8.09
1995	—	2.75	8.36	7.56	4.19	9.45	R 19.41	8.48	—	8.10	8.10	—	8.10
1996	—	3.07	9.29	8.50	4.76	8.78	20.08	9.29	—	9.01	9.01	—	9.01
1997	—	3.69	9.39	8.35	4.88	8.28	17.86	9.27	—	8.93	8.93	—	8.93
	Expenditures in Million Nominal Dollars												
1970	(s)	—	3.6	32.2	6.4	1.1	13.8	358.2	(s)	415.3	415.3	—	415.3
1975	(s)	—	3.1	92.9	15.0	2.6	23.6	693.1	R (s)	830.4	830.4	—	830.4
1980	—	—	10.1	426.9	89.3	1.5	52.5	1,368.8	(s)	1,949.1	1,949.1	—	1,949.1
1981	—	—	11.7	443.0	103.7	4.5	63.2	1,469.4	(s)	2,095.6	2,095.6	—	2,095.6
1982	—	—	10.5	427.5	73.3	4.1	55.2	1,444.7	—	2,015.3	2,015.3	—	2,015.3
1983	—	—	9.3	379.6	54.4	5.5	56.9	1,302.5	2.3	1,810.4	1,810.4	—	1,810.4
1984	—	—	8.0	416.9	120.6	1.9	63.0	1,295.3	1.3	1,907.0	1,907.0	—	1,907.0
1985	—	—	6.9	399.8	147.6	1.5	58.6	R 1,315.0	—	R 1,929.4	R 1,929.4	—	R 1,929.4
1986	—	—	6.9	344.9	148.2	3.1	50.8	966.1	(s)	1,519.9	1,519.9	—	1,519.9
1987	—	—	4.6	467.2	96.7	3.3	50.0	R 1,035.6	—	R 1,657.4	R 1,657.4	—	R 1,657.4
1988	—	—	5.5	418.1	89.2	4.1	51.9	R 1,061.6	—	R 1,630.4	R 1,630.4	—	R 1,630.4
1989	—	—	6.5	452.3	91.5	R 5.1	52.7	R 1,161.3	—	R 1,769.5	R 1,769.5	—	R 1,769.5
1990	—	—	6.4	588.7	115.4	2.2	54.7	R 1,295.0	—	R 2,062.5	R 2,062.5	—	R 2,062.5
1991	—	—	5.5	490.3	88.2	1.4	56.3	R 1,244.6	—	R 1,886.3	R 1,886.3	—	R 1,886.3
1992	—	—	6.1	453.4	101.0	2.9	62.6	R 1,206.0	—	R 1,832.0	R 1,832.0	—	R 1,832.0
1993	—	—	6.3	468.6	84.7	1.6	66.0	R 1,202.3	—	R 1,829.4	R 1,829.4	—	R 1,829.4
1994	—	(s)	5.7	431.2	45.4	5.0	69.5	R 1,221.9	—	R 1,778.7	R 1,778.8	—	R 1,778.8
1995	—	(s)	6.2	593.2	57.2	1.9	R 69.4	1,261.4	—	R 1,989.3	R 1,989.3	—	R 1,989.3
1996	—	(s)	8.3	560.0	54.2	0.7	69.7	1,454.7	—	2,147.5	2,147.5	—	2,147.5
1997	—	(s)	11.7	528.0	58.9	0.6	65.5	1,438.8	—	2,103.5	2,103.5	—	2,103.5

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 112. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Kansas

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.31	0.30	0.47	0.62	—	0.52	—	—	0.30
1975	0.67	0.48	1.55	2.08	0.65	1.69	—	—	0.72
1980	1.07	1.78	3.78	5.74	—	4.60	—	—	1.38
1981	1.18	2.19	4.63	7.12	—	5.65	—	—	1.51
1982	1.34	2.48	3.68	6.90	—	5.14	—	—	1.64
1983	1.42	2.95	4.48	6.03	—	5.22	—	—	1.72
1984	1.50	3.22	4.84	6.11	—	5.90	—	—	1.71
1985	1.40	2.88	3.99	5.55	—	5.39	0.84	—	1.44
1986	1.32	2.50	2.33	3.36	—	3.27	0.63	—	1.22
1987	1.27	2.18	2.39	3.87	—	3.62	0.51	—	1.16
1988	1.24	2.06	2.73	3.43	—	3.12	0.45	—	1.13
1989	1.24	1.98	2.13	4.33	—	3.81	0.32	—	1.04
1990	1.24	1.76	1.86	5.40	—	4.86	0.30	—	1.08
1991	1.23	1.71	1.41	4.32	—	4.25	0.31	—	1.12
1992	1.18	2.00	1.47	4.38	—	4.33	0.29	—	0.99
1993	1.02	2.32	2.00	4.16	—	3.61	0.33	—	0.95
1994	1.03	1.92	1.58	4.05	—	3.82	0.35	—	0.94
1995	1.02	1.61	1.64	3.69	—	3.68	0.39	—	0.90
1996	0.99	2.32	2.46	4.60	—	3.56	0.49	—	0.97
1997	1.02	2.58	2.26	4.49	—	3.66	0.48	—	1.01
	Expenditures in Million Nominal Dollars								
1970	2.6	49.5	1.1	0.6	—	1.8	—	—	53.9
1975	39.9	60.6	40.3	18.6	(s)	58.9	—	—	159.5
1980	197.4	172.4	11.7	12.8	—	24.5	—	—	394.3
1981	243.0	167.0	10.5	11.1	—	21.6	—	—	431.6
1982	273.9	145.0	6.8	10.6	—	17.5	—	—	436.4
1983	319.2	132.9	7.6	9.2	—	16.8	—	—	468.9
1984	403.3	101.2	1.2	7.6	—	8.8	—	—	513.3
1985	352.6	59.1	R (s)	6.3	—	6.8	34.9	—	453.4
1986	324.6	36.4	R (s)	3.4	—	3.6	47.7	—	412.3
1987	331.9	34.5	R (s)	3.0	—	3.3	35.7	—	405.4
1988	328.0	38.6	2.1	3.2	—	5.3	32.4	—	404.4
1989	324.9	36.7	0.7	4.8	—	5.5	33.3	—	400.5
1990	333.8	47.3	R (s)	4.1	—	4.3	25.3	—	410.7
1991	325.0	59.7	(s)	3.8	—	3.9	19.4	—	408.0
1992	295.2	27.1	(s)	2.6	—	2.6	26.7	—	351.7
1993	304.7	48.9	0.5	3.1	—	3.6	28.0	—	385.2
1994	303.3	51.5	R (s)	3.1	—	3.2	31.5	—	389.4
1995	291.4	44.1	(s)	3.2	—	3.2	42.0	—	380.7
1996	330.2	52.1	2.4	4.7	—	7.1	42.9	—	432.3
1997	313.9	65.3	1.3	4.3	—	5.5	43.3	—	428.0

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 113. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Kentucky

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	0.38	0.25	0.26	0.65	1.21	0.73	1.90	2.93	0.56	R 1.38	2.14	—	R 1.23	0.95	0.22	3.37	R 1.66
1975	1.60	0.70	0.75	1.02	2.58	2.03	3.60	4.69	2.06	R 2.92	R 3.84	—	R 1.54	1.88	0.64	5.32	R 3.26
1980	1.81	1.35	1.37	2.85	6.41	6.39	5.85	9.65	3.64	R 7.25	R 7.87	—	R 2.66	R 4.00	1.32	10.07	R 6.74
1981	2.03	1.51	1.52	3.30	7.69	7.67	8.84	10.74	4.83	R 7.69	R 9.23	—	R 3.04	R 4.36	1.49	12.00	R 7.93
1982	2.04	1.59	1.60	4.27	7.48	7.42	7.68	10.30	4.87	R 7.03	R 8.80	—	R 3.07	R 4.46	1.58	13.79	R 8.28
1983	1.58	1.55	1.56	4.91	6.96	6.85	8.39	8.96	4.89	R 7.61	R 8.06	—	R 2.88	R 4.27	1.55	14.24	R 8.03
1984	1.91	1.51	1.53	4.76	6.96	6.63	8.22	8.72	5.09	R 7.48	R 7.92	—	R 3.66	4.15	1.49	13.76	R 7.81
1985	1.93	1.46	1.48	4.77	6.64	6.17	6.76	8.80	4.89	R 7.26	R 7.75	—	R 3.50	R 3.94	1.43	14.84	R 7.93
1986	1.75	1.38	1.39	4.38	5.47	4.39	7.17	6.69	3.08	R 6.27	R 6.20	—	R 2.67	R 3.28	1.34	15.26	R 7.17
1987	1.63	R 1.30	R 1.31	3.91	5.92	4.16	8.21	7.36	2.98	R 5.18	R 6.54	—	R 2.49	R 3.36	1.26	15.18	R 7.25
1988	1.73	1.24	1.26	3.89	5.78	3.93	7.41	7.42	2.91	R 4.99	R 6.43	—	R 2.50	R 3.26	1.20	15.08	R 7.21
1989	1.75	1.20	1.22	4.07	6.41	4.45	6.13	8.08	3.05	R 5.13	R 6.89	—	e R 2.82	e R 3.53	1.14	14.17	e R 7.35
1990	1.80	1.24	1.27	4.12	7.57	5.82	7.11	9.25	3.61	R 5.05	R 7.88	—	R 2.86	3.78	1.20	13.16	R 7.78
1991	1.72	1.23	1.24	3.90	7.02	4.92	6.63	8.94	3.12	R 5.24	R 7.36	—	R 2.77	R 3.67	1.18	12.96	R 7.52
1992	1.74	1.20	1.22	3.92	6.88	4.61	6.70	8.65	2.71	R 4.72	R 7.04	—	R 2.58	R 3.61	1.17	12.33	R 7.23
1993	1.68	1.21	1.22	4.30	6.98	4.36	10.05	8.51	2.76	R 4.68	R 7.17	—	R 2.34	R 3.56	1.17	12.70	R 7.33
1994	1.57	1.20	1.22	4.29	6.78	4.09	9.16	8.72	2.56	R 4.51	R 7.09	—	R 2.39	R 3.58	1.17	12.54	R 7.34
1995	1.57	1.15	1.17	3.78	6.82	4.15	9.25	9.10	2.92	R 4.75	R 7.36	—	R 2.37	R 3.58	1.11	11.97	R 7.20
1996	1.68	1.11	1.13	4.47	7.75	4.87	10.71	9.80	3.40	5.34	8.09	—	2.58	3.78	1.07	11.86	7.69
1997	1.78	1.10	1.12	4.97	7.50	4.59	10.52	9.64	3.72	4.85	7.92	—	2.44	3.84	1.06	11.86	7.72
	Expenditures in Million Nominal Dollars																
1970	16.4	122.4	138.9	136.7	58.0	12.6	67.5	517.3	3.2	R 99.8	R 758.5	—	R 5.9	R 1,040.0	-90.6	354.9	R 1,304.2
1975	52.1	368.8	421.0	185.7	164.1	24.6	143.7	1,005.6	11.1	R 199.1	R 1,548.1	—	R 9.8	R 2,164.5	-309.8	852.2	R 2,707.0
1980	44.0	834.8	878.8	511.8	855.7	104.4	216.4	2,019.1	20.9	R 645.2	R 3,861.7	—	R 11.2	R 5,263.5	-743.7	1,698.6	R 6,218.4
1981	19.3	988.4	1,007.7	573.0	813.6	139.7	252.4	2,267.4	29.0	R 439.3	R 3,941.4	—	R 13.3	R 5,535.4	-893.5	2,004.9	R 6,646.8
1982	25.4	976.6	1,002.0	676.8	761.7	154.9	193.5	2,167.0	26.0	R 399.5	R 3,702.6	—	R 13.6	R 5,395.1	-883.8	2,173.6	R 6,684.8
1983	47.0	945.0	992.0	745.7	827.4	154.9	214.4	1,895.2	24.2	R 378.4	R 3,494.6	—	R 13.7	R 5,246.0	-866.6	2,261.9	R 6,641.3
1984	69.5	R 958.5	R 1,028.1	780.6	898.5	121.9	168.2	1,868.9	14.1	R 408.4	R 3,480.0	—	R 27.0	R 5,315.7	-857.2	2,432.9	R 6,891.4
1985	60.5	R 1,000.1	R 1,060.6	722.4	841.7	119.3	132.6	R 1,846.2	9.5	R 375.0	R 3,324.4	—	R 25.1	R 5,132.4	-883.4	2,528.3	R 6,777.3
1986	52.2	R 992.7	R 1,044.9	630.7	649.6	87.8	131.4	1,494.7	8.9	R 305.8	R 2,678.2	—	R 22.9	R 4,376.7	-886.1	2,552.6	R 6,043.2
1987	57.1	R 922.3	R 979.4	587.4	707.9	113.5	199.6	R 1,666.0	11.2	R 292.6	R 2,990.7	—	R 19.6	R 4,577.0	-832.6	2,596.4	R 6,340.8
1988	60.4	973.2	1,033.6	637.0	831.3	110.8	179.1	R 1,720.1	7.4	R 281.7	R 3,130.4	—	R 20.5	R 4,821.4	-884.5	2,747.0	R 6,683.9
1989	60.6	R 873.4	R 934.0	689.6	1,050.3	127.7	138.4	R 1,842.2	6.3	R 288.0	R 3,452.9	—	e R 21.4	e R 5,097.9	-768.0	2,792.2	e R 7,122.1
1990	56.9	961.8	R 1,018.7	656.4	1,031.7	188.2	153.7	R 2,091.8	8.9	R 309.6	R 3,783.9	—	R 23.9	R 5,482.8	-859.2	2,707.2	R 7,330.8
1991	39.4	958.9	998.3	659.4	926.7	177.3	158.0	R 2,055.1	5.4	R 513.7	R 3,836.2	—	R 24.2	R 5,518.0	-862.0	2,800.7	R 7,456.7
1992	52.7	R 938.5	R 991.2	696.2	1,025.6	179.7	153.8	R 2,035.3	4.5	R 501.8	R 3,900.6	—	R 23.7	R 5,611.7	-862.7	2,782.1	R 7,531.1
1993	52.9	R 1,076.2	R 1,129.1	798.9	1,135.7	140.8	208.2	R 2,046.2	3.9	R 472.5	R 4,007.3	—	R 19.1	R 5,954.3	-969.0	2,911.9	R 7,897.2
1994	52.4	1,038.1	1,090.5	813.5	1,107.4	146.8	184.9	R 2,115.4	3.3	R 477.9	R 4,035.7	—	R 21.1	R 5,960.8	-947.5	3,058.6	R 8,071.9
1995	60.3	R 1,023.4	R 1,083.7	796.3	1,155.5	148.2	185.1	2,299.2	1.9	R 491.8	R 4,281.6	—	R 22.6	R 6,184.2	-927.8	3,004.2	R 8,260.6
1996	60.8	1,013.2	1,074.0	953.7	1,278.5	154.5	252.6	2,242.1	2.5	566.3	4,496.5	—	25.2	6,549.5	-921.4	3,072.9	8,701.0
1997	64.0	1,043.0	1,107.0	1,035.6	1,281.3	118.4	251.3	2,539.8	2.0	562.5	4,755.4	—	20.8	6,918.8	-941.7	3,067.4	9,044.5

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.

R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 114. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Kentucky

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	0.86	0.81	1.19	1.73	2.36	1.98	0.85	1.08	5.85	R 1.86
1975	1.91	1.22	2.49	3.13	4.16	3.69	1.69	R 1.76	7.83	R 3.19
1980	2.30	3.00	6.89	8.52	8.31	8.10	4.31	4.13	12.91	R 6.81
1981	2.63	3.44	8.54	10.41	8.61	8.97	5.31	R 4.22	14.84	R 7.84
1982	2.59	4.41	8.11	10.27	9.32	9.18	5.15	5.03	16.24	R 8.97
1983	2.41	5.20	7.63	R 7.77	9.67	R 8.53	4.99	R 5.71	17.32	R 9.98
1984	2.46	5.09	7.66	R 7.61	9.43	R 8.26	5.07	R 5.49	16.63	R 9.47
1985	2.45	5.15	7.67	R 7.18	9.78	R 8.31	4.87	R 5.65	17.06	R 9.90
1986	2.29	4.75	5.10	R 5.44	9.15	6.96	3.91	R 5.00	16.94	R 9.64
1987	2.12	4.37	5.25	R 5.41	8.93	R 7.31	3.72	R 4.83	16.68	R 9.55
1988	2.04	4.32	5.60	R 5.33	8.34	R 6.83	3.76	R 4.68	16.60	R 9.33
1989	2.01	4.50	6.14	R 6.26	11.02	R 8.69	4.16	R 5.18	16.51	R 9.63
1990	2.25	4.74	6.76	R 7.94	11.86	R 9.70	3.53	R 5.40	16.69	R 10.22
1991	2.12	4.65	6.27	R 7.91	10.54	R 8.89	3.37	R 5.23	16.65	R 10.17
1992	2.09	4.74	6.42	R 7.39	11.12	R 9.05	3.08	R 5.25	16.70	R 9.95
1993	2.19	5.01	7.09	R 6.00	10.22	R 8.67	3.02	R 5.45	16.71	R 10.13
1994	2.18	5.14	6.17	R 6.36	11.72	R 9.21	2.93	R 5.65	16.93	R 10.48
1995	2.05	4.61	5.45	R 6.32	11.53	R 8.88	2.87	R 5.17	16.48	R 10.02
1996	2.02	5.28	6.31	6.94	12.84	10.34	3.29	6.00	16.26	10.44
1997	2.08	6.07	6.46	7.40	12.62	10.24	3.27	6.58	16.36	10.85
	Expenditures in Million Nominal Dollars									
1970	3.8	71.6	2.8	20.4	30.0	53.1	1.5	R 130.1	139.6	R 269.7
1975	4.6	97.1	6.4	19.0	57.8	83.2	3.3	R 188.3	256.0	R 444.3
1980	5.6	224.9	32.9	84.6	63.0	180.4	7.4	R 418.3	575.9	R 994.2
1981	11.2	246.0	28.4	28.0	58.7	115.1	9.3	R 381.6	693.6	R 1,075.2
1982	8.9	302.1	30.6	30.7	51.3	112.6	9.7	R 433.3	758.7	R 1,192.0
1983	7.5	334.7	30.2	R 40.1	63.3	R 133.6	9.3	R 485.1	854.5	R 1,339.6
1984	7.8	347.8	32.7	R 36.8	45.7	R 115.3	22.2	R 493.1	832.6	R 1,325.6
1985	5.2	318.9	36.8	R 33.9	55.9	R 126.7	20.8	R 471.6	846.2	R 1,317.7
1986	5.7	292.7	20.3	20.7	54.9	95.9	16.3	R 410.6	884.7	R 1,295.3
1987	5.3	267.7	23.2	R 13.7	77.0	R 113.9	13.0	R 399.9	915.1	R 1,315.0
1988	6.3	286.8	28.9	R 19.5	65.4	R 113.8	13.6	R 420.5	952.0	R 1,372.5
1989	3.9	304.6	26.7	R 20.7	90.3	R 137.6	15.6	R 461.7	953.0	R 1,414.7
1990	2.9	276.4	25.4	R 14.5	78.5	R 118.3	18.8	R 416.4	957.5	R 1,373.9
1991	3.4	289.6	25.7	R 16.9	81.9	R 124.6	19.0	R 436.6	1,059.5	R 1,496.0
1992	3.9	310.2	28.8	R 15.3	81.6	R 125.7	18.3	R 458.0	1,013.4	R 1,471.4
1993	5.1	351.3	32.2	R 13.5	86.5	R 132.1	13.5	R 502.0	1,096.0	R 1,598.1
1994	5.4	341.4	29.3	R 14.1	96.7	R 140.1	12.9	R 499.9	1,125.0	R 1,624.8
1995	2.3	334.1	24.8	R 14.9	94.4	R 134.0	14.0	R 484.4	1,155.1	R 1,639.5
1996	2.0	389.1	24.7	17.3	124.7	166.7	16.0	573.8	1,185.0	1,758.8
1997	6.0	420.6	26.2	20.4	122.7	169.3	11.6	607.5	1,172.1	1,779.6

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 115. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Kentucky

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.44	0.66	1.02	0.79	1.65	2.93	0.78	1.34	0.85	0.75	5.48	1.51
1975	1.30	1.05	2.29	2.53	3.29	4.69	1.69	2.88	1.69	1.43	5.26	2.55
1980	1.75	2.89	6.49	6.08	5.22	9.65	4.12	6.53	4.31	4.01	10.42	5.96
1981	1.86	3.35	8.05	6.94	8.91	10.74	5.47	8.57	5.31	3.82	11.94	6.80
1982	1.91	4.33	7.57	7.17	7.22	10.30	5.28	8.13	5.15	4.46	14.93	8.56
1983	1.76	5.06	6.44	R 7.77	7.95	8.96	4.84	R 6.95	4.99	R 5.18	14.38	R 8.60
1984	R 1.87	4.93	6.43	R 7.61	7.85	8.72	5.09	6.85	5.07	5.08	12.50	7.76
1985	R 1.87	4.95	6.09	R 7.18	5.52	8.80	4.89	R 6.52	NA	5.09	12.34	7.90
1986	1.79	4.55	3.72	R 5.44	6.20	6.69	3.08	R 4.73	NA	R 4.33	12.94	7.85
1987	R 1.74	4.11	4.25	R 5.41	7.81	7.36	2.98	R 6.01	NA	R 4.17	15.63	R 9.10
1988	1.76	4.06	3.84	R 5.33	6.97	7.42	2.91	R 5.10	NA	R 4.01	15.30	R 8.65
1989	1.83	4.19	4.48	R 6.26	3.34	8.08	3.05	R 5.38	NA	R 4.21	15.13	R 9.02
1990	1.86	4.35	5.55	R 7.94	5.01	9.25	3.61	R 6.73	NA	R 4.64	15.33	9.77
1991	1.87	4.24	4.92	R 7.91	4.74	8.94	—	R 5.98	NA	R 4.38	15.21	R 9.61
1992	1.76	4.22	4.72	R 7.39	4.62	8.65	—	R 5.51	NA	R 4.27	15.11	9.24
1993	1.70	4.60	4.54	R 6.00	9.94	8.51	2.76	R 6.12	3.02	R 4.50	15.10	R 9.39
1994	1.75	4.69	4.33	R 6.36	8.22	8.72	2.56	R 5.27	2.93	R 4.50	15.09	R 9.38
1995	1.77	4.20	4.34	R 6.32	8.25	9.10	—	R 5.20	2.87	4.27	15.01	R 9.21
1996	1.78	4.85	5.29	6.94	9.45	9.80	3.40	6.24	3.29	4.98	14.85	9.53
1997	1.83	5.51	4.96	7.40	9.98	9.64	—	6.30	3.27	5.26	15.13	10.08
	Expenditures in Million Nominal Dollars											
1970	3.5	28.3	5.0	1.8	3.7	4.1	R (s)	14.6	(s)	46.5	64.8	R 111.3
1975	5.6	40.8	12.2	3.0	8.1	6.8	R (s)	30.2	(s)	R 76.7	116.4	R 193.1
1980	7.7	114.9	99.6	21.4	7.0	12.7	R (s)	141.1	(s)	R 264.0	299.9	R 563.9
1981	14.4	123.4	28.2	4.9	10.7	14.5	0.6	59.0	(s)	R 197.0	356.7	R 553.7
1982	12.2	154.9	21.6	3.4	7.0	14.3	R (s)	46.4	(s)	R 213.8	459.3	R 673.1
1983	10.0	175.9	59.4	R 8.4	9.2	15.0	1.4	R 93.3	(s)	R 279.5	460.1	R 739.6
1984	R 10.7	182.2	64.1	R 7.4	6.7	13.5	1.0	R 92.7	0.5	R 286.1	396.2	R 682.3
1985	7.4	172.1	53.9	R 3.7	5.6	17.5	(s)	R 80.7	NA	R 260.1	398.7	R 658.8
1986	R 8.3	154.4	22.2	R 4.6	6.6	14.2	0.6	R 48.2	NA	R 211.0	437.7	R 648.7
1987	R 8.0	141.8	13.2	R 2.1	11.9	16.2	(s)	R 43.4	NA	R 193.2	546.5	R 739.6
1988	10.1	150.4	21.8	R 4.3	9.6	R 15.7	0.7	R 52.2	NA	R 212.7	565.0	R 777.7
1989	6.6	157.2	16.9	R 5.8	4.8	16.7	(s)	R 44.3	NA	R 208.1	588.0	R 796.1
1990	4.5	143.8	21.2	R 4.2	5.9	R 21.6	(s)	R 52.9	NA	R 201.1	613.9	R 815.1
1991	5.6	149.6	20.5	R 4.6	6.5	15.0	—	R 46.6	NA	R 201.8	654.4	R 856.2
1992	6.0	158.3	24.2	R 2.4	6.0	12.6	—	R 45.2	NA	R 209.5	628.7	R 838.2
1993	7.3	182.3	17.5	R 2.7	14.8	1.8	(s)	36.8	1.1	R 226.4	649.4	R 875.8
1994	8.0	183.0	24.9	R 2.6	12.0	1.8	(s)	R 41.3	1.1	R 233.4	667.2	R 900.7
1995	3.7	177.6	30.4	R 4.2	11.9	2.0	—	R 48.6	1.1	R 231.0	692.6	R 923.5
1996	3.3	208.5	37.3	4.4	16.2	2.1	(s)	59.9	1.3	273.1	696.2	969.2
1997	9.8	223.7	28.6	4.7	17.1	2.0	—	52.5	1.1	287.0	786.9	1,073.9

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 116. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Kentucky

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	0.38	0.44	0.42	0.48	0.67	0.73	0.79	1.65	5.08	2.93	0.44	R 1.15	R 1.20	R 1.47	R 0.71	2.16	R 1.01
1975	1.60	1.30	1.44	0.75	1.80	2.31	2.53	3.29	7.48	4.69	2.11	R 2.63	R 2.72	R 1.47	R 1.81	4.56	R 2.64
1980	1.81	1.75	1.77	2.66	3.56	5.43	6.08	5.22	14.36	9.65	3.58	R 7.21	R 6.03	R 1.47	R 4.10	8.63	R 5.24
1981	2.03	1.86	1.89	3.14	4.81	6.34	6.94	8.91	18.00	10.74	4.68	R 6.64	R 7.04	R 1.47	R 4.60	10.55	R 6.28
1982	2.04	1.91	1.94	4.06	4.57	6.54	7.17	7.22	17.25	10.30	4.87	R 6.15	R 6.44	R 1.47	R 4.57	11.93	R 6.55
1983	1.58	1.76	1.68	4.48	4.57	6.73	R 7.30	7.95	16.98	8.96	4.89	R 6.93	R 6.94	R 1.47	R 4.48	12.23	R 6.55
1984	1.91	R 1.87	R 1.89	4.29	4.40	6.67	R 7.35	7.85	17.63	8.72	5.09	R 6.68	R 6.92	R 1.47	R 4.36	12.66	R 6.71
1985	1.93	R 1.87	R 1.89	4.25	4.74	6.34	R 6.94	5.52	17.61	8.80	4.89	R 6.11	R 6.42	R 1.47	R 4.15	14.51	R 6.90
1986	1.75	1.79	R 1.77	3.79	4.90	4.10	R 4.98	6.20	15.59	6.69	3.08	R 4.98	R 5.20	R 1.51	R 3.54	15.14	R 6.61
1987	1.63	R 1.74	R 1.69	3.27	3.19	4.54	R 4.95	7.81	13.58	7.36	2.98	R 4.48	R 5.08	R 1.51	R 3.47	13.98	R 6.09
1988	1.73	1.76	1.74	3.32	3.05	4.20	R 4.61	6.97	14.62	7.42	2.91	R 3.94	R 4.78	R 1.51	R 3.37	14.00	R 6.19
1989	1.75	1.83	1.80	3.55	2.86	4.76	R 5.51	3.34	14.48	8.08	3.05	R 4.21	R 4.51	d R 1.51	d R 3.26	12.46	d R 5.87
1990	1.80	1.86	1.84	3.47	2.94	5.92	R 6.96	5.01	14.60	9.25	3.61	R 4.10	R 5.08	1.67	R 3.56	10.50	R 5.57
1991	1.72	1.87	1.82	3.08	3.30	5.27	R 6.02	4.74	16.80	8.94	3.12	R 4.66	R 5.00	1.67	R 3.69	9.93	R 5.39
1992	1.74	1.76	1.75	3.05	2.03	5.21	R 5.28	4.62	18.32	8.65	2.71	R 4.18	R 4.61	1.67	R 3.52	9.25	R 5.18
1993	1.68	1.70	1.70	3.49	2.36	5.05	R 5.10	9.94	18.96	8.51	2.76	R 3.97	R 4.94	1.67	R 3.62	9.67	R 5.30
1994	1.57	1.75	1.67	3.43	2.44	4.91	R 5.29	7.21	19.11	8.72	2.56	R 3.73	R 4.59	R 1.76	R 3.51	9.51	R 5.26
1995	1.57	1.77	1.69	2.97	2.61	4.91	R 4.91	7.56	R 19.41	9.10	2.92	R 3.97	R 4.81	R 1.76	R 3.42	8.58	R 4.87
1996	1.68	1.78	1.74	3.69	3.12	5.91	5.85	9.19	20.08	9.80	3.40	4.62	5.62	1.74	4.00	8.54	5.30
1997	1.78	1.83	1.81	3.99	3.23	5.42	5.68	8.96	17.86	9.64	3.72	4.16	5.16	1.75	3.94	8.22	5.12
	Expenditures in Million Nominal Dollars																
1970	16.4	27.5	44.0	34.3	13.8	8.9	2.7	33.5	14.6	3.2	1.8	R 31.5	R 110.0	R 4.4	R 192.6	150.5	R 343.2
1975	52.1	50.1	102.3	47.5	31.3	44.7	4.2	77.0	23.5	4.8	9.9	R 91.7	R 287.1	R 6.4	R 443.3	479.9	R 923.1
1980	44.0	90.6	134.6	167.8	47.8	203.6	18.6	146.2	46.9	4.5	17.1	R 375.7	R 860.3	R 3.6	R 1,166.3	822.8	R 1,989.2
1981	19.3	91.4	110.7	196.7	61.8	196.6	22.2	180.2	56.4	4.1	20.3	R 206.7	R 748.3	R 3.8	R 1,059.5	954.7	R 2,014.2
1982	25.4	90.0	115.4	214.5	87.9	187.1	21.5	127.9	49.3	3.3	25.6	R 154.4	R 657.1	R 3.7	R 990.7	955.6	R 1,946.3
1983	47.0	74.5	121.5	230.5	63.7	163.4	R 18.5	132.5	50.8	2.3	22.5	R 143.0	R 596.8	R 4.2	R 952.9	947.3	R 1,900.3
1984	69.5	R 100.2	R 169.7	244.1	63.3	175.1	R 14.7	R 107.6	56.3	29.3	13.0	R 172.0	R 631.3	R 4.3	R 1,049.4	1,204.1	R 2,253.5
1985	60.5	R 117.4	R 177.8	227.4	58.9	207.2	R 22.9	69.2	52.4	39.0	9.5	R 149.5	R 608.5	R 4.2	R 1,018.0	1,283.4	R 2,301.4
1986	52.2	R 98.7	R 150.9	182.3	74.3	118.5	R 7.5	68.2	45.3	28.9	8.3	R 106.1	R 457.1	R 6.6	R 796.9	1,230.1	R 2,027.0
1987	57.1	R 82.7	R 139.8	176.9	57.2	144.0	R 3.8	108.6	44.6	R 32.7	11.2	R 125.9	R 528.1	R 6.6	R 851.4	1,134.8	R 1,986.2
1988	60.4	77.9	138.4	198.6	53.0	127.4	R 4.9	102.2	46.3	30.6	6.6	R 106.8	R 477.8	R 6.9	R 821.7	1,230.0	R 2,051.7
1989	60.6	R 102.1	R 162.6	226.9	52.4	132.7	6.1	42.4	47.1	35.6	6.3	R 108.4	R 430.9	d R 5.8	d R 826.2	1,251.2	d R 2,077.5
1990	56.9	103.2	R 160.1	235.4	59.1	179.7	R 6.0	68.2	48.8	R 41.2	8.9	R 127.6	R 539.5	R 5.0	R 940.0	1,135.7	R 2,075.7
1991	39.4	R 95.1	R 134.5	219.6	61.3	160.4	R 2.4	68.7	50.3	40.6	5.4	R 327.6	R 716.6	R 5.2	R 1,075.9	1,086.8	R 2,162.8
1992	52.7	R 72.2	124.8	226.9	34.1	175.6	R 2.5	65.2	55.9	39.1	4.5	R 335.5	R 712.4	R 5.5	R 1,069.6	1,140.0	R 2,209.6
1993	52.9	R 101.1	154.0	264.6	40.0	154.4	R 4.0	104.9	58.9	46.6	3.8	R 295.2	R 707.8	R 5.5	R 1,131.9	1,166.5	R 2,298.3
1994	52.4	86.2	138.6	288.1	46.1	182.6	R 3.0	73.1	62.1	51.0	3.3	R 288.5	R 709.7	R 7.2	R 1,143.4	1,266.4	R 2,409.8
1995	60.3	R 99.2	R 159.5	282.0	48.0	188.8	R 3.2	77.2	R 62.0	55.8	1.9	R 298.1	R 735.0	R 7.5	R 1,184.0	1,156.6	R 2,340.6
1996	60.8	102.2	163.0	349.6	56.2	212.2	4.0	110.2	62.2	61.8	2.5	360.3	869.4	7.9	1,389.9	1,191.8	2,581.6
1997	64.0	100.6	164.6	383.7	73.2	189.6	4.4	110.2	58.5	62.3	2.0	343.8	843.9	8.1	1,400.3	1,108.4	2,508.7

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.

R=Revised data.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 117. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Kentucky

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.44	—	2.17	1.45	0.73	1.65	5.08	2.93	0.77	2.58	2.58	—	2.58
1975	1.30	—	3.45	2.78	2.03	3.29	7.48	4.69	1.46	4.34	4.34	—	4.34
1980	—	—	9.02	6.86	6.39	5.22	14.36	9.65	3.94	8.82	8.82	—	8.82
1981	—	—	10.84	8.25	7.67	8.91	18.00	10.74	5.20	10.05	10.05	—	10.05
1982	—	—	10.92	7.85	7.42	7.22	17.25	10.30	5.08	9.62	9.62	—	9.62
1983	—	—	10.44	7.06	6.85	7.95	16.98	8.96	4.64	8.40	8.40	—	8.40
1984	—	—	10.27	7.09	6.63	7.85	17.63	8.72	4.80	8.24	8.24	—	8.24
1985	—	—	9.99	6.78	6.17	5.52	17.61	8.80	—	8.19	8.19	—	8.19
1986	—	—	8.41	6.16	4.39	6.20	15.59	6.69	—	6.50	6.50	—	6.50
1987	—	—	7.55	6.61	4.16	7.81	13.58	7.36	—	6.98	6.98	—	6.98
1988	—	—	7.41	6.40	3.93	6.97	14.62	7.42	—	6.92	6.92	—	6.92
1989	—	—	8.28	6.86	4.45	3.34	14.48	8.08	—	7.45	7.45	—	7.45
1990	—	—	9.32	8.21	5.82	5.01	14.60	9.25	—	8.70	8.70	—	8.70
1991	—	—	8.71	7.75	4.92	4.74	16.80	8.94	—	8.29	8.29	—	8.29
1992	—	3.57	8.54	7.56	4.61	4.62	18.32	8.65	—	8.00	8.00	—	8.00
1993	—	5.06	8.24	7.56	4.36	9.94	18.96	8.51	—	7.95	7.95	—	7.95
1994	—	4.35	7.96	7.59	4.09	9.20	19.11	8.72	—	8.05	8.05	—	8.05
1995	—	4.65	8.36	7.68	4.15	9.55	R 19.41	9.10	—	8.32	8.32	—	8.32
1996	—	5.28	9.29	8.55	4.87	8.78	20.08	9.80	—	9.08	9.08	—	9.08
1997	—	6.36	9.39	8.27	4.59	8.28	17.86	9.64	—	8.97	8.97	—	8.97
	Expenditures in Million Nominal Dollars												
1970	R (s)	—	3.6	41.4	12.6	R (s)	11.4	510.0	0.7	580.0	580.1	—	580.1
1975	(s)	—	2.2	100.8	24.6	0.8	24.0	994.0	(s)	1,146.5	1,146.5	—	1,146.5
1980	—	—	5.1	511.0	104.4	R (s)	45.1	2,002.0	3.4	2,671.1	2,671.1	—	2,671.1
1981	—	—	5.0	545.1	139.7	2.8	54.3	2,248.8	8.2	3,003.8	3,003.8	—	3,003.8
1982	—	—	4.9	509.3	154.9	7.2	47.4	2,149.4	R (s)	2,873.5	2,873.5	—	2,873.5
1983	—	—	5.0	565.4	154.9	9.4	48.9	1,877.9	R (s)	2,661.9	2,661.9	—	2,661.9
1984	—	—	3.8	615.8	121.9	R 8.2	54.1	1,826.0	R (s)	2,630.0	2,630.0	—	2,630.0
1985	—	—	3.3	534.7	119.3	2.0	50.4	R 1,789.8	—	R 2,499.4	R 2,499.4	—	R 2,499.4
1986	—	—	3.6	483.8	87.8	1.8	43.6	1,451.6	—	2,072.2	2,072.2	—	2,072.2
1987	—	—	2.4	522.1	113.5	2.0	42.9	R 1,617.1	—	R 2,299.9	R 2,299.9	—	R 2,299.9
1988	—	—	2.3	648.7	110.8	1.9	44.6	R 1,673.8	—	R 2,482.0	R 2,482.0	—	R 2,482.0
1989	—	—	2.2	867.7	127.7	0.9	45.3	R 1,790.0	—	R 2,833.8	R 2,833.8	—	R 2,833.8
1990	—	—	2.4	798.4	188.2	1.2	47.0	R 2,029.0	—	R 3,066.1	R 3,066.1	—	R 3,066.1
1991	—	—	2.3	713.4	177.3	0.9	48.3	R 1,999.5	—	R 2,941.7	R 2,941.7	—	R 2,941.7
1992	—	(s)	2.4	791.6	179.7	1.0	53.7	R 1,983.6	—	R 3,011.9	R 3,011.9	—	R 3,011.9
1993	—	(s)	1.7	926.1	140.8	2.0	56.7	R 1,997.8	—	R 3,125.1	R 3,125.1	—	R 3,125.1
1994	—	(s)	1.8	862.6	146.8	3.1	59.7	R 2,062.5	—	R 3,136.6	R 3,136.6	—	R 3,136.6
1995	—	(s)	1.9	904.4	148.2	1.6	R 59.6	R 2,241.3	—	3,357.0	3,357.0	—	3,357.0
1996	—	(s)	2.2	995.1	154.5	1.5	59.8	2,178.3	—	3,391.3	3,391.3	—	3,391.3
1997	—	(s)	1.3	1,029.4	118.4	1.3	56.2	2,475.6	—	3,682.2	3,682.3	—	3,682.3

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 118. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Kentucky

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.21	0.29	0.87	1.12	—	0.88	—	—	0.22
1975	0.64	0.68	1.69	2.25	—	1.72	—	—	0.64
1980	1.31	2.16	—	6.54	—	6.54	—	—	1.32
1981	1.47	2.58	—	8.09	—	8.09	—	—	1.49
1982	1.55	3.39	—	7.60	—	7.60	—	—	1.58
1983	1.53	3.79	—	6.28	—	6.28	—	—	1.55
1984	1.47	3.60	—	6.13	—	6.13	—	—	1.49
1985	1.41	3.54	—	5.80	—	5.80	—	—	1.43
1986	1.34	2.97	—	3.50	—	3.50	—	—	1.34
1987	1.26	2.78	—	4.07	—	4.07	—	—	1.26
1988	1.20	2.46	—	3.85	—	3.85	—	—	1.20
1989	1.14	2.67	—	4.75	—	4.75	—	—	1.14
1990	1.19	2.98	—	5.75	—	5.75	—	—	1.20
1991	1.18	2.60	—	5.05	—	5.05	—	—	1.18
1992	1.16	2.72	—	4.79	—	4.79	—	—	1.17
1993	1.17	3.01	—	4.38	—	4.38	—	—	1.17
1994	1.16	2.87	—	4.33	—	4.33	—	—	1.17
1995	1.11	2.94	—	4.28	—	4.28	—	—	1.11
1996	1.06	3.41	—	5.15	—	5.15	—	—	1.07
1997	1.05	3.37	—	4.83	—	4.83	—	—	1.06
	Expenditures in Million Nominal Dollars								
1970	87.4	2.5	0.7	(s)	—	0.7	—	—	90.6
1975	308.4	R (s)	1.1	R (s)	—	1.2	—	—	309.8
1980	730.9	4.2	—	8.6	—	8.6	—	—	743.7
1981	871.5	6.8	—	15.2	—	15.2	—	—	893.5
1982	865.5	5.3	—	13.1	—	13.1	—	—	883.8
1983	853.0	4.6	—	9.0	—	9.0	—	—	866.6
1984	839.9	6.5	—	10.8	—	10.8	—	—	857.2
1985	870.2	4.1	—	9.1	—	9.1	—	—	883.4
1986	879.9	1.3	—	4.8	—	4.8	—	—	886.1
1987	826.3	1.0	—	5.3	—	5.3	—	—	832.6
1988	878.9	1.1	—	4.5	—	4.5	—	—	884.5
1989	760.8	0.9	—	6.4	—	6.4	—	—	768.0
1990	851.3	0.9	—	7.1	—	7.1	—	—	859.2
1991	854.7	0.6	—	6.7	—	6.7	—	—	862.0
1992	856.5	0.7	—	5.5	—	5.5	—	—	862.7
1993	962.7	0.8	—	5.5	—	5.5	—	—	969.0
1994	938.4	1.0	—	8.0	—	8.0	—	—	947.5
1995	918.2	2.6	—	7.0	—	7.0	—	—	927.8
1996	905.8	6.4	—	9.3	—	9.3	—	—	921.4
1997	926.6	7.6	—	7.5	—	7.5	—	—	941.7

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 119. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Louisiana

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	—	—	0.27	0.86	0.72	1.12	2.86	0.45	R 1.20	R 1.52	—	R 1.49	R 0.66	0.21	4.69	R 0.95
1975	—	—	—	0.75	2.34	2.01	2.52	4.49	1.62	R 2.87	R 2.86	—	R 1.62	1.60	0.73	6.24	R 2.04
1980	—	1.26	1.26	1.61	6.02	6.34	5.30	9.89	3.31	R 7.08	R 6.13	—	R 2.31	R 3.72	2.19	11.49	R 4.54
1981	—	1.97	1.97	2.26	7.69	7.47	5.04	11.03	4.16	R 8.59	R 7.09	—	R 2.56	R 4.58	2.81	14.07	R 5.61
1982	—	2.20	2.20	3.23	7.07	7.09	6.27	10.25	3.85	R 7.76	R 6.92	—	R 2.58	R 5.15	3.02	15.48	R 6.48
1983	—	2.24	2.24	3.35	6.52	6.25	6.60	9.03	3.77	R 7.53	R 6.71	—	R 2.46	R 5.03	2.96	15.66	R 6.36
1984	—	R 2.22	R 2.22	3.29	6.52	6.07	6.77	8.99	3.88	R 7.49	R 6.84	—	R 2.17	R 4.85	2.84	16.50	R 6.35
1985	—	2.14	2.14	3.09	6.26	5.70	5.32	9.36	3.60	R 7.48	R 6.54	0.86	R 2.13	R 4.61	2.46	18.25	R 6.47
1986	—	R 1.78	R 1.78	2.15	5.11	3.67	5.90	7.04	1.39	R 4.59	R 4.95	1.04	R 1.74	R 3.36	1.67	17.40	R 5.09
1987	—	R 1.63	R 1.63	2.00	5.60	3.90	6.08	7.14	2.55	R 5.28	R 5.41	0.97	R 1.77	R 3.45	1.46	17.33	R 5.24
1988	—	R 1.56	R 1.56	2.14	5.36	3.61	5.99	7.25	2.55	R 4.55	R 5.16	0.92	R 1.77	R 3.39	1.44	17.30	R 5.22
1989	—	1.62	1.62	2.12	6.10	4.12	5.66	7.90	2.52	R 5.30	R 5.55	0.90	e R 1.42	e R 3.48	1.51	17.64	e R 5.25
1990	—	1.68	1.68	2.11	7.46	5.79	8.13	9.47	2.10	R 6.32	R 6.85	0.88	R 1.46	R 4.01	1.49	17.77	R 5.97
1991	—	1.65	1.65	1.89	6.94	4.67	8.14	9.51	2.84	R 5.80	R 6.52	0.84	R 1.48	R 3.76	1.40	17.59	R 5.67
1992	—	1.54	1.54	2.09	6.85	4.29	4.45	9.23	1.90	R 5.48	R 5.56	0.81	R 1.47	R 3.46	1.52	17.80	R 5.30
1993	—	1.59	1.59	2.50	6.82	4.02	4.49	9.14	1.88	R 4.80	R 5.47	0.69	R 1.41	R 3.56	1.65	18.56	R 5.50
1994	—	1.55	1.55	2.32	6.62	3.77	5.10	9.04	1.87	R 4.92	R 5.51	0.70	R 1.53	R 3.54	1.59	17.99	R 5.38
1995	—	1.56	1.56	2.00	6.83	3.75	4.99	9.25	1.95	R 5.49	R 5.71	0.64	R 1.53	R 3.36	1.46	17.11	R 5.23
1996	—	1.51	1.51	2.98	7.64	4.57	6.37	9.63	2.09	6.25	6.47	0.56	1.42	4.19	1.81	17.96	6.10
1997	—	1.48	1.48	2.80	7.45	4.22	5.68	9.59	2.93	5.04	6.12	0.98	1.43	3.97	1.91	17.70	5.81
	Expenditures in Million Nominal Dollars																
1970	—	—	—	376.4	59.1	23.4	199.3	523.4	31.1	R 114.4	R 950.8	—	R 12.4	R 1,339.6	-72.9	435.9	R 1,702.6
1975	—	—	—	1,036.2	268.9	67.9	481.4	1,018.8	280.0	R 524.5	R 2,641.5	—	R 14.0	R 3,691.6	-303.4	710.5	R 4,098.7
1980	—	3.1	3.1	2,396.3	752.1	306.8	1,012.5	2,449.2	1,265.9	R 2,294.3	R 8,080.8	—	R 30.4	R 10,510.6	-1,079.1	1,899.6	R 11,331.1
1981	—	46.8	46.8	3,270.7	1,693.2	326.8	1,347.8	2,835.1	1,409.1	R 2,167.3	R 9,779.3	—	R 35.0	R 13,131.8	-1,346.0	2,655.7	R 14,441.5
1982	—	141.1	141.1	3,483.0	1,269.0	325.0	1,976.4	2,713.8	1,112.6	R 1,570.8	R 8,967.5	—	R 35.4	R 12,626.9	-1,378.1	2,889.7	R 14,138.5
1983	—	238.7	238.7	3,369.6	1,180.6	383.7	2,110.1	2,394.3	840.9	R 1,233.3	R 8,142.9	—	R 36.5	R 11,787.6	-1,226.1	2,859.4	R 13,420.9
1984	—	R 263.5	R 263.5	3,799.7	1,190.3	433.0	1,535.4	2,378.9	702.0	R 1,175.8	R 7,415.3	—	R 27.9	R 11,506.5	-1,214.1	3,323.1	R 13,615.5
1985	—	R 340.1	R 340.1	3,152.5	1,225.8	410.5	1,344.6	R 2,424.8	546.9	R 1,093.3	R 7,046.0	22.9	R 26.9	R 10,588.4	-1,168.2	3,664.5	R 13,084.6
1986	—	R 306.2	R 306.2	2,249.7	1,040.5	369.3	1,297.1	1,847.2	228.6	R 936.0	R 5,718.7	119.4	R 28.0	R 8,422.0	-942.4	3,408.9	R 10,888.5
1987	—	R 280.7	R 280.7	2,095.4	1,193.6	415.1	1,182.5	R 1,808.4	377.3	R 1,037.0	R 6,013.9	128.5	R 29.3	R 8,547.9	-811.9	3,379.5	R 11,115.5
1988	—	R 330.8	R 330.8	2,203.4	1,215.0	435.5	1,148.0	R 1,859.6	416.0	R 947.9	R 6,022.1	135.7	R 30.6	R 8,722.5	-886.9	3,430.5	R 11,266.2
1989	—	335.6	335.6	2,440.3	1,315.9	518.2	1,051.1	R 1,945.6	406.6	R 1,085.3	R 6,322.6	119.8	e R 55.2	e R 9,273.4	-881.3	3,604.0	e R 11,996.1
1990	—	351.2	351.2	2,466.4	1,703.2	845.1	1,395.7	R 2,186.7	302.9	R 1,421.3	R 7,854.9	133.6	R 45.0	R 10,851.1	-931.6	3,739.5	R 13,658.9
1991	—	R 353.9	R 353.9	2,207.6	1,406.6	848.7	1,525.3	R 2,149.4	457.3	R 1,075.1	R 7,462.4	125.4	R 52.6	R 10,201.8	-869.3	3,754.3	R 13,086.9
1992	—	344.8	344.8	2,439.5	1,258.3	653.1	872.4	R 2,188.6	354.4	R 1,060.2	R 6,387.0	89.2	R 53.3	R 9,313.7	-903.4	3,823.0	R 12,233.3
1993	—	354.0	354.0	2,970.2	1,396.6	571.2	900.1	R 2,211.3	327.8	R 991.3	R 6,398.2	105.5	R 53.6	R 9,881.4	-1,058.1	4,127.8	R 12,951.2
1994	—	357.4	357.4	2,898.0	1,494.3	688.3	1,251.4	R 2,167.4	288.7	R 989.2	R 6,879.3	96.1	R 68.5	R 10,299.3	-1,041.2	4,101.5	R 13,359.5
1995	—	338.4	338.4	2,672.1	1,301.1	613.0	1,208.2	2,295.9	285.4	R 1,020.4	R 6,724.1	106.6	R 79.7	R 9,920.8	-1,041.6	4,056.2	R 12,935.4
1996	—	310.7	310.7	3,822.6	1,748.3	752.2	1,572.9	2,572.5	352.7	1,182.8	8,181.5	94.4	78.2	12,487.3	-1,151.8	4,466.7	15,802.1
1997	—	333.0	333.0	3,750.7	1,530.7	729.2	1,417.3	2,363.2	397.3	1,204.9	7,642.6	140.0	76.5	11,942.8	-1,265.5	4,442.5	15,119.7

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 120. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Louisiana

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	—	0.75	0.96	1.60	2.20	2.19	0.71	0.90	6.58	R 2.27
1975	—	1.33	2.24	3.40	4.39	4.36	1.39	1.55	7.96	R 3.29
1980	2.97	3.28	6.65	—	8.54	8.52	3.57	3.56	13.81	R 7.71
1981	—	4.01	—	12.09	8.03	8.17	4.39	R 4.22	17.03	R 9.24
1982	3.30	5.08	7.61	12.02	9.55	9.58	4.26	R 5.26	18.47	R 10.98
1983	—	5.88	4.25	R 7.05	9.43	R 9.11	4.13	R 5.95	18.22	R 11.18
1984	3.27	5.72	7.08	R 7.16	9.50	R 9.01	4.19	R 5.84	19.87	R 12.22
1985	—	5.47	3.24	R 6.80	7.68	R 7.60	4.03	R 5.53	20.27	R 12.89
1986	2.89	5.56	5.05	R 4.91	8.99	R 8.85	3.23	R 5.67	20.75	R 13.35
1987	—	5.35	5.00	R 4.88	9.13	R 9.06	3.08	R 5.45	21.05	R 13.13
1988	2.62	5.51	6.69	R 3.94	9.28	R 9.17	3.11	R 5.60	20.89	R 13.24
1989	—	5.72	5.62	R 5.09	10.44	R 10.11	3.44	R 5.85	21.50	R 13.86
1990	—	5.85	6.46	R 6.37	11.43	R 11.21	3.53	5.98	21.71	R 14.50
1991	2.81	5.51	5.94	R 6.35	12.88	R 12.69	3.37	R 5.74	21.68	R 14.28
1992	—	5.36	8.61	R 5.79	11.68	R 11.60	3.08	R 5.61	22.03	R 14.24
1993	2.73	5.88	7.73	R 5.72	11.88	R 11.78	3.02	R 5.98	22.74	R 15.08
1994	—	6.01	5.18	R 4.27	11.04	R 10.80	2.93	R 6.05	22.31	R 15.15
1995	2.61	5.82	7.77	R 3.95	11.28	R 11.11	2.87	R 5.85	21.20	R 14.72
1996	—	6.47	5.81	4.47	12.59	12.32	3.29	6.57	22.13	15.26
1997	2.72	6.31	5.53	6.15	12.91	11.87	3.27	6.48	21.67	14.98
	Expenditures in Million Nominal Dollars									
1970	—	66.7	(s)	R (s)	22.5	22.8	1.2	R 90.6	209.6	R 300.3
1975	—	131.6	R (s)	R (s)	34.0	34.6	2.8	R 169.0	323.8	R 492.8
1980	R (s)	248.7	R (s)	—	36.0	36.2	15.2	R 300.1	792.9	R 1,093.0
1981	—	337.9	—	1.9	33.5	35.4	18.9	R 392.2	1,022.6	R 1,414.9
1982	R (s)	364.7	3.7	5.2	29.5	38.4	19.7	R 423.0	1,133.5	R 1,556.5
1983	—	418.1	R (s)	R 3.7	34.7	R 38.4	18.9	R 475.3	1,078.8	R 1,554.1
1984	R (s)	414.1	R (s)	R 6.0	30.9	R 37.0	10.2	R 461.5	1,308.1	R 1,769.6
1985	—	344.3	R (s)	R 0.7	27.3	R 28.2	9.5	R 382.0	1,395.0	R 1,777.0
1986	(s)	335.6	R (s)	R (s)	34.7	R 35.4	7.4	R 378.5	1,434.7	R 1,813.2
1987	—	341.3	R (s)	R (s)	33.8	R 34.1	8.9	R 384.3	1,435.7	R 1,820.0
1988	(s)	342.7	R (s)	R (s)	32.6	R 33.0	9.3	R 385.0	1,435.0	R 1,820.0
1989	—	344.5	R (s)	R 0.9	34.8	R 35.9	10.7	R 391.1	1,505.0	R 1,896.1
1990	—	325.2	R (s)	R (s)	32.1	R 32.9	11.6	R 369.7	1,587.5	R 1,957.1
1991	(s)	315.0	R (s)	R (s)	38.4	R 38.9	11.7	R 365.6	1,596.0	R 1,961.6
1992	—	309.2	(s)	R (s)	44.8	R 45.1	11.3	R 365.6	1,592.4	R 1,957.9
1993	(s)	344.7	(s)	R (s)	30.5	R 30.7	9.6	R 385.1	1,740.7	R 2,125.8
1994	—	330.6	R (s)	R (s)	27.4	R 27.9	9.1	R 367.7	1,722.7	R 2,090.4
1995	R (s)	316.1	R (s)	R (s)	25.6	R 25.9	10.0	R 352.1	1,744.5	R 2,096.5
1996	—	382.8	(s)	(s)	36.0	36.4	11.4	430.6	1,835.6	2,266.2
1997	(s)	377.4	(s)	3.2	36.9	40.2	8.3	425.8	1,811.3	2,237.1

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 121. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Louisiana

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	—	0.37	0.89	0.59	1.06	2.86	0.49	1.04	0.71	0.48	5.07	1.62
1975	—	0.77	2.14	2.01	2.44	4.49	1.76	2.19	1.39	1.25	6.99	2.89
1980	1.24	2.60	6.36	5.53	5.22	9.89	3.55	3.77	3.57	3.40	12.08	5.54
1981	—	3.57	7.88	7.27	4.99	11.03	4.38	4.89	4.39	4.54	14.62	6.86
1982	1.63	4.70	7.28	7.51	6.24	10.25	3.90	4.09	4.26	4.24	15.36	6.99
1983	—	5.49	6.07	R 7.05	6.57	9.03	3.40	R 5.34	4.13	5.43	15.83	R 10.10
1984	R 1.63	5.33	6.14	R 7.16	6.73	8.99	4.56	R 5.96	4.19	R 5.55	18.10	R 11.82
1985	—	5.09	6.13	R 6.80	5.29	9.36	4.12	R 6.00	NA	R 5.51	20.24	12.71
1986	R 1.45	5.05	3.59	R 4.91	5.84	7.04	2.14	3.74	NA	4.42	19.24	11.86
1987	R 1.34	4.78	4.04	R 4.88	6.02	7.14	2.67	4.26	NA	R 4.60	19.25	12.78
1988	R 1.65	4.94	3.63	R 3.94	5.93	7.25	1.91	R 3.96	NA	R 4.66	19.56	13.33
1989	—	4.98	4.15	R 5.09	5.57	7.90	2.29	R 4.44	NA	R 4.85	19.99	14.02
1990	R 1.56	5.04	5.47	R 6.37	8.07	9.47	2.62	R 6.29	NA	5.36	20.57	14.76
1991	1.73	4.68	4.77	R 6.35	8.06	9.51	2.03	5.55	NA	4.88	20.30	14.43
1992	R 1.69	4.59	4.43	R 5.79	4.30	9.23	2.02	5.52	NA	R 4.73	20.72	14.55
1993	1.68	5.15	4.30	5.72	4.40	9.14	1.92	4.52	3.02	R 4.99	21.51	R 15.59
1994	R 1.74	5.22	3.98	R 4.27	8.59	9.04	—	R 4.52	2.93	R 5.07	20.92	R 15.51
1995	1.73	4.98	4.07	R 3.95	8.99	9.25	—	R 5.71	2.87	R 5.01	19.93	R 15.39
1996	—	5.83	4.88	4.47	9.58	9.63	2.76	7.20	3.29	5.88	21.13	16.36
1997	1.26	5.48	4.66	6.15	9.79	9.59	—	6.47	3.27	5.53	20.27	15.45
	Expenditures in Million Nominal Dollars											
1970	—	26.6	4.3	1.5	1.9	5.7	1.6	15.0	(s)	R 41.7	R 145.7	187.4
1975	—	40.5	18.2	5.3	3.3	11.0	20.2	58.0	(s)	98.5	220.0	318.5
1980	R (s)	107.7	14.8	17.2	3.9	8.7	300.8	345.4	(s)	R 453.6	527.7	R 981.3
1981	—	145.9	23.7	104.3	3.7	10.3	423.5	565.5	(s)	R 711.8	683.9	R 1,395.7
1982	R (s)	166.2	14.7	14.1	3.4	9.9	407.8	449.9	(s)	R 616.7	734.2	R 1,350.8
1983	—	199.5	74.8	3.1	4.3	11.1	26.6	R 120.0	(s)	R 319.9	760.4	R 1,080.2
1984	R (s)	183.4	74.3	R 8.1	3.9	9.8	23.9	R 119.9	(s)	R 303.8	R 989.0	R 1,292.9
1985	—	159.7	133.6	R 2.5	3.3	11.6	14.9	R 165.9	NA	R 325.6	1,142.6	R 1,468.2
1986	(s)	146.9	84.3	R 0.6	4.0	8.8	3.1	100.8	NA	R 247.7	1,086.9	1,334.5
1987	—	138.4	44.3	0.6	3.9	9.3	4.5	62.6	NA	201.0	R 1,062.7	R 1,263.7
1988	(s)	141.2	27.4	R 2.5	3.7	9.0	2.6	R 45.1	NA	R 186.4	1,088.8	R 1,275.2
1989	—	140.9	20.5	R 1.0	3.3	9.2	3.6	R 37.6	NA	R 178.5	R 1,129.8	R 1,308.4
1990	—	130.9	34.7	0.8	4.0	R 15.8	0.7	55.9	NA	186.9	R 1,159.9	1,346.8
1991	(s)	124.7	25.0	0.8	4.2	12.9	1.5	44.4	NA	169.1	1,145.4	1,314.5
1992	—	136.3	15.6	R (s)	2.9	11.9	R (s)	30.8	NA	167.1	1,162.3	1,329.4
1993	(s)	134.1	21.7	0.8	2.0	2.0	(s)	26.5	0.8	160.6	R 1,239.2	1,399.8
1994	—	131.1	20.1	R (s)	3.8	1.9	—	R 26.1	0.8	R 157.9	R 1,258.5	R 1,416.5
1995	R (s)	122.7	5.0	R (s)	3.6	2.0	—	10.8	0.8	R 134.4	1,225.2	R 1,359.6
1996	—	156.8	3.4	(s)	4.8	2.1	(s)	10.5	0.9	168.2	1,327.4	1,495.6
1997	(s)	159.3	6.0	(s)	4.9	2.0	—	13.1	0.8	173.2	1,306.3	1,479.6

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 122. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Louisiana

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	—	—	0.23	0.66	0.51	0.59	1.06	5.08	2.86	0.49	R 0.78	R 1.01	R 1.69	R 0.43	2.49	0.48
1975	—	—	—	0.74	1.78	1.81	2.01	2.44	7.48	4.49	1.72	R 2.73	R 2.52	R 1.69	1.32	3.99	1.40
1980	—	1.24	1.24	1.24	3.62	4.89	5.53	5.22	14.36	9.89	3.68	R 7.10	R 5.98	R 1.69	R 3.09	9.02	R 3.33
1981	—	1.55	1.55	1.81	3.84	6.48	7.27	4.99	18.00	11.03	4.58	R 8.72	R 6.38	R 1.69	R 3.72	11.58	R 4.11
1982	—	1.63	1.63	3.02	3.55	6.54	7.51	6.24	17.25	10.25	4.38	R 7.65	R 6.52	R 1.69	R 4.84	13.18	R 5.32
1983	—	1.63	1.63	3.01	4.17	6.34	R 6.23	6.57	16.98	9.03	4.40	R 7.20	R 6.38	R 1.69	R 4.71	13.54	R 5.22
1984	—	R 1.63	R 1.63	3.06	4.15	6.41	R 6.29	6.73	17.63	8.99	4.56	R 6.91	R 6.54	R 1.69	R 4.42	12.67	R 4.92
1985	—	1.46	1.46	2.92	4.17	6.09	R 6.48	5.29	17.61	9.36	4.12	R 6.88	R 5.85	R 1.69	R 4.15	14.93	R 4.82
1986	—	R 1.45	R 1.45	1.84	4.57	3.67	R 3.97	5.84	15.59	7.04	2.14	R 3.92	R 4.88	R 1.49	R 3.09	12.63	R 3.62
1987	—	R 1.34	R 1.34	1.73	3.15	4.29	R 4.11	6.02	13.58	7.14	2.67	R 4.86	R 5.28	R 1.49	R 3.13	12.30	R 3.65
1988	—	R 1.65	R 1.65	1.91	3.14	3.81	R 3.64	5.93	14.62	7.25	1.91	R 4.01	R 4.80	R 1.49	R 3.09	12.25	R 3.63
1989	—	1.55	1.55	1.89	2.89	4.51	R 4.47	5.57	14.48	7.90	2.29	R 4.88	R 5.17	d R 1.24	d R 3.01	12.46	d R 3.54
1990	—	1.56	1.56	1.92	2.91	5.78	R 6.30	8.07	14.60	9.47	2.62	R 5.99	R 6.75	R 1.21	R 3.63	12.27	R 4.13
1991	—	1.73	1.73	1.66	3.08	5.03	R 4.74	8.06	16.80	9.51	2.03	R 5.21	R 6.49	R 1.28	R 3.29	12.15	R 3.82
1992	—	1.69	1.69	1.85	2.17	4.79	R 4.60	4.30	18.32	9.23	2.02	R 4.99	R 4.81	1.29	R 2.84	12.37	R 3.44
1993	—	1.68	1.68	2.22	2.30	4.67	R 4.12	4.40	18.96	9.14	1.92	R 4.45	R 4.67	1.27	R 3.02	13.00	R 3.63
1994	—	1.74	1.74	2.09	2.40	4.41	R 3.83	5.03	19.11	9.04	2.07	R 4.23	R 4.85	R 1.42	R 3.05	12.36	R 3.60
1995	—	1.73	1.73	1.76	2.58	4.39	R 4.03	4.92	R 19.41	9.25	2.35	R 4.67	R 4.98	R 1.43	R 2.81	11.64	R 3.34
1996	—	1.24	1.24	2.72	2.64	5.29	4.81	6.29	20.08	9.63	2.76	5.53	6.03	1.28	3.78	12.66	4.35
1997	—	1.26	1.26	2.53	2.72	5.02	4.36	5.59	17.86	9.59	2.67	4.63	5.20	1.33	3.41	12.87	4.00
	Expenditures in Million Nominal Dollars																
1970	—	—	—	210.8	9.7	12.4	6.8	173.5	32.4	4.5	2.5	R 42.4	R 284.2	R 11.2	R 506.2	80.5	R 586.6
1975	—	—	—	624.6	33.2	49.0	22.0	441.2	59.0	4.1	33.6	R 375.6	R 1,017.5	R 11.2	R 1,653.3	166.6	R 1,819.9
1980	—	2.9	2.9	1,150.2	46.8	210.9	161.9	969.6	111.3	3.2	208.8	R 1,882.6	R 3,595.2	R 14.8	R 4,763.2	578.8	R 5,342.0
1981	—	9.8	9.8	1,614.9	69.9	543.9	177.5	1,306.8	133.8	5.1	336.2	R 1,583.6	R 4,157.0	R 15.7	R 5,797.3	948.9	R 6,746.2
1982	—	11.9	11.9	1,748.8	69.9	569.0	227.7	1,937.8	116.9	42.3	263.9	R 1,057.0	R 4,284.5	R 15.2	R 6,060.4	1,021.9	R 7,082.2
1983	—	11.5	11.5	1,772.3	72.3	341.9	R 35.9	2,064.2	120.6	24.9	459.4	R 918.0	R 4,037.1	R 17.1	R 5,838.1	1,020.1	R 6,858.2
1984	—	R 14.2	R 14.2	2,244.6	55.6	339.7	R 32.9	R 1,492.2	133.5	16.3	315.4	R 854.8	R 3,240.4	R 17.5	R 5,516.7	1,025.8	R 6,542.5
1985	—	R 15.9	R 15.9	1,833.1	50.8	338.2	R 3.8	1,311.9	124.2	23.9	161.8	R 832.6	R 2,847.1	R 17.4	R 4,713.5	1,126.7	R 5,840.3
1986	—	R 9.2	R 9.2	1,248.4	54.3	255.1	R 4.3	1,256.5	107.5	14.5	18.6	R 701.2	R 2,412.0	R 20.5	R 3,690.2	887.1	R 4,577.3
1987	—	R 11.7	R 11.7	1,203.7	47.5	334.8	R 1.0	1,142.7	105.9	14.0	27.3	R 817.0	R 2,490.2	R 20.5	R 3,726.0	880.9	R 4,606.9
1988	—	R 17.4	R 17.4	1,292.8	49.9	312.1	R 2.8	1,109.9	109.9	13.1	25.9	R 716.0	R 2,339.7	R 21.3	R 3,671.2	906.5	R 4,577.7
1989	—	22.0	22.0	1,519.5	44.4	312.5	R 2.6	1,011.6	111.7	12.1	13.9	R 856.9	R 2,365.7	d R 44.5	d R 3,951.8	969.0	d R 4,920.8
1990	—	24.8	24.8	1,544.3	32.3	452.8	R 1.7	1,357.4	115.9	R 16.8	13.6	R 1,199.8	R 3,190.2	33.3	R 4,792.7	991.9	R 5,784.6
1991	—	17.8	17.8	1,362.2	30.6	375.6	R 1.4	1,480.5	119.3	17.8	7.7	R 851.2	R 2,884.1	40.9	R 4,305.1	1,012.7	R 5,317.8
1992	—	18.7	18.7	1,507.9	24.3	317.5	R 0.7	823.8	132.6	16.7	5.7	R 823.5	R 2,144.7	R 42.0	R 3,713.4	1,068.2	R 4,781.5
1993	—	18.1	18.1	1,884.4	28.4	333.1	R 0.7	866.5	139.8	31.5	2.6	R 733.5	R 2,135.8	R 44.0	R 4,082.4	1,147.7	R 5,230.1
1994	—	19.9	19.9	1,835.1	26.8	347.0	R 0.7	1,216.8	147.3	37.8	2.3	R 725.7	R 2,504.2	R 58.6	R 4,417.8	1,120.0	R 5,537.8
1995	—	R 13.3	R 13.3	1,624.9	28.3	239.3	R 0.5	1,177.1	R 147.0	37.5	4.3	R 757.7	R 2,391.6	R 69.0	R 4,098.7	1,086.3	R 5,185.0
1996	—	2.6	2.6	2,542.4	30.1	337.8	0.8	1,530.6	147.6	39.1	9.8	916.7	3,012.4	65.8	5,623.2	1,303.4	6,926.6
1997	—	2.1	2.1	2,439.9	95.4	261.3	0.7	1,374.0	138.7	41.5	11.0	884.0	2,806.7	67.5	5,316.1	1,324.6	6,640.7

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.

R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 123. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Louisiana

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	—	—	2.17	1.09	0.72	1.06	5.08	2.86	0.44	1.97	1.97	5.07	1.97
1975	—	—	3.45	2.54	2.01	2.44	7.48	4.49	1.54	3.28	3.28	6.99	3.28
1980	—	—	9.02	6.84	6.34	5.22	14.36	9.89	3.05	6.87	6.87	12.08	6.87
1981	—	—	10.84	8.60	7.47	4.99	18.00	11.03	3.78	8.42	8.42	14.62	8.42
1982	—	—	10.92	7.61	7.09	6.24	17.25	10.25	3.53	8.05	8.05	15.36	8.05
1983	—	—	10.44	6.66	6.25	6.57	16.98	9.03	3.20	7.14	7.14	15.83	7.14
1984	—	—	10.27	6.61	6.07	6.73	17.63	8.99	3.40	7.13	7.13	18.10	7.13
1985	—	—	9.99	6.38	5.70	5.29	17.61	9.36	3.40	7.16	7.16	20.24	7.16
1986	—	—	8.41	6.35	3.67	5.84	15.59	7.04	1.34	5.06	5.06	19.24	5.06
1987	—	—	7.55	6.56	3.90	6.02	13.58	7.14	2.54	5.51	5.51	17.55	5.51
1988	—	—	7.41	6.40	3.61	5.93	14.62	7.25	2.61	5.43	5.43	18.24	5.43
1989	—	—	8.28	6.97	4.12	5.57	14.48	7.90	2.53	5.81	5.81	17.80	5.81
1990	—	3.11	9.32	8.48	5.79	8.07	14.60	9.47	2.07	6.92	6.92	20.15	6.92
1991	—	3.40	8.71	8.21	4.67	8.06	16.80	9.51	2.87	6.53	6.53	18.65	6.53
1992	—	4.12	8.54	8.14	4.29	4.30	18.32	9.23	1.90	6.05	6.05	18.88	6.05
1993	—	3.35	8.24	8.13	4.02	4.40	18.96	9.14	1.87	6.14	6.14	20.85	6.14
1994	—	2.27	7.96	7.96	3.77	8.36	19.11	9.04	1.87	6.03	6.03	19.96	6.03
1995	—	2.89	8.36	7.87	3.75	8.66	R 19.41	9.25	1.94	6.21	6.21	20.42	6.21
1996	—	3.38	9.29	8.60	4.57	8.86	20.08	9.63	2.08	6.74	6.74	22.80	6.74
1997	—	4.91	9.39	8.33	4.22	8.97	17.86	9.59	2.94	6.84	6.84	19.00	6.84
	Expenditures in Million Nominal Dollars												
1970	—	—	4.9	42.1	23.4	1.4	16.6	513.2	26.8	628.3	628.3	(s)	628.3
1975	—	—	5.1	200.6	67.9	2.8	23.9	1,003.8	163.2	1,467.4	1,467.4	R (s)	1,467.5
1980	—	—	11.6	496.3	306.8	3.0	62.8	2,437.3	596.8	3,914.6	3,914.6	R (s)	3,914.7
1981	—	—	20.7	1,074.2	326.8	3.8	75.5	2,819.7	563.8	4,884.5	4,884.5	R (s)	4,884.7
1982	—	—	14.0	667.3	325.0	5.6	65.9	2,661.6	409.4	4,148.9	4,148.9	R (s)	4,149.0
1983	—	—	11.8	751.4	383.7	7.0	68.0	2,358.2	348.0	3,928.2	3,928.2	R (s)	3,928.3
1984	—	—	9.7	771.3	433.0	8.5	75.3	2,352.7	359.9	4,010.3	4,010.3	R (s)	4,010.5
1985	—	—	8.6	749.4	410.5	2.1	70.0	R 2,389.3	368.9	R 3,999.0	R 3,999.0	R (s)	R 3,999.2
1986	—	—	7.0	699.4	369.3	2.0	60.6	R 1,823.8	201.1	3,163.3	3,163.3	R (s)	3,163.5
1987	—	—	5.0	813.1	415.1	2.0	59.7	R 1,785.1	344.7	R 3,424.7	R 3,424.7	R (s)	R 3,424.9
1988	—	—	4.6	871.6	435.5	1.8	62.0	R 1,837.5	380.1	R 3,593.0	R 3,593.0	R (s)	R 3,593.2
1989	—	—	4.8	974.0	518.2	1.5	63.0	R 1,924.2	385.0	R 3,870.7	R 3,870.7	R (s)	R 3,870.9
1990	—	R (s)	5.1	1,210.7	845.1	R 2.1	65.3	R 2,154.1	287.5	R 4,570.1	R 4,570.2	R (s)	R 4,570.4
1991	—	(s)	4.1	1,004.0	848.7	2.2	67.2	R 2,118.7	447.7	R 4,492.7	R 4,492.7	R (s)	R 4,492.9
1992	—	(s)	3.8	923.3	653.1	1.0	74.8	R 2,160.0	348.4	R 4,164.2	R 4,164.3	R (s)	R 4,164.5
1993	—	(s)	9.1	1,040.2	571.2	1.1	78.8	R 2,177.9	317.0	R 4,195.2	R 4,195.3	R (s)	R 4,195.4
1994	—	R (s)	5.3	1,124.5	688.3	3.5	83.0	R 2,127.6	282.3	R 4,314.6	R 4,314.7	R (s)	R 4,314.9
1995	—	R (s)	3.7	1,055.0	613.0	1.9	R 82.9	R 2,256.4	280.9	4,293.9	4,294.0	R (s)	R 4,294.2
1996	—	(s)	3.8	1,402.3	752.2	1.5	83.2	2,531.3	339.0	5,113.3	5,113.4	(s)	5,113.7
1997	—	(s)	4.6	1,261.2	729.2	1.4	78.2	2,319.6	367.8	4,762.0	4,762.1	(s)	4,762.3

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 124. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Louisiana

Year	Coal	Natural Gas	Petroleum: Heavy Oil	Petroleum: Light Oil	Petroleum: Petroleum Coke	Petroleum: Total	Nuclear Fuel	Wood and Waste	Total Energy [a]
	Prices in Nominal Dollars per Million Btu								
1970	—	0.21	0.55	0.60	—	0.57	—	—	0.21
1975	—	0.64	1.76	1.92	—	1.76	—	—	0.73
1980	—	2.01	3.58	4.37	—	3.68	—	—	2.19
1981	2.13	2.71	4.36	6.16	—	4.90	—	—	2.81
1982	2.27	3.09	3.91	6.31	—	4.44	—	—	3.02
1983	2.28	3.15	3.41	6.07	—	4.74	—	—	2.96
1984	2.26	3.04	3.52	5.91	—	4.71	—	—	2.84
1985	2.19	2.73	3.51	5.84	—	5.08	0.86	—	2.46
1986	1.79	1.86	1.45	3.20	—	1.63	1.04	—	1.67
1987	1.64	1.60	2.72	3.63	—	3.24	0.97	—	1.46
1988	1.56	1.63	2.98	4.42	—	3.35	0.92	—	1.44
1989	1.63	1.70	2.85	5.01	—	4.04	0.90	—	1.51
1990	1.70	1.66	2.47	5.01	—	4.15	0.88	—	1.49
1991	1.65	1.53	3.30	4.56	—	4.32	0.84	—	1.40
1992	1.54	1.83	2.16	4.31	([b])	0.37	0.81	—	1.52
1993	1.59	2.39	2.07	4.12	([b])	0.47	0.69	—	1.65
1994	1.54	2.07	1.93	4.06	([b])	0.78	0.70	—	1.59
1995	1.55	1.81	1.90	3.73	([b])	3.44	0.64	—	1.46
1996	1.51	2.82	2.04	4.25	([b])	2.87	0.56	—	1.81
1997	1.48	2.69	2.87	4.24	([b])	2.97	0.98	—	1.91
	Expenditures in Million Nominal Dollars								
1970	—	72.3	[R] (s)	[R] (s)	—	0.5	—	—	72.9
1975	—	239.5	62.9	1.0	—	63.9	—	—	303.4
1980	—	889.7	159.5	29.9	—	189.4	—	—	1,079.1
1981	37.0	1,172.0	85.5	51.4	—	136.9	—	—	1,346.0
1982	129.0	1,203.2	31.4	14.4	—	45.8	—	—	1,378.1
1983	227.1	979.7	6.9	12.3	—	19.3	—	—	1,226.1
1984	248.8	957.6	2.9	4.8	—	7.7	—	—	1,214.1
1985	324.2	815.3	1.3	4.5	—	5.8	22.9	—	1,168.2
1986	297.1	518.7	5.7	1.4	—	7.2	119.4	—	942.4
1987	269.1	412.0	0.8	1.5	—	2.3	128.5	—	811.9
1988	313.4	426.6	7.4	3.8	—	11.2	135.7	—	886.9
1989	313.5	435.3	4.0	8.7	—	12.7	119.8	—	881.3
1990	326.3	465.9	1.2	4.7	—	5.8	133.6	—	931.6
1991	336.0	405.6	[R] (s)	1.9	—	2.3	125.4	—	869.3
1992	326.1	486.0	[R] (s)	1.9	([b])	2.1	89.2	—	903.4
1993	335.8	606.9	8.2	1.7	([b])	9.9	105.5	—	1,058.1
1994	337.6	601.2	4.1	2.3	([b])	6.4	96.1	—	1,041.2
1995	324.9	608.3	[R] (s)	1.7	([b])	1.8	106.6	—	1,041.6
1996	308.0	740.5	4.0	4.9	([b])	8.9	94.4	—	1,151.8
1997	330.9	774.0	18.5	2.1	([b])	20.6	140.0	—	1,265.5

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[b] Utilities used petroleum coke at no charge.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 125. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Maine

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	1.06	1.06	1.48	1.37	0.75	2.37	3.02	0.38	1.53	1.46	—	R 1.13	1.45	0.35	5.92	R 1.93
1975	—	2.60	2.60	2.03	2.78	2.09	4.20	4.56	1.79	3.05	3.04	0.32	R 1.29	R 2.51	0.71	9.70	R 3.70
1980	—	1.89	1.89	5.03	6.83	6.51	7.86	9.69	4.10	7.34	7.00	0.58	R 1.59	R 5.37	1.82	16.30	R 7.80
1981	—	2.38	2.38	6.03	8.43	7.80	8.59	10.75	5.10	9.12	8.08	0.67	R 1.67	R 5.96	2.03	18.65	R 8.94
1982	—	2.24	2.24	7.22	8.18	7.51	9.54	10.08	4.69	8.36	7.22	0.58	R 1.68	R 5.65	1.81	18.74	R 8.08
1983	—	2.14	2.14	8.50	7.98	6.93	10.29	9.49	4.59	R 7.16	R 7.47	0.62	R 1.64	R 5.27	1.68	18.14	R 8.53
1984	—	2.67	2.67	8.13	8.04	6.69	9.58	9.05	4.96	R 6.93	7.26	0.63	R 1.60	R 5.43	1.89	19.10	R 8.43
1985	—	R 2.59	R 2.59	7.41	7.97	6.10	11.14	9.35	4.37	R 6.87	7.38	0.62	R 1.58	R 5.49	1.60	20.16	R 8.72
1986	—	R 2.69	R 2.69	7.06	5.97	4.50	10.82	7.38	2.44	R 6.67	R 5.25	0.58	R 1.55	R 4.03	1.11	19.88	R 6.97
1987	—	R 2.49	R 2.49	6.45	6.15	4.41	10.88	7.72	2.93	R 5.53	R 5.83	0.60	R 1.52	R 4.69	1.50	19.10	R 7.50
1988	—	R 2.62	R 2.62	5.64	6.16	4.13	10.83	8.15	2.33	R 4.84	R 5.60	0.64	R 1.52	R 4.54	1.27	19.62	R 7.28
1989	—	2.66	2.66	5.78	6.92	4.79	10.52	8.69	2.80	R 5.12	R 6.10	0.54	e R 1.30	e R 4.32	R 1.23	20.53	e R 7.38
1990	—	2.72	2.72	6.05	7.87	5.92	13.25	9.74	2.86	R 6.24	R 6.98	0.46	1.30	R 5.19	1.17	22.42	R 8.37
1991	—	R 2.70	R 2.70	5.50	7.53	5.07	14.71	9.64	2.33	R 5.48	R 6.67	0.43	R 1.36	R 4.68	R 0.74	25.20	R 8.25
1992	—	R 2.64	R 2.64	5.43	6.95	5.20	11.62	9.63	2.42	R 5.22	R 6.53	0.39	R 1.35	R 4.58	R 0.78	26.51	R 8.07
1993	—	2.36	2.36	6.06	6.62	4.43	12.78	9.33	2.38	R 5.39	R 6.41	0.37	R 1.32	R 4.54	0.60	26.66	R 8.05
1994	—	2.25	2.25	6.27	6.71	4.16	13.23	9.41	2.41	R 6.61	R 6.36	0.39	R 1.47	R 4.38	R 0.65	28.24	R 7.99
1995	—	2.28	2.28	5.79	6.42	4.12	12.89	9.95	2.72	R 6.11	R 6.69	2.14	R 1.48	R 5.29	R 1.75	27.80	R 8.11
1996	—	2.31	2.31	6.40	7.62	4.99	13.81	10.29	3.21	6.82	7.45	0.38	1.41	5.28	0.76	27.71	8.65
1997	—	2.56	2.56	6.86	7.36	4.68	14.33	10.36	3.02	6.51	7.35	—	1.43	5.90	1.93	27.86	8.82
	Expenditures in Million Nominal Dollars																
1970	—	2.3	2.3	1.9	94.2	9.4	5.7	174.9	27.5	25.4	337.1	—	R 6.4	R 347.7	-10.6	102.3	R 439.4
1975	—	3.4	3.4	4.0	186.5	22.7	15.1	303.1	111.7	36.2	675.1	16.1	R 8.4	R 707.0	-48.1	216.1	R 875.1
1980	—	5.7	5.7	11.2	422.8	66.7	25.2	598.7	220.7	53.9	1,388.1	27.9	R 34.0	R 1,466.8	-129.8	455.3	R 1,792.4
1981	—	7.5	7.5	14.3	454.3	65.7	22.3	653.1	319.9	56.6	1,571.9	38.5	R 37.5	R 1,669.6	-164.7	524.3	R 2,029.2
1982	—	15.6	15.6	19.4	436.7	65.1	28.9	624.9	455.9	51.1	1,662.6	29.2	R 37.1	R 1,763.9	-127.0	557.9	R 2,194.8
1983	—	12.6	12.6	21.1	341.8	56.7	31.3	602.7	243.2	R 51.6	R 1,327.3	38.8	R 40.0	R 1,439.9	-142.2	584.1	R 1,881.8
1984	—	13.2	13.2	20.5	392.8	55.3	20.8	583.9	322.0	R 73.6	R 1,448.4	35.0	R 38.8	R 1,555.9	-147.4	627.0	R 2,035.6
1985	—	13.2	13.2	19.3	445.0	54.4	27.1	R 616.1	217.2	R 149.1	R 1,508.9	35.7	R 38.0	R 1,615.1	-127.6	675.7	R 2,163.2
1986	—	R 25.0	R 25.0	17.9	399.8	39.6	40.9	520.9	196.6	R 66.8	R 1,264.6	38.9	R 35.3	R 1,381.8	-105.0	692.1	R 1,968.8
1987	—	17.0	17.0	17.6	428.5	43.7	51.8	R 571.7	170.3	R 61.7	R 1,327.7	25.9	R 33.4	R 1,421.7	-106.3	698.4	R 2,013.7
1988	—	R 18.1	R 18.1	18.5	492.2	47.7	63.6	R 657.9	177.4	R 85.6	R 1,524.4	34.2	R 34.8	R 1,630.1	-107.3	754.0	R 2,276.8
1989	—	18.0	18.0	21.3	494.2	59.5	60.8	R 647.7	209.6	R 69.3	R 1,541.2	40.0	e R 63.7	e R 1,692.5	R -137.2	801.0	e R 2,356.3
1990	—	18.0	18.0	26.4	549.8	82.9	66.8	R 722.7	192.7	R 59.5	R 1,674.5	24.1	R 54.0	R 1,799.9	R -89.4	881.9	R 2,592.4
1991	—	R 25.2	R 25.2	26.5	454.8	66.7	78.4	R 715.0	149.1	R 69.9	R 1,533.8	29.0	R 63.2	R 1,679.7	R -61.3	978.9	R 2,597.2
1992	—	R 56.7	R 56.7	28.2	441.0	54.8	51.9	R 714.2	146.8	R 63.6	R 1,472.4	22.2	R 65.6	R 1,647.9	R -57.2	1,038.7	R 2,629.5
1993	—	R 26.4	R 26.4	30.5	492.7	36.6	63.0	R 705.2	139.7	R 79.1	R 1,516.4	22.9	R 68.7	R 1,665.8	R -42.6	1,087.3	R 2,710.6
1994	—	R 26.0	R 26.0	32.1	530.6	23.3	66.5	R 717.4	174.1	R 71.6	R 1,583.4	27.6	R 83.1	R 1,765.3	R -58.0	1,118.2	R 2,825.5
1995	—	16.1	16.1	31.4	542.9	19.6	72.1	751.3	163.1	R 76.3	R 1,625.4	4.5	R 96.0	R 1,794.2	R -49.9	1,096.6	R 2,840.9
1996	—	13.5	13.5	37.2	675.3	25.2	89.4	808.6	196.4	90.1	1,885.0	20.6	87.8	2,054.6	-52.4	1,108.7	3,111.0
1997	—	12.4	12.4	43.5	649.2	25.3	93.8	870.4	190.7	93.7	1,923.1	—	86.7	2,093.5	-72.0	1,136.9	3,158.4

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 126. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Maine

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.29	1.96	1.51	1.60	3.04	1.56	0.56	R 1.53	8.12	R 2.12
1975	2.62	2.59	2.87	3.16	4.78	2.98	1.11	R 2.90	11.67	R 4.06
1980	3.90	6.20	6.94	8.15	10.04	7.12	2.85	R 6.82	18.30	R 8.96
1981	4.87	7.27	8.68	10.54	10.92	8.84	3.51	R 8.35	21.02	R 11.12
1982	4.43	8.43	8.33	10.79	12.01	8.62	3.40	R 8.09	21.71	R 11.24
1983	4.06	9.59	7.78	R 7.14	12.23	R 8.09	3.30	R 7.49	21.63	R 11.66
1984	4.76	9.28	7.87	R 9.08	12.88	R 8.14	3.35	R 7.62	22.35	R 12.22
1985	4.39	8.76	7.55	R 8.92	11.45	R 7.89	3.22	R 7.56	23.71	R 11.33
1986	4.19	8.26	5.63	R 6.38	9.79	R 5.90	2.58	R 5.72	23.98	R 9.83
1987	3.85	7.73	5.66	R 5.86	10.37	R 6.04	2.46	R 5.88	23.79	R 10.10
1988	3.99	7.07	5.88	R 5.53	10.37	R 6.19	2.48	R 6.04	24.17	R 10.16
1989	3.96	7.14	6.77	R 5.18	10.37	R 6.89	2.75	R 6.70	24.93	R 11.03
1990	4.21	7.57	7.49	R 6.56	14.41	R 8.01	2.83	R 7.62	27.24	R 12.61
1991	4.07	6.82	7.34	R 5.89	15.88	R 7.99	2.70	R 7.60	30.64	R 13.21
1992	3.94	6.86	6.66	R 4.96	12.26	R 6.96	2.47	R 6.61	33.33	R 13.14
1993	3.96	7.37	6.31	R 4.97	13.72	R 6.80	2.42	R 6.50	33.51	R 12.61
1994	4.07	7.72	6.25	R 5.41	14.73	R 6.91	2.35	R 6.62	36.10	R 13.10
1995	4.01	7.20	6.01	R 4.70	14.34	R 6.50	2.30	R 6.27	36.65	R 11.65
1996	4.19	7.72	7.43	5.65	15.60	7.84	2.64	7.55	36.88	12.54
1997	4.14	8.35	7.20	5.76	15.44	7.67	2.62	7.48	37.36	12.63
	Expenditures in Million Nominal Dollars									
1970	0.7	1.0	69.1	14.9	4.4	88.4	1.0	R 91.2	47.7	R 138.9
1975	0.8	1.9	127.9	16.7	10.7	155.3	2.6	R 160.6	99.0	R 259.6
1980	1.1	3.5	257.7	18.7	14.6	291.0	8.1	R 303.7	187.2	R 490.9
1981	2.5	4.3	264.0	13.9	13.7	291.7	10.1	R 308.5	217.5	R 526.0
1982	2.7	5.1	239.7	16.6	17.5	273.9	10.5	R 292.2	235.7	R 527.9
1983	1.9	5.3	146.9	R 10.8	21.2	R 178.9	10.1	R 196.3	237.4	R 433.7
1984	2.7	5.2	152.3	R 14.0	10.7	R 177.1	8.3	R 193.3	256.9	R 450.2
1985	2.2	4.8	214.6	R 46.0	14.4	R 275.0	7.8	R 289.8	276.6	R 566.4
1986	2.6	4.6	186.4	R 22.6	18.2	R 227.2	6.1	R 240.6	292.7	R 533.3
1987	2.0	4.2	179.9	R 20.9	30.5	R 231.4	4.3	R 242.0	302.4	R 544.4
1988	1.6	4.1	204.6	R 24.6	34.3	R 263.4	4.5	R 273.6	322.0	R 595.6
1989	1.1	4.6	223.9	R 23.6	35.2	R 282.6	5.2	R 293.5	341.0	R 634.5
1990	1.9	4.9	219.8	R 20.9	45.1	R 285.8	7.4	R 300.0	365.5	R 665.5
1991	0.8	5.0	220.4	R 19.8	53.9	R 294.1	7.4	R 307.2	399.1	R 706.3
1992	1.5	6.1	204.8	R 13.3	34.1	R 252.2	7.1	R 266.9	435.5	R 702.4
1993	1.1	6.7	210.4	R 20.9	47.1	R 278.4	7.3	R 293.5	442.7	R 736.2
1994	R (s)	7.0	205.5	R 23.3	52.7	R 281.5	7.0	R 295.8	454.7	R 750.5
1995	R (s)	6.7	258.7	R 29.0	58.2	R 346.0	7.6	R 360.4	453.8	R 814.2
1996	(s)	7.6	331.4	43.9	70.6	445.9	8.7	462.4	462.9	925.4
1997	(s)	8.5	320.6	42.7	70.0	433.3	6.3	448.3	466.4	914.7

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 127. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Maine

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.98	1.42	1.11	0.68	1.35	3.02	0.35	1.02	0.56	1.03	7.86	R 2.39
1975	2.59	2.07	2.46	2.55	3.24	4.56	1.79	2.41	1.11	R 2.39	11.68	R 5.08
1980	1.68	5.00	6.32	6.50	6.06	9.69	4.33	5.84	2.85	R 5.71	19.20	R 9.14
1981	1.90	5.98	8.03	7.08	6.41	10.75	5.29	7.57	3.51	R 7.28	21.83	R 11.55
1982	2.03	7.15	7.70	8.05	7.24	10.08	4.77	6.84	3.40	R 6.62	22.56	R 11.31
1983	1.98	8.67	7.16	R 7.14	7.72	9.49	4.64	R 6.42	3.30	R 6.41	22.22	R 11.04
1984	R 2.40	8.34	7.14	R 9.08	7.53	9.05	4.96	R 6.36	3.35	6.33	22.19	R 11.18
1985	2.38	7.73	6.81	R 8.92	10.81	9.35	4.50	R 5.95	NA	R 5.93	23.69	R 12.00
1986	R 2.58	7.26	4.72	R 6.38	11.81	7.38	2.47	R 3.86	NA	R 4.00	23.53	R 9.53
1987	2.37	6.71	4.86	R 5.86	11.69	7.72	2.93	R 4.62	NA	R 4.69	20.68	10.37
1988	R 2.54	6.09	4.71	R 5.53	11.43	8.15	2.33	R 3.82	NA	R 3.92	21.15	R 8.44
1989	2.61	6.28	5.50	R 5.18	10.73	8.69	2.83	R 4.33	NA	R 4.43	22.09	R 9.31
1990	2.61	6.69	6.44	R 6.56	11.34	9.74	2.91	R 4.69	NA	R 4.77	24.03	R 9.83
1991	R 2.67	5.98	5.95	R 5.89	12.66	9.64	2.41	R 4.00	NA	R 4.12	27.11	R 10.14
1992	R 2.62	6.11	5.45	R 4.96	10.56	9.63	2.47	R 4.39	NA	R 4.53	27.81	R 11.80
1993	2.32	6.67	5.20	R 4.97	10.62	9.33	2.44	R 4.71	2.42	R 4.82	28.32	R 12.25
1994	R 2.23	6.87	5.21	R 5.41	10.42	9.41	2.46	R 4.72	2.35	R 4.92	30.46	R 12.84
1995	2.27	6.41	5.15	R 4.70	10.69	9.95	2.75	R 5.04	2.30	R 5.18	30.87	R 13.91
1996	2.29	6.98	6.23	5.65	11.17	10.29	3.26	5.92	2.64	6.00	31.06	14.40
1997	2.54	7.59	5.91	5.76	11.00	10.36	3.11	5.59	2.62	5.79	31.16	14.28
	Expenditures in Million Nominal Dollars											
1970	R (s)	0.6	10.8	R (s)	R (s)	0.6	0.6	12.7	(s)	R 13.8	26.1	39.9
1975	0.7	1.1	23.1	0.6	1.3	1.0	3.7	29.7	(s)	31.5	62.5	R 94.0
1980	0.5	4.4	67.7	2.6	1.6	2.5	18.6	92.9	(s)	R 98.0	112.5	R 210.5
1981	0.7	6.4	81.4	1.8	1.4	3.0	12.0	99.6	(s)	R 107.0	133.1	R 240.1
1982	1.4	8.7	63.5	1.0	1.9	2.9	19.2	88.6	(s)	R 99.0	141.0	R 239.9
1983	1.1	10.0	58.4	R 2.7	2.4	4.9	21.6	R 90.1	(s)	101.4	145.3	246.7
1984	1.6	9.7	59.7	R 2.2	1.1	5.4	31.6	R 100.1	(s)	R 111.6	172.3	R 283.8
1985	1.6	9.1	38.5	R 5.0	2.4	5.1	29.4	R 80.3	NA	R 91.1	189.0	R 280.0
1986	R 2.4	9.1	42.9	R 0.9	3.9	4.1	22.7	R 74.4	NA	R 86.0	199.9	R 285.9
1987	1.7	8.7	42.0	R 1.4	6.1	3.8	13.0	R 66.2	NA	R 76.7	186.4	R 263.0
1988	1.4	9.1	49.1	R 5.0	6.7	R 4.4	27.5	R 92.7	NA	R 103.3	198.0	R 301.3
1989	1.0	10.5	51.9	R 2.8	6.4	5.3	34.1	R 100.4	NA	R 111.9	213.0	R 324.9
1990	1.6	11.3	63.4	R 2.5	6.3	R 5.2	39.6	R 117.0	NA	R 129.8	233.4	R 363.2
1991	R (s)	11.2	50.1	R 4.2	7.6	2.7	37.3	R 101.8	NA	R 113.4	264.2	R 377.6
1992	1.4	13.7	54.4	R 1.8	5.2	2.5	19.5	R 83.5	NA	R 98.6	275.2	R 373.8
1993	0.8	15.6	68.5	R 4.9	6.4	0.6	11.3	R 91.7	0.6	R 108.2	293.8	R 401.9
1994	R (s)	16.6	69.6	R 4.7	6.6	0.6	11.9	R 93.3	0.6	R 110.7	307.8	R 418.5
1995	R (s)	15.8	66.4	R 4.3	7.7	0.6	6.5	R 85.4	0.6	R 101.9	313.1	R 415.0
1996	(s)	18.2	89.2	4.7	8.9	0.6	10.6	114.1	0.7	133.1	347.2	480.3
1997	(s)	20.9	83.5	5.1	8.8	0.6	11.7	109.7	0.6	131.3	355.4	486.8

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
(s)=Value less than 0.05 million nominal dollars.

NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 128. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Maine

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	0.98	0.98	0.84	0.73	0.63	0.68	1.35	5.08	3.02	0.43	0.89	0.58	R 1.40	R 0.65	3.52	R 1.06
1975	—	2.59	2.59	1.42	1.99	2.30	2.55	3.24	7.48	4.56	1.82	—	1.97	R 1.40	R 1.93	6.46	R 2.55
1980	—	1.68	1.68	4.19	3.73	5.94	6.50	6.06	14.36	9.69	3.84	—	4.38	R 1.40	R 3.29	13.15	R 4.99
1981	—	1.90	1.90	5.09	5.42	6.43	7.08	6.41	18.00	10.75	5.00	—	5.36	R 1.40	R 4.05	14.88	R 5.70
1982	—	2.03	2.03	6.47	4.04	7.07	8.05	7.24	17.25	10.08	4.67	—	4.93	R 1.40	R 4.15	14.31	R 5.25
1983	—	1.98	1.98	7.47	4.23	6.97	R 7.01	7.72	16.98	9.49	4.54	—	R 5.00	R 1.40	R 3.57	13.72	R 5.50
1984	—	R 2.40	R 2.40	7.04	4.62	7.01	R 7.44	7.53	17.63	9.05	4.96	—	5.27	R 1.40	R 4.03	14.57	R 5.64
1985	—	2.38	2.38	6.14	5.21	6.65	R 7.16	10.81	17.61	9.35	4.50	—	5.24	R 1.40	R 3.84	15.15	R 5.78
1986	—	R 2.58	R 2.58	5.81	4.88	4.74	R 5.20	11.81	15.59	7.38	2.47	—	3.23	R 1.43	R 2.75	14.14	R 4.41
1987	—	2.37	2.37	5.26	3.55	4.74	R 4.58	11.69	13.58	7.72	2.93	—	R 3.73	R 1.43	R 2.94	14.12	R 4.98
1988	—	R 2.54	R 2.54	4.39	3.35	4.44	R 4.37	11.43	14.62	8.15	2.33	—	3.33	R 1.43	R 2.79	14.86	R 4.76
1989	—	2.61	2.61	4.56	3.23	5.35	R 5.27	10.73	14.48	8.69	2.83	—	R 3.73	d R 1.24	d R 2.50	15.74	d R 4.29
1990	—	2.61	2.61	5.03	3.34	6.17	R 6.68	11.34	14.60	9.74	2.91	—	3.76	R 1.19	R 2.57	17.46	R 4.89
1991	—	R 2.67	R 2.67	4.66	3.05	5.83	R 5.73	12.66	16.80	9.64	2.41	7.33	3.37	R 1.28	R 2.44	19.64	4.77
1992	—	R 2.62	R 2.62	4.09	2.81	5.42	R 5.04	10.56	18.32	9.63	2.47	8.91	3.22	1.28	R 2.40	20.23	R 4.51
1993	—	2.32	2.32	4.59	3.30	5.17	R 4.78	10.62	18.96	9.33	2.44	7.53	R 3.23	1.26	R 2.39	20.40	R 4.61
1994	—	R 2.23	R 2.23	4.72	3.64	5.12	R 4.88	8.85	19.11	9.41	2.46	8.46	R 3.12	R 1.42	R 2.42	21.05	R 4.44
1995	—	2.27	2.27	4.39	3.78	4.95	R 4.53	7.58	R 19.41	9.95	2.75	8.80	R 3.40	R 1.43	R 2.43	19.48	R 4.39
1996	—	2.29	2.29	5.14	3.90	5.93	5.52	8.59	20.08	10.29	3.26	9.77	4.00	1.33	2.74	18.34	4.48
1997	—	2.54	2.54	5.47	4.05	5.98	4.73	12.46	17.86	10.36	3.11	8.64	4.04	1.38	2.76	18.63	4.68
	Expenditures in Million Nominal Dollars																
1970	—	1.1	1.1	R (s)	3.4	2.9	R (s)	0.9	1.7	2.2	13.8	R (s)	25.5	R 5.4	R 32.3	28.4	R 60.7
1975	—	2.0	2.0	1.0	9.2	9.2	0.9	3.0	2.7	1.9	66.8	—	93.5	R 5.8	R 102.3	54.6	R 156.9
1980	—	4.1	4.1	3.2	10.8	26.4	1.1	8.9	5.6	3.8	97.6	—	154.2	R 25.8	R 187.2	155.7	R 342.9
1981	—	4.2	4.2	3.7	17.2	27.9	R (s)	7.1	6.8	2.2	165.3	—	227.0	R 27.2	R 262.1	173.6	R 435.8
1982	—	11.4	11.4	5.6	12.5	37.7	1.0	9.2	5.9	3.1	324.0	—	393.3	R 26.3	R 436.6	181.3	R 617.9
1983	—	9.6	9.6	5.8	16.4	25.8	0.8	7.3	6.1	2.1	120.0	—	R 178.5	R 29.7	R 223.6	201.4	R 424.9
1984	—	8.9	8.9	5.7	34.1	26.6	R (s)	8.4	6.7	4.4	179.0	—	259.8	R 30.3	R 304.7	197.8	R 502.5
1985	—	9.3	9.3	5.4	75.6	17.6	R 1.4	9.7	6.3	6.1	96.3	—	R 213.0	R 30.2	R 257.9	210.2	R 468.1
1986	—	R 20.0	R 20.0	4.2	23.8	15.3	R 0.5	17.9	5.4	5.1	107.4	—	R 175.4	R 29.3	R 228.9	199.5	R 428.4
1987	—	13.3	13.3	4.7	20.1	25.3	R 1.0	14.6	5.3	R 5.6	76.8	—	R 148.7	R 29.1	R 195.7	209.6	R 405.4
1988	—	15.1	15.1	5.2	35.2	31.9	R 1.4	21.5	5.5	R 5.6	72.9	—	R 174.0	R 30.3	R 224.7	234.0	R 458.7
1989	—	15.9	15.9	6.3	21.5	33.5	R 1.5	18.0	5.6	6.4	84.6	—	R 171.1	d R 58.5	d R 251.8	247.0	d R 498.8
1990	—	14.5	14.5	10.2	14.3	25.4	R 1.0	14.7	5.9	4.8	88.9	—	R 155.0	R 46.7	R 226.4	283.0	R 509.4
1991	—	R 24.1	R 24.1	10.4	20.0	26.4	R 0.8	16.2	6.0	5.1	80.7	4.9	R 160.1	R 55.8	R 250.3	315.6	R 565.9
1992	—	R 53.9	R 53.9	8.5	19.8	23.7	R (s)	12.1	6.7	5.1	93.5	6.1	R 167.5	R 58.5	R 288.4	328.1	R 616.4
1993	—	24.5	24.5	8.2	23.7	37.9	R 1.4	9.0	7.1	7.1	106.5	5.2	R 198.0	R 61.4	R 292.0	350.8	R 642.8
1994	—	R 25.5	R 25.5	8.5	11.6	42.2	R 2.0	6.5	7.4	8.1	142.2	6.1	R 226.0	R 75.6	R 335.6	355.7	R 691.3
1995	—	15.9	15.9	8.9	12.1	33.6	R 0.8	5.9	7.4	8.8	129.4	6.0	R 204.1	R 87.8	R 316.6	329.7	R 646.3
1996	—	13.2	13.2	11.4	9.8	46.8	0.5	9.6	7.5	9.5	161.2	7.1	252.0	78.4	355.1	298.6	653.7
1997	—	12.1	12.1	14.0	15.0	45.0	1.1	14.8	7.0	9.7	133.3	6.8	232.8	79.8	338.7	315.1	653.8

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 129. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Maine

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.98	—	2.17	1.39	0.75	1.35	5.08	3.02	0.31	2.28	2.28	—	2.28
1975	2.59	—	3.45	2.90	2.09	3.24	7.48	4.56	1.66	3.95	3.95	—	3.95
1980	—	—	9.02	7.41	6.51	6.06	14.36	9.69	3.68	8.99	8.99	—	8.99
1981	—	—	10.84	9.05	7.80	6.41	18.00	10.75	4.57	10.03	10.03	—	10.03
1982	—	—	10.92	8.73	7.51	7.24	17.25	10.08	4.33	9.44	9.44	—	9.44
1983	—	—	10.44	9.24	6.93	7.72	16.98	9.49	4.35	9.27	9.27	—	9.27
1984	—	—	10.27	8.92	6.69	7.53	17.63	9.05	4.76	8.88	8.88	—	8.88
1985	—	—	9.99	9.16	6.10	10.81	17.61	9.35	4.08	9.06	9.06	—	9.06
1986	—	—	8.41	7.24	4.50	11.81	15.59	7.38	2.22	7.14	7.14	—	7.14
1987	—	—	7.55	7.62	4.41	11.69	13.58	7.72	2.83	7.42	7.42	—	7.42
1988	—	—	7.41	7.55	4.13	11.43	14.62	8.15	2.03	7.55	7.55	—	7.55
1989	—	—	8.28	8.20	4.79	10.73	14.48	8.69	2.48	8.12	8.12	—	8.12
1990	—	—	9.32	9.10	5.92	11.34	14.60	9.74	2.52	R 9.11	R 9.11	—	R 9.11
1991	—	—	8.71	9.11	5.07	12.66	16.80	9.64	1.90	8.98	8.98	—	8.98
1992	—	—	8.54	8.65	5.20	10.56	18.32	9.63	2.16	9.00	9.00	—	9.00
1993	—	—	8.24	8.59	4.43	10.62	18.96	9.33	1.96	8.75	8.75	—	8.75
1994	—	—	7.96	8.67	4.16	8.57	19.11	9.41	2.02	8.94	8.94	—	8.94
1995	—	—	8.36	8.46	4.12	8.66	R 19.41	9.95	2.54	9.35	9.35	—	9.35
1996	—	—	9.29	9.53	4.99	8.54	20.08	10.29	2.81	9.86	9.86	67.49	9.86
1997	—	—	9.39	9.12	4.68	7.56	17.86	10.36	2.65	9.85	9.85	68.08	9.85
	Expenditures in Million Nominal Dollars												
1970	(s)	—	1.0	11.2	9.4	(s)	3.5	172.1	2.7	199.9	199.9	—	199.9
1975	(s)	—	1.2	25.8	22.7	(s)	4.9	300.2	9.8	364.6	364.6	—	364.6
1980	—	—	3.7	68.8	66.7	R (s)	11.5	592.4	4.8	748.1	748.1	—	748.1
1981	—	—	2.6	79.1	65.7	R (s)	13.8	647.8	18.2	827.3	827.3	—	827.3
1982	—	—	2.0	93.3	65.1	R (s)	12.1	618.9	17.4	809.1	809.1	—	809.1
1983	—	—	2.4	108.3	56.7	R (s)	12.4	595.7	R (s)	776.4	776.4	—	776.4
1984	—	—	2.3	152.5	55.3	0.6	13.8	574.1	0.5	799.0	799.0	—	799.0
1985	—	—	2.1	173.3	54.4	0.6	12.8	R 604.9	0.5	R 848.7	R 848.7	—	R 848.7
1986	—	—	2.4	154.4	39.6	1.0	11.1	R 511.7	1.0	721.3	721.3	—	721.3
1987	—	—	2.0	180.4	43.7	0.7	10.9	R 562.3	0.9	R 800.9	R 800.9	—	R 800.9
1988	—	—	2.5	205.3	47.7	1.2	11.3	R 647.9	5.4	R 921.2	R 921.2	—	R 921.2
1989	—	—	2.9	183.8	59.5	1.2	11.5	R 636.1	3.1	R 898.1	R 898.1	—	R 898.1
1990	—	—	2.9	240.6	82.9	0.7	11.9	R 712.8	2.4	R 1,054.3	R 1,054.3	—	R 1,054.3
1991	—	—	1.9	157.3	66.7	0.8	12.3	R 707.2	1.4	R 947.4	R 947.4	—	R 947.4
1992	—	—	1.8	157.4	54.8	0.6	13.7	R 706.5	2.1	R 936.9	R 936.9	—	R 936.9
1993	—	—	1.5	175.5	36.6	R (s)	14.4	R 697.5	3.5	R 929.6	R 929.6	—	R 929.6
1994	—	—	1.4	212.9	23.3	0.7	15.2	R 708.7	3.0	R 965.2	R 965.2	—	R 965.2
1995	—	—	1.5	183.7	19.6	R (s)	R 15.2	741.9	3.3	965.4	965.4	—	965.4
1996	—	—	1.3	207.6	25.2	(s)	15.2	798.4	3.6	1,051.6	1,051.6	(s)	1,051.6
1997	—	—	1.7	199.8	25.3	(s)	14.3	860.0	1.8	1,103.2	1,103.2	(s)	1,103.2

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 130. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Maine

Year	Coal	Natural Gas	Petroleum: Heavy Oil	Petroleum: Light Oil	Petroleum: Petroleum Coke	Petroleum: Total	Nuclear Fuel	Wood and Waste	Total Energy [a]
	Prices in Nominal Dollars per Million Btu								
1970	—	—	0.34	0.41	—	0.35	—	—	0.35
1975	—	—	1.78	2.48	—	1.79	0.32	—	0.71
1980	—	—	4.38	6.33	—	4.41	0.58	—	1.82
1981	—	—	5.31	7.96	—	5.34	0.67	—	2.03
1982	—	—	4.83	7.54	—	4.87	0.58	—	1.81
1983	—	—	4.65	6.44	—	4.68	0.62	—	1.68
1984	—	—	4.96	6.33	—	4.97	0.63	—	1.89
1985	—	—	4.21	5.89	—	4.23	0.62	—	1.60
1986	—	—	2.39	3.49	—	2.40	0.58	—	1.11
1987	—	—	2.93	4.19	—	2.94	0.60	—	1.50
1988	—	—	2.35	4.43	—	2.37	0.64	—	1.27
1989	—	—	2.78	4.14	—	2.79	0.54	—	R 1.23
1990	—	—	2.78	5.40	—	2.79	0.46	—	1.17
1991	—	—	2.07	4.59	—	2.09	0.43	—	R 0.74
1992	—	—	2.27	4.37	—	2.29	0.39	—	R 0.78
1993	—	—	2.13	3.95	—	2.15	0.37	—	0.60
1994	—	—	2.12	3.80	—	2.14	0.39	—	R 0.65
1995	—	—	2.60	3.78	—	2.62	2.14	1.50	R 1.75
1996	—	—	2.93	4.68	—	2.94	0.38	1.37	0.76
1997	—	—	2.78	4.26	—	2.79	—	—	1.93
	Expenditures in Million Nominal Dollars								
1970	—	—	10.3	R (s)	—	10.6	—	—	10.6
1975	—	—	31.4	0.6	—	32.0	16.1	—	48.1
1980	—	—	99.7	2.2	—	101.9	27.9	—	129.8
1981	—	—	124.4	1.8	—	126.2	38.5	—	164.7
1982	—	—	95.3	2.5	—	97.8	29.2	—	127.0
1983	—	—	101.1	2.3	—	103.4	38.8	—	142.2
1984	—	—	110.8	1.6	—	112.4	35.0	—	147.4
1985	—	—	90.9	1.0	—	91.9	35.7	—	127.6
1986	—	—	65.5	0.7	—	66.1	38.9	—	105.0
1987	—	—	79.6	0.8	—	80.4	25.9	—	106.3
1988	—	—	71.7	1.3	—	73.0	34.2	—	107.3
1989	—	—	87.8	1.1	—	88.9	40.0	—	R 137.2
1990	—	—	61.8	0.6	—	62.4	24.1	—	R 89.4
1991	—	—	29.8	0.6	—	30.3	29.0	—	R 61.3
1992	—	—	31.6	0.6	—	32.2	22.2	—	R 57.2
1993	—	—	18.4	R (s)	—	18.8	22.9	—	R 42.6
1994	—	—	17.0	R (s)	—	17.4	27.6	—	R 58.0
1995	—	—	23.8	0.6	—	24.5	4.5	(s)	R 49.9
1996	—	—	21.0	(s)	—	21.3	20.6	(s)	52.4
1997	—	—	43.8	(s)	—	44.1	—	—	72.0

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 131. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Maryland

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	0.58	0.34	0.45	1.07	1.20	0.73	1.87	2.85	0.43	R 1.43	1.62	—	R 1.17	1.17	0.40	5.76	R 1.78
1975	2.14	1.28	1.69	1.94	2.61	2.04	3.71	4.86	1.87	R 2.73	R 3.28	0.23	R 1.43	R 2.61	1.36	11.19	R 3.99
1980	2.38	1.50	1.77	3.81	6.87	6.46	6.81	9.93	4.04	R 6.97	R 7.65	0.44	R 2.57	R 4.90	1.66	15.47	R 7.65
1981	2.56	1.76	2.00	4.42	8.24	7.61	7.18	11.09	4.80	R 7.38	R 8.91	0.46	R 2.96	R 5.60	1.79	17.31	R 8.74
1982	2.73	1.87	2.09	5.52	7.89	7.18	7.04	10.38	4.45	R 6.98	R 8.46	0.47	R 2.98	R 5.56	1.78	18.97	R 9.04
1983	2.15	1.71	1.81	6.64	7.74	6.44	7.79	9.36	4.49	R 6.48	R 7.87	0.53	R 2.81	R 5.31	1.65	18.71	R 8.91
1984	2.02	1.75	R 1.80	6.59	7.96	6.16	7.01	9.00	4.78	R 6.43	R 7.74	0.58	R 3.03	R 5.18	1.68	17.67	R 8.57
1985	1.88	1.71	1.75	6.29	7.78	5.80	11.52	9.50	4.06	R 6.69	R 8.09	0.59	R 2.94	R 5.35	1.65	18.60	R 9.01
1986	1.76	1.64	1.67	5.99	6.07	4.01	11.24	7.55	2.30	R 5.56	R 6.36	0.56	R 2.19	R 4.29	1.32	18.66	R 8.09
1987	1.59	1.56	1.56	5.31	6.32	4.01	11.05	7.80	3.03	R 4.74	R 6.44	0.49	R 2.05	R 4.33	1.43	17.61	R 7.83
1988	1.61	1.56	1.57	4.92	6.29	3.75	9.93	8.18	2.27	R 4.57	R 6.42	0.49	R 2.06	R 4.21	1.35	R 17.13	R 7.83
1989	1.67	1.59	1.60	5.12	6.72	4.38	14.06	8.84	2.68	R 5.09	R 6.85	0.52	e R 2.12	e R 4.91	1.83	17.53	e R 8.42
1990	1.71	R 1.60	R 1.61	5.07	8.02	5.47	11.81	9.88	3.03	R 4.75	R 7.87	0.61	R 2.38	R 5.40	1.88	18.47	R 9.25
1991	1.75	R 1.60	1.62	4.69	7.58	4.78	12.74	9.56	2.16	R 4.46	R 7.60	0.50	2.43	R 4.84	1.46	19.97	R 9.53
1992	—	R 1.57	R 1.57	4.97	7.31	4.49	11.56	9.74	2.16	R 4.09	R 7.70	0.45	R 2.29	R 4.94	1.35	19.94	R 9.72
1993	1.73	1.58	1.58	5.44	7.22	4.16	11.71	9.39	2.21	R 4.49	R 7.38	0.53	R 2.18	R 4.83	1.38	20.39	R 9.88
1994	—	1.53	1.53	5.35	6.96	3.85	11.61	9.52	2.36	R 4.45	R 7.46	0.52	R 2.26	R 4.87	1.40	20.59	R 9.97
1995	—	1.50	1.50	4.81	6.82	3.89	12.57	9.83	2.65	R 4.63	R 8.00	0.48	R 2.23	R 4.80	1.26	20.69	R 9.99
1996	—	1.48	1.48	6.26	7.83	4.70	13.53	10.43	3.22	5.29	8.67	0.48	2.38	5.43	1.31	20.40	10.55
1997	—	1.49	1.49	5.78	7.75	4.47	13.72	10.26	2.88	5.04	8.48	0.47	2.28	5.26	1.27	20.46	10.27
	Expenditures in Million Nominal Dollars																
1970	79.6	60.0	139.6	168.5	138.3	18.1	13.0	556.7	58.7	74.1	858.9	—	R 7.2	R 1,174.2	-91.0	442.4	R 1,525.6
1975	200.6	132.6	333.2	270.5	317.1	34.6	33.0	1,115.0	314.0	121.3	1,935.0	11.3	R 9.1	R 2,559.2	-352.5	1,042.3	R 3,248.9
1980	168.9	247.9	416.8	607.5	872.6	126.3	51.5	2,296.3	415.8	289.9	4,052.5	52.5	R 17.3	R 5,146.5	-544.9	R 1,825.4	R 6,427.1
1981	158.3	258.8	417.1	765.7	889.3	149.6	52.0	2,587.2	382.6	329.9	4,390.7	58.4	R 20.6	R 5,652.4	-549.0	R 2,086.1	R 7,189.5
1982	152.1	301.8	453.9	864.2	746.0	142.5	51.4	2,408.7	326.9	291.8	3,967.2	54.3	R 21.2	R 5,360.8	-534.5	2,247.3	R 7,073.5
1983	117.4	304.2	421.6	973.1	832.5	135.9	57.7	2,176.6	308.6	R 316.2	R 3,827.5	67.3	R 21.1	R 5,310.6	-540.2	R 2,341.9	R 7,112.3
1984	115.1	R 372.3	R 487.4	1,059.9	864.6	124.9	60.7	2,148.4	345.1	R 360.2	R 3,903.8	72.8	R 29.5	R 5,553.4	-593.0	R 2,313.7	R 7,274.1
1985	107.4	341.2	448.6	966.9	803.3	125.7	74.9	R 2,276.2	201.9	R 377.1	R 3,859.1	62.9	R 27.0	R 5,364.6	-536.2	R 2,495.9	R 7,324.3
1986	91.5	366.7	458.3	933.1	614.2	86.7	58.5	1,860.2	105.5	R 353.1	R 3,078.2	77.3	R 27.1	R 4,574.0	-495.4	R 2,671.1	R 6,749.7
1987	82.3	R 369.0	R 451.3	913.8	665.8	84.0	70.4	R 1,974.7	173.2	R 322.5	R 3,290.4	53.2	R 23.8	R 4,732.5	-517.2	R 2,698.3	R 6,913.6
1988	82.8	390.6	473.4	864.2	679.4	93.7	61.4	R 2,112.1	148.8	R 300.9	R 3,396.3	62.1	R 24.9	R 4,820.9	-544.1	R 2,779.3	R 7,056.1
1989	77.4	395.6	473.0	990.5	806.0	107.2	110.6	R 2,303.5	254.9	R 301.2	R 3,883.3	15.1	e R 27.3	e R 5,389.2	-646.8	R 2,946.2	e R 7,688.6
1990	57.6	R 404.7	R 462.3	884.5	794.7	110.9	84.1	R 2,461.0	188.4	R 297.6	R 3,936.8	8.2	R 21.5	R 5,313.3	-568.0	R 3,121.6	R 7,866.9
1991	46.6	R 398.1	R 444.7	822.0	764.1	87.8	92.9	R 2,434.1	127.0	R 229.0	R 3,735.0	48.2	R 21.3	R 5,071.2	-558.0	R 3,482.5	R 7,995.8
1992	—	R 389.7	R 389.7	913.4	781.5	76.8	110.4	R 2,508.8	106.3	R 220.1	R 3,803.9	51.8	R 21.1	R 5,179.9	-524.0	R 3,468.8	R 8,124.6
1993	(s)	412.6	412.6	995.8	829.5	69.9	104.7	R 2,446.3	134.8	R 268.9	R 3,854.1	69.6	R 22.0	R 5,354.1	-594.9	R 3,748.6	R 8,507.8
1994	—	412.6	412.6	999.4	789.1	70.3	119.7	R 2,534.9	134.3	R 261.2	R 3,909.5	62.7	R 25.7	R 5,410.0	-603.6	R 3,847.4	R 8,653.7
1995	—	433.7	433.7	943.5	762.4	75.6	122.4	R 2,657.2	65.3	R 268.4	R 3,951.3	66.3	28.0	R 5,422.8	-553.6	R 3,964.5	R 8,833.7
1996	—	433.2	433.2	1,223.4	1,009.6	103.9	143.2	2,838.1	88.7	289.9	4,473.3	61.4	30.3	6,221.5	-557.5	3,966.6	9,630.7
1997	—	432.1	432.1	1,220.4	912.4	103.7	146.8	2,888.4	72.9	346.8	4,471.1	65.7	25.5	6,214.7	-560.4	3,928.4	9,582.7

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 132. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Maryland

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.05	1.42	1.42	1.50	2.57	1.50	0.73	R 1.45	7.02	R 2.32
1975	1.75	2.30	2.71	3.37	4.61	2.92	1.45	R 2.56	12.65	R 4.57
1980	3.18	4.38	7.06	8.55	9.81	7.31	3.70	R 5.66	17.32	R 8.45
1981	3.76	5.00	8.75	10.80	8.68	8.90	4.56	R 6.47	19.34	R 9.77
1982	3.82	6.02	8.44	10.56	8.65	8.64	4.42	R 6.92	21.31	R 10.79
1983	3.37	7.27	8.35	R 8.04	9.39	R 8.41	4.28	R 7.57	21.20	R 11.53
1984	3.57	7.25	8.59	R 8.55	8.16	R 8.55	4.35	R 7.55	20.32	R 11.12
1985	3.28	7.01	8.24	R 8.26	11.42	R 8.53	4.18	R 7.37	21.32	R 11.50
1986	3.22	6.64	6.92	R 5.69	11.25	R 7.09	3.35	R 6.61	21.14	R 11.22
1987	3.10	6.16	6.56	R 4.99	11.25	R 6.70	3.20	R 6.21	20.19	R 10.79
1988	3.07	5.72	6.59	R 4.72	9.17	R 6.47	3.23	R 5.88	19.68	R 10.44
1989	3.25	6.11	7.10	R 4.39	17.98	R 7.92	3.57	R 6.59	20.10	R 11.32
1990	3.36	6.28	8.47	R 4.99	12.58	R 8.75	3.53	R 6.90	21.17	R 12.41
1991	3.09	6.01	8.21	R 5.62	13.46	R 8.76	3.37	R 6.69	23.14	R 13.17
1992	3.10	6.26	7.56	R 5.02	13.03	R 8.25	3.08	R 6.70	23.37	R 12.88
1993	3.23	6.89	7.43	R 4.56	13.18	R 7.97	3.02	R 7.07	24.07	R 13.45
1994	3.23	6.75	7.19	R 4.87	14.04	R 8.03	2.93	R 6.97	24.58	R 13.67
1995	3.11	6.46	7.09	R 4.43	14.68	R 8.10	2.87	R 6.72	24.71	R 13.58
1996	3.19	7.39	8.05	5.38	16.01	9.00	3.29	7.74	24.21	13.71
1997	3.23	8.09	8.00	5.55	16.04	9.08	3.27	8.24	24.41	14.31
	Expenditures in Million Nominal Dollars									
1970	0.9	106.1	67.9	18.4	9.8	96.1	1.6	R 204.7	184.2	R 388.9
1975	0.6	161.4	133.3	19.3	21.3	173.9	3.9	R 339.7	416.8	R 756.5
1980	1.2	304.1	361.7	40.2	26.7	428.6	12.2	R 746.1	716.3	R 1,462.4
1981	1.7	356.7	346.1	37.6	28.9	412.6	15.2	R 786.2	812.1	R 1,598.3
1982	3.6	413.7	303.3	39.7	24.8	367.8	15.9	R 801.0	906.9	R 1,707.9
1983	3.0	480.3	294.9	R 25.0	32.0	R 352.0	15.2	R 850.5	975.7	R 1,826.2
1984	2.6	543.1	311.3	R 17.6	30.6	R 359.5	22.7	R 927.9	968.9	R 1,896.7
1985	3.6	496.1	241.0	R 52.1	40.6	R 333.8	21.3	R 854.7	1,041.6	R 1,896.4
1986	3.6	494.8	194.2	R 26.7	31.0	R 251.9	16.6	R 767.0	1,141.2	R 1,908.2
1987	4.9	450.2	210.8	R 32.1	39.1	R 282.0	13.0	R 750.1	1,186.1	R 1,936.2
1988	3.5	442.0	227.2	R 35.2	30.1	R 292.5	13.7	R 751.6	1,241.0	R 1,992.6
1989	1.6	473.4	212.6	R 20.2	72.9	R 305.7	15.7	R 796.4	1,308.0	R 2,104.4
1990	1.5	428.5	211.4	R 10.9	49.6	R 271.9	14.3	R 716.2	1,379.8	R 2,095.9
1991	1.2	426.5	199.9	R 12.6	59.1	R 271.6	14.4	R 713.7	1,602.6	R 2,316.3
1992	R (s)	483.0	196.4	R 9.0	64.5	R 269.9	13.9	R 767.2	1,575.5	R 2,342.6
1993	0.5	544.2	226.3	R 13.2	66.7	R 306.1	14.6	R 865.5	1,769.8	R 2,635.3
1994	1.1	533.0	208.8	R 10.8	73.0	R 292.7	13.9	R 840.7	1,817.4	R 2,658.1
1995	8.3	506.8	196.7	R 13.4	87.6	R 297.8	15.1	R 827.9	1,874.7	R 2,702.6
1996	1.2	650.1	276.3	18.1	102.2	396.6	17.3	1,065.2	1,898.5	2,963.7
1997	1.6	647.9	241.3	18.8	102.4	362.5	12.5	1,024.5	1,826.7	2,851.2

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 133. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Maryland

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.07	1.09	1.12	0.88	1.03	2.85	0.43	0.93	0.73	0.98	6.86	R 2.59
1975	1.06	1.96	2.39	2.53	2.75	4.86	1.83	2.31	1.45	2.13	12.49	5.77
1980	1.19	3.88	6.39	6.24	5.13	9.93	4.16	5.81	3.70	4.74	18.41	R 9.77
1981	1.39	4.42	8.08	7.54	5.91	11.09	5.01	7.81	4.56	5.28	20.77	R 11.80
1982	1.37	5.46	7.69	7.46	6.00	10.38	4.52	7.15	4.42	5.85	22.23	R 12.54
1983	1.33	6.57	6.92	R 8.04	6.43	9.36	4.52	R 6.62	4.28	6.44	21.87	R 12.42
1984	R 1.30	6.49	6.81	R 8.55	6.13	9.00	4.95	R 6.49	4.35	6.36	20.96	R 12.06
1985	1.33	6.17	6.37	R 8.26	11.63	9.50	4.41	R 6.63	NA	R 6.11	22.00	13.10
1986	1.33	5.54	4.25	R 5.69	11.24	7.55	2.56	R 4.10	NA	R 4.80	21.81	12.46
1987	R 1.31	4.94	4.29	R 4.99	10.81	7.80	3.14	4.05	NA	4.34	19.92	10.71
1988	1.33	4.93	3.94	R 4.72	10.77	8.18	2.39	R 4.00	NA	4.43	19.27	R 11.28
1989	1.28	5.27	4.79	R 4.39	9.89	8.84	2.82	R 4.41	NA	R 4.83	19.63	R 11.01
1990	R 1.14	5.21	5.89	R 4.99	10.85	9.88	3.13	R 5.80	NA	R 5.38	19.92	R 12.14
1991	1.34	4.92	5.37	R 5.62	11.64	9.56	2.36	R 5.68	NA	R 5.09	20.86	R 11.53
1992	R 1.30	5.10	4.94	R 5.02	9.97	9.74	2.26	R 4.88	NA	R 5.02	21.06	R 11.10
1993	1.27	5.57	4.75	R 4.56	9.79	9.39	2.37	R 4.87	3.02	R 5.32	21.21	R 11.53
1994	1.27	5.30	4.40	R 4.87	10.98	9.52	2.41	R 4.62	2.93	R 5.04	21.28	R 11.72
1995	1.25	4.94	4.39	R 4.43	10.72	9.83	2.74	R 4.70	2.87	R 4.62	20.41	R 12.88
1996	1.29	5.91	5.37	5.38	11.40	10.43	3.29	5.65	3.29	5.77	20.18	13.48
1997	1.30	6.32	5.20	5.55	10.95	10.26	3.04	5.60	3.27	6.06	20.26	13.70
	Expenditures in Million Nominal Dollars											
1970	R (s)	28.8	20.9	R (s)	0.7	1.5	4.1	27.5	(s)	56.4	148.5	R 205.0
1975	R (s)	50.1	45.8	R (s)	2.2	3.1	13.4	65.0	(s)	R 115.6	365.3	R 481.0
1980	0.6	113.1	106.6	0.7	2.5	6.3	30.3	146.4	(s)	R 260.3	R 589.6	R 850.0
1981	0.7	143.7	73.8	0.7	3.5	8.0	6.5	92.4	(s)	R 237.2	R 679.0	R 916.1
1982	2.1	171.4	79.2	3.7	3.0	7.5	12.9	106.3	(s)	R 280.3	735.6	R 1,015.9
1983	2.1	206.4	112.4	R 1.9	3.9	8.1	15.9	R 142.1	(s)	R 351.0	R 754.8	R 1,105.8
1984	1.6	168.5	113.5	R 1.0	4.1	7.1	23.8	R 149.5	0.5	R 320.1	R 676.2	R 996.3
1985	2.5	153.9	72.0	R 4.2	7.3	8.5	7.0	R 99.0	NA	R 255.4	R 722.3	R 977.7
1986	2.7	136.6	38.2	R 1.6	5.5	6.9	14.0	R 66.1	NA	R 205.4	R 763.3	R 968.7
1987	3.7	130.3	48.4	R 0.7	6.6	7.4	36.1	R 99.2	NA	233.1	R 738.2	R 971.3
1988	2.6	131.7	42.7	R 1.7	6.2	7.3	10.8	R 68.7	NA	R 203.0	R 758.3	R 961.3
1989	1.1	146.2	55.9	R 2.2	7.1	9.2	22.9	R 97.3	NA	R 244.6	R 712.9	R 957.5
1990	0.9	128.7	71.9	R 1.3	7.6	R 12.0	10.9	R 103.7	NA	R 233.3	R 749.1	R 982.3
1991	0.9	192.1	71.8	R 1.7	9.0	5.9	2.0	R 90.4	NA	R 283.4	R 801.5	R 1,085.0
1992	R (s)	222.5	74.0	R 1.2	8.7	5.3	6.8	R 96.0	NA	R 318.8	R 816.0	R 1,134.8
1993	R (s)	249.6	74.3	R 2.2	8.7	1.5	2.9	R 89.7	1.2	R 339.6	R 868.7	R 1,208.3
1994	0.7	241.0	78.5	R 5.9	10.1	1.6	3.3	R 99.3	1.2	R 342.1	R 1,010.3	R 1,352.4
1995	5.9	237.2	76.7	R 5.3	11.3	1.6	2.1	R 97.0	1.1	R 341.2	R 1,652.5	R 1,993.8
1996	0.9	278.7	103.7	4.6	12.8	1.7	2.3	125.1	1.4	406.1	1,637.2	2,043.4
1997	1.1	325.2	77.6	7.1	12.3	1.7	1.0	99.7	1.2	427.3	1,664.1	2,091.4

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
(s)=Value less than 0.05 million nominal dollars.

NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 134. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Maryland

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	0.58	0.07	0.50	0.67	0.60	0.81	0.88	1.03	5.08	2.85	0.43	R 1.43	R 0.82	R 1.42	0.64	3.80	0.91
1975	2.14	1.06	2.05	1.35	1.89	2.34	2.53	2.75	7.48	4.86	2.08	R 1.95	R 2.32	R 1.42	R 2.02	8.42	R 2.75
1980	2.38	1.19	2.15	3.19	3.73	5.60	6.24	5.13	14.36	9.93	4.37	R 8.34	R 5.67	R 1.42	R 3.57	11.65	R 4.93
1981	2.56	1.39	2.29	3.92	4.95	6.81	7.54	5.91	18.00	11.09	5.26	R 6.68	R 6.48	R 1.42	R 4.07	12.97	R 5.63
1982	2.73	1.37	2.43	4.95	4.14	6.77	7.46	6.00	17.25	10.38	4.73	R 7.32	R 6.11	R 1.42	R 4.31	14.13	R 6.11
1983	2.15	1.33	1.95	5.89	4.12	6.78	R 7.09	6.43	16.98	9.36	4.57	R 8.01	R 5.79	R 1.42	R 4.36	13.70	R 6.04
1984	2.02	R 1.30	1.82	5.85	4.47	6.59	R 7.14	6.13	17.63	9.00	4.95	R 7.17	R 5.82	R 1.42	R 4.43	13.10	R 5.95
1985	1.88	1.33	1.75	5.51	4.95	6.23	R 6.99	11.63	17.61	9.50	4.41	R 6.46	R 6.18	R 1.42	R 4.31	13.92	R 6.24
1986	1.76	1.33	1.65	5.43	4.18	3.99	R 4.84	11.24	15.59	7.55	2.56	R 5.89	R 5.02	R 1.47	R 3.88	14.12	R 5.98
1987	1.59	R 1.31	1.50	4.97	3.22	4.24	R 4.62	10.81	13.58	7.80	3.14	R 5.04	R 4.56	R 1.47	R 3.53	13.43	R 5.56
1988	1.61	1.33	1.54	4.17	3.16	3.87	R 4.39	10.77	14.62	8.18	2.39	R 4.37	R 4.27	R 1.47	R 3.29	12.97	R 5.36
1989	1.67	1.28	1.57	4.67	2.90	4.92	R 5.24	9.89	14.48	8.84	2.82	R 6.48	R 4.94	d R 1.37	d R 3.72	13.83	d R 6.11
1990	1.71	R 1.14	R 1.48	4.45	2.97	5.91	R 6.82	10.85	14.60	9.88	3.13	R 5.30	R 4.75	R 1.44	R 3.66	14.94	R 6.40
1991	1.75	1.34	1.55	3.42	2.89	5.44	R 5.90	11.64	16.80	9.56	2.36	R 3.65	R 4.38	R 1.53	R 3.15	16.11	R 6.79
1992	—	R 1.30	R 1.30	3.47	2.20	5.13	R 4.96	9.97	18.32	9.74	2.26	R 3.31	R 4.02	R 1.54	R 3.40	15.84	R 7.39
1993	1.73	1.27	1.27	3.49	3.11	4.79	R 4.78	9.79	18.96	9.39	2.37	R 3.54	R 4.23	R 1.52	R 3.53	15.96	R 7.44
1994	—	1.27	1.27	3.92	3.03	4.66	R 5.09	8.71	19.11	9.52	2.41	R 3.24	R 4.19	R 1.71	R 3.63	15.52	R 7.22
1995	—	1.25	1.25	3.13	3.41	4.57	R 4.38	8.66	R 19.41	9.83	2.74	R 3.23	R 4.38	R 1.70	R 3.42	12.39	R 5.12
1996	—	1.29	1.29	5.21	3.46	5.56	5.51	9.18	20.08	10.43	3.29	4.43	5.01	1.65	4.44	12.17	5.87
1997	—	1.30	1.30	3.14	3.94	5.44	5.05	10.14	17.86	10.26	3.04	4.18	4.93	1.69	3.71	12.33	5.12
	Expenditures in Million Nominal Dollars																
1970	79.6	1.8	81.4	29.8	11.1	14.8	R (s)	2.4	10.0	3.9	17.8	21.1	81.6	R 5.5	R 198.3	109.7	R 308.0
1975	200.6	8.8	209.4	58.6	40.8	44.4	2.1	9.1	20.7	7.5	62.8	20.3	207.7	R 5.2	R 480.9	260.2	R 741.1
1980	168.9	21.2	190.1	176.9	65.3	104.1	11.3	21.9	36.1	7.6	69.9	101.4	417.5	R 4.8	R 789.3	518.5	R 1,307.8
1981	158.3	26.0	184.2	248.4	99.0	119.6	10.7	18.0	43.4	8.6	38.9	99.1	437.3	R 5.0	R 875.0	593.7	R 1,468.7
1982	152.1	21.3	173.4	275.1	85.7	88.5	2.2	22.4	37.9	6.0	33.2	90.0	366.0	R 4.9	R 819.4	603.5	R 1,422.8
1983	117.4	23.8	141.2	278.3	117.8	92.3	2.8	20.5	39.1	5.7	85.0	96.6	459.7	R 5.5	R 884.8	609.9	R 1,494.7
1984	115.1	R 28.5	R 143.5	343.7	148.7	92.0	1.0	24.2	43.2	12.9	125.4	112.8	560.3	R 5.6	R 1,053.1	665.9	R 1,719.0
1985	107.4	23.5	131.0	311.7	148.6	92.4	1.7	24.5	40.2	14.9	28.3	96.3	446.9	R 5.6	R 895.2	727.4	R 1,622.7
1986	91.5	23.9	115.4	295.4	144.7	48.5	R 1.6	20.5	34.8	12.7	15.3	113.3	R 391.5	R 10.3	R 812.6	761.8	R 1,574.4
1987	82.3	R 31.5	113.7	300.5	102.9	41.1	1.3	23.5	34.3	13.6	15.9	122.2	R 354.8	R 10.3	R 779.2	767.2	R 1,546.4
1988	82.8	22.8	105.5	276.0	91.3	38.7	R 3.6	22.9	35.6	R 15.1	15.9	103.2	R 326.5	R 10.7	R 718.8	772.0	R 1,490.8
1989	77.4	21.7	99.1	318.8	86.7	60.3	R 3.1	28.5	36.2	15.9	17.5	122.2	R 370.4	d R 11.5	d R 799.7	918.0	d R 1,717.7
1990	57.6	R 27.1	R 84.8	282.6	98.7	59.7	R 1.3	24.9	37.5	R 15.4	24.4	116.2	R 378.1	R 7.2	R 752.7	984.3	R 1,737.0
1991	46.6	R 35.1	R 81.7	165.5	71.0	49.3	R 0.9	23.0	38.6	14.3	11.5	71.9	280.7	R 6.9	R 534.7	1,069.1	R 1,603.8
1992	—	R 23.2	R 23.2	177.0	51.2	42.1	R 0.5	33.5	43.0	14.1	15.2	78.9	R 278.5	R 7.2	R 485.9	1,068.1	R 1,554.0
1993	(s)	23.5	23.6	175.3	96.7	49.9	R 0.7	25.2	45.3	14.3	18.5	72.7	R 323.3	R 7.4	R 529.6	1,100.1	R 1,629.7
1994	—	23.8	23.8	192.7	87.6	46.1	1.9	33.4	47.7	14.7	18.9	68.7	R 319.0	R 10.7	R 546.1	1,008.1	R 1,554.3
1995	—	24.1	24.1	157.2	95.8	44.7	R 1.4	22.0	47.6	16.9	12.8	67.2	R 308.4	R 11.7	R 501.4	425.2	R 926.6
1996	—	25.5	25.5	268.1	83.0	67.6	1.8	26.6	47.8	18.8	28.6	97.1	371.4	11.6	676.6	419.4	1,096.1
1997	—	25.8	25.8	214.4	147.0	55.9	1.2	30.7	44.9	19.6	16.4	92.1	407.7	11.8	659.6	426.0	1,085.7

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 135. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Maryland

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.07	—	2.17	1.32	0.73	1.03	5.08	2.85	0.39	2.30	2.30	—	2.30
1975	1.06	—	3.45	2.81	2.03	2.75	7.48	4.86	1.61	4.30	4.30	—	4.30
1980	—	—	9.02	7.69	6.46	5.13	14.36	9.93	3.53	8.92	8.92	12.62	8.92
1981	—	—	10.84	8.53	7.61	5.91	18.00	11.09	4.33	9.99	9.99	14.79	9.99
1982	—	—	10.92	7.93	7.18	6.00	17.25	10.38	4.18	9.44	9.44	15.89	9.44
1983	—	—	10.44	8.13	6.44	6.43	16.98	9.36	4.24	8.85	8.85	15.30	8.85
1984	—	—	10.27	8.70	6.16	6.13	17.63	9.00	4.55	8.66	8.66	16.35	8.66
1985	—	—	9.99	8.64	5.80	11.63	17.61	9.50	3.88	9.00	9.00	17.74	9.01
1986	—	—	8.41	6.68	4.01	11.24	15.59	7.55	2.09	7.10	7.10	17.80	7.11
1987	—	—	7.55	7.32	4.01	10.81	13.58	7.80	2.85	7.33	7.33	24.06	R 7.35
1988	—	—	7.41	7.40	3.75	10.77	14.62	8.18	2.07	7.50	7.50	23.33	7.52
1989	—	—	8.28	7.61	4.38	9.89	14.48	8.84	2.39	R 8.09	R 8.09	23.37	R 8.10
1990	—	—	9.32	8.97	5.47	10.85	14.60	9.88	2.72	9.25	9.25	24.37	R 9.27
1991	—	—	8.71	8.44	4.78	11.64	16.80	9.56	1.97	8.97	8.97	25.64	R 8.99
1992	—	—	8.54	8.31	4.49	9.97	18.32	9.74	1.97	9.05	9.05	26.15	9.07
1993	—	3.48	8.24	8.48	4.16	9.79	18.96	9.39	2.02	8.86	8.86	24.26	R 8.88
1994	—	3.65	7.96	8.56	3.85	8.94	19.11	9.52	2.28	8.99	8.99	25.13	9.01
1995	—	2.99	8.36	8.13	3.89	8.58	R 19.41	9.83	2.64	9.17	9.16	25.77	R 9.19
1996	—	3.71	9.29	9.23	4.70	8.59	20.08	10.43	3.17	9.83	9.83	25.32	9.85
1997	—	3.46	9.39	8.89	4.47	8.57	17.86	10.26	2.83	9.62	9.62	25.79	9.64
	Expenditures in Million Nominal Dollars												
1970	(s)	—	3.4	32.1	18.1	R (s)	9.2	551.2	9.5	623.7	623.7	—	623.7
1975	(s)	—	3.6	85.9	33.5	R (s)	13.9	1,104.5	28.5	1,270.4	1,270.4	—	1,270.4
1980	—	—	7.9	262.0	125.9	R (s)	27.0	2,282.4	100.1	2,805.9	2,805.9	R 1.0	2,806.8
1981	—	—	7.0	315.1	149.1	1.6	32.5	2,570.6	129.2	3,205.1	3,205.1	1.3	3,206.4
1982	—	—	4.1	244.3	142.5	1.1	28.4	2,395.2	109.9	2,925.5	2,925.5	R 1.4	2,926.9
1983	—	—	3.8	301.3	135.9	1.3	29.3	2,162.8	49.7	2,684.1	2,684.1	R 1.4	R 2,685.5
1984	—	—	3.5	314.9	124.9	R 1.8	32.4	2,128.3	53.5	2,659.3	2,659.3	R 2.8	R 2,662.1
1985	—	—	3.8	371.1	125.7	2.5	30.1	R 2,252.8	36.9	R 2,823.0	R 2,823.0	R 4.5	R 2,827.5
1986	—	—	4.3	318.6	86.7	1.4	26.1	1,840.6	15.9	2,293.6	2,293.6	R 4.8	R 2,298.4
1987	—	—	3.3	347.6	84.0	1.3	25.7	R 1,953.6	37.4	R 2,452.8	R 2,452.8	R 6.9	R 2,459.7
1988	—	—	3.5	353.4	93.7	2.2	26.7	R 2,089.7	34.2	R 2,603.4	R 2,603.4	R 8.0	R 2,611.4
1989	—	—	3.5	447.0	107.2	2.1	27.1	R 2,278.4	36.4	R 2,901.7	R 2,901.7	R 7.4	R 2,909.0
1990	—	—	3.5	433.3	110.9	2.0	28.1	R 2,433.6	31.6	R 3,043.1	R 3,043.1	R 8.5	R 3,051.6
1991	—	—	3.3	428.9	87.8	1.8	28.9	R 2,413.8	17.0	R 2,981.5	R 2,981.5	R 9.2	R 2,990.7
1992	—	—	4.1	457.6	76.8	3.7	32.2	R 2,489.4	20.2	R 3,084.0	R 3,084.0	R 9.3	R 3,093.2
1993	—	R (s)	4.2	465.4	69.9	4.0	33.9	R 2,430.4	16.4	R 3,024.4	R 3,024.5	R 9.9	R 3,034.4
1994	—	R (s)	2.8	432.5	70.3	3.1	35.7	R 2,518.7	14.2	R 3,077.3	R 3,077.4	R 11.5	R 3,089.0
1995	—	R (s)	2.0	429.4	75.6	1.5	R 35.7	2,638.7	15.7	R 3,198.6	3,198.7	R 12.0	R 3,210.7
1996	—	(s)	1.6	540.2	103.9	1.5	35.8	2,817.5	15.3	3,515.9	3,516.1	11.5	3,527.6
1997	—	(s)	2.1	521.7	103.7	1.4	33.7	2,867.2	13.1	3,542.8	3,543.0	11.5	3,554.4

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 136. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Maryland

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.39	0.32	0.44	0.48	—	0.44	—	—	0.40
1975	1.30	1.10	1.85	2.18	—	1.86	0.23	—	1.36
1980	1.54	2.50	4.21	5.97	—	4.41	0.44	—	1.66
1981	1.81	2.76	5.04	7.30	—	5.28	0.46	—	1.79
1982	1.92	4.10	4.58	7.01	—	4.83	0.47	—	1.78
1983	1.75	4.40	4.52	5.90	—	4.71	0.53	—	1.65
1984	1.79	3.53	4.71	5.85	—	4.89	0.58	1.28	1.68
1985	1.75	3.73	4.02	5.53	—	4.22	0.59	0.79	1.65
1986	1.67	2.74	2.26	3.39	—	2.41	0.56	0.32	1.32
1987	1.58	2.68	3.06	3.81	—	3.17	0.49	0.95	1.43
1988	1.58	2.60	2.33	3.49	—	2.46	0.49	0.87	1.35
1989	1.61	2.60	2.72	4.12	—	2.86	0.52	1.27	1.83
1990	1.65	2.45	3.10	5.29	—	3.28	0.61	—	1.88
1991	1.63	2.26	2.17	4.44	—	2.32	0.50	—	1.46
1992	1.60	2.55	2.19	4.30	—	2.37	0.45	—	1.35
1993	1.60	2.89	2.21	3.94	—	2.34	0.53	—	1.38
1994	1.55	2.47	2.37	3.84	—	2.55	0.52	—	1.40
1995	1.50	2.16	2.62	3.76	—	2.88	0.48	—	1.26
1996	1.49	2.99	3.18	4.77	—	3.59	0.48	—	1.31
1997	1.50	2.85	2.83	4.32	—	3.13	0.47	—	1.27
	Expenditures in Million Nominal Dollars								
1970	57.3	3.8	27.4	2.6	—	30.0	—	—	91.0
1975	122.7	R (s)	209.3	8.7	—	218.0	11.3	—	352.5
1980	224.9	13.4	215.5	38.6	—	254.1	52.5	—	544.9
1981	230.5	16.8	208.0	35.3	—	243.3	58.4	—	549.0
1982	274.8	3.9	170.8	30.6	—	201.5	54.3	—	534.5
1983	275.2	8.1	158.1	31.5	—	189.6	67.3	—	540.2
1984	339.6	4.7	142.4	32.9	—	175.3	72.8	0.6	593.0
1985	311.6	5.2	129.7	26.7	—	156.4	62.9	R (s)	536.2
1986	336.6	6.4	60.3	14.7	—	75.1	77.3	R (s)	495.4
1987	328.9	32.9	83.8	17.9	—	101.7	53.2	0.5	517.2
1988	361.8	14.4	87.8	17.4	—	105.3	62.1	0.5	544.1
1989	371.2	52.1	178.1	30.1	—	208.2	15.1	R (s)	646.8
1990	375.2	44.7	121.5	18.4	—	139.9	8.2	—	568.0
1991	361.0	37.9	96.5	14.3	—	110.8	48.2	—	558.0
1992	365.9	30.8	64.0	11.5	—	75.5	51.8	—	524.0
1993	388.3	26.5	97.0	13.6	—	110.5	69.6	—	594.9
1994	387.0	32.7	97.9	23.3	—	121.2	62.7	—	603.6
1995	395.5	42.2	34.8	14.8	—	49.6	66.3	—	553.6
1996	405.6	26.3	42.4	21.7	—	64.2	61.4	—	557.5
1997	403.5	32.7	42.4	16.0	—	58.4	65.7	—	560.4

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 137. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Massachusetts

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.55	0.55	1.58	1.34	0.75	2.31	2.86	0.39	1.63	1.24	0.20	R 1.13	1.25	0.37	7.29	R 1.89
1975	—	1.57	1.57	2.86	2.74	2.10	3.74	4.73	1.95	3.37	2.95	0.18	R 1.29	R 2.82	1.66	13.93	R 4.12
1980	—	2.03	2.03	4.88	6.87	6.51	6.62	9.69	3.84	8.10	6.60	0.41	R 2.43	R 5.99	3.41	21.13	R 8.77
1981	—	2.58	2.58	5.80	8.50	7.80	6.96	10.86	4.74	9.99	7.89	0.44	R 2.87	R 7.03	3.97	25.53	R 10.48
1982	—	2.53	2.53	6.58	8.27	7.51	8.26	10.07	4.26	8.95	7.55	0.50	R 2.84	R 6.63	3.30	24.62	R 10.12
1983	—	2.29	2.29	6.94	8.10	6.87	9.03	9.28	4.28	R 9.16	7.40	0.56	R 2.71	R 6.40	3.04	25.05	R 10.27
1984	—	2.20	2.20	6.53	8.22	6.42	9.33	8.85	4.66	R 9.68	7.35	1.05	R 2.65	R 6.54	3.62	26.23	R 10.20
1985	—	2.03	2.03	6.25	8.02	6.04	12.02	9.18	4.04	R 9.42	7.27	0.60	R 2.55	R 6.16	2.74	24.34	R 9.95
1986	—	R 1.83	R 1.83	6.35	5.93	4.18	10.41	7.25	2.31	R 7.49	5.12	0.88	R 2.50	R 4.92	2.03	22.70	R 8.31
1987	—	1.66	1.66	5.23	5.82	4.12	11.33	7.56	2.77	R 6.97	5.59	0.92	R 2.37	R 5.07	2.26	23.46	R 8.64
1988	—	1.66	1.66	5.46	5.86	4.02	11.26	7.90	2.27	R 6.47	R 5.55	0.96	R 2.39	R 5.09	2.04	R 22.87	R 8.79
1989	—	1.64	1.64	5.33	6.54	4.61	12.19	8.50	2.64	R 7.03	6.11	0.70	e R 2.24	e R 5.35	R 2.17	24.39	e R 9.36
1990	—	1.77	1.77	5.55	7.99	5.83	12.39	9.53	2.88	R 7.45	7.14	0.62	R 2.22	R 5.93	R 2.14	25.93	R 10.36
1991	—	1.75	1.75	5.66	7.50	5.00	13.94	10.01	2.21	R 6.70	6.97	0.61	R 2.40	5.85	1.85	27.94	R 10.67
1992	—	1.74	1.74	5.66	6.93	4.63	11.65	9.83	2.33	R 7.39	6.93	0.50	2.22	R 5.80	R 1.89	R 28.32	R 10.32
1993	—	1.71	1.71	6.10	6.83	4.36	11.67	9.47	2.57	R 7.59	R 6.93	0.49	R 2.04	R 5.96	R 1.96	29.25	R 10.30
1994	—	1.70	1.70	6.46	6.74	4.08	12.63	9.55	2.59	R 8.55	R 7.11	0.49	R 2.13	R 6.10	R 1.89	R 29.33	R 10.55
1995	—	1.69	1.69	5.70	6.65	4.06	12.52	10.19	2.68	R 8.34	7.73	0.42	R 2.09	R 6.19	R 1.74	R 29.66	R 10.69
1996	—	1.70	1.70	6.40	7.67	4.99	13.33	10.55	3.10	8.83	8.31	0.40	2.19	6.65	1.93	29.69	11.08
1997	—	1.71	1.71	6.79	7.49	4.61	14.53	10.64	2.68	8.50	7.89	0.45	2.21	6.62	2.04	30.70	11.35
	Expenditures in Million Nominal Dollars																
1970	—	11.7	11.7	234.1	461.9	33.3	15.9	743.8	210.9	71.6	1,537.4	2.7	R 12.4	R 1,798.1	-112.4	R 612.8	R 2,298.5
1975	—	38.5	38.5	441.3	934.7	95.0	32.2	1,357.3	808.9	97.6	3,325.6	7.5	R 12.8	R 3,825.8	-524.9	1,401.0	R 4,701.9
1980	—	46.4	46.4	901.9	1,504.7	315.8	51.7	2,619.1	1,306.9	244.7	6,042.8	14.3	R 43.9	R 7,049.3	-1,191.4	2,398.4	R 8,256.3
1981	—	68.7	68.7	1,083.9	1,586.4	352.5	65.2	2,971.5	1,474.2	312.2	6,762.1	20.8	R 53.2	R 7,988.7	-1,321.0	2,975.7	R 9,643.3
1982	—	226.7	226.7	1,303.4	1,537.8	312.6	64.4	2,747.1	1,128.0	274.5	6,064.4	23.2	R 55.1	R 7,672.8	-1,130.9	2,893.7	R 9,435.6
1983	—	221.5	221.5	1,356.8	1,488.5	283.1	70.8	2,562.3	943.0	R 234.4	R 5,582.1	37.2	R 54.0	R 7,251.6	-1,081.4	R 3,077.2	R 9,247.5
1984	—	255.6	255.6	1,397.1	1,605.5	250.5	57.8	2,505.1	1,101.4	R 257.2	R 5,777.4	11.8	R 46.0	R 7,487.9	-1,187.1	R 3,333.6	R 9,634.4
1985	—	R 223.9	R 223.9	1,395.1	1,544.6	238.4	74.5	R 2,644.5	915.4	R 257.4	R 5,674.7	39.8	R 42.9	R 7,376.4	-1,011.3	R 3,166.1	R 9,531.2
1986	—	R 182.6	R 182.6	1,203.3	1,229.3	163.4	86.4	R 2,147.7	721.3	R 208.7	R 4,556.7	23.1	R 29.5	R 5,995.2	-698.3	R 3,101.8	R 8,398.6
1987	—	195.2	195.2	1,215.6	1,281.4	182.9	109.2	R 2,289.8	661.9	R 207.1	R 4,732.3	11.3	R 21.5	R 6,175.9	-782.8	R 3,392.7	R 8,785.8
1988	—	194.2	194.2	1,174.4	1,254.7	212.1	97.6	R 2,462.5	548.3	R 194.2	R 4,769.5	11.5	R 22.5	R 6,172.0	-704.3	R 3,489.7	R 8,957.4
1989	—	198.4	198.4	1,367.2	1,538.0	260.8	115.3	R 2,602.4	633.1	R 193.1	R 5,342.7	22.7	e R 28.0	e R 6,965.7	R -869.5	R 3,801.7	e R 9,898.0
1990	—	200.4	200.4	1,479.7	1,568.4	323.3	118.1	R 2,810.2	581.2	R 204.2	R 5,605.4	33.6	R 43.4	R 7,368.9	R -807.6	R 4,020.9	R 10,582.2
1991	—	204.7	204.7	1,470.6	1,450.7	264.2	96.7	R 2,865.2	424.7	R 205.8	R 5,307.4	29.0	R 39.9	R 7,057.5	R -667.1	R 4,271.1	R 10,661.6
1992	—	R 193.1	R 193.1	1,720.9	1,418.2	206.1	78.9	R 2,863.8	401.8	R 213.8	R 5,182.6	25.5	R 39.4	R 7,167.1	R -633.9	R 4,347.5	R 10,880.6
1993	—	168.5	168.5	1,964.2	1,457.4	190.6	88.5	R 2,789.7	393.8	R 214.6	R 5,134.7	22.7	R 40.2	R 7,336.2	R -568.4	R 4,519.4	R 11,287.2
1994	—	170.8	170.8	2,223.0	1,386.3	171.9	94.4	R 2,852.0	343.1	R 206.3	R 5,053.9	20.0	R 47.0	R 7,536.2	R -555.4	R 4,612.1	R 11,592.8
1995	—	176.9	176.9	2,108.8	1,419.6	152.7	97.3	R 3,144.9	234.6	R 212.5	R 5,261.6	20.1	R 50.9	R 7,625.4	R -494.3	R 4,707.0	R 11,838.1
1996	—	192.7	192.7	2,339.5	1,561.1	194.6	120.8	3,315.0	302.5	225.7	5,719.6	22.6	58.3	8,337.9	-540.7	4,791.3	12,588.6
1997	—	210.8	210.8	2,621.8	1,553.0	190.7	133.0	3,405.8	378.4	210.1	5,871.0	20.7	46.3	8,777.2	-682.7	4,992.6	13,087.1

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 138. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Massachusetts

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.05	1.90	1.49	1.62	3.04	1.52	0.56	R 1.60	8.59	R 2.22
1975	2.62	3.14	2.85	3.16	4.92	2.89	1.11	R 2.94	15.30	R 4.19
1980	4.47	5.33	7.05	8.15	8.99	7.10	2.85	R 6.18	22.18	R 8.40
1981	5.40	6.27	8.75	10.54	9.85	8.79	3.51	R 7.37	26.93	R 10.31
1982	5.46	7.38	8.48	10.79	10.76	8.59	3.40	R 7.72	26.29	R 10.57
1983	5.02	8.16	8.26	R 7.64	11.45	R 8.35	3.30	R 7.92	27.00	R 11.07
1984	4.76	7.65	8.45	R 8.02	11.36	R 8.53	3.35	R 7.84	27.82	R 11.11
1985	4.39	7.65	8.10	R 7.72	11.43	R 8.20	3.22	R 7.69	26.16	R 10.72
1986	4.19	7.23	6.22	R 5.65	9.01	R 6.30	2.58	R 6.55	24.38	R 9.53
1987	3.85	6.45	6.10	R 5.80	10.88	R 6.30	2.46	R 6.24	25.52	R 9.61
1988	3.99	6.28	6.22	R 5.23	10.95	R 6.40	2.48	R 6.21	24.88	R 9.64
1989	3.96	6.91	7.01	R 5.22	12.96	R 7.26	2.75	R 6.95	26.70	R 10.43
1990	4.21	7.56	8.21	R 6.28	13.36	R 8.43	2.83	R 7.73	28.31	R 11.61
1991	4.07	7.81	7.80	R 5.53	14.73	R 8.08	2.70	R 7.66	30.47	R 12.04
1992	3.94	7.63	7.00	R 4.78	12.29	R 7.17	2.47	R 7.16	31.11	R 11.33
1993	3.96	8.02	6.79	R 4.97	12.32	R 6.98	2.42	R 7.26	32.25	R 11.48
1994	4.07	8.73	6.59	R 5.05	14.23	R 6.89	2.35	R 7.55	32.49	R 11.93
1995	4.01	8.81	6.39	R 4.68	14.34	R 6.73	2.30	R 7.41	32.99	R 12.13
1996	4.19	8.66	7.39	6.17	15.42	7.79	2.64	7.92	32.97	12.52
1997	4.14	9.24	7.27	5.72	16.07	7.70	2.62	8.22	33.97	13.03
	Expenditures in Million Nominal Dollars									
1970	2.6	158.6	334.9	13.2	10.7	358.9	2.1	R 522.1	273.7	R 795.8
1975	3.3	284.4	628.7	10.6	18.4	657.7	4.4	R 949.8	555.7	R 1,505.5
1980	5.2	511.9	932.9	14.9	22.3	970.1	35.5	R 1,522.7	875.7	R 2,398.4
1981	8.8	616.0	952.8	10.8	25.6	989.2	44.2	R 1,658.2	1,073.7	R 2,731.9
1982	9.8	736.3	893.3	31.2	27.7	952.2	46.2	R 1,744.6	1,075.4	R 2,820.0
1983	8.1	764.3	845.0	R 7.1	35.1	R 887.2	44.2	R 1,703.8	1,145.6	R 2,849.5
1984	11.6	758.4	886.5	R 9.5	35.1	R 931.1	36.3	R 1,737.4	1,205.5	R 2,942.9
1985	7.2	765.7	847.8	R 25.3	42.1	R 915.2	34.0	R 1,722.1	1,151.9	R 2,874.0
1986	4.1	758.4	669.5	R 16.0	37.3	R 722.8	26.5	R 1,511.9	1,131.8	R 2,643.6
1987	3.1	696.2	660.3	R 17.4	54.1	R 731.8	18.5	R 1,449.6	1,260.4	R 2,709.9
1988	3.2	702.8	671.1	R 8.9	53.4	R 733.4	19.4	R 1,458.8	1,317.0	R 2,775.8
1989	2.7	799.5	838.4	R 8.0	75.7	R 922.2	22.2	R 1,746.6	1,437.0	R 3,183.6
1990	3.1	835.2	826.4	R 5.8	65.8	R 898.0	31.0	R 1,767.3	1,504.9	R 3,272.3
1991	1.5	835.0	755.8	R 4.7	65.4	R 826.0	31.2	R 1,693.6	1,599.2	R 3,292.8
1992	2.4	947.8	766.6	R 7.0	54.3	R 827.9	30.0	R 1,808.1	1,651.9	R 3,460.0
1993	2.1	1,009.8	812.0	R 7.0	59.7	R 878.7	30.1	R 1,920.8	1,737.1	R 3,657.9
1994	1.3	1,069.6	758.3	R 6.3	71.9	R 836.4	28.6	R 1,935.9	1,779.1	R 3,715.0
1995	1.4	956.4	723.0	R 3.5	75.4	R 801.8	31.2	R 1,790.7	1,800.2	R 3,590.9
1996	1.7	1,015.6	801.7	5.2	91.3	898.2	35.7	1,951.1	1,828.6	3,779.6
1997	1.4	1,059.1	800.8	6.1	95.3	902.3	25.8	1,988.6	1,886.3	3,874.9

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 139. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Massachusetts

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.89	1.40	1.10	0.81	1.54	2.86	0.37	0.72	0.56	0.83	8.05	1.64
1975	2.62	2.64	2.44	2.62	2.84	4.73	1.89	2.22	1.11	R 2.31	14.39	4.51
1980	1.67	4.65	6.36	6.12	5.52	9.69	3.81	5.37	2.85	R 5.03	22.08	R 9.34
1981	1.89	5.63	8.03	7.31	5.85	10.86	4.72	6.87	3.51	6.21	26.61	R 12.28
1982	2.01	6.28	7.76	7.73	7.02	10.07	4.16	6.22	3.40	R 6.17	25.61	R 11.45
1983	1.97	7.27	7.17	R 7.64	7.48	9.28	4.21	6.29	3.30	R 6.63	25.60	R 13.26
1984	2.38	7.01	7.04	R 8.02	7.30	8.85	4.88	6.25	3.35	R 6.45	27.55	R 13.53
1985	R 2.39	6.88	6.72	R 7.72	12.89	9.18	4.31	R 5.99	NA	6.31	25.20	12.89
1986	R 2.55	6.49	4.57	R 5.65	11.81	7.25	2.46	R 4.01	NA	R 5.01	23.40	R 11.27
1987	2.35	5.75	4.72	R 5.80	11.81	7.56	2.93	4.31	NA	4.96	23.49	R 11.76
1988	R 2.50	5.93	4.51	R 5.23	11.65	7.90	2.36	3.91	NA	4.81	22.72	R 11.31
1989	2.57	5.67	5.38	R 5.22	10.96	8.50	2.69	4.59	NA	5.04	24.05	R 11.57
1990	2.62	6.14	6.38	R 6.28	11.34	9.53	3.05	R 5.04	NA	R 5.50	25.44	R 12.62
1991	R 2.68	5.94	5.73	R 5.53	12.54	10.01	2.28	R 4.55	NA	5.13	27.37	R 12.58
1992	R 2.64	5.65	5.33	R 4.78	10.46	9.83	2.27	4.34	NA	4.99	27.57	R 12.58
1993	R 2.32	5.82	5.16	R 4.97	10.52	9.47	2.46	R 4.46	2.42	R 5.16	28.65	R 13.39
1994	2.23	6.66	5.20	R 5.05	10.32	9.55	2.51	R 4.35	2.35	R 5.75	28.91	R 13.34
1995	2.26	6.42	4.90	R 4.68	10.59	10.19	2.86	R 4.33	2.30	R 5.54	29.37	R 13.28
1996	2.30	6.57	5.83	6.17	11.17	10.55	3.41	5.23	2.64	6.08	29.39	13.52
1997	2.53	7.19	5.45	5.72	11.00	10.64	3.01	4.89	2.62	6.43	30.38	13.91
	Expenditures in Million Nominal Dollars											
1970	1.7	50.1	86.4	0.5	1.0	1.5	35.0	124.4	(s)	R 176.3	R 213.6	R 389.9
1975	2.6	100.1	187.9	0.7	1.9	2.7	108.6	301.8	(s)	404.6	R 559.7	R 964.3
1980	2.0	252.5	278.0	1.0	2.4	9.7	116.3	407.5	0.9	R 662.8	R 983.0	R 1,645.8
1981	2.8	287.0	269.3	R (s)	2.7	11.8	93.5	377.6	1.1	R 668.5	R 1,215.7	R 1,884.2
1982	3.9	393.2	249.2	1.2	3.2	11.3	110.5	375.4	1.1	R 773.6	R 1,196.3	R 1,969.9
1983	3.4	294.2	227.4	R 1.6	4.0	9.4	64.6	306.9	1.1	R 605.6	R 1,255.0	R 1,860.6
1984	7.1	296.2	229.0	0.8	4.0	7.8	102.2	343.8	0.9	R 648.0	R 1,398.9	R 2,046.9
1985	3.9	291.5	223.3	R 4.7	8.4	9.1	85.6	R 331.1	NA	R 626.4	R 1,338.2	R 1,964.6
1986	R 2.3	290.4	177.5	R 9.3	8.6	7.2	53.0	R 255.7	NA	R 548.4	R 1,322.1	R 1,870.5
1987	1.5	275.4	167.1	1.6	10.4	7.7	52.4	R 239.2	NA	R 516.1	R 1,415.8	R 1,931.9
1988	2.1	298.9	167.2	2.1	10.0	7.6	50.8	R 237.7	NA	538.7	R 1,452.2	R 1,990.8
1989	1.9	302.4	242.7	R 1.9	11.3	8.4	65.4	R 329.6	NA	R 633.8	R 1,585.9	R 2,219.7
1990	2.2	321.4	231.8	R 4.5	9.9	3.4	87.0	R 336.7	NA	R 660.3	R 1,694.3	R 2,354.6
1991	0.8	328.2	254.0	R 6.3	9.8	9.6	65.4	R 345.1	NA	R 674.1	R 1,813.6	R 2,487.7
1992	2.2	377.1	207.5	R 2.0	8.2	8.5	52.9	R 279.0	NA	R 658.3	R 1,840.4	R 2,498.7
1993	1.2	395.2	190.2	R 3.2	9.0	2.6	40.1	R 245.2	2.4	R 641.6	R 1,923.1	R 2,564.7
1994	0.5	576.5	168.1	R 2.9	9.2	2.8	47.3	R 230.3	2.4	R 809.8	R 1,982.9	R 2,792.6
1995	0.7	542.2	179.0	R 2.9	9.8	3.5	56.1	R 251.3	2.4	R 796.5	R 2,029.9	R 2,826.4
1996	1.0	648.3	194.2	1.6	11.7	3.6	53.0	264.1	2.9	916.3	2,077.2	2,993.5
1997	0.9	776.7	186.0	1.5	11.5	2.7	43.2	245.0	2.5	1,025.1	2,198.0	3,223.1

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 140. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Massachusetts

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	0.89	0.89	1.03	0.63	0.74	0.81	1.54	5.08	2.86	0.42	1.86	0.60	R 1.42	R 0.67	4.88	R 1.06
1975	—	2.62	2.62	2.28	1.95	2.36	2.62	2.84	7.48	4.73	2.06	3.28	2.25	R 1.42	R 2.23	11.21	R 3.36
1980	—	1.67	1.67	4.09	3.73	5.59	6.12	5.52	14.36	9.69	4.14	8.66	5.92	R 1.42	R 4.98	18.21	R 8.09
1981	—	1.89	1.89	5.01	6.00	6.64	7.31	5.85	18.00	10.86	4.96	9.98	6.81	R 1.42	R 5.99	22.09	R 9.40
1982	—	2.01	2.01	5.55	4.06	6.77	7.73	7.02	17.25	10.07	4.71	9.62	6.21	R 1.42	R 5.75	20.74	R 9.07
1983	—	1.97	1.97	5.56	4.25	6.84	R 7.06	7.48	16.98	9.28	4.57	9.29	6.18	R 1.42	R 5.61	21.54	R 9.07
1984	—	2.38	2.38	5.35	4.64	7.27	R 7.33	7.30	17.63	8.85	4.88	9.61	6.30	R 1.42	R 5.68	22.03	R 9.03
1985	—	R 2.39	R 2.39	5.24	5.21	6.62	R 6.88	12.89	17.61	9.18	4.31	9.25	R 5.83	R 1.42	R 5.34	20.47	R 8.40
1986	—	R 2.55	R 2.55	4.88	4.87	4.35	R 5.54	11.81	15.59	7.25	2.46	6.58	3.67	R 1.93	R 3.83	19.18	R 6.62
1987	—	2.35	2.35	4.13	3.57	4.84	R 4.46	11.81	13.58	7.56	2.93	7.32	4.62	R 1.93	R 4.39	20.32	R 7.58
1988	—	R 2.50	R 2.50	3.91	3.38	4.70	R 4.34	11.65	14.62	7.90	2.36	6.31	4.63	R 1.93	R 4.29	19.94	R 8.22
1989	—	2.57	2.57	3.93	3.20	5.00	R 5.36	10.96	14.48	8.50	2.69	7.21	5.00	d R 1.31	d R 4.42	21.40	d R 8.63
1990	—	2.62	2.62	4.00	3.36	6.71	R 6.75	11.34	14.60	9.53	3.05	7.46	5.99	1.45	R 4.79	23.13	R 9.08
1991	—	R 2.68	R 2.68	3.84	3.05	5.41	R 5.42	12.54	16.80	10.01	2.28	6.97	R 5.41	R 1.70	R 4.37	24.98	R 9.20
1992	—	R 2.64	R 2.64	3.99	2.79	5.13	R 4.71	10.46	18.32	9.83	2.27	7.55	R 5.26	R 1.67	R 4.34	25.21	R 8.44
1993	—	R 2.32	R 2.32	4.89	3.30	5.32	R 4.49	10.52	18.96	9.47	2.46	6.84	R 4.89	R 1.61	R 4.72	25.39	R 8.17
1994	—	2.23	2.23	5.12	3.65	5.43	R 4.78	8.77	19.11	9.55	2.51	6.92	R 5.39	R 1.80	R 4.98	24.80	R 8.53
1995	—	2.26	2.26	4.32	3.78	5.48	R 4.41	7.50	R 19.41	10.19	2.86	7.21	R 6.02	R 1.78	R 4.58	24.65	R 8.08
1996	—	2.30	2.30	5.24	3.80	6.58	5.36	8.51	20.08	10.55	3.41	7.99	6.53	1.64	5.30	24.71	8.76
1997	—	2.53	2.53	5.67	4.01	6.45	5.09	12.34	17.86	10.64	3.01	7.05	6.47	1.77	5.61	25.73	9.06
	Expenditures in Million Nominal Dollars																
1970	—	3.2	3.2	23.5	12.0	12.5	2.5	4.0	15.6	1.7	68.1	11.2	127.6	R 10.3	R 164.5	123.4	R 288.0
1975	—	6.9	6.9	55.0	23.7	36.5	3.4	11.6	16.0	2.0	205.3	19.6	318.1	R 8.4	R 388.4	280.3	R 668.7
1980	—	4.0	4.0	120.2	30.5	61.5	12.0	26.5	32.9	4.6	69.3	100.5	337.7	R 7.6	R 469.5	527.3	R 996.8
1981	—	2.8	2.8	153.7	55.4	89.9	9.9	35.7	39.5	4.3	147.1	136.2	518.1	R 8.0	R 682.6	675.0	R 1,357.6
1982	—	4.4	4.4	109.5	41.0	82.9	10.1	32.2	34.5	5.1	163.7	104.9	474.4	R 7.7	R 596.1	612.5	R 1,208.5
1983	—	5.5	5.5	198.3	31.9	53.0	1.6	30.1	35.6	2.0	153.6	104.2	R 412.1	R 8.7	R 624.6	664.8	R 1,289.5
1984	—	6.3	6.3	204.8	33.8	57.8	R 0.8	15.9	39.4	5.1	224.2	117.2	R 494.3	R 8.9	R 714.3	712.2	R 1,426.5
1985	—	10.4	10.4	177.8	36.4	40.2	R 2.0	20.8	36.7	17.7	227.8	100.5	R 482.1	R 8.9	R 679.2	660.4	R 1,339.6
1986	—	R 7.2	R 7.2	119.7	36.0	39.7	R 1.1	37.8	31.8	14.4	210.0	69.3	R 440.0	R 3.0	R 569.9	633.5	R 1,203.4
1987	—	9.8	9.8	145.1	35.0	108.9	R 1.1	42.5	31.3	15.5	131.4	77.6	R 443.2	R 3.0	R 601.2	696.2	R 1,297.3
1988	—	R 8.8	R 8.8	127.3	39.6	67.1	R 1.2	31.5	32.5	17.3	54.2	65.4	R 308.7	R 3.1	R 447.9	697.0	R 1,145.0
1989	—	7.3	7.3	144.8	30.3	74.0	R 1.7	25.8	33.0	21.2	57.9	72.8	R 316.7	d R 5.7	d R 474.6	758.0	d R 1,232.6
1990	—	4.8	4.8	183.5	29.9	85.0	R 0.7	40.0	34.2	R 20.7	50.6	82.5	343.7	R 12.4	R 544.4	801.6	R 1,346.0
1991	—	R 5.7	R 5.7	218.5	40.0	37.7	0.6	18.3	35.2	17.4	20.2	73.8	R 243.2	R 8.7	R 476.0	834.7	R 1,310.7
1992	—	R 10.2	R 10.2	293.4	29.0	55.5	R 2.5	14.1	39.2	17.3	31.0	R 84.2	R 272.6	R 9.4	R 585.6	831.3	R 1,416.9
1993	—	6.7	6.7	480.9	31.8	43.5	R (s)	17.4	41.3	8.7	54.7	76.6	R 274.5	R 10.2	R 772.2	832.1	R 1,604.3
1994	—	3.6	3.6	487.2	21.5	35.5	R (s)	10.6	43.5	17.4	43.1	75.5	R 247.5	R 16.0	R 754.4	821.5	R 1,575.9
1995	—	2.4	2.4	477.2	31.4	39.5	R 0.9	10.5	43.4	20.0	26.6	73.6	R 245.9	R 17.4	R 742.9	843.1	R 1,586.0
1996	—	2.2	2.2	537.1	32.1	47.4	(s)	16.4	43.6	20.6	36.8	85.1	282.4	19.7	841.4	850.4	1,691.8
1997	—	2.3	2.3	625.9	24.4	43.8	0.6	25.1	40.9	21.9	33.3	82.1	272.1	18.0	918.3	871.7	1,790.0

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.

R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 141. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Massachusetts

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.89	—	2.17	1.35	0.75	1.54	5.08	2.86	0.34	2.37	2.37	5.66	2.38
1975	2.62	—	3.45	2.90	2.09	2.84	7.48	4.73	1.72	4.24	4.24	14.77	4.25
1980	—	—	9.02	7.40	6.51	5.52	14.36	9.69	3.22	9.01	9.01	21.74	R 9.03
1981	—	—	10.84	9.06	7.80	5.85	18.00	10.86	4.12	10.25	10.25	24.42	10.27
1982	—	—	10.92	8.75	7.51	7.02	17.25	10.07	3.91	9.54	9.54	23.77	9.55
1983	—	—	10.44	8.82	6.87	7.48	16.98	9.28	3.96	9.00	9.00	22.92	R 9.02
1984	—	—	10.27	9.02	6.42	7.30	17.63	8.85	4.39	8.67	8.67	27.61	8.70
1985	—	—	9.99	9.24	6.04	12.89	17.61	9.18	3.77	8.84	8.84	23.83	R 8.87
1986	—	—	8.41	7.07	4.18	11.81	15.59	7.25	2.09	6.93	6.93	22.13	6.95
1987	—	—	7.55	6.82	4.12	11.81	13.58	7.56	2.55	7.09	7.09	30.14	R 7.13
1988	—	—	7.41	6.90	4.02	11.65	14.62	7.90	2.00	7.28	7.28	28.58	7.32
1989	—	—	8.28	7.43	4.61	10.96	14.48	8.50	2.33	7.78	7.78	30.55	R 7.82
1990	—	3.47	9.32	9.37	5.83	11.34	14.60	9.53	2.44	8.89	8.89	31.94	R 8.93
1991	—	3.75	8.71	9.22	5.00	12.54	16.80	10.01	1.94	9.22	9.22	34.15	R 9.27
1992	—	3.52	8.54	8.78	4.63	10.46	18.32	9.83	2.11	9.11	9.11	33.04	R 9.16
1993	—	4.79	8.24	8.66	4.36	10.52	18.96	9.47	2.37	8.83	8.83	35.78	R 8.88
1994	—	2.26	7.96	8.48	4.08	8.49	19.11	9.55	2.53	8.85	8.85	36.93	R 8.91
1995	—	4.11	8.36	8.78	4.06	8.58	R 19.41	10.19	2.60	9.46	9.46	41.95	R 9.53
1996	—	4.40	9.29	9.76	4.99	8.54	20.08	10.55	3.01	9.77	9.77	42.60	9.83
1997	—	3.63	9.39	9.49	4.61	7.56	17.86	10.64	2.60	9.79	9.79	42.46	9.85
	Expenditures in Million Nominal Dollars												
1970	(s)	—	3.0	25.2	33.3	R (s)	13.6	740.6	7.0	822.8	822.8	R 2.0	R 824.8
1975	(s)	—	4.0	75.8	94.4	R (s)	19.6	1,352.5	11.3	1,558.0	1,558.0	R 5.3	R 1,563.3
1980	—	—	12.5	211.1	315.5	0.5	40.4	2,604.7	18.2	3,202.9	3,202.9	R 12.4	R 3,215.3
1981	—	—	11.4	262.2	352.1	1.2	48.5	2,955.5	27.5	3,658.4	3,658.4	R 11.3	R 3,669.6
1982	—	—	9.1	295.7	312.5	1.2	42.4	2,730.8	35.9	3,427.6	3,427.6	R 9.6	R 3,437.2
1983	—	—	8.7	344.4	283.1	1.6	43.7	2,550.9	3.8	3,236.1	3,236.1	R 11.8	R 3,247.9
1984	—	—	7.2	396.1	250.5	2.7	48.4	2,492.2	4.0	3,201.2	3,201.2	R 16.9	R 3,218.1
1985	—	—	6.8	405.4	238.4	3.2	45.0	R 2,617.7	20.7	R 3,337.3	R 3,337.3	R 15.7	R 3,353.0
1986	—	—	6.2	321.4	163.4	2.7	39.0	2,126.1	8.0	2,666.7	2,666.7	R 14.4	R 2,681.1
1987	—	—	4.7	324.0	182.9	2.2	38.4	R 2,266.6	7.4	R 2,826.2	R 2,826.2	R 20.5	R 2,846.7
1988	—	—	4.8	316.8	212.1	2.6	39.9	R 2,437.7	8.5	R 3,022.3	R 3,022.3	R 23.5	R 3,045.8
1989	—	—	4.9	342.3	260.8	2.5	40.5	R 2,572.8	17.4	R 3,241.1	R 3,241.1	R 20.8	R 3,262.0
1990	—	(s)	4.5	409.8	323.3	R 2.4	42.0	R 2,786.1	21.2	R 3,589.3	R 3,589.3	R 20.0	R 3,609.3
1991	—	(s)	2.0	390.5	264.2	3.1	43.2	R 2,838.2	5.4	R 3,546.7	R 3,546.7	R 23.7	R 3,570.4
1992	—	(s)	1.9	378.7	206.1	2.4	48.1	R 2,838.1	5.8	R 3,481.1	R 3,481.1	R 23.9	R 3,505.0
1993	—	(s)	3.5	402.4	190.6	2.3	50.7	R 2,778.4	5.2	R 3,433.2	R 3,433.2	R 27.0	R 3,460.3
1994	—	(s)	2.9	412.2	171.9	2.7	53.4	R 2,831.7	5.9	R 3,480.6	R 3,480.7	R 28.6	R 3,509.3
1995	—	R (s)	3.6	464.9	152.7	1.6	53.3	3,121.5	3.3	R 3,800.9	3,800.9	R 33.8	R 3,834.7
1996	—	(s)	4.2	505.5	194.6	1.4	53.5	3,290.7	38.6	4,088.5	4,088.5	35.1	4,123.6
1997	—	(s)	4.1	512.1	190.7	1.1	50.3	3,381.2	23.1	4,162.5	4,162.5	36.6	4,199.1

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 142. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Massachusetts

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.31	0.33	0.38	0.43	—	0.38	0.20	—	0.37
1975	1.31	1.32	1.93	2.17	—	1.93	0.18	—	1.66
1980	1.95	3.40	3.84	6.00	—	3.86	0.41	—	3.41
1981	2.46	3.94	4.74	7.51	—	4.76	0.44	—	3.97
1982	2.49	4.02	4.21	7.08	—	4.24	0.50	—	3.30
1983	2.25	3.89	4.24	6.28	—	4.27	0.56	—	3.04
1984	2.14	4.04	4.58	6.10	—	4.63	1.05	—	3.62
1985	1.97	3.41	3.91	5.80	—	3.97	0.60	—	2.74
1986	1.78	2.27	2.24	3.54	—	2.27	0.88	—	2.03
1987	1.61	2.40	2.71	3.22	—	2.73	0.92	—	2.26
1988	1.61	2.22	2.26	3.63	—	2.32	0.96	—	2.04
1989	1.60	2.37	2.64	4.22	—	2.72	0.70	—	R 2.17
1990	1.73	2.40	2.86	5.41	—	2.91	0.62	—	R 2.14
1991	1.73	2.18	2.20	4.58	—	2.24	0.61	—	1.85
1992	1.69	2.59	2.36	4.28	—	2.39	0.50	—	R 1.89
1993	1.68	2.63	2.61	4.14	—	2.64	0.49	—	R 1.96
1994	1.68	2.24	2.62	3.95	—	2.66	0.49	—	R 1.89
1995	1.68	2.01	2.58	3.72	—	2.65	0.42	—	R 1.74
1996	1.69	2.96	2.99	4.68	—	3.06	0.40	—	1.93
1997	1.70	3.01	2.60	4.48	—	2.64	0.45	—	2.04
	Expenditures in Million Nominal Dollars								
1970	4.2	1.9	100.8	2.9	—	103.7	2.7	—	112.4
1975	25.6	1.9	483.6	6.3	—	490.0	7.5	—	524.9
1980	35.2	17.3	1,103.1	21.5	—	1,124.6	14.3	—	1,191.4
1981	54.3	27.2	1,206.1	12.7	—	1,218.8	20.8	—	1,321.0
1982	208.5	64.5	817.9	16.9	—	834.7	23.2	—	1,130.9
1983	204.5	99.9	721.1	18.7	—	739.7	37.2	—	1,081.4
1984	230.6	137.7	770.9	36.1	—	807.0	11.8	—	1,187.1
1985	202.4	160.1	581.3	27.8	—	609.0	39.8	—	1,011.3
1986	169.0	34.7	450.3	21.1	—	471.5	23.1	—	698.3
1987	180.8	98.9	470.7	21.1	—	491.8	11.3	—	782.8
1988	180.0	45.4	434.9	32.4	—	467.3	11.5	—	704.3
1989	186.5	120.5	492.5	40.6	—	533.1	22.7	—	R 869.5
1990	190.3	139.5	422.3	15.4	—	437.7	33.6	—	R 807.6
1991	196.7	89.0	333.8	12.6	—	346.4	29.0	—	R 667.1
1992	178.3	102.6	312.1	9.8	—	321.9	25.5	—	R 633.9
1993	158.5	78.3	293.8	9.3	—	303.1	22.7	—	R 568.4
1994	165.3	89.6	246.8	12.3	—	259.0	20.0	—	R 555.4
1995	172.4	133.0	148.5	13.3	—	161.8	20.1	—	R 494.3
1996	187.9	138.5	174.1	12.4	—	186.5	22.6	—	540.7
1997	206.1	160.1	278.8	10.2	—	289.0	20.7	—	682.7

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

—No consumption.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 143. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Michigan

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	0.55	0.42	0.44	0.77	1.09	0.74	1.89	2.71	0.59	R 1.83	R 2.01	0.36	R 1.01	1.12	0.38	5.55	1.70
1975	2.07	1.04	1.23	1.42	2.49	2.08	3.76	4.72	1.96	R 3.57	R 3.73	0.28	R 1.29	2.23	1.02	9.78	3.33
1980	2.27	1.62	1.71	3.05	6.76	6.38	6.62	10.09	3.90	R 8.17	R 8.49	0.49	R 2.12	R 4.38	1.58	15.40	R 6.58
1981	2.41	1.81	1.89	3.65	8.09	7.55	7.05	11.00	5.31	R 10.16	R 9.81	0.50	R 2.41	R 4.89	1.67	17.26	R 7.57
1982	2.47	1.99	2.06	4.51	7.89	7.22	7.57	10.55	4.55	R 9.81	R 9.56	0.53	R 2.42	R 5.08	1.71	18.52	R 7.92
1983	2.19	1.92	1.95	5.41	7.71	6.65	8.15	9.34	4.23	R 9.61	R 8.79	0.59	R 2.30	R 5.05	1.62	18.86	R 8.14
1984	2.16	R 1.94	R 1.96	5.47	7.84	6.39	8.08	9.12	4.72	R 10.06	R 8.76	0.69	R 2.29	R 5.11	1.72	18.81	R 8.20
1985	2.08	1.90	1.92	5.70	7.70	6.09	8.96	9.10	4.45	R 9.85	R 8.69	0.80	R 2.21	R 5.17	1.72	19.88	R 8.44
1986	1.95	1.83	1.84	5.12	5.77	4.20	8.44	6.79	2.84	R 7.42	R 6.57	0.77	R 1.91	R 4.29	1.66	20.35	R 7.45
1987	1.85	1.75	1.76	4.96	6.08	4.09	8.08	7.13	3.00	R 7.42	R 6.81	0.77	R 1.89	R 4.26	1.60	19.26	R 7.56
1988	1.73	1.76	1.76	4.80	5.77	3.85	7.92	7.15	2.86	R 7.33	R 6.68	0.88	R 1.90	R 4.20	1.60	19.39	R 7.40
1989	1.75	1.72	1.72	4.61	6.35	4.39	9.97	7.77	3.01	R 7.17	R 7.33	0.78	e R 1.71	e R 4.31	1.52	19.91	e R 7.65
1990	1.80	1.63	1.63	4.33	7.48	5.65	10.47	8.78	3.00	R 7.57	R 8.26	0.79	R 1.98	R 4.62	1.41	20.85	R 8.00
1991	1.72	1.62	1.62	4.43	6.99	4.94	10.35	8.37	2.54	R 7.38	R 7.89	0.65	R 2.02	R 4.36	1.32	21.18	R 8.05
1992	—	1.58	1.58	4.38	6.83	4.57	9.72	8.16	2.50	R 7.53	R 7.69	0.67	R 1.92	4.45	1.36	21.24	R 7.88
1993	1.68	1.55	1.55	4.39	6.98	4.26	9.69	8.09	2.78	R 7.25	R 7.58	0.60	R 1.62	4.30	1.25	20.98	R 7.83
1994	1.57	1.53	1.53	4.37	6.94	3.91	9.00	8.29	2.77	R 7.59	R 7.68	0.52	R 1.70	R 4.41	1.35	20.84	R 7.80
1995	1.57	1.48	R 1.49	4.07	6.88	3.93	9.08	8.40	2.61	R 7.53	R 7.79	0.65	R 1.68	R 4.24	1.25	20.72	R 7.71
1996	1.68	1.43	1.44	4.35	7.76	4.76	10.74	9.14	2.91	8.33	8.62	0.59	1.61	4.56	1.19	20.86	8.13
1997	1.83	1.40	1.42	4.52	7.54	4.56	10.58	9.03	3.10	6.89	8.30	0.61	1.64	4.67	1.21	20.68	8.18
	Expenditures in Million Nominal Dollars																
1970	73.4	290.3	363.6	620.2	240.6	30.4	43.9	1,378.2	33.7	R 196.8	R 1,923.7	1.5	R 6.3	R 2,915.3	-223.6	1,041.7	R 3,733.5
1975	290.3	634.7	925.0	1,235.6	610.6	66.8	103.9	2,686.4	217.0	R 329.8	R 4,014.6	22.2	R 7.9	R 6,205.3	-733.0	2,139.6	R 7,612.0
1980	250.1	1,049.1	1,299.2	2,596.2	1,087.9	236.9	163.6	5,144.7	315.1	R 1,054.8	R 8,002.9	85.1	R 32.7	R 12,016.1	-1,246.3	3,647.5	R 14,417.3
1981	245.7	1,188.2	1,433.8	2,868.9	1,253.4	258.5	142.5	5,358.8	247.1	R 941.5	R 8,201.8	93.9	R 38.5	R 12,636.9	-1,315.1	4,020.2	R 15,341.9
1982	229.3	1,232.6	1,462.0	3,297.0	1,054.7	229.9	192.1	4,887.5	120.2	R 719.5	R 7,203.9	88.3	R 39.3	R 12,090.4	-1,214.2	4,082.7	R 14,958.9
1983	164.0	1,212.1	1,376.1	3,727.0	995.0	218.7	209.3	4,350.5	87.8	R 719.3	R 6,580.5	105.4	R 39.6	R 11,828.7	-1,172.0	4,405.8	R 15,062.4
1984	149.6	R 1,312.9	R 1,462.5	3,840.6	1,089.9	213.3	217.4	4,454.4	62.1	R 775.3	R 6,812.5	104.9	R 38.8	R 12,259.3	-1,267.0	4,652.7	R 15,645.0
1985	149.7	R 1,349.8	R 1,499.6	3,954.1	1,138.5	223.6	451.8	R 4,466.4	56.0	R 715.5	R 7,051.8	117.0	R 36.6	R 12,659.2	-1,312.2	4,993.3	R 16,340.2
1986	140.3	R 1,353.5	R 1,493.8	3,376.6	890.6	167.7	474.7	R 3,423.7	50.6	R 595.2	R 5,602.4	102.1	R 36.1	R 10,611.1	-1,294.4	5,231.3	R 14,547.9
1987	53.0	R 1,422.5	R 1,475.5	3,189.8	896.7	191.9	514.3	R 3,714.7	51.2	R 617.4	R 5,986.2	119.2	R 37.2	R 10,807.9	-1,413.6	5,127.9	R 14,522.3
1988	38.0	R 1,420.9	R 1,458.9	3,507.2	928.8	185.4	493.9	R 3,843.7	74.0	R 572.4	R 6,098.1	169.0	R 38.8	R 11,272.1	-1,448.5	5,397.5	R 15,221.1
1989	44.2	R 1,331.0	R 1,375.2	3,517.4	919.7	227.7	679.4	R 4,129.1	75.1	R 606.6	R 6,637.6	178.2	e R 51.3	e R 11,759.7	R -1,403.9	5,572.4	e R 15,928.2
1990	51.3	R 1,232.3	R 1,283.6	3,433.8	1,015.7	319.7	553.1	R 4,608.3	44.2	R 664.5	R 7,205.5	181.4	R 58.1	R 11,996.5	R -1,114.4	5,797.5	R 16,679.6
1991	26.3	R 1,204.4	R 1,230.7	3,538.2	1,016.1	283.9	591.1	R 4,457.9	23.2	R 688.1	R 7,060.3	189.1	R 60.0	R 12,070.8	R -1,273.7	6,041.5	R 16,838.6
1992	—	1,108.6	1,108.6	3,783.5	1,007.3	260.5	580.8	R 4,342.7	22.2	R 714.3	R 6,927.8	135.5	R 60.7	R 12,012.2	R -1,138.2	6,008.5	R 16,882.5
1993	(s)	1,100.9	R 1,100.9	3,882.2	1,167.1	247.7	454.0	R 4,461.9	30.9	R 743.0	R 7,104.5	183.3	R 48.8	R 12,322.5	R -1,183.0	6,213.6	R 17,353.1
1994	58.3	1,158.9	1,217.2	3,917.6	1,186.1	227.5	461.4	R 4,605.6	31.7	R 744.5	R 7,256.8	78.5	R 61.9	R 12,568.5	R -1,182.4	6,423.1	R 17,809.2
1995	59.1	R 1,100.8	R 1,159.9	3,812.1	1,167.2	196.3	472.3	4,875.1	23.2	R 780.1	R 7,514.1	170.3	R 71.5	R 12,753.4	R -1,213.5	6,636.4	R 18,176.4
1996	60.0	1,079.0	1,139.0	4,246.3	1,333.3	243.9	640.6	5,305.6	28.7	802.0	8,354.1	168.1	71.6	13,983.7	-1,171.5	6,792.2	19,604.4
1997	66.7	1,035.3	1,101.9	4,264.2	1,361.7	245.0	639.0	5,328.9	26.4	898.2	8,499.1	141.8	65.0	14,066.3	-1,114.3	6,806.0	19,758.0

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 144. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Michigan

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.43	1.00	1.23	1.56	2.07	1.35	0.57	1.10	6.99	R 1.73
1975	3.07	1.58	2.51	3.12	4.29	2.78	1.12	R 1.92	11.32	R 3.13
1980	3.70	3.13	7.05	8.43	8.08	7.25	2.87	R 3.71	16.76	R 5.52
1981	4.12	3.75	8.53	10.34	8.24	8.51	3.53	R 4.38	18.73	R 6.44
1982	4.24	4.66	8.21	10.29	9.35	8.60	3.43	R 5.11	19.25	R 7.15
1983	3.98	5.63	7.98	R 7.65	9.46	R 8.42	3.32	R 5.89	20.60	R 8.17
1984	4.06	5.83	7.87	R 8.40	9.30	R 8.36	3.37	R 6.09	20.33	R 8.34
1985	3.86	6.14	7.66	R 8.47	9.63	R 8.29	3.24	R 6.36	21.62	R 8.74
1986	3.45	5.53	6.07	R 7.50	8.16	R 6.83	2.60	R 5.64	22.13	R 8.31
1987	3.48	5.29	5.81	R 7.46	8.10	R 6.81	2.48	R 5.45	21.45	R 8.24
1988	3.45	5.14	5.81	R 6.96	7.74	R 6.62	2.50	R 5.29	21.68	R 8.02
1989	3.46	4.93	6.40	R 7.64	12.10	R 9.11	2.77	R 5.42	22.17	R 8.13
1990	3.39	4.80	7.57	R 9.53	11.37	R 9.45	3.56	R 5.34	22.95	R 8.45
1991	3.15	4.88	7.06	R 9.71	10.11	R 8.61	3.41	R 5.33	23.63	R 8.62
1992	3.18	4.88	6.53	R 9.01	9.17	R 7.92	3.12	5.20	23.77	R 8.31
1993	3.42	4.87	6.54	R 6.22	9.27	R 7.96	3.05	R 5.23	23.92	R 8.41
1994	3.37	4.82	6.55	R 8.93	10.15	R 8.55	2.96	5.25	24.26	R 8.57
1995	3.08	4.53	6.57	R 8.79	10.10	R 8.51	2.90	4.98	24.44	R 8.40
1996	3.01	4.79	7.47	8.91	11.83	10.07	3.33	5.41	24.83	8.71
1997	3.17	5.00	7.20	9.41	11.63	9.87	3.31	5.60	25.12	9.03
	Expenditures in Million Nominal Dollars									
1970	10.3	345.1	135.5	4.8	35.2	175.5	1.7	R 532.6	408.1	R 940.7
1975	10.1	542.8	284.4	5.3	83.3	373.0	3.2	R 929.1	806.7	R 1,735.8
1980	9.8	1,236.0	377.7	4.0	100.1	481.8	20.5	R 1,748.1	1,273.3	R 3,021.4
1981	6.4	1,390.9	392.2	12.1	88.8	493.2	25.5	R 1,915.9	1,375.7	R 3,291.7
1982	8.5	1,718.6	302.0	32.6	110.7	445.3	26.7	R 2,199.1	1,397.2	R 3,596.3
1983	5.7	1,992.0	229.7	R 19.1	133.2	R 381.9	25.6	R 2,405.1	1,542.3	R 3,947.4
1984	10.1	2,022.8	244.8	R 21.8	148.1	R 414.7	24.5	R 2,472.1	1,547.7	R 4,019.8
1985	8.4	2,143.5	266.0	R 20.4	153.6	R 440.0	23.0	R 2,614.8	1,645.1	R 4,259.9
1986	7.7	1,894.5	208.2	R 14.7	149.6	R 372.5	17.9	R 2,292.6	1,738.9	R 4,031.5
1987	3.6	1,716.0	176.5	R 13.7	184.0	R 374.3	19.0	R 2,112.9	1,758.7	R 3,871.6
1988	5.3	1,861.1	197.0	R 15.8	183.5	R 396.3	20.0	R 2,282.6	1,873.0	R 4,155.7
1989	5.3	1,877.1	177.8	R 17.0	318.7	R 513.5	22.9	R 2,418.7	1,915.0	R 4,333.8
1990	7.9	1,643.5	183.7	R 11.7	269.5	R 464.9	30.9	R 2,147.2	1,982.5	R 4,129.7
1991	7.3	1,709.6	187.5	R 15.4	264.7	R 467.6	31.1	R 2,215.7	2,157.9	R 4,373.6
1992	5.3	1,811.9	161.0	R 10.5	243.6	R 415.1	30.0	R 2,262.2	2,081.7	R 4,344.0
1993	7.0	1,863.8	158.0	R 12.5	266.7	R 437.3	15.0	R 2,323.1	2,184.5	R 4,507.6
1994	8.4	1,815.6	153.9	R 16.3	291.3	R 461.6	14.3	R 2,299.9	2,249.2	R 4,549.1
1995	6.8	1,793.7	157.8	R 11.6	293.3	R 462.7	15.5	R 2,278.8	2,387.3	R 4,666.1
1996	7.1	1,981.6	170.2	11.6	407.6	589.4	17.8	2,595.9	2,448.3	5,044.2
1997	5.2	1,975.2	162.7	13.6	401.3	577.5	12.9	2,570.7	2,461.9	5,032.6

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 145. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Michigan

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.53	0.83	1.05	0.74	1.39	2.71	0.64	1.23	0.57	0.88	7.12	2.11
1975	1.49	1.45	2.33	2.44	2.51	4.72	1.97	2.69	1.12	1.63	11.41	3.40
1980	1.82	3.13	6.53	6.14	5.16	10.09	3.97	6.86	2.87	3.53	17.60	6.38
1981	2.13	3.73	8.02	7.04	5.70	11.00	5.50	8.38	3.53	4.19	19.54	7.57
1982	2.25	4.53	7.69	7.36	6.01	10.55	4.80	7.97	3.43	4.84	20.77	8.39
1983	2.03	5.42	6.58	R 7.65	6.56	9.34	4.65	7.11	3.32	5.57	21.26	R 9.25
1984	R 2.01	5.44	6.58	R 8.40	6.31	9.12	4.76	R 7.10	3.37	5.57	22.04	R 9.52
1985	R 2.00	5.61	6.30	R 8.47	8.66	9.10	4.39	6.92	NA	R 5.69	23.36	10.12
1986	R 1.90	5.03	4.04	R 7.50	8.58	6.79	3.02	R 4.96	NA	4.95	24.24	10.29
1987	1.73	4.88	4.45	R 7.46	8.07	7.13	2.90	R 5.70	NA	4.92	22.31	9.12
1988	1.73	4.81	4.35	R 6.96	8.04	7.15	3.20	R 5.43	NA	4.84	22.48	9.45
1989	1.68	4.61	4.77	R 7.64	8.63	7.77	3.13	R 6.12	NA	4.72	23.20	9.51
1990	1.77	4.43	5.63	R 9.53	9.74	8.78	3.15	R 7.18	NA	4.64	24.21	10.18
1991	R 1.78	4.53	5.04	R 9.71	10.55	8.37	2.79	R 6.93	NA	4.70	24.16	10.23
1992	1.73	4.48	4.77	R 9.01	10.16	8.16	2.66	R 6.72	NA	4.64	24.44	10.11
1993	1.71	4.50	4.74	R 6.22	10.34	8.09	2.83	R 6.84	3.05	4.61	23.64	R 10.98
1994	1.70	4.53	4.50	R 8.93	8.17	8.29	2.81	R 6.21	2.96	4.59	23.44	R 10.94
1995	R 1.71	4.28	4.48	R 8.79	8.25	8.40	2.57	R 5.90	2.90	R 4.35	23.27	10.59
1996	1.70	4.58	5.61	8.91	9.45	9.14	2.95	7.16	3.33	4.73	23.49	10.86
1997	1.72	4.80	5.16	9.41	9.98	9.03	3.08	6.82	3.31	4.93	23.19	11.09
	Expenditures in Million Nominal Dollars											
1970	7.0	111.4	21.4	1.7	4.2	11.4	2.2	40.9	(s)	R 159.4	316.4	475.7
1975	9.0	269.8	48.7	3.1	8.6	23.7	4.8	88.9	(s)	R 367.8	568.1	R 935.9
1980	8.8	606.7	118.8	0.5	11.3	43.6	5.6	179.8	(s)	R 795.8	1,006.9	R 1,802.7
1981	6.1	668.6	110.6	0.8	10.8	51.1	3.9	177.2	0.6	R 852.5	1,121.5	R 1,974.0
1982	8.3	793.1	95.4	0.8	12.6	49.3	6.6	164.6	0.6	R 966.6	1,187.5	R 2,154.1
1983	5.3	900.7	95.5	0.7	16.3	41.4	1.8	155.7	0.6	R 1,062.4	1,246.0	R 2,308.5
1984	R 9.3	896.3	103.0	R 0.7	17.7	49.1	1.3	R 171.7	0.6	R 1,077.8	1,348.6	R 2,426.4
1985	8.0	905.1	86.6	R 0.6	24.4	33.4	7.6	R 152.5	NA	R 1,065.6	1,468.2	R 2,533.7
1986	R 7.9	708.7	69.6	R 0.6	27.8	25.2	4.4	R 127.5	NA	R 844.1	1,582.9	R 2,427.0
1987	3.3	935.4	45.3	R 0.6	32.4	27.2	2.4	R 108.0	NA	R 1,046.7	1,511.3	R 2,557.9
1988	4.9	839.5	61.6	R 0.7	33.6	28.3	3.9	R 128.1	NA	R 972.5	1,601.0	R 2,573.6
1989	4.8	854.5	57.7	R 2.4	40.1	27.4	1.8	R 129.4	NA	R 988.7	1,700.0	R 2,688.7
1990	7.7	738.2	56.8	R 1.0	40.7	R 35.5	1.4	R 135.4	NA	R 881.2	1,815.9	R 2,697.1
1991	R 7.6	778.1	56.9	R 0.9	48.8	25.8	R (s)	R 132.5	NA	R 918.2	R 1,875.0	R 2,793.2
1992	5.3	808.2	49.1	R (s)	47.6	23.7	R (s)	R 120.9	NA	R 934.3	R 1,876.6	2,810.9
1993	6.5	839.9	40.6	R 0.9	52.5	3.3	R (s)	97.4	1.2	943.8	R 2,438.9	3,382.8
1994	7.8	856.8	37.6	R 1.7	41.4	15.8	R (s)	R 96.5	1.2	R 962.3	R 2,500.5	R 3,462.8
1995	7.0	865.6	46.2	R 5.1	42.3	3.4	R (s)	R 97.0	1.2	R 970.7	R 2,552.9	R 3,523.7
1996	7.4	956.6	58.5	7.6	57.5	3.7	(s)	127.3	1.5	1,092.8	2,636.1	3,728.9
1997	5.2	961.3	61.0	3.0	60.7	3.6	1.1	129.4	1.2	1,097.1	2,628.9	3,726.0

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
(s)=Value less than 0.05 million nominal dollars.

NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 146. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Michigan

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	0.55	0.53	0.54	0.53	0.84	0.68	0.74	1.39	5.08	2.71	0.54	R 1.31	R 1.29	R 1.44	0.71	3.74	R 1.02
1975	2.07	1.49	1.82	1.22	2.12	2.27	2.44	2.51	7.48	4.72	1.98	R 3.07	R 2.86	R 1.44	1.81	7.83	2.54
1980	2.27	1.82	2.04	2.87	4.04	5.56	6.14	5.16	14.36	10.09	3.23	R 7.97	R 6.84	R 1.44	R 3.66	13.18	R 4.97
1981	2.41	2.13	2.27	3.46	5.52	6.45	7.04	5.70	18.00	11.00	4.09	R 9.53	R 8.15	R 1.44	R 4.11	14.93	R 5.75
1982	2.47	2.25	2.36	4.20	4.14	6.66	7.36	6.01	17.25	10.55	4.12	R 8.88	R 7.65	R 1.44	R 4.26	16.52	R 6.19
1983	2.19	2.03	2.10	4.93	4.56	6.73	R 7.42	6.56	16.98	9.34	4.02	R 8.50	R 7.58	R 1.44	R 4.44	16.15	R 6.56
1984	2.16	R 2.01	R 2.07	4.82	4.85	6.61	R 7.50	6.31	17.63	9.12	4.76	R 8.79	R 8.08	R 1.44	R 4.50	15.97	R 6.68
1985	2.08	R 2.00	2.03	4.95	5.00	6.38	R 7.14	8.66	17.61	9.10	4.39	R 8.41	R 8.11	R 1.44	R 4.70	16.75	R 6.96
1986	1.95	R 1.90	R 1.92	4.40	3.59	4.26	R 5.21	8.58	15.59	6.79	3.02	R 5.80	R 6.34	R 1.51	R 4.04	16.88	R 6.41
1987	1.85	1.73	1.76	4.29	3.40	4.79	R 4.84	8.07	13.58	7.13	2.90	R 6.63	R 6.46	R 1.51	R 4.22	15.95	R 6.84
1988	1.73	1.73	1.73	4.19	3.21	4.63	R 4.59	8.04	14.62	7.15	3.20	R 5.66	R 6.23	R 1.51	R 4.06	15.94	R 6.46
1989	1.75	1.68	R 1.70	4.01	2.84	5.24	R 5.61	8.63	14.48	7.77	3.13	R 6.16	R 6.58	d R 1.31	d R 4.08	16.28	d R 6.53
1990	1.80	1.77	1.78	3.72	3.06	5.54	R 6.73	9.74	14.60	8.78	3.15	R 6.82	R 6.96	R 1.31	R 3.99	17.15	R 6.29
1991	1.72	R 1.78	R 1.77	3.85	2.87	5.22	R 5.59	10.55	16.80	8.37	2.79	R 5.90	R 6.91	1.40	R 4.22	17.26	R 6.59
1992	—	1.73	1.73	3.78	2.25	5.24	R 5.02	10.16	18.32	8.16	2.66	R 5.99	R 6.90	R 1.40	R 4.23	17.29	R 6.56
1993	1.68	1.71	1.71	3.78	2.99	5.09	R 5.06	10.34	18.96	8.09	2.83	R 5.41	R 6.31	R 1.36	R 4.01	15.65	R 5.83
1994	1.57	1.70	1.65	3.80	2.98	4.83	R 5.17	7.16	19.11	8.29	2.81	R 5.23	R 6.13	R 1.49	R 3.84	15.37	R 5.61
1995	1.57	R 1.71	R 1.67	3.47	3.26	4.66	R 4.78	7.56	R 19.41	8.40	2.57	R 5.60	R 6.31	R 1.49	3.67	15.02	5.45
1996	1.68	1.70	1.69	3.73	3.07	5.67	5.79	9.19	20.08	9.14	2.95	6.43	7.23	1.36	3.99	14.88	5.68
1997	1.83	1.72	1.76	3.86	4.05	5.43	5.29	8.96	17.86	9.03	3.08	5.50	6.35	1.44	4.08	14.56	5.71
	Expenditures in Million Nominal Dollars																
1970	73.4	99.3	172.7	136.5	21.5	33.3	9.2	4.3	56.5	39.2	12.0	R 54.4	R 230.5	R 4.5	R 544.2	317.2	R 861.4
1975	290.3	158.8	449.1	362.3	54.6	115.9	11.4	11.2	64.9	46.9	32.6	R 124.4	R 462.0	R 4.6	R 1,277.9	764.8	R 2,042.8
1980	250.1	198.2	448.3	700.3	94.0	155.7	39.5	49.7	156.4	51.3	56.3	R 609.5	R 1,212.4	R 11.7	R 2,372.8	1,367.4	R 3,740.1
1981	245.7	215.8	461.5	768.1	130.1	200.1	30.6	36.5	188.1	51.4	41.1	R 411.5	R 1,089.4	R 12.3	R 2,331.3	1,522.9	R 3,854.2
1982	229.3	205.6	435.0	752.9	71.4	171.5	6.9	63.0	164.3	45.6	49.2	R 299.6	R 871.6	R 11.9	R 2,071.4	1,497.9	R 3,569.3
1983	164.0	190.0	353.9	822.5	82.8	144.5	4.2	52.2	169.4	29.2	55.5	R 286.6	R 824.5	R 13.5	R 2,014.4	1,617.5	R 3,631.8
1984	149.6	R 199.5	R 349.1	895.4	89.7	153.5	2.7	41.8	187.6	39.8	36.5	R 309.1	R 860.7	R 13.7	R 2,118.9	1,756.5	R 3,875.4
1985	149.7	R 195.2	R 344.9	884.9	92.2	157.4	2.8	264.8	174.6	R 57.0	30.5	R 271.2	R 1,050.5	R 13.7	R 2,294.0	1,880.0	R 4,173.9
1986	140.3	R 188.4	R 328.7	759.6	80.6	113.8	R 1.8	288.4	151.1	41.1	26.9	R 211.4	R 915.2	R 18.2	R 2,021.7	1,909.5	R 3,931.2
1987	53.0	R 164.7	R 217.7	526.4	79.0	118.7	R 2.2	287.9	148.8	R 42.9	25.8	R 241.4	R 946.7	R 18.1	R 1,708.9	1,858.0	R 3,566.9
1988	38.0	R 187.9	R 225.9	800.5	61.2	134.1	R 1.5	266.6	154.5	40.0	29.6	R 202.6	R 890.1	R 18.9	R 1,935.3	1,923.4	R 3,858.7
1989	44.2	R 157.4	R 201.6	782.3	72.8	115.0	R 2.2	311.5	157.0	43.8	24.2	R 214.9	R 941.4	d R 28.4	d R 1,953.7	1,957.3	d R 3,911.0
1990	51.3	R 158.6	R 209.9	1,041.2	80.1	109.9	R 1.3	R 232.9	162.9	R 45.0	20.4	R 263.4	R 916.0	R 27.2	R 2,194.3	1,999.1	R 4,193.5
1991	26.3	R 137.6	R 163.8	1,032.4	66.0	139.0	R 2.0	267.6	167.6	48.8	7.9	R 289.3	R 988.3	R 28.9	R 2,213.4	2,008.1	R 4,221.5
1992	—	131.8	131.8	1,143.2	53.0	141.1	R 1.2	280.3	186.4	40.7	7.9	R 302.0	R 1,012.6	30.8	R 2,318.4	2,049.7	R 4,368.2
1993	(s)	133.9	133.9	1,161.1	88.4	132.8	R 2.1	R 124.5	196.4	43.9	11.3	R 272.9	R 872.4	R 33.8	R 2,201.3	1,589.7	R 3,791.0
1994	58.3	119.0	177.3	1,227.5	71.2	132.8	1.8	113.1	207.0	50.8	10.7	R 266.9	R 854.3	R 46.4	R 2,305.5	1,672.9	R 3,978.4
1995	59.1	R 122.8	R 181.9	1,126.6	107.3	101.2	0.9	128.4	R 206.6	57.8	3.4	R 269.0	R 874.5	R 54.8	R 2,237.9	1,695.7	R 3,933.6
1996	60.0	120.2	180.3	1,284.2	75.5	130.0	1.4	168.8	207.4	68.1	3.8	318.0	972.8	52.4	2,489.7	1,707.2	4,196.9
1997	66.7	101.2	167.9	1,301.1	209.0	133.4	1.3	171.3	194.9	60.3	4.1	306.8	1,081.1	50.9	2,601.0	1,714.7	4,315.7

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 147. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Michigan

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.53	—	2.17	1.27	0.74	1.39	5.08	2.71	0.57	2.50	2.50	—	2.50
1975	1.49	—	3.45	2.77	2.08	2.51	7.48	4.72	1.76	4.46	4.46	—	4.46
1980	—	—	9.02	7.19	6.38	5.16	14.36	10.09	3.49	9.63	9.63	—	9.63
1981	—	—	10.84	8.64	7.55	5.70	18.00	11.00	5.21	10.62	10.62	—	10.62
1982	—	—	10.92	8.34	7.22	6.01	17.25	10.55	4.68	10.22	10.22	—	10.22
1983	—	—	10.44	8.26	6.65	6.56	16.98	9.34	4.49	9.17	9.17	—	9.17
1984	—	—	10.27	8.65	6.39	6.31	17.63	9.12	4.44	9.03	9.03	—	9.03
1985	—	—	9.99	8.55	6.09	8.66	17.61	9.10	4.38	8.96	8.96	—	8.96
1986	—	—	8.41	6.69	4.20	8.58	15.59	6.79	2.45	6.73	6.73	—	6.73
1987	—	—	7.55	6.86	4.09	8.07	13.58	7.13	2.90	6.97	6.97	—	6.97
1988	—	—	7.41	6.50	3.85	8.04	14.62	7.15	2.26	6.93	6.93	—	6.93
1989	—	—	8.28	6.94	4.39	8.63	14.48	7.77	2.49	7.50	7.50	—	7.50
1990	—	1.94	9.32	8.24	5.65	9.74	14.60	8.78	2.42	8.53	8.53	—	8.53
1991	—	2.07	8.71	7.88	4.94	10.55	16.80	8.37	2.09	8.12	8.12	26.86	8.12
1992	—	0.95	8.54	7.74	4.57	10.16	18.32	8.16	2.14	7.92	7.92	27.25	7.93
1993	—	3.25	8.24	7.78	4.26	10.34	18.96	8.09	2.46	7.86	7.86	26.81	7.86
1994	—	2.75	7.96	7.79	3.91	9.14	19.11	8.29	2.62	8.00	8.00	30.90	8.00
1995	—	2.96	8.36	7.67	3.93	9.55	R 19.41	8.40	2.66	8.11	8.11	31.39	8.11
1996	—	3.26	9.29	8.48	4.76	8.78	20.08	9.14	2.91	8.86	8.86	31.78	8.86
1997	—	3.85	9.39	8.32	4.56	8.28	17.86	9.03	3.10	8.70	8.70	31.89	8.70
	Expenditures in Million Nominal Dollars												
1970	R (s)	—	7.9	46.9	30.4	R (s)	40.8	1,327.5	1.5	1,455.3	1,455.6	—	1,455.6
1975	R (s)	—	6.0	144.2	65.8	0.9	60.0	2,615.8	4.7	2,897.4	2,897.5	—	2,897.5
1980	—	—	22.2	408.1	236.9	2.4	128.6	5,049.8	5.1	5,853.1	5,853.1	—	5,853.1
1981	—	—	13.7	522.8	258.5	6.3	154.7	5,256.3	9.8	6,222.0	6,222.0	—	6,222.0
1982	—	—	8.7	464.9	229.9	5.9	135.2	4,792.7	1.9	5,639.1	5,639.1	—	5,639.1
1983	—	—	17.1	509.3	218.7	7.6	139.3	4,279.9	2.8	5,174.7	5,174.7	—	5,174.7
1984	—	—	9.4	569.6	213.3	9.9	154.3	4,365.6	1.5	5,323.5	5,323.5	—	5,323.5
1985	—	—	10.1	607.5	223.6	9.1	143.6	R 4,376.0	2.7	R 5,372.6	R 5,372.6	—	R 5,372.6
1986	—	—	10.6	488.8	167.7	8.8	124.3	3,357.5	0.5	R 4,158.2	R 4,158.2	—	R 4,158.2
1987	—	—	9.2	546.8	191.9	10.0	122.4	R 3,644.6	0.9	R 4,525.8	R 4,525.8	—	R 4,525.8
1988	—	—	9.0	525.7	185.4	10.1	127.0	R 3,775.4	R (s)	R 4,633.1	R 4,633.1	—	R 4,633.1
1989	—	—	11.2	558.0	227.7	9.0	129.1	R 4,057.9	1.8	R 4,994.7	R 4,994.7	—	R 4,994.7
1990	—	(s)	10.1	656.3	319.7	R 10.0	133.9	R 4,527.8	1.4	R 5,659.3	R 5,659.3	—	R 5,659.3
1991	—	(s)	9.0	625.2	283.9	10.0	137.8	R 4,383.3	0.7	R 5,449.9	R 5,449.9	R (s)	R 5,450.3
1992	—	(s)	7.8	648.5	260.5	R 9.2	153.3	R 4,278.4	1.3	R 5,359.0	R 5,359.0	R (s)	R 5,359.4
1993	—	(s)	8.2	827.7	247.7	10.2	161.5	R 4,414.8	1.1	R 5,671.3	R 5,671.3	R (s)	R 5,671.8
1994	—	(s)	9.5	855.0	227.5	15.6	170.2	R 4,539.0	1.6	R 5,818.4	R 5,818.4	R 0.5	R 5,818.9
1995	—	R (s)	9.8	852.8	196.3	8.3	R 169.9	4,813.9	1.6	R 6,052.5	R 6,052.6	R (s)	R 6,053.1
1996	—	(s)	10.1	966.5	243.9	6.7	170.6	5,233.8	2.3	6,633.8	6,633.9	0.5	6,634.4
1997	—	(s)	9.3	996.7	245.0	5.7	160.3	5,265.0	1.0	6,683.0	6,683.2	(s)	6,683.6

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 148. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Michigan

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.36	0.42	0.63	0.65	—	0.63	0.36	—	0.38
1975	0.92	1.28	1.97	2.05	—	1.98	0.28	—	1.02
1980	1.56	2.74	4.10	6.07	—	4.24	0.49	—	1.58
1981	1.75	3.29	5.67	7.44	—	5.85	0.50	—	1.67
1982	1.94	3.85	4.93	7.04	—	5.33	0.53	—	1.71
1983	1.89	4.39	4.67	6.03	—	5.09	0.59	—	1.62
1984	1.91	4.55	4.68	5.98	—	5.19	0.69	—	1.72
1985	1.88	4.43	4.64	5.60	—	5.15	0.80	—	1.72
1986	1.81	3.64	2.58	3.44	—	2.83	0.77	—	1.66
1987	1.75	2.76	3.14	3.98	—	3.35	0.77	—	1.60
1988	1.76	2.56	2.64	3.59	—	2.79	0.88	—	1.60
1989	1.72	1.75	2.97	4.21	—	3.15	0.78	—	1.52
1990	1.60	2.11	2.89	4.60	—	3.26	0.79	—	1.41
1991	1.59	1.96	2.44	4.51	—	2.89	0.65	—	1.32
1992	1.56	1.95	2.44	4.39	—	2.92	0.67	—	1.36
1993	1.53	2.42	2.77	3.97	—	3.05	0.60	—	1.25
1994	1.51	2.40	2.76	3.67	—	2.95	0.52	—	1.35
1995	1.45	2.00	2.62	3.90	—	2.94	0.65	—	1.25
1996	1.40	2.69	2.91	4.87	0.97	3.25	0.59	—	1.19
1997	1.37	2.56	3.11	4.44	—	3.39	0.61	—	1.21
	Expenditures in Million Nominal Dollars								
1970	173.4	27.2	17.9	3.6	—	21.5	1.5	—	223.6
1975	456.8	60.7	174.9	18.4	—	193.2	22.2	—	733.0
1980	832.3	53.2	248.2	27.5	—	275.7	85.1	—	1,246.3
1981	959.9	41.3	192.3	27.7	—	220.0	93.9	—	1,315.1
1982	1,010.3	32.4	62.6	20.8	—	83.3	88.3	—	1,214.2
1983	1,011.2	11.8	27.6	16.0	—	43.7	105.4	—	1,172.0
1984	1,094.1	26.1	22.9	19.1	—	41.9	104.9	—	1,267.0
1985	1,138.3	20.6	15.2	21.1	—	36.3	117.0	—	1,312.2
1986	1,149.5	13.8	18.8	10.3	—	29.0	102.1	—	1,294.4
1987	1,250.9	12.0	22.1	9.4	—	31.5	119.2	—	1,413.6
1988	1,222.8	6.2	40.1	10.4	—	50.5	169.0	—	1,448.5
1989	1,163.5	3.5	47.4	11.2	—	58.6	178.2	—	R 1,403.9
1990	1,058.2	10.8	20.9	9.1	—	30.0	181.4	—	R 1,114.4
1991	1,052.0	18.1	14.5	7.5	—	22.0	189.1	—	R 1,273.7
1992	966.2	20.1	12.8	7.5	—	20.2	135.5	—	R 1,138.2
1993	953.5	17.3	18.3	7.9	—	26.1	183.3	—	R 1,183.0
1994	1,023.6	17.6	19.3	6.8	—	26.1	78.5	—	R 1,182.4
1995	964.3	26.1	18.1	9.3	—	27.4	170.3	—	R 1,213.5
1996	944.3	23.7	22.6	8.2	(s)	30.8	168.1	—	1,171.5
1997	923.7	26.4	20.1	7.9	—	28.1	141.8	—	1,114.3

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 149. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Minnesota

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	0.53	0.40	0.41	0.66	1.08	0.75	1.80	2.97	0.59	R 1.38	R 2.02	—	R 0.98	R 1.28	0.34	6.10	1.86
1975	1.80	0.69	0.83	1.17	2.51	2.09	3.67	4.63	1.80	R 2.97	R 3.59	0.24	R 1.32	2.13	0.52	8.64	3.18
1980	—	1.12	1.12	2.85	6.72	6.47	5.82	9.55	3.52	R 6.01	R 7.94	0.44	R 1.99	4.41	0.91	13.26	R 6.89
1981	—	1.22	1.22	3.65	7.84	7.60	6.34	10.56	4.52	R 8.54	R 9.22	0.46	R 2.22	R 5.04	0.96	14.57	R 8.06
1982	—	1.40	1.40	4.57	7.94	7.19	7.20	10.51	4.09	R 6.88	R 9.05	0.44	R 2.23	R 5.40	1.02	16.13	R 8.44
1983	—	1.49	1.49	5.18	7.75	6.39	7.56	9.52	3.99	R 6.80	R 8.49	0.49	R 2.13	R 5.23	1.06	16.46	R 8.49
1984	—	R 1.47	R 1.47	5.32	7.78	6.27	7.52	9.39	4.44	R 7.31	R 8.44	0.53	R 2.09	R 5.41	1.14	15.70	R 8.41
1985	—	1.51	1.51	5.13	7.59	5.93	8.36	9.73	4.05	R 7.05	R 8.49	0.50	R 2.03	R 5.24	1.09	15.81	R 8.38
1986	—	1.44	1.44	4.61	5.69	4.04	8.20	7.42	2.88	R 5.79	R 6.51	0.50	R 1.88	R 4.35	1.03	16.07	R 7.25
1987	—	1.26	1.26	3.72	6.01	4.15	6.96	7.71	2.43	R 5.28	R 6.71	0.51	R 1.80	4.02	0.99	15.72	R 7.25
1988	—	1.25	1.25	3.87	5.89	3.94	7.60	7.81	2.36	R 5.60	R 6.82	0.49	R 1.72	3.97	0.99	15.80	R 7.32
1989	—	1.26	1.26	3.87	6.57	4.47	8.85	8.72	2.38	R 4.92	R 7.52	0.49	e R 1.62	e R 4.22	R 1.02	15.57	e R 7.57
1990	—	1.32	1.32	3.87	8.05	5.68	9.13	9.56	2.50	R 4.82	R 8.34	0.48	R 1.70	R 4.56	R 1.01	15.68	R 8.06
1991	—	1.30	1.30	3.70	7.09	4.87	8.15	9.31	2.11	R 5.12	R 7.92	0.47	R 1.73	R 4.42	1.02	16.06	R 7.88
1992	—	1.24	1.24	3.99	6.94	4.64	7.24	9.11	1.79	R 5.02	R 7.64	0.44	R 1.65	R 4.46	0.97	16.23	R 7.82
1993	—	1.21	1.21	4.36	6.98	4.33	8.81	9.26	2.18	R 5.29	R 7.76	0.41	R 1.53	R 4.55	R 0.92	16.46	R 7.96
1994	—	1.22	1.22	4.16	7.00	3.96	7.95	9.42	2.17	R 5.54	R 7.78	0.47	R 1.69	R 4.47	R 0.97	16.55	R 7.95
1995	—	1.21	1.21	3.73	6.98	4.00	8.12	9.39	2.41	R 5.33	R 7.75	0.48	R 1.67	R 4.38	R 0.95	16.40	R 7.75
1996	—	1.12	1.12	4.38	7.94	4.79	9.98	10.43	2.98	5.18	8.64	0.48	1.70	4.91	0.92	16.30	8.32
1997	—	1.15	1.15	4.58	7.79	4.65	9.64	10.37	3.07	5.11	8.53	0.47	1.65	4.91	0.99	16.48	8.46
	Expenditures in Million Nominal Dollars																
1970	8.6	65.5	74.1	220.6	140.5	14.7	60.1	688.9	14.9	R 67.2	R 986.3	—	R 3.8	R 1,284.8	-65.3	427.5	R 1,647.0
1975	45.4	114.4	159.8	381.4	355.7	66.5	124.8	1,172.9	38.4	R 137.2	R 1,895.6	25.5	R 5.7	R 2,468.0	-144.2	769.9	R 3,093.7
1980	—	270.7	270.7	785.0	837.2	188.3	163.0	2,319.4	56.3	R 209.9	R 3,774.0	48.6	R 17.4	R 4,895.8	-311.3	1,481.2	R 6,065.8
1981	—	297.5	297.5	915.5	853.1	194.2	136.7	2,497.5	37.9	R 302.9	R 4,022.2	51.9	R 20.1	R 5,307.1	-325.0	1,704.2	R 6,686.3
1982	—	296.7	296.7	1,149.6	966.2	173.3	192.1	2,477.9	33.9	R 241.3	R 4,084.9	50.0	R 20.4	R 5,601.7	-312.4	1,836.9	R 7,126.2
1983	—	314.6	314.6	1,240.0	784.4	146.0	204.3	2,303.1	27.4	R 276.8	R 3,742.0	62.8	R 20.9	R 5,380.4	-338.7	1,998.7	R 7,040.4
1984	—	R 339.6	R 339.6	1,313.5	824.2	260.1	133.5	2,371.3	19.4	R 308.5	R 3,917.0	48.3	R 20.3	R 5,638.6	-342.9	2,026.6	R 7,322.3
1985	—	R 342.0	R 342.0	1,283.0	856.7	261.4	159.2	R 2,314.7	15.8	R 305.7	R 3,913.4	62.5	R 19.3	R 5,620.3	-355.5	2,062.8	R 7,327.6
1986	—	R 290.0	R 290.0	1,084.8	625.5	178.6	185.2	1,784.2	22.2	R 263.5	R 3,059.2	59.2	R 21.6	R 4,514.8	-307.0	2,097.2	R 6,305.0
1987	—	323.6	323.6	856.2	639.4	132.8	136.6	R 1,903.7	13.6	R 256.0	R 3,082.0	63.1	R 20.9	R 4,345.9	-362.5	2,211.9	R 6,195.3
1988	—	R 378.1	R 378.1	1,051.7	682.0	114.7	154.5	R 2,003.0	14.4	R 240.3	R 3,208.8	64.2	R 22.7	R 4,725.5	-419.5	2,433.7	R 6,739.7
1989	—	405.5	405.5	1,108.8	734.0	118.0	194.3	R 2,225.9	12.4	R 232.2	R 3,516.8	57.4	e R 25.6	e R 5,120.6	R -439.3	2,409.9	e R 7,091.1
1990	—	R 427.2	R 427.2	1,066.5	866.5	164.0	193.7	R 2,399.4	12.2	R 259.4	R 3,895.2	61.7	R 30.7	R 5,455.2	R -426.6	2,491.4	R 7,520.0
1991	—	390.2	390.2	1,110.6	876.8	137.3	191.8	R 2,374.9	10.0	R 264.7	R 3,855.5	60.7	R 31.9	R 5,444.6	R -433.9	2,637.3	R 7,647.9
1992	—	R 370.9	R 370.9	1,170.0	874.6	173.8	207.9	R 2,379.3	9.2	R 272.6	R 3,917.5	52.0	R 32.1	R 5,541.4	R -400.8	2,592.1	R 7,732.7
1993	—	R 391.7	R 391.7	1,354.6	855.8	231.3	280.7	R 2,496.8	12.0	R 269.7	R 4,146.3	52.9	R 30.7	R 5,969.2	R -402.7	2,727.8	R 8,294.3
1994	—	R 405.2	R 405.2	1,270.4	965.1	219.2	267.9	R 2,599.5	10.2	R 281.7	R 4,343.6	61.2	R 40.6	R 6,152.8	R -457.1	2,851.7	R 8,547.4
1995	—	R 408.9	R 408.9	1,241.8	998.1	226.1	283.4	2,679.9	6.0	R 319.7	R 4,513.1	67.1	R 44.6	R 6,293.7	R -456.4	2,983.1	R 8,820.4
1996	—	385.3	385.3	1,536.3	1,136.2	288.7	389.8	3,004.9	8.6	329.8	5,158.1	61.1	44.8	7,214.5	-443.1	3,017.3	9,788.6
1997	—	391.5	391.5	1,537.3	1,125.8	287.2	381.2	3,037.8	8.6	335.1	5,175.7	53.9	42.2	7,275.8	-496.6	3,089.7	9,868.9

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 150. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Minnesota

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.55	1.09	1.26	1.52	2.03	1.54	0.61	R 1.28	7.30	R 2.16
1975	3.04	1.57	2.55	2.91	4.22	3.12	1.20	R 2.14	9.90	R 3.36
1980	4.32	3.24	7.20	8.02	7.34	7.25	3.06	R 4.45	16.06	R 6.86
1981	3.53	4.11	8.54	9.82	7.37	8.26	3.77	R 5.26	17.29	R 8.06
1982	5.14	4.94	8.30	9.82	9.19	8.53	3.66	R 5.98	18.37	R 8.63
1983	4.53	5.77	7.88	R 7.84	8.71	R 8.21	3.54	R 6.27	19.41	R 9.59
1984	5.09	5.98	7.96	R 7.40	8.70	R 8.15	3.60	R 6.39	18.89	R 9.47
1985	4.10	5.78	7.79	R 8.00	7.79	R 7.79	3.46	R 6.16	19.01	R 9.25
1986	3.89	5.28	6.05	R 9.81	7.53	R 6.55	2.77	R 5.52	19.41	R 8.89
1987	3.81	4.58	5.70	R 8.77	7.40	R 6.25	2.64	R 4.97	19.38	R 8.89
1988	3.51	4.61	5.62	R 10.37	7.03	R 6.10	2.67	R 4.93	19.82	R 8.69
1989	3.49	4.54	6.30	R 9.12	10.03	R 7.50	2.95	R 5.23	19.71	R 8.68
1990	3.46	4.61	7.75	R 8.35	8.35	7.97	3.56	5.28	19.94	R 9.14
1991	3.81	4.47	6.96	R 8.73	7.42	7.12	3.41	5.04	20.27	R 8.88
1992	3.47	4.81	6.29	R 7.23	8.37	7.11	3.12	R 5.26	20.54	R 9.08
1993	3.28	5.25	6.36	R 6.37	8.24	R 7.21	3.05	R 5.62	20.77	R 9.34
1994	3.28	5.12	6.16	R 6.09	8.56	7.22	2.96	R 5.52	20.99	R 9.38
1995	3.48	4.74	6.15	R 5.04	8.56	R 7.22	2.90	R 5.20	21.01	R 9.19
1996	3.41	5.36	6.98	6.09	10.73	8.77	3.33	6.03	20.89	9.54
1997	3.57	5.66	6.90	5.70	10.17	8.56	3.31	6.25	21.20	10.03
	Expenditures in Million Nominal Dollars									
1970	6.5	111.5	52.9	10.3	48.9	112.2	1.1	R 231.4	225.0	R 456.4
1975	4.8	179.5	107.6	9.2	94.8	211.6	2.2	R 398.1	344.1	R 742.2
1980	4.5	333.8	249.5	5.2	79.0	333.7	9.1	R 681.0	643.8	R 1,324.9
1981	3.0	392.5	239.6	6.4	71.6	317.5	11.3	R 724.3	724.4	R 1,448.7
1982	5.3	534.2	300.0	10.6	93.6	404.2	11.8	R 955.5	800.8	R 1,756.2
1983	5.4	576.5	143.7	R 4.1	105.5	R 253.2	11.3	R 846.4	886.7	R 1,733.1
1984	7.8	611.5	156.7	R 9.2	75.1	R 241.0	10.5	R 870.8	839.9	R 1,710.7
1985	6.0	618.7	173.6	R 6.2	67.4	R 247.2	9.8	R 881.7	860.3	R 1,742.0
1986	5.0	545.1	141.0	R 4.9	76.6	R 222.4	7.6	R 780.1	878.1	R 1,658.2
1987	4.1	411.9	129.1	R 3.7	73.2	R 206.0	6.6	R 628.6	914.7	R 1,543.3
1988	5.2	508.9	143.2	R 6.8	73.0	R 222.9	6.9	R 744.0	1,014.0	R 1,758.0
1989	5.9	534.3	164.9	R 13.9	115.4	R 294.2	8.0	R 842.4	994.0	R 1,836.3
1990	3.9	495.3	145.5	R 1.4	88.8	R 235.6	12.7	R 747.4	1,010.6	R 1,758.0
1991	2.2	529.5	166.2	R 2.0	85.4	R 253.6	12.7	R 798.1	1,082.9	R 1,881.0
1992	0.5	551.9	125.5	R 1.6	107.9	235.0	12.3	R 799.7	1,040.7	R 1,840.4
1993	2.3	655.3	118.9	R 1.3	130.0	R 250.2	10.1	R 917.8	1,105.3	R 2,023.1
1994	5.2	633.2	121.4	R 1.6	134.0	R 257.0	9.6	R 905.0	1,146.1	R 2,051.1
1995	6.5	617.9	119.5	R 1.4	137.8	R 258.7	10.4	R 893.6	1,216.6	R 2,110.2
1996	3.3	777.1	142.3	2.1	205.2	349.6	11.9	1,141.8	1,223.1	2,364.9
1997	2.4	742.3	124.9	1.7	194.6	321.1	8.6	1,074.5	1,235.0	2,309.5

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 151. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Minnesota

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.47	0.69	1.05	0.89	1.20	2.97	0.58	1.13	0.61	0.76	7.72	1.42
1975	0.87	1.16	2.34	2.54	2.61	4.63	1.97	2.61	1.20	1.39	10.38	2.56
1980	1.77	2.89	6.60	—	4.87	9.55	4.48	6.73	3.06	3.47	12.95	5.37
1981	1.93	3.66	7.93	6.76	5.50	10.56	5.52	7.97	3.77	4.10	14.73	6.48
1982	2.15	4.53	7.58	7.74	5.97	10.51	4.63	7.53	3.66	4.84	15.92	7.18
1983	2.29	5.15	6.66	R 7.84	6.63	9.52	3.66	6.78	3.54	5.44	16.99	7.67
1984	R 2.19	5.37	6.50	R 7.40	6.40	9.39	4.44	6.87	3.60	5.61	17.39	7.93
1985	R 2.07	5.18	6.27	R 8.00	8.82	9.73	4.10	R 6.62	NA	5.39	17.53	7.84
1986	R 1.93	4.62	3.98	R 9.81	8.75	7.42	2.86	R 5.04	NA	4.60	17.81	7.60
1987	1.85	3.89	4.37	R 8.77	6.52	7.71	2.43	R 5.04	NA	R 3.99	17.19	7.43
1988	R 1.84	4.00	3.84	R 10.37	8.19	7.81	2.37	R 4.75	NA	4.03	17.52	7.22
1989	1.86	3.98	4.65	R 9.12	7.55	8.72	2.38	R 5.23	NA	4.04	17.61	7.09
1990	R 1.97	3.96	5.57	R 8.35	9.92	9.56	2.50	R 7.66	NA	R 4.58	17.70	7.66
1991	1.87	3.76	4.99	R 8.73	8.84	9.31	2.11	R 5.68	NA	3.94	17.98	7.33
1992	R 1.92	4.06	4.95	R 7.23	6.33	9.11	1.79	R 5.17	NA	4.15	18.15	7.65
1993	R 1.98	4.47	4.78	R 6.37	9.37	9.26	2.18	R 6.31	3.05	R 4.57	18.37	R 7.96
1994	R 1.93	4.31	4.40	R 6.09	8.22	9.42	2.17	R 5.44	2.96	4.35	18.51	R 7.94
1995	R 1.81	3.93	4.39	R 5.04	8.28	9.39	2.41	R 5.57	2.90	R 4.00	18.35	R 7.63
1996	1.51	4.55	5.51	6.09	9.45	10.43	2.98	6.67	3.33	4.70	18.22	8.03
1997	1.65	4.71	5.31	5.70	9.98	10.37	3.09	7.96	3.31	5.12	18.44	8.47
	Expenditures in Million Nominal Dollars											
1970	3.7	53.2	10.7	1.3	5.1	3.7	1.4	22.3	(s)	R 79.3	83.7	163.0
1975	2.5	104.2	24.1	1.7	10.3	8.6	2.8	47.6	(s)	154.3	171.6	R 326.0
1980	3.4	183.6	55.5	—	9.3	17.1	0.9	82.7	(s)	R 269.9	252.8	R 522.8
1981	3.1	242.8	38.6	R (s)	9.4	19.5	0.7	68.4	(s)	R 314.6	324.5	R 639.1
1982	4.1	338.1	43.6	R (s)	10.7	20.0	5.0	79.5	(s)	R 422.1	372.5	R 794.6
1983	5.0	372.6	106.2	R (s)	14.2	17.5	3.2	141.1	(s)	R 519.0	388.8	R 907.9
1984	R 6.3	404.8	112.0	R (s)	9.8	31.3	2.6	155.7	(s)	R 567.0	430.4	R 997.4
1985	5.6	400.2	100.2	R 1.1	13.5	17.1	5.8	R 137.6	NA	R 543.4	446.9	R 990.3
1986	R 4.6	343.8	25.0	R (s)	15.7	12.7	5.5	R 59.2	NA	R 407.6	463.3	870.9
1987	3.7	256.4	25.7	R (s)	11.4	9.7	2.0	R 49.0	NA	R 309.1	471.2	R 780.3
1988	5.1	322.4	24.6	R (s)	15.0	9.9	4.4	R 54.2	NA	R 381.7	514.0	R 895.7
1989	5.9	340.7	28.0	R (s)	15.3	8.7	4.0	R 56.3	NA	R 402.9	508.0	910.8
1990	R 4.1	310.5	30.5	R (s)	18.6	R 78.8	4.1	R 132.2	NA	R 446.8	532.2	R 979.1
1991	2.0	327.2	26.5	R (s)	18.0	9.7	3.9	R 58.2	NA	387.4	562.2	R 949.6
1992	0.5	337.8	21.9	R (s)	14.4	5.6	2.2	44.4	NA	382.7	557.7	940.4
1993	2.5	391.6	18.2	R (s)	26.1	2.4	1.8	48.8	0.8	442.9	578.5	1,021.4
1994	R 5.6	365.9	23.2	R (s)	22.7	2.4	2.2	R 51.0	0.8	R 423.3	612.4	R 1,035.7
1995	6.3	360.8	23.8	0.7	23.6	2.5	1.7	R 52.2	0.8	R 420.1	651.7	R 1,071.8
1996	2.7	456.2	33.0	0.9	31.9	2.7	2.6	71.1	1.0	531.0	674.5	1,205.5
1997	2.1	442.7	28.6	0.8	33.7	55.1	3.2	121.3	0.8	567.0	685.1	1,252.1

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 152. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Minnesota

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	0.53	0.47	0.49	0.42	0.68	0.83	0.89	1.20	5.08	2.97	0.55	R 1.28	R 1.18	R 1.43	R 0.79	4.17	R 1.12
1975	1.80	0.87	1.33	0.83	2.19	2.39	2.54	2.61	7.48	4.63	1.74	R 2.31	R 2.67	R 1.43	R 1.73	6.73	R 2.34
1980	—	1.77	1.77	2.51	3.31	5.66	5.92	4.87	14.36	9.55	2.97	R 7.34	R 5.23	R 1.43	R 3.57	11.22	R 5.06
1981	—	1.93	1.93	3.20	6.06	6.42	6.76	5.50	18.00	10.56	4.29	R 8.55	R 6.65	R 1.43	R 4.46	12.36	R 6.18
1982	—	2.15	2.15	4.08	4.22	7.31	7.74	5.97	17.25	10.51	3.95	R 7.55	R 6.71	R 1.43	R 5.14	14.15	R 6.96
1983	—	2.29	2.29	4.36	4.63	6.66	R 7.29	6.63	16.98	9.52	4.07	R 7.79	R 6.27	R 1.43	R 4.94	13.69	R 7.00
1984	—	R 2.19	R 2.19	4.29	4.98	6.73	R 7.42	6.40	17.63	9.39	4.44	R 8.06	R 6.47	R 1.43	R 4.92	12.64	R 6.95
1985	—	R 2.07	R 2.07	4.04	4.99	6.37	R 7.21	8.82	17.61	9.73	4.10	R 7.03	R 6.65	R 1.43	R 4.95	12.65	R 6.90
1986	—	R 1.93	R 1.93	3.42	3.86	4.22	R 4.99	8.75	15.59	7.42	2.86	R 10.73	R 5.05	R 1.59	R 4.03	12.76	R 6.18
1987	—	1.85	1.85	2.55	3.53	4.62	R 4.84	6.52	13.58	7.71	2.43	R 10.73	R 4.76	R 1.59	R 3.52	12.50	R 5.88
1988	—	R 1.84	R 1.84	2.79	3.60	4.33	R 4.59	8.19	14.62	7.81	2.37	R 10.84	R 4.90	R 1.59	R 3.63	12.32	R 6.10
1989	—	1.86	1.86	2.84	3.01	4.85	R 5.73	7.55	14.48	8.72	2.38	R 10.00	R 4.89	d R 1.46	d R 3.55	12.02	d R 5.96
1990	—	R 1.97	R 1.97	2.96	3.31	6.51	R 6.88	9.92	14.60	9.56	2.50	R 9.71	R 5.66	R 1.49	R 3.92	12.14	R 6.17
1991	—	1.87	1.87	2.75	3.19	5.33	R 6.04	8.84	16.80	9.31	2.11	R 7.77	R 5.51	R 1.54	R 3.86	12.47	R 6.25
1992	—	R 1.92	R 1.92	3.02	2.71	5.45	R 5.59	6.33	18.32	9.11	1.79	R 9.40	R 5.17	R 1.53	R 3.84	12.69	R 6.13
1993	—	R 1.98	R 1.98	3.17	2.93	5.16	R 5.05	9.37	18.96	9.26	2.18	R 8.07	R 5.54	1.49	R 3.95	12.89	R 6.30
1994	—	R 1.93	R 1.93	2.84	2.93	5.18	R 5.10	7.21	19.11	9.42	2.17	R 9.01	R 5.41	R 1.72	R 3.76	12.91	R 6.18
1995	—	R 1.81	R 1.81	2.42	3.13	5.21	R 5.21	7.60	R 19.41	9.39	2.41	R 9.31	R 5.36	R 1.69	R 3.57	12.61	R 5.87
1996	—	1.51	1.51	2.92	2.99	6.31	6.12	9.24	20.08	10.43	2.98	10.20	5.90	1.67	3.94	12.50	6.12
1997	—	1.65	1.65	3.22	3.32	6.01	5.75	9.01	17.86	10.37	3.09	9.15	6.09	1.69	4.22	12.70	6.37
	Expenditures in Million Nominal Dollars																
1970	8.6	12.2	20.8	40.6	20.0	37.5	1.2	5.6	9.1	56.3	9.4	R 2.6	R 141.9	R 2.5	R 205.7	118.8	R 324.5
1975	45.4	22.2	67.6	83.5	67.2	111.0	2.5	18.8	11.4	76.1	19.0	R 7.0	R 313.2	R 3.4	R 467.7	254.2	R 721.9
1980	—	31.9	31.9	251.7	78.4	188.2	3.3	73.5	28.2	67.1	22.0	R 16.7	R 477.3	R 8.1	R 769.0	584.6	R 1,353.6
1981	—	40.8	40.8	265.8	156.3	192.6	1.1	52.7	33.9	60.7	24.7	R 12.7	R 534.7	R 8.6	R 849.8	655.4	R 1,505.2
1982	—	40.9	40.9	266.3	108.7	225.3	1.6	85.1	29.6	149.9	25.5	R 11.3	R 637.1	R 8.3	R 952.6	663.6	R 1,616.2
1983	—	42.6	42.6	279.9	145.0	133.7	R 1.8	81.1	30.5	85.7	22.9	R 14.2	R 514.8	R 9.4	R 846.7	723.2	R 1,569.9
1984	—	R 40.2	R 40.2	289.9	154.3	146.1	R 2.1	R 44.6	33.8	69.7	13.8	R 19.4	R 483.8	R 9.6	R 823.5	756.3	R 1,579.7
1985	—	R 43.8	R 43.8	259.4	165.1	177.6	0.9	74.4	31.4	87.8	6.2	R 15.8	R 559.3	R 9.5	R 872.0	755.7	R 1,627.7
1986	—	R 39.1	R 39.1	190.8	140.3	138.6	R 0.9	88.9	27.2	62.0	15.8	R 13.4	R 487.1	R 13.9	R 730.9	755.8	R 1,486.7
1987	—	31.3	31.3	176.0	137.2	127.3	R (s)	50.3	26.8	R 61.1	11.5	R 15.0	R 429.5	R 13.9	R 650.7	826.1	R 1,476.8
1988	—	R 27.9	R 27.9	210.1	117.1	132.8	0.9	64.2	27.8	R 52.2	9.9	R 11.9	R 416.8	R 14.4	R 669.2	905.7	R 1,574.9
1989	—	35.5	35.5	224.2	98.5	130.9	R 1.6	61.9	28.3	57.4	8.2	R 10.3	R 397.2	d R 15.4	d R 672.2	907.9	d R 1,580.2
1990	—	R 47.0	R 47.0	250.7	132.5	178.9	R (s)	R 84.3	29.3	R 56.1	8.0	R 10.0	R 499.4	R 15.5	R 812.6	948.6	R 1,761.3
1991	—	28.5	28.5	243.8	106.6	174.2	R (s)	86.7	30.2	70.5	6.0	R 38.5	R 513.0	R 16.1	R 801.4	992.2	R 1,793.7
1992	—	R 37.7	R 37.7	271.2	95.9	196.3	R (s)	84.3	33.6	67.8	6.9	R 48.2	R 533.4	R 17.2	R 859.6	993.8	R 1,853.4
1993	—	R 49.1	R 49.1	298.1	93.2	172.9	R (s)	121.2	35.4	59.4	10.1	R 41.9	R 534.5	R 18.3	R 900.0	1,044.0	R 1,944.0
1994	—	R 51.9	R 51.9	258.7	92.2	193.2	R 2.2	107.0	37.3	62.0	8.0	R 47.2	R 549.0	R 27.9	R 887.5	1,093.1	R 1,980.7
1995	—	R 48.3	R 48.3	248.3	132.8	197.2	0.9	117.4	37.2	58.8	4.2	R 46.4	R 595.0	R 31.2	R 922.8	1,114.8	R 2,037.6
1996	—	47.6	47.6	291.3	132.3	242.1	1.2	148.5	37.4	36.7	5.9	54.1	658.3	30.1	1,027.3	1,119.7	2,147.1
1997	—	46.3	46.3	337.2	146.8	237.1	0.8	149.4	35.1	100.6	5.2	52.2	727.2	31.0	1,141.6	1,169.6	2,311.2

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 153. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Minnesota

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.47	—	2.17	1.24	0.75	1.20	5.08	2.97	0.57	2.64	2.64	—	2.64
1975	0.87	—	3.45	2.67	2.09	2.61	7.48	4.63	1.70	4.13	4.13	—	4.13
1980	—	—	9.02	7.16	6.47	4.87	14.36	9.55	3.81	8.88	8.88	—	8.88
1981	—	—	10.84	8.34	7.60	5.50	18.00	10.56	4.77	10.06	10.06	—	10.06
1982	—	—	10.92	8.12	7.19	5.97	17.25	10.51	4.43	9.93	9.93	—	9.93
1983	—	—	10.44	8.56	6.39	6.63	16.98	9.52	3.43	9.24	9.24	—	9.24
1984	—	—	10.27	8.68	6.27	6.40	17.63	9.39	4.41	9.01	9.01	—	9.01
1985	—	—	9.99	8.68	5.93	8.82	17.61	9.73	3.91	R 9.15	R 9.15	—	R 9.15
1986	—	—	8.41	6.78	4.04	8.75	15.59	7.42	3.65	6.98	6.98	—	6.98
1987	—	—	7.55	7.15	4.15	6.52	13.58	7.71	2.25	7.36	7.36	—	7.36
1988	—	—	7.41	7.21	3.94	8.19	14.62	7.81	1.83	7.48	7.48	—	7.48
1989	—	—	8.28	7.83	4.47	7.55	14.48	8.72	1.84	8.33	8.33	—	8.33
1990	—	—	9.32	9.19	5.68	9.92	14.60	9.56	—	9.23	9.23	—	9.23
1991	—	—	8.71	8.28	4.87	8.84	16.80	9.31	1.98	R 8.85	R 8.85	—	R 8.85
1992	—	—	8.54	8.12	4.64	6.33	18.32	9.11	1.32	8.58	8.58	—	8.58
1993	—	6.01	8.24	8.22	4.33	9.37	18.96	9.26	1.51	8.51	8.51	—	8.51
1994	—	1.88	7.96	8.32	3.96	9.20	19.11	9.42	1.65	8.58	8.58	—	8.58
1995	—	1.80	8.36	8.23	4.00	9.59	R 19.41	9.39	—	8.56	8.56	—	8.56
1996	—	3.36	9.29	9.22	4.79	8.78	20.08	10.43	—	9.51	9.51	—	9.51
1997	—	3.44	9.39	9.07	4.65	8.28	17.86	10.37	2.43	9.38	9.38	—	9.38
	Expenditures in Million Nominal Dollars												
1970	(s)	—	3.0	36.6	14.7	R (s)	19.3	628.9	R (s)	703.1	703.1	—	703.1
1975	(s)	—	3.7	104.1	66.5	0.9	34.1	1,088.1	6.2	1,303.7	1,303.8	—	1,303.8
1980	—	—	8.8	338.4	188.3	1.2	69.3	2,235.3	23.2	2,864.5	2,864.5	—	2,864.5
1981	—	—	8.9	378.6	194.2	3.0	83.3	2,417.3	8.1	3,093.4	3,093.4	—	3,093.4
1982	—	—	6.5	393.5	173.3	2.7	72.8	2,308.0	2.2	2,959.2	2,959.2	—	2,959.2
1983	—	—	6.2	397.8	146.0	3.6	75.1	2,199.9	1.1	2,829.6	2,829.6	—	2,829.6
1984	—	—	6.5	407.4	260.1	4.1	83.1	2,270.3	2.8	3,034.4	3,034.4	—	3,034.4
1985	—	—	7.8	403.6	261.4	3.9	77.4	R 2,209.8	3.8	R 2,967.7	R 2,967.7	—	R 2,967.7
1986	—	—	9.6	319.6	178.6	4.0	67.0	1,709.5	0.8	2,289.1	2,289.1	—	2,289.1
1987	—	—	6.8	354.7	132.8	1.7	65.9	R 1,832.9	R (s)	R 2,394.9	R 2,394.9	—	R 2,394.9
1988	—	—	6.2	378.6	114.7	2.2	68.4	R 1,940.8	R (s)	R 2,511.1	R 2,511.1	—	R 2,511.1
1989	—	—	6.6	408.2	118.0	1.7	69.6	R 2,159.7	(s)	R 2,763.8	R 2,763.8	—	R 2,763.8
1990	—	—	10.0	508.9	164.0	R 2.0	72.2	R 2,264.5	—	R 3,021.7	R 3,021.7	—	R 3,021.7
1991	—	—	8.3	507.6	137.3	1.7	74.3	R 2,294.6	(s)	R 3,023.7	R 3,023.7	—	R 3,023.7
1992	—	—	5.8	529.2	173.8	1.2	82.6	R 2,305.9	(s)	R 3,098.5	R 3,098.5	—	R 3,098.5
1993	—	(s)	5.5	543.6	231.3	R 3.4	87.0	R 2,435.0	(s)	R 3,305.8	R 3,305.8	—	R 3,305.8
1994	—	R (s)	5.0	624.7	219.2	4.2	91.7	R 2,535.0	(s)	R 3,479.9	R 3,479.9	—	R 3,479.9
1995	—	(s)	5.4	654.5	226.1	4.7	R 91.6	2,618.6	—	R 3,600.8	3,600.8	—	3,600.8
1996	—	(s)	5.8	714.9	288.7	4.2	91.9	2,965.5	—	4,071.0	4,071.2	—	4,071.2
1997	—	(s)	6.5	730.1	287.2	3.6	86.4	2,882.1	(s)	3,996.0	3,996.1	—	3,996.1

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 154. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Minnesota

Year	Coal	Natural Gas	Petroleum: Heavy Oil	Petroleum: Light Oil	Petroleum: Petroleum Coke	Petroleum: Total	Nuclear Fuel	Wood and Waste	Total Energy [a]
	Prices in Nominal Dollars per Million Btu								
1970	0.34	0.26	0.74	0.85	0.28	0.73	—	0.65	0.34
1975	0.62	0.64	1.95	2.26	0.54	2.03	0.24	0.92	0.52
1980	1.04	1.99	4.46	5.80	—	4.86	0.44	1.74	0.91
1981	1.14	2.60	5.46	8.00	—	6.38	0.46	—	0.96
1982	1.29	3.36	4.65	7.21	—	6.37	0.44	1.28	1.02
1983	1.38	3.80	3.69	6.32	—	5.96	0.49	1.12	1.06
1984	1.37	3.73	4.50	6.22	—	6.12	0.53	1.28	1.14
1985	1.43	3.69	3.99	5.97	—	5.96	0.50	—	1.09
1986	1.36	2.95	—	3.91	—	3.91	0.50	—	1.03
1987	1.21	2.08	2.39	4.47	—	4.46	0.51	0.95	0.99
1988	1.20	1.98	2.06	3.69	0.82	2.07	0.49	0.87	0.99
1989	1.20	2.15	2.13	4.42	0.77	1.16	0.49	0.88	R 1.02
1990	1.25	1.92	1.86	5.33	0.76	1.25	0.48	0.62	R 1.01
1991	1.26	1.70	2.16	4.63	0.77	1.09	0.47	0.72	1.02
1992	1.19	1.84	1.47	4.51	0.70	0.90	0.44	0.61	0.97
1993	1.13	2.45	1.65	4.42	0.71	0.99	0.41	0.55	R 0.92
1994	1.14	2.13	—	4.20	0.69	1.03	0.47	0.54	R 0.97
1995	1.14	1.76	—	4.07	0.69	1.17	0.48	0.51	R 0.95
1996	1.07	2.17	2.34	4.87	0.64	1.12	0.48	0.41	0.92
1997	1.10	2.44	2.30	4.83	0.65	1.17	0.47	0.38	0.99
	Expenditures in Million Nominal Dollars								
1970	43.1	15.3	3.9	2.7	R (s)	6.9	—	R (s)	65.3
1975	84.9	14.2	10.4	8.9	R (s)	19.5	25.5	(s)	144.2
1980	230.9	16.0	10.1	5.6	—	15.8	48.6	(s)	311.3
1981	250.6	14.3	4.5	3.7	—	8.2	51.9	—	325.0
1982	246.4	11.0	1.2	3.7	—	4.9	50.0	R (s)	312.4
1983	261.6	11.0	R (s)	3.0	—	3.3	62.8	(s)	338.7
1984	285.2	7.4	R (s)	1.9	—	2.0	48.3	(s)	342.9
1985	286.5	4.7	(s)	1.7	—	1.7	62.5	—	355.5
1986	241.4	5.1	—	1.4	—	1.4	59.2	—	307.0
1987	284.5	11.8	(s)	2.6	—	2.6	63.1	R (s)	362.5
1988	339.9	10.4	R (s)	2.8	0.8	3.7	64.2	1.4	419.5
1989	358.3	9.5	R (s)	2.1	3.2	5.4	57.4	2.3	R 439.3
1990	372.2	10.1	(s)	2.8	3.3	6.2	61.7	R 2.6	R 426.6
1991	357.4	10.1	(s)	2.4	4.4	6.9	60.7	3.0	R 433.9
1992	332.1	9.1	(s)	1.6	4.5	6.1	52.0	2.6	R 400.8
1993	337.8	9.7	(s)	2.3	4.6	6.9	52.9	2.4	R 402.7
1994	342.5	12.5	—	2.7	4.1	6.8	61.2	2.3	R 457.1
1995	347.9	14.7	—	3.2	3.2	6.3	67.1	2.3	R 456.4
1996	331.8	11.5	(s)	4.0	4.0	8.0	61.1	1.8	443.1
1997	340.7	14.9	(s)	5.0	4.9	10.0	53.9	1.7	496.6

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 155. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Mississippi

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.26	0.26	0.38	1.32	0.73	1.83	2.84	0.45	R 1.22	R 2.14	—	R 1.35	R 1.16	0.27	4.44	1.71
1975	—	0.83	0.83	0.87	2.24	2.03	3.42	4.34	1.67	R 2.59	R 3.12	—	R 1.51	R 2.26	1.24	7.58	3.19
1980	—	1.84	1.84	2.55	6.89	6.39	6.31	10.53	2.84	R 6.15	R 7.10	—	R 1.89	R 4.90	2.16	13.69	R 7.28
1981	—	2.27	2.27	3.11	7.79	7.67	7.06	11.69	3.74	R 8.10	R 8.69	—	R 2.02	R 5.98	2.59	16.82	R 8.73
1982	—	2.42	2.42	3.81	7.99	7.42	7.94	11.02	3.73	R 7.63	R 8.88	—	R 2.05	R 5.97	2.79	17.69	R 8.87
1983	—	2.47	2.47	4.29	7.03	6.15	8.24	8.89	3.63	R 7.56	R 7.83	—	R 1.96	R 5.68	2.80	16.69	R 8.17
1984	—	2.40	2.40	3.85	6.99	6.04	7.87	8.72	3.78	R 6.43	R 7.61	1.08	R 2.46	R 5.35	2.60	16.47	R 7.84
1985	—	2.50	2.50	3.76	6.70	5.84	7.66	8.75	4.06	R 7.33	R 7.63	1.13	R 2.38	R 5.14	2.30	17.05	R 8.10
1986	—	2.27	2.27	3.40	5.22	3.41	8.31	6.54	2.01	R 6.96	R 5.65	1.15	R 1.99	R 4.14	2.05	18.01	R 7.18
1987	—	1.94	1.94	3.33	5.64	3.97	8.68	6.97	1.94	R 5.56	R 6.01	0.89	R 1.89	R 4.06	1.57	17.87	R 7.31
1988	—	1.81	1.81	3.19	5.59	3.43	9.01	7.27	2.79	R 5.14	R 5.97	1.40	R 1.90	R 4.03	1.70	18.21	R 7.25
1989	—	1.67	1.67	2.89	6.23	3.92	9.31	8.07	2.41	R 5.63	R 6.69	1.17	e R 1.57	e R 4.30	1.56	18.25	e R 7.61
1990	—	1.66	1.66	2.76	7.32	5.16	6.59	9.21	2.33	R 5.45	R 7.41	1.11	1.54	R 4.56	1.54	18.05	R 8.07
1991	—	1.67	1.67	2.59	6.79	4.59	7.44	8.92	1.75	R 5.91	R 7.00	0.88	R 1.58	R 4.28	1.35	17.79	R 7.71
1992	—	1.60	1.60	2.71	6.75	4.33	6.21	8.62	1.70	R 5.85	R 6.78	0.70	R 1.55	R 4.29	1.31	17.84	R 7.57
1993	—	1.64	1.64	3.31	6.85	3.96	6.98	8.58	1.69	R 6.18	R 6.48	0.56	R 1.46	R 4.34	1.42	18.29	R 7.89
1994	—	1.58	1.58	2.95	6.71	3.70	7.35	8.68	1.58	R 6.25	R 6.85	0.52	R 1.53	4.23	1.30	17.94	R 8.02
1995	—	1.54	1.54	2.62	6.74	3.73	7.00	8.83	1.92	R 6.14	R 7.16	0.52	1.52	R 4.22	1.31	17.74	R 8.06
1996	—	1.51	1.51	3.58	7.62	4.47	8.28	9.41	2.19	6.54	7.79	0.50	1.47	4.72	1.54	17.77	8.74
1997	—	1.55	1.55	3.70	7.36	4.21	7.74	9.26	2.70	5.92	7.42	0.47	1.47	4.60	1.51	17.46	8.59
	Expenditures in Million Nominal Dollars																
1970	—	3.5	3.5	111.2	46.2	6.3	59.4	362.5	1.9	R 40.6	R 516.9	—	R 12.8	R 644.4	-31.7	225.9	R 838.7
1975	—	27.5	27.5	154.3	127.6	16.3	102.3	633.5	126.6	R 85.3	R 1,091.6	—	R 13.3	R 1,286.7	-154.7	486.0	R 1,618.0
1980	—	137.6	137.6	553.4	383.8	53.3	125.9	1,481.0	284.7	R 137.2	R 2,465.9	—	R 15.0	R 3,171.9	-438.6	1,075.9	R 3,809.1
1981	—	188.3	188.3	603.9	607.2	72.8	116.6	1,698.9	239.4	R 151.3	R 2,886.2	—	R 16.8	R 3,695.1	-451.0	1,302.0	R 4,546.1
1982	—	242.7	242.7	829.0	549.4	137.6	127.8	1,530.3	123.6	R 145.5	R 2,614.1	—	R 16.7	R 3,702.5	-518.8	1,351.0	R 4,534.8
1983	—	237.0	237.0	829.9	538.1	101.0	134.1	1,247.1	53.0	R 149.6	R 2,222.9	—	R 17.7	R 3,307.5	-405.5	1,315.8	R 4,217.8
1984	—	R 249.6	R 249.6	848.6	570.0	77.4	127.7	1,231.5	50.0	R 220.2	R 2,276.9	1.9	R 26.9	R 3,403.9	-431.5	1,364.4	R 4,336.8
1985	—	273.2	273.2	710.7	621.3	134.1	128.7	R 1,267.5	33.5	R 155.2	R 2,340.2	53.1	R 25.6	R 3,402.8	-476.1	1,455.8	R 4,382.6
1986	—	246.5	246.5	581.3	450.4	93.8	110.6	980.8	53.0	R 134.7	R 1,823.3	50.6	R 25.6	R 2,727.4	-420.1	1,582.5	R 3,889.9
1987	—	237.6	237.6	530.0	549.6	171.0	117.2	R 1,075.5	24.8	R 118.9	R 2,057.0	74.1	R 23.4	R 2,922.1	-381.2	1,606.2	R 4,147.1
1988	—	234.1	234.1	515.9	619.6	154.5	129.2	R 1,125.4	59.2	R 125.6	R 2,213.5	143.8	R 24.4	R 3,131.8	-453.7	1,694.2	R 4,372.3
1989	—	161.3	161.3	520.5	621.0	144.6	168.3	R 1,229.9	48.8	R 113.4	R 2,326.1	97.9	e R 37.2	e R 3,143.1	-355.7	1,786.8	e R 4,574.1
1990	—	172.3	172.3	557.5	687.4	201.1	169.2	R 1,407.2	50.2	R 130.1	R 2,645.2	87.9	41.8	R 3,504.7	-387.1	1,914.8	R 5,032.4
1991	—	159.4	159.4	524.1	610.7	208.6	164.0	R 1,396.5	51.3	R 158.1	R 2,589.2	86.7	R 46.7	R 3,406.1	-346.5	1,940.3	R 4,999.9
1992	—	139.2	139.2	529.3	601.9	269.5	139.5	R 1,382.5	35.6	R 142.3	R 2,571.3	61.3	48.0	R 3,349.0	-298.8	1,959.0	R 5,009.2
1993	—	163.0	163.0	589.9	586.2	186.0	156.2	R 1,437.6	94.9	R 142.3	R 2,603.2	47.0	R 45.7	R 3,448.7	-359.5	2,088.1	R 5,177.4
1994	—	153.5	153.5	619.9	605.2	141.4	173.6	R 1,497.8	53.5	R 151.9	R 2,623.4	53.5	R 51.2	R 3,501.4	-376.5	2,138.9	R 5,263.8
1995	—	159.9	159.9	625.9	530.8	159.9	172.5	1,577.3	31.8	R 160.9	R 2,633.1	44.8	R 60.3	R 3,524.0	-392.0	2,190.4	R 5,322.5
1996	—	193.1	193.1	762.3	642.4	181.2	274.4	1,689.5	48.2	178.5	3,014.2	48.6	55.9	4,074.2	-490.5	2,331.8	5,915.4
1997	—	205.2	205.2	749.2	646.6	189.1	259.1	1,721.8	90.5	184.4	3,091.5	53.8	54.4	4,154.1	-517.3	2,326.1	5,963.0

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 156. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Mississippi

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	—	0.86	1.24	2.06	2.16	2.14	0.85	R 1.30	5.06	R 2.36
1975	—	1.38	2.49	3.79	4.10	3.98	1.69	R 2.31	8.06	R 4.37
1980	2.97	3.36	6.89	10.48	8.35	8.41	4.31	4.45	14.38	R 9.01
1981	—	3.88	8.54	12.79	7.92	8.02	5.31	R 4.77	17.37	R 10.60
1982	—	4.78	—	12.61	9.83	9.93	5.15	R 5.84	18.23	R 11.67
1983	3.56	5.74	6.62	R 7.21	9.39	R 9.23	4.99	R 6.54	17.43	R 11.54
1984	3.27	5.35	6.77	R 6.66	9.39	R 8.97	5.07	R 5.96	17.41	R 11.31
1985	2.74	5.33	7.07	R 6.78	7.71	R 7.69	4.87	R 5.75	18.12	R 11.88
1986	2.89	5.47	5.15	R 5.10	8.61	R 8.48	3.91	R 5.90	19.13	R 12.70
1987	2.88	6.01	4.89	R 4.63	8.90	R 8.76	3.72	R 6.42	19.01	R 12.80
1988	2.62	5.76	4.42	R 4.54	9.17	R 9.06	3.76	R 6.30	19.15	R 12.84
1989	2.64	4.95	3.86	R 4.54	9.77	R 9.67	4.16	R 5.95	20.00	R 13.07
1990	2.70	5.16	4.59	R 4.98	9.50	R 9.45	3.53	R 5.91	20.19	R 13.46
1991	2.81	5.06	4.23	R 6.47	10.70	10.61	3.37	R 5.91	20.16	R 13.53
1992	2.69	4.70	7.66	R 5.94	9.28	R 9.23	3.08	R 5.29	20.55	R 13.31
1993	2.73	5.11	7.16	R 5.89	10.29	R 10.21	3.02	R 5.98	20.88	R 13.87
1994	—	5.29	7.63	R 4.39	10.82	R 10.72	2.93	R 6.23	20.70	R 14.13
1995	—	5.19	5.32	R 4.07	10.95	R 10.84	2.87	R 6.06	20.49	R 14.16
1996	—	5.57	5.98	4.60	12.77	12.65	3.29	6.85	20.65	14.34
1997	2.72	6.15	5.69	6.32	12.64	12.55	3.27	7.39	20.58	14.78
	Expenditures in Million Nominal Dollars									
1970	—	32.4	0.6	0.9	42.0	43.5	1.6	R 77.4	118.7	R 196.1
1975	—	41.6	2.8	2.7	64.4	70.0	3.1	R 114.6	222.5	R 337.1
1980	(s)	102.6	R (s)	2.6	67.5	70.4	5.0	R 178.0	488.9	R 666.9
1981	—	113.0	R (s)	2.1	60.3	62.5	6.2	R 181.7	569.5	R 751.2
1982	—	135.7	—	3.6	70.7	74.3	6.5	R 216.5	602.0	R 818.5
1983	R (s)	162.2	R (s)	R 4.6	80.3	R 85.0	6.2	R 253.6	574.5	R 828.1
1984	R (s)	158.7	R (s)	R 6.8	54.2	R 61.2	14.9	R 234.9	601.4	R 836.4
1985	(s)	140.4	R (s)	R 1.0	53.2	R 54.3	14.0	R 208.7	646.0	R 854.7
1986	R (s)	141.4	R (s)	R 1.1	53.1	R 54.3	10.9	R 206.6	709.4	R 916.0
1987	R (s)	162.3	R (s)	R 0.7	65.3	R 66.5	8.8	R 237.6	721.8	R 959.4
1988	R (s)	157.3	R (s)	R 0.7	69.7	R 70.5	9.2	R 237.3	746.0	R 983.2
1989	(s)	134.2	R (s)	R 0.6	81.7	R 82.5	10.5	R 227.2	786.0	R 1,013.2
1990	(s)	133.5	(s)	R (s)	74.3	R 74.6	12.6	R 220.8	845.1	R 1,065.9
1991	(s)	134.2	(s)	0.8	72.0	72.9	12.7	R 219.8	861.0	R 1,080.8
1992	(s)	131.1	R (s)	R (s)	58.6	R 59.2	12.2	R 202.5	870.9	R 1,073.4
1993	(s)	148.3	R (s)	R 0.8	81.6	R 82.6	9.0	R 239.8	940.4	R 1,180.2
1994	—	147.4	(s)	R 0.5	84.9	R 85.5	8.5	R 241.4	963.6	R 1,205.0
1995	—	142.3	(s)	R (s)	77.2	R 77.7	9.3	R 229.3	991.3	R 1,220.6
1996	—	172.5	(s)	0.6	110.6	111.2	10.6	294.3	1,054.2	1,348.5
1997	(s)	175.4	(s)	0.8	109.5	110.3	7.7	293.4	1,040.4	1,333.8

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 157. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Mississippi

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	—	0.57	0.96	—	1.33	2.84	0.49	1.39	0.85	0.70	5.53	1.96
1975	—	0.92	2.18	—	2.66	4.34	1.72	2.17	1.69	1.29	8.59	3.34
1980	1.65	2.97	6.27	—	4.92	10.53	3.02	3.36	4.31	3.17	15.87	6.70
1981	—	3.47	7.78	6.73	6.33	11.69	3.84	4.44	5.31	3.96	19.21	9.03
1982	—	4.40	7.27	7.47	6.41	11.02	3.82	7.58	5.15	4.93	19.69	R 12.11
1983	1.85	5.33	6.19	R 7.21	6.97	8.89	—	R 6.70	4.99	R 5.75	18.32	R 11.29
1984	R 1.87	4.99	6.26	R 6.66	7.02	8.72	—	R 6.65	5.07	R 5.47	18.81	R 11.26
1985	1.85	4.95	6.24	R 6.78	7.62	8.75	4.33	R 6.65	NA	5.51	19.50	11.82
1986	1.78	4.88	3.66	R 5.10	8.06	6.54	2.12	R 5.00	NA	4.90	20.66	12.58
1987	1.70	5.21	4.12	R 4.63	8.42	6.97	2.18	R 5.36	NA	R 5.24	20.22	R 12.10
1988	1.68	4.94	3.70	R 4.54	8.84	7.27	1.94	5.42	NA	5.03	21.34	12.81
1989	1.70	4.59	4.23	R 4.54	8.92	8.07	2.71	5.59	NA	4.87	21.18	12.81
1990	1.74	4.34	5.57	R 4.98	5.32	9.21	—	R 6.06	NA	4.75	21.34	13.29
1991	1.74	4.15	4.86	R 6.47	6.01	8.92	2.03	R 5.47	NA	4.44	21.22	13.18
1992	1.71	3.92	4.54	R 5.94	5.02	8.62	2.08	5.39	NA	4.23	21.58	13.10
1993	1.64	4.28	4.43	R 5.89	5.16	8.58	—	5.02	3.02	R 4.35	22.16	R 13.53
1994	R 1.65	4.42	4.10	R 4.39	8.84	8.68	—	6.26	2.93	R 4.76	21.50	R 13.40
1995	R 1.64	4.21	4.19	R 4.07	9.25	8.83	—	R 6.62	2.87	R 4.51	20.92	R 13.42
1996	—	5.09	5.02	4.60	9.58	9.41	—	7.15	3.29	5.37	21.15	13.60
1997	1.67	5.09	4.79	6.32	9.79	9.26	—	7.54	3.27	5.38	19.98	13.85
	Expenditures in Million Nominal Dollars											
1970	—	13.9	0.6	—	4.6	1.4	R (s)	6.7	(s)	R 20.6	57.0	R 77.6
1975	—	22.6	3.0	—	7.4	2.4	9.7	22.5	(s)	45.1	116.7	R 161.9
1980	(s)	64.1	0.9	—	7.0	6.8	64.7	79.4	(s)	R 143.6	276.8	R 420.4
1981	—	68.8	6.2	0.5	8.5	8.1	66.2	89.6	(s)	R 158.5	382.7	R 541.3
1982	—	78.0	4.8	5.4	8.1	7.8	0.7	26.8	(s)	R 105.0	397.9	R 502.9
1983	R (s)	93.9	32.3	R 4.2	10.5	8.1	—	R 55.1	(s)	R 149.3	374.4	R 523.8
1984	R (s)	91.9	32.1	R 4.3	7.2	7.0	—	R 50.5	(s)	R 142.8	376.3	R 519.1
1985	(s)	84.1	38.8	R 1.5	9.3	6.2	R (s)	R 56.0	NA	R 140.2	407.9	548.1
1986	R (s)	84.1	9.4	R 0.5	8.8	7.5	1.2	R 27.4	NA	R 111.6	446.7	R 558.2
1987	R (s)	94.8	19.1	R (s)	10.9	R 9.7	R (s)	R 40.2	NA	R 135.1	439.8	R 574.9
1988	R (s)	90.9	12.9	R (s)	11.9	7.1	R (s)	32.2	NA	123.4	477.0	600.4
1989	(s)	83.1	21.1	R (s)	13.2	6.8	R (s)	41.4	NA	124.5	513.0	637.6
1990	(s)	78.6	19.1	R (s)	7.3	8.0	—	34.6	NA	113.2	539.3	652.5
1991	(s)	75.9	17.2	R (s)	7.1	3.8	(s)	28.4	NA	104.3	541.5	645.8
1992	(s)	74.1	13.5	R (s)	5.6	7.8	(s)	27.2	NA	101.3	539.6	640.9
1993	(s)	84.1	8.5	R (s)	7.2	2.2	—	18.1	0.7	102.2	553.4	655.6
1994	—	87.4	10.3	R (s)	12.2	6.8	—	29.4	0.7	R 117.6	567.0	R 684.6
1995	—	85.2	6.4	R (s)	11.5	2.3	—	20.4	0.7	R 106.2	586.1	R 692.4
1996	—	116.0	10.2	(s)	14.6	2.8	—	27.8	0.9	144.7	621.7	766.4
1997	(s)	116.1	6.6	(s)	15.0	2.3	—	24.3	0.7	141.1	726.0	867.1

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 158. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Mississippi

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	0.33	0.33	0.29	0.66	0.74	0.79	1.33	5.08	2.84	0.40	R 0.43	R 0.97	R 1.47	R 0.54	2.94	R 0.73
1975	—	1.11	1.11	0.71	1.77	1.70	1.86	2.66	7.48	4.34	1.77	R 1.61	R 2.09	R 1.47	1.32	6.39	1.93
1980	—	1.65	1.65	2.66	3.56	5.55	6.21	4.92	14.36	10.53	2.82	R 5.46	R 4.77	R 1.47	R 3.55	11.42	R 4.83
1981	—	1.89	1.89	3.22	4.79	6.15	6.73	6.33	18.00	11.69	4.31	R 7.51	R 6.08	R 1.47	R 4.46	14.17	R 5.84
1982	—	1.86	1.86	4.00	4.62	6.82	7.47	6.41	17.25	—	4.00	R 6.44	R 6.02	R 1.47	R 4.69	15.17	R 6.00
1983	—	1.85	1.85	4.19	4.67	6.47	R 6.19	6.97	16.98	—	4.02	R 6.75	R 6.40	R 1.47	R 4.73	14.41	R 6.06
1984	—	R 1.87	R 1.87	3.82	4.44	6.53	R 6.21	7.02	17.63	8.72	4.83	R 6.81	R 6.25	R 1.47	R 4.57	13.68	R 5.74
1985	—	1.85	1.85	3.68	4.81	6.21	R 5.89	7.62	17.61	8.75	4.33	R 6.00	R 6.56	R 1.47	R 4.59	13.94	R 5.98
1986	—	1.78	1.78	3.08	4.90	3.75	R 3.49	8.06	15.59	6.54	2.12	R 4.81	R 4.80	R 1.46	R 3.58	14.63	R 5.36
1987	—	1.70	1.70	2.71	3.27	4.37	R 4.33	8.42	13.58	6.97	2.18	R 5.70	R 4.90	R 1.46	R 3.45	14.74	R 5.37
1988	—	1.68	1.68	2.50	3.03	3.88	R 3.82	8.84	14.62	7.27	1.94	R 4.76	R 4.46	R 1.46	R 3.18	14.84	R 5.08
1989	—	1.70	1.70	2.46	2.86	4.60	R 4.65	8.92	14.48	8.07	2.71	R 5.41	R 5.16	d R 1.26	d R 3.23	14.18	d R 5.00
1990	—	1.74	1.74	2.49	2.93	5.89	R 5.95	5.32	14.60	9.21	3.02	R 6.34	R 5.36	1.24	R 3.44	13.62	R 5.11
1991	—	1.74	1.74	2.28	3.29	5.13	R 4.90	6.01	16.80	8.92	2.03	R 6.46	R 5.43	1.32	R 3.27	13.17	R 4.98
1992	—	1.71	1.71	2.40	2.04	4.91	R 4.65	5.02	18.32	8.62	2.08	R 7.20	R 5.06	R 1.32	R 3.14	12.93	R 4.91
1993	—	1.64	1.64	2.92	2.36	4.81	R 4.30	5.16	18.96	8.58	2.02	R 6.26	R 5.03	R 1.31	R 3.31	13.46	R 5.29
1994	—	1.65	1.65	2.89	2.47	4.54	R 4.11	5.17	19.11	8.68	2.32	R 6.60	R 4.99	R 1.38	R 3.33	13.14	R 5.36
1995	—	1.64	1.64	2.66	2.63	4.51	R 4.18	5.06	R 19.41	8.83	2.47	R 6.98	R 5.02	R 1.39	R 3.17	13.03	R 5.22
1996	—	1.43	1.43	3.34	3.12	5.44	5.01	6.48	20.08	9.41	2.75	7.91	5.92	1.29	3.88	12.92	5.85
1997	—	1.67	1.67	3.44	3.23	5.16	4.59	5.75	17.86	9.26	3.33	6.86	5.45	1.33	3.79	12.08	5.42
	Expenditures in Million Nominal Dollars																
1970	—	R (s)	R (s)	37.6	7.7	13.3	11.6	10.5	7.5	4.6	0.5	R 0.8	R 56.4	R 11.2	R 105.7	50.2	R 155.9
1975	—	0.6	0.6	63.2	30.4	43.4	13.8	25.9	17.0	5.0	8.3	R 4.0	R 147.6	R 10.2	R 221.6	146.7	R 368.3
1980	—	2.0	2.0	182.6	48.1	111.3	7.0	48.6	29.7	4.1	37.3	R 13.1	R 299.1	R 9.9	R 493.6	310.2	R 803.9
1981	—	4.9	4.9	224.3	56.3	226.5	2.2	43.5	35.7	4.5	42.5	R 13.8	R 425.0	R 10.4	R 664.6	349.7	R 1,014.3
1982	—	4.6	4.6	345.8	52.7	192.9	6.4	43.0	31.2	—	61.9	R 11.6	R 399.6	R 10.1	R 760.0	351.1	R 1,111.2
1983	—	6.7	6.7	403.5	52.8	185.4	R 5.1	35.5	32.1	—	9.7	R 15.2	R 335.9	R 11.4	R 757.5	366.9	R 1,124.4
1984	—	R 9.5	R 9.5	412.9	104.9	184.2	R 8.4	59.0	35.6	20.5	7.7	R 21.1	R 441.4	R 11.6	R 875.4	386.7	R 1,262.1
1985	—	10.7	10.7	330.6	65.5	194.8	R 0.7	59.8	33.1	34.5	2.2	R 17.3	R 408.0	R 11.6	R 760.9	401.9	R 1,162.9
1986	—	10.3	10.3	241.5	61.9	97.4	R 0.6	43.1	28.7	21.6	13.0	R 9.7	R 275.9	R 14.7	R 542.4	426.5	R 968.8
1987	—	11.3	11.3	194.7	47.2	140.6	R 1.1	36.2	28.2	23.0	0.6	R 11.2	R 288.1	R 14.6	R 508.7	444.6	R 953.3
1988	—	10.5	10.5	204.7	52.8	124.5	R 1.2	43.3	29.3	24.2	6.2	R 9.6	R 291.1	R 15.2	R 521.5	471.2	R 992.7
1989	—	10.5	10.5	218.8	37.5	133.2	R 1.0	69.7	29.8	23.8	12.4	R 10.6	R 318.0	d R 26.7	d R 573.9	487.7	d R 1,061.6
1990	—	10.9	10.9	226.3	48.8	194.3	R 1.2	85.0	30.9	R 28.0	13.1	R 14.0	R 415.3	29.2	R 681.8	530.5	R 1,212.2
1991	—	9.8	9.8	213.4	55.2	144.2	R 0.9	82.5	31.8	31.4	1.6	R 34.9	R 382.5	34.0	R 639.6	537.7	R 1,177.3
1992	—	9.9	9.9	223.9	29.4	124.1	R (s)	73.6	35.3	28.9	1.1	R 39.7	R 332.5	R 35.7	R 602.1	548.4	R 1,150.5
1993	—	10.4	10.4	259.0	30.5	105.1	R 0.9	65.4	37.2	17.3	2.2	R 34.7	R 293.3	R 36.7	R 599.4	594.3	R 1,193.7
1994	—	11.7	11.7	221.6	34.6	109.0	R 0.7	71.5	39.2	R 19.0	1.9	R 37.7	R 313.6	R 42.0	R 588.9	608.3	R 1,197.2
1995	—	11.3	11.3	200.3	42.4	84.2	R (s)	81.4	R 39.2	19.8	0.9	R 37.8	R 306.2	R 50.3	R 568.1	613.0	R 1,181.1
1996	—	8.0	8.0	242.3	54.0	107.0	0.6	147.0	39.3	21.3	1.5	44.7	415.3	44.4	710.0	655.9	1,365.9
1997	—	9.4	9.4	259.1	65.1	99.4	0.8	132.6	37.0	23.7	(s)	43.1	402.1	45.9	716.6	559.8	1,276.4

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 159. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Mississippi

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.33	—	2.17	2.02	0.73	1.33	5.08	2.84	0.43	2.64	2.64	—	2.64
1975	1.11	—	3.45	2.75	2.03	2.66	7.48	4.34	1.49	3.91	3.91	—	3.91
1980	—	—	9.02	7.67	6.39	4.92	14.36	10.53	2.55	8.71	8.71	—	8.71
1981	—	—	10.84	9.32	7.67	6.33	18.00	11.69	3.31	10.36	10.36	—	10.36
1982	—	—	10.92	8.85	7.42	6.41	17.25	11.02	3.45	9.80	9.80	—	9.80
1983	—	—	10.44	7.52	6.15	6.97	16.98	8.89	3.53	8.19	8.19	—	8.19
1984	—	—	10.27	7.35	6.04	7.02	17.63	8.72	3.62	8.06	8.06	—	8.06
1985	—	—	9.99	7.05	5.84	7.62	17.61	8.75	4.03	7.97	7.97	—	7.97
1986	—	—	8.41	5.96	3.41	8.06	15.59	6.54	1.90	5.91	5.91	—	5.91
1987	—	—	7.55	6.44	3.97	8.42	13.58	6.97	1.92	6.20	6.20	—	6.20
1988	—	—	7.41	6.42	3.43	8.84	14.62	7.27	2.79	6.31	6.31	—	6.31
1989	—	—	8.28	7.12	3.92	8.92	14.48	8.07	2.15	7.12	7.12	—	7.12
1990	—	—	9.32	8.25	5.16	5.32	14.60	9.21	2.01	8.15	8.15	—	8.15
1991	—	—	8.71	7.73	4.59	6.01	16.80	8.92	1.71	7.40	7.40	—	7.40
1992	—	—	8.54	7.63	4.33	5.02	18.32	8.62	1.65	7.19	7.19	—	7.19
1993	—	—	8.24	7.66	3.96	5.16	18.96	8.58	1.58	7.23	7.23	—	7.23
1994	—	2.73	7.96	7.65	3.70	8.60	19.11	8.68	1.55	7.34	7.34	—	7.34
1995	—	1.60	8.36	7.53	3.73	8.91	R 19.41	8.83	1.91	7.52	7.52	—	7.52
1996	—	2.45	9.29	8.42	4.47	8.86	20.08	9.41	2.21	8.32	8.32	—	8.32
1997	—	2.67	9.39	8.05	4.21	8.97	17.86	9.26	2.77	8.14	8.14	—	8.14
	Expenditures in Million Nominal Dollars												
1970	(s)	—	3.5	31.6	6.3	2.4	8.7	356.5	(s)	409.1	409.1	—	409.1
1975	(s)	—	3.5	75.1	16.3	4.6	13.9	626.2	11.1	750.7	750.7	—	750.7
1980	—	—	9.4	269.0	53.3	2.7	27.4	1,470.2	86.0	1,918.0	1,918.0	—	1,918.0
1981	—	—	7.8	371.0	72.8	4.2	32.9	1,686.4	64.3	2,239.3	2,239.3	—	2,239.3
1982	—	—	5.8	349.3	137.6	6.0	28.8	1,522.4	52.3	2,102.2	2,102.2	—	2,102.2
1983	—	—	6.0	318.8	101.0	7.7	29.7	1,239.0	39.3	1,741.5	1,741.5	—	1,741.5
1984	—	—	6.3	351.9	77.4	7.3	32.9	1,204.0	39.4	1,719.3	1,719.3	—	1,719.3
1985	—	—	5.4	385.5	134.1	6.4	30.6	R 1,226.9	28.1	R 1,816.9	R 1,816.9	—	R 1,816.9
1986	—	—	5.8	342.3	93.8	5.6	26.5	951.8	21.1	1,446.8	1,446.8	—	1,446.8
1987	—	—	4.3	388.7	171.0	4.9	26.1	R 1,042.7	21.9	R 1,659.4	R 1,659.4	—	R 1,659.4
1988	—	—	4.8	480.4	154.5	4.3	27.1	R 1,094.1	30.7	R 1,795.9	R 1,795.9	—	R 1,795.9
1989	—	—	6.4	463.9	144.6	3.7	27.5	R 1,199.4	16.2	R 1,861.7	R 1,861.7	—	R 1,861.7
1990	—	—	6.2	472.5	201.1	R 2.5	28.5	R 1,371.3	19.7	R 2,101.8	R 2,101.8	—	R 2,101.8
1991	—	—	4.8	447.1	208.6	2.4	29.4	R 1,361.3	42.3	R 2,095.9	R 2,095.9	—	R 2,095.9
1992	—	—	4.1	463.4	269.5	1.7	32.6	R 1,345.8	27.2	R 2,144.4	R 2,144.4	—	R 2,144.4
1993	—	—	3.5	471.6	186.0	2.0	34.4	R 1,418.1	32.3	R 2,147.8	R 2,147.8	—	R 2,147.8
1994	—	(s)	2.9	484.6	141.4	4.9	36.2	R 1,472.0	34.9	R 2,177.0	R 2,177.0	—	R 2,177.0
1995	—	R (s)	4.2	439.3	159.9	2.3	36.2	1,555.2	30.7	2,227.9	2,228.3	—	2,228.3
1996	—	(s)	2.9	522.8	181.2	2.2	36.3	1,665.4	23.7	2,434.6	2,434.6	—	2,434.6
1997	—	(s)	3.1	539.4	189.1	2.0	34.1	1,695.7	22.2	2,485.7	2,485.7	—	2,485.7

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 160. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Mississippi

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.26	0.27	0.48	0.61	—	0.48	—	—	0.27
1975	0.82	0.83	1.69	2.08	—	1.70	—	—	1.24
1980	1.84	2.11	3.03	5.47	—	3.06	—	—	2.16
1981	2.28	2.61	3.79	7.13	—	3.87	—	—	2.59
1982	2.43	3.17	3.82	6.73	—	4.20	—	—	2.79
1983	2.49	3.33	3.75	6.24	—	4.19	—	—	2.80
1984	2.43	2.88	3.76	6.09	—	4.36	1.08	—	2.60
1985	2.54	2.80	4.16	5.97	—	4.78	1.13	—	2.30
1986	2.29	2.32	2.06	4.45	—	2.13	1.15	—	2.05
1987	1.96	1.85	2.07	3.76	—	2.38	0.89	—	1.57
1988	1.81	1.85	3.18	4.99	—	3.26	1.40	—	1.70
1989	1.67	1.83	2.48	5.32	—	2.65	1.17	—	1.56
1990	1.65	1.76	2.35	4.80	—	2.44	1.11	—	1.54
1991	1.67	1.57	1.94	4.74	—	2.25	0.88	—	1.35
1992	1.60	1.80	1.85	R 4.67	—	1.96	0.70	—	1.31
1993	1.64	2.42	1.75	4.39	—	1.76	0.56	—	1.42
1994	1.57	1.90	1.58	4.16	—	1.65	0.52	—	1.30
1995	1.53	1.71	1.87	3.79	—	3.48	0.52	—	1.31
1996	1.51	2.68	2.15	4.36	—	2.25	0.50	—	1.54
1997	1.55	2.62	2.67	4.31	—	2.69	0.47	—	1.51
	Expenditures in Million Nominal Dollars								
1970	3.1	27.3	1.2	(s)	—	1.3	—	—	31.7
1975	26.9	26.9	97.6	3.2	—	100.8	—	—	154.7
1980	135.5	204.2	96.7	2.2	—	98.9	—	—	438.6
1981	183.4	197.8	66.4	3.4	—	69.8	—	—	451.0
1982	238.1	269.5	8.8	2.3	—	11.1	—	—	518.8
1983	229.9	170.3	3.9	1.4	—	5.4	—	—	405.5
1984	240.0	185.1	2.9	1.6	—	4.4	1.9	—	431.5
1985	262.4	155.6	2.8	2.1	—	4.9	53.1	—	476.1
1986	236.1	114.4	17.8	1.2	—	18.9	50.6	—	420.1
1987	226.0	78.2	2.0	0.8	—	2.8	74.1	—	381.2
1988	223.0	63.0	22.2	1.7	—	23.8	143.8	—	453.7
1989	150.8	84.5	19.9	2.7	—	22.6	97.9	—	355.7
1990	161.3	119.1	17.4	1.4	—	18.8	87.9	—	387.1
1991	149.6	100.6	7.4	2.2	—	9.5	86.7	—	346.5
1992	129.3	100.2	7.2	0.8	—	8.0	61.3	—	298.8
1993	152.6	98.5	60.4	0.9	—	61.3	47.0	—	359.5
1994	141.8	163.4	16.7	1.2	—	17.9	53.5	—	376.5
1995	148.6	197.6	R (s)	0.9	—	1.0	44.8	—	392.0
1996	185.2	231.5	23.0	2.3	—	25.3	48.6	—	490.5
1997	195.8	198.5	67.8	1.3	—	69.1	53.8	—	517.3

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 161. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Missouri

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	0.38	0.28	0.29	0.64	1.05	0.75	1.79	2.73	0.56	R 1.42	R 1.98	—	R 1.85	R 1.17	0.26	6.17	R 1.84
1975	1.60	0.60	0.62	1.16	2.52	2.09	3.06	4.55	1.78	R 3.00	3.67	—	R 2.19	2.08	0.57	8.64	3.32
1980	1.81	1.21	1.22	2.95	6.61	6.47	6.32	9.33	3.33	R 7.11	R 8.07	—	R 2.99	R 4.38	1.25	13.91	R 7.19
1981	2.03	1.37	1.38	3.65	7.86	7.60	6.80	10.15	3.83	R 8.88	R 9.20	—	R 3.45	R 5.00	1.39	14.61	R 8.16
1982	2.04	1.45	1.45	4.80	7.56	7.19	7.29	9.88	4.16	R 7.96	R 8.81	—	R 3.40	R 5.16	1.48	16.09	R 8.49
1983	1.58	1.50	1.50	5.56	6.99	6.44	7.42	8.74	4.16	R 8.19	R 8.11	—	R 3.30	R 4.90	1.53	16.96	R 8.56
1984	1.91	1.50	1.50	5.35	7.07	6.27	7.27	8.48	4.64	R 8.16	R 7.97	0.78	R 3.31	R 4.73	1.50	16.11	R 8.26
1985	1.93	1.51	1.51	4.94	6.79	5.90	8.26	8.56	4.09	R 7.75	R 7.89	0.82	R 3.22	R 4.58	1.41	17.16	R 8.28
1986	1.75	1.46	1.46	4.52	5.27	3.95	6.72	6.11	2.25	R 5.70	R 5.76	0.82	R 2.62	R 3.72	1.38	18.45	R 7.31
1987	1.63	1.40	1.40	4.28	5.75	4.13	6.82	6.81	2.60	R 5.62	R 6.23	0.52	R 2.53	R 3.85	1.31	18.90	R 7.67
1988	—	1.37	1.37	4.37	5.50	3.89	7.13	6.82	2.14	R 5.07	R 6.08	0.73	R 2.55	R 3.76	1.29	18.94	R 7.60
1989	—	1.35	1.35	4.51	6.15	4.36	7.45	7.45	2.35	R 5.58	R 6.70	0.71	e R 2.76	e R 4.03	1.26	18.92	e R 8.01
1990	—	1.35	1.35	4.69	7.43	5.68	9.04	8.61	2.54	R 5.69	R 7.75	0.74	R 2.98	R 4.50	1.27	18.94	R 8.78
1991	—	1.34	1.34	4.52	6.91	4.81	8.06	8.30	2.15	R 5.46	R 7.43	0.71	R 2.88	R 4.26	1.24	18.95	R 8.67
1992	—	1.34	1.34	4.60	6.80	4.57	7.43	8.11	2.22	R 5.14	R 7.20	0.58	R 2.67	R 4.28	1.23	18.79	R 8.44
1993	—	1.25	1.25	4.88	6.75	4.24	8.15	7.92	2.23	R 5.09	R 7.04	0.56	R 2.42	R 4.40	1.14	18.55	R 8.41
1994	—	1.12	1.12	4.86	6.77	3.94	7.80	8.16	1.63	R 4.67	R 7.01	0.49	R 2.56	R 4.20	1.01	18.41	R 8.40
1995	—	1.00	1.00	4.36	6.72	3.99	7.82	8.31	2.30	R 4.99	R 7.14	0.48	R 2.48	R 4.12	0.94	18.32	R 8.42
1996	—	0.97	0.97	5.29	7.84	4.85	9.71	9.27	2.72	5.87	8.18	0.47	2.74	4.65	0.91	17.91	9.05
1997	—	0.95	0.95	5.79	7.62	4.59	9.37	9.23	2.86	5.98	8.09	0.47	2.56	4.62	0.90	17.86	9.15
	Expenditures in Million Nominal Dollars																
1970	3.1	77.2	80.3	265.4	99.1	34.1	79.5	803.2	11.4	R 98.8	R 1,126.1	—	R 9.4	R 1,481.2	-76.3	542.4	R 1,947.3
1975	11.9	254.9	266.8	423.0	261.8	98.2	147.5	1,490.4	21.7	R 185.5	R 2,205.1	—	R 13.3	R 2,908.0	-234.0	974.3	R 3,648.4
1980	9.6	637.7	647.4	928.2	708.2	229.5	211.7	2,889.0	23.2	R 630.2	R 4,691.7	—	R 16.5	R 6,283.8	-639.6	2,022.4	R 7,666.7
1981	10.0	727.1	737.1	1,014.9	833.7	203.8	182.4	3,122.9	13.0	R 741.5	R 5,097.3	—	R 19.6	R 6,868.9	-700.0	2,106.7	R 8,275.7
1982	8.1	752.5	760.6	1,342.0	921.7	177.8	235.7	3,002.6	19.1	604.0	4,960.8	—	R 20.1	R 7,083.5	-731.8	2,301.9	R 8,653.5
1983	5.4	841.5	846.9	1,454.6	689.9	199.0	241.5	2,697.9	15.6	R 574.2	R 4,418.0	—	R 20.1	R 6,739.7	-813.9	2,612.8	R 8,538.6
1984	5.4	R 887.0	892.5	1,414.0	766.4	199.0	145.7	2,668.1	10.9	R 628.5	R 4,418.6	7.8	R 19.0	R 6,752.0	-850.7	2,496.6	R 8,397.8
1985	12.0	788.8	R 800.9	1,284.0	774.5	196.6	166.2	R 2,700.5	18.8	R 587.0	R 4,443.7	71.3	R 17.9	R 6,617.8	-811.7	2,712.0	R 8,518.2
1986	10.8	739.3	R 750.2	1,089.0	562.2	149.9	144.6	2,034.0	7.8	R 458.4	R 3,356.9	63.1	R 13.0	R 5,272.1	-761.7	3,038.6	R 7,549.0
1987	3.4	738.0	741.4	994.0	645.3	174.6	155.3	R 2,279.7	11.1	R 466.2	R 3,732.2	34.9	R 11.7	R 5,514.2	-733.5	3,232.6	R 8,013.2
1988	—	751.9	751.9	1,090.0	680.0	160.8	170.6	R 2,323.8	10.1	R 467.9	R 3,813.2	70.3	R 12.2	R 5,737.7	-781.9	3,377.0	R 8,332.7
1989	—	740.3	740.3	1,124.5	793.4	179.6	227.8	R 2,494.1	8.3	R 470.2	R 4,173.4	63.1	e R 12.8	e R 6,114.2	-762.9	3,396.0	e R 8,747.3
1990	—	728.0	728.0	1,107.8	898.0	213.8	225.3	R 2,895.9	10.0	R 508.1	R 4,751.1	62.9	R 17.6	R 6,667.4	-754.7	3,484.6	R 9,397.3
1991	—	717.7	717.7	1,157.2	817.1	204.2	251.6	R 2,786.9	7.4	R 331.2	R 4,398.4	76.5	R 17.8	R 6,367.6	-774.2	3,653.4	R 9,246.8
1992	—	R 699.2	R 699.2	1,099.3	889.4	194.6	228.1	R 2,780.1	9.3	R 333.1	R 4,434.7	49.7	R 17.3	R 6,300.2	-715.7	3,489.1	R 9,073.6
1993	—	R 582.2	R 582.2	1,322.7	896.3	216.8	281.8	R 2,751.7	15.1	R 349.7	R 4,511.4	50.1	R 14.7	R 6,481.1	-609.6	3,709.7	R 9,581.2
1994	—	606.0	606.0	1,294.1	968.6	237.2	266.8	R 2,892.8	5.5	R 387.8	R 4,758.6	52.4	R 16.1	R 6,727.2	-636.0	3,749.1	R 9,840.3
1995	—	594.2	594.2	1,192.9	1,000.4	258.6	314.1	3,008.0	5.2	R 395.6	R 4,981.9	41.9	R 17.4	R 6,828.3	-627.3	3,891.8	R 10,092.8
1996	—	613.1	613.1	1,533.4	1,272.9	333.8	413.7	3,407.8	6.3	438.8	5,873.3	44.7	19.6	8,084.1	-637.2	3,961.9	11,408.8
1997	—	634.8	634.8	1,615.5	1,332.7	320.8	403.5	3,421.7	4.6	400.9	5,884.2	44.5	15.7	8,194.7	-664.4	4,002.1	11,532.5

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 162. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Missouri

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	0.86	0.96	1.19	1.43	1.95	1.81	0.61	1.13	7.86	R 2.07
1975	1.72	1.48	2.62	2.88	3.26	3.14	1.20	R 1.84	10.06	R 3.37
1980	1.70	3.23	6.85	7.95	7.06	7.01	3.06	R 3.78	15.21	R 6.82
1981	1.73	3.96	8.12	9.73	7.04	7.43	3.77	R 4.50	16.30	R 7.55
1982	1.66	5.11	7.84	9.73	8.21	8.16	3.66	R 5.51	17.92	R 8.66
1983	2.10	5.96	7.22	R 6.80	7.78	R 7.67	3.54	R 6.15	19.07	R 9.87
1984	2.04	5.75	7.08	R 8.07	7.56	R 7.45	3.60	R 5.86	17.94	R 9.37
1985	1.73	5.40	6.70	R 10.06	7.53	R 7.38	3.46	R 5.56	19.27	R 9.56
1986	1.54	4.98	4.95	R 11.02	5.81	R 5.68	2.77	R 5.00	20.87	R 9.98
1987	1.37	4.71	4.66	R 6.39	6.41	R 6.06	2.64	R 4.80	21.59	R 10.33
1988	1.25	4.73	4.71	R 6.27	6.82	R 6.38	2.67	R 4.85	21.49	R 10.23
1989	1.43	4.80	5.88	R 6.79	8.02	R 7.72	2.95	R 5.12	21.50	R 10.27
1990	1.56	5.15	7.27	R 11.50	9.61	R 9.35	3.56	5.57	21.56	R 11.07
1991	1.53	5.10	6.75	R 7.47	8.54	R 8.33	3.41	R 5.48	21.65	R 11.08
1992	1.33	5.10	5.36	R 7.08	7.52	7.31	3.12	R 5.33	21.80	R 10.81
1993	1.72	5.35	5.46	R 6.24	7.23	R 7.04	3.05	R 5.49	21.29	R 10.77
1994	0.98	5.40	6.32	R 5.96	8.01	R 7.85	2.96	R 5.66	21.37	R 11.17
1995	0.95	5.12	5.33	R 4.93	8.01	R 7.68	2.90	R 5.41	21.26	R 11.07
1996	1.04	5.91	6.75	5.96	10.10	9.82	3.33	6.42	20.75	11.35
1997	0.97	6.54	6.83	5.58	9.56	9.33	3.31	6.88	20.77	11.88
	Expenditures in Million Nominal Dollars									
1970	0.6	150.9	9.1	0.6	65.9	75.5	1.4	R 228.4	259.5	R 487.9
1975	2.0	232.0	21.9	R (s)	115.5	137.9	2.8	R 374.6	468.8	R 843.5
1980	1.1	471.2	49.7	2.6	129.4	181.7	11.1	R 665.1	967.9	R 1,633.1
1981	1.4	516.9	66.5	4.2	119.4	190.1	13.8	R 722.2	914.4	R 1,636.5
1982	1.1	707.3	51.4	6.8	143.2	201.3	14.4	R 924.2	1,021.8	R 1,946.0
1983	2.1	775.2	29.5	R 2.7	161.3	R 193.5	13.8	R 984.6	1,236.3	R 2,220.9
1984	2.0	763.9	31.3	R 4.6	86.2	R 122.1	12.6	R 900.6	1,131.8	R 2,032.4
1985	2.2	703.3	31.8	R 5.4	94.8	R 132.0	11.8	R 849.4	1,215.3	R 2,064.7
1986	1.3	606.9	23.6	R 3.6	82.6	R 109.8	9.2	R 727.2	1,386.2	R 2,113.4
1987	2.6	552.4	17.8	R 1.9	96.1	R 115.8	7.9	R 678.7	1,496.5	R 2,175.2
1988	2.1	610.8	17.4	R 2.1	96.2	R 115.7	8.3	R 737.0	1,565.0	R 2,301.9
1989	2.8	625.1	16.2	R 2.6	147.4	R 166.3	9.6	R 803.7	1,545.0	R 2,348.7
1990	3.4	604.1	15.0	R 1.9	146.1	R 163.0	15.1	R 785.5	1,592.7	R 2,378.3
1991	3.0	620.3	16.9	R 1.6	169.4	R 187.9	15.2	R 826.3	1,727.7	R 2,554.0
1992	2.3	596.1	11.2	0.8	151.0	163.0	14.6	R 776.1	1,583.5	R 2,359.6
1993	3.5	720.5	13.2	R 1.3	152.9	R 167.4	12.0	R 903.4	1,756.7	R 2,660.1
1994	1.7	665.5	13.0	R 0.8	168.0	R 181.8	11.4	R 860.4	1,754.4	R 2,614.8
1995	1.6	645.6	14.6	R 0.9	169.5	R 185.1	12.4	R 844.6	1,842.9	R 2,687.5
1996	1.7	819.2	13.2	1.9	253.7	268.8	14.2	1,103.9	1,872.8	2,976.7
1997	2.1	843.6	13.1	1.4	240.4	254.9	10.3	1,110.8	1,885.0	2,995.8

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 163. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Missouri

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.49	0.62	1.03	0.82	1.27	2.73	0.57	0.93	0.61	0.69	7.00	1.66
1975	1.17	1.14	2.45	2.40	2.49	4.55	1.77	2.38	1.20	1.36	9.46	2.87
1980	1.58	2.88	6.49	6.10	5.42	9.33	3.47	5.74	3.06	3.32	14.33	R 6.86
1981	1.69	3.54	7.80	7.37	6.39	10.15	4.50	7.62	3.77	4.07	15.42	7.91
1982	1.71	4.68	7.46	7.15	6.21	9.88	4.29	7.27	3.66	R 5.05	16.70	8.96
1983	1.61	5.46	6.38	R 6.80	6.80	8.74	4.20	6.44	3.54	5.56	17.55	9.70
1984	R 1.59	5.18	6.37	R 8.07	6.89	8.48	4.66	R 6.56	3.60	5.34	17.01	9.65
1985	R 1.57	4.88	6.04	R 10.06	9.50	8.56	4.11	R 6.84	NA	5.11	17.94	R 10.29
1986	R 1.39	4.35	3.70	R 11.02	8.51	6.11	2.25	R 4.82	NA	4.37	19.02	10.43
1987	1.27	4.06	4.22	R 6.39	7.60	6.81	2.61	R 4.98	NA	R 4.13	19.04	10.53
1988	1.27	4.17	3.81	R 6.27	7.58	6.82	2.20	R 4.69	NA	4.15	19.06	10.62
1989	1.29	4.31	4.45	R 6.79	6.58	7.45	2.41	R 5.44	NA	4.31	19.03	10.98
1990	1.31	4.48	5.46	R 11.50	8.15	8.61	2.60	R 6.55	NA	4.57	18.98	11.38
1991	1.34	4.46	4.84	R 7.47	7.23	8.30	2.21	R 5.79	NA	4.50	18.79	11.16
1992	R 1.34	4.46	4.64	R 7.08	7.27	8.11	2.28	R 5.69	NA	4.51	18.81	11.24
1993	1.36	4.74	4.46	R 6.24	9.60	7.92	2.26	R 6.37	3.05	R 4.79	18.45	R 11.00
1994	1.43	4.82	4.25	R 5.96	8.08	8.16	1.62	5.66	2.96	4.80	18.28	R 11.18
1995	1.42	4.36	4.27	R 4.93	8.11	8.31	2.36	5.66	2.90	R 4.43	18.20	R 11.14
1996	1.36	5.29	5.20	5.96	9.45	9.27	2.79	6.85	3.33	5.38	17.81	11.23
1997	1.32	5.82	4.88	5.58	9.98	9.23	2.92	6.89	3.31	5.76	17.68	11.50
	Expenditures in Million Nominal Dollars											
1970	0.6	54.9	6.5	2.0	7.5	2.2	6.0	24.2	(s)	79.8	147.3	227.1
1975	2.5	104.7	16.9	2.4	15.5	3.8	8.5	47.2	(s)	R 154.5	246.5	R 401.0
1980	1.8	222.7	37.9	5.9	17.5	10.9	12.1	84.4	(s)	R 309.1	634.8	R 943.9
1981	2.5	245.9	35.1	16.6	19.1	15.9	0.8	87.6	(s)	R 336.3	651.1	R 987.3
1982	2.1	333.2	45.5	23.7	19.1	11.7	0.8	100.9	(s)	R 436.5	727.4	R 1,163.9
1983	3.0	370.7	60.3	1.3	24.9	9.7	6.2	102.3	(s)	R 476.3	793.1	R 1,269.5
1984	2.9	354.2	65.0	R 1.3	13.9	12.8	4.6	R 97.6	(s)	R 454.9	846.0	R 1,300.9
1985	3.6	299.5	51.6	R 1.9	21.1	11.8	3.1	R 89.5	NA	R 392.6	930.8	R 1,323.4
1986	2.1	272.1	31.9	R 0.6	21.4	10.4	1.8	R 66.1	NA	R 340.3	1,043.8	R 1,384.1
1987	4.4	239.2	45.6	R (s)	20.1	11.2	2.0	R 79.1	NA	322.7	1,121.0	R 1,443.8
1988	4.1	268.1	36.9	R 0.6	18.9	8.9	1.4	R 66.7	NA	R 338.8	1,193.0	R 1,531.9
1989	4.7	273.6	24.0	R (s)	21.4	8.3	0.5	R 54.7	NA	R 332.9	1,218.0	R 1,550.9
1990	5.3	269.0	28.1	R 0.5	21.9	R 10.8	1.0	R 62.3	NA	R 336.6	1,252.0	R 1,588.6
1991	4.8	284.4	31.3	R (s)	25.3	5.6	R (s)	R 62.8	NA	R 352.0	1,282.9	R 1,634.9
1992	4.4	272.5	31.8	R 0.6	25.8	5.1	(s)	R 63.4	NA	R 340.3	1,262.9	R 1,603.2
1993	5.1	331.6	29.8	R (s)	35.8	4.7	R (s)	R 70.9	1.0	R 407.7	1,311.1	R 1,718.8
1994	4.6	321.1	29.6	R (s)	29.9	R 4.3	R (s)	64.5	1.0	R 391.2	R 1,341.8	R 1,733.0
1995	4.4	285.7	32.0	R (s)	30.3	4.3	(s)	66.9	0.9	R 357.9	R 1,398.4	R 1,756.3
1996	4.1	389.5	40.2	0.9	41.9	5.6	(s)	88.7	1.2	483.5	1,425.7	1,909.2
1997	5.2	410.6	35.2	0.6	44.3	7.0	0.6	87.7	1.0	504.5	1,435.2	1,939.7

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 164. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Missouri

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	0.38	0.49	0.47	0.40	0.71	0.77	0.82	1.27	5.08	2.73	0.53	R 1.52	R 1.20	R 2.84	R 0.79	4.01	R 1.14
1975	1.60	1.17	1.24	0.80	2.05	2.25	2.40	2.49	7.48	4.55	1.82	R 3.00	R 2.71	R 2.84	R 1.77	6.46	R 2.41
1980	1.81	1.58	1.61	2.61	3.59	5.83	6.10	5.42	14.36	9.33	3.09	R 7.65	R 6.49	R 2.84	R 4.54	11.21	R 5.42
1981	2.03	1.69	1.73	3.28	4.54	7.00	7.37	6.39	18.00	10.15	3.75	R 9.04	R 7.84	R 2.84	R 5.40	11.80	R 6.45
1982	2.04	1.71	1.75	4.34	4.63	6.75	7.15	6.21	17.25	9.88	4.13	R 7.80	R 7.06	R 2.84	R 5.44	13.02	R 6.65
1983	1.58	1.61	1.61	4.88	4.93	6.67	R 7.17	6.80	16.98	8.74	4.12	R 8.06	R 7.27	R 2.84	R 5.45	13.25	R 6.91
1984	1.91	R 1.59	1.62	4.73	5.19	6.61	R 7.11	6.89	17.63	8.48	4.66	R 7.83	R 7.26	R 2.84	R 5.38	12.32	R 6.57
1985	1.93	R 1.57	1.62	4.14	4.77	6.30	R 6.71	9.50	17.61	8.56	4.11	R 7.60	R 6.92	R 2.84	R 5.02	13.14	R 6.36
1986	1.75	R 1.39	1.44	3.75	3.81	4.07	R 4.52	8.51	15.59	6.11	2.25	R 4.90	R 4.97	R 2.32	R 3.91	14.02	R 5.73
1987	1.63	1.27	R 1.30	3.61	3.70	4.51	R 4.70	7.60	13.58	6.81	2.61	R 5.07	R 5.04	R 2.32	R 3.97	14.36	R 5.81
1988	—	1.27	1.27	3.79	3.53	4.17	R 4.03	7.58	14.62	6.82	2.20	R 4.28	R 4.59	R 2.32	R 3.82	14.45	R 5.59
1989	—	1.29	1.29	4.10	3.12	4.73	R 4.82	6.58	14.48	7.45	2.41	R 5.24	R 5.03	d R 2.32	d R 4.14	14.50	d R 6.00
1990	—	1.31	1.31	4.14	3.11	5.82	R 6.67	8.15	14.60	8.61	2.60	R 5.37	R 5.37	R 1.51	R 4.39	14.50	R 6.21
1991	—	1.34	1.34	4.04	3.22	5.19	R 5.82	7.23	16.80	8.30	2.21	R 3.66	R 4.87	R 1.51	R 3.98	14.37	R 6.10
1992	—	R 1.34	R 1.34	3.86	2.46	5.13	R 4.99	7.27	18.32	8.11	2.28	R 3.31	R 4.50	R 1.51	R 3.79	14.01	R 5.88
1993	—	1.36	1.36	4.23	2.86	4.97	R 4.88	9.60	18.96	7.92	2.26	R 3.36	R 5.01	R 1.51	R 4.18	13.81	R 6.10
1994	—	1.43	1.43	4.15	2.74	4.82	R 4.80	7.09	19.11	8.16	1.62	R 3.21	R 4.59	R 1.82	R 4.04	13.55	R 5.82
1995	—	1.42	1.42	3.46	3.23	4.83	R 4.76	7.43	R 19.41	8.31	2.36	R 3.21	R 5.03	R 1.82	R 4.03	13.29	R 5.79
1996	—	1.36	1.36	4.30	3.27	5.81	5.68	9.04	20.08	9.27	2.79	4.47	5.73	1.82	4.67	13.01	6.29
1997	—	1.32	1.32	4.73	3.49	5.33	5.64	8.81	17.86	9.23	2.92	4.24	5.77	1.81	4.78	13.07	6.44
	Expenditures in Million Nominal Dollars																
1970	3.1	17.3	20.4	42.9	26.8	25.4	0.7	5.6	12.8	39.7	4.4	R 31.4	R 146.7	R 8.1	R 218.1	135.6	R 353.7
1975	11.9	44.9	56.8	71.3	73.3	75.7	1.0	15.8	22.3	64.7	7.5	R 46.7	R 307.0	R 10.4	R 445.5	259.0	R 704.5
1980	9.6	48.4	58.0	201.1	95.3	162.3	3.0	63.4	58.4	91.4	7.5	R 376.1	R 857.2	R 5.2	R 1,121.5	419.6	R 1,541.2
1981	10.0	56.7	66.7	232.0	95.6	211.3	3.0	40.5	70.2	79.5	11.5	R 442.8	R 954.4	R 5.5	R 1,258.6	541.3	R 1,800.0
1982	8.1	49.2	57.3	285.0	101.1	236.0	3.0	70.7	61.3	62.2	14.6	314.8	863.8	R 5.3	R 1,211.3	552.7	R 1,764.0
1983	5.4	49.8	55.2	297.1	111.8	114.4	R 1.3	51.8	63.2	42.2	7.2	298.4	R 690.3	R 6.0	R 1,048.5	583.4	R 1,631.9
1984	5.4	R 57.4	62.9	286.1	136.5	122.4	R 1.2	41.1	70.0	50.7	5.4	310.7	738.0	R 6.1	R 1,093.1	518.8	R 1,611.9
1985	12.0	54.7	66.7	276.4	135.9	146.5	0.8	45.6	65.2	48.4	14.4	280.4	737.1	R 6.1	R 1,086.3	565.9	R 1,652.2
1986	10.8	45.5	R 56.4	206.6	116.9	64.8	R (s)	35.8	56.4	30.8	5.3	195.3	R 505.5	R 3.7	R 772.1	608.6	R 1,380.7
1987	3.4	R 41.9	45.2	198.3	106.8	82.7	R (s)	35.4	55.5	R 34.3	8.8	219.1	R 542.9	R 3.7	R 790.2	615.0	R 1,405.2
1988	—	45.3	45.3	206.7	132.6	91.4	0.6	52.7	57.7	31.9	7.3	188.3	R 562.4	R 3.9	R 818.2	619.0	R 1,437.2
1989	—	42.5	42.5	222.8	94.1	89.0	0.9	56.3	58.6	30.4	6.4	223.5	559.2	d R 3.3	d R 827.6	633.0	d R 1,460.6
1990	—	39.9	39.9	228.5	92.2	102.0	R (s)	R 53.9	60.8	R 30.0	8.6	261.9	R 609.7	R 2.5	R 880.6	639.9	R 1,520.5
1991	—	38.6	38.6	233.3	86.7	89.0	R 0.8	53.5	62.6	33.0	6.6	87.3	R 419.5	R 2.6	R 694.0	642.8	R 1,336.9
1992	—	R 35.8	R 35.8	226.3	62.6	97.3	R (s)	49.0	69.6	28.5	8.9	97.6	413.6	R 2.7	R 678.4	642.7	R 1,321.0
1993	—	R 37.8	R 37.8	259.2	77.0	81.1	R (s)	89.9	73.3	61.1	14.4	88.1	485.2	2.8	784.9	641.8	R 1,426.8
1994	—	35.2	35.2	299.3	103.9	97.9	R (s)	62.2	77.2	R 69.5	4.7	88.1	R 503.8	R 3.7	R 842.0	652.1	R 1,494.1
1995	—	36.2	36.2	239.9	113.4	91.8	R (s)	110.5	77.1	73.2	4.8	87.0	R 558.0	R 3.9	R 837.9	649.4	R 1,487.3
1996	—	35.1	35.1	311.2	116.8	109.1	1.1	115.1	77.4	81.7	5.5	127.9	634.7	4.1	985.1	662.1	1,647.2
1997	—	36.3	36.3	340.2	95.8	116.7	(s)	116.4	72.8	81.8	3.4	121.2	608.4	4.2	989.0	680.7	1,669.8

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 165. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Missouri

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.49	—	2.17	1.24	0.75	1.27	5.08	2.73	0.55	2.32	2.32	—	2.32
1975	1.17	—	3.45	2.72	2.09	2.49	7.48	4.55	1.73	4.07	4.07	—	4.07
1980	—	—	9.02	6.97	6.47	5.42	14.36	9.33	3.38	8.76	8.76	—	8.76
1981	—	—	10.84	8.28	7.60	6.39	18.00	10.15	4.36	9.79	9.79	—	9.79
1982	—	—	10.92	7.96	7.19	6.21	17.25	9.88	4.20	9.45	9.45	—	9.45
1983	—	—	10.44	7.17	6.44	6.80	16.98	8.74	4.05	8.42	8.42	—	8.42
1984	—	—	10.27	7.29	6.27	6.89	17.63	8.48	4.31	8.22	8.22	—	8.22
1985	—	—	9.99	7.04	5.90	9.50	17.61	8.56	3.88	8.19	8.19	—	8.19
1986	—	—	8.41	5.75	3.95	8.51	15.59	6.11	2.24	5.98	5.98	—	5.98
1987	—	—	7.55	6.33	4.13	7.60	13.58	6.81	—	6.56	6.56	—	6.56
1988	—	—	7.41	6.10	3.89	7.58	14.62	6.82	1.80	6.52	6.52	—	6.52
1989	—	—	8.28	6.54	4.36	6.58	14.48	7.45	2.08	7.07	7.07	—	7.07
1990	—	—	9.32	7.87	5.68	8.15	14.60	8.61	1.65	8.30	8.30	—	8.30
1991	—	—	8.71	7.42	4.81	7.23	16.80	8.30	—	7.91	7.91	—	7.91
1992	—	—	8.54	7.31	4.57	7.27	18.32	8.11	1.31	7.74	7.74	—	7.74
1993	—	—	8.24	7.26	4.24	9.60	18.96	7.92	1.61	7.53	7.53	—	7.53
1994	—	4.34	7.96	7.33	3.94	9.04	19.11	8.16	1.65	7.61	7.61	20.73	7.61
1995	—	2.72	8.36	7.26	3.99	9.39	R 19.41	8.31	1.73	7.68	7.68	20.67	7.68
1996	—	3.16	9.29	8.33	4.85	8.78	20.08	9.27	2.15	8.62	8.62	20.60	8.62
1997	—	3.75	9.39	8.16	4.59	8.28	17.86	9.23	2.57	8.49	8.49	19.83	8.49
	Expenditures in Million Nominal Dollars												
1970	(s)	—	2.0	57.5	34.1	R (s)	22.7	761.4	0.6	878.5	878.6	—	878.6
1975	(s)	—	3.2	137.9	98.2	0.7	36.0	1,421.9	1.5	1,699.4	1,699.4	—	1,699.4
1980	—	—	7.4	439.5	229.5	1.3	81.2	2,786.6	3.0	3,548.5	3,548.5	—	3,548.5
1981	—	—	11.5	507.8	203.8	3.4	97.6	3,027.5	R (s)	3,851.8	3,851.8	—	3,851.8
1982	—	—	8.0	574.2	177.8	2.6	85.3	2,928.7	3.0	3,779.6	3,779.6	—	3,779.6
1983	—	—	7.5	471.9	199.0	3.4	87.9	2,646.0	0.6	3,416.3	3,416.3	—	3,416.3
1984	—	—	6.9	540.0	199.0	4.6	97.4	2,604.5	R (s)	3,452.6	3,452.6	—	3,452.6
1985	—	—	6.8	537.8	196.6	4.7	90.6	R 2,640.4	0.9	R 3,477.9	R 3,477.9	—	R 3,477.9
1986	—	—	6.9	437.4	149.9	4.9	78.4	R 1,992.8	R (s)	2,670.8	2,670.8	—	2,670.8
1987	—	—	5.1	494.3	174.6	3.7	77.2	R 2,234.2	—	R 2,989.1	R 2,989.1	—	R 2,989.1
1988	—	—	6.1	528.0	160.8	2.8	80.2	R 2,283.0	1.0	R 3,061.7	R 3,061.7	—	R 3,061.7
1989	—	—	8.4	658.5	179.6	2.8	81.5	R 2,455.4	0.9	R 3,387.1	R 3,387.1	—	R 3,387.1
1990	—	—	5.9	746.7	213.8	3.5	84.5	R 2,855.1	R (s)	R 3,909.9	R 3,909.9	—	R 3,909.9
1991	—	—	5.1	673.0	204.2	3.4	87.0	R 2,748.3	—	R 3,721.1	R 3,721.1	—	R 3,721.1
1992	—	—	4.9	744.6	194.6	2.3	96.7	R 2,746.5	R (s)	R 3,789.8	R 3,789.8	—	R 3,789.8
1993	—	—	3.9	763.6	216.8	R 3.2	101.9	R 2,685.9	R (s)	R 3,775.6	R 3,775.6	—	R 3,775.6
1994	—	(s)	4.5	822.6	237.2	R 6.7	107.4	R 2,818.9	R (s)	R 3,997.5	R 3,997.5	R 0.8	R 3,998.3
1995	—	(s)	4.6	855.6	258.6	3.8	R 107.2	2,930.5	R (s)	R 4,160.6	R 4,160.6	R 1.1	R 4,161.7
1996	—	(s)	5.1	1,104.2	333.8	2.9	107.6	3,320.5	(s)	4,874.3	4,874.4	1.3	4,875.7
1997	—	(s)	7.6	1,160.8	320.8	2.5	101.2	3,332.8	(s)	4,925.8	4,926.0	1.2	4,927.2

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 166. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Missouri

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.25	0.26	0.55	0.69	—	0.62	—	—	0.26
1975	0.54	0.59	1.74	2.26	0.65	2.05	—	—	0.57
1980	1.19	2.22	3.45	6.02	0.67	5.07	—	—	1.25
1981	1.35	2.66	4.50	7.25	—	7.08	—	—	1.39
1982	1.43	3.64	4.36	6.96	—	6.79	—	—	1.48
1983	1.49	4.16	4.19	6.08	1.33	5.70	—	—	1.53
1984	1.50	3.93	4.40	6.09	—	5.94	0.78	—	1.50
1985	1.50	3.31	3.99	5.76	1.38	5.60	0.82	—	1.41
1986	1.47	2.92	2.32	3.49	—	3.38	0.82	—	1.38
1987	1.41	2.96	2.41	4.14	—	3.93	0.52	—	1.31
1988	1.38	2.77	1.83	3.55	0.97	3.35	0.73	—	1.29
1989	1.35	2.46	2.12	4.45	0.80	3.90	0.71	—	1.26
1990	1.35	1.72	1.80	5.11	—	4.99	0.74	—	1.27
1991	1.34	1.49	1.33	4.78	—	4.23	0.71	—	1.24
1992	1.34	1.87	1.45	4.26	—	3.92	0.58	—	1.23
1993	1.24	2.32	1.64	4.01	0.64	1.58	0.56	0.52	1.14
1994	1.10	1.90	1.66	3.75	0.70	1.23	0.49	0.68	1.01
1995	0.98	1.68	1.64	3.89	0.73	1.35	0.48	0.61	0.94
1996	0.96	2.55	2.31	4.73	—	4.45	0.47	0.65	0.91
1997	0.93	2.79	2.53	4.31	—	4.15	0.47	0.65	0.90
	Expenditures in Million Nominal Dollars								
1970	58.6	16.6	R (s)	0.6	—	1.1	—	—	76.3
1975	205.4	15.0	4.1	9.3	R (s)	13.5	—	—	234.0
1980	586.4	33.3	0.6	18.8	R (s)	19.9	—	—	639.6
1981	666.5	20.1	0.5	12.9	—	13.4	—	—	700.0
1982	700.1	16.5	0.6	14.6	—	15.2	—	—	731.8
1983	786.7	11.6	1.7	13.8	R (s)	15.6	—	—	813.9
1984	824.8	9.8	0.5	7.8	—	8.3	7.8	—	850.7
1985	728.4	4.8	R (s)	6.8	(s)	7.2	71.3	—	811.7
1986	690.4	3.4	R (s)	4.5	—	4.8	63.1	—	761.7
1987	689.2	4.0	R (s)	5.0	—	5.4	34.9	—	733.5
1988	700.4	4.5	R (s)	6.3	(s)	6.7	70.3	—	781.9
1989	690.4	3.1	R (s)	5.7	R (s)	6.3	63.1	—	762.9
1990	679.4	6.2	R (s)	6.2	—	6.3	62.9	—	754.7
1991	671.3	19.2	R (s)	6.8	—	7.2	76.5	—	774.2
1992	656.8	4.4	R (s)	4.6	—	4.8	49.7	—	715.7
1993	535.7	11.4	R (s)	8.6	3.5	12.3	50.1	(s)	609.6
1994	564.4	8.3	R (s)	5.6	5.1	11.0	52.4	(s)	636.0
1995	552.1	21.7	R (s)	6.4	4.9	11.4	41.9	R (s)	627.3
1996	572.3	13.4	(s)	6.3	—	6.7	44.7	(s)	637.2
1997	591.3	21.0	(s)	6.9	—	7.3	44.5	(s)	664.4

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 167. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Montana

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.22	0.22	0.57	1.14	0.76	2.10	2.89	0.39	R 0.91	R 1.92	—	R 1.13	R 1.27	0.23	2.88	R 1.56
1975	—	0.33	0.33	1.07	2.58	2.12	3.62	4.78	1.99	R 2.22	R 3.45	—	R 1.43	R 2.41	0.34	4.05	R 2.78
1980	—	0.53	0.53	3.14	6.59	6.59	6.49	9.99	3.28	R 4.89	R 7.25	—	R 1.77	R 4.80	0.72	5.80	R 6.04
1981	—	0.63	0.63	4.00	7.91	7.67	7.55	11.02	4.19	R 5.28	R 8.58	—	R 1.79	R 5.57	0.66	7.03	R 7.15
1982	—	0.69	0.69	4.76	7.59	7.38	7.59	10.47	4.00	R 4.85	R 8.41	—	R 1.83	R 5.79	0.61	8.83	R 7.44
1983	—	0.83	0.83	4.54	6.72	7.27	7.67	9.19	4.11	R 5.25	R 7.55	—	R 1.73	R 5.60	0.80	10.51	R 7.22
1984	—	0.78	0.78	5.00	6.73	7.03	7.35	9.11	4.49	R 5.19	R 7.51	—	R 1.81	R 4.80	0.77	10.16	R 7.46
1985	—	0.75	0.75	4.84	6.42	6.64	7.60	9.16	3.03	R 5.14	R 7.30	—	R 1.68	R 4.65	0.72	10.72	R 7.38
1986	—	R 0.74	R 0.74	4.32	5.66	4.81	6.60	6.74	2.63	R 4.50	R 5.94	—	R 1.48	R 3.34	0.68	11.18	R 6.56
1987	—	0.67	0.67	4.05	6.06	4.38	6.15	7.57	2.34	R 3.32	R 6.20	—	R 1.49	R 3.38	0.66	11.81	R 6.77
1988	—	0.57	0.57	3.92	6.22	4.33	6.15	7.75	2.12	R 3.48	R 6.38	—	R 1.48	R 2.98	0.55	12.09	R 6.89
1989	—	0.60	0.60	3.95	6.65	4.79	7.33	8.59	2.16	R 3.33	R 6.88	—	e R 1.35	e R 3.30	0.58	12.00	e R 7.09
1990	—	0.70	0.70	4.16	7.79	6.26	9.11	9.56	3.03	R 3.39	R 7.81	—	R 1.82	R 3.82	0.68	11.68	R 7.71
1991	—	0.70	0.70	4.06	7.11	5.47	9.87	9.07	2.36	R 3.71	R 7.46	—	R 1.88	R 3.57	0.68	12.23	R 7.54
1992	—	0.73	0.73	4.42	7.42	5.46	8.72	9.39	1.70	R 3.09	R 7.49	—	R 1.75	R 3.58	0.71	12.37	R 7.66
1993	—	R 0.72	R 0.72	4.22	7.45	5.39	8.43	9.57	2.32	R 3.16	R 7.57	—	R 1.68	R 3.96	0.70	12.87	R 7.60
1994	—	R 0.73	R 0.73	4.87	7.68	5.02	7.69	9.99	2.14	R 3.15	R 7.69	—	R 1.85	R 3.82	0.70	13.29	R 7.82
1995	—	0.73	0.73	4.84	7.73	5.32	7.62	10.04	2.20	R 3.41	R 7.93	—	R 1.99	R 4.09	0.69	13.71	R 7.93
1996	—	0.72	0.72	4.65	8.33	5.76	9.11	10.75	2.71	3.71	8.48	—	2.07	4.79	0.72	13.93	8.46
1997	—	0.70	0.70	4.76	7.52	5.94	8.99	10.84	2.11	3.72	8.27	—	1.95	4.45	0.70	15.31	8.41
	Expenditures in Million Nominal Dollars																
1970	—	2.6	2.6	45.1	31.9	2.7	9.9	140.7	0.7	R 17.2	R 203.1	—	R 2.9	R 253.7	-3.4	84.1	R 334.4
1975	—	6.2	6.2	78.2	114.2	9.7	17.1	266.6	17.6	R 32.6	R 457.8	—	R 2.7	R 544.9	-6.4	119.8	R 658.3
1980	—	31.8	31.8	166.0	288.2	34.1	41.9	546.8	68.3	R 63.8	R 1,043.1	—	R 4.3	R 1,245.2	-44.3	207.7	R 1,408.6
1981	—	39.6	39.6	189.3	298.1	34.5	28.0	624.8	48.6	R 87.6	R 1,121.5	—	R 4.8	R 1,355.3	-39.8	253.4	R 1,568.9
1982	—	33.6	33.6	225.2	257.5	25.8	39.4	573.6	26.3	R 65.3	R 988.0	—	R 4.7	R 1,251.5	-27.4	301.5	R 1,525.6
1983	—	35.7	35.7	190.9	347.1	26.6	40.8	508.1	22.6	R 67.3	R 1,012.5	—	R 5.1	R 1,244.3	-32.1	322.2	R 1,534.4
1984	—	R 70.5	R 70.5	210.6	370.5	25.3	25.8	500.0	11.4	77.6	1,010.5	—	R 6.0	R 1,297.6	-67.8	471.5	R 1,701.4
1985	—	R 74.7	R 74.7	204.7	423.0	25.2	39.8	R 490.3	2.4	R 86.9	1,067.7	—	R 5.5	R 1,352.7	-69.2	488.6	R 1,772.0
1986	—	R 98.1	R 98.1	157.7	230.9	23.3	33.9	359.8	0.6	R 91.0	R 739.5	—	R 9.7	R 1,005.0	-87.0	515.8	R 1,433.8
1987	—	89.7	89.7	140.4	231.5	17.7	35.8	R 408.0	R (s)	R 69.4	R 762.7	—	R 9.2	R 1,001.9	-85.9	488.8	R 1,404.8
1988	—	R 103.1	R 103.1	149.0	228.4	19.6	31.8	R 424.9	R (s)	R 69.3	R 774.2	—	R 9.6	R 1,035.9	-99.1	521.6	R 1,458.4
1989	—	107.3	107.3	164.9	297.2	20.0	42.0	R 465.1	R (s)	R 71.1	R 895.5	—	e R 8.3	e R 1,176.1	R -102.3	519.2	e R 1,593.0
1990	—	R 115.7	R 115.7	162.9	336.9	24.8	55.5	R 518.4	R (s)	R 73.5	R 1,009.5	—	R 8.0	R 1,296.2	R -110.7	510.9	R 1,696.4
1991	—	R 126.4	R 126.4	169.1	344.8	19.0	36.7	R 493.4	(s)	R 72.0	R 966.0	—	R 8.2	R 1,269.8	-119.3	546.3	R 1,696.7
1992	—	R 138.4	R 138.4	179.8	333.5	26.3	31.1	R 529.2	(s)	R 69.1	R 989.2	—	R 8.3	R 1,315.9	R -132.8	541.1	R 1,724.2
1993	—	R 113.5	R 113.5	197.8	347.1	27.1	65.0	R 553.2	2.5	R 72.0	R 1,066.9	—	R 8.0	R 1,386.3	R -106.8	555.5	R 1,835.0
1994	—	R 138.8	R 138.8	225.8	369.1	24.0	29.1	R 582.6	1.5	R 80.7	R 1,087.0	—	R 8.3	R 1,460.6	R -126.4	585.2	R 1,919.4
1995	—	R 124.2	R 124.2	251.4	401.7	31.3	25.2	597.6	0.6	R 73.5	R 1,130.0	—	R 9.2	R 1,514.9	R -110.7	614.1	R 2,018.3
1996	—	97.7	97.7	259.6	476.5	32.6	54.4	663.9	(s)	93.0	1,320.5	—	9.8	1,687.6	-96.8	643.3	2,234.1
1997	—	113.1	113.1	258.3	472.3	26.7	54.3	653.9	(s)	82.8	1,290.0	—	8.8	1,670.2	-110.3	611.4	2,171.4

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 168. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Montana

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	0.80	0.88	1.28	—	2.35	2.03	0.72	1.06	6.57	R 1.86
1975	1.06	1.27	2.84	—	3.88	3.37	1.43	R 1.73	7.02	R 2.72
1980	1.35	3.02	6.92	—	7.21	7.08	3.66	R 3.90	9.04	R 5.35
1981	1.64	3.72	8.27	—	8.25	8.26	4.51	4.46	10.50	R 6.39
1982	1.90	4.42	8.41	—	8.85	8.66	4.37	R 5.20	11.20	R 7.00
1983	0.68	4.60	6.97	R 7.45	8.33	R 7.72	4.23	R 5.38	12.96	R 7.74
1984	0.84	4.84	6.56	R 7.70	8.19	R 7.17	4.30	R 5.26	12.58	R 7.68
1985	0.98	4.82	7.92	R 8.29	8.18	R 8.06	4.14	R 5.37	13.77	R 8.22
1986	1.37	4.46	4.87	R 4.48	7.12	R 6.04	3.32	R 4.74	14.68	R 8.07
1987	1.44	4.33	5.15	R 4.48	6.62	R 6.09	3.16	R 4.67	16.19	R 8.70
1988	0.95	4.20	4.61	R 4.19	6.55	5.88	3.19	R 4.49	15.89	R 8.41
1989	1.25	4.29	5.08	R 4.38	8.51	7.10	3.53	R 4.84	15.77	R 8.41
1990	1.32	4.47	6.42	R 5.70	9.99	8.69	4.75	5.28	15.97	R 8.83
1991	1.16	4.40	6.11	R 6.97	10.42	8.48	4.54	R 5.13	16.88	R 8.94
1992	1.26	4.70	5.99	R 6.56	8.65	7.67	4.15	R 5.13	17.11	R 9.24
1993	1.27	4.84	6.02	R 6.64	7.36	R 6.77	4.06	R 5.08	16.92	R 8.96
1994	1.36	5.11	5.67	R 5.67	8.03	R 7.17	3.94	R 5.34	17.47	R 9.54
1995	1.39	5.00	6.09	R 5.87	8.02	7.13	3.86	R 5.23	17.85	R 9.50
1996	—	4.72	6.27	6.59	9.94	7.82	4.43	5.20	18.24	9.39
1997	1.42	4.90	6.00	6.90	9.52	6.92	4.41	5.31	18.76	9.38
	Expenditures in Million Nominal Dollars									
1970	R (s)	22.5	1.9	—	7.9	9.7	(s)	R 32.6	34.4	R 66.9
1975	R (s)	31.2	9.7	—	14.0	23.8	0.5	R 55.6	51.3	R 106.9
1980	R (s)	58.9	17.0	—	21.9	38.9	1.1	R 99.0	89.9	R 188.9
1981	R (s)	64.7	13.2	—	15.1	28.3	1.3	R 94.5	104.1	R 198.5
1982	R (s)	89.1	17.3	—	23.5	40.8	1.4	R 131.4	121.4	R 252.9
1983	(s)	78.5	18.2	R 0.6	27.1	R 46.0	1.3	R 125.9	137.0	R 262.8
1984	(s)	89.6	17.5	R 0.7	12.6	R 30.8	1.8	R 122.3	144.8	R 267.1
1985	(s)	93.2	15.9	R (s)	17.8	R 34.2	1.7	R 129.2	169.8	R 299.0
1986	R (s)	74.8	10.0	R (s)	16.6	R 26.9	1.3	R 103.2	161.0	R 264.2
1987	R (s)	67.7	7.4	R (s)	17.2	24.6	0.6	R 93.0	173.4	R 266.4
1988	R (s)	72.7	6.3	R (s)	17.1	23.4	0.6	R 96.8	179.0	R 275.8
1989	R (s)	79.5	10.8	(s)	26.0	36.9	0.7	R 117.6	186.0	R 303.6
1990	R (s)	77.3	10.8	R (s)	29.4	R 40.2	3.6	121.7	183.0	304.7
1991	R (s)	83.2	12.7	(s)	26.5	39.2	3.6	R 126.3	199.2	R 325.6
1992	R (s)	80.0	7.6	(s)	18.7	26.3	3.5	R 110.0	191.8	R 301.8
1993	R (s)	100.2	9.4	R (s)	14.5	24.2	3.1	R 127.5	207.7	R 335.2
1994	(s)	97.9	6.2	R (s)	15.8	R 22.2	3.0	R 123.1	212.6	R 335.7
1995	R (s)	101.1	8.9	(s)	13.7	22.7	3.2	R 127.2	221.6	R 348.8
1996	—	107.8	16.0	(s)	18.7	34.7	3.7	146.1	243.3	389.5
1997	0.7	106.1	31.8	(s)	17.9	49.8	2.7	159.2	243.6	402.8

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 169. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Montana

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.48	0.60	1.06	0.94	1.49	2.89	0.34	1.64	0.72	0.78	5.74	1.51
1975	0.79	1.07	2.49	2.63	2.77	4.78	2.03	2.89	1.43	1.49	6.39	2.39
1980	2.04	3.12	6.45	—	5.85	9.99	4.42	6.87	3.66	3.76	8.50	5.12
1981	1.89	4.15	7.78	—	6.85	11.02	—	8.28	4.51	4.89	9.81	6.40
1982	1.82	4.83	7.78	—	6.26	10.47	4.63	8.22	4.37	5.22	10.10	6.69
1983	1.59	5.03	6.24	R 7.45	6.63	9.19	4.08	6.13	4.23	5.43	11.76	7.19
1984	R 2.01	5.22	6.11	R 7.70	6.70	9.11	4.49	6.12	4.30	5.53	11.44	8.06
1985	R 1.82	5.10	5.76	R 8.29	7.19	9.16	3.03	5.71	NA	5.27	12.49	8.18
1986	R 2.06	4.48	3.58	R 4.48	6.17	6.74	2.63	4.21	NA	R 4.39	13.45	8.78
1987	1.64	4.26	4.01	R 4.48	5.77	7.57	2.34	4.80	NA	4.35	14.04	8.43
1988	R 1.57	4.20	3.71	R 4.19	5.75	7.75	2.12	4.90	NA	4.28	13.46	8.22
1989	1.53	4.28	4.41	R 4.38	5.98	8.59	2.16	5.47	NA	4.33	13.46	7.90
1990	1.54	4.52	5.53	R 5.70	8.30	9.56	3.03	7.11	NA	4.71	13.53	8.44
1991	R 1.60	4.23	4.88	R 6.97	8.68	9.07	2.36	R 6.41	NA	4.42	14.36	8.59
1992	1.52	4.36	4.73	R 6.56	8.82	9.39	1.70	R 6.42	NA	4.56	14.83	9.26
1993	R 1.29	4.59	4.74	R 6.64	8.79	9.57	2.32	5.78	4.06	R 4.66	14.71	R 8.97
1994	R 1.42	4.80	4.43	R 5.67	8.27	9.99	2.14	5.55	3.94	R 4.86	14.85	R 9.40
1995	R 1.46	4.78	4.56	R 5.87	8.02	10.04	2.20	5.83	3.86	4.82	15.78	R 9.58
1996	1.54	4.51	5.40	6.59	9.89	10.75	2.71	6.29	4.43	4.73	16.39	9.52
1997	1.49	4.69	5.30	6.90	10.37	10.84	2.11	6.51	4.41	4.68	17.19	9.91
	Expenditures in Million Nominal Dollars											
1970	R (s)	11.5	1.7	R (s)	0.9	3.3	(s)	6.5	(s)	18.0	23.3	41.3
1975	R (s)	20.4	9.7	0.8	1.8	4.4	(s)	16.7	(s)	37.2	35.9	73.1
1980	R (s)	44.9	13.0	—	3.1	4.8	R (s)	21.2	(s)	66.4	60.7	R 127.2
1981	R (s)	57.4	17.2	—	2.2	6.4	—	25.8	(s)	83.4	73.7	157.1
1982	R (s)	77.9	8.3	—	2.9	7.0	R (s)	18.4	(s)	96.5	80.6	177.1
1983	R (s)	68.5	40.1	(s)	3.8	3.6	4.4	52.0	(s)	120.7	100.3	221.0
1984	R (s)	74.7	40.1	(s)	1.8	2.9	3.0	47.9	(s)	R 122.8	190.2	R 313.0
1985	R (s)	75.5	28.9	(s)	2.8	3.5	2.4	37.6	NA	113.2	180.8	294.1
1986	R 0.5	56.1	8.4	R (s)	2.5	2.7	0.6	14.4	NA	R 71.1	204.5	R 275.6
1987	R (s)	47.7	7.1	(s)	2.6	3.2	R (s)	13.1	NA	61.0	142.7	203.7
1988	R (s)	51.8	4.3	(s)	2.6	3.1	R (s)	10.2	NA	62.1	147.0	209.1
1989	1.0	57.3	5.2	(s)	3.2	3.5	R (s)	12.1	NA	70.4	141.0	211.4
1990	1.1	56.4	4.9	(s)	4.3	4.2	R (s)	13.6	NA	R 71.2	149.4	220.5
1991	0.8	55.9	5.8	(s)	3.9	3.0	(s)	R 12.7	NA	R 69.5	163.0	232.4
1992	R (s)	51.5	4.7	(s)	3.4	2.7	(s)	10.8	NA	62.7	171.8	234.5
1993	R (s)	64.8	5.4	(s)	3.1	0.6	R (s)	9.1	(s)	74.1	175.4	249.5
1994	R (s)	63.7	4.9	(s)	2.9	0.8	(s)	8.6	(s)	R 72.7	185.2	R 257.9
1995	R (s)	66.4	3.1	(s)	2.4	0.7	(s)	6.3	(s)	R 73.1	183.6	R 256.7
1996	(s)	68.8	9.7	(s)	3.3	1.1	(s)	14.1	(s)	83.3	201.4	284.7
1997	1.4	67.2	6.6	(s)	3.4	0.7	(s)	10.8	(s)	79.6	209.8	289.5

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 170. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Montana

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	0.48	0.48	0.33	0.59	0.87	0.94	1.49	5.08	2.89	0.45	R 0.52	R 0.98	R 1.49	R 0.66	1.33	0.82
1975	—	0.79	0.79	0.93	1.84	2.44	2.63	2.77	7.48	4.78	1.99	1.40	R 2.38	R 1.49	R 1.76	1.96	R 1.80
1980	—	2.04	2.04	3.11	3.67	5.19	—	5.85	14.36	9.99	3.28	R 2.54	R 4.37	R 1.49	R 3.92	3.05	R 3.73
1981	—	1.89	1.89	4.22	4.41	7.04	7.42	6.85	18.00	11.02	4.19	R 2.84	R 5.51	R 1.49	R 4.80	4.06	R 4.63
1982	—	1.82	1.82	5.43	4.24	5.90	—	6.26	17.25	10.47	4.00	R 2.19	R 5.12	R 1.49	R 4.75	6.48	R 5.16
1983	—	1.59	1.59	3.96	4.22	6.29	R 6.81	6.63	16.98	9.19	4.12	R 1.86	R 5.54	R 1.49	R 4.82	7.34	R 5.26
1984	—	R 2.01	R 2.01	5.15	4.65	6.37	R 6.79	6.70	17.63	9.11	4.49	R 1.92	R 5.66	R 1.49	R 5.18	7.47	R 5.77
1985	—	R 1.82	R 1.82	4.71	4.83	6.14	R 6.44	7.19	17.61	9.16	3.03	2.05	5.82	R 1.49	R 5.32	7.35	R 5.75
1986	—	R 2.06	R 2.06	3.92	4.35	3.92	R 5.07	6.17	15.59	6.74	2.63	1.53	R 4.23	R 1.49	R 3.69	7.52	R 4.72
1987	—	1.64	1.64	3.36	3.07	4.22	R 5.04	5.77	13.58	7.57	2.34	1.50	R 3.73	R 1.49	R 3.30	8.42	R 4.76
1988	—	R 1.57	R 1.57	3.01	3.29	4.02	R 4.24	5.75	14.62	7.75	2.12	1.45	R 3.70	R 1.49	R 3.17	9.33	R 4.99
1989	—	1.53	1.53	2.93	2.75	4.79	R 4.84	5.98	14.48	8.59	2.16	1.74	R 4.08	d R 1.46	d R 3.51	9.15	d R 4.98
1990	—	1.54	1.54	3.19	2.64	6.01	R 6.43	8.30	14.60	9.56	3.03	2.02	R 4.75	R 1.55	R 4.12	8.40	R 5.28
1991	—	R 1.60	R 1.60	3.13	3.29	5.24	5.93	8.68	16.80	9.07	2.36	1.72	R 4.53	1.57	R 3.92	8.55	R 5.15
1992	—	1.52	1.52	4.10	2.86	5.15	R 5.39	8.82	18.32	9.39	1.70	1.29	R 3.99	R 1.57	R 3.69	8.48	R 4.94
1993	—	R 1.29	R 1.29	2.71	2.80	5.18	R 5.49	8.79	18.96	9.57	2.32	1.06	R 4.46	R 1.57	R 3.71	9.10	R 4.88
1994	—	R 1.42	R 1.42	4.80	2.82	5.07	R 4.81	7.03	19.11	9.99	2.14	1.14	R 3.87	1.57	R 3.57	9.66	R 4.90
1995	—	R 1.46	R 1.46	4.73	3.13	5.21	R 5.22	6.96	R 19.41	10.04	2.20	1.34	R 4.25	R 1.54	R 3.79	10.07	R 5.19
1996	—	1.54	1.54	4.74	3.46	6.06	6.02	8.63	20.08	10.75	2.71	1.75	5.06	1.51	4.69	9.66	5.77
1997	—	1.49	1.49	4.65	3.57	5.83	5.60	8.61	17.86	10.84	2.11	1.69	5.10	1.53	4.66	10.72	5.70
	Expenditures in Million Nominal Dollars																
1970	—	R (s)	R (s)	10.4	5.3	6.5	1.5	0.9	1.4	9.6	R (s)	R 3.3	R 28.9	R 2.1	R 41.8	26.5	R 68.2
1975	—	0.8	0.8	26.1	11.3	35.5	1.0	0.8	2.1	19.4	14.9	R 8.7	R 93.7	R 2.1	R 122.6	32.6	R 155.3
1980	—	6.0	6.0	45.2	24.9	58.2	—	15.9	4.4	32.5	68.1	R 10.1	R 214.1	R 2.9	R 268.1	57.1	R 325.2
1981	—	10.1	10.1	58.4	30.3	79.7	1.1	9.3	5.4	38.4	48.6	R 20.5	R 233.3	R 3.0	R 304.9	75.6	R 380.4
1982	—	7.9	7.9	57.5	24.8	47.9	—	12.2	4.7	34.7	26.2	R 12.8	R 163.4	R 2.9	R 231.7	99.4	R 331.1
1983	—	5.3	5.3	43.6	31.7	116.3	R (s)	8.6	4.8	24.6	18.1	R 6.2	R 210.4	R 3.3	R 262.6	85.0	R 347.5
1984	—	R 6.3	R 6.3	46.0	37.5	120.3	R (s)	9.7	5.3	26.7	8.3	R 9.5	R 217.5	R 3.4	R 273.2	136.5	R 409.6
1985	—	R 7.4	R 7.4	35.7	46.9	207.4	(s)	17.9	5.0	32.6	(s)	R 10.9	R 320.7	R 3.4	R 367.1	138.0	R 505.1
1986	—	R 11.7	R 11.7	26.3	57.4	48.4	(s)	13.6	4.3	22.6	(s)	R 7.7	R 154.1	R 8.2	R 200.2	150.2	R 350.5
1987	—	5.6	5.6	24.4	33.5	44.3	R (s)	15.2	4.2	22.8	(s)	R 12.1	R 132.3	R 8.1	R 170.5	172.7	R 343.2
1988	—	R 6.2	R 6.2	24.1	32.2	37.9	R (s)	11.1	4.4	23.4	(s)	R 11.8	R 120.7	R 8.5	R 159.5	195.6	R 355.1
1989	—	5.6	5.6	27.6	31.9	77.5	R (s)	11.6	4.5	R 28.5	(s)	R 13.4	R 167.5	d R 7.6	d R 208.2	192.2	d R 400.4
1990	—	6.2	6.2	28.4	26.0	96.2	R (s)	19.8	4.6	R 30.8	(s)	R 19.6	R 197.3	R 4.4	R 236.3	178.5	R 414.9
1991	—	R 8.3	R 8.3	28.7	29.5	108.7	R (s)	4.8	4.8	29.1	(s)	R 14.6	R 191.5	R 4.6	R 233.2	184.1	R 417.3
1992	—	R 7.1	R 7.1	47.3	24.8	77.6	(s)	7.8	5.3	28.2	(s)	R 15.4	R 159.2	R 4.9	R 218.5	177.5	R 396.0
1993	—	R 8.8	R 8.8	32.0	31.7	82.6	(s)	46.0	5.6	28.5	2.4	R 10.3	R 207.2	R 4.9	R 252.9	172.5	R 425.4
1994	—	R 14.9	R 14.9	63.4	36.7	67.2	(s)	8.9	5.9	31.7	1.5	R 12.2	R 164.0	R 5.1	R 247.4	187.4	R 434.7
1995	—	R 16.4	R 16.4	82.3	26.8	80.3	(s)	8.3	5.9	34.1	0.6	R 14.9	R 170.9	R 5.7	R 275.3	208.8	R 484.1
1996	—	3.7	3.7	81.6	39.0	122.1	(s)	32.0	5.9	37.4	(s)	20.7	257.2	5.8	348.2	198.5	546.7
1997	—	4.0	4.0	82.8	34.3	109.3	(s)	32.5	5.5	39.1	(s)	18.2	238.9	5.9	331.7	158.1	489.8

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 171. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Montana

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.48	—	2.17	1.24	0.76	1.49	5.08	2.89	0.34	2.34	2.34	—	2.34
1975	0.79	—	3.45	2.65	2.12	2.77	7.48	4.78	2.01	4.02	4.02	—	4.02
1980	—	—	9.02	7.15	6.59	5.85	14.36	9.99	—	8.92	8.92	—	8.92
1981	—	—	10.84	8.36	7.67	6.85	18.00	11.02	—	10.19	10.19	—	10.19
1982	—	—	10.92	8.13	7.38	6.26	17.25	10.47	—	9.75	9.75	—	9.75
1983	—	—	10.44	7.16	7.27	6.63	16.98	9.19	4.10	8.62	8.62	—	8.62
1984	—	—	10.27	7.18	7.03	6.70	17.63	9.11	4.57	8.52	8.52	—	8.52
1985	—	—	9.99	6.80	6.64	7.19	17.61	9.16	4.01	8.42	8.42	—	8.42
1986	—	—	8.41	6.84	4.81	6.17	15.59	6.74	—	6.78	6.78	—	6.78
1987	—	—	7.55	7.09	4.38	5.77	13.58	7.57	—	7.35	7.35	—	7.35
1988	—	—	7.41	7.31	4.33	5.75	14.62	7.75	—	7.52	7.52	—	7.52
1989	—	—	8.28	8.13	4.79	5.98	14.48	8.59	—	8.33	8.33	—	8.33
1990	—	4.47	9.32	9.18	6.26	8.30	14.60	9.56	—	9.35	9.35	—	9.35
1991	—	4.38	8.71	8.94	5.47	8.68	16.80	9.07	—	8.97	8.97	—	8.97
1992	—	4.41	8.54	8.85	5.46	8.82	18.32	9.39	—	9.11	9.11	—	9.11
1993	—	5.08	8.24	8.96	5.39	8.79	18.96	9.57	—	9.26	9.26	—	9.26
1994	—	4.24	7.96	8.95	5.02	7.56	19.11	9.99	—	9.48	9.48	—	9.48
1995	—	4.48	8.36	9.03	5.32	7.38	R 19.41	10.04	—	9.50	9.50	—	9.50
1996	—	3.82	9.29	10.09	5.76	8.63	20.08	10.75	—	10.34	10.34	—	10.34
1997	—	3.72	9.39	8.68	5.94	8.12	17.86	10.84	—	9.89	9.89	—	9.89
	Expenditures in Million Nominal Dollars												
1970	(s)	—	R (s)	21.9	2.7	R (s)	4.7	127.7	R (s)	157.9	157.9	—	157.9
1975	(s)	—	1.4	59.2	9.7	0.5	7.3	242.9	2.0	323.1	323.1	—	323.1
1980	—	—	7.3	198.3	34.1	1.0	17.1	509.5	—	767.3	767.3	—	767.3
1981	—	—	9.7	186.7	34.5	1.3	20.6	580.1	—	832.8	832.8	—	832.8
1982	—	—	5.1	183.1	25.8	0.6	18.0	531.9	—	764.5	764.5	—	764.5
1983	—	—	5.4	171.3	26.6	1.3	18.5	479.9	R (s)	703.0	703.0	—	703.0
1984	—	—	4.0	189.8	25.3	1.7	20.5	470.3	(s)	711.6	711.6	—	711.6
1985	—	—	4.6	169.4	25.2	1.3	19.1	R 454.3	(s)	R 673.9	R 673.9	—	R 673.9
1986	—	—	4.4	163.5	23.3	1.2	16.5	R 334.5	—	543.5	543.5	—	543.5
1987	—	—	3.1	171.7	17.7	0.8	16.3	R 382.0	—	R 591.5	R 591.5	—	R 591.5
1988	—	—	4.0	178.4	19.6	1.0	16.9	R 398.4	—	R 618.4	R 618.4	—	R 618.4
1989	—	—	4.0	202.0	20.0	1.2	17.2	R 433.1	—	R 677.5	R 677.5	—	R 677.5
1990	—	(s)	5.2	223.1	24.8	2.0	17.8	R 483.4	—	R 756.3	R 756.3	—	R 756.3
1991	—	(s)	4.8	216.6	19.0	1.5	18.3	R 461.4	—	R 721.5	R 721.5	—	R 721.5
1992	—	(s)	3.3	242.6	26.3	1.1	20.4	R 498.3	—	R 791.8	R 791.9	—	R 791.9
1993	—	(s)	2.6	248.3	27.1	1.4	21.5	R 524.1	—	R 825.0	R 825.0	—	R 825.0
1994	—	(s)	3.0	289.7	24.0	1.6	22.6	R 550.1	—	R 891.0	R 891.1	—	R 891.1
1995	—	(s)	3.3	307.9	31.3	0.7	22.6	562.8	—	928.6	928.6	—	928.6
1996	—	(s)	4.6	327.4	32.6	0.5	22.7	625.4	—	1,013.2	1,013.2	—	1,013.2
1997	—	(s)	3.4	323.4	26.7	(s)	21.3	614.2	—	989.3	989.4	—	989.4

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 172. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Montana

Year	Coal	Natural Gas	Petroleum: Heavy Oil	Petroleum: Light Oil	Petroleum: Petroleum Coke	Petroleum: Total	Nuclear Fuel	Wood and Waste	Total Energy [a]
	Prices in Nominal Dollars per Million Btu								
1970	0.19	0.27	0.33	0.36	—	0.33	—	0.65	0.23
1975	0.30	0.38	1.99	2.30	—	2.00	—	0.92	0.34
1980	0.44	3.87	—	5.01	—	5.01	—	1.74	0.72
1981	0.51	3.94	—	5.84	—	5.84	—	1.24	0.66
1982	0.58	1.71	—	5.42	—	5.42	—	1.28	0.61
1983	0.77	0.80	—	6.21	—	6.21	—	1.12	0.80
1984	0.74	0.66	—	5.80	—	5.80	—	1.28	0.77
1985	0.71	0.59	—	6.11	—	6.11	—	0.79	0.72
1986	0.67	0.86	—	4.28	—	4.28	—	0.32	0.68
1987	0.65	0.92	—	4.11	—	4.11	—	0.95	0.66
1988	0.55	1.26	—	4.03	—	4.03	—	0.87	0.55
1989	0.58	1.14	—	4.31	—	4.31	—	([b])	0.58
1990	0.67	1.45	—	5.43	—	5.43	—	([b])	0.68
1991	0.67	3.94	—	4.72	—	4.72	—	([b])	0.68
1992	0.71	3.42	—	5.09	—	5.09	—	([b])	0.71
1993	0.69	2.68	—	5.26	—	5.26	—	([b])	0.70
1994	0.69	1.15	—	4.63	—	4.63	—	([b])	0.70
1995	0.67	3.58	—	4.91	—	4.91	—	([b])	0.69
1996	0.71	2.69	—	5.65	—	5.65	—	([b])	0.72
1997	0.68	4.75	—	5.29	—	5.29	—	([b])	0.70
	Expenditures in Million Nominal Dollars								
1970	2.2	0.7	[R] (s)	(s)	—	[R] (s)	—	[R] (s)	3.4
1975	5.2	[R] (s)	0.7	(s)	—	0.7	—	[R] (s)	6.4
1980	25.3	17.0	—	1.7	—	1.7	—	[R] (s)	44.3
1981	29.3	8.8	—	1.3	—	1.3	—	[R] (s)	39.8
1982	25.4	0.7	—	1.0	—	1.0	—	[R] (s)	27.4
1983	30.2	[R] (s)	—	1.1	—	1.1	—	[R] (s)	32.1
1984	64.1	[R] (s)	—	2.6	—	2.6	—	0.8	67.8
1985	67.1	[R] (s)	—	1.4	—	1.4	—	[R] (s)	69.2
1986	85.7	[R] (s)	—	0.6	—	0.6	—	[R] (s)	87.0
1987	83.8	0.5	—	1.1	—	1.1	—	[R] (s)	85.9
1988	96.7	[R] (s)	—	1.5	—	1.5	—	[R] (s)	99.1
1989	100.2	[R] (s)	—	1.5	—	1.5	—	([b])	[R] 102.3
1990	107.9	0.7	—	2.0	—	2.0	—	([b])	[R] 110.7
1991	116.9	1.3	—	1.1	—	1.1	—	([b])	119.3
1992	130.8	0.9	—	1.0	—	1.0	—	([b])	[R] 132.8
1993	104.4	0.8	—	1.5	—	1.5	—	([b])	[R] 106.8
1994	123.9	0.8	—	1.1	—	1.1	—	([b])	[R] 126.4
1995	107.5	1.5	—	1.5	—	1.5	—	([b])	[R] 110.7
1996	94.0	1.4	—	1.3	—	1.3	—	([b])	96.8
1997	106.9	2.1	—	1.2	—	1.2	—	([b])	110.3

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[b] Utilities used biomass fuels at no charge or received a fee for accepting them.
R=Revised data.

—No consumption.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 173. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Nebraska

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.32	0.32	0.50	0.95	0.75	1.56	3.03	0.48	R 1.77	R 2.12	—	R 0.91	1.21	0.30	5.12	1.72
1975	—	0.86	0.86	0.90	2.38	2.09	3.07	4.76	1.74	R 3.69	3.74	0.17	R 1.34	1.96	0.50	6.89	R 2.89
1980	—	1.27	1.27	2.40	6.24	6.47	5.70	10.06	3.21	R 7.62	8.27	0.44	R 3.06	4.18	1.00	11.76	R 6.51
1981	—	1.21	1.21	3.11	7.60	7.60	5.84	11.37	4.38	R 9.95	R 9.63	0.55	R 3.73	4.80	0.95	13.27	R 7.69
1982	—	1.22	1.22	3.83	7.07	7.19	6.09	10.71	4.22	8.71	8.93	0.68	R 3.63	R 4.58	0.96	13.52	R 7.60
1983	—	1.25	1.25	4.42	6.82	6.63	6.52	9.61	4.46	R 9.16	8.22	0.62	R 3.52	4.74	1.01	15.97	R 7.94
1984	—	1.32	1.32	4.46	6.81	6.50	6.29	9.55	4.65	R 9.58	8.26	0.57	R 3.57	R 4.61	1.06	15.50	R 7.88
1985	—	R 1.18	R 1.18	4.43	6.52	6.19	7.15	9.67	4.28	R 10.18	R 8.21	0.65	R 3.43	4.79	1.01	15.70	R 8.01
1986	—	1.08	1.08	4.08	5.67	4.43	7.38	7.28	2.71	R 6.81	R 6.53	0.64	R 2.81	3.78	0.89	15.62	R 7.15
1987	—	0.98	0.98	3.71	6.09	4.38	7.04	7.58	2.53	R 6.22	6.76	0.64	R 2.71	3.72	0.82	15.65	R 7.18
1988	—	0.87	0.87	3.81	5.65	4.14	7.17	7.22	2.17	R 6.01	6.37	0.63	R 2.74	R 3.64	0.79	15.52	R 6.93
1989	—	0.85	0.85	3.84	6.42	4.54	7.55	8.42	2.04	R 6.30	7.30	0.65	e R 2.96	e 3.91	0.78	16.22	e R 7.61
1990	—	0.78	0.78	3.93	7.64	6.03	9.15	9.49	2.22	R 6.02	8.38	0.61	R 3.42	R 4.29	0.73	16.33	R 8.38
1991	—	0.78	0.78	3.93	7.20	5.01	8.05	9.43	2.02	R 5.96	8.11	0.62	R 3.28	4.06	0.72	16.05	R 8.14
1992	—	0.78	0.78	4.10	7.04	4.64	7.55	9.09	1.97	7.24	7.92	0.57	R 2.94	4.07	0.69	16.20	8.12
1993	—	R 0.78	R 0.78	4.25	7.01	4.33	6.73	9.08	2.27	7.92	7.87	0.64	R 2.68	4.07	0.74	16.24	8.02
1994	—	0.80	0.80	4.19	6.82	3.99	7.12	9.17	2.08	7.37	7.77	0.73	R 2.73	4.18	0.77	16.08	7.99
1995	—	R 0.77	R 0.77	3.89	6.89	4.01	7.30	9.15	2.38	7.97	7.91	0.68	R 2.62	3.99	0.74	15.82	7.93
1996	—	0.74	0.74	4.22	8.00	4.89	8.93	9.95	2.94	6.16	8.68	0.64	3.01	4.32	0.71	15.58	8.45
1997	—	0.62	0.62	4.79	7.54	4.59	8.90	9.55	2.65	6.64	8.35	0.64	3.09	4.24	0.63	15.53	8.47
	Expenditures in Million Nominal Dollars																
1970	—	9.6	9.6	104.1	41.4	7.3	33.2	294.4	2.3	R 26.2	R 404.8	—	R (s)	R 518.8	-22.3	170.3	R 666.8
1975	—	28.4	28.4	184.3	117.9	19.3	65.4	516.3	11.2	R 44.7	R 774.9	11.0	R 0.7	R 999.2	-68.1	271.2	R 1,202.2
1980	—	119.4	119.4	354.1	332.7	56.2	94.2	1,008.9	4.3	R 67.4	R 1,563.7	27.7	R 3.7	R 2,068.7	-164.7	550.6	R 2,454.6
1981	—	119.0	119.0	395.7	362.4	60.9	84.9	1,095.0	1.7	R 87.4	R 1,692.2	36.3	R 4.6	R 2,247.8	-154.8	628.9	R 2,722.0
1982	—	117.7	117.7	499.6	380.8	57.2	105.4	1,027.3	5.1	73.8	1,649.6	66.2	R 4.8	R 2,337.9	-181.3	644.5	R 2,801.2
1983	—	131.1	131.1	542.5	459.0	53.9	113.5	904.3	2.9	R 73.6	R 1,607.3	41.1	R 4.6	R 2,326.7	-169.7	816.8	R 2,973.8
1984	—	164.0	164.0	567.2	475.5	49.3	47.9	896.6	2.0	77.2	1,548.6	35.5	R 4.2	R 2,319.5	-191.7	826.9	R 2,954.7
1985	—	R 135.8	R 135.8	523.7	470.2	45.9	66.7	R 901.4	1.7	R 67.2	R 1,553.1	29.3	R 3.9	R 2,245.8	-158.7	841.2	R 2,928.3
1986	—	R 118.4	R 118.4	408.4	398.3	32.8	65.8	679.4	4.3	R 77.1	R 1,257.7	52.8	R 3.6	R 1,840.9	-167.8	846.3	R 2,519.4
1987	—	114.1	114.1	383.6	436.7	32.9	82.9	R 711.9	4.2	R 80.8	R 1,349.3	59.0	R 3.1	R 1,909.0	-169.4	864.2	R 2,603.8
1988	—	121.7	121.7	439.0	460.7	34.2	91.6	R 705.4	5.6	R 78.0	R 1,375.4	46.5	R 3.3	R 1,986.0	-166.5	914.0	R 2,733.5
1989	—	112.7	112.7	436.6	465.1	37.1	100.7	R 814.6	4.8	74.4	R 1,496.7	56.3	e R 3.5	e R 2,105.9	-168.9	972.0	e R 2,909.0
1990	—	R 110.1	R 110.1	415.4	554.4	50.0	96.5	R 920.2	3.6	R 83.0	R 1,707.7	49.3	R 4.9	R 2,287.4	-161.1	995.7	R 3,122.0
1991	—	118.4	118.4	438.4	545.9	33.1	92.1	R 882.0	2.5	72.9	R 1,628.7	53.4	R 4.9	R 2,243.8	-169.5	1,019.1	R 3,093.4
1992	—	110.2	110.2	418.8	577.6	30.7	88.3	R 857.6	2.3	64.0	R 1,620.5	53.6	R 4.8	R 2,207.9	-159.2	983.2	R 3,031.9
1993	—	R 130.2	R 130.2	512.2	573.9	27.8	72.4	R 859.6	4.0	65.0	R 1,602.7	46.5	R 4.0	R 2,295.5	-172.8	1,038.7	R 3,161.5
1994	—	R 128.3	R 128.3	509.1	623.6	28.1	79.7	R 869.4	2.8	72.6	R 1,676.2	49.1	R 4.3	R 2,367.0	-172.9	1,090.5	R 3,284.6
1995	—	R 138.9	R 138.9	506.1	624.4	22.7	79.9	928.0	1.8	72.7	1,729.6	54.3	R 4.7	R 2,433.5	-190.2	1,127.9	R 3,371.2
1996	—	132.6	132.6	545.2	793.9	27.9	112.5	1,017.7	3.1	90.4	2,045.5	64.1	5.2	2,792.8	-195.2	1,143.1	3,740.7
1997	—	120.3	120.3	611.8	776.5	28.0	113.3	995.0	1.9	84.7	1,999.4	62.7	3.9	2,798.1	-180.7	1,196.3	3,813.7

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 174. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Nebraska

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.08	0.84	1.19	1.39	1.78	1.69	0.61	1.04	6.21	1.84
1975	2.16	1.29	2.62	2.74	3.57	3.39	1.20	1.74	8.13	2.95
1980	3.60	2.78	6.85	7.55	6.82	6.84	3.06	3.32	13.22	R 5.79
1981	3.75	3.52	8.12	9.24	7.08	7.45	3.77	R 4.08	15.07	R 7.06
1982	4.26	4.24	7.84	9.24	7.67	7.75	3.66	R 4.67	14.34	R 7.10
1983	4.23	5.05	7.20	R 7.70	7.46	R 7.42	3.54	R 5.34	17.88	R 8.88
1984	4.09	5.18	6.89	R 7.89	7.18	R 7.14	3.60	R 5.31	17.35	R 8.75
1985	2.76	5.10	7.92	R 7.81	7.12	R 7.42	3.46	R 5.32	17.30	R 8.74
1986	2.40	4.62	4.88	R 6.29	5.35	5.21	2.77	R 4.64	17.27	R 8.55
1987	2.43	4.43	4.50	R 6.38	5.35	R 5.19	2.64	R 4.48	17.52	R 8.74
1988	2.49	4.53	4.27	R 6.26	5.48	R 5.24	2.67	R 4.57	17.42	R 8.67
1989	2.42	4.54	5.37	R 6.78	7.82	7.21	2.95	R 4.82	18.05	R 8.91
1990	2.42	4.67	6.74	8.28	7.79	7.57	3.56	4.92	18.25	R 9.35
1991	2.36	4.71	6.25	R 7.52	6.92	6.79	3.41	4.90	17.86	R 9.08
1992	2.39	4.92	5.51	R 7.13	6.65	6.48	3.12	R 5.04	18.38	R 9.32
1993	2.44	5.09	5.65	R 6.28	6.45	R 6.30	3.05	R 5.16	18.31	R 9.31
1994	2.47	5.09	5.56	R 6.00	6.78	6.55	2.96	R 5.18	18.48	R 9.64
1995	2.44	4.93	5.92	R 4.97	6.84	R 6.73	2.90	R 5.05	18.68	R 9.68
1996	2.35	4.85	6.91	6.00	8.62	8.41	3.33	5.17	18.44	9.41
1997	2.40	5.70	6.00	5.62	8.74	8.45	3.31	5.90	18.71	10.18
	Expenditures in Million Nominal Dollars									
1970	R (s)	49.6	1.4	3.0	26.1	30.4	(s)	R 80.4	87.0	R 167.5
1975	R (s)	68.9	2.6	5.8	41.7	50.1	(s)	R 119.4	130.3	R 249.6
1980	R (s)	133.5	14.4	R (s)	35.2	50.0	3.5	R 187.4	249.1	R 436.5
1981	R (s)	151.5	18.2	1.5	33.8	53.5	4.3	R 209.8	288.0	R 497.8
1982	0.8	213.6	16.7	1.5	39.8	58.0	4.5	R 277.0	286.0	R 562.9
1983	1.8	234.1	10.4	R 2.0	46.1	R 58.5	4.3	R 298.7	392.7	R 691.4
1984	2.8	243.3	10.8	R 3.1	19.8	R 33.6	3.9	R 283.6	371.0	R 654.6
1985	R (s)	233.9	15.7	R 1.8	25.6	R 43.1	3.7	R 280.9	365.5	R 646.5
1986	R (s)	194.0	8.0	R 0.7	17.3	26.0	2.9	R 222.9	372.6	R 595.5
1987	R (s)	169.5	5.3	R (s)	23.9	R 29.7	2.4	R 201.6	381.4	R 583.0
1988	0.7	194.0	4.9	R 0.6	23.9	29.4	2.5	R 226.7	405.0	R 631.7
1989	R (s)	200.7	7.8	R (s)	34.8	42.9	2.9	R 246.7	414.0	R 660.7
1990	R (s)	190.9	6.6	R (s)	27.6	34.4	4.5	229.9	423.4	653.3
1991	R (s)	207.3	7.2	R (s)	30.7	38.1	4.6	R 250.2	435.0	R 685.2
1992	R (s)	199.6	4.7	R (s)	30.0	35.1	4.4	R 239.2	411.4	R 650.7
1993	R (s)	239.3	5.5	R (s)	27.2	R 33.1	3.6	R 276.1	451.6	R 727.7
1994	R (s)	222.4	5.2	R (s)	26.9	32.3	3.4	R 258.2	465.4	R 723.6
1995	R (s)	217.6	3.3	R (s)	29.1	32.5	3.7	R 253.9	484.1	R 738.0
1996	(s)	239.1	4.6	(s)	43.5	48.2	4.2	291.5	487.0	778.5
1997	1.7	268.0	3.3	(s)	44.1	47.7	3.1	320.5	510.0	830.5

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 175. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Nebraska

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.16	0.52	1.03	0.79	1.09	3.03	0.50	1.09	0.61	0.59	4.87	1.36
1975	0.81	1.00	2.45	2.39	2.46	4.76	1.75	2.60	1.20	1.17	6.96	2.36
1980	1.69	2.33	6.49	5.17	5.19	10.06	3.22	6.81	3.06	2.62	12.86	5.01
1981	1.97	3.02	7.80	6.74	5.24	11.37	4.64	7.89	3.77	3.44	14.06	6.21
1982	1.79	3.56	7.46	6.06	5.41	10.71	4.03	6.98	3.66	3.84	14.32	6.51
1983	1.67	4.29	6.37	R 7.70	6.01	9.61	—	6.63	3.54	4.59	16.66	7.81
1984	1.70	4.35	6.34	R 7.89	5.78	9.55	—	R 6.56	3.60	4.57	16.44	7.93
1985	R 2.51	4.29	6.00	R 7.81	7.17	9.67	—	R 6.63	NA	4.60	16.78	8.28
1986	R 1.67	3.95	3.67	R 6.29	8.54	7.28	—	R 5.37	NA	4.07	16.55	8.23
1987	R 1.62	3.76	4.21	R 6.38	8.07	7.58	2.60	R 5.75	NA	3.94	16.43	8.34
1988	R 1.57	3.81	3.80	R 6.26	8.04	7.22	2.13	5.48	NA	3.91	16.22	8.06
1989	1.47	3.82	4.44	R 6.78	7.41	8.42	2.02	R 5.86	NA	3.97	16.93	8.58
1990	1.48	3.92	5.50	R 8.28	9.83	9.49	2.22	R 7.38	NA	R 4.20	17.21	8.88
1991	1.54	3.93	4.88	R 7.52	8.76	9.43	2.03	R 6.83	NA	4.09	16.84	8.59
1992	1.57	4.07	4.68	R 7.13	8.12	9.09	1.97	6.02	NA	4.23	17.15	9.06
1993	R 1.43	4.38	4.50	R 6.28	6.91	9.08	2.27	R 5.24	3.05	R 4.43	17.28	R 9.29
1994	R 1.46	4.30	4.29	R 6.00	8.14	9.17	2.08	R 5.27	2.96	4.37	16.88	R 8.99
1995	R 1.42	4.04	4.30	R 4.97	8.17	9.15	2.38	6.11	2.90	4.13	16.46	R 8.84
1996	1.45	4.44	5.24	6.00	9.45	9.95	—	7.04	3.33	4.58	16.60	9.05
1997	1.42	4.89	4.91	5.62	9.98	9.55	2.65	7.25	3.31	4.89	16.41	9.76
	Expenditures in Million Nominal Dollars											
1970	R (s)	24.7	1.2	R (s)	2.8	1.7	0.8	6.8	(s)	31.7	58.3	89.9
1975	R (s)	42.9	2.5	1.0	5.1	3.0	1.7	13.3	(s)	56.2	86.9	R 143.2
1980	R (s)	99.1	6.8	0.6	4.7	7.9	R (s)	20.5	(s)	R 120.1	178.5	R 298.6
1981	R (s)	120.3	15.4	R (s)	4.4	9.2	R (s)	29.9	(s)	R 150.6	217.0	R 367.6
1982	0.6	150.2	13.0	R (s)	5.0	7.3	2.6	28.3	(s)	R 179.3	227.9	R 407.2
1983	1.3	164.7	30.9	R (s)	6.5	6.1	—	R 43.8	(s)	R 209.9	277.7	R 487.6
1984	2.1	179.0	33.2	R (s)	2.8	4.8	—	R 41.2	(s)	R 222.4	316.6	R 539.0
1985	R (s)	166.0	28.0	R 0.5	4.5	8.0	—	R 41.1	NA	R 207.5	327.2	R 534.7
1986	R (s)	142.8	7.1	R (s)	4.9	5.4	—	R 17.7	NA	R 160.6	327.3	R 487.9
1987	R (s)	126.6	8.7	R (s)	6.4	5.5	(s)	20.7	NA	R 147.4	333.8	R 481.2
1988	0.8	147.7	6.6	(s)	6.2	5.1	R (s)	18.1	NA	166.7	351.0	517.7
1989	R (s)	140.8	5.9	R (s)	5.8	5.6	0.6	17.9	NA	R 158.9	374.0	R 532.9
1990	R (s)	140.8	7.9	R 1.1	6.1	7.7	R (s)	R 23.2	NA	R 164.1	378.7	R 542.8
1991	R (s)	155.9	5.2	R (s)	6.9	5.0	R (s)	R 17.5	NA	173.6	389.5	563.1
1992	R (s)	137.6	7.4	(s)	6.5	4.4	0.5	18.8	NA	156.5	378.6	R 535.2
1993	R (s)	148.4	8.0	R (s)	5.1	1.0	R (s)	14.6	(s)	163.0	386.8	R 549.9
1994	R (s)	165.1	9.0	R (s)	5.7	1.0	R (s)	R 16.2	(s)	R 181.7	411.8	R 593.6
1995	R (s)	158.6	4.4	R (s)	6.1	1.0	(s)	11.6	(s)	R 170.7	420.9	R 591.6
1996	(s)	182.5	7.1	(s)	8.4	1.1	—	16.8	(s)	199.7	428.4	628.1
1997	1.9	165.2	5.0	(s)	8.9	1.0	(s)	15.2	(s)	182.6	448.7	631.2

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 176. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Nebraska

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	0.16	0.16	0.32	0.71	0.73	0.79	1.09	5.08	3.03	0.40	R 0.43	R 1.27	R 1.44	0.69	3.42	0.88
1975	—	0.81	0.81	0.69	2.07	2.25	2.39	2.46	7.48	4.76	1.74	R 4.56	R 2.94	R 1.44	1.48	4.96	1.77
1980	—	1.69	1.69	2.21	3.89	4.94	5.17	5.19	14.36	10.06	3.13	R 11.23	R 5.89	R 3.00	3.87	8.71	4.50
1981	—	1.97	1.97	2.84	5.50	6.40	6.74	5.24	18.00	11.37	4.09	R 13.57	R 7.12	R 3.00	4.70	9.66	R 5.35
1982	—	1.79	1.79	3.62	4.46	5.72	6.06	5.41	17.25	10.71	4.44	15.76	6.37	R 3.00	4.87	11.06	5.62
1983	—	1.67	1.67	3.79	4.85	6.67	R 7.31	6.01	16.98	9.61	4.47	14.29	6.83	R 3.00	R 5.21	11.71	6.07
1984	—	1.70	1.70	3.71	4.96	6.57	R 7.18	5.78	17.63	9.55	4.65	13.48	6.84	R 3.00	5.01	10.96	5.83
1985	—	R 2.51	R 2.51	3.67	5.04	6.25	R 7.08	7.17	17.61	9.67	4.28	13.38	6.99	R 3.00	5.34	11.47	R 6.21
1986	—	R 1.67	R 1.67	3.28	3.93	4.04	R 4.81	8.54	15.59	7.28	2.81	7.20	R 5.08	R 3.00	4.28	11.42	5.35
1987	—	R 1.62	R 1.62	2.81	3.85	4.50	R 4.89	8.07	13.58	7.58	2.60	7.78	R 5.39	R 3.00	4.20	11.34	5.18
1988	—	R 1.57	R 1.57	2.90	3.54	4.16	R 4.49	8.04	14.62	7.22	2.13	6.53	5.00	R 3.00	4.04	11.28	5.04
1989	—	1.47	1.47	2.96	3.09	4.72	R 5.32	7.41	14.48	8.42	2.02	9.15	5.42	d R 3.00	d 4.27	12.34	d 5.50
1990	—	1.48	1.48	3.02	3.15	5.87	R 7.81	9.83	14.60	9.49	2.22	8.55	6.25	R 2.17	R 4.92	12.28	R 6.16
1991	—	1.54	1.54	2.80	3.18	5.22	R 5.80	8.76	16.80	9.43	2.03	16.33	5.71	R 2.17	R 4.49	12.17	5.77
1992	—	1.57	1.57	2.98	2.62	5.16	R 5.76	8.12	18.32	9.09	1.97	24.75	5.67	R 2.17	4.46	11.91	R 5.74
1993	—	R 1.43	R 1.43	3.17	2.92	5.00	R 5.41	6.91	18.96	9.08	2.27	19.10	5.35	R 2.17	4.14	11.83	R 5.35
1994	—	R 1.46	R 1.46	3.17	2.91	4.86	R 5.17	7.14	19.11	9.17	2.08	24.75	5.26	R 2.31	4.16	11.70	5.35
1995	—	R 1.42	R 1.42	2.85	3.27	4.87	R 5.39	7.49	R 19.41	9.15	2.38	23.89	5.45	R 2.31	4.01	11.26	5.23
1996	—	1.45	1.45	3.27	3.12	5.85	6.11	9.11	20.08	9.95	2.94	22.95	6.04	2.31	4.68	10.78	5.81
1997	—	1.42	1.42	3.86	3.43	5.37	6.00	8.88	17.86	9.55	2.65	24.62	5.91	2.31	4.75	10.59	5.81
	Expenditures in Million Nominal Dollars																
1970	—	0.8	0.8	17.0	5.3	14.0	0.6	3.4	4.9	21.0	R (s)	R (s)	R 49.5	R (s)	R 67.5	25.0	92.4
1975	—	4.8	4.8	49.2	10.3	42.3	1.5	16.5	8.8	41.1	0.8	R 1.4	R 122.7	R (s)	R 177.2	54.0	R 231.1
1980	—	8.7	8.7	101.1	18.6	98.1	0.9	51.0	3.6	77.7	R (s)	R 3.3	R 253.5	R (s)	R 363.4	123.0	R 486.4
1981	—	13.8	13.8	113.6	24.5	113.9	1.8	42.6	4.3	81.0	0.7	R 6.8	R 275.7	R (s)	R 403.3	123.9	R 527.2
1982	—	11.0	11.0	131.1	21.8	111.8	1.7	57.2	3.8	67.8	2.5	6.0	272.6	R (s)	R 414.9	130.7	R 545.5
1983	—	7.1	7.1	138.8	21.5	137.9	R 1.0	56.4	3.9	55.2	2.9	5.9	R 284.7	R (s)	R 430.8	146.4	R 577.2
1984	—	9.2	9.2	140.1	20.8	146.8	R 1.2	23.8	4.3	48.2	2.0	5.5	R 252.8	R (s)	R 402.3	139.3	R 541.6
1985	—	R 12.2	R 12.2	119.4	15.8	156.4	R 0.9	35.1	4.0	R 70.8	1.7	5.6	R 290.1	R (s)	R 421.9	148.5	R 570.4
1986	—	R 10.4	R 10.4	66.3	24.9	100.3	R 3.9	42.4	3.5	45.5	3.5	9.7	R 233.7	R 0.7	R 311.1	146.4	R 457.6
1987	—	9.4	9.4	83.2	31.7	101.7	R 2.4	51.1	3.4	R 49.7	3.4	10.4	R 253.8	R 0.7	R 347.1	149.0	R 496.1
1988	—	R 7.9	R 7.9	92.1	29.7	105.5	R 1.5	60.0	3.5	R 40.3	4.3	9.2	253.9	R 0.7	R 354.6	158.0	R 512.6
1989	—	7.9	7.9	89.2	23.2	109.8	R (s)	58.2	3.6	46.8	3.4	12.6	258.0	d R 0.6	d R 355.7	184.0	d R 539.7
1990	—	6.6	6.6	76.5	29.0	141.5	R 0.6	60.6	3.7	R 47.4	3.3	12.9	R 299.1	R (s)	R 382.5	193.5	R 576.0
1991	—	9.4	9.4	68.3	29.9	141.6	R (s)	52.5	3.8	46.6	2.2	2.4	279.3	R (s)	R 357.5	194.7	R 552.1
1992	—	9.4	9.4	77.2	15.6	147.8	R (s)	50.4	4.3	39.4	1.8	3.8	263.4	R (s)	R 350.4	193.2	R 543.5
1993	—	R 9.8	R 9.8	119.5	15.5	143.5	R (s)	R 38.8	4.5	33.2	3.7	3.2	R 242.7	R (s)	R 372.3	200.4	R 572.6
1994	—	R 11.5	R 11.5	115.3	19.9	166.6	R (s)	44.8	4.8	35.4	2.6	4.2	278.4	R 0.5	R 405.8	213.3	R 619.1
1995	—	R 9.4	R 9.4	124.9	20.2	145.5	R (s)	43.9	4.7	36.5	1.8	4.0	256.9	R 0.5	R 391.7	222.9	R 614.6
1996	—	7.8	7.8	118.9	36.7	159.1	(s)	60.0	4.8	40.4	3.1	4.7	309.1	0.6	436.4	227.7	664.1
1997	—	8.1	8.1	171.0	33.0	155.5	(s)	59.7	4.5	40.6	1.7	4.5	300.0	0.6	479.7	237.7	717.4

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 177. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Nebraska

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.16	—	2.17	1.14	0.75	1.09	5.08	3.03	0.50	2.51	2.51	—	2.51
1975	0.81	—	3.45	2.50	2.09	2.46	7.48	4.76	1.74	4.15	4.15	—	4.15
1980	—	—	9.02	7.06	6.47	5.19	14.36	10.06	—	9.20	9.20	—	9.20
1981	—	—	10.84	8.39	7.60	5.24	18.00	11.37	4.63	10.59	10.59	—	10.59
1982	—	—	10.92	7.88	7.19	5.41	17.25	10.71	—	9.91	9.91	—	9.91
1983	—	—	10.44	6.96	6.63	6.01	16.98	9.61	—	8.76	8.76	—	8.76
1984	—	—	10.27	7.00	6.50	5.78	17.63	9.55	—	8.76	8.76	—	8.76
1985	—	—	9.99	6.68	6.19	7.17	17.61	9.67	—	8.70	8.70	—	8.70
1986	—	—	8.41	6.79	4.43	8.54	15.59	7.28	2.32	7.10	7.10	—	7.10
1987	—	—	7.55	7.02	4.38	8.07	13.58	7.58	2.29	7.32	7.32	—	7.32
1988	—	—	7.41	6.47	4.14	8.04	14.62	7.22	—	6.90	6.90	—	6.90
1989	—	—	8.28	7.39	4.54	7.41	14.48	8.42	—	7.96	7.96	—	7.96
1990	—	—	9.32	8.66	6.03	9.83	14.60	9.49	—	9.12	9.12	—	9.12
1991	—	—	8.71	8.44	5.01	8.76	16.80	9.43	—	9.00	9.00	—	9.00
1992	—	4.17	8.54	8.20	4.64	8.12	18.32	9.09	—	8.71	8.71	—	8.71
1993	—	4.30	8.24	8.29	4.33	6.91	18.96	9.08	—	8.74	8.74	—	8.74
1994	—	4.74	7.96	8.21	3.99	9.11	19.11	9.17	—	8.73	8.73	—	8.73
1995	—	3.97	8.36	7.99	4.01	9.46	R 19.41	9.15	—	8.69	8.69	—	8.69
1996	—	—	9.29	8.92	4.89	8.78	20.08	9.95	—	9.49	9.49	—	9.49
1997	—	—	9.39	8.48	4.59	8.28	17.86	9.55	—	9.06	9.06	—	9.06
	Expenditures in Million Nominal Dollars												
1970	(s)	—	2.2	24.4	7.3	0.9	9.8	271.7	0.7	317.0	317.0	—	317.0
1975	(s)	—	2.5	67.2	19.3	2.1	13.6	472.2	1.5	578.3	578.3	—	578.3
1980	—	—	9.7	210.2	56.2	3.3	30.3	923.3	—	1,233.0	1,233.0	—	1,233.0
1981	—	—	11.7	211.5	60.9	4.0	36.4	1,004.8	R (s)	1,329.4	1,329.4	—	1,329.4
1982	—	—	6.8	234.3	57.2	3.4	31.8	952.2	—	1,285.6	1,285.6	—	1,285.6
1983	—	—	6.3	277.2	53.9	4.5	32.8	843.0	—	1,217.6	1,217.6	—	1,217.6
1984	—	—	5.5	283.3	49.3	1.5	36.3	843.6	—	1,219.6	1,219.6	—	1,219.6
1985	—	—	4.9	268.1	45.9	1.5	33.8	R 822.6	—	R 1,176.7	R 1,176.7	—	R 1,176.7
1986	—	—	5.0	281.8	32.8	1.2	29.3	628.5	(s)	978.5	978.5	—	978.5
1987	—	—	3.4	320.3	32.9	1.5	28.8	R 656.7	(s)	R 1,043.5	R 1,043.5	—	R 1,043.5
1988	—	—	3.6	342.3	34.2	1.5	29.9	R 660.0	—	R 1,071.5	R 1,071.5	—	R 1,071.5
1989	—	—	3.9	340.4	37.1	1.8	30.4	R 762.2	—	R 1,175.8	R 1,175.8	—	R 1,175.8
1990	—	—	3.9	397.2	50.0	2.2	31.5	R 865.0	—	R 1,349.8	R 1,349.8	—	R 1,349.8
1991	—	—	3.7	391.2	33.1	2.0	32.5	R 830.4	—	R 1,292.9	R 1,292.9	—	R 1,292.9
1992	—	(s)	3.5	417.1	30.7	1.4	36.1	R 813.8	—	R 1,302.5	R 1,302.5	—	R 1,302.5
1993	—	(s)	3.0	415.8	27.8	1.2	38.0	R 825.4	—	R 1,311.3	R 1,311.3	—	R 1,311.3
1994	—	(s)	3.0	441.7	28.1	2.4	40.1	R 833.0	—	R 1,348.3	R 1,348.3	—	R 1,348.3
1995	—	(s)	3.2	469.8	22.7	0.8	40.0	890.5	—	1,427.0	1,427.0	—	1,427.0
1996	—	—	3.5	621.6	27.9	0.6	40.2	976.2	—	1,670.0	1,670.0	—	1,670.0
1997	—	—	4.2	610.8	28.0	0.5	37.7	953.3	—	1,634.6	1,634.6	—	1,634.6

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 178. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Nebraska

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.35	0.27	0.49	0.63	—	0.54	—	—	0.30
1975	0.87	0.63	1.73	1.85	—	1.77	0.17	—	0.50
1980	1.24	1.82	3.21	6.19	—	4.14	0.44	—	1.00
1981	1.14	2.40	4.63	7.22	—	6.82	0.55	—	0.95
1982	1.17	3.02	4.06	6.66	—	6.65	0.68	—	0.96
1983	1.22	3.26	4.20	5.86	—	5.85	0.62	—	1.01
1984	1.28	3.40	—	6.04	—	6.04	0.57	—	1.06
1985	1.11	3.58	—	5.89	—	5.89	0.65	—	1.01
1986	1.04	3.21	2.32	3.87	—	3.05	0.64	—	0.89
1987	0.95	2.56	2.29	R 3.97	—	2.87	0.64	—	0.82
1988	0.84	2.69	2.34	3.47	—	2.83	0.63	—	0.79
1989	0.83	2.36	2.15	4.35	—	3.09	0.65	—	0.78
1990	0.75	2.01	1.86	7.03	—	6.89	0.61	—	0.73
1991	0.75	1.97	1.41	4.57	—	4.20	0.62	—	0.72
1992	0.75	2.38	—	4.65	—	4.65	0.57	0.99	0.69
1993	0.76	2.73	—	4.20	—	4.20	0.64	1.09	0.74
1994	0.77	2.05	1.67	4.02	—	3.98	0.73	0.86	0.77
1995	0.75	1.66	—	4.15	—	4.15	0.68	0.77	0.74
1996	0.72	2.06	—	5.11	—	5.11	0.64	0.78	0.71
1997	0.59	2.87	2.30	4.50	—	4.50	0.64	0.38	0.63
	Expenditures in Million Nominal Dollars								
1970	8.5	12.8	0.6	R (s)	—	1.0	—	—	22.3
1975	23.4	23.3	7.2	3.3	—	10.5	11.0	—	68.1
1980	109.8	20.5	3.6	3.1	—	6.7	27.7	—	164.7
1981	104.4	10.3	R (s)	3.3	—	3.7	36.3	—	154.8
1982	105.3	4.6	(s)	5.1	—	5.1	66.2	—	181.3
1983	121.0	4.9	(s)	2.7	—	2.7	41.1	—	169.7
1984	149.9	4.8	—	1.5	—	1.5	35.5	—	191.7
1985	122.9	4.4	—	2.1	—	2.1	29.3	—	158.7
1986	107.7	5.3	0.8	1.1	—	1.9	52.8	—	167.8
1987	104.5	4.4	0.8	0.8	—	1.6	59.0	—	169.4
1988	112.3	5.2	1.1	1.3	—	2.4	46.5	—	166.5
1989	104.7	5.9	0.8	1.2	—	2.1	56.3	—	168.9
1990	103.4	7.2	(s)	1.3	—	1.3	49.3	—	161.1
1991	108.5	6.8	(s)	0.7	—	0.8	53.4	—	169.5
1992	100.6	4.3	—	0.7	—	0.7	53.6	R (s)	159.2
1993	120.2	5.0	—	1.0	—	1.0	46.5	R (s)	172.8
1994	116.4	6.2	(s)	1.0	—	1.1	49.1	R (s)	172.9
1995	129.2	5.1	—	1.5	—	1.5	54.3	R (s)	190.2
1996	124.8	4.8	—	1.4	—	1.4	64.1	(s)	195.2
1997	108.6	7.6	(s)	1.9	—	1.9	62.7	(s)	180.7

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 179. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Nevada

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.37	0.37	0.61	1.29	0.76	2.91	3.07	0.58	1.35	1.95	—	R 0.72	1.32	0.36	3.89	1.96
1975	—	0.35	0.35	1.31	2.75	2.12	4.03	4.74	1.98	2.61	3.40	—	R 1.43	1.82	0.59	6.86	3.52
1980	—	1.06	1.06	3.10	6.97	6.59	7.07	9.96	3.58	5.86	7.67	—	R 3.66	4.69	1.68	13.18	R 8.17
1981	—	1.12	1.12	3.53	8.20	7.67	8.83	11.46	4.75	7.68	9.51	—	R 4.51	5.12	1.76	13.84	9.31
1982	—	1.21	1.21	4.63	8.06	7.38	8.77	11.09	4.22	6.39	9.17	—	R 4.37	4.87	1.49	15.88	R 9.53
1983	—	1.29	1.29	5.38	7.20	6.76	10.14	9.21	4.73	R 6.12	R 7.95	—	R 4.23	4.70	1.51	16.97	R 8.96
1984	—	1.34	1.34	5.50	6.87	6.45	10.48	8.78	4.49	R 6.45	R 7.65	—	R 4.30	R 4.44	1.52	15.89	R 8.71
1985	—	1.62	1.62	5.44	6.73	6.22	11.65	8.77	4.45	R 6.53	R 7.63	—	R 4.14	4.83	1.79	16.75	R 8.93
1986	—	1.40	1.40	4.60	5.25	4.25	11.03	6.75	2.04	R 6.11	R 5.77	—	R 3.32	3.56	1.47	17.16	R 7.76
1987	—	1.40	1.40	4.25	5.75	4.27	10.33	6.79	2.41	R 4.58	5.84	—	R 3.16	3.70	1.47	15.45	R 7.37
1988	—	1.37	1.37	4.49	5.66	4.08	10.26	7.32	2.39	R 4.60	R 5.99	—	R 3.19	R 3.67	1.47	15.93	R 7.70
1989	—	1.52	1.52	3.84	6.52	4.79	12.86	8.19	2.73	R 3.80	6.87	—	e R 3.53	e 4.17	1.62	15.46	e R 8.17
1990	—	1.49	1.49	3.68	7.28	6.26	11.58	9.10	2.93	R 4.05	R 7.81	—	R 4.64	R 4.54	1.59	15.77	8.93
1991	—	1.41	1.41	3.72	7.18	5.00	12.36	8.83	3.69	R 4.64	R 7.42	—	R 4.44	4.26	1.48	16.47	8.74
1992	—	1.46	1.46	3.65	7.09	4.70	12.93	9.30	3.15	R 4.77	R 7.62	—	R 4.07	4.37	1.55	16.71	R 9.02
1993	—	1.47	1.47	4.05	7.41	4.69	12.13	9.21	3.38	R 4.35	R 7.57	—	R 3.69	4.49	1.60	17.27	R 8.83
1994	—	1.44	1.44	4.47	7.36	4.23	11.44	9.51	3.03	R 4.18	7.63	—	R 3.85	4.58	1.53	18.73	R 9.40
1995	—	1.32	1.32	4.14	7.29	4.36	11.38	9.23	2.83	R 4.24	7.36	—	R 3.79	4.53	1.39	17.95	R 8.99
1996	—	1.38	1.38	3.92	8.54	5.14	11.69	10.35	3.75	4.75	8.51	—	4.32	5.00	1.54	17.48	9.56
1997	—	1.39	1.39	4.57	8.15	4.92	11.88	10.50	3.30	6.43	8.68	—	4.26	5.22	1.58	16.49	9.81
	Expenditures in Million Nominal Dollars																
1970	—	6.4	6.4	34.5	21.2	19.2	9.2	118.7	0.5	7.7	176.6	—	R (s)	R 217.6	-15.1	75.7	R 278.2
1975	—	35.8	35.8	85.5	41.1	69.2	7.4	239.7	16.7	19.4	393.4	—	R (s)	R 514.9	-79.8	179.0	R 614.1
1980	—	99.1	99.1	191.5	160.9	266.2	22.9	587.0	55.0	34.0	1,125.9	—	R 1.2	R 1,417.7	-226.1	468.2	R 1,659.8
1981	—	125.5	125.5	271.5	166.5	301.0	24.3	695.8	8.3	40.7	1,236.5	—	R 1.5	R 1,635.1	-275.2	472.1	R 1,832.0
1982	—	176.8	176.8	225.0	165.3	276.4	28.3	658.9	6.2	36.5	1,171.5	—	R 1.5	R 1,574.9	-238.8	555.2	R 1,891.2
1983	—	180.5	180.5	232.4	221.3	254.4	32.4	545.9	2.5	R 39.7	R 1,096.1	—	R 1.5	R 1,510.5	-221.6	587.4	R 1,876.3
1984	—	209.1	209.1	238.9	221.2	212.0	28.5	533.0	5.6	R 41.5	R 1,041.9	—	R 2.1	R 1,492.0	-248.0	580.8	R 1,824.8
1985	—	204.2	204.2	222.8	211.7	197.0	41.3	R 535.7	4.4	R 46.0	R 1,036.1	—	R 1.9	R 1,465.1	-238.1	634.3	R 1,861.3
1986	—	R 225.5	R 225.5	162.3	166.7	140.5	34.0	432.9	8.0	R 32.1	R 814.3	—	R 1.5	R 1,203.5	-249.1	655.8	R 1,610.2
1987	—	217.1	217.1	173.6	216.5	152.5	32.7	R 466.2	7.8	R 32.5	R 908.2	—	R 0.8	R 1,299.8	-239.1	638.7	R 1,699.4
1988	—	250.6	250.6	213.0	222.8	145.3	37.5	R 540.9	14.8	R 34.9	R 996.2	—	R 0.8	R 1,460.6	-290.8	717.3	R 1,887.1
1989	—	259.5	259.5	245.9	282.4	162.6	73.7	R 626.6	11.1	R 40.5	R 1,196.9	—	e R 0.9	e R 1,703.4	R -316.0	773.1	e R 2,160.5
1990	—	247.5	247.5	243.0	311.8	212.9	60.0	R 714.3	8.4	R 34.5	R 1,342.0	—	R 5.2	R 1,837.7	-301.8	879.8	R 2,415.6
1991	—	254.1	254.1	245.1	296.2	182.5	46.5	R 712.4	10.2	R 39.0	R 1,286.7	—	R 5.3	R 1,791.1	-296.7	914.0	R 2,408.4
1992	—	261.9	261.9	252.7	302.8	161.8	42.2	R 783.6	11.4	R 32.7	R 1,334.5	—	R 5.1	R 1,854.4	R -314.9	988.2	R 2,527.7
1993	—	253.1	253.1	345.6	327.7	171.1	36.5	R 785.2	9.8	R 38.7	R 1,369.1	—	R 5.2	R 1,973.1	R -308.2	1,066.1	R 2,730.9
1994	—	258.6	258.6	458.2	323.6	163.3	48.7	R 860.5	6.3	R 40.1	R 1,442.6	—	R 5.4	R 2,164.9	-321.7	1,253.0	R 3,096.2
1995	—	R 214.2	R 214.2	462.7	325.5	182.1	30.6	R 873.2	15.6	R 46.1	R 1,473.1	—	R 5.8	R 2,156.0	R -275.5	1,236.0	R 3,116.5
1996	—	233.1	233.1	486.3	470.9	228.6	38.3	1,030.5	4.8	50.5	1,823.8	—	6.7	2,549.9	-329.7	1,322.1	3,542.3
1997	—	231.7	231.7	590.0	431.5	210.7	41.6	1,100.1	2.4	26.0	1,812.3	—	5.0	2,639.0	-340.6	1,338.4	3,636.8

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 180. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Nevada

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.31	1.39	1.27	—	3.52	2.51	0.72	R 1.75	4.46	R 2.69
1975	1.55	1.83	2.82	—	4.90	3.72	1.43	R 2.17	7.54	R 4.28
1980	5.13	3.87	6.92	—	9.28	8.31	3.66	R 4.57	14.21	R 8.69
1981	5.43	4.49	7.90	14.85	10.19	9.77	4.51	R 5.29	14.47	R 9.07
1982	5.68	5.20	7.85	14.80	11.09	10.04	4.37	R 5.81	17.33	R 10.31
1983	4.62	6.39	7.97	R 8.47	12.23	R 10.38	4.23	R 7.20	18.42	R 12.12
1984	4.63	6.57	6.92	R 8.37	12.24	R 9.80	4.30	R 7.15	17.46	R 11.81
1985	4.54	6.63	7.55	R 11.26	12.40	R 10.45	4.14	R 7.46	18.83	R 12.43
1986	4.49	5.62	7.26	R 5.02	11.84	R 9.60	3.32	R 6.41	19.28	R 12.20
1987	4.11	5.29	5.79	R 4.73	11.19	R 8.40	3.16	R 5.92	17.05	R 11.01
1988	3.83	5.89	6.02	R 5.12	10.98	R 8.77	3.19	R 6.45	17.58	R 11.62
1989	4.14	5.38	8.26	R 5.42	14.68	R 12.51	3.53	R 6.86	16.78	R 11.25
1990	5.03	5.49	6.76	R 7.50	13.10	R 11.04	4.75	R 6.51	16.71	R 11.09
1991	4.07	5.41	6.58	R 5.87	13.42	R 11.11	4.54	R 6.28	17.27	R 11.13
1992	4.14	5.40	7.74	R 5.30	14.23	R 11.82	4.15	R 6.32	18.14	R 11.84
1993	3.87	5.49	6.96	R 5.81	12.92	R 10.94	4.06	R 6.12	19.08	R 11.97
1994	4.49	6.43	6.98	R 5.07	12.03	R 10.61	3.94	R 6.82	20.97	R 13.45
1995	3.95	6.53	6.96	R 5.12	11.79	R 10.32	3.86	R 6.78	20.84	R 13.42
1996	4.26	5.95	9.25	5.35	12.63	11.59	4.43	6.45	20.22	13.07
1997	4.41	6.11	8.14	4.97	13.35	11.33	4.41	6.61	19.83	12.82
	Expenditures in Million Nominal Dollars									
1970	0.7	10.9	2.4	—	8.3	10.7	(s)	R 22.5	30.3	R 52.7
1975	R (s)	21.6	4.4	—	5.8	10.1	(s)	R 32.1	72.1	R 104.2
1980	R (s)	53.6	7.5	—	14.6	22.1	1.2	R 77.1	179.2	R 256.3
1981	R (s)	63.5	6.9	3.0	15.0	24.9	1.4	R 90.2	172.9	R 263.0
1982	R (s)	88.9	7.2	1.0	17.9	26.2	1.5	R 116.8	223.6	R 340.4
1983	R (s)	77.9	10.1	R 2.1	23.4	R 35.5	1.4	R 115.0	230.1	R 345.1
1984	1.0	82.7	9.9	R 1.8	22.2	R 34.0	2.1	R 119.7	241.6	R 361.3
1985	R (s)	88.7	12.5	R 3.0	29.1	R 44.6	1.9	R 135.2	265.1	R 400.3
1986	R (s)	72.9	10.4	R 1.2	23.5	R 35.2	1.5	R 109.7	269.5	R 379.2
1987	R (s)	75.1	11.0	R 0.5	21.4	R 32.9	0.8	108.9	263.9	R 372.7
1988	R (s)	89.7	10.2	R (s)	25.0	R 35.6	0.8	R 126.2	298.0	R 424.2
1989	R (s)	93.0	12.1	R (s)	46.1	R 58.6	0.9	152.7	296.0	448.7
1990	R (s)	97.1	9.4	R (s)	38.8	R 48.6	5.1	R 151.0	315.9	R 466.9
1991	R (s)	107.3	8.5	R (s)	35.6	R 44.4	5.2	R 157.0	340.7	R 497.7
1992	(s)	101.6	9.8	R (s)	32.6	R 42.7	5.0	R 149.3	375.3	R 524.6
1993	R (s)	117.7	7.3	R (s)	29.0	R 36.6	5.1	R 159.5	408.8	R 568.3
1994	(s)	141.6	6.1	R (s)	28.1	R 34.3	4.8	R 180.8	489.8	R 670.6
1995	(s)	139.8	5.3	R (s)	21.7	R 27.2	5.3	R 172.3	473.3	R 645.6
1996	(s)	139.9	7.3	(s)	25.1	32.5	6.0	178.5	519.3	697.8
1997	(s)	158.3	9.7	(s)	26.5	36.4	4.4	199.0	527.9	727.0

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 181. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Nevada

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.52	0.70	1.12	0.77	1.16	3.07	0.62	1.34	0.72	0.77	4.74	2.15
1975	0.82	1.45	2.62	2.42	2.45	4.74	2.00	2.99	1.43	1.59	8.01	3.88
1980	1.36	3.68	6.60	—	4.99	9.96	3.53	6.78	3.66	4.29	15.39	7.73
1981	1.52	4.25	7.54	6.86	7.26	11.46	4.63	7.83	4.51	5.08	17.21	9.56
1982	2.09	5.18	7.49	7.21	6.44	11.09	4.16	8.19	4.37	5.51	18.53	R 10.53
1983	1.81	5.66	6.33	R 8.47	7.03	9.21	4.49	R 7.00	4.23	5.91	19.54	9.97
1984	R 1.79	5.80	6.06	R 8.37	6.94	8.78	4.55	R 6.83	4.30	5.94	17.56	10.47
1985	R 1.61	5.77	5.99	R 11.26	10.19	8.77	4.80	R 6.98	NA	5.98	18.24	11.15
1986	R 1.66	4.63	3.55	R 5.02	9.58	6.75	2.30	4.46	NA	4.58	18.66	10.57
1987	1.56	4.27	4.19	R 4.73	9.01	6.79	2.64	4.72	NA	4.39	16.59	9.31
1988	R 1.52	4.64	3.86	R 5.12	9.07	7.32	2.32	R 4.86	NA	R 4.68	16.94	9.92
1989	1.69	4.30	4.83	R 5.42	10.66	8.19	2.52	6.27	NA	4.64	16.85	9.98
1990	1.56	4.25	5.67	R 7.50	9.55	9.10	2.85	R 6.84	NA	4.66	17.38	10.45
1991	R 1.57	4.19	5.28	R 5.87	9.82	8.83	2.54	6.63	NA	4.50	17.92	10.42
1992	1.53	4.19	5.03	R 5.30	9.86	9.30	2.44	6.42	NA	4.48	17.89	10.73
1993	R 1.54	4.25	5.26	R 5.81	9.81	9.21	—	R 5.77	4.06	R 4.50	18.38	R 10.54
1994	R 1.56	5.17	4.83	R 5.07	10.75	9.51	—	5.60	3.94	R 5.23	19.66	R 11.65
1995	R 1.49	5.22	5.13	R 5.12	10.89	9.23	—	5.67	3.86	R 5.28	19.06	R 11.41
1996	1.75	4.72	6.08	5.35	11.50	10.35	—	6.58	4.43	5.03	18.55	11.01
1997	1.44	4.96	5.47	4.97	11.70	10.50	3.11	6.93	4.41	5.10	17.44	10.92
	Expenditures in Million Nominal Dollars											
1970	0.5	7.3	1.0	(s)	R (s)	0.8	R (s)	2.5	(s)	10.3	33.4	43.7
1975	R (s)	23.2	2.0	R (s)	0.5	1.7	R (s)	4.8	(s)	28.1	78.6	106.6
1980	R (s)	39.6	13.6	—	1.4	3.2	R (s)	18.3	(s)	57.9	93.2	151.1
1981	R (s)	38.0	14.6	0.7	1.9	4.1	0.7	22.0	(s)	R 60.2	119.5	R 179.7
1982	R (s)	46.8	3.3	R (s)	1.8	4.3	R (s)	10.0	(s)	57.0	120.5	177.5
1983	R (s)	70.9	12.8	R (s)	2.4	6.2	R (s)	21.9	(s)	92.9	130.2	R 223.2
1984	0.7	73.7	13.9	R (s)	2.2	9.3	0.8	26.4	(s)	R 100.9	190.8	R 291.7
1985	(s)	74.9	11.3	R (s)	4.2	3.8	0.8	R 20.4	NA	R 95.3	212.0	R 307.3
1986	R (s)	56.2	10.2	R (s)	3.4	2.9	R (s)	16.8	NA	73.1	219.9	293.0
1987	(s)	59.0	17.4	R (s)	3.0	3.0	R (s)	23.8	NA	82.8	211.6	294.4
1988	(s)	68.7	10.2	R (s)	3.6	3.1	R (s)	17.3	NA	86.1	233.0	R 319.1
1989	R (s)	67.1	10.6	R (s)	5.9	3.5	(s)	20.2	NA	87.4	247.0	R 334.4
1990	R (s)	66.0	11.5	R (s)	5.0	4.0	(s)	20.7	NA	R 86.8	269.8	356.6
1991	(s)	73.6	9.0	R (s)	4.6	3.6	(s)	17.4	NA	91.0	285.6	376.6
1992	(s)	69.7	8.7	R (s)	4.0	3.4	(s)	16.2	NA	86.0	299.7	385.7
1993	(s)	77.2	18.6	R (s)	3.9	0.6	—	23.2	(s)	100.5	315.9	416.4
1994	(s)	100.2	14.8	R (s)	4.4	0.6	—	20.0	(s)	R 120.6	363.3	R 483.9
1995	(s)	101.0	18.3	(s)	3.5	0.6	—	22.5	(s)	R 123.9	358.2	R 482.2
1996	(s)	100.3	23.8	(s)	4.0	0.7	—	28.6	(s)	129.4	378.0	507.3
1997	(s)	111.8	7.1	(s)	4.1	0.7	(s)	11.9	(s)	124.1	379.8	503.9

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.

(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 182. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Nevada

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	0.52	0.52	0.52	0.59	0.96	0.77	1.16	5.08	3.07	0.49	0.43	1.04	—	0.75	2.14	1.02
1975	—	0.82	0.82	1.06	1.83	2.25	2.42	2.45	7.48	4.74	1.83	—	2.25	—	1.61	4.23	2.18
1980	—	1.36	1.36	2.83	3.69	5.56	—	4.99	14.36	9.96	3.75	4.04	5.10	—	3.67	11.63	7.20
1981	—	1.52	1.52	3.35	4.44	6.51	6.86	7.26	18.00	11.46	4.82	4.46	6.30	—	4.26	11.80	7.58
1982	—	2.09	2.09	4.12	4.21	6.73	—	6.44	17.25	11.09	4.87	2.72	6.00	—	4.54	13.57	8.45
1983	—	1.81	1.81	4.51	4.20	6.53	R 7.18	7.03	16.98	9.21	4.89	3.67	5.94	—	4.93	14.69	8.42
1984	—	R 1.79	R 1.79	4.79	4.54	6.35	R 6.96	6.94	17.63	8.78	4.55	3.62	5.88	—	5.18	12.52	7.39
1985	—	R 1.61	R 1.61	4.05	4.78	6.24	R 6.96	10.19	17.61	8.77	4.80	R 3.38	6.06	—	5.12	12.91	7.66
1986	—	R 1.66	R 1.66	3.76	4.34	3.88	R 4.85	9.58	15.59	6.75	2.30	—	R 4.44	—	R 3.99	13.36	7.55
1987	—	1.56	1.56	3.72	3.27	4.46	R 4.85	9.01	13.58	6.79	2.64	—	4.43	—	3.98	12.46	6.85
1988	—	R 1.52	R 1.52	3.84	3.28	4.11	R 5.01	9.07	14.62	7.32	2.32	—	4.21	—	3.89	13.01	6.75
1989	—	1.69	1.69	4.83	2.73	5.02	R 5.55	10.66	14.48	8.19	2.52	—	4.79	[d] —	[d] 4.51	12.99	[d] 7.08
1990	—	1.56	1.56	3.98	2.60	5.73	R 7.24	9.55	14.60	9.10	2.85	—	5.32	R 2.17	R 4.70	13.76	7.82
1991	—	R 1.57	R 1.57	4.06	3.27	5.41	R 6.12	9.82	16.80	8.83	2.54	—	5.08	R 2.17	4.47	14.51	R 7.96
1992	—	1.53	1.53	3.93	2.91	5.47	R 5.24	9.86	18.32	9.30	2.44	—	5.15	R 2.17	R 4.48	14.43	8.11
1993	—	R 1.54	R 1.54	4.15	2.84	5.71	R 5.21	9.81	18.96	9.21	2.36	—	4.98	R 2.17	4.30	14.78	R 7.51
1994	—	R 1.56	R 1.56	5.47	2.76	5.31	R 5.06	10.79	19.11	9.51	2.51	—	4.96	R 2.31	R 4.94	15.96	R 8.25
1995	—	R 1.49	R 1.49	5.16	3.11	5.46	R 5.33	10.23	R 19.41	9.23	2.82	—	4.54	R 2.31	4.55	14.79	7.52
1996	—	1.75	1.75	4.71	3.51	6.43	6.10	9.85	20.08	10.35	3.19	—	5.71	2.31	4.95	14.37	7.97
1997	—	1.44	1.44	7.58	3.51	5.81	6.10	9.45	17.86	10.50	3.11	—	6.01	2.31	6.43	13.13	8.90
	Expenditures in Million Nominal Dollars																
1970	—	0.9	0.9	5.8	2.4	4.7	(s)	R (s)	0.7	2.7	R (s)	(s)	11.0	—	17.7	12.0	29.7
1975	—	1.5	1.5	11.4	10.2	9.3	R (s)	1.0	1.2	2.9	0.5	—	25.2	—	38.1	28.3	66.4
1980	—	4.6	4.6	21.9	15.0	21.1	—	6.9	2.2	5.8	(s)	R (s)	51.1	—	77.6	195.8	273.4
1981	—	6.8	6.8	20.8	14.7	22.0	0.7	7.1	2.6	6.8	1.0	(s)	54.9	—	82.4	179.7	262.1
1982	—	10.1	10.1	23.6	18.5	21.0	—	8.0	2.3	8.2	0.5	(s)	58.6	—	92.4	211.0	303.4
1983	—	7.1	7.1	37.4	20.9	57.6	R (s)	6.0	2.4	3.5	1.4	R (s)	92.3	—	136.9	227.0	363.9
1984	—	4.5	4.5	39.3	22.6	62.7	R (s)	3.0	2.6	3.0	4.3	R (s)	R 98.7	—	142.5	148.5	291.0
1985	—	R 4.2	R 4.2	24.2	26.8	55.7	(s)	6.9	2.4	6.0	2.5	R (s)	100.4	—	R 128.8	157.2	R 286.0
1986	—	R 4.1	R 4.1	12.1	16.3	33.6	R (s)	6.4	2.1	4.9	1.6	—	R 65.0	—	R 81.1	166.3	R 247.5
1987	—	4.1	4.1	20.7	18.7	41.5	R (s)	7.7	2.1	5.5	1.3	—	77.1	—	101.8	163.2	R 265.1
1988	—	4.3	4.3	24.8	20.3	55.2	R (s)	8.1	2.2	5.6	1.5	—	93.0	—	122.1	186.4	308.4
1989	—	6.4	6.4	35.3	25.3	86.4	R (s)	21.0	2.2	6.4	0.7	—	142.1	[d] —	[d] 183.8	230.1	[d] 413.9
1990	—	6.1	6.1	30.8	18.7	108.8	R (s)	R 15.5	2.3	8.1	R (s)	—	R 153.8	R (s)	190.8	294.0	484.8
1991	—	R 7.2	R 7.2	25.5	23.3	93.5	R (s)	5.6	2.3	8.3	0.9	—	134.2	R (s)	R 166.9	287.7	R 454.6
1992	—	6.1	6.1	34.7	16.2	94.7	R (s)	4.7	2.6	8.4	0.8	—	R 127.8	R (s)	R 168.7	313.3	R 482.0
1993	—	7.0	7.0	98.5	21.6	85.0	(s)	2.7	2.7	6.8	1.0	—	119.9	R (s)	225.5	341.3	566.8
1994	—	R 7.1	R 7.1	152.2	23.1	77.4	(s)	14.6	2.9	9.5	1.5	—	129.0	R (s)	288.5	399.8	688.3
1995	—	R 8.6	R 8.6	153.0	30.7	79.8	R (s)	4.6	2.9	9.8	15.1	—	142.8	R (s)	R 304.6	404.5	R 709.1
1996	—	7.1	7.1	146.8	33.4	99.3	(s)	8.5	2.9	11.2	1.2	—	156.5	(s)	310.6	424.8	735.4
1997	—	5.9	5.9	206.8	10.4	106.5	(s)	10.3	2.7	16.5	1.8	—	148.2	(s)	361.1	430.7	791.8

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 183. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Nevada

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.52	—	2.17	1.50	0.76	1.16	5.08	3.07	0.60	2.08	2.08	—	2.08
1975	0.82	—	3.45	3.01	2.12	2.45	7.48	4.74	2.36	3.66	3.66	—	3.66
1980	—	—	9.02	7.36	6.59	4.99	14.36	9.96	—	8.44	8.44	—	8.44
1981	—	—	10.84	8.73	7.67	7.26	18.00	11.46	—	9.85	9.85	—	9.85
1982	—	—	10.92	8.36	7.38	6.44	17.25	11.09	—	9.49	9.49	—	9.49
1983	—	—	10.44	7.58	6.76	7.03	16.98	9.21	4.27	8.19	8.19	—	8.19
1984	—	—	10.27	7.25	6.45	6.94	17.63	8.78	3.80	7.89	7.89	—	7.89
1985	—	—	9.99	6.97	6.22	10.19	17.61	8.77	—	7.79	7.79	—	7.79
1986	—	—	8.41	6.01	4.25	9.58	15.59	6.75	1.86	5.96	5.96	—	5.96
1987	—	—	7.55	6.59	4.27	9.01	13.58	6.79	—	6.07	6.07	—	6.07
1988	—	—	7.41	6.87	4.08	9.07	14.62	7.32	—	R 6.39	R 6.39	—	R 6.39
1989	—	—	8.28	7.76	4.79	10.66	14.48	8.19	—	7.27	7.27	—	7.27
1990	—	—	9.32	8.97	6.26	9.55	14.60	9.10	—	8.37	8.37	—	8.37
1991	—	3.59	8.71	8.89	5.00	9.82	16.80	8.83	—	7.85	7.85	—	7.85
1992	—	3.34	8.54	8.53	4.70	9.86	18.32	9.30	—	8.08	8.08	—	8.08
1993	—	3.22	8.24	8.80	4.69	9.81	18.96	9.21	—	8.04	8.04	—	8.04
1994	—	3.68	7.96	8.90	4.23	9.88	19.11	9.51	—	R 8.11	8.11	—	8.11
1995	—	3.60	8.36	8.67	4.36	10.12	R 19.41	9.23	—	7.91	7.91	—	7.91
1996	—	3.39	9.29	9.76	5.14	9.39	20.08	10.35	—	8.96	8.96	—	8.96
1997	—	3.52	9.39	9.63	4.92	9.16	17.86	10.50	—	9.02	9.02	—	9.02
	Expenditures in Million Nominal Dollars												
1970	(s)	—	2.0	13.0	19.2	(s)	2.6	115.3	(s)	152.1	152.1	—	152.1
1975	(s)	—	3.4	24.7	69.2	R (s)	4.2	235.2	R (s)	336.9	336.9	—	336.9
1980	—	—	9.4	118.0	266.2	R (s)	7.3	578.0	—	978.9	978.9	—	978.9
1981	—	—	10.2	122.0	301.0	R (s)	8.7	685.0	—	1,127.1	1,127.1	—	1,127.1
1982	—	—	6.7	132.2	276.4	0.5	7.6	646.4	—	1,069.8	1,069.8	—	1,069.8
1983	—	—	5.8	139.2	254.4	0.6	7.9	536.2	R (s)	944.1	944.1	—	944.1
1984	—	—	5.1	133.2	212.0	1.1	8.7	520.7	(s)	880.8	880.8	—	880.8
1985	—	—	5.3	130.3	197.0	1.1	8.1	R 525.9	—	R 867.6	R 867.6	—	R 867.6
1986	—	—	5.2	111.9	140.5	0.8	7.0	425.0	(s)	690.5	690.5	—	690.5
1987	—	—	3.8	145.7	152.5	0.6	6.9	R 457.7	—	R 767.2	R 767.2	—	R 767.2
1988	—	—	4.5	145.5	145.3	0.7	7.2	R 532.2	—	R 835.5	R 835.5	—	R 835.5
1989	—	—	4.9	171.2	162.6	0.8	7.3	R 616.8	—	R 963.5	R 963.5	—	R 963.5
1990	—	—	5.2	178.7	212.9	0.8	7.6	R 702.1	—	R 1,107.3	R 1,107.3	—	R 1,107.3
1991	—	(s)	4.9	183.1	182.5	0.7	7.8	R 700.4	—	R 1,079.5	R 1,079.5	—	R 1,079.5
1992	—	(s)	4.5	187.7	161.8	0.9	8.6	R 771.9	—	R 1,135.4	R 1,135.5	—	R 1,135.5
1993	—	R (s)	4.7	215.6	171.1	0.9	9.1	R 777.9	—	R 1,179.4	R 1,179.4	—	R 1,179.4
1994	—	R (s)	4.3	224.0	163.3	1.5	9.6	R 850.3	—	R 1,253.2	R 1,253.3	—	R 1,253.3
1995	—	R (s)	2.7	221.4	182.1	0.7	9.6	R 862.9	—	R 1,279.2	R 1,279.6	—	R 1,279.6
1996	—	(s)	4.3	339.6	228.6	0.8	9.6	1,018.6	—	1,601.6	1,601.8	—	1,601.8
1997	—	(s)	3.6	306.9	210.7	0.7	9.0	1,082.9	—	1,613.9	1,614.1	—	1,614.1

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 184. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Nevada

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.31	0.38	0.61	0.70	—	0.62	—	—	0.36
1975	0.34	1.09	1.98	2.47	—	2.00	—	—	0.59
1980	1.05	2.59	3.58	5.58	—	3.60	—	—	1.68
1981	1.10	3.14	4.76	6.77	—	4.94	—	—	1.76
1982	1.18	3.92	4.17	7.28	—	4.62	—	—	1.49
1983	1.27	4.54	4.59	6.20	—	5.62	—	—	1.51
1984	1.33	4.33	4.03	6.14	—	5.38	—	—	1.52
1985	1.62	4.07	3.71	6.12	—	4.91	—	—	1.79
1986	1.39	3.04	1.97	3.94	—	2.06	—	—	1.47
1987	1.40	2.58	2.36	4.41	—	2.51	—	—	1.47
1988	1.36	2.72	2.40	4.05	—	2.51	—	—	1.47
1989	1.52	2.11	2.74	5.19	—	2.97	—	—	1.62
1990	1.49	1.96	2.93	6.47	—	3.50	—	—	1.59
1991	1.41	1.73	3.86	5.20	—	4.05	—	—	1.48
1992	1.46	1.87	3.23	4.90	—	3.41	—	—	1.55
1993	1.47	2.38	3.55	5.08	—	3.68	—	—	1.60
1994	1.43	1.92	3.22	4.37	—	3.40	—	—	1.53
1995	1.31	1.66	2.99	4.93	—	3.94	—	—	1.39
1996	1.37	2.06	3.97	5.51	—	4.22	—	—	1.54
1997	1.39	2.12	4.09	5.08	—	4.73	—	—	1.58
	Expenditures in Million Nominal Dollars								
1970	4.3	10.5	R (s)	R (s)	—	R (s)	—	—	15.1
1975	34.1	29.3	15.7	0.8	—	16.5	—	—	79.8
1980	94.2	76.4	54.8	0.7	—	55.5	—	—	226.1
1981	118.2	149.4	6.6	0.9	—	7.6	—	—	275.2
1982	166.3	65.6	5.3	1.6	—	6.9	—	—	238.8
1983	173.1	46.2	0.7	1.6	—	2.3	—	—	221.6
1984	202.9	43.1	0.5	1.5	—	2.0	—	—	248.0
1985	199.9	35.0	1.2	1.9	—	3.1	—	—	238.1
1986	221.2	21.1	6.2	0.6	—	6.8	—	—	249.1
1987	213.0	18.9	6.3	0.9	—	7.2	—	—	239.1
1988	246.2	29.8	13.2	1.6	—	14.8	—	—	290.8
1989	253.0	50.4	10.4	2.0	—	12.4	—	—	R 316.0
1990	241.1	49.1	8.2	3.4	—	11.6	—	—	301.8
1991	246.8	38.6	9.2	2.0	—	11.3	—	—	296.7
1992	255.7	46.6	10.5	1.9	—	12.4	—	—	R 314.9
1993	246.0	52.1	8.8	1.2	—	10.0	—	—	R 308.2
1994	251.5	64.1	4.9	1.2	—	6.1	—	—	321.7
1995	205.6	68.5	R (s)	0.8	—	1.3	—	—	R 275.5
1996	225.9	99.1	3.7	1.0	—	4.6	—	—	329.7
1997	225.8	112.9	0.6	1.3	—	1.9	—	—	340.6

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 185. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, New Hampshire

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.37	0.37	1.65	1.38	0.75	2.06	2.92	0.42	1.41	1.60	—	R 1.11	1.41	0.36	6.74	R 2.18
1975	—	1.22	1.22	2.24	2.80	2.10	3.53	4.54	1.85	2.99	3.24	—	R 1.31	R 2.85	1.43	12.68	R 4.32
1980	—	1.60	1.60	4.27	6.97	6.51	6.89	10.11	3.82	7.45	7.29	—	R 2.01	R 6.02	2.68	19.55	R 9.29
1981	—	1.73	1.73	5.17	8.57	7.80	8.25	11.22	4.69	9.09	8.63	—	R 2.25	R 7.16	3.23	25.11	R 11.35
1982	—	1.91	1.91	6.25	8.19	7.51	8.66	10.52	4.20	8.27	8.33	—	R 2.26	R 6.85	2.76	23.90	R 10.67
1983	—	1.95	1.95	6.85	7.66	7.95	9.41	9.53	4.27	R 7.25	R 7.82	—	R 2.16	R 6.44	2.79	24.78	R 10.54
1984	—	2.03	2.03	6.38	7.87	6.21	9.70	9.04	4.39	R 6.36	7.41	—	R 2.09	R 6.15	2.92	24.75	R 10.20
1985	—	2.03	2.03	6.44	7.49	6.53	11.42	9.26	3.81	R 7.44	R 7.77	—	R 2.02	R 6.26	2.46	23.28	R 10.34
1986	—	R 2.02	R 2.02	6.53	5.51	4.93	10.87	7.32	2.02	R 6.52	R 5.43	—	R 2.00	R 4.97	1.95	22.14	R 8.69
1987	—	1.93	1.93	5.75	5.56	4.18	10.68	7.60	2.67	R 5.26	R 5.92	—	R 1.90	R 5.23	2.20	23.25	R 8.91
1988	—	1.79	1.79	5.50	5.68	4.22	10.55	7.82	1.94	R 5.56	R 5.80	—	R 1.91	R 5.09	1.83	24.24	R 9.43
1989	—	1.75	1.75	6.06	6.33	4.83	10.32	8.60	2.33	R 5.21	R 6.39	—	e R 1.41	e R 5.44	2.01	24.49	e R 9.55
1990	—	1.82	1.82	6.38	7.36	6.40	11.55	9.66	2.43	R 4.88	R 7.24	1.03	1.46	R 5.18	1.58	26.64	R 10.62
1991	—	1.81	1.81	6.12	6.70	5.36	12.82	9.55	1.90	R 4.88	R 7.27	0.84	R 1.52	R 4.54	1.22	26.76	10.42
1992	—	1.73	1.73	6.11	6.31	4.86	11.54	9.50	1.93	R 4.44	R 7.12	0.95	R 1.48	R 4.35	1.24	29.22	R 10.56
1993	—	1.66	1.66	6.56	6.15	4.58	11.37	9.16	1.91	R 5.64	R 6.99	0.57	R 1.43	R 4.05	R 0.96	31.80	R 10.68
1994	—	1.53	1.53	6.37	6.03	4.29	11.47	9.29	2.14	R 5.88	R 7.08	0.52	R 1.52	R 4.49	R 1.03	33.18	R 11.04
1995	—	1.60	1.60	5.49	5.98	4.12	11.48	9.93	2.42	R 5.72	R 7.61	0.54	1.54	R 4.39	R 0.99	34.36	R 11.26
1996	—	1.61	1.61	6.36	6.98	5.25	12.67	10.13	2.74	6.10	8.21	0.42	1.47	4.56	0.85	33.98	11.46
1997	—	1.64	1.64	6.94	6.96	4.84	13.27	10.08	2.73	5.91	8.20	0.47	1.48	4.85	1.03	34.17	11.58
	Expenditures in Million Nominal Dollars																
1970	—	10.1	10.1	11.2	61.9	4.2	6.5	124.4	14.7	13.4	225.2	—	R 3.2	R 249.7	-15.6	83.5	R 317.6
1975	—	31.9	31.9	17.2	116.9	10.3	18.7	223.4	53.2	19.4	441.9	—	R 4.1	R 495.1	-58.2	207.7	R 644.6
1980	—	46.9	46.9	41.0	236.1	27.3	31.3	498.1	135.5	42.9	971.1	—	R 11.4	R 1,070.4	-150.9	394.5	R 1,314.0
1981	—	41.9	41.9	53.6	264.6	24.5	36.5	545.3	145.0	47.2	1,063.2	—	R 13.2	R 1,171.9	-159.1	521.3	R 1,534.0
1982	—	52.7	52.7	63.7	242.0	25.7	41.3	505.6	101.4	43.0	958.9	—	R 13.4	R 1,088.7	-116.8	491.6	R 1,463.4
1983	—	57.4	57.4	67.4	201.6	24.5	45.1	470.6	R 103.3	R 38.1	R 883.2	—	R 13.7	R 1,021.7	-124.2	530.1	R 1,427.5
1984	—	69.2	69.2	68.9	219.8	27.8	42.1	476.7	138.0	R 55.4	R 959.8	—	R 12.5	R 1,110.4	-157.5	573.0	R 1,525.9
1985	—	80.5	80.5	69.7	228.9	18.4	65.3	R 502.9	82.4	R 90.2	R 988.0	—	R 11.9	R 1,150.2	-131.5	588.4	R 1,607.0
1986	—	R 50.5	R 50.5	68.8	185.4	16.5	66.5	427.7	90.1	R 46.5	R 832.8	—	R 9.3	R 961.4	-104.3	594.8	R 1,451.9
1987	—	60.9	60.9	70.7	244.1	14.6	80.3	R 472.6	92.4	R 48.1	R 952.2	—	R 8.1	R 1,091.9	-118.2	664.3	R 1,638.1
1988	—	58.7	58.7	73.2	225.2	16.6	80.3	R 506.1	77.6	R 39.1	R 944.9	—	R 8.4	R 1,085.2	-115.5	731.9	R 1,701.7
1989	—	55.3	55.3	86.0	278.8	20.0	93.8	R 555.2	90.5	R 48.7	R 1,087.0	—	e R 18.5	e R 1,247.3	R -127.9	759.1	e R 1,878.5
1990	—	57.2	57.2	92.2	271.2	22.7	88.9	R 597.6	80.3	R 52.8	R 1,113.6	45.0	R 17.8	R 1,326.4	R -157.5	816.3	R 1,985.3
1991	—	R 62.8	R 62.8	86.9	248.0	13.9	76.5	R 609.0	48.0	R 35.8	R 1,031.1	61.4	R 19.5	R 1,264.5	R -152.1	800.1	R 1,912.4
1992	—	60.1	60.1	103.4	243.0	10.2	73.7	R 604.3	45.8	R 35.7	R 1,012.6	80.0	R 20.4	R 1,279.5	R -167.4	892.9	R 2,005.0
1993	—	62.1	62.1	109.8	240.8	9.9	88.7	R 601.5	49.2	R 31.7	R 1,021.8	55.5	R 21.1	R 1,273.7	R -142.9	950.7	R 2,081.5
1994	—	51.4	51.4	120.9	240.7	8.2	92.6	R 625.2	56.4	R 33.5	R 1,056.6	34.2	R 23.3	R 1,292.0	R -124.0	1,014.0	R 2,182.0
1995	—	56.7	56.7	110.2	258.1	7.8	95.1	704.0	50.5	R 33.3	R 1,148.7	48.2	R 26.2	R 1,397.1	R -142.2	1,055.9	R 2,310.8
1996	—	58.4	58.4	123.3	323.3	10.7	110.4	741.7	50.1	48.0	1,284.3	44.3	25.9	1,540.4	-130.3	1,058.2	2,468.2
1997	—	72.9	72.9	146.1	326.8	11.2	116.9	776.9	53.9	42.4	1,328.1	39.7	23.7	1,617.2	-150.9	1,058.6	2,524.9

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 186. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, New Hampshire

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.29	1.97	1.51	1.58	2.58	1.56	0.56	R 1.57	8.29	R 2.23
1975	2.62	2.62	2.87	3.16	4.70	3.01	1.11	R 2.92	14.25	R 4.56
1980	3.90	4.57	7.24	8.15	9.22	7.48	2.85	R 6.74	20.93	R 9.77
1981	4.87	5.55	8.92	10.54	9.98	9.10	3.51	R 8.14	26.80	R 12.20
1982	4.43	6.72	8.46	10.79	10.66	8.82	3.40	R 8.02	26.24	R 12.06
1983	4.06	7.32	7.51	R 7.13	11.11	R 7.92	3.30	R 7.41	27.60	R 12.09
1984	4.76	6.83	7.82	R 8.39	11.52	R 8.30	3.35	R 7.69	27.34	R 12.56
1985	4.39	6.96	7.38	R 8.48	11.14	R 8.01	3.22	R 7.58	26.15	R 11.74
1986	4.93	6.88	5.47	R 6.07	10.35	R 6.27	2.58	R 6.14	25.02	R 10.81
1987	4.04	6.32	5.52	R 5.58	10.37	R 6.25	2.46	R 6.10	26.68	R 10.85
1988	4.08	6.13	5.64	R 5.27	10.37	R 6.42	2.48	R 6.19	27.75	R 11.45
1989	4.09	6.72	6.44	R 4.93	10.37	R 7.01	2.75	R 6.80	27.97	R 11.55
1990	4.23	7.31	7.41	R 6.25	11.90	R 8.25	2.83	R 7.72	30.30	R 13.43
1991	4.15	7.09	6.60	R 5.56	13.12	R 7.63	2.70	R 7.18	30.42	R 12.90
1992	3.96	7.20	6.17	R 4.68	12.13	R 7.10	2.47	R 6.79	33.29	R 13.19
1993	3.94	7.58	5.97	R 4.69	12.00	R 6.97	2.42	R 6.76	36.07	R 13.54
1994	3.81	7.86	5.71	R 5.10	12.62	R 6.99	2.35	R 6.82	37.82	R 14.03
1995	3.94	7.09	5.62	R 4.44	12.58	R 6.82	2.30	R 6.56	39.57	R 13.58
1996	3.96	7.26	6.78	6.81	13.86	8.02	2.64	7.57	39.40	14.02
1997	3.93	8.39	6.79	5.43	14.03	7.93	2.62	7.76	40.07	14.22
	Expenditures in Million Nominal Dollars									
1970	R (s)	7.3	53.0	6.3	4.6	63.9	0.6	R 71.9	41.8	R 113.7
1975	R (s)	9.9	95.5	7.3	12.1	114.8	1.4	R 126.3	104.5	R 230.8
1980	R (s)	20.2	148.4	14.9	19.9	183.2	6.3	R 209.8	177.0	R 386.8
1981	R (s)	25.3	180.6	12.3	21.3	214.2	7.8	R 247.9	226.9	R 474.8
1982	0.7	31.0	158.9	14.3	23.0	196.2	8.2	R 236.1	220.3	R 456.5
1983	0.8	32.2	132.2	R 8.8	28.5	R 169.4	7.8	R 210.3	236.7	R 447.0
1984	0.9	32.4	141.2	R 7.6	30.9	R 179.7	6.6	R 219.6	257.2	R 476.8
1985	R (s)	33.6	139.4	R 41.1	34.3	R 214.8	6.2	R 255.1	254.4	R 509.5
1986	0.9	36.1	103.3	R 12.2	38.9	R 154.3	4.8	R 196.1	262.5	R 458.6
1987	0.6	36.4	126.7	R 12.7	46.5	R 185.9	3.6	R 226.6	296.9	R 523.5
1988	0.7	37.2	121.3	R 13.1	51.3	R 185.6	3.8	R 227.3	328.0	R 555.3
1989	0.5	43.1	161.6	R 13.1	61.6	R 236.3	4.3	R 284.3	338.0	R 622.3
1990	0.7	43.7	146.6	R 8.3	62.5	R 217.4	6.3	R 268.2	356.1	R 624.3
1991	1.4	40.0	137.2	R 8.5	58.2	R 203.9	6.4	R 251.7	348.4	R 600.1
1992	0.8	46.8	132.4	R 6.6	56.5	R 195.5	6.1	R 249.3	389.4	R 638.8
1993	0.6	49.7	132.7	R 9.3	64.0	R 206.0	6.2	R 262.6	421.0	R 683.5
1994	R (s)	52.3	126.9	R 8.2	70.3	R 205.4	5.9	R 264.0	442.7	R 706.8
1995	R (s)	46.6	140.9	R 8.3	75.7	R 225.0	6.4	R 278.4	454.2	R 732.6
1996	(s)	51.9	185.9	15.2	87.6	288.6	7.4	348.3	460.7	809.0
1997	(s)	58.8	189.2	14.6	88.7	292.6	5.3	357.1	460.4	817.5

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 187. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, New Hampshire

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.95	1.42	1.11	0.74	1.37	2.92	0.34	1.14	0.56	R 1.22	8.80	R 3.11
1975	2.65	2.10	2.46	2.54	2.43	4.54	1.85	2.54	1.11	R 2.37	15.39	R 6.17
1980	1.69	4.05	6.44	6.27	4.78	10.11	3.76	5.95	2.85	R 5.35	24.30	R 9.44
1981	1.90	5.00	8.13	6.96	6.64	11.22	4.65	6.77	3.51	R 6.04	28.47	R 11.86
1982	2.04	5.95	7.76	7.00	7.00	10.52	4.09	6.09	3.40	R 6.00	26.60	R 11.04
1983	1.98	6.59	6.86	R 7.13	7.46	9.53	4.20	6.09	3.30	R 6.24	27.05	R 12.84
1984	2.40	6.46	6.87	R 8.39	6.74	9.04	4.60	R 5.98	3.35	R 6.12	26.88	R 12.96
1985	R 2.41	6.13	6.53	R 8.48	11.75	9.26	4.20	R 7.27	NA	R 6.67	25.55	R 13.14
1986	R 2.59	6.36	4.17	R 6.07	11.70	7.32	2.23	R 4.29	NA	R 4.92	24.03	R 10.36
1987	2.39	5.65	4.50	R 5.58	11.14	7.60	2.86	R 4.85	NA	R 5.05	25.01	10.34
1988	R 2.55	5.52	4.47	R 5.27	10.88	7.82	2.22	R 4.59	NA	R 4.86	25.78	R 10.97
1989	2.60	6.11	4.99	R 4.93	10.22	8.60	2.63	R 5.06	NA	R 5.37	26.23	11.48
1990	2.62	6.64	5.83	R 6.25	10.80	9.66	3.06	R 5.41	NA	R 5.74	28.33	12.27
1991	R 2.64	6.31	5.57	R 5.56	11.94	9.55	2.26	R 4.91	NA	5.29	28.61	12.19
1992	R 2.60	6.43	5.13	R 4.68	9.96	9.50	2.11	R 5.01	NA	R 5.51	30.89	R 13.62
1993	2.32	6.76	4.98	R 4.69	10.02	9.16	2.05	4.78	2.42	R 5.44	32.64	R 14.01
1994	2.23	7.08	4.90	R 5.10	9.83	9.29	2.35	4.72	2.35	R 5.52	32.24	R 15.76
1995	R 2.26	6.38	4.68	R 4.44	10.09	9.93	2.55	R 4.68	2.30	R 5.28	33.45	R 16.46
1996	2.30	6.61	5.55	6.81	11.17	10.13	2.99	5.51	2.64	5.87	33.40	16.03
1997	2.53	7.55	5.57	5.43	11.00	10.08	2.89	5.42	2.62	6.18	33.56	16.08
	Expenditures in Million Nominal Dollars											
1970	R (s)	3.2	4.1	R (s)	R (s)	0.7	R (s)	5.5	(s)	8.8	21.0	29.8
1975	R (s)	5.5	8.5	R (s)	1.1	1.2	0.7	11.7	(s)	17.4	46.4	63.8
1980	(s)	17.0	39.2	R (s)	1.8	6.2	8.8	56.3	(s)	R 73.5	92.0	R 165.5
1981	R (s)	22.3	25.2	R (s)	2.5	5.4	13.7	46.9	(s)	R 69.6	114.8	R 184.4
1982	R (s)	26.8	26.7	R (s)	2.7	4.2	16.1	50.0	(s)	R 77.2	111.0	R 188.2
1983	R (s)	29.9	16.2	R (s)	3.4	3.3	8.2	31.3	(s)	R 61.6	123.9	R 185.5
1984	R (s)	27.2	16.6	R (s)	3.2	3.2	12.2	35.4	(s)	R 63.0	136.1	R 199.2
1985	R (s)	31.2	20.9	R 2.0	6.4	6.1	2.3	R 37.7	NA	R 69.1	137.9	R 207.0
1986	R (s)	29.0	21.8	R 0.7	7.8	5.6	7.3	R 43.2	NA	R 72.4	140.9	R 213.3
1987	R (s)	26.7	43.9	R 1.2	8.8	R 5.2	5.1	R 64.1	NA	R 91.1	163.0	R 254.1
1988	R (s)	28.5	30.0	R 1.3	9.5	5.8	6.8	R 53.5	NA	R 82.3	180.0	R 262.3
1989	R (s)	33.5	34.5	R 1.5	10.7	5.8	7.9	R 60.4	NA	R 94.1	190.0	R 284.1
1990	R (s)	34.1	40.5	R 0.9	10.0	3.7	12.6	R 67.7	NA	R 102.2	204.7	306.9
1991	0.6	31.9	37.0	0.7	9.4	2.8	9.6	59.4	NA	91.9	208.9	300.8
1992	R (s)	38.0	33.8	R 0.6	8.2	2.4	4.3	R 49.3	NA	R 87.8	231.2	R 318.9
1993	R (s)	41.9	32.6	R 0.9	9.4	0.5	4.9	48.4	(s)	R 90.5	249.6	R 340.1
1994	R (s)	46.0	36.5	1.2	9.7	0.5	6.7	54.6	(s)	R 101.2	367.8	R 469.0
1995	R (s)	42.0	29.8	R 1.1	10.7	0.6	7.1	R 49.3	(s)	R 91.9	383.1	R 475.0
1996	(s)	47.8	43.3	1.6	12.5	0.6	8.5	66.5	0.6	115.2	383.6	498.8
1997	(s)	57.1	44.4	1.8	12.3	0.6	8.8	67.8	0.5	125.6	386.5	512.1

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
(s)=Value less than 0.05 million nominal dollars.

NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 188. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, New Hampshire

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	0.95	0.95	0.84	0.70	0.69	0.74	1.37	5.08	2.92	0.51	1.76	0.67	R 1.45	R 0.72	4.18	R 1.21
1975	—	2.65	2.65	1.44	2.05	2.29	2.54	2.43	7.48	4.54	1.85	4.01	2.08	R 1.45	R 2.01	9.42	R 3.43
1980	—	1.69	1.69	3.85	4.00	5.73	6.27	4.78	14.36	10.11	3.95	8.04	5.07	R 1.45	R 4.30	15.82	R 7.75
1981	—	1.90	1.90	4.53	5.41	6.33	6.96	6.64	18.00	11.22	5.10	11.42	6.54	R 1.45	R 5.25	21.73	R 10.80
1982	—	2.04	2.04	5.46	4.03	6.14	7.00	7.00	17.25	10.52	4.71	11.94	5.96	R 1.45	R 4.76	20.03	R 9.43
1983	—	1.98	1.98	5.87	4.25	6.70	R 6.69	7.46	16.98	9.53	4.57	11.12	5.77	R 1.45	R 4.58	20.59	R 9.48
1984	—	2.40	2.40	5.09	4.62	6.38	R 7.17	6.74	17.63	9.04	4.60	10.75	5.31	R 1.45	R 4.51	20.69	R 8.71
1985	—	R 2.41	R 2.41	5.41	5.20	6.04	R 6.87	11.75	17.61	9.26	4.20	10.67	6.09	R 1.45	R 5.12	19.32	R 9.41
1986	—	R 2.59	R 2.59	5.04	4.86	3.57	R 5.28	11.70	15.59	7.32	2.23	10.51	R 4.00	R 1.61	R 3.75	18.22	R 8.09
1987	—	2.39	2.39	4.22	3.54	4.37	R 4.52	11.14	13.58	7.60	2.86	10.58	R 4.53	R 1.61	R 4.19	18.71	R 8.55
1988	—	R 2.55	R 2.55	3.63	3.34	4.25	R 4.19	10.88	14.62	7.82	2.22	8.98	R 4.48	R 1.61	R 3.96	19.66	R 9.77
1989	—	2.60	2.60	4.12	3.17	4.79	R 5.11	10.22	14.48	8.60	2.63	13.28	5.05	d R 1.22	d R 3.45	19.80	d R 8.07
1990	—	2.62	2.62	4.30	3.34	6.02	R 6.26	10.80	14.60	9.66	3.06	11.23	4.93	R 1.15	R 3.57	21.91	R 8.64
1991	—	R 2.64	R 2.64	4.28	3.05	5.12	R 5.53	11.94	16.80	9.55	2.26	6.19	4.34	R 1.26	R 3.06	21.79	R 8.54
1992	—	R 2.60	R 2.60	4.45	2.78	4.77	R 4.69	9.96	18.32	9.50	2.11	6.82	R 3.62	R 1.26	R 2.87	23.95	R 8.29
1993	—	2.32	2.32	4.63	3.30	4.39	R 4.49	10.02	18.96	9.16	2.05	5.89	3.77	R 1.24	R 2.90	26.49	R 8.49
1994	—	—	—	4.38	3.64	4.64	R 4.64	8.35	19.11	9.29	2.35	6.21	3.95	R 1.34	3.01	27.32	R 7.51
1995	—	R 2.26	R 2.26	3.76	3.79	4.69	R 4.30	7.15	R 19.41	9.93	2.55	6.62	R 4.11	R 1.38	R 2.90	28.01	R 7.71
1996	—	—	—	4.70	3.80	5.42	5.28	8.10	20.08	10.13	2.99	7.57	4.60	1.23	3.20	26.85	7.60
1997	—	—	—	4.85	4.02	5.46	4.57	11.76	17.86	10.08	2.89	6.51	5.14	1.29	3.45	26.55	8.00
	Expenditures in Million Nominal Dollars																
1970	—	R (s)	R (s)	0.7	2.5	2.0	R (s)	1.4	0.5	0.6	9.1	1.6	18.0	R 2.6	R 21.5	20.7	R 42.2
1975	—	R (s)	R (s)	1.6	5.9	5.7	0.6	5.5	1.0	0.7	26.1	1.7	47.0	R 2.6	R 51.6	56.9	R 108.5
1980	—	R (s)	R (s)	3.9	6.7	18.6	R (s)	8.3	2.0	1.4	21.7	11.6	70.7	R 4.9	R 79.9	125.5	R 205.3
1981	—	R (s)	R (s)	5.4	12.6	21.0	R (s)	12.5	2.4	1.0	13.4	11.6	74.7	R 5.2	R 85.5	179.5	R 265.0
1982	—	2.9	2.9	5.9	9.8	17.5	R (s)	15.4	2.1	1.1	17.4	9.2	72.8	R 5.0	R 86.5	160.2	R 246.8
1983	—	2.8	2.8	5.2	11.0	10.5	R (s)	12.9	2.2	1.0	25.1	8.7	71.7	R 5.7	R 85.4	169.5	R 255.0
1984	—	3.1	3.1	9.0	29.7	10.3	R (s)	7.4	2.4	1.5	34.5	8.1	93.9	R 5.8	R 111.8	179.6	R 291.4
1985	—	2.4	2.4	5.0	29.5	13.5	R (s)	23.5	2.3	3.0	27.0	8.1	107.1	R 5.8	R 120.2	196.1	R 316.3
1986	—	R (s)	R (s)	3.8	17.8	7.1	R (s)	19.1	2.0	2.6	27.7	7.0	R 83.5	R 4.5	R 92.0	191.4	R 283.4
1987	—	R (s)	R (s)	7.5	18.3	13.6	R 0.7	24.2	1.9	2.6	25.9	7.2	94.5	R 4.5	R 106.6	204.4	R 311.1
1988	—	R (s)	R (s)	7.3	9.5	12.3	R (s)	18.9	2.0	2.8	12.7	6.4	64.9	R 4.7	R 76.9	224.0	R 300.9
1989	—	1.0	1.0	9.4	15.6	15.1	R (s)	21.0	2.0	4.1	10.1	9.3	77.7	d R 14.2	d R 102.3	231.0	d R 333.3
1990	—	1.8	1.8	14.3	26.6	15.3	R (s)	15.7	2.1	2.8	10.2	8.3	81.2	R 11.5	R 108.9	255.5	R 364.4
1991	—	3.4	3.4	14.9	13.3	13.3	1.0	8.5	2.2	2.5	6.5	3.4	50.8	R 13.1	R 82.2	242.8	R 325.0
1992	—	2.9	2.9	17.2	14.6	13.9	R 0.5	8.6	2.4	2.5	13.7	3.8	R 60.1	R 14.2	R 94.4	272.3	R 366.7
1993	—	4.6	4.6	17.8	7.0	10.8	R (s)	14.6	2.5	4.4	18.5	3.3	61.4	R 14.9	R 98.6	280.2	R 378.8
1994	—	—	—	19.9	9.2	9.9	R (s)	11.9	2.7	4.8	19.6	3.6	62.1	R 16.9	R 98.8	203.4	R 302.2
1995	—	(s)	(s)	17.5	9.2	11.4	R (s)	8.1	2.7	5.7	17.7	3.7	R 58.9	R 19.3	R 95.7	218.5	R 314.3
1996	—	—	—	23.5	15.8	12.6	0.5	10.0	2.7	5.7	18.3	4.4	69.9	17.9	111.4	213.8	325.2
1997	—	—	—	28.6	11.0	10.2	0.7	15.6	2.5	6.1	15.4	4.2	65.7	17.9	112.1	211.8	323.9

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 189. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, New Hampshire

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.95	—	2.17	1.32	0.75	1.37	5.08	2.92	0	2.60	2.60	—	2.60
1975	2.65	—	3.45	2.90	2.09	2.43	7.48	4.54	1.90	4.27	4.27	—	4.27
1980	—	—	9.02	7.38	6.51	4.78	14.36	10.11	3.18	9.62	9.62	—	9.62
1981	—	—	10.84	9.01	7.80	6.64	18.00	11.22	4.02	10.86	10.86	—	10.86
1982	—	—	10.92	8.72	7.51	7.00	17.25	10.52	3.72	10.21	10.21	—	10.21
1983	—	—	10.44	9.03	7.95	7.46	16.98	9.53	—	9.45	9.45	—	9.45
1984	—	—	10.27	8.96	6.21	6.74	17.63	9.04	—	8.88	8.88	—	8.88
1985	—	—	9.99	8.95	6.53	11.75	17.61	9.26	—	9.16	9.16	—	9.16
1986	—	—	8.41	7.11	4.93	11.70	15.59	7.32	1.97	7.20	7.20	—	7.20
1987	—	—	7.55	7.48	4.18	11.14	13.58	7.60	2.69	7.36	7.36	—	7.36
1988	—	—	7.41	7.39	4.22	10.88	14.62	7.82	1.90	7.55	7.55	—	7.55
1989	—	—	8.28	7.76	4.83	10.22	14.48	8.60	2.36	8.32	8.32	—	8.32
1990	—	—	9.32	9.17	6.40	10.80	14.60	9.66	2.32	9.42	9.42	—	9.42
1991	—	—	8.71	8.77	5.36	11.94	16.80	9.55	1.84	9.24	9.24	—	9.24
1992	—	—	8.54	8.41	4.86	9.96	18.32	9.50	1.91	9.22	9.22	—	9.22
1993	—	—	8.24	8.31	4.58	10.02	18.96	9.16	1.64	8.99	8.99	—	8.99
1994	—	6.13	7.96	8.42	4.29	8.09	19.11	9.29	1.94	9.11	9.11	—	9.11
1995	—	6.10	8.36	8.34	4.12	8.17	R 19.41	9.93	—	9.66	9.66	—	9.66
1996	—	—	9.29	9.41	5.25	8.54	20.08	10.13	2.57	9.97	9.97	—	9.97
1997	—	—	9.39	9.10	4.84	7.56	17.86	10.08	2.63	9.87	9.87	—	9.87
	Expenditures in Million Nominal Dollars												
1970	(s)	—	R (s)	2.4	4.2	(s)	1.7	123.1	(s)	131.9	131.9	—	131.9
1975	(s)	—	0.6	7.1	10.2	(s)	2.2	221.4	R (s)	241.5	241.5	—	241.5
1980	—	—	1.8	29.5	27.0	1.3	5.2	490.5	1.0	556.4	556.4	—	556.4
1981	—	—	1.6	37.0	24.4	R (s)	6.3	538.9	1.2	609.7	609.7	—	609.7
1982	—	—	1.4	38.3	25.5	R (s)	5.5	500.3	0.7	572.0	572.0	—	572.0
1983	—	—	1.4	42.0	24.5	R (s)	5.7	466.3	—	540.1	540.1	—	540.1
1984	—	—	1.0	50.7	27.8	0.6	6.3	472.0	—	558.5	558.5	—	558.5
1985	—	—	1.2	54.1	18.4	1.0	5.8	R 493.7	—	R 574.3	R 574.3	—	R 574.3
1986	—	—	1.6	52.6	16.5	0.7	5.1	419.5	0.6	496.6	496.6	—	496.6
1987	—	—	1.1	59.3	14.6	0.8	5.0	R 464.9	3.8	R 549.5	R 549.5	—	R 549.5
1988	—	—	1.4	60.3	16.6	0.6	5.2	R 497.5	1.7	R 583.2	R 583.2	—	R 583.2
1989	—	—	1.4	66.2	20.0	0.5	5.2	R 545.3	R (s)	R 638.8	R 638.8	—	R 638.8
1990	—	—	1.0	67.7	22.7	0.6	5.4	R 591.1	1.2	R 689.7	R 689.7	—	R 689.7
1991	—	—	1.1	59.6	13.9	R (s)	5.6	R 603.7	2.3	R 686.6	R 686.6	—	R 686.6
1992	—	—	0.8	62.1	10.2	R (s)	6.2	R 599.4	1.5	R 680.6	R 680.6	—	R 680.6
1993	—	—	1.8	63.6	9.9	0.6	6.6	R 596.6	(s)	R 679.1	R 679.1	—	R 679.1
1994	—	(s)	1.3	66.8	8.2	0.7	6.9	R 619.9	R (s)	R 704.0	R 704.0	—	R 704.0
1995	—	(s)	0.9	74.9	7.8	0.5	6.9	697.7	—	788.8	788.8	—	788.8
1996	—	—	0.9	80.7	10.7	(s)	6.9	735.4	(s)	835.2	835.2	—	835.2
1997	—	—	1.1	82.1	11.2	(s)	6.5	770.2	(s)	871.5	871.5	—	871.5

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 190. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, New Hampshire

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.36	—	0.34	0.40	—	0.35	—	—	0.36
1975	1.21	1.01	1.84	2.26	—	1.84	—	—	1.43
1980	1.60	—	3.80	6.17	—	3.81	—	—	2.68
1981	1.72	3.44	4.66	7.59	—	4.67	—	—	3.23
1982	1.88	—	4.12	7.15	—	4.14	—	—	2.76
1983	1.94	3.87	4.18	R 6.10	—	4.20	—	—	2.79
1984	2.00	3.91	4.29	6.18	—	4.31	—	—	2.92
1985	2.01	—	3.62	R 5.79	—	3.64	—	—	2.46
1986	1.99	—	1.91	3.61	—	1.92	—	—	1.95
1987	1.92	2.93	2.58	4.04	—	2.59	—	—	2.20
1988	1.78	2.41	1.86	R 3.67	—	1.89	—	—	1.83
1989	1.73	3.08	2.26	4.26	—	2.28	—	—	2.01
1990	1.78	—	2.25	5.69	—	2.28	1.03	—	1.58
1991	1.74	—	1.76	4.83	—	1.79	0.84	—	1.22
1992	1.69	2.06	1.83	4.44	—	1.86	0.95	—	1.24
1993	1.61	2.17	1.79	4.05	—	1.83	0.57	—	R 0.96
1994	1.52	2.10	1.98	3.72	—	2.00	0.52	—	R 1.03
1995	1.59	1.83	2.31	3.73	—	2.35	0.54	—	R 0.99
1996	1.61	2.66	2.49	4.75	—	2.53	0.42	—	0.85
1997	1.63	2.67	2.61	4.27	—	2.64	0.47	—	1.03
	Expenditures in Million Nominal Dollars								
1970	9.7	—	5.5	R (s)	—	5.9	—	—	15.6
1975	31.3	R (s)	26.4	R (s)	—	26.7	—	—	58.2
1980	46.3	—	104.0	0.7	—	104.6	—	—	150.9
1981	41.1	R (s)	116.7	0.8	—	117.5	—	—	159.1
1982	48.9	—	67.2	0.8	—	68.0	—	—	116.8
1983	53.5	R (s)	69.9	0.7	—	70.7	—	—	124.2
1984	65.0	R (s)	91.3	1.1	—	92.3	—	—	157.5
1985	77.4	—	53.0	1.1	—	54.1	—	—	131.5
1986	49.1	—	54.5	0.7	—	55.2	—	—	104.3
1987	59.9	(s)	57.6	0.7	—	58.3	—	—	118.2
1988	57.7	R (s)	56.3	1.3	—	57.7	—	—	115.5
1989	53.5	R (s)	72.2	1.5	—	73.7	—	—	R 127.9
1990	54.3	—	56.3	1.2	—	57.5	45.0	—	R 157.5
1991	57.4	—	29.5	1.0	—	30.5	61.4	—	R 152.1
1992	55.9	1.3	26.3	0.8	—	27.1	80.0	—	R 167.4
1993	56.7	R (s)	25.8	1.1	—	26.9	55.5	—	R 142.9
1994	50.7	2.7	30.0	0.6	—	30.6	34.2	—	R 124.0
1995	56.1	4.2	25.7	1.0	—	26.8	48.2	—	R 142.2
1996	57.8	(s)	23.2	0.7	—	24.0	44.3	—	130.3
1997	72.4	1.5	29.7	0.9	—	30.5	39.7	—	150.9

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 191. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, New Jersey

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	0.58	0.44	0.45	1.28	1.29	0.72	1.63	2.99	0.45	R 1.38	R 1.43	0.20	R 0.95	1.31	0.42	6.24	R 1.95
1975	—	1.58	1.58	2.29	2.73	2.03	3.59	4.79	2.08	R 3.04	R 3.30	0.18	R 1.14	R 3.00	1.71	13.61	R 4.28
1980	—	1.81	1.81	4.15	6.75	6.26	5.72	9.94	4.53	R 7.61	R 7.24	0.34	R 1.90	R 6.04	2.67	21.26	R 8.35
1981	—	2.09	2.09	5.01	8.24	7.50	6.75	10.99	5.14	R 9.18	R 8.58	0.33	R 2.25	6.87	2.62	24.56	R 9.65
1982	—	2.15	2.15	5.87	7.99	7.03	7.80	10.06	4.92	R 8.29	R 8.02	0.57	R 2.21	R 6.64	2.36	27.09	R 9.60
1983	—	1.97	1.97	5.93	7.66	6.36	8.37	9.01	4.62	R 7.70	R 7.49	0.70	R 2.13	R 6.53	2.89	26.85	R 9.36
1984	—	R 1.96	R 1.96	6.02	7.97	6.13	7.51	8.67	4.85	R 8.01	R 7.38	0.79	R 2.08	R 6.56	3.15	26.87	R 9.28
1985	—	1.92	1.92	6.18	7.86	5.76	12.48	8.95	4.35	R 8.09	R 7.47	0.71	R 2.01	R 6.17	1.90	28.18	R 9.56
1986	—	1.80	1.80	5.86	6.20	3.84	12.07	6.89	2.34	R 5.39	R 5.46	0.73	R 1.83	R 4.96	1.47	27.56	R 8.07
1987	—	1.76	1.76	5.04	6.06	4.01	11.58	7.25	2.99	R 5.74	R 5.78	0.81	R 1.77	R 4.82	1.49	R 25.17	R 7.91
1988	—	1.71	1.71	4.97	5.94	3.79	11.17	7.58	2.40	R 5.20	R 5.72	0.68	R 1.78	R 4.74	1.30	24.97	R 7.99
1989	—	1.75	1.75	5.11	6.39	4.34	9.86	8.48	2.83	R 5.72	R 6.28	0.66	e R 1.90	e R 5.12	1.45	R 25.96	e R 8.49
1990	—	1.79	1.79	5.05	7.77	5.60	11.53	9.03	3.25	R 6.52	R 7.24	0.61	R 2.51	R 5.60	1.20	R 26.64	R 9.22
1991	—	1.77	1.77	4.91	7.29	4.79	10.78	8.91	2.63	R 6.31	R 6.86	0.61	R 2.49	R 5.33	1.12	R 27.77	R 9.15
1992	—	1.72	1.72	5.02	6.79	4.44	11.42	9.04	2.66	R 6.30	R 6.74	0.56	R 2.31	R 5.35	1.04	27.91	R 8.77
1993	—	1.75	1.75	5.07	6.79	4.15	11.67	8.83	2.51	R 5.48	R 6.39	0.58	R 2.14	R 5.07	1.01	29.31	R 8.81
1994	—	1.81	1.81	5.19	6.83	3.87	11.00	8.82	2.78	R 5.77	R 6.49	0.62	R 2.24	R 5.30	1.11	R 29.52	R 8.86
1995	—	1.78	1.78	4.90	6.82	3.85	11.22	9.18	2.87	R 5.99	R 6.66	0.63	R 2.20	R 5.42	1.17	R 30.65	R 9.02
1996	—	1.75	1.75	5.44	7.70	4.75	12.35	9.55	3.40	6.71	7.50	0.36	2.40	6.19	1.21	30.83	9.61
1997	—	1.76	1.76	5.61	7.61	4.41	12.77	9.44	2.87	5.81	7.28	0.58	2.39	6.03	1.26	30.93	9.46
	Expenditures in Million Nominal Dollars																
1970	5.3	50.4	55.6	413.8	468.7	26.9	40.9	1,040.8	215.4	R 201.1	R 1,993.8	7.6	R 5.8	R 2,476.7	-182.1	799.5	R 3,094.1
1975	—	95.9	95.9	556.5	947.8	71.4	95.0	1,951.3	575.0	R 422.7	R 4,063.2	6.1	R 7.9	R 4,729.5	-451.6	1,966.1	R 6,244.1
1980	—	124.5	124.5	1,434.3	2,072.7	308.7	134.3	3,797.7	1,419.1	R 1,174.7	R 8,907.3	27.9	R 28.3	R 10,522.4	-881.5	3,538.5	R 13,179.3
1981	—	157.5	157.5	2,004.7	2,418.5	766.5	149.5	4,179.2	1,138.8	R 1,498.8	R 10,151.3	42.5	R 34.4	R 12,390.4	-928.2	4,134.6	R 15,596.8
1982	—	168.3	168.3	2,253.8	2,101.3	1,357.8	173.6	3,876.2	978.5	R 1,122.3	R 9,609.8	88.2	R 35.6	R 12,155.6	-826.6	4,480.3	R 15,809.3
1983	—	179.9	179.9	2,452.3	1,748.9	1,335.0	185.5	3,673.8	751.3	R 1,112.3	R 8,807.0	48.6	R 34.9	R 11,522.7	-883.8	R 4,639.1	R 15,277.9
1984	—	R 164.2	R 164.2	2,539.0	1,887.5	1,469.4	229.6	3,517.4	867.5	R 1,124.7	R 9,096.0	48.2	R 25.0	R 11,872.5	-922.2	R 4,787.9	R 15,738.2
1985	—	198.1	198.1	2,371.8	1,848.0	1,430.6	316.6	R 3,547.0	644.1	R 1,036.9	R 8,823.3	135.8	R 23.3	R 11,552.4	-730.2	R 5,148.1	R 15,970.3
1986	—	140.2	140.2	2,097.3	1,621.2	852.8	278.6	2,921.4	441.1	R 813.6	R 6,928.8	117.2	R 19.9	R 9,303.4	-479.1	R 5,228.4	R 14,052.6
1987	—	R 159.0	R 159.0	2,150.0	1,545.5	984.5	324.0	R 3,097.9	457.5	R 855.2	R 7,264.6	197.0	R 18.7	R 9,789.3	-655.2	R 5,019.1	R 14,153.1
1988	—	138.5	138.5	2,087.1	1,594.5	876.3	293.2	R 3,226.6	339.0	R 755.9	R 7,085.4	175.7	R 19.5	R 9,506.3	-574.2	R 5,266.6	R 14,198.7
1989	—	164.2	164.2	2,360.1	1,674.7	1,084.9	218.7	R 3,627.6	392.2	R 815.5	R 7,813.5	162.2	e R 20.7	e R 10,520.8	-654.6	R 5,584.6	e R 15,450.8
1990	—	144.4	144.4	2,184.4	1,578.2	1,470.6	169.4	R 3,715.4	303.1	R 961.3	R 8,198.1	155.8	R 27.1	R 10,709.8	-478.0	R 5,690.2	R 15,922.0
1991	—	109.3	109.3	2,295.8	1,410.7	1,183.7	230.0	R 3,729.2	278.4	R 808.2	R 7,640.3	162.9	R 26.9	R 10,235.3	-454.0	R 6,090.2	R 15,871.4
1992	—	108.0	108.0	2,757.9	1,328.9	1,160.8	268.5	R 3,640.2	255.2	R 839.0	R 7,492.7	129.6	R 26.3	R 10,514.4	-354.9	R 5,975.9	R 16,135.4
1993	—	R 109.7	R 109.7	2,842.2	1,348.3	1,131.5	153.8	R 3,269.5	192.6	R 900.8	R 6,996.4	153.4	R 27.3	R 10,128.9	-376.5	R 6,526.0	R 16,278.4
1994	—	94.8	94.8	3,095.0	1,483.0	1,060.2	148.3	R 3,778.1	228.5	R 880.3	R 7,578.5	145.5	R 30.9	R 10,944.8	-390.1	R 6,637.9	R 17,192.5
1995	—	97.8	97.8	2,938.1	1,309.0	1,093.3	160.6	3,969.4	219.4	R 907.3	R 7,659.0	112.9	R 33.2	R 10,841.1	-342.1	R 6,946.1	R 17,445.0
1996	—	109.4	109.4	3,325.5	1,609.3	1,157.7	164.2	4,314.9	201.6	979.3	8,427.0	42.5	37.9	11,942.3	-257.1	7,003.3	18,688.5
1997	—	131.7	131.7	3,532.0	1,608.7	969.7	172.8	4,404.4	163.4	1,062.8	8,381.7	86.3	29.8	12,161.6	-323.3	6,925.4	18,763.7

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 192. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, New Jersey

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.13	1.84	1.43	1.72	3.00	1.46	0.40	R 1.61	7.83	R 2.27
1975	2.09	2.61	2.81	3.51	4.94	2.86	0.79	R 2.73	15.77	R 4.47
1980	3.17	4.90	7.06	9.27	9.83	7.14	2.02	R 5.87	24.08	R 8.75
1981	3.57	5.68	8.76	11.86	11.47	8.85	2.49	R 7.01	27.84	R 10.19
1982	3.54	6.82	8.46	11.92	11.47	8.60	2.41	R 7.35	30.71	R 11.06
1983	3.03	7.22	8.25	R 7.36	11.74	R 8.36	2.34	R 7.40	30.95	R 11.63
1984	3.24	7.15	8.48	R 8.34	10.50	R 8.55	2.38	R 7.54	30.56	R 11.70
1985	3.07	7.33	8.09	R 7.13	10.95	R 8.13	2.28	R 7.50	32.24	R 11.82
1986	2.82	7.17	6.89	R 3.91	12.42	R 6.98	1.83	R 6.94	31.19	R 11.33
1987	2.80	6.44	6.44	R 5.93	11.74	R 6.63	1.74	R 6.39	29.01	R 10.59
1988	2.82	6.17	6.48	R 4.25	10.21	R 6.59	1.76	R 6.21	28.70	R 10.45
1989	2.93	6.35	7.02	R 5.16	8.96	R 7.05	1.95	R 6.47	29.53	R 10.75
1990	3.14	6.44	8.39	R 5.11	14.08	R 8.57	2.83	R 6.92	30.36	R 11.95
1991	2.90	6.57	8.02	R 5.83	15.07	R 8.37	2.70	R 6.93	31.69	R 12.39
1992	2.68	6.77	7.21	R 5.07	13.82	R 7.61	2.47	R 6.84	31.85	R 11.80
1993	2.89	6.75	7.06	R 4.91	11.77	R 7.35	2.42	R 6.76	33.43	R 12.32
1994	3.19	6.84	6.84	R 5.29	14.64	R 7.28	2.35	R 6.82	33.81	R 12.07
1995	2.88	7.03	6.79	R 4.42	14.70	R 7.34	2.30	R 6.94	35.11	R 12.90
1996	2.68	6.91	7.83	5.91	15.98	8.38	2.64	7.14	35.15	12.58
1997	2.72	7.66	7.90	5.90	16.08	8.48	2.62	7.74	35.42	13.23
	Expenditures in Million Nominal Dollars									
1970	2.4	264.7	274.6	7.5	9.5	291.6	1.2	R 559.9	324.1	R 884.0
1975	2.2	348.4	501.0	8.6	17.7	527.3	2.5	R 880.4	780.0	R 1,660.3
1980	2.4	691.2	985.9	13.8	28.0	1,027.7	23.0	R 1,744.3	1,341.5	R 3,085.8
1981	4.9	856.8	1,181.9	13.0	39.5	1,234.4	28.6	R 2,124.8	1,522.1	R 3,646.8
1982	4.9	1,046.6	951.3	23.9	34.9	1,010.0	29.9	R 2,091.5	1,651.5	R 3,743.0
1983	3.8	1,090.5	770.6	R 12.9	42.4	R 826.0	28.6	R 1,948.8	1,781.4	R 3,730.1
1984	1.6	1,107.2	813.0	R 21.3	34.9	R 869.1	18.8	R 1,996.8	1,789.1	R 3,785.9
1985	4.4	1,130.9	852.0	R 36.7	36.2	R 924.9	17.7	R 2,077.8	1,889.6	R 3,967.4
1986	2.5	1,163.4	693.4	R 14.3	46.4	R 754.1	13.8	R 1,933.7	1,925.0	R 3,858.7
1987	1.3	1,113.0	654.5	R 17.2	47.6	R 719.3	12.6	R 1,846.2	1,911.3	R 3,757.5
1988	1.1	1,147.1	659.9	R 11.4	50.4	R 721.7	13.2	R 1,883.0	2,023.0	R 3,906.1
1989	0.7	1,273.0	650.9	R 16.7	43.0	R 710.6	15.1	R 1,999.4	2,085.0	R 4,084.3
1990	0.6	1,133.0	561.7	R 8.6	45.9	R 616.1	22.2	R 1,771.8	2,123.4	R 3,895.3
1991	R (s)	1,188.8	517.3	R 10.9	60.3	R 588.5	22.3	R 1,800.1	2,329.1	R 4,129.2
1992	0.6	1,377.3	470.4	R 7.8	66.0	R 544.3	21.5	R 1,943.6	2,232.8	R 4,176.5
1993	R (s)	1,367.0	474.5	R 6.2	59.1	R 539.8	22.4	R 1,929.5	2,514.3	R 4,443.9
1994	R (s)	1,542.0	491.7	R 8.7	69.4	R 569.8	21.3	R 2,133.6	2,555.9	R 4,689.5
1995	R (s)	1,413.5	460.4	R 5.9	82.4	R 548.8	23.2	R 1,985.8	2,692.1	R 4,677.9
1996	(s)	1,594.0	562.7	9.5	92.7	665.0	26.6	2,285.8	2,714.0	4,999.8
1997	(s)	1,720.2	539.1	9.8	93.4	642.3	19.2	2,382.0	2,693.1	5,075.1

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 193. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, New Jersey

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.23	1.38	1.14	0.79	1.43	2.99	0.45	0.83	0.40	0.99	7.62	2.01
1975	1.27	2.26	2.48	2.50	3.38	4.79	2.04	2.39	0.79	2.34	14.97	5.19
1980	1.49	4.45	6.47	5.81	5.15	9.94	4.66	5.51	2.02	5.14	22.49	R 9.21
1981	1.71	5.30	8.14	7.01	5.88	10.99	5.48	6.95	2.49	R 6.14	25.78	R 11.29
1982	1.87	6.17	7.83	7.24	7.22	10.06	5.03	6.76	2.41	R 6.41	27.95	R 12.45
1983	1.74	6.50	6.87	R 7.36	7.71	9.01	4.70	R 6.44	2.34	R 6.44	27.36	R 12.78
1984	R 1.76	6.40	6.86	R 8.34	7.15	8.67	5.10	6.37	2.38	6.37	27.79	R 12.82
1985	1.74	6.49	6.50	R 7.13	12.71	8.95	4.56	6.05	NA	6.28	29.02	13.83
1986	1.62	6.17	4.43	R 3.91	12.00	6.89	2.67	R 4.20	NA	R 5.26	28.40	R 12.62
1987	1.60	5.41	4.46	R 5.93	11.56	7.25	3.12	R 4.40	NA	4.99	25.49	R 11.80
1988	1.56	5.11	4.19	R 4.25	11.39	7.58	2.54	4.02	NA	4.67	25.00	11.48
1989	1.58	5.17	4.91	R 5.16	10.11	8.48	2.97	4.84	NA	5.05	25.96	11.97
1990	1.60	5.07	6.10	R 5.11	10.80	9.03	3.47	R 5.90	NA	R 5.33	26.49	R 12.70
1991	1.58	5.08	5.66	R 5.83	9.79	8.91	2.64	5.37	NA	5.17	27.43	12.94
1992	1.57	5.40	5.06	R 5.07	10.81	9.04	2.56	R 4.99	NA	R 5.28	27.65	R 12.82
1993	1.50	5.40	4.74	R 4.91	11.61	8.83	2.71	R 4.37	2.42	R 5.11	28.84	R 13.45
1994	1.51	5.80	4.56	R 5.29	11.08	8.82	2.85	R 4.29	2.35	R 5.40	29.15	R 13.81
1995	1.69	5.57	4.40	R 4.42	10.83	9.18	2.92	R 4.30	2.30	R 5.32	30.30	R 14.52
1996	1.50	5.92	5.38	5.91	11.40	9.55	3.47	5.21	2.64	5.76	30.55	14.33
1997	1.55	5.68	5.12	5.90	10.95	9.44	3.00	5.13	2.62	5.59	30.63	13.90
	Expenditures in Million Nominal Dollars											
1970	R (s)	79.3	74.0	1.3	0.8	9.6	32.5	118.2	(s)	197.9	R 280.7	R 478.6
1975	0.9	124.2	149.4	2.4	2.1	15.9	83.0	252.9	(s)	378.0	707.2	R 1,085.3
1980	0.8	278.0	345.2	1.3	2.6	15.5	321.1	685.8	0.6	R 965.0	R 1,295.2	R 2,260.2
1981	1.7	409.1	363.1	2.3	3.6	17.8	220.7	607.4	0.7	R 1,018.8	R 1,518.3	R 2,537.1
1982	1.7	500.8	320.8	3.9	3.9	17.1	146.2	492.0	0.7	R 995.2	R 1,690.5	R 2,685.8
1983	1.4	532.7	286.8	R 2.1	4.9	34.5	78.7	R 407.1	0.7	R 941.9	R 1,740.5	R 2,682.4
1984	R 0.7	547.6	293.5	R 1.3	4.2	29.4	116.5	R 444.9	(s)	R 993.7	R 1,866.1	R 2,859.8
1985	1.9	553.5	213.6	R 3.1	7.4	31.0	89.7	R 344.9	NA	R 900.2	R 2,069.8	R 2,970.0
1986	1.0	543.1	229.5	R 2.4	7.9	23.6	45.6	R 309.0	NA	R 853.1	R 2,148.0	R 3,001.2
1987	R (s)	523.3	202.5	R 3.7	8.3	R 25.4	46.9	R 286.7	NA	R 810.5	R 2,057.8	R 2,868.3
1988	R (s)	530.9	192.7	R 2.8	9.9	R 25.7	45.6	R 276.8	NA	R 808.1	R 2,176.2	R 2,984.3
1989	R (s)	622.1	233.8	7.7	8.6	29.8	33.6	313.5	NA	935.9	R 2,376.0	R 3,311.9
1990	R (s)	601.1	245.8	R 5.2	6.2	R 35.8	32.3	R 325.3	NA	R 926.6	R 2,458.9	R 3,385.5
1991	R (s)	631.7	216.1	R 6.3	6.9	R 32.4	26.6	R 288.3	NA	R 920.1	R 2,619.7	R 3,539.9
1992	R (s)	725.1	187.6	R 11.2	9.1	29.1	22.1	R 259.1	NA	R 984.5	R 2,619.5	R 3,604.0
1993	R (s)	722.1	154.7	R 4.4	10.3	3.6	34.1	R 207.0	1.8	R 929.2	R 2,840.2	R 3,769.4
1994	R (s)	796.0	132.4	R 18.5	9.3	3.9	37.8	R 201.9	1.8	R 999.9	R 2,956.3	R 3,956.2
1995	R (s)	800.4	86.1	R 14.2	10.7	3.8	23.1	R 137.8	1.8	R 940.1	R 3,119.1	R 4,059.2
1996	(s)	923.7	157.2	8.2	11.7	3.9	28.4	209.3	2.2	1,135.3	3,180.8	4,316.0
1997	(s)	992.3	104.8	25.1	11.2	3.9	15.3	160.3	1.9	1,154.6	3,148.1	4,302.7

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
(s)=Value less than 0.05 million nominal dollars.

NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 194. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, New Jersey

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	0.58	0.23	0.40	0.68	0.68	0.76	0.79	1.43	5.08	2.99	0.48	R 1.20	R 0.95	R 1.45	R 0.88	3.89	R 1.20
1975	—	1.27	1.27	1.65	1.89	2.36	2.50	3.38	7.48	4.79	2.15	R 2.96	R 2.69	R 1.45	R 2.51	10.03	R 3.51
1980	—	1.49	1.49	3.63	3.65	5.48	5.81	5.15	14.36	9.94	4.69	R 7.90	R 6.19	R 1.45	R 5.71	16.96	R 7.15
1981	—	1.71	1.71	4.57	5.41	6.60	7.01	5.88	18.00	10.99	4.88	R 9.31	R 7.65	R 1.45	R 6.83	19.99	R 8.54
1982	—	1.87	1.87	5.09	4.10	6.65	7.24	7.22	17.25	10.06	5.16	R 8.51	R 7.12	R 1.45	R 6.50	22.27	R 8.62
1983	—	1.74	1.74	5.29	4.18	6.66	R 7.05	7.71	16.98	9.01	4.89	R 8.00	R 7.11	R 1.45	R 6.40	21.64	R 8.72
1984	—	R 1.76	R 1.76	5.51	4.53	6.85	R 7.22	7.15	17.63	8.67	5.10	R 8.12	R 7.21	R 1.45	R 6.52	21.57	R 8.75
1985	—	1.74	1.74	5.39	4.89	6.24	R 6.82	12.71	17.61	8.95	4.56	R 7.86	R 7.77	R 1.45	R 6.80	22.54	R 9.31
1986	—	1.62	1.62	4.27	4.16	4.61	R 4.58	12.00	15.59	6.89	2.67	R 4.54	R 5.39	R 1.83	R 4.99	22.09	R 7.60
1987	—	1.60	1.60	3.98	3.39	4.84	R 4.48	11.56	13.58	7.25	3.12	R 5.44	R 5.74	R 1.83	R 5.13	19.68	R 7.26
1988	—	1.56	1.56	3.78	3.07	4.20	R 4.19	11.39	14.62	7.58	2.54	R 4.52	R 5.21	R 1.83	R 4.71	19.83	R 7.03
1989	—	1.58	1.58	3.88	2.71	4.69	R 5.03	10.11	14.48	8.48	2.97	R 5.27	R 5.52	d R 1.78	d R 4.91	21.00	d R 7.40
1990	—	1.60	1.60	3.85	2.86	5.92	R 6.17	10.80	14.60	9.03	3.47	R 6.24	R 6.25	R 1.68	R 5.35	21.58	R 7.76
1991	—	1.58	1.58	3.56	2.70	5.33	R 5.54	9.79	16.80	8.91	2.64	R 5.61	R 6.04	R 1.79	R 5.02	22.47	R 7.70
1992	—	1.57	1.57	3.34	2.26	4.90	R 4.88	10.81	18.32	9.04	2.56	R 5.58	R 6.11	R 1.79	R 4.65	22.59	R 6.84
1993	—	1.50	1.50	3.57	2.92	5.28	R 4.59	11.61	18.96	8.83	2.71	R 5.02	R 5.27	R 1.79	R 4.37	23.70	R 6.52
1994	—	1.51	1.51	3.50	2.97	5.07	R 4.88	8.79	19.11	8.82	2.85	R 4.82	R 5.37	R 1.97	R 4.37	23.28	R 6.50
1995	—	1.69	1.69	3.01	3.29	5.43	R 4.31	8.74	R 19.41	9.18	2.92	R 5.22	R 5.68	R 1.95	R 4.19	23.89	R 6.32
1996	—	1.50	1.50	3.68	3.35	6.31	5.30	9.26	20.08	9.55	3.47	6.06	6.36	1.87	4.86	23.90	6.94
1997	—	1.55	1.55	3.65	3.90	6.09	4.85	10.23	17.86	9.44	3.00	5.14	5.65	1.97	4.62	23.77	6.53
	Expenditures in Million Nominal Dollars																
1970	5.3	2.2	7.5	51.4	26.3	38.6	3.4	30.0	42.5	6.3	52.1	R 100.6	R 299.9	R 4.7	R 363.5	194.0	R 557.5
1975	—	2.0	2.0	75.5	62.9	109.5	8.7	73.9	51.6	5.9	125.3	R 259.6	R 697.3	R 5.3	R 780.1	477.3	R 1,257.4
1980	—	1.2	1.2	217.5	105.7	230.9	45.9	102.9	144.4	7.7	410.2	R 797.8	R 1,845.5	R 4.8	R 2,069.0	900.1	R 2,969.1
1981	—	0.8	0.8	406.8	177.0	363.7	48.1	102.1	173.6	8.4	205.8	R 1,006.0	R 2,084.8	R 5.1	R 2,497.6	1,091.9	R 3,589.5
1982	—	6.6	6.6	415.2	131.5	312.5	39.3	130.5	151.7	6.4	235.2	R 699.0	R 1,706.2	R 4.9	R 2,133.0	1,136.2	R 3,269.1
1983	—	11.6	11.6	422.7	169.5	137.4	R 57.3	132.7	156.4	5.4	99.8	R 638.7	R 1,397.1	R 5.6	R 1,837.0	1,115.1	R 2,952.1
1984	—	R 13.5	R 13.5	455.5	187.5	142.6	R 19.2	185.6	173.2	4.3	133.2	R 640.7	R 1,486.3	R 5.7	R 1,961.1	1,127.9	R 3,088.9
1985	—	R 15.1	R 15.1	433.0	153.6	90.4	R 16.2	267.9	161.2	21.7	126.5	R 587.5	R 1,425.1	R 5.7	R 1,878.8	1,181.8	R 3,060.6
1986	—	10.6	10.6	294.9	153.5	90.3	R 12.2	219.9	139.5	16.9	73.1	R 425.0	R 1,130.5	R 6.1	R 1,442.1	1,148.7	R 2,590.8
1987	—	13.0	13.0	315.7	119.3	83.2	R 17.7	264.8	137.4	R 19.7	102.4	R 493.2	R 1,237.6	R 6.1	R 1,572.4	1,031.3	R 2,603.7
1988	—	10.2	10.2	290.6	88.4	78.1	R 18.8	229.3	142.6	20.9	70.2	R 425.0	R 1,073.2	R 6.3	R 1,380.3	1,051.5	R 2,431.8
1989	—	11.3	11.3	324.5	72.4	94.3	R 20.1	164.0	144.9	22.3	63.8	R 486.1	R 1,067.9	d R 5.6	d R 1,409.3	1,104.2	d R 2,513.5
1990	—	11.1	11.1	343.6	68.0	99.6	R 9.0	114.4	150.4	R 21.8	68.5	R 650.1	R 1,181.6	R 5.0	R 1,541.3	1,089.1	R 2,630.4
1991	—	9.2	9.2	350.4	56.1	77.8	R 3.0	160.3	154.7	19.7	37.9	R 506.3	R 1,015.7	R 4.6	R 1,380.0	1,121.8	R 2,501.7
1992	—	8.5	8.5	570.8	50.6	56.4	R 4.4	190.4	172.0	20.1	39.5	R 513.8	R 1,047.2	R 4.8	R 1,631.4	1,102.9	R 2,734.2
1993	—	8.3	8.3	668.4	160.8	63.4	R 3.5	81.1	181.3	25.1	34.2	R 461.5	R 1,010.9	R 4.9	R 1,692.6	1,150.3	R 2,842.8
1994	—	2.7	2.7	664.5	102.9	65.3	R 16.5	65.2	191.1	25.8	35.9	R 454.2	R 956.9	R 7.8	R 1,632.0	1,103.5	R 2,735.5
1995	—	0.5	0.5	623.9	134.2	59.2	R 10.1	65.3	R 190.7	29.0	25.3	R 464.1	R 978.0	R 8.3	R 1,610.7	1,112.3	R 2,723.0
1996	—	(s)	(s)	731.6	119.6	71.0	9.5	58.0	191.5	29.9	27.7	553.5	1,060.6	9.1	1,801.6	1,083.8	2,885.4
1997	—	(s)	(s)	729.1	212.3	64.7	18.1	66.5	179.9	31.1	20.4	533.9	1,127.1	8.7	1,865.4	1,060.0	2,925.4

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 195. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, New Jersey

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.23	—	2.17	1.57	0.72	1.43	5.08	2.99	0.41	2.39	2.39	4.62	2.39
1975	1.27	—	3.45	3.21	2.01	3.38	7.48	4.79	1.81	4.32	4.32	11.14	4.32
1980	—	—	9.02	7.34	6.27	5.15	14.36	9.94	3.94	8.60	8.60	14.91	8.60
1981	—	—	10.84	8.76	7.49	5.88	18.00	10.99	4.74	9.48	9.48	19.80	R 9.48
1982	—	—	10.92	8.29	7.02	7.22	17.25	10.06	4.55	8.56	8.56	17.33	8.57
1983	—	—	10.44	7.75	6.36	7.71	16.98	9.01	4.41	7.74	7.74	19.11	R 7.75
1984	—	—	10.27	8.37	6.13	7.15	17.63	8.67	4.65	7.53	7.53	20.93	R 7.54
1985	—	—	9.99	8.51	5.76	12.71	17.61	8.95	4.18	7.53	7.53	21.28	7.54
1986	—	—	8.41	6.96	3.84	12.00	15.59	6.89	2.16	5.60	5.60	18.46	5.60
1987	—	—	7.55	6.83	4.01	11.56	13.58	7.25	2.86	5.89	5.89	48.18	5.91
1988	—	—	7.41	6.80	3.79	11.39	14.62	7.58	2.16	6.10	6.10	46.87	6.12
1989	—	—	8.28	7.22	4.34	10.11	14.48	8.48	2.57	6.71	6.71	47.21	6.73
1990	—	—	9.32	8.64	5.60	10.80	14.60	9.03	2.99	R 7.54	R 7.54	46.79	R 7.56
1991	—	—	8.71	8.00	4.79	9.79	16.80	8.91	2.55	7.09	7.09	47.82	R 7.11
1992	—	—	8.54	7.59	4.44	10.81	18.32	9.04	2.63	R 6.96	R 6.96	49.08	R 6.99
1993	—	—	8.24	7.66	4.15	11.61	18.96	8.83	2.35	6.76	6.76	51.41	R 6.78
1994	—	4.10	7.96	7.83	3.87	9.03	19.11	8.82	2.70	6.86	6.86	51.88	R 6.88
1995	—	4.14	8.36	7.59	3.85	8.66	R 19.41	9.18	2.86	6.93	6.93	52.95	R 6.95
1996	—	—	9.29	8.54	4.75	8.59	20.08	9.55	3.36	7.79	7.79	53.60	7.81
1997	—	6.82	9.39	8.10	4.41	8.57	17.86	9.44	2.84	7.66	7.66	53.77	7.68
	Expenditures in Million Nominal Dollars												
1970	(s)	—	1.7	78.3	26.9	0.6	17.7	1,024.9	23.3	1,173.4	1,173.4	R 0.6	R 1,174.0
1975	(s)	—	1.6	166.5	64.9	1.2	27.5	1,929.5	48.3	2,239.5	2,239.5	R 1.6	2,241.2
1980	—	—	3.8	438.1	284.6	0.8	62.1	3,774.5	298.7	4,862.5	4,862.5	R 1.7	4,864.2
1981	—	—	4.1	478.1	740.7	4.3	74.6	4,153.0	366.1	5,821.0	5,821.0	R 2.3	R 5,823.3
1982	—	—	7.8	502.8	1,342.1	4.3	65.2	3,852.8	334.3	6,109.3	6,109.3	2.1	6,111.4
1983	—	—	8.2	518.0	1,335.0	5.5	67.2	3,634.0	343.4	5,911.3	5,911.3	R 2.1	R 5,913.3
1984	—	—	7.0	598.3	1,469.4	5.0	74.4	3,483.6	361.0	R 5,998.7	R 5,998.7	R 4.9	R 6,003.6
1985	—	—	9.3	667.6	1,430.6	5.1	69.3	R 3,494.3	289.3	R 5,965.3	R 5,965.3	R 6.9	R 5,972.3
1986	—	—	6.8	595.0	852.8	4.5	60.0	2,880.9	195.5	R 4,595.3	R 4,595.3	R 6.6	R 4,601.9
1987	—	—	7.7	580.8	984.5	3.4	59.0	R 3,052.9	216.5	R 4,904.9	R 4,904.9	R 18.7	R 4,923.6
1988	—	—	5.7	629.6	876.3	3.7	61.3	R 3,180.0	104.1	R 4,860.6	R 4,860.6	R 15.9	R 4,876.5
1989	—	—	5.3	645.2	1,084.9	3.1	62.3	R 3,575.4	145.4	R 5,521.6	R 5,521.6	R 19.5	R 5,541.1
1990	—	—	5.6	651.7	1,470.6	2.9	64.6	R 3,657.8	138.9	R 5,992.1	R 5,992.1	R 18.7	R 6,010.8
1991	—	—	4.4	583.4	1,183.7	2.5	66.5	R 3,677.2	163.4	R 5,681.1	R 5,681.1	R 19.6	R 5,700.6
1992	—	—	5.3	606.1	1,160.8	3.0	73.9	R 3,591.0	159.9	R 5,600.0	R 5,600.0	R 20.7	R 5,620.7
1993	—	—	5.0	646.6	1,131.5	R 3.4	77.9	R 3,240.8	95.9	R 5,201.0	R 5,201.0	R 21.2	R 5,222.3
1994	—	(s)	6.3	779.2	1,060.2	4.4	82.1	R 3,748.5	108.4	R 5,789.2	R 5,789.2	R 22.2	R 5,811.4
1995	—	(s)	6.1	695.1	1,093.3	2.2	R 82.0	3,936.6	147.1	5,962.3	5,962.3	R 22.6	R 5,984.9
1996	—	—	5.3	805.1	1,157.7	1.8	82.3	4,281.1	129.2	6,462.5	6,462.5	24.7	6,487.2
1997	—	(s)	6.3	890.8	969.7	1.7	77.3	4,369.3	121.3	6,436.4	6,436.4	24.2	6,460.6

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 196. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, New Jersey

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.45	0.39	0.45	0.45	—	0.45	0.20	—	0.42
1975	1.59	0.95	2.12	2.14	—	2.12	0.18	—	1.71
1980	1.80	3.01	4.79	5.93	—	4.98	0.34	—	2.67
1981	2.07	4.00	5.58	7.48	—	5.79	0.33	—	2.62
1982	2.14	4.30	5.17	7.27	—	5.32	0.57	—	2.36
1983	1.97	4.05	4.80	6.23	—	4.96	0.70	—	2.89
1984	1.97	4.34	4.93	6.67	—	5.11	0.79	—	3.15
1985	1.92	3.97	4.41	6.24	—	4.62	0.71	—	1.90
1986	1.81	2.51	2.38	3.20	—	2.44	0.73	—	1.47
1987	1.77	2.55	3.12	4.10	—	3.29	0.81	—	1.49
1988	1.72	2.25	2.51	3.53	—	2.68	0.68	—	1.30
1989	1.76	2.46	3.03	4.08	—	3.24	0.66	—	1.45
1990	1.80	2.17	3.56	5.45	—	3.87	0.61	—	1.20
1991	1.78	1.96	2.96	4.81	—	3.26	0.61	—	1.12
1992	1.73	2.11	3.02	4.51	—	3.23	0.56	—	1.04
1993	1.77	2.30	2.65	4.04	—	2.89	0.58	—	1.01
1994	1.82	2.10	2.84	3.86	—	3.03	0.62	—	1.11
1995	1.78	2.12	2.84	3.84	—	3.04	0.63	—	1.17
1996	1.75	2.90	3.42	5.38	—	4.09	0.36	—	1.21
1997	1.76	2.95	2.89	4.50	—	3.66	0.58	—	1.26
	Expenditures in Million Nominal Dollars								
1970	45.4	18.4	107.5	3.2	—	110.6	7.6	—	182.1
1975	90.8	8.4	318.4	27.9	—	346.2	6.1	—	451.6
1980	120.2	247.6	389.1	96.7	—	485.8	27.9	—	881.5
1981	150.0	332.0	346.2	57.5	—	403.7	42.5	—	928.2
1982	155.0	291.1	262.7	29.6	—	292.3	88.2	—	826.6
1983	163.1	406.5	229.5	36.1	—	265.6	48.6	—	883.8
1984	148.4	428.6	256.8	40.1	—	296.9	48.2	—	922.2
1985	176.8	254.5	138.7	24.4	—	163.1	135.8	—	730.2
1986	126.1	95.9	126.9	13.0	—	139.9	117.2	—	479.1
1987	144.2	197.9	91.6	24.5	—	116.1	197.0	—	655.2
1988	126.9	118.4	119.1	34.1	—	153.2	175.7	—	574.2
1989	151.9	140.5	149.5	50.5	—	199.9	162.2	—	654.6
1990	132.5	106.8	63.5	19.5	—	82.9	155.8	—	478.0
1991	99.4	125.0	50.6	16.1	—	66.7	162.9	—	454.0
1992	98.7	84.5	33.7	8.3	—	42.0	129.6	—	354.9
1993	100.9	84.7	28.5	9.1	—	37.6	153.4	—	376.5
1994	91.5	92.5	46.3	14.4	—	60.7	145.5	—	390.1
1995	96.9	100.2	23.9	8.2	—	32.1	112.9	—	342.1
1996	108.7	76.3	16.3	13.3	—	29.6	42.5	—	257.1
1997	131.0	90.4	6.4	9.2	—	15.6	86.3	—	323.3

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

—No consumption.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 197. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, New Mexico

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.14	0.14	0.39	1.07	0.76	1.35	2.94	0.34	R 1.25	R 1.93	—	R 1.04	0.85	0.20	5.62	1.46
1975	—	0.23	0.23	0.75	2.42	2.12	3.17	4.72	1.66	R 2.57	R 3.44	—	R 1.46	1.63	0.45	7.99	2.88
1980	—	0.56	0.56	2.66	6.80	6.59	5.84	9.58	3.80	R 6.40	R 7.85	—	R 2.46	R 3.71	1.02	15.52	R 7.10
1981	—	0.71	0.71	3.06	8.36	7.67	6.85	10.98	4.07	R 7.68	R 9.21	—	R 2.80	4.56	1.20	17.98	R 8.47
1982	—	0.80	0.80	3.84	7.65	7.38	6.04	10.64	4.76	R 6.72	R 8.87	—	R 2.82	4.27	1.23	20.60	R 9.01
1983	—	0.84	0.84	4.36	6.84	6.74	8.15	9.18	4.60	R 6.45	R 7.68	—	R 2.67	R 3.88	1.14	20.70	R 8.29
1984	—	0.94	0.94	4.47	6.84	6.36	7.54	9.11	4.51	R 6.62	R 7.67	—	R 2.90	R 4.09	1.23	20.32	R 8.50
1985	—	1.09	1.09	4.60	6.54	6.24	8.29	9.14	3.98	R 6.80	R 7.87	—	R 2.79	R 3.99	1.33	21.20	R 9.24
1986	—	1.14	1.14	4.24	5.15	4.39	7.01	7.02	2.01	R 5.96	R 6.14	—	R 2.16	R 3.46	1.31	22.14	R 8.05
1987	—	1.21	1.21	3.68	5.72	4.28	7.29	7.46	2.56	R 4.62	R 6.41	—	R 1.87	R 3.50	1.29	21.83	R 8.03
1988	—	1.18	1.18	3.44	5.50	4.17	6.46	7.44	1.87	R 4.78	R 6.34	—	R 1.88	3.39	1.25	21.76	R 7.81
1989	—	1.24	1.24	3.61	6.42	4.79	6.66	8.24	2.16	R 4.80	R 7.09	—	e R 2.04	e 3.64	1.32	21.55	e R 8.46
1990	—	1.32	1.32	3.84	7.48	6.01	8.32	9.23	2.75	R 5.10	R 8.14	—	R 3.88	R 4.20	1.37	20.98	R 9.22
1991	—	1.38	1.38	3.62	6.99	4.84	6.32	9.10	2.27	R 5.60	R 7.58	—	R 3.74	R 4.28	1.42	21.09	R 8.75
1992	—	1.32	1.32	3.67	7.44	4.57	4.62	9.33	2.09	R 5.10	R 7.45	—	R 3.43	R 4.08	1.38	21.03	R 8.62
1993	—	1.37	1.37	3.91	7.67	4.50	5.47	9.87	1.96	R 4.83	R 7.85	—	R 3.15	R 4.26	1.45	21.39	R 9.04
1994	—	1.41	1.41	3.86	7.45	4.04	5.62	9.64	2.12	R 5.03	R 7.83	—	R 3.23	R 4.16	1.47	21.10	R 9.24
1995	—	1.42	1.42	3.23	6.60	4.16	5.60	9.44	2.43	R 5.47	R 7.78	—	R 3.20	R 3.92	1.43	20.12	R 9.01
1996	—	1.43	1.43	3.29	8.34	5.04	8.70	10.13	2.81	6.06	8.97	—	3.62	4.32	1.52	19.99	9.64
1997	—	1.34	1.34	3.88	8.20	4.79	8.60	10.11	2.75	6.37	8.98	—	3.40	4.36	1.47	20.11	9.45
	Expenditures in Million Nominal Dollars																
1970	—	14.3	14.3	80.7	33.6	12.9	22.0	202.9	R (s)	R 20.1	R 291.9	—	R 0.9	R 387.8	-32.0	106.6	R 462.4
1975	—	30.0	30.0	134.8	94.7	30.9	41.3	409.2	31.0	R 44.9	R 652.2	—	R 1.5	818.4	-95.4	179.5	902.6
1980	—	114.2	114.2	394.1	315.6	96.0	98.6	850.8	23.5	R 119.2	R 1,503.7	—	R 2.6	R 2,014.6	-268.0	460.2	R 2,206.7
1981	—	139.3	139.3	408.4	605.3	106.7	77.6	978.8	19.4	R 115.3	R 1,903.0	—	R 3.0	R 2,453.8	-301.6	526.8	R 2,679.0
1982	—	179.6	179.6	414.4	355.2	105.6	59.0	958.0	22.3	R 105.1	R 1,605.3	—	R 3.1	R 2,202.4	-333.4	605.2	R 2,474.3
1983	—	222.6	222.6	410.7	268.9	96.9	80.4	824.3	92.3	R 164.7	R 1,527.6	—	R 3.1	R 2,164.0	-334.6	608.3	R 2,437.7
1984	—	R 237.2	R 237.2	434.3	284.8	104.1	154.3	835.4	59.7	R 194.2	R 1,632.5	—	R 4.0	R 2,308.0	-346.8	746.5	R 2,707.7
1985	—	293.7	293.7	350.8	324.4	97.7	89.7	R 859.5	19.0	R 93.3	R 1,483.7	—	R 3.7	R 2,131.9	-392.6	836.0	R 2,575.3
1986	—	R 274.2	R 274.2	303.8	291.5	66.8	44.8	674.8	2.7	R 82.9	R 1,163.5	—	R 3.8	R 1,745.3	-342.2	874.2	R 2,277.3
1987	—	R 315.2	R 315.2	280.8	354.5	70.0	41.0	R 742.2	1.2	R 78.6	R 1,287.5	—	R 2.7	R 1,886.1	-359.9	893.3	R 2,419.6
1988	—	R 312.8	R 312.8	320.8	327.9	64.1	35.3	R 754.8	1.2	R 81.5	R 1,264.7	—	R 2.8	R 1,901.2	-359.3	923.0	R 2,464.9
1989	—	346.0	346.0	355.4	335.7	74.7	94.9	R 817.5	1.8	R 69.3	R 1,394.0	—	e R 2.7	e R 2,098.1	-407.0	958.2	e R 2,649.3
1990	—	363.4	363.4	348.8	397.6	96.2	239.0	R 903.9	2.0	R 66.3	R 1,705.0	—	R 7.1	R 2,424.3	-414.2	962.7	R 2,972.8
1991	—	R 321.9	R 321.9	352.7	384.3	65.2	267.7	R 915.2	1.1	R 79.6	R 1,713.0	—	R 7.2	R 2,394.8	-371.1	987.1	R 3,010.8
1992	—	353.8	353.8	341.2	432.2	71.3	174.8	R 952.4	0.8	R 83.3	R 1,714.7	—	R 7.0	R 2,416.7	-398.9	1,009.7	R 3,027.4
1993	—	369.6	369.6	388.1	367.6	82.5	189.3	R 1,057.6	1.5	R 96.4	R 1,795.0	—	R 6.5	R 2,559.2	-431.5	1,057.7	R 3,185.4
1994	—	392.1	392.1	379.4	315.6	58.9	178.8	R 1,053.8	1.8	R 89.9	R 1,698.9	—	R 6.8	R 2,477.2	-455.1	1,100.3	R 3,122.4
1995	—	R 389.7	R 389.7	319.5	182.1	52.3	166.0	1,042.3	2.1	R 87.8	R 1,532.6	—	R 7.3	R 2,249.0	-438.9	1,084.9	R 2,895.0
1996	—	398.2	398.2	338.2	483.6	46.1	64.9	1,077.7	2.6	90.1	1,765.1	—	8.2	2,509.8	-466.7	1,141.9	3,184.9
1997	—	385.1	385.1	511.8	489.0	47.5	64.9	1,141.7	1.8	79.1	1,824.0	—	6.3	2,727.3	-472.3	1,172.5	3,427.5

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 198. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, New Mexico

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	0.90	0.86	0.98	1.49	1.61	1.60	0.72	R 0.99	8.15	R 1.77
1975	—	1.24	2.82	3.05	4.16	4.12	1.43	1.64	10.47	R 3.04
1980	2.54	3.17	6.79	7.95	7.19	7.29	3.66	R 3.77	18.89	R 6.63
1981	3.42	3.67	8.07	9.79	8.19	8.40	4.51	4.24	21.07	R 7.79
1982	3.18	4.70	7.76	9.79	4.93	5.98	4.37	R 4.89	23.70	R 8.61
1983	2.91	5.28	4.96	R 7.02	8.84	R 8.31	4.23	R 5.82	23.75	R 9.44
1984	2.92	5.55	7.32	R 6.84	9.33	R 7.96	4.30	R 5.86	23.74	R 9.98
1985	2.83	5.59	6.92	R 6.59	8.62	R 8.53	4.14	R 6.27	25.48	R 10.98
1986	2.78	5.28	5.09	R 5.04	7.16	R 6.99	3.32	R 5.45	26.43	R 10.89
1987	2.40	4.61	4.81	R 5.14	7.78	R 7.64	3.16	R 4.94	26.39	R 10.28
1988	2.12	4.87	4.74	R 4.48	6.51	R 6.43	3.19	R 5.01	26.42	R 10.49
1989	2.43	5.45	5.34	R 4.48	7.48	R 7.41	3.53	R 5.70	26.41	R 11.16
1990	2.41	5.37	6.47	R 6.81	9.28	9.24	4.75	5.99	26.19	R 10.96
1991	2.36	5.18	5.96	R 6.41	10.46	10.39	4.54	R 5.84	26.63	R 11.05
1992	2.43	4.55	5.40	R 5.85	10.40	10.27	4.15	R 5.14	26.56	R 10.54
1993	2.16	5.24	5.71	R 5.78	9.85	R 9.77	4.06	R 5.55	26.90	R 11.11
1994	2.25	5.61	5.41	R 4.31	9.95	R 9.84	3.94	R 5.89	26.78	R 11.81
1995	2.24	4.94	5.22	R 3.99	9.87	R 9.79	3.86	R 5.34	26.16	R 11.42
1996	2.14	4.33	5.87	4.51	11.21	11.10	4.43	4.87	26.16	10.67
1997	2.14	5.75	5.59	6.21	11.84	11.77	4.41	6.16	26.15	11.54
	Expenditures in Million Nominal Dollars									
1970	(s)	28.6	(s)	R (s)	12.2	12.4	(s)	R 41.3	41.0	R 82.3
1975	—	37.0	R (s)	R (s)	19.6	20.2	0.7	R 57.9	69.9	R 127.8
1980	0.8	95.0	R (s)	6.0	31.9	38.3	1.7	R 135.7	158.1	R 293.8
1981	R (s)	95.2	0.8	4.7	24.5	30.0	2.1	R 127.5	169.4	R 296.9
1982	R (s)	130.8	1.1	9.9	19.2	30.2	2.2	R 163.4	195.6	R 359.0
1983	R (s)	146.3	R (s)	R 11.4	40.9	R 52.8	2.1	R 201.4	208.2	R 409.6
1984	R (s)	161.5	0.7	R 17.4	19.9	R 38.0	2.9	R 202.6	246.2	R 448.8
1985	R (s)	133.4	0.8	R 1.5	64.9	R 67.3	2.7	R 203.6	269.4	R 472.9
1986	R (s)	137.3	1.0	R 0.6	26.1	R 27.7	2.1	R 167.2	283.5	R 450.7
1987	R (s)	137.1	R (s)	R 0.6	28.9	R 29.9	1.0	R 168.2	297.7	R 465.9
1988	(s)	145.6	R (s)	R (s)	21.4	R 22.1	1.1	R 168.8	306.0	R 474.8
1989	R (s)	152.4	R (s)	R (s)	33.7	R 34.3	1.3	R 188.0	312.0	R 500.0
1990	R (s)	159.6	R (s)	R (s)	57.4	58.0	6.3	223.9	318.7	542.6
1991	R (s)	160.7	R (s)	R (s)	51.0	R 51.5	6.3	R 218.7	333.0	R 551.7
1992	R (s)	149.3	R (s)	R (s)	41.3	41.9	6.1	R 197.4	343.6	R 541.0
1993	R (s)	173.9	R (s)	R (s)	28.7	R 29.0	5.6	R 208.6	356.5	R 565.2
1994	R (s)	173.2	R (s)	R (s)	27.9	28.3	5.3	R 206.9	372.7	R 579.6
1995	R (s)	145.0	R (s)	R (s)	30.8	31.0	5.8	R 181.9	368.1	R 550.0
1996	(s)	150.6	(s)	(s)	34.5	34.8	6.6	192.1	386.4	578.5
1997	(s)	215.0	(s)	(s)	36.5	36.8	4.8	256.6	401.7	658.4

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 199. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, New Mexico

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.56	0.44	0.92	1.01	1.12	2.94	—	1.34	0.72	0.50	5.78	1.37
1975	—	0.74	2.62	2.22	2.60	4.72	—	3.03	1.43	0.94	7.90	2.74
1980	0.88	2.79	6.57	6.80	5.36	9.58	—	6.85	3.66	3.50	15.95	6.79
1981	1.27	3.21	7.81	8.38	6.37	10.98	—	8.17	4.51	4.56	18.32	8.34
1982	1.61	4.22	7.51	7.34	6.79	10.64	—	7.76	4.37	4.88	20.86	9.60
1983	1.62	4.61	6.11	R 7.02	7.54	9.18	4.03	R 6.17	4.23	R 5.20	20.47	R 8.81
1984	R 1.46	4.67	6.13	R 6.84	7.33	9.11	4.51	R 6.36	4.30	R 5.28	20.97	R 9.82
1985	R 1.39	5.34	6.11	R 6.59	7.55	9.14	4.00	R 6.89	NA	R 5.65	22.57	R 12.53
1986	R 1.35	4.04	3.62	R 5.04	6.82	7.02	—	R 4.77	NA	4.13	23.41	11.61
1987	R 1.42	3.67	4.07	R 5.14	6.35	7.46	—	4.76	NA	3.89	22.49	11.22
1988	R 1.27	3.08	3.66	R 4.48	6.40	7.44	—	R 4.53	NA	3.26	23.10	9.68
1989	R 1.15	3.54	4.18	R 4.48	6.28	8.24	—	R 5.14	NA	3.74	22.68	10.57
1990	R 1.31	4.19	5.52	R 6.81	8.05	9.23	—	R 6.49	NA	4.60	22.21	11.55
1991	R 1.33	3.98	4.82	R 6.41	5.78	9.10	—	5.65	NA	4.21	22.57	11.50
1992	R 1.41	3.22	4.47	R 5.85	3.94	9.33	—	R 5.31	NA	3.39	22.47	10.88
1993	R 1.30	4.13	4.35	R 5.78	5.06	9.87	—	4.70	4.06	R 4.16	22.98	R 11.67
1994	R 1.33	4.41	4.02	R 4.31	8.67	9.64	—	R 5.56	3.94	R 4.47	22.71	R 12.76
1995	R 1.19	3.66	4.11	R 3.99	9.08	9.44	—	R 5.88	3.86	3.81	21.85	R 12.13
1996	1.14	3.25	4.93	4.51	9.58	10.13	2.81	6.89	4.43	3.44	21.87	11.70
1997	1.19	3.92	4.70	6.21	9.79	10.11	—	7.14	4.41	4.04	22.16	11.47
	Expenditures in Million Nominal Dollars											
1970	(s)	15.7	0.6	(s)	1.5	1.1	—	3.2	(s)	19.0	43.7	62.7
1975	—	18.2	2.7	R (s)	2.2	2.3	—	7.2	(s)	25.4	74.0	99.4
1980	R (s)	71.7	5.1	25.4	4.2	5.5	—	40.1	(s)	112.4	184.0	R 296.4
1981	R (s)	69.3	31.0	25.0	3.4	6.9	—	66.2	(s)	135.6	206.3	341.9
1982	R (s)	96.3	24.4	6.4	4.7	6.9	—	42.4	(s)	R 139.0	248.7	R 387.7
1983	R (s)	107.7	17.3	R 47.2	6.2	5.1	15.7	R 91.4	(s)	R 199.4	242.4	R 441.8
1984	R (s)	113.8	17.1	R 53.6	2.8	4.6	11.7	R 89.7	(s)	R 203.7	329.5	R 533.2
1985	R (s)	97.2	16.1	R 2.3	10.0	5.4	R (s)	R 33.9	NA	R 131.3	359.2	R 490.5
1986	R (s)	90.2	8.5	R (s)	4.4	4.3	—	17.6	NA	107.9	387.8	R 495.8
1987	R (s)	79.2	16.8	R (s)	4.2	4.8	—	26.2	NA	105.5	396.8	502.3
1988	R (s)	102.7	12.0	0.8	3.7	4.6	—	21.1	NA	R 123.8	420.0	543.9
1989	R (s)	105.9	12.3	R (s)	5.0	5.2	—	22.9	NA	R 128.9	441.0	R 569.9
1990	R (s)	105.0	20.2	0.6	8.8	6.1	—	R 35.7	NA	140.7	442.8	583.5
1991	R (s)	103.7	13.0	0.7	5.0	5.4	—	R 24.1	NA	127.9	452.2	580.1
1992	R (s)	93.7	6.3	R (s)	2.8	4.9	—	14.2	NA	108.1	462.4	R 570.4
1993	R (s)	120.2	8.6	R (s)	2.6	0.9	—	12.3	(s)	132.7	488.1	620.8
1994	R (s)	110.1	5.0	R (s)	4.3	0.9	—	R 10.2	(s)	R 120.9	511.0	R 632.0
1995	R (s)	89.5	4.8	R (s)	5.0	0.9	—	10.8	(s)	R 100.8	495.0	R 595.8
1996	(s)	88.7	4.4	(s)	5.2	1.0	(s)	10.6	0.5	100.0	516.6	616.6
1997	(s)	125.4	3.3	(s)	5.3	1.0	—	9.7	(s)	135.6	517.0	652.6

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.

(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 200. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, New Mexico

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	0.56	0.56	0.25	0.58	0.95	1.01	1.12	5.08	2.94	0.41	R 0.43	R 1.02	R 1.49	0.49	3.44	0.65
1975	—	—	—	0.58	1.84	2.05	2.22	2.60	7.48	4.72	1.60	R 1.31	R 2.14	R 1.49	1.27	5.54	1.52
1980	—	0.88	0.88	2.46	3.67	6.42	6.80	5.36	14.36	9.58	3.82	R 4.04	R 5.48	R 1.49	R 4.09	12.11	R 4.99
1981	—	1.27	1.27	2.84	4.48	7.95	8.38	6.37	18.00	10.98	4.03	R 4.46	R 6.80	R 1.49	R 4.98	15.11	R 6.17
1982	—	1.61	1.61	3.44	4.16	6.63	7.34	6.79	17.25	10.64	4.76	R 2.72	R 5.90	R 1.49	R 4.94	17.47	R 7.06
1983	—	1.62	1.62	3.74	4.16	6.39	R 7.14	7.54	16.98	9.18	4.78	R 3.67	R 5.63	R 1.49	R 5.08	17.96	R 6.62
1984	—	R 1.46	R 1.46	3.86	4.50	6.40	R 7.20	7.33	17.63	9.11	4.51	R 3.62	R 6.17	R 1.49	R 5.63	16.04	R 6.91
1985	—	R 1.39	R 1.39	3.67	4.79	6.07	R 7.09	7.55	17.61	9.14	4.00	R 3.39	R 5.90	R 1.49	R 5.42	16.01	R 7.63
1986	—	R 1.35	R 1.35	3.04	4.35	3.70	R 5.19	6.82	15.59	7.02	2.09	R 3.95	R 4.34	R 1.49	R 4.06	16.64	R 6.78
1987	—	R 1.42	R 1.42	3.30	3.19	4.32	R 5.21	6.35	13.58	7.46	2.86	R 4.85	R 4.28	R 1.49	R 4.04	16.56	R 6.48
1988	—	R 1.27	R 1.27	3.16	3.39	3.84	R 4.84	6.40	14.62	7.44	1.81	R 4.00	R 4.10	R 1.49	R 3.82	15.56	R 6.19
1989	—	R 1.15	R 1.15	2.97	2.87	4.55	R 5.73	6.28	14.48	8.24	1.96	R 4.86	R 4.79	d R 1.49	d R 4.22	15.53	d R 6.55
1990	—	R 1.31	R 1.31	3.49	2.76	5.84	R 7.07	8.05	14.60	9.23	2.62	R 5.98	R 6.43	1.63	R 5.82	14.59	R 7.50
1991	—	R 1.33	R 1.33	3.39	3.45	5.08	R 6.49	5.78	16.80	9.10	2.01	R 5.18	R 5.44	1.63	R 5.06	14.17	R 6.47
1992	—	R 1.41	R 1.41	6.58	2.99	4.84	R 6.20	3.94	18.32	9.33	2.05	R 4.93	R 4.24	1.60	R 4.45	14.06	R 6.09
1993	—	R 1.30	R 1.30	3.66	3.12	4.72	R 6.02	5.06	18.96	9.87	1.94	R 4.40	R 4.83	1.61	R 4.60	14.25	R 6.25
1994	—	R 1.33	R 1.33	3.39	3.05	4.45	R 4.04	5.08	19.11	9.64	2.11	R 4.16	R 4.85	R 1.59	R 4.54	13.77	R 6.29
1995	—	R 1.19	R 1.19	2.77	3.30	4.43	R 4.18	4.97	R 19.41	9.44	2.43	R 4.60	R 4.91	R 1.58	R 4.40	12.91	R 6.11
1996	—	1.14	1.14	2.81	3.55	5.34	7.20	6.35	20.08	10.13	2.81	5.46	5.61	1.62	4.72	12.75	7.12
1997	—	1.19	1.19	2.93	3.72	5.06	4.50	5.64	17.86	10.11	2.75	4.57	5.67	1.62	4.15	12.94	6.38
	Expenditures in Million Nominal Dollars																
1970	—	R (s)	R (s)	18.7	4.6	11.7	5.5	7.3	3.2	3.0	R (s)	R (s)	R 35.7	R 0.5	R 55.1	21.9	R 76.9
1975	—	—	—	32.8	19.9	27.5	7.8	17.5	5.4	3.6	12.8	R 0.8	R 95.4	R 0.7	R 129.0	35.6	R 164.6
1980	—	R (s)	R (s)	84.5	27.7	82.1	21.1	61.9	10.3	4.2	19.4	R 2.5	R 229.3	R 0.9	R 314.8	118.1	R 432.9
1981	—	3.4	3.4	85.0	34.6	161.2	7.4	46.8	12.4	4.2	17.8	R 1.4	R 285.8	R 0.9	R 375.2	151.1	R 526.4
1982	—	4.4	4.4	40.2	40.0	62.7	10.6	32.9	10.8	3.0	17.3	R 0.8	R 178.2	R 0.9	R 223.6	160.9	R 384.6
1983	—	3.4	3.4	47.6	49.0	92.0	R 18.8	30.4	11.2	2.3	72.8	R 1.5	R 277.8	R 1.0	R 329.9	157.8	R 487.7
1984	—	2.3	2.3	50.7	56.8	90.5	R 26.2	129.5	12.4	10.1	45.4	R 1.2	R 372.0	R 1.0	R 426.1	170.8	R 596.9
1985	—	2.5	2.5	21.1	47.7	129.7	R 3.6	12.1	11.5	17.3	18.0	R 1.3	R 241.2	R 1.0	R 265.8	207.5	R 473.3
1986	—	R 2.7	R 2.7	6.8	46.7	81.7	R 1.0	12.0	10.0	12.6	2.3	R 2.0	R 168.3	R 1.6	R 179.4	202.9	R 382.3
1987	—	1.5	1.5	19.8	43.7	101.2	0.7	6.2	9.8	12.9	0.8	R 2.3	R 177.6	R 1.6	R 200.5	198.8	R 399.3
1988	—	R 1.4	R 1.4	26.3	47.6	79.8	R (s)	8.4	10.2	13.0	0.7	R 2.0	R 161.9	R 1.7	R 191.4	197.0	R 388.3
1989	—	R 1.0	R 1.0	36.8	31.7	59.3	1.5	53.7	10.3	15.0	1.2	R 2.4	R 175.3	d R 1.4	d R 214.6	205.2	d R 419.8
1990	—	1.1	1.1	34.1	26.6	74.3	1.5	169.4	10.7	R 16.0	1.4	R 3.4	R 303.3	R 0.8	R 339.4	201.2	R 540.6
1991	—	1.2	1.2	39.6	34.9	69.9	1.4	210.0	11.0	17.2	0.8	R 7.2	R 352.6	R 0.9	R 394.3	201.9	R 596.2
1992	—	1.4	1.4	53.5	37.2	53.8	R (s)	129.3	12.3	16.1	0.7	R 7.0	R 256.6	R 0.9	R 312.4	203.7	R 516.1
1993	—	1.7	1.7	32.2	50.4	41.6	R (s)	156.2	12.9	29.1	1.5	R 6.2	R 298.2	R 0.9	R 333.0	213.0	R 546.1
1994	—	2.0	2.0	31.8	42.8	32.0	R (s)	142.2	13.6	30.4	1.8	R 6.1	R 269.1	R 1.0	R 303.9	216.5	R 520.4
1995	—	R 2.0	R 2.0	34.5	40.7	40.6	R (s)	127.2	13.6	32.4	2.1	R 6.4	R 263.1	R 1.0	R 300.7	221.8	R 522.5
1996	—	1.9	1.9	29.5	38.8	55.1	(s)	22.3	13.7	35.0	2.6	7.7	175.7	1.1	208.0	238.9	446.9
1997	—	2.0	2.0	82.7	30.4	43.7	(s)	20.4	12.8	36.8	1.8	7.5	153.5	1.1	239.3	253.8	493.1

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 201. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, New Mexico

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.56	—	2.17	1.15	0.76	1.12	5.08	2.94	0.38	2.28	2.28	—	2.28
1975	—	—	3.45	2.62	2.12	2.60	7.48	4.72	—	4.03	4.03	—	4.03
1980	—	—	9.02	6.97	6.59	5.36	14.36	9.58	—	8.69	8.69	—	8.69
1981	—	—	10.84	8.59	7.67	6.37	18.00	10.98	—	9.97	9.97	—	9.97
1982	—	—	10.92	7.98	7.38	6.79	17.25	10.64	—	9.72	9.72	—	9.72
1983	—	—	10.44	7.26	6.74	7.54	16.98	9.18	4.53	8.65	8.65	—	8.65
1984	—	—	10.27	7.19	6.36	7.33	17.63	9.11	4.51	8.50	8.50	—	8.50
1985	—	—	9.99	6.98	6.24	7.55	17.61	9.14	—	8.47	8.47	—	8.47
1986	—	—	8.41	6.29	4.39	6.82	15.59	7.02	—	6.65	6.65	—	6.65
1987	—	—	7.55	6.89	4.28	6.35	13.58	7.46	—	7.03	7.03	—	7.03
1988	—	—	7.41	6.67	4.17	6.40	14.62	7.44	—	6.99	6.99	—	6.99
1989	—	—	8.28	7.30	4.79	6.28	14.48	8.24	—	7.70	7.70	—	7.70
1990	—	—	9.32	8.26	6.01	8.05	14.60	9.23	—	8.69	8.69	—	8.69
1991	—	—	8.71	7.85	4.84	5.78	16.80	9.10	—	8.46	8.46	—	8.46
1992	—	3.48	8.54	8.19	4.57	3.94	18.32	9.33	—	8.61	8.61	—	8.61
1993	—	3.42	8.24	8.59	4.50	5.06	18.96	9.87	—	9.02	9.02	—	9.02
1994	—	5.11	7.96	8.24	4.04	8.44	19.11	9.64	—	8.89	8.89	—	8.89
1995	—	3.78	8.36	7.97	4.16	8.74	R 19.41	9.44	—	8.87	8.87	—	8.87
1996	—	4.63	9.29	9.09	5.04	8.86	20.08	10.13	—	9.61	9.61	—	9.61
1997	—	4.57	9.39	8.80	4.79	8.97	17.86	10.11	—	9.47	9.46	—	9.46
	Expenditures in Million Nominal Dollars												
1970	(s)	—	1.2	21.2	12.9	1.0	5.1	198.9	(s)	240.4	240.4	—	240.4
1975	—	—	1.4	64.0	30.9	2.0	9.0	403.4	—	510.8	510.8	—	510.8
1980	—	—	7.6	219.7	96.0	0.6	18.6	841.2	—	1,183.6	1,183.6	—	1,183.6
1981	—	—	7.4	406.8	106.7	2.9	22.3	967.7	—	1,513.9	1,513.9	—	1,513.9
1982	—	—	7.1	260.6	105.6	2.2	19.5	948.1	—	1,343.1	1,343.1	—	1,343.1
1983	—	—	5.6	156.1	96.9	2.9	20.1	816.9	(s)	1,098.6	1,098.6	—	1,098.6
1984	—	—	4.3	175.2	104.1	2.2	22.3	820.7	(s)	1,128.8	1,128.8	—	1,128.8
1985	—	—	4.8	176.1	97.7	2.6	20.7	R 836.8	—	R 1,138.7	R 1,138.7	—	R 1,138.7
1986	—	—	4.4	199.2	66.8	2.3	18.0	657.9	—	948.5	948.5	—	948.5
1987	—	—	3.3	234.9	70.0	1.7	17.7	R 724.5	—	R 1,052.1	R 1,052.1	—	R 1,052.1
1988	—	—	2.1	234.5	64.1	1.7	18.3	R 737.1	—	R 1,057.9	R 1,057.9	—	R 1,057.9
1989	—	—	4.0	262.3	74.7	R 2.6	18.6	R 797.3	—	R 1,159.5	R 1,159.5	—	R 1,159.5
1990	—	—	4.0	301.4	96.2	R 3.4	19.3	R 881.8	—	R 1,306.2	R 1,306.2	—	R 1,306.2
1991	—	—	4.1	299.3	65.2	1.7	19.9	R 892.6	—	R 1,282.8	R 1,282.8	—	R 1,282.8
1992	—	(s)	4.0	369.5	71.3	1.4	22.1	R 931.4	—	R 1,399.8	R 1,399.9	—	R 1,399.9
1993	—	R (s)	2.9	315.2	82.5	1.8	23.3	R 1,027.6	—	R 1,453.3	R 1,453.4	—	R 1,453.4
1994	—	R (s)	2.5	277.2	58.9	4.4	24.6	R 1,022.5	—	R 1,390.1	R 1,390.4	—	R 1,390.4
1995	—	R (s)	2.3	135.4	52.3	3.0	24.5	1,009.0	—	1,226.4	1,226.7	—	1,226.7
1996	—	(s)	4.7	422.5	46.1	2.9	24.6	1,041.7	—	1,542.6	1,542.9	—	1,542.9
1997	—	0.7	4.8	440.6	47.5	2.7	23.1	1,103.9	—	1,622.6	1,623.4	—	1,623.4

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 202. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, New Mexico

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.14	0.30	0.23	0.27	—	0.23	—	—	0.20
1975	0.23	0.69	1.70	1.89	—	1.70	—	—	0.45
1980	0.56	2.47	3.70	6.53	—	5.21	—	—	1.02
1981	0.70	2.83	4.69	7.55	—	6.65	—	—	1.20
1982	0.79	3.22	4.77	6.99	—	5.80	—	—	1.23
1983	0.84	3.59	4.07	6.15	—	4.77	—	—	1.14
1984	0.93	3.53	4.72	6.22	—	5.13	—	—	1.23
1985	1.09	3.48	3.71	6.20	—	4.98	—	—	1.33
1986	1.13	3.31	1.65	3.79	—	2.69	—	—	1.31
1987	1.21	2.36	2.14	4.47	—	3.58	—	—	1.29
1988	1.18	2.14	1.97	4.22	—	3.17	—	—	1.25
1989	1.24	2.13	2.74	4.98	—	3.99	—	—	1.32
1990	1.32	1.91	3.09	6.22	—	4.70	—	—	1.37
1991	1.38	1.70	3.86	5.35	—	5.11	—	—	1.42
1992	1.32	1.95	3.23	5.16	—	5.10	—	—	1.38
1993	1.37	2.19	3.55	5.06	—	5.03	—	—	1.45
1994	1.41	1.95	3.22	4.65	—	4.63	—	—	1.47
1995	1.42	1.55	2.99	4.90	—	4.87	—	—	1.43
1996	1.43	2.28	3.97	5.87	—	5.85	—	—	1.52
1997	1.34	2.59	4.09	5.75	—	5.73	—	—	1.47
	Expenditures in Million Nominal Dollars								
1970	14.2	17.7	R (s)	(s)	—	R (s)	—	—	32.0
1975	30.0	46.8	18.2	R (s)	—	18.6	—	—	95.4
1980	112.8	142.9	4.1	8.2	—	12.3	—	—	268.0
1981	135.7	158.9	1.6	5.5	—	7.0	—	—	301.6
1982	174.7	147.2	5.0	6.5	—	11.5	—	—	333.4
1983	218.7	109.1	3.9	3.0	—	6.8	—	—	334.6
1984	234.5	108.4	2.6	1.3	—	3.9	—	—	346.8
1985	290.9	99.1	0.9	1.6	—	2.6	—	—	392.6
1986	271.3	69.5	R (s)	0.9	—	1.4	—	—	342.2
1987	313.5	44.6	R (s)	1.4	—	1.8	—	—	359.9
1988	311.3	46.2	0.5	1.3	—	1.8	—	—	359.3
1989	344.7	60.3	0.6	1.4	—	2.0	—	—	407.0
1990	362.1	50.2	0.6	1.3	—	2.0	—	—	414.2
1991	320.5	48.6	R (s)	1.8	—	2.0	—	—	371.1
1992	352.1	44.7	(s)	2.1	—	2.2	—	—	398.9
1993	367.6	61.8	(s)	2.1	—	2.1	—	—	431.5
1994	389.8	64.0	(s)	1.3	—	1.3	—	—	455.1
1995	387.5	50.2	(s)	1.2	—	1.3	—	—	438.9
1996	396.1	69.1	(s)	1.5	—	1.5	—	—	466.7
1997	382.9	88.0	(s)	1.4	—	1.4	—	—	472.3

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 203. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, New York

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	0.58	0.49	0.51	1.07	1.24	0.72	2.24	2.92	0.43	R 1.53	1.36	0.20	R 0.96	1.17	0.42	R 6.70	R 1.81
1975	2.14	1.27	1.53	2.16	2.66	2.02	3.99	4.80	1.93	R 3.00	2.96	0.31	R 1.13	R 2.59	1.53	14.04	R 4.10
1980	2.38	1.56	1.78	4.10	6.78	6.27	7.43	10.26	4.10	R 7.11	6.94	0.56	R 1.88	R 5.41	2.68	19.64	R 8.01
1981	2.56	1.81	1.99	4.67	8.59	7.49	8.02	11.22	4.99	R 8.23	R 8.31	0.56	R 2.22	R 6.31	3.27	24.93	R 9.82
1982	2.73	1.94	2.07	5.46	8.38	7.02	8.81	10.45	4.60	R 7.55	R 7.86	0.60	R 2.18	R 6.24	3.20	26.63	R 10.07
1983	2.15	1.87	1.90	6.38	8.09	6.94	9.38	9.17	4.52	R 7.30	R 7.44	0.56	R 2.10	R 6.13	3.08	R 27.59	R 10.62
1984	2.02	R 1.88	R 1.90	6.10	8.19	6.87	9.23	8.71	4.84	R 7.55	R 7.34	0.64	R 2.04	R 5.84	2.96	R 27.06	R 10.33
1985	1.88	R 1.81	1.81	5.94	7.88	6.51	11.57	8.79	4.38	R 7.27	R 7.37	0.67	R 1.97	R 5.82	2.54	R 26.95	R 10.26
1986	1.76	1.71	1.72	5.65	6.14	4.42	10.65	6.60	2.61	R 5.90	R 5.34	0.61	R 1.78	R 4.71	1.79	R 26.04	R 8.96
1987	1.59	1.62	1.61	5.06	6.04	4.55	10.27	6.99	3.10	R 5.41	R 5.64	0.63	R 1.73	R 4.70	2.01	R 25.54	R 8.88
1988	1.61	1.62	1.62	5.09	6.03	4.15	10.14	7.16	2.52	R 4.85	R 5.33	0.57	R 1.74	R 4.49	1.80	R 25.07	R 8.84
1989	1.67	1.62	1.63	5.38	6.59	4.70	11.13	7.82	2.99	R 5.12	R 5.94	0.65	e R 1.76	e R 4.89	R 2.05	R 26.06	e R 9.55
1990	1.71	1.66	1.66	5.25	8.13	6.03	12.87	8.83	3.64	R 5.33	R 7.03	0.65	R 2.35	R 5.46	R 2.21	R 27.49	R 10.43
1991	1.72	1.64	1.65	5.18	7.91	5.18	13.68	9.44	2.73	R 5.06	R 7.06	0.55	R 2.33	R 5.30	1.74	R 28.66	R 10.67
1992	1.73	1.54	1.56	5.48	7.48	4.84	13.07	9.28	2.71	R 4.70	R 7.09	0.45	R 2.16	R 5.40	1.65	R 29.85	R 10.62
1993	1.73	1.54	1.56	6.00	7.34	4.47	12.25	9.04	2.69	R 4.86	R 7.00	0.57	R 2.00	R 5.51	1.62	R 31.41	R 10.79
1994	1.73	1.50	1.53	6.16	7.32	4.14	12.97	9.12	2.77	R 4.91	R 7.17	0.53	R 2.09	R 5.52	R 1.43	R 31.97	R 11.00
1995	1.72	1.47	1.50	5.50	7.15	4.04	12.90	9.51	3.01	R 5.15	R 7.55	0.54	R 2.07	R 5.55	R 1.45	R 32.39	R 10.89
1996	1.69	1.48	1.51	6.41	7.94	4.88	13.33	9.86	3.53	5.95	7.93	0.53	2.22	5.95	1.50	32.58	11.09
1997	1.76	1.48	1.51	6.32	7.74	4.53	13.47	9.96	3.07	5.81	7.95	0.46	2.13	6.00	1.58	32.61	11.18
	Expenditures in Million Nominal Dollars																
1970	96.4	212.0	308.4	771.3	803.3	155.5	37.2	2,005.9	409.7	R 199.0	R 3,610.6	9.2	R 12.6	R 4,712.0	-335.3	R 2,001.7	R 6,378.4
1975	197.8	279.3	477.1	1,255.2	1,626.9	441.7	70.3	3,368.0	1,740.1	R 367.9	R 7,614.9	44.9	R 14.6	R 9,406.7	-1,326.8	R 4,580.2	R 12,660.1
1980	197.6	361.0	558.6	3,087.1	2,862.3	1,275.3	139.0	6,865.7	2,964.1	R 789.3	R 14,895.6	118.3	R 73.4	R 18,733.1	-2,427.3	R 7,042.1	R 23,347.9
1981	189.5	415.8	605.2	3,583.3	3,201.2	1,074.5	150.5	7,648.6	2,933.3	R 901.3	R 15,909.5	108.0	R 88.2	R 20,294.3	-2,881.5	R 9,110.6	R 26,523.4
1982	133.4	463.3	596.7	4,285.4	3,021.1	189.3	154.1	7,129.7	2,712.2	R 752.6	R 13,959.2	96.7	R 91.2	R 19,029.1	-2,676.2	R 9,576.7	R 25,929.6
1983	61.8	446.1	507.9	4,665.6	2,669.6	146.1	165.0	6,127.7	R 2,139.2	R 747.0	R 11,994.6	100.8	R 89.9	R 17,358.8	-2,616.7	R 10,253.2	R 24,995.3
1984	73.3	R 496.0	R 569.3	4,913.5	2,824.9	147.7	168.0	5,179.8	2,221.8	R 706.4	R 11,248.6	147.6	R 65.1	R 16,944.0	-2,656.9	R 10,332.9	R 24,620.0
1985	58.5	R 488.0	R 546.5	4,637.2	2,845.8	139.0	205.2	R 6,298.5	1,827.8	R 903.3	R 12,219.6	175.2	R 60.9	R 17,639.4	-2,320.5	R 10,362.3	R 25,681.1
1986	58.1	R 377.2	R 435.3	4,213.2	2,524.7	91.8	189.1	R 4,740.1	1,308.1	R 653.2	R 9,507.0	146.3	R 56.2	R 14,358.0	-1,558.8	R 10,209.4	R 23,008.7
1987	61.6	R 412.0	R 473.6	3,999.6	2,568.1	72.8	205.3	R 5,246.2	1,495.6	R 669.5	R 10,257.5	154.6	R 52.5	R 14,937.9	-1,917.7	R 10,319.3	R 23,339.5
1988	72.6	R 466.7	R 539.3	4,090.8	2,650.4	113.6	192.6	R 4,909.1	1,398.8	R 682.5	R 9,947.1	148.3	R 54.9	R 14,780.4	-1,892.7	R 10,698.8	R 23,586.5
1989	74.1	R 515.4	R 589.5	4,627.0	2,941.0	158.9	226.5	R 5,482.9	1,590.5	R 597.9	R 10,997.7	159.1	e R 60.8	e R 16,454.3	R -2,323.1	R 11,344.4	e R 25,475.6
1990	62.2	R 512.6	R 574.8	4,614.1	3,140.5	183.5	259.1	R 6,456.3	1,756.9	R 606.1	R 12,402.5	164.7	R 103.1	R 17,834.3	R -2,358.6	R 12,080.9	R 27,556.6
1991	56.6	R 510.3	R 566.8	4,630.3	2,836.8	153.0	356.2	R 6,613.1	1,164.1	R 592.4	R 11,715.6	169.4	R 102.9	R 17,180.3	R -1,843.3	R 12,655.0	R 27,992.0
1992	53.4	R 472.1	R 525.5	5,365.3	2,863.6	144.6	335.3	R 6,292.9	877.4	R 582.9	R 11,096.6	117.2	R 101.8	R 17,204.8	R -1,507.8	R 13,083.8	R 28,780.7
1993	57.7	R 421.9	R 479.6	5,789.5	2,994.1	128.2	271.2	R 6,254.5	812.7	R 632.3	R 11,093.0	163.8	R 107.0	R 17,643.9	R -1,372.7	R 13,949.8	R 30,220.9
1994	61.7	393.0	R 454.7	6,366.0	2,886.5	133.8	299.5	R 6,144.8	704.8	R 631.5	R 10,800.9	164.5	R 120.1	R 17,965.1	R -1,261.2	R 14,308.3	R 31,012.2
1995	63.8	R 368.8	R 432.6	6,401.1	2,891.0	176.4	295.8	6,622.4	574.3	R 644.9	R 11,204.9	152.9	R 129.6	R 18,355.7	R -1,242.6	R 14,419.8	R 31,532.8
1996	61.0	382.1	443.1	7,379.4	3,384.2	319.2	333.7	6,786.7	821.0	740.5	12,385.2	196.9	144.6	20,561.8	-1,268.6	14,620.5	33,913.7
1997	62.1	400.4	462.6	7,913.0	3,280.6	311.4	341.0	6,852.9	586.2	745.1	12,117.1	144.6	118.0	20,766.1	-1,358.6	14,681.9	34,089.4

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 204. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, New York

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.43	1.37	1.43	1.56	2.70	1.48	0.40	R 1.42	8.83	R 2.18
1975	2.78	2.50	2.81	3.28	4.48	2.89	0.79	R 2.68	16.44	R 4.37
1980	3.26	4.85	7.08	8.49	9.12	7.22	2.02	R 5.63	23.08	R 8.17
1981	3.67	5.41	8.88	10.85	9.85	9.00	2.49	R 6.59	28.98	R 9.92
1982	3.86	6.38	8.69	10.91	10.23	8.87	2.41	R 7.00	30.76	R 10.57
1983	3.68	7.67	8.41	R 7.57	10.55	R 8.49	2.34	R 7.63	32.08	R 11.63
1984	3.74	7.45	8.66	R 9.08	10.03	R 8.75	2.38	R 7.68	31.17	R 11.58
1985	3.61	7.54	8.35	R 8.92	11.12	R 8.55	2.28	R 7.71	31.84	R 11.70
1986	3.39	7.26	6.83	R 7.90	9.96	R 7.06	1.83	R 6.98	30.86	R 10.87
1987	3.27	6.68	6.39	R 6.80	9.64	R 6.61	1.74	R 6.49	30.81	R 10.50
1988	3.29	6.32	6.47	R 6.31	9.53	R 6.62	1.76	R 6.29	30.67	R 10.36
1989	3.36	7.01	7.18	R 5.41	11.54	R 7.33	1.95	R 6.96	32.03	R 11.23
1990	3.59	7.19	8.44	R 6.83	13.64	R 8.78	2.83	R 7.46	33.54	R 12.43
1991	3.44	7.16	8.35	R 6.23	14.59	R 8.85	2.70	R 7.43	35.09	R 12.79
1992	3.21	7.37	7.71	R 5.80	14.43	R 8.28	2.47	R 7.38	36.43	R 12.53
1993	3.25	7.92	7.51	R 5.56	13.35	R 7.89	2.42	R 7.60	38.61	R 13.16
1994	3.29	8.52	7.24	R 5.62	14.56	R 7.82	2.35	R 7.96	39.72	R 13.78
1995	3.18	8.19	7.16	R 5.38	14.27	R 7.72	2.30	R 7.67	40.73	R 13.71
1996	3.38	8.68	7.97	6.03	14.93	8.47	2.64	8.25	41.14	13.94
1997	3.57	9.48	7.99	6.26	15.02	8.49	2.62	8.84	41.38	14.73
	Expenditures in Million Nominal Dollars									
1970	12.8	484.5	501.4	49.4	28.3	579.2	2.5	R 1,079.1	768.0	R 1,847.0
1975	14.2	830.2	914.6	69.6	51.2	1,035.4	5.1	R 1,884.9	1,610.5	R 3,495.5
1980	13.7	1,654.8	1,554.5	82.9	84.1	1,721.5	56.5	R 3,446.5	2,408.8	R 5,855.3
1981	20.6	1,852.6	1,813.4	92.9	95.8	2,002.0	70.3	R 3,945.5	3,035.5	R 6,981.0
1982	27.1	2,235.6	1,602.3	113.6	92.5	1,808.4	73.6	R 4,144.7	3,214.7	R 7,359.5
1983	16.3	2,535.1	1,439.8	R 64.3	113.4	R 1,617.4	70.4	R 4,239.2	3,481.5	R 7,720.7
1984	20.8	2,576.6	1,521.3	R 56.1	107.0	R 1,684.4	45.9	R 4,327.6	3,492.1	R 7,819.8
1985	17.7	2,478.1	1,506.7	R 162.8	129.3	R 1,798.8	43.0	R 4,337.6	3,558.6	R 7,896.2
1986	17.1	2,511.7	1,355.5	R 98.9	118.9	R 1,573.4	33.5	R 4,135.7	3,556.3	R 7,692.0
1987	14.6	2,300.8	1,347.9	R 123.9	135.2	R 1,607.1	29.9	R 3,952.4	3,709.8	R 7,662.2
1988	11.6	2,322.2	1,373.0	R 148.9	129.4	R 1,651.3	31.4	R 4,016.5	3,920.1	R 7,936.6
1989	12.0	2,633.2	1,455.7	R 85.0	167.1	R 1,707.8	36.0	R 4,389.0	4,140.1	R 8,529.1
1990	11.5	2,501.1	1,303.6	R 68.4	201.6	R 1,573.6	79.7	R 4,166.0	4,414.1	R 8,580.1
1991	11.2	2,490.9	1,216.4	R 74.1	266.3	R 1,556.9	80.2	R 4,139.3	4,689.9	R 8,829.2
1992	10.2	2,870.5	1,257.2	R 41.2	259.7	R 1,558.0	77.2	R 4,515.9	4,812.9	R 9,328.8
1993	9.5	3,131.4	1,255.2	R 49.3	206.6	R 1,511.1	80.8	R 4,732.8	5,255.7	R 9,988.5
1994	7.2	3,372.3	1,129.1	R 44.5	230.3	R 1,403.9	76.9	R 4,860.3	5,434.6	R 10,294.9
1995	8.3	3,157.5	1,156.0	R 37.9	233.6	R 1,427.5	83.7	R 4,677.0	5,543.7	R 10,220.7
1996	11.3	3,589.0	1,424.2	49.6	253.9	1,727.7	95.8	5,423.9	5,654.4	11,078.3
1997	10.1	3,655.0	1,409.7	61.9	255.6	1,727.1	69.4	5,461.6	5,656.4	11,118.0

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 205. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, New York

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.48	1.17	1.14	0.73	1.45	2.92	0.42	0.67	0.40	0.80	7.80	R 1.98
1975	1.36	1.97	2.48	2.51	3.09	4.80	1.90	2.19	0.79	2.11	16.57	5.42
1980	1.67	4.17	6.48	5.68	5.79	10.26	4.18	5.09	2.02	R 4.69	23.21	R 9.25
1981	1.89	4.65	8.20	7.00	6.05	11.22	5.05	6.66	2.49	R 5.58	29.35	R 12.63
1982	2.01	5.37	7.95	7.50	7.28	10.45	4.60	6.09	2.41	5.68	31.03	R 12.68
1983	1.96	6.31	7.11	R 7.57	7.55	9.17	4.49	R 5.94	2.34	6.05	33.00	R 14.39
1984	R 1.94	6.10	7.23	R 9.08	8.10	8.71	5.03	R 6.06	2.38	R 6.00	31.04	R 13.64
1985	R 1.92	5.95	6.79	R 8.92	12.43	8.79	4.64	R 5.83	NA	R 5.83	30.86	13.65
1986	1.74	5.61	4.88	R 7.90	12.08	6.60	2.92	R 3.99	NA	R 4.63	29.62	R 11.98
1987	1.76	5.02	4.90	R 6.80	11.75	6.99	3.22	R 4.14	NA	4.49	27.96	R 11.80
1988	R 1.71	5.24	4.75	R 6.31	11.66	7.16	2.67	R 3.77	NA	R 4.45	27.13	R 11.63
1989	1.75	5.46	5.28	R 5.41	10.12	7.82	3.12	R 4.37	NA	4.88	27.99	R 12.25
1990	1.76	5.43	6.54	R 6.83	10.74	8.83	3.75	5.10	NA	5.24	29.44	R 13.05
1991	1.74	5.33	6.01	R 6.23	11.53	9.44	2.83	4.37	NA	4.84	30.31	R 13.13
1992	R 1.75	5.59	5.47	R 5.80	9.88	9.28	2.89	4.26	NA	4.95	31.48	R 13.29
1993	1.67	5.99	5.29	R 5.56	9.70	9.04	2.88	4.08	2.42	R 5.03	32.87	R 13.63
1994	1.67	6.34	5.15	R 5.62	10.87	9.12	3.08	4.17	2.35	R 5.30	32.98	R 14.12
1995	1.67	5.93	5.06	R 5.38	10.62	9.51	3.34	4.37	2.30	R 5.21	33.57	R 14.66
1996	1.60	6.71	6.01	6.03	11.40	9.86	4.04	5.23	2.64	6.04	33.99	15.07
1997	1.65	6.34	5.50	6.26	10.95	9.96	3.44	4.81	2.62	5.79	34.22	14.50
	Expenditures in Million Nominal Dollars											
1970	3.2	166.0	135.5	2.6	2.7	16.1	113.8	270.8	(s)	R 440.0	R 872.8	R 1,312.7
1975	6.2	256.7	273.8	6.0	6.2	29.3	340.7	656.0	(s)	919.0	R 2,139.2	R 3,058.3
1980	7.0	690.4	546.7	5.4	9.4	55.7	668.1	1,285.4	1.4	R 1,984.2	R 3,205.2	R 5,189.4
1981	11.3	791.9	601.8	6.3	10.4	67.4	437.2	1,123.0	1.7	R 1,927.9	R 4,275.3	R 6,203.3
1982	16.5	903.5	629.9	8.5	11.6	57.4	543.0	1,250.3	1.8	R 2,172.0	R 4,532.1	R 6,704.2
1983	10.2	1,047.5	493.9	R 55.4	14.3	47.0	R 351.3	R 961.8	1.7	R 2,021.2	R 4,936.6	R 6,957.8
1984	R 12.8	1,065.1	515.1	R 22.5	15.2	49.1	537.2	R 1,139.1	1.1	R 2,218.1	R 5,041.0	R 7,259.0
1985	10.4	1,010.8	468.3	R 43.6	25.5	88.3	486.6	R 1,112.4	NA	R 2,133.5	R 5,139.5	R 7,273.1
1986	R 11.0	966.2	468.4	R 10.2	25.5	64.3	367.0	R 935.3	NA	R 1,912.6	R 5,096.1	R 7,008.7
1987	8.8	864.3	422.3	R 12.3	29.1	R 50.3	384.0	R 897.9	NA	R 1,771.1	R 4,985.5	R 6,756.6
1988	7.3	1,013.5	407.0	R 7.4	27.9	R 41.5	305.3	R 789.2	NA	R 1,810.0	R 5,119.6	R 6,929.6
1989	7.2	1,103.7	475.8	R 15.9	25.8	55.4	311.4	R 884.3	NA	R 1,995.2	R 5,353.2	R 7,348.4
1990	6.3	1,090.0	494.2	R 10.4	28.0	R 55.7	416.2	R 1,004.5	NA	R 2,100.7	R 5,628.6	R 7,729.3
1991	6.4	1,091.8	446.4	R 7.5	37.1	35.5	304.0	R 830.6	NA	R 1,928.8	R 5,833.0	R 7,761.8
1992	6.3	1,249.0	443.2	R 13.4	31.4	33.2	289.8	R 811.1	NA	R 2,066.4	R 6,023.1	R 8,089.5
1993	4.6	1,359.7	465.7	R 19.4	26.5	9.4	317.8	R 838.8	6.5	R 2,203.1	R 6,437.9	R 8,641.0
1994	4.1	1,453.4	437.9	R 17.2	30.3	8.6	316.1	R 810.1	6.4	R 2,274.1	R 6,616.5	R 8,890.6
1995	4.8	1,411.2	448.5	R 21.8	30.7	10.4	289.2	R 800.5	6.3	R 2,222.9	R 7,160.1	R 9,382.9
1996	5.9	1,741.2	551.2	25.7	34.2	10.4	330.1	951.6	7.9	2,706.5	7,266.5	9,973.0
1997	5.7	2,085.6	473.7	28.4	32.9	10.2	223.0	768.2	6.7	2,866.3	7,476.1	10,342.3

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 206. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, New York

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	0.58	0.48	0.53	0.68	0.70	0.70	0.73	1.45	5.08	2.92	0.49	R 1.21	0.81	R 1.49	R 0.70	3.51	0.97
1975	2.14	1.36	1.82	1.47	1.84	2.36	2.51	3.09	7.48	4.80	2.01	R 2.75	R 2.36	R 1.49	R 2.05	7.97	R 2.84
1980	2.38	1.67	2.08	3.43	3.67	5.36	5.68	5.79	14.36	10.26	3.78	R 7.32	R 5.36	R 1.49	R 3.94	12.11	R 5.34
1981	2.56	1.89	2.26	3.89	5.09	6.58	7.00	6.05	18.00	11.22	4.83	R 7.65	R 7.11	R 1.49	R 4.71	15.55	R 6.78
1982	2.73	2.01	2.34	4.87	4.09	6.88	7.50	7.28	17.25	10.45	4.65	R 6.97	R 6.15	R 1.49	R 4.68	16.43	R 7.04
1983	2.15	1.96	2.02	5.54	4.22	6.97	R 7.15	7.55	16.98	9.17	4.40	R 7.21	R 6.37	R 1.49	R 4.79	15.66	R 7.39
1984	2.02	R 1.94	R 1.97	5.22	4.62	6.58	7.18	8.10	17.63	8.71	5.03	R 6.51	R 6.28	R 1.49	R 4.63	16.41	R 7.07
1985	1.88	R 1.92	R 1.91	5.13	4.81	6.14	R 6.91	12.43	17.61	8.79	4.64	R 6.06	R 6.09	R 1.49	R 4.63	15.34	R 6.84
1986	1.76	1.74	1.75	4.78	4.34	4.12	R 4.88	12.08	15.59	6.60	2.92	R 4.07	R 4.57	R 1.72	R 3.84	14.43	R 6.17
1987	1.59	1.76	1.68	4.16	3.73	4.64	R 4.65	11.75	13.58	6.99	3.22	R 4.08	R 4.58	R 1.72	R 3.66	14.74	R 6.04
1988	1.61	R 1.71	1.66	4.56	3.18	4.27	R 4.44	11.66	14.62	7.16	2.67	R 3.37	R 4.06	R 1.72	R 3.49	14.47	R 5.89
1989	1.67	1.75	1.71	4.69	2.81	4.74	R 5.28	10.12	14.48	7.82	3.12	R 3.96	R 4.52	d R 1.53	d R 3.68	15.52	d R 6.40
1990	1.71	1.76	1.74	4.72	2.96	6.78	R 6.46	10.74	14.60	8.83	3.75	R 4.26	R 4.93	R 1.49	R 3.96	16.95	R 7.02
1991	1.72	1.74	1.73	4.60	2.76	5.60	R 5.80	11.53	16.80	9.44	2.83	R 3.85	R 4.64	R 1.57	R 3.84	18.07	R 7.08
1992	1.73	R 1.75	1.74	4.79	2.30	5.51	R 4.88	9.88	18.32	9.28	2.89	R 3.55	R 4.27	R 1.54	R 3.90	19.06	R 7.11
1993	1.73	1.67	1.70	5.03	2.81	5.07	R 4.84	9.70	18.96	9.04	2.88	R 3.47	R 4.26	R 1.50	R 3.98	19.53	R 7.01
1994	1.73	1.67	1.70	5.08	2.74	5.08	R 5.15	8.63	19.11	9.12	3.08	R 3.37	R 4.29	R 1.67	R 4.13	19.86	R 6.88
1995	1.72	1.67	R 1.69	4.56	3.19	4.84	R 4.46	8.57	R 19.41	9.51	3.34	R 3.48	R 4.56	R 1.68	R 4.04	16.97	R 5.86
1996	1.69	1.60	1.64	4.91	3.49	5.88	5.72	9.09	20.08	9.86	4.04	4.67	5.40	1.61	4.48	16.48	6.08
1997	1.76	1.65	1.70	4.92	4.07	5.39	5.24	10.04	17.86	9.96	3.44	4.29	5.30	1.59	4.46	15.23	5.90
	Expenditures in Million Nominal Dollars																
1970	96.4	68.1	164.5	80.0	26.0	68.8	3.3	5.6	30.9	50.3	103.2	R 47.2	R 335.4	R 10.1	R 589.9	322.1	R 912.0
1975	197.8	85.5	283.3	156.0	69.9	216.9	14.8	11.4	45.3	34.1	276.6	R 114.4	R 783.4	R 9.4	R 1,232.1	734.6	R 1,966.7
1980	197.6	106.6	304.2	398.4	121.3	289.8	13.4	43.8	89.5	82.7	337.3	R 369.4	R 1,347.2	R 15.3	R 2,065.2	1,318.1	R 3,383.2
1981	189.5	113.4	302.9	468.5	183.3	228.9	16.1	40.9	107.6	245.0	176.2	R 369.0	R 1,366.9	R 16.2	R 2,154.5	1,678.3	R 3,832.8
1982	133.4	117.2	250.6	532.1	146.5	235.1	22.4	46.3	94.0	57.5	239.1	R 259.4	R 1,100.3	R 15.7	R 1,898.6	1,677.3	R 3,575.9
1983	61.8	120.4	182.2	526.3	160.7	193.4	R 29.2	32.8	96.9	40.0	94.8	R 228.4	R 876.1	R 17.7	R 1,602.4	1,648.5	R 3,250.8
1984	73.3	R 130.9	R 204.2	572.5	165.3	192.0	10.1	39.6	107.3	28.0	179.8	224.1	R 946.4	R 18.0	R 1,741.0	1,612.3	R 3,353.3
1985	58.5	R 122.3	R 180.8	526.2	230.1	172.3	R 48.5	43.9	99.8	R 56.6	162.0	203.9	R 1,017.0	R 17.9	R 1,742.0	1,500.4	R 3,242.4
1986	58.1	R 84.8	R 142.9	425.4	185.3	75.5	R 17.2	40.0	86.4	43.4	110.9	154.7	R 713.5	R 22.7	R 1,304.5	1,383.9	R 2,688.3
1987	61.6	R 79.7	141.3	398.7	162.0	104.1	R 16.5	37.3	85.1	R 47.2	90.1	176.7	R 719.1	R 22.6	R 1,281.8	1,416.4	R 2,698.1
1988	72.6	R 78.3	R 150.9	412.8	168.7	92.0	R 22.5	30.0	88.3	R 53.0	69.0	151.3	R 674.8	R 23.5	R 1,262.0	1,460.6	R 2,722.6
1989	74.1	R 86.6	R 160.8	449.8	92.7	105.6	R 45.1	R 27.8	89.8	R 57.1	71.1	172.7	R 662.0	d R 24.8	d R 1,297.4	1,632.7	d R 2,930.1
1990	62.2	R 80.7	R 142.9	473.7	108.4	134.5	R 9.1	23.6	93.1	R 53.1	95.7	216.5	R 734.1	R 23.4	R 1,374.1	1,815.7	R 3,189.8
1991	56.6	R 85.8	142.4	561.4	117.0	99.3	R 11.0	46.1	95.9	54.4	42.4	184.7	R 650.8	R 22.6	R 1,377.2	1,917.9	R 3,295.0
1992	53.4	70.7	R 124.1	727.3	105.4	100.1	R 5.6	39.1	106.6	54.1	56.2	197.1	R 664.2	R 24.5	R 1,540.1	2,017.4	R 3,557.5
1993	57.7	R 71.7	R 129.4	829.3	150.3	119.5	R 6.6	33.6	112.3	46.7	70.9	175.5	R 715.5	R 26.0	R 1,700.2	2,011.6	R 3,711.8
1994	61.7	65.8	127.5	1,119.4	135.3	90.8	R 10.4	29.7	118.4	51.7	62.2	179.3	R 677.8	R 36.5	R 1,961.1	1,996.3	R 3,957.5
1995	63.8	R 59.0	R 122.8	1,306.5	149.7	83.8	R 10.3	27.4	118.1	56.2	42.5	181.4	R 669.4	R 39.3	R 2,138.0	1,466.0	R 3,604.0
1996	61.0	58.1	119.1	1,626.2	143.1	106.1	22.1	41.8	118.6	57.7	63.4	255.4	808.2	40.6	2,594.1	1,459.4	4,053.5
1997	62.1	58.9	121.0	1,542.9	171.1	94.7	10.7	49.1	111.5	61.4	43.4	242.9	784.8	41.9	2,490.6	1,314.0	3,804.6

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.

R=Revised data.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 207. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, New York

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.48	—	2.17	1.44	0.72	1.45	5.08	2.92	0.37	2.12	2.12	4.82	2.14
1975	1.36	—	3.45	2.84	2.01	3.09	7.48	4.80	1.67	3.95	3.95	13.66	4.02
1980	—	—	9.02	7.45	6.27	5.79	14.36	10.26	3.53	8.82	8.82	15.02	R 8.87
1981	—	—	10.84	9.45	7.49	6.05	18.00	11.22	4.40	10.05	10.05	17.29	10.10
1982	—	—	10.92	8.96	7.02	7.28	17.25	10.45	4.18	9.75	9.75	21.60	9.85
1983	—	—	10.44	8.98	6.94	7.55	16.98	9.17	4.23	9.07	9.07	22.59	R 9.22
1984	—	—	10.27	8.82	6.87	8.10	17.63	8.71	4.55	8.67	8.67	20.47	R 8.82
1985	—	—	9.99	8.48	6.51	12.43	17.61	8.79	4.08	8.74	8.74	19.65	R 8.85
1986	—	—	8.41	6.59	4.42	12.08	15.59	6.60	2.27	6.56	6.56	19.51	R 6.70
1987	—	—	7.55	6.74	4.55	11.75	13.58	6.99	2.84	6.90	6.90	22.59	R 7.07
1988	—	—	7.41	6.78	4.15	11.66	14.62	7.16	2.18	6.96	6.96	21.39	R 7.12
1989	—	—	8.28	7.36	4.70	10.12	14.48	7.82	2.63	7.67	7.67	22.65	R 7.84
1990	—	4.57	9.32	8.99	6.03	10.74	14.60	8.83	3.13	8.75	8.75	23.33	R 8.90
1991	—	4.56	8.71	9.06	5.18	11.53	16.80	9.44	2.38	9.10	R 9.09	23.12	R 9.24
1992	—	5.32	8.54	8.89	4.84	9.88	18.32	9.28	2.33	8.94	8.94	25.54	R 9.12
1993	—	4.33	8.24	9.04	4.47	9.70	18.96	9.04	2.29	8.80	8.80	26.78	R 8.99
1994	—	3.54	7.96	9.25	4.14	8.86	19.11	9.12	2.40	8.87	8.87	27.28	R 9.07
1995	—	2.07	8.36	9.02	4.04	8.50	R 19.41	9.51	2.66	9.12	9.12	26.59	R 9.30
1996	—	5.33	9.29	9.67	4.88	8.59	20.08	9.86	3.15	9.25	9.25	26.75	9.42
1997	—	4.04	9.39	9.29	4.53	8.57	17.86	9.96	2.81	9.26	9.26	26.88	9.42
	Expenditures in Million Nominal Dollars												
1970	R (s)	—	2.7	89.5	155.5	0.6	36.9	1,939.4	43.0	2,267.6	2,267.8	R 38.9	R 2,306.7
1975	(s)	—	4.8	173.7	423.1	1.4	43.1	3,304.6	93.0	4,043.7	4,043.8	R 95.9	R 4,139.6
1980	—	—	14.6	447.5	1,274.5	1.7	92.7	6,727.2	251.7	8,809.9	8,809.9	R 110.0	R 8,919.9
1981	—	—	14.9	519.6	1,074.4	3.5	111.4	7,336.2	324.8	9,384.8	9,384.8	R 121.4	R 9,506.3
1982	—	—	10.9	527.5	188.8	3.7	97.3	7,014.9	294.5	8,137.6	8,137.6	R 152.5	R 8,290.1
1983	—	—	11.8	519.8	146.1	4.6	100.4	6,040.8	55.9	6,879.4	6,879.4	R 186.6	R 7,066.0
1984	—	—	9.8	566.0	147.7	6.1	111.1	5,102.7	56.9	R 6,000.3	R 6,000.3	R 187.5	R 6,187.9
1985	—	—	11.1	669.3	139.0	6.6	103.4	R 6,153.6	22.7	R 7,105.7	R 7,105.7	R 163.7	R 7,269.5
1986	—	—	10.9	595.4	91.8	4.7	89.5	R 4,632.4	21.8	R 5,446.4	R 5,446.4	R 173.2	R 5,619.6
1987	—	—	4.8	658.1	72.8	3.7	88.2	R 5,148.6	38.9	R 6,015.1	R 6,015.1	R 207.6	R 6,222.7
1988	—	—	3.9	728.4	113.6	5.2	91.5	R 4,814.5	42.0	R 5,799.1	R 5,799.1	R 198.6	R 5,997.7
1989	—	—	3.7	809.0	158.9	5.7	93.0	R 5,370.5	8.8	R 6,449.5	R 6,449.5	R 218.4	R 6,667.9
1990	—	(s)	3.6	1,170.8	183.5	5.9	96.5	R 6,347.5	27.1	R 7,834.9	R 7,834.9	R 222.5	R 8,057.4
1991	—	R (s)	2.9	1,047.4	153.0	6.6	99.3	R 6,523.2	59.3	R 7,891.7	R 7,891.8	R 214.2	R 8,106.0
1992	—	(s)	3.2	1,051.1	144.6	R 5.1	110.4	R 6,205.5	54.6	R 7,574.6	R 7,574.6	R 230.4	R 7,805.0
1993	—	R (s)	2.5	1,138.2	128.2	4.4	116.3	R 6,198.4	46.9	R 7,635.0	R 7,635.1	R 244.5	R 7,879.6
1994	—	R (s)	4.0	1,206.5	133.8	9.2	122.6	R 6,084.4	47.7	R 7,608.2	R 7,608.4	R 260.8	R 7,869.3
1995	—	R (s)	3.2	1,173.3	176.4	4.3	R 122.4	R 6,555.8	39.4	8,074.8	R 8,075.1	R 250.1	R 8,325.2
1996	—	(s)	3.1	1,270.9	319.2	3.7	122.9	6,718.6	129.9	8,568.3	8,568.6	240.2	8,808.8
1997	—	2.4	3.2	1,280.0	311.4	3.4	115.4	6,781.2	92.0	8,586.7	8,589.1	235.4	8,824.6

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 208. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, New York

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.47	0.38	0.42	0.44	—	0.42	0.20	—	0.42
1975	1.18	0.88	1.94	2.16	—	1.95	0.31	—	1.53
1980	1.47	2.67	4.25	5.63	—	4.26	0.56	1.74	2.68
1981	1.71	3.49	5.10	7.13	—	5.12	0.56	1.24	3.27
1982	1.83	3.91	4.69	7.05	—	4.71	0.60	1.28	3.20
1983	1.79	3.98	4.54	6.43	—	4.56	0.56	1.12	3.08
1984	1.80	3.99	4.76	6.44	—	4.79	0.64	1.28	2.96
1985	1.72	3.48	4.26	6.11	—	4.29	0.67	—	2.54
1986	1.65	2.24	2.47	3.81	—	2.50	0.61	—	1.79
1987	1.54	2.44	3.06	4.25	—	3.09	0.63	0.95	2.01
1988	1.58	2.24	2.49	3.97	—	2.53	0.57	—	1.80
1989	1.57	2.35	2.95	4.48	—	3.03	0.65	—	R 2.05
1990	1.61	2.38	3.60	6.34	—	3.65	0.65	—	R 2.21
1991	1.59	2.23	2.72	5.30	—	2.76	0.55	—	1.74
1992	1.49	2.41	2.63	4.96	—	2.66	0.45	—	1.65
1993	1.50	2.65	2.56	4.69	—	2.61	0.57	1.40	1.62
1994	1.45	2.24	2.50	4.05	—	2.57	0.53	2.48	R 1.43
1995	1.41	2.08	2.64	4.41	—	2.78	0.54	2.21	R 1.45
1996	1.43	2.88	3.17	5.07	—	3.29	0.53	0.58	1.50
1997	1.42	2.81	2.83	3.75	—	2.89	0.46	0.33	1.58
	Expenditures in Million Nominal Dollars								
1970	127.6	40.9	149.6	8.1	—	157.7	9.2	—	335.3
1975	173.3	12.2	1,029.8	66.6	—	1,096.4	44.9	—	1,326.8
1980	233.8	343.4	1,706.9	24.5	—	1,731.5	118.3	R (s)	2,427.3
1981	270.5	470.3	1,995.1	37.7	—	2,032.7	108.0	(s)	2,881.5
1982	302.5	614.3	1,635.7	26.9	—	1,662.5	96.7	R (s)	2,676.2
1983	299.3	556.6	1,637.3	22.6	—	1,659.8	100.8	R (s)	2,616.7
1984	331.6	699.3	1,447.9	30.5	—	1,478.4	147.6	R (s)	2,656.9
1985	337.5	622.1	1,156.5	29.2	—	1,185.7	175.2	—	2,320.5
1986	264.2	309.9	808.5	29.9	—	838.4	146.3	—	1,558.8
1987	308.9	435.8	982.7	35.7	—	1,018.3	154.6	(s)	1,917.7
1988	369.5	342.3	982.6	50.0	—	1,032.6	148.3	—	1,892.7
1989	409.5	440.2	1,199.2	94.9	—	1,294.1	159.1	—	R 2,323.1
1990	414.1	549.3	1,218.0	37.5	—	1,255.5	164.7	—	R 2,358.6
1991	406.8	486.2	758.4	27.3	—	785.7	169.4	—	R 1,843.3
1992	384.8	518.6	476.7	12.1	—	488.7	117.2	—	R 1,507.8
1993	336.1	469.0	377.1	15.5	—	392.6	163.8	R (s)	R 1,372.7
1994	315.9	420.8	278.7	22.2	—	300.9	164.5	R (s)	R 1,261.2
1995	296.7	525.6	203.3	29.5	—	232.7	152.9	R (s)	R 1,242.6
1996	306.8	422.7	297.5	31.9	—	329.4	196.9	(s)	1,268.6
1997	325.7	627.1	227.7	22.5	—	250.3	144.6	(s)	1,358.6

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 209. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, North Carolina

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.43	0.43	0.69	1.13	0.73	1.89	2.82	0.46	R 1.33	R 1.93	—	R 0.30	R 1.19	0.41	4.17	R 2.00
1975	—	1.12	1.12	1.57	2.74	2.03	3.24	4.55	1.90	R 2.82	R 3.67	0.29	R 0.60	R 2.44	1.05	7.92	R 4.05
1980	—	1.58	1.58	3.55	6.80	6.46	6.11	9.91	3.72	R 7.00	R 8.14	0.36	R 2.04	R 4.60	1.48	11.72	R 7.92
1981	—	1.74	1.74	4.59	8.35	7.61	7.25	11.05	4.76	R 8.62	R 9.61	0.37	R 2.25	R 5.19	1.62	13.33	R 9.23
1982	—	1.89	1.89	4.85	8.18	7.18	7.49	10.52	4.36	R 8.22	R 9.27	0.41	R 2.28	R 5.06	1.68	15.56	R 9.54
1983	—	1.88	1.88	5.50	7.53	6.40	8.09	9.18	4.37	R 7.33	R 8.20	0.44	R 2.16	R 4.74	1.62	16.13	R 9.13
1984	—	1.95	1.95	5.59	7.51	6.17	8.43	8.93	4.85	R 7.39	R 8.03	0.58	R 2.41	R 4.65	1.55	16.89	R 9.23
1985	—	1.97	1.97	5.29	7.36	5.77	9.89	9.03	4.45	R 7.31	R 8.11	0.54	R 2.32	R 4.70	1.56	17.46	R 9.35
1986	—	1.85	1.85	4.77	5.70	3.85	9.17	6.69	2.72	R 5.77	R 6.10	0.53	R 2.61	R 3.77	1.46	18.16	R 8.31
1987	—	1.79	1.79	4.66	5.80	3.96	8.85	7.33	2.94	R 5.66	R 6.50	0.56	R 2.46	R 3.88	1.29	18.05	R 8.57
1988	—	1.77	1.77	4.46	5.67	3.71	8.89	7.26	2.34	R 5.40	R 6.34	0.59	R 2.48	R 3.82	1.30	18.03	R 8.44
1989	—	1.77	1.77	4.56	6.34	4.30	8.93	8.10	2.70	R 5.57	R 7.08	0.55	e R 1.98	e R 4.01	1.31	18.33	e R 9.02
1990	—	1.79	1.79	4.19	7.98	5.65	10.45	9.44	3.11	R 5.70	R 8.37	0.54	R 1.86	R 4.58	1.33	18.73	R 9.82
1991	—	1.77	1.77	4.09	7.55	4.79	11.32	9.23	2.37	R 5.93	R 8.17	0.52	R 1.82	R 4.36	1.27	18.96	R 9.82
1992	—	1.73	1.73	4.29	7.25	4.48	10.37	8.96	2.46	R 5.48	R 7.77	0.51	R 1.71	R 4.32	1.35	19.33	R 9.60
1993	—	1.71	1.71	4.79	7.07	4.19	9.74	8.68	2.35	R 5.63	R 7.55	0.48	R 1.67	R 4.25	1.34	19.44	R 9.66
1994	—	1.69	1.69	4.85	6.97	3.87	9.52	8.67	2.46	R 5.55	R 7.59	0.49	R 1.75	R 4.19	1.21	19.42	R 9.64
1995	—	1.64	1.64	4.56	6.84	3.90	9.75	8.83	2.79	R 5.33	R 7.61	0.51	R 1.75	R 4.15	1.18	19.28	R 9.56
1996	—	1.51	1.51	5.44	7.62	4.78	10.99	9.49	3.22	6.22	8.28	0.47	1.75	4.46	1.13	19.15	10.03
1997	—	1.45	1.45	5.95	7.51	4.42	10.82	9.50	2.99	5.91	8.29	0.47	1.68	4.47	1.12	19.00	10.11
	Expenditures in Million Nominal Dollars																
1970	—	210.3	210.3	102.8	149.3	18.7	39.1	835.7	19.7	137.8	1,200.2	—	R 4.5	R 1,517.8	-190.7	576.2	R 1,903.2
1975	—	533.2	533.2	178.1	339.0	42.3	77.6	1,599.1	92.9	198.2	2,349.1	4.4	R 9.1	R 3,073.9	-473.6	1,393.1	R 3,993.5
1980	—	985.6	985.6	529.3	955.5	185.3	179.1	3,448.9	211.1	438.5	5,418.5	22.9	R 37.6	R 6,993.9	-967.2	2,553.8	R 8,580.5
1981	—	1,141.3	1,141.3	678.9	1,032.7	223.6	199.0	3,860.4	168.2	454.5	5,938.5	25.5	R 43.1	R 7,827.2	-1,105.3	2,971.2	R 9,693.2
1982	—	1,173.9	1,173.9	667.6	955.2	228.2	185.9	3,640.5	129.1	398.2	5,537.0	41.5	R 43.5	R 7,463.5	-1,140.2	3,288.7	R 9,612.0
1983	—	1,120.0	1,120.0	743.4	1,081.0	227.7	204.2	3,241.6	159.4	R 361.7	R 5,275.7	58.8	R 45.0	R 7,242.9	-1,105.9	3,645.0	R 9,781.9
1984	—	R 1,089.9	R 1,089.9	798.7	1,140.1	219.0	206.3	3,280.3	241.0	R 410.0	R 5,496.7	127.5	R 57.1	R 7,570.0	-1,127.3	4,130.4	R 10,573.1
1985	—	1,084.5	1,084.5	705.5	1,064.4	213.6	268.8	R 3,362.8	174.3	R 511.9	R 5,595.9	111.8	R 54.1	R 7,551.7	-1,097.2	4,305.3	R 10,759.9
1986	—	R 1,077.6	R 1,077.6	644.6	917.5	152.9	243.3	2,601.7	108.4	R 463.4	R 4,487.1	115.7	R 35.4	R 6,360.4	-1,079.1	4,797.8	R 10,079.1
1987	—	894.0	894.0	677.9	959.0	171.2	283.1	R 2,954.7	100.7	R 441.8	R 4,910.5	171.2	R 30.4	R 6,684.0	-960.0	5,051.7	R 10,775.7
1988	—	912.8	912.8	662.9	1,042.0	172.1	249.8	R 3,011.8	76.7	R 476.0	R 5,028.3	183.3	R 31.8	R 6,819.2	-989.4	5,228.3	R 11,058.0
1989	—	982.3	982.3	718.8	997.9	184.0	298.7	R 3,312.2	80.3	R 415.3	R 5,288.2	173.4	e R 45.0	e R 7,207.7	-1,058.0	5,479.4	e R 11,629.1
1990	—	945.7	945.7	656.5	1,164.8	174.2	326.1	R 3,845.9	101.2	R 404.6	R 6,016.8	150.4	R 46.5	R 7,815.9	-973.5	5,715.0	R 12,557.4
1991	—	R 925.7	R 925.7	675.7	1,053.1	116.3	421.5	R 3,735.9	91.1	R 409.1	R 5,826.9	169.8	R 51.1	R 7,649.1	-992.1	5,972.6	R 12,629.6
1992	—	R 1,038.2	R 1,038.2	768.8	1,087.1	116.4	416.7	R 3,634.5	116.5	R 413.5	R 5,784.7	122.8	R 54.2	R 7,768.8	-1,043.7	6,212.8	R 12,937.9
1993	—	R 1,096.1	R 1,096.1	891.0	1,090.6	114.2	416.8	R 3,711.7	119.3	R 432.2	R 5,884.8	123.0	R 56.6	R 8,051.4	-1,118.3	6,618.8	R 13,551.9
1994	—	979.6	979.6	914.9	1,160.5	95.0	426.5	R 3,800.8	99.1	R 427.5	R 6,009.5	169.1	R 66.0	R 8,139.1	-1,043.4	6,610.8	R 13,706.5
1995	—	R 986.2	R 986.2	925.5	1,267.7	109.3	428.9	4,009.0	111.6	R 481.2	R 6,407.7	196.4	R 74.1	R 8,589.8	-1,084.4	6,884.9	R 14,390.3
1996	—	1,036.5	1,036.5	1,158.9	1,482.0	247.2	540.7	4,392.6	140.8	488.7	7,291.9	168.5	73.9	9,729.8	-1,116.2	7,074.6	15,688.1
1997	—	1,066.6	1,066.6	1,275.3	1,479.0	179.3	537.9	4,538.1	115.2	482.5	7,332.2	160.9	68.7	9,903.7	-1,148.8	7,068.2	15,823.1

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 210. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, North Carolina

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.14	1.27	1.31	1.40	2.28	1.44	0.73	R 1.38	5.45	R 2.36
1975	2.06	1.99	2.71	2.96	4.32	2.97	1.45	R 2.63	9.31	R 5.03
1980	2.70	4.06	6.95	7.96	7.67	7.30	3.70	R 6.04	13.91	R 9.47
1981	3.32	5.11	8.64	10.02	8.68	8.93	4.56	R 7.25	15.96	R 11.42
1982	2.90	5.55	8.38	10.00	9.75	9.01	4.42	R 7.37	18.50	R 12.72
1983	2.76	6.44	7.98	R 7.18	10.09	R 8.33	4.28	R 7.34	19.42	R 13.29
1984	2.97	6.46	7.93	R 7.35	10.43	R 8.39	4.35	R 7.32	19.57	R 13.36
1985	2.75	6.38	8.02	R 6.98	10.27	R 8.06	4.18	R 7.19	20.48	R 13.50
1986	2.60	6.41	6.35	R 5.94	9.44	R 6.82	3.35	R 6.38	21.17	R 13.77
1987	2.69	6.46	5.30	R 6.86	9.20	R 6.58	3.20	R 6.30	21.59	R 13.86
1988	2.53	6.07	5.54	R 6.69	8.81	R 6.54	3.23	R 6.14	21.89	R 13.76
1989	2.87	6.35	6.36	R 6.51	9.63	R 7.34	3.57	R 6.70	22.45	R 14.65
1990	2.78	5.98	7.95	R 8.10	11.22	R 9.12	3.53	R 7.34	22.99	R 16.15
1991	2.58	6.05	7.48	R 8.23	11.67	R 9.23	3.37	R 7.40	23.29	R 16.31
1992	2.65	6.38	7.06	R 7.17	10.29	R 8.33	3.08	R 7.06	23.78	R 16.01
1993	2.79	6.75	7.07	R 7.34	11.03	R 8.64	3.02	R 7.33	23.97	R 16.29
1994	2.73	7.05	6.01	R 7.04	11.27	R 8.46	2.93	7.30	23.95	R 16.41
1995	2.62	6.71	6.28	R 5.67	11.39	R 8.09	2.87	R 7.04	23.79	R 16.02
1996	2.63	7.33	7.17	5.85	12.79	8.93	3.29	7.78	23.59	15.94
1997	2.51	8.67	6.87	5.59	12.67	8.84	3.27	8.41	23.55	16.50
	Expenditures in Million Nominal Dollars									
1970	4.1	35.6	65.9	79.8	25.9	171.6	4.4	R 215.7	272.5	R 488.3
1975	6.3	55.6	114.6	82.2	36.0	232.8	9.0	R 303.6	603.3	R 906.8
1980	3.9	139.6	285.2	124.0	80.2	489.4	17.7	R 650.7	1,156.6	R 1,807.3
1981	3.9	171.0	277.5	110.2	88.0	475.6	22.1	R 672.6	1,357.7	R 2,030.2
1982	3.9	181.0	239.7	114.9	88.9	443.5	23.1	R 651.4	1,515.4	R 2,166.8
1983	3.1	207.9	259.5	R 49.4	109.3	R 418.2	22.1	R 651.3	1,672.2	R 2,323.5
1984	3.1	216.4	264.3	R 53.8	118.7	R 436.8	33.4	R 689.8	1,797.8	R 2,487.5
1985	4.7	189.1	228.0	R 158.1	118.2	R 504.3	31.3	R 729.4	1,876.5	R 2,605.9
1986	3.5	209.8	184.1	R 111.9	109.3	R 405.2	24.4	R 643.0	2,131.4	R 2,774.5
1987	3.8	239.1	175.5	R 124.8	130.5	R 430.8	19.5	R 693.2	2,321.2	R 3,014.5
1988	4.5	239.9	185.0	R 154.8	115.6	R 455.4	20.4	R 720.2	2,406.0	R 3,126.2
1989	3.8	253.2	173.1	R 111.1	171.1	R 455.4	23.5	R 735.9	2,511.0	R 3,246.9
1990	3.8	216.0	164.6	R 64.6	173.9	R 403.2	21.3	R 644.3	2,599.4	R 3,243.7
1991	2.2	237.0	139.6	R 78.1	201.9	R 419.6	21.4	R 680.2	2,732.7	R 3,412.9
1992	4.7	281.1	144.0	R 74.6	200.5	R 419.1	20.6	R 725.5	2,819.9	R 3,545.4
1993	5.6	329.3	152.5	R 78.6	220.8	R 451.9	22.0	R 808.7	3,086.2	R 3,894.9
1994	6.3	346.4	114.1	R 52.2	228.1	R 394.5	20.9	R 768.0	3,041.0	R 3,809.0
1995	5.2	342.2	142.5	R 67.4	241.5	R 451.4	22.8	R 821.5	3,207.3	R 4,028.8
1996	4.7	446.4	180.3	84.4	295.0	559.8	26.0	1,036.9	3,348.3	4,385.2
1997	4.2	475.0	141.5	82.6	292.5	516.5	18.9	1,014.6	3,262.7	4,277.3

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 211. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, North Carolina

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.53	0.94	1.02	0.77	1.41	2.82	0.67	1.23	0.73	0.98	4.60	2.51
1975	1.53	1.71	2.34	2.37	2.67	4.55	1.79	2.66	1.45	2.01	8.46	R 5.15
1980	1.71	3.67	6.33	6.12	5.24	9.91	3.80	6.58	3.70	R 4.72	12.28	8.50
1981	1.86	4.66	7.86	7.22	6.42	11.05	4.63	8.45	4.56	5.80	14.03	10.33
1982	2.02	5.07	7.51	7.45	6.18	10.52	4.33	7.94	4.42	R 5.72	16.20	R 11.73
1983	1.79	5.82	6.44	R 7.18	6.59	9.18	4.44	R 6.78	4.28	6.10	16.92	R 11.71
1984	R 1.94	5.87	6.51	R 7.35	6.70	8.93	4.85	R 7.11	4.35	R 6.36	17.67	R 12.20
1985	1.90	5.65	6.10	R 6.98	9.61	9.03	4.46	R 6.71	NA	R 5.91	18.18	12.68
1986	1.83	5.39	3.79	R 5.94	8.96	6.69	2.74	R 4.74	NA	R 4.93	18.79	13.01
1987	1.75	5.05	4.11	R 6.86	8.57	7.33	2.95	R 5.13	NA	R 4.94	18.45	R 12.57
1988	1.74	4.80	3.72	R 6.69	8.97	7.26	2.36	R 4.71	NA	R 4.60	18.35	R 12.20
1989	1.71	4.99	4.31	R 6.51	8.14	8.10	2.75	R 5.40	NA	R 5.01	18.44	R 12.84
1990	1.80	4.49	5.41	R 8.10	9.69	9.44	3.16	R 6.73	NA	R 5.18	18.93	R 13.62
1991	1.71	4.39	4.93	R 8.23	11.01	9.23	2.42	R 6.52	NA	R 4.98	19.11	R 13.82
1992	1.73	4.63	4.72	R 7.17	10.44	8.96	2.49	R 6.37	NA	4.94	19.51	13.95
1993	1.73	5.32	4.51	R 7.34	8.60	8.68	2.36	R 5.26	3.02	R 5.03	19.41	R 13.94
1994	1.74	5.37	4.27	R 7.04	9.23	8.67	2.47	R 5.42	2.93	R 5.12	19.29	R 13.75
1995	1.71	5.07	4.27	R 5.67	9.49	8.83	2.81	R 5.33	2.87	R 4.93	19.09	R 13.86
1996	1.72	5.97	5.14	5.85	10.31	9.49	3.24	6.19	3.29	5.82	18.83	13.77
1997	1.72	6.76	4.97	5.59	10.53	9.50	3.01	6.01	3.27	6.23	18.91	14.18
	Expenditures in Million Nominal Dollars											
1970	3.6	20.7	10.1	1.0	2.8	5.3	0.8	20.0	(s)	R 44.4	152.2	R 196.6
1975	8.6	37.7	19.4	1.6	3.9	9.9	2.6	37.4	(s)	R 83.9	337.0	R 421.0
1980	4.6	97.1	61.7	4.1	9.7	41.1	11.7	128.3	(s)	R 230.5	597.4	R 827.9
1981	4.1	124.4	61.5	1.8	11.5	46.5	3.0	124.3	0.5	R 253.3	750.4	R 1,003.7
1982	5.0	130.4	38.8	1.4	9.9	38.1	5.0	93.2	0.6	R 229.2	871.2	R 1,100.3
1983	3.7	148.4	110.0	R 3.8	12.6	32.0	4.7	R 163.1	0.5	R 315.8	944.5	R 1,260.3
1984	R 3.7	159.0	114.1	R 1.7	13.5	71.5	7.0	R 207.8	0.8	R 371.3	1,101.0	R 1,472.2
1985	6.0	146.2	94.1	R 9.7	19.5	30.0	9.0	R 162.3	NA	R 314.5	1,188.9	R 1,503.4
1986	4.6	141.7	53.4	R 5.8	18.3	22.8	4.1	R 104.3	NA	R 250.7	1,337.2	R 1,587.8
1987	4.6	156.4	70.2	R 5.3	21.5	R 27.9	1.2	R 126.0	NA	R 287.0	1,392.0	R 1,679.0
1988	5.8	160.4	66.9	R 9.8	20.8	R 26.0	4.2	R 127.6	NA	R 293.8	1,447.0	R 1,740.8
1989	4.2	170.4	59.1	R 6.5	25.5	26.6	3.9	R 121.6	NA	R 296.2	1,526.9	R 1,823.2
1990	4.6	144.8	61.1	R 3.6	26.5	R 38.8	4.5	R 134.5	NA	R 283.9	1,648.2	R 1,932.1
1991	2.7	155.4	52.3	R 4.4	33.6	18.2	1.8	R 110.2	NA	R 268.4	1,722.3	R 1,990.7
1992	5.7	174.4	45.0	R 1.9	35.9	15.2	1.8	R 99.8	NA	R 280.0	1,791.1	R 2,071.1
1993	6.4	205.9	49.5	R 2.1	30.4	2.7	4.3	R 89.0	1.8	R 301.3	1,891.0	R 2,192.4
1994	7.4	216.5	48.8	R 13.6	33.0	3.6	4.2	R 103.0	1.8	R 328.7	1,927.3	R 2,256.0
1995	6.3	195.8	56.5	R 4.7	35.5	2.8	3.3	R 102.9	1.7	R 306.6	2,025.9	R 2,332.5
1996	5.7	250.1	85.7	5.9	42.0	15.6	4.6	153.7	2.1	411.7	2,092.5	2,504.2
1997	5.4	266.1	85.5	6.5	42.9	8.8	3.3	146.9	1.8	420.3	2,151.0	2,571.3

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
(s)=Value less than 0.05 million nominal dollars.

NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 212. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, North Carolina

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	0.53	0.53	0.50	0.67	0.71	0.77	1.41	5.08	2.82	0.45	R 0.89	R 0.85	—	R 0.65	2.76	R 1.02
1975	—	1.53	1.53	1.34	1.80	2.19	2.37	2.67	7.48	4.55	1.92	R 2.04	R 2.27	—	R 1.82	6.36	R 2.89
1980	—	1.71	1.71	3.32	3.57	5.49	6.12	5.24	14.36	9.91	3.72	R 7.12	R 5.00	R 1.44	R 3.88	9.28	R 5.18
1981	—	1.86	1.86	4.36	4.79	6.52	7.22	6.42	18.00	11.05	4.81	R 7.06	R 6.32	R 1.44	R 4.60	10.24	R 6.03
1982	—	2.02	2.02	4.49	4.11	6.76	7.45	6.18	17.25	10.52	4.39	R 6.78	R 6.02	R 1.44	R 4.50	11.93	R 6.36
1983	—	1.79	1.79	5.01	4.09	6.70	R 6.82	6.59	16.98	9.18	4.37	R 7.61	R 5.83	R 1.44	R 4.51	12.24	R 6.50
1984	—	R 1.94	R 1.94	5.14	4.49	6.56	R 6.94	6.70	17.63	8.93	4.85	R 7.34	R 5.97	R 1.44	R 4.72	13.64	R 6.95
1985	—	1.90	1.90	4.75	4.94	6.36	R 6.68	9.61	17.61	9.03	4.46	R 6.75	R 6.30	R 1.44	R 4.62	13.83	R 6.96
1986	—	1.83	1.83	3.87	4.22	4.34	R 4.69	8.96	15.59	6.69	2.74	R 4.73	R 4.68	R 1.75	R 3.76	14.39	R 6.38
1987	—	1.75	1.75	3.65	3.23	4.43	R 4.49	8.57	13.58	7.33	2.95	R 4.93	R 4.76	R 1.75	R 3.67	13.80	R 6.34
1988	—	1.74	1.74	3.47	3.18	4.06	R 4.23	8.97	14.62	7.26	2.36	R 4.07	R 4.33	R 1.75	R 3.42	13.60	R 6.20
1989	—	1.71	1.71	3.53	2.89	4.83	R 5.15	8.14	14.48	8.10	2.75	R 4.78	R 4.72	d R 1.33	d R 3.47	13.83	d R 6.33
1990	—	1.80	1.80	3.36	2.95	5.77	R 6.74	9.69	14.60	9.44	3.16	R 5.12	R 5.17	R 1.33	R 3.57	13.99	R 6.28
1991	—	1.71	1.71	3.14	3.08	5.26	R 5.83	11.01	16.80	9.23	2.42	R 4.89	R 5.18	R 1.37	R 3.54	14.11	R 6.31
1992	—	1.73	1.73	3.23	2.32	4.99	R 5.05	10.44	18.32	8.96	2.49	R 4.82	R 4.74	1.35	R 3.41	14.44	R 6.17
1993	—	1.73	1.73	3.61	2.88	4.81	R 4.71	8.60	18.96	8.68	2.36	R 4.60	R 4.52	1.33	R 3.49	14.37	R 6.27
1994	—	1.74	1.74	3.55	2.86	4.64	R 4.65	7.86	19.11	8.67	2.47	R 4.53	R 4.59	R 1.45	R 3.48	14.45	R 6.28
1995	—	1.71	1.71	3.45	3.25	4.50	R 4.37	7.97	R 19.41	8.83	2.81	R 4.66	R 4.66	R 1.46	R 3.50	14.21	R 6.08
1996	—	1.72	1.72	4.22	3.30	5.40	5.45	9.25	20.08	9.49	3.24	5.73	5.53	1.36	4.09	14.02	6.56
1997	—	1.72	1.72	4.50	3.57	5.14	5.05	8.99	17.86	9.50	3.01	5.21	5.38	1.39	4.13	13.82	6.58
	Expenditures in Million Nominal Dollars																
1970	—	28.7	28.7	38.4	16.1	18.6	5.8	10.1	10.1	14.9	16.5	7.1	99.1	—	166.3	151.4	317.7
1975	—	53.2	53.2	84.6	36.4	54.6	10.9	36.6	20.2	18.7	85.1	20.5	282.9	—	420.7	452.8	873.6
1980	—	57.3	57.3	287.1	73.3	132.0	13.7	88.2	49.7	26.8	197.3	108.7	689.7	R 19.4	R 1,053.5	799.8	R 1,853.3
1981	—	78.3	78.3	379.3	68.7	124.9	15.2	96.3	59.8	28.3	154.3	117.7	665.1	R 20.5	R 1,143.2	863.1	R 2,006.3
1982	—	80.3	80.3	355.8	60.2	119.9	11.6	83.9	52.2	24.0	118.1	89.7	559.4	R 19.9	R 1,015.4	902.2	R 1,917.6
1983	—	83.0	83.0	386.3	87.2	115.1	R 9.3	78.2	53.9	18.6	153.6	88.3	R 604.3	R 22.4	R 1,096.0	1,028.3	R 2,124.3
1984	—	R 95.6	R 95.6	422.7	114.7	115.6	R 7.1	69.1	59.6	43.5	232.8	98.0	R 740.5	R 22.9	R 1,281.6	1,231.7	R 2,513.3
1985	—	106.1	106.1	367.2	113.2	120.0	R 20.3	124.8	55.5	39.5	163.0	84.7	R 720.9	R 22.8	R 1,217.0	1,239.9	R 2,456.9
1986	—	R 116.4	R 116.4	289.8	127.0	116.0	R 11.8	110.2	48.0	28.6	102.7	95.8	R 640.3	R 11.0	R 1,057.5	1,329.2	R 2,386.7
1987	—	110.3	110.3	278.7	86.3	97.9	R 8.0	127.2	47.3	R 31.7	88.0	109.1	R 595.5	R 10.9	R 995.5	1,338.5	R 2,334.0
1988	—	109.4	109.4	258.9	94.8	87.7	R 11.2	108.6	49.1	28.2	67.1	93.0	R 539.6	R 11.4	R 919.4	1,375.3	R 2,294.6
1989	—	108.5	108.5	289.3	72.3	99.7	R 5.4	R 97.4	49.9	35.6	66.4	105.0	R 531.6	d R 21.5	d R 951.0	1,441.5	d R 2,392.5
1990	—	133.2	133.2	287.9	82.4	97.5	R 5.3	R 120.1	51.8	R 40.0	88.1	129.3	R 614.4	R 25.2	R 1,060.7	1,467.3	R 2,528.0
1991	—	116.3	116.3	275.0	78.2	91.2	R 5.6	178.6	53.3	41.7	79.9	122.8	R 651.3	R 29.6	R 1,072.2	1,517.6	R 2,589.8
1992	—	R 124.3	R 124.3	303.9	65.4	93.1	R 4.2	R 174.9	59.2	38.5	105.7	135.8	R 676.7	R 33.6	R 1,138.5	1,601.8	R 2,740.3
1993	—	107.6	107.6	345.2	88.9	88.0	R 4.2	160.8	62.4	38.5	109.5	121.7	R 674.1	R 34.6	R 1,161.5	1,641.6	R 2,803.1
1994	—	104.5	104.5	349.0	91.6	84.3	R 2.2	157.2	65.8	R 40.5	92.0	123.6	R 657.1	R 43.4	R 1,154.0	1,642.5	R 2,796.5
1995	—	105.5	105.5	380.0	138.5	117.7	R 2.8	147.6	R 65.7	45.3	103.6	123.1	R 744.4	R 49.6	R 1,279.5	1,651.7	R 2,931.2
1996	—	101.3	101.3	455.0	88.5	139.5	5.1	199.6	65.9	50.0	130.3	158.6	837.4	45.7	1,439.5	1,633.8	3,073.2
1997	—	95.3	95.3	519.7	98.8	124.1	4.6	199.0	62.0	52.0	107.2	151.8	799.3	48.0	1,462.3	1,654.5	3,116.8

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.

R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 213. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, North Carolina

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.53	—	2.17	1.30	0.73	1.41	5.08	2.82	0.27	2.52	2.52	—	2.52
1975	1.53	—	3.45	3.12	2.03	2.67	7.48	4.55	1.56	4.27	4.27	—	4.27
1980	—	—	9.02	7.34	6.46	5.24	14.36	9.91	3.43	9.35	9.35	—	9.35
1981	—	—	10.84	8.88	7.61	6.42	18.00	11.05	4.16	10.53	10.53	—	10.53
1982	—	—	10.92	8.57	7.18	6.18	17.25	10.52	3.96	10.03	10.03	—	10.03
1983	—	—	10.44	7.83	6.40	6.59	16.98	9.18	4.17	8.81	8.81	—	8.81
1984	—	—	10.27	7.80	6.17	6.70	17.63	8.93	4.47	8.60	8.60	—	8.60
1985	—	—	9.99	7.66	5.77	9.61	17.61	9.03	3.78	8.62	8.62	—	8.62
1986	—	—	8.41	6.26	3.85	8.96	15.59	6.69	1.80	6.46	6.46	—	6.46
1987	—	—	7.55	6.70	3.96	8.57	13.58	7.33	2.83	6.97	6.97	—	6.97
1988	—	—	7.41	6.41	3.71	8.97	14.62	7.26	2.07	6.84	6.84	—	6.84
1989	—	—	8.28	7.05	4.30	8.14	14.48	8.10	2.37	7.62	7.62	—	7.62
1990	—	4.42	9.32	8.75	5.65	9.69	14.60	9.44	2.65	9.10	9.10	—	9.10
1991	—	4.51	8.71	8.37	4.79	11.01	16.80	9.23	2.00	8.86	8.86	—	8.86
1992	—	4.91	8.54	8.01	4.48	10.44	18.32	8.96	2.19	8.58	8.58	—	8.58
1993	—	2.51	8.24	7.82	4.19	8.60	18.96	8.68	2.04	8.34	8.34	—	8.34
1994	—	4.29	7.96	7.83	3.87	8.18	19.11	8.67	2.20	8.35	8.35	—	8.35
1995	—	4.13	8.36	7.81	3.90	8.50	R 19.41	8.83	2.48	8.44	8.44	—	8.44
1996	—	—	9.29	8.59	4.78	8.51	20.08	9.49	2.83	8.97	8.97	—	8.97
1997	—	—	9.39	8.45	4.42	8.01	17.86	9.50	2.68	9.00	9.00	—	9.00
	Expenditures in Million Nominal Dollars												
1970	(s)	—	1.7	47.8	18.7	R (s)	16.1	815.5	0.6	900.7	900.7	—	900.7
1975	(s)	—	3.8	149.2	42.3	1.1	22.6	1,570.5	2.6	1,792.1	1,792.1	—	1,792.1
1980	—	—	9.8	457.5	185.3	1.0	55.3	3,381.0	2.1	4,092.0	4,092.0	—	4,092.0
1981	—	—	14.7	548.3	223.6	3.3	66.5	3,785.6	11.0	4,652.9	4,652.9	—	4,652.9
1982	—	—	10.2	543.3	228.2	3.2	58.1	3,578.4	6.0	4,427.3	4,427.3	—	4,427.3
1983	—	—	9.9	580.3	227.7	4.1	59.9	3,190.9	1.1	4,073.9	4,073.9	—	4,073.9
1984	—	—	8.7	634.6	219.0	5.0	66.3	3,165.3	1.2	R 4,100.0	R 4,100.0	—	R 4,100.0
1985	—	—	8.8	607.6	213.6	6.3	61.7	R 3,293.3	2.3	R 4,193.7	R 4,193.7	—	R 4,193.7
1986	—	—	9.6	556.9	152.9	5.5	53.4	2,550.3	1.5	R 3,330.1	R 3,330.1	—	R 3,330.1
1987	—	—	8.3	605.5	171.2	3.9	52.6	R 2,895.2	11.6	R 3,748.2	R 3,748.2	—	R 3,748.2
1988	—	—	8.8	693.0	172.1	4.9	54.6	R 2,957.6	5.4	R 3,896.4	R 3,896.4	—	R 3,896.4
1989	—	—	9.6	653.0	184.0	4.6	55.5	R 3,249.9	10.0	R 4,166.6	R 4,166.6	—	R 4,166.6
1990	—	(s)	10.0	830.4	174.2	R 5.6	57.5	R 3,767.2	8.7	R 4,853.6	R 4,853.6	—	R 4,853.6
1991	—	(s)	7.5	760.4	116.3	7.4	59.2	R 3,676.0	9.4	R 4,636.2	R 4,636.2	—	R 4,636.2
1992	—	(s)	6.6	797.0	116.4	5.4	65.8	R 3,580.8	9.1	R 4,581.1	R 4,581.1	—	R 4,581.1
1993	—	(s)	4.9	792.3	114.2	4.8	69.4	R 3,670.5	5.5	R 4,661.6	R 4,661.6	—	R 4,661.6
1994	—	(s)	5.5	903.4	95.0	8.3	73.1	R 3,756.7	2.9	R 4,844.9	R 4,844.9	—	R 4,844.9
1995	—	(s)	5.9	939.7	109.3	4.3	R 73.0	R 3,960.8	4.7	R 5,097.8	5,097.8	—	5,097.8
1996	—	—	6.9	1,061.0	247.2	4.1	73.3	4,327.1	5.9	5,725.5	5,725.5	—	5,725.5
1997	—	—	7.5	1,116.3	179.3	3.5	68.9	4,477.4	4.8	5,857.8	5,857.8	—	5,857.8

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 214. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, North Carolina

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.41	0.37	0.69	0.83	—	0.79	—	—	0.41
1975	1.07	1.41	1.78	2.22	—	1.89	0.29	—	1.05
1980	1.57	3.15	3.82	5.82	—	5.82	0.36	—	1.48
1981	1.73	4.48	—	7.37	—	7.37	0.37	—	1.62
1982	1.88	4.48	4.36	7.06	—	7.05	0.41	—	1.68
1983	1.89	4.70	—	5.98	—	5.98	0.44	—	1.62
1984	1.95	5.21	4.64	5.91	—	5.91	0.58	—	1.55
1985	1.98	4.78	—	5.68	—	5.68	0.54	—	1.56
1986	1.85	2.74	—	3.48	—	3.48	0.53	—	1.46
1987	1.79	3.09	—	3.91	—	3.91	0.56	—	1.29
1988	1.78	3.37	—	3.49	—	3.49	0.59	—	1.30
1989	1.77	3.46	—	3.99	—	3.99	0.55	—	1.31
1990	1.78	3.10	—	5.12	—	5.12	0.54	—	1.33
1991	1.78	2.68	—	4.74	—	4.74	0.52	—	1.27
1992	1.73	2.86	—	4.41	—	4.41	0.51	—	1.35
1993	1.70	3.52	—	4.05	—	4.05	0.48	—	1.34
1994	1.68	3.26	—	3.84	—	3.84	0.49	—	1.21
1995	1.63	2.33	—	3.82	—	3.82	0.51	—	1.18
1996	1.48	3.01	—	4.68	—	4.68	0.47	—	1.13
1997	1.43	3.11	—	4.28	—	4.28	0.47	—	1.12
	Expenditures in Million Nominal Dollars								
1970	173.8	8.0	1.9	6.9	—	8.9	—	—	190.7
1975	465.1	R (s)	2.6	1.2	—	3.9	4.4	—	473.6
1980	919.7	5.5	(s)	19.0	—	19.0	22.9	—	967.2
1981	1,055.0	4.2	—	20.6	—	20.6	25.5	—	1,105.3
1982	1,084.8	R (s)	(s)	13.6	—	13.6	41.5	—	1,140.2
1983	1,030.2	0.8	—	16.2	—	16.2	58.8	—	1,105.9
1984	987.6	0.7	(s)	11.6	—	11.6	127.5	—	1,127.3
1985	967.8	2.9	—	14.7	—	14.7	111.8	—	1,097.2
1986	953.1	3.2	—	7.1	—	7.1	115.7	—	1,079.1
1987	775.2	3.7	—	9.9	—	9.9	171.2	—	960.0
1988	793.1	3.7	—	9.3	—	9.3	183.3	—	989.4
1989	865.7	6.0	—	12.9	—	12.9	173.4	—	1,058.0
1990	804.0	7.9	—	11.1	—	11.1	150.4	—	973.5
1991	804.4	8.3	—	9.6	—	9.6	169.8	—	992.1
1992	903.5	9.4	—	8.1	—	8.1	122.8	—	1,043.7
1993	976.5	10.6	—	8.3	—	8.3	123.0	—	1,118.3
1994	861.4	2.9	—	10.0	—	10.0	169.1	—	1,043.4
1995	869.2	7.6	—	11.2	—	11.2	196.4	—	1,084.4
1996	924.8	7.4	—	15.5	—	15.5	168.5	—	1,116.2
1997	961.7	14.5	—	11.6	—	11.6	160.9	—	1,148.8

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 215. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, North Dakota

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.34	0.34	0.78	1.07	0.75	1.87	2.83	0.91	R 1.25	R 1.85	—	R 0.61	R 1.27	0.25	7.04	R 1.98
1975	—	0.42	0.42	1.26	2.66	2.09	3.29	4.69	1.80	R 2.71	R 3.58	—	R 1.20	R 2.24	0.27	8.57	R 3.49
1980	—	0.67	0.67	3.41	6.59	6.47	6.12	9.97	3.58	R 5.79	R 7.78	—	R 3.06	R 3.66	0.57	11.96	R 7.32
1981	—	0.78	0.78	3.81	7.75	7.60	6.52	11.02	3.92	R 7.68	R 8.86	—	R 3.77	R 4.09	0.70	14.00	R 8.48
1982	—	0.92	0.92	4.24	7.70	7.19	6.22	10.52	4.14	R 6.70	R 8.54	—	R 3.66	R 3.78	0.82	15.58	R 8.35
1983	—	0.93	0.93	5.04	7.06	6.91	6.50	9.75	3.94	R 6.32	R 7.89	—	R 3.54	R 3.48	0.84	16.85	R 8.23
1984	—	R 1.17	R 1.17	5.52	7.08	6.83	6.43	9.51	4.13	R 6.73	R 7.93	—	R 3.60	R 3.39	0.89	16.90	R 7.77
1985	—	R 1.45	R 1.45	4.97	6.78	6.44	8.59	9.64	3.49	R 6.60	R 7.91	—	R 3.46	R 3.29	0.89	17.11	R 7.07
1986	—	R 1.42	R 1.42	4.73	5.09	4.90	7.68	6.92	1.93	R 5.76	R 5.95	—	R 2.77	2.72	0.83	17.30	R 5.93
1987	—	1.35	1.35	4.65	5.73	4.64	5.47	7.53	1.61	R 5.33	R 6.33	—	R 2.64	R 2.70	0.80	17.15	R 5.88
1988	—	R 1.14	R 1.14	4.34	5.63	4.37	5.23	8.05	2.49	R 5.15	R 6.47	—	R 2.67	2.43	0.71	16.93	R 5.96
1989	—	1.21	1.21	4.08	6.17	4.77	5.54	8.88	2.58	R 4.91	R 7.02	—	e R 2.95	e R 2.62	0.70	16.74	e R 6.07
1990	—	R 1.16	R 1.16	4.12	7.41	6.11	7.18	9.87	2.64	R 5.33	R 8.14	—	3.56	R 2.72	0.69	16.87	R 6.59
1991	—	1.16	1.16	4.15	6.77	5.17	7.95	9.57	2.35	R 5.60	R 7.79	—	R 3.41	R 2.70	0.71	16.88	R 6.51
1992	—	1.18	1.18	4.24	6.61	4.89	7.44	9.29	2.30	R 4.12	R 7.30	—	R 3.12	2.59	0.73	17.04	R 6.18
1993	—	R 1.00	R 1.00	4.41	6.72	4.81	7.59	9.34	2.37	R 5.43	R 7.56	—	R 2.82	R 2.51	0.72	17.09	R 6.08
1994	—	R 1.04	R 1.04	4.29	6.55	4.57	7.26	9.12	2.51	R 4.91	R 7.31	—	R 2.83	R 2.51	R 0.72	16.95	R 6.05
1995	—	R 1.08	R 1.08	3.81	6.48	4.54	7.30	9.11	2.38	R 6.10	R 7.53	—	R 2.65	R 2.55	0.74	16.74	R 5.99
1996	—	1.02	1.02	3.77	7.64	5.23	9.20	9.77	2.94	5.79	8.44	—	3.23	2.69	0.75	16.57	6.47
1997	—	1.06	1.06	3.73	6.81	5.15	9.36	9.61	3.05	5.20	7.93	—	3.21	2.71	0.79	16.59	6.25
	Expenditures in Million Nominal Dollars																
1970	—	19.5	19.5	14.9	30.9	8.3	12.1	130.2	3.2	R 15.7	R 200.5	—	R (s)	R 235.1	-12.3	67.3	R 290.0
1975	—	28.8	28.8	31.1	68.8	20.9	19.3	247.6	10.0	R 24.8	R 391.5	—	R (s)	R 451.5	-15.8	108.0	R 543.7
1980	—	110.2	110.2	77.6	312.6	59.7	29.0	480.1	13.6	R 39.5	R 934.5	—	R 1.5	R 1,123.8	-87.9	210.2	R 1,246.1
1981	—	133.8	133.8	78.3	346.8	67.0	34.3	551.1	22.1	R 49.5	R 1,070.8	—	R 1.8	R 1,284.7	-115.6	263.6	R 1,432.7
1982	—	182.7	182.7	104.8	325.0	61.5	32.0	516.2	25.2	R 43.5	R 1,003.3	—	R 1.9	R 1,292.7	-154.9	314.6	R 1,452.4
1983	—	197.8	197.8	111.4	282.0	55.7	33.9	461.8	25.6	R 54.8	R 913.9	—	R 1.9	R 1,224.9	-170.9	327.2	R 1,381.2
1984	—	R 300.5	R 300.5	143.3	308.4	62.8	10.9	443.2	15.3	R 55.2	R 895.8	—	R 1.7	R 1,341.3	-198.5	386.1	R 1,528.9
1985	—	R 438.9	R 438.9	118.4	296.0	58.3	16.7	R 446.8	6.2	R 55.0	R 879.2	—	R 1.6	R 1,437.9	-203.4	407.5	1,642.0
1986	—	R 440.8	R 440.8	103.3	219.2	43.5	47.7	311.7	3.1	R 40.7	R 665.9	—	R 1.2	R 1,211.2	-188.0	401.2	R 1,424.4
1987	—	R 430.9	R 430.9	89.4	227.5	31.5	35.0	R 349.6	2.6	R 38.1	R 684.2	—	R 1.0	R 1,205.5	-183.8	383.2	R 1,405.0
1988	—	R 423.1	R 423.1	103.4	221.9	31.0	30.3	R 363.2	4.0	R 39.3	R 689.8	—	R 1.1	R 1,217.4	-201.8	407.3	R 1,422.9
1989	—	R 436.7	R 436.7	105.4	251.8	34.5	34.8	R 391.9	3.5	R 36.5	R 752.9	—	e R 1.2	e R 1,297.1	R -190.2	400.6	e R 1,507.4
1990	—	R 434.8	R 434.8	98.9	291.8	39.0	36.3	R 422.5	4.0	R 35.6	R 829.3	—	1.9	R 1,365.5	R -198.8	401.1	R 1,567.8
1991	—	439.9	439.9	110.1	292.3	27.0	57.5	R 415.0	2.8	R 35.5	R 830.2	—	R 1.9	R 1,379.1	R -206.5	415.4	R 1,588.0
1992	—	R 472.0	R 472.0	109.8	270.6	37.1	47.4	R 401.8	2.7	R 45.0	R 804.6	—	R 1.8	R 1,390.0	R -222.6	411.7	R 1,579.1
1993	—	R 398.2	R 398.2	125.2	290.9	32.6	37.2	R 416.4	4.0	R 40.5	R 821.6	—	R 1.5	R 1,346.8	R -220.6	430.6	R 1,556.8
1994	—	R 419.6	R 419.6	120.4	318.0	21.1	34.2	R 401.9	3.5	R 47.3	R 826.0	—	R 1.6	R 1,370.7	R -221.5	441.2	R 1,590.3
1995	—	R 432.7	R 432.7	114.2	322.4	8.5	45.8	413.8	1.4	R 40.6	R 832.4	—	R 1.7	R 1,382.2	R -222.5	447.7	R 1,607.4
1996	—	413.5	413.5	126.1	378.4	7.3	65.4	445.7	1.3	42.6	940.6	—	1.9	1,485.1	-237.4	467.5	1,715.2
1997	—	411.1	411.1	163.1	334.2	5.5	67.5	435.7	1.9	49.5	894.3	—	1.4	1,467.4	-233.9	465.7	1,699.2

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 216. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, North Dakota

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.56	0.99	1.28	1.65	2.07	1.62	0.61	1.37	7.80	R 2.53
1975	3.09	1.51	2.55	2.69	3.51	3.02	1.20	2.25	9.18	R 3.94
1980	1.96	3.66	6.92	7.39	7.48	7.04	3.06	R 5.07	13.14	R 7.45
1981	1.17	4.10	8.30	9.04	7.54	8.10	3.77	R 5.77	15.12	R 8.76
1982	2.78	4.50	8.07	9.04	7.91	8.05	3.66	R 5.63	16.51	R 9.29
1983	2.17	5.33	7.80	R 7.70	7.92	R 7.82	3.54	R 6.03	17.91	R 9.95
1984	2.73	6.08	7.67	R 7.93	8.22	7.72	3.60	R 6.37	17.76	R 10.40
1985	1.74	5.26	7.48	R 7.85	8.46	7.57	3.46	R 5.91	18.02	R 10.08
1986	1.53	5.08	4.84	R 6.32	6.13	R 5.20	2.77	R 4.93	18.20	R 9.46
1987	1.45	5.22	5.34	R 6.47	5.13	5.28	2.64	R 5.08	18.44	R 9.89
1988	1.15	4.88	4.66	R 6.35	5.24	R 4.86	2.67	R 4.70	18.26	R 9.48
1989	1.13	4.46	5.55	R 6.91	7.32	6.20	2.95	R 5.03	18.01	R 9.48
1990	1.10	4.55	6.87	R 8.28	7.98	7.23	3.56	5.49	18.33	R 10.10
1991	1.45	4.61	6.38	R 7.52	7.09	R 6.67	3.41	5.35	18.21	R 9.67
1992	1.11	4.78	5.21	R 7.13	7.01	R 6.14	3.12	R 5.16	18.55	R 9.86
1993	0.92	4.93	6.05	R 6.28	6.26	R 6.13	3.05	R 5.18	18.50	R 9.93
1994	0.92	4.91	6.12	R 6.00	7.13	R 6.49	2.96	R 5.27	18.67	R 10.15
1995	1.12	4.44	6.12	R 4.97	6.91	R 6.42	2.90	R 5.02	18.25	R 9.83
1996	0.24	4.32	7.00	6.00	9.24	7.91	3.33	5.45	18.15	9.91
1997	0.51	4.75	6.89	5.62	9.73	8.22	3.31	5.79	18.39	10.43
	Expenditures in Million Nominal Dollars									
1970	1.2	8.4	8.2	1.8	10.0	20.0	(s)	29.6	37.2	66.8
1975	2.3	15.4	11.5	R (s)	15.4	27.3	(s)	R 45.0	59.5	R 104.5
1980	1.3	37.1	47.3	R (s)	14.0	61.6	1.5	R 101.5	110.1	R 211.6
1981	0.9	38.3	51.5	0.7	17.9	70.2	1.8	R 111.2	136.7	R 247.9
1982	2.8	50.4	42.9	1.1	10.7	54.7	1.9	R 109.8	163.3	R 273.1
1983	2.4	53.9	41.6	R 0.8	12.8	55.2	1.8	R 113.3	165.1	R 278.4
1984	3.1	63.6	44.2	0.8	3.8	48.8	1.7	R 117.2	179.0	R 296.1
1985	1.6	57.9	48.8	0.6	5.2	54.5	1.6	R 115.5	185.1	R 300.7
1986	1.2	49.5	29.8	R (s)	13.9	R 44.0	1.2	R 95.9	183.5	R 279.4
1987	0.7	44.1	27.8	R (s)	12.0	40.0	1.0	R 85.8	175.4	R 261.2
1988	0.7	47.1	26.2	R (s)	14.4	R 40.9	1.1	R 89.8	190.0	R 279.8
1989	0.9	46.0	29.5	R (s)	22.6	R 52.5	1.2	R 100.6	188.0	R 288.6
1990	0.7	43.2	33.8	R (s)	18.9	52.9	1.9	R 98.7	184.8	R 283.5
1991	1.0	49.8	33.5	R (s)	25.0	58.8	1.9	R 111.5	192.4	R 303.9
1992	0.7	48.5	19.5	R (s)	27.5	R 47.2	1.8	R 98.2	191.1	R 289.3
1993	0.7	56.0	26.5	R (s)	17.2	44.0	1.5	R 102.2	202.5	R 304.7
1994	0.7	55.3	26.1	R (s)	18.0	44.3	1.4	R 101.7	206.6	R 308.3
1995	0.7	52.2	27.6	R (s)	19.4	R 47.1	1.5	R 101.6	210.7	R 312.3
1996	(s)	57.2	33.8	(s)	30.8	64.8	1.8	123.9	223.0	346.9
1997	(s)	56.7	25.6	(s)	32.4	58.2	1.3	116.6	215.6	332.2

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 217. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, North Dakota

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.74	0.67	1.06	—	1.30	2.83	0.84	1.45	0.61	0.89	6.62	1.74
1975	1.26	1.11	2.34	—	2.63	4.69	1.69	2.23	1.20	1.43	7.84	2.23
1980	2.63	3.26	6.45	—	5.23	9.97	3.78	5.63	3.06	R 4.05	12.16	5.39
1981	2.70	3.51	7.80	—	5.69	11.02	5.52	7.69	3.77	4.42	14.15	6.59
1982	2.71	3.99	7.46	7.40	5.62	10.52	4.63	6.59	3.66	4.35	14.88	6.62
1983	2.94	4.84	6.37	R 7.70	5.87	9.75	3.87	6.17	3.54	4.94	16.74	7.40
1984	R 3.05	5.58	6.37	R 7.93	5.75	9.51	4.13	6.07	3.60	R 5.35	17.20	R 8.83
1985	R 3.25	4.81	6.03	R 7.85	8.66	9.64	3.49	6.18	NA	4.96	17.54	R 8.74
1986	R 3.07	4.59	3.69	R 6.32	8.58	6.92	1.92	4.43	NA	R 4.39	17.53	8.69
1987	2.80	4.53	4.27	R 6.47	5.67	7.53	1.61	R 4.80	NA	4.45	17.25	9.15
1988	R 2.65	4.25	3.86	R 6.35	5.22	8.05	2.49	4.77	NA	4.19	17.41	8.58
1989	2.74	3.99	4.52	R 6.91	3.82	8.88	2.58	R 4.85	NA	3.99	16.95	8.08
1990	R 2.72	4.06	5.50	R 8.28	6.47	9.87	2.64	R 6.39	NA	R 4.25	17.10	R 8.95
1991	2.70	4.15	4.88	R 7.52	8.76	9.57	2.35	6.72	NA	4.36	17.05	8.98
1992	R 2.67	4.33	4.68	R 7.13	8.12	9.29	2.30	6.32	NA	4.47	17.22	9.18
1993	R 1.93	4.48	4.50	R 6.28	9.28	9.34	2.37	6.10	3.05	R 4.40	17.45	R 9.09
1994	R 2.14	4.23	4.29	R 6.00	8.14	9.12	2.51	5.34	2.96	R 4.17	17.18	R 8.89
1995	R 2.12	3.71	4.30	R 4.97	8.17	9.11	2.38	5.51	2.90	R 3.79	17.12	R 8.90
1996	2.01	3.72	5.24	6.00	9.45	9.77	2.94	6.61	3.33	3.91	16.81	8.79
1997	2.05	4.14	4.91	5.62	9.98	9.61	3.05	6.28	3.31	4.28	17.09	9.21
	Expenditures in Million Nominal Dollars											
1970	1.0	5.8	1.5	—	1.1	2.2	0.5	5.4	(s)	12.2	15.7	27.9
1975	1.7	13.7	2.4	—	2.0	2.3	5.2	12.0	(s)	27.5	21.5	49.0
1980	3.2	37.8	24.1	—	1.7	3.8	9.5	39.2	(s)	80.3	47.5	R 127.9
1981	3.9	34.4	17.8	—	2.4	4.6	2.1	26.9	(s)	65.3	60.0	125.3
1982	5.0	46.5	9.1	R (s)	1.3	4.5	6.1	21.3	(s)	72.8	68.4	141.2
1983	6.0	49.7	15.7	(s)	1.7	4.3	3.4	25.1	(s)	80.8	72.2	R 153.1
1984	R 6.5	58.3	16.9	(s)	R (s)	1.0	2.4	20.8	(s)	R 85.6	114.5	R 200.1
1985	R 5.5	51.7	17.0	(s)	0.9	3.5	1.4	22.8	NA	R 80.0	121.2	201.2
1986	R 4.6	43.5	6.7	(s)	3.4	2.6	0.9	13.7	NA	R 61.8	119.9	181.7
1987	2.5	37.6	6.0	(s)	2.3	2.9	R (s)	11.6	NA	51.7	116.0	167.6
1988	R 3.1	44.0	3.5	(s)	2.5	3.1	0.7	9.8	NA	57.0	118.0	175.0
1989	4.1	44.5	4.9	(s)	2.1	2.8	R (s)	10.3	NA	58.8	115.0	R 173.9
1990	R 3.3	42.9	4.8	(s)	2.7	3.6	R (s)	R 11.6	NA	R 57.8	134.2	R 191.9
1991	3.3	46.6	4.5	(s)	5.5	2.2	R (s)	12.3	NA	62.2	139.5	201.7
1992	3.1	44.1	4.3	(s)	5.6	1.8	R (s)	11.9	NA	59.1	133.6	192.6
1993	R 2.5	50.5	3.8	(s)	4.5	R (s)	R (s)	9.0	(s)	R 62.1	138.1	R 200.2
1994	R 2.9	48.3	4.8	(s)	3.6	R (s)	R (s)	9.2	(s)	R 60.5	142.2	R 202.7
1995	R 2.4	45.4	4.0	(s)	4.0	R (s)	R (s)	8.9	(s)	R 56.7	159.4	R 216.1
1996	2.8	47.5	6.5	(s)	5.6	0.5	(s)	12.7	(s)	63.2	165.0	228.2
1997	2.8	47.3	7.8	(s)	5.9	0.5	(s)	14.4	(s)	64.6	161.5	226.1

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 218. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, North Dakota

	Primary Energy																
	Coal				Petroleum												
	Coking Coal	Steam Coal	Total	Natural Gas	Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total	Wood and Waste	Total [c]	Electricity	Total Energy [c]
Year	Prices in Nominal Dollars per Million Btu																
1970	—	0.74	0.74	0.38	0.79	0.79	0.85	1.30	5.08	2.83	0.94	R 0.43	R 1.48	R 3.00	R 1.32	5.95	R 1.55
1975	—	1.26	1.26	1.00	2.08	2.72	2.90	2.63	7.48	4.69	1.94	R 1.31	R 3.24	R 3.00	R 2.78	8.00	R 3.18
1980	—	2.63	2.63	2.58	3.85	5.50	5.76	5.23	14.36	9.97	3.19	R 4.04	R 6.29	—	R 5.51	9.94	R 6.02
1981	—	2.70	2.70	3.93	5.46	6.68	—	5.69	18.00	11.02	3.81	R 4.46	R 6.81	—	R 6.11	12.06	R 6.78
1982	—	2.71	2.71	4.21	4.66	7.00	—	5.62	17.25	10.52	3.83	R 2.72	R 7.00	—	R 6.05	14.52	R 7.00
1983	—	2.94	2.94	4.56	4.85	6.67	R 7.14	5.87	16.98	9.75	3.95	R 3.67	R 6.36	—	R 5.72	15.26	R 6.83
1984	—	R 3.05	R 3.05	4.23	5.02	6.61	R 7.20	5.75	17.63	9.51	4.13	R 3.62	R 6.43	—	R 4.66	15.15	R 5.53
1985	—	R 3.25	R 3.25	4.19	5.17	6.28	R 6.86	8.66	17.61	9.64	3.49	R 3.39	R 6.63	—	R 4.29	15.27	R 4.95
1986	—	R 3.07	R 3.07	3.92	4.07	4.06	R 4.93	8.58	15.59	6.92	1.92	R —	R 4.92	—	R 3.61	15.60	R 4.22
1987	—	2.80	2.80	3.09	3.74	4.56	R 4.99	5.67	13.58	7.53	1.61	R —	R 4.96	—	R 3.36	15.05	R 3.92
1988	—	R 2.65	R 2.65	3.23	3.53	4.22	R 4.56	5.22	14.62	8.05	2.49	R —	R 4.75	—	R 3.21	14.44	R 3.84
1989	—	2.74	2.74	3.38	3.13	4.81	R 5.57	3.82	14.48	8.88	2.58	R —	R 4.93	d —	d R 3.30	14.56	d R 3.88
1990	—	R 2.72	R 2.72	3.24	3.32	5.87	R 6.88	6.47	14.60	9.87	2.64	R —	R 5.91	—	R 3.50	14.05	R 4.00
1991	—	2.70	2.70	3.05	3.36	5.22	R 5.80	8.76	16.80	9.57	2.35	R —	R 5.78	—	R 3.52	14.26	R 4.02
1992	—	R 2.67	R 2.67	3.11	2.58	5.16	R 5.12	8.12	18.32	9.29	2.30	R —	R 5.00	—	R 3.28	14.27	R 3.77
1993	—	R 1.93	R 1.93	3.23	3.00	5.00	R 4.97	9.28	18.96	9.34	2.37	R —	R 5.27	—	R 2.78	14.22	R 3.32
1994	—	R 2.14	R 2.14	3.13	3.00	4.86	R 5.34	7.14	19.11	9.12	2.51	R —	R 4.95	0.95	R 2.89	13.81	R 3.42
1995	—	R 2.12	R 2.12	2.76	3.29	4.87	R 5.28	7.49	R 19.41	9.11	2.38	R —	R 5.37	0.99	R 2.89	13.19	R 3.32
1996	—	2.01	2.01	2.87	3.23	5.85	6.39	9.11	20.08	9.77	2.94	—	6.09	1.06	3.02	13.00	3.48
1997	—	2.05	2.05	2.90	3.46	5.37	5.30	8.88	17.86	9.61	3.05	—	5.58	0.77	2.97	12.83	3.44
	Expenditures in Million Nominal Dollars																
1970	—	5.4	5.4	0.7	7.3	10.0	R (s)	1.0	0.9	34.4	2.3	R (s)	R 56.3	—	R 62.3	14.3	R 76.7
1975	—	9.4	9.4	1.9	14.6	25.6	0.8	1.8	1.0	54.1	4.6	R (s)	R 102.9	—	R 114.1	27.0	R 141.1
1980	—	20.2	20.2	2.6	19.2	78.8	R (s)	13.0	2.3	80.7	4.1	R 1.3	R 199.8	—	R 222.6	52.6	R 275.2
1981	—	17.4	17.4	5.5	27.0	115.2	—	11.5	2.7	67.3	20.0	R 0.7	R 244.5	—	R 267.4	66.8	R 334.2
1982	—	23.8	23.8	7.8	23.5	114.6	—	16.6	2.4	72.1	10.7	R (s)	R 240.4	—	R 272.0	82.8	R 354.9
1983	—	21.8	21.8	7.7	35.1	91.7	R (s)	15.3	2.5	58.7	22.2	R 0.8	R 226.4	—	R 255.9	89.9	R 345.8
1984	—	R 98.1	R 98.1	21.3	33.2	98.3	R (s)	6.2	2.7	42.1	12.9	R 1.0	R 196.5	—	R 315.8	92.7	R 408.5
1985	—	R 230.8	R 230.8	8.7	35.9	101.6	(s)	10.3	2.5	54.7	4.8	R 1.0	R 210.9	—	R 450.4	101.1	R 551.6
1986	—	R 248.1	R 248.1	10.3	23.7	72.6	R (s)	29.6	2.2	33.6	2.2	R —	R 164.0	—	R 422.4	97.9	R 520.3
1987	—	R 245.2	R 245.2	7.7	22.0	68.3	(s)	20.4	2.2	R 40.7	2.3	R —	R 155.8	—	R 408.6	91.8	R 500.5
1988	—	R 218.5	R 218.5	12.3	22.4	60.4	R (s)	13.1	2.2	37.9	3.3	R —	R 139.5	—	R 370.3	99.3	R 469.6
1989	—	R 244.1	R 244.1	15.0	19.2	77.8	(s)	9.9	2.3	38.2	3.0	R —	R 150.5	d —	d R 409.6	97.5	d R 507.1
1990	—	R 234.3	R 234.3	12.9	17.9	88.7	(s)	14.4	2.4	R 41.4	3.7	R —	R 168.4	—	R 415.7	82.2	R 497.8
1991	—	228.0	228.0	13.7	17.3	93.1	R (s)	26.5	2.4	39.4	2.7	R —	R 181.5	—	R 423.2	83.5	R 506.7
1992	—	R 249.0	R 249.0	17.2	25.1	88.3	(s)	13.9	2.7	35.1	2.5	R —	R 167.6	—	R 433.8	87.1	R 520.9
1993	—	R 176.5	R 176.5	18.5	18.2	85.9	(s)	14.9	2.8	33.1	3.8	R —	R 158.7	—	R 353.7	90.0	R 443.7
1994	—	R 200.3	R 200.3	16.7	24.9	91.4	(s)	12.0	3.0	33.5	3.2	R —	R 168.0	(s)	R 385.0	92.3	R 477.4
1995	—	R 210.7	R 210.7	16.5	17.3	92.5	(s)	21.9	3.0	32.8	1.1	R —	R 168.6	R (s)	R 395.9	77.7	R 473.6
1996	—	180.6	180.6	21.4	19.5	100.4	(s)	28.8	3.0	29.5	1.2	—	182.4	(s)	384.5	79.4	463.8
1997	—	175.7	175.7	59.0	28.5	86.4	(s)	28.9	2.8	22.7	1.7	—	171.1	(s)	405.9	88.5	494.4

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 219. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, North Dakota

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.74	—	2.17	1.33	0.75	1.30	5.08	2.83	0.83	2.19	2.19	—	2.19
1975	1.26	—	3.45	2.67	2.09	2.63	7.48	4.69	—	3.95	3.95	—	3.95
1980	—	—	9.02	7.23	6.47	5.23	14.36	9.97	—	8.74	8.74	—	8.74
1981	—	—	10.84	8.57	7.60	5.69	18.00	11.02	—	10.03	10.03	—	10.03
1982	—	—	10.92	8.24	7.19	5.62	17.25	10.52	4.25	9.41	9.41	—	9.41
1983	—	—	10.44	7.28	6.91	5.87	16.98	9.75	3.89	8.82	8.82	—	8.82
1984	—	—	10.27	7.42	6.83	5.75	17.63	9.51	4.60	8.71	8.71	—	8.71
1985	—	—	9.99	7.12	6.44	8.66	17.61	9.64	—	8.65	8.65	—	8.65
1986	—	—	8.41	6.46	4.90	8.58	15.59	6.92	2.34	6.64	6.64	—	6.64
1987	—	—	7.55	6.97	4.64	5.67	13.58	7.53	—	7.17	7.17	—	7.17
1988	—	—	7.41	7.14	4.37	5.22	14.62	8.05	—	7.49	7.49	—	7.49
1989	—	—	8.28	7.73	4.77	3.82	14.48	8.88	—	8.19	8.19	—	8.19
1990	—	4.18	9.32	8.96	6.11	6.47	14.60	9.87	—	9.30	9.30	—	9.30
1991	—	3.19	8.71	8.50	5.17	8.76	16.80	9.57	—	8.99	8.99	—	8.99
1992	—	4.07	8.54	8.32	4.89	8.12	18.32	9.29	—	8.63	8.63	—	8.63
1993	—	4.35	8.24	8.42	4.81	9.28	18.96	9.34	—	8.74	8.74	—	8.74
1994	—	3.96	7.96	8.15	4.57	9.11	19.11	9.12	—	8.62	8.62	—	8.62
1995	—	2.58	8.36	7.91	4.54	9.46	R 19.41	9.11	—	8.69	8.69	—	8.69
1996	—	1.47	9.29	9.17	5.23	8.78	20.08	9.77	—	9.59	9.59	—	9.59
1997	—	3.73	9.39	7.86	5.15	8.28	17.86	9.61	—	9.00	9.00	—	9.00
	Expenditures in Million Nominal Dollars												
1970	(s)	—	1.0	11.1	8.3	(s)	4.2	93.6	R (s)	118.6	118.6	—	118.6
1975	(s)	—	1.5	29.2	20.9	(s)	6.2	191.2	—	249.1	249.1	—	249.1
1980	—	—	2.9	159.9	59.7	R (s)	13.2	395.6	—	631.5	631.5	—	631.5
1981	—	—	2.5	158.2	67.0	2.5	15.9	479.1	—	725.3	725.3	—	725.3
1982	—	—	1.9	154.7	61.5	3.3	13.9	439.5	8.4	683.1	683.1	—	683.1
1983	—	—	1.3	129.8	55.7	4.1	14.3	398.8	(s)	603.9	603.9	—	603.9
1984	—	—	1.6	143.4	62.8	R (s)	15.8	400.1	(s)	624.2	624.2	—	624.2
1985	—	—	R (s)	126.3	58.3	R (s)	14.7	R 388.7	—	R 588.5	R 588.5	—	R 588.5
1986	—	—	1.6	108.9	43.5	0.7	12.7	275.5	(s)	443.0	443.0	—	443.0
1987	—	—	1.1	124.1	31.5	R (s)	12.6	R 306.1	—	R 475.6	R 475.6	—	R 475.6
1988	—	—	1.2	130.8	31.0	R (s)	13.0	R 322.3	—	R 498.6	R 498.6	—	R 498.6
1989	—	—	1.3	137.7	34.5	R (s)	13.2	R 350.8	—	R 537.8	R 537.8	—	R 537.8
1990	—	(s)	1.3	162.7	39.0	R (s)	13.7	R 377.5	—	R 594.6	R 594.6	—	R 594.6
1991	—	(s)	1.2	159.4	27.0	R (s)	14.1	R 373.4	—	R 575.7	R 575.7	—	R 575.7
1992	—	(s)	1.2	156.9	37.1	R (s)	15.7	R 364.9	—	R 576.3	576.4	—	576.4
1993	—	(s)	2.6	173.1	32.6	0.6	16.6	R 382.8	—	R 608.2	R 608.2	—	R 608.2
1994	—	(s)	1.7	193.0	21.1	0.7	17.5	R 368.0	—	R 601.9	R 601.9	—	R 601.9
1995	—	(s)	2.7	195.8	8.5	R (s)	17.4	380.5	—	605.4	605.5	—	605.5
1996	—	(s)	2.4	233.1	7.3	(s)	17.5	415.6	—	676.2	676.2	—	676.2
1997	—	(s)	1.6	210.3	5.5	(s)	16.4	412.5	—	646.5	646.5	—	646.5

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 220. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, North Dakota

Year	Coal	Natural Gas	Petroleum: Heavy Oil	Petroleum: Light Oil	Petroleum: Petroleum Coke	Petroleum: Total	Nuclear Fuel	Wood and Waste	Total Energy [a]
	Prices in Nominal Dollars per Million Btu								
1970	0.25	0.35	0.90	1.23	—	0.96	—	—	0.25
1975	0.26	0.66	1.93	2.12	—	1.94	—	—	0.27
1980	0.56	2.47	—	6.07	—	6.07	—	—	0.57
1981	0.68	4.22	—	7.54	—	7.54	—	—	0.70
1982	0.81	3.18	—	7.18	—	7.18	—	—	0.82
1983	0.83	4.40	—	5.76	—	5.76	—	—	0.84
1984	0.87	5.69	—	5.91	—	5.91	—	—	0.89
1985	0.88	4.74	—	5.52	—	5.52	—	—	0.89
1986	0.82	5.22	—	3.71	—	3.71	—	—	0.83
1987	0.79	4.43	—	4.19	—	4.19	—	—	0.80
1988	0.70	4.29	—	R 3.80	—	R 3.80	—	—	0.71
1989	0.69	4.39	—	4.41	—	4.41	—	—	0.70
1990	0.69	3.86	—	5.60	—	5.60	—	—	0.69
1991	0.71	4.34	—	4.49	—	4.49	—	—	0.71
1992	0.72	4.03	—	4.76	—	4.76	—	—	0.73
1993	0.71	4.25	—	4.42	—	4.42	—	—	0.72
1994	0.70	3.76	—	4.11	—	4.11	—	—	R 0.72
1995	0.73	3.49	—	4.18	—	4.18	—	—	0.74
1996	0.74	2.77	—	5.05	—	5.05	—	—	0.75
1997	0.78	3.22	—	4.59	—	4.59	—	—	0.79
	Expenditures in Million Nominal Dollars								
1970	12.0	R (s)	R (s)	(s)	—	R (s)	—	—	12.3
1975	15.4	R (s)	R (s)	(s)	—	R (s)	—	—	15.8
1980	85.5	(s)	—	2.4	—	2.4	—	—	87.9
1981	111.5	R (s)	—	4.0	—	4.0	—	—	115.6
1982	151.2	R (s)	—	3.7	—	3.7	—	—	154.9
1983	167.6	R (s)	—	3.3	—	3.3	—	—	170.9
1984	192.8	R (s)	—	5.6	—	5.6	—	—	198.5
1985	201.1	(s)	—	2.4	—	2.4	—	—	203.4
1986	186.8	(s)	—	1.2	—	1.2	—	—	188.0
1987	182.5	(s)	—	1.2	—	1.2	—	—	183.8
1988	200.8	(s)	—	1.0	—	1.0	—	—	201.8
1989	187.6	(s)	—	1.9	—	1.9	—	—	R 190.2
1990	196.5	(s)	—	1.8	—	1.8	—	—	R 198.8
1991	207.7	(s)	—	1.8	—	1.8	—	—	R 206.5
1992	219.3	(s)	—	1.6	—	1.6	—	—	R 222.6
1993	218.5	(s)	—	1.8	—	1.8	—	—	R 220.6
1994	215.8	(s)	—	2.7	—	2.7	—	—	R 221.5
1995	218.9	(s)	—	2.4	—	2.4	—	—	R 222.5
1996	229.9	(s)	—	4.6	—	4.6	—	—	237.4
1997	232.2	(s)	—	4.1	—	4.1	—	—	233.9

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 221. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Ohio

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	0.42	0.33	0.35	0.74	1.13	0.74	1.73	2.93	0.61	R 1.58	R 2.19	—	R 1.18	0.98	0.30	4.68	1.50
1975	1.57	1.03	1.14	1.30	2.53	2.09	3.73	4.73	2.14	R 3.15	R 3.82	—	R 1.44	2.00	0.98	7.94	R 3.06
1980	2.00	1.47	1.56	3.27	6.44	6.38	5.48	9.45	3.34	R 7.42	R 7.75	0.28	R 2.23	4.08	1.50	12.97	R 6.23
1981	2.35	1.64	1.76	3.64	7.89	7.55	6.09	10.63	4.59	R 9.13	R 9.07	0.44	R 2.52	R 4.57	1.62	14.80	R 7.11
1982	2.43	1.71	1.81	4.56	7.91	7.22	6.92	10.29	4.65	R 8.12	R 8.95	0.53	R 2.52	R 4.81	1.71	17.45	R 7.78
1983	2.18	1.70	1.74	5.50	7.71	6.73	7.48	9.42	4.42	R 8.19	R 8.54	0.61	R 2.41	4.88	1.68	18.07	R 8.20
1984	2.10	1.70	1.74	5.44	7.80	6.46	7.51	9.10	4.60	R 8.48	R 8.48	0.67	R 2.30	R 4.80	1.69	16.79	R 8.05
1985	2.05	1.68	1.72	5.32	7.69	6.04	9.92	9.15	4.21	R 8.31	R 8.67	1.09	R 2.14	4.81	1.70	16.90	R 8.23
1986	2.04	1.62	1.66	5.11	5.83	3.85	9.16	6.78	2.60	R 6.68	R 6.50	0.72	R 1.85	4.01	1.63	17.23	R 7.31
1987	1.72	1.55	1.56	4.70	6.07	4.04	8.68	7.36	2.84	R 6.17	R 6.81	0.73	R 1.88	3.92	1.51	16.97	R 7.31
1988	1.73	1.51	1.53	4.55	5.95	3.92	8.71	7.43	2.50	R 6.35	R 6.82	1.33	R 1.89	R 3.86	1.52	16.90	R 7.20
1989	1.75	1.48	1.51	4.65	6.64	4.49	9.58	8.18	2.62	R 5.84	R 7.34	1.32	e R 1.80	e R 4.04	1.48	16.83	e R 7.60
1990	1.80	1.51	1.54	4.53	7.84	5.73	10.70	9.35	2.60	R 6.18	R 8.37	1.24	R 2.14	R 4.34	1.50	17.34	8.19
1991	1.72	1.48	1.49	4.53	7.44	4.95	10.33	9.23	2.35	R 6.29	R 8.22	1.14	R 2.03	4.21	1.45	17.98	R 8.34
1992	1.74	1.44	1.46	4.55	7.15	4.64	9.71	8.98	2.27	R 6.03	7.92	1.12	R 1.98	4.15	1.40	17.84	R 8.17
1993	1.68	1.42	1.43	5.03	7.20	4.30	9.93	8.82	2.42	R 6.65	R 7.95	1.07	R 1.87	4.33	1.39	18.30	R 8.49
1994	1.57	1.44	1.45	5.06	7.12	4.02	8.17	9.08	2.64	R 6.52	R 7.92	1.06	R 2.08	4.40	1.42	18.21	R 8.53
1995	1.57	1.42	1.43	4.58	7.11	4.02	8.51	9.21	2.70	R 6.69	R 8.07	1.00	R 2.05	4.27	1.38	18.37	R 8.49
1996	1.68	1.35	1.36	4.93	8.19	4.81	10.14	9.81	3.04	6.67	8.69	0.87	2.09	4.53	1.30	18.52	8.85
1997	1.83	1.33	1.35	5.69	7.92	4.55	10.14	9.71	3.30	6.09	8.43	0.65	1.94	4.70	1.26	18.40	9.01
	Expenditures in Million Nominal Dollars																
1970	146.6	409.5	556.1	769.2	224.5	24.4	56.5	1,637.3	17.6	R 257.7	R 2,217.9	—	R 9.0	R 3,552.2	-245.5	R 1,344.1	R 4,650.8
1975	519.3	1,328.3	1,847.6	1,243.3	621.6	70.7	127.6	2,949.3	117.1	R 453.0	R 4,339.4	—	R 11.5	R 7,441.7	-1,046.9	2,773.5	R 9,168.3
1980	549.5	1,840.7	2,390.1	2,887.6	1,828.0	259.2	883.2	5,623.4	122.1	R 1,165.4	R 9,881.3	6.4	R 40.7	R 15,206.2	-1,729.9	4,904.7	R 18,381.0
1981	629.3	2,073.5	2,702.9	3,128.3	2,071.1	244.3	868.2	6,154.1	135.0	R 1,320.3	R 10,793.0	21.3	R 47.5	R 16,692.9	-1,878.9	5,628.6	R 20,442.6
1982	465.4	2,051.8	2,517.1	3,673.8	1,860.8	223.1	994.3	5,725.9	54.9	R 1,077.9	R 9,937.0	19.1	R 48.3	R 16,195.3	-1,882.6	5,976.3	R 20,289.0
1983	274.6	2,028.0	2,302.6	4,111.0	1,495.9	220.4	1,091.9	5,299.2	75.9	R 1,011.0	R 9,194.2	32.8	R 49.2	R 15,689.9	-1,846.3	6,508.1	R 20,351.7
1984	287.2	R 2,077.7	R 2,364.9	4,274.1	1,641.1	248.5	773.9	5,211.8	46.2	R 1,116.0	R 9,037.6	31.3	R 51.0	R 15,758.9	-1,875.8	6,865.5	R 20,748.6
1985	287.8	R 2,096.2	2,383.9	3,944.8	1,610.5	245.3	975.6	R 5,225.9	33.6	R 1,005.7	R 9,096.6	23.0	R 48.0	R 15,496.2	-1,919.7	7,080.8	R 20,657.3
1986	283.0	R 2,091.4	R 2,374.3	3,711.1	1,217.0	215.8	479.8	R 3,986.6	24.5	R 877.5	R 6,801.2	R (s)	R 40.6	R 12,927.4	-1,870.3	7,209.8	R 18,266.9
1987	246.8	R 1,993.5	R 2,240.3	3,382.8	1,184.0	246.2	496.2	R 4,488.2	27.0	R 917.9	R 7,359.5	59.0	R 44.3	R 13,085.8	-1,844.2	R 7,450.8	R 18,692.5
1988	252.4	R 2,008.1	R 2,260.5	3,688.3	1,283.8	203.8	345.8	R 4,570.4	32.7	R 828.4	R 7,264.9	120.8	R 45.8	R 13,380.2	-1,915.4	R 7,649.6	R 19,114.4
1989	247.6	R 1,960.5	R 2,208.1	3,826.1	1,478.5	263.6	451.8	R 4,926.0	29.1	R 907.7	R 8,056.8	179.7	e R 47.0	e R 14,317.8	-1,980.6	R 8,033.4	e R 20,370.5
1990	239.0	R 1,955.4	R 2,194.5	3,390.5	1,674.2	343.5	416.0	R 5,425.5	20.5	R 962.1	R 8,841.7	141.3	R 54.3	R 14,622.3	-1,920.0	R 8,321.8	R 21,024.0
1991	170.7	R 1,941.4	R 2,112.1	3,509.0	1,545.6	291.0	409.0	R 5,327.6	13.3	R 899.9	R 8,486.5	182.1	R 57.1	R 14,346.8	-1,960.3	R 8,825.7	R 21,212.2
1992	175.2	1,898.0	2,073.3	3,705.8	1,596.2	279.0	507.2	R 5,126.7	15.4	R 947.7	R 8,472.3	176.6	R 55.1	R 14,483.0	-1,927.6	R 8,717.3	R 21,272.8
1993	130.3	1,921.0	2,051.3	4,221.5	1,661.7	259.1	531.3	R 5,315.0	22.1	R 939.8	R 8,729.0	114.2	R 38.1	R 15,154.2	-1,887.6	R 9,162.9	R 22,429.4
1994	129.9	1,869.2	1,999.1	4,247.9	1,791.2	265.7	441.1	R 5,400.0	21.8	R 964.4	R 8,884.2	124.3	R 50.4	R 15,305.9	-1,866.4	R 9,475.8	R 22,915.3
1995	117.2	1,859.4	1,976.5	4,095.5	1,764.9	256.2	432.9	5,623.3	13.1	R 977.8	R 9,068.3	179.4	R 55.0	R 15,374.7	-1,925.3	R 9,828.8	R 23,278.2
1996	82.9	1,892.1	1,974.9	4,606.8	2,158.0	326.5	526.9	5,945.0	16.6	1,100.2	10,073.2	128.1	58.7	16,841.7	-1,884.7	9,905.9	24,863.0
1997	90.8	1,807.4	1,898.2	5,139.3	2,262.8	325.0	533.2	6,035.0	13.9	1,151.1	10,321.0	105.9	55.9	17,520.3	-1,795.1	9,831.1	25,556.3

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 222. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Ohio

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.05	0.88	1.41	1.42	2.14	1.54	0.57	0.98	6.99	R 1.68
1975	2.62	1.47	2.51	2.90	4.53	2.96	1.12	1.74	10.93	R 3.11
1980	3.07	3.49	6.63	8.07	7.66	6.94	2.87	R 3.90	16.29	R 6.32
1981	3.37	3.88	8.16	9.91	8.50	8.44	3.53	R 4.36	18.55	R 7.20
1982	3.28	4.83	7.95	9.86	8.47	8.31	3.43	R 5.10	20.94	R 8.34
1983	3.08	5.89	7.67	R 7.75	9.60	R 8.32	3.32	R 5.99	22.53	R 9.72
1984	3.10	5.85	7.73	R 8.18	9.91	R 8.49	3.37	R 5.99	21.94	R 9.46
1985	3.00	5.79	7.55	R 8.21	10.09	R 8.33	3.24	R 5.96	22.49	R 9.66
1986	2.86	5.55	5.88	R 6.91	9.59	R 7.04	2.60	R 5.60	22.45	R 9.46
1987	2.74	5.12	5.66	R 6.70	8.88	R 6.86	2.48	R 5.22	22.56	R 9.34
1988	2.65	5.01	5.66	R 6.50	8.40	R 6.60	2.50	R 5.10	22.24	R 9.14
1989	2.69	5.11	6.18	R 7.25	11.42	R 8.10	2.77	R 5.36	22.79	R 9.42
1990	2.80	5.09	7.43	R 8.54	12.05	R 9.18	3.56	5.47	23.58	R 10.08
1991	2.64	5.06	6.89	R 7.28	10.71	R 8.30	3.41	R 5.35	23.91	R 10.20
1992	2.55	5.02	6.33	R 6.53	10.72	R 7.73	3.12	R 5.24	24.14	R 9.84
1993	2.65	5.50	6.36	R 5.85	9.89	R 7.56	3.05	R 5.67	24.51	R 10.40
1994	2.61	5.67	6.15	R 6.19	10.07	R 7.49	2.96	R 5.82	25.08	R 10.74
1995	2.64	5.26	6.12	R 6.28	10.15	R 7.67	2.90	R 5.47	25.20	R 10.59
1996	2.50	5.68	6.97	6.71	11.57	8.98	3.33	5.97	25.19	10.83
1997	2.57	6.46	6.91	6.88	11.79	9.17	3.31	6.70	25.29	11.53
	Expenditures in Million Nominal Dollars									
1970	13.8	414.0	76.5	24.1	31.5	132.0	1.9	R 561.7	531.1	R 1,092.8
1975	23.3	643.4	157.8	33.8	82.0	273.6	3.9	R 944.3	1,039.7	R 1,984.0
1980	14.0	1,396.3	286.8	46.5	72.0	405.3	23.5	R 1,839.0	1,859.9	R 3,698.9
1981	19.5	1,495.7	270.8	57.1	86.1	414.0	29.2	R 1,958.5	2,080.1	R 4,038.6
1982	19.5	1,834.4	207.7	51.0	80.8	339.5	30.6	R 2,223.9	2,343.3	R 4,567.2
1983	21.8	2,006.6	139.3	R 38.6	109.0	R 286.8	29.3	R 2,344.4	2,568.8	R 4,913.2
1984	24.7	2,125.8	151.6	R 56.7	118.0	R 326.3	28.1	R 2,505.0	2,551.7	R 5,056.6
1985	21.7	1,978.7	196.7	R 43.8	121.3	R 361.9	26.3	R 2,388.6	2,604.3	R 4,993.0
1986	25.3	1,898.7	157.0	R 46.3	120.2	R 323.5	20.5	R 2,268.0	2,698.4	R 4,966.4
1987	18.8	1,746.7	137.1	R 40.7	131.9	R 309.7	21.7	R 2,096.9	2,826.2	R 4,923.1
1988	16.4	1,826.7	153.4	R 46.4	122.2	R 322.0	22.8	R 2,187.9	2,938.0	R 5,125.9
1989	12.4	1,910.7	164.6	R 35.9	190.1	R 390.6	26.2	R 2,339.8	3,017.0	R 5,356.9
1990	15.5	1,631.0	176.5	R 30.2	183.7	R 390.5	35.1	R 2,072.1	3,049.0	R 5,121.1
1991	11.0	1,698.7	169.4	R 27.9	172.3	R 369.6	35.4	R 2,114.7	3,339.5	R 5,454.2
1992	13.0	1,771.3	171.9	R 27.0	154.9	R 353.7	34.1	R 2,172.1	3,224.5	R 5,396.6
1993	13.2	2,022.0	165.7	R 27.8	168.3	R 361.8	17.0	R 2,414.0	3,507.6	R 5,921.5
1994	11.2	2,018.8	175.3	R 24.9	169.2	R 369.4	16.2	R 2,415.6	3,576.4	R 5,992.0
1995	9.3	1,953.3	154.0	R 26.7	183.1	R 363.7	17.6	R 2,343.9	3,784.4	R 6,128.4
1996	13.9	2,211.5	155.5	31.2	247.7	434.4	20.1	2,679.8	3,831.2	6,511.0
1997	7.2	2,393.2	141.8	30.2	252.7	424.7	14.6	2,839.6	3,764.6	6,604.2

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 223. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Ohio

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.40	0.75	1.20	0.84	1.39	2.93	0.69	1.26	0.57	0.76	6.33	1.87
1975	1.31	1.31	2.33	2.48	2.83	4.73	2.20	2.74	1.12	1.51	10.10	R 3.54
1980	1.34	3.26	6.28	6.01	5.34	9.45	3.58	7.13	2.87	3.76	15.71	R 7.06
1981	1.52	3.63	7.81	7.21	5.91	10.63	5.00	8.38	3.53	4.08	17.83	8.32
1982	1.53	4.52	7.53	8.01	6.81	10.29	5.20	7.96	3.43	4.70	19.90	9.55
1983	1.47	5.53	6.44	R 7.75	7.30	9.42	R 4.50	R 7.00	3.32	5.47	20.78	R 10.46
1984	1.50	5.48	6.45	R 8.18	7.20	9.10	4.59	R 7.36	3.37	5.53	20.53	R 10.16
1985	1.49	5.34	6.12	R 8.21	9.90	9.15	4.18	R 7.20	NA	R 5.27	20.91	R 10.78
1986	1.45	5.11	3.85	R 6.91	9.03	6.78	2.60	R 5.44	NA	R 4.84	20.73	R 10.49
1987	1.39	4.68	4.34	R 6.70	8.61	7.36	2.83	R 6.02	NA	R 4.65	20.29	R 10.27
1988	1.39	4.57	3.88	R 6.50	8.89	7.43	2.51	R 6.05	NA	R 4.63	19.97	R 10.02
1989	1.39	4.70	4.51	R 7.25	8.57	8.18	2.60	R 6.71	NA	R 4.81	20.66	R 10.65
1990	1.44	4.50	5.53	R 8.54	9.83	9.35	2.54	R 7.40	NA	R 4.63	21.31	R 11.30
1991	R 1.43	4.56	4.94	R 7.28	10.07	9.23	2.30	R 6.96	NA	R 4.67	21.55	11.54
1992	1.44	4.56	4.71	R 6.53	9.32	8.98	2.23	R 6.29	NA	4.56	21.72	11.26
1993	1.42	5.05	4.62	R 5.85	9.94	8.82	2.42	R 6.40	3.05	R 4.96	21.78	R 11.67
1994	1.46	5.19	4.30	R 6.19	8.14	9.08	2.64	R 5.92	2.96	5.09	22.16	R 11.94
1995	1.44	4.74	4.30	R 6.28	8.17	9.21	2.69	R 5.76	2.90	R 4.71	22.04	R 11.64
1996	1.44	5.18	5.24	6.71	9.45	9.81	3.02	7.03	3.33	5.13	22.12	11.65
1997	1.39	5.96	4.91	6.88	9.98	9.71	3.32	7.89	3.31	6.06	21.97	12.22
	Expenditures in Million Nominal Dollars											
1970	9.5	140.0	13.0	0.7	3.6	6.2	3.6	27.1	(s)	176.6	R 368.9	R 545.6
1975	21.5	227.6	29.0	1.5	9.0	23.7	20.1	83.5	(s)	R 332.6	R 690.8	R 1,023.3
1980	11.2	551.1	94.8	4.4	8.9	102.2	8.5	218.8	0.6	R 781.7	R 1,250.1	R 2,031.8
1981	16.3	597.9	118.1	2.7	10.6	66.2	0.9	198.5	0.7	R 813.4	R 1,584.3	R 2,397.6
1982	16.8	732.6	92.3	2.8	11.5	45.3	5.8	157.7	0.7	R 907.7	1,800.6	R 2,708.3
1983	19.2	820.3	134.2	R 15.2	14.6	39.0	0.8	R 203.8	0.7	R 1,044.0	R 1,919.4	R 2,963.3
1984	22.1	882.5	145.1	R 13.9	15.1	102.4	0.6	R 277.0	0.7	R 1,182.4	R 1,960.3	R 3,142.6
1985	19.7	799.0	72.5	R 20.5	21.0	29.0	2.2	R 145.2	NA	R 963.9	R 2,081.8	R 3,045.7
1986	R 23.9	743.7	47.6	R 7.4	20.0	66.3	2.6	R 144.0	NA	R 911.6	R 2,155.1	R 3,066.7
1987	R 17.7	718.7	53.5	R 7.2	22.5	R 78.1	0.9	R 162.2	NA	R 898.6	R 2,199.0	R 3,097.6
1988	15.9	754.3	50.5	R 9.7	22.8	R 118.0	1.2	R 202.3	NA	R 972.5	R 2,270.3	R 3,242.7
1989	11.7	791.4	44.3	R 9.9	25.2	88.5	R (s)	R 168.2	NA	R 971.4	R 2,430.0	R 3,401.4
1990	14.8	671.6	53.3	R 9.2	26.4	R 52.0	R (s)	R 141.2	NA	R 827.6	R 2,533.6	R 3,361.2
1991	R 10.9	715.6	46.5	R 7.4	28.6	R 44.9	0.6	R 128.0	NA	R 854.5	R 2,707.3	R 3,561.8
1992	13.3	758.2	46.2	R 2.5	23.8	31.7	1.0	R 105.2	NA	R 876.8	R 2,678.8	R 3,555.6
1993	13.0	859.6	37.2	R 6.7	29.9	18.2	R (s)	R 92.4	1.4	R 965.0	R 2,804.6	R 3,769.6
1994	11.4	897.4	37.6	R 5.1	24.1	21.4	R (s)	R 88.3	1.4	R 998.4	R 2,912.7	R 3,911.1
1995	9.3	861.8	46.3	R 3.2	26.0	21.2	R (s)	R 96.7	1.3	R 969.1	R 3,014.7	R 3,983.8
1996	14.5	1,022.0	41.3	5.9	35.7	18.8	(s)	101.7	1.7	1,139.9	3,062.3	4,202.2
1997	7.0	1,145.3	42.5	4.9	37.7	99.7	(s)	184.9	1.4	1,338.7	3,068.1	4,406.8

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
(s)=Value less than 0.05 million nominal dollars.

NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 224. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Ohio

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	0.42	0.40	0.41	0.57	0.74	0.77	0.84	1.39	5.08	2.93	0.55	R 1.29	R 1.24	R 1.69	0.60	2.90	R 0.84
1975	1.57	1.31	1.47	1.08	2.03	2.31	2.48	2.83	7.48	4.73	2.17	R 2.63	R 2.65	R 1.69	1.60	5.61	R 2.17
1980	2.00	1.34	1.79	3.01	3.66	5.45	6.01	5.34	14.36	9.45	3.31	R 7.79	R 5.84	R 1.69	3.56	9.73	4.43
1981	2.35	1.52	2.05	3.35	5.92	6.60	7.21	5.91	18.00	10.63	4.57	R 8.47	R 6.92	R 1.69	R 4.02	10.94	R 4.99
1982	2.43	1.53	2.07	4.19	4.29	7.26	8.01	6.81	17.25	10.29	4.53	R 7.89	R 7.07	R 1.69	R 4.45	13.08	R 5.60
1983	2.18	1.47	1.81	4.98	4.21	6.73	R 7.30	7.30	16.98	9.42	4.42	R 8.04	R 7.21	R 1.69	4.69	13.12	R 6.03
1984	2.10	1.50	1.79	4.86	4.40	6.82	R 7.36	7.20	17.63	9.10	4.59	R 8.12	R 7.39	R 1.69	R 4.51	11.94	5.99
1985	2.05	1.49	1.78	4.66	4.43	6.39	R 6.98	9.90	17.61	9.15	4.18	R 7.61	R 8.14	R 1.69	R 4.70	11.75	R 6.18
1986	2.04	1.45	R 1.76	4.48	3.70	4.22	R 5.05	9.03	15.59	6.78	2.60	R 5.86	R 6.15	R 1.72	3.88	12.12	5.64
1987	1.72	1.39	1.56	4.09	3.23	4.70	R 5.19	8.61	13.58	7.36	2.83	R 6.15	R 5.97	R 1.72	R 3.63	11.80	R 5.42
1988	1.73	1.39	1.56	3.94	3.23	4.39	R 4.73	8.89	14.62	7.43	2.51	R 5.33	R 5.73	R 1.72	R 3.41	11.79	R 5.20
1989	1.75	1.39	1.59	4.02	2.99	5.04	R 5.78	8.57	14.48	8.18	2.60	R 5.64	R 5.59	d R 1.56	d R 3.59	11.36	d R 5.38
1990	1.80	1.44	1.63	3.92	3.13	6.14	R 6.91	9.83	14.60	9.35	2.54	R 5.94	R 6.05	R 1.50	3.69	11.81	R 5.63
1991	1.72	R 1.43	R 1.56	3.92	2.96	5.35	R 5.83	10.07	16.80	9.23	2.30	R 5.73	R 6.04	R 1.49	R 3.71	12.31	R 5.81
1992	1.74	1.44	R 1.60	4.01	2.33	5.16	R 5.16	9.32	18.32	8.98	2.23	R 5.61	R 6.02	R 1.54	3.96	12.14	R 5.91
1993	1.68	1.42	1.53	4.47	2.91	4.88	R 5.01	9.94	18.96	8.82	2.42	R 5.40	R 6.26	R 1.54	R 4.21	12.45	R 6.23
1994	1.57	1.46	1.51	4.29	2.95	4.74	R 5.21	7.14	19.11	9.08	2.64	R 5.18	R 5.72	R 1.80	3.99	12.12	R 6.05
1995	1.57	1.44	1.50	3.79	3.21	4.75	R 4.81	7.49	R 19.41	9.21	2.69	R 5.31	R 5.93	R 1.77	R 3.83	12.21	R 5.97
1996	1.68	1.44	1.52	3.95	3.30	5.72	5.69	9.11	20.08	9.81	3.02	5.91	6.31	1.71	4.12	12.33	6.18
1997	1.83	1.39	1.54	4.72	3.55	5.36	5.35	8.88	17.86	9.71	3.32	5.45	5.88	1.67	4.39	12.20	6.32
	Expenditures in Million Nominal Dollars																
1970	146.6	155.3	301.9	206.6	44.3	50.5	15.9	20.7	73.7	29.7	7.9	R 53.0	R 295.5	R 7.1	R 811.1	443.4	R 1,254.4
1975	519.3	296.0	815.2	366.0	118.0	149.7	20.2	34.7	90.2	37.7	73.0	R 107.1	R 630.6	R 7.5	R 1,819.3	1,042.0	R 2,861.2
1980	549.5	174.1	723.6	926.5	178.1	396.8	44.5	797.9	208.6	57.3	95.1	R 537.6	R 2,316.0	R 16.6	R 3,982.7	1,792.6	R 5,775.3
1981	629.3	228.8	858.1	1,027.9	271.4	473.6	68.2	764.1	250.8	48.4	126.0	R 498.6	R 2,501.0	R 17.5	R 4,404.6	1,961.4	R 6,366.0
1982	465.4	193.8	659.1	1,101.6	209.5	460.3	72.2	893.6	219.1	25.4	44.4	R 371.2	R 2,295.7	R 17.0	R 4,073.4	1,829.2	R 5,902.6
1983	274.6	202.5	477.1	1,278.7	188.6	177.5	R 27.9	957.5	225.9	51.6	71.7	R 359.5	R 2,060.2	R 19.2	R 3,835.1	2,016.8	R 5,851.8
1984	287.2	214.7	R 501.9	1,262.0	201.1	194.5	R 18.7	R 626.8	250.1	70.1	41.3	R 409.9	R 1,812.4	R 19.6	R 3,595.9	2,350.5	R 5,946.5
1985	287.8	R 185.8	473.5	1,163.5	186.3	248.3	R 13.0	819.7	232.8	51.6	27.5	R 354.2	R 1,933.3	R 19.5	R 3,589.8	2,391.2	R 5,981.0
1986	283.0	R 187.9	R 470.9	1,065.9	180.3	142.8	R 5.6	326.2	201.5	36.3	20.4	R 300.5	R 1,213.6	R 19.1	R 2,769.6	2,352.8	R 5,122.3
1987	246.8	R 192.0	R 438.9	914.7	193.3	144.9	5.8	330.8	198.4	R 39.9	23.9	R 345.3	R 1,282.2	R 19.1	R 2,654.8	2,422.9	R 5,077.7
1988	252.4	R 205.5	R 457.8	1,103.9	136.4	132.4	R 5.9	189.5	206.0	R 40.0	25.3	R 289.1	R 1,024.5	R 19.8	R 2,606.1	2,438.6	R 5,044.7
1989	247.6	R 159.7	R 407.3	1,120.9	210.5	154.2	R 7.3	224.7	209.3	43.7	20.1	R 299.7	R 1,169.6	d R 20.8	d R 2,718.7	2,583.4	d R 5,302.1
1990	239.0	R 166.5	R 405.5	1,084.4	205.0	183.7	3.4	R 193.1	217.2	R 47.8	17.4	R 356.7	R 1,224.2	R 19.2	R 2,733.3	2,736.5	R 5,469.9
1991	170.7	R 167.7	R 338.4	1,087.4	176.5	163.4	3.8	197.6	223.5	46.7	9.9	R 318.4	R 1,139.7	R 21.8	R 2,587.3	2,776.1	R 5,363.3
1992	175.2	139.9	315.1	1,169.3	153.2	192.1	R 4.0	R 320.1	248.5	131.8	12.5	R 355.0	R 1,417.1	R 21.0	R 2,922.5	2,810.8	R 5,733.3
1993	130.3	R 142.7	273.0	1,331.7	148.4	184.9	R 8.9	324.3	261.9	52.0	21.1	R 321.7	R 1,323.2	R 21.1	R 2,949.1	2,847.6	R 5,796.7
1994	129.9	135.6	265.5	1,320.6	173.4	196.3	6.2	232.5	275.9	52.4	20.2	R 307.3	R 1,264.2	R 32.9	R 2,883.2	2,983.6	R 5,866.9
1995	117.2	126.9	244.1	1,262.1	191.4	175.0	R 5.1	215.0	R 275.5	58.1	12.0	R 302.2	R 1,234.3	R 36.1	R 2,776.5	3,026.6	R 5,803.1
1996	82.9	133.8	216.6	1,362.2	246.3	189.1	7.1	236.5	276.6	62.0	14.9	352.5	1,384.9	36.9	3,000.7	3,009.2	6,009.9
1997	90.8	131.5	222.2	1,586.3	338.4	188.9	7.4	236.9	259.9	62.8	12.7	337.8	1,444.5	39.9	3,293.0	2,995.4	6,288.4

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.

R=Revised data.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 225. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Ohio

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.40	—	2.17	1.26	0.74	1.39	5.08	2.93	0.64	2.66	2.66	4.05	2.66
1975	1.31	—	3.45	2.76	2.08	2.83	7.48	4.73	1.61	4.39	4.38	7.63	4.39
1980	—	—	9.02	6.95	6.38	5.34	14.36	9.45	3.02	8.87	8.87	13.51	8.87
1981	—	—	10.84	8.53	7.55	5.91	18.00	10.63	4.45	10.18	10.18	17.35	10.19
1982	—	—	10.92	8.28	7.22	6.81	17.25	10.29	4.70	9.87	9.87	20.76	9.87
1983	—	—	10.44	8.15	6.73	7.30	16.98	9.42	4.22	9.16	9.16	22.27	9.16
1984	—	—	10.27	8.26	6.46	7.20	17.63	9.10	4.54	8.90	8.90	21.75	8.90
1985	—	—	9.99	8.28	6.04	9.90	17.61	9.15	—	8.92	8.92	22.10	8.92
1986	—	—	8.41	6.47	3.85	9.03	15.59	6.78	2.51	6.61	6.61	23.15	6.61
1987	—	—	7.55	6.70	4.04	8.61	13.58	7.36	2.84	7.07	7.07	17.79	7.07
1988	—	—	7.41	6.57	3.92	8.89	14.62	7.43	2.16	7.13	7.13	17.01	7.13
1989	—	—	8.28	7.22	4.49	8.57	14.48	8.18	2.32	R 7.80	R 7.80	17.59	R 7.80
1990	—	3.04	9.32	8.44	5.73	9.83	14.60	9.35	2.70	8.96	8.96	18.01	8.96
1991	—	2.84	8.71	8.22	4.95	10.07	16.80	9.23	2.26	8.80	8.80	17.82	8.80
1992	—	3.01	8.54	8.02	4.64	9.32	18.32	8.98	2.41	8.55	8.55	18.24	8.55
1993	—	4.64	8.24	8.10	4.30	9.94	18.96	8.82	2.42	8.45	8.45	18.27	8.45
1994	—	4.70	7.96	8.11	4.02	9.11	19.11	9.08	2.59	8.58	8.58	18.64	8.59
1995	—	4.28	8.36	8.00	4.02	9.46	R 19.41	9.21	2.72	8.67	8.67	18.34	R 8.68
1996	—	4.60	9.29	8.92	4.81	8.78	20.08	9.81	3.17	9.31	9.31	18.39	9.31
1997	—	5.97	9.39	8.60	4.55	8.28	17.86	9.71	3.14	9.11	9.11	17.93	9.11
	Expenditures in Million Nominal Dollars												
1970	R (s)	—	7.8	81.2	24.4	0.7	38.3	1,601.5	3.1	1,756.8	1,757.3	R 0.7	R 1,758.0
1975	R (s)	—	8.5	251.5	69.2	1.9	73.6	2,887.8	6.0	3,298.5	3,298.6	1.2	3,299.8
1980	—	—	21.5	994.9	259.2	4.4	124.1	5,463.9	4.8	6,872.9	6,872.9	R 2.1	R 6,875.0
1981	—	—	22.3	1,173.5	244.3	7.4	149.2	6,039.5	1.4	7,637.6	7,637.6	R 2.8	7,640.5
1982	—	—	21.6	1,068.7	223.1	8.5	130.4	5,655.3	(s)	7,107.6	7,107.6	3.2	7,110.8
1983	—	—	20.9	1,024.5	220.4	10.8	134.4	5,208.6	0.5	6,620.1	6,620.1	R 3.2	R 6,623.3
1984	—	—	16.7	1,131.3	248.5	R 14.0	148.8	5,039.4	1.1	R 6,599.8	R 6,599.8	R 3.1	R 6,602.9
1985	—	—	16.6	1,074.9	245.3	13.5	138.5	R 5,145.3	—	R 6,634.2	R 6,634.2	R 3.4	R 6,637.6
1986	—	—	15.9	858.8	215.8	13.5	119.9	3,884.0	R (s)	5,108.0	5,108.0	R 3.6	R 5,111.6
1987	—	—	9.1	836.2	246.2	11.0	118.1	R 4,370.2	0.5	R 5,591.4	R 5,591.4	R 2.8	R 5,594.1
1988	—	—	12.4	935.9	203.8	11.3	122.6	R 4,412.3	R (s)	R 5,698.3	R 5,698.3	R 2.7	R 5,701.1
1989	—	—	10.5	1,102.9	263.6	11.8	124.6	R 4,793.8	R (s)	R 6,307.3	R 6,307.3	R 2.9	R 6,310.2
1990	—	R (s)	11.2	1,246.5	343.5	R 12.7	129.2	R 5,325.7	R (s)	R 7,068.9	R 7,069.2	R 2.7	R 7,071.9
1991	—	R (s)	9.4	1,149.6	291.0	10.6	133.0	R 5,236.1	R (s)	R 6,829.8	R 6,830.0	R 2.8	R 6,832.8
1992	—	R (s)	9.7	1,174.9	279.0	8.5	147.9	R 4,963.2	0.8	R 6,583.9	R 6,584.1	R 3.2	R 6,587.3
1993	—	R (s)	8.6	1,260.9	259.1	8.8	155.8	R 5,244.7	R (s)	R 6,938.3	R 6,938.5	R 3.1	R 6,941.6
1994	—	R (s)	7.5	1,362.1	265.7	15.2	164.2	R 5,326.2	1.0	R 7,142.0	R 7,142.2	R 3.1	R 7,145.3
1995	—	0.8	9.9	1,375.1	256.2	8.8	R 163.9	R 5,544.0	1.0	R 7,359.0	R 7,359.8	R 3.1	R 7,362.9
1996	—	1.1	16.2	1,755.4	326.5	7.0	164.6	5,864.2	1.7	8,135.5	8,136.6	3.2	8,139.8
1997	—	1.6	17.9	1,875.0	325.0	6.0	154.6	5,872.4	1.2	8,252.2	8,253.9	3.1	8,256.9

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 226. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Ohio

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.29	0.39	0.69	0.75	—	0.72	—	0.65	0.30
1975	0.95	1.19	2.18	2.35	—	2.29	—	0.92	0.98
1980	1.48	2.90	3.58	5.72	—	5.11	0.28	1.74	1.50
1981	1.64	3.28	4.95	7.18	—	6.69	0.44	1.24	1.62
1982	1.72	4.25	5.22	7.44	—	7.06	0.53	1.28	1.71
1983	1.72	5.17	4.46	6.71	—	6.31	0.61	1.12	1.68
1984	1.72	5.17	4.71	6.71	—	6.31	0.67	1.28	1.69
1985	1.69	5.09	4.43	6.09	—	5.71	1.09	0.79	1.70
1986	1.63	4.67	2.73	3.71	—	3.56	0.72	0.32	1.63
1987	1.56	3.04	3.00	4.10	—	3.93	0.73	0.95	1.51
1988	1.52	3.47	2.45	3.77	—	3.19	1.33	0.87	1.52
1989	1.49	3.13	2.66	4.26	—	3.43	1.32	([b])	1.48
1990	1.52	2.55	3.12	5.40	—	4.84	1.24	([b])	1.50
1991	1.48	2.18	2.58	4.91	—	4.35	1.14	([b])	1.45
1992	1.44	2.24	2.72	4.51	—	4.27	1.12	([b])	1.40
1993	1.41	2.86	2.70	4.07	—	4.02	1.07	([b])	1.39
1994	1.44	3.75	2.68	4.04	—	3.99	1.06	([b])	1.42
1995	1.42	2.28	—	3.91	—	3.91	1.00	—	1.38
1996	1.34	3.35	—	4.90	—	4.90	0.87	—	1.30
1997	1.32	3.63	—	4.37	—	4.37	0.65	—	1.26
	Expenditures in Million Nominal Dollars								
1970	230.5	8.6	3.0	3.4	—	6.4	—	(s)	245.5
1975	987.4	6.3	18.0	35.2	—	53.2	—	(s)	1,046.9
1980	1,641.4	13.7	13.6	54.7	—	68.3	6.4	(s)	1,729.9
1981	1,809.0	6.8	6.7	35.1	—	41.8	21.3	(s)	1,878.9
1982	1,821.8	5.3	4.7	31.8	—	36.5	19.1	(s)	1,882.6
1983	1,784.6	5.5	2.9	20.4	—	23.3	32.8	[R] (s)	1,846.3
1984	1,816.1	3.6	3.3	18.7	—	22.0	31.3	2.7	1,875.8
1985	1,869.0	3.6	3.9	18.0	—	22.0	23.0	2.2	1,919.7
1986	1,854.3	2.9	1.4	10.7	—	12.1	[R] (s)	0.9	1,870.3
1987	1,764.9	2.7	1.7	12.4	—	14.1	59.0	3.5	1,844.2
1988	1,770.4	3.4	6.0	11.7	—	17.7	120.8	3.2	1,915.4
1989	1,776.7	3.1	8.5	12.6	—	21.1	179.7	([b])	1,980.6
1990	1,758.7	3.2	2.7	14.2	—	16.9	141.3	([b])	1,920.0
1991	1,751.8	7.1	2.7	16.7	—	19.4	182.1	([b])	1,960.3
1992	1,731.8	6.8	1.1	11.2	—	12.3	176.6	([b])	1,927.6
1993	1,752.1	8.1	[R] (s)	12.9	—	13.3	114.2	([b])	1,887.6
1994	1,711.0	10.9	[R] (s)	19.8	—	20.3	124.3	([b])	1,866.4
1995	1,713.9	17.4	—	14.6	—	14.6	179.4	—	1,925.3
1996	1,729.9	10.0	—	16.7	—	16.7	128.1	—	1,884.7
1997	1,661.7	13.0	—	14.6	—	14.6	105.9	—	1,795.1

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[b] Utilities used biomass fuels at no charge or received a fee for accepting them.
R=Revised data.

—No consumption.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 227. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Oklahoma

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.57	0.57	0.35	0.90	0.72	1.42	2.82	0.50	R 1.11	R 2.02	—	R 0.76	R 1.04	0.19	5.76	R 1.85
1975	—	0.96	0.96	0.75	2.36	2.01	2.91	4.52	1.58	R 2.46	R 3.59	—	R 1.45	R 1.91	0.61	6.64	R 3.08
1980	—	1.25	1.25	1.96	6.77	6.34	6.03	9.79	3.23	R 5.90	R 8.15	—	R 3.06	R 4.05	1.63	11.80	R 6.48
1981	—	1.46	1.46	2.27	7.33	7.47	6.58	10.89	4.33	R 8.11	R 9.27	—	R 3.65	R 4.58	1.77	13.53	R 7.30
1982	—	1.66	1.66	2.66	7.47	7.09	7.20	10.25	4.84	R 7.16	R 8.91	—	R 3.61	R 4.68	1.90	15.34	R 7.65
1983	—	1.74	1.74	3.05	6.96	6.41	7.83	8.76	4.86	R 6.85	R 7.90	—	R 3.44	R 4.55	2.10	16.42	R 7.59
1984	—	1.73	1.73	3.28	7.00	6.24	7.28	8.64	4.20	R 7.85	R 7.86	—	R 3.12	R 4.60	2.21	16.31	R 7.48
1985	—	1.69	1.69	3.41	6.74	5.87	7.37	8.76	3.41	R 7.09	R 7.79	—	R 3.00	R 4.69	2.30	17.23	R 7.74
1986	—	1.65	1.65	3.11	5.38	3.94	8.12	6.30	2.09	R 7.25	R 6.07	—	R 2.37	R 3.88	2.17	17.83	R 6.96
1987	—	1.58	1.58	2.76	5.96	3.90	7.63	7.08	2.18	R 6.60	R 6.46	—	R 2.38	R 3.77	2.08	16.48	R 6.64
1988	—	R 1.48	R 1.48	2.80	5.63	3.75	5.60	7.12	1.81	R 6.09	R 6.23	—	R 2.39	R 3.66	2.04	16.20	R 6.49
1989	—	1.36	1.36	2.86	6.17	4.27	5.86	7.79	2.04	R 6.65	R 6.76	—	e R 2.05	e R 3.84	2.02	16.28	e R 6.68
1990	—	1.40	1.40	2.80	7.48	5.93	6.64	9.00	2.46	R 6.27	R 7.93	—	R 2.23	R 4.20	2.05	16.09	R 7.38
1991	—	1.32	1.32	2.78	6.95	4.73	6.65	8.72	1.77	R 6.75	R 7.48	—	R 2.25	R 4.04	1.92	16.98	R 7.25
1992	—	1.24	1.24	3.02	6.71	4.42	5.54	8.37	2.29	R 7.00	R 7.09	—	R 2.16	R 4.03	1.88	17.04	R 7.15
1993	—	1.25	1.25	3.17	6.80	4.12	7.40	8.21	2.42	R 6.64	R 7.18	—	R 1.97	R 4.03	1.88	17.51	R 7.26
1994	—	1.05	1.05	3.01	6.63	3.84	7.35	8.16	2.35	R 6.91	R 7.06	—	R 2.03	R 3.97	1.60	17.15	R 7.21
1995	—	1.03	1.03	2.94	6.60	4.12	7.79	8.27	2.18	R 7.42	R 7.42	—	R 1.98	R 3.88	1.43	16.36	R 7.19
1996	—	0.99	0.99	3.64	7.50	4.87	9.44	9.04	2.47	8.09	8.26	—	2.10	4.45	1.55	16.32	7.88
1997	—	0.95	0.95	4.22	7.22	4.58	9.23	8.92	3.03	9.46	8.12	—	2.02	4.55	1.46	15.93	8.07
	Expenditures in Million Nominal Dollars																
1970	—	R (s)	R (s)	152.7	28.7	17.2	50.3	481.9	2.2	R 51.5	R 631.8	—	R 1.9	R 786.5	-46.8	311.7	R 1,051.4
1975	—	0.5	0.5	392.2	128.1	43.2	99.1	913.4	5.7	R 122.7	R 1,312.2	—	R 5.5	R 1,710.3	-190.0	509.6	R 2,030.0
1980	—	132.5	132.5	1,209.5	478.2	170.5	196.2	2,038.2	13.1	R 279.9	R 3,176.1	—	R 14.3	R 4,532.4	-727.3	1,211.3	R 5,016.4
1981	—	230.6	230.6	1,363.9	660.4	206.5	169.7	2,384.1	16.0	R 284.9	R 3,721.5	—	R 17.4	R 5,333.5	-783.2	1,571.2	R 6,121.5
1982	—	337.4	337.4	1,484.3	631.0	232.5	206.3	2,337.0	15.1	R 251.8	R 3,673.8	—	R 18.1	R 5,513.6	-850.3	1,853.6	R 6,517.0
1983	—	380.6	380.6	1,642.7	671.3	212.4	227.4	1,965.7	10.3	R 272.0	R 3,359.1	—	R 17.6	R 5,400.1	-956.0	2,054.9	R 6,499.1
1984	—	400.4	400.4	1,760.6	732.7	243.0	183.6	1,902.6	5.3	R 257.2	R 3,324.5	—	R 10.7	R 5,496.2	-995.2	1,979.9	R 6,480.8
1985	—	R 400.3	R 400.3	1,633.3	720.5	190.6	209.6	R 1,941.1	2.4	R 272.1	R 3,336.3	—	R 10.0	R 5,379.8	-988.5	2,141.2	R 6,532.6
1986	—	R 360.3	R 360.3	1,416.3	436.5	129.8	172.8	R 1,342.6	3.2	R 234.0	R 2,318.8	—	R 10.4	R 4,105.8	-883.8	2,158.5	R 5,380.5
1987	—	379.9	379.9	1,305.6	484.4	161.8	150.4	R 1,439.6	3.3	R 192.1	R 2,431.6	—	R 11.5	R 4,128.6	-882.1	2,014.1	R 5,260.6
1988	—	R 398.8	R 398.8	1,307.5	488.8	150.7	98.7	R 1,452.2	5.2	R 210.0	R 2,405.5	—	R 12.0	R 4,123.8	-900.4	2,047.7	R 5,271.2
1989	—	R 366.2	R 366.2	1,363.3	530.6	220.5	118.1	R 1,590.8	3.7	R 195.4	R 2,659.1	—	e R 15.8	e R 4,404.4	-891.0	2,040.0	e R 5,553.4
1990	—	R 387.7	R 387.7	1,307.5	668.4	259.8	77.2	R 1,842.9	7.6	R 214.9	R 3,070.9	—	R 14.0	R 4,780.1	-904.7	2,317.1	R 6,192.6
1991	—	R 384.1	R 384.1	1,262.6	573.6	279.1	115.1	R 1,778.6	2.0	R 230.2	R 2,978.7	—	R 14.5	R 4,639.9	-862.2	2,266.3	R 6,044.0
1992	—	R 381.5	R 381.5	1,281.5	636.2	321.7	88.9	R 1,753.8	5.9	R 217.7	R 3,024.2	—	R 14.1	R 4,701.3	-835.3	2,207.6	R 6,073.6
1993	—	R 413.8	R 413.8	1,429.4	649.1	207.9	149.1	R 1,760.0	7.2	R 241.3	R 3,014.7	—	R 13.1	R 4,870.9	-873.1	2,402.6	R 6,400.5
1994	—	R 320.8	R 320.8	1,367.0	668.7	223.4	146.1	R 1,780.6	5.2	R 245.1	R 3,069.0	—	R 15.0	R 4,771.7	-719.3	2,390.0	R 6,442.4
1995	—	R 353.6	R 353.6	1,332.9	678.8	124.9	100.6	1,840.6	3.9	R 245.0	R 2,993.7	—	R 16.9	R 4,697.1	-670.9	2,294.6	R 6,320.8
1996	—	347.5	347.5	1,672.8	894.7	129.8	125.4	2,078.8	4.0	242.9	3,475.7	—	17.3	5,513.3	-734.9	2,393.5	7,171.9
1997	—	348.8	348.8	1,884.2	919.5	136.4	124.1	2,000.5	2.7	206.7	3,389.9	—	14.7	5,637.7	-702.2	2,397.7	7,333.3

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 228. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Oklahoma

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	0.90	0.81	0.89	1.41	1.60	1.60	0.71	R 0.98	7.42	R 2.22
1975	1.58	1.22	2.22	2.88	3.13	3.12	1.39	1.62	8.22	R 3.16
1980	2.54	2.46	6.60	7.95	7.29	7.29	3.57	R 2.87	13.50	R 6.33
1981	3.42	2.87	8.00	9.71	7.40	7.47	4.39	R 3.35	15.85	R 7.80
1982	3.18	3.50	7.54	9.67	8.49	8.50	4.26	R 3.96	18.00	R 8.78
1983	2.91	4.18	6.95	R 7.55	9.06	8.96	4.13	R 4.67	19.31	R 9.69
1984	2.92	4.48	6.81	R 7.10	7.90	R 7.80	4.19	R 4.71	18.18	R 9.39
1985	2.83	4.49	3.73	R 6.78	7.78	R 7.52	4.03	R 4.75	19.37	R 10.01
1986	2.78	4.90	5.41	R 4.86	6.95	R 6.88	3.23	R 5.00	20.69	R 11.05
1987	2.40	4.49	3.64	R 6.38	6.33	R 6.30	3.08	R 4.57	19.76	R 10.57
1988	2.12	4.36	4.81	R 6.26	6.80	R 6.72	3.11	R 4.47	19.74	R 10.19
1989	2.43	4.40	6.14	R 6.78	6.70	R 6.70	3.44	R 4.53	20.02	R 10.28
1990	2.41	4.71	7.37	R 8.24	8.27	R 8.27	3.53	4.89	19.30	R 11.22
1991	2.36	4.66	6.84	R 7.49	7.35	R 7.35	3.37	R 4.78	20.61	R 11.14
1992	2.43	4.85	6.25	R 7.10	8.11	R 8.08	3.08	R 4.96	21.02	R 11.31
1993	2.16	4.84	6.28	R 6.25	8.82	R 8.79	3.02	R 4.99	20.94	R 11.10
1994	2.25	5.36	7.88	R 5.98	7.84	R 7.82	2.93	R 5.42	20.60	R 11.70
1995	2.24	5.48	6.10	R 4.95	8.23	R 8.18	2.87	R 5.54	19.99	R 11.59
1996	2.14	5.51	6.88	5.98	9.96	9.80	3.29	5.71	19.65	11.36
1997	2.14	6.19	6.86	5.60	9.66	9.59	3.27	6.25	19.43	11.81
	Expenditures in Million Nominal Dollars									
1970	(s)	65.1	(s)	R (s)	35.1	35.5	1.7	R 102.4	184.6	R 286.9
1975	(s)	97.3	R (s)	R (s)	65.4	66.0	3.7	R 167.0	258.7	R 425.7
1980	0.6	188.5	0.6	0.9	47.1	48.6	12.1	R 249.9	566.8	R 816.7
1981	R (s)	205.5	4.5	0.8	50.9	56.1	15.1	R 276.8	722.1	R 998.9
1982	R (s)	281.0	(s)	0.8	66.8	67.6	15.8	R 364.8	868.1	R 1,232.9
1983	(s)	343.5	3.0	R 0.5	84.8	R 88.4	15.1	R 447.0	965.0	R 1,412.0
1984	R (s)	371.0	3.2	R 1.0	46.2	R 50.4	8.3	R 429.9	884.3	R 1,314.2
1985	R (s)	348.3	1.8	R 1.2	56.8	R 59.8	7.8	R 416.0	951.6	R 1,367.6
1986	R (s)	333.7	0.9	R (s)	37.4	R 38.6	6.1	R 378.4	981.5	R 1,359.9
1987	(s)	297.1	R (s)	R 0.8	31.6	R 32.6	7.2	R 336.9	949.6	R 1,286.5
1988	R (s)	325.3	0.8	R 0.9	32.9	34.5	7.6	R 367.6	975.0	R 1,342.5
1989	(s)	323.1	(s)	R 0.7	37.2	R 38.0	8.7	R 369.8	962.0	R 1,331.7
1990	(s)	315.0	(s)	R (s)	38.2	38.7	9.5	363.2	1,124.5	1,487.7
1991	(s)	326.6	(s)	R (s)	36.5	36.9	9.6	R 373.1	1,077.7	R 1,450.8
1992	(s)	326.4	R (s)	R (s)	32.6	33.2	9.2	R 368.8	1,022.2	R 1,391.0
1993	(s)	387.1	(s)	R (s)	40.9	R 41.1	7.9	R 436.1	1,135.9	R 1,572.0
1994	(s)	380.7	(s)	R (s)	34.1	R 34.3	7.5	R 422.5	1,133.6	R 1,556.1
1995	R (s)	382.0	R (s)	R (s)	36.2	R 36.7	8.2	R 427.1	1,113.0	R 1,540.1
1996	(s)	432.2	0.9	0.7	52.0	53.6	9.4	495.2	1,160.2	1,655.4
1997	3.8	447.1	(s)	(s)	50.5	51.1	6.8	508.7	1,151.9	1,660.6

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 229. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Oklahoma

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.45	0.51	0.82	0.62	1.12	2.82	0.47	1.18	0.71	0.61	5.50	1.68
1975	0.94	0.94	2.12	2.37	2.56	4.52	1.46	2.58	1.39	1.24	6.73	2.96
1980	1.39	2.30	6.31	6.42	5.72	9.79	3.42	7.20	3.57	2.74	11.91	6.12
1981	1.55	2.78	7.65	5.38	6.29	10.89	—	8.18	4.39	3.47	13.10	7.61
1982	1.77	3.42	7.21	6.99	6.71	10.25	—	7.98	4.26	3.88	14.77	8.55
1983	1.77	3.98	6.25	R 7.55	7.24	8.76	—	7.22	4.13	4.43	15.94	9.38
1984	1.76	4.35	6.31	R 7.10	7.09	8.64	—	7.33	4.19	4.79	17.03	9.91
1985	1.79	4.32	5.99	R 6.78	7.23	8.76	—	R 6.90	NA	4.70	18.02	10.69
1986	R 1.85	4.31	3.66	R 4.86	8.52	6.30	—	5.79	NA	4.46	18.48	11.29
1987	1.96	4.05	4.21	R 6.38	8.07	7.08	2.18	R 5.85	NA	4.30	17.13	10.78
1988	R 1.44	3.92	3.80	R 6.26	5.14	7.12	1.80	R 4.96	NA	R 4.04	16.67	R 9.39
1989	R 1.39	3.86	4.44	R 6.78	5.54	7.79	2.01	R 5.43	NA	R 4.10	16.87	R 10.05
1990	R 1.30	3.84	5.47	R 8.24	5.57	9.00	2.38	R 6.33	NA	R 4.21	16.65	R 10.58
1991	R 1.30	3.86	4.85	R 7.49	6.38	8.72	1.66	R 5.71	NA	4.08	17.59	10.66
1992	R 1.38	4.14	4.66	R 7.10	4.67	8.37	2.29	R 5.34	NA	4.26	17.68	11.16
1993	R 1.39	4.33	4.48	R 6.25	6.97	8.21	—	R 5.44	3.02	R 4.38	18.03	R 11.15
1994	R 1.50	4.61	4.26	R 5.98	8.10	8.16	—	5.75	2.93	R 4.67	17.46	R 11.45
1995	R 1.35	4.41	4.28	R 4.95	8.13	8.27	2.37	R 5.68	2.87	R 4.47	16.52	R 10.65
1996	1.34	4.61	5.21	5.98	9.45	9.04	—	6.59	3.29	4.73	16.65	10.47
1997	1.43	5.32	4.89	5.60	9.98	8.92	—	6.07	3.27	5.14	16.28	10.45
	Expenditures in Million Nominal Dollars											
1970	(s)	22.9	R (s)	0.8	4.3	3.4	0.6	9.6	(s)	R 32.6	82.9	R 115.5
1975	(s)	39.1	5.0	1.4	9.4	6.3	1.8	24.0	(s)	R 63.2	156.5	219.6
1980	0.6	108.4	11.6	0.5	6.5	15.5	0.6	34.8	(s)	R 144.1	365.8	R 509.9
1981	R (s)	116.6	23.3	1.2	7.6	18.0	—	50.2	(s)	R 167.2	475.0	R 642.2
1982	R (s)	157.7	6.6	9.6	9.3	17.3	—	42.8	(s)	R 201.3	573.2	R 774.5
1983	R (s)	182.3	21.7	R 0.6	12.0	18.9	—	R 53.2	(s)	R 235.9	640.0	R 875.9
1984	R (s)	196.5	23.7	0.6	7.3	27.2	—	58.8	(s)	R 255.6	652.3	R 907.9
1985	R (s)	179.8	24.6	R 0.8	9.3	15.6	—	50.2	NA	230.1	719.9	950.0
1986	R (s)	160.9	6.0	R (s)	8.1	11.4	—	25.7	NA	186.7	734.7	921.4
1987	R (s)	135.5	10.0	R (s)	7.1	13.3	R (s)	30.8	NA	R 166.5	677.6	R 844.1
1988	R (s)	194.8	13.8	R 1.5	4.4	R 12.7	R (s)	R 32.5	NA	R 227.5	690.0	R 917.5
1989	(s)	151.7	16.5	R 3.4	5.4	12.8	0.6	R 38.7	NA	R 190.4	684.0	R 874.4
1990	(s)	145.9	17.2	R 0.6	4.5	R 17.7	1.2	R 41.2	NA	R 187.0	776.2	R 963.2
1991	(s)	154.8	13.7	R (s)	5.6	10.6	0.8	R 31.1	NA	R 185.9	760.3	R 946.2
1992	(s)	148.9	10.2	R (s)	3.3	7.6	0.6	21.8	NA	170.7	749.0	R 919.7
1993	(s)	180.2	8.5	R (s)	5.7	1.6	—	15.9	0.6	196.1	795.5	R 991.7
1994	(s)	172.7	6.5	R (s)	6.2	1.6	—	14.5	0.6	R 187.8	791.9	R 979.7
1995	R (s)	177.6	7.3	R (s)	6.3	1.6	(s)	15.4	0.6	R 193.8	752.9	R 946.7
1996	(s)	217.4	11.8	(s)	8.7	1.8	—	22.5	0.8	240.6	785.7	1,026.3
1997	4.7	241.2	17.1	0.5	9.2	1.7	—	28.6	0.7	275.1	793.0	1,068.1

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 230. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Oklahoma

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	—	—	0.25	0.68	0.54	0.62	1.12	5.08	2.82	0.53	R 0.70	R 0.86	R 1.58	0.53	3.13	R 0.77
1975	—	0.94	0.94	0.72	1.86	2.09	2.37	2.56	7.48	4.52	1.65	R 1.56	R 2.17	R 1.58	1.39	4.29	R 1.72
1980	—	1.39	1.39	2.11	3.60	5.68	6.42	5.72	14.36	9.79	3.22	R 5.33	R 5.28	R 1.58	R 3.27	9.31	R 3.93
1981	—	1.55	1.55	2.49	4.79	4.80	5.38	6.29	18.00	10.89	4.34	R 6.19	R 5.82	R 1.58	R 3.38	10.90	R 4.19
1982	—	1.77	1.77	2.93	4.03	6.05	6.99	6.71	17.25	10.25	4.84	R 4.94	R 6.08	R 1.58	R 3.79	12.20	R 4.73
1983	—	1.77	1.77	3.23	4.21	6.54	R 6.69	7.24	16.98	8.76	4.87	R 5.61	R 6.27	R 1.58	R 4.17	12.83	R 5.19
1984	—	1.76	1.76	3.27	4.19	6.54	6.94	7.09	17.63	8.64	4.25	R 5.89	R 6.58	R 1.58	R 4.21	12.89	R 5.17
1985	—	1.79	1.79	3.23	4.20	6.24	R 6.74	7.23	17.61	8.76	3.39	R 5.13	R 6.34	R 1.58	R 4.26	13.33	R 5.31
1986	—	R 1.85	R 1.85	2.57	4.58	4.03	R 4.54	8.52	15.59	6.30	2.11	R 5.07	R 5.85	R 1.71	R 3.48	13.05	R 4.70
1987	—	1.96	1.96	1.96	3.44	4.50	R 4.50	8.07	13.58	7.08	2.18	R 5.95	R 5.70	R 1.71	R 2.84	11.19	R 3.85
1988	—	R 1.44	R 1.44	1.70	3.24	4.16	R 4.13	5.14	14.62	7.12	1.80	R 5.00	R 4.65	R 1.71	R 2.49	10.75	R 3.57
1989	—	R 1.39	R 1.39	1.93	3.15	4.72	R 5.08	5.54	14.48	7.79	2.01	R 5.58	R 5.20	d R 1.37	d R 2.64	10.73	d R 3.65
1990	—	R 1.30	R 1.30	1.71	3.14	5.84	R 6.53	5.57	14.60	9.00	2.38	R 6.45	R 5.40	R 1.25	R 2.52	10.65	R 3.58
1991	—	R 1.30	R 1.30	1.67	3.40	5.20	R 5.77	6.38	16.80	8.72	1.66	R 6.57	R 5.64	R 1.36	R 2.64	11.29	R 3.77
1992	—	R 1.38	R 1.38	1.98	2.47	5.14	R 4.96	4.67	18.32	8.37	2.29	R 7.18	R 5.14	R 1.38	R 2.77	11.32	R 3.90
1993	—	R 1.39	R 1.39	2.15	2.74	4.98	R 4.96	6.97	18.96	8.21	2.42	R 6.36	R 5.45	R 1.36	R 2.94	12.12	R 4.09
1994	—	R 1.50	R 1.50	2.09	2.71	4.84	R 4.73	7.10	19.11	8.16	2.35	R 6.55	R 5.54	R 1.49	R 2.94	11.92	R 4.03
1995	—	R 1.35	R 1.35	2.24	2.90	4.84	R 5.02	7.45	R 19.41	8.27	2.37	R 6.89	R 5.73	R 1.48	R 2.87	11.00	R 3.85
1996	—	1.34	1.34	3.19	3.02	5.82	5.45	9.06	20.08	9.04	2.93	7.76	6.56	1.40	3.77	11.06	4.71
1997	—	1.43	1.43	4.15	3.26	5.34	5.41	8.84	17.86	8.92	3.04	6.76	6.79	1.46	4.47	10.65	5.31
	Expenditures in Million Nominal Dollars																
1970	—	—	—	18.1	20.7	6.3	2.9	8.7	5.1	7.6	1.2	R 2.7	R 55.2	R (s)	R 73.5	44.2	R 117.7
1975	—	R (s)	R (s)	66.6	69.9	49.3	2.7	19.7	12.4	10.4	3.2	R 6.2	R 173.7	R 1.7	R 242.5	94.5	R 337.0
1980	—	7.8	7.8	310.6	115.1	122.5	11.1	137.7	50.4	18.4	12.5	R 19.1	R 486.9	R 1.9	R 807.2	278.6	R 1,085.8
1981	—	22.3	22.3	468.4	106.7	140.7	7.6	103.6	60.6	19.8	15.9	R 12.0	R 466.8	R 2.0	R 959.5	374.1	R 1,333.6
1982	—	25.1	25.1	509.0	91.8	162.9	8.1	120.1	53.0	17.5	15.1	R 8.9	R 477.4	R 1.9	R 1,013.4	412.3	R 1,425.8
1983	—	22.4	22.4	520.8	121.1	222.8	R 3.6	117.6	54.6	13.2	10.3	R 11.9	R 555.1	R 2.2	R 1,100.5	450.0	R 1,550.4
1984	—	R 26.3	R 26.3	574.0	85.9	241.1	3.0	126.7	60.5	33.9	5.0	R 15.3	R 571.4	R 2.2	R 1,173.9	443.3	R 1,617.2
1985	—	R 32.7	R 32.7	486.9	111.7	251.9	2.4	139.9	56.3	R 45.0	2.2	R 13.2	R 622.6	R 2.2	R 1,144.4	469.7	R 1,614.1
1986	—	R 30.3	R 30.3	369.8	99.8	81.3	R 1.6	124.0	48.7	30.0	3.1	R 7.5	R 396.0	R 4.3	R 800.4	442.2	R 1,242.6
1987	—	25.3	25.3	346.9	62.4	76.6	R 0.9	109.0	48.0	30.5	3.0	R 8.6	R 339.1	R 4.3	R 715.6	386.9	R 1,102.4
1988	—	R 17.2	R 17.2	269.4	76.7	76.4	R (s)	59.5	49.8	R 29.6	5.0	R 7.3	R 304.9	R 4.4	R 596.0	382.7	R 978.7
1989	—	R 19.7	R 19.7	345.4	57.5	76.2	R (s)	73.7	50.6	37.1	3.0	R 8.0	R 306.5	d R 7.1	d R 678.8	394.0	d R 1,072.8
1990	—	R 16.5	R 16.5	315.5	73.1	105.1	R 0.6	R 32.6	52.5	R 39.4	5.3	R 10.4	R 318.9	R 4.5	R 655.3	416.5	R 1,071.8
1991	—	R 21.0	R 21.0	282.9	77.5	96.8	R (s)	70.6	54.0	41.0	1.0	R 20.1	R 361.3	R 4.9	R 670.1	428.4	R 1,098.5
1992	—	R 22.9	R 22.9	330.0	47.9	125.6	R (s)	51.5	60.1	36.5	5.1	R 22.7	R 349.9	R 4.9	R 707.7	436.5	R 1,144.1
1993	—	R 37.2	R 37.2	365.8	67.7	90.8	R (s)	100.2	63.3	44.2	7.1	R 20.2	R 393.8	R 5.2	R 802.0	471.2	R 1,273.2
1994	—	R 24.1	R 24.1	391.0	63.6	98.0	R 0.6	101.0	66.7	47.6	5.1	R 20.9	R 403.4	R 6.8	R 825.4	464.5	R 1,289.9
1995	—	R 44.7	R 44.7	412.2	61.3	87.4	R (s)	56.1	66.6	51.4	2.6	R 20.8	R 346.3	R 8.1	R 811.2	428.7	R 1,239.9
1996	—	22.0	22.0	617.1	55.4	116.3	(s)	63.4	66.9	57.8	2.3	24.4	386.6	7.2	1,033.0	447.6	1,480.6
1997	—	21.4	21.4	813.1	30.8	113.9	(s)	63.4	62.8	58.5	2.5	23.5	356.0	7.3	1,197.8	452.9	1,650.7

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 231. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Oklahoma

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	—	—	2.17	1.11	0.72	1.12	5.08	2.82	0.46	2.44	2.44	—	2.44
1975	0.94	—	3.45	2.61	2.01	2.56	7.48	4.52	1.79	4.11	4.11	—	4.11
1980	—	—	9.02	7.30	6.34	5.72	14.36	9.79	—	9.12	9.12	—	9.12
1981	—	—	10.84	8.61	7.47	6.29	18.00	10.89	—	10.25	10.25	—	10.25
1982	—	—	10.92	8.16	7.09	6.71	17.25	10.25	—	9.63	9.63	—	9.63
1983	—	—	10.44	7.25	6.41	7.24	16.98	8.76	—	8.34	8.34	—	8.34
1984	—	—	10.27	7.31	6.24	7.09	17.63	8.64	—	8.22	8.22	—	8.22
1985	—	—	9.99	7.15	5.87	7.23	17.61	8.76	—	8.27	8.27	—	8.27
1986	—	—	8.41	5.92	3.94	8.52	15.59	6.30	—	6.11	6.11	—	6.11
1987	—	—	7.55	6.45	3.90	8.07	13.58	7.08	—	6.62	6.62	—	6.62
1988	—	—	7.41	6.17	3.75	5.14	14.62	7.12	—	6.59	6.59	—	6.59
1989	—	—	8.28	6.64	4.27	5.54	14.48	7.79	—	7.08	7.08	—	7.08
1990	—	—	9.32	8.00	5.93	5.57	14.60	9.00	—	8.44	8.44	—	8.44
1991	—	3.78	8.71	7.59	4.73	6.38	16.80	8.72	—	7.88	7.88	—	7.88
1992	—	2.99	8.54	7.34	4.42	4.67	18.32	8.37	—	7.47	7.47	—	7.47
1993	—	2.60	8.24	7.31	4.12	6.97	18.96	8.21	—	7.54	7.54	—	7.54
1994	—	2.30	7.96	7.14	3.84	9.07	19.11	8.16	—	7.37	7.37	—	7.37
1995	—	2.33	8.36	7.03	4.12	9.41	R 19.41	8.27	—	7.74	7.74	—	7.74
1996	—	2.31	9.29	7.92	4.87	8.78	20.08	9.04	—	8.56	8.56	—	8.56
1997	—	2.45	9.39	7.70	4.58	8.28	17.86	8.92	—	8.33	8.32	—	8.32
	Expenditures in Million Nominal Dollars												
1970	—	—	4.9	21.7	17.2	2.2	14.1	470.9	R (s)	531.2	531.2	—	531.2
1975	(s)	—	5.4	73.0	43.2	4.5	24.4	896.7	R (s)	1,047.7	1,047.7	—	1,047.7
1980	—	—	14.9	341.7	170.5	4.9	67.7	2,004.2	—	2,604.0	2,604.0	—	2,604.0
1981	—	—	14.7	490.4	206.5	7.6	81.4	2,346.2	—	3,146.7	3,146.7	—	3,146.7
1982	—	—	8.6	459.2	232.5	10.2	71.1	2,302.2	—	3,083.8	3,083.8	—	3,083.8
1983	—	—	6.4	422.0	212.4	13.0	73.3	1,933.7	—	2,660.8	2,660.8	—	2,660.8
1984	—	—	9.8	462.7	243.0	3.4	81.2	1,841.5	—	2,641.6	2,641.6	—	2,641.6
1985	—	—	11.0	439.7	190.6	3.5	75.5	R 1,880.6	—	R 2,600.9	R 2,600.9	—	R 2,600.9
1986	—	—	10.6	346.3	129.8	3.3	65.4	1,301.2	—	R 1,856.5	R 1,856.5	—	R 1,856.5
1987	—	—	6.8	396.1	161.8	2.7	64.4	R 1,395.8	—	R 2,027.6	R 2,027.6	—	R 2,027.6
1988	—	—	6.5	396.7	150.7	1.9	66.8	R 1,409.8	—	R 2,032.3	R 2,032.3	—	R 2,032.3
1989	—	—	6.9	436.5	220.5	1.7	67.9	R 1,540.9	—	R 2,274.5	R 2,274.5	—	R 2,274.5
1990	—	—	6.9	545.0	259.8	2.0	70.5	R 1,785.8	—	R 2,669.9	R 2,669.9	—	R 2,669.9
1991	—	(s)	4.9	462.5	279.1	2.5	72.5	R 1,727.0	—	R 2,548.5	R 2,548.6	—	R 2,548.6
1992	—	R (s)	5.3	499.9	321.7	1.4	80.6	R 1,709.7	—	R 2,618.7	R 2,618.8	—	R 2,618.8
1993	—	R (s)	4.3	549.5	207.9	2.4	85.0	R 1,714.2	—	R 2,563.3	R 2,563.6	—	R 2,563.6
1994	—	R (s)	3.4	563.8	223.4	R 4.8	89.5	R 1,731.5	—	R 2,616.3	R 2,616.7	—	R 2,616.7
1995	—	R (s)	6.5	583.5	124.9	2.0	R 89.4	1,787.6	—	R 2,593.8	R 2,594.1	—	R 2,594.1
1996	—	(s)	5.5	763.7	129.8	1.2	89.7	2,019.3	—	3,009.2	3,009.6	—	3,009.6
1997	—	(s)	3.8	787.9	136.4	1.0	84.3	1,940.2	—	2,953.7	2,953.9	—	2,953.9

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 232. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Oklahoma

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.39	0.19	0.46	0.56	—	0.50	—	—	0.19
1975	0.43	0.61	1.45	1.92	—	1.75	—	—	0.61
1980	1.23	1.74	3.44	5.30	—	5.29	—	—	1.63
1981	1.45	1.92	3.68	7.09	—	6.76	—	—	1.77
1982	1.65	2.08	3.76	6.71	—	6.61	—	—	1.90
1983	1.73	2.39	3.42	5.81	—	5.72	—	—	2.10
1984	1.73	2.65	3.65	5.85	—	5.38	—	—	2.21
1985	1.68	2.95	3.73	5.54	—	5.34	—	—	2.30
1986	1.64	2.68	1.50	2.90	—	2.81	—	—	2.17
1987	1.56	2.67	2.76	3.91	—	3.89	—	—	2.08
1988	1.48	2.81	2.50	R 3.41	—	3.35	—	—	2.04
1989	1.36	2.93	2.91	4.15	—	3.94	—	—	2.02
1990	1.40	3.01	3.02	7.28	—	4.34	—	—	2.05
1991	1.32	2.87	3.33	4.09	—	3.84	—	—	1.92
1992	1.23	3.08	2.16	4.36	—	3.54	—	—	1.88
1993	1.24	3.11	2.07	3.50	—	3.16	—	—	1.88
1994	1.02	2.67	2.10	3.70	—	3.28	—	—	1.60
1995	0.99	2.27	1.90	2.53	—	1.97	—	—	1.43
1996	0.98	2.90	2.04	4.07	—	2.79	—	—	1.55
1997	0.92	2.88	2.87	4.09	—	3.68	—	—	1.46
	Expenditures in Million Nominal Dollars								
1970	(s)	46.5	R (s)	R (s)	—	R (s)	—	—	46.8
1975	(s)	189.1	R (s)	0.6	—	0.9	—	—	190.0
1980	123.5	602.0	(s)	1.8	—	1.8	—	—	727.3
1981	208.1	573.4	R (s)	1.5	—	1.6	—	—	783.2
1982	311.6	536.5	(s)	2.2	—	2.2	—	—	850.3
1983	358.1	596.2	(s)	1.7	—	1.7	—	—	956.0
1984	373.8	619.1	R (s)	2.0	—	2.3	—	—	995.2
1985	367.4	618.3	R (s)	2.5	—	2.7	—	—	988.5
1986	329.8	551.9	R (s)	1.9	—	2.0	—	—	883.8
1987	354.5	526.0	(s)	1.5	—	1.6	—	—	882.1
1988	381.3	518.0	R (s)	1.1	—	1.2	—	—	900.4
1989	346.5	543.1	R (s)	1.3	—	1.5	—	—	891.0
1990	371.3	531.1	1.1	1.2	—	2.3	—	—	904.7
1991	363.1	498.2	R (s)	0.6	—	0.9	—	—	862.2
1992	358.6	476.1	R (s)	R (s)	—	0.6	—	—	835.3
1993	376.5	496.1	R (s)	R (s)	—	R (s)	—	—	873.1
1994	296.6	422.2	R (s)	R (s)	—	R (s)	—	—	719.3
1995	308.4	360.9	1.3	R (s)	—	1.6	—	—	670.9
1996	325.4	405.8	1.7	2.0	—	3.7	—	—	734.9
1997	318.9	382.6	(s)	(s)	—	0.7	—	—	702.2

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 233. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Oregon

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.57	0.57	0.81	1.21	0.73	2.21	2.83	0.51	R 1.33	R 1.87	—	R 1.34	R 1.61	0.48	2.90	R 1.84
1975	—	1.04	1.04	1.44	2.62	2.04	4.17	4.45	2.06	R 2.23	R 3.45	0.20	R 1.49	R 2.88	2.04	4.13	R 3.14
1980	—	1.72	1.72	4.69	6.62	6.21	7.09	9.75	3.92	R 5.40	R 7.82	0.36	1.74	R 6.02	0.59	7.59	R 7.06
1981	—	1.77	1.77	4.92	7.61	7.56	7.68	10.83	5.26	R 5.69	R 8.68	0.47	R 1.80	R 6.36	0.74	8.63	R 7.79
1982	—	1.96	1.96	5.91	7.57	7.37	7.78	10.51	5.63	R 5.61	R 8.37	0.61	R 1.84	R 6.70	0.79	10.27	R 8.13
1983	—	1.99	1.99	5.93	7.29	6.76	8.64	8.81	5.44	R 6.21	R 7.80	0.64	R 1.79	R 6.37	0.78	11.58	R 8.02
1984	—	2.15	2.15	5.80	7.29	6.42	7.86	8.79	5.12	R 6.47	R 7.67	0.58	R 1.82	R 6.16	0.78	12.10	R 8.09
1985	—	R 2.16	R 2.16	5.60	7.45	6.16	9.18	8.87	4.70	R 6.22	R 7.74	0.54	R 1.78	R 5.90	0.67	13.08	R 8.26
1986	—	R 2.42	R 2.42	4.94	5.32	4.24	9.58	6.92	2.52	R 5.49	R 5.83	0.52	R 1.68	R 4.62	0.52	12.95	R 7.00
1987	—	2.43	2.43	4.55	5.75	4.33	8.71	7.12	2.62	R 4.59	R 5.98	0.45	R 1.72	R 4.93	0.45	12.88	R 7.06
1988	—	2.43	2.43	4.80	5.81	4.04	8.54	7.48	2.35	R 4.44	R 6.06	0.46	R 1.70	R 4.87	0.47	12.61	R 7.06
1989	—	1.76	1.76	4.17	6.79	4.76	10.19	8.50	2.55	R 4.05	R 6.87	0.46	e R 1.67	e R 5.28	R 1.02	12.49	e R 7.47
1990	—	1.22	1.22	4.28	7.57	5.93	10.37	9.45	3.50	R 3.81	R 7.68	0.44	1.98	R 5.73	R 0.82	12.25	R 7.97
1991	—	R 1.18	R 1.18	4.01	7.72	5.01	10.84	9.14	2.56	R 4.27	R 7.37	0.43	R 2.02	R 5.76	R 1.05	12.45	R 7.77
1992	—	1.18	1.18	3.85	7.76	4.67	10.35	10.03	1.89	R 3.76	R 7.51	0.53	R 1.98	R 5.43	R 1.00	12.64	R 7.84
1993	—	1.20	1.20	4.14	7.99	4.62	10.43	9.98	2.04	R 4.16	R 7.86	—	R 1.88	R 6.14	R 1.48	12.98	R 8.13
1994	—	1.15	1.15	4.12	7.82	4.16	10.22	10.03	2.06	R 4.23	R 7.80	—	R 1.94	R 5.93	R 1.36	13.49	R 8.24
1995	—	1.25	1.25	3.93	7.80	4.28	9.93	10.23	2.20	R 4.35	R 8.03	—	R 1.92	R 6.30	R 1.20	13.69	R 8.32
1996	—	1.15	1.15	3.81	8.78	5.11	9.99	11.12	2.14	5.07	8.90	—	1.97	6.68	1.21	13.99	8.65
1997	—	1.27	1.27	3.67	8.55	4.74	10.05	11.05	2.93	4.93	8.70	—	1.88	6.63	1.30	13.52	8.40
	Expenditures in Million Nominal Dollars																
1970	—	1.7	1.7	68.7	89.2	8.6	10.2	371.2	18.5	40.4	538.1	—	R 23.8	R 632.3	-0.8	248.3	R 879.8
1975	—	2.8	2.8	139.9	199.4	24.0	10.0	675.3	45.4	77.8	1,031.9	(s)	R 26.2	R 1,200.8	R (s)	458.4	R 1,658.8
1980	—	20.8	20.8	320.9	643.9	86.5	31.7	1,562.9	100.0	152.0	2,577.1	21.4	R 47.2	R 2,987.4	-41.1	950.4	R 3,896.8
1981	—	45.6	45.6	369.2	728.2	72.3	35.2	1,690.1	210.0	158.1	2,893.9	33.2	R 50.4	R 3,392.3	-68.5	1,108.8	R 4,432.5
1982	—	23.2	23.2	388.8	659.9	74.3	34.2	1,566.9	353.3	131.7	2,820.4	32.6	R 48.9	R 3,313.8	-49.1	1,191.5	R 4,456.2
1983	—	19.7	19.7	366.5	678.9	67.8	37.9	1,309.7	135.8	148.2	2,378.3	25.7	R 52.1	R 2,842.3	-36.2	1,302.4	R 4,108.5
1984	—	R 25.4	R 25.4	456.2	669.1	71.0	36.8	1,354.9	185.7	R 169.3	R 2,486.9	29.7	R 54.3	R 3,052.4	-46.9	1,571.4	R 4,576.9
1985	—	R 21.7	R 21.7	432.9	667.0	74.3	44.7	R 1,354.2	142.9	R 175.5	R 2,458.6	40.6	R 52.8	R 3,006.6	-54.5	1,573.1	R 4,525.2
1986	—	R 7.1	R 7.1	340.2	461.9	62.5	52.9	1,088.0	86.9	R 148.7	R 1,900.9	39.5	R 54.6	R 2,342.2	-39.6	1,549.2	R 3,851.9
1987	—	8.9	8.9	337.2	542.4	71.4	47.5	R 1,147.0	83.8	R 139.9	R 2,031.8	21.1	R 57.3	R 2,456.3	-21.1	1,657.4	R 4,092.6
1988	—	7.6	7.6	388.0	557.5	72.7	49.3	R 1,261.6	91.0	R 141.7	R 2,173.7	31.4	R 60.6	R 2,661.2	-32.3	1,692.0	R 4,321.0
1989	—	R 12.1	R 12.1	429.7	642.5	90.9	60.5	R 1,423.7	86.4	R 138.8	2,442.9	26.1	e R 62.9	e R 2,980.4	R -82.3	1,774.0	e R 4,672.1
1990	—	19.1	19.1	438.3	751.4	111.3	52.1	R 1,575.3	98.9	R 146.0	R 2,735.0	28.6	R 57.5	R 3,285.3	R -74.7	1,796.6	R 5,007.2
1991	—	38.5	38.5	472.4	726.7	105.8	61.1	R 1,542.2	101.7	R 149.9	R 2,687.4	6.8	R 59.2	R 3,275.7	R -69.6	1,854.4	R 5,060.5
1992	—	48.1	48.1	459.7	693.9	105.9	53.7	R 1,681.2	78.2	R 165.0	R 2,777.9	26.0	R 59.3	R 3,391.1	R -117.0	1,850.3	R 5,124.4
1993	—	44.4	44.4	560.2	657.7	112.7	58.7	R 1,758.4	59.6	R 170.5	2,817.6	—	R 55.8	R 3,488.5	R -87.8	1,974.3	R 5,375.0
1994	—	51.5	51.5	602.7	638.2	109.7	52.9	R 1,783.6	57.8	R 183.6	R 2,825.7	—	R 60.4	R 3,561.1	R -114.3	2,070.0	R 5,516.9
1995	—	25.2	25.2	566.6	667.7	124.1	55.2	1,829.0	50.3	R 170.1	R 2,896.5	—	R 65.8	R 3,561.7	R -51.3	2,135.2	R 5,645.6
1996	—	23.2	23.2	637.0	720.5	151.7	60.3	2,054.1	44.5	204.6	3,235.7	—	68.6	3,976.7	-50.9	2,252.9	6,178.7
1997	—	20.8	20.8	609.9	769.0	153.8	61.3	1,950.3	64.9	200.5	3,199.8	—	63.9	3,898.7	-37.3	2,196.6	6,058.1

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 234. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Oregon

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	0.95	1.45	1.41	2.79	2.66	1.63	0.82	R 1.49	3.65	R 2.41
1975	1.14	2.11	2.80	3.82	5.27	3.03	1.62	R 2.37	5.27	R 3.70
1980	4.26	5.36	7.02	9.80	9.00	7.35	4.15	R 6.05	9.37	R 7.91
1981	4.57	5.81	8.03	11.53	9.12	8.26	5.10	R 6.88	10.59	R 8.89
1982	4.81	6.63	8.05	11.44	9.61	8.36	4.95	R 7.19	10.56	R 9.07
1983	3.75	6.95	7.47	R 8.01	10.37	R 8.04	4.79	R 7.21	12.07	R 9.97
1984	3.76	6.93	7.16	R 7.92	10.92	R 7.60	4.87	R 7.01	12.73	R 10.23
1985	3.67	6.73	7.00	R 10.64	8.73	R 7.26	4.68	R 6.78	13.72	R 10.58
1986	3.79	6.47	5.08	R 4.75	10.89	R 5.75	3.75	R 5.98	13.84	R 10.42
1987	3.76	6.44	5.23	R 4.47	9.83	R 5.82	3.58	R 5.92	14.07	R 10.59
1988	3.37	6.64	5.11	R 4.84	9.16	R 5.50	3.61	R 5.95	14.02	R 10.53
1989	3.66	5.98	5.78	R 5.13	15.93	R 6.84	4.00	R 6.04	13.97	R 10.50
1990	3.77	6.13	6.99	R 7.09	13.92	R 7.80	4.75	6.46	13.86	R 10.64
1991	5.21	5.95	6.73	R 5.55	14.26	R 7.98	4.54	R 6.29	14.11	R 10.67
1992	3.76	5.94	6.33	R 4.98	12.88	R 7.62	4.15	R 6.05	14.45	R 10.95
1993	3.77	6.17	6.62	R 5.45	13.14	R 8.04	4.06	R 6.30	14.71	R 11.08
1994	3.74	6.68	6.40	R 4.76	10.76	R 7.40	3.94	R 6.53	15.61	R 11.72
1995	3.77	6.45	6.45	R 4.81	10.53	R 7.39	3.86	R 6.32	16.08	R 11.91
1996	—	6.05	7.13	5.02	11.51	8.15	4.43	6.19	16.69	12.08
1997	3.71	5.92	7.43	4.67	12.60	8.63	4.41	6.22	16.31	11.96
	Expenditures in Million Nominal Dollars									
1970	R (s)	29.8	25.6	1.0	8.7	35.3	2.4	R 67.7	122.8	R 190.5
1975	R (s)	63.1	39.0	1.0	7.1	47.1	4.9	R 115.3	217.4	R 332.7
1980	0.6	103.1	82.5	2.1	19.0	103.5	10.8	R 218.0	432.9	R 650.9
1981	R (s)	104.1	118.6	4.6	20.9	144.1	13.4	R 261.7	476.5	R 738.2
1982	R (s)	129.5	98.9	3.9	21.2	124.1	14.0	R 267.8	498.0	R 765.8
1983	R (s)	121.5	80.3	R 1.3	27.1	R 108.6	13.4	R 243.6	540.0	R 783.6
1984	R (s)	140.0	87.0	R 1.2	17.3	R 105.5	14.7	R 260.4	610.1	R 870.5
1985	R (s)	148.8	96.8	R 2.5	16.3	R 115.5	13.8	R 278.2	680.0	R 958.3
1986	(s)	126.1	60.5	R 0.6	17.2	R 78.3	10.8	R 215.1	647.8	R 862.9
1987	R (s)	124.1	53.2	R (s)	15.1	R 68.5	13.6	R 206.4	658.3	R 864.7
1988	R (s)	141.4	54.9	R (s)	10.6	R 65.7	14.3	R 221.5	686.0	R 907.5
1989	R (s)	139.3	63.6	R 1.1	21.0	R 85.8	16.4	R 241.7	719.0	R 960.7
1990	R (s)	146.6	72.7	R 0.5	19.2	R 92.4	22.3	R 261.3	727.3	R 988.6
1991	(s)	161.4	58.3	R (s)	25.2	R 83.9	22.4	R 267.7	767.6	R 1,035.3
1992	(s)	142.6	39.4	R (s)	20.2	R 60.0	21.6	R 224.2	749.7	R 973.9
1993	R (s)	191.2	39.9	R 0.6	22.9	R 63.4	17.8	R 272.5	838.1	R 1,110.6
1994	(s)	201.6	34.8	R 1.3	19.9	R 56.0	17.0	R 274.7	876.9	R 1,151.6
1995	(s)	189.2	35.4	R 0.7	18.6	R 54.7	18.5	R 262.4	895.1	R 1,157.5
1996	—	209.7	34.1	1.2	19.2	54.5	21.2	285.4	984.3	1,269.7
1997	(s)	202.0	36.5	0.9	21.1	58.5	15.3	275.8	956.2	1,232.0

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 235. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Oregon

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.53	1.22	1.22	0.93	1.12	2.83	0.79	1.14	0.82	1.16	3.90	2.29
1975	1.04	1.79	2.60	2.58	2.76	4.45	2.45	2.68	1.62	2.21	5.20	R 3.66
1980	2.24	4.88	6.71	6.54	5.40	9.75	4.90	6.39	4.15	R 5.65	8.86	7.29
1981	2.35	5.20	7.68	7.15	6.24	10.83	6.50	7.45	5.10	6.26	10.36	R 8.35
1982	2.70	6.03	7.67	7.08	5.94	10.51	6.62	7.32	4.95	6.67	11.83	9.12
1983	2.55	6.23	5.97	R 8.01	6.10	8.81	5.97	R 6.44	4.79	R 6.32	13.11	9.76
1984	R 2.52	6.32	5.77	R 7.92	6.29	8.79	4.47	R 5.95	4.87	R 6.14	14.55	10.34
1985	R 2.52	6.06	5.69	R 10.64	9.45	8.87	4.12	R 6.05	NA	R 6.05	14.96	R 10.82
1986	R 2.42	5.47	3.27	R 4.75	9.06	6.92	2.10	3.60	NA	R 4.73	14.82	10.30
1987	2.42	5.17	3.97	R 4.47	8.28	7.12	2.65	4.24	NA	4.78	15.00	10.44
1988	R 2.41	5.24	3.76	R 4.84	8.38	7.48	2.55	4.01	NA	4.74	14.19	9.96
1989	2.37	4.64	4.56	R 5.13	8.55	8.50	2.39	R 4.76	NA	4.67	14.17	10.05
1990	R 2.55	4.74	5.39	R 7.09	9.03	9.45	3.03	R 5.61	NA	5.04	14.04	10.09
1991	2.65	4.61	4.79	R 5.55	9.29	9.14	2.36	4.96	NA	4.70	14.29	10.19
1992	2.45	4.56	4.69	R 4.98	9.26	10.03	2.30	R 5.00	NA	4.67	14.31	10.55
1993	2.33	4.84	4.87	R 5.45	9.21	9.98	2.20	R 4.72	4.06	R 4.77	14.50	R 10.53
1994	R 2.33	5.28	4.35	R 4.76	10.10	10.03	2.43	R 4.71	3.94	R 5.17	14.62	R 10.98
1995	2.42	5.01	4.54	R 4.81	10.22	10.23	2.74	R 4.85	3.86	R 4.96	14.90	R 11.03
1996	—	4.65	5.56	5.02	11.50	11.12	2.99	5.81	4.43	4.82	15.17	11.04
1997	2.23	4.42	5.24	4.67	11.70	11.05	2.85	5.63	4.41	4.61	14.69	10.71
	Expenditures in Million Nominal Dollars											
1970	R (s)	14.5	11.5	R (s)	0.6	3.7	6.6	22.6	(s)	R 37.5	88.7	R 126.2
1975	R (s)	29.6	18.8	0.5	0.7	5.1	14.8	39.8	(s)	R 69.8	156.1	R 225.9
1980	0.6	77.5	70.0	1.4	2.0	14.9	27.0	115.3	(s)	R 193.6	316.0	R 509.6
1981	R (s)	81.0	42.8	2.1	2.5	16.8	40.2	104.5	(s)	R 186.0	321.3	R 507.3
1982	R (s)	102.8	44.7	R (s)	2.3	16.8	61.9	126.2	(s)	R 229.6	367.9	R 597.5
1983	R (s)	98.3	62.5	R 2.0	2.8	18.8	4.4	R 90.6	(s)	R 189.3	402.7	R 592.0
1984	R (s)	111.5	68.3	R 1.5	1.8	13.7	8.3	R 93.5	(s)	R 205.5	485.3	R 690.8
1985	R (s)	118.9	45.9	R 1.6	3.1	10.8	4.9	R 66.2	NA	R 185.3	527.6	R 712.9
1986	(s)	94.2	25.6	R (s)	2.5	8.5	4.3	41.1	NA	135.4	523.2	658.6
1987	R (s)	88.8	37.5	R (s)	2.2	9.1	3.7	R 52.7	NA	141.5	R 551.9	R 693.4
1988	R (s)	98.7	33.3	R (s)	1.7	9.3	5.3	49.9	NA	148.7	548.6	697.3
1989	R (s)	97.2	28.5	R (s)	2.0	9.8	4.0	R 44.5	NA	142.0	R 561.6	R 703.5
1990	R (s)	99.2	41.9	R (s)	2.2	R 13.5	5.5	R 63.4	NA	R 162.7	R 579.4	R 742.1
1991	(s)	106.1	27.7	R (s)	2.9	8.4	3.8	42.9	NA	149.0	R 604.5	R 753.5
1992	(s)	92.6	20.9	R (s)	2.6	8.7	3.5	35.9	NA	128.5	R 613.9	R 742.4
1993	R (s)	121.2	15.5	R (s)	2.8	1.7	2.4	22.8	1.4	R 144.0	R 636.4	R 780.4
1994	(s)	126.7	13.0	R (s)	3.3	1.7	1.7	20.1	1.4	R 148.3	R 669.5	R 817.8
1995	(s)	117.3	20.7	R (s)	3.2	1.7	1.5	R 27.5	1.4	R 146.2	R 689.0	R 835.3
1996	—	124.1	20.1	1.1	3.4	1.9	1.6	28.0	1.7	153.9	729.0	882.9
1997	(s)	117.9	22.8	0.6	3.5	1.8	0.9	29.5	1.5	148.9	725.6	874.5

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 236. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Oregon

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	0.53	0.53	0.46	0.58	0.80	0.93	1.12	5.08	2.83	0.33	R 0.39	R 0.78	R 1.46	R 0.73	1.26	R 0.82
1975	—	1.04	1.04	0.92	1.78	2.29	2.58	2.76	7.48	4.45	1.85	R 0.33	R 2.00	R 1.46	R 1.50	2.13	R 1.65
1980	—	2.24	2.24	4.21	3.60	5.62	6.54	5.40	14.36	9.75	3.39	R 2.06	R 4.67	R 1.46	R 3.87	4.65	R 4.08
1981	—	2.35	2.35	4.43	4.36	6.31	7.15	6.24	18.00	10.83	3.86	R 0.73	R 4.88	R 1.46	R 3.97	5.93	R 4.54
1982	—	2.70	2.70	5.35	3.99	6.44	7.08	5.94	17.25	10.51	4.40	R 0.89	R 4.94	R 1.46	R 4.28	8.62	R 5.37
1983	—	2.55	2.55	5.13	4.14	6.14	R 6.79	6.10	16.98	8.81	4.43	R 1.82	R 5.29	R 1.46	R 4.17	9.72	R 5.64
1984	—	R 2.52	R 2.52	5.01	4.27	6.00	R 6.58	6.29	17.63	8.79	4.47	R 2.57	R 5.34	R 1.46	R 4.38	9.79	R 5.84
1985	—	R 2.52	R 2.52	4.65	4.42	5.86	R 6.59	9.45	17.61	8.87	4.12	R 1.93	R 5.28	R 1.46	R 4.16	10.32	R 5.58
1986	—	R 2.42	R 2.42	3.73	4.47	3.61	R 4.59	9.06	15.59	6.92	2.10	R 1.48	R 3.91	R 1.48	R 3.23	10.08	R 4.85
1987	—	2.42	2.42	3.30	4.27	4.13	R 4.59	8.28	13.58	7.12	2.65	R 1.07	R 3.91	R 1.48	R 3.14	9.91	R 4.88
1988	—	R 2.41	R 2.41	3.64	3.95	3.84	R 4.74	8.38	14.62	7.48	2.55	R 0.86	R 3.76	R 1.48	R 3.18	9.82	R 4.87
1989	—	2.37	2.37	3.40	3.19	4.84	R 5.25	8.55	14.48	8.50	2.39	R 0.78	R 4.08	d R 1.40	d R 3.18	9.69	d R 4.95
1990	—	R 2.55	R 2.55	3.39	3.15	5.26	R 6.84	9.03	14.60	9.45	3.03	R 0.61	R 3.97	1.45	R 3.28	9.26	R 4.97
1991	—	2.65	2.65	3.31	3.28	5.18	R 5.79	9.29	16.80	9.14	2.36	R 1.26	R 4.19	1.50	R 3.32	9.23	R 4.96
1992	—	2.45	2.45	3.24	2.81	5.19	R 4.92	9.26	18.32	10.03	2.30	R 1.14	R 3.62	R 1.52	R 3.09	9.42	R 4.73
1993	—	2.33	2.33	3.34	2.95	5.49	R 4.89	9.21	18.96	9.98	2.20	R 1.26	R 4.03	R 1.52	R 3.31	9.75	R 4.94
1994	—	R 2.33	R 2.33	3.45	3.13	4.70	R 4.65	10.13	19.11	10.03	2.43	R 1.19	R 3.86	R 1.58	R 3.26	10.17	R 5.00
1995	—	2.42	2.42	3.27	3.21	4.97	R 5.13	9.61	R 19.41	10.23	2.74	R 1.12	R 4.14	R 1.57	R 3.26	10.18	R 4.99
1996	—	1.85	1.85	3.11	3.39	5.92	5.98	9.24	20.08	11.12	2.99	2.73	4.89	1.54	3.37	9.99	4.92
1997	—	2.23	2.23	2.89	3.46	5.49	5.93	8.87	17.86	11.05	2.85	2.70	4.81	1.56	3.26	9.46	4.67
	Expenditures in Million Nominal Dollars																
1970	—	1.2	1.2	23.9	8.3	14.8	0.6	0.8	8.7	10.7	7.0	3.3	54.1	R 21.1	R 100.4	36.8	R 137.2
1975	—	2.5	2.5	47.2	38.0	35.1	2.1	2.1	8.6	13.1	24.5	2.4	125.9	R 21.2	R 196.7	84.8	R 281.5
1980	—	8.5	8.5	138.8	59.2	128.4	1.4	9.5	19.3	21.4	44.2	10.6	294.0	R 33.3	R 474.5	201.6	R 676.1
1981	—	13.9	13.9	183.2	53.2	120.0	0.7	8.6	23.2	17.9	42.5	6.8	272.9	R 35.1	R 505.2	311.0	R 816.1
1982	—	7.5	7.5	156.3	44.2	109.1	1.0	9.1	20.3	15.7	81.3	6.5	287.0	R 34.0	R 484.8	325.5	R 810.3
1983	—	9.8	9.8	146.8	59.7	114.4	R (s)	6.1	20.9	8.7	16.2	7.7	233.7	R 38.4	R 428.7	359.8	R 788.5
1984	—	8.2	8.2	204.7	71.3	127.9	R (s)	R 11.2	23.1	22.4	60.7	10.3	R 327.1	R 39.2	R 579.2	476.0	R 1,055.2
1985	—	R 7.6	R 7.6	165.2	83.3	86.4	R (s)	18.9	21.5	R 22.5	40.3	8.0	R 281.0	R 39.0	R 492.8	365.4	R 858.2
1986	—	R 7.0	R 7.0	119.9	65.9	52.0	(s)	28.0	18.6	18.2	28.5	10.6	221.9	R 43.8	R 392.6	378.2	R 770.7
1987	—	R 8.7	R 8.7	124.3	60.6	73.3	(s)	24.9	18.3	18.0	26.2	11.8	R 233.2	R 43.6	R 409.9	446.7	R 856.5
1988	—	7.2	7.2	147.9	63.5	65.1	(s)	30.9	19.0	16.4	25.8	9.4	230.1	R 45.4	R 430.7	457.0	R 887.7
1989	—	3.5	3.5	154.0	59.4	81.7	R (s)	R 31.6	19.4	R 21.4	5.5	8.1	R 227.1	d R 46.4	d R 431.1	493.0	d R 924.1
1990	—	3.6	3.6	169.6	63.3	87.0	R (s)	24.7	20.1	R 21.1	8.6	7.9	R 232.9	R 35.2	R 441.5	489.5	R 931.0
1991	—	5.0	5.0	187.7	57.9	69.1	R (s)	27.7	20.7	23.5	5.2	15.8	219.9	R 36.7	R 449.3	481.8	R 931.0
1992	—	5.7	5.7	196.6	61.4	68.7	R (s)	26.0	23.0	13.4	7.3	19.2	R 219.2	R 37.6	R 459.1	486.2	R 945.3
1993	—	5.2	5.2	210.9	65.2	77.9	R (s)	28.2	24.2	23.7	9.4	17.4	R 246.3	R 37.8	R 500.2	499.3	R 999.5
1994	—	6.6	6.6	225.9	71.0	57.3	R (s)	22.2	25.5	26.3	6.4	17.8	R 226.7	R 42.0	R 501.2	523.1	R 1,024.3
1995	—	6.8	6.8	235.0	58.8	75.9	R 0.7	29.6	R 25.5	27.6	5.7	17.1	240.9	R 46.0	R 528.6	550.3	R 1,078.8
1996	—	3.6	3.6	284.3	61.7	59.9	(s)	34.1	25.6	33.0	2.6	44.7	261.9	45.7	595.4	538.9	1,134.3
1997	—	4.3	4.3	273.9	68.0	70.7	(s)	33.5	24.0	33.9	3.0	41.0	274.4	47.1	599.7	514.1	1,113.9

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 237. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Oregon

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.53	—	2.17	1.34	0.73	1.12	5.08	2.83	0.71	2.41	2.41	—	2.41
1975	1.04	—	3.45	2.69	2.04	2.76	7.48	4.45	2.21	3.98	3.98	—	3.98
1980	—	—	9.02	6.96	6.21	5.40	14.36	9.75	4.14	8.81	8.81	—	8.81
1981	—	—	10.84	7.94	7.56	6.24	18.00	10.83	5.61	9.64	9.64	—	9.64
1982	—	—	10.92	7.82	7.37	5.94	17.25	10.51	6.01	9.25	9.25	—	9.25
1983	—	—	10.44	7.91	6.76	6.10	16.98	8.81	5.61	8.34	8.34	—	8.34
1984	—	—	10.27	8.31	6.42	6.29	17.63	8.79	5.61	8.41	8.41	—	8.41
1985	—	—	9.99	8.27	6.16	9.45	17.61	8.87	5.02	8.40	8.40	—	8.40
1986	—	—	8.41	6.16	4.24	9.06	15.59	6.92	2.86	6.39	6.39	—	6.39
1987	—	—	7.55	6.63	4.33	8.28	13.58	7.12	2.60	6.55	6.55	17.04	R 6.56
1988	—	—	7.41	6.81	4.04	8.38	14.62	7.48	2.26	6.69	6.69	13.54	6.69
1989	—	—	8.28	7.77	4.76	8.55	14.48	8.50	2.57	7.51	7.51	14.24	7.51
1990	—	—	9.32	8.54	5.93	9.03	14.60	9.45	3.59	8.55	8.55	13.98	8.55
1991	—	—	8.71	8.63	5.01	9.29	16.80	9.14	2.58	7.99	7.99	15.53	8.00
1992	—	2.09	8.54	8.63	4.67	9.26	18.32	10.03	1.84	8.37	8.37	14.58	8.37
1993	—	3.62	8.24	8.93	4.62	9.21	18.96	9.98	2.00	8.73	8.73	15.64	8.73
1994	—	4.69	7.96	8.75	4.16	9.28	19.11	10.03	2.02	8.65	8.65	15.44	8.65
1995	—	4.43	8.36	8.89	4.28	9.51	R 19.41	10.23	2.13	8.88	8.88	16.09	8.89
1996	—	4.25	9.29	9.55	5.11	9.39	20.08	11.12	2.08	9.68	9.68	16.83	9.69
1997	—	5.65	9.39	9.44	4.74	9.16	17.86	11.05	2.94	9.50	9.50	18.87	9.50
	Expenditures in Million Nominal Dollars												
1970	(s)	—	3.3	37.4	8.6	R (s)	15.0	356.7	4.8	426.0	426.0	—	426.0
1975	(s)	—	3.0	106.2	24.0	R (s)	22.3	657.1	6.1	818.7	818.7	—	818.7
1980	—	—	11.8	358.9	86.5	1.3	46.1	1,526.7	28.8	2,060.1	2,060.1	—	2,060.1
1981	—	—	12.0	445.4	72.3	3.2	55.5	1,655.4	127.2	2,370.9	2,370.9	—	2,370.9
1982	—	—	7.0	406.6	74.3	1.6	48.5	1,534.4	210.1	2,282.5	2,282.5	—	2,282.5
1983	—	—	6.6	420.8	67.8	1.9	50.0	1,282.2	R 115.3	1,944.5	1,944.5	—	1,944.5
1984	—	—	6.5	385.6	71.0	6.5	55.3	1,318.8	116.7	R 1,960.4	R 1,960.4	—	R 1,960.4
1985	—	—	7.1	437.8	74.3	6.5	51.5	R 1,321.0	97.6	R 1,995.8	R 1,995.8	—	R 1,995.8
1986	—	—	8.2	323.8	62.5	5.1	44.6	1,061.3	54.1	1,559.6	1,559.6	—	1,559.6
1987	—	—	4.8	378.3	71.4	5.3	43.9	R 1,119.8	53.9	R 1,677.5	R 1,677.5	R (s)	R 1,677.9
1988	—	—	3.7	404.2	72.7	6.2	45.6	R 1,235.9	59.9	R 1,828.1	R 1,828.1	R (s)	R 1,828.5
1989	—	—	4.2	466.7	90.9	R 5.9	46.3	R 1,392.5	76.9	R 2,083.4	R 2,083.4	R (s)	R 2,083.8
1990	—	—	5.7	548.7	111.3	6.0	48.0	R 1,540.7	84.8	R 2,345.1	R 2,345.1	R (s)	R 2,345.5
1991	—	—	5.5	570.9	105.8	5.3	49.4	R 1,510.3	92.8	R 2,340.1	R 2,340.1	0.5	R 2,340.7
1992	—	(s)	5.6	564.4	105.9	4.9	55.0	R 1,659.1	67.3	R 2,462.3	R 2,462.3	R 0.5	R 2,462.8
1993	—	(s)	4.6	523.1	112.7	R 4.8	57.9	R 1,733.1	47.8	R 2,483.9	R 2,484.0	R 0.5	R 2,484.5
1994	—	R (s)	6.3	532.9	109.7	7.4	61.0	R 1,755.6	49.7	R 2,522.6	R 2,522.7	R 0.6	R 2,523.2
1995	—	R (s)	6.0	535.5	124.1	3.8	60.9	R 1,799.6	43.1	R 2,573.2	2,573.2	R 0.7	R 2,574.0
1996	—	(s)	8.9	606.1	151.7	3.6	61.2	2,019.2	40.3	2,891.0	2,891.1	0.6	2,891.8
1997	—	(s)	8.3	638.4	153.8	3.2	57.5	1,914.6	61.0	2,836.8	2,837.0	0.7	2,837.7

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 238. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Oregon

Year	Coal	Natural Gas	Petroleum: Heavy Oil	Petroleum: Light Oil	Petroleum: Petroleum Coke	Petroleum: Total	Nuclear Fuel	Wood and Waste	Total Energy [a]
	Prices in Nominal Dollars per Million Btu								
1970	—	0.37	0.80	0.83	—	0.80	—	0.65	0.48
1975	—	1.27	—	2.31	—	2.31	0.20	0.92	2.04
1980	1.41	4.29	—	6.53	—	6.53	0.36	1.74	0.59
1981	1.59	4.40	—	6.70	—	6.70	0.47	1.24	0.74
1982	1.72	5.38	—	7.22	—	7.22	0.61	1.28	0.79
1983	1.62	5.08	—	6.07	—	6.07	0.64	—	0.78
1984	2.00	5.09	—	5.75	—	5.75	0.58	—	0.78
1985	2.00	—	—	5.67	—	5.67	0.54	—	0.67
1986	—	2.81	—	3.24	—	3.24	0.52	—	0.52
1987	—	—	—	4.10	—	4.10	0.45	—	0.45
1988	—	—	—	4.03	—	4.03	0.46	0.87	0.47
1989	1.56	2.92	—	4.53	—	4.53	0.46	0.33	R 1.02
1990	1.08	3.03	—	3.47	—	3.47	0.44	0.85	R 0.82
1991	1.08	1.57	—	4.75	—	4.75	0.43	1.63	R 1.05
1992	1.10	1.94	—	4.49	—	4.49	0.53	1.61	R 1.00
1993	1.12	2.25	—	3.83	—	3.83	—	1.13	R 1.48
1994	1.07	1.83	—	4.65	—	4.65	—	—	R 1.36
1995	1.06	1.30	—	4.27	—	4.27	—	—	R 1.20
1996	1.07	1.32	—	5.09	—	5.09	—	—	1.21
1997	1.14	1.48	—	4.90	—	4.90	—	—	1.30
	Expenditures in Million Nominal Dollars								
1970	—	R (s)	R (s)	(s)	—	R (s)	—	R (s)	0.8
1975	—	(s)	—	R (s)	—	R (s)	(s)	(s)	R (s)
1980	11.2	1.4	—	4.2	—	4.2	21.4	2.9	41.1
1981	31.5	0.9	—	1.4	—	1.4	33.2	1.5	68.5
1982	15.3	R (s)	—	0.6	—	0.6	32.6	0.5	49.1
1983	9.6	(s)	—	0.9	—	0.9	25.7	—	36.2
1984	16.8	(s)	—	R (s)	—	R (s)	29.7	—	46.9
1985	13.9	—	—	R (s)	—	R (s)	40.6	—	54.5
1986	—	(s)	—	R (s)	—	R (s)	39.5	—	39.6
1987	—	—	—	(s)	—	(s)	21.1	—	21.1
1988	—	—	—	(s)	—	(s)	31.4	0.9	32.3
1989	8.1	39.2	—	2.0	—	2.0	26.1	R (s)	R 82.3
1990	15.3	22.9	—	1.1	—	1.1	28.6	(s)	R 74.7
1991	33.5	17.2	—	0.6	—	0.6	6.8	(s)	R 69.6
1992	42.3	27.9	—	R (s)	—	R (s)	26.0	R (s)	R 117.0
1993	39.1	36.8	—	1.2	—	1.2	—	R (s)	R 87.8
1994	44.7	48.3	—	R (s)	—	R (s)	—	—	R 114.3
1995	18.4	25.1	—	R (s)	—	R (s)	—	—	R 51.3
1996	19.6	18.7	—	(s)	—	(s)	—	—	50.9
1997	16.4	15.9	—	0.7	—	0.7	—	—	37.3

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 239. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Pennsylvania

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	0.44	0.35	0.39	0.87	1.17	0.72	1.82	2.92	0.47	R 1.97	R 1.72	0.21	R 0.96	0.97	0.34	5.23	1.47
1975	1.52	1.03	1.21	1.53	2.65	2.01	3.39	4.72	2.02	R 3.48	R 3.47	0.25	R 1.19	2.02	0.93	10.37	3.25
1980	2.20	1.35	1.59	3.37	6.70	6.27	6.16	9.71	4.30	R 7.99	R 7.72	0.42	R 1.84	R 4.02	1.55	15.17	R 6.37
1981	2.37	1.59	1.80	4.02	8.17	7.49	7.05	10.79	5.19	R 9.69	R 8.98	0.53	R 2.10	R 4.66	1.78	17.08	R 7.41
1982	2.53	1.67	1.80	4.85	7.97	7.02	7.77	10.04	4.87	R 8.91	R 8.66	0.67	R 2.08	R 4.72	1.70	19.93	R 8.27
1983	2.15	1.56	1.66	5.68	7.79	6.53	8.40	9.18	4.51	R 8.78	R 8.06	0.89	R 2.01	R 4.63	1.75	19.76	R 8.23
1984	2.02	1.62	1.71	5.74	7.91	6.24	8.43	8.91	4.90	R 9.23	R 8.06	0.88	R 1.94	R 4.50	1.72	20.03	R 8.04
1985	1.88	1.58	1.64	5.74	7.69	5.84	10.12	9.01	4.38	R 8.84	R 8.07	0.92	R 1.89	4.43	1.61	21.24	R 8.40
1986	1.76	1.52	1.55	5.38	5.81	3.91	9.25	6.54	2.45	R 7.17	R 5.87	0.78	R 1.71	3.55	1.35	21.86	R 7.59
1987	1.59	1.47	1.49	4.84	5.86	4.02	8.83	7.03	2.95	R 6.60	R 6.10	0.78	R 1.67	3.56	1.36	R 21.49	R 7.41
1988	1.61	1.47	1.50	4.70	5.82	3.85	9.17	7.01	2.34	R 6.63	R 6.03	0.84	R 1.68	3.47	1.35	20.92	R 7.26
1989	1.67	1.47	1.50	4.96	6.28	4.44	9.59	7.79	2.83	R 6.54	R 6.61	0.88	e R 1.69	e R 3.71	1.38	R 21.69	e R 7.71
1990	1.71	1.54	1.57	5.34	7.78	5.59	11.78	9.35	3.20	R 6.74	R 7.96	0.83	R 2.05	R 4.02	1.32	R 22.47	R 8.53
1991	1.75	1.55	1.59	5.38	7.56	4.81	12.58	9.44	2.31	R 7.08	R 7.97	0.77	2.06	R 4.03	1.28	23.51	R 8.87
1992	1.73	1.50	1.54	5.22	7.16	4.49	10.69	9.33	2.33	R 7.36	R 7.82	0.68	R 1.95	R 3.91	1.19	23.61	R 8.57
1993	1.73	1.45	1.50	5.33	7.01	4.17	10.87	9.01	2.35	R 7.61	R 7.50	0.66	R 1.86	R 3.88	1.18	23.26	R 8.48
1994	1.73	1.44	1.50	5.73	6.99	3.90	11.91	9.21	2.53	R 7.39	R 7.56	0.62	R 1.93	R 3.94	1.14	23.13	R 8.63
1995	1.72	1.38	1.45	5.43	6.87	3.87	11.66	9.64	2.64	R 7.37	R 7.89	0.56	R 1.91	R 3.94	1.06	R 23.29	R 8.74
1996	1.69	1.40	1.45	5.79	7.79	4.77	12.53	10.01	3.26	7.76	8.51	0.55	2.01	4.15	1.08	23.38	9.09
1997	1.76	1.37	1.45	6.50	7.74	4.36	12.70	10.16	2.72	7.53	8.49	0.51	1.97	4.24	1.04	23.48	9.32
	Expenditures in Million Nominal Dollars																
1970	317.5	339.1	656.6	653.4	429.1	36.9	32.7	1,559.6	157.4	R 224.5	R 2,440.1	1.1	R 10.9	R 3,762.1	-296.5	R 1,329.8	R 4,795.4
1975	913.7	1,078.1	1,991.7	964.8	1,039.9	97.3	76.5	2,695.2	441.3	R 352.3	R 4,702.5	44.3	R 14.4	R 7,717.7	-1,047.7	3,060.5	R 9,730.5
1980	1,005.0	1,589.6	2,594.6	2,489.5	2,665.1	360.1	163.8	5,507.0	798.1	R 963.0	R 10,457.1	55.4	R 62.0	R 15,658.5	-1,997.2	5,096.8	R 18,758.1
1981	941.5	1,738.9	2,680.4	3,034.3	2,836.4	382.0	191.8	5,901.0	906.4	R 1,169.7	R 11,387.3	82.8	R 72.8	R 17,257.5	-2,178.4	5,826.2	R 20,905.3
1982	482.4	1,837.2	2,319.6	3,255.5	2,443.1	342.3	198.6	5,386.2	590.1	R 991.8	R 9,952.0	121.7	R 74.3	R 15,723.0	-2,088.9	6,382.4	R 20,016.6
1983	483.3	1,730.1	2,213.4	3,505.9	2,393.4	337.7	214.7	4,953.7	663.7	R 877.3	R 9,440.6	142.4	R 75.0	R 15,377.3	-2,222.3	R 6,467.9	R 19,622.9
1984	624.9	R 1,870.0	2,494.9	3,715.2	2,523.1	369.6	261.3	4,784.1	669.9	R 922.0	R 9,530.1	204.8	R 58.9	R 16,003.9	-2,309.7	R 6,863.2	R 20,557.4
1985	492.9	R 1,814.5	R 2,307.3	3,444.8	2,409.2	334.6	272.3	R 4,827.1	483.8	R 1,007.9	R 9,334.9	262.2	R 56.1	R 15,405.3	-2,233.1	R 7,202.9	R 20,375.2
1986	330.9	R 1,712.4	R 2,043.3	3,147.9	1,831.3	219.3	281.4	3,576.6	348.8	R 825.7	R 7,083.1	336.6	R 46.3	R 12,657.2	-2,058.5	R 7,568.4	R 18,167.2
1987	357.1	R 1,694.5	R 2,051.6	2,944.4	1,969.4	239.6	269.1	R 3,936.5	427.8	R 777.5	R 7,619.8	293.8	R 43.8	R 12,953.6	-2,014.1	R 7,791.1	R 18,730.7
1988	437.4	1,755.6	R 2,193.1	3,012.8	1,990.1	255.1	199.2	R 4,078.6	312.7	R 761.0	R 7,596.7	342.6	R 45.8	R 13,190.9	-2,092.5	R 7,995.6	R 19,094.1
1989	442.2	1,757.4	2,199.6	3,293.4	2,243.3	242.5	237.1	R 4,455.5	372.1	R 777.3	R 8,327.7	369.7	e R 49.7	e R 14,240.1	-2,169.5	R 8,362.3	e R 20,432.9
1990	480.0	R 1,764.1	R 2,244.2	3,291.5	2,440.5	380.7	259.3	R 5,277.2	338.3	R 795.2	R 9,491.1	511.5	R 60.4	R 15,598.6	-2,215.1	R 8,738.0	R 22,121.5
1991	412.9	R 1,750.3	R 2,163.2	3,285.9	2,330.8	309.5	338.7	R 5,312.5	214.3	R 766.0	R 9,271.9	474.0	R 61.1	R 15,256.1	-2,122.4	R 9,237.2	R 22,370.9
1992	458.8	R 1,710.7	R 2,169.4	3,404.8	2,293.0	277.8	350.8	R 5,266.7	205.6	R 806.6	R 9,200.5	436.0	R 61.2	R 15,271.9	-1,992.9	R 9,276.8	R 22,555.8
1993	479.5	R 1,636.6	R 2,116.1	3,539.9	2,499.7	278.1	222.9	R 5,206.5	254.8	R 846.0	R 9,308.0	416.7	R 63.6	R 15,444.3	-1,991.2	R 9,431.8	R 22,884.9
1994	501.8	1,535.8	2,037.6	3,833.5	2,534.7	259.7	239.6	R 5,301.9	288.1	R 908.4	R 9,532.4	447.2	R 76.0	R 15,926.7	-1,971.8	R 9,619.5	R 23,574.4
1995	500.7	R 1,506.6	R 2,007.2	3,765.0	2,470.7	269.9	229.1	5,685.0	198.1	R 937.0	R 9,789.9	393.2	R 83.0	R 16,038.4	-1,848.5	R 9,939.9	R 24,129.7
1996	482.8	1,596.7	2,079.5	4,028.3	2,836.3	320.0	267.0	5,978.0	229.4	989.6	10,620.3	398.1	88.4	17,215.4	-1,939.5	10,093.6	25,369.5
1997	486.2	1,626.4	2,112.6	4,314.2	2,759.8	366.4	274.6	6,124.3	172.5	958.7	10,656.3	369.6	76.0	17,528.9	-1,876.5	10,157.5	25,809.8

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 240. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Pennsylvania

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.03	1.20	1.35	1.57	2.47	1.41	0.40	R 1.25	7.15	R 1.97
1975	2.57	1.89	2.81	3.12	4.42	2.89	0.79	R 2.30	12.80	R 3.94
1980	2.70	3.73	6.95	8.05	9.00	7.10	2.02	R 4.82	17.42	R 7.01
1981	3.21	4.41	8.52	10.29	9.77	8.69	2.49	R 5.66	19.54	R 8.16
1982	3.20	5.28	8.20	10.35	10.37	8.49	2.41	R 6.02	22.49	R 9.13
1983	2.78	6.26	8.09	R 8.27	11.37	R 8.28	2.34	R 6.56	22.87	R 9.87
1984	3.08	6.34	8.25	R 9.19	11.83	8.50	2.38	R 6.75	23.35	R 10.11
1985	2.83	6.50	7.82	R 8.62	11.63	R 8.11	2.28	R 6.81	25.05	R 10.55
1986	2.76	6.17	6.22	R 6.93	9.88	R 6.51	1.83	R 6.01	25.96	R 10.29
1987	2.72	5.82	5.88	R 6.46	10.30	6.21	1.74	R 5.68	25.96	R 10.22
1988	2.69	5.59	5.95	R 6.45	9.26	R 6.21	1.76	R 5.56	25.44	R 10.01
1989	2.79	5.92	6.50	R 6.25	11.08	R 6.76	1.95	R 5.96	26.09	R 10.37
1990	2.96	6.37	7.84	R 7.97	12.94	R 8.25	2.83	R 6.66	27.03	R 11.71
1991	2.64	6.53	7.62	R 7.21	13.85	R 8.14	2.70	R 6.72	28.09	R 12.08
1992	2.69	6.37	6.79	R 6.27	11.87	R 7.22	2.47	R 6.32	28.33	R 11.52
1993	2.79	6.60	6.60	R 5.94	11.86	R 6.93	2.42	R 6.43	27.99	R 11.57
1994	2.75	7.18	6.55	R 6.13	14.33	R 7.13	2.35	R 6.85	28.00	R 12.04
1995	2.55	6.92	6.31	R 5.85	13.50	R 6.86	2.30	R 6.57	28.49	R 12.03
1996	2.73	7.14	7.28	7.11	14.93	7.87	2.64	7.08	28.52	12.27
1997	2.66	8.05	7.26	7.00	14.77	7.85	2.62	7.63	29.00	12.94
	Expenditures in Million Nominal Dollars									
1970	48.4	367.4	245.1	29.9	17.6	292.7	2.4	R 710.8	561.5	R 1,272.3
1975	59.9	527.3	517.2	35.8	34.7	587.6	4.8	R 1,179.6	1,208.5	R 2,388.1
1980	51.3	1,098.2	1,127.1	107.8	52.6	1,287.5	38.0	R 2,475.1	1,888.1	R 4,363.2
1981	74.7	1,288.6	1,200.5	116.3	65.0	1,381.8	47.3	R 2,792.5	2,114.3	R 4,906.7
1982	68.0	1,477.7	988.6	128.7	66.6	1,183.9	49.6	R 2,779.2	2,414.6	R 5,193.8
1983	51.2	1,625.5	975.2	R 59.1	86.8	R 1,121.0	47.4	R 2,845.1	2,522.9	R 5,368.0
1984	60.8	1,740.5	1,019.9	R 56.2	97.2	R 1,173.3	31.1	R 3,005.7	2,640.0	R 5,645.6
1985	42.7	1,644.9	986.4	R 139.5	96.3	R 1,222.2	29.1	R 2,939.0	2,793.4	R 5,732.4
1986	48.5	1,629.4	683.8	R 116.7	71.2	R 871.6	22.7	R 2,572.3	3,032.4	R 5,604.7
1987	53.5	1,514.6	652.8	R 78.8	84.6	R 816.1	20.3	R 2,404.5	3,166.9	R 5,571.5
1988	48.1	1,551.9	685.1	R 106.7	79.8	R 871.6	21.3	R 2,493.0	3,283.0	R 5,776.0
1989	52.3	1,662.4	835.2	R 89.8	103.1	R 1,028.1	24.5	R 2,767.2	3,395.0	R 6,162.2
1990	52.2	1,586.5	776.8	R 62.2	118.8	R 957.9	35.6	R 2,632.2	3,519.6	R 6,151.9
1991	47.0	1,640.8	776.0	R 61.6	147.2	R 984.8	35.8	R 2,708.5	3,794.8	R 6,503.2
1992	52.5	1,759.1	698.2	R 56.3	133.7	R 888.1	34.5	R 2,734.3	3,793.3	R 6,527.6
1993	44.2	1,839.9	803.5	R 55.8	121.5	R 980.8	36.2	R 2,901.1	3,959.2	R 6,860.3
1994	43.5	1,996.9	755.3	R 51.8	150.5	R 957.6	34.4	R 3,032.5	4,035.4	R 7,067.9
1995	R 39.9	1,876.8	723.0	R 68.5	151.1	R 942.6	37.5	R 2,896.8	4,160.6	R 7,057.5
1996	38.2	2,056.1	891.0	97.3	172.9	1,161.2	42.9	3,298.5	4,247.8	7,546.3
1997	44.9	2,186.6	836.6	100.8	171.2	1,108.6	31.1	3,371.1	4,226.7	7,597.9

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 241. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Pennsylvania

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.32	0.93	1.09	0.74	1.40	2.92	0.47	1.12	0.40	0.90	6.71	R 1.89
1975	1.25	1.67	2.48	2.52	2.84	4.72	2.02	2.56	0.79	1.94	11.88	4.48
1980	1.33	3.49	6.39	6.01	5.36	9.71	4.43	6.08	2.02	3.95	16.63	R 7.56
1981	1.57	4.13	8.01	7.02	6.17	10.79	5.35	7.58	2.49	4.67	18.87	R 8.63
1982	1.71	4.91	7.66	7.49	6.89	10.04	4.92	7.30	2.41	R 5.05	21.56	R 9.83
1983	1.58	5.90	6.70	R 8.27	7.14	9.18	4.53	R 6.53	2.34	R 5.65	21.67	R 10.38
1984	1.65	5.99	6.71	R 9.19	7.20	8.91	5.16	R 6.46	2.38	5.71	22.28	R 10.49
1985	1.61	5.99	6.50	R 8.62	9.45	9.01	4.70	R 6.47	NA	R 5.74	23.28	R 11.36
1986	R 1.53	5.61	4.28	R 6.93	9.05	6.54	2.71	R 4.45	NA	R 4.92	23.66	R 11.02
1987	R 1.47	5.23	4.47	R 6.46	8.29	7.03	3.05	R 4.58	NA	R 4.66	22.76	10.66
1988	1.45	4.91	4.14	R 6.45	9.11	7.01	2.54	R 4.33	NA	R 4.46	22.37	10.37
1989	1.44	5.16	4.78	R 6.25	8.69	7.79	3.02	R 4.89	NA	R 4.76	23.26	R 10.74
1990	1.47	5.79	5.85	R 7.97	10.95	9.35	3.46	R 6.10	NA	5.51	24.01	12.03
1991	1.43	5.80	5.48	R 7.21	11.75	9.44	2.51	R 5.79	NA	R 5.39	24.66	R 12.39
1992	1.42	5.67	5.12	R 6.27	10.07	9.33	2.51	5.20	NA	5.13	25.11	12.13
1993	1.36	5.78	4.82	R 5.94	9.88	9.01	2.54	4.73	2.42	R 5.17	24.60	R 12.24
1994	1.34	6.27	4.75	R 6.13	11.08	9.21	2.63	R 4.71	2.35	R 5.55	24.54	R 12.33
1995	1.35	6.07	4.62	R 5.85	10.83	9.64	2.80	R 4.70	2.30	R 5.42	24.68	R 12.41
1996	1.35	6.23	5.64	7.11	11.40	10.01	3.35	5.63	2.64	5.84	24.70	12.60
1997	1.36	7.10	5.20	7.00	10.95	10.16	2.96	5.39	2.62	6.35	24.89	13.40
	Expenditures in Million Nominal Dollars											
1970	12.3	95.9	34.4	1.2	1.8	37.6	15.4	90.4	(s)	198.6	R 307.6	R 506.2
1975	23.3	169.1	79.4	2.5	3.9	32.5	46.0	164.3	(s)	R 356.9	R 754.3	R 1,111.2
1980	23.0	422.8	218.2	6.6	5.5	16.0	42.4	288.6	0.9	R 735.4	R 1,234.2	R 1,969.6
1981	31.0	542.2	240.9	7.3	7.2	37.9	53.5	346.9	1.1	R 921.1	R 1,441.0	R 2,362.1
1982	35.3	633.2	210.6	10.0	7.8	25.8	34.2	288.4	1.2	R 958.1	R 1,665.9	R 2,624.1
1983	28.4	699.9	222.6	R 17.1	9.6	32.2	43.5	R 325.1	1.1	R 1,054.5	R 1,699.7	R 2,754.2
1984	30.4	782.2	228.8	R 7.8	10.4	18.4	67.7	R 333.1	0.7	R 1,146.4	R 1,817.1	R 2,963.5
1985	24.3	714.6	186.9	R 17.5	13.8	21.2	41.8	R 281.2	NA	R 1,020.2	R 1,952.9	R 2,973.0
1986	R 27.1	665.6	149.7	R 15.5	11.5	15.8	16.1	R 208.6	NA	R 901.3	R 2,088.6	R 2,989.9
1987	R 29.9	622.2	147.1	R 12.0	12.0	17.9	23.1	R 212.1	NA	R 864.2	R 2,096.1	R 2,960.3
1988	26.3	648.4	134.8	R 15.4	13.9	17.4	18.3	R 199.7	NA	R 874.4	R 2,165.3	R 3,039.7
1989	R 27.3	708.5	203.3	R 10.1	14.3	18.5	17.3	R 263.5	NA	R 999.2	R 2,335.5	R 3,334.7
1990	R 22.3	754.0	190.6	R 6.8	17.7	R 34.4	17.5	R 267.0	NA	R 1,043.4	R 2,473.4	R 3,516.8
1991	25.2	753.3	174.0	R 5.3	22.0	27.5	10.0	R 238.8	NA	R 1,017.3	R 2,659.7	R 3,677.1
1992	R 29.8	788.1	161.3	R 3.6	20.0	16.4	14.0	R 215.4	NA	R 1,033.2	R 2,725.8	R 3,759.0
1993	20.2	789.3	168.6	R 5.8	17.9	4.1	17.9	R 214.3	2.9	R 1,023.8	R 2,789.3	R 3,813.1
1994	17.7	900.1	191.2	R 11.6	20.5	4.2	22.9	R 250.5	2.9	R 1,171.1	R 2,877.5	R 4,048.7
1995	R 18.7	902.7	164.9	R 17.5	21.4	4.4	21.8	R 230.0	2.8	R 1,154.2	R 2,992.5	R 4,146.7
1996	14.3	995.9	205.0	22.4	23.3	4.6	27.9	283.3	3.5	1,297.0	3,064.9	4,361.9
1997	18.7	1,059.0	150.4	12.8	22.4	15.1	19.5	220.3	3.0	1,301.0	3,127.4	4,428.4

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
(s)=Value less than 0.05 million nominal dollars.

NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 242. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Pennsylvania

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	0.44	0.32	0.41	0.57	0.78	0.70	0.74	1.40	5.08	2.92	0.50	R 1.60	R 1.00	R 1.60	R 0.56	3.55	R 0.79
1975	1.52	1.25	1.47	1.07	1.97	2.38	2.52	2.84	7.48	4.72	2.07	R 2.90	R 2.60	R 1.60	1.62	7.99	R 2.25
1980	2.20	1.33	2.03	3.00	3.72	5.67	6.01	5.36	14.36	9.71	4.07	R 8.09	R 6.26	R 1.60	3.12	12.87	4.29
1981	2.37	1.57	2.22	3.62	5.02	6.61	7.02	6.17	18.00	10.79	4.98	R 9.48	R 7.58	R 1.60	R 3.74	14.48	R 5.13
1982	2.53	1.71	2.27	4.38	4.27	6.87	7.49	6.89	17.25	10.04	4.75	R 8.74	R 7.14	R 1.60	4.28	16.97	R 6.21
1983	2.15	1.58	1.98	4.93	4.22	6.77	R 7.11	7.14	16.98	9.18	4.45	R 8.29	R 7.49	R 1.60	R 4.08	16.19	R 6.01
1984	2.02	1.65	1.92	4.93	4.51	6.72	R 7.27	7.20	17.63	8.91	5.16	R 8.33	R 7.64	R 1.60	3.87	16.21	R 5.70
1985	1.88	1.61	1.81	4.77	4.95	6.40	R 6.97	9.45	17.61	9.01	4.70	R 7.98	R 7.82	R 1.60	R 3.92	17.07	R 6.00
1986	1.76	R 1.53	1.68	4.21	4.01	4.10	R 4.88	9.05	15.59	6.54	2.71	R 6.43	R 5.90	R 1.61	R 3.52	17.31	R 5.87
1987	1.59	R 1.47	1.55	3.52	3.25	4.54	R 4.70	8.29	13.58	7.03	3.05	R 7.18	R 5.66	R 1.61	R 3.17	16.91	R 5.39
1988	1.61	1.45	1.57	3.50	3.04	4.29	R 4.32	9.11	14.62	7.01	2.54	R 6.16	R 5.54	R 1.61	R 2.96	16.18	R 5.15
1989	1.67	1.44	1.61	3.76	2.81	4.99	R 5.33	8.69	14.48	7.79	3.02	R 7.12	R 5.71	d R 1.49	d 3.15	16.86	d R 5.36
1990	1.71	1.47	1.65	4.02	2.83	5.89	R 6.67	10.95	14.60	9.35	3.46	R 7.40	R 6.10	1.47	R 3.31	17.51	R 5.58
1991	1.75	1.43	1.65	3.88	2.76	5.47	R 5.74	11.75	16.80	9.44	2.51	R 6.86	R 6.45	R 1.54	R 3.36	18.43	R 5.89
1992	1.73	1.42	1.65	3.62	2.31	5.19	R 4.92	10.07	18.32	9.33	2.51	R 7.41	R 6.49	R 1.53	R 3.27	18.21	R 5.64
1993	1.73	1.36	1.63	3.71	3.15	5.14	R 4.81	9.88	18.96	9.01	2.54	R 6.70	R 6.34	R 1.52	R 3.17	17.69	R 5.46
1994	1.73	1.34	1.63	3.87	3.27	5.04	R 4.99	8.79	19.11	9.21	2.63	R 6.77	R 6.23	R 1.65	R 3.18	17.39	R 5.45
1995	1.72	1.35	1.63	3.77	3.44	5.04	R 4.57	8.74	R 19.41	9.64	2.80	R 7.07	R 6.57	R 1.64	R 3.16	17.35	R 5.48
1996	1.69	1.35	1.59	3.98	3.29	5.98	5.70	9.26	20.08	10.01	3.35	7.87	6.95	1.59	3.27	17.38	5.57
1997	1.76	1.36	1.64	4.45	3.79	5.38	5.28	10.23	17.86	10.16	2.96	6.92	6.89	1.64	3.43	17.25	5.75
	Expenditures in Million Nominal Dollars																
1970	317.5	64.3	381.8	186.2	34.0	38.9	2.5	12.6	77.6	18.1	60.9	R 31.1	R 275.7	R 8.5	R 852.2	458.4	R 1,310.6
1975	913.7	172.0	1,085.7	266.6	74.2	144.8	17.1	36.2	102.3	27.2	196.0	R 63.3	R 661.2	R 9.5	R 2,023.0	1,092.1	R 3,115.1
1980	1,005.0	150.8	1,155.8	957.9	127.1	358.4	7.1	102.8	240.0	29.9	153.1	R 343.3	R 1,361.9	R 23.0	R 3,498.6	1,964.8	R 5,463.4
1981	941.5	148.8	1,090.3	1,190.2	180.8	378.0	19.0	114.2	288.6	69.0	177.0	R 403.3	R 1,629.9	R 24.3	R 3,934.7	2,260.0	R 6,194.7
1982	482.4	149.5	631.9	1,138.1	152.9	342.9	21.3	118.8	252.2	59.2	196.6	R 292.6	R 1,436.5	R 23.5	R 3,230.0	2,289.3	R 5,519.3
1983	483.3	151.4	634.7	1,172.0	111.7	240.2	R 8.5	111.6	260.0	35.3	89.5	R 278.8	R 1,135.7	R 26.5	R 2,968.9	2,226.2	R 5,195.1
1984	624.9	190.5	R 815.3	1,180.8	121.4	240.8	R 5.1	144.2	287.9	26.1	132.8	R 290.1	R 1,248.4	R 27.1	R 3,271.6	2,381.4	R 5,653.0
1985	492.9	R 154.7	R 647.5	1,077.2	161.3	210.5	R 13.6	153.7	267.9	60.4	70.5	R 264.1	R 1,202.0	R 26.9	R 2,953.8	2,430.3	R 5,384.1
1986	330.9	R 153.1	R 484.0	850.2	158.5	154.5	R 12.3	192.4	231.9	43.2	70.8	R 163.9	R 1,027.5	R 23.6	R 2,385.4	2,419.9	R 4,805.3
1987	357.1	R 152.3	R 509.5	800.7	141.9	202.9	R 11.7	167.9	228.4	R 48.5	90.6	R 183.6	R 1,075.5	R 23.5	R 2,409.2	2,488.3	R 4,897.5
1988	437.4	R 146.5	R 583.9	803.4	110.4	170.3	R 8.6	99.6	237.0	R 51.0	59.1	R 155.4	R 891.5	R 24.5	R 2,303.2	2,507.3	R 4,810.4
1989	442.2	R 148.1	590.3	908.2	125.1	183.1	R 7.7	114.3	240.9	54.9	88.4	R 175.3	R 989.7	d R 25.2	d R 2,513.4	2,589.8	d R 5,103.2
1990	480.0	R 148.9	R 628.9	943.7	140.3	215.0	4.8	116.5	249.9	R 58.0	107.9	R 199.9	R 1,092.2	R 24.8	R 2,689.6	2,702.2	R 5,391.8
1991	412.9	R 143.8	R 556.7	885.5	113.6	168.9	R 4.7	161.5	257.2	62.2	51.1	R 191.0	R 1,010.2	R 25.3	R 2,477.7	2,738.0	R 5,215.7
1992	458.8	R 147.2	R 606.0	848.2	92.4	186.8	R 3.9	190.2	286.0	65.8	52.4	R 216.5	R 1,094.0	R 26.7	R 2,574.8	2,716.4	R 5,291.2
1993	479.5	R 145.0	R 624.5	888.6	127.2	181.3	R 6.2	R 76.5	301.4	45.4	52.5	R 196.5	R 987.1	R 27.5	R 2,527.6	2,643.4	R 5,171.0
1994	501.8	R 134.7	R 636.5	906.3	165.2	149.9	R 7.2	R 56.6	317.6	R 43.9	54.1	R 194.7	R 989.3	R 38.7	R 2,570.8	2,664.3	R 5,235.1
1995	500.7	135.5	636.2	935.1	178.4	121.3	R 4.4	50.7	R 317.0	47.3	36.9	R 190.7	R 946.6	R 42.7	R 2,560.6	2,744.0	R 5,304.5
1996	482.8	149.3	632.1	955.5	163.1	155.9	4.8	66.1	318.3	45.0	53.0	221.0	1,027.2	41.9	2,656.8	2,736.0	5,392.7
1997	486.2	148.8	635.1	1,046.0	175.3	133.6	4.5	76.8	299.1	47.4	33.1	213.3	983.0	41.9	2,706.0	2,759.3	5,465.3

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.

R=Revised data.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 243. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Pennsylvania

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.32	—	2.17	1.35	0.72	1.40	5.08	2.92	0.42	2.48	2.48	3.66	2.48
1975	1.25	—	3.45	2.64	2.01	2.84	7.48	4.72	1.80	4.15	4.15	8.41	4.16
1980	—	—	9.02	7.05	6.27	5.36	14.36	9.71	3.76	8.85	8.85	15.14	8.86
1981	—	—	10.84	8.66	7.49	6.17	18.00	10.79	4.71	10.05	10.05	18.45	10.05
1982	—	—	10.92	8.42	7.02	6.89	17.25	10.04	4.45	9.58	9.58	19.80	9.59
1983	—	—	10.44	8.35	6.53	7.14	16.98	9.18	4.25	8.87	8.87	18.79	8.89
1984	—	—	10.27	8.45	6.24	7.20	17.63	8.91	4.61	8.66	8.66	21.12	R 8.68
1985	—	—	9.99	8.35	5.84	9.45	17.61	9.01	4.14	8.65	8.65	21.08	8.67
1986	—	—	8.41	6.52	3.91	9.05	15.59	6.54	2.23	6.27	6.27	20.55	6.29
1987	—	—	7.55	6.73	4.02	8.29	13.58	7.03	2.78	6.62	6.62	29.63	R 6.66
1988	—	—	7.41	6.66	3.85	9.11	14.62	7.01	2.08	6.57	6.57	29.15	6.60
1989	—	—	8.28	7.05	4.44	8.69	14.48	7.79	2.47	7.32	7.32	29.79	7.36
1990	—	4.71	9.32	8.79	5.59	10.95	14.60	9.35	2.82	8.70	8.70	31.65	R 8.74
1991	—	5.08	8.71	8.56	4.81	11.75	16.80	9.44	2.10	8.66	8.66	32.83	R 8.70
1992	—	5.76	8.54	8.43	4.49	10.07	18.32	9.33	2.18	8.50	8.50	33.51	R 8.54
1993	—	7.98	8.24	8.32	4.17	9.88	18.96	9.01	2.15	8.28	8.28	33.89	8.31
1994	—	6.23	7.96	8.31	3.90	9.03	19.11	9.21	2.44	8.41	8.41	33.51	R 8.45
1995	—	6.99	8.36	8.06	3.87	8.66	R 19.41	9.64	2.60	8.69	8.69	33.08	R 8.73
1996	—	4.00	9.29	9.02	4.77	8.59	20.08	10.01	3.22	9.33	9.33	33.09	9.36
1997	—	4.83	9.39	8.86	4.36	8.57	17.86	10.16	2.64	9.18	9.18	34.33	9.21
	Expenditures in Million Nominal Dollars												
1970	R (s)	—	7.3	99.5	36.9	0.7	40.9	1,503.8	14.6	1,703.6	1,704.0	R 2.3	R 1,706.3
1975	R (s)	—	7.4	254.4	96.2	1.7	49.7	2,635.5	65.5	3,110.4	3,110.5	5.6	3,116.1
1980	—	—	15.3	885.1	360.1	2.9	114.3	5,461.1	113.4	6,952.3	6,952.3	R 9.6	R 6,961.9
1981	—	—	15.2	943.7	381.9	5.3	137.4	5,794.1	153.3	7,430.8	7,430.8	R 11.0	R 7,441.8
1982	—	—	10.8	841.7	342.2	5.4	120.1	5,301.2	45.4	6,666.8	6,666.8	R 12.6	R 6,679.4
1983	—	—	11.1	877.2	337.7	6.6	123.8	4,886.2	43.8	6,286.4	6,286.4	R 19.1	R 6,305.6
1984	—	—	9.6	958.9	369.6	9.4	137.0	4,739.6	46.4	6,270.6	6,270.6	R 24.7	R 6,295.3
1985	—	—	10.5	977.0	334.6	8.5	127.5	R 4,745.5	55.7	R 6,259.3	R 6,259.3	R 26.3	R 6,285.6
1986	—	—	10.7	811.7	219.3	6.3	110.4	R 3,517.5	63.8	R 4,739.8	R 4,739.8	R 27.5	R 4,767.3
1987	—	—	5.6	929.9	239.6	4.6	108.7	R 3,870.1	103.0	R 5,261.6	R 5,261.6	R 39.8	R 5,301.4
1988	—	—	7.1	965.3	255.1	5.9	112.8	R 4,010.2	71.6	R 5,427.9	R 5,427.9	R 40.1	R 5,468.0
1989	—	—	7.4	974.6	242.5	5.5	114.7	R 4,382.0	64.1	R 5,790.8	R 5,790.8	R 41.9	R 5,832.7
1990	—	(s)	6.8	1,220.2	380.7	R 6.2	119.0	R 5,184.8	100.5	R 7,018.2	R 7,018.2	R 42.8	R 7,061.0
1991	—	(s)	5.1	1,186.8	309.5	8.0	122.5	R 5,222.8	75.4	R 6,930.1	R 6,930.1	R 44.7	R 6,974.8
1992	—	(s)	7.0	1,228.7	277.8	6.9	136.1	R 5,184.4	95.8	R 6,936.7	R 6,936.8	R 41.2	R 6,977.9
1993	—	(s)	6.2	1,326.4	278.1	R 7.0	143.5	R 5,157.0	82.4	R 7,000.5	R 7,000.6	R 39.9	R 7,040.5
1994	—	R (s)	5.5	1,406.6	259.7	11.8	151.2	R 5,253.8	91.9	R 7,180.4	R 7,180.5	R 42.3	R 7,222.8
1995	—	R (s)	5.3	1,433.7	269.9	5.9	R 150.9	R 5,633.2	79.1	7,578.1	R 7,578.2	R 42.8	R 7,621.0
1996	—	(s)	5.7	1,544.8	320.0	4.6	151.5	5,928.4	68.5	8,023.5	8,023.7	44.9	8,068.6
1997	—	(s)	5.1	1,616.3	366.4	4.2	142.4	6,061.9	77.6	8,274.0	8,274.2	44.1	8,318.3

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 244. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Pennsylvania

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.31	0.41	0.47	0.49	—	0.47	0.21	—	0.34
1975	0.96	1.47	2.07	2.27	—	2.12	0.25	—	0.93
1980	1.33	3.60	4.52	5.85	0.72	4.60	0.42	—	1.55
1981	1.56	4.02	5.42	7.27	0.93	5.51	0.53	—	1.78
1982	1.64	4.10	5.02	7.06	1.14	5.11	0.67	—	1.70
1983	1.53	5.10	4.54	6.15	1.27	4.56	0.89	—	1.75
1984	1.59	4.53	4.82	6.19	1.25	4.79	0.88	—	1.72
1985	1.56	5.08	4.32	5.85	1.27	4.30	0.92	—	1.61
1986	1.49	3.61	2.42	3.79	1.09	2.47	0.78	—	1.35
1987	1.44	3.35	2.99	4.01	1.05	2.95	0.78	—	1.36
1988	1.45	3.33	2.37	3.57	1.02	2.39	0.84	—	1.35
1989	1.45	3.48	2.87	4.07	0.94	2.87	0.88	—	1.38
1990	1.52	2.95	3.31	5.48	0.90	3.32	0.83	—	1.32
1991	1.55	2.95	2.40	4.76	0.84	2.48	0.77	—	1.28
1992	1.48	2.97	2.45	4.31	0.78	2.36	0.68	—	1.19
1993	1.44	2.58	2.40	4.05	0.58	2.36	0.66	—	1.18
1994	1.43	2.29	2.53	3.89	0.55	2.50	0.62	—	1.14
1995	1.36	1.98	2.55	3.80	0.55	2.38	0.56	—	1.06
1996	1.38	2.77	3.19	4.79	0.67	3.01	0.55	—	1.08
1997	1.36	2.93	2.61	4.34	0.68	2.40	0.51	—	1.04
	Expenditures in Million Nominal Dollars								
1970	213.6	4.0	66.6	11.3	—	77.8	1.1	—	296.5
1975	822.7	1.8	133.8	45.2	—	178.9	44.3	—	1,047.7
1980	1,364.4	10.5	489.2	76.2	1.4	566.8	55.4	—	1,997.2
1981	1,484.4	13.3	522.6	73.4	1.9	597.9	82.8	—	2,178.4
1982	1,584.4	6.5	313.9	59.3	3.1	376.3	121.7	—	2,088.9
1983	1,499.2	8.4	486.9	78.2	7.3	572.3	142.4	—	2,222.3
1984	1,588.3	11.9	423.1	74.8	6.8	504.7	204.8	—	2,309.7
1985	1,592.7	8.0	315.7	48.5	6.0	370.2	262.2	—	2,233.1
1986	1,483.7	2.7	198.0	31.7	5.8	235.5	336.6	—	2,058.5
1987	1,458.8	6.9	211.0	36.6	6.8	254.5	293.8	—	2,014.1
1988	1,534.8	9.1	163.7	34.7	7.5	206.0	342.6	—	2,092.5
1989	1,529.8	14.4	202.2	47.0	6.4	255.6	369.7	—	2,169.5
1990	1,540.7	7.2	112.5	37.8	5.4	155.8	511.5	—	2,215.1
1991	1,534.3	6.2	77.8	25.1	5.0	108.0	474.0	—	2,122.4
1992	1,481.1	9.5	43.5	18.0	4.8	66.3	436.0	—	1,992.9
1993	1,427.3	22.0	102.0	19.9	3.2	125.2	416.7	—	1,991.2
1994	1,340.0	30.0	119.1	31.7	3.6	154.5	447.2	—	1,971.8
1995	1,312.4	50.4	60.4	27.8	4.3	92.5	393.2	—	1,848.5
1996	1,395.0	20.6	80.0	39.6	5.5	125.1	398.1	—	1,939.5
1997	1,413.9	22.3	42.2	22.9	5.4	70.5	369.6	—	1,876.5

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

—No consumption.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 245. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Rhode Island

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.94	0.94	1.38	1.35	0.75	1.77	2.90	0.43	1.36	1.41	—	R 2.56	R 1.42	0.43	6.85	R 1.92
1975	—	2.64	2.64	2.74	2.76	2.09	3.50	4.50	1.92	2.53	3.17	—	R 2.51	R 3.10	1.84	13.78	R 4.14
1980	—	2.37	2.37	5.09	7.06	6.51	6.57	9.72	4.03	6.05	7.59	—	R 2.85	R 6.99	3.91	20.67	R 8.96
1981	—	3.43	3.43	5.77	8.71	7.80	7.88	10.79	4.83	7.15	8.96	—	R 3.49	R 8.10	4.43	25.68	R 10.68
1982	—	4.08	4.08	7.00	8.45	7.51	7.60	10.12	4.56	5.77	8.49	—	R 3.39	R 8.03	4.56	24.73	R 10.29
1983	—	3.69	3.69	7.09	8.30	6.91	8.62	9.46	4.34	R 5.58	R 8.14	—	R 3.29	R 7.79	4.13	25.65	R 10.32
1984	—	3.50	3.50	6.39	8.28	6.46	8.42	8.85	5.08	5.90	7.89	—	R 3.34	R 7.45	4.33	25.75	R 9.95
1985	—	R 3.04	R 3.04	6.66	8.02	6.10	12.02	9.13	4.66	R 5.80	7.63	—	R 3.21	R 7.36	3.82	24.73	R 9.59
1986	—	R 2.70	R 2.70	6.77	6.19	4.25	11.00	7.36	2.67	R 6.03	R 5.98	—	R 2.63	R 6.06	2.39	23.40	R 8.41
1987	—	3.09	3.09	5.49	6.16	4.18	11.55	7.96	3.10	R 4.51	R 6.38	—	R 2.54	R 6.13	2.50	23.93	R 8.55
1988	—	2.54	2.54	5.94	6.30	4.04	11.35	8.40	2.47	R 4.33	R 6.34	—	R 2.56	R 6.12	2.28	23.28	R 8.47
1989	—	2.70	2.70	6.21	6.99	4.75	9.57	9.11	2.89	R 4.22	7.14	—	e R 2.78	e R 6.84	R 2.62	24.24	e R 9.36
1990	—	R 3.54	R 3.54	5.83	8.50	6.03	12.80	10.03	3.40	R 4.42	8.21	—	R 2.71	R 7.48	R 2.55	26.81	10.50
1991	—	R 3.52	R 3.52	5.94	7.81	5.23	14.24	10.09	2.86	R 6.00	8.50	—	R 2.66	R 7.44	R 2.11	29.80	R 10.43
1992	—	R 3.42	R 3.42	5.52	7.20	4.79	12.50	9.83	2.57	R 4.10	R 7.72	—	R 2.45	R 6.63	R 1.68	30.18	R 9.27
1993	—	R 3.30	R 3.30	5.97	7.11	4.49	12.50	9.57	2.84	R 5.38	R 7.82	—	R 2.23	R 6.86	R 1.74	30.48	9.59
1994	—	3.34	3.34	5.93	7.00	4.20	13.50	9.86	2.80	R 5.20	7.84	—	R 2.34	R 6.90	R 1.68	30.02	9.60
1995	—	3.31	3.31	5.18	7.00	4.19	13.17	10.42	2.97	R 5.65	8.30	—	R 2.30	R 6.73	R 1.59	30.43	R 9.87
1996	—	3.44	3.44	4.95	7.81	5.18	14.76	10.74	3.63	8.30	9.03	—	2.61	6.94	2.16	30.71	10.63
1997	—	3.50	3.50	5.62	7.98	4.86	15.81	10.79	3.41	8.32	9.04	—	2.58	7.30	2.96	31.37	11.04
	Expenditures in Million Nominal Dollars																
1970	—	R (s)	R (s)	35.2	67.9	0.6	2.5	122.0	25.7	15.5	234.1	—	R 6.8	R 276.4	-9.3	90.7	R 357.7
1975	—	R (s)	R (s)	64.3	128.5	3.2	6.5	211.9	52.9	31.4	434.3	—	R 5.0	R 503.9	-18.1	209.3	R 695.0
1980	—	R (s)	R (s)	142.7	207.0	12.8	7.1	429.7	63.9	74.0	794.4	—	R 6.3	R 943.8	-47.5	361.9	R 1,258.3
1981	—	0.7	0.7	171.6	202.0	13.3	8.0	482.8	67.0	62.0	835.0	—	R 7.8	R 1,015.1	-46.5	441.4	R 1,410.0
1982	—	0.8	0.8	200.8	195.5	11.9	9.0	447.1	47.3	58.7	769.4	—	R 8.2	R 979.2	-26.7	413.5	R 1,366.0
1983	—	0.6	0.6	212.0	227.6	12.8	10.3	412.5	40.0	R 54.9	R 758.1	—	R 7.8	R 978.5	-31.7	451.3	R 1,398.2
1984	—	0.8	0.8	207.8	236.5	20.8	9.5	398.1	54.0	R 62.2	781.1	—	R 6.5	R 996.1	-34.3	472.1	R 1,434.0
1985	—	0.6	0.6	204.6	207.9	17.1	21.7	R 415.6	65.5	R 127.4	R 855.1	—	R 5.9	R 1,066.3	-27.4	458.2	R 1,497.1
1986	—	R 1.9	R 1.9	182.9	191.2	9.3	23.4	345.4	63.2	R 72.5	R 705.1	—	R 5.2	R 895.1	-22.3	451.6	R 1,324.3
1987	—	R (s)	R (s)	202.3	217.3	12.5	28.3	R 382.0	45.2	R 62.3	R 747.5	—	R 3.8	R 954.0	-26.8	485.1	R 1,412.3
1988	—	11.1	11.1	187.0	217.9	14.5	23.4	R 409.1	47.2	R 58.7	R 770.7	—	R 4.0	R 972.9	-22.4	494.0	R 1,444.4
1989	—	1.8	1.8	215.8	240.2	19.4	17.7	R 424.5	31.0	R 52.1	R 784.9	—	e R 4.3	e R 1,007.1	R -18.0	526.0	e R 1,515.1
1990	—	R (s)	R (s)	213.6	229.7	26.4	23.3	R 461.7	30.8	R 55.2	R 827.1	—	R 5.7	R 1,047.4	R -21.1	587.3	R 1,613.5
1991	—	R (s)	R (s)	330.8	230.4	19.4	24.0	R 459.9	19.8	R 25.9	R 779.2	—	R 5.6	R 1,116.6	R -6.3	651.1	R 1,761.4
1992	—	R (s)	R (s)	435.3	222.6	15.1	20.7	R 451.9	19.4	R 46.0	R 775.7	—	R 5.4	R 1,220.0	R -6.5	658.3	R 1,871.7
1993	—	R (s)	R (s)	462.7	226.6	13.4	23.1	R 446.5	23.6	R 35.5	R 768.7	—	R 5.5	R 1,240.6	R -5.9	681.0	R 1,915.6
1994	—	R (s)	R (s)	432.3	241.8	12.6	24.6	R 447.2	20.8	R 49.7	R 796.7	—	R 5.8	R 1,237.9	R -5.6	673.2	R 1,905.6
1995	—	R (s)	R (s)	369.5	233.7	11.8	22.0	488.6	17.7	R 44.7	R 818.4	—	R 6.2	R 1,201.4	R -18.0	688.9	R 1,872.3
1996	—	(s)	(s)	430.2	275.4	15.8	27.9	508.0	22.8	28.9	878.9	—	7.1	1,320.7	-63.7	691.9	1,948.9
1997	—	(s)	(s)	472.6	319.9	22.8	30.3	521.1	19.8	27.4	941.2	—	5.4	1,426.2	-98.5	716.4	2,044.0

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 246. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Rhode Island

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	0.98	1.79	1.49	1.70	2.55	1.52	0.56	R 1.58	8.44	R 2.18
1975	2.62	3.04	2.85	3.16	5.49	2.90	1.11	R 2.92	15.43	R 4.30
1980	4.47	5.58	7.29	8.15	8.57	7.33	2.85	R 6.38	22.64	R 8.77
1981	5.40	6.46	8.93	10.54	10.04	8.99	3.51	R 7.48	27.89	R 10.74
1982	5.46	7.68	8.66	10.79	9.61	8.78	3.40	R 7.89	26.90	R 10.90
1983	5.02	8.37	8.45	R 7.56	10.92	R 8.50	3.30	R 8.09	27.90	R 11.26
1984	4.76	7.29	8.51	R 9.43	10.48	8.59	3.35	R 7.74	27.55	R 10.88
1985	4.39	7.62	8.15	R 8.61	11.44	R 8.32	3.22	R 7.80	26.77	R 10.59
1986	4.19	7.25	6.33	R 8.69	9.82	R 6.61	2.58	R 6.70	25.42	R 9.65
1987	3.85	6.63	6.31	R 5.96	11.25	R 6.57	2.46	R 6.46	25.93	R 9.59
1988	3.99	6.43	6.39	R 5.58	11.14	R 6.57	2.48	R 6.38	25.28	R 9.38
1989	3.96	6.94	7.18	R 5.23	8.50	R 7.21	2.75	R 6.93	26.34	R 10.19
1990	4.21	7.03	8.38	R 6.69	13.81	R 8.69	2.83	R 7.55	28.84	R 11.45
1991	4.07	7.42	7.71	R 5.94	15.22	R 8.14	2.70	R 7.50	32.22	R 11.96
1992	3.94	7.54	7.04	R 5.01	13.80	R 7.34	2.47	R 7.20	32.75	R 11.26
1993	3.96	7.94	6.89	R 4.52	13.58	R 7.24	2.42	R 7.33	33.37	R 11.52
1994	4.07	8.86	6.83	R 5.46	15.99	R 7.29	2.35	R 7.72	32.99	R 11.94
1995	4.01	7.82	6.74	R 4.75	16.05	R 7.19	2.30	R 7.19	33.62	R 11.71
1996	4.19	7.91	7.61	5.71	17.67	8.15	2.64	7.75	34.60	12.04
1997	4.14	9.40	7.63	5.81	18.02	8.16	2.62	8.48	35.52	12.90
	Expenditures in Million Nominal Dollars									
1970	R (s)	21.9	50.7	3.2	1.5	55.5	(s)	R 77.7	40.0	R 117.7
1975	R (s)	40.2	89.6	1.6	3.0	94.1	0.6	R 135.1	88.7	R 223.8
1980	R (s)	79.5	140.0	2.5	3.6	146.1	6.0	R 231.8	142.1	R 373.9
1981	R (s)	95.3	133.5	2.8	4.4	140.7	7.5	R 243.9	172.9	R 416.9
1982	0.6	118.0	124.4	7.5	4.2	136.1	7.8	R 262.5	168.1	R 430.6
1983	R (s)	119.1	142.3	R 2.5	5.6	R 150.4	7.5	R 277.4	182.1	R 459.5
1984	0.5	112.9	147.1	1.9	6.1	155.2	6.1	R 274.7	184.0	R 458.7
1985	R (s)	118.0	162.4	R 6.4	11.5	R 180.3	5.7	R 304.3	180.0	R 484.3
1986	R (s)	120.2	110.5	R 8.0	9.2	R 127.7	4.5	R 252.6	179.0	R 431.6
1987	R (s)	114.0	117.4	R 3.4	12.5	R 133.3	3.1	R 250.6	193.4	R 444.0
1988	R (s)	116.7	134.1	R 3.0	10.7	R 147.8	3.2	R 267.9	200.0	R 467.9
1989	R (s)	130.4	132.9	R 1.7	8.5	R 143.1	3.7	R 277.4	213.0	R 490.4
1990	R (s)	128.0	124.6	R 1.4	13.9	R 139.9	5.2	R 273.4	233.8	R 507.2
1991	R (s)	132.5	120.7	R 1.2	15.4	R 137.2	5.2	R 275.2	260.4	R 535.6
1992	R (s)	153.6	134.0	R 1.0	13.4	R 148.4	5.0	R 307.4	264.1	R 571.4
1993	R (s)	161.1	131.6	R 1.0	15.6	R 148.3	5.1	R 314.6	274.6	R 589.2
1994	R (s)	158.5	139.9	R 1.2	18.2	R 159.2	4.8	R 322.8	276.6	R 599.3
1995	R (s)	139.1	131.8	R 0.7	16.5	R 149.0	5.2	R 293.5	283.5	R 577.0
1996	(s)	159.9	156.4	1.0	21.6	178.9	6.0	345.1	292.8	637.9
1997	(s)	174.5	165.4	1.1	22.0	188.6	4.3	367.6	301.3	668.9

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 247. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Rhode Island

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.90	1.44	1.10	0.78	1.20	2.90	0.44	0.85	0.56	1.00	7.02	2.08
1975	2.65	2.71	2.44	2.59	2.66	4.50	1.81	2.28	1.11	2.39	13.84	5.23
1980	1.67	5.00	6.46	—	5.29	9.72	3.96	6.05	2.85	R 5.43	20.45	R 10.67
1981	1.86	5.70	8.10	7.98	6.20	10.79	4.79	7.21	3.51	R 6.19	25.31	R 13.27
1982	2.01	6.62	7.85	8.04	6.44	10.12	4.55	6.90	3.40	R 6.68	23.99	R 12.76
1983	1.97	6.87	7.25	R 7.56	6.86	9.46	4.34	6.34	3.30	R 6.60	25.23	R 12.99
1984	2.39	6.34	7.18	R 9.43	6.20	8.85	5.35	6.46	3.35	R 6.37	25.58	R 12.79
1985	R 2.39	6.45	6.92	R 8.61	12.75	9.13	4.96	6.08	NA	6.27	24.56	12.49
1986	R 2.53	6.21	4.74	R 8.69	11.92	7.36	2.85	R 3.78	NA	4.65	23.01	9.92
1987	R 2.37	5.38	5.18	R 5.96	11.80	7.96	3.42	4.75	NA	5.08	23.26	10.65
1988	R 2.52	5.65	5.02	R 5.58	11.54	8.40	2.83	4.26	NA	4.93	22.62	10.77
1989	2.60	6.24	5.52	R 5.23	10.83	9.11	3.06	R 4.82	NA	5.58	23.52	11.81
1990	R 2.58	6.04	6.95	R 6.69	11.56	10.03	3.35	5.44	NA	5.73	26.21	13.06
1991	R 2.68	5.87	6.00	R 5.94	12.78	10.09	2.92	4.91	NA	5.38	29.00	13.58
1992	R 2.64	6.21	5.82	R 5.01	10.66	9.83	2.71	4.60	NA	5.50	29.51	14.06
1993	R 2.32	6.90	5.55	R 4.52	10.72	9.57	2.82	4.34	2.42	R 5.66	30.01	R 14.03
1994	2.23	7.36	5.59	R 5.46	10.52	9.86	2.82	4.50	2.35	R 6.12	29.41	R 13.15
1995	2.26	6.25	5.49	R 4.75	10.79	10.42	3.00	R 4.60	2.30	R 5.58	29.78	R 13.29
1996	2.30	6.98	6.11	5.71	11.17	10.74	3.62	5.11	2.64	6.18	30.02	13.18
1997	2.53	8.03	5.85	5.81	11.00	10.79	3.41	4.94	2.62	6.71	30.84	14.13
	Expenditures in Million Nominal Dollars											
1970	R (s)	7.5	9.4	(s)	R (s)	0.6	2.7	12.8	(s)	20.3	30.8	51.1
1975	R (s)	11.6	19.3	(s)	R (s)	1.0	6.9	27.3	(s)	39.1	74.4	113.5
1980	(s)	34.5	23.2	—	R (s)	2.5	4.5	30.6	(s)	R 65.2	132.0	R 197.3
1981	R (s)	40.0	18.0	(s)	R (s)	2.9	5.7	27.2	(s)	R 67.5	162.2	R 229.7
1982	R (s)	49.1	19.8	R (s)	R (s)	3.0	6.4	29.8	(s)	R 79.2	154.2	R 233.4
1983	R (s)	49.6	24.4	R (s)	0.6	2.0	8.2	35.3	(s)	R 85.2	170.3	R 255.5
1984	R (s)	48.8	24.8	R (s)	0.6	1.3	13.8	40.7	(s)	R 89.8	181.1	R 270.9
1985	R (s)	50.6	17.8	R (s)	2.3	1.5	17.2	39.0	NA	89.7	181.0	R 270.7
1986	R (s)	42.9	22.3	R (s)	2.0	1.3	20.5	46.2	NA	R 89.3	178.1	R 267.4
1987	R (s)	52.0	26.9	R (s)	2.3	1.5	10.9	41.8	NA	93.9	190.2	R 284.1
1988	R (s)	48.4	23.6	R (s)	2.0	1.6	11.0	38.2	NA	86.8	196.0	282.7
1989	R (s)	56.2	25.0	R (s)	1.9	1.8	8.8	37.7	NA	94.0	211.0	305.0
1990	R (s)	50.0	27.2	R (s)	2.0	2.0	12.7	44.1	NA	94.3	240.4	334.7
1991	R (s)	49.9	27.1	(s)	2.3	1.9	10.8	42.2	NA	R 92.1	264.3	356.5
1992	R (s)	57.4	20.4	R (s)	1.8	1.7	8.9	32.9	NA	R 90.4	268.9	359.3
1993	R (s)	65.4	20.7	R (s)	2.2	R (s)	11.4	34.8	(s)	R 100.2	278.3	378.5
1994	R (s)	91.2	26.4	R (s)	2.1	R (s)	11.2	R 40.3	(s)	R 132.0	274.6	R 406.6
1995	R (s)	77.3	22.9	R 0.8	2.0	0.5	9.5	R 35.8	(s)	R 113.6	283.5	R 397.0
1996	(s)	92.2	29.2	(s)	2.4	0.5	15.5	47.7	(s)	140.5	284.0	424.5
1997	(s)	101.0	26.1	1.8	2.4	0.6	13.3	44.2	(s)	145.7	297.4	443.1

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 248. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Rhode Island

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	0.90	0.90	0.85	0.66	0.71	0.78	1.20	5.08	2.90	0.42	1.86	0.62	R 3.00	R 0.78	4.83	R 1.16
1975	—	2.65	2.65	2.10	1.86	2.34	2.59	2.66	7.48	4.50	2.05	4.18	2.17	R 3.00	R 2.19	11.36	R 3.19
1980	—	1.67	1.67	4.45	3.58	5.65	6.18	5.29	14.36	9.72	4.24	8.20	5.07	R 3.00	R 4.90	18.39	R 7.26
1981	—	1.86	1.86	5.21	5.42	7.25	7.98	6.20	18.00	10.79	4.97	9.22	6.07	R 3.00	5.83	23.20	R 9.03
1982	—	—	—	5.97	4.02	7.14	—	6.44	17.25	10.12	4.52	8.28	5.09	R 3.00	5.31	22.57	R 8.15
1983	—	—	—	5.96	4.23	7.54	R 6.95	6.86	16.98	9.46	4.33	7.61	5.27	R 3.00	R 5.44	22.90	R 8.55
1984	—	2.39	2.39	5.65	4.62	7.29	R 7.72	6.20	17.63	8.85	5.35	7.50	5.59	R 3.00	R 5.59	23.38	R 8.65
1985	—	R 2.39	R 2.39	5.70	5.18	7.11	R 7.29	12.75	17.61	9.13	4.96	7.37	5.58	R 3.00	R 5.58	21.93	R 7.48
1986	—	R 2.53	R 2.53	5.58	4.86	4.71	R 6.40	11.92	15.59	7.36	2.85	10.73	4.77	R 3.00	R 4.81	20.90	R 7.28
1987	—	R 2.37	R 2.37	5.23	3.54	5.01	R 4.63	11.80	13.58	7.96	3.42	10.73	4.47	R 3.00	R 4.58	21.89	R 7.12
1988	—	R 2.52	R 2.52	4.70	3.34	4.62	R 4.12	11.54	14.62	8.40	2.83	10.84	4.11	R 3.00	R 3.95	21.10	R 6.39
1989	—	2.60	2.60	5.03	3.17	4.81	R 4.93	10.83	14.48	9.11	3.06	10.00	4.03	d R 3.00	d R 4.19	21.98	d R 7.22
1990	—	R 2.58	R 2.58	5.18	3.34	7.53	R 6.70	11.56	14.60	10.03	3.35	9.71	R 4.44	R 1.82	R 4.56	24.46	R 8.10
1991	—	—	—	5.25	3.05	6.01	R 5.76	12.78	16.80	10.09	2.92	16.33	R 4.94	R 2.17	R 5.17	27.17	R 7.71
1992	—	—	—	4.58	2.78	5.31	R 5.02	10.66	18.32	9.83	2.71	24.75	3.80	R 2.17	R 4.38	27.03	R 5.90
1993	—	—	—	4.97	3.30	5.18	R 4.76	10.72	18.96	9.57	2.82	19.10	R 4.40	R 2.17	R 4.84	26.46	R 6.47
1994	—	—	—	4.31	3.66	5.12	R 4.66	8.94	19.11	9.86	2.82	24.75	4.47	R 2.31	R 4.34	25.96	R 6.00
1995	—	—	—	3.99	3.79	5.11	R 4.60	7.65	R 19.41	10.42	3.00	23.89	4.74	R 2.31	R 4.16	26.01	R 6.10
1996	—	—	—	4.35	3.80	6.03	6.08	8.67	20.08	10.74	3.62	22.95	5.91	2.31	4.65	24.95	7.00
1997	—	—	—	4.23	4.01	5.79	5.56	12.58	17.86	10.79	3.41	24.62	6.21	2.31	4.64	24.98	7.23
	Expenditures in Million Nominal Dollars																
1970	—	(s)	(s)	5.0	4.1	2.8	R (s)	0.7	1.5	(s)	8.3	2.2	20.1	R 6.5	R 31.6	19.9	R 51.5
1975	—	R (s)	R (s)	12.4	16.5	6.0	0.6	2.9	1.8	R (s)	24.7	3.4	56.0	R 4.4	R 72.9	46.2	R 119.0
1980	—	R (s)	R (s)	23.1	24.7	13.6	1.1	2.9	5.4	R (s)	17.4	22.0	87.2	R (s)	R 110.7	87.8	R 198.5
1981	—	R (s)	R (s)	27.6	35.8	13.6	R (s)	2.8	6.5	R (s)	23.0	8.1	90.2	R (s)	R 118.1	106.2	R 224.3
1982	—	—	—	30.5	32.1	13.4	—	3.9	5.7	R (s)	17.6	5.4	78.2	R (s)	R 108.9	91.2	R 200.1
1983	—	—	—	31.3	34.0	16.0	(s)	3.6	5.8	R (s)	12.8	4.6	77.0	R (s)	R 108.6	99.0	R 207.5
1984	—	R (s)	R (s)	31.4	41.0	15.9	(s)	2.0	6.5	R (s)	21.6	4.2	91.7	R (s)	R 123.3	107.1	R 230.4
1985	—	R (s)	R (s)	27.2	102.3	10.2	(s)	6.9	6.0	1.3	30.3	4.1	161.2	R (s)	R 188.8	97.3	R 286.1
1986	—	R 1.5	R 1.5	19.8	47.7	7.9	R (s)	11.5	5.2	1.2	20.9	4.0	98.5	R 0.7	R 120.5	94.6	R 215.1
1987	—	R (s)	R (s)	23.6	41.7	15.8	R (s)	13.1	5.1	1.2	18.0	4.4	99.4	R 0.7	R 123.7	101.6	R 225.4
1988	—	10.9	10.9	21.5	38.6	7.3	R (s)	9.8	5.3	1.5	11.3	3.5	R 77.7	R 0.7	R 110.8	98.0	R 208.8
1989	—	1.6	1.6	23.9	33.7	8.7	(s)	6.5	5.4	1.7	9.6	3.1	68.7	d R 0.6	d R 94.7	102.0	d R 196.7
1990	—	(s)	(s)	23.3	36.3	10.3	R 0.5	6.5	5.6	1.8	9.7	3.0	R 73.7	R (s)	R 97.5	113.0	R 210.5
1991	—	—	—	145.1	9.3	8.0	R (s)	5.6	5.8	1.4	7.0	1.2	R 38.8	R (s)	R 184.3	126.4	R 310.6
1992	—	—	—	223.3	27.7	8.7	R (s)	4.9	6.4	1.4	7.8	1.9	R 59.2	R (s)	R 282.9	125.4	R 408.2
1993	—	—	—	235.2	17.9	8.7	R (s)	5.0	6.8	2.5	10.7	1.6	R 53.3	R (s)	R 288.9	128.1	R 417.0
1994	—	—	—	181.3	30.5	9.1	R (s)	3.8	7.1	2.5	8.4	2.1	R 63.7	R 0.6	R 245.6	122.1	R 367.7
1995	—	—	—	143.6	24.9	8.1	R (s)	3.3	7.1	3.0	7.1	2.0	R 55.6	R 0.6	R 199.8	121.9	R 321.7
1996	—	—	—	120.6	8.5	10.5	(s)	3.7	7.1	2.7	7.3	2.3	42.2	0.6	163.4	115.0	278.4
1997	—	—	—	106.0	7.3	11.9	(s)	5.7	6.7	2.9	6.4	2.2	43.3	0.7	149.9	117.7	267.6

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 249. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Rhode Island

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	—	—	2.17	1.36	0.75	1.20	5.08	2.90	0.41	2.17	2.17	—	2.17
1975	2.65	—	3.45	2.90	2.09	2.66	7.48	4.50	1.71	4.19	4.19	—	4.19
1980	—	—	9.02	7.41	6.51	5.29	14.36	9.72	3.34	9.40	9.40	—	9.40
1981	—	—	10.84	8.93	7.80	6.20	18.00	10.79	4.14	10.56	10.56	—	10.56
1982	—	—	10.92	8.71	7.51	6.44	17.25	10.12	4.20	9.95	9.95	—	9.95
1983	—	—	10.44	8.91	6.91	6.86	16.98	9.46	—	9.37	9.37	—	9.37
1984	—	—	10.27	8.70	6.46	6.20	17.63	8.85	—	8.76	8.76	—	8.76
1985	—	—	9.99	8.89	6.10	12.75	17.61	9.13	—	9.03	9.03	—	9.03
1986	—	—	8.41	7.26	4.25	11.92	15.59	7.36	2.20	7.28	7.28	—	7.28
1987	—	—	7.55	6.96	4.18	11.80	13.58	7.96	2.55	7.58	7.58	—	7.58
1988	—	—	7.41	7.36	4.04	11.54	14.62	8.40	2.05	7.87	7.87	—	7.87
1989	—	—	8.28	7.81	4.75	10.83	14.48	9.11	2.50	8.60	8.60	—	8.60
1990	—	3.77	9.32	9.93	6.03	11.56	14.60	10.03	3.42	9.72	9.72	—	9.72
1991	—	3.67	8.71	9.39	5.23	12.78	16.80	10.09	2.16	9.71	9.71	—	9.71
1992	—	3.81	8.54	8.91	4.79	10.66	18.32	9.83	1.86	9.44	9.44	—	9.44
1993	—	6.89	8.24	9.00	4.49	10.72	18.96	9.57	2.96	9.28	9.28	—	9.28
1994	—	6.89	7.96	8.85	4.20	8.65	19.11	9.86	2.45	R 9.48	R 9.48	—	R 9.48
1995	—	5.70	8.36	8.83	4.19	8.74	R 19.41	10.42	2.55	9.95	9.95	—	9.95
1996	—	3.11	9.29	9.98	5.18	8.54	20.08	10.74	5.08	10.40	10.40	—	10.40
1997	—	5.15	9.39	9.89	4.86	7.56	17.86	10.79	2.75	10.24	10.24	—	10.24
	Expenditures in Million Nominal Dollars												
1970	—	—	1.6	4.8	0.6	R (s)	2.4	121.4	6.5	137.4	137.4	—	137.4
1975	(s)	—	5.0	13.3	3.2	R (s)	2.6	210.8	3.5	238.7	238.7	—	238.7
1980	—	—	12.2	29.2	12.8	R (s)	6.1	427.1	1.2	488.7	488.7	—	488.7
1981	—	—	1.2	36.2	13.3	R (s)	7.3	479.7	1.3	539.2	539.2	—	539.2
1982	—	—	1.5	37.2	11.9	R (s)	6.4	444.0	R (s)	501.9	501.9	—	501.9
1983	—	—	1.2	44.2	12.8	R (s)	6.6	410.4	—	475.7	475.7	—	475.7
1984	—	—	1.1	47.8	20.8	0.7	7.3	396.3	—	474.0	474.0	—	474.0
1985	—	—	1.5	16.9	17.1	1.0	6.8	R 412.8	—	R 456.1	R 456.1	—	R 456.1
1986	—	—	1.5	50.0	9.3	0.8	5.9	342.8	R (s)	410.3	410.3	—	410.3
1987	—	—	1.6	56.7	12.5	R (s)	5.8	R 379.3	2.7	R 458.9	R 458.9	—	R 458.9
1988	—	—	1.7	52.0	14.5	0.9	6.0	R 406.1	3.8	R 485.0	R 485.0	—	R 485.0
1989	—	—	1.9	72.7	19.4	0.7	6.1	R 421.0	1.1	R 523.0	R 523.0	—	R 523.0
1990	—	(s)	2.0	66.9	26.4	0.8	6.3	R 457.8	0.7	R 561.0	R 561.1	—	R 561.1
1991	—	(s)	1.3	74.0	19.4	0.7	6.5	R 456.6	R (s)	R 558.6	R 558.7	—	R 558.7
1992	—	(s)	1.3	59.0	15.1	0.5	7.3	R 448.9	0.7	R 532.7	R 532.8	—	R 532.8
1993	—	(s)	R (s)	65.2	13.4	R (s)	7.6	R 443.5	R (s)	R 530.8	R 530.8	—	R 530.8
1994	—	(s)	R (s)	66.1	12.6	0.5	8.1	R 444.2	R (s)	R 532.0	R 532.0	—	R 532.0
1995	—	(s)	0.9	70.4	11.8	R (s)	8.0	485.1	(s)	576.6	576.6	—	576.6
1996	—	(s)	1.7	77.3	15.8	(s)	8.1	504.8	(s)	608.0	608.0	—	608.0
1997	—	(s)	0.5	115.8	22.8	(s)	7.6	517.6	(s)	664.4	664.4	—	664.4

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 250. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Rhode Island

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	—	0.39	0.44	0.48	—	0.44	—	—	0.43
1975	—	1.15	1.84	2.00	—	1.84	—	—	1.84
1980	—	3.32	3.97	6.03	—	4.00	—	—	3.91
1981	—	3.27	4.79	7.55	—	4.82	—	—	4.43
1982	—	3.96	4.60	7.17	—	4.65	—	—	4.56
1983	—	3.75	4.35	6.32	—	4.40	—	—	4.13
1984	—	3.91	4.65	6.17	—	4.70	—	—	4.33
1985	—	3.37	4.03	5.83	—	4.08	—	—	3.82
1986	—	—	2.37	3.55	—	2.39	—	—	2.39
1987	—	2.32	2.68	3.39	—	2.70	—	—	2.50
1988	—	2.09	2.25	3.71	—	2.28	—	—	2.28
1989	—	2.41	2.70	4.23	—	2.77	—	—	R 2.62
1990	—	2.17	3.59	5.53	—	3.68	—	—	R 2.55
1991	—	1.98	2.41	4.70	—	2.70	—	—	R 2.11
1992	—	2.13	1.95	4.43	—	2.17	—	—	R 1.68
1993	—	2.39	3.20	4.11	—	3.41	—	—	R 1.74
1994	—	2.23	2.54	3.88	—	2.79	—	—	R 1.68
1995	—	1.85	2.57	4.13	—	2.92	—	—	R 1.59
1996	—	2.23	—	4.81	—	4.81	—	—	2.16
1997	—	3.26	—	4.49	—	4.49	—	—	2.96
	Expenditures in Million Nominal Dollars								
1970	—	0.9	8.2	R (s)	—	8.4	—	—	9.3
1975	—	(s)	17.8	R (s)	—	18.1	—	—	18.1
1980	—	5.7	40.8	1.0	—	41.8	—	—	47.5
1981	—	8.7	36.9	0.8	—	37.8	—	—	46.5
1982	—	3.2	22.7	0.7	—	23.5	—	—	26.7
1983	—	12.0	19.0	0.7	—	19.7	—	—	31.7
1984	—	14.7	18.6	0.9	—	19.5	—	—	34.3
1985	—	8.8	17.9	0.7	—	18.6	—	—	27.4
1986	—	—	21.7	0.6	—	22.3	—	—	22.3
1987	—	12.8	13.6	0.5	—	14.1	—	—	26.8
1988	—	R (s)	21.1	0.9	—	22.0	—	—	22.4
1989	—	5.3	11.5	0.9	—	12.4	—	—	R 18.0
1990	—	12.3	7.7	0.6	—	8.3	—	—	R 21.1
1991	—	3.3	1.9	0.5	—	2.4	—	—	R 6.3
1992	—	1.0	2.0	R (s)	—	2.4	—	—	R 6.5
1993	—	1.0	1.1	R (s)	—	1.5	—	—	R 5.9
1994	—	1.2	1.0	R (s)	—	1.4	—	—	R 5.6
1995	—	9.5	1.0	R (s)	—	1.5	—	—	R 18.0
1996	—	57.4	—	2.1	—	2.1	—	—	63.7
1997	—	91.0	—	0.7	—	0.7	—	—	98.5

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 251. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, South Carolina

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.47	0.47	0.57	1.03	0.73	2.04	2.75	0.42	1.39	1.89	0.19	R 1.30	R 1.21	0.42	3.98	R 1.81
1975	—	1.25	1.25	1.16	2.68	2.03	3.56	4.35	1.40	2.84	3.43	0.19	R 1.47	1.86	0.56	7.72	R 3.74
1980	—	1.60	1.60	3.07	6.84	6.46	5.77	10.18	3.43	R 6.62	R 8.05	0.44	R 2.26	R 4.06	1.14	11.11	R 7.19
1981	—	1.82	1.82	3.90	8.41	7.61	7.57	11.33	4.45	R 7.48	R 9.42	0.45	R 2.54	R 4.63	1.31	12.81	R 8.39
1982	—	1.93	1.93	4.52	8.04	7.18	7.93	10.65	4.06	R 7.02	R 9.16	0.48	R 2.56	R 4.73	1.36	14.53	R 8.88
1983	—	1.95	1.95	5.12	7.43	6.87	8.61	9.26	4.17	R 6.74	R 8.16	0.50	R 2.43	R 4.04	1.08	15.13	R 8.59
1984	—	R 1.96	R 1.96	5.32	7.60	6.62	9.05	8.83	4.94	R 6.90	R 7.98	0.61	R 2.71	R 4.18	1.20	15.15	R 8.60
1985	—	1.88	1.88	5.06	7.11	6.11	10.08	8.84	4.36	R 6.89	R 7.97	0.62	R 2.61	R 3.78	1.11	15.99	R 8.76
1986	—	1.82	1.82	4.40	5.71	4.23	9.97	6.40	2.50	R 5.01	R 5.94	0.61	R 1.91	R 2.96	1.03	16.25	R 7.71
1987	—	1.74	1.74	4.60	5.91	4.35	8.51	7.08	2.93	R 4.63	R 6.27	0.64	R 1.81	R 2.99	1.03	16.41	R 7.98
1988	—	1.75	1.75	4.25	5.72	4.19	10.37	7.08	2.30	R 4.24	R 6.17	0.59	R 1.82	R 2.98	1.00	16.40	R 7.79
1989	—	1.71	1.71	4.22	6.21	4.74	9.44	7.84	2.70	R 4.67	R 6.82	0.58	e R 1.56	e R 3.12	0.99	16.53	e R 8.16
1990	—	1.73	1.73	4.01	7.70	6.07	10.56	8.80	3.11	R 4.76	R 7.80	0.53	1.58	R 3.41	0.94	16.40	R 8.67
1991	—	1.64	1.64	3.66	7.26	5.12	11.06	8.56	2.42	R 5.08	R 7.51	0.52	R 1.62	R 3.29	0.90	16.49	R 8.53
1992	—	1.57	1.57	3.96	6.85	4.82	9.55	8.25	2.50	R 4.48	R 7.14	0.50	R 1.56	R 3.12	0.84	16.21	R 8.27
1993	—	1.60	1.60	4.19	6.63	4.49	9.41	7.94	2.25	R 4.64	R 6.87	0.50	R 1.55	R 3.05	0.88	16.54	R 8.25
1994	—	1.60	1.60	4.22	6.81	4.19	10.44	8.03	2.35	R 4.54	R 7.09	0.53	R 1.63	R 3.16	0.91	16.63	R 8.40
1995	—	1.55	1.55	4.06	6.73	4.21	10.58	8.32	2.68	R 4.68	R 7.29	0.51	R 1.62	R 3.13	0.85	16.68	R 8.56
1996	—	1.51	1.51	4.71	7.35	5.12	11.58	8.90	3.29	5.41	7.88	0.49	1.58	3.46	0.89	16.61	8.99
1997	—	1.49	1.49	4.76	7.18	4.79	11.68	8.74	3.08	4.93	7.65	0.42	1.55	3.41	0.85	16.13	8.77
	Expenditures in Million Nominal Dollars																
1970	—	65.3	65.3	91.4	56.7	12.4	22.6	415.8	14.2	48.0	569.7	(s)	R 15.6	R 742.0	-65.0	294.7	R 971.7
1975	—	174.7	174.7	143.3	130.7	29.5	42.3	809.3	67.5	87.4	1,166.8	40.6	R 18.0	R 1,543.4	-205.4	782.8	R 2,120.8
1980	—	392.2	392.2	441.2	424.9	107.1	67.4	1,899.0	155.3	275.6	2,929.4	83.4	R 16.0	R 3,862.2	-467.6	1,412.5	R 4,807.1
1981	—	486.0	486.0	552.8	481.2	118.2	77.9	2,118.4	149.7	323.2	3,268.6	85.5	R 18.6	R 4,411.5	-552.4	1,725.9	R 5,585.0
1982	—	524.5	524.5	443.1	444.1	106.5	74.7	1,982.8	79.9	242.2	2,930.3	70.3	R 18.9	R 3,987.1	-493.0	1,996.1	R 5,490.2
1983	—	455.2	455.2	520.1	456.7	94.1	81.5	1,746.6	103.2	R 243.0	R 2,725.1	140.6	R 19.3	R 3,860.3	-492.9	2,156.7	R 5,524.1
1984	—	R 478.0	R 478.0	577.4	509.6	110.1	82.1	1,723.4	155.8	R 216.6	R 2,797.6	152.5	R 25.4	R 4,030.8	-525.3	2,337.2	R 5,842.6
1985	—	493.6	493.6	495.3	485.7	105.3	114.8	R 1,752.1	80.0	R 264.4	R 2,802.4	214.5	R 23.9	R 4,029.6	-601.3	2,523.7	R 5,952.0
1986	—	480.7	480.7	435.6	388.8	72.7	104.5	1,321.6	37.8	R 221.8	R 2,147.2	233.9	R 29.4	R 3,326.8	-598.7	2,741.1	R 5,469.2
1987	—	R 512.9	R 512.9	488.0	408.2	75.4	112.7	R 1,431.9	45.3	R 235.0	R 2,308.5	269.0	R 26.8	R 3,605.3	-670.6	2,909.0	R 5,843.7
1988	—	R 526.8	R 526.8	479.3	419.7	73.4	134.0	R 1,593.7	47.3	R 245.9	R 2,513.9	257.5	R 27.9	R 3,805.5	-677.1	2,955.0	R 6,083.4
1989	—	514.1	514.1	495.2	451.9	80.3	127.7	R 1,735.8	46.5	R 235.9	R 2,678.2	251.7	e R 41.0	e R 3,980.2	-672.7	3,038.0	e R 6,345.5
1990	—	499.0	499.0	525.9	651.9	97.4	111.6	R 1,999.1	47.9	230.2	R 3,138.0	242.8	R 34.7	R 4,440.4	-656.9	3,113.3	R 6,896.8
1991	—	478.2	478.2	492.8	646.6	95.8	144.1	R 1,912.7	37.0	R 283.0	R 3,119.2	240.5	R 38.2	R 4,368.8	-640.7	3,211.3	R 6,939.5
1992	—	451.3	451.3	549.8	548.2	68.0	124.5	R 1,882.9	37.7	R 265.9	R 2,927.3	241.2	R 40.7	R 4,210.2	-603.7	3,230.5	R 6,837.1
1993	—	528.2	528.2	598.5	527.5	49.7	124.2	R 1,879.7	53.9	R 270.8	R 2,905.7	247.1	R 41.2	R 4,320.8	-675.1	3,472.0	R 7,117.7
1994	—	528.1	528.1	617.7	615.6	33.9	146.9	R 1,908.1	38.5	R 252.8	R 2,995.7	250.0	R 49.2	R 4,440.7	-683.9	3,509.2	R 7,266.0
1995	—	486.9	486.9	621.3	584.2	24.5	146.7	2,051.8	45.4	R 278.4	R 3,131.0	267.8	R 56.9	R 4,563.9	-676.0	3,703.0	R 7,590.8
1996	—	533.3	533.3	710.7	668.2	37.5	150.0	2,217.0	62.7	322.4	3,457.7	225.7	54.9	4,982.3	-683.7	3,801.6	8,100.2
1997	—	539.1	539.1	741.3	684.0	36.0	153.0	2,271.4	51.2	349.5	3,545.2	201.7	53.2	5,080.6	-674.4	3,770.9	8,177.0

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 252. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, South Carolina

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.20	1.32	1.30	1.58	2.46	1.64	0.73	R 1.47	5.64	R 2.75
1975	2.47	2.08	2.69	3.16	4.28	3.29	1.45	R 2.63	9.60	R 5.62
1980	3.19	4.06	6.95	8.27	7.47	7.50	3.70	R 5.65	13.69	R 9.57
1981	3.88	4.79	8.66	10.41	9.07	9.12	4.56	R 6.62	15.73	R 11.42
1982	3.69	5.35	8.37	10.39	9.57	9.19	4.42	R 6.76	17.61	R 12.85
1983	3.67	6.21	7.54	R 8.12	10.02	R 8.56	4.28	R 6.91	18.97	R 13.54
1984	3.68	6.46	7.81	R 8.44	10.43	R 8.90	4.35	R 7.09	19.20	R 13.84
1985	3.48	6.44	7.19	R 7.93	9.72	R 8.28	4.18	R 7.09	20.54	R 14.43
1986	3.31	6.35	6.66	R 7.01	10.26	R 7.95	3.35	R 6.65	20.89	R 14.71
1987	3.20	6.41	5.29	R 7.82	7.93	R 6.91	3.20	R 6.36	21.03	R 14.46
1988	3.26	6.55	6.01	R 7.26	10.62	R 8.02	3.23	R 6.91	20.89	R 14.69
1989	3.34	6.56	5.90	R 7.11	10.02	R 7.72	3.57	R 6.88	21.08	R 14.86
1990	3.34	6.97	7.57	R 8.62	10.57	R 9.00	3.53	7.51	20.95	R 15.93
1991	3.15	6.80	7.06	R 9.85	11.00	R 9.38	3.37	R 7.59	21.16	R 15.88
1992	3.11	6.84	5.87	R 8.64	8.87	R 7.98	3.08	R 6.90	21.07	R 15.58
1993	3.26	6.94	5.90	R 6.99	8.70	R 7.48	3.02	R 6.73	21.48	R 15.67
1994	3.23	7.42	6.13	R 7.63	12.11	R 9.76	2.93	R 7.75	21.97	R 16.51
1995	3.10	7.34	6.67	R 7.30	12.37	R 9.85	2.87	R 7.72	22.07	R 16.66
1996	3.06	7.19	5.47	7.80	13.50	9.82	3.29	7.62	21.98	16.42
1997	3.12	8.12	7.12	8.27	13.92	10.83	3.27	8.64	22.01	17.09
	Expenditures in Million Nominal Dollars									
1970	2.5	25.6	18.2	18.0	16.5	52.6	2.1	R 82.8	141.3	R 224.2
1975	4.9	38.8	26.6	15.4	27.9	69.8	4.2	R 117.7	322.3	R 440.0
1980	5.4	79.1	64.0	56.3	41.5	161.7	9.0	R 255.2	587.6	R 842.8
1981	3.4	93.0	72.1	32.6	51.6	156.3	11.2	R 264.0	701.2	R 965.2
1982	3.7	96.8	55.2	31.0	45.1	131.3	11.7	R 243.5	811.0	R 1,054.5
1983	5.5	119.6	51.6	R 23.3	56.2	R 131.0	11.2	R 267.3	894.5	R 1,161.8
1984	3.7	127.5	54.8	R 17.5	59.2	R 131.5	17.1	R 279.7	954.3	R 1,234.0
1985	2.0	108.7	48.3	R 54.5	65.1	R 167.8	16.0	R 294.6	1,027.5	R 1,322.1
1986	6.3	114.1	45.6	R 39.4	62.7	R 147.6	12.5	R 280.6	1,149.0	R 1,429.6
1987	3.4	133.1	43.2	R 51.2	57.1	R 151.4	9.9	R 297.8	1,213.8	R 1,511.6
1988	3.6	139.9	39.2	R 52.7	76.4	R 168.3	10.4	R 322.3	1,224.0	R 1,546.2
1989	0.5	137.8	44.1	R 47.8	77.1	R 168.9	11.9	R 319.1	1,256.0	R 1,575.1
1990	R (s)	131.9	44.5	R 26.9	64.5	R 135.9	10.8	R 278.7	1,305.1	R 1,583.8
1991	0.6	136.9	41.1	R 40.8	78.3	R 160.1	10.8	R 308.5	1,350.5	R 1,659.0
1992	0.8	157.4	23.6	R 21.6	68.0	R 113.2	10.4	R 281.9	1,361.4	R 1,643.3
1993	3.3	173.8	28.6	R 25.6	67.2	R 121.4	11.1	R 309.6	1,516.5	R 1,826.1
1994	1.9	179.7	23.8	R 16.1	96.2	R 136.1	10.6	R 328.2	1,491.7	R 1,819.8
1995	0.5	189.7	26.0	R 19.5	94.3	R 139.8	11.5	R 341.6	1,610.5	R 1,952.1
1996	0.5	217.9	23.0	24.8	90.7	138.6	13.2	370.1	1,688.3	2,058.5
1997	(s)	215.5	22.9	28.6	93.6	145.1	9.5	370.1	1,622.8	1,992.9

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 253. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, South Carolina

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.50	0.86	1.01	0.63	1.39	2.75	0.46	1.28	0.73	0.93	4.85	2.35
1975	1.53	1.22	2.32	2.29	2.68	4.35	1.15	2.58	1.45	1.58	8.55	R 4.83
1980	1.70	3.11	6.33	5.15	4.24	10.18	3.41	6.70	3.70	3.57	12.07	7.65
1981	1.88	3.87	7.89	7.41	5.71	11.33	4.35	7.91	4.56	4.59	14.22	R 9.53
1982	1.99	4.67	7.50	7.01	6.29	10.65	4.10	8.02	4.42	R 5.16	15.98	R 11.42
1983	1.86	5.39	6.50	R 8.12	6.56	9.26	4.32	R 6.96	4.28	R 5.49	16.56	R 11.38
1984	R 1.90	5.71	6.64	R 8.44	6.76	8.83	4.87	6.83	4.35	5.77	17.25	R 11.96
1985	1.77	5.60	6.22	R 7.93	10.60	8.84	4.50	R 7.20	NA	5.96	18.01	12.87
1986	1.77	5.47	3.86	R 7.01	9.57	6.40	2.67	R 5.31	NA	R 4.94	18.37	R 12.61
1987	1.70	5.45	4.19	R 7.82	9.20	7.08	2.97	R 5.53	NA	R 5.21	18.33	R 12.76
1988	1.67	5.44	3.79	R 7.26	10.07	7.08	2.40	R 5.13	NA	R 5.08	18.03	R 12.53
1989	R 1.70	5.51	4.40	R 7.11	8.68	7.84	2.81	R 5.61	NA	R 5.50	18.11	R 13.27
1990	1.74	5.74	5.52	R 8.62	10.55	8.80	3.25	R 7.11	NA	6.10	17.92	13.93
1991	1.71	5.41	4.97	R 9.85	11.13	8.56	2.59	R 6.90	NA	R 5.70	18.15	R 14.06
1992	1.72	5.50	4.76	R 8.64	10.54	8.25	2.61	R 6.26	NA	R 5.62	18.00	13.71
1993	1.72	5.66	4.55	R 6.99	10.41	7.94	2.30	R 5.79	3.02	R 5.37	18.15	R 13.61
1994	1.75	5.93	4.32	R 7.63	9.32	8.03	2.36	R 5.55	2.93	R 5.65	18.57	R 14.10
1995	1.71	5.93	4.32	R 7.30	9.58	8.32	2.72	R 5.35	2.87	R 5.70	18.52	R 14.01
1996	1.76	6.08	5.19	7.80	10.31	8.90	3.42	6.08	3.29	6.00	18.64	14.14
1997	1.76	6.54	5.02	8.27	10.53	8.74	3.20	5.96	3.27	6.34	18.50	14.29
	Expenditures in Million Nominal Dollars											
1970	1.9	12.3	4.2	R (s)	1.6	3.0	R (s)	9.2	(s)	R 23.5	70.1	R 93.6
1975	5.7	21.5	6.8	R (s)	3.1	5.1	1.2	16.5	(s)	R 43.8	207.8	R 251.6
1980	5.3	73.5	17.8	0.7	4.1	12.8	0.7	36.2	(s)	R 115.2	358.4	R 473.6
1981	3.1	77.0	19.9	1.2	5.7	15.2	2.8	44.8	(s)	R 125.2	407.9	R 533.1
1982	3.7	74.9	17.6	1.0	5.2	14.2	0.7	38.7	(s)	R 117.5	499.2	R 616.7
1983	5.2	91.6	31.5	R 1.1	6.5	14.8	2.0	R 55.9	(s)	R 152.9	525.1	R 678.1
1984	3.5	97.5	33.0	R 0.6	6.8	9.7	3.1	53.2	(s)	R 154.6	541.7	R 696.3
1985	1.9	88.0	30.5	R 2.2	12.5	10.7	2.3	R 58.1	NA	R 147.9	600.8	R 748.7
1986	6.3	89.5	15.8	R 2.2	10.3	8.1	0.6	R 36.9	NA	R 132.7	658.4	R 791.1
1987	3.3	96.3	21.2	R 2.3	11.7	9.2	0.6	R 45.1	NA	R 144.7	689.1	R 833.8
1988	3.4	97.7	23.3	R 1.1	12.8	8.7	0.7	R 46.6	NA	R 147.7	709.0	R 856.7
1989	R (s)	93.4	23.7	R 2.8	11.8	8.5	0.7	R 47.5	NA	R 141.3	747.0	R 888.3
1990	R (s)	90.8	19.5	R 0.6	11.3	11.8	R (s)	R 43.7	NA	R 134.7	776.3	R 910.9
1991	0.6	87.8	15.1	R 0.6	14.0	5.4	R (s)	R 35.5	NA	R 124.0	805.2	R 929.2
1992	0.9	94.0	18.6	R 0.7	14.3	4.5	0.9	R 38.9	NA	R 133.8	808.1	R 941.8
1993	2.9	99.0	22.5	R 0.8	14.2	1.3	R (s)	R 39.2	0.9	R 141.1	865.7	R 1,006.8
1994	1.7	109.2	16.4	R 1.1	13.1	1.3	1.0	R 32.9	0.9	R 144.6	899.6	R 1,044.2
1995	R (s)	114.9	24.4	R 1.1	12.9	1.4	0.7	R 40.4	0.9	R 156.6	939.5	R 1,096.1
1996	0.5	127.3	29.5	1.0	12.2	1.5	0.8	45.1	1.1	174.0	978.5	1,152.5
1997	(s)	131.8	31.7	0.8	12.5	1.4	(s)	46.6	0.9	179.3	987.6	1,167.0

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
(s)=Value less than 0.05 million nominal dollars.

NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 254. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, South Carolina

	Primary Energy																
	Coal				Petroleum												
	Coking Coal	Steam Coal	Total	Natural Gas	Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total	Wood and Waste	Total [c]	Electricity	Total Energy [c]
Year	Prices in Nominal Dollars per Million Btu																
1970	—	0.50	0.50	0.45	0.67	0.58	0.63	1.39	5.08	2.75	0.40	1.58	0.83	R 1.48	R 0.62	2.41	R 0.90
1975	—	1.53	1.53	1.00	1.78	2.12	2.29	2.68	7.48	4.35	1.82	3.34	2.27	R 1.48	1.56	5.80	R 2.43
1980	—	1.70	1.70	2.89	3.58	4.62	5.15	4.24	14.36	10.18	3.53	R 6.31	R 4.77	R 1.48	R 3.27	8.56	R 4.32
1981	—	1.88	1.88	3.75	4.86	6.69	7.41	5.71	18.00	11.33	4.79	R 6.73	R 6.25	R 1.48	R 4.05	10.03	R 5.35
1982	—	1.99	1.99	4.25	4.08	6.36	7.01	6.29	17.25	10.65	4.18	R 6.08	R 5.74	R 1.48	R 3.92	11.41	R 5.81
1983	—	1.86	1.86	4.73	4.08	6.76	R 6.90	6.56	16.98	9.26	4.21	R 6.49	R 5.62	R 1.48	R 4.08	11.58	R 6.00
1984	—	R 1.90	R 1.90	4.91	4.53	6.69	R 7.11	6.76	17.63	8.83	4.87	R 5.70	R 5.78	R 1.48	R 4.26	11.50	R 6.23
1985	—	1.77	1.77	4.57	4.99	6.49	R 6.84	10.60	17.61	8.84	4.50	R 5.47	R 6.15	R 1.48	R 4.06	12.02	R 6.28
1986	—	1.77	1.77	3.62	4.18	4.43	R 4.86	9.57	15.59	6.40	2.67	R 3.31	R 4.33	R 1.45	R 3.14	12.00	R 5.63
1987	—	1.70	1.70	3.82	3.20	4.52	R 4.57	9.20	13.58	7.08	2.97	R 3.32	R 4.22	R 1.45	R 3.18	12.27	R 5.71
1988	—	1.67	1.67	3.34	3.17	4.14	R 4.32	10.07	14.62	7.08	2.40	R 2.80	R 3.79	R 1.45	R 2.93	12.42	R 5.43
1989	—	R 1.70	R 1.70	3.37	2.90	4.92	R 5.23	8.68	14.48	7.84	2.81	R 3.59	R 4.30	d R 1.27	d R 3.01	12.48	d R 5.49
1990	—	1.74	1.74	3.26	2.90	5.88	R 6.82	10.55	14.60	8.80	3.25	R 3.88	R 4.72	1.27	R 3.18	12.24	R 5.54
1991	—	1.71	1.71	2.87	3.06	5.31	R 5.90	11.13	16.80	8.56	2.59	R 4.11	R 4.78	1.34	R 3.10	12.20	R 5.48
1992	—	1.72	1.72	3.05	2.27	5.03	R 5.09	10.54	18.32	8.25	2.61	R 3.75	R 4.30	R 1.33	R 3.02	11.82	R 5.29
1993	—	1.72	1.72	3.26	2.93	4.86	R 4.79	10.41	18.96	7.94	2.30	R 3.76	R 4.08	R 1.33	R 3.01	11.89	R 5.28
1994	—	1.75	1.75	3.22	2.87	4.69	R 4.71	7.93	19.11	8.03	2.36	R 3.57	R 4.01	R 1.44	R 2.96	11.80	R 5.28
1995	—	1.71	1.71	3.03	3.29	4.54	R 4.45	8.04	R 19.41	8.32	2.72	R 3.74	R 4.25	R 1.44	R 2.97	11.73	R 5.29
1996	—	1.76	1.76	3.66	3.29	5.45	5.52	9.34	20.08	8.90	3.42	4.83	5.05	1.33	3.50	11.40	5.64
1997	—	1.76	1.76	3.61	3.58	5.19	5.11	9.08	17.86	8.74	3.20	4.35	4.70	1.37	3.41	10.87	5.44
	Expenditures in Million Nominal Dollars																
1970	—	22.0	22.0	36.4	9.9	8.9	1.1	4.1	4.6	4.8	4.0	4.4	41.8	R 13.4	R 113.7	83.3	R 197.0
1975	—	43.2	43.2	72.3	28.9	25.2	1.9	10.6	11.3	4.8	30.7	17.5	130.8	R 13.8	R 260.1	252.6	R 512.7
1980	—	74.9	74.9	275.2	36.4	50.4	3.7	21.3	24.6	5.1	94.2	124.4	360.2	R 6.7	R 717.2	466.5	R 1,183.6
1981	—	94.8	94.8	365.9	46.9	70.0	4.1	19.1	29.6	4.3	77.7	174.1	425.9	R 7.1	R 893.7	616.9	R 1,510.6
1982	—	111.7	111.7	269.4	32.6	55.6	2.1	22.7	25.8	3.0	52.9	119.2	314.0	R 6.9	R 702.0	686.0	R 1,387.9
1983	—	101.3	101.3	304.8	51.5	58.0	4.1	16.6	26.6	1.4	77.1	104.7	340.1	R 7.8	R 754.0	737.0	R 1,491.0
1984	—	R 104.9	R 104.9	350.4	37.3	58.8	R 2.0	12.8	29.5	13.8	121.8	96.1	R 372.0	R 7.9	R 835.3	841.2	R 1,676.5
1985	—	111.3	111.3	296.3	45.3	64.2	R 8.7	31.9	27.4	32.6	63.1	94.1	R 367.4	R 7.9	R 782.9	895.4	R 1,678.3
1986	—	R 108.7	R 108.7	229.1	57.4	39.5	R 3.7	28.9	23.8	21.3	29.6	66.8	R 271.0	R 16.9	R 625.7	933.7	R 1,559.3
1987	—	R 109.2	R 109.2	256.8	51.6	36.7	R 3.9	41.5	23.4	R 24.8	34.3	76.4	R 292.6	R 16.9	R 675.5	1,006.1	R 1,681.6
1988	—	R 108.8	R 108.8	237.3	69.3	40.3	R 4.3	41.6	24.3	23.9	37.0	67.1	R 307.7	R 17.5	R 671.4	1,022.0	R 1,693.4
1989	—	105.1	105.1	257.9	44.5	54.7	R 5.0	36.0	24.7	30.2	35.3	83.3	R 313.6	d R 29.0	d R 705.6	1,035.0	d R 1,740.7
1990	—	101.2	101.2	290.9	38.1	66.8	3.7	R 32.5	25.6	R 32.5	39.1	106.9	R 345.2	23.9	R 761.2	1,031.9	R 1,793.1
1991	—	95.5	95.5	253.1	39.4	65.0	R 3.6	48.0	26.3	30.2	26.1	139.9	R 378.6	R 27.4	R 754.6	1,055.6	R 1,810.3
1992	—	R 94.3	R 94.3	295.2	31.1	52.2	R 2.0	38.9	29.3	31.0	29.4	144.4	R 358.4	R 30.3	R 778.1	1,061.1	R 1,839.3
1993	—	103.8	103.8	320.1	45.8	44.3	R 2.6	39.7	30.9	16.1	44.7	129.6	R 353.6	R 30.1	R 807.7	1,089.8	R 1,897.5
1994	—	102.3	102.3	323.7	37.9	36.6	R 2.0	33.4	32.5	17.5	36.4	128.5	R 324.8	R 37.7	R 788.5	1,117.9	R 1,906.4
1995	—	R 94.4	R 94.4	305.8	57.7	48.8	R 2.0	37.1	32.5	18.6	36.7	130.6	R 363.8	R 44.5	R 808.6	1,152.9	R 1,961.5
1996	—	88.2	88.2	360.0	52.6	68.4	2.8	45.7	32.6	21.1	49.0	175.7	447.9	40.7	936.7	1,134.7	2,071.4
1997	—	89.1	89.1	382.9	88.5	60.4	2.0	45.7	30.6	22.0	40.5	167.7	457.4	42.8	972.2	1,160.5	2,132.6

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.

R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 255. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, South Carolina

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.50	—	2.17	1.32	0.73	1.39	5.08	2.75	0.41	2.34	2.34	—	2.34
1975	1.53	—	3.45	3.01	2.03	2.68	7.48	4.35	1.52	4.04	4.04	—	4.04
1980	—	—	9.02	7.63	6.46	4.24	14.36	10.18	2.90	9.42	9.42	—	9.42
1981	—	—	10.84	9.03	7.61	5.71	18.00	11.33	3.77	10.60	10.60	—	10.60
1982	—	—	10.92	8.45	7.18	6.29	17.25	10.65	3.72	10.00	10.00	—	10.00
1983	—	—	10.44	7.69	6.87	6.56	16.98	9.26	4.05	8.80	8.80	—	8.80
1984	—	—	10.27	7.88	6.62	6.76	17.63	8.83	5.28	8.50	8.50	—	8.50
1985	—	—	9.99	7.36	6.11	10.60	17.61	8.84	3.82	8.39	8.39	—	8.39
1986	—	—	8.41	6.00	4.23	9.57	15.59	6.40	2.01	6.19	6.19	—	6.19
1987	—	—	7.55	6.48	4.35	9.20	13.58	7.08	2.80	6.78	6.78	—	6.78
1988	—	—	7.41	6.27	4.19	10.07	14.62	7.08	1.98	R 6.73	R 6.73	—	R 6.73
1989	—	—	8.28	6.82	4.74	8.68	14.48	7.84	2.38	R 7.44	R 7.44	—	R 7.44
1990	—	—	9.32	8.17	6.07	10.55	14.60	8.80	2.58	8.49	8.49	—	8.49
1991	—	—	8.71	7.77	5.12	11.13	16.80	8.56	2.06	8.12	8.12	—	8.12
1992	—	—	8.54	7.39	4.82	10.54	18.32	8.25	2.14	R 7.91	R 7.91	—	R 7.91
1993	—	—	8.24	7.17	4.49	10.41	18.96	7.94	2.00	7.65	7.65	—	7.65
1994	—	3.30	7.96	7.26	4.19	8.26	19.11	8.03	2.18	7.80	7.80	—	7.80
1995	—	4.55	8.36	7.35	4.21	8.58	R 19.41	8.32	2.53	8.05	8.05	—	8.05
1996	—	2.79	9.29	8.07	5.12	8.51	20.08	8.90	2.86	8.62	8.62	—	8.62
1997	—	5.01	9.39	7.78	4.79	8.01	17.86	8.74	2.68	8.43	8.43	—	8.43
	Expenditures in Million Nominal Dollars												
1970	(s)	—	2.5	22.3	12.4	R (s)	7.3	408.0	4.1	457.0	457.0	—	457.0
1975	(s)	—	2.5	70.5	29.5	0.8	9.7	799.5	4.0	916.4	916.4	—	916.4
1980	—	—	6.8	273.6	107.1	0.5	22.7	1,881.0	15.4	2,307.1	2,307.1	—	2,307.1
1981	—	—	7.3	297.6	118.2	1.5	27.3	2,098.9	25.3	2,576.1	2,576.1	—	2,576.1
1982	—	—	6.6	307.8	106.5	1.7	23.9	1,965.6	19.0	2,431.1	2,431.1	—	2,431.1
1983	—	—	7.0	311.1	94.1	2.2	24.6	1,730.4	23.8	2,193.2	2,193.2	—	2,193.2
1984	—	—	6.3	358.1	110.1	3.4	27.2	1,699.9	30.9	2,235.9	2,235.9	—	2,235.9
1985	—	—	6.9	336.7	105.3	5.3	25.4	R 1,708.8	14.6	R 2,202.9	R 2,202.9	—	R 2,202.9
1986	—	—	6.6	285.4	72.7	2.6	21.9	1,292.2	7.7	1,689.2	1,689.2	—	1,689.2
1987	—	—	4.6	304.5	75.4	2.4	21.6	R 1,397.9	10.3	R 1,816.7	R 1,816.7	—	R 1,816.7
1988	—	—	4.7	312.6	73.4	3.2	22.4	R 1,561.1	9.6	R 1,987.0	R 1,987.0	—	R 1,987.0
1989	—	—	5.0	323.2	80.3	2.8	22.8	R 1,697.1	10.0	R 2,141.4	R 2,141.4	—	R 2,141.4
1990	—	—	4.8	516.8	97.4	3.3	23.6	R 1,954.8	8.3	R 2,608.9	R 2,608.9	—	R 2,608.9
1991	—	—	7.9	521.8	95.8	3.8	24.3	R 1,877.1	10.3	R 2,541.1	R 2,541.1	—	R 2,541.1
1992	—	—	9.7	450.0	68.0	3.3	27.1	R 1,847.4	7.2	R 2,412.7	R 2,412.7	—	R 2,412.7
1993	—	—	7.0	428.7	49.7	3.1	28.5	R 1,862.2	8.0	R 2,387.3	R 2,387.3	—	R 2,387.3
1994	—	(s)	4.6	532.4	33.9	4.3	30.1	R 1,889.3	1.0	R 2,495.5	R 2,495.5	—	R 2,495.5
1995	—	(s)	5.2	480.2	24.5	2.4	30.0	2,031.8	7.0	2,581.1	2,581.1	—	2,581.1
1996	—	(s)	2.8	539.5	37.5	1.4	30.1	2,194.4	12.1	2,817.8	2,817.8	—	2,817.8
1997	—	(s)	3.0	558.5	36.0	1.2	28.3	2,248.0	9.5	2,884.5	2,884.5	—	2,884.5

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 256. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, South Carolina

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.43	0.37	0.46	0.70	—	0.52	0.19	—	0.42
1975	1.14	0.71	1.14	2.41	—	1.17	0.19	—	0.56
1980	1.56	2.41	3.44	5.78	—	3.91	0.44	—	1.14
1981	1.80	3.29	4.36	7.37	—	5.04	0.45	—	1.31
1982	1.91	3.94	4.15	6.87	—	5.22	0.48	—	1.36
1983	1.96	4.29	4.31	5.99	—	5.89	0.50	—	1.08
1984	1.97	4.46	—	5.94	—	5.94	0.61	—	1.20
1985	1.91	4.54	3.94	5.73	—	5.72	0.62	—	1.11
1986	1.83	2.03	2.16	3.64	—	3.61	0.61	—	1.03
1987	1.74	3.35	2.93	4.00	—	3.98	0.64	—	1.03
1988	1.76	1.81	2.22	3.74	—	3.72	0.59	—	1.00
1989	1.71	2.22	2.71	4.26	—	4.07	0.58	—	0.99
1990	1.72	1.72	3.02	6.22	—	6.00	0.53	—	0.94
1991	1.63	1.49	2.22	4.75	—	4.54	0.52	—	0.90
1992	1.53	1.69	2.38	4.62	—	4.39	0.50	—	0.84
1993	1.57	2.91	2.19	4.26	—	3.60	0.50	—	0.88
1994	1.56	1.67	2.26	4.10	—	4.03	0.53	—	0.91
1995	1.51	1.60	2.48	4.11	—	3.67	0.51	—	0.85
1996	1.47	4.45	2.85	4.97	—	4.68	0.49	—	0.89
1997	1.45	3.98	2.68	4.54	—	4.30	0.42	—	0.85
	Expenditures in Million Nominal Dollars								
1970	39.0	17.1	5.9	3.1	—	9.0	(s)	—	65.0
1975	120.9	10.7	31.6	1.7	—	33.3	40.6	—	205.4
1980	306.6	13.4	45.0	19.1	—	64.1	83.4	—	467.6
1981	384.6	16.9	43.9	21.6	—	65.5	85.5	—	552.4
1982	405.4	2.1	7.3	7.8	—	15.2	70.3	—	493.0
1983	343.3	4.1	R (s)	4.6	—	4.8	140.6	—	492.9
1984	365.9	2.0	—	4.9	—	4.9	152.5	—	525.3
1985	378.4	2.3	(s)	6.1	—	6.1	214.5	—	601.3
1986	359.5	2.9	(s)	2.4	—	2.5	233.9	—	598.7
1987	397.0	1.8	(s)	2.7	—	2.7	269.0	—	670.6
1988	410.9	4.4	(s)	4.2	—	4.2	257.5	—	677.1
1989	408.0	6.1	0.6	6.3	—	6.8	251.7	—	672.7
1990	397.5	12.3	R (s)	4.3	—	4.4	242.8	—	656.9
1991	381.4	15.0	R (s)	3.7	—	3.8	240.5	—	640.7
1992	355.3	3.1	R (s)	3.9	—	4.1	241.2	—	603.7
1993	418.2	5.5	0.8	3.5	—	4.3	247.1	—	675.1
1994	422.3	5.1	R (s)	6.4	—	6.5	250.0	—	683.9
1995	391.5	10.9	1.1	4.8	—	5.8	267.8	—	676.0
1996	444.1	5.5	0.7	7.7	—	8.4	225.7	—	683.7
1997	450.0	11.1	0.9	10.6	—	11.6	201.7	—	674.4

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 257. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, South Dakota

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.41	0.41	0.69	0.97	0.75	1.61	2.97	0.70	1.44	2.05	—	R 1.20	1.65	0.41	7.38	2.13
1975	—	0.53	0.53	1.04	2.60	2.09	3.05	4.70	2.15	2.90	3.77	—	R 1.41	2.72	0.58	8.21	R 3.63
1980	—	0.85	0.85	2.83	6.53	6.47	5.50	10.14	3.28	6.07	8.19	—	R 2.44	R 5.73	0.83	12.95	R 7.74
1981	—	1.06	1.06	3.55	7.70	7.60	5.72	11.22	3.99	8.36	9.38	—	R 2.84	R 6.52	1.01	14.74	R 8.84
1982	—	1.25	1.25	4.35	7.44	7.19	6.11	10.72	3.91	7.05	8.88	—	R 2.83	R 6.38	1.20	16.04	R 8.64
1983	—	1.27	1.27	5.08	6.94	6.98	6.71	9.53	4.03	R 7.52	8.25	—	R 2.69	R 6.25	1.23	16.99	R 8.68
1984	—	R 1.31	R 1.31	5.53	6.97	6.60	6.50	9.32	4.60	R 7.10	8.12	—	R 2.66	R 6.12	1.23	17.04	R 8.66
1985	—	1.37	1.37	5.01	6.76	6.29	8.03	9.26	4.43	R 7.00	R 8.08	—	R 2.56	R 6.07	1.22	17.38	R 8.56
1986	—	R 1.38	R 1.38	4.62	5.11	4.57	7.69	6.83	2.33	5.76	R 6.11	—	R 2.07	R 4.94	1.27	17.35	R 7.21
1987	—	1.41	1.41	4.27	5.40	4.39	6.58	7.16	2.83	R 5.64	6.30	—	R 1.98	R 5.44	1.28	17.64	R 7.37
1988	—	1.27	1.27	4.18	5.01	4.36	6.60	7.46	2.31	R 5.26	6.22	—	R 1.99	R 4.85	1.25	17.54	R 7.35
1989	—	1.31	1.31	4.12	5.93	4.76	8.65	8.51	2.15	R 5.17	7.32	—	e R 2.19	e R 5.61	1.27	17.71	e R 8.04
1990	—	1.22	1.22	4.41	6.97	6.21	8.55	9.40	2.61	R 5.36	8.09	—	R 2.69	R 6.14	1.19	17.96	8.68
1991	—	1.22	1.22	4.21	6.50	5.36	7.33	8.92	2.33	5.59	7.65	—	R 2.61	R 5.60	1.16	17.96	8.38
1992	—	1.21	1.21	4.44	6.64	5.16	7.96	8.65	2.28	5.25	7.45	—	R 2.45	R 5.65	1.15	18.22	R 8.29
1993	—	R 1.06	R 1.06	4.60	6.42	4.90	8.15	8.78	2.41	R 6.26	7.53	—	R 2.25	R 5.73	1.13	18.17	R 8.27
1994	—	R 1.12	R 1.12	4.57	6.32	4.58	7.19	8.85	2.34	6.59	7.42	—	R 2.29	R 5.56	R 1.13	18.15	R 8.15
1995	—	1.08	1.08	4.17	6.35	4.54	7.44	9.07	2.36	6.12	7.54	—	R 2.28	5.64	1.07	18.18	R 8.21
1996	—	1.04	1.04	4.39	7.42	5.26	9.22	9.82	2.91	5.51	8.40	—	2.48	6.31	1.01	18.12	8.78
1997	—	1.00	1.00	4.79	7.30	4.93	9.93	10.04	3.02	5.28	8.52	—	2.33	6.18	1.02	18.23	8.98
	Expenditures in Million Nominal Dollars																
1970	—	2.3	2.3	25.2	24.8	4.7	16.5	154.6	1.4	10.8	212.9	—	R (s)	R 240.9	-4.7	70.6	R 306.8
1975	—	12.9	12.9	33.7	58.2	11.9	33.2	262.4	2.9	20.6	389.2	—	R 0.7	R 436.6	-16.0	113.6	R 534.2
1980	—	30.9	30.9	67.7	182.6	46.0	51.2	516.3	2.5	35.1	833.6	—	R 2.1	R 934.2	-28.7	224.7	R 1,130.2
1981	—	38.5	38.5	78.3	197.9	46.6	37.1	541.8	4.0	42.5	869.9	—	R 2.5	R 989.2	-32.8	249.4	R 1,205.8
1982	—	46.3	46.3	108.3	219.8	44.1	49.3	510.3	1.3	41.1	865.8	—	R 2.6	R 1,023.0	-37.5	280.8	R 1,266.2
1983	—	39.0	39.0	118.8	180.9	36.1	54.5	448.0	3.4	R 38.5	R 761.3	—	R 2.6	R 921.7	-33.5	314.4	R 1,202.6
1984	—	R 45.1	R 45.1	136.5	198.7	36.5	23.8	435.1	2.6	R 49.3	R 746.1	—	R 2.4	R 930.1	-37.6	322.5	R 1,215.0
1985	—	R 47.4	R 47.4	125.9	197.0	34.6	35.9	R 451.3	1.0	R 49.9	R 769.8	—	R 2.2	R 945.4	-36.2	335.0	R 1,244.2
1986	—	R 40.2	R 40.2	107.4	180.4	12.9	43.9	323.0	0.9	39.8	600.8	—	R 2.1	R 750.5	-31.5	335.9	R 1,054.9
1987	—	20.5	20.5	90.1	185.9	16.0	56.8	R 339.3	1.0	33.6	R 632.6	—	R 1.9	R 745.1	-13.7	343.8	R 1,075.1
1988	—	R 43.1	R 43.1	102.3	181.7	20.6	38.1	R 359.4	1.2	R 38.5	R 639.5	—	R 2.0	R 786.8	-38.5	373.0	R 1,121.3
1989	—	42.7	42.7	105.9	188.0	26.3	115.4	R 407.8	0.9	34.3	R 772.7	—	e R 2.0	e R 923.3	-36.0	383.1	e R 1,270.4
1990	—	R 39.7	R 39.7	111.0	224.3	36.8	114.4	R 443.9	1.0	R 36.2	R 856.6	—	2.8	R 1,010.0	-34.4	388.1	R 1,363.6
1991	—	44.0	44.0	109.4	221.9	10.8	47.5	R 427.4	1.0	36.0	R 744.6	—	R 2.8	R 901.3	R -36.8	R 409.7	R 1,274.1
1992	—	40.6	40.6	110.2	216.5	35.4	55.7	R 424.7	2.1	38.0	R 772.4	—	R 2.8	R 927.0	R -34.4	403.6	R 1,296.2
1993	—	R 36.6	R 36.6	131.8	232.7	31.6	76.2	R 441.0	1.8	R 35.1	R 818.4	—	R 2.4	R 989.3	-32.7	428.1	R 1,384.6
1994	—	R 44.0	R 44.0	129.2	257.3	32.3	60.0	R 457.5	1.3	36.4	R 844.9	—	R 2.5	R 1,022.4	R -37.1	444.2	R 1,429.6
1995	—	R 39.6	R 39.6	131.7	246.5	36.1	61.9	477.0	R (s)	R 41.4	863.1	—	R 2.7	1,037.1	-33.2	459.8	1,463.6
1996	—	34.6	34.6	149.5	289.3	30.0	88.2	523.4	0.7	49.1	980.7	—	3.0	1,167.8	-27.5	478.4	1,618.7
1997	—	42.3	42.3	157.6	273.0	19.5	96.0	536.3	1.2	54.7	980.8	—	2.5	1,183.1	-37.4	483.4	1,629.1

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 258. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, South Dakota

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.75	1.04	1.28	1.57	1.78	1.60	0.61	1.30	7.76	[R] 2.40
1975	3.61	1.40	2.55	2.91	3.41	3.14	1.20	2.23	8.97	[R] 3.81
1980	3.48	3.14	6.92	7.83	6.85	6.89	3.06	[R] 4.79	14.52	[R] 7.80
1981	2.69	3.90	8.30	9.59	7.01	7.73	3.77	[R] 5.46	16.41	[R] 8.96
1982	4.30	4.71	8.07	9.59	7.38	7.82	3.66	[R] 5.97	17.90	[R] 9.54
1983	3.69	5.53	7.36	[R] 7.70	7.75	[R] 7.57	3.54	[R] 6.30	19.36	[R] 10.62
1984	2.18	6.09	7.26	[R] 7.93	7.15	[R] 7.24	3.60	[R] 6.41	18.74	[R] 10.68
1985	2.65	5.69	7.64	[R] 7.85	7.56	[R] 7.62	3.46	[R] 6.33	19.13	[R] 10.56
1986	3.05	5.24	5.45	[R] 6.32	6.92	[R] 5.95	2.77	[R] 5.49	19.44	[R] 9.87
1987	2.97	4.81	4.64	[R] 6.44	5.31	[R] 4.98	2.64	[R] 4.85	19.93	[R] 9.63
1988	2.58	4.81	3.95	[R] 6.26	5.64	[R] 4.63	2.67	[R] 4.68	19.62	[R] 9.60
1989	2.65	4.77	5.35	[R] 6.78	10.56	7.95	2.95	[R] 6.22	19.95	[R] 10.43
1990	2.62	5.06	5.52	[R] 8.20	7.20	[R] 6.49	3.56	5.73	20.37	[R] 10.25
1991	2.97	4.85	5.13	[R] 7.45	6.40	[R] 5.71	3.41	[R] 5.16	20.24	[R] 10.22
1992	2.63	5.07	5.77	[R] 7.06	7.88	6.97	3.12	[R] 5.68	20.80	[R] 10.97
1993	2.44	5.23	5.98	[R] 6.22	7.20	6.70	3.05	[R] 5.75	20.63	[R] 10.67
1994	2.44	5.22	5.53	[R] 5.95	7.04	[R] 6.43	2.96	[R] 5.61	20.68	[R] 10.77
1995	2.64	4.98	4.98	[R] 4.92	7.32	[R] 6.41	2.90	[R] 5.46	20.75	[R] 10.67
1996	2.56	5.18	6.85	5.95	9.27	8.34	3.33	6.38	20.53	10.95
1997	2.73	5.65	6.82	5.57	10.44	9.25	3.31	7.01	20.76	11.64
	Expenditures in Million Nominal Dollars									
1970	[R] (s)	14.3	5.7	[R] (s)	13.5	19.4	(s)	[R] 34.1	42.0	[R] 76.1
1975	0.5	16.7	8.5	(s)	25.3	33.9	(s)	[R] 51.2	63.3	[R] 114.5
1980	[R] (s)	33.1	30.7	[R] (s)	29.3	60.5	1.5	[R] 95.5	129.9	[R] 225.4
1981	1.0	38.2	33.8	0.8	23.7	58.3	1.9	[R] 99.3	140.2	[R] 239.6
1982	0.5	54.6	41.1	1.2	25.3	67.5	2.0	[R] 124.7	159.7	[R] 284.4
1983	[R] (s)	59.5	26.0	[R] 1.2	31.5	[R] 58.7	1.9	[R] 120.3	182.9	[R] 303.3
1984	[R] (s)	67.7	27.7	[R] 1.3	15.5	[R] 44.6	1.8	[R] 114.2	176.9	[R] 291.0
1985	[R] (s)	65.3	33.1	[R] 1.6	19.1	[R] 53.8	1.6	[R] 121.0	180.7	[R] 301.7
1986	0.5	55.6	33.0	[R] 0.8	21.2	55.1	1.3	[R] 112.4	182.7	[R] 295.1
1987	[R] (s)	45.2	23.1	0.5	25.2	48.9	1.1	[R] 95.3	182.3	[R] 277.6
1988	[R] (s)	52.5	21.1	[R] (s)	19.5	[R] 41.1	1.1	[R] 94.8	195.0	[R] 289.8
1989	[R] (s)	55.0	28.1	[R] (s)	55.2	83.6	1.3	[R] 140.0	199.0	[R] 339.0
1990	[R] (s)	52.4	25.9	[R] (s)	45.2	71.3	2.0	125.8	199.2	[R] 325.0
1991	[R] (s)	55.4	24.0	[R] (s)	24.5	48.7	2.0	[R] 106.2	210.0	[R] 316.2
1992	(s)	55.6	15.9	[R] (s)	28.7	44.8	1.9	[R] 102.4	201.7	[R] 304.1
1993	(s)	65.9	20.6	[R] (s)	35.2	56.0	1.6	[R] 123.5	218.9	[R] 342.4
1994	[R] (s)	63.5	17.3	[R] (s)	32.7	50.1	1.5	[R] 115.4	222.1	[R] 337.5
1995	[R] (s)	63.7	15.7	[R] (s)	36.7	52.5	1.6	[R] 118.0	231.4	[R] 349.3
1996	(s)	73.9	25.2	(s)	55.2	80.5	1.9	156.4	240.0	396.4
1997	(s)	75.9	19.5	(s)	62.1	81.8	1.4	159.1	239.1	398.2

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 259. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, South Dakota

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.49	0.63	1.06	—	1.13	2.97	0.66	1.22	0.61	0.76	7.53	1.94
1975	1.04	0.99	2.34	—	2.28	4.70	2.21	2.54	1.20	1.31	8.82	2.71
1980	1.79	2.72	6.45	—	4.36	10.14	3.08	6.24	3.06	R 3.68	13.11	R 5.98
1981	1.93	3.40	7.80	—	4.32	11.22	4.64	7.37	3.77	4.19	15.18	7.10
1982	1.73	4.10	7.46	6.76	5.17	10.72	4.03	7.32	3.66	4.78	15.30	R 7.44
1983	1.92	4.82	6.37	R 7.70	5.67	9.53	4.08	6.44	3.54	5.21	16.40	8.23
1984	R 2.14	5.30	6.37	R 7.93	5.55	9.32	4.60	6.86	3.60	5.62	16.93	9.42
1985	R 2.45	4.56	6.03	R 7.85	8.66	9.26	4.44	7.01	NA	5.03	17.53	9.14
1986	R 2.05	4.32	3.69	R 6.32	8.58	6.83	2.33	R 5.41	NA	4.52	17.68	8.53
1987	1.85	4.17	4.25	R 6.44	8.15	7.16	2.84	5.55	NA	R 4.61	17.52	8.62
1988	R 1.78	4.02	3.80	R 6.26	8.04	7.46	2.35	5.20	NA	4.35	17.66	8.78
1989	1.76	3.92	4.44	R 6.78	7.41	8.51	2.15	6.10	NA	4.46	17.57	R 8.91
1990	R 1.76	4.13	5.44	R 8.20	9.74	9.40	2.61	7.50	NA	4.96	18.09	9.52
1991	1.73	3.97	4.83	R 7.45	8.68	8.92	2.33	6.23	NA	4.39	18.28	9.30
1992	1.67	4.13	4.63	R 7.06	8.04	8.65	2.28	5.72	NA	4.47	18.63	9.44
1993	R 0.90	4.31	4.45	R 6.22	9.19	8.78	2.41	6.28	3.05	R 4.65	18.69	R 9.34
1994	R 1.26	4.31	4.24	R 5.95	8.06	8.85	2.34	5.59	2.96	R 4.50	18.47	R 9.68
1995	R 1.29	3.93	4.26	R 4.92	8.09	9.07	2.36	5.54	2.90	R 4.24	18.40	R 9.54
1996	1.44	4.14	5.19	5.95	9.45	9.82	—	7.02	3.33	4.65	18.45	9.81
1997	1.34	4.63	4.87	5.57	9.98	10.04	3.02	6.87	3.31	5.08	18.68	10.43
	Expenditures in Million Nominal Dollars											
1970	R (s)	7.2	1.9	—	1.5	0.8	R (s)	4.2	(s)	11.6	24.1	35.7
1975	R (s)	11.4	3.1	—	3.0	1.4	R (s)	7.8	(s)	19.5	29.9	49.4
1980	R (s)	23.1	13.7	—	3.3	3.5	R (s)	20.9	(s)	44.4	51.0	R 95.4
1981	1.3	27.9	11.4	—	2.6	4.1	R (s)	18.5	(s)	R 47.8	62.3	110.1
1982	R (s)	38.4	12.4	R (s)	3.1	4.3	R (s)	20.5	(s)	R 59.4	64.5	123.8
1983	R (s)	42.2	8.1	(s)	4.1	4.9	1.6	18.7	(s)	61.0	70.9	131.9
1984	R (s)	48.9	8.7	(s)	2.1	6.8	1.2	18.9	(s)	68.0	103.4	R 171.5
1985	0.5	46.0	9.8	(s)	3.9	4.8	0.5	18.9	NA	R 65.5	111.5	176.9
1986	0.6	39.8	5.8	(s)	4.6	5.4	R (s)	16.0	NA	R 56.5	96.7	153.1
1987	R (s)	34.6	10.2	(s)	6.8	4.9	R (s)	22.1	NA	56.8	97.4	R 154.2
1988	R (s)	34.4	7.6	(s)	4.9	4.9	R (s)	17.8	NA	52.3	106.0	158.3
1989	R (s)	35.2	5.7	(s)	6.8	5.3	R (s)	18.1	NA	53.4	108.1	161.4
1990	R (s)	35.9	6.6	(s)	10.8	3.8	R (s)	21.6	NA	57.6	111.8	169.4
1991	R (s)	38.3	5.4	(s)	5.9	2.5	0.5	14.3	NA	52.7	119.7	172.3
1992	(s)	38.2	6.6	(s)	5.2	2.5	0.5	14.8	NA	53.0	119.1	172.2
1993	(s)	46.7	6.4	(s)	7.9	0.5	(s)	14.9	(s)	R 61.6	124.2	185.9
1994	R (s)	44.7	6.6	(s)	6.6	0.5	R (s)	13.8	(s)	R 58.9	142.7	R 201.6
1995	R (s)	42.6	8.1	(s)	7.2	0.5	(s)	15.8	(s)	R 58.7	152.2	R 210.9
1996	(s)	48.7	7.7	(s)	9.9	0.6	—	18.2	(s)	67.1	159.0	226.1
1997	(s)	49.1	7.9	(s)	10.5	0.6	(s)	19.1	(s)	68.4	162.8	231.2

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 260. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, South Dakota

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	0.49	0.49	0.32	0.76	0.73	0.78	1.13	5.08	2.97	0.70	—	1.56	R 1.49	1.34	4.72	1.42
1975	—	1.04	1.04	0.60	2.09	2.57	2.74	2.28	7.48	4.70	2.02	—	3.15	R 1.49	R 2.62	6.00	R 2.93
1980	—	1.79	1.79	2.35	3.82	5.65	5.92	4.36	14.36	10.14	3.34	—	6.44	R 1.49	R 5.48	9.70	R 5.98
1981	—	1.93	1.93	3.02	5.42	6.58	6.93	4.32	18.00	11.22	3.92	—	7.39	R 1.49	R 6.16	10.96	R 6.76
1982	—	1.73	1.73	3.90	4.45	6.39	6.76	5.17	17.25	10.72	3.86	—	6.90	R 1.49	R 5.64	12.96	R 6.47
1983	—	1.92	1.92	4.41	4.74	6.67	R 7.14	5.67	16.98	9.53	3.98	—	6.99	R 1.49	R 5.97	12.79	R 6.91
1984	—	R 2.14	R 2.14	4.60	4.95	6.61	R 7.20	5.55	17.63	9.32	4.60	—	6.74	R 1.49	R 5.74	12.49	R 6.44
1985	—	R 2.45	R 2.45	4.11	5.06	6.28	R 6.86	8.66	17.61	9.26	4.44	—	R 6.65	R 1.49	R 5.58	12.34	R 6.29
1986	—	R 2.05	R 2.05	3.53	3.99	4.06	R 4.93	8.58	15.59	6.83	2.33	—	4.72	R 1.49	R 4.22	12.59	R 5.20
1987	—	1.85	1.85	3.04	3.73	4.54	R 4.97	8.15	13.58	7.16	2.84	—	5.15	R 1.49	R 4.47	13.41	R 5.61
1988	—	R 1.78	R 1.78	3.12	3.58	4.16	R 4.49	8.04	14.62	7.46	2.35	—	4.62	R 1.49	R 4.08	13.51	R 5.33
1989	—	1.76	1.76	3.04	3.14	4.72	R 5.47	7.41	14.48	8.51	2.15	—	5.50	d R 1.49	d R 4.67	13.82	d R 5.84
1990	—	R 1.76	R 1.76	3.73	3.24	5.81	R 6.81	9.74	14.60	9.40	2.61	—	6.52	1.63	5.50	13.65	6.60
1991	—	1.73	1.73	3.25	3.24	5.17	R 5.75	8.68	16.80	8.92	2.33	16.33	5.48	1.63	4.55	13.58	5.89
1992	—	1.67	1.67	3.58	2.71	5.11	R 5.07	8.04	18.32	8.65	2.28	24.75	5.19	1.63	R 4.44	13.65	5.84
1993	—	R 0.90	R 0.90	3.71	3.06	4.96	R 4.92	9.19	18.96	8.78	2.41	19.10	5.63	1.63	R 4.59	13.48	R 5.87
1994	—	R 1.26	R 1.26	3.68	3.12	4.81	R 5.19	7.07	19.11	8.85	2.34	24.75	5.20	R 1.62	R 4.18	13.22	R 5.36
1995	—	R 1.29	R 1.29	3.39	3.34	4.82	R 5.28	7.42	R 19.41	9.07	2.36	23.89	5.32	R 1.62	4.22	12.97	R 5.36
1996	—	1.44	1.44	3.45	3.28	5.80	6.32	9.02	20.08	9.82	2.91	22.95	5.89	1.62	4.66	13.05	5.74
1997	—	1.34	1.34	3.95	3.54	5.32	5.94	8.79	17.86	10.04	3.02	24.62	5.64	1.62	4.55	12.96	5.62
	Expenditures in Million Nominal Dollars																
1970	—	(s)	(s)	2.2	4.5	9.9	(s)	1.3	R (s)	34.5	R (s)	—	50.7	R (s)	R 53.3	4.5	R 57.8
1975	—	1.2	1.2	3.5	11.9	24.5	(s)	4.5	0.9	40.1	0.7	—	82.6	R 0.5	R 87.8	20.4	R 108.2
1980	—	4.4	4.4	11.0	16.1	54.0	R (s)	17.5	R (s)	78.5	2.0	—	168.5	R 0.5	R 184.4	43.8	R 228.1
1981	—	6.1	6.1	12.1	19.0	60.9	R (s)	10.0	R (s)	71.6	3.5	—	165.8	R 0.5	R 184.5	46.9	R 231.3
1982	—	9.9	9.9	15.2	18.9	64.6	R (s)	19.9	R (s)	63.6	0.9	—	168.2	R 0.5	R 193.9	56.6	R 250.5
1983	—	6.9	6.9	16.9	16.8	56.0	R (s)	17.5	R (s)	60.0	1.8	—	152.7	R 0.6	R 177.1	60.6	R 237.6
1984	—	R 8.3	R 8.3	19.7	26.5	60.0	R (s)	5.6	R (s)	44.4	1.4	—	R 138.7	R 0.6	R 167.3	42.2	R 209.5
1985	—	R 11.8	R 11.8	14.6	28.3	61.1	R (s)	12.1	R (s)	33.8	R (s)	—	136.3	R 0.6	R 163.2	42.9	R 206.1
1986	—	R 8.6	R 8.6	11.9	21.6	60.1	R (s)	17.2	R (s)	21.3	0.8	—	R 121.6	R 0.8	R 142.8	56.5	R 199.4
1987	—	7.4	7.4	10.1	16.7	63.3	R (s)	23.3	R (s)	23.7	0.8	—	R 128.4	R 0.8	R 146.6	64.1	R 210.8
1988	—	R 6.2	R 6.2	14.8	20.8	64.6	R (s)	13.2	R (s)	21.3	0.8	—	R 121.1	R 0.8	R 143.0	72.0	R 215.0
1989	—	7.8	7.8	15.3	16.2	56.2	R (s)	52.8	R (s)	24.2	0.6	—	150.3	d R 0.7	d R 174.2	76.0	d R 250.2
1990	—	R 6.8	R 6.8	22.0	17.0	69.3	R (s)	57.6	R (s)	R 24.1	0.6	—	R 169.0	0.8	R 198.6	77.1	275.7
1991	—	8.7	8.7	15.4	16.5	70.5	R (s)	16.7	R (s)	22.7	R (s)	1.6	128.9	0.8	153.8	80.0	R 233.9
1992	—	7.7	7.7	16.3	15.9	65.0	R (s)	21.2	R (s)	19.5	1.6	2.6	R 126.2	0.8	R 151.1	82.8	233.8
1993	—	R 5.2	R 5.2	18.7	13.1	72.8	(s)	32.2	R (s)	24.9	1.8	2.2	147.3	0.8	R 172.1	84.9	R 257.0
1994	—	R 9.8	R 9.8	20.5	13.0	79.2	(s)	19.4	R (s)	21.5	1.2	2.9	137.7	R 0.9	R 168.9	79.5	R 248.4
1995	—	R 8.7	R 8.7	23.8	18.2	66.8	R (s)	17.5	R (s)	25.4	R (s)	2.8	131.4	R 0.9	R 164.9	76.2	R 241.1
1996	—	9.9	9.9	25.1	24.7	78.2	(s)	22.6	(s)	27.9	0.7	3.2	157.9	1.0	193.9	79.5	273.3
1997	—	10.2	10.2	27.9	31.8	67.4	(s)	23.0	(s)	29.9	1.1	3.1	156.7	1.0	195.7	81.4	277.1

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 261. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, South Dakota

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.49	—	2.17	1.32	0.75	1.13	5.08	2.97	0.65	2.56	2.56	—	2.56
1975	1.04	—	3.45	2.72	2.09	2.28	7.48	4.70	1.82	4.23	4.23	—	4.23
1980	—	—	9.02	7.12	6.47	4.36	14.36	10.14	—	9.21	9.21	—	9.21
1981	—	—	10.84	8.42	7.60	4.32	18.00	11.22	—	10.43	10.43	—	10.43
1982	—	—	10.92	8.04	7.19	5.17	17.25	10.72	—	9.90	9.90	—	9.90
1983	—	—	10.44	7.09	6.98	5.67	16.98	9.53	—	8.89	8.89	—	8.89
1984	—	—	10.27	7.20	6.60	5.55	17.63	9.32	—	8.73	8.73	—	8.73
1985	—	—	9.99	6.93	6.29	8.66	17.61	9.26	—	8.64	8.64	—	8.64
1986	—	—	8.41	6.38	4.57	8.58	15.59	6.83	—	6.77	6.77	—	6.77
1987	—	—	7.55	6.83	4.39	8.15	13.58	7.16	—	7.03	7.03	—	7.03
1988	—	—	7.41	6.66	4.36	8.04	14.62	7.46	—	7.17	7.17	—	7.17
1989	—	—	8.28	7.44	4.76	7.41	14.48	8.51	2.07	8.05	8.05	—	8.05
1990	—	—	9.32	8.57	6.21	9.74	14.60	9.40	1.82	9.01	9.01	—	9.01
1991	—	4.06	8.71	8.34	5.36	8.68	16.80	8.92	—	8.78	8.78	—	8.78
1992	—	4.02	8.54	8.25	5.16	8.04	18.32	8.65	—	8.34	8.34	—	8.34
1993	—	4.14	8.24	8.01	4.90	9.19	18.96	8.78	—	8.38	8.38	—	8.38
1994	—	3.14	7.96	7.92	4.58	9.02	19.11	8.85	—	8.35	8.35	—	8.35
1995	—	3.84	8.36	7.89	4.54	9.37	R 19.41	9.07	—	8.44	8.44	—	8.44
1996	—	3.71	9.29	8.79	5.26	8.78	20.08	9.82	—	9.33	9.33	—	9.33
1997	—	3.42	9.39	8.84	4.93	8.28	17.86	10.04	—	9.55	9.55	—	9.55
	Expenditures in Million Nominal Dollars												
1970	(s)	—	1.1	7.1	4.7	R (s)	4.7	119.3	(s)	137.2	137.2	—	137.2
1975	(s)	—	1.3	21.1	11.9	R (s)	6.3	220.8	(s)	262.1	262.1	—	262.1
1980	—	—	4.4	82.0	46.0	1.1	13.6	434.3	—	581.3	581.3	—	581.3
1981	—	—	5.6	89.3	46.6	0.9	16.3	466.0	—	624.8	624.8	—	624.8
1982	—	—	5.9	99.8	44.1	1.0	14.3	442.4	—	607.5	607.5	—	607.5
1983	—	—	5.2	89.4	36.1	1.3	14.7	383.1	—	529.7	529.7	—	529.7
1984	—	—	4.4	101.4	36.5	0.6	16.3	383.9	—	543.0	543.0	—	543.0
1985	—	—	4.4	91.8	34.6	0.8	15.2	R 412.8	—	R 559.5	R 559.5	—	R 559.5
1986	—	—	3.6	80.6	12.9	0.8	13.1	296.3	—	407.3	407.3	—	407.3
1987	—	—	3.1	88.7	16.0	1.4	12.9	R 310.7	—	R 432.6	R 432.6	—	R 432.6
1988	—	—	3.3	87.2	20.6	0.6	13.4	R 333.1	—	R 458.2	R 458.2	—	R 458.2
1989	—	—	3.7	97.2	26.3	0.5	13.6	R 378.4	(s)	R 519.7	R 519.7	—	R 519.7
1990	—	—	4.4	121.5	36.8	0.8	14.1	R 415.9	(s)	R 593.6	R 593.6	—	R 593.6
1991	—	(s)	2.7	121.0	10.8	R (s)	14.6	R 402.2	—	R 551.7	R 551.7	—	R 551.7
1992	—	(s)	2.7	128.5	35.4	0.5	16.2	402.8	—	R 586.1	R 586.1	—	R 586.1
1993	—	(s)	2.2	132.0	31.6	R 0.9	17.1	R 415.6	—	R 599.3	R 599.3	—	R 599.3
1994	—	(s)	1.9	153.1	32.3	1.3	18.0	R 435.4	—	R 642.1	R 642.1	—	R 642.1
1995	—	(s)	2.0	154.8	36.1	R (s)	17.9	451.0	—	662.2	R 662.3	—	R 662.3
1996	—	(s)	2.5	177.1	30.0	(s)	18.0	494.9	—	722.9	722.9	—	722.9
1997	—	(s)	2.3	177.6	19.5	(s)	16.9	505.9	—	722.5	722.6	—	722.6

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 262. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, South Dakota

Year	Coal	Natural Gas	Petroleum: Heavy Oil	Petroleum: Light Oil	Petroleum: Petroleum Coke	Petroleum: Total	Nuclear Fuel	Wood and Waste	Total Energy [a]
	Prices in Nominal Dollars per Million Btu								
1970	0.35	0.33	0.70	0.97	—	0.74	—	—	0.41
1975	0.48	0.64	2.19	2.29	—	2.22	—	—	0.58
1980	0.76	1.97	3.07	6.50	—	6.03	—	—	0.83
1981	0.94	2.26	4.63	7.88	—	7.83	—	—	1.01
1982	1.15	3.76	4.06	6.71	—	6.62	—	—	1.20
1983	1.18	3.85	4.20	5.69	—	5.66	—	—	1.23
1984	1.20	4.18	4.50	6.04	—	5.98	—	—	1.23
1985	1.18	3.73	3.99	5.81	—	5.75	—	—	1.22
1986	1.24	3.49	2.33	3.68	—	3.64	—	—	1.27
1987	1.23	2.43	2.39	4.34	—	4.23	—	—	1.28
1988	1.21	2.28	2.06	4.02	—	3.65	—	—	1.25
1989	1.24	2.58	—	4.50	—	4.50	—	—	1.27
1990	1.15	2.60	—	5.65	—	5.65	—	—	1.19
1991	1.13	1.76	—	4.88	—	4.88	—	—	1.16
1992	1.13	2.83	—	4.40	—	4.40	—	—	1.15
1993	1.10	2.38	—	4.67	—	4.67	—	—	1.13
1994	1.08	2.72	—	3.97	—	3.97	—	—	R 1.13
1995	1.03	1.58	—	3.98	—	3.98	—	—	1.07
1996	0.94	2.33	—	5.98	—	5.98	—	—	1.01
1997	0.92	2.68	—	4.49	—	4.49	—	—	1.02
	Expenditures in Million Nominal Dollars								
1970	1.8	1.5	1.2	R (s)	—	1.5	—	—	4.7
1975	11.0	2.1	2.0	0.9	—	2.9	—	—	16.0
1980	25.8	0.5	R (s)	2.2	—	2.4	—	—	28.7
1981	30.2	R (s)	(s)	2.5	—	2.5	—	—	32.8
1982	35.4	R (s)	(s)	2.0	—	2.1	—	—	37.5
1983	32.0	R (s)	(s)	1.4	—	1.4	—	—	33.5
1984	36.4	R (s)	(s)	0.9	—	0.9	—	—	37.6
1985	34.8	R (s)	(s)	1.3	—	1.3	—	—	36.2
1986	30.5	R (s)	(s)	0.8	—	0.8	—	—	31.5
1987	12.9	R (s)	(s)	0.5	—	0.6	—	—	13.7
1988	36.7	0.5	R (s)	1.1	—	1.3	—	—	38.5
1989	34.7	R (s)	—	0.9	—	0.9	—	—	36.0
1990	32.8	0.6	—	1.1	—	1.1	—	—	34.4
1991	35.1	R (s)	—	1.0	—	1.0	—	—	R 36.8
1992	32.8	R (s)	—	R (s)	—	R (s)	—	—	R 34.4
1993	31.4	R (s)	—	0.9	—	0.9	—	—	32.7
1994	33.7	R (s)	—	1.2	—	1.2	—	—	R 37.1
1995	30.7	1.5	—	1.1	—	1.1	—	—	33.2
1996	24.6	1.7	—	1.1	—	1.1	—	—	27.5
1997	32.0	4.7	—	0.6	—	0.6	—	—	37.4

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 263. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Tennessee

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	0.38	0.25	0.26	0.54	1.11	0.73	1.92	2.84	0.36	R 1.13	R 2.06	—	R 1.43	R 1.02	0.23	2.85	R 1.71
1975	1.60	0.91	0.91	0.93	2.68	2.03	3.44	4.58	1.78	R 2.80	R 3.77	—	R 1.69	R 2.12	0.89	5.83	R 3.52
1980	1.81	1.54	1.54	2.69	6.80	6.39	6.42	9.89	3.36	R 6.54	R 8.39	0.38	R 2.22	R 4.41	1.57	10.67	R 7.25
1981	2.03	1.71	1.71	3.24	8.10	7.67	7.65	11.13	4.27	R 7.91	R 9.71	0.42	R 2.40	R 4.93	1.63	12.96	R 8.43
1982	2.04	1.73	1.74	4.04	7.82	7.42	7.99	10.40	4.34	R 6.94	R 9.16	0.40	R 2.43	R 4.83	1.47	15.15	R 8.83
1983	1.58	1.69	1.69	4.62	6.84	6.44	8.04	9.01	4.38	R 7.27	R 8.15	0.50	R 2.32	R 4.22	1.42	14.48	R 8.21
1984	1.91	1.62	1.62	4.40	6.85	6.14	8.44	8.72	4.90	R 6.79	R 7.90	0.65	R 2.89	R 4.24	1.41	14.11	R 7.99
1985	1.93	1.55	1.55	4.46	6.58	5.83	9.19	8.85	4.80	R 6.73	R 7.87	0.78	R 2.79	R 4.25	1.41	14.65	R 8.07
1986	1.75	1.44	1.44	4.20	5.88	3.81	8.86	7.01	2.83	R 5.32	R 6.35	—	R 2.52	R 3.86	1.43	15.59	R 7.42
1987	1.63	1.38	1.38	3.69	6.24	4.01	8.91	7.44	2.88	R 4.92	R 6.60	—	R 2.40	R 3.86	1.38	15.98	R 7.59
1988	1.70	1.35	1.35	3.75	5.99	3.82	9.11	7.43	2.64	R 4.69	R 6.55	0.83	R 2.41	R 3.73	1.30	16.19	R 7.63
1989	1.74	1.35	1.36	3.87	6.61	4.34	9.59	8.25	2.68	R 4.72	R 7.16	0.89	e R 2.31	e R 3.85	1.23	15.91	e R 7.89
1990	1.83	1.35	1.35	3.98	7.93	5.58	11.09	9.40	3.14	R 5.13	R 8.19	0.84	R 2.21	R 4.20	1.24	15.58	R 8.43
1991	1.80	1.28	1.28	3.91	7.39	4.82	9.88	9.00	2.34	R 5.16	R 7.83	0.85	R 2.16	R 3.97	1.15	15.29	R 8.18
1992	—	1.30	1.30	4.14	7.23	4.56	8.73	8.92	2.51	R 4.71	R 7.61	0.94	R 2.06	R 4.01	1.20	15.28	R 8.05
1993	—	1.28	1.28	4.48	7.20	4.19	9.52	8.78	2.67	R 4.75	R 7.51	0.95	R 1.87	R 4.15	1.25	15.33	R 8.05
1994	—	1.28	1.28	4.66	7.04	3.92	10.28	8.83	2.86	R 4.68	R 7.43	1.00	R 2.01	R 4.13	1.22	15.35	R 8.08
1995	—	1.19	1.19	4.23	7.06	3.93	10.33	8.99	2.40	R 4.93	R 7.58	0.58	R 1.98	R 3.95	1.04	15.30	R 8.04
1996	—	1.18	1.18	4.84	7.97	4.67	11.94	9.76	3.64	5.52	8.34	0.47	2.06	4.20	0.95	15.39	8.62
1997	—	1.17	1.17	5.12	7.62	4.39	12.04	9.58	3.56	5.17	8.09	0.47	2.03	4.11	0.93	15.60	8.60
	Expenditures in Million Nominal Dollars																
1970	2.5	100.7	103.1	123.6	70.8	13.6	23.0	625.1	1.1	R 97.6	R 831.2	—	R 13.3	R 1,071.2	-80.9	504.6	R 1,494.9
1975	8.9	422.1	431.0	186.1	272.8	45.1	48.8	1,292.7	4.3	R 206.4	R 1,870.0	—	R 16.0	R 2,503.1	-376.4	1,357.0	R 3,483.6
1980	5.0	883.2	888.2	570.9	759.3	149.8	65.3	2,853.4	28.2	R 504.0	R 4,360.0	2.1	R 24.9	R 5,846.1	-804.8	2,656.5	R 7,697.8
1981	9.2	961.0	970.2	659.0	921.5	150.8	42.0	3,192.2	26.9	R 604.7	R 4,938.2	21.6	R 28.1	R 6,617.0	-863.9	3,102.4	R 8,855.5
1982	6.8	810.3	817.2	767.8	857.2	95.5	65.7	2,978.9	15.3	R 506.8	R 4,519.4	44.6	R 28.1	R 6,177.1	-739.5	3,353.0	R 8,790.6
1983	6.9	919.2	926.2	849.5	802.1	74.5	66.9	2,548.1	20.0	R 432.1	R 3,943.6	76.6	R 29.6	R 5,825.4	-844.6	3,390.2	R 8,371.1
1984	7.4	R 893.5	R 900.9	854.9	876.0	125.9	67.2	2,629.7	12.8	R 462.9	R 4,174.6	88.7	R 47.1	R 6,066.3	-827.8	3,428.6	R 8,667.0
1985	8.0	R 921.4	929.3	813.4	853.7	160.1	74.9	R 2,698.9	9.6	R 465.4	R 4,262.6	81.1	R 44.5	R 6,130.9	-846.9	3,409.7	R 8,693.7
1986	5.1	867.9	873.1	742.6	774.8	127.8	85.7	2,221.8	7.1	R 404.8	R 3,622.0	—	R 39.8	R 5,277.5	-716.0	3,559.5	R 8,121.0
1987	3.3	819.0	822.3	689.5	821.3	129.0	84.5	R 2,245.6	4.4	R 399.8	R 3,684.6	—	R 35.9	R 5,232.3	-682.9	3,754.3	R 8,303.7
1988	3.6	818.8	822.4	747.2	822.1	91.3	102.7	R 2,313.8	5.5	R 383.7	R 3,719.2	34.9	R 37.5	R 5,361.2	-718.6	3,975.4	R 8,618.0
1989	3.6	761.6	765.2	797.6	898.8	106.8	120.9	R 2,601.9	5.7	R 427.0	R 4,161.1	149.2	e R 41.5	e R 5,914.6	-773.6	4,030.7	e R 9,171.8
1990	3.3	809.6	812.8	804.8	1,103.3	131.7	115.3	R 2,862.8	4.6	R 490.5	R 4,708.2	125.9	R 40.5	R 6,492.3	-803.6	4,054.4	R 9,743.0
1991	0.9	724.2	725.0	829.9	974.2	92.9	113.7	R 2,656.0	4.0	R 477.7	R 4,318.5	151.1	R 42.0	R 6,066.6	-745.1	4,041.5	R 9,363.0
1992	—	765.0	765.0	938.5	1,012.2	115.3	149.8	R 2,746.1	4.5	R 464.3	R 4,492.2	156.4	R 41.8	R 6,393.9	-791.8	4,041.0	R 9,643.1
1993	—	880.2	880.2	1,065.2	1,005.8	155.5	121.7	R 2,822.3	6.1	R 443.7	R 4,555.2	33.6	R 35.9	R 6,570.1	-782.1	4,116.3	R 9,904.3
1994	—	R 798.8	R 798.8	1,070.5	1,017.3	172.3	129.0	R 2,916.4	5.4	R 470.0	R 4,710.4	127.7	R 46.8	R 6,754.1	-792.0	4,264.5	R 10,226.6
1995	—	796.2	796.2	1,017.3	1,125.1	180.5	127.0	3,062.8	3.0	R 484.0	R 4,982.3	96.9	R 51.5	R 6,944.2	-768.2	4,224.3	R 10,400.2
1996	—	768.0	768.0	1,251.9	1,278.8	246.9	168.0	3,326.5	2.7	540.5	5,563.4	113.7	53.7	7,750.7	-763.0	4,542.0	11,529.6
1997	—	788.5	788.5	1,340.4	1,247.2	234.5	171.3	3,329.0	2.3	522.4	5,506.8	123.1	47.3	7,806.1	-789.7	4,587.3	11,603.8

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 264. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Tennessee

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	0.74	0.89	1.24	1.62	2.16	1.82	0.85	R 1.14	3.34	R 2.12
1975	1.75	1.25	2.49	3.38	3.84	3.56	1.69	R 1.92	6.62	R 4.40
1980	1.97	2.85	6.89	9.09	7.65	7.95	4.31	R 3.75	10.43	R 7.74
1981	2.38	3.38	8.54	11.11	9.06	9.91	5.31	R 4.66	12.94	R 9.61
1982	1.75	4.22	8.11	10.96	9.87	9.79	5.15	5.12	14.47	R 10.72
1983	1.60	5.14	7.72	R 8.54	9.04	R 8.64	4.99	R 5.51	14.31	R 10.71
1984	2.07	4.92	8.12	R 7.25	9.71	R 8.33	5.07	R 5.39	14.01	R 10.41
1985	1.85	4.96	6.59	R 6.88	9.23	R 7.86	4.87	R 5.37	14.28	R 10.73
1986	1.67	4.81	5.30	R 5.19	8.96	R 7.64	3.91	R 5.10	15.26	R 11.33
1987	1.79	4.53	5.25	R 6.56	9.09	R 7.80	3.72	R 4.93	16.03	R 11.72
1988	1.52	4.51	5.53	R 7.53	9.06	R 8.17	3.76	5.00	16.74	R 11.90
1989	1.61	4.68	5.90	R 6.86	10.25	R 8.77	4.16	R 5.27	16.65	R 11.88
1990	1.77	4.94	6.59	R 7.93	11.90	R 10.35	3.53	R 5.46	16.68	R 12.15
1991	1.75	5.02	6.12	R 7.28	10.57	R 9.39	3.37	5.40	16.55	R 11.98
1992	1.61	5.33	5.21	R 8.18	9.41	R 8.62	3.08	R 5.52	16.71	R 11.96
1993	1.79	5.50	5.30	R 6.68	9.61	R 8.67	3.02	R 5.70	16.87	R 12.02
1994	1.77	5.94	5.53	R 6.11	11.83	R 9.71	2.93	R 6.24	17.23	R 12.72
1995	1.50	5.60	5.42	R 6.54	11.72	R 9.87	2.87	R 5.91	17.33	R 12.37
1996	1.56	6.07	4.76	6.54	13.39	11.04	3.29	6.53	17.24	12.56
1997	1.61	6.70	6.33	6.50	13.59	11.44	3.27	7.17	17.66	13.17
	Expenditures in Million Nominal Dollars									
1970	3.3	42.5	1.2	18.6	18.9	38.7	2.5	R 87.0	204.2	R 291.2
1975	4.7	56.8	3.4	25.3	39.5	68.1	5.1	R 134.7	520.6	R 655.3
1980	3.9	129.8	12.4	28.3	42.2	82.8	9.5	R 226.0	932.6	R 1,158.6
1981	2.9	143.8	23.4	56.7	25.3	105.5	11.9	R 264.1	1,087.4	R 1,351.5
1982	2.6	181.6	19.0	33.6	38.7	91.4	12.4	R 288.0	1,216.3	R 1,504.3
1983	6.6	213.6	11.8	R 35.3	42.2	R 89.2	11.9	R 321.3	1,209.0	R 1,530.3
1984	5.4	222.0	13.4	R 36.2	40.5	R 90.1	28.7	R 346.1	1,253.9	R 1,600.0
1985	2.7	202.0	9.9	R 28.8	40.2	R 78.9	26.9	R 310.5	1,244.6	R 1,555.1
1986	1.1	199.9	5.1	R 9.7	46.5	R 61.3	21.0	R 283.2	1,347.6	R 1,630.8
1987	1.5	203.5	7.0	R 16.8	46.7	R 70.4	17.2	R 292.6	1,501.5	R 1,794.1
1988	2.5	221.7	7.3	R 26.8	58.0	R 92.0	18.0	R 334.2	1,597.0	R 1,931.1
1989	3.1	237.6	8.4	R 24.0	74.7	R 107.1	20.7	R 368.5	1,611.0	R 1,979.5
1990	3.4	236.8	9.1	R 14.5	74.0	R 97.7	25.3	R 363.2	1,636.6	R 1,999.8
1991	2.8	256.2	9.6	R 11.1	74.0	R 94.6	25.5	R 379.0	1,671.4	R 2,050.4
1992	2.2	287.2	7.9	R 16.7	71.5	R 96.1	24.5	R 410.0	1,681.8	R 2,091.8
1993	1.8	335.2	6.3	R 11.8	76.3	R 94.4	18.3	R 449.7	1,738.2	R 2,187.8
1994	1.4	351.5	9.7	R 15.2	90.8	R 115.8	17.4	R 486.1	1,927.9	R 2,414.0
1995	1.9	346.2	8.9	R 13.8	90.4	R 113.1	19.0	R 480.1	1,831.5	R 2,311.7
1996	1.5	440.8	7.5	16.9	122.6	147.0	21.7	611.1	2,078.3	2,689.4
1997	1.9	443.1	9.2	16.1	124.5	149.9	15.7	610.5	2,010.8	2,621.4

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 265. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Tennessee

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.35	0.70	1.06	0.78	1.27	2.84	0.42	1.46	0.85	0.75	4.97	1.87
1975	1.17	1.09	2.29	2.32	2.39	4.58	1.77	2.88	1.69	1.38	8.27	3.48
1980	1.39	2.95	6.49	6.16	4.96	9.89	3.44	7.05	4.31	3.57	13.29	7.97
1981	1.57	3.48	8.05	7.24	6.20	11.13	4.24	8.53	5.31	4.35	15.44	R 9.71
1982	1.68	4.32	7.57	8.35	6.28	10.40	4.06	8.00	5.15	4.95	18.77	11.87
1983	1.58	5.04	6.40	R 8.54	6.76	9.01	4.12	R 6.87	4.99	R 5.11	16.08	R 10.00
1984	R 1.60	4.75	6.46	R 7.25	7.04	8.72	4.90	R 6.88	5.07	R 5.08	16.55	R 8.80
1985	1.60	4.75	6.12	R 6.88	9.14	8.85	4.80	R 6.44	NA	R 5.16	17.05	R 9.03
1986	1.54	4.53	3.74	R 5.19	8.75	7.01	2.83	R 4.66	NA	4.49	17.96	9.40
1987	1.43	4.20	4.27	R 6.56	8.71	7.44	2.88	R 5.32	NA	R 4.33	17.67	R 9.34
1988	1.40	4.25	3.86	R 7.53	9.18	7.43	2.62	R 5.52	NA	R 4.36	18.03	R 9.34
1989	1.40	4.35	4.50	R 6.86	8.69	8.25	2.69	R 6.38	NA	R 4.48	18.03	R 9.96
1990	1.40	4.64	5.52	R 7.93	9.88	9.40	3.16	R 7.39	NA	4.82	18.02	10.65
1991	1.42	4.61	4.90	R 7.28	8.80	9.00	2.48	R 6.84	NA	R 4.74	17.98	10.54
1992	1.41	4.91	4.72	R 8.18	8.18	8.92	2.67	R 6.01	NA	R 4.95	19.38	R 9.20
1993	1.41	5.09	4.54	R 6.68	9.37	8.78	2.72	R 5.91	3.02	R 5.06	20.13	R 8.79
1994	1.41	5.39	4.33	R 6.11	8.22	8.83	2.87	5.17	2.93	R 5.25	19.94	R 8.93
1995	1.42	5.02	4.34	R 6.54	8.25	8.99	2.40	R 5.42	2.87	R 4.91	19.96	R 8.73
1996	1.41	5.54	5.29	6.54	9.45	9.76	3.66	6.33	3.29	5.51	20.06	9.00
1997	1.45	5.93	4.96	6.50	9.98	9.58	3.60	6.21	3.27	5.80	17.56	12.47
	Expenditures in Million Nominal Dollars											
1970	2.9	30.4	2.6	1.8	2.0	5.9	(s)	12.2	(s)	45.6	107.8	153.4
1975	5.8	47.9	7.9	3.4	4.3	10.1	(s)	25.7	(s)	R 79.5	210.0	R 289.5
1980	5.1	132.1	38.4	3.6	4.8	24.2	1.0	72.0	(s)	R 209.5	644.5	R 854.0
1981	3.5	151.1	52.5	3.0	3.1	29.2	2.0	89.7	(s)	R 244.5	812.3	R 1,056.8
1982	4.6	171.3	49.2	6.3	4.3	26.7	2.6	89.2	(s)	R 265.3	1,007.6	R 1,273.0
1983	12.1	221.1	74.2	R 9.2	5.6	25.0	3.2	R 117.2	(s)	R 350.7	888.0	R 1,238.7
1984	R 7.8	226.5	80.8	R 7.6	5.2	27.1	2.6	R 123.3	0.7	R 358.3	561.6	R 919.9
1985	4.3	213.2	109.9	R 6.5	7.0	R 15.7	2.9	R 142.1	NA	R 359.6	573.3	R 932.8
1986	1.9	199.0	30.8	R 2.7	8.0	14.8	2.3	R 58.5	NA	R 259.4	595.9	R 855.4
1987	2.2	191.1	28.9	R 4.7	7.9	14.6	1.2	R 57.3	NA	R 250.7	614.9	R 865.6
1988	4.2	200.8	24.8	R 10.3	10.4	20.2	1.3	R 66.9	NA	R 272.0	644.9	R 916.9
1989	4.8	213.3	17.4	R 6.0	11.2	22.3	0.9	R 57.9	NA	R 276.0	753.0	R 1,029.0
1990	4.8	209.0	20.5	R 3.1	10.8	R 22.9	0.7	R 57.9	NA	R 271.8	803.8	R 1,075.6
1991	3.9	218.7	17.2	R 1.3	10.9	19.8	R (s)	R 49.4	NA	R 272.0	804.8	R 1,076.8
1992	3.5	235.5	28.6	R 3.2	11.0	16.2	1.0	R 59.9	NA	R 298.9	488.8	R 787.7
1993	2.5	267.5	24.8	R 2.3	13.1	9.4	0.6	R 50.1	1.5	R 320.1	419.2	R 739.4
1994	2.1	282.2	25.4	2.5	11.1	2.3	0.6	R 41.9	1.5	R 327.6	416.4	R 744.0
1995	3.4	265.4	20.2	R 3.0	11.2	2.3	R (s)	R 36.9	1.4	R 307.1	424.5	R 731.6
1996	2.5	334.6	28.3	3.3	15.3	2.5	0.6	50.0	1.8	388.9	447.9	836.8
1997	3.1	336.8	25.3	3.7	16.1	2.5	1.0	48.6	1.5	389.9	1,548.0	1,938.0

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
(s)=Value less than 0.05 million nominal dollars.

NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 266. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Tennessee

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	0.38	0.35	0.35	0.38	0.67	0.72	0.78	1.27	5.08	2.84	0.36	R 0.81	R 0.87	R 1.69	R 0.57	2.05	0.94
1975	1.60	1.17	1.22	0.73	1.79	2.11	2.32	2.39	7.48	4.58	1.89	R 2.26	R 2.29	R 1.69	R 1.39	4.87	R 2.55
1980	1.81	1.39	1.41	2.54	3.56	5.50	6.16	4.96	14.36	9.89	3.36	R 6.50	R 5.59	R 1.69	R 3.32	9.71	R 5.04
1981	2.03	1.57	1.60	3.10	4.81	6.62	7.24	6.20	18.00	11.13	4.31	R 7.08	R 6.76	R 1.69	R 3.76	11.71	R 5.75
1982	2.04	1.68	1.69	3.87	4.57	7.62	8.35	6.28	17.25	10.40	4.41	R 6.23	R 6.40	R 1.69	R 4.02	13.50	R 6.18
1983	1.58	1.58	1.58	4.21	4.57	6.70	R 6.97	6.76	16.98	9.01	4.44	R 6.41	R 6.34	R 1.69	R 3.75	13.70	R 6.29
1984	1.91	R 1.60	R 1.62	4.01	4.39	6.70	R 7.07	7.04	17.63	8.72	4.90	R 5.91	R 6.18	R 1.69	R 3.73	13.50	R 6.59
1985	1.93	1.60	1.61	4.11	4.76	6.37	R 6.74	9.14	17.61	8.85	4.80	R 5.95	R 6.26	R 1.69	R 3.80	14.22	R 6.65
1986	1.75	1.54	1.55	3.77	4.89	4.12	R 4.70	8.75	15.59	7.01	2.83	R 3.75	R 4.75	R 1.81	R 3.27	15.12	R 6.37
1987	1.63	1.43	1.43	3.05	3.24	4.56	R 4.67	8.71	13.58	7.44	2.88	R 4.35	R 4.59	R 1.81	R 2.99	15.39	R 6.20
1988	1.70	1.40	1.40	3.16	3.05	4.22	R 4.28	9.18	14.62	7.43	2.62	R 3.61	R 4.23	R 1.81	R 2.89	15.15	R 6.18
1989	1.74	1.40	1.41	3.27	2.86	4.78	R 5.30	8.69	14.48	8.25	2.69	R 4.34	R 4.43	d R 1.60	d R 2.99	14.51	d R 6.02
1990	1.83	1.40	1.41	3.29	2.94	5.90	R 6.92	9.88	14.60	9.40	3.16	R 5.15	R 5.01	R 1.36	R 3.26	13.74	R 6.02
1991	1.80	1.42	1.42	3.12	3.30	5.25	R 5.81	8.80	16.80	9.00	2.48	R 4.72	R 4.88	R 1.39	R 3.16	13.20	R 5.82
1992	—	1.41	1.41	3.34	2.03	5.21	R 5.12	8.18	18.32	8.92	2.67	R 4.39	R 4.56	R 1.40	R 3.19	13.49	R 6.09
1993	—	1.41	1.41	3.76	2.37	5.05	R 4.85	9.37	18.96	8.78	2.72	R 4.05	R 4.44	R 1.39	R 3.23	13.54	R 6.25
1994	—	1.41	1.41	3.72	2.45	4.91	R 4.87	7.21	19.11	8.83	2.87	R 3.95	R 4.32	R 1.66	R 3.17	13.24	R 6.07
1995	—	1.42	1.42	3.24	2.62	4.91	R 4.59	7.56	R 19.41	8.99	2.40	R 4.24	R 4.54	R 1.65	R 3.11	13.19	R 6.07
1996	—	1.41	1.41	3.80	3.12	5.91	5.72	9.19	20.08	9.76	3.66	4.96	5.30	1.60	3.57	13.24	6.47
1997	—	1.45	1.45	4.05	3.23	5.42	5.21	8.96	17.86	9.58	3.60	4.40	4.99	1.66	3.63	11.17	5.12
	Expenditures in Million Nominal Dollars																
1970	2.5	17.8	20.3	46.3	16.2	13.3	7.5	1.7	10.3	3.5	1.1	R 26.8	R 80.5	R 10.8	R 157.9	192.6	R 350.5
1975	8.9	52.0	60.8	81.4	44.8	57.6	9.4	3.9	23.7	2.8	2.3	R 62.0	R 206.5	R 10.8	R 359.5	626.3	R 985.8
1980	5.0	89.4	94.4	306.4	79.8	136.3	30.8	17.1	49.2	1.9	27.0	R 240.3	R 582.4	R 15.1	R 998.2	1,079.4	R 2,077.7
1981	9.2	128.6	137.8	363.1	87.3	141.5	22.6	11.6	59.1	1.7	23.0	R 292.5	R 639.3	R 15.9	R 1,156.2	1,202.8	R 2,358.9
1982	6.8	121.7	128.6	414.9	126.7	148.1	20.1	19.2	51.7	1.4	12.2	R 197.1	R 576.4	R 15.4	R 1,135.3	1,129.0	R 2,264.3
1983	6.9	143.9	150.9	414.4	90.9	103.9	R 6.5	14.7	53.3	0.8	16.7	R 163.6	R 450.5	R 17.4	R 1,033.2	1,293.2	R 2,326.4
1984	7.4	R 148.6	R 156.0	406.4	111.1	112.5	R 6.2	15.4	59.0	20.7	10.3	R 163.8	R 498.8	R 17.8	R 1,079.0	1,613.1	R 2,692.1
1985	8.0	R 156.7	164.6	398.1	139.3	129.0	R 7.7	22.2	54.9	29.9	6.6	R 154.8	R 544.4	R 17.7	R 1,124.8	1,591.8	R 2,716.6
1986	5.1	153.5	158.6	343.7	134.9	87.9	R 1.5	24.9	47.5	21.3	4.9	R 143.0	R 466.0	R 18.8	R 987.1	1,616.0	R 2,603.1
1987	3.3	137.5	140.8	294.8	98.3	92.3	R 2.5	R 26.0	46.8	23.8	3.2	R 167.6	R 460.6	R 18.7	R 914.9	1,637.9	R 2,552.7
1988	3.6	136.4	140.0	324.1	81.8	83.1	R 3.2	29.4	48.6	21.9	4.0	R 148.1	R 420.1	R 19.5	R 903.7	1,733.5	R 2,637.2
1989	3.6	137.6	141.2	346.6	108.1	65.7	R 1.1	30.0	49.4	26.2	4.7	R 171.8	R 457.0	d R 20.8	d R 965.5	1,666.7	d R 2,632.2
1990	3.3	132.8	136.1	357.4	113.0	100.4	R 1.8	25.9	51.2	R 28.8	3.9	R 237.4	R 562.4	R 15.2	R 1,071.0	1,613.9	R 2,684.9
1991	0.9	132.0	132.9	354.4	117.3	82.5	R 1.4	24.6	52.7	26.3	3.2	R 224.5	R 532.5	R 16.6	R 1,036.4	1,565.3	R 2,601.6
1992	—	130.9	130.9	415.1	71.2	110.8	R (s)	63.9	58.6	26.9	3.1	R 229.3	R 564.2	R 17.3	R 1,127.5	1,870.3	R 2,997.8
1993	—	139.5	139.5	460.8	77.3	99.5	R 1.1	27.4	61.8	33.4	5.4	R 199.2	R 505.0	R 17.6	R 1,122.9	1,958.8	R 3,081.8
1994	—	R 144.7	R 144.7	435.6	88.7	106.9	R 0.9	19.1	65.1	36.4	4.8	R 204.0	R 525.8	R 27.9	R 1,134.0	1,920.0	R 3,054.1
1995	—	134.7	134.7	401.1	94.3	113.6	R 1.0	20.7	R 65.0	40.9	2.7	R 212.4	R 550.6	R 31.1	R 1,117.5	1,968.1	R 3,085.6
1996	—	129.1	129.1	474.8	106.9	129.9	1.3	26.2	65.2	45.6	2.0	258.0	635.3	30.2	1,269.4	2,015.7	3,285.1
1997	—	131.0	131.0	556.0	105.3	144.6	1.3	27.2	61.3	47.2	1.3	246.7	634.8	30.1	1,351.9	1,028.4	2,380.3

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 267. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Tennessee

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.35	—	2.17	1.28	0.73	1.27	5.08	2.84	0.42	2.49	2.49	4.97	2.49
1975	1.17	—	3.45	3.02	2.03	2.39	7.48	4.58	1.67	4.19	4.19	8.27	4.19
1980	—	—	9.02	7.25	6.39	4.96	14.36	9.89	3.45	9.20	9.20	13.29	9.20
1981	—	—	10.84	8.48	7.67	6.20	18.00	11.13	3.90	10.46	10.46	15.44	10.46
1982	—	—	10.92	7.88	7.42	6.28	17.25	10.40	4.07	9.83	9.83	18.77	9.83
1983	—	—	10.44	6.91	6.44	6.76	16.98	9.01	—	8.53	8.53	16.08	8.53
1984	—	—	10.27	6.92	6.14	7.04	17.63	8.72	—	8.27	8.27	16.55	8.27
1985	—	—	9.99	6.73	5.83	9.14	17.61	8.85	—	8.29	8.29	17.05	8.29
1986	—	—	8.41	6.47	3.81	8.75	15.59	7.01	—	6.73	6.73	17.96	6.73
1987	—	—	7.55	6.75	4.01	8.71	13.58	7.44	1.92	R 7.08	R 7.08	19.96	R 7.08
1988	—	—	7.41	6.49	3.82	9.18	14.62	7.43	3.01	7.07	7.07	20.34	7.07
1989	—	—	8.28	6.96	4.34	8.69	14.48	8.25	2.37	7.77	7.77	19.95	7.77
1990	—	4.14	9.32	8.36	5.58	9.88	14.60	9.40	2.22	8.97	8.97	20.11	8.97
1991	—	3.98	8.71	7.84	4.82	8.80	16.80	9.00	1.71	8.57	8.57	20.13	8.57
1992	—	4.22	8.54	7.82	4.56	8.18	18.32	8.92	1.65	8.47	8.47	21.74	8.47
1993	—	4.47	8.24	7.80	4.19	9.37	18.96	8.78	1.58	8.27	8.27	23.20	8.27
1994	—	5.51	7.96	7.70	3.92	9.20	19.11	8.83	1.55	8.21	8.21	22.68	8.21
1995	—	4.93	8.36	7.63	3.93	9.55	R 19.41	8.99	1.91	8.29	8.29	22.17	8.29
1996	—	5.32	9.29	8.54	4.67	8.78	20.08	9.76	2.21	9.02	9.02	23.34	9.02
1997	—	5.42	9.39	8.25	4.39	8.28	17.86	9.58	2.77	8.80	8.80	23.09	8.80
	Expenditures in Million Nominal Dollars												
1970	(s)	—	1.3	53.6	13.6	R (s)	15.1	615.7	(s)	699.8	699.9	(s)	699.9
1975	(s)	—	1.2	187.1	45.1	1.1	36.6	1,279.8	2.0	1,553.0	1,553.0	(s)	1,553.0
1980	—	—	13.2	557.1	149.8	1.1	58.9	2,827.3	R (s)	3,607.6	3,607.6	(s)	3,607.6
1981	—	—	12.7	688.7	150.8	2.0	70.8	3,161.4	1.9	4,088.3	4,088.3	(s)	4,088.3
1982	—	—	9.4	627.3	95.5	3.5	61.8	2,950.8	0.5	3,748.9	3,748.9	(s)	3,749.0
1983	—	—	9.4	601.2	74.5	4.5	63.7	2,522.3	—	3,275.6	3,275.6	(s)	3,275.6
1984	—	—	8.5	662.0	125.9	R 6.0	70.6	2,582.0	—	3,455.0	3,455.0	(s)	3,455.0
1985	—	—	7.8	596.7	160.1	5.5	65.7	R 2,653.3	—	R 3,489.1	R 3,489.1	(s)	R 3,489.1
1986	—	—	8.5	646.5	127.8	6.4	56.9	2,185.7	—	R 3,031.7	R 3,031.7	(s)	R 3,031.7
1987	—	—	7.1	688.2	129.0	3.8	56.0	R 2,207.1	(s)	R 3,091.2	R 3,091.2	(s)	R 3,091.2
1988	—	—	6.8	699.5	91.3	4.9	58.1	R 2,271.8	R (s)	R 3,132.7	R 3,132.7	(s)	R 3,132.7
1989	—	—	7.6	799.1	106.8	5.0	59.1	R 2,553.3	R (s)	R 3,531.0	R 3,531.0	(s)	R 3,531.0
1990	—	(s)	8.2	965.8	131.7	4.5	61.3	R 2,811.1	R (s)	R 3,982.6	R 3,982.6	(s)	R 3,982.7
1991	—	(s)	6.4	857.0	92.9	4.3	63.1	R 2,609.9	0.5	R 3,634.1	R 3,634.1	(s)	R 3,634.1
1992	—	(s)	14.8	858.6	115.3	3.6	70.1	R 2,703.0	R (s)	R 3,765.8	R 3,765.8	(s)	R 3,765.8
1993	—	(s)	16.4	864.8	155.5	R 5.0	73.9	R 2,779.5	R (s)	R 3,895.3	R 3,895.3	(s)	R 3,895.4
1994	—	(s)	15.8	862.8	172.3	8.0	77.9	R 2,877.7	(s)	R 4,014.4	R 4,014.4	R (s)	R 4,014.5
1995	—	(s)	16.8	971.9	180.5	4.7	77.7	3,019.6	(s)	4,271.1	R 4,271.2	R (s)	4,271.2
1996	—	(s)	10.8	1,100.0	246.9	3.9	78.0	3,278.4	(s)	4,718.1	4,718.2	(s)	4,718.3
1997	—	(s)	14.8	1,058.5	234.5	3.4	73.3	3,279.4	(s)	4,664.0	4,664.0	(s)	4,664.1

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 268. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Tennessee

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.23	0.25	—	—	—	—	—	—	0.23
1975	0.87	—	—	2.19	—	2.19	—	—	0.89
1980	1.56	2.33	—	6.39	—	6.39	0.38	—	1.57
1981	1.74	2.89	—	8.24	—	8.24	0.42	—	1.63
1982	1.75	—	—	8.10	—	8.10	0.40	—	1.47
1983	1.72	3.78	—	6.50	—	6.50	0.50	—	1.42
1984	1.62	—	—	6.11	—	6.11	0.65	—	1.41
1985	1.54	—	—	5.85	—	5.85	0.78	—	1.41
1986	1.42	—	—	3.37	—	3.37	—	—	1.43
1987	1.37	—	—	3.93	—	3.93	—	—	1.38
1988	1.34	2.39	—	3.51	—	3.51	0.83	—	1.30
1989	1.34	2.74	—	3.95	—	3.95	0.89	—	1.23
1990	1.34	2.72	—	5.61	—	5.61	0.84	—	1.24
1991	1.25	2.44	—	4.98	—	4.98	0.85	—	1.15
1992	1.27	2.42	—	4.80	—	4.80	0.94	—	1.20
1993	1.26	1.07	—	4.31	—	4.31	0.95	—	1.25
1994	1.26	1.16	—	4.15	—	4.15	1.00	—	1.22
1995	1.15	2.21	—	3.97	—	3.97	0.58	—	1.04
1996	1.15	2.53	—	4.85	—	4.85	0.47	—	0.95
1997	1.13	2.63	—	4.39	—	4.39	0.47	—	0.93
	Expenditures in Million Nominal Dollars								
1970	76.5	4.4	—	—	—	—	—	—	80.9
1975	359.6	—	—	16.7	—	16.7	—	—	376.4
1980	784.9	2.6	—	15.1	—	15.1	2.1	—	804.8
1981	826.0	0.9	—	15.4	—	15.4	21.6	—	863.9
1982	681.4	—	—	13.5	—	13.5	44.6	—	739.5
1983	756.5	R (s)	—	11.0	—	11.0	76.6	—	844.6
1984	731.7	—	—	7.4	—	7.4	88.7	—	827.8
1985	757.7	—	—	8.1	—	8.1	81.1	—	846.9
1986	711.4	—	—	4.5	—	4.5	—	—	716.0
1987	677.8	—	—	5.1	—	5.1	—	—	682.9
1988	675.7	0.6	—	7.5	—	7.5	34.9	—	718.6
1989	616.1	R (s)	—	8.2	—	8.2	149.2	—	773.6
1990	668.5	1.6	—	7.6	—	7.6	125.9	—	803.6
1991	585.5	0.5	—	7.9	—	7.9	151.1	—	745.1
1992	628.5	0.7	—	6.3	—	6.3	156.4	—	791.8
1993	736.4	1.7	—	10.4	—	10.4	33.6	—	782.1
1994	650.6	1.2	—	12.6	—	12.6	127.7	—	792.0
1995	656.1	4.7	—	10.5	—	10.5	96.9	—	768.2
1996	634.8	1.5	—	13.0	—	13.0	113.7	—	763.0
1997	652.6	4.4	—	9.6	—	9.6	123.1	—	789.7

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 269. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Texas

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	0.38	0.86	0.39	0.29	0.94	0.72	1.07	2.66	0.42	R 1.14	R 1.58	—	R 1.43	0.85	0.25	4.52	R 1.29
1975	1.60	0.46	0.61	0.89	2.35	2.01	2.49	4.36	1.61	R 2.87	R 3.08	—	R 1.60	R 1.94	0.73	6.81	R 2.82
1980	1.81	1.19	1.22	2.17	6.73	6.34	5.29	9.26	2.49	R 7.16	R 6.75	—	R 2.97	R 4.25	1.65	12.69	R 6.05
1981	2.03	1.46	1.47	2.78	7.78	7.47	5.99	10.50	3.10	R 8.95	R 7.86	—	R 3.49	R 5.01	2.11	15.62	R 7.12
1982	2.04	1.60	1.61	3.44	7.32	7.09	6.13	9.83	3.53	R 8.06	R 7.52	—	R 3.48	R 5.15	2.55	18.34	R 7.59
1983	1.58	1.68	1.68	3.53	6.59	6.27	6.64	8.74	3.49	R 7.43	R 7.13	—	R 3.30	R 4.99	2.54	19.06	R 7.53
1984	1.91	R 1.68	1.68	3.68	6.61	6.04	6.45	8.66	3.59	R 7.43	R 7.04	—	R 2.97	R 5.02	2.54	18.42	R 7.46
1985	1.93	1.59	1.60	3.38	6.34	5.67	4.59	8.79	4.00	R 7.31	R 6.57	—	R 2.63	R 4.63	2.44	18.58	R 7.06
1986	1.75	1.55	1.55	2.62	4.99	3.56	4.42	6.47	1.45	R 4.82	R 4.93	—	R 2.21	R 3.58	1.92	16.91	R 5.77
1987	—	1.54	1.54	2.38	5.68	3.85	3.88	7.19	2.59	R 5.23	R 5.23	—	R 2.40	R 3.63	1.80	16.32	R 5.76
1988	—	1.47	1.47	2.44	5.42	3.57	3.77	7.32	1.84	R 4.54	R 4.99	0.37	R 2.62	R 3.50	1.74	16.58	R 5.59
1989	—	1.44	1.44	2.51	6.10	4.16	2.84	7.92	2.43	R 5.28	R 5.13	0.42	e R 2.10	e R 3.53	1.73	16.79	e R 5.66
1990	—	1.44	1.44	2.47	7.35	5.41	4.38	9.16	2.93	R 5.98	R 6.37	0.56	R 1.70	R 4.09	1.67	17.09	R 6.50
1991	—	1.49	1.49	2.30	6.99	4.64	4.46	9.09	2.97	R 5.56	R 6.11	0.49	R 1.72	R 3.90	1.61	17.91	R 6.36
1992	—	1.48	1.48	2.47	7.07	4.32	4.21	9.05	1.90	R 5.25	R 5.88	0.52	R 1.68	R 3.88	1.67	18.21	R 6.31
1993	—	1.42	1.42	2.79	7.07	4.01	4.04	8.90	1.88	R 4.95	R 5.81	0.69	R 1.57	R 3.93	1.81	18.93	R 6.47
1994	—	1.34	1.34	2.51	7.05	3.73	5.20	8.94	2.03	R 4.81	R 6.12	0.60	R 1.69	R 3.95	1.59	19.07	R 6.60
1995	—	1.33	1.33	2.24	7.05	3.74	5.08	9.21	1.99	R 5.19	R 6.18	0.56	R 1.86	R 3.83	1.44	18.12	R 6.42
1996	—	1.29	1.29	2.79	7.80	4.56	6.46	9.65	2.14	5.89	7.02	0.56	1.97	4.43	1.64	18.21	7.06
1997	—	1.26	1.26	3.08	7.58	4.24	5.75	9.44	2.92	5.12	6.52	0.54	1.84	4.30	1.67	18.23	6.94
	Expenditures in Million Nominal Dollars																
1970	11.6	R (s)	11.9	804.9	176.6	97.4	611.9	1,976.0	36.0	R 442.8	R 3,340.7	—	R 17.1	R 4,174.7	-267.6	1,421.0	R 5,328.1
1975	41.0	79.2	120.2	2,361.3	735.9	306.2	1,452.4	4,020.6	383.7	R 1,309.7	R 8,208.5	—	R 20.5	R 10,710.5	-1,099.3	2,895.0	R 12,506.2
1980	47.9	844.6	892.5	6,838.0	2,823.7	1,098.5	3,670.4	8,805.7	969.9	R 6,421.5	R 23,789.7	—	R 69.7	R 31,589.9	-3,576.1	7,434.5	R 35,448.3
1981	37.8	1,223.8	1,261.6	8,869.9	4,096.5	1,295.2	4,439.1	10,214.6	1,243.4	R 6,870.6	R 28,159.4	—	R 83.7	R 38,374.7	-4,635.8	9,476.0	R 43,214.8
1982	21.0	1,474.6	1,495.5	9,736.5	3,855.6	1,706.4	4,268.4	9,842.7	1,285.5	R 4,889.0	R 25,847.7	—	R 86.4	R 37,166.2	-5,579.5	11,268.2	R 42,854.9
1983	R (s)	1,711.3	1,711.8	9,522.6	3,718.3	1,669.1	4,686.2	8,948.5	917.8	R 4,656.1	R 24,596.1	—	R 84.8	R 35,915.3	-5,566.6	12,051.8	R 42,400.5
1984	25.6	R 1,781.7	R 1,807.3	10,687.9	3,744.3	2,202.2	6,084.2	8,948.2	776.2	R 4,458.0	R 26,213.0	—	R 55.7	R 38,763.8	-5,814.0	12,669.6	R 45,619.4
1985	20.9	R 1,812.3	R 1,833.2	9,815.8	3,475.1	2,383.1	4,236.4	R 9,481.7	710.5	R 3,880.9	R 24,167.8	—	R 53.2	R 35,870.0	-5,652.8	13,119.7	R 43,336.9
1986	3.6	R 1,795.0	R 1,798.6	7,021.2	2,511.6	1,614.0	4,011.0	R 7,118.8	251.2	R 2,655.9	R 18,162.6	—	R 41.1	R 27,023.6	-4,302.1	11,920.6	R 34,642.1
1987	—	1,850.9	1,850.9	6,513.9	2,920.5	1,839.5	3,858.2	R 7,753.1	351.5	R 2,779.3	R 19,502.1	—	R 49.3	R 27,916.2	-4,036.5	11,645.3	R 35,525.0
1988	—	1,852.4	1,852.4	7,247.2	2,729.9	1,911.9	4,024.8	R 8,028.3	278.0	R 2,557.9	R 19,530.9	15.1	R 49.2	R 28,694.8	-4,073.9	12,325.7	R 36,946.7
1989	—	R 1,910.2	R 1,910.2	7,783.9	3,123.7	2,189.7	3,190.5	R 8,462.4	437.5	R 2,773.4	R 20,177.2	44.6	e R 66.6	e R 29,982.5	-4,245.4	12,782.0	e R 38,519.1
1990	—	R 1,918.7	R 1,918.7	7,311.4	3,525.7	2,931.6	4,635.4	R 9,887.8	505.9	R 3,657.4	R 25,143.9	94.9	R 42.6	R 34,510.5	R -4,164.2	13,430.7	R 43,777.0
1991	—	R 1,981.7	R 1,981.7	6,953.6	3,446.5	2,377.9	5,167.7	R 9,488.4	524.9	R 3,357.4	R 24,362.9	103.3	R 45.0	R 33,440.2	R -4,056.7	14,271.2	R 43,654.6
1992	—	R 1,961.0	R 1,961.0	7,289.1	3,716.3	2,198.6	5,074.1	R 9,541.4	364.0	R 3,327.8	R 24,222.1	135.9	R 44.9	R 33,639.6	R -4,197.4	14,457.4	R 43,899.7
1993	—	R 2,008.4	R 2,008.4	8,821.1	3,777.4	1,975.4	4,686.8	R 9,703.6	260.8	R 3,154.1	R 23,558.1	91.7	R 42.7	R 34,510.8	R -4,667.6	15,644.2	R 45,487.4
1994	—	1,859.5	1,859.5	7,798.4	3,674.1	1,760.3	R 6,765.6	R 10,272.7	273.3	R 3,108.9	R 25,854.9	184.1	R 52.1	R 35,736.1	R -4,246.4	16,149.9	R 47,639.6
1995	—	R 1,815.4	R 1,815.4	7,224.0	3,392.4	1,759.9	6,806.5	R 10,326.5	277.8	R 3,235.4	R 25,798.5	214.4	R 55.5	R 35,096.0	R -3,969.9	15,675.1	R 46,801.2
1996	—	1,906.4	1,906.4	9,467.3	4,211.6	2,583.6	9,454.2	11,476.2	270.1	3,747.3	31,743.0	214.3	54.6	43,372.2	-4,649.7	16,872.0	55,594.5
1997	—	1,900.1	1,900.1	10,365.4	3,826.3	2,541.5	8,504.4	11,162.7	401.8	3,590.1	30,026.8	213.1	51.4	42,542.0	-4,857.6	17,385.6	55,070.1

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 270. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Texas

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	0.90	0.90	0.98	1.29	1.71	1.70	0.71	R 1.05	6.31	R 2.47
1975	—	1.48	2.24	3.01	3.50	3.45	1.39	R 1.78	8.74	R 4.06
1980	2.54	3.31	6.51	8.35	7.39	7.43	3.57	R 3.68	14.92	R 8.39
1981	3.42	4.06	8.03	10.15	8.17	8.22	4.39	R 4.46	18.32	R 10.50
1982	3.18	5.05	7.53	10.10	9.35	9.41	4.26	R 5.32	21.25	R 12.32
1983	—	5.39	6.87	R 6.76	8.86	R 8.63	4.13	R 5.59	22.44	R 13.02
1984	—	5.60	7.28	R 6.66	8.79	R 8.42	4.19	R 5.79	21.62	R 13.10
1985	2.83	5.55	6.99	R 6.44	8.53	R 8.47	4.03	R 5.80	21.99	R 13.69
1986	2.78	5.09	4.57	R 4.31	8.08	R 8.02	3.23	R 5.32	20.18	R 12.91
1987	2.40	5.00	4.69	R 4.71	7.60	R 7.51	3.08	R 5.17	19.74	R 12.39
1988	2.12	5.16	4.41	R 4.25	7.88	R 7.80	3.11	R 5.30	20.16	R 12.87
1989	2.43	5.34	5.42	R 4.43	10.02	R 9.94	3.44	R 5.66	20.45	R 12.99
1990	2.41	5.55	4.32	R 6.44	10.39	10.36	3.53	5.93	21.12	R 14.01
1991	2.36	5.49	3.98	R 5.97	11.71	R 11.63	3.37	5.80	22.17	R 14.51
1992	2.43	5.51	5.46	R 5.28	10.07	R 10.02	3.08	R 5.68	22.69	R 14.75
1993	2.16	5.74	5.78	R 5.85	9.80	R 9.74	3.02	R 5.89	23.45	R 15.33
1994	2.25	5.75	5.47	R 4.36	9.91	R 9.85	2.93	R 5.91	23.68	R 15.85
1995	—	5.68	5.29	R 4.04	10.20	R 10.12	2.87	R 5.84	22.61	R 15.49
1996	—	5.68	7.28	4.56	11.66	11.48	3.29	5.82	22.76	15.54
1997	2.14	6.14	5.65	5.22	12.32	12.11	3.27	6.29	22.92	15.85
	Expenditures in Million Nominal Dollars									
1970	(s)	213.8	0.8	R (s)	99.5	100.5	1.7	R 316.1	701.2	R 1,017.3
1975	—	353.8	3.5	0.7	148.5	152.7	4.1	R 510.5	1,219.6	R 1,730.1
1980	(s)	765.9	R (s)	9.4	166.4	176.1	55.1	R 997.1	2,910.3	R 3,907.4
1981	R (s)	877.4	R (s)	6.6	185.8	192.7	68.5	R 1,138.7	3,601.8	R 4,740.5
1982	R (s)	1,153.8	1.3	20.4	159.8	181.4	71.7	R 1,407.1	4,402.9	R 5,810.1
1983	—	1,192.1	13.8	R 4.3	180.1	R 198.2	68.6	R 1,458.9	4,619.9	R 6,078.8
1984	—	1,340.4	14.3	R 17.3	162.5	R 194.1	39.3	R 1,573.8	5,043.0	R 6,616.8
1985	R (s)	1,226.8	1.6	R 4.1	223.3	R 229.0	36.8	R 1,492.7	5,381.8	R 6,874.6
1986	R (s)	1,032.8	0.6	R 1.1	194.4	R 196.1	28.7	R 1,258.0	4,984.7	R 6,242.7
1987	0.6	1,097.7	2.2	R 1.6	195.9	R 199.8	35.7	R 1,333.7	5,009.0	R 6,342.7
1988	0.8	1,127.5	0.8	R 1.4	178.6	R 180.9	37.4	R 1,346.6	5,314.0	R 6,660.6
1989	R (s)	1,277.0	R (s)	R 1.2	241.2	R 242.8	42.9	R 1,563.1	5,556.0	R 7,119.1
1990	R (s)	1,217.6	R (s)	R 1.0	231.1	R 232.1	20.6	R 1,470.5	5,947.4	R 7,417.9
1991	R (s)	1,268.8	R (s)	R 1.2	171.0	R 172.3	20.7	R 1,462.0	6,361.3	R 7,823.3
1992	R (s)	1,240.9	R (s)	R 0.7	125.9	R 126.6	19.9	R 1,387.6	6,342.7	R 7,730.3
1993	R (s)	1,369.9	R (s)	R 1.0	129.8	R 130.9	17.1	R 1,518.0	7,017.3	R 8,535.3
1994	(s)	1,278.5	R (s)	R (s)	130.6	R 131.3	16.3	R 1,426.0	7,254.7	R 8,680.7
1995	—	1,222.0	R (s)	R 0.5	122.6	R 123.3	17.7	R 1,363.0	7,161.9	R 8,524.9
1996	—	1,350.7	(s)	1.0	97.4	98.4	20.3	1,469.4	7,739.9	9,209.2
1997	(s)	1,485.1	(s)	1.3	103.0	104.3	14.7	1,604.1	7,904.6	9,508.6

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 271. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Texas

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.86	0.44	0.90	0.76	1.00	2.66	0.48	1.01	0.71	0.56	5.19	1.91
1975	—	1.02	2.14	2.23	2.42	4.36	1.87	2.37	1.39	1.41	7.59	3.92
1980	0.89	2.90	6.23	6.89	5.22	9.26	2.53	6.24	3.57	3.89	14.12	R 7.76
1981	1.48	3.56	7.68	7.61	5.92	10.50	2.88	6.80	4.39	4.67	17.24	R 9.63
1982	1.68	4.35	7.20	7.25	6.05	9.83	3.11	6.51	4.26	4.82	19.62	10.77
1983	—	4.89	6.13	R 6.76	6.57	8.74	3.22	R 6.54	4.13	R 5.66	20.46	R 11.05
1984	—	4.88	6.14	R 6.66	6.40	8.66	4.47	R 6.51	4.19	R 5.56	20.14	R 11.34
1985	1.60	4.70	6.13	R 6.44	4.48	8.79	3.87	R 6.36	NA	5.23	20.06	R 12.19
1986	R 1.51	4.00	3.60	R 4.31	4.33	6.47	2.00	R 4.26	NA	4.06	18.28	R 11.28
1987	1.27	4.09	4.09	R 4.71	3.78	7.19	2.67	R 4.55	NA	4.22	17.45	10.56
1988	1.31	4.03	3.70	R 4.25	3.68	7.32	1.90	4.46	NA	4.12	17.76	10.75
1989	1.27	3.95	4.23	R 4.43	2.68	7.92	2.33	R 5.05	NA	R 4.16	17.92	10.99
1990	1.14	3.97	5.58	R 6.44	4.25	9.16	2.60	6.61	NA	4.41	18.12	11.66
1991	R 1.24	3.86	4.87	R 5.97	4.37	9.09	1.95	5.91	NA	4.13	19.11	12.08
1992	1.27	3.90	4.53	R 5.28	4.15	9.05	2.07	R 5.71	NA	4.13	19.56	12.23
1993	1.16	4.33	4.40	R 5.85	3.97	8.90	—	4.57	3.02	R 4.34	20.23	R 13.31
1994	1.26	4.15	4.07	R 4.36	8.78	8.94	2.12	R 4.91	2.93	4.22	20.52	R 13.40
1995	R 1.25	3.92	4.16	R 4.04	9.19	9.21	2.46	R 5.09	2.87	R 4.00	19.38	R 12.28
1996	—	4.12	4.99	4.56	9.58	9.65	—	5.64	3.29	4.24	19.55	13.20
1997	1.29	4.77	4.76	5.22	9.79	9.44	—	5.68	3.27	4.81	19.61	12.98
	Expenditures in Million Nominal Dollars											
1970	(s)	66.3	4.4	15.6	10.3	9.7	R (s)	40.1	(s)	R 106.5	405.2	511.7
1975	—	122.6	20.8	53.1	18.1	15.7	7.9	115.7	(s)	238.3	877.2	R 1,115.5
1980	(s)	504.3	103.1	126.9	20.7	160.5	40.9	452.2	1.3	R 957.8	2,122.5	R 3,080.3
1981	R (s)	578.6	167.4	293.8	23.8	43.1	45.8	573.8	1.6	R 1,154.2	2,780.1	R 3,934.3
1982	R (s)	849.9	204.6	53.4	18.3	44.9	35.5	356.6	1.7	R 1,208.4	3,303.0	R 4,511.4
1983	—	794.7	319.5	R 451.2	23.6	111.5	20.6	R 926.4	1.6	R 1,722.7	3,576.1	R 5,298.8
1984	—	840.5	314.5	R 378.6	20.9	79.5	19.1	R 812.6	0.9	R 1,654.1	3,927.2	R 5,581.3
1985	R (s)	741.3	342.4	R 9.1	20.7	90.2	6.1	R 468.5	NA	R 1,210.0	4,116.0	R 5,326.0
1986	R (s)	613.0	113.4	R 4.3	18.4	70.9	3.1	R 210.1	NA	R 823.4	3,827.0	R 4,650.4
1987	0.6	666.7	195.1	R 2.2	17.2	R 86.7	9.0	R 310.2	NA	R 977.5	3,719.8	R 4,697.3
1988	0.9	734.8	120.4	R 1.0	14.7	R 93.9	6.5	R 236.5	NA	R 972.2	3,970.0	R 4,942.1
1989	R (s)	750.8	96.1	R 10.2	11.4	97.0	4.4	R 219.0	NA	R 970.0	4,123.0	R 5,093.1
1990	R (s)	713.5	106.5	R 0.9	16.7	R 110.4	1.2	R 235.7	NA	R 949.3	4,376.7	R 5,326.0
1991	R (s)	725.7	83.7	R (s)	11.3	77.5	2.7	175.6	NA	901.5	4,704.4	5,605.8
1992	R (s)	755.3	81.9	R 2.0	9.2	68.8	R (s)	R 162.0	NA	R 917.5	4,810.1	R 5,727.6
1993	R (s)	783.1	60.0	0.8	9.3	7.4	—	R 77.5	1.4	860.8	5,209.8	6,070.6
1994	(s)	780.4	59.8	R 0.7	20.4	7.5	(s)	R 88.5	1.4	R 870.3	5,464.6	R 6,334.9
1995	—	857.2	53.5	R 1.1	19.5	7.9	(s)	R 82.0	1.3	R 940.5	5,314.4	R 6,254.9
1996	—	762.4	68.3	1.0	14.1	8.3	—	91.7	1.7	855.8	5,568.6	6,424.4
1997	(s)	1,062.2	47.7	1.1	14.4	8.1	—	71.3	1.4	1,134.9	5,699.2	6,834.1

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 272. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Texas

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	0.38	0.86	0.38	0.20	0.74	0.66	0.76	1.00	5.08	2.66	0.37	R 0.87	R 0.99	R 1.74	R 0.54	2.51	R 0.64
1975	1.60	1.01	1.20	0.92	1.77	2.02	2.23	2.42	7.48	4.36	1.51	R 2.76	R 2.48	R 1.74	R 1.75	4.70	R 1.97
1980	1.81	0.89	1.28	2.24	3.79	6.09	6.89	5.22	14.36	9.26	3.69	R 7.19	R 6.12	R 1.74	R 4.40	9.99	R 4.81
1981	2.03	1.48	1.59	2.81	5.18	6.79	7.61	5.92	18.00	10.50	3.98	R 8.93	R 7.04	R 1.74	R 5.05	12.44	R 5.58
1982	2.04	1.68	1.72	3.30	4.42	6.32	7.25	6.05	17.25	9.83	4.44	R 7.97	R 6.61	R 1.74	R 5.14	14.92	R 5.93
1983	1.58	1.71	1.71	3.34	4.24	6.40	R 6.57	6.57	16.98	8.74	4.46	R 7.45	R 6.71	R 1.74	R 5.18	15.32	R 6.06
1984	1.91	R 1.75	R 1.77	3.68	4.19	6.41	R 6.68	6.40	17.63	8.66	4.47	R 7.32	R 6.62	R 1.74	R 5.29	14.26	R 6.01
1985	1.93	1.60	1.64	3.07	4.20	6.10	R 6.49	4.48	17.61	8.79	3.87	R 7.13	R 5.51	R 1.74	R 4.34	14.15	R 5.12
1986	1.75	R 1.51	1.51	2.36	4.58	3.68	R 4.34	4.33	15.59	6.47	2.00	R 4.07	R 4.36	R 1.74	R 3.46	12.51	R 4.18
1987	—	1.27	1.27	1.98	3.35	4.34	R 4.50	3.78	13.58	7.19	2.67	R 4.92	R 4.26	R 1.74	R 3.22	11.82	R 3.88
1988	—	1.31	1.31	2.11	3.21	3.88	R 4.03	3.68	14.62	7.32	1.90	R 4.07	R 3.93	R 1.74	R 3.07	11.87	R 3.70
1989	—	1.27	1.27	2.15	2.84	4.60	R 4.89	2.68	14.48	7.92	2.33	R 4.92	R 3.59	d R 1.33	d R 2.87	11.96	d R 3.50
1990	—	1.14	1.14	2.09	2.94	5.91	R 6.07	4.25	14.60	9.16	2.60	R 5.94	R 4.95	R 1.29	R 3.58	11.82	R 4.17
1991	—	R 1.24	R 1.24	1.86	3.33	5.14	R 5.30	4.37	16.80	9.09	1.95	R 5.15	R 4.78	R 1.36	R 3.41	12.15	R 4.01
1992	—	1.27	1.27	2.02	2.33	4.90	R 4.88	4.15	18.32	9.05	2.07	R 4.90	R 4.52	R 1.38	R 3.38	12.31	R 4.00
1993	—	1.16	1.16	2.44	3.14	4.77	R 4.38	3.97	18.96	8.90	1.94	R 4.41	R 4.30	R 1.36	R 3.38	12.67	R 4.02
1994	—	1.26	1.26	2.11	2.94	4.50	R 4.34	5.14	19.11	8.94	2.12	R 4.19	R 4.94	R 1.55	R 3.62	12.52	R 4.22
1995	—	1.25	1.25	1.81	3.18	4.48	R 4.20	5.02	R 19.41	9.21	2.46	R 4.60	R 4.99	R 1.57	R 3.50	11.68	R 4.04
1996	—	1.24	1.24	2.49	3.32	5.40	5.34	6.43	20.08	9.65	2.84	5.43	6.16	1.55	4.40	11.81	4.89
1997	—	1.29	1.29	2.74	3.49	5.13	4.49	5.71	17.86	9.44	2.66	4.59	5.46	1.54	4.19	11.88	4.73
	Expenditures in Million Nominal Dollars																
1970	11.6	R (s)	11.8	258.3	58.0	33.9	16.7	481.0	79.6	19.7	4.5	R 200.8	R 894.2	R 14.7	R 1,179.0	314.5	R 1,493.5
1975	41.0	52.3	93.3	834.9	95.7	168.1	37.5	1,241.2	117.3	22.8	99.0	R 903.7	R 2,685.3	R 15.5	R 3,629.0	798.2	R 4,427.2
1980	47.9	32.9	80.9	2,840.6	274.5	701.9	464.9	3,470.9	298.7	22.9	300.1	R 5,023.3	R 10,557.2	R 11.9	R 13,490.5	2,401.7	R 15,892.2
1981	37.8	107.6	145.4	3,928.9	272.5	1,117.6	165.0	4,199.9	359.2	41.4	624.9	R 5,502.5	R 12,282.9	R 12.5	R 16,369.7	3,094.1	R 19,463.8
1982	21.0	122.2	143.2	3,561.9	230.2	999.4	348.3	4,064.2	313.9	32.9	693.9	R 3,698.5	R 10,381.2	R 12.1	R 14,098.5	3,562.2	R 17,660.7
1983	R (s)	112.0	112.4	3,665.9	329.6	1,197.7	R 88.9	4,448.8	323.6	24.5	365.7	R 3,238.3	R 10,017.1	R 13.7	R 13,809.1	3,855.9	R 17,665.0
1984	25.6	R 137.2	R 162.8	4,368.8	298.0	1,178.6	R 122.3	5,881.7	358.3	102.3	242.7	R 3,034.3	R 11,218.1	R 14.0	R 15,763.7	3,699.4	R 19,463.1
1985	20.9	R 118.0	R 138.8	3,940.8	329.2	969.9	R 15.2	3,982.6	333.4	217.1	133.2	R 2,937.9	R 8,918.5	R 13.9	R 13,012.0	3,621.9	R 16,633.9
1986	3.6	R 105.7	R 109.3	2,775.0	414.4	588.5	R 11.2	3,786.3	288.6	154.3	16.7	R 1,710.2	R 6,970.3	R 11.4	R 9,865.9	3,108.9	R 12,974.8
1987	—	78.4	78.4	2,507.9	279.8	663.2	R 11.3	R 3,638.8	284.2	R 159.5	16.8	R 1,998.2	R 7,051.8	R 11.3	R 9,649.4	2,916.5	R 12,566.0
1988	—	68.3	68.3	3,131.1	307.9	624.6	R 3.1	3,825.2	295.0	R 158.6	9.3	R 1,747.6	R 6,971.2	R 11.8	R 10,182.5	3,041.7	R 13,224.2
1989	—	R 78.9	R 78.9	3,476.9	182.7	673.2	R 6.9	2,933.4	299.8	R 187.8	5.0	R 2,071.5	R 6,360.4	d R 23.0	d R 9,939.1	3,103.0	d R 13,042.0
1990	—	R 69.8	R 69.8	3,188.7	273.0	890.0	R 5.1	R 4,380.3	311.0	R 208.7	15.2	R 2,853.9	R 8,937.2	R 21.0	R 12,216.7	3,106.7	R 15,323.4
1991	—	R 78.1	R 78.1	2,915.7	206.8	692.1	R 1.4	4,980.0	320.1	220.4	7.2	R 2,620.5	R 9,048.6	R 23.3	R 12,065.7	3,205.5	R 15,271.2
1992	—	R 76.7	R 76.7	3,112.5	182.3	656.4	R 2.3	4,934.4	355.9	206.3	4.7	R 2,552.7	R 8,895.0	R 23.9	R 12,108.1	3,304.6	R 15,412.7
1993	—	R 82.1	R 82.1	4,019.0	264.9	620.1	R 2.4	R 4,542.7	375.1	160.8	20.1	R 2,270.6	R 8,256.9	R 24.5	R 12,382.5	3,417.2	R 15,799.7
1994	—	104.6	104.6	3,429.6	213.7	495.8	R 2.4	6,595.4	395.2	R 176.1	24.9	R 2,245.2	R 10,148.9	R 33.4	R 13,716.5	3,430.6	R 17,147.0
1995	—	79.8	79.8	3,120.9	248.7	430.0	R 3.1	6,654.1	R 394.6	190.8	28.8	R 2,340.7	R 10,290.8	R 36.5	R 13,528.0	3,198.8	R 16,726.9
1996	—	91.3	91.3	4,743.2	263.7	638.8	4.9	9,333.4	396.1	204.8	28.2	2,830.9	13,700.9	32.7	18,568.1	3,563.0	22,131.1
1997	—	95.8	95.8	4,972.1	243.1	465.2	7.2	8,378.4	372.2	210.2	19.9	2,726.8	12,423.0	35.3	17,526.2	3,780.7	21,306.9

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 273. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Texas

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.86	—	2.17	1.05	0.72	1.00	5.08	2.66	0.42	2.07	2.07	—	2.07
1975	1.01	—	3.45	2.49	2.01	2.42	7.48	4.36	1.63	3.54	3.54	—	3.54
1980	—	—	9.02	7.09	6.34	5.22	14.36	9.26	2.15	7.42	7.42	—	7.42
1981	—	—	10.84	8.33	7.47	5.92	18.00	10.50	2.49	8.76	8.76	—	8.76
1982	—	—	10.92	7.86	7.09	6.05	17.25	9.83	2.81	8.37	8.37	—	8.37
1983	—	—	10.44	6.82	6.27	6.57	16.98	8.74	3.02	7.55	7.55	—	7.55
1984	—	—	10.27	6.80	6.04	6.40	17.63	8.66	3.25	7.44	7.44	—	7.44
1985	—	—	9.99	6.50	5.67	4.48	17.61	8.79	4.03	7.44	7.44	—	7.44
1986	—	—	8.41	5.84	3.56	4.33	15.59	6.47	1.42	5.36	5.36	—	5.36
1987	—	—	7.55	6.60	3.85	3.78	13.58	7.19	2.57	6.04	6.04	—	6.04
1988	—	—	7.41	6.44	3.57	3.68	14.62	7.32	1.83	R 5.88	R 5.88	—	R 5.88
1989	—	—	8.28	6.97	4.16	2.68	14.48	7.92	2.41	6.41	6.41	—	6.41
1990	—	2.97	9.32	8.20	5.41	4.25	14.60	9.16	2.94	7.57	7.57	—	7.57
1991	—	5.28	8.71	7.84	4.64	4.37	16.80	9.09	3.00	7.30	7.30	—	7.30
1992	—	4.32	8.54	7.99	4.32	4.15	18.32	9.05	1.90	7.13	7.13	—	7.13
1993	—	4.89	8.24	7.94	4.01	3.97	18.96	8.90	1.87	7.20	7.20	19.56	7.20
1994	—	3.27	7.96	7.87	3.73	8.54	19.11	8.94	2.02	7.25	7.25	—	7.25
1995	—	2.76	8.36	7.84	3.74	8.84	R 19.41	9.21	1.94	7.34	7.34	—	7.34
1996	—	3.22	9.29	8.62	4.56	8.86	20.08	9.65	2.08	7.87	7.86	18.87	7.87
1997	—	3.08	9.39	8.21	4.24	8.97	17.86	9.44	2.94	7.56	7.56	18.92	7.56
	Expenditures in Million Nominal Dollars												
1970	(s)	—	22.0	137.5	97.4	21.1	50.0	1,946.6	30.9	2,305.5	2,305.6	—	2,305.6
1975	(s)	—	22.8	542.6	306.2	44.6	78.9	3,982.0	256.2	5,233.3	5,233.3	—	5,233.3
1980	—	—	57.5	1,993.2	1,098.5	12.4	166.3	8,622.3	618.1	12,568.4	12,568.4	—	12,568.4
1981	—	—	71.2	2,788.2	1,295.2	29.6	199.9	10,130.2	561.9	15,076.3	15,076.3	—	15,076.3
1982	—	—	49.8	2,613.1	1,706.4	26.2	174.7	9,764.9	537.7	14,872.8	14,872.8	—	14,872.8
1983	—	—	40.2	2,133.6	1,669.1	33.7	180.1	8,812.5	R 488.8	13,357.9	13,357.9	—	13,357.9
1984	—	—	49.9	2,214.9	2,202.2	R 19.1	199.4	8,766.4	506.4	13,958.3	13,958.3	—	13,958.3
1985	—	—	66.4	2,136.1	2,383.1	9.8	185.6	R 9,174.4	547.0	R 14,502.5	R 14,502.5	—	R 14,502.5
1986	—	—	65.4	1,800.9	1,614.0	12.0	160.6	R 6,893.6	227.7	R 10,774.3	R 10,774.3	—	R 10,774.3
1987	—	—	43.8	2,048.6	1,839.5	R 6.3	158.2	R 7,506.9	315.8	R 11,919.1	R 11,919.1	—	R 11,919.1
1988	—	—	37.9	1,971.0	1,911.9	6.2	164.2	R 7,775.8	252.7	R 12,119.7	R 12,119.7	—	R 12,119.7
1989	—	—	34.3	2,297.4	2,189.7	4.5	166.9	R 8,177.5	394.7	R 13,264.9	R 13,264.9	—	R 13,264.9
1990	—	(s)	39.4	2,505.6	2,931.6	7.4	173.1	R 9,568.7	484.0	R 15,709.7	R 15,709.8	—	R 15,709.8
1991	—	(s)	28.8	2,660.7	2,377.9	5.5	178.2	R 9,190.5	512.8	R 14,954.3	R 14,954.3	—	R 14,954.3
1992	—	(s)	33.8	2,970.9	2,198.6	4.7	198.1	R 9,266.4	356.7	R 15,029.0	R 15,029.1	—	R 15,029.1
1993	—	R (s)	28.8	3,091.8	1,975.4	5.0	208.8	R 9,535.3	236.4	R 15,081.5	R 15,081.9	(s)	R 15,081.9
1994	—	R (s)	31.1	3,113.4	1,760.3	R 19.1	220.0	R 10,089.0	243.9	R 15,476.7	R 15,476.9	—	R 15,476.9
1995	—	R (s)	27.2	2,901.5	1,759.9	10.3	R 219.6	R 10,127.7	248.2	R 15,294.5	R 15,294.6	—	R 15,294.6
1996	—	(s)	29.3	3,485.9	2,583.6	9.3	220.5	11,263.0	237.6	17,829.2	17,829.3	(s)	17,829.8
1997	—	(s)	31.1	3,304.9	2,541.5	8.6	207.2	10,944.4	381.4	17,419.1	17,419.2	1.2	17,420.4

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 274. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Texas

Year	Coal	Natural Gas	Petroleum: Heavy Oil	Petroleum: Light Oil	Petroleum: Petroleum Coke	Petroleum: Total	Nuclear Fuel	Wood and Waste	Total Energy [a]
	Prices in Nominal Dollars per Million Btu								
1970	—	0.24	0.47	0.63	—	0.51	—	0.65	0.25
1975	0.23	0.76	1.89	2.03	—	1.89	—	0.92	0.73
1980	1.21	1.84	2.59	3.83	—	3.35	—	1.74	1.65
1981	1.46	2.46	2.92	4.33	—	3.75	—	1.24	2.11
1982	1.60	3.14	3.20	4.96	—	4.20	—	1.28	2.55
1983	1.68	3.17	3.29	5.18	—	4.13	—	1.12	2.54
1984	1.68	3.18	3.91	5.97	—	5.24	—	1.28	2.54
1985	1.59	3.15	4.36	5.57	—	4.90	—	0.79	2.44
1986	1.55	2.27	1.55	3.03	—	2.35	—	0.32	1.92
1987	1.55	2.06	2.76	3.87	—	3.26	—	0.95	1.80
1988	1.47	2.09	2.08	3.43	—	2.69	0.37	—	1.74
1989	1.45	2.15	2.74	4.20	—	3.51	0.42	0.35	1.73
1990	1.45	2.10	3.50	5.78	—	5.14	0.56	0.35	1.67
1991	1.50	1.97	3.47	4.91	—	4.56	0.49	0.35	1.61
1992	1.49	2.20	2.16	4.11	—	3.35	0.52	0.35	1.67
1993	1.44	2.41	2.07	3.85	0.84	2.09	0.69	0.35	1.81
1994	1.35	2.15	2.10	3.78	0.50	2.71	0.60	0.35	1.59
1995	1.34	1.89	1.90	3.74	—	3.43	0.56	—	1.44
1996	1.30	2.46	2.04	4.73	—	3.79	0.56	—	1.64
1997	1.26	2.63	2.87	4.54	—	4.41	0.54	—	1.67
	Expenditures in Million Nominal Dollars								
1970	—	266.5	R (s)	R (s)	—	R (s)	—	0.7	267.6
1975	26.9	1,050.0	20.6	0.9	—	21.5	—	0.9	1,099.3
1980	811.7	2,727.1	10.7	25.1	—	35.9	—	1.4	3,576.1
1981	1,116.0	3,485.1	10.8	23.0	—	33.8	—	1.0	4,635.8
1982	1,352.1	4,170.9	18.4	37.3	—	55.7	—	0.8	5,579.5
1983	1,599.4	3,869.8	42.8	53.7	—	96.5	—	0.9	5,566.6
1984	1,644.5	4,138.1	8.0	21.9	—	29.9	—	1.5	5,814.0
1985	1,694.0	3,907.0	24.2	25.1	—	49.3	—	2.5	5,652.8
1986	1,688.7	2,600.4	3.6	8.3	—	12.0	—	1.0	4,302.1
1987	1,771.4	2,241.5	9.9	11.4	—	21.3	—	2.3	4,036.5
1988	1,782.4	2,253.8	9.6	13.1	—	22.6	15.1	—	4,073.9
1989	1,830.8	2,279.2	33.4	56.6	—	90.0	44.6	0.7	4,245.4
1990	1,848.5	2,191.6	5.6	23.6	—	29.2	94.9	1.0	R 4,164.2
1991	1,903.1	2,043.5	2.3	10.0	—	12.2	103.3	1.0	R 4,056.7
1992	1,884.0	2,180.4	2.4	7.1	—	9.5	135.9	1.0	R 4,197.4
1993	1,926.1	2,648.6	4.3	5.4	1.6	11.2	91.7	1.1	R 4,667.6
1994	1,754.9	2,309.8	4.5	4.8	(s)	9.4	184.1	1.1	R 4,246.4
1995	1,735.5	2,023.8	0.7	7.2	—	8.0	214.4	—	R 3,969.9
1996	1,815.1	2,610.9	4.3	18.5	—	22.8	214.3	—	4,649.7
1997	1,804.3	2,845.9	(s)	8.6	—	9.0	213.1	—	4,857.6

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 275. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Utah

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	0.43	0.28	0.38	0.57	1.09	0.76	2.12	2.75	0.39	R 1.14	R 1.69	—	R 1.28	R 1.03	0.25	5.31	R 1.31
1975	1.38	0.55	0.92	1.07	2.61	2.12	4.37	4.52	1.71	R 2.57	R 3.31	—	R 1.62	2.04	0.51	7.06	R 2.60
1980	1.97	1.16	1.35	2.33	6.54	6.59	5.68	9.80	3.70	R 5.52	R 7.58	—	R 2.83	R 4.06	1.20	13.11	R 5.80
1981	2.26	1.29	1.51	2.74	7.52	7.67	5.54	10.98	4.76	R 7.74	R 9.19	—	R 3.27	R 4.57	1.31	14.49	R 6.71
1982	2.07	1.45	1.54	3.26	7.31	7.38	6.79	10.82	3.98	R 7.12	R 9.09	—	R 3.27	R 4.77	1.45	16.12	R 7.30
1983	1.58	1.39	1.42	3.57	6.93	7.02	7.50	9.01	4.20	R 7.31	R 7.93	—	R 3.11	R 4.40	1.39	17.39	R 6.95
1984	1.91	1.39	1.49	4.46	6.88	6.63	7.33	8.93	4.05	R 6.87	R 7.86	—	R 3.32	R 4.48	1.36	17.78	R 7.10
1985	1.93	1.39	1.48	4.01	6.67	6.25	8.90	9.09	3.86	R 6.67	R 7.96	—	R 3.19	R 4.28	1.39	19.05	R 7.25
1986	1.75	1.42	R 1.45	4.41	5.62	4.05	7.01	6.78	2.36	R 6.26	R 6.09	—	R 2.71	R 3.82	1.42	19.56	R 6.97
1987	—	1.25	1.25	4.16	5.97	4.19	6.88	7.44	2.16	R 5.01	R 6.40	—	R 2.46	R 3.42	1.27	19.15	R 7.38
1988	2.02	1.26	R 1.33	3.94	6.04	3.95	6.98	7.71	1.98	R 5.66	R 6.60	—	R 2.47	R 3.29	1.27	18.41	R 6.80
1989	1.92	1.25	1.31	3.99	6.77	4.60	8.87	8.24	1.67	R 4.53	R 7.07	—	e R 2.66	e R 3.36	1.25	17.10	e R 6.82
1990	1.84	1.18	1.24	4.17	8.04	5.75	8.91	9.09	2.67	R 4.94	R 7.97	—	R 3.94	R 3.55	1.18	16.09	R 7.16
1991	1.99	1.21	1.28	4.21	7.36	5.13	9.39	8.81	2.31	R 4.53	R 7.37	—	R 3.80	R 3.61	1.21	16.09	R 6.94
1992	2.00	1.21	1.28	4.24	7.29	4.96	9.66	8.95	1.78	R 5.39	R 7.63	—	R 3.52	R 3.58	1.22	15.61	R 7.17
1993	1.95	1.19	R 1.25	3.99	7.24	4.91	9.45	8.76	1.96	R 5.27	R 7.51	—	R 3.24	R 3.52	1.21	15.69	R 6.95
1994	1.90	1.14	1.19	3.64	7.09	4.56	8.01	8.93	1.94	R 5.19	R 7.51	—	R 3.32	R 3.42	1.17	15.78	R 6.95
1995	1.97	1.08	1.15	3.37	7.54	4.84	7.72	9.17	1.86	R 5.15	R 7.77	—	R 3.29	R 3.60	1.13	15.63	R 6.98
1996	1.94	1.06	1.13	3.28	8.47	6.07	9.30	10.02	1.66	5.36	8.63	—	3.66	3.95	1.09	15.57	7.53
1997	—	1.11	1.02	3.83	8.34	5.70	8.97	10.39	2.25	5.51	8.77	—	3.46	4.06	1.13	15.25	7.58
	Expenditures in Million Nominal Dollars																
1970	22.7	7.4	30.1	61.5	32.4	7.6	6.7	177.5	10.3	R 17.2	R 251.7	—	R 0.6	R 343.9	-6.4	92.0	R 429.5
1975	71.7	35.3	107.0	113.6	137.5	22.4	15.4	357.3	43.5	R 31.2	R 607.3	—	R 1.0	R 828.9	-26.2	186.9	R 989.6
1980	77.9	149.2	227.1	255.6	319.7	96.4	23.8	799.6	74.8	R 76.9	R 1,391.3	—	R 2.3	R 1,876.2	-141.2	469.3	R 2,204.4
1981	89.4	176.0	265.3	284.1	310.9	103.3	30.7	897.1	22.8	R 79.4	R 1,444.2	—	R 2.7	R 1,996.4	-153.3	569.8	R 2,412.9
1982	47.0	198.0	244.9	327.1	274.1	115.0	37.0	898.0	14.2	R 71.4	R 1,409.7	—	R 2.8	R 1,984.5	-170.5	665.0	R 2,479.0
1983	35.1	192.3	227.4	390.1	257.7	128.7	41.2	754.8	31.3	R 65.2	R 1,278.9	—	R 2.8	R 1,899.2	-168.2	712.6	R 2,443.6
1984	68.0	208.6	276.6	489.7	276.2	126.3	34.9	757.7	14.6	R 86.6	R 1,296.2	—	R 3.6	R 2,066.1	-178.2	757.9	R 2,645.8
1985	64.8	230.2	295.0	439.9	230.8	133.0	44.4	R 775.5	1.7	R 93.2	R 1,278.6	—	R 3.3	R 2,016.7	-208.0	830.7	R 2,639.5
1986	36.9	R 237.8	R 274.7	365.0	239.3	98.4	36.9	624.7	0.7	R 68.2	R 1,068.2	—	R 3.3	R 1,711.2	-222.5	852.9	R 2,341.7
1987	—	R 341.9	R 341.9	348.4	235.3	116.8	38.5	R 688.7	1.5	R 60.0	R 1,140.9	—	R 2.2	R 1,833.4	-331.1	861.6	R 2,363.9
1988	63.8	R 387.3	R 451.1	376.3	258.0	110.4	34.0	R 734.8	0.6	R 54.1	R 1,191.8	—	R 2.3	R 2,021.5	-367.6	895.9	R 2,549.8
1989	60.6	R 391.3	452.0	406.0	243.7	131.7	43.0	R 749.6	R (s)	R 61.2	R 1,229.4	—	e R 2.3	e R 2,089.6	-367.7	853.9	e R 2,575.9
1990	60.8	394.2	455.0	419.4	343.9	171.0	33.3	R 798.8	2.1	R 57.3	R 1,406.3	—	R 6.9	R 2,287.7	-370.7	831.0	R 2,748.0
1991	63.5	377.6	441.1	512.8	334.1	170.3	24.4	R 805.1	R (s)	R 97.5	R 1,431.7	—	R 6.9	R 2,392.5	-362.7	857.9	R 2,887.7
1992	59.8	R 403.5	R 463.3	481.3	342.6	156.3	23.3	R 842.2	R (s)	R 71.8	R 1,436.4	—	R 6.8	R 2,387.8	-395.5	867.8	R 2,860.1
1993	52.6	R 406.4	R 459.0	512.6	337.3	152.6	25.9	R 866.9	1.4	R 73.6	R 1,457.6	—	R 6.4	R 2,435.6	-399.0	887.1	R 2,923.7
1994	51.2	398.5	449.8	457.8	346.9	135.2	22.2	R 911.7	1.4	R 75.3	R 1,492.8	—	R 6.8	R 2,407.1	-395.5	944.5	R 2,956.1
1995	52.2	R 357.2	R 409.4	439.3	402.3	154.3	42.4	R 1,000.6	0.8	R 86.1	R 1,686.4	—	R 7.3	R 2,542.5	-358.2	967.5	R 3,151.7
1996	54.4	347.6	402.0	429.6	489.4	216.6	89.8	1,114.1	(s)	95.6	2,005.8	—	8.3	2,845.7	-344.3	1,036.5	3,537.8
1997	—	373.8	373.8	529.3	546.8	202.7	87.6	1,202.5	(s)	85.7	2,125.5	—	6.5	3,035.3	-369.9	1,042.2	3,707.6

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 276. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Utah

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	0.76	0.91	1.28	2.62	2.31	2.06	0.72	0.99	6.69	1.62
1975	1.33	1.28	2.84	5.16	5.77	4.31	1.43	1.49	8.84	2.37
1980	3.02	2.51	6.89	—	8.68	8.08	3.66	2.69	16.92	4.64
1981	4.34	3.00	8.22	15.04	7.75	8.40	4.51	R 3.21	18.45	R 5.60
1982	3.81	3.63	8.24	15.05	8.91	9.35	4.37	3.95	19.70	R 7.31
1983	3.40	3.96	6.68	R 7.76	9.35	R 8.41	4.23	R 4.16	21.36	R 7.05
1984	3.78	5.29	6.25	R 8.06	8.47	R 7.83	4.30	R 5.36	21.71	R 8.12
1985	3.46	4.52	7.25	R 8.67	9.25	R 8.93	4.14	R 4.66	22.80	R 7.66
1986	3.42	4.89	4.04	R 4.69	6.93	R 6.45	3.32	R 4.91	23.27	R 8.33
1987	2.62	4.60	3.73	R 4.71	7.34	R 6.59	3.16	R 4.67	23.28	R 8.70
1988	2.63	4.73	3.86	R 4.40	7.49	R 6.56	3.19	R 4.76	22.88	R 8.72
1989	3.01	4.73	5.43	R 4.60	12.23	R 9.58	3.53	R 4.91	21.68	R 8.40
1990	3.02	4.85	7.20	R 5.98	9.19	R 8.48	4.75	R 4.93	20.90	R 8.36
1991	3.06	5.07	6.86	R 7.32	9.59	R 8.52	4.54	5.12	20.86	R 8.28
1992	2.80	5.05	7.08	R 6.88	10.06	R 8.98	4.15	R 5.09	20.43	R 8.52
1993	2.47	4.75	4.12	R 6.98	10.06	R 6.85	4.06	R 4.75	20.08	R 8.00
1994	2.28	4.64	4.32	R 5.95	9.93	R 6.95	3.94	R 4.64	20.26	R 8.31
1995	2.21	4.46	6.38	R 6.15	10.07	R 8.60	3.86	R 4.51	20.34	R 8.26
1996	2.20	4.29	8.30	6.91	11.58	10.24	4.43	4.41	20.39	8.19
1997	2.72	4.92	6.23	7.23	8.31	7.42	4.41	4.94	20.19	8.47
	Expenditures in Million Nominal Dollars									
1970	0.7	37.9	1.1	R (s)	6.0	7.2	(s)	R 46.0	38.5	R 84.6
1975	1.5	72.8	5.9	R (s)	12.1	18.1	(s)	R 92.6	75.2	R 167.9
1980	5.8	158.0	4.5	—	11.1	15.6	1.6	R 181.0	179.9	R 361.0
1981	6.9	176.8	3.5	2.2	10.8	16.5	2.0	R 202.2	216.4	R 418.6
1982	5.5	156.7	6.0	3.9	13.8	23.8	2.1	R 188.1	254.4	R 442.5
1983	5.2	234.3	6.4	R 1.7	17.8	R 25.9	2.0	R 267.5	277.3	R 544.8
1984	7.9	310.5	6.1	R 1.5	19.5	R 27.2	2.8	R 348.4	285.7	R 634.0
1985	7.2	285.3	3.1	R (s)	21.0	R 24.6	2.6	R 319.7	310.1	R 629.8
1986	5.3	267.4	1.8	R (s)	15.7	R 17.6	2.0	R 292.3	316.7	R 609.0
1987	2.7	206.4	2.2	R (s)	17.4	R 19.8	1.0	R 229.9	316.1	R 546.1
1988	4.2	215.9	3.0	R (s)	17.3	R 20.5	1.0	R 241.5	324.0	R 565.5
1989	5.6	232.2	5.8	R (s)	21.0	R 27.0	1.2	R 265.9	308.0	R 573.8
1990	6.5	229.3	5.7	R (s)	14.1	R 20.0	5.9	R 261.8	302.9	R 564.6
1991	7.6	275.1	6.4	R (s)	14.4	R 21.0	6.0	R 309.7	317.5	R 627.2
1992	5.0	243.2	4.8	R (s)	12.2	R 17.0	5.7	R 271.0	314.0	R 585.0
1993	2.4	265.6	3.6	R (s)	7.3	R 11.0	5.3	R 284.4	323.7	R 608.2
1994	2.0	242.7	2.8	R (s)	5.9	R 8.9	5.1	R 258.6	346.3	R 604.8
1995	1.4	232.1	3.1	R (s)	7.6	R 10.9	5.5	R 249.9	349.9	R 599.8
1996	1.7	242.9	4.8	(s)	10.5	15.5	6.3	266.4	381.4	647.8
1997	2.7	298.1	4.2	(s)	7.5	12.0	4.6	317.4	389.9	707.3

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 277. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Utah

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.29	0.63	1.06	0.71	1.20	2.75	0.27	0.84	0.72	0.70	5.32	1.78
1975	0.74	1.60	2.49	2.35	2.30	4.52	1.55	2.22	1.43	1.94	7.15	3.30
1980	1.07	5.12	6.42	5.82	4.36	9.80	3.69	5.14	3.66	4.30	13.22	7.70
1981	1.21	4.97	7.73	6.56	4.79	10.98	—	7.90	4.51	4.16	15.03	11.20
1982	1.47	3.65	7.62	6.61	5.94	10.82	4.70	7.69	4.37	3.97	16.78	7.69
1983	1.49	4.01	6.49	R 7.76	6.52	9.01	4.49	6.35	4.23	4.51	18.54	9.87
1984	1.47	4.61	6.39	R 8.06	6.26	8.93	4.00	6.23	4.30	4.51	18.77	10.61
1985	1.28	4.57	6.03	R 8.67	8.60	9.09	3.94	R 6.51	NA	R 4.33	20.09	R 11.80
1986	R 1.27	4.99	3.75	R 4.69	7.07	6.78	2.40	4.12	NA	R 3.80	20.49	12.77
1987	1.08	4.61	4.21	R 4.71	6.54	7.44	2.16	4.40	NA	4.28	20.06	10.75
1988	R 1.11	3.77	3.89	R 4.40	6.53	7.71	1.98	4.33	NA	3.60	19.91	9.86
1989	1.19	3.83	4.64	R 4.60	7.02	8.24	1.66	R 5.24	NA	3.67	18.87	9.97
1990	1.23	3.95	5.81	R 5.98	8.71	9.09	2.51	6.08	NA	3.80	17.34	9.53
1991	1.14	4.19	5.13	R 7.32	9.12	8.81	2.31	R 5.77	NA	R 3.91	17.10	R 9.14
1992	R 1.10	4.08	4.97	R 6.88	9.26	8.95	1.78	5.55	NA	3.88	16.79	9.65
1993	R 1.13	3.76	4.97	R 6.98	9.23	8.76	1.96	R 4.96	4.06	R 3.69	16.82	R 9.07
1994	1.16	3.59	4.65	R 5.95	8.68	8.93	1.94	4.83	3.94	R 3.60	16.68	R 8.76
1995	R 0.86	3.42	4.79	R 6.15	8.41	9.17	1.86	5.04	3.86	3.48	16.80	R 8.84
1996	0.82	3.24	5.66	6.91	9.89	10.02	1.66	5.91	4.43	3.40	16.78	8.64
1997	0.82	3.75	5.55	7.23	10.37	10.39	2.25	5.87	4.41	3.81	16.31	8.76
	Expenditures in Million Nominal Dollars											
1970	0.5	6.0	3.2	R (s)	0.6	2.9	1.4	8.2	(s)	14.8	34.3	R 49.1
1975	1.5	9.2	18.8	R (s)	0.9	5.0	10.7	35.8	(s)	R 46.5	60.5	106.9
1980	3.8	1.8	38.4	1.1	1.0	4.1	24.4	69.0	(s)	74.7	141.7	216.4
1981	3.6	1.8	9.3	2.2	1.2	5.1	—	17.7	(s)	R 23.2	153.8	R 177.0
1982	3.9	74.9	17.0	1.7	1.6	5.6	1.1	27.1	(s)	105.9	183.6	289.5
1983	4.3	34.5	29.7	R (s)	2.2	6.2	6.3	R 44.8	(s)	R 83.6	211.9	R 295.5
1984	5.7	42.5	29.9	R (s)	2.5	3.6	3.4	R 39.8	(s)	R 88.0	273.4	R 361.4
1985	4.9	41.7	19.0	R 0.9	3.4	4.2	1.1	R 28.7	NA	R 75.4	315.0	R 390.4
1986	3.7	21.9	19.9	R (s)	2.8	3.2	0.6	26.7	NA	52.3	327.3	R 379.6
1987	2.0	73.8	18.1	R (s)	2.7	R 3.7	1.5	R 26.5	NA	102.3	332.9	435.1
1988	3.3	73.1	15.8	R (s)	2.7	3.6	0.6	22.8	NA	99.2	342.0	R 441.1
1989	4.1	68.7	12.4	R (s)	2.1	3.9	R (s)	R 18.6	NA	91.5	333.0	424.5
1990	4.9	69.7	12.2	R (s)	2.4	4.6	1.2	20.5	NA	R 95.2	318.9	414.0
1991	5.2	86.7	14.0	R (s)	2.4	3.8	R (s)	R 20.9	NA	R 112.9	325.0	R 437.9
1992	3.7	73.0	13.6	(s)	2.0	3.4	R (s)	19.3	NA	95.9	335.0	R 431.0
1993	R 2.1	91.7	10.6	R (s)	1.2	0.9	0.7	13.5	(s)	R 107.3	339.7	447.0
1994	1.8	101.8	13.1	(s)	0.9	1.0	R (s)	15.3	(s)	R 119.3	360.9	R 480.2
1995	1.0	97.6	12.3	(s)	1.1	1.0	R (s)	14.7	(s)	R 113.7	370.4	R 484.1
1996	1.2	99.9	16.6	(s)	1.6	1.1	(s)	19.6	0.5	121.1	384.6	505.8
1997	1.5	121.7	17.5	(s)	1.7	1.1	(s)	20.6	(s)	144.2	405.4	549.6

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 278. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Utah

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	0.43	0.29	0.40	0.32	0.57	0.66	0.71	1.20	5.08	2.75	0.60	R 0.43	R 0.77	R 1.73	0.46	3.75	R 0.57
1975	1.38	0.74	1.26	0.73	1.79	2.18	2.35	2.30	7.48	4.52	1.78	R 1.40	R 2.08	R 1.73	1.38	5.39	R 1.61
1980	1.97	1.07	1.77	2.08	3.65	5.49	5.82	4.36	14.36	9.80	3.71	R 5.19	R 4.64	R 1.73	R 2.76	10.22	R 3.48
1981	2.26	1.21	1.93	2.40	4.50	6.23	6.56	4.79	18.00	10.98	4.78	R 7.29	R 5.89	R 1.73	R 3.01	11.50	R 4.01
1982	2.07	1.47	1.80	2.61	4.15	6.13	6.61	5.94	17.25	10.82	3.93	R 6.07	R 5.80	R 1.73	R 3.14	13.05	R 4.57
1983	1.58	1.49	1.54	2.92	4.17	6.55	R 7.10	6.52	16.98	9.01	4.05	R 6.52	R 5.97	R 1.73	R 3.20	13.48	R 4.62
1984	1.91	1.47	1.79	3.27	4.57	6.67	R 7.11	6.26	17.63	8.93	4.00	R 6.69	R 6.07	R 1.73	R 3.27	13.35	R 4.41
1985	1.93	1.28	1.77	3.01	4.85	6.43	R 6.74	8.60	17.61	9.09	3.94	R 5.88	R 6.29	R 1.73	R 3.17	14.36	R 4.53
1986	1.75	R 1.27	1.62	3.16	4.38	4.10	R 5.30	7.07	15.59	6.78	2.40	R —	R 4.89	R 2.08	R 3.10	14.90	R 4.91
1987	—	1.08	1.08	2.96	3.23	4.43	R 5.29	6.54	13.58	7.44	2.16	R —	R 4.57	R 2.08	R 3.23	14.35	R 5.52
1988	2.02	R 1.11	1.75	2.87	3.32	4.22	R 4.45	6.53	14.62	7.71	1.98	R —	R 4.60	R 2.08	R 2.73	13.27	R 4.32
1989	1.92	1.19	1.68	3.04	2.73	5.03	R 5.09	7.02	14.48	8.24	1.66	R —	R 4.58	d R 2.08	d R 2.79	11.77	d R 4.10
1990	1.84	1.23	1.64	3.33	2.70	6.31	R 6.75	8.71	14.60	9.09	2.51	R —	R 5.35	R 1.89	R 2.95	11.15	R 4.19
1991	1.99	1.14	1.76	3.44	3.25	5.50	R 6.23	9.12	16.80	8.81	2.31	R 16.33	R 4.61	R 1.89	R 3.14	11.28	R 4.27
1992	2.00	R 1.10	1.74	3.79	2.96	5.41	R 5.65	9.26	18.32	8.95	1.78	R 24.75	R 5.02	R 1.89	R 3.27	10.79	R 4.46
1993	1.95	R 1.13	R 1.63	3.40	2.91	5.44	R 5.76	9.23	18.96	8.76	1.96	R 19.10	R 5.08	R 1.89	R 3.09	11.07	R 4.31
1994	1.90	1.16	1.59	2.56	2.81	5.32	R 5.14	7.37	19.11	8.93	1.94	R 24.75	R 4.91	R 1.99	R 2.74	11.22	R 4.11
1995	1.97	R 0.86	R 1.48	2.20	3.17	5.47	R 5.37	7.30	R 19.41	9.17	1.86	R 23.89	R 5.18	R 1.99	R 2.68	10.91	R 3.99
1996	1.94	0.82	1.60	2.01	3.50	6.35	6.36	9.05	20.08	10.02	1.66	22.95	6.23	1.99	3.22	10.84	4.56
1997	—	0.82	0.26	2.45	3.52	6.11	6.13	9.02	17.86	10.39	2.25	24.62	6.33	1.99	2.96	10.22	4.18
	Expenditures in Million Nominal Dollars																
1970	22.7	3.6	26.4	16.5	6.0	6.0	0.8	R (s)	2.9	3.8	6.0	R (s)	R 25.9	R (s)	R 69.2	19.2	R 88.4
1975	71.7	9.5	81.2	29.9	14.5	40.9	1.5	2.3	3.3	6.3	30.5	R 1.4	R 100.9	R 0.7	R 212.7	51.2	R 263.9
1980	77.9	12.0	89.9	86.0	35.8	70.9	2.2	11.5	9.2	8.5	49.1	R 5.4	R 192.6	R 0.6	R 369.0	147.7	R 516.7
1981	89.4	21.8	111.2	98.9	27.7	82.2	2.6	17.7	11.1	9.6	22.3	R 5.7	R 178.8	R 0.6	R 389.6	199.7	R 589.3
1982	47.0	27.3	74.3	88.5	25.7	74.7	3.7	19.6	9.7	10.3	13.1	R 4.8	R 161.6	R 0.6	R 325.1	227.0	R 552.1
1983	35.1	21.0	56.2	117.6	22.7	69.7	R (s)	18.8	10.0	9.4	17.1	R 6.3	R 154.4	R 0.7	R 328.8	223.4	R 552.3
1984	68.0	19.9	87.9	135.8	40.6	72.4	R (s)	10.2	11.0	7.1	7.2	R 8.5	R 157.3	R 0.7	R 381.7	198.8	R 580.5
1985	64.8	13.5	78.3	111.8	50.8	41.3	R (s)	17.6	10.3	10.5	(s)	R 7.0	R 137.6	R 0.7	R 328.4	205.7	R 534.1
1986	36.9	R 10.5	R 47.4	74.4	37.7	46.3	R (s)	16.3	8.9	7.5	(s)	R —	R 117.1	R 1.2	R 240.1	208.9	R 449.0
1987	—	12.1	12.1	66.7	30.6	39.6	R (s)	17.0	8.8	R 8.0	(s)	R —	R 104.1	R 1.2	R 184.1	212.6	R 396.7
1988	63.8	R 15.2	R 79.0	86.8	23.5	47.1	R (s)	12.5	9.1	8.5	(s)	R —	R 101.0	R 1.3	R 268.1	229.9	R 498.0
1989	60.6	18.4	R 79.0	103.0	30.3	45.2	(s)	18.4	9.2	8.4	(s)	R —	R 111.6	d R 1.1	d R 294.7	212.9	d R 507.6
1990	60.8	19.3	80.1	115.8	24.7	55.3	R (s)	15.2	9.6	R 9.5	(s)	R —	R 114.4	R 0.9	R 311.2	209.3	R 520.5
1991	63.5	13.4	77.0	141.9	61.9	60.6	R (s)	6.1	9.9	9.7	(s)	R 1.7	R 150.2	R 1.0	R 370.1	215.4	R 585.4
1992	59.8	R 13.3	73.1	152.8	32.1	61.3	(s)	7.8	11.0	9.7	(s)	R 2.8	R 124.7	R 1.0	R 351.6	218.8	R 570.4
1993	52.6	R 19.3	R 71.8	140.5	33.4	58.0	R (s)	15.9	11.6	11.4	0.7	R 2.3	R 133.3	R 1.0	R 346.7	223.7	R 570.4
1994	51.2	22.2	73.4	91.6	33.9	55.4	R (s)	13.9	12.2	14.8	1.2	R 3.1	R 134.4	R 1.3	R 300.7	237.3	R 538.1
1995	52.2	R 18.1	R 70.3	89.4	45.8	51.0	R (s)	32.7	12.2	15.5	0.6	R 2.9	R 160.8	R 1.4	R 321.8	247.2	R 569.0
1996	54.4	9.8	64.1	78.8	54.8	67.8	(s)	76.9	12.2	17.4	(s)	3.4	232.7	1.4	377.1	270.5	647.6
1997	—	10.2	10.2	100.3	46.6	85.3	(s)	77.7	11.5	18.2	(s)	3.3	242.6	1.5	354.6	246.9	601.5

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 279. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Utah

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.29	—	2.17	1.32	0.76	1.20	5.08	2.75	0.26	2.28	2.28	—	2.28
1975	0.74	—	3.45	2.97	2.12	2.30	7.48	4.52	1.84	3.97	3.97	—	3.97
1980	—	—	9.02	7.02	6.59	4.36	14.36	9.80	—	8.82	8.82	—	8.82
1981	—	—	10.84	8.15	7.67	4.79	18.00	10.98	—	10.06	10.06	—	10.06
1982	—	—	10.92	7.91	7.38	5.94	17.25	10.82	—	9.89	9.89	—	9.89
1983	—	—	10.44	7.25	7.02	6.52	16.98	9.01	R 4.34	8.42	8.42	—	8.42
1984	—	—	10.27	7.11	6.63	6.26	17.63	8.93	4.18	8.30	8.30	—	8.30
1985	—	—	9.99	6.82	6.25	8.60	17.61	9.09	—	8.28	8.28	—	8.28
1986	—	—	8.41	6.80	4.05	7.07	15.59	6.78	—	6.39	6.39	—	6.39
1987	—	—	7.55	6.97	4.19	6.54	13.58	7.44	—	6.78	6.78	—	6.78
1988	—	—	7.41	7.27	3.95	6.53	14.62	7.71	—	6.98	6.98	—	6.98
1989	—	—	8.28	7.82	4.60	7.02	14.48	8.24	2.73	7.49	7.49	—	7.49
1990	—	6.29	9.32	8.76	5.75	8.71	14.60	9.09	2.92	8.39	8.39	—	8.39
1991	—	5.14	8.71	8.30	5.13	9.12	16.80	8.81	—	R 7.98	R 7.98	—	R 7.98
1992	—	5.03	8.54	8.20	4.96	9.26	18.32	8.95	—	8.07	8.07	—	8.07
1993	—	4.88	8.24	8.07	4.91	9.23	18.96	8.76	—	7.96	7.96	—	7.96
1994	—	4.59	7.96	7.89	4.56	7.93	19.11	8.93	—	8.00	8.00	—	8.00
1995	—	4.45	8.36	8.22	4.84	7.74	R 19.41	9.17	—	8.26	8.26	—	8.26
1996	—	4.31	9.29	9.20	6.07	8.63	20.08	10.02	—	9.15	9.14	—	9.14
1997	—	5.15	9.39	9.22	5.70	8.12	17.86	10.39	—	9.31	9.31	—	9.31
	Expenditures in Million Nominal Dollars												
1970	(s)	—	1.9	22.1	7.6	(s)	5.0	170.9	(s)	207.5	207.5	—	207.5
1975	(s)	—	2.8	71.7	22.4	R (s)	7.2	346.0	0.8	451.0	451.0	—	451.0
1980	—	—	6.3	203.5	96.4	R (s)	16.9	787.0	—	1,110.3	1,110.3	—	1,110.3
1981	—	—	7.7	213.4	103.3	1.0	20.3	882.4	—	1,228.1	1,228.1	—	1,228.1
1982	—	—	4.2	174.1	115.0	1.8	17.7	882.1	—	1,194.9	1,194.9	—	1,194.9
1983	—	—	5.4	149.1	128.7	2.5	18.3	739.2	7.9	1,051.0	1,051.0	—	1,051.0
1984	—	—	4.0	165.7	126.3	2.6	20.2	747.0	4.0	R 1,069.8	R 1,069.8	—	R 1,069.8
1985	—	—	4.7	165.5	133.0	2.3	18.8	R 760.8	—	R 1,085.2	R 1,085.2	—	R 1,085.2
1986	—	—	4.7	168.6	98.4	2.0	16.3	614.0	—	904.0	904.0	—	904.0
1987	—	—	3.8	170.9	116.8	1.4	16.0	R 677.1	—	R 986.0	R 986.0	—	R 986.0
1988	—	—	4.2	189.7	110.4	1.6	16.6	R 722.7	—	R 1,045.2	R 1,045.2	—	R 1,045.2
1989	—	—	4.4	178.1	131.7	R 1.5	16.9	R 737.3	(s)	R 1,070.0	R 1,070.0	—	R 1,070.0
1990	—	(s)	5.0	268.1	171.0	1.6	17.6	R 784.7	0.9	R 1,248.8	R 1,248.8	—	R 1,248.8
1991	—	(s)	5.2	250.7	170.3	1.4	18.1	R 791.6	—	R 1,237.2	R 1,237.3	—	R 1,237.3
1992	—	R (s)	5.7	261.1	156.3	1.3	20.1	R 829.1	—	R 1,273.7	R 1,273.8	—	R 1,273.8
1993	—	R (s)	4.7	263.5	152.6	1.4	21.2	R 854.6	—	R 1,298.0	R 1,298.2	—	R 1,298.2
1994	—	R (s)	3.5	274.1	135.2	1.6	22.3	R 895.9	—	R 1,332.8	R 1,333.0	—	R 1,333.0
1995	—	R (s)	2.7	334.1	154.3	0.9	22.3	984.1	—	1,498.3	1,498.8	—	1,498.8
1996	—	0.5	2.4	398.3	216.6	0.8	22.4	1,095.6	—	1,736.1	1,736.7	—	1,736.7
1997	—	0.7	2.9	438.0	202.7	0.7	21.0	1,183.2	—	1,848.5	1,849.2	—	1,849.2

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 280. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Utah

Year	Coal	Natural Gas	Petroleum: Heavy Oil	Petroleum: Light Oil	Petroleum: Petroleum Coke	Petroleum: Total	Nuclear Fuel	Wood and Waste	Total Energy [a]
	Prices in Nominal Dollars per Million Btu								
1970	0.23	0.31	0.26	0.32	—	0.26	—	—	0.25
1975	0.48	0.61	1.54	2.31	—	1.59	—	—	0.51
1980	1.14	2.00	3.69	6.23	—	5.00	—	—	1.20
1981	1.27	2.29	4.06	7.33	—	6.46	—	—	1.31
1982	1.41	2.43	4.77	6.94	—	6.92	—	—	1.45
1983	1.35	3.13	4.59	6.11	—	6.11	—	—	1.39
1984	1.34	3.72	—	6.09	—	6.09	—	—	1.36
1985	1.37	4.12	3.71	5.67	—	5.02	—	—	1.39
1986	1.41	5.10	2.09	3.62	—	R 3.54	—	—	1.42
1987	1.25	5.07	—	4.12	—	4.12	—	—	1.27
1988	1.27	2.83	—	3.98	—	3.98	—	—	1.27
1989	1.24	3.14	—	4.45	—	4.45	—	—	1.25
1990	1.17	5.04	—	5.42	—	5.42	—	—	1.18
1991	1.19	1.62	—	4.90	—	4.90	—	—	1.21
1992	1.21	1.75	—	4.84	—	4.84	—	—	1.22
1993	1.19	2.18	—	5.39	—	5.39	—	—	1.21
1994	1.14	2.32	—	4.67	—	4.67	—	—	1.17
1995	1.09	2.15	—	5.05	—	5.05	—	—	1.13
1996	1.07	1.79	—	5.79	—	5.79	—	—	1.09
1997	1.11	2.03	—	5.84	—	5.84	—	—	1.13
	Expenditures in Million Nominal Dollars								
1970	2.5	1.0	2.8	(s)	—	2.9	—	—	6.4
1975	22.8	1.8	1.5	R (s)	—	1.6	—	—	26.2
1980	127.6	9.8	1.4	2.4	—	3.8	—	—	141.2
1981	143.7	6.6	0.5	2.5	—	3.0	—	—	153.3
1982	161.2	6.9	(s)	2.4	—	2.4	—	—	170.5
1983	161.7	3.7	(s)	2.8	—	2.8	—	—	168.2
1984	175.1	1.0	—	2.0	—	2.0	—	—	178.2
1985	204.6	1.0	0.6	1.8	—	2.4	—	—	208.0
1986	218.4	1.3	R (s)	2.7	—	2.8	—	—	222.5
1987	325.1	1.4	—	4.5	—	4.5	—	—	331.1
1988	364.7	0.6	—	2.4	—	2.4	—	—	367.6
1989	363.3	2.2	—	2.2	—	2.2	—	—	367.7
1990	363.5	4.6	—	2.6	—	2.6	—	—	370.7
1991	351.4	8.9	—	2.3	—	2.3	—	—	362.7
1992	381.5	12.3	—	1.7	—	1.7	—	—	395.5
1993	382.7	14.6	—	1.7	—	1.7	—	—	399.0
1994	372.5	21.5	—	1.4	—	1.4	—	—	395.5
1995	336.7	19.7	—	1.8	—	1.8	—	—	358.2
1996	335.0	7.5	—	1.8	—	1.8	—	—	344.3
1997	359.5	8.5	—	1.8	—	1.8	—	—	369.9

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 281. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Vermont

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.72	0.72	1.41	1.37	0.75	2.15	3.09	0.66	1.64	1.97	—	R 0.98	R 1.90	0.72	6.05	R 2.37
1975	—	2.35	2.35	1.87	2.77	2.22	4.12	4.69	1.92	3.82	3.64	0.31	R 1.24	R 2.39	0.36	10.33	R 4.33
1980	—	2.46	2.46	5.62	7.01	6.55	7.56	10.12	4.05	9.09	8.42	0.58	R 1.98	R 5.56	0.69	14.33	R 9.02
1981	—	3.19	3.19	6.27	8.60	7.83	8.72	11.22	4.97	11.42	9.88	0.56	R 2.20	R 5.98	0.63	17.22	R 10.52
1982	—	2.64	2.64	6.33	8.26	7.54	8.09	10.52	4.72	10.93	9.45	0.69	R 2.16	R 5.27	0.74	18.74	R 10.55
1983	—	2.52	2.52	5.83	8.34	6.91	10.22	9.94	4.66	R 9.33	R 9.16	0.60	R 2.04	R 5.93	0.68	19.05	R 10.32
1984	—	2.67	2.67	5.64	8.41	6.46	10.71	9.51	5.06	R 8.53	R 8.87	0.59	R 1.81	R 5.57	0.71	19.22	R 10.19
1985	—	2.84	2.84	5.59	8.06	6.10	11.82	9.53	4.54	R 8.08	R 8.83	0.64	R 1.44	R 5.79	0.72	20.81	R 10.19
1986	—	R 2.77	R 2.77	5.00	6.27	4.25	10.52	7.47	2.92	R 7.40	R 6.96	0.70	R 1.47	R 5.17	0.73	22.51	R 8.82
1987	—	3.37	3.37	4.92	6.18	4.18	10.60	7.58	3.15	R 5.76	R 6.93	0.69	R 1.42	R 4.64	0.73	24.16	R 9.13
1988	—	3.40	3.40	4.51	6.15	4.04	9.46	7.87	2.54	R 5.67	R 7.01	0.71	R 1.47	R 4.55	0.74	23.69	R 9.18
1989	—	3.12	3.12	4.56	6.70	5.33	12.28	8.84	2.83	R 5.82	R 7.93	0.62	e R 2.11	e R 5.11	R 0.84	23.46	e R 9.90
1990	—	3.73	3.73	4.65	8.08	6.60	13.23	9.66	3.32	R 9.32	R 9.19	0.57	R 2.31	R 5.83	R 0.69	24.25	R 11.28
1991	—	R 3.09	R 3.09	4.51	7.61	5.07	14.45	9.48	2.51	R 4.85	R 8.70	0.56	R 2.24	R 5.39	R 0.70	25.29	R 10.95
1992	—	R 2.89	R 2.89	5.00	7.09	4.72	11.88	9.39	2.53	R 5.08	R 8.34	0.53	R 2.10	R 5.67	R 0.54	25.89	R 10.72
1993	—	3.62	3.62	4.99	7.00	5.16	11.75	9.09	2.62	R 7.31	R 8.15	0.54	R 1.76	R 5.48	R 0.66	26.49	R 10.54
1994	—	3.06	3.06	5.40	7.01	4.76	12.51	9.17	2.64	R 6.32	R 8.31	0.49	R 1.83	R 5.18	R 0.59	26.74	R 10.74
1995	—	3.62	3.62	5.22	6.95	4.62	12.48	9.71	2.90	R 6.06	R 8.54	0.48	R 1.92	R 5.42	R 0.65	27.73	R 10.99
1996	—	3.75	3.75	5.08	7.86	5.61	13.76	10.05	3.25	6.23	9.12	0.47	1.90	5.79	0.66	28.56	11.46
1997	—	3.74	3.74	4.90	7.64	5.30	13.76	10.26	3.21	5.26	8.95	0.42	1.86	5.43	0.68	28.99	11.36
	Expenditures in Million Nominal Dollars																
1970	—	1.5	1.5	3.8	45.7	R (s)	4.4	82.5	3.7	8.8	145.6	—	R 1.6	R 152.5	-2.2	53.9	R 204.2
1975	—	1.7	1.7	7.5	75.0	2.2	12.8	140.2	9.6	11.0	250.8	12.0	R 2.2	R 274.2	-14.5	105.6	R 365.2
1980	—	1.3	1.3	22.2	167.3	5.6	18.5	288.9	12.0	26.5	518.8	18.7	R 7.1	R 568.2	-23.4	193.1	R 737.9
1981	—	3.3	3.3	27.3	191.2	3.5	19.9	324.5	10.9	28.4	578.5	22.1	R 7.6	R 638.8	-25.2	219.2	R 832.8
1982	—	3.3	3.3	27.4	129.9	3.8	25.2	305.6	10.6	26.0	501.2	31.7	R 8.0	R 571.7	-35.5	241.8	R 777.9
1983	—	2.9	2.9	25.2	167.0	4.0	32.0	291.2	9.3	R 26.1	R 529.6	18.7	R 8.1	R 584.6	-22.4	254.2	R 816.4
1984	—	3.7	3.7	27.2	182.2	6.2	24.9	290.9	13.8	R 27.7	R 545.8	21.4	R 9.3	R 607.4	-28.1	277.1	R 856.5
1985	—	5.6	5.6	27.7	196.9	6.7	33.7	R 291.0	3.5	R 51.4	R 583.2	20.8	R 8.9	R 646.2	-26.1	285.1	R 905.2
1986	—	R 1.8	R 1.8	24.7	145.1	3.1	33.2	234.0	8.7	R 43.5	R 467.6	15.5	R 7.3	R 517.0	-17.3	286.2	R 785.9
1987	—	1.1	1.1	25.1	157.3	4.2	42.7	R 260.0	6.7	R 34.8	R 505.6	26.3	R 7.8	R 565.9	-29.2	337.8	R 874.5
1988	—	1.0	1.0	24.8	167.3	3.2	40.0	R 280.9	3.8	R 35.0	R 530.2	31.3	R 7.4	R 594.7	-33.9	357.0	R 917.8
1989	—	0.7	0.7	27.6	180.6	6.6	68.0	R 304.3	3.4	R 35.1	R 598.1	24.1	e R 12.0	e R 669.9	R -38.4	366.0	e R 997.5
1990	—	0.8	0.8	31.0	190.5	6.6	67.2	R 339.8	5.0	R 22.5	R 631.5	22.1	R 8.8	R 696.2	R -28.7	390.3	R 1,057.7
1991	—	0.9	0.9	31.5	188.8	4.6	85.3	R 337.3	4.2	R 26.7	R 646.8	24.9	R 9.1	R 718.0	R -34.9	405.9	R 1,089.0
1992	—	1.5	1.5	37.8	206.1	3.0	82.3	R 339.2	4.5	R 20.2	R 655.4	21.2	R 9.0	R 719.8	R -20.5	436.5	R 1,135.7
1993	—	0.5	0.5	36.0	218.6	3.5	69.5	R 338.8	7.9	R 16.3	R 654.6	19.5	R 9.6	R 724.5	R -26.5	453.4	R 1,151.3
1994	—	R (s)	R (s)	39.3	206.8	3.7	75.7	R 344.7	4.7	R 20.2	R 655.8	22.5	R 11.1	R 732.9	R -29.3	462.3	R 1,165.9
1995	—	R (s)	R (s)	37.8	216.5	3.3	75.6	368.0	4.0	R 20.0	R 687.4	19.8	R 13.9	R 765.2	R -30.8	482.9	R 1,217.3
1996	—	(s)	(s)	37.7	268.3	3.2	89.2	387.0	5.9	23.2	776.7	18.8	14.3	857.2	-32.7	510.5	1,335.0
1997	—	(s)	(s)	39.9	245.6	3.2	90.1	409.8	6.7	38.5	793.9	19.2	13.4	883.9	-41.3	525.4	1,368.0

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 282. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Vermont

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.37	1.97	1.51	1.63	2.55	1.57	0.56	R 1.55	6.68	R 2.20
1975	2.62	2.62	2.87	3.16	4.72	3.07	1.11	R 2.96	11.47	R 4.41
1980	4.42	6.30	7.32	8.15	9.28	7.56	2.85	R 7.11	15.76	R 9.29
1981	5.38	7.05	9.04	10.54	10.15	9.26	3.51	R 8.57	18.20	R 11.03
1982	5.26	7.30	8.66	10.79	9.61	8.97	3.40	R 8.17	19.57	R 11.67
1983	4.57	6.85	8.47	R 7.36	12.55	R 8.87	3.30	R 8.24	19.99	R 11.25
1984	5.28	6.36	8.39	R 8.73	11.79	R 8.83	3.35	R 8.23	19.74	R 11.31
1985	4.91	6.33	8.08	R 8.24	11.79	R 8.55	3.22	R 8.03	21.20	R 10.66
1986	4.71	6.36	6.49	R 8.00	10.02	R 7.20	2.58	R 6.81	23.15	R 9.83
1987	4.37	6.31	6.23	R 5.89	10.04	R 6.90	2.46	R 6.62	27.72	R 11.12
1988	4.51	5.71	6.19	R 5.65	8.95	R 6.69	2.48	R 6.40	26.66	R 10.83
1989	4.48	5.70	6.79	R 5.13	12.77	R 8.03	2.75	R 7.58	26.24	R 11.48
1990	4.73	5.87	8.02	R 6.50	13.76	R 9.33	2.83	R 8.54	27.16	R 12.97
1991	4.59	6.31	7.71	R 5.83	15.17	R 9.39	2.70	R 8.65	27.92	R 12.97
1992	4.46	6.73	6.98	R 4.92	12.37	R 8.31	2.47	R 7.78	28.02	R 12.28
1993	4.48	6.20	6.84	R 4.92	12.20	R 7.91	2.42	R 7.38	28.84	R 12.16
1994	4.59	6.97	6.63	R 5.36	13.58	R 8.27	2.35	R 7.75	29.18	R 12.85
1995	4.53	6.85	6.46	R 4.66	13.75	R 8.10	2.30	R 7.57	30.83	R 12.95
1996	4.71	6.31	7.34	5.60	15.21	9.11	2.64	8.40	32.22	13.69
1997	4.66	6.33	7.47	5.70	14.59	9.04	2.62	8.44	33.56	14.02
	Expenditures in Million Nominal Dollars									
1970	0.6	2.1	34.0	4.0	3.4	41.4	(s)	R 44.5	27.7	R 72.2
1975	0.5	3.0	51.9	4.2	9.7	65.8	1.1	R 70.4	55.8	R 126.2
1980	0.7	8.1	92.5	10.6	12.1	115.3	3.6	R 127.7	95.8	R 223.5
1981	1.9	9.0	105.8	10.6	14.1	130.4	4.5	R 145.9	106.1	R 251.9
1982	1.2	9.3	70.4	9.4	14.5	94.2	4.7	R 109.4	116.1	R 225.5
1983	0.9	8.5	98.8	R 9.0	22.5	R 130.3	4.5	R 144.2	120.4	R 264.6
1984	1.2	8.5	100.5	R 6.6	21.3	R 128.3	3.8	R 141.9	124.5	R 266.4
1985	2.3	9.1	104.5	R 24.0	25.5	R 154.1	3.6	R 169.1	111.2	R 280.3
1986	0.7	10.0	69.9	R 13.2	22.2	R 105.3	2.8	R 118.8	91.3	R 210.1
1987	0.7	10.4	68.1	R 8.4	28.1	R 104.5	2.0	R 117.6	133.3	R 250.8
1988	0.6	10.6	70.0	R 9.8	29.6	R 109.5	2.1	R 122.7	143.0	R 265.7
1989	R (s)	11.9	85.5	R 8.1	54.6	R 148.2	2.4	R 162.8	149.0	R 311.8
1990	0.5	12.4	90.2	R 7.1	55.3	R 152.6	3.4	R 169.0	167.6	R 336.6
1991	R (s)	13.7	91.5	R 8.2	65.1	R 164.8	3.4	R 182.3	169.9	R 352.2
1992	R (s)	16.9	89.1	R 5.8	63.8	R 158.8	3.3	R 179.3	184.2	R 363.6
1993	R (s)	15.7	94.5	R 6.6	53.0	R 154.1	3.4	R 173.5	194.0	R 367.4
1994	R (s)	16.9	83.8	R 5.6	60.6	R 149.9	3.2	R 170.2	200.0	R 370.2
1995	R (s)	15.7	84.5	R 4.8	60.9	R 150.2	3.5	R 169.6	207.5	R 377.1
1996	(s)	16.1	102.6	6.5	72.2	181.3	4.0	201.6	220.6	422.1
1997	(s)	16.9	103.7	7.7	69.3	180.7	2.9	200.6	228.1	428.8

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 283. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Vermont

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.87	1.43	1.11	0.92	1.37	3.09	0.79	1.04	0.56	1.06	6.78	2.18
1975	2.60	2.10	2.46	2.65	2.92	4.69	1.91	2.35	1.11	R 2.32	11.34	4.51
1980	1.65	6.22	6.48	6.39	5.59	10.12	4.09	5.93	2.85	R 5.89	15.56	R 8.98
1981	1.86	6.90	8.18	7.18	6.49	11.22	5.00	7.54	3.51	R 7.19	19.48	R 11.26
1982	1.99	7.11	7.84	7.90	6.68	10.52	4.49	7.33	3.40	R 7.12	21.00	R 12.17
1983	1.93	6.57	7.62	R 7.36	7.11	9.94	4.44	7.50	3.30	R 7.10	21.76	R 13.21
1984	2.39	5.73	7.52	R 8.73	6.94	9.51	5.06	R 7.30	3.35	R 6.68	22.17	R 12.61
1985	R 2.39	5.76	7.16	R 8.24	11.92	9.53	4.54	R 7.69	NA	R 6.65	24.02	R 12.62
1986	R 2.62	5.19	5.23	R 8.00	11.70	7.47	2.92	R 5.63	NA	R 5.47	25.65	R 12.26
1987	R 2.37	4.94	5.03	R 5.89	11.86	7.58	3.15	R 5.60	NA	R 5.39	24.53	R 13.11
1988	R 2.52	4.72	4.93	R 5.65	11.32	7.87	2.54	R 5.59	NA	R 5.33	24.44	R 13.05
1989	2.60	4.81	5.57	R 5.13	10.63	8.84	2.84	R 6.05	NA	R 5.72	24.23	R 12.99
1990	2.62	5.12	6.85	R 6.50	11.23	9.66	3.33	R 7.05	NA	R 6.46	25.21	14.38
1991	R 2.59	5.30	6.13	R 5.83	12.54	9.48	2.51	R 6.53	NA	R 6.19	26.50	14.23
1992	R 2.56	5.69	5.51	R 4.92	10.46	9.39	2.54	R 5.99	NA	R 5.89	27.40	R 13.95
1993	2.32	5.26	5.42	R 4.92	10.52	9.09	2.62	R 5.56	2.42	R 5.39	27.62	R 13.84
1994	2.23	5.62	5.40	R 5.36	10.32	9.17	2.64	R 5.82	2.35	R 5.68	27.95	R 14.27
1995	2.26	5.45	5.22	R 4.66	10.59	9.71	2.90	R 5.84	2.30	R 5.65	29.04	R 15.26
1996	2.30	5.16	5.97	5.60	11.17	10.05	3.25	6.50	2.64	6.02	29.96	15.31
1997	2.53	5.12	5.72	5.70	11.00	10.26	3.21	6.13	2.62	5.77	30.16	14.90
	Expenditures in Million Nominal Dollars											
1970	R (s)	0.8	5.1	R (s)	R (s)	R (s)	2.1	8.1	(s)	9.1	14.1	23.2
1975	R (s)	1.6	9.1	R (s)	1.1	0.7	4.5	15.6	(s)	17.6	27.4	45.0
1980	R (s)	5.1	23.4	1.6	1.3	1.7	6.1	34.1	(s)	R 39.4	49.0	R 88.4
1981	R (s)	5.7	26.4	1.1	1.6	2.1	4.8	35.9	(s)	R 42.2	56.6	R 98.8
1982	R (s)	6.0	23.1	1.2	1.8	2.1	3.2	31.4	(s)	R 37.8	63.7	R 101.5
1983	R (s)	5.6	18.8	R (s)	2.2	3.0	1.3	R 25.7	(s)	R 31.7	69.4	R 101.1
1984	R (s)	8.3	19.0	R (s)	2.2	1.8	2.1	25.3	(s)	R 34.1	70.1	R 104.2
1985	1.6	9.0	22.1	R 1.7	4.6	2.0	0.7	R 31.0	NA	R 41.6	78.6	R 120.2
1986	R (s)	8.6	16.4	R 2.7	4.6	1.6	2.5	R 27.7	NA	R 36.6	87.1	R 123.7
1987	R (s)	8.9	19.1	R 1.1	5.9	1.6	1.8	R 29.5	NA	R 38.7	119.2	R 157.9
1988	R (s)	9.1	19.8	R 2.0	6.6	1.6	1.0	R 31.0	NA	R 40.3	125.0	R 165.3
1989	R (s)	9.9	23.4	R 1.7	8.0	1.7	1.5	R 36.3	NA	R 46.3	127.1	R 173.3
1990	R (s)	10.3	22.5	R (s)	8.0	2.1	2.5	35.5	NA	R 46.0	131.3	R 177.3
1991	R (s)	10.8	25.0	R 0.5	9.5	1.4	2.1	38.5	NA	R 49.4	138.4	R 187.8
1992	R (s)	13.1	26.2	R (s)	9.5	1.7	1.7	R 39.5	NA	R 52.8	147.1	R 199.9
1993	R (s)	12.5	23.6	R 0.9	8.1	R (s)	2.9	R 35.7	(s)	R 48.4	152.1	R 200.4
1994	R (s)	14.9	24.2	R 0.6	8.1	R (s)	1.4	R 34.7	(s)	R 50.1	154.7	R 204.8
1995	R (s)	14.5	20.4	R (s)	8.3	R (s)	1.3	R 30.7	(s)	R 45.5	163.2	R 208.7
1996	(s)	14.8	28.1	(s)	9.4	(s)	1.5	39.7	(s)	54.9	173.4	228.3
1997	(s)	15.8	29.2	0.7	9.2	(s)	2.3	41.8	(s)	57.9	181.1	239.0

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
(s)=Value less than 0.05 million nominal dollars.

NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 284. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Vermont

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	0.87	0.87	0.85	0.68	0.84	0.92	1.37	5.08	3.09	0.53	4.14	0.97	R 1.42	R 0.99	4.52	R 1.69
1975	—	2.60	2.60	1.44	1.91	2.38	2.65	2.92	7.48	4.69	1.93	4.95	2.63	R 1.42	R 2.33	7.61	R 3.59
1980	—	1.65	1.65	4.94	3.66	5.84	6.39	5.59	14.36	10.12	4.01	12.01	5.96	R 1.42	R 4.94	11.37	R 6.89
1981	—	1.86	1.86	5.65	5.42	6.53	7.18	6.49	18.00	11.22	4.96	R 13.84	6.99	R 1.42	R 5.56	14.15	R 8.10
1982	—	1.99	1.99	5.50	4.02	7.09	7.90	6.68	17.25	10.52	4.84	15.76	6.91	R 1.42	R 5.62	15.76	R 8.40
1983	—	1.93	1.93	5.06	4.22	6.87	R 7.25	7.11	16.98	9.94	4.70	14.29	R 6.79	R 1.42	R 5.25	15.60	R 8.34
1984	—	2.39	2.39	5.22	4.62	6.91	R 7.37	6.94	17.63	9.51	5.06	13.48	R 6.44	R 1.42	R 5.21	16.67	R 8.87
1985	—	R 2.39	R 2.39	4.91	5.20	6.58	R 7.13	11.92	17.61	9.53	4.54	13.38	R 6.98	R 1.42	R 5.51	18.40	R 9.64
1986	—	R 2.62	R 2.62	3.57	4.86	4.24	R 5.24	11.70	15.59	7.47	2.92	14.34	5.32	R 1.40	R 4.28	20.05	R 8.55
1987	—	R 2.37	R 2.37	3.52	3.55	4.78	R 4.85	11.86	13.58	7.58	3.15	13.55	R 5.32	R 1.40	R 4.28	19.79	R 7.86
1988	—	R 2.52	R 2.52	3.00	3.39	4.51	R 4.38	11.32	14.62	7.87	2.54	11.82	R 4.88	R 1.40	R 3.86	19.39	R 7.68
1989	—	2.60	2.60	3.05	3.17	5.38	R 5.37	10.63	14.48	8.84	2.84	17.61	R 5.76	d R 1.38	d R 4.40	19.21	d R 8.25
1990	—	2.62	2.62	3.56	3.34	6.21	R 6.56	11.23	14.60	9.66	3.33	14.39	R 7.23	R 1.62	R 5.35	19.39	R 10.35
1991	—	R 2.59	R 2.59	3.03	3.05	5.94	R 5.68	12.54	16.80	9.48	2.51	—	R 5.34	1.64	R 4.45	20.56	R 9.05
1992	—	R 2.56	R 2.56	3.16	2.79	5.53	R 4.92	10.46	18.32	9.39	2.54	—	R 5.22	R 1.56	R 4.19	21.39	R 9.19
1993	—	—	—	3.58	3.30	5.25	R 4.71	10.52	18.96	9.09	2.62	—	R 5.46	R 1.37	R 3.99	21.98	R 9.28
1994	—	—	—	3.48	3.65	5.38	R 4.89	8.77	19.11	9.17	2.64	—	R 5.26	R 1.48	R 3.75	21.97	R 9.05
1995	—	—	—	3.40	3.79	5.29	R 4.51	7.50	R 19.41	9.71	2.90	—	R 5.35	R 1.49	R 3.65	22.15	R 9.04
1996	—	—	—	3.39	3.80	6.19	5.78	8.51	20.08	10.05	3.25	—	5.65	1.37	3.86	22.22	9.09
1997	—	—	—	3.03	4.09	5.88	5.80	12.34	17.86	10.26	3.21	—	5.50	1.42	4.11	21.82	8.31
	Expenditures in Million Nominal Dollars																
1970	—	R (s)	R (s)	0.9	1.2	2.3	R (s)	0.6	0.5	1.1	1.5	1.0	8.5	R 1.1	R 10.6	12.1	R 22.8
1975	—	R (s)	R (s)	2.2	R (s)	5.1	1.0	1.9	R (s)	1.9	5.1	2.5	18.3	R 1.1	R 21.8	22.3	R 44.0
1980	—	R (s)	R (s)	7.9	1.0	17.1	R (s)	5.0	1.3	1.0	5.9	5.9	37.6	R 2.5	R 48.1	48.4	R 96.5
1981	—	R (s)	R (s)	11.6	1.8	17.8	R (s)	3.7	1.6	0.7	6.0	6.7	38.7	R 2.7	R 53.1	56.6	R 109.7
1982	—	R (s)	R (s)	11.6	2.0	17.3	R (s)	8.8	1.4	0.7	7.4	6.0	43.9	R 2.6	R 58.4	62.0	R 120.3
1983	—	R (s)	R (s)	10.2	1.8	11.5	R 1.4	7.1	1.4	0.5	8.0	5.9	R 37.6	R 2.9	R 50.9	64.4	R 115.3
1984	—	R (s)	R (s)	9.2	6.9	11.9	R 0.5	1.0	1.6	3.4	11.8	5.5	42.6	R 3.0	R 54.9	82.5	R 137.4
1985	—	R (s)	R (s)	9.1	11.4	17.2	1.1	3.0	1.5	5.8	2.8	5.6	R 48.3	R 3.0	R 60.7	95.3	R 156.1
1986	—	R (s)	R (s)	6.1	13.5	12.4	R 0.9	6.1	1.3	4.7	6.2	6.4	R 51.5	R 4.3	R 62.0	107.8	R 169.8
1987	—	R (s)	R (s)	5.8	11.6	13.2	R 0.9	8.3	1.3	4.8	4.8	6.5	R 51.3	R 4.2	R 61.6	85.3	R 146.9
1988	—	R (s)	R (s)	5.2	8.9	15.2	R 2.1	3.3	1.3	5.1	2.8	5.8	R 44.4	R 4.4	R 54.2	89.0	R 143.2
1989	—	R (s)	R (s)	5.7	9.5	15.7	R 0.8	5.0	1.3	5.9	1.8	8.4	R 48.5	d R 4.0	d R 58.6	90.0	d R 148.6
1990	—	R (s)	R (s)	6.6	0.6	16.9	R 0.6	3.5	1.4	4.1	2.4	6.8	R 36.3	R 2.6	R 45.6	91.4	R 137.0
1991	—	R (s)	R (s)	5.1	10.7	15.4	R (s)	10.2	1.4	4.4	2.1	—	R 44.6	R 2.7	R 52.9	97.5	R 150.4
1992	—	0.9	0.9	6.2	6.2	16.4	R (s)	8.6	1.6	4.4	2.7	—	R 40.0	R 3.1	R 50.3	105.1	R 155.4
1993	—	—	—	7.3	0.7	15.6	R (s)	8.2	1.7	3.6	5.0	—	35.1	R 4.5	46.8	107.3	R 154.2
1994	—	—	—	7.0	5.6	10.9	R (s)	6.3	1.8	4.1	3.3	—	R 32.2	R 5.6	R 44.9	107.6	R 152.4
1995	—	—	—	7.3	6.4	9.8	R (s)	6.0	1.8	4.5	2.7	—	R 31.3	R 6.4	R 45.1	112.2	R 157.2
1996	—	—	—	6.7	7.3	11.9	0.7	7.1	1.8	4.8	4.4	—	38.0	6.1	50.8	116.5	167.4
1997	—	—	—	7.2	21.5	12.2	0.8	11.2	1.7	5.1	4.4	—	56.8	6.3	70.3	116.2	186.5

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 285. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Vermont

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.87	—	2.17	1.43	0.75	1.37	5.08	3.09	0.76	2.94	2.94	—	2.94
1975	2.60	—	3.45	2.90	2.09	2.92	7.48	4.69	1.84	4.49	4.49	—	4.49
1980	—	—	9.02	7.41	6.51	5.59	14.36	10.12	—	9.72	9.72	—	9.72
1981	—	—	10.84	9.02	7.80	6.49	18.00	11.22	—	10.94	10.94	—	10.94
1982	—	—	10.92	8.73	7.51	6.68	17.25	10.52	—	10.42	10.42	—	10.42
1983	—	—	10.44	9.05	6.91	7.11	16.98	9.94	—	9.84	9.84	—	9.84
1984	—	—	10.27	9.44	6.46	6.94	17.63	9.51	—	9.49	9.49	—	9.49
1985	—	—	9.99	9.30	6.10	11.92	17.61	9.53	—	9.46	9.46	—	9.46
1986	—	—	8.41	7.51	4.25	11.70	15.59	7.47	—	7.48	7.48	—	7.48
1987	—	—	7.55	7.35	4.18	11.86	13.58	7.58	2.64	7.51	7.51	—	7.51
1988	—	—	7.41	7.51	4.04	11.32	14.62	7.87	—	7.78	7.78	—	7.78
1989	—	—	8.28	7.88	5.33	10.63	14.48	8.84	2.60	8.62	8.62	—	8.62
1990	—	—	9.32	9.66	6.60	11.23	14.60	9.66	2.76	9.62	9.62	—	9.62
1991	—	—	8.71	9.14	5.07	12.54	16.80	9.48	2.16	9.39	9.39	—	9.39
1992	—	—	8.54	8.67	4.72	10.46	18.32	9.39	2.24	9.24	9.24	—	9.24
1993	—	—	8.24	8.46	5.16	10.52	18.96	9.09	—	8.96	8.96	—	8.96
1994	—	—	7.96	8.54	4.76	8.49	19.11	9.17	—	9.03	9.03	—	9.03
1995	—	—	8.36	8.34	4.62	8.58	R 19.41	9.71	—	9.37	9.37	—	9.37
1996	—	—	9.29	9.33	5.61	8.54	20.08	10.05	—	9.87	9.87	—	9.87
1997	—	—	9.39	9.12	5.30	7.56	17.86	10.26	—	10.00	10.00	—	10.00
	Expenditures in Million Nominal Dollars												
1970	(s)	—	R (s)	2.9	R (s)	(s)	1.5	81.0	(s)	86.0	86.0	—	86.0
1975	(s)	—	R (s)	8.5	1.5	(s)	2.1	137.6	(s)	149.9	149.9	—	149.9
1980	—	—	1.1	32.7	4.9	(s)	4.5	286.2	—	329.5	329.5	—	329.5
1981	—	—	0.9	40.6	3.2	R (s)	5.4	321.8	—	372.4	372.4	—	372.4
1982	—	—	1.1	18.4	3.4	R (s)	4.8	302.8	—	330.6	330.6	—	330.6
1983	—	—	1.3	37.3	4.0	R (s)	4.9	287.7	—	335.4	335.4	—	335.4
1984	—	—	0.9	49.8	6.2	R (s)	5.4	285.7	—	348.4	348.4	—	348.4
1985	—	—	1.1	52.0	6.7	0.6	5.1	R 283.2	—	R 348.6	R 348.6	—	R 348.6
1986	—	—	1.2	45.4	3.1	R (s)	4.4	227.7	—	R 282.2	R 282.2	—	R 282.2
1987	—	—	0.8	55.5	4.2	R (s)	4.3	R 253.6	(s)	R 318.9	R 318.9	—	R 318.9
1988	—	—	0.6	60.6	3.2	R (s)	4.5	R 274.2	—	R 343.6	R 343.6	—	R 343.6
1989	—	—	0.7	54.7	6.6	R (s)	4.5	R 296.7	R (s)	R 363.8	R 363.8	—	R 363.8
1990	—	—	0.7	60.7	6.6	R (s)	4.7	R 333.6	R (s)	R 406.8	R 406.8	—	R 406.8
1991	—	—	0.7	56.4	4.6	R (s)	4.9	R 331.6	(s)	R 398.6	R 398.6	—	R 398.6
1992	—	—	0.6	74.3	3.0	R (s)	5.4	R 333.1	R (s)	R 416.9	R 416.9	—	R 416.9
1993	—	—	0.5	84.4	3.5	R (s)	5.7	R 334.9	—	R 429.3	R 429.3	—	R 429.3
1994	—	—	R (s)	87.3	3.7	0.6	6.0	R 340.3	—	R 438.4	R 438.4	—	R 438.4
1995	—	—	0.5	100.9	3.3	R (s)	6.0	363.1	—	474.3	474.3	—	474.3
1996	—	—	(s)	125.2	3.2	0.5	6.0	381.9	—	517.2	517.2	—	517.2
1997	—	—	0.6	99.6	3.2	(s)	5.6	404.4	—	513.8	513.8	—	513.8

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 286. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Vermont

Year	Coal	Natural Gas	Petroleum: Heavy Oil	Petroleum: Light Oil	Petroleum: Petroleum Coke	Petroleum: Total	Nuclear Fuel	Wood and Waste	Total Energy [a]
	Prices in Nominal Dollars per Million Btu								
1970	0.49	—	0.83	0.92	—	0.91	—	—	0.72
1975	2.05	1.17	1.95	2.42	—	2.41	0.31	—	0.36
1980	1.73	4.50	—	6.28	—	6.28	0.58	1.74	0.69
1981	2.17	4.82	—	7.53	—	7.53	0.56	1.24	0.63
1982	2.11	5.00	—	7.59	—	7.59	0.69	1.28	0.74
1983	2.18	4.22	—	6.32	—	6.32	0.60	1.12	0.68
1984	2.11	4.34	—	6.17	—	6.17	0.59	1.28	0.71
1985	2.03	4.84	—	5.83	—	5.83	0.64	0.79	0.72
1986	1.88	2.26	—	3.55	—	3.55	0.70	0.32	0.73
1987	—	—	—	3.39	—	3.39	0.69	0.95	0.73
1988	—	—	—	3.71	—	3.71	0.71	0.87	0.74
1989	—	2.64	—	4.23	—	4.23	0.62	2.92	R 0.84
1990	—	2.42	—	5.53	—	5.53	0.57	2.82	R 0.69
1991	—	1.74	—	4.70	—	4.70	0.56	2.60	R 0.70
1992	—	2.02	—	4.43	—	4.43	0.53	2.74	R 0.54
1993	—	2.02	—	4.85	—	4.85	0.54	2.60	R 0.66
1994	—	2.32	—	4.54	—	4.54	0.49	2.65	R 0.59
1995	—	1.95	—	4.12	—	4.12	0.48	2.87	R 0.65
1996	—	3.18	—	5.24	—	5.24	0.47	2.73	0.66
1997	—	3.12	—	4.54	—	4.54	0.42	2.51	0.68
	Expenditures in Million Nominal Dollars								
1970	0.7	—	R (s)	1.4	—	1.6	—	—	2.2
1975	0.7	0.7	(s)	1.2	—	1.2	12.0	—	14.5
1980	R (s)	1.1	—	2.3	—	2.3	18.7	0.9	23.4
1981	0.8	0.9	—	1.1	—	1.1	22.1	R (s)	25.2
1982	1.7	0.5	—	1.0	—	1.0	31.7	0.6	35.5
1983	1.6	0.9	—	0.6	—	0.6	18.7	0.6	22.4
1984	2.0	1.2	—	1.1	—	1.1	21.4	2.4	28.1
1985	1.4	R (s)	—	1.1	—	1.1	20.8	2.3	26.1
1986	0.6	(s)	—	0.9	—	0.9	15.5	R (s)	17.3
1987	—	—	—	1.4	—	1.4	26.3	1.5	29.2
1988	—	—	—	1.6	—	1.6	31.3	0.9	33.9
1989	—	R (s)	—	1.2	—	1.2	24.1	R 5.6	R 38.4
1990	—	1.7	—	R (s)	—	R (s)	22.1	R 2.8	R 28.7
1991	—	1.9	—	R (s)	—	R (s)	24.9	R 3.0	R 34.9
1992	—	1.6	—	R (s)	—	R (s)	21.2	2.6	R 20.5
1993	—	0.5	—	R (s)	—	R (s)	19.5	1.7	R 26.5
1994	—	R (s)	—	0.6	—	0.6	22.5	2.0	R 29.3
1995	—	R (s)	—	0.9	—	0.9	19.8	3.8	R 30.8
1996	—	(s)	—	(s)	—	(s)	18.8	3.8	32.7
1997	—	(s)	—	0.8	—	0.8	19.2	3.9	41.3

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 287. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Virginia

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	0.40	0.41	0.41	0.96	1.14	0.73	1.95	2.85	0.31	R 1.35	1.49	—	R 1.19	1.17	0.35	4.91	R 1.79
1975	—	1.30	1.30	1.71	2.60	2.03	3.63	4.77	1.80	R 3.02	3.16	0.28	R 1.46	R 2.51	1.24	9.63	R 3.94
1980	1.86	1.71	1.72	3.62	6.84	6.46	6.33	9.97	3.75	R 7.13	R 7.48	0.74	R 2.39	R 5.29	2.00	15.77	R 7.97
1981	1.96	1.93	1.93	4.04	8.37	7.61	7.24	11.14	4.79	R 9.01	R 9.20	0.59	R 2.71	R 5.74	1.64	16.06	R 9.07
1982	2.05	1.95	1.96	5.09	8.08	7.18	7.84	10.54	4.38	R 8.51	R 8.92	0.55	R 2.74	R 5.60	1.41	17.40	R 9.23
1983	1.58	1.72	1.71	5.90	8.03	6.43	8.78	9.25	4.33	R 7.52	8.17	0.46	R 2.58	R 5.21	1.20	18.01	R 8.92
1984	1.91	1.82	1.83	5.80	7.91	6.16	8.40	9.03	4.63	R 7.64	R 8.04	0.53	R 2.87	R 5.21	1.35	17.20	R 8.64
1985	1.93	1.78	1.80	5.68	7.78	5.79	10.02	9.33	4.26	R 7.41	R 8.09	0.55	R 2.76	R 5.10	1.18	17.06	R 8.70
1986	1.75	1.69	1.70	5.06	5.90	3.83	9.38	6.97	2.15	R 5.94	5.88	0.53	R 2.20	R 4.00	1.14	16.97	R 7.44
1987	1.72	1.59	1.60	4.53	6.12	4.05	9.35	7.60	2.99	R 5.61	R 6.37	0.56	R 2.07	R 4.25	1.23	17.03	R 7.63
1988	1.73	1.56	1.57	4.40	5.97	3.77	9.22	7.85	2.21	R 5.61	R 6.37	0.53	R 2.08	R 4.18	1.11	16.64	R 7.59
1989	1.75	1.56	1.57	4.95	6.51	4.34	8.53	8.55	2.67	R 5.50	R 6.85	0.39	e R 1.79	e R 4.60	1.28	17.26	e R 8.16
1990	1.80	1.59	1.60	4.67	7.79	5.53	11.40	9.46	3.24	R 5.64	R 7.97	0.47	1.77	R 4.86	1.06	17.70	R 8.74
1991	1.72	1.56	1.57	4.76	7.41	4.78	11.87	9.02	2.03	R 5.83	7.57	0.53	1.85	4.59	1.05	17.89	R 8.65
1992	1.74	1.53	1.54	4.73	7.12	4.47	9.65	9.04	2.25	R 5.57	7.50	0.43	R 1.77	R 4.57	1.01	R 18.43	8.73
1993	1.68	1.52	1.54	5.14	6.93	4.16	10.04	8.89	2.02	R 5.64	R 7.34	0.43	R 1.71	R 4.61	1.07	18.30	R 8.87
1994	1.57	1.52	1.52	4.86	6.88	3.84	10.54	8.85	2.07	R 5.70	R 7.33	0.45	R 1.75	4.55	1.02	18.20	8.77
1995	1.57	1.52	1.52	4.69	6.77	3.87	11.38	9.06	2.36	R 6.07	R 7.66	0.46	R 1.72	4.65	1.01	18.38	R 8.92
1996	1.68	1.50	1.51	5.59	7.41	4.70	12.62	9.68	2.82	6.49	8.36	0.42	1.72	5.03	0.98	17.88	9.34
1997	—	1.47	1.37	6.07	7.22	4.44	12.04	9.57	2.77	5.94	8.13	0.43	1.62	4.98	0.98	18.02	9.32
	Expenditures in Million Nominal Dollars																
1970	R (s)	113.3	113.6	126.6	163.6	44.9	17.8	727.8	65.0	R 86.0	R 1,105.0	—	R 16.5	R 1,361.7	-101.4	494.4	R 1,754.8
1975	—	220.7	220.7	205.0	344.3	131.9	41.2	1,484.6	462.4	R 123.9	R 2,588.3	27.7	R 19.7	R 3,061.4	-455.1	1,280.5	R 3,886.7
1980	33.0	365.1	398.1	548.0	980.1	444.2	70.2	3,092.9	575.1	R 557.9	R 5,720.5	92.8	R 25.2	R 6,784.5	-726.4	2,581.5	R 8,639.6
1981	39.4	460.9	500.3	575.3	1,146.1	478.9	76.6	3,466.4	386.6	R 493.7	R 6,048.4	116.2	R 29.7	R 7,269.9	-662.4	2,769.3	R 9,376.8
1982	29.7	475.1	504.8	723.5	1,024.3	444.1	83.1	3,231.2	242.8	R 397.2	R 5,422.7	106.3	R 30.3	R 6,787.5	-538.1	3,023.9	R 9,273.3
1983	38.1	431.4	469.5	810.9	1,160.8	391.2	93.3	2,899.2	R 208.5	R 394.4	R 5,147.3	94.2	R 30.6	R 6,552.5	-470.2	3,275.9	R 9,358.3
1984	51.0	R 508.3	R 559.3	809.6	1,182.4	359.2	110.4	2,935.9	234.9	R 437.0	R 5,259.9	97.2	R 40.8	R 6,766.8	-527.1	R 3,245.2	R 9,484.9
1985	45.7	R 485.7	R 531.4	783.7	1,141.6	357.1	140.5	R 3,086.8	221.1	R 552.6	R 5,499.8	131.5	R 38.2	R 6,984.6	-514.6	3,343.0	R 9,813.0
1986	42.1	R 470.2	R 512.2	706.0	974.0	283.6	114.8	R 2,387.3	158.2	R 378.5	R 4,296.4	120.4	R 37.3	R 5,672.4	-510.6	3,643.1	R 8,804.9
1987	43.4	495.5	538.9	707.2	1,044.5	327.8	140.4	R 2,788.8	196.1	R 347.5	R 4,845.0	108.9	R 32.8	R 6,232.8	-538.8	3,868.1	R 9,562.1
1988	42.8	R 494.8	R 537.6	701.7	1,133.2	331.6	139.8	R 2,932.4	133.6	R 332.2	R 5,002.8	119.0	R 34.2	R 6,395.3	-522.4	3,964.8	R 9,837.7
1989	44.0	525.1	R 569.2	851.4	1,102.3	383.1	136.6	R 3,184.6	191.8	R 335.2	R 5,333.6	60.1	e R 46.7	e R 6,861.1	-568.3	R 4,307.6	e R 10,600.4
1990	42.7	R 490.0	R 532.7	830.8	1,267.6	489.8	164.2	R 3,495.0	152.2	R 328.1	R 5,897.0	119.6	R 38.5	R 7,418.6	-508.9	4,374.5	R 11,284.1
1991	44.9	R 513.1	R 558.0	818.0	1,156.9	318.7	196.4	R 3,341.2	108.8	R 332.7	R 5,454.9	135.2	R 39.6	R 7,005.6	-532.0	R 4,557.9	R 11,031.5
1992	45.4	483.7	529.1	932.8	1,095.0	294.4	163.9	R 3,398.0	105.5	R 318.9	R 5,375.7	108.2	R 40.0	R 6,985.7	-500.1	4,781.6	R 11,267.2
1993	43.4	R 489.3	R 532.7	1,115.4	1,136.6	279.6	172.5	R 3,447.2	99.9	R 329.9	R 5,465.8	103.7	R 42.0	R 7,259.7	-561.6	R 5,053.1	R 11,751.1
1994	40.7	456.0	496.7	1,107.0	1,171.3	261.3	185.0	R 3,489.2	97.0	R 336.4	R 5,540.2	123.2	R 47.1	R 7,314.1	-548.1	5,075.7	R 11,841.6
1995	40.8	R 477.0	R 517.8	1,139.9	1,200.9	232.1	194.4	3,751.1	74.5	R 344.6	R 5,797.6	122.5	R 54.8	R 7,632.6	-547.5	R 5,311.7	R 12,396.8
1996	44.1	528.0	572.2	1,314.2	1,557.0	245.5	228.2	4,026.4	65.5	377.1	6,499.6	117.7	54.5	8,558.2	-563.8	5,316.8	13,311.2
1997	—	524.8	524.8	1,448.2	1,547.2	236.5	220.9	4,095.2	82.6	361.4	6,543.9	122.7	50.1	8,689.6	-587.2	5,348.5	13,450.9

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 288. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Virginia

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.34	1.45	1.37	1.44	2.27	1.45	0.73	R 1.42	6.11	R 2.41
1975	2.73	2.20	2.69	2.99	4.43	2.88	1.45	R 2.56	11.05	R 5.08
1980	3.85	4.20	7.10	7.96	8.07	7.32	3.70	R 5.67	17.80	R 10.08
1981	4.39	4.55	8.69	10.03	8.77	8.86	4.56	R 6.39	18.15	R 11.23
1982	4.23	5.88	8.49	10.01	9.72	8.86	4.42	R 7.01	19.81	R 12.37
1983	3.69	6.83	8.07	R 6.90	10.72	R 8.23	4.28	R 7.26	20.56	R 12.92
1984	4.07	6.75	8.21	R 7.49	10.23	R 8.40	4.35	R 7.22	19.53	R 12.26
1985	3.92	6.76	7.89	R 7.26	10.48	R 7.96	4.18	R 7.14	19.49	R 12.05
1986	3.59	6.24	6.43	R 6.03	9.86	R 6.66	3.35	R 6.24	19.48	R 11.79
1987	3.53	5.63	5.93	R 6.13	10.08	R 6.47	3.20	R 5.87	19.62	R 11.72
1988	3.49	5.58	6.01	R 5.87	9.81	R 6.37	3.23	R 5.82	19.29	R 11.52
1989	3.59	6.33	6.49	R 6.23	11.03	R 7.04	3.57	R 6.49	20.33	R 12.52
1990	3.48	6.48	8.25	R 7.34	13.03	R 8.95	3.53	R 7.31	21.24	R 13.96
1991	3.35	6.53	7.54	R 6.27	13.55	R 8.50	3.37	R 7.12	21.51	R 14.14
1992	3.32	6.44	6.93	R 5.14	10.59	R 7.36	3.08	R 6.57	22.37	R 13.94
1993	3.37	7.19	6.66	R 4.72	11.58	R 7.23	3.02	R 6.90	22.19	R 14.13
1994	3.45	7.35	6.37	R 5.21	12.94	R 7.49	2.93	R 7.08	22.72	R 14.53
1995	3.35	6.96	6.30	R 5.26	13.31	R 7.71	2.87	R 6.94	22.99	R 14.55
1996	3.37	7.65	7.10	5.67	14.64	8.41	3.29	7.62	22.27	14.24
1997	3.30	8.24	7.07	5.64	13.85	8.28	3.27	8.01	22.71	14.79
	Expenditures in Million Nominal Dollars									
1970	5.3	73.8	77.7	37.1	12.3	127.1	3.8	R 210.1	240.5	R 450.6
1975	7.3	109.5	142.4	34.9	25.7	203.0	7.9	R 327.7	598.6	R 926.3
1980	6.4	233.9	305.3	63.4	44.7	413.3	15.8	R 669.4	1,198.3	R 1,867.7
1981	4.9	237.6	282.0	52.3	44.4	378.7	19.6	R 640.8	1,274.1	R 1,914.9
1982	8.9	291.0	248.9	59.5	46.0	354.4	20.5	R 674.8	1,374.9	R 2,049.7
1983	8.2	332.7	253.7	R 46.2	60.3	R 360.3	19.6	R 720.8	1,514.1	R 2,234.9
1984	10.3	359.7	264.5	R 41.9	64.1	R 370.5	29.4	R 770.0	1,446.6	R 2,216.6
1985	9.3	342.4	236.3	R 148.6	68.1	R 453.0	27.6	R 832.3	1,500.6	R 2,332.9
1986	7.7	334.3	243.3	R 84.5	54.9	R 382.8	21.5	R 746.3	1,677.6	R 2,423.9
1987	10.1	324.8	229.4	R 75.9	68.9	R 374.2	17.1	R 726.2	1,799.3	R 2,525.5
1988	9.0	340.1	243.9	R 87.6	63.9	R 395.4	17.9	R 762.5	1,856.0	R 2,618.5
1989	6.1	406.7	237.7	R 80.2	84.6	R 402.5	20.6	R 835.9	2,027.0	R 2,862.9
1990	7.2	347.2	245.6	R 48.2	100.3	R 394.1	18.9	R 767.5	2,038.6	R 2,806.1
1991	4.1	368.6	201.9	R 47.0	113.6	R 362.5	19.0	R 754.1	2,173.2	R 2,927.4
1992	5.7	417.7	192.9	R 37.4	93.2	R 323.5	18.3	R 765.2	2,273.3	R 3,038.5
1993	9.2	491.7	192.5	R 39.8	99.9	R 332.2	19.3	R 852.4	2,458.7	R 3,311.1
1994	9.5	497.3	182.2	R 37.1	114.7	R 334.1	18.4	R 859.3	2,507.2	R 3,366.5
1995	8.4	493.4	183.3	R 36.4	138.5	R 358.3	20.0	R 880.0	2,625.8	R 3,505.8
1996	11.7	605.1	242.2	49.7	160.8	452.7	22.9	1,092.5	2,632.9	3,725.3
1997	5.3	635.6	221.7	50.6	152.2	424.6	16.6	1,082.0	2,628.1	3,710.1

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 289. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Virginia

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.42	0.94	1.08	0.65	1.48	2.85	0.32	1.18	0.73	0.94	4.84	2.53
1975	1.47	1.69	2.37	2.36	2.79	4.77	1.85	2.60	1.45	1.93	9.49	R 5.49
1980	1.64	3.71	6.46	5.94	4.60	9.97	3.91	6.32	3.70	4.30	15.79	10.06
1981	1.90	4.09	8.01	7.39	5.83	11.14	5.03	7.96	4.56	5.06	16.07	R 11.02
1982	1.93	5.24	7.69	7.23	6.33	10.54	4.55	7.27	4.42	5.53	17.16	11.60
1983	1.72	6.06	6.38	R 6.90	6.60	9.25	4.47	6.56	4.28	5.97	17.88	R 11.83
1984	R 1.74	5.89	6.54	R 7.49	6.73	9.03	4.75	R 6.47	4.35	R 5.80	17.51	R 11.90
1985	1.69	5.76	6.16	R 7.26	9.63	9.33	4.29	R 6.51	NA	R 5.74	17.35	12.05
1986	1.61	5.07	4.00	R 6.03	8.98	6.97	2.40	R 4.11	NA	R 4.49	17.21	11.40
1987	1.55	4.46	4.14	R 6.13	8.74	7.60	3.05	R 4.53	NA	R 4.27	17.12	R 11.21
1988	1.53	4.28	3.77	R 5.87	8.78	7.85	2.32	R 4.47	NA	R 4.15	16.55	R 11.03
1989	1.56	4.74	4.41	R 6.23	6.23	8.55	2.72	R 5.09	NA	R 4.70	16.89	R 11.72
1990	1.64	4.73	5.62	R 7.34	9.53	9.46	3.31	R 6.28	NA	R 5.01	17.15	R 12.18
1991	1.61	4.66	5.05	R 6.27	10.14	9.02	2.32	R 5.85	NA	R 4.86	17.16	12.30
1992	1.63	4.79	4.77	R 5.14	8.64	9.04	2.41	R 5.40	NA	4.79	17.73	R 12.34
1993	R 1.64	5.36	4.63	R 4.72	8.49	8.89	2.22	R 4.96	3.02	R 5.00	17.53	R 12.21
1994	1.66	5.46	4.34	R 5.21	9.18	8.85	2.36	R 4.86	2.93	R 5.06	16.94	R 11.92
1995	1.69	4.93	4.48	R 5.26	9.44	9.06	2.68	R 5.03	2.87	R 4.76	17.10	R 11.82
1996	1.73	5.71	5.33	5.67	10.31	9.68	3.13	5.70	3.29	5.42	16.79	11.67
1997	1.76	6.18	4.99	5.64	10.53	9.57	2.91	5.57	3.27	5.87	16.84	12.01
	Expenditures in Million Nominal Dollars											
1970	3.1	28.9	13.1	R (s)	1.4	3.1	R (s)	18.2	(s)	R 50.3	178.4	R 228.7
1975	7.2	55.5	26.8	0.6	2.9	7.8	2.9	40.8	(s)	R 103.7	453.5	R 557.2
1980	5.0	144.9	61.5	1.5	4.5	19.4	10.9	97.8	(s)	R 248.1	R 914.1	R 1,162.2
1981	3.9	147.5	65.1	1.6	5.2	30.3	12.0	114.2	(s)	R 266.1	997.7	R 1,263.8
1982	7.6	205.0	66.4	1.4	5.3	19.2	14.8	107.1	(s)	R 320.2	1,082.9	R 1,403.1
1983	7.0	239.8	101.8	R 2.3	6.5	31.7	13.6	155.9	(s)	R 403.2	R 1,170.2	R 1,573.4
1984	8.0	212.6	107.0	R 1.3	7.4	19.4	19.7	R 154.9	0.7	R 376.3	R 1,232.4	R 1,608.7
1985	7.4	203.3	88.2	R 8.8	11.1	22.4	11.9	R 142.4	NA	R 353.1	R 1,272.5	R 1,625.5
1986	6.4	186.8	65.9	R 4.9	8.8	14.5	14.7	R 108.9	NA	R 302.1	R 1,380.2	R 1,682.3
1987	8.2	182.8	62.7	R 6.9	10.6	20.3	19.0	R 119.5	NA	R 310.5	R 1,459.5	R 1,770.0
1988	7.3	187.0	57.1	R 9.0	10.1	20.7	5.9	R 102.7	NA	R 297.0	R 1,476.1	R 1,773.0
1989	4.9	217.8	60.4	R 9.9	8.4	22.6	3.6	R 105.0	NA	R 327.7	R 1,599.4	R 1,927.1
1990	6.3	202.3	77.6	R 5.8	13.0	R 23.7	4.6	R 124.6	NA	R 333.2	R 1,643.1	R 1,976.3
1991	3.6	213.8	62.8	R 5.3	15.0	R 16.2	1.7	R 100.8	NA	R 318.3	R 1,720.2	R 2,038.4
1992	5.1	252.3	54.3	R 3.7	13.4	R 16.4	3.4	R 91.2	NA	R 348.5	R 1,806.2	R 2,154.7
1993	8.3	296.1	65.4	R 4.3	12.9	5.7	2.5	R 90.8	1.6	R 395.2	R 1,878.9	R 2,274.1
1994	8.5	300.2	62.3	R 3.0	14.4	6.4	2.3	R 88.4	1.5	R 398.6	R 1,827.5	R 2,226.1
1995	7.8	289.3	67.1	R 8.2	17.4	6.3	3.5	R 102.4	1.5	R 401.1	R 1,928.0	R 2,329.1
1996	11.2	351.4	107.0	8.9	20.0	6.6	5.1	147.6	1.9	512.0	1,938.0	2,450.1
1997	5.2	399.2	89.1	11.9	20.4	6.9	2.4	130.7	1.6	536.7	1,962.9	2,499.6

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
(s)=Value less than 0.05 million nominal dollars.

NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 290. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Virginia

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	0.40	0.42	0.42	0.49	0.68	0.60	0.65	1.48	5.08	2.85	0.34	R 1.01	R 0.79	R 1.47	R 0.61	3.08	R 0.84
1975	—	1.47	1.47	1.08	1.82	2.19	2.36	2.79	7.48	4.77	1.81	R 2.90	R 2.19	R 1.47	1.74	7.37	R 2.47
1980	1.86	1.64	1.69	2.99	3.60	5.33	5.94	4.60	14.36	9.97	3.58	R 7.43	R 5.62	R 1.47	R 3.73	12.19	R 4.77
1981	1.96	1.90	1.91	3.51	4.79	6.68	7.39	5.83	18.00	11.14	4.74	R 9.45	R 7.26	R 1.47	R 4.17	12.40	R 5.36
1982	2.05	1.93	1.95	4.27	4.14	6.57	7.23	6.33	17.25	10.54	4.23	R 8.74	R 6.64	R 1.47	R 4.11	13.69	R 5.61
1983	1.58	1.72	1.68	4.89	4.11	6.74	R 6.77	6.60	16.98	9.25	4.27	R 8.32	R 6.40	R 1.47	R 3.88	13.81	R 5.42
1984	1.91	R 1.74	1.78	4.77	4.50	6.70	R 6.83	6.73	17.63	9.03	4.75	R 8.59	R 6.51	R 1.47	R 3.96	12.78	R 5.25
1985	1.93	1.69	1.74	4.60	4.93	6.51	R 6.54	9.63	17.61	9.33	4.29	R 8.23	R 6.53	R 1.47	R 4.06	12.47	R 5.31
1986	1.75	1.61	1.64	3.81	4.21	4.60	R 4.46	8.98	15.59	6.97	2.40	R 5.94	R 4.82	R 1.50	R 3.18	12.08	R 4.57
1987	1.72	1.55	1.59	3.50	3.29	4.43	R 4.45	8.74	13.58	7.60	3.05	R 6.77	R 4.86	R 1.50	R 3.06	12.12	R 4.46
1988	1.73	1.53	1.57	3.22	3.25	3.87	R 4.09	8.78	14.62	7.85	2.32	R 5.81	R 4.57	R 1.50	R 2.87	11.95	R 4.35
1989	1.75	1.56	1.60	3.76	2.96	4.85	R 5.11	6.23	14.48	8.55	2.72	R 6.17	R 4.62	d R 1.29	d R 2.98	12.33	d R 4.51
1990	1.80	1.64	1.67	3.52	2.99	5.64	R 6.34	9.53	14.60	9.46	3.31	R 6.85	R 5.13	R 1.20	R 3.15	12.51	R 4.61
1991	1.72	1.61	1.63	3.66	3.10	5.22	R 5.51	10.14	16.80	9.02	2.32	R 6.06	R 5.24	R 1.30	R 3.06	12.39	R 4.50
1992	1.74	1.63	1.65	3.45	2.35	5.04	R 4.90	8.64	18.32	9.04	2.41	R 6.34	R 4.88	R 1.31	R 3.02	12.54	R 4.57
1993	1.68	R 1.64	R 1.65	3.71	2.96	4.74	R 4.65	8.49	18.96	8.89	2.22	R 5.66	R 4.89	R 1.29	R 3.20	12.29	R 4.79
1994	1.57	1.66	1.63	3.03	2.91	4.63	R 4.78	7.82	19.11	8.85	2.36	R 5.64	R 4.84	R 1.35	R 2.98	12.19	R 4.58
1995	1.57	1.69	1.66	3.25	3.28	4.66	R 4.42	7.93	R 19.41	9.06	2.68	R 6.02	R 5.19	R 1.36	R 3.14	12.20	R 4.72
1996	1.68	1.73	1.72	3.92	3.33	5.40	5.50	9.21	20.08	9.68	3.13	6.89	5.75	1.23	3.55	11.69	5.03
1997	—	1.76	1.23	4.48	3.55	5.02	5.10	8.95	17.86	9.57	2.91	5.38	5.23	1.26	3.48	11.73	4.96
	Expenditures in Million Nominal Dollars																
1970	R (s)	41.8	42.1	22.5	10.2	15.3	1.5	3.8	8.9	9.8	8.6	R 9.0	R 67.0	R 12.6	R 144.3	75.5	R 219.8
1975	—	97.0	97.0	39.4	28.1	36.8	2.2	12.0	13.9	11.5	85.4	R 20.5	R 210.5	R 11.6	R 358.4	228.3	R 586.7
1980	33.0	115.4	148.4	161.9	62.6	111.0	9.0	20.3	36.8	14.6	110.9	R 328.6	R 693.7	R 9.1	R 1,013.1	467.5	R 1,480.6
1981	39.4	138.7	178.1	181.7	74.9	142.8	9.1	24.9	44.2	13.6	59.3	R 246.1	R 614.8	R 9.6	R 984.1	495.3	R 1,479.5
1982	29.7	140.8	170.5	214.6	55.3	140.7	7.6	30.1	38.6	11.3	59.8	R 176.5	R 519.9	R 9.3	R 914.3	563.9	R 1,478.2
1983	38.1	133.2	171.3	223.8	77.1	114.7	4.0	24.3	39.8	7.7	59.3	R 166.4	R 493.3	R 10.5	R 898.8	589.0	R 1,487.8
1984	51.0	R 151.9	R 202.9	223.4	109.1	115.1	2.1	35.5	44.1	18.9	84.5	R 176.5	R 585.8	R 10.7	R 1,022.7	562.5	R 1,585.2
1985	45.7	R 138.1	R 183.8	232.5	132.0	112.8	R 7.7	57.8	41.0	33.6	83.5	R 156.4	R 624.8	R 10.6	R 1,051.8	566.4	R 1,618.2
1986	42.1	R 133.9	R 176.0	183.2	124.2	88.1	R 4.8	49.2	35.5	25.2	46.5	R 73.3	R 446.9	R 15.7	R 821.8	580.5	R 1,402.3
1987	43.4	141.0	184.4	195.3	96.2	89.7	R 3.1	58.3	35.0	29.5	46.1	R 83.8	R 441.7	R 15.7	R 837.1	604.1	R 1,441.2
1988	42.8	R 142.3	R 185.1	172.3	77.6	87.4	R 3.5	62.6	36.3	R 28.4	34.7	R 69.9	R 400.5	R 16.3	R 774.2	627.8	R 1,402.0
1989	44.0	137.9	R 182.0	217.1	82.4	97.4	4.1	41.4	36.9	34.5	41.4	R 72.3	R 410.3	d R 26.2	d R 835.6	676.6	d R 1,512.3
1990	42.7	R 153.2	R 195.9	263.7	93.3	99.6	R 2.7	48.7	38.3	R 35.0	51.3	R 88.5	R 457.5	R 19.6	R 936.7	688.2	R 1,624.9
1991	44.9	R 172.4	R 217.3	217.6	76.9	88.4	2.9	64.1	39.4	31.8	26.3	R 106.7	R 436.6	R 20.6	R 892.1	659.8	R 1,551.9
1992	45.4	145.6	191.0	235.6	58.5	73.2	R 1.6	54.1	43.8	R 31.7	35.2	R 114.6	R 412.7	21.7	R 861.0	697.0	R 1,557.9
1993	43.4	R 116.9	R 160.3	270.5	72.7	81.2	R 2.3	56.4	46.2	29.6	29.3	R 102.4	R 420.1	R 22.7	R 873.6	710.4	R 1,584.0
1994	40.7	116.7	157.4	258.3	75.9	66.2	R 2.7	50.5	48.6	31.0	29.4	R 103.9	R 408.2	R 27.2	R 851.1	735.9	R 1,587.0
1995	40.8	R 108.6	R 149.4	313.3	79.3	93.5	R 3.1	36.5	R 48.6	34.2	21.7	R 104.6	R 421.4	R 33.3	R 917.3	753.4	R 1,670.8
1996	44.1	112.4	156.5	327.0	77.6	137.7	3.6	45.6	48.8	38.9	26.9	123.7	502.8	29.7	1,016.0	741.5	1,757.4
1997	—	108.5	108.5	380.0	81.9	149.1	2.6	46.8	45.8	40.3	35.2	108.6	510.3	31.9	1,030.7	753.2	1,783.9

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 291. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Virginia

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.42	—	2.17	1.25	0.73	1.48	5.08	2.85	0.30	1.95	1.95	—	1.95
1975	1.47	—	3.45	2.72	2.03	2.79	7.48	4.77	1.61	3.91	3.91	—	3.91
1980	—	—	9.02	7.27	6.46	4.60	14.36	9.97	3.32	8.72	8.72	14.65	8.73
1981	—	—	10.84	8.83	7.61	5.83	18.00	11.14	4.38	9.98	9.98	17.52	9.98
1982	—	—	10.92	8.48	7.18	6.33	17.25	10.54	4.17	9.56	9.56	17.82	9.56
1983	—	—	10.44	8.67	6.43	6.60	16.98	9.25	R 4.23	8.66	8.66	18.06	8.67
1984	—	—	10.27	8.36	6.16	6.73	17.63	9.03	4.45	8.48	8.48	22.72	8.49
1985	—	—	9.99	8.34	5.79	9.63	17.61	9.33	4.18	8.55	8.55	17.33	8.55
1986	—	—	8.41	6.34	3.83	8.98	15.59	6.97	1.91	6.29	6.29	18.20	6.29
1987	—	—	7.55	6.93	4.05	8.74	13.58	7.60	2.81	6.85	6.85	16.57	6.86
1988	—	—	7.41	6.74	3.77	8.78	14.62	7.85	1.99	6.89	6.89	16.10	6.90
1989	—	—	8.28	7.26	4.34	6.23	14.48	8.55	2.34	7.53	7.53	15.09	7.54
1990	—	—	9.32	8.40	5.53	9.53	14.60	9.46	3.03	R 8.47	R 8.47	15.56	8.47
1991	—	—	8.71	8.10	4.78	10.14	16.80	9.02	1.82	R 8.09	R 8.09	15.67	8.09
1992	—	—	8.54	7.79	4.47	8.64	18.32	9.04	2.05	8.10	8.10	16.32	8.11
1993	—	5.38	8.24	7.72	4.16	8.49	18.96	8.89	1.83	7.99	7.99	16.30	R 8.00
1994	—	2.48	7.96	7.72	3.84	8.14	19.11	8.85	1.91	7.96	7.96	16.50	7.97
1995	—	2.23	8.36	7.64	3.87	8.46	R 19.41	9.06	2.21	8.18	8.18	15.26	8.19
1996	—	2.70	9.29	8.25	4.70	8.51	20.08	9.68	2.57	8.91	8.91	15.40	8.91
1997	—	4.84	9.39	8.06	4.44	8.01	17.86	9.57	2.64	8.75	8.74	15.08	8.75
	Expenditures in Million Nominal Dollars												
1970	R (s)	—	3.9	56.0	44.9	R (s)	13.3	714.9	22.4	855.7	855.7	—	855.7
1975	(s)	—	4.4	130.4	131.9	0.6	19.4	1,465.4	64.4	1,816.5	1,816.5	—	1,816.5
1980	—	—	9.9	475.3	444.2	0.8	46.1	3,058.9	92.3	4,127.6	4,127.6	R 1.6	R 4,129.2
1981	—	—	10.1	631.4	478.9	2.1	55.5	3,422.6	115.8	4,716.4	4,716.4	2.2	4,718.6
1982	—	—	9.9	555.1	444.1	1.8	48.5	3,200.6	80.1	4,340.1	4,340.1	2.2	4,342.3
1983	—	—	8.6	681.1	391.2	2.2	50.0	2,859.8	R 66.8	R 4,059.5	R 4,059.5	R 2.6	R 4,062.2
1984	—	—	6.6	685.1	359.2	3.4	55.3	2,897.6	63.4	4,070.7	4,070.7	R 3.7	R 4,074.4
1985	—	—	6.6	693.2	357.1	3.5	51.5	R 3,030.9	89.9	R 4,232.8	R 4,232.8	R 3.5	R 4,236.4
1986	—	—	6.6	571.4	283.6	1.8	44.6	R 2,347.5	36.1	3,291.6	3,291.6	R 4.8	R 3,296.4
1987	—	—	2.8	655.5	327.8	2.6	43.9	R 2,739.0	48.7	R 3,820.3	R 3,820.3	R 5.1	R 3,825.4
1988	—	—	2.8	738.2	331.6	3.1	45.6	R 2,883.3	34.9	R 4,039.3	R 4,039.3	R 4.9	R 4,044.2
1989	—	—	3.1	692.9	383.1	2.1	46.3	R 3,127.5	38.5	R 4,293.6	R 4,293.6	R 4.6	R 4,298.1
1990	—	—	3.3	828.5	489.8	2.2	48.0	R 3,436.3	64.1	R 4,872.2	R 4,872.2	R 4.6	R 4,876.8
1991	—	—	5.1	795.7	318.7	3.7	49.4	R 3,293.3	43.2	R 4,509.1	R 4,509.1	R 4.7	R 4,513.9
1992	—	—	4.4	767.3	294.4	3.2	55.0	R 3,349.9	37.0	R 4,511.0	R 4,511.0	R 5.1	R 4,516.1
1993	—	(s)	4.4	792.2	279.6	3.3	57.9	R 3,411.9	27.5	R 4,576.9	R 4,576.9	R 5.1	R 4,582.0
1994	—	R (s)	4.1	849.6	261.3	5.4	61.0	R 3,451.9	23.7	R 4,656.9	R 4,656.9	R 5.0	R 4,661.9
1995	—	R (s)	3.6	850.1	232.1	2.0	60.9	3,710.7	27.2	R 4,886.6	R 4,886.7	R 4.5	R 4,891.1
1996	—	(s)	3.7	1,060.8	245.5	1.7	61.2	3,980.9	20.0	5,373.8	5,373.9	4.5	5,378.4
1997	—	(s)	2.4	1,082.3	236.5	1.5	57.5	4,048.0	24.6	5,452.8	5,453.0	4.3	5,457.3

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 292. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Virginia

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.38	0.29	0.31	0.35	0.35	0.32	—	—	0.35
1975	1.14	0.99	1.84	2.18	—	1.85	0.28	—	1.24
1980	1.71	2.89	3.94	5.86	—	4.03	0.74	—	2.00
1981	1.93	3.55	5.06	7.05	—	5.22	0.59	—	1.64
1982	1.93	3.94	4.67	6.95	—	4.88	0.55	—	1.41
1983	1.70	4.20	4.48	5.82	—	4.60	0.46	—	1.20
1984	1.83	4.23	4.62	5.95	—	4.77	0.53	—	1.35
1985	1.80	3.44	4.37	5.57	—	4.60	0.55	—	1.18
1986	1.71	1.93	2.09	3.39	—	2.16	0.53	—	1.14
1987	1.58	2.42	3.06	3.73	—	3.11	0.56	—	1.23
1988	1.55	2.05	2.30	3.38	—	2.38	0.53	—	1.11
1989	1.55	2.48	2.78	4.01	—	2.88	0.39	—	1.28
1990	1.55	2.58	3.60	5.83	—	4.14	0.47	—	1.06
1991	1.52	1.82	2.13	4.64	—	2.36	0.53	—	1.05
1992	1.47	2.37	2.33	4.71	—	2.59	0.43	—	1.01
1993	1.47	2.79	2.03	4.11	—	2.16	0.43	—	1.07
1994	1.45	2.57	1.98	3.85	—	2.20	0.45	—	1.02
1995	1.45	2.59	2.23	3.65	—	2.45	0.46	—	1.01
1996	1.42	2.82	2.62	4.67	—	3.18	0.42	—	0.98
1997	1.39	2.74	2.69	4.34	—	2.90	0.43	—	0.98
	Expenditures in Million Nominal Dollars								
1970	63.1	1.3	33.8	1.5	1.8	37.0	—	—	101.4
1975	109.3	0.5	309.7	7.9	—	317.6	27.7	—	455.1
1980	238.2	7.3	361.0	27.1	—	388.1	92.8	—	726.4
1981	313.4	8.5	199.5	24.8	—	224.3	116.2	—	662.4
1982	317.8	12.9	88.0	13.1	—	101.2	106.3	—	538.1
1983	283.1	14.6	68.8	9.4	—	78.3	94.2	—	470.2
1984	338.1	13.9	67.3	10.7	—	78.0	97.2	—	527.1
1985	330.9	5.5	35.7	11.0	—	46.7	131.5	—	514.6
1986	322.1	1.7	60.8	5.4	—	66.3	120.4	—	510.6
1987	336.2	4.3	82.3	7.0	—	89.4	108.9	—	538.8
1988	336.3	2.4	58.2	6.6	—	64.8	119.0	—	522.4
1989	376.2	9.8	108.3	13.9	—	122.2	60.1	—	568.3
1990	323.2	17.6	32.2	16.4	—	48.5	119.6	—	508.9
1991	333.0	18.0	37.6	8.2	—	45.8	135.2	—	532.0
1992	327.4	27.2	29.9	7.4	—	37.3	108.2	—	500.1
1993	355.0	57.1	40.6	5.3	—	45.9	103.7	—	561.6
1994	321.3	51.1	41.6	11.0	—	52.5	123.2	—	548.1
1995	352.2	43.8	22.1	6.9	—	29.0	122.5	—	547.5
1996	392.8	30.6	13.5	9.3	—	22.8	117.7	—	563.8
1997	405.9	33.2	20.4	5.0	—	25.5	122.7	—	587.2

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

—No consumption.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 293. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Washington

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.54	0.54	0.71	1.18	0.73	2.50	2.92	0.32	R 1.00	R 1.72	0.18	R 1.33	R 1.42	0.18	2.02	R 1.58
1975	—	0.61	0.61	1.60	2.55	2.04	4.46	4.62	1.93	R 2.01	R 3.25	0.24	R 1.48	R 2.49	0.46	2.77	R 2.79
1980	—	1.15	1.15	4.48	6.68	6.21	6.78	9.92	3.24	R 4.61	R 7.13	0.43	R 1.91	R 5.73	0.91	4.16	R 5.88
1981	—	1.30	1.30	4.90	7.86	7.56	8.26	11.03	5.09	R 4.80	R 8.25	0.48	R 2.05	R 6.60	1.00	5.31	R 6.84
1982	—	1.63	1.63	5.83	8.13	7.37	8.45	10.52	5.23	R 4.00	R 8.17	0.54	R 2.08	R 6.66	1.07	7.35	R 7.45
1983	—	1.74	1.74	5.68	7.87	6.61	9.24	9.09	5.16	R 4.81	R 7.80	0.58	R 1.97	R 6.25	1.26	8.26	R 7.44
1984	—	R 1.83	R 1.83	5.59	7.73	6.32	8.28	9.25	4.75	R 4.48	R 7.50	0.67	R 2.00	R 6.03	1.26	9.06	R 7.47
1985	—	1.74	1.74	5.23	7.66	6.03	9.56	9.31	4.53	R 4.48	R 7.38	0.71	R 1.87	R 5.68	1.17	9.18	R 7.36
1986	—	R 1.76	R 1.76	4.53	5.84	4.01	9.67	7.29	2.55	R 3.74	R 5.50	0.70	R 1.69	R 4.52	1.06	9.41	R 6.18
1987	—	1.73	1.73	3.81	6.27	4.02	9.35	7.36	2.59	R 3.00	R 5.58	0.70	R 1.76	R 4.53	1.28	9.80	R 6.20
1988	—	1.62	1.62	3.96	6.24	3.79	9.41	7.40	2.17	R 2.98	R 5.38	0.49	R 1.75	R 4.38	1.13	10.13	R 6.23
1989	—	1.62	1.62	4.02	6.95	4.50	9.78	8.03	2.19	R 3.08	R 5.92	0.48	e R 1.77	e R 4.74	1.31	10.34	e R 6.61
1990	—	1.65	1.65	3.60	7.81	5.68	10.53	9.45	2.70	R 3.03	R 6.79	0.47	2.17	R 5.38	R 1.10	10.03	R 7.05
1991	—	1.65	1.65	3.55	7.78	4.76	11.08	9.14	5.18	R 3.15	R 6.85	0.45	R 2.19	R 5.48	1.16	9.96	R 7.04
1992	—	1.45	1.45	3.75	7.75	4.56	10.91	9.47	1.85	R 2.55	R 6.00	0.38	R 2.04	R 4.83	R 1.08	10.12	R 6.55
1993	—	1.45	1.45	3.97	8.15	4.54	10.55	9.16	2.00	R 2.68	R 6.36	0.46	R 1.92	R 4.99	R 1.03	10.77	R 6.92
1994	—	1.46	1.46	3.97	7.93	4.09	10.75	9.66	2.03	R 2.72	R 6.47	0.47	R 1.98	R 5.07	R 1.03	11.85	R 7.13
1995	—	1.59	1.59	3.92	7.96	4.20	10.59	9.98	2.15	R 2.83	R 6.58	0.42	R 2.02	R 5.33	R 1.01	12.10	R 7.22
1996	—	1.63	1.63	3.90	8.99	4.96	10.86	10.81	2.10	3.15	7.46	0.46	2.01	5.81	1.27	12.35	7.73
1997	—	1.69	1.69	4.07	9.02	4.70	11.11	10.39	2.94	3.07	7.37	0.44	1.96	5.78	1.16	11.90	7.64
	Expenditures in Million Nominal Dollars																
1970	—	3.2	3.2	97.2	123.0	43.3	15.3	553.3	17.9	R 58.3	R 811.0	5.2	R 21.8	R 938.5	-5.2	316.8	R 1,250.0
1975	—	46.9	46.9	242.3	248.4	160.7	11.5	994.2	82.8	R 131.0	R 1,628.5	8.7	R 23.6	R 1,950.0	-46.5	523.9	R 2,427.3
1980	—	104.2	104.2	530.5	715.7	419.5	33.4	2,222.4	327.7	R 212.8	R 3,931.5	9.6	R 46.7	R 4,622.5	-95.7	953.4	R 5,480.2
1981	—	118.0	118.0	574.1	806.0	512.4	43.2	2,493.2	480.8	R 340.1	R 4,675.7	10.8	R 52.6	R 5,431.2	-103.3	1,428.1	R 6,756.0
1982	—	120.9	120.9	617.7	859.3	529.9	47.6	2,386.7	404.2	R 238.7	R 4,466.4	21.8	R 52.6	R 5,279.4	-110.1	1,846.7	R 7,016.0
1983	—	139.9	139.9	582.3	744.9	476.8	51.8	2,136.2	132.2	R 265.0	R 3,806.9	22.1	R 56.0	R 4,607.3	-136.4	2,093.3	R 6,564.1
1984	—	R 150.2	R 150.2	679.9	815.0	555.6	55.8	2,242.1	275.3	R 282.9	R 4,226.7	38.7	R 60.6	R 5,156.0	-167.1	R 2,341.4	R 7,330.3
1985	—	163.4	163.4	686.4	908.1	522.2	72.7	R 2,152.0	314.2	R 276.2	R 4,245.6	61.4	R 58.9	R 5,215.6	-203.6	2,331.7	R 7,343.7
1986	—	R 111.6	R 111.6	510.2	787.4	385.1	70.9	1,798.4	236.4	R 213.1	R 3,491.1	63.7	R 59.6	R 4,236.3	-155.9	2,312.1	R 6,392.5
1987	—	165.3	165.3	476.0	772.4	421.2	95.7	R 1,982.5	213.1	R 229.9	R 3,714.8	41.8	R 67.6	R 4,465.5	-194.0	2,427.3	R 6,698.8
1988	—	R 160.8	R 160.8	551.3	763.9	440.3	78.4	R 1,971.8	210.7	R 225.6	R 3,690.7	31.6	R 70.4	R 4,504.8	-182.6	2,800.5	R 7,122.7
1989	—	157.5	157.5	627.7	850.7	522.5	98.0	R 2,269.2	208.5	R 259.2	R 4,208.2	31.7	e R 72.7	e R 5,107.8	R -231.5	2,983.8	e R 7,860.1
1990	—	141.3	141.3	554.3	990.2	716.0	74.7	R 2,654.5	269.6	R 290.2	R 4,995.2	29.1	R 78.5	R 5,806.6	R -165.4	3,033.6	R 8,674.8
1991	—	R 146.9	R 146.9	590.0	903.4	572.7	81.8	R 2,604.9	552.2	R 306.8	R 5,021.8	20.4	R 80.8	R 5,857.1	R -149.7	3,069.8	R 8,777.2
1992	—	R 153.7	R 153.7	618.3	831.7	619.4	77.5	R 2,747.1	269.4	R 315.2	R 4,860.3	23.2	R 84.0	R 5,748.5	R -191.6	3,014.3	R 8,571.2
1993	—	141.8	141.8	771.1	732.3	570.3	74.0	R 2,761.4	196.9	R 274.5	R 4,609.5	35.2	R 78.5	R 5,628.7	R -177.2	R 3,248.2	R 8,699.7
1994	—	156.2	156.2	821.6	867.7	497.6	82.0	R 2,914.6	197.2	R 312.6	R 4,871.6	33.8	R 91.4	R 5,966.0	R -178.9	3,445.5	R 9,232.7
1995	—	R 110.6	R 110.6	835.3	872.1	547.6	93.5	3,084.0	235.4	R 330.8	R 5,163.3	30.8	R 97.3	R 6,205.1	R -122.1	3,568.6	R 9,651.7
1996	—	147.9	147.9	899.2	991.7	627.1	111.2	3,498.5	169.4	391.2	5,789.1	27.1	105.9	6,953.2	-184.5	3,625.7	10,394.4
1997	—	135.7	135.7	909.4	1,134.7	597.9	125.7	3,340.3	240.5	366.8	5,805.9	28.9	92.9	6,975.8	-176.1	3,530.5	10,330.3

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 294. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Washington

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	0.95	1.33	1.40	2.47	3.05	1.57	0.82	R 1.44	3.12	R 2.09
1975	1.14	2.18	2.80	3.61	5.73	2.97	1.62	R 2.50	3.94	R 3.20
1980	4.26	5.05	7.27	9.80	8.12	7.40	4.15	R 5.87	5.56	R 5.69
1981	4.56	5.73	8.40	11.52	10.59	9.05	5.10	R 7.02	6.73	R 6.84
1982	4.81	6.52	8.48	11.43	9.61	8.66	4.95	R 7.17	8.19	R 7.81
1983	3.75	6.59	8.37	R 8.53	10.32	R 8.68	4.79	R 7.10	10.46	R 9.26
1984	3.76	6.54	7.88	R 8.43	10.73	R 8.14	4.87	R 6.88	10.79	R 9.28
1985	3.67	6.35	7.76	R 11.34	8.46	R 7.92	4.68	R 6.67	11.14	R 9.39
1986	3.79	5.76	5.95	R 5.06	9.77	R 6.24	3.75	R 5.74	11.45	R 9.26
1987	3.76	5.25	6.10	R 4.76	10.26	R 6.59	3.58	R 5.53	12.20	R 9.55
1988	3.37	5.36	6.03	R 5.16	10.31	R 6.43	3.61	R 5.49	12.45	R 9.63
1989	3.66	5.32	6.71	R 5.46	13.86	R 7.55	4.00	R 5.80	12.69	R 9.92
1990	3.77	4.87	7.90	R 7.55	12.32	R 8.42	4.75	R 5.87	12.88	R 9.96
1991	5.21	4.54	7.80	R 5.91	12.62	R 8.64	4.54	R 5.53	12.79	R 9.72
1992	3.76	4.84	7.24	R 5.30	12.21	R 8.35	4.15	R 5.46	13.07	R 9.93
1993	3.77	5.05	7.67	R 5.81	11.37	R 8.62	4.06	R 5.52	13.48	R 10.14
1994	3.74	5.48	7.30	R 5.07	11.01	R 8.24	3.94	R 5.77	14.57	R 10.80
1995	3.77	5.67	7.39	R 5.12	10.83	R 8.44	3.86	R 5.95	14.55	R 10.86
1996	4.03	5.45	8.29	5.35	11.90	9.34	4.43	5.97	14.76	10.85
1997	3.71	5.39	8.75	4.97	13.21	10.01	4.41	6.07	14.51	10.81
	Expenditures in Million Nominal Dollars									
1970	R (s)	44.8	57.4	1.6	13.2	72.2	2.4	R 119.7	163.5	R 283.2
1975	R (s)	78.1	78.3	4.2	8.6	91.1	5.2	R 174.6	258.0	R 432.5
1980	5.5	158.0	144.9	3.6	18.7	167.2	16.9	R 347.5	463.8	R 811.3
1981	4.4	161.7	146.8	34.9	26.2	208.0	21.0	R 395.1	653.9	R 1,048.9
1982	6.5	200.2	160.4	4.7	24.0	189.1	22.0	R 417.8	814.7	R 1,232.5
1983	6.6	178.8	131.3	R 2.2	30.5	R 164.0	21.0	R 370.3	973.4	R 1,343.7
1984	6.3	200.0	139.7	R 3.6	18.6	R 161.8	23.6	R 391.7	983.8	R 1,375.4
1985	6.5	217.8	140.0	R 5.5	16.8	R 162.3	22.1	R 408.8	1,061.8	R 1,470.6
1986	2.6	179.1	106.4	R 1.4	15.2	R 123.1	17.3	R 322.1	1,035.3	R 1,357.4
1987	1.5	161.5	107.7	R 1.1	25.0	R 133.8	22.6	R 319.5	1,072.8	R 1,392.3
1988	3.0	192.4	106.2	R 1.7	20.0	R 128.0	23.7	R 347.1	1,156.0	R 1,503.1
1989	2.5	210.6	107.3	R 1.7	31.0	R 140.0	27.2	R 380.3	1,241.0	R 1,621.3
1990	1.9	202.5	138.0	R 2.1	29.3	R 169.4	38.0	R 411.8	1,265.9	R 1,677.7
1991	3.3	216.3	112.8	R 1.5	40.7	R 155.0	38.2	R 412.8	1,303.9	R 1,716.7
1992	2.7	215.2	77.1	R 0.9	38.9	R 116.9	36.8	R 371.6	1,267.7	R 1,639.3
1993	3.4	278.5	67.8	R 1.4	37.8	R 107.0	30.7	R 419.6	1,422.2	R 1,841.8
1994	2.5	302.9	64.7	R 1.9	37.8	R 104.4	29.2	R 439.0	1,475.5	R 1,914.5
1995	2.3	310.8	63.6	R 2.5	48.5	R 114.6	31.8	R 459.6	1,497.0	R 1,956.5
1996	0.8	354.2	72.4	3.4	54.1	129.8	36.4	521.2	1,611.7	2,132.9
1997	0.7	348.6	74.1	3.7	60.1	138.0	26.4	513.6	1,572.2	2,085.8

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 295. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Washington

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.52	1.05	1.21	0.84	1.19	2.92	0.33	1.21	0.82	1.12	3.21	1.90
1975	0.90	1.75	2.60	2.31	2.67	4.62	2.45	2.87	1.62	2.06	4.10	2.94
1980	2.28	4.59	6.90	7.04	5.60	9.92	3.61	6.76	4.15	5.03	5.67	5.35
1981	2.57	5.09	7.98	7.63	6.17	11.03	6.50	7.89	5.10	5.75	7.08	6.52
1982	2.67	5.90	8.02	8.87	7.53	10.52	6.62	7.92	4.95	6.50	8.50	R 7.55
1983	2.34	5.83	6.56	R 8.53	8.04	9.09	5.97	R 7.05	4.79	R 6.05	8.98	R 7.64
1984	2.36	5.82	6.16	R 8.43	7.43	9.25	4.56	R 5.85	4.87	R 5.66	10.24	R 7.95
1985	2.30	5.24	5.91	R 11.34	9.94	9.31	4.05	R 6.07	NA	R 5.48	10.57	R 7.87
1986	R 2.09	4.91	3.42	R 5.06	9.65	7.29	2.07	R 3.85	NA	4.48	10.95	8.07
1987	R 2.35	4.36	4.22	R 4.76	9.07	7.36	2.58	R 4.67	NA	R 4.45	10.92	R 8.01
1988	R 2.33	4.47	3.88	R 5.16	9.14	7.40	2.01	R 4.33	NA	R 4.36	11.01	R 7.88
1989	R 2.39	4.54	4.74	5.46	8.61	8.03	2.33	5.22	NA	4.68	11.47	8.43
1990	2.45	4.02	5.45	R 7.55	9.62	9.45	2.84	R 5.93	NA	4.49	11.63	8.56
1991	R 2.72	3.94	5.12	R 5.91	9.89	9.14	2.30	5.55	NA	4.25	11.78	8.56
1992	2.72	4.18	4.98	R 5.30	9.86	9.47	2.26	R 5.74	NA	4.36	12.15	9.20
1993	2.63	4.37	5.19	R 5.81	9.81	9.16	2.08	R 5.69	4.06	R 4.39	12.76	R 9.40
1994	R 3.05	4.71	4.50	R 5.07	10.75	9.66	2.37	R 5.33	3.94	R 4.72	13.43	R 9.99
1995	R 3.11	4.81	4.91	R 5.12	10.89	9.98	2.75	R 5.57	3.86	R 4.87	13.65	R 10.18
1996	2.99	4.64	5.82	5.35	11.50	10.81	3.07	6.33	4.43	4.81	13.86	10.24
1997	2.90	4.52	5.41	4.97	11.70	10.39	2.82	6.31	4.41	4.72	13.74	10.17
	Expenditures in Million Nominal Dollars											
1970	R (s)	20.4	15.7	R (s)	0.9	4.7	1.0	22.3	(s)	R 43.1	73.6	116.7
1975	R (s)	58.2	23.0	R (s)	0.7	9.1	5.5	38.6	(s)	R 97.1	145.3	R 242.4
1980	5.4	148.7	43.1	0.7	2.3	24.9	9.7	80.7	(s)	R 235.2	267.8	R 503.0
1981	4.6	153.1	34.6	0.8	2.7	24.9	31.1	94.1	0.5	R 252.3	431.1	R 683.4
1982	6.7	189.8	93.0	0.9	3.3	26.1	38.3	161.6	0.5	R 358.6	526.0	R 884.6
1983	7.6	174.5	65.9	R 17.9	4.2	24.3	23.4	R 135.7	0.5	R 318.4	559.2	R 877.6
1984	7.3	196.9	70.0	R 12.4	2.3	13.8	45.0	R 143.4	0.6	R 348.2	R 629.0	R 977.2
1985	7.6	193.3	147.1	R 13.2	3.5	17.4	19.0	R 200.4	NA	R 401.2	R 683.7	R 1,084.9
1986	R 2.7	161.7	48.3	R 1.5	2.6	11.8	1.8	R 66.1	NA	R 230.5	R 702.8	933.3
1987	1.8	145.6	57.3	R 21.8	3.9	R 12.2	0.9	R 96.1	NA	R 243.5	R 734.0	R 977.5
1988	3.9	168.3	59.7	R 25.4	3.1	10.8	2.8	R 101.9	NA	R 274.1	R 777.6	R 1,051.7
1989	3.1	180.2	47.1	R 20.1	3.4	11.0	1.0	82.7	NA	265.9	R 807.5	R 1,073.4
1990	2.3	160.1	66.4	R 0.6	4.0	R 14.0	1.0	R 85.9	NA	R 248.3	R 853.4	R 1,101.7
1991	3.2	169.5	48.1	0.6	5.6	9.1	1.5	64.8	NA	237.4	R 883.0	R 1,120.4
1992	3.6	163.3	23.6	R (s)	5.5	6.5	0.8	36.9	NA	203.8	R 933.9	R 1,137.6
1993	4.4	197.6	20.4	R (s)	5.8	2.3	0.8	29.7	2.5	231.7	R 999.7	R 1,231.4
1994	3.8	210.6	18.9	R (s)	6.5	2.5	0.7	R 29.0	2.4	R 245.9	R 1,071.1	R 1,317.0
1995	3.6	212.8	26.7	R (s)	8.6	3.1	1.9	R 40.7	2.4	R 259.6	R 1,113.9	R 1,373.4
1996	1.1	231.5	22.8	(s)	9.2	3.4	3.3	39.0	3.0	274.6	1,189.0	1,463.6
1997	0.9	220.8	26.9	(s)	9.4	3.3	0.8	40.8	2.6	265.1	1,181.0	1,446.1

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
(s)=Value less than 0.05 million nominal dollars.

NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 296. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Washington

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	0.52	0.52	0.38	0.66	0.73	0.84	1.19	5.08	2.92	0.33	R 0.60	R 0.67	R 1.45	R 0.60	0.97	R 0.70
1975	—	0.90	0.90	1.29	1.77	2.05	2.31	2.67	7.48	4.62	1.78	R 1.50	R 1.86	R 1.45	R 1.57	1.37	R 1.51
1980	—	2.28	2.28	4.09	3.70	6.06	7.04	5.60	14.36	9.92	3.36	R 3.07	R 4.26	R 1.45	R 3.82	2.26	R 3.28
1981	—	2.57	2.57	4.40	4.71	6.73	7.63	6.17	18.00	11.03	4.05	R 3.05	R 4.49	R 1.45	R 4.10	3.10	R 3.76
1982	—	2.67	2.67	5.28	4.02	8.08	8.87	7.53	17.25	10.52	4.48	R 2.47	R 4.76	R 1.45	R 4.44	5.62	R 4.81
1983	—	2.34	2.34	5.04	4.00	6.64	R 7.23	8.04	16.98	9.09	4.48	R 2.26	R 4.79	R 1.45	R 4.28	5.71	R 4.83
1984	—	2.36	2.36	4.94	4.09	6.41	R 7.01	7.43	17.63	9.25	4.56	R 2.36	R 4.66	R 1.45	R 4.32	6.88	R 5.18
1985	—	2.30	2.30	4.58	4.17	6.18	R 7.01	9.94	17.61	9.31	4.05	R 2.36	R 4.49	R 1.45	R 4.10	6.23	R 4.78
1986	—	R 2.09	R 2.09	3.49	3.94	3.91	R 4.88	9.65	15.59	7.29	2.07	R 1.90	R 3.27	R 1.46	R 3.03	6.29	R 4.04
1987	—	R 2.35	R 2.35	2.78	3.21	4.58	R 4.88	9.07	13.58	7.36	2.58	R 1.75	R 3.23	R 1.46	R 2.86	6.71	R 3.98
1988	—	R 2.33	R 2.33	2.89	3.41	4.23	R 5.05	9.14	14.62	7.40	2.01	R 1.65	R 2.85	R 1.46	R 2.67	7.68	R 4.34
1989	—	R 2.39	R 2.39	2.84	3.29	4.78	R 5.59	8.61	14.48	8.03	2.33	R 1.93	R 3.38	d R 1.40	d R 2.92	7.77	d R 4.64
1990	—	2.45	2.45	2.64	3.18	5.51	R 7.29	9.62	14.60	9.45	2.84	R 2.14	R 3.47	R 1.55	R 2.99	7.00	R 4.43
1991	—	R 2.72	R 2.72	2.71	3.40	5.37	R 6.16	9.89	16.80	9.14	2.30	R 2.22	R 3.49	1.58	R 3.01	6.72	R 4.35
1992	—	2.72	2.72	2.92	2.85	5.28	R 5.38	9.86	18.32	9.47	2.26	R 1.75	R 2.86	R 1.55	R 2.73	6.56	R 3.97
1993	—	2.63	2.63	3.11	3.30	5.60	R 5.21	9.81	18.96	9.16	2.08	R 1.58	R 2.87	R 1.55	R 2.80	7.02	R 4.17
1994	—	R 3.05	R 3.05	2.83	3.31	5.03	R 5.30	10.79	19.11	9.66	2.37	R 1.63	R 2.85	R 1.67	R 2.70	8.18	R 4.25
1995	—	R 3.11	R 3.11	2.64	3.34	5.35	R 5.48	10.23	R 19.41	9.98	2.75	R 1.81	R 3.01	R 1.66	R 2.70	8.67	R 4.36
1996	—	2.99	2.99	2.58	3.38	6.18	6.35	9.85	20.08	10.81	3.07	2.24	3.40	1.59	2.84	8.37	4.23
1997	—	2.90	2.90	3.02	3.44	5.83	6.49	9.45	17.86	10.39	2.82	2.12	3.40	1.67	3.03	7.58	4.23
	Expenditures in Million Nominal Dollars																
1970	—	2.7	2.7	32.0	10.2	19.6	0.5	1.1	8.2	8.4	13.1	R 21.5	R 82.5	R 19.3	R 136.5	79.7	R 216.1
1975	—	9.8	9.8	106.0	34.1	44.8	1.5	1.8	8.7	10.6	47.9	R 57.9	R 207.3	R 18.3	R 341.4	120.6	R 462.0
1980	—	16.2	16.2	220.5	50.3	150.7	1.5	10.5	17.6	14.5	113.3	R 79.2	R 437.7	R 29.4	R 703.8	221.7	R 925.5
1981	—	19.7	19.7	257.5	56.2	163.8	8.4	9.6	21.1	14.5	155.2	R 149.4	R 578.4	R 31.1	R 886.7	343.0	R 1,229.7
1982	—	21.2	21.2	226.9	47.8	209.2	5.1	16.1	18.5	15.2	187.5	R 103.2	R 602.6	R 30.1	R 880.8	505.8	R 1,386.6
1983	—	13.0	13.0	228.8	61.2	148.2	R 48.7	11.8	19.0	10.1	50.9	R 58.2	R 408.2	R 33.9	R 684.0	560.5	R 1,244.4
1984	—	R 10.7	R 10.7	282.8	71.3	160.4	R 32.8	22.0	21.1	27.9	171.7	R 80.4	R 587.5	R 34.6	R 915.6	728.3	R 1,643.9
1985	—	10.3	10.3	274.9	56.4	99.0	R 36.6	40.5	19.6	33.8	121.8	R 86.0	R 493.8	R 34.5	R 813.5	585.8	R 1,399.3
1986	—	R 15.4	R 15.4	169.0	62.9	77.9	R 18.0	43.0	17.0	28.4	74.1	R 60.5	R 381.8	R 41.7	R 608.0	573.5	R 1,181.5
1987	—	R 13.8	R 13.8	168.6	48.3	97.2	R (s)	R 58.6	16.7	R 28.5	79.2	R 89.6	R 418.5	R 41.6	R 642.6	620.0	R 1,262.6
1988	—	12.3	12.3	185.1	43.5	69.8	R (s)	46.0	17.3	26.3	70.0	R 86.1	R 359.4	R 43.2	R 600.0	866.5	R 1,466.5
1989	—	11.8	11.8	193.8	57.1	102.1	R (s)	R 55.7	17.6	29.4	19.5	R 110.8	R 392.5	d R 42.4	d R 640.5	934.8	d R 1,575.3
1990	—	12.7	12.7	190.8	52.4	142.2	R (s)	31.1	18.3	R 32.7	24.7	R 156.2	R 458.0	R 38.4	R 700.0	913.7	R 1,613.7
1991	—	R 11.6	R 11.6	203.4	67.0	123.8	R (s)	26.7	18.8	38.1	13.1	R 160.1	R 447.9	R 40.4	R 703.4	882.3	R 1,585.6
1992	—	9.2	9.2	221.5	57.2	103.9	R (s)	25.7	20.9	40.1	9.7	R 171.2	R 428.9	R 44.3	R 703.9	812.1	R 1,515.9
1993	—	9.2	9.2	275.2	64.4	85.8	R (s)	22.9	22.1	25.3	7.4	R 123.0	R 351.0	R 44.3	R 679.7	825.7	R 1,505.4
1994	—	R 11.8	R 11.8	295.2	77.6	83.1	R (s)	26.5	23.2	27.0	8.8	R 138.7	R 385.2	R 56.6	R 748.8	898.2	R 1,647.0
1995	—	13.2	13.2	281.8	78.8	84.4	0.7	29.8	23.2	29.1	8.8	R 157.9	R 412.5	R 61.0	R 768.5	957.0	R 1,725.5
1996	—	8.9	8.9	280.3	82.9	89.3	0.8	42.7	23.3	32.1	2.8	209.0	482.9	63.6	835.7	824.4	1,660.1
1997	—	9.3	9.3	323.2	92.3	90.7	0.8	51.5	21.9	32.4	2.5	183.8	475.9	62.0	870.4	776.5	1,647.0

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 297. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Washington

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.52	—	2.17	1.32	0.73	1.19	5.08	2.92	0.30	2.23	2.23	2.16	2.23
1975	0.90	—	3.45	2.65	2.04	2.67	7.48	4.62	2.14	3.73	3.73	3.20	3.73
1980	—	—	9.02	6.72	6.21	5.60	14.36	9.92	3.15	7.86	7.86	4.26	7.86
1981	—	—	10.84	8.18	7.56	6.17	18.00	11.03	5.73	9.41	9.41	5.05	9.41
1982	—	—	10.92	8.06	7.37	7.53	17.25	10.52	6.02	9.29	9.29	5.57	9.29
1983	—	—	10.44	8.57	6.61	8.04	16.98	9.09	5.61	8.50	8.50	6.13	8.50
1984	—	—	10.27	8.67	6.32	7.43	17.63	9.25	5.61	8.48	8.48	7.12	8.48
1985	—	—	9.99	8.77	6.03	9.94	17.61	9.31	5.02	8.24	8.24	8.28	8.24
1986	—	—	8.41	6.71	4.01	9.65	15.59	7.29	2.86	6.07	6.07	8.39	6.07
1987	—	—	7.55	7.22	4.02	9.07	13.58	7.36	2.60	6.19	6.19	7.63	6.19
1988	—	—	7.41	7.24	3.79	9.14	14.62	7.40	2.26	R 6.00	R 6.00	8.49	R 6.00
1989	—	—	8.28	7.92	4.50	8.61	14.48	8.03	2.18	6.42	6.42	9.19	R 6.43
1990	—	3.93	9.32	9.04	5.68	9.62	14.60	9.45	2.69	R 7.52	R 7.52	9.18	R 7.52
1991	—	3.94	8.71	8.94	4.76	9.89	16.80	9.14	5.36	7.58	7.58	9.40	7.58
1992	—	4.07	8.54	8.68	4.56	9.86	18.32	9.47	1.84	6.69	6.69	9.79	6.69
1993	—	4.26	8.24	9.06	4.54	9.81	18.96	9.16	2.00	7.05	7.05	10.35	7.05
1994	—	4.12	7.96	8.79	4.09	9.88	19.11	9.66	2.01	7.27	7.27	11.23	7.27
1995	—	5.42	8.36	8.75	4.20	10.12	R 19.41	9.98	2.13	7.34	7.34	10.98	7.34
1996	—	2.53	9.29	9.71	4.96	9.39	20.08	10.81	2.08	8.37	8.37	11.24	8.37
1997	—	3.64	9.39	9.76	4.70	9.16	17.86	10.39	2.94	8.21	8.21	11.90	8.21
	Expenditures in Million Nominal Dollars												
1970	(s)	—	3.8	30.3	43.3	R (s)	12.3	540.2	3.8	633.9	633.9	(s)	R 634.0
1975	(s)	—	4.8	102.2	160.7	R (s)	19.4	974.5	28.3	1,290.3	1,290.3	(s)	1,290.3
1980	—	—	16.2	375.8	419.5	1.9	43.6	2,183.1	200.3	3,240.3	3,240.3	(s)	3,240.3
1981	—	—	16.7	459.6	512.4	4.7	52.5	2,453.7	294.2	3,793.8	3,793.8	R (s)	3,793.9
1982	—	—	12.6	395.7	529.9	4.2	45.8	2,345.5	178.4	3,512.0	3,512.0	R (s)	3,512.3
1983	—	—	10.5	398.6	476.8	5.3	47.3	2,101.8	57.9	3,098.1	3,098.1	R (s)	3,098.4
1984	—	—	9.1	444.4	555.6	12.9	52.3	2,200.5	58.6	R 3,333.4	R 3,333.4	R (s)	3,333.8
1985	—	—	10.2	521.4	522.2	11.8	48.7	R 2,100.7	173.4	R 3,388.5	R 3,388.5	R (s)	R 3,388.9
1986	—	—	9.7	554.4	385.1	10.0	42.2	1,758.2	160.5	2,919.9	2,919.9	R (s)	2,920.3
1987	—	—	10.5	509.7	421.2	R 8.2	41.5	R 1,941.9	133.0	R 3,065.9	R 3,065.9	R (s)	R 3,066.3
1988	—	—	8.0	527.9	440.3	9.2	43.1	R 1,934.6	137.9	R 3,101.0	R 3,101.0	R (s)	R 3,101.4
1989	—	—	7.9	593.1	522.5	7.9	43.8	R 2,228.8	185.5	R 3,589.6	R 3,589.6	R (s)	R 3,590.1
1990	—	R (s)	14.7	642.8	716.0	10.2	45.4	R 2,607.9	243.9	R 4,280.9	R 4,281.1	R (s)	R 4,281.6
1991	—	R (s)	11.8	618.2	572.7	8.8	46.8	R 2,557.7	537.6	R 4,353.6	R 4,353.9	R 0.6	R 4,354.4
1992	—	R (s)	12.5	626.7	619.4	7.4	52.0	R 2,700.5	258.9	R 4,277.3	R 4,277.7	R 0.7	R 4,278.3
1993	—	R (s)	8.2	556.6	570.3	7.6	54.8	R 2,733.8	188.8	R 4,120.1	R 4,120.5	R 0.7	R 4,121.1
1994	—	0.7	12.8	700.6	497.6	11.2	57.7	R 2,885.2	187.6	R 4,352.7	R 4,353.3	R 0.7	R 4,354.1
1995	—	0.6	9.7	697.0	547.6	6.6	57.6	3,051.8	224.7	4,594.9	4,595.5	R 0.7	R 4,596.2
1996	—	(s)	13.7	806.7	627.1	5.3	57.9	3,463.0	163.3	5,136.9	5,137.2	0.7	5,137.9
1997	—	(s)	9.6	941.8	597.9	4.7	54.4	3,304.6	237.2	5,150.2	5,150.7	0.7	5,151.4

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 298. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Washington

Year	Coal	Natural Gas	Petroleum: Heavy Oil	Petroleum: Light Oil	Petroleum: Petroleum Coke	Petroleum: Total	Nuclear Fuel	Wood and Waste	Total Energy [a]
	Prices in Nominal Dollars per Million Btu								
1970	—	—	0.32	R 0.38	—	0.33	0.18	0.65	0.18
1975	0.57	—	2.50	R 2.43	—	R 2.50	0.24	—	0.46
1980	0.96	3.43	3.58	6.40	—	3.93	0.43	—	0.91
1981	1.11	3.82	6.62	R 6.67	—	6.67	0.48	—	1.00
1982	1.39	5.62	6.77	7.78	—	7.76	0.54	—	1.07
1983	1.62	5.07	6.06	6.66	—	6.65	0.58	1.12	1.26
1984	1.73	4.92	—	6.04	—	6.04	0.67	1.28	1.26
1985	1.65	4.54	—	5.72	—	5.72	0.71	0.79	1.17
1986	1.69	2.81	3.16	2.76	—	2.79	0.70	0.32	1.06
1987	1.67	2.50	2.82	4.10	—	4.03	0.70	0.95	1.28
1988	1.55	3.05	2.66	4.03	—	3.98	0.49	0.87	1.13
1989	1.56	5.02	2.54	4.52	—	2.95	0.48	0.79	1.31
1990	1.58	3.03	3.05	5.15	—	5.09	0.47	0.61	R 1.10
1991	1.55	3.83	6.19	5.72	—	5.74	0.45	0.76	1.16
1992	1.37	3.16	2.18	4.66	—	4.47	0.38	0.78	R 1.08
1993	1.36	3.76	2.31	4.69	—	4.66	0.46	0.86	R 1.03
1994	1.37	4.71	—	4.72	—	4.72	0.47	0.77	R 1.03
1995	1.44	4.38	—	4.85	—	4.85	0.42	0.78	R 1.01
1996	1.57	4.75	—	5.09	—	5.09	0.46	0.78	1.27
1997	1.63	5.92	—	4.99	—	4.99	0.44	0.55	1.16
	Expenditures in Million Nominal Dollars								
1970	—	—	(s)	(s)	—	(s)	5.2	(s)	5.2
1975	36.7	—	1.1	R (s)	—	1.2	8.7	—	46.5
1980	77.1	3.3	4.5	1.1	—	5.7	9.6	—	95.7
1981	89.2	1.9	R (s)	1.3	—	1.5	10.8	—	103.3
1982	86.5	0.7	(s)	1.0	—	1.1	21.8	—	110.1
1983	112.7	R (s)	(s)	0.9	—	0.9	22.1	0.6	136.4
1984	125.9	R (s)	—	0.6	—	0.6	38.7	1.7	167.1
1985	139.0	R (s)	—	0.6	—	0.6	61.4	2.3	203.6
1986	90.9	R (s)	(s)	R (s)	—	R (s)	63.7	0.6	155.9
1987	148.1	R (s)	(s)	R (s)	—	R (s)	41.8	3.4	194.0
1988	141.6	5.5	(s)	R (s)	—	R (s)	31.6	3.4	182.6
1989	140.0	43.2	2.4	1.1	—	3.5	31.7	R 3.1	R 231.5
1990	124.4	0.6	(s)	0.9	—	0.9	29.1	2.1	R 165.4
1991	128.9	0.6	(s)	R (s)	—	0.5	20.4	2.2	R 149.7
1992	138.2	17.8	(s)	R (s)	—	R (s)	23.2	2.9	R 191.6
1993	124.8	19.3	(s)	1.7	—	1.7	35.2	3.5	R 177.2
1994	138.0	12.2	—	R (s)	—	R (s)	33.8	3.1	R 178.9
1995	91.6	29.2	—	0.5	—	0.5	30.8	2.1	R 122.1
1996	137.1	32.8	—	(s)	—	(s)	27.1	2.9	184.5
1997	124.8	16.2	—	1.1	—	1.1	28.9	2.0	176.1

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 299. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, West Virginia

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	0.40	0.28	0.31	0.62	1.40	0.73	1.67	2.86	0.58	R 1.03	R 1.76	—	R 1.16	0.68	0.26	3.96	R 1.12
1975	1.51	0.94	1.02	1.16	3.36	2.05	3.25	4.61	1.89	R 2.93	R 3.60	—	R 1.47	1.58	0.88	8.30	R 2.77
1980	1.86	1.41	1.46	3.18	7.24	6.46	6.16	9.96	3.33	R 7.27	R 8.04	—	R 2.66	R 3.15	1.43	10.58	R 5.75
1981	1.96	1.61	1.64	3.71	8.70	7.64	6.77	11.08	4.68	R 8.82	R 9.44	—	R 3.08	R 3.54	1.65	12.05	R 6.76
1982	2.05	1.70	1.73	4.60	8.45	7.18	8.17	10.41	4.02	R 8.00	R 8.95	—	R 3.09	R 3.52	1.74	14.12	R 7.06
1983	1.58	1.69	1.68	5.37	8.01	7.15	8.42	9.77	4.05	R 7.71	R 8.54	—	R 2.92	R 3.45	1.72	14.32	R 7.22
1984	1.91	R 1.62	1.63	5.24	8.14	7.08	9.16	9.12	4.84	R 7.53	R 8.26	—	R 3.19	R 3.21	1.64	13.53	R 6.76
1985	1.93	1.59	1.61	5.28	8.04	6.87	9.37	9.19	4.01	R 7.38	R 8.24	—	R 3.06	R 3.20	1.62	14.19	R 7.25
1986	1.75	1.49	1.50	4.99	5.79	5.14	8.35	7.00	2.57	R 4.32	R 5.72	—	R 2.03	R 2.61	1.50	14.81	R 5.87
1987	1.72	1.41	1.43	4.48	6.08	4.72	8.71	7.34	2.81	R 4.92	R 6.21	—	R 1.90	R 2.64	1.43	14.77	R 6.00
1988	1.73	1.42	1.44	4.08	5.91	4.45	10.55	7.52	2.38	R 4.23	R 5.99	—	R 1.91	R 2.57	1.45	14.10	R 5.68
1989	1.75	1.41	1.43	4.08	6.61	4.99	8.20	8.52	2.65	R 4.85	R 6.68	—	e R 2.08	e R 2.72	1.43	14.04	e R 5.98
1990	1.80	1.45	R 1.48	4.40	7.77	6.41	11.23	9.96	2.68	R 5.69	R 7.77	—	R 2.42	R 3.10	1.48	13.90	R 6.58
1991	1.72	1.50	1.51	4.59	7.21	5.58	11.62	9.92	1.92	R 5.13	R 7.75	—	R 2.36	R 3.09	1.53	14.24	R 6.80
1992	1.74	1.46	1.47	4.47	7.43	5.31	10.86	9.49	2.18	R 4.74	R 7.50	—	R 2.24	R 3.02	1.48	14.84	R 6.82
1993	1.68	1.41	1.43	4.43	7.22	4.19	10.64	9.61	2.41	R 4.62	R 7.49	—	R 2.14	R 3.00	1.43	15.34	R 6.83
1994	1.57	1.39	1.39	4.60	7.19	3.88	9.61	9.77	2.44	R 4.39	R 7.42	—	R 2.17	R 2.93	1.40	15.42	R 6.81
1995	1.57	1.28	1.29	4.55	7.18	3.88	9.36	9.95	2.68	R 4.70	R 7.69	—	R 2.16	R 2.93	1.28	15.68	R 7.15
1996	1.68	1.25	1.27	4.70	7.72	4.70	10.38	10.21	3.41	5.51	8.08	—	2.33	2.90	1.26	15.32	7.41
1997	—	1.25	1.21	4.57	7.87	4.44	10.28	10.22	3.38	4.84	7.85	—	2.19	2.86	1.24	14.75	7.33
	Expenditures in Million Nominal Dollars																
1970	55.3	131.9	187.2	108.3	31.9	1.2	7.8	237.6	7.5	94.8	380.8	—	R 4.7	R 681.0	-89.9	204.3	R 795.4
1975	178.3	655.6	833.9	171.0	114.2	2.8	18.1	467.7	26.2	291.9	920.8	—	R 6.6	R 1,932.3	-531.0	477.3	R 1,878.5
1980	190.2	1,063.6	1,253.8	415.1	441.1	12.9	77.7	1,014.2	24.8	803.4	2,374.2	—	R 8.0	R 4,051.1	-997.7	748.8	R 3,802.1
1981	172.9	1,263.7	1,436.6	497.1	474.5	14.5	77.9	1,094.4	21.2	941.0	2,623.7	—	R 9.6	R 4,567.0	-1,215.2	890.6	R 4,242.4
1982	137.1	1,261.2	1,398.4	523.4	374.8	12.0	77.8	1,037.1	28.2	654.3	2,184.2	—	R 9.9	R 4,115.8	-1,186.8	991.4	R 3,920.4
1983	78.2	1,311.4	1,389.7	549.8	469.3	11.1	79.9	958.7	23.0	R 570.1	R 2,112.0	—	R 9.8	R 4,061.2	-1,235.8	1,003.4	R 3,828.8
1984	102.3	R 1,363.7	R 1,466.0	545.2	496.4	9.5	12.8	888.3	35.2	R 527.0	R 1,969.3	—	R 13.2	R 3,993.6	-1,260.9	963.8	R 3,696.5
1985	72.4	R 1,326.2	R 1,398.7	510.6	453.5	9.0	38.4	R 894.2	22.2	R 534.1	R 1,951.3	—	R 12.3	R 3,872.8	-1,261.8	1,000.4	R 3,611.4
1986	89.0	1,226.2	1,315.2	472.4	257.7	6.3	34.6	686.3	15.5	R 372.2	R 1,372.5	—	R 15.8	R 3,176.0	-1,156.2	1,029.6	R 3,049.4
1987	81.0	R 1,161.0	R 1,242.0	444.9	318.4	5.6	38.0	R 745.6	8.1	R 412.0	R 1,527.7	—	R 13.8	R 3,228.3	-1,093.2	1,053.0	R 3,188.2
1988	94.3	1,225.2	1,319.5	434.9	311.6	6.2	45.9	R 780.3	8.3	R 383.2	R 1,535.5	—	R 14.4	R 3,304.4	-1,148.1	1,068.2	R 3,224.4
1989	91.5	1,234.7	1,326.2	475.4	387.6	10.6	44.3	R 871.9	14.9	R 438.1	R 1,767.3	—	e R 14.0	e R 3,582.9	-1,155.4	1,084.9	e R 3,512.4
1990	93.1	R 1,193.4	R 1,286.5	471.2	441.2	9.8	62.2	R 1,027.7	18.7	R 571.3	R 2,130.9	—	9.8	R 3,898.5	-1,108.0	1,088.7	R 3,879.1
1991	86.8	R 1,121.9	R 1,208.7	454.7	403.1	7.3	74.5	R 1,007.7	9.5	R 356.1	R 1,858.3	—	R 10.0	R 3,531.7	-1,056.7	1,134.3	R 3,609.4
1992	75.4	1,108.5	1,183.9	485.0	407.8	8.0	65.6	R 989.7	6.4	R 349.0	R 1,826.5	—	R 9.9	R 3,505.3	-1,043.6	1,192.9	R 3,654.6
1993	79.1	R 1,065.6	R 1,144.7	493.5	451.9	6.0	68.3	R 991.0	6.0	R 327.6	R 1,850.9	—	R 10.0	R 3,499.2	-994.2	1,265.7	R 3,770.6
1994	72.5	1,140.5	1,213.0	513.1	462.6	4.9	66.3	R 1,024.8	6.1	R 333.3	R 1,898.1	—	R 10.5	R 3,634.8	-1,064.2	1,289.7	R 3,860.3
1995	R 75.3	R 1,037.2	R 1,112.5	538.0	470.4	3.8	63.4	1,092.0	2.4	R 343.1	R 1,975.1	—	R 11.2	R 3,636.8	-979.4	1,375.2	R 4,032.6
1996	73.1	1,070.6	1,143.7	562.7	420.3	4.5	79.4	1,013.2	5.8	425.6	1,948.8	—	12.4	3,667.6	-1,024.9	1,352.4	3,995.1
1997	—	1,119.0	1,119.0	568.3	496.9	4.3	80.2	1,060.8	3.9	415.8	2,062.0	—	10.5	3,759.8	-1,066.4	1,308.1	4,001.6

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 300. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, West Virginia

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	0.66	0.87	1.37	1.64	2.49	1.75	0.73	0.91	6.41	R 1.73
1975	1.22	1.40	2.69	3.17	4.97	3.27	1.45	R 1.56	10.47	R 3.46
1980	1.59	3.48	6.65	8.48	8.94	7.36	3.70	R 4.10	12.64	R 6.34
1981	2.14	4.08	8.29	10.68	10.32	9.10	4.56	R 4.71	14.61	R 7.43
1982	2.22	4.97	7.88	10.66	9.72	8.74	4.42	R 5.39	16.72	R 8.65
1983	1.64	5.78	7.65	R 8.30	10.06	R 8.31	4.28	R 5.84	16.99	R 9.33
1984	1.71	5.81	7.73	R 8.24	10.39	R 8.25	4.35	R 5.80	16.38	R 9.12
1985	1.66	5.99	7.42	R 7.77	9.61	R 7.87	4.18	R 6.06	17.38	R 9.71
1986	1.37	5.90	5.65	R 5.87	7.27	R 5.94	3.35	R 5.69	17.84	R 9.67
1987	1.23	5.57	5.78	R 5.70	6.08	R 5.80	3.20	R 5.40	17.87	R 9.64
1988	1.24	5.11	5.67	R 5.58	11.03	R 6.60	3.23	R 5.17	17.39	R 9.31
1989	1.29	5.34	6.34	R 6.45	6.99	R 6.50	3.57	R 5.33	17.31	R 9.42
1990	1.43	6.03	7.57	R 7.77	12.50	R 8.84	3.53	R 6.16	17.28	R 10.26
1991	1.31	6.06	7.14	R 7.32	13.00	R 8.64	3.37	R 6.19	17.33	R 10.54
1992	1.15	5.92	6.60	R 6.36	11.46	R 7.94	3.08	R 5.98	18.08	R 10.53
1993	1.18	6.06	6.54	R 6.10	11.88	R 7.78	3.02	R 6.09	18.47	R 10.86
1994	1.19	6.26	6.18	R 6.09	14.00	R 8.17	2.93	R 6.32	18.65	R 11.08
1995	1.10	6.64	6.23	R 5.56	13.41	R 7.87	2.87	R 6.56	19.05	R 11.61
1996	1.16	6.62	7.34	6.23	13.70	8.45	3.29	6.64	18.69	11.31
1997	1.32	6.38	7.35	6.49	14.23	8.60	3.27	6.53	18.34	11.12
	Expenditures in Million Nominal Dollars									
1970	1.1	51.7	2.0	2.5	2.5	7.0	1.2	R 60.9	75.6	R 136.6
1975	2.4	74.5	9.1	3.1	6.1	18.3	2.6	R 97.8	177.9	R 275.7
1980	2.1	173.6	45.3	19.6	13.0	77.9	5.8	R 259.3	284.9	R 544.3
1981	3.8	199.8	43.1	16.7	14.8	74.5	7.2	R 285.3	334.2	R 619.5
1982	3.7	224.0	39.6	18.9	9.0	67.5	7.5	R 302.6	378.0	R 680.6
1983	3.4	239.9	22.0	R 12.1	11.0	R 45.1	7.2	R 295.6	391.6	R 687.1
1984	3.2	243.1	22.8	R 5.7	7.5	R 36.1	10.4	R 292.7	378.2	R 670.9
1985	1.2	234.7	20.0	R 17.2	7.8	R 45.0	9.8	R 290.6	398.1	R 688.7
1986	1.4	229.8	18.4	R 15.1	6.0	R 39.5	7.6	R 278.3	425.1	R 703.5
1987	1.5	213.1	21.4	R 11.1	6.0	R 38.4	5.7	R 258.7	442.0	R 700.7
1988	1.2	207.3	18.9	R 12.6	13.5	R 45.0	5.9	R 259.5	448.0	R 707.4
1989	1.7	213.5	23.8	R 12.6	10.2	R 46.6	6.8	R 268.6	451.0	R 719.6
1990	2.2	210.6	25.3	R 9.3	18.9	R 53.4	5.9	R 272.2	446.8	R 719.0
1991	1.1	211.8	22.3	R 8.2	18.5	R 49.0	5.9	R 267.9	479.4	R 747.3
1992	0.9	222.7	17.8	R 8.8	18.9	R 45.5	5.7	R 274.8	502.0	R 776.9
1993	1.1	227.1	21.6	R 11.2	20.7	R 53.5	5.8	R 287.5	547.0	R 834.5
1994	0.9	234.4	21.0	R 10.5	24.8	R 56.3	5.5	R 297.1	551.3	R 848.4
1995	0.6	249.4	17.4	R 9.0	20.2	R 46.7	6.0	R 302.7	595.8	R 898.6
1996	1.1	262.5	26.0	13.3	22.6	61.9	6.9	332.3	591.6	923.9
1997	1.2	245.1	26.7	14.7	23.5	64.9	5.0	316.2	564.8	881.0

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 301. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, West Virginia

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.35	0.69	1.08	0.77	1.45	2.86	0.86	1.57	0.73	0.69	5.81	1.83
1975	1.33	1.18	2.37	2.46	2.76	4.61	1.82	2.77	1.45	1.29	10.00	3.36
1980	1.44	3.24	6.24	6.85	5.80	9.96	4.02	7.04	3.70	3.44	12.59	R 6.27
1981	1.51	3.80	7.82	7.51	6.26	11.08	5.10	8.15	4.56	R 4.28	14.27	7.34
1982	1.58	4.72	7.40	7.49	8.00	10.41	4.80	8.17	4.42	4.71	16.07	R 8.63
1983	1.52	5.51	6.73	R 8.30	8.20	9.77	4.50	R 7.73	4.28	R 5.37	16.26	R 9.08
1984	R 1.50	5.51	6.69	R 8.24	7.83	9.12	4.84	R 7.45	4.35	5.34	15.83	8.95
1985	R 1.42	5.64	6.25	R 7.77	9.31	9.19	4.01	R 7.28	NA	R 5.81	16.64	R 9.84
1986	1.33	5.47	3.96	R 5.87	8.63	7.00	2.57	R 4.93	NA	R 5.04	16.95	R 9.57
1987	1.25	5.10	4.41	R 5.70	9.49	7.34	2.81	R 5.70	NA	4.86	16.61	9.46
1988	1.23	4.81	4.19	R 5.58	10.36	7.52	2.38	R 5.18	NA	R 4.67	16.04	R 8.63
1989	1.23	4.88	4.76	R 6.45	8.64	8.52	2.65	R 5.92	NA	R 4.80	16.06	R 8.63
1990	1.28	5.44	5.87	R 7.77	10.76	9.96	2.68	R 7.31	NA	R 5.37	15.86	R 9.13
1991	R 1.28	5.69	5.16	R 7.32	11.22	9.92	1.92	R 6.63	NA	R 5.63	16.02	R 9.59
1992	1.28	5.15	4.90	R 6.36	10.64	9.49	2.18	R 6.53	NA	R 5.15	16.67	R 9.39
1993	1.32	5.51	4.63	R 6.10	10.17	9.61	2.41	R 5.32	3.02	R 5.25	17.11	R 9.76
1994	1.31	5.55	4.48	R 6.09	9.41	9.77	2.44	R 5.26	2.93	R 5.32	17.27	R 9.88
1995	1.35	5.74	4.43	R 5.56	9.67	9.95	—	R 5.28	2.87	R 5.54	17.35	R 10.19
1996	1.34	5.68	5.37	6.23	10.31	10.21	—	6.35	3.29	5.49	16.90	9.81
1997	1.41	5.94	5.01	6.49	10.53	10.22	—	6.01	3.27	5.69	16.39	9.87
	Expenditures in Million Nominal Dollars											
1970	1.0	15.3	0.6	R (s)	R (s)	0.8	(s)	1.8	(s)	R 18.2	44.4	62.5
1975	4.9	30.2	2.9	R (s)	0.6	1.4	R (s)	5.2	(s)	R 40.4	97.5	R 137.9
1980	3.5	73.4	9.5	1.4	1.5	5.7	R (s)	18.3	(s)	R 95.4	157.1	R 252.5
1981	4.9	87.7	32.4	0.7	1.6	7.3	R (s)	42.0	(s)	R 134.8	198.7	R 333.6
1982	4.8	101.6	13.0	0.7	1.3	6.9	R (s)	22.0	(s)	R 128.6	231.3	R 360.0
1983	5.8	107.5	20.9	R 2.9	1.6	13.5	(s)	R 38.8	(s)	R 152.2	237.9	R 390.2
1984	5.2	108.9	21.3	R 1.0	1.0	12.3	(s)	R 35.6	(s)	R 150.0	233.1	R 383.2
1985	1.8	103.7	22.0	R 5.7	1.3	14.8	R (s)	R 43.9	NA	R 149.4	253.4	R 402.8
1986	2.4	94.2	17.3	R 1.8	1.3	12.0	R (s)	R 32.5	NA	R 129.1	267.0	R 396.2
1987	2.9	92.0	11.6	R 1.9	1.7	R 12.5	R (s)	R 27.7	NA	R 122.6	269.6	R 392.2
1988	2.2	116.1	8.7	R 2.5	2.2	12.2	2.6	R 28.2	NA	R 146.6	269.0	R 415.6
1989	3.0	122.3	13.7	R 2.8	2.2	13.8	1.5	R 34.0	NA	R 159.4	275.0	R 434.4
1990	3.7	124.7	15.1	R 2.0	2.9	R 17.3	1.1	R 38.4	NA	R 166.8	275.1	R 442.0
1991	2.0	128.6	15.5	R 2.7	2.8	13.7	0.6	R 35.3	NA	R 165.9	290.5	R 456.4
1992	1.7	133.8	9.2	R 1.1	3.1	10.9	0.8	R 25.1	NA	R 160.6	302.7	R 463.4
1993	2.1	143.1	11.8	R 1.3	3.1	1.0	R (s)	R 17.5	(s)	R 162.7	325.3	R 488.0
1994	1.8	147.6	10.7	R 1.3	2.9	1.0	R (s)	R 16.0	(s)	R 165.9	331.8	R 497.7
1995	1.4	157.6	8.9	R 1.2	2.6	1.0	—	R 13.7	(s)	R 173.1	351.8	R 524.8
1996	2.3	169.0	8.4	1.3	3.0	1.1	—	13.7	0.6	185.6	347.7	533.3
1997	2.4	164.3	9.5	1.9	3.1	1.0	—	15.5	(s)	182.7	337.8	520.4

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.

(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 302. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, West Virginia

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	0.40	0.35	0.38	0.45	0.68	0.71	0.77	1.45	5.08	2.86	0.48	R 0.83	R 0.93	R 1.49	0.53	2.63	R 0.66
1975	1.51	1.33	1.43	0.98	1.81	2.27	2.46	2.76	7.48	4.61	1.92	R 2.79	R 2.74	R 1.49	R 1.74	6.56	R 2.09
1980	1.86	1.44	1.70	2.91	3.58	6.15	6.85	5.80	14.36	9.96	3.33	R 7.12	R 6.71	R 1.49	R 3.88	8.58	R 4.30
1981	1.96	1.51	1.80	3.38	4.84	6.78	7.51	6.26	18.00	11.08	4.68	R 8.62	R 8.15	R 1.49	R 4.60	9.64	R 5.10
1982	2.05	1.58	1.84	4.19	4.07	6.79	7.49	8.00	17.25	10.41	4.01	R 7.71	R 7.44	R 1.49	R 4.39	11.51	R 5.15
1983	1.58	1.52	1.55	4.89	4.07	7.36	R 7.31	8.20	16.98	9.77	4.05	R 7.31	R 7.35	R 1.49	R 4.42	11.54	R 5.26
1984	1.91	R 1.50	1.67	4.55	4.49	7.03	R 7.34	7.83	17.63	9.12	4.84	R 7.02	R 7.07	R 1.49	R 3.99	10.55	R 4.74
1985	1.93	R 1.42	R 1.63	4.39	4.91	6.72	R 6.96	9.31	17.61	9.19	4.01	R 6.86	R 7.00	R 1.49	R 4.29	10.77	R 5.12
1986	1.75	1.33	1.53	3.85	4.19	4.66	R 5.02	8.63	15.59	7.00	2.57	R 3.71	R 4.21	R 1.49	R 2.96	11.26	R 3.84
1987	1.72	1.25	1.46	3.24	3.23	4.81	R 4.86	9.49	13.58	7.34	2.81	R 4.49	R 4.86	R 1.49	R 3.11	11.26	R 3.97
1988	1.73	1.23	1.46	2.66	3.35	4.53	R 4.49	10.36	14.62	7.52	2.38	R 3.71	R 4.25	R 1.49	R 2.73	10.57	R 3.57
1989	1.75	1.23	1.46	2.71	3.13	5.30	R 5.36	8.64	14.48	8.52	2.65	R 4.41	R 4.81	d R 1.49	d R 2.97	10.52	d R 3.77
1990	1.80	1.28	1.50	2.75	3.07	5.89	R 6.78	10.76	14.60	9.96	2.68	R 5.38	R 5.61	1.63	R 3.41	10.44	R 4.15
1991	1.72	R 1.28	1.49	2.75	3.11	5.62	R 5.94	11.22	16.80	9.92	1.92	R 4.46	R 5.21	1.63	R 3.11	10.75	R 4.04
1992	1.74	1.28	1.48	2.86	2.35	5.35	R 5.17	10.64	18.32	9.49	2.18	R 4.03	R 4.84	1.63	R 3.03	11.26	R 4.07
1993	1.68	1.32	1.48	2.57	2.90	5.01	R 5.02	10.17	18.96	9.61	2.41	R 3.74	R 4.67	1.63	R 2.86	11.61	R 3.92
1994	1.57	1.31	1.42	2.75	2.86	4.76	R 5.39	8.01	19.11	9.77	2.44	R 3.51	R 4.37	R 1.62	R 2.77	11.67	R 3.83
1995	1.57	1.35	1.46	2.45	3.36	4.65	R 4.88	8.12	R 19.41	9.95	2.68	R 3.82	R 4.66	R 1.61	R 2.90	11.82	R 4.04
1996	1.68	1.34	1.51	2.60	3.30	5.69	5.68	9.43	20.08	10.21	3.42	4.81	5.54	1.62	3.44	11.45	4.50
1997	—	1.41	0.90	2.72	3.55	5.28	5.68	9.16	17.86	10.22	3.38	4.16	4.95	1.62	3.23	10.87	4.29
	Expenditures in Million Nominal Dollars																
1970	55.3	42.6	97.9	41.2	3.9	4.5	R (s)	5.0	15.4	1.7	4.8	66.3	101.7	R 3.4	R 244.1	84.3	R 328.4
1975	178.3	125.7	304.0	66.1	11.3	19.1	2.0	11.2	20.3	1.9	17.9	243.2	326.9	R 3.9	R 701.0	201.9	R 902.9
1980	190.2	85.6	275.7	167.9	17.0	125.3	2.0	62.9	36.6	4.3	24.7	702.0	974.8	R 2.1	R 1,420.6	306.7	R 1,727.2
1981	172.9	76.7	249.6	208.7	23.8	96.8	3.0	60.8	44.0	4.2	21.2	824.9	1,078.8	R 2.2	R 1,539.3	357.7	R 1,897.1
1982	137.1	87.9	225.0	197.3	17.9	86.8	4.9	67.0	38.5	3.5	28.1	549.4	796.1	R 2.2	R 1,220.5	382.1	R 1,602.6
1983	78.2	82.2	160.4	201.9	11.0	89.8	R 4.0	66.5	39.7	2.9	23.0	474.6	R 711.5	R 2.4	R 1,076.2	373.9	R 1,450.1
1984	102.3	R 108.8	R 211.1	192.6	14.2	86.8	1.6	3.7	43.9	5.6	35.1	432.4	R 623.3	R 2.5	R 1,029.6	352.4	R 1,382.0
1985	72.4	R 74.8	R 147.3	171.6	14.0	72.8	R 7.0	28.5	40.9	11.1	22.1	423.1	R 619.4	R 2.5	R 940.8	348.9	R 1,289.7
1986	89.0	75.7	164.7	147.3	15.7	50.0	2.2	26.7	35.4	8.4	15.4	278.8	432.5	R 8.2	R 752.6	337.5	R 1,090.1
1987	81.0	R 74.1	R 155.1	138.8	11.5	70.6	R 3.3	29.8	34.8	9.1	8.1	327.4	R 494.5	R 8.1	R 796.6	341.4	R 1,138.0
1988	94.3	82.1	176.4	111.2	19.5	68.1	R 2.7	29.3	36.2	9.3	5.7	286.9	R 457.6	R 8.5	R 753.7	351.2	R 1,104.9
1989	91.5	85.7	R 177.2	139.0	16.9	79.6	R 2.7	31.2	36.7	11.1	13.4	343.0	R 534.5	d R 7.2	d R 857.9	358.9	d R 1,216.8
1990	93.1	R 92.4	R 185.5	135.2	14.8	91.0	R 1.5	39.7	38.1	13.0	17.6	481.2	R 697.0	3.9	R 1,021.6	366.8	R 1,388.3
1991	86.8	R 73.3	R 160.0	113.8	10.9	83.6	1.3	52.5	39.2	13.5	8.9	269.0	R 478.9	4.0	R 756.8	364.5	R 1,121.3
1992	75.4	71.6	147.0	127.8	8.6	67.4	R 1.8	42.8	43.6	12.4	5.7	259.1	R 441.4	R 4.2	R 720.3	388.1	R 1,108.5
1993	79.1	R 78.3	R 157.5	122.7	8.2	79.1	R 1.8	43.7	46.0	8.1	5.8	230.8	R 423.5	R 4.3	R 707.9	393.3	R 1,101.3
1994	72.5	85.4	157.9	130.1	13.1	81.5	R 2.1	37.8	48.4	9.3	6.0	228.0	R 426.4	R 4.5	R 718.9	406.7	R 1,125.6
1995	R 75.3	R 65.9	R 141.2	129.5	14.3	84.4	2.0	40.3	R 48.4	10.1	2.4	238.4	440.3	R 4.8	R 715.7	427.6	R 1,143.3
1996	73.1	53.8	126.9	130.6	20.7	104.3	2.5	53.4	48.5	10.1	5.7	308.9	554.1	4.9	816.6	413.1	1,229.7
1997	—	57.6	57.6	158.1	27.3	89.1	2.0	53.4	45.6	10.7	3.9	296.1	528.2	5.1	749.1	405.5	1,154.6

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 303. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, West Virginia

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.35	—	2.17	1.72	0.73	1.45	5.08	2.86	0.85	2.68	2.67	—	2.67
1975	1.33	—	3.45	3.97	2.03	2.76	7.48	4.61	—	4.50	4.50	—	4.50
1980	—	—	9.02	8.36	6.46	5.80	14.36	9.96	—	9.61	9.61	—	9.61
1981	—	—	10.84	10.18	7.61	6.26	18.00	11.08	—	10.92	10.92	—	10.92
1982	—	—	10.92	9.84	7.18	8.00	17.25	10.41	—	10.34	10.34	—	10.34
1983	—	—	10.44	8.46	7.15	8.20	16.98	9.77	—	9.45	9.45	—	9.45
1984	—	—	10.27	8.72	7.08	7.83	17.63	9.12	—	9.08	9.08	—	9.08
1985	—	—	9.99	8.76	6.87	9.31	17.61	9.19	4.29	9.14	9.14	—	9.14
1986	—	—	8.41	6.85	5.14	8.63	15.59	7.00	—	7.05	7.05	—	7.05
1987	—	—	7.55	7.04	4.72	9.49	13.58	7.34	—	7.32	7.32	—	7.32
1988	—	—	7.41	6.86	4.45	10.36	14.62	7.52	—	7.42	7.42	—	7.42
1989	—	—	8.28	7.50	4.99	8.64	14.48	8.52	—	8.27	8.27	—	8.27
1990	—	—	9.32	8.95	6.41	10.76	14.60	9.96	—	9.73	9.73	—	9.73
1991	—	—	8.71	8.23	5.58	11.22	16.80	9.92	—	9.53	9.53	—	9.53
1992	—	2.72	—	8.48	5.31	10.64	18.32	9.49	—	9.27	9.27	—	9.27
1993	—	2.72	8.24	8.49	4.19	10.17	18.96	9.61	—	9.35	9.35	—	9.35
1994	—	3.59	7.96	8.68	3.88	8.34	19.11	9.77	—	9.52	9.52	—	9.52
1995	—	1.96	8.36	8.64	3.88	8.66	R 19.41	9.95	—	9.65	9.65	—	9.65
1996	—	2.07	9.29	9.36	4.70	8.51	20.08	10.21	2.87	10.08	10.08	—	10.08
1997	—	2.52	9.39	9.32	4.44	8.01	17.86	10.22	—	10.02	10.02	—	10.02
	Expenditures in Million Nominal Dollars												
1970	R (s)	—	0.9	24.8	1.2	R (s)	5.7	235.1	(s)	267.7	267.9	—	267.9
1975	(s)	—	1.0	83.0	2.7	R (s)	10.9	464.3	—	562.1	562.1	—	562.1
1980	—	—	3.0	236.1	12.8	R (s)	21.8	1,004.2	—	1,278.1	1,278.1	—	1,278.1
1981	—	—	1.7	267.0	13.9	0.7	26.2	1,082.9	—	1,392.4	1,392.4	—	1,392.4
1982	—	—	1.3	214.1	11.8	0.6	22.9	1,026.6	—	1,277.2	1,277.2	—	1,277.2
1983	—	—	2.3	321.5	11.1	0.7	23.6	942.3	—	1,301.4	1,301.4	—	1,301.4
1984	—	—	2.0	351.8	9.5	0.6	26.1	870.4	—	1,260.4	1,260.4	—	1,260.4
1985	—	—	1.9	325.9	9.0	0.7	24.3	R 868.3	(s)	R 1,230.1	R 1,230.1	—	R 1,230.1
1986	—	—	2.1	163.8	6.3	0.6	21.0	R 665.8	—	859.7	859.7	—	859.7
1987	—	—	1.3	205.2	5.6	R (s)	20.7	R 724.0	—	R 957.3	R 957.3	—	R 957.3
1988	—	—	1.4	207.7	6.2	0.8	21.5	R 758.8	—	R 996.5	R 996.5	—	R 996.5
1989	—	—	1.6	259.9	10.6	0.6	21.9	R 847.0	—	R 1,141.6	R 1,141.6	—	R 1,141.6
1990	—	—	1.7	297.6	9.8	0.7	22.7	R 997.4	—	R 1,329.8	R 1,329.8	—	R 1,329.8
1991	—	—	1.5	271.0	7.3	0.7	23.3	R 980.6	—	R 1,284.4	R 1,284.4	—	R 1,284.4
1992	—	(s)	—	304.7	8.0	0.8	25.9	R 966.3	—	R 1,305.9	R 1,305.9	—	R 1,305.9
1993	—	(s)	1.1	329.8	6.0	0.8	27.3	R 981.9	—	R 1,346.9	R 1,346.9	—	R 1,346.9
1994	—	(s)	1.0	338.5	4.9	0.8	28.8	R 1,014.5	—	R 1,388.6	R 1,388.6	—	R 1,388.6
1995	—	(s)	1.1	351.0	3.8	R (s)	R 28.8	1,080.8	—	1,465.9	1,465.9	—	1,465.9
1996	—	(s)	1.5	270.8	4.5	(s)	28.9	1,002.1	(s)	1,308.2	1,308.2	—	1,308.2
1997	—	(s)	1.0	363.7	4.3	(s)	27.1	1,049.1	—	1,445.5	1,445.5	—	1,445.5

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 304. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, West Virginia

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.25	0.32	0.94	R 0.93	—	0.94	—	0.65	0.26
1975	0.87	0.60	1.83	2.44	—	1.84	—	—	0.88
1980	1.41	2.99	—	6.30	—	6.30	—	—	1.43
1981	1.62	4.48	—	7.48	—	7.48	—	—	1.65
1982	1.71	4.15	—	7.04	—	7.04	—	—	1.74
1983	1.70	4.55	—	6.22	—	6.22	—	—	1.72
1984	1.63	5.02	—	6.22	—	6.22	—	—	1.64
1985	1.60	4.78	—	6.00	—	6.00	—	—	1.62
1986	1.50	4.03	—	3.71	—	3.71	—	—	1.50
1987	1.42	3.94	—	4.36	—	4.36	—	—	1.43
1988	1.44	3.89	—	3.96	—	3.96	—	—	1.45
1989	1.43	4.59	—	4.51	—	4.51	—	—	1.43
1990	1.47	5.13	—	5.72	—	5.72	—	—	1.48
1991	1.52	3.63	—	5.37	—	5.37	—	—	1.53
1992	1.47	3.53	—	4.84	—	4.84	—	—	1.48
1993	1.42	4.36	—	4.62	—	4.62	—	—	1.43
1994	1.39	4.00	—	4.42	—	4.42	—	—	1.40
1995	1.27	3.58	—	4.39	—	4.39	—	—	1.28
1996	1.25	2.99	—	5.29	—	5.29	—	—	1.26
1997	1.24	3.35	—	4.64	—	4.64	—	—	1.24
	Expenditures in Million Nominal Dollars								
1970	87.1	R (s)	2.5	(s)	—	2.6	—	(s)	89.9
1975	522.5	R (s)	8.2	R (s)	—	8.3	—	—	531.0
1980	972.5	R (s)	—	25.1	—	25.1	—	—	997.7
1981	1,178.3	0.9	—	36.0	—	36.0	—	—	1,215.2
1982	1,164.9	0.5	—	21.4	—	21.4	—	—	1,186.8
1983	1,220.1	0.5	—	15.1	—	15.1	—	—	1,235.8
1984	1,246.5	0.6	—	13.9	—	13.9	—	—	1,260.9
1985	1,248.3	0.6	—	12.9	—	12.9	—	—	1,261.8
1986	1,146.7	1.2	—	8.2	—	8.2	—	—	1,156.2
1987	1,082.5	0.9	—	9.7	—	9.7	—	—	1,093.2
1988	1,139.6	R (s)	—	8.2	—	8.2	—	—	1,148.1
1989	1,144.3	0.6	—	10.6	—	10.6	—	—	1,155.4
1990	1,095.1	0.7	—	12.3	—	12.3	—	—	1,108.0
1991	1,045.6	0.5	—	10.6	—	10.6	—	—	1,056.7
1992	1,034.2	0.7	—	8.7	—	8.7	—	—	1,043.6
1993	984.0	0.6	—	9.6	—	9.6	—	—	994.2
1994	1,052.4	1.0	—	10.9	—	10.9	—	—	1,064.2
1995	969.3	1.5	—	8.6	—	8.6	—	—	979.4
1996	1,013.4	0.6	—	10.9	—	10.9	—	—	1,024.9
1997	1,057.8	0.7	—	7.9	—	7.9	—	—	1,066.4

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 305. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Wisconsin

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	0.53	0.51	0.51	0.79	1.07	0.74	1.88	2.65	0.57	R 1.43	1.89	0.15	R 1.09	1.16	0.39	6.02	1.75
1975	1.80	1.03	1.05	1.30	2.47	2.08	3.60	4.54	1.79	R 3.19	3.65	0.32	R 1.31	R 2.11	0.71	8.88	R 3.27
1980	2.27	1.43	1.44	3.43	6.59	6.38	6.51	9.43	3.48	R 7.04	R 8.13	0.47	R 1.58	R 4.35	1.25	13.34	R 6.69
1981	2.41	1.64	1.65	4.22	7.90	7.55	6.99	10.48	4.31	R 9.55	R 9.41	0.53	R 1.64	R 5.02	1.34	15.14	R 7.87
1982	2.47	1.80	1.80	4.95	7.81	7.22	7.74	10.40	3.97	R 8.54	R 9.20	0.80	R 1.65	R 5.16	1.50	17.31	R 8.29
1983	2.19	1.79	1.79	5.47	7.54	6.75	8.20	9.36	4.15	R 8.51	R 8.63	0.83	R 1.61	R 5.02	1.54	17.68	R 8.30
1984	2.16	R 1.79	R 1.79	5.38	7.67	6.45	8.28	9.26	4.85	R 9.41	R 8.67	0.67	R 1.61	R 4.92	1.46	17.12	R 8.39
1985	2.08	1.76	1.76	5.37	7.63	6.19	8.73	9.33	4.59	R 9.00	R 8.68	0.58	R 1.57	R 4.92	1.42	16.87	R 8.36
1986	—	1.68	1.68	5.14	5.78	4.45	8.31	7.00	2.99	R 7.54	R 6.64	0.51	R 1.54	R 4.09	1.33	16.97	R 7.54
1987	—	1.53	1.53	5.03	6.13	4.28	7.47	7.49	2.55	R 6.81	R 6.94	0.48	R 1.55	R 4.09	1.23	16.41	R 7.51
1988	—	1.53	1.53	4.88	5.94	4.11	7.18	7.55	2.45	R 6.09	R 6.83	0.43	R 1.55	R 4.09	1.21	16.14	R 7.35
1989	—	1.50	1.50	4.61	6.57	4.63	10.30	8.29	2.40	R 5.83	R 7.56	0.45	e R 1.52	e R 4.31	1.21	15.99	e R 7.55
1990	—	1.41	1.41	4.56	7.69	5.99	9.95	9.38	2.41	R 6.09	R 8.51	0.48	1.80	R 4.57	1.15	15.77	R 8.01
1991	—	1.41	1.41	4.40	7.17	5.26	8.56	9.18	2.35	R 6.47	R 8.24	0.45	R 1.82	4.43	1.15	16.02	R 7.86
1992	—	1.38	1.38	4.57	6.95	4.64	8.11	8.94	2.23	R 6.91	R 8.03	0.40	R 1.78	4.40	1.11	16.12	7.82
1993	—	1.27	1.27	4.92	7.05	4.26	8.78	8.72	2.50	R 6.89	R 7.93	0.40	R 1.65	4.46	1.02	16.24	R 7.92
1994	—	1.27	1.27	4.76	6.98	3.99	8.40	9.06	2.37	R 6.89	R 8.06	0.41	R 1.80	R 4.44	1.03	16.04	R 7.86
1995	—	1.20	1.20	4.30	7.05	3.97	8.40	9.52	2.39	R 6.74	R 8.36	0.44	R 1.80	R 4.39	R 1.01	15.75	R 7.79
1996	—	1.12	1.12	4.70	7.97	4.79	10.13	10.24	2.54	7.03	9.18	0.46	1.77	4.82	0.97	15.44	8.21
1997	—	1.15	1.15	5.11	7.79	4.53	10.09	10.00	2.63	6.48	8.88	0.46	1.75	4.96	1.11	15.35	8.25
	Expenditures in Million Nominal Dollars																
1970	5.0	191.2	196.2	267.1	161.6	6.7	54.3	633.6	8.8	R 87.4	R 952.5	R (s)	R 6.6	R 1,422.7	-109.2	501.0	R 1,814.5
1975	12.0	273.6	285.6	474.2	382.3	26.0	112.5	1,230.6	19.3	R 124.6	R 1,895.4	36.6	R 9.2	R 2,701.0	-245.2	932.2	R 3,387.9
1980	12.3	459.9	472.2	1,184.8	863.2	86.1	143.2	2,457.8	27.6	R 252.8	R 3,830.9	50.3	R 50.1	R 5,588.3	-494.9	1,669.5	R 6,762.9
1981	12.2	527.1	539.3	1,321.2	964.2	97.1	125.0	2,654.8	19.1	R 310.5	R 4,170.8	56.7	R 54.5	R 6,142.4	-522.4	1,942.3	R 7,562.3
1982	7.1	576.8	583.8	1,517.8	933.5	85.4	163.6	2,526.4	39.5	R 262.2	R 4,010.6	90.8	R 54.0	R 6,257.1	-584.9	2,192.0	R 7,864.1
1983	1.9	629.2	631.2	1,612.0	897.9	70.0	175.3	2,303.2	14.7	R 257.8	R 3,718.9	84.6	R 58.1	R 6,104.7	-625.6	2,331.0	R 7,810.2
1984	R (s)	R 648.9	R 648.9	1,613.2	980.5	58.1	164.0	2,268.8	14.1	R 265.0	R 3,750.4	78.4	R 59.0	R 6,149.9	-633.9	2,588.7	R 8,104.7
1985	R (s)	635.9	636.0	1,634.5	1,004.7	57.8	167.7	R 2,281.4	9.3	R 255.1	R 3,776.1	69.2	R 57.4	R 6,173.1	-612.9	2,601.0	R 8,161.1
1986	—	R 623.7	R 623.7	1,408.5	738.8	39.1	160.9	R 1,743.7	14.5	R 207.7	R 2,904.6	62.2	R 44.5	R 5,043.5	-595.6	2,674.4	R 7,122.3
1987	—	R 591.1	R 591.1	1,374.5	754.4	34.8	152.8	R 1,869.1	13.8	R 209.7	R 3,034.7	59.1	R 46.2	R 5,105.5	-571.4	2,491.2	R 7,025.3
1988	—	R 601.7	R 601.7	1,515.0	837.0	30.9	156.9	R 1,965.0	12.8	R 223.1	R 3,225.7	52.7	R 48.0	R 5,443.1	-574.9	2,609.1	R 7,477.4
1989	—	589.5	589.5	1,491.3	928.9	34.9	259.5	R 2,140.3	12.2	R 229.2	R 3,604.9	52.1	e R 50.3	e R 5,788.2	-565.7	2,613.8	e R 7,836.3
1990	—	560.2	560.2	1,371.6	1,032.2	47.9	237.7	R 2,414.3	13.2	R 237.8	R 3,983.1	57.9	R 63.9	R 6,036.7	-544.4	2,621.1	R 8,113.4
1991	—	573.5	573.5	1,420.9	961.3	39.8	260.2	R 2,406.4	8.6	R 256.4	R 3,932.8	53.4	R 66.1	R 6,048.4	R -559.1	2,761.1	R 8,250.3
1992	—	550.5	550.5	1,485.1	920.8	44.9	227.5	R 2,361.2	8.7	R 271.1	R 3,834.2	47.5	R 68.5	R 5,988.8	R -533.4	2,771.9	R 8,227.3
1993	—	513.5	513.5	1,680.8	1,004.5	45.9	271.8	R 2,364.3	14.2	R 282.3	R 3,983.0	48.5	R 62.0	R 6,287.7	-499.0	2,913.6	R 8,702.2
1994	—	R 540.2	R 540.2	1,634.3	1,057.7	44.4	270.7	R 2,524.9	13.0	R 300.7	R 4,211.2	50.2	R 92.7	R 6,534.9	R -530.1	3,000.5	R 9,005.3
1995	—	R 531.1	R 531.1	1,607.0	1,024.4	46.0	264.6	R 2,754.4	7.5	R 319.3	R 4,416.2	51.6	R 98.8	R 6,725.5	R -545.8	3,083.8	R 9,263.4
1996	—	507.7	507.7	1,866.9	1,185.3	41.6	368.6	3,028.0	9.3	334.6	4,967.4	49.6	100.7	7,492.9	-513.7	3,062.6	10,041.8
1997	—	561.6	561.6	2,014.0	1,185.0	50.0	371.5	2,926.4	10.2	365.1	4,908.3	19.3	100.5	7,603.7	-560.5	3,112.7	10,155.9

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 306. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Wisconsin

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	1.63	1.22	1.21	1.47	2.07	1.42	0.57	R 1.32	6.75	R 2.05
1975	3.10	1.71	2.57	2.97	4.15	2.94	1.12	R 2.23	10.04	R 3.46
1980	3.92	3.81	6.60	8.11	7.69	6.82	2.87	R 4.74	15.04	R 6.78
1981	4.15	4.73	7.87	9.96	8.07	7.92	3.53	R 5.71	17.14	R 8.17
1982	4.11	5.58	7.77	9.91	9.05	8.03	3.43	R 6.27	19.72	R 9.11
1983	4.18	6.43	7.66	R 7.77	8.97	R 8.04	3.32	R 6.76	20.33	R 9.97
1984	4.16	6.46	7.65	R 8.00	9.03	R 8.02	3.37	R 6.79	19.68	R 10.04
1985	4.26	6.41	7.44	R 7.93	8.72	R 7.74	3.24	R 6.72	19.73	R 9.92
1986	3.86	6.14	5.72	R 6.38	8.05	6.26	2.60	R 6.09	20.07	R 9.66
1987	3.72	5.94	5.69	R 6.44	7.69	6.23	2.48	R 5.93	19.69	R 9.41
1988	3.83	5.84	5.59	R 6.32	7.29	6.02	2.50	R 5.81	19.52	R 9.08
1989	3.84	5.61	6.14	R 6.84	12.12	8.18	2.77	R 6.23	19.56	R 9.36
1990	3.37	5.71	7.13	R 8.28	10.03	8.17	3.56	6.29	19.45	R 9.67
1991	3.43	5.57	6.78	R 7.52	8.91	7.60	3.41	6.07	19.74	R 9.47
1992	3.41	5.82	6.19	R 7.13	7.99	6.90	3.12	R 6.02	20.24	R 9.49
1993	3.35	6.27	6.23	R 6.28	8.59	7.18	3.05	6.47	20.61	R 9.90
1994	3.33	6.21	6.14	R 6.00	8.89	7.28	2.96	R 6.44	20.74	R 10.01
1995	3.26	5.76	6.15	R 4.97	8.75	R 7.35	2.90	R 6.07	20.42	R 9.74
1996	3.29	5.96	6.81	6.00	10.61	8.74	3.33	6.56	20.15	9.84
1997	3.59	6.36	7.06	5.62	10.56	8.95	3.31	6.92	20.15	10.29
	Expenditures in Million Nominal Dollars									
1970	15.5	131.2	82.3	13.4	43.9	139.5	1.2	R 287.5	226.2	R 513.7
1975	11.9	209.5	164.8	8.9	83.2	257.0	2.4	R 480.8	403.6	R 884.3
1980	1.7	473.2	313.4	5.7	84.3	403.4	10.7	R 889.0	697.6	R 1,586.7
1981	1.4	531.5	343.2	4.1	79.5	426.8	13.3	R 973.0	803.3	R 1,776.2
1982	1.3	666.7	342.5	4.4	92.0	438.9	13.9	R 1,120.9	940.6	R 2,061.5
1983	1.7	728.6	221.3	R 3.6	108.3	R 333.2	13.3	R 1,076.7	1,001.9	R 2,078.6
1984	4.4	735.5	238.5	R 6.2	106.1	R 350.9	13.0	R 1,103.8	1,075.9	R 2,179.7
1985	1.0	751.6	278.4	R 8.8	95.7	R 382.9	12.2	R 1,147.7	1,097.7	R 2,245.4
1986	1.1	687.3	214.2	2.6	89.6	R 306.4	9.5	R 1,004.3	1,133.5	R 2,137.8
1987	2.9	617.9	191.5	3.7	95.5	290.7	10.1	R 921.6	1,036.7	R 1,958.4
1988	2.6	714.7	212.4	1.9	92.9	307.2	10.6	R 1,035.0	1,091.0	R 2,126.0
1989	0.6	716.3	193.0	R 1.5	198.4	392.9	12.2	R 1,122.0	1,085.0	R 2,207.0
1990	R (s)	654.6	192.5	R 1.4	152.2	R 346.1	16.5	1,017.4	1,087.2	R 2,104.6
1991	R (s)	696.1	202.4	1.3	168.7	372.4	16.6	R 1,085.4	1,168.3	R 2,253.8
1992	R (s)	724.4	171.5	1.2	143.4	316.0	16.0	R 1,056.5	1,147.6	R 2,204.1
1993	1.1	825.0	186.3	R 1.7	172.8	R 360.7	8.1	R 1,194.9	1,221.9	R 2,416.8
1994	1.5	804.9	171.6	R 1.2	177.1	R 349.9	7.7	R 1,164.0	1,249.9	R 2,413.9
1995	3.7	791.6	141.6	R 1.0	176.3	R 318.9	8.4	R 1,122.5	1,298.1	R 2,420.6
1996	3.0	893.3	155.5	1.4	253.6	410.4	9.6	1,316.3	1,284.8	2,601.2
1997	5.1	873.3	141.2	1.4	252.7	395.3	6.9	1,280.6	1,272.6	2,553.2

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 307. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Wisconsin

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.66	0.82	1.04	0.83	1.35	2.65	0.59	1.08	0.57	0.84	7.28	2.05
1975	1.51	1.29	2.39	2.41	2.63	4.54	1.66	2.43	1.12	1.50	10.13	3.55
1980	1.47	3.43	6.30	5.72	5.33	9.43	4.31	6.21	2.87	3.80	15.25	6.92
1981	2.11	4.34	7.61	7.52	5.67	10.48	5.44	7.35	3.53	4.67	17.32	R 8.56
1982	2.20	4.88	7.40	8.09	6.53	10.40	5.50	7.38	3.43	5.19	19.37	R 9.42
1983	2.15	5.26	6.74	R 7.77	7.19	9.36	4.84	6.92	3.32	R 5.68	19.89	R 9.53
1984	R 2.19	5.19	6.53	R 8.00	7.18	9.26	4.74	6.71	3.37	5.54	19.24	R 9.74
1985	2.11	5.14	6.21	R 7.93	8.74	9.33	4.50	R 6.59	NA	5.47	18.90	9.49
1986	2.02	4.96	3.94	R 6.38	8.66	7.00	2.90	4.75	NA	4.90	18.78	10.04
1987	1.90	4.74	4.41	R 6.44	7.12	7.49	2.55	5.03	NA	4.74	17.93	9.46
1988	R 1.96	4.64	4.04	R 6.32	7.03	7.55	2.46	4.64	NA	4.60	17.63	9.07
1989	1.87	4.42	4.73	R 6.84	6.92	8.29	2.40	5.13	NA	4.55	17.33	8.84
1990	1.80	4.72	5.53	R 8.28	9.83	9.38	2.41	R 6.37	NA	5.04	17.04	9.30
1991	1.78	4.59	5.01	R 7.52	7.99	9.18	2.35	R 5.74	NA	4.80	17.17	9.11
1992	1.74	4.77	4.84	R 7.13	8.32	8.94	2.23	5.64	NA	4.91	17.47	9.36
1993	R 1.71	5.10	4.85	R 6.28	9.14	8.72	2.50	R 5.80	3.05	R 5.18	17.57	R 9.46
1994	R 1.71	4.85	4.52	R 6.00	8.14	9.06	2.36	R 5.52	2.96	4.91	17.35	R 9.32
1995	1.66	4.45	4.59	R 4.97	8.17	9.52	2.38	5.76	2.90	4.53	17.09	R 8.93
1996	1.68	4.77	5.59	6.00	9.45	10.24	2.50	6.98	3.33	4.95	16.78	8.94
1997	1.66	5.29	5.20	5.62	9.98	10.00	2.62	6.67	3.31	5.37	16.57	9.26
	Expenditures in Million Nominal Dollars											
1970	11.7	45.5	11.5	0.6	5.0	0.8	0.9	18.8	(s)	76.1	153.5	229.6
1975	10.7	88.6	24.9	0.6	9.3	1.2	1.8	37.8	(s)	R 137.2	288.4	425.5
1980	1.2	266.9	61.8	1.8	10.3	3.8	0.8	78.5	(s)	R 346.8	521.5	R 868.2
1981	1.3	298.0	51.1	R (s)	9.9	4.5	R (s)	66.0	(s)	R 365.6	604.5	R 970.2
1982	1.3	344.3	55.1	6.0	11.7	4.7	1.3	78.8	(s)	R 424.7	675.1	R 1,099.9
1983	1.6	361.4	147.5	R (s)	15.3	13.2	R (s)	176.7	(s)	R 540.0	702.0	R 1,242.0
1984	R 4.3	367.6	154.3	R (s)	14.9	12.4	R (s)	182.1	(s)	R 554.3	850.6	R 1,404.9
1985	0.9	378.3	114.7	R 0.8	16.9	13.9	3.0	R 149.3	NA	R 528.4	779.6	R 1,308.1
1986	1.1	277.1	39.7	R (s)	17.0	10.3	4.6	R 71.8	NA	349.9	789.8	R 1,139.8
1987	2.8	276.0	46.2	R (s)	15.6	11.2	1.9	R 75.0	NA	R 353.8	744.8	R 1,098.6
1988	2.4	313.3	42.4	R (s)	15.8	11.4	3.8	73.6	NA	R 389.3	778.0	R 1,167.3
1989	0.5	311.2	55.6	R (s)	20.0	12.1	4.5	R 92.5	NA	R 404.2	776.0	R 1,180.2
1990	R (s)	315.1	59.0	R (s)	26.3	15.7	3.3	R 104.8	NA	R 420.0	779.4	R 1,199.4
1991	R (s)	330.4	57.2	R (s)	26.7	11.9	2.6	98.8	NA	429.5	819.9	R 1,249.5
1992	R (s)	343.0	43.7	R (s)	26.3	9.9	3.2	R 83.7	NA	R 426.8	830.5	R 1,257.3
1993	1.0	397.7	43.7	R (s)	32.4	2.3	3.1	81.8	0.6	R 480.6	861.5	R 1,342.1
1994	1.4	386.0	34.4	R (s)	28.6	4.2	2.5	R 70.0	0.6	R 458.0	890.2	R 1,348.2
1995	3.5	382.0	28.4	R (s)	29.0	2.6	1.6	61.9	0.6	R 448.0	911.9	R 1,359.9
1996	2.9	453.1	32.3	(s)	39.9	4.3	2.1	79.0	0.8	535.8	927.1	1,462.8
1997	4.4	474.7	40.3	(s)	42.1	2.7	2.2	87.6	0.7	567.3	931.5	1,498.8

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
(s)=Value less than 0.05 million nominal dollars.

NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 308. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Wisconsin

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	0.53	0.66	0.65	0.54	0.76	0.76	0.83	1.35	5.08	2.65	0.57	R 2.26	1.14	R 1.40	R 0.77	4.23	R 1.01
1975	1.80	1.51	1.55	1.03	2.05	2.23	2.41	2.63	7.48	4.54	2.06	R 3.46	R 2.71	R 1.40	1.65	6.63	R 2.17
1980	2.27	1.47	1.55	3.12	3.85	5.18	5.72	5.33	14.36	9.43	3.31	R 9.29	R 5.98	R 1.40	R 3.41	10.10	R 4.31
1981	2.41	2.11	2.14	3.74	5.46	6.89	7.52	5.67	18.00	10.48	4.17	R 9.90	R 7.79	R 1.40	R 4.15	11.50	R 5.23
1982	2.47	2.20	2.21	4.36	4.54	7.33	8.09	6.53	17.25	10.40	3.91	R 9.48	R 7.14	R 1.40	R 4.36	13.08	R 5.61
1983	2.19	2.15	2.15	4.65	4.51	6.80	R 6.26	7.19	16.98	9.36	4.02	R 9.11	R 7.30	R 1.40	R 4.36	13.27	R 5.77
1984	2.16	R 2.19	R 2.19	4.43	4.75	6.64	R 6.60	7.18	17.63	9.26	4.74	R 9.35	R 7.67	R 1.40	R 4.36	12.65	R 5.81
1985	2.08	2.11	2.11	4.44	4.87	6.35	R 6.07	8.74	17.61	9.33	4.50	R 9.02	R 7.66	R 1.40	R 4.28	12.64	R 5.85
1986	—	2.02	2.02	4.18	4.09	4.29	R 4.70	8.66	15.59	7.00	2.90	R 7.94	R 5.87	R 1.44	R 3.86	12.71	R 5.63
1987	—	1.90	1.90	4.32	3.37	4.64	R 4.61	7.12	13.58	7.49	2.55	R 8.50	R 5.55	R 1.44	R 3.88	12.31	R 5.52
1988	—	R 1.96	R 1.96	4.05	3.34	4.05	R 4.28	7.03	14.62	7.55	2.46	R 7.57	R 5.07	R 1.44	R 3.69	12.01	R 5.30
1989	—	1.87	1.87	3.71	2.94	4.75	R 5.33	6.92	14.48	8.29	2.40	R 8.45	R 5.19	d R 1.37	d R 3.53	11.91	d R 5.15
1990	—	1.80	1.80	3.37	3.13	5.66	R 6.28	9.83	14.60	9.38	2.41	R 8.30	R 5.81	1.59	R 3.54	11.69	R 5.14
1991	—	1.78	1.78	3.14	3.10	5.30	R 5.83	7.99	16.80	9.18	2.35	R 7.81	R 5.89	1.61	R 3.50	11.81	R 5.10
1992	—	1.74	1.74	3.27	2.59	4.95	R 5.51	8.32	18.32	8.94	2.23	R 8.96	R 5.89	R 1.61	R 3.52	11.72	5.15
1993	—	R 1.71	R 1.71	3.48	3.19	5.22	R 5.12	9.14	18.96	8.72	2.50	R 7.98	R 5.94	R 1.60	R 3.68	11.67	R 5.28
1994	—	R 1.71	R 1.71	3.32	3.09	4.78	R 4.77	7.14	19.11	9.06	2.36	R 8.53	R 5.66	R 1.79	R 3.48	11.39	R 5.04
1995	—	1.66	1.66	2.93	3.27	4.68	R 4.85	7.49	R 19.41	9.52	2.38	R 8.79	R 5.75	R 1.79	R 3.29	11.09	R 4.83
1996	—	1.68	1.68	3.44	3.24	5.54	5.96	9.11	20.08	10.24	2.50	9.57	6.33	1.76	3.72	10.71	5.11
1997	—	1.66	1.66	4.08	3.63	5.49	5.41	8.88	17.86	10.00	2.62	8.64	6.06	1.78	3.98	10.89	5.34
	Expenditures in Million Nominal Dollars																
1970	5.0	73.0	78.0	77.3	23.6	35.1	5.9	5.0	13.6	34.4	3.9	R 9.2	R 130.7	R 5.3	R 291.4	121.3	R 412.6
1975	12.0	72.6	84.6	159.5	41.1	92.9	5.5	19.1	19.3	48.4	9.3	R 23.5	R 259.1	R 6.7	R 509.9	240.2	R 750.1
1980	12.3	72.3	84.6	404.2	77.1	108.3	1.3	47.0	43.2	80.9	19.4	R 72.4	R 449.6	R 38.0	R 976.3	450.4	R 1,426.7
1981	12.2	100.7	112.9	464.4	70.6	142.1	2.0	31.7	52.0	74.6	15.8	R 120.6	R 509.4	R 40.1	R 1,126.8	534.5	R 1,661.4
1982	7.1	109.5	116.6	488.5	63.7	140.4	1.5	56.1	45.4	62.3	37.3	R 91.5	R 498.2	R 38.8	R 1,142.2	576.2	R 1,718.4
1983	1.9	109.4	111.4	507.1	61.0	126.1	R 1.0	46.1	46.8	56.3	11.0	R 89.7	R 438.1	R 43.8	R 1,100.3	627.2	R 1,727.5
1984	R (s)	R 99.9	R 100.0	502.3	47.8	133.1	R 0.8	35.9	51.9	58.6	7.2	R 98.3	R 433.6	R 44.7	R 1,080.6	662.2	R 1,742.8
1985	R (s)	104.6	104.7	499.2	54.6	113.5	R 0.7	49.4	48.3	55.7	2.2	R 85.8	R 410.2	R 44.5	R 1,058.6	723.7	R 1,782.3
1986	—	R 100.5	R 100.5	437.5	55.8	85.8	0.5	49.9	41.8	39.2	7.7	R 58.3	R 339.0	R 34.7	R 911.7	751.0	R 1,662.7
1987	—	R 87.0	R 87.0	472.1	53.5	83.6	R (s)	38.5	41.1	R 39.4	12.0	R 64.5	R 332.8	R 34.5	R 926.4	709.7	R 1,636.1
1988	—	R 89.8	R 89.8	478.2	75.8	81.8	R (s)	44.8	42.7	34.5	8.9	R 53.8	R 342.5	R 35.9	R 946.3	740.1	R 1,686.5
1989	—	R 86.6	R 86.6	457.4	74.3	93.0	0.5	38.0	43.4	37.8	7.6	R 58.2	R 352.8	d R 36.7	d R 933.5	752.9	d R 1,686.4
1990	—	85.0	85.0	394.8	76.4	118.4	R (s)	R 55.0	45.0	R 38.4	9.8	R 61.1	R 404.5	R 46.2	R 930.5	754.6	R 1,685.1
1991	—	81.3	81.3	386.9	68.5	126.5	R (s)	60.8	46.3	48.1	6.0	R 86.1	R 442.7	R 48.2	R 959.1	772.8	R 1,731.9
1992	—	77.6	77.6	411.3	53.3	120.4	R (s)	54.1	51.5	38.3	5.4	R 104.7	R 428.1	R 51.0	R 968.0	793.8	R 1,761.9
1993	—	R 74.0	R 74.0	449.7	68.9	144.9	R 0.5	61.6	54.3	37.8	10.9	R 94.2	R 473.2	R 52.0	R 1,048.9	830.2	R 1,879.1
1994	—	R 81.8	R 81.8	433.1	72.1	139.9	R (s)	55.2	57.2	43.5	10.3	R 97.2	R 476.0	R 82.1	R 1,072.9	860.4	R 1,933.3
1995	—	R 78.4	R 78.4	412.7	90.1	120.8	R (s)	55.0	57.1	46.7	5.5	R 94.0	R 469.6	R 87.4	R 1,048.1	873.8	R 1,921.9
1996	—	67.1	67.1	498.1	88.6	154.2	0.7	72.0	57.3	49.5	6.6	108.1	537.0	88.8	1,191.0	850.7	2,041.7
1997	—	70.5	70.5	615.8	124.3	156.0	(s)	74.0	53.9	48.0	7.8	104.3	568.8	91.3	1,346.3	908.6	2,254.9

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 309. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Wisconsin

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.66	—	2.17	1.33	0.74	1.35	5.08	2.65	0.55	2.49	2.49	—	2.49
1975	1.51	—	3.45	2.62	2.08	2.63	7.48	4.54	1.44	4.24	4.24	—	4.24
1980	—	—	9.02	7.28	6.38	5.33	14.36	9.43	3.80	8.99	8.99	—	8.99
1981	—	—	10.84	8.45	7.55	5.67	18.00	10.48	5.00	10.09	10.09	—	10.09
1982	—	—	10.92	8.15	7.22	6.53	17.25	10.40	5.03	9.97	9.97	—	9.97
1983	—	—	10.44	8.15	6.75	7.19	16.98	9.36	4.60	9.14	9.14	—	9.14
1984	—	—	10.27	8.64	6.45	7.18	17.63	9.26	4.97	9.13	9.13	—	9.13
1985	—	—	9.99	8.69	6.19	8.74	17.61	9.33	4.71	9.18	9.18	—	9.18
1986	—	—	8.41	6.69	4.45	8.66	15.59	7.00	3.60	6.95	6.95	—	6.95
1987	—	—	7.55	7.15	4.28	7.12	13.58	7.49	—	7.41	7.41	—	7.41
1988	—	—	7.41	7.00	4.11	7.03	14.62	7.55	2.37	7.42	7.42	—	7.42
1989	—	—	8.28	7.51	4.63	6.92	14.48	8.29	2.66	8.09	8.09	—	8.09
1990	—	3.36	9.32	8.79	5.99	9.83	14.60	9.38	2.80	9.22	9.22	—	9.22
1991	—	3.42	8.71	8.40	5.26	7.99	16.80	9.18	2.29	9.00	9.00	—	9.00
1992	—	3.66	8.54	8.21	4.64	8.32	18.32	8.94	2.41	8.75	8.75	—	8.75
1993	—	3.76	8.24	8.34	4.26	9.14	18.96	8.72	2.42	8.59	8.59	—	8.59
1994	—	3.37	7.96	8.27	3.99	9.11	19.11	9.06	2.59	8.81	8.81	20.51	8.81
1995	—	2.93	8.36	8.19	3.97	9.46	R 19.41	9.52	2.72	9.12	9.12	20.06	9.12
1996	—	2.37	9.29	9.19	4.79	8.78	20.08	10.24	3.17	9.94	9.94	19.89	9.94
1997	—	2.35	9.39	8.90	4.53	8.28	17.86	10.00	3.14	9.65	9.64	19.86	9.64
	Expenditures in Million Nominal Dollars												
1970	R (s)	—	3.6	32.3	6.7	R (s)	17.0	598.4	(s)	658.4	658.5	—	658.5
1975	(s)	—	3.0	92.4	25.5	0.9	22.6	1,181.0	2.6	1,328.0	1,328.0	—	1,328.0
1980	—	—	5.6	363.6	86.1	1.6	45.5	2,373.2	5.6	2,881.3	2,881.3	—	2,881.3
1981	—	—	5.9	414.6	97.1	4.0	54.7	2,575.8	2.4	3,154.5	3,154.5	—	3,154.5
1982	—	—	1.7	385.3	85.4	3.9	47.8	2,459.4	0.9	2,984.4	2,984.4	—	2,984.4
1983	—	—	6.0	394.2	70.0	5.5	49.3	2,233.7	3.4	2,762.1	2,762.1	—	2,762.1
1984	—	—	5.0	448.2	58.1	7.0	54.6	2,197.8	6.7	2,777.4	2,777.4	—	2,777.4
1985	—	—	5.1	490.1	57.8	5.8	50.8	R 2,211.8	4.1	R 2,825.5	R 2,825.5	—	R 2,825.5
1986	—	—	4.6	393.6	39.1	4.4	44.0	1,694.2	2.2	2,182.0	2,182.0	—	2,182.0
1987	—	—	3.2	429.2	34.8	3.3	43.3	R 1,818.5	—	R 2,332.2	R 2,332.2	—	R 2,332.2
1988	—	—	3.5	495.5	30.9	3.5	44.9	R 1,919.2	R (s)	R 2,497.6	R 2,497.6	—	R 2,497.6
1989	—	—	5.4	583.3	34.9	3.1	45.7	R 2,090.4	R (s)	R 2,762.8	R 2,762.8	—	R 2,762.8
1990	—	R (s)	5.7	658.9	47.9	4.2	47.4	R 2,360.2	(s)	R 3,124.3	R 3,124.3	—	R 3,124.3
1991	—	R (s)	4.6	571.4	39.8	4.0	48.8	R 2,346.4	(s)	R 3,015.1	R 3,015.2	—	R 3,015.2
1992	—	R (s)	5.2	583.0	44.9	3.6	54.2	R 2,312.9	R (s)	R 3,004.0	R 3,004.1	—	R 3,004.1
1993	—	R (s)	5.0	626.7	45.9	R 5.0	57.1	R 2,324.3	R (s)	R 3,064.1	R 3,064.2	—	R 3,064.2
1994	—	R (s)	11.4	706.7	44.4	9.7	60.2	R 2,477.2	R (s)	R 3,309.8	R 3,309.9	(s)	R 3,309.9
1995	—	R (s)	15.8	729.3	46.0	4.2	60.1	2,705.2	R (s)	R 3,561.0	R 3,561.1	(s)	R 3,561.1
1996	—	(s)	17.2	838.8	41.6	3.2	60.3	2,974.2	0.6	3,935.9	3,936.0	(s)	3,936.0
1997	—	(s)	23.0	840.4	50.0	2.7	56.7	2,875.7	(s)	3,848.8	3,849.0	(s)	3,849.0

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 310. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Wisconsin

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.39	0.42	0.56	0.67	0.36	0.54	0.15	0.65	0.39
1975	0.86	0.82	1.65	2.30	0.72	1.93	0.32	—	0.71
1980	1.42	2.94	4.28	5.58	1.17	5.35	0.47	1.74	1.25
1981	1.55	3.65	5.35	6.49	1.31	5.93	0.53	1.24	1.34
1982	1.72	4.18	—	6.83	1.50	6.46	0.80	1.28	1.50
1983	1.72	4.28	—	5.97	—	5.97	0.83	1.12	1.54
1984	1.72	4.05	—	5.94	1.00	5.36	0.67	1.28	1.46
1985	1.71	4.11	—	5.48	1.38	5.12	0.58	0.79	1.42
1986	1.62	3.74	—	3.60	—	3.60	0.51	0.32	1.33
1987	1.47	3.92	—	3.97	—	3.97	0.48	0.95	1.23
1988	1.46	3.25	—	3.65	—	3.65	0.43	0.87	1.21
1989	1.45	3.10	—	4.10	—	4.10	0.45	0.75	1.21
1990	1.36	2.93	—	5.26	—	5.26	0.48	0.68	1.15
1991	1.36	2.70	—	4.46	—	4.46	0.45	0.73	1.15
1992	1.33	2.40	—	4.64	0.83	3.31	0.40	0.93	1.11
1993	1.21	2.63	—	4.09	0.28	2.26	0.40	0.82	1.02
1994	1.21	2.63	—	3.98	0.61	2.53	0.41	0.82	1.03
1995	1.14	2.21	—	3.85	0.60	2.44	0.44	0.80	R 1.01
1996	1.06	3.01	—	4.82	0.62	2.89	0.46	0.47	0.97
1997	1.09	3.15	—	4.63	0.71	3.02	0.46	0.42	1.11
	Expenditures in Million Nominal Dollars								
1970	90.8	13.1	4.0	R (s)	0.5	5.0	R (s)	R (s)	109.2
1975	178.3	16.7	5.7	7.7	R (s)	13.6	36.6	—	245.2
1980	384.7	40.6	1.8	16.2	R (s)	18.1	50.3	1.1	494.9
1981	423.7	27.3	R (s)	13.3	R (s)	14.0	56.7	0.7	522.4
1982	464.6	18.3	—	10.2	R (s)	10.4	90.8	1.0	584.9
1983	516.6	14.9	—	8.7	—	8.7	84.6	0.7	625.6
1984	540.2	7.8	—	6.3	R (s)	6.4	78.4	1.1	633.9
1985	529.4	5.4	—	8.0	R (s)	8.2	69.2	0.7	612.9
1986	520.9	6.7	—	5.4	—	5.4	62.2	R (s)	595.6
1987	498.4	8.5	—	4.0	—	4.0	59.1	1.5	571.4
1988	506.9	8.9	—	4.9	—	4.9	52.7	1.5	574.9
1989	501.7	6.4	—	4.0	—	4.0	52.1	1.4	565.7
1990	474.9	7.0	—	3.5	—	3.5	57.9	1.2	544.4
1991	491.6	7.4	—	3.8	—	3.8	53.4	1.2	R 559.1
1992	472.7	6.3	—	2.2	R (s)	2.4	47.5	1.4	R 533.4
1993	437.5	8.2	—	2.9	R (s)	3.1	48.5	1.8	499.0
1994	455.5	10.2	—	5.1	0.6	5.7	50.2	2.2	R 530.1
1995	445.5	20.7	—	4.3	0.5	4.9	51.6	2.4	R 545.8
1996	434.7	22.2	—	4.5	(s)	5.0	49.6	1.5	513.7
1997	481.7	50.0	—	7.1	0.8	7.9	19.3	1.6	560.5

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 311. Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Wyoming

Year	Primary Energy														Electric Utility Fuel [c,d]	Electricity Purchased by End-Users	Total Energy [c]
	Coal			Natural Gas	Petroleum							Nuclear Fuel	Wood and Waste	Total [c,d]			
	Coking Coal	Steam Coal	Total		Distillate Fuel	Jet Fuel	LPG [a]	Motor Gasoline	Residual Fuel	Other [b]	Total						
	Prices in Nominal Dollars per Million Btu																
1970	—	0.16	0.16	0.38	1.11	0.76	1.64	2.93	0.55	R 1.06	R 1.77	—	R 1.25	R 0.85	0.14	4.53	R 1.33
1975	—	0.31	0.31	0.71	2.51	2.12	3.46	4.77	1.71	R 2.68	R 3.34	—	R 1.47	1.51	0.26	4.63	R 2.55
1980	—	0.70	0.70	2.45	6.44	6.59	5.77	10.28	3.56	R 5.25	R 7.34	—	R 1.99	R 3.01	0.59	7.45	R 5.85
1981	—	0.80	0.80	3.02	7.51	7.67	6.38	11.35	4.37	R 6.69	R 8.39	—	R 2.16	3.15	0.71	9.62	R 6.68
1982	—	0.84	0.84	3.97	6.96	7.38	6.55	10.76	4.07	R 6.21	R 7.97	—	R 2.18	2.99	0.80	10.99	R 6.61
1983	—	0.98	0.98	4.24	6.87	7.36	6.59	9.33	4.14	R 7.63	R 7.87	—	R 2.08	R 2.80	0.93	12.48	R 6.55
1984	—	1.05	1.05	4.54	6.97	7.06	6.28	9.02	4.25	R 6.21	R 7.67	—	R 2.24	R 2.72	0.98	12.26	R 6.79
1985	—	R 1.01	R 1.01	4.28	6.73	6.53	8.31	8.87	3.14	R 5.94	R 7.52	—	R 2.17	R 2.50	0.93	12.54	R 6.78
1986	—	R 1.00	R 1.00	4.01	5.56	4.56	7.36	6.72	2.06	R 5.49	R 6.10	—	R 1.81	R 2.30	0.93	13.13	R 6.14
1987	—	0.91	0.91	3.93	5.71	4.61	6.42	6.88	1.83	R 4.48	R 6.03	—	R 1.64	R 2.08	0.88	12.91	R 6.06
1988	—	0.88	0.88	3.75	5.81	4.62	6.31	6.84	1.65	R 5.15	R 6.11	—	R 1.64	R 2.03	0.85	12.81	R 6.12
1989	—	0.89	0.89	3.82	6.71	5.06	7.64	7.79	1.88	R 4.94	R 7.02	—	e R 1.52	e 2.29	0.85	12.66	e R 6.50
1990	—	0.86	0.86	3.57	7.76	6.45	8.22	8.66	2.46	R 4.83	R 7.87	—	2.37	R 2.29	0.84	12.39	R 6.51
1991	—	0.86	0.86	3.48	7.02	6.05	9.80	8.40	2.26	R 5.45	R 7.51	—	R 2.36	2.21	0.84	12.52	R 6.23
1992	—	0.79	0.79	3.16	7.06	5.88	7.29	8.73	R 1.79	R 5.97	R 7.62	—	R 2.65	R 2.12	0.76	12.59	R 5.95
1993	—	0.83	0.83	3.70	7.00	5.71	6.88	8.42	2.05	R 6.06	R 7.43	—	R 2.51	R 2.29	0.81	12.52	R 6.10
1994	—	0.83	0.83	3.66	6.84	5.29	7.73	8.65	2.22	R 5.84	R 7.45	—	R 2.35	R 2.26	0.81	12.56	R 6.01
1995	—	0.84	0.84	3.43	7.16	5.33	7.54	8.68	2.29	R 6.93	R 7.67	—	R 2.52	R 2.40	0.83	12.73	R 6.16
1996	—	0.84	0.84	3.25	7.86	5.84	9.21	9.26	1.77	6.84	8.30	—	2.73	2.53	0.83	12.70	6.39
1997	—	0.83	0.83	3.54	7.58	5.76	9.27	9.39	2.20	6.26	8.11	—	2.51	2.56	0.81	12.78	6.51
	Expenditures in Million Nominal Dollars																
1970	—	10.2	10.2	28.4	32.7	0.5	10.8	90.8	2.7	R 12.8	R 150.2	—	R (s)	R 189.3	-8.9	46.9	R 227.2
1975	—	39.8	39.8	36.4	111.2	1.5	21.6	184.4	13.6	R 22.0	R 354.2	—	R (s)	R 430.8	-30.3	70.0	R 470.6
1980	—	187.2	187.2	91.6	496.4	6.0	42.7	458.9	24.0	R 58.0	R 1,086.0	—	R 1.5	R 1,366.3	-140.7	176.1	R 1,401.6
1981	—	255.2	255.2	128.3	544.1	10.7	46.6	506.6	40.6	R 60.6	R 1,209.2	—	R 1.7	R 1,594.4	-205.6	235.5	R 1,624.4
1982	—	280.3	280.3	210.0	449.7	8.9	59.8	467.3	27.8	R 54.2	R 1,067.7	—	R 1.7	R 1,559.7	-245.2	292.9	R 1,607.4
1983	—	306.1	306.1	198.6	289.2	6.4	61.0	385.2	5.5	R 38.3	R 785.6	—	R 1.8	R 1,292.1	-263.2	309.1	R 1,338.0
1984	—	R 377.9	R 377.9	196.8	300.4	6.3	45.2	388.3	2.5	R 66.3	R 809.0	—	R 2.1	R 1,385.8	-318.1	395.3	R 1,463.0
1985	—	R 408.4	R 408.4	176.5	300.6	5.6	52.2	R 357.3	1.4	R 80.1	R 797.1	—	R 2.0	R 1,384.0	-346.3	427.3	R 1,465.0
1986	—	R 337.3	R 337.3	148.5	223.7	3.7	53.8	R 254.1	1.4	R 66.3	R 603.0	—	R 2.4	R 1,091.2	-283.5	433.6	R 1,241.3
1987	—	389.3	389.3	125.2	291.7	5.2	60.8	R 263.2	R (s)	R 50.8	R 672.0	—	R 2.0	R 1,188.4	-345.3	449.3	R 1,292.5
1988	—	R 392.6	R 392.6	131.2	318.6	5.0	44.3	R 266.7	1.2	R 43.7	R 679.5	—	R 2.1	R 1,205.4	-350.0	465.3	R 1,320.7
1989	—	374.6	374.6	135.2	382.2	4.5	64.9	R 309.3	(s)	R 37.6	R 798.6	—	e R 2.5	e R 1,310.8	-328.6	466.9	e R 1,449.2
1990	—	395.9	395.9	162.9	434.2	5.1	36.0	R 323.2	(s)	R 37.8	R 836.3	—	3.3	R 1,398.5	-349.8	482.6	R 1,531.2
1991	—	387.8	387.8	179.9	360.5	4.1	41.2	R 318.0	(s)	R 44.1	R 767.9	—	R 3.5	R 1,339.1	-340.2	486.9	R 1,485.9
1992	—	R 389.5	R 389.5	229.6	381.9	5.0	29.5	R 340.7	(s)	R 38.6	R 795.8	—	R 3.0	R 1,418.0	-340.1	488.6	R 1,566.4
1993	—	R 386.1	R 386.1	280.6	410.5	4.5	42.3	R 334.8	R (s)	R 38.9	R 831.2	—	R 2.8	R 1,500.8	-341.4	492.6	R 1,652.0
1994	—	404.7	404.7	295.7	398.7	4.5	43.4	R 349.2	R (s)	R 44.0	R 839.9	—	R 3.1	R 1,543.4	-359.9	486.7	R 1,670.3
1995	—	388.0	388.0	243.7	471.7	4.7	53.6	361.7	R (s)	R 46.3	R 938.1	—	R 3.1	R 1,573.0	-345.3	473.1	R 1,700.8
1996	—	398.2	398.2	237.5	570.6	5.0	56.1	384.5	(s)	54.5	1,070.7	—	3.5	1,709.9	-353.8	483.9	1,839.9
1997	—	389.4	389.4	250.2	585.5	4.0	57.1	375.0	(s)	53.9	1,075.5	—	2.9	1,717.9	-343.9	499.1	1,873.2

[a] Liquefied petroleum gases.
[b] "Other" includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke (industrial and used at electric utilities), and the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.
[e] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 312. Residential Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Wyoming

Year	Primary Energy								Electricity	Total Energy [b]
			Petroleum							
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu									
1970	0.66	0.67	1.28	1.70	1.96	1.93	0.72	0.89	7.52	R 1.44
1975	0.99	1.09	2.84	3.17	4.20	4.13	1.43	1.83	7.58	R 2.77
1980	0.87	2.66	6.94	—	7.25	7.23	3.66	3.42	11.66	R 5.57
1981	1.23	3.31	8.26	9.94	7.50	7.58	4.51	4.13	12.93	R 6.75
1982	2.63	4.53	8.14	—	7.63	7.66	4.37	4.95	13.61	R 7.04
1983	2.36	4.84	7.38	R 7.68	7.69	7.59	4.23	R 5.44	15.72	R 7.75
1984	1.97	5.55	7.36	R 7.93	7.49	7.43	4.30	R 5.71	16.06	R 8.18
1985	2.29	4.92	10.07	R 8.54	7.51	R 7.88	4.14	R 5.16	16.60	R 8.08
1986	1.37	4.69	5.72	R 4.62	6.75	6.69	3.32	R 4.90	17.66	R 8.08
1987	1.44	4.45	3.73	R 4.62	6.44	6.33	3.16	R 4.89	17.90	R 8.10
1988	0.95	4.25	4.29	R 4.31	6.20	R 6.09	3.19	R 4.45	17.11	R 7.81
1989	1.25	4.46	5.43	R 4.51	10.48	10.05	3.53	R 5.13	17.71	R 8.54
1990	1.32	4.40	6.35	R 5.87	10.72	R 10.38	4.75	4.96	17.50	R 8.34
1991	1.16	4.47	6.05	R 7.18	11.18	10.19	4.54	5.16	17.59	R 8.49
1992	1.26	4.46	4.79	R 6.75	8.10	7.57	4.15	R 4.77	17.83	R 8.54
1993	1.27	4.52	6.02	R 6.88	8.06	7.74	4.06	R 4.64	17.47	R 8.20
1994	1.36	4.83	5.89	R 5.89	8.59	8.03	3.94	R 4.85	17.70	R 8.49
1995	1.39	4.54	3.28	R 6.10	8.04	7.42	3.86	R 4.77	17.86	R 8.47
1996	1.40	4.02	7.46	6.86	9.70	9.43	4.43	4.22	17.96	7.86
1997	1.42	4.28	6.46	7.17	9.92	9.31	4.41	4.73	18.24	8.59
	Expenditures in Million Nominal Dollars									
1970	R (s)	12.3	R (s)	R (s)	7.4	7.9	(s)	R 20.3	15.5	R 35.8
1975	R (s)	12.3	R (s)	R (s)	15.0	15.6	(s)	R 28.5	23.0	R 51.5
1980	0.6	27.5	0.9	—	17.1	18.1	0.6	R 46.8	56.1	R 102.9
1981	0.9	31.3	1.2	R (s)	19.7	21.4	0.8	R 54.3	72.0	R 126.3
1982	2.4	68.8	1.4	—	22.7	24.1	0.8	R 96.1	84.5	R 180.6
1983	2.1	71.5	13.6	R (s)	28.0	R 41.7	0.8	R 116.1	97.4	R 213.5
1984	2.0	80.7	13.9	R (s)	13.9	R 27.8	1.1	R 111.6	98.6	R 210.2
1985	1.5	74.2	3.0	R (s)	13.4	R 16.8	1.0	R 93.5	102.8	R 196.2
1986	0.8	62.8	0.9	R (s)	19.1	20.1	0.8	R 84.5	101.1	R 185.5
1987	0.9	49.9	0.7	R (s)	31.2	32.0	(s)	R 83.1	99.8	R 182.9
1988	0.8	52.2	0.8	(s)	20.0	20.8	(s)	R 74.2	103.0	R 177.2
1989	1.0	55.5	1.1	(s)	22.8	23.9	(s)	R 80.8	104.0	R 184.8
1990	1.2	55.6	0.9	R (s)	18.9	19.9	2.0	78.7	102.7	181.4
1991	1.3	56.8	3.1	R (s)	24.1	27.2	2.0	R 87.4	109.2	R 196.6
1992	0.8	51.4	1.6	(s)	14.9	16.5	2.0	R 70.7	107.2	R 178.0
1993	1.5	60.4	1.8	R (s)	13.1	15.0	1.7	R 78.7	113.6	R 192.3
1994	2.1	59.0	2.4	(s)	13.1	15.5	1.7	R 78.3	112.6	R 190.9
1995	1.3	58.7	1.0	(s)	17.3	18.3	1.8	R 80.1	118.2	R 198.3
1996	3.4	57.7	1.6	(s)	16.1	17.7	2.1	80.8	123.9	204.7
1997	1.3	59.5	2.2	(s)	16.4	18.7	1.5	81.0	124.9	206.0

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 313. Commercial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Wyoming

Year	Primary Energy										Electricity	Total Energy [b]
			Petroleum									
	Coal	Natural Gas	Distillate Fuel	Kerosene	LPG [a]	Motor Gasoline	Residual Fuel	Total	Wood	Total [b]		
	Prices in Nominal Dollars per Million Btu											
1970	0.42	0.43	1.06	0.86	1.22	2.93	0.55	1.32	0.72	0.55	5.28	1.10
1975	0.90	0.72	2.49	2.42	2.48	4.77	2.03	2.77	1.43	1.08	5.48	1.86
1980	1.72	2.50	6.47	5.76	5.07	10.28	3.59	6.70	3.66	3.95	11.21	5.94
1981	1.76	3.09	7.76	—	5.76	11.35	4.37	8.37	4.51	4.08	12.58	7.33
1982	1.32	4.62	7.53	6.51	6.03	10.76	4.63	7.04	4.37	4.93	12.72	6.82
1983	1.41	5.07	6.42	R 7.68	5.88	9.33	4.51	R 6.56	4.23	4.90	14.42	7.56
1984	R 1.89	5.09	6.29	R 7.93	5.86	9.02	4.25	6.54	4.30	4.87	15.23	8.34
1985	R 1.94	4.83	5.93	R 8.54	8.63	8.87	3.14	6.14	NA	R 4.93	15.38	8.62
1986	R 1.75	4.43	3.69	R 4.62	7.75	6.72	2.06	4.38	NA	R 4.20	16.02	R 8.44
1987	1.35	4.23	4.13	R 4.62	6.41	6.88	1.83	4.98	NA	4.15	15.72	8.33
1988	R 1.40	3.90	3.82	R 4.31	6.40	6.84	1.65	4.11	NA	3.66	15.84	7.93
1989	1.36	4.10	4.55	R 4.51	6.66	7.79	1.62	R 5.41	NA	R 3.99	15.45	8.26
1990	1.12	4.07	5.70	R 5.87	6.53	8.66	2.46	6.41	NA	4.04	15.64	8.45
1991	1.14	4.07	5.03	R 7.18	8.34	8.40	2.26	R 6.27	NA	R 3.99	15.45	R 8.26
1992	R 1.12	4.03	4.87	R 6.75	6.63	8.73	—	5.93	NA	4.05	15.35	8.81
1993	1.10	4.01	4.90	R 6.88	6.45	8.42	—	5.27	4.06	R 3.69	14.99	R 7.96
1994	1.05	4.21	4.61	R 5.89	8.60	8.65	2.22	5.34	3.94	3.71	14.96	7.98
1995	1.04	3.98	4.75	R 6.10	8.34	8.68	2.29	R 5.43	3.86	3.85	15.26	8.03
1996	1.02	3.46	5.62	6.86	9.89	9.26	1.77	6.38	4.43	3.26	15.24	7.26
1997	1.10	3.68	5.51	7.17	10.37	9.39	2.20	6.29	4.41	3.75	15.56	8.07
	Expenditures in Million Nominal Dollars											
1970	R (s)	6.1	R (s)	0.7	0.8	1.3	R (s)	3.2	(s)	9.4	11.8	R 21.3
1975	0.5	6.9	0.9	0.6	1.6	1.8	1.1	5.9	(s)	13.4	14.5	27.9
1980	2.1	13.2	16.1	0.8	2.1	5.5	0.6	25.1	(s)	R 40.5	43.5	84.0
1981	2.3	14.8	5.6	—	2.7	6.8	R (s)	15.2	(s)	32.3	61.5	93.8
1982	2.2	46.7	15.4	0.6	3.2	6.5	5.1	30.7	(s)	79.6	66.1	R 145.8
1983	2.3	49.3	8.3	R 0.6	3.8	3.2	0.9	16.8	(s)	68.4	77.9	R 146.4
1984	3.6	50.5	8.3	R (s)	1.9	2.8	0.5	13.9	(s)	R 68.1	106.9	174.9
1985	2.3	46.4	15.2	R (s)	2.7	3.1	1.4	22.7	NA	R 71.5	121.8	R 193.3
1986	R 2.0	37.4	8.4	(s)	3.9	4.3	1.4	18.0	NA	R 57.4	122.9	R 180.3
1987	1.6	37.7	6.6	R (s)	5.5	2.6	R (s)	15.1	NA	54.4	116.8	171.2
1988	R 2.3	35.8	6.0	R (s)	3.6	2.4	1.2	13.4	NA	R 51.4	120.0	R 171.4
1989	2.1	37.0	6.6	R (s)	2.6	2.6	(s)	11.8	NA	51.0	117.0	168.0
1990	1.9	37.7	7.2	(s)	2.0	3.4	(s)	12.6	NA	52.2	123.8	R 176.1
1991	2.4	39.2	7.0	R (s)	3.2	3.8	(s)	R 14.2	NA	R 55.8	128.6	R 184.3
1992	1.4	34.1	6.3	(s)	2.1	3.6	—	12.0	NA	47.5	130.7	178.2
1993	2.5	43.4	6.1	(s)	1.9	R (s)	—	8.3	(s)	54.2	133.8	188.0
1994	3.0	41.1	6.2	(s)	2.3	R (s)	(s)	8.9	(s)	R 53.2	131.3	R 184.5
1995	1.8	41.6	8.5	R (s)	3.2	R (s)	(s)	12.1	(s)	R 55.6	127.1	R 182.7
1996	4.6	35.7	11.6	(s)	2.9	1.8	(s)	16.3	(s)	56.8	133.2	190.0
1997	1.8	42.3	9.4	(s)	3.0	(s)	(s)	12.8	(s)	57.0	136.4	193.4

[a] Liquefied petroleum gases.
[b] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption.

(s)=Value less than 0.05 million nominal dollars.
NA=Not available.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 314. Industrial Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Wyoming

Year	Primary Energy															Electricity	Total Energy [c]
	Coal			Natural Gas	Petroleum									Wood and Waste	Total [c]		
	Coking Coal	Steam Coal	Total		Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Other [b]	Total				
	Prices in Nominal Dollars per Million Btu																
1970	—	0.42	0.42	0.24	0.58	0.80	0.86	1.22	5.08	2.93	0.55	R 0.43	R 1.00	R 1.49	R 0.55	3.23	R 0.76
1975	—	0.90	0.90	0.55	1.80	2.30	2.42	2.48	7.48	4.77	1.65	R 1.31	R 2.35	R 1.49	1.46	3.44	R 1.67
1980	—	1.72	1.72	2.32	3.66	5.44	5.76	5.07	14.36	10.28	3.55	R 4.04	R 5.15	R 1.49	R 3.68	5.12	R 3.85
1981	—	1.76	1.76	2.90	4.46	6.57	6.92	5.76	18.00	11.35	4.37	R 4.46	R 6.08	R 1.49	R 4.15	7.27	R 4.49
1982	—	1.32	1.32	3.41	4.21	5.93	6.51	6.03	17.25	10.76	3.95	R 2.72	R 5.78	R 1.49	R 4.04	9.34	R 4.69
1983	—	1.41	1.41	3.47	4.22	6.48	R 7.02	5.88	16.98	9.33	4.08	R 3.67	R 6.38	R 1.49	R 3.76	10.16	R 4.64
1984	—	R 1.89	R 1.89	3.47	4.57	6.57	R 7.00	5.86	17.63	9.02	4.25	R 3.62	R 6.07	R 1.49	R 3.92	9.94	R 5.02
1985	—	R 1.94	R 1.94	3.38	4.82	6.33	R 6.64	8.63	17.61	8.87	3.14	R 3.39	R 6.35	R 1.49	R 4.03	10.15	R 5.19
1986	—	R 1.75	R 1.75	3.17	4.36	4.03	R 5.22	7.75	15.59	6.72	2.06	R —	R 4.92	R 1.49	R 3.30	10.68	R 4.77
1987	—	1.35	1.35	3.20	3.21	4.34	R 5.19	6.41	13.58	6.88	1.83	R —	R 4.52	R 1.49	R 2.93	10.68	R 4.63
1988	—	R 1.40	R 1.40	3.19	3.40	4.14	R 4.36	6.40	14.62	6.84	1.65	R —	R 4.60	R 1.49	R 2.90	10.67	R 4.79
1989	—	1.36	1.36	3.06	2.88	4.93	R 4.99	6.66	14.48	7.79	1.62	R —	R 5.21	d R 1.35	d R 3.07	10.49	d R 4.79
1990	—	1.12	1.12	2.94	2.71	6.19	R 6.62	6.53	14.60	8.66	2.46	R —	R 5.66	1.34	R 2.83	10.18	R 4.43
1991	—	1.14	1.14	2.86	3.43	5.40	R 6.11	8.34	16.80	8.40	2.26	R —	R 5.50	1.41	R 2.83	10.22	R 4.29
1992	—	R 1.12	R 1.12	2.73	3.07	5.30	R 5.55	6.63	18.32	8.73	1.75	R —	R 5.46	1.61	R 2.71	10.32	R 3.95
1993	—	1.10	1.10	3.43	2.93	5.37	R 5.68	6.45	18.96	8.42	2.05	R —	R 5.46	1.63	R 3.11	10.25	R 4.30
1994	—	1.05	1.05	3.32	3.02	5.27	R 5.09	7.31	19.11	8.65	2.22	R —	R 5.48	1.51	R 3.07	10.28	R 4.19
1995	—	1.04	1.04	2.99	3.20	5.42	R 5.32	7.24	R 19.41	8.68	2.29	R —	R 5.86	R 1.62	R 2.87	10.26	R 4.06
1996	—	1.02	1.02	2.96	3.52	6.30	6.31	8.97	20.08	9.26	1.77	—	6.53	1.62	3.21	10.10	4.30
1997	—	1.10	1.10	3.26	3.62	6.06	6.08	8.95	17.86	9.39	2.20	—	6.30	1.62	3.38	10.14	4.46
	Expenditures in Million Nominal Dollars																
1970	—	1.7	1.7	9.5	4.2	8.9	0.8	2.1	0.9	8.5	0.9	R (s)	R 26.7	R (s)	R 38.3	19.6	R 57.8
1975	—	10.6	10.6	16.7	7.2	47.3	1.6	4.0	2.1	14.8	11.1	R 1.5	R 89.7	R (s)	R 117.3	32.5	R 149.8
1980	—	49.6	49.6	50.0	28.2	198.0	1.3	22.0	5.0	19.7	23.4	R 4.8	R 302.4	R 0.9	R 402.9	76.5	R 479.4
1981	—	53.3	53.3	81.9	28.9	226.2	2.4	21.8	6.0	16.0	40.3	R 2.5	R 344.2	R 0.9	R 480.3	102.0	R 582.3
1982	—	35.9	35.9	93.9	25.3	191.3	4.6	31.1	5.2	24.9	22.5	R 1.4	R 306.3	R 0.9	R 437.0	142.3	R 579.3
1983	—	42.1	42.1	77.2	11.1	118.3	R 1.8	25.8	5.4	21.5	4.5	R 2.3	R 190.7	R 1.0	R 311.0	133.8	R 444.9
1984	—	R 59.1	R 59.1	65.1	37.1	122.4	R 1.1	28.1	6.0	8.2	2.0	R 3.0	R 207.9	R 1.0	R 333.2	189.8	R 522.9
1985	—	R 63.9	R 63.9	55.3	53.6	101.3	R (s)	34.6	5.6	24.7	(s)	R 2.8	R 222.8	R 1.0	R 343.0	202.7	R 545.7
1986	—	R 54.2	R 54.2	47.8	46.5	57.6	R (s)	29.3	4.8	17.7	(s)	R —	R 156.2	R 1.6	R 259.8	209.6	R 469.4
1987	—	44.6	44.6	37.3	31.3	67.1	R (s)	22.9	4.8	16.3	(s)	R —	R 142.6	R 1.6	R 226.1	232.7	R 458.8
1988	—	R 42.9	R 42.9	42.5	23.6	53.5	R (s)	19.5	4.9	16.6	(s)	R —	R 118.2	R 1.7	R 205.4	242.3	R 447.7
1989	—	46.1	46.1	42.4	17.6	65.8	R (s)	38.7	5.0	19.7	(s)	R —	R 146.9	d R 2.0	d R 237.4	245.9	d R 483.3
1990	—	46.3	46.3	69.3	17.1	81.8	R (s)	14.4	5.2	R 19.0	(s)	R —	R 137.7	1.3	R 254.6	256.1	R 510.6
1991	—	R 47.8	R 47.8	83.6	23.1	83.6	R (s)	12.5	5.4	22.1	(s)	R —	R 146.8	1.4	R 279.6	249.1	R 528.8
1992	—	R 50.3	R 50.3	143.7	15.7	83.9	R (s)	11.9	6.0	22.5	(s)	R —	R 140.1	R 1.1	R 335.2	250.6	R 585.8
1993	—	43.9	43.9	176.4	14.7	85.6	R 0.6	26.6	6.3	17.1	R (s)	R —	R 151.1	R 1.1	R 372.4	245.2	R 617.7
1994	—	42.7	42.7	194.8	18.1	84.9	R 0.6	26.8	6.6	18.9	R (s)	R —	R 156.1	R 1.3	R 394.9	242.9	R 637.8
1995	—	44.0	44.0	142.3	14.1	69.4	R 0.7	32.8	6.6	20.2	R (s)	R —	R 143.8	R 1.2	R 331.3	227.7	R 559.0
1996	—	41.0	41.0	143.0	19.5	112.7	0.9	36.7	6.6	22.0	(s)	—	198.4	1.2	383.5	226.8	610.4
1997	—	46.4	46.4	147.5	23.3	131.9	0.8	37.2	6.2	23.2	(s)	—	222.6	1.3	417.7	237.8	655.6

[a] Liquefied petroleum gases.
[b] "Other" is the "other petroleum products" category described in Appendix A.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of non-electric utility use of wood and waste beginning in 1989.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.
(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 315. Transportation Sector Energy Price and Expenditure Estimates by Source, Selected Years 1970-1997, Wyoming

Year	Primary Energy											Electricity	Total Energy
			Petroleum										
	Coal	Natural Gas	Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG [a]	Lubricants	Motor Gasoline	Residual Fuel	Total	Total		
	Prices in Nominal Dollars per Million Btu												
1970	0.42	—	2.17	1.31	0.76	1.22	5.08	2.93	0.54	2.19	2.19	—	2.19
1975	0.90	—	3.45	2.70	2.12	2.48	7.48	4.77	—	3.95	3.95	—	3.95
1980	—	—	9.02	7.39	6.59	5.07	14.36	10.28	—	8.94	8.94	—	8.94
1981	—	—	10.84	8.40	7.67	5.76	18.00	11.35	4.84	10.02	10.02	—	10.02
1982	—	—	10.92	8.05	7.38	6.03	17.25	10.76	4.50	9.65	9.65	—	9.65
1983	—	—	10.44	7.21	7.36	5.88	16.98	9.33	—	8.68	8.68	—	8.68
1984	—	—	10.27	7.36	7.06	5.86	17.63	9.02	—	8.58	8.58	—	8.58
1985	—	—	9.99	7.05	6.53	8.63	17.61	8.87	4.01	8.25	8.25	—	8.25
1986	—	—	8.41	6.77	4.56	7.75	15.59	6.72	—	6.84	6.84	—	6.84
1987	—	—	7.55	6.46	4.61	6.41	13.58	6.88	—	6.74	6.74	—	6.74
1988	—	—	7.41	6.48	4.62	6.40	14.62	6.84	—	6.72	6.72	—	6.72
1989	—	—	8.28	7.41	5.06	6.66	14.48	7.79	2.73	7.64	7.64	—	7.64
1990	—	—	9.32	8.38	6.45	6.53	14.60	8.66	—	8.56	8.56	—	8.56
1991	—	5.34	8.71	7.92	6.05	8.34	16.80	8.40	—	8.25	8.25	—	8.25
1992	—	5.43	8.54	7.97	5.88	6.63	18.32	8.73	—	8.43	8.43	—	8.43
1993	—	5.36	8.24	7.74	5.71	6.45	18.96	8.42	—	8.16	8.16	—	8.16
1994	—	4.37	7.96	7.59	5.29	7.86	19.11	8.65	—	8.20	8.20	—	8.20
1995	—	5.02	8.36	7.75	5.33	7.68	R 19.41	8.68	—	8.24	8.24	—	8.24
1996	—	4.94	9.29	8.52	5.84	8.63	20.08	9.26	—	8.92	8.92	—	8.92
1997	—	5.20	9.39	8.32	5.76	8.12	17.86	9.39	—	8.83	8.83	—	8.83
	Expenditures in Million Nominal Dollars												
1970	(s)	—	2.8	23.4	0.5	R (s)	2.6	81.0	1.6	112.3	112.4	—	112.4
1975	(s)	—	3.8	62.4	1.5	1.1	4.9	167.8	—	241.4	241.4	—	241.4
1980	—	—	4.9	276.4	6.0	1.4	13.1	433.7	—	735.4	735.4	—	735.4
1981	—	—	4.6	304.5	10.7	2.5	15.8	483.8	R (s)	822.0	822.0	—	822.0
1982	—	—	3.3	236.8	8.9	2.8	13.8	436.0	R (s)	701.8	701.8	—	701.8
1983	—	—	2.9	146.0	6.4	3.4	14.2	360.5	—	533.3	533.3	—	533.3
1984	—	—	3.0	151.4	6.3	1.3	15.7	377.2	—	554.9	554.9	—	554.9
1985	—	—	2.6	176.1	5.6	1.4	14.6	329.4	(s)	R 529.8	R 529.8	—	R 529.8
1986	—	—	2.1	154.0	3.7	1.5	12.7	R 232.1	—	R 406.0	R 406.0	—	R 406.0
1987	—	—	1.9	214.5	5.2	1.2	12.5	R 244.2	—	R 479.5	R 479.5	—	R 479.5
1988	—	—	2.0	255.6	5.0	1.2	12.9	R 247.7	—	R 524.4	R 524.4	—	R 524.4
1989	—	—	1.6	305.9	4.5	0.9	13.2	R 287.0	(s)	R 613.1	R 613.1	—	R 613.1
1990	—	—	1.7	341.2	5.1	0.6	13.7	R 300.9	—	R 663.2	R 663.2	—	R 663.2
1991	—	(s)	1.2	263.2	4.1	1.5	14.1	R 292.1	—	R 576.1	R 576.2	—	R 576.2
1992	—	R (s)	1.1	287.3	5.0	0.7	15.6	R 314.7	—	R 624.3	R 624.4	—	R 624.4
1993	—	R (s)	0.8	314.2	4.5	0.7	16.5	R 317.4	—	R 654.0	R 654.1	—	R 654.1
1994	—	R (s)	1.3	303.0	4.5	1.1	17.4	R 329.9	—	R 657.1	R 657.2	—	R 657.2
1995	—	R (s)	7.6	389.4	4.7	R (s)	17.3	341.1	—	R 760.7	760.7	—	760.7
1996	—	(s)	10.0	441.1	5.0	0.5	17.4	360.8	—	834.8	834.9	—	834.9
1997	—	(s)	7.2	438.8	4.0	(s)	16.3	351.4	—	818.1	818.2	—	818.2

[a] Liquefied petroleum gases.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 7 of Appendix A.

(s)=Value less than 0.05 million nominal dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Table 316. Price and Expenditure Estimates for Energy Input at Electric Utilities by Source, Selected Years 1970-1997, Wyoming

Year	Coal	Natural Gas	Petroleum				Nuclear Fuel	Wood and Waste	Total Energy [a]
			Heavy Oil	Light Oil	Petroleum Coke	Total			
	Prices in Nominal Dollars per Million Btu								
1970	0.14	0.22	0.58	0.76	—	0.67	—	—	0.14
1975	0.25	0.94	1.99	2.44	—	2.01	—	—	0.26
1980	0.57	4.61	—	6.98	—	6.98	—	—	0.59
1981	0.69	4.58	—	7.60	—	7.60	—	—	0.71
1982	0.79	5.16	—	7.22	—	7.22	—	—	0.80
1983	0.92	4.79	—	6.27	—	6.27	—	—	0.93
1984	0.96	5.11	—	6.37	—	6.37	—	—	0.98
1985	0.92	4.33	—	6.00	—	6.00	—	—	0.93
1986	0.92	3.80	—	3.87	—	3.87	—	—	0.93
1987	0.87	3.26	—	4.10	—	4.10	—	—	0.88
1988	0.84	3.68	—	3.80	—	3.80	—	—	0.85
1989	0.85	3.48	—	4.15	—	4.15	—	—	0.85
1990	0.84	3.15	—	5.27	—	5.27	—	—	0.84
1991	0.83	3.34	—	4.94	—	4.94	—	—	0.84
1992	0.76	3.20	—	4.79	—	4.79	—	—	0.76
1993	0.80	3.30	—	4.73	—	4.73	—	—	0.81
1994	0.80	5.61	—	4.45	—	4.45	—	—	0.81
1995	0.82	7.98	—	4.45	—	4.45	—	—	0.83
1996	0.82	12.11	—	5.46	—	5.46	—	—	0.83
1997	0.81	8.76	—	5.17	—	5.17	—	—	0.81
	Expenditures in Million Nominal Dollars								
1970	8.3	0.5	(s)	R (s)	—	R (s)	—	—	8.9
1975	28.4	R (s)	1.4	R (s)	—	1.5	—	—	30.3
1980	134.9	0.9	—	5.0	—	5.0	—	—	140.7
1981	198.7	R (s)	—	6.5	—	6.5	—	—	205.6
1982	239.8	0.6	—	4.8	—	4.8	—	—	245.2
1983	259.5	0.7	—	3.0	—	3.0	—	—	263.2
1984	313.1	R (s)	—	4.5	—	4.5	—	—	318.1
1985	340.7	0.6	—	5.0	—	5.0	—	—	346.3
1986	280.2	0.5	—	2.8	—	2.8	—	—	283.5
1987	342.2	R (s)	—	2.8	—	2.8	—	—	345.3
1988	346.6	0.7	—	2.7	—	2.7	—	—	350.0
1989	325.4	R (s)	—	2.9	—	2.9	—	—	328.6
1990	346.6	R (s)	—	3.0	—	3.0	—	—	349.8
1991	336.4	R (s)	—	3.5	—	3.5	—	—	340.2
1992	337.0	R (s)	—	2.8	—	2.8	—	—	340.1
1993	338.2	R (s)	—	2.9	—	2.9	—	—	341.4
1994	356.9	0.7	—	2.2	—	2.2	—	—	359.9
1995	340.9	1.1	—	3.3	—	3.3	—	—	345.3
1996	349.2	1.1	—	3.5	—	3.5	—	—	353.8
1997	339.9	0.9	—	3.2	—	3.2	—	—	343.9

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. Net imports of electricity generated from nonrenewable energy sources are included in this total but not in any other columns.

R=Revised data.

—No consumption.

(s)=Value less than 0.05 million nominal dollars.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Documentation

Section 1. Overview

This appendix documents data sources and procedures used to develop the estimates in the Combined State Energy Data System (CSEDS) that are presented in the "Statistical Tables" of this report. Information is provided for each of the four major energy sources: coal, natural gas, petroleum, and electricity. The last section describes adjustments for consumption of industrial process fuel and intermediate products and other uncosted energy sources.

Price Estimation Methodologies

Price data in the *State Energy Price and Expenditure Report* are expressed in dollars per million Btu. If the source data are in physical units, they are divided by the appropriate conversion factors to create the Btu prices. Estimated prices are used only when specific State-level prices are not available for a given energy source and sector. In some cases, prices for energy consumed in one sector in a State are assigned to another sector in the same State. Specific examples are: industrial steam coal prices are assigned to the commercial and transportation sectors' steam coal use; industrial lubricants prices are assigned to transportation lubricants uses; and transportation motor gasoline prices are assigned to commercial and industrial use of motor gasoline.

In addition, there are a few cases where State-level prices could not be identified for any economic sector for a given energy source for some or all years. In these instances, a national-level price is used for all States for a given year. The procedures for estimating these national-level prices are presented in the body of the documentation under each energy source as appropriate. The cases where a national-level price is assigned to all States in all years are: transportation use of aviation gasoline; industrial and transportation use of lubricants; and some components of other petroleum products used in the industrial sector.

Finally, within a given energy source and sector where price data are usually available, there are some cases of missing prices. Two general approaches are used to assign or estimate prices in cases where consumption occurs but no price is directly available from the data sources. The first approach is to assign an adjacent State price or the simple average of adjacent States' prices. When this approach is not feasible, the consumption-weighted price from the Census division or region or the Petroleum Administration for Defense district or subdistrict in which the State is located is assigned.

Three State groupings used in the report—U.S. Census regions and divisions, Federal regions, and Petroleum Administration for Defense districts—are shown in Figures A1, A2, and A3, respectively, on the following pages. States are often designated by their two-letter postal code abbreviations shown in the map legends. Throughout the documentation, the term "State" includes the District of Columbia.

Expenditures

Energy consumption estimates in CSEDS used to calculate expenditures are published in the EIA *State Energy Data Report 1997, Consumption Estimates,* DOE/EIA-0214(95), September 1999. Full documentation of the data sources and the methods used to estimate energy consumption are described in the consumption report.

To calculate energy expenditures, CSEDS consumption is adjusted to remove quantities of process fuel and intermediate products used in the industrial and transportation sectors that are not purchased directly by end users. Use of hydroelectric, geothermal, wind, and solar energy sources are also removed from CSEDS expenditure calculations since there are no direct fuel costs for those energy sources. CSEDS consumption of wood in the residential and commercial sectors and wood and waste consumption in the industrial sector are adjusted to remove estimated quantities that were obtained at no cost. Energy expenditures, in million dollars, are calculated by multiplying CSEDS prices for each fuel in dollars per million Btu times the CSEDS adjusted consumption in billion Btu.

End-Use Sector, State, and National Consumption-Weighted Average Prices

Aggregated prices shown in this report are the consumption-weighted averages of the various energy sources included in the aggregation. The CSEDS calculation is performed by summing the expenditures for the energy sources and dividing by the sum of the corresponding consumption values. For example, the average price for residential petroleum is the sum of residential expenditures for distillate fuel oil, kerosene, and liquefied petroleum gas divided by the sum of residential consumption of those fuels.

Primary Energy and Electricity. Within each end-use sector, the sum of all fuels used directly as energy, i.e., coal, natural gas, petroleum products, and wood and waste, is called primary energy. Electricity is considered a secondary energy source because it is generated from the primary energy sources consumed by electric utilities. Within each sector, the primary energy price is calculated by summing the expenditures for coal (the sum of coking coal and steam coal), natural gas, petroleum (the sum of all petroleum products used by the sector), and wood and waste and dividing by the sum of all the consumption for those fuels. The average price of all energy consumed by each sector is the sum of the expenditures for primary energy and electricity divided by the sum of the consumption of the primary energy sources and electricity.

Electric Utility Sector. Electric utilities comprise a fifth energy consuming sector, although they are not considered an end-use sector. The average price paid by electric utilities for primary energy sources is the sum of their expenditures for coal, natural gas, petroleum products, nuclear fuel, and wood and waste divided by the quantities consumed.

Primary Energy, Total, and Total Energy. The average price for the "Primary Energy, Total" shown in the first *SEPER* table for each State and the United States is the sum of the four end-use sectors' and the electric utility sector's expenditures for coal, natural gas, petroleum, and other fuels divided by the sum of the five sectors' consumption of those fuels. The distinction between this average price and the "Total Energy" average price shown in the same table is that this price includes all fossil and other fuels consumed, including those used to generate electricity. The "Total Energy" price is the average price of fuels consumed directly as energy by the four end-use sectors and the much higher price of the four sectors' electricity consumption.

Figure A1. U.S. Census Regions and Divisions

Region 1
Northeast

Division 1
(New England)
Connecticut (CT)
Maine (ME)
Massachusetts (MA)
New Hampshire (NH)
Rhode Island (RI)
Vermont (VT)

Division 2
(Middle Atlantic)
New Jersey (NJ)
New York (NY)
Pennsylvania (PA)

Region 2 Midwest

Division 3
(East North Central)
Illinois (IL)
Indiana (IN)
Michigan (MI)
Ohio (OH)
Wisconsin (WI)

Division 4
(West North Central)
Iowa (IA)
Kansas (KS)
Minnesota (MN)
Missouri (MO)
Nebraska (NE)
North Dakota (ND)
South Dakota (SD)

Region 3 South

Division 5
(South Atlantic)
Delaware (DE)
District of Columbia (DC)
Florida (FL)
Georgia (GA)
Maryland (MD)
North Carolina (NC)
South Carolina (SC)
Virginia (VA)
West Virginia (WV)

Division 6
(East South Central)
Alabama (AL)
Kentucky (KY)
Mississippi (MS)
Tennessee (TN)

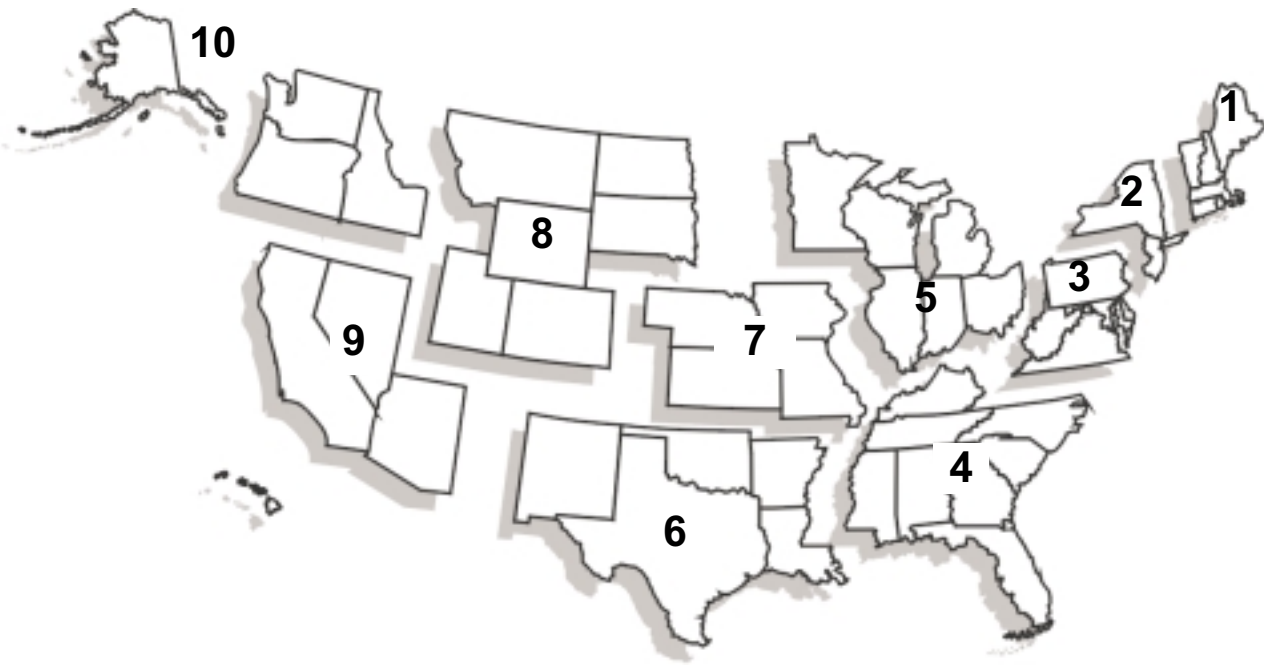
Division 7
(West South Central)
Arkansas (AR)
Louisiana (LA)
Oklahoma (OK)
Texas (TX)

Region 4 West

Division 8
(Mountain)
Arizona (AZ)
Colorado (CO)
Idaho (ID)
Montana (MT)
Nevada (NV)
New Mexico (NM)
Utah (UT)
Wyoming (WY)

Division 9
(Pacific)
Alaska (AK)
California (CA)
Hawaii (HI)
Oregon (OR)
Washington (WA)

Figure A2. Federal Regions



Region 1
New England
Connecticut (CT)
Maine (ME)
Massachusetts (MA)
New Hampshire (NH)
Rhode Island (RI)
Vermont (VT)

Region 2
New York/New Jersey
New Jersey (NJ)
New York (NY)

Region 3
Mid Atlantic
Delaware (DE)
District of Columbia (DC)
Maryland (MD)
Pennsylvania (PA)
Virginia (VA)
West Virginia (WV)

Region 4
South Atlantic
Alabama (AL)
Florida (FL)
Georgia (GA)
Kentucky (KY)
Mississippi (MS)
North Carolina (NC)
South Carolina (SC)
Tennessee (TN)

Region 5
Midwest
Illinois (IL)
Indiana (IN)
Michigan (MI)
Minnesota (MN)
Ohio (OH)
Wisconsin (WI)

Region 6
Southwest
Arkansas (AR)
Louisiana (LA)
New Mexico (NM)
Oklahoma (OK)
Texas (TX)

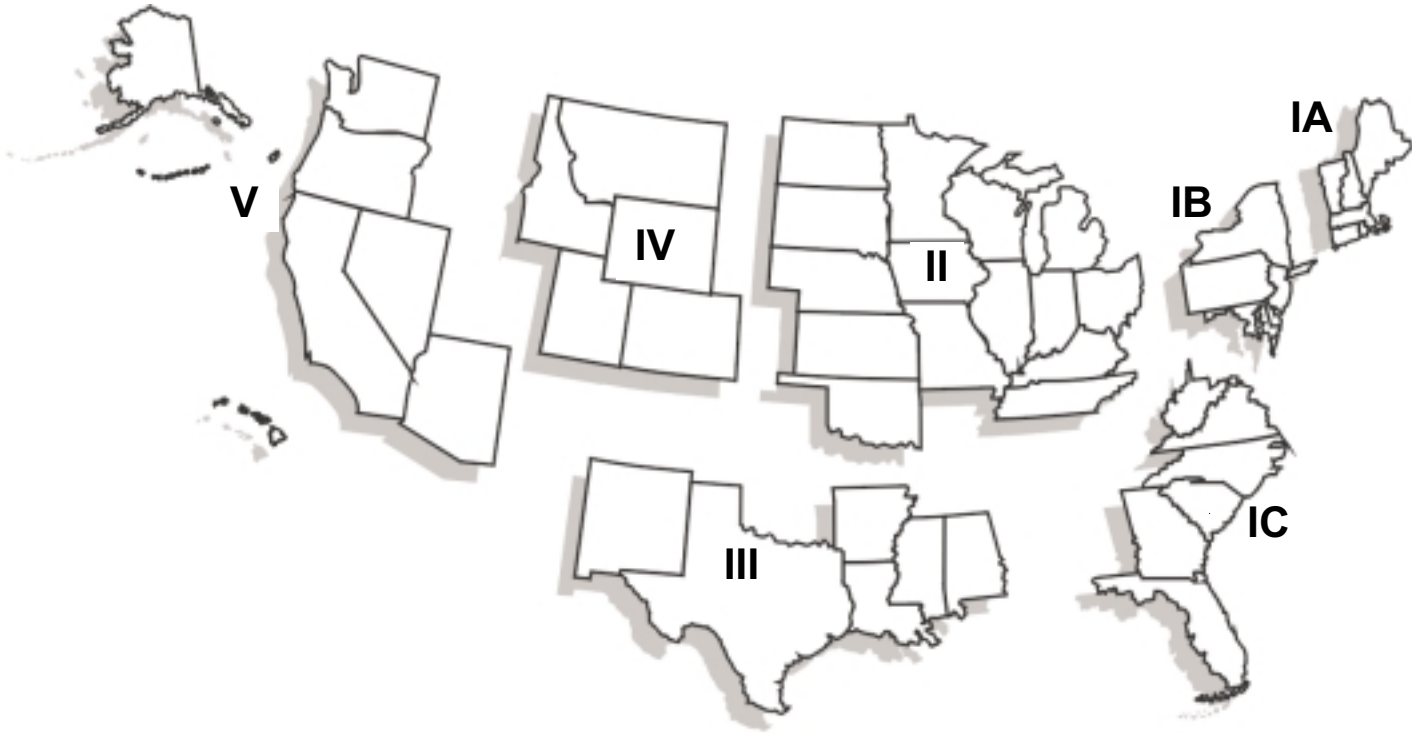
Region 7
Central
Iowa (IA)
Kansas (KS)
Missouri (MO)
Nebraska (NE)

Region 8
North Central
Colorado (CO)
Montana (MT)
North Dakota (ND)
South Dakota (SD)
Utah (UT)
Wyoming (WY)

Region 9
West
Arizona (AZ)
California (CA)
Hawaii (HI)
Nevada (NV)

Region 10
Northwest
Alaska (AK)
Idaho (ID)
Oregon (OR)
Washington (WA)

Figure A3. Petroleum Administration for Defense Districts



District IA

Connecticut (CT)
Maine (ME)
Massachusetts (MA)
New Hampshire (NH)
Rhode Island (RI)
Vermont (VT)

District IB

Delaware (DE)
District of Columbia (DC)
Maryland (MD)
New Jersey (NJ)
New York (NY)
Pennsylvania (PA)

District IC

Florida (FL)
Georgia (GA)
North Carolina (NC)
South Carolina (SC)
Virginia (VA)
West Virginia (WV)

District II

Illinois (IL)
Indiana (IN)
Iowa (IA)
Kansas (KS)
Kentucky (KY)
Michigan (MI)
Minnesota (MN)
Missouri (MO)
Nebraska (NE)
North Dakota (ND)
Ohio (OH)
Oklahoma (OK)
South Dakota (SD)
Tennessee (TN)
Wisconsin (WI)

District III

Alabama (AL)
Arkansas (AR)
Louisiana (LA)
Mississippi (MS)
New Mexico (NM)
Texas (TX)

District IV

Colorado (CO)
Idaho (ID)
Montana (MT)
Utah (UT)
Wyoming (WY)

District V

Alaska (AK)
Arizona (AZ)
California (CA)
Hawaii (HI)
Nevada (NV)
Oregon (OR)
Washington (WA)

Section 2. Coal

Coal prices are developed for the following three categories: coking coal; steam coal (all noncoking coal); and coal coke, imports and exports.

Coking coal, used in the industrial sector only, is a high-quality bituminous coal that is used to make coal coke. Steam coal, which may be used by all sectors, includes anthracite, bituminous coal, subbituminous coal, and lignite. In the industrial sector, coal consumption is the sum of coking coal and steam coal. The industrial coal price is the quantity-weighted average price of these two components.

Imports and exports of coal coke are available only on the national level and are accounted for in the industrial sector. Coal coke imports and exports are reported separately and are not averaged with other coal prices and expenditures.

Coking Coal

Coking coal is generally more expensive than steam coal; therefore, it is identified separately in the development of the price estimates. Coking coal prices are those paid at coke plants for coal received and include insurance, freight, and taxes.

Physical Unit Prices: All Years

Source publications contain physical unit prices for States, groups of States, or Census Divisions. Individual State prices are used directly for their respective States. Group and Census Division prices are assigned to each State within the group. Wherever individual State prices or State group prices are unavailable, prices are assigned from adjacent or nearby States or Census Divisions or from States with similar coal use patterns as shown in Table A1.

Btu Prices: All Years

Btu prices for States are calculated from the physical unit prices and the constant conversion factor for coking coal. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from the Combined State Energy Data System (CSEDS).

Data Sources

Prices

1981 forward: Energy Information Administration, *Quarterly Coal Report,* October-December issue, Table A3 (1981–1991), Table 39 (1992–1994), and Table 31 (1995 forward).

1977-1980: Energy Information Administration, *Coke and Coal Chemicals*, Table 19 (1977), Table 15 (1978), and Table 7 (1979, 1980).

1970-1976: Bureau of Mines, U.S. Department of the Interior, *Minerals Yearbook*, "Coke and Coal Chemicals" chapter, Table 22.

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, coking coal consumption.

Table A1. Coking Coal State Group Price and Adjacent State Price Assignments

State	Years	State or Division Prices Assigned
AL	1997	East South Central
CA	1970–1982	CA, CO, UT
CO	1970–1982	CA, CO, UT
IL	1986–1996	IN
	1997	East North Central
IN	1997	East North Central
KY	1970–1987	KY, MO, TN, TX
	1988–1996	OH
	1997	East South Central
MD	1970, 1971	MD, NJ, NY
	1983–1991, 1993	PA
MI	1979	MI, MN, WI
	1980–1985, 1987	MI, WI
	1988–1991, 1993–1996	OH
	1997	East North Central
MN	1970–1978	MN, WI
	1979	MI, MN, WI
MO	1970–1987	KY, MO, TN, TX
	1988	AL
NJ	1970, 1971	MD, NJ, NY
NY	1970, 1971	MD, NJ, NY
	1972–1982	MD, NY
	1983–1996	PA
	1997	Middle Atlantic
OH	1997	East North Central
PA	1997	Middle Atlantic
TN	1970–1987	KY, MO, TN, TX
	1988–1991	AL
TX	1970–1987	KY, MO, TN, TX
UT	1970–1982	CA, CO, UT
	1983–1986	TX
	1988–1996	IN
	1997	East North Central
VA	1970, 1971, 1976, 1977	WV
	1978–1982	VA, WV
	1983–1986	KY
	1987–1996	OH
	1997	East North Central
WI	1970–1978	MN, WI
	1979	MI, MN, WI
	1980–1985, 1987	MI, WI
WV	1978–1982	VA, WV
	1983–1986	KY
	1987–1996	OH
	1997	East North Central

Conversion Factor: All Years

26.80 million Btu per short ton.

Steam Coal

Steam coal is used in all sectors. Price data are generally available in the electric utility, residential, and industrial sectors. However, no price data are directly available in the transportation and commercial sectors, and industrial sector steam coal prices are assigned to these two sectors. Data sources and calculations for estimating coal prices are discussed by sector. Estimates of the amount of steam coal consumed by sector are taken from CSEDS and are adjusted for process fuel consumption in the industrial sector. (See the "Consumption Adjustments for Calculating Expenditures" section on page 417.)

Electric Utility Sector

Btu Prices: 1973 Forward

State Btu prices, including insurance, freight, and taxes, are taken from *Cost and Quality of Fuels for Electric Utility Plants (C&Q)* for 1973 forward and are converted from cents to dollars per million Btu. Where individual State prices are withheld or unavailable, quantity-weighted Census division prices are assigned as shown in Table A2. Price estimates for Alaska are explained below.

Btu Prices: 1970 Through 1972

Btu prices for States are taken from the Edison Electric Institute's (EEI) *Statistical Yearbook* and are converted from cents to dollars. Delaware, DC, and Maryland are each assigned the combined price for the three States. The steam coal electric utility sector Alaska price for 1971 is estimated as discussed below.

Table A2. Electric Utility Sector Price Assignments, 1973 Forward

State	Years	State/Census Division Prices Assigned
CT	1975–1979	New England
DC	1976	MD, VA
OK	1973, 1974	West South Central
	1975	CO, KS, MO, NM, TX
OR	1983, 1989	Pacific Contiguous
RI	1974	MA
VT	1980, 1983–1986	New England

Alaska Prices: All Years

The *C&Q* does not collect or publish prices for Alaska. The Alaska prices for 1994 forward are estimated from an informal survey of the single coal supplier in the State. Prior to that, Btu prices for Alaska are based on data from the EEI *Statistical Yearbook.* For the years 1970, 1972, 1974, 1976, 1977, and 1979 through 1993, prices were taken directly from the *Statistical Yearbook*. Prices for 1971, 1973, 1975, and 1978 are estimated from the *Statistical Yearbook* prices for the United States and the average ratio of AK-to-U.S. prices for the years when AK prices are available. The 1971 and 1973 estimated prices are based on the average ratio for 1970 and 1972; the 1975 price is based on the average ratio for 1974 and 1976; and the 1978 price is based on the average ratio for 1977 and 1979.

U.S. Prices: All Years

U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from CSEDS.

Data Sources

Prices

1973 forward: Energy Information Administration, *Cost and Quality of Fuels for Electric Utility Plants,* Table 3 (1973-1979), Table 51 (1980-1982), Table 50 (1983, 1984), Table 40 (1985-1989), Table 7 (1990, 1991), and Table 2 (1992 forward).

1994–1997: Alaska price estimated from informal discussions with Usibelli Coal Mine Co., the only coal supplier in Alaska.

1970–1993: Edison Electric Institute, *Statistical Yearbook of the Electric Utility Industry*, table titled "Analysis of Fuel for Electric Generation: Total Electric Utility Industry" (1970–1988), Table 29 (1989–1993).

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, electric utility sector coal consumption.

Conversion Factors: All Years

Btu prices are taken directly from the data sources; no explicit conversion factors are used.

Residential Sector

Residential sector steam coal prices are the average delivered prices for coal purchased by residential customers and include taxes.

Prices: 1979 Forward

Residential steam coal Btu prices for 1979 forward are not available. Electric utility coal spot prices from *C&Q* for 1979 forward are converted from cents per million Btu to dollars per million Btu and are used in a regression equation to estimate residential steam coal prices for 1979 forward. The residential steam coal prices calculated for 1974 through 1978 from *Gas Househeating Survey (GHS)* and the average Btu spot prices from the *Cost and Quality of Fuels for Electric Utility Plants (C&Q)* for 1974 through 1978 are used to develop the regression equation. AK residential coal prices are estimated by using a different methodology, described on page 337.

Table A3. Residential Sector Coal Spot Price Assignments from *C&Q*, 1979 Forward

State	Years	State Prices Assigned
CO	1979, 1981	KS
CT	1975	NY
	1976–1979	NH
	1980–1987, 1993–1995	MA
DC	1976–1997	MD
ID	1974, 1979–1982	NV
	1975–1977	SD
	1978	ND
	1983–1997	CO
MA	1975	VT
	1976–1979	NH
ME	1974, 1975, 1981, 1983	VT
	1976–1980, 1982	NH
	1984–1997	MA
MT	1974, 1975, 1978	ND
	1976, 1977	SD
	1979–1982	NV
ND	1976, 1977	SD
	1979–1995	MN
NH	1974, 1975, 1981, 1983	VT
	1984, 1985	MA
NV	1975–1978, 1983–1989, 1992, 1993, 1995	CO
RI	1974	CT
	1975	VT
	1976–1979	NH
	1980–1997	MA
SD	1978, 1984	ND
	1979–1983, 1986, 1987, 1989, 1991–1997	MN
UT	1975–1978, 1980, 1983	CO
	1979	NV
VT	1976, 1980	NH
	1984–1997	MA
WA	1970	OR
	1974–1978, 1983–1985	CO
	1979–1982	NV
WY	1974–1976, 1978, 1982, 1983, 1985	CO

Some States have *GHS* residential prices during the 1974 through 1978 period to use in the regression analysis, but are missing prices in the 1979 forward data used to calculate prices. For these missing data, *C&Q* prices are assigned from other States for use in the regression, as shown in Table A3. *C&Q* prices for ND and MT for some years result in a negative price when used in the regression; therefore MN spot prices are assigned to ND for use in the regression and the WY final price is assigned to MT as shown in Tables A3 and A4.

Price estimates for 1974 through 1978 for some States are not available because there was no consumption. To calculate prices for 1979 forward, these States are assigned the final prices from selected States as shown in Table A4.

In addition, several States are assigned the simple average of the final prices of adjacent States as shown in Table A4.

Table A4. Residential Sector Spot Coal Final Price Assignments, 1979 Forward

State	Years	State and Averaged Final Prices Assigned
AR	1980, 1982, 1984, 1985, 1987–1995	AL
	1981	MO, OK, TN, TX
	1983	MO, MS, OK, TN
AZ	1982, 1984, 1985	CA, NM, NV, UT
	1987, 1988, 1990–1995	UT
CA	1979–1985	NV
	1987–1997	WA
FL	1980–1996	GA
LA	1980, 1982, 1984, 1986, 1988, 1991, 199–1995, 1997	AL
MS	1979, 1980, 1983, 1984, 1986–1995, 1997	AL
	1985	AL, AR, TN
MT	1986–1995, 1997	WY
NM	1979–1997	CO
OK	1979–1997	CO
OR	1979, 1980, 1982–1997	WA
	1981	CA, ID, NV, WA
TX	1980–1982, 1985–1997	CO

Prices: 1971 Through 1978

For 1971 through 1978, Btu steam coal prices are calculated by using data from *GHS*. The price for a State is equal to the simple average of the city/utility price observations for that State. For 1971 and 1972, *GHS* reports physical unit prices rather than Btu prices (as published for 1973 through 1978) and, therefore, the State-level conversion factors for this sector from CSEDS are used to convert to Btu prices for those years. AK residential coal prices are estimated by using a different methodology, described on page 337.

A simple average of price observations in CT, MA, ME, NH, RI, and VT is assigned to each of these States. To impute other missing prices in the 1971 through 1978 period, States are assigned simple averages of adjacent State prices or are directly assigned the single price of an adjacent or nearby State as listed in Table A5.

Prices: 1970

Since State-level coal price data for 1970 are not available from either *GHS* or *C&Q*, the 1970 residential sector coal prices are calculated by using the 1971 through 1978 data from the *Statistical Yearbook* for the 39 States, with some reported coal use from 1971 through 1983 and regression analysis.

For estimating the 1970 prices, States missing *Statistical Yearbook* data are assigned prices as follows: ID for 1970 through 1978 from MT; MA for 1976 through 1978 from CT; ME for 1970 through 1978 from NH; RI for 1973 and 1975 through 1978 from CT; and WA for 1970 through 1972 from OR. DC, DE, and MD are all assigned the combined *Statistical Yearbook* price for those States. Wherever individual State prices are unavailable, prices are assigned from an adjacent or nearby State as follows: CA from NV; NM from CO; OK from CO; OR from WA; and TX from CO. AK residential coal prices are estimated by using a different methodology, described as follows.

Table A5. Residential Sector Spot Coal Price Assignments, 1971-1978

State	Years	State Assigned or Averaged Prices
AL	1971	TN
AR	1977, 1978	AL
CA	1971, 1972, 1974, 1978	NV
DC	1971-1978	MD
DE	1971, 1972, 1974, 1976, 1977	MD
GA	1971	NC, TN
	1972	AL, NC, TN
ID	1977	MT, UT, WY
KS	1971, 1972	CO, MO
MN	1971	IA, ND, WI
	1972	IA, WI
MS	1978	AL
MT	1971	ID, ND, WY
	1972, 1973	ID, WY
ND	1972	IA, WI
	1973	MN, SD
	1974	MN, MT, SD
NE	1971, 1972	CO, IA, MO, WY
	1975	CO, IA, KS, MO, SD, WY
NJ	1971, 1972, 1974, 1977, 1978	DE, NY, PA
NM	1971	CO
NV	1971, 1972, 1975	ID, UT
	1973	ID, OR, UT
OK	1971–1978	CO
OR	1971–1978	WA
SC	1971, 1972	NC
SD	1971	IA, ND, WY
	1972	IA, WY
TX	1971–1974, 1977	CO
UT	1974, 1978	CO, ID, NV, WY
WA	1971, 1972, 1974	ID
	1977	MT, UT, WY
WV	1971, 1972	KY, MD, OH, PA, VA

Alaska Prices: All Years

The AK residential coal prices for 1994 through1997 are estimated from an informal survey of the single coal supplier in the State.

The AK residential Btu prices for 1978 through 1993 are estimated from the WA State prices during that period. To estimate the AK price for each year that AK has consumption, the average ratio of AK-to-WA prices during 1970 through 1977 is applied to the WA price.

AK physical unit prices for 1970 through 1977 are estimated by using the ratio of AK-to-U.S. electric utility sector prices.

U.S. Prices: All Years

U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from CSEDS.

Data Sources

Prices

1974 forward: Energy Information Administration, *Cost and Quality of Fuels for Electric Plants,* average spot coal prices, Table 2 (1974-1979), Table 44 (1980-1982), Table 49 (1983, 1984), Table 39 (1985-1989), Table 8 (1990, 1991), and Table 3 (1992 forward).

1994–1997: Alaska price estimated from informal discussions with Usibelli Coal Mine Co., the only coal supplier in Alaska.

1971–1978: American Gas Association, *Gas Househeating Survey*, table titled "Competitive Fuel Prices."

1970–1978: Edison Electric Institute, *Statistical Yearbook of the Electric Utility Industry*, Table 43S.

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, residential sector coal consumption.

Conversion Factors: 1971, 1972

Energy Information Administration, *State Energy Data Report 1997, Consumption Estimates,* Table C8.

Table A6. Commercial Sector Final Price Assignments

State	Years	State Prices Assigned
CT	1980	NY
CT	1995-1997	MA
DC	1980–1997	MD
NH	1994, 1996-1997	MA
OK	1970	KS
RI	1982, 1983, 1991–1997	MA
VT	1993-1997	MA

Commercial Sector

Commercial sector prices are assigned from industrial steam coal prices. States without Btu industrial steam coal prices were assigned the prices from adjacent States, as shown in Table A6. The AK prices for 1994 through 1997 are estimated from an informal survey of the single coal supplier in the State. U.S. Btu prices are calculated as the average of all States' Btu prices, weighted by consumption data from CSEDS.

Industrial Sector

Industrial coal prices from 1980 forward are taken from Form EIA-3, which collects quarterly data on manufacturers' coal stocks, receipts, prices, and consumption. Through the end of 1988, all manufacturers that consumed coal were required to respond to EIA-3, but thereafter, respondents were limited to those manufacturers that consumed 1,000 or more tons in the reporting year. Data prior to 1980 are based on the average cost of coal sold to manufacturing firms, which was reported on a monthly basis.

Physical Unit Prices: 1980 Forward

For 1984 forward, State prices are published in the EIA *Coal Industry Annual (CIA)*. Prices include insurance, freight, and taxes. Price data for 1980 through 1983 are taken directly from Form EIA-3.

Table A7. Industrial Sector Steam Coal Price Assignments, 1980 Forward

State	Years	Prices Used in the Assignment
AZ	1980	CA, UT
	1981, 1984–1986	CA, CO, UT
CO	1980	KS, UT
CT	1981–1994	New England
DC	1980, 1981	MD
DE	1980–1997	MD
FL	1980	AL, GA
HI	1982, 1983, 1987–1997	CA
LA	1980–1997	AR, TX
MA	1980–1983	NY
	1984–1997	New England
ME	1980–1983	NY
	1984–1997	New England
MS	1980–1997	AL, AR, TN
MT	1983, 1987–1992	ID, WY
	1984–1986	ID
	1993–1997	ID, SD, WY
ND	1980–1982	MN, MT
	1983–1992	MN
	1993–1997	MN,SD
NE	1980	IA, KS, MO
	1982, 1983, 1987–1992	CO, IA, KS, MO, WY
	1993–1997	CO, IA, KS, MO, SD, WY
NH	1980–1983	NY
	1984–1993, 1995	New England
NJ	1980–1997	NY, PA
NM	1980	TX, UT
	1981	CO, OK, TX
	1982, 1983	AZ, CO, OK, TX
	1984–1986	CO, OK, TX, UT
	1987	AZ, CO, OK, TX, UT
	1988–1997	AZ, CO, TX, UT
NV	1980, 1981, 1984–1986	CA, ID, UT
	1983, 1987–1997	AZ, CA, ID, UT
OK	1980	AR, KS, MO, TX
	1984–1997	AR, CO, KS, MO, TX
OR	1980, 1981, 1983–1997	CA, ID, WA
	1982	CA, ID, NV, WA
RI	1980, 1981	NY
	1984–1990	New England
SD	1980	IA, MN, MT
	1981	IA, MN, MT, NE
	1982	IA, MN, MT, WY
	1983, 1987–1997	IA, MN, WY
	1984–1986	IA, MN, NE
VT	1980–1983	NY
	1984–1992	New England
WV	1980	KY, MD, OH, PA, VA
WY	1980	ID, MT, UT
	1981	CO, ID, MT, NE, UT
	1984–1986	CO, ID, NE, UT

Prices for States in which data are withheld or unavailable are estimated by using simple averages of the published data for adjacent States. In a few cases, only a single adjacent State or Census division price is published and, therefore, available for the estimation. The adjacent State and Census division price assignments used for estimations are shown in Table A7. Price estimates for Alaska are explained on page 341.

Physical Unit Prices: 1971, 1974 Through 1979

For 1971 and 1974 through 1979, available cost and quantity of bituminous coal, lignite, and anthracite from the *Annual Survey of Manufactures (ASM)* or *Census of Manufactures (CM)* are used to calculate prices as average cost per unit of sales for covered States. (States with undisclosed data are not considered covered.) Although it is not clear from the data sources, the prices probably include taxes.

For States with industrial steam coal use and for which *ASM* or *CM* data are not available in 1971 and 1974 through 1979, adjacent State simple averages of available *ASM*/*CM* data are used to impute prices. The assigned prices from adjacent States are shown in Table A8.

Table A8. Industrial Sector Steam Coal Price Assignments for 1971 and 1974-1979

State	Years	State Prices Used in the Assignment
AR	1971, 1972, 1974, 1975	MO, TN
	1979	MO, TN, TX
AZ	1971	CA, NV, UT
	1974–1978	CA, UT
CO	1974–1978	KS, NE, UT
	1979	UT
CT	1974–1978	MA, NY
	1979	NY
DC	1971, 1974–1979	MD, VA
DE	1971, 1974–1979	MD, NJ, PA
FL	1979	AL, GA
ID	1974	OR, UT
	1975–1978	UT
	1979	UT, WA
KS	1979	MO
LA	1978	AR
	1979	TX
MA	1979	NY
ME	1975–1978	MA
	1979	NY
MS	1971, 1974, 1975, 1979	AL, TN
	1976–1978	AL, AR, TN
MT	1974–1978	MN, NE, UT
	1979	MN, UT
ND	1974–1979	MN
NE	1979	IA, MO
NH	1971, 1974–1979	MA
NM	1971	CO, OK, TX, UT
	1974, 1976–1978	KS, UT
	1979	UT
MT	1974–1978	MN, NE, UT
	1979	MN, UT
ND	1974–1979	MN
NE	1979	IA, MO
NH	1971, 1974–1979	MA
NM	1971	CO, OK, TX, UT
	1974, 1976–1978	KS, UT
	1979	UT
NV	1974	CA, OR, UT
	1975–1979	CA, UT
OK	1974, 1975	KS, MO
	1976–1978	AR, KS, MO
	1979	MO, TX
OR	1975–1978	CA
	1979	CA, WA
RI	1971, 1974–1978	MA
	1979	NY
SD	1971, 1974	IA
	1975–1978	IA, MN, NE
	1979	IA, MN
TX	1974, 1975	KS
	1976–1978	AR, KS
VT	1971, 1974–1978	MA
	1979	NY
WA	1974	CA, OR
	1975–1978	CA
WY	1974–1978	NE, UT
	1979	UT

Physical Unit Prices: 1970, 1972, 1973

Steam coal industrial sector prices for 1970, 1972, and 1973 (years for which no *ASM/CM* prices are available) are estimated by using regression techniques. Values for the independent variable are steam coal electric utility sector physical unit prices, and values for the dependent variable are the steam coal industrial physical unit prices (from *ASM* or estimated, as described above) for 1971, and 1974 through 1977. A few States are assigned electric utility prices for the dependent variable in the regression, as shown in Table A9.

Wherever individual State prices remain unavailable after the estimation that used the above regression techniques, prices are assigned from adjacent or nearby States, as shown in Table A10.

Physical Unit Prices: Alaska, All Years

There was no steam coal consumption reported Alaska's industrial sector in 1995. The Alaska steam coal industrial sector prices for 1994, 1996, and 1997 are estimated from an informal survey of the single coal supplier in the State. For all other years with industrial steam coal use in Alaska (1993 and 1970 through 1977), prices are estimated by assuming that the ratio of the Alaska price to the U.S. price in the industrial sector is the same as the ratio of the Alaska and U.S. prices in the electric utility sector.

Btu Prices: All Years

Btu prices for States are calculated from the physical unit prices and the conversion factors, which vary by State and by year. U.S. Btu prices are calculated as the average of all States' Btu prices, weighted by consumption data from CSEDS, adjusted for process fuel and coking coal consumption.

Data Sources

Prices

1984 forward: Energy Information Administration, *Coal Industry Annual,* Table 94.

Table A9. Industrial Sector Price Assignments Used in the Regression Equation for 1971, and 1974-1979

State	Years	State Prices Assigned
AR	1973–1977	MO
CA	1970–1977	NV
CT	1975–1977	NY
DC	1976, 1977	MD
ID	1970–1977	MT
MA	1976, 1977	NH
ME	1970–1977	NH
OK	1973–1975	KS
OR	1973–1977	WA
TX	1970	NM
WA	1970–1972	OR

Table A10. Industrial Sector Final Price Assignments for 1970, 1972 and 1973

State	Years	State Prices Assigned
AR	1972	MO, TN
NH	1970, 1972, 1973	MA
RI	1970, 1972, 1973	MA
SD	1970, 1972, 1973	IA
VT	1970, 1972, 1973	MA

1980–1983: Energy Information Administration, "Quarterly Coal Consumption Report: Manufacturing Plants" (Form EIA-3). Only published data are used from Table 25 (1980), Table 11 (1981, 1982), and Table 2 (1983).

1971, 1974–1979: Bureau of the Census, U.S. Department of Commerce, *Annual Survey of Manufactures* and *Census of Manufactures*, Table 4 (1971) and Table 3 (1974–1979).

1970, 1972, 1973: Steam coal electric utility physical unit prices.

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, industrial (other than coke plants) coal consumption.

Conversion Factors: All Years

Energy Information Administration, *State Energy Data Report 1997, Consumption Estimates*, Tables C10, and C11. Conversion factors for 1971, 1972, 1973, and 1974 are available only from EIA's website, http://www.eia.doe.gov/pub/state.data/data/. The ASCII comma-delimited data file, convfac.csv, contains conversion factors for all States and years. The conversion factor used for industrial steam coal is labled "BCOCK" followed by the two-letter State abbreviation. Consumption in Vermont in 1986, Rhode Island in 1990, Connecticut in 1990 and 1995, and New Jersey in 1996 and 1997 is assumed to be anthracite and is converted to Btu using the national annual anthracite factors shown in Table C1 of the *State Energy Data Report*.

Transportation Sector

Transportation use of coal accounted for 298 thousand short tons out of a total of 523,231 thousand short tons in 1970 and declined to none after 1977. Transportation sector steam coal prices are assigned from industrial sector steam coal prices. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by CSEDS consumption data.

Coal Coke, Imports and Exports

Imports and exports of coal coke are components of total U.S. energy consumption and are accounted for in the industrial sector. Prices and values of imports and exports are developed only for the United States; no attempt is made to estimate State-level prices or expenditures. Prices are f.a.s. (free alongside ship) values and do not include taxes. The quantities of U.S. coal coke imports and exports are taken from CSEDS.

Physical Unit Prices: All Years

For 1980 forward, the *Coke Plant Report*, the *Quarterly Coal Report*, and Bureau of the Census computer tapes provide physical unit coal coke import and export prices in dollars per short ton. For 1970 through 1979, *Coke and Coal Chemicals, International Coal*, and the *Minerals Yearbook* provide coal coke import and export physical unit quantities and values in short tons and dollars, respectively. Values are equivalent to expenditures.

Btu Prices: All Years

For 1980 forward, Btu prices are computed by dividing the physical unit prices by the conversion factor. For 1970 through 1979, physical unit prices are computed by dividing the import and export values by their respective quantities, and Btu prices are computed by dividing the physical unit prices by the conversion factor.

Data Sources

Prices

1989 forward: Bureau of the Census, U.S. Department of Commerce, electronic data from “Monthly Report IM 145" and “Monthly Report EM 545."

1981–1988: Energy Information Administration (EIA), *Quarterly Coal Report*, October-December issues, Tables A11 and A13 (1981-1985) and Tables A10 and A12 (1986-1988).

1980: EIA, *Coke Plant Report*, Tables 7 and 8.

1978–1979: EIA, *Coke and Coal Chemicals 1979*, Tables 5 and 6.

1977: National Coal Association, *International Coal 1980*, tables titled “U.S. Imports of Solid Fuels and Customs Value” and “U.S. Exports of Coke and Value.”

1976: EIA, *Coke and Coal Chemicals*, Tables 19 and 20.

1970–1975: Bureau of Mines, U.S. Department of the Interior, *Minerals Yearbook*, “Coke and Coal Chemicals” chapter, Tables 19 and 20.

Consumption

1970 forward: EIA, Combined State Energy Data System, U.S. imports and exports of coal coke.

Conversion Factor: All Years

24.8 million Btu per short ton.

Section 3. Natural Gas

Natural gas prices are developed for the residential, commercial, industrial, transportation, and electric utility sectors. Reported natural gas prices are retail prices for sales of natural gas to ultimate users.

In general, taxes are included in the prices. However, taxes collected by a utility from an end user and turned over to a Government authority frequently are not included in the revenues reported in the source documents and, therefore, are not included in the prices. Taxes paid by the utility (rather than the end user) are considered operating costs and are passed on to the end user as part of the rate. Therefore, Federal, State, business, and property taxes are typically included in the prices, while sales and other point-of-purchase taxes typically are not.

Estimates of the amount of natural gas consumed by the residential, commercial, industrial, and electric utility sectors are taken from the Combined State Energy Data System (CSEDS). Estimates for the industrial sector are adjusted to remove estimated refinery consumption and lease and plant use of natural gas, and estimates of transportation sector use are adjusted to remove pipeline fuel in each State. (See the discussion in Section 7, "Consumption Adjustments for Calculating Expenditures," on page 417.)

Residential, Commercial, and Industrial Sectors

Prices: 1987 Forward

All natural gas physical unit prices by State for the residential, commercial, and industrial sectors are taken from the Energy Information Administration (EIA) *Natural Gas Annual (NGA).*

Prices: 1970 Through 1986

All natural gas physical unit prices for the residential, commercial, and industrial sectors are calculated from value and quantity of sales data from the *NGA* or its predecessor report, *Natural Gas Production and Consumption*. State prices are calculated directly from the data sources as average revenue per unit of sales by natural gas utilities. Prices for each of the three sectors are calculated by dividing the value of natural gas, reported in thousands of dollars, by the quantity of natural gas sold, as reported in million cubic feet.

For 1970 through 1979, both the value and quantity of sales data from the *NGA* are reported as composites for MD and DC and for ME, NH, and VT. In each case, the combined prices are assigned to each of the States in the composite.

Btu Prices: All Years

State Btu prices for all years are calculated by using the physical unit price series and the State-level non-electric utility conversion factors. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from CSEDS, adjusted for process fuel consumption in the industrial and transportation sectors.

Data Sources

Prices

1987 forward: Energy Information Administration, *Historical Natural Gas Annual, 1930 Through 1997,* Table 23 (residential); Table 24

(commercial 1987–1992) and Table 25 (commercial, 1993 forward); and Table 27 (industrial 1987–1992) and Table 28 (industrial, 1993 forward).

1980–1986: Calculated from quantity and value data published in the Energy Information Administration, *Natural Gas Annual, Volume 1*, Table 11 (1980), Table 14 (1981–1985), and Table 15 (1986). Comparable price data are available in the *Historical Natural Gas Annual, 1930 Through 1997,* Table 23 (residential), Table 24 (commercial), and Table 27 (industrial).

1970–1979: Calculated from quantity and value data published in the Bureau of Mines, U.S. Department of the Interior, *Natural Gas Production and Consumption*, Table 6 (1970 and 1979) and Table 7 (1971–1978). Comparable price data are available in the *Historical Natural Gas Annual, 1930 Through 1997,* Table 23 (residential), Table 24 (commercial), and Table 27 (industrial).

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, residential, commercial, and industrial natural gas consumption.

Conversion Factors: All Years

Energy Information Administration, factors published rounded in *State Energy Data Report 1997 Consumption Estimates*, Tables C4 and C5.

Transportation Sector

Most of the natural gas used for transportation is consumed in pipeline operations and is discussed in Section 7, "Consumption Adjustments for Calculating Expenditures," on page 417. A small but increasing portion is consumed by natural gas vehicles. Prices for natural gas consumed by vehicles are reported in the EIA *Natural Gas Annual* beginning in 1990. Much of the natural gas delivered for vehicle fuel represents deliveries to fueling stations that are used primarily by fleet vehicles.

In the first years of the vehicle fuel price series, the coverage of the reporting universe is not complete. Prices are assigned, when missing, from an adjacent State with the highest percentage of reported data. Natural gas vehicle fuel consumption for NE is assigned the SD price in 1992, 1993, and 1995; NV is assigned the AZ price in 1992 and 1993; and DE is assigned the MD price in 1994.

Data Sources

Prices

1990 forward: Energy Information Administration, *Historical Natural Gas Annual, 1930 Through 1997*, Table 30.

Consumption

1990 forward: Energy Information Administration, Combined State Energy Data System, natural gas vehicle consumption.

Conversion Factors: All Years

Energy Information Administration, unrounded conversion factors as published rounded in the *State Energy Data Report 1997, Consumption Estimates*, Tables C4 and C5.

Electric Utility Sector

Prices: 1973, 1974, 1983 Forward

Prices for States are reported by *Cost and Quality of Fuels for Electric Utility Plants (C&Q)* for gas consumed at steam-electric plants only. Btu prices are taken from *C&Q*, converted from cents to dollars per million Btu.

Where individual State prices are unavailable from *C&Q*, they are developed from the *NGA*. Physical unit prices prior to 1987 are calculated by dividing the value of natural gas, reported in thousands of dollars, by the quantity of natural gas sold, reported in million cubic feet. For 1987 forward, physical unit prices are taken directly from the *NGA*. Table A11 lists the States and years for which *NGA* data are used. Btu prices

Table A11. Natural Gas Electric Utility Sector Prices from *NGA*, 1973 Forward

State	Years
AK	1973–1990
CT	1974–1976
ID	1983–1986
MD	1973, 1974, 1983–1985
NC	1983–1990
ND	1973, 1974, 1976–1986
NH	1973, 1974, 1977, 1987–1989
PA	1973
RI	1976, 1980
SC	1977
SD	1983–1990
TN	1976, 1980, 1981, 1983, 1988–1996
UT	1988, 1989
VT	1983–1985, 1989, 1990
WA	1978, 1983–1985, 1988, 1989
WY	1973, 1975

Note: *NGA* includes predecessor publications.

are calculated from the physical unit prices by using State-level electric utility conversion factors.

Prices are not available from either *C&Q* or *NGA* for CT in 1973; ID in 1974, 1987; NH in 1983, 1996; OR in 1983, 1984, 1986, 1989, 1990; SD in 1997; and TN in 1997 In these cases, quantity-weighted Census division prices from *C&Q* are assigned. In addition, prices for VT in 1986 and WA in 1986, 1987, 1990 use quantity-weighted Census division prices from *C&Q* for more consistent prices than those available from the *NGA*.

Prices: 1980 Through 1982

State Btu and physical unit prices for 1980 through 1982 are taken from *C&Q* for all reporting plants. Physical unit prices are taken directly from the data source, while Btu prices are converted from cents to dollars per million Btu.

Prices: 1975 Through 1979

State prices are reported separately by *C&Q* for gas consumed at steam-electric plants and gas consumed at combustion turbine and internal combustion units. Weighted-average Btu prices are calculated by using the two *C&Q* prices and the respective gas deliveries for steam-electric and combustion use. The NH price in 1977 is not available from *C&Q*. A combined price is computed from value and quantity of sales data from the *NGA* for ME, NH, and VT and assigned to NH for 1977.

Prices: 1970 Through 1972

State prices for 1970 through 1972 are taken from *Natural Gas Production and Consumption* and are calculated similarly to the way prices for the residential, commercial, and industrial sectors are calculated. Prices, as average revenue per unit of sales, are computed from value and quantity of sales data from the source reports. A combined price is reported for NH and VT for 1971 and 1972, and each of these States is assigned the combined price. State Btu prices are calculated from the physical unit prices by using the State-level electric utility conversion factors.

U.S. Prices: All Years

U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from CSEDS.

Data Sources

Prices

1973 forward: Energy Information Administration, *Cost and Quality of Fuels for Electric Utility Plants,* tables shown in Table A12.

1990 forward: Energy Information Administration, *Historical Natural Gas Annual 1930 Through 1997,* Table 31.

1980–1989: Energy Information Administration, *Natural Gas Annual 1992, Volume 2*, Table 23.

Table A12. Tables from EIA *Cost and Quality of Fuels for Electric Utility Plants* Used as Data Sources

Years	Price Data	Volume Data
1973, 1974	Table 10	Table 9
1975–1979	Table 10, 16	Table 9, 15
1980–1982	Table 48	-
1983, 1984	Table 53	-
1985–1987	Table 43	-
1988, 1989	Table 44	-
1990, 1991	Table 12 (*1994* edition)	-
1992 forward	Table 12 (*1996* edition)	-

1976–1979: Energy Information Administration, Energy Data Reports, *Natural Gas Production and Consumption*, Table 7 (1976–1978) and Table 6 (1979).

1970–1975: Bureau of Mines, U.S. Department of the Interior, *Natural Gas Production and Consumption,* Table 6 (1970) and Table 7 (1971–1975).

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, electric utility natural gas consumption.

Conversion Factors

Btu prices that are calculated directly from *Cost and Quality of Fuels for Electric Utility Plants (C&Q)* require no conversion factors. When *Natural Gas Annual (NGA)* data are used to develop prices that are missing from *C&Q*, conversion factors are used from the following source:

1970 forward: Energy Information Administration, *State Energy Data Report 1997, Consumption Estimates*, Tables C2 and C3.

Section 4. Petroleum

Asphalt and Road Oil

The Combined State Energy Data System (CSEDS) assumes that all asphalt and road oil consumption occurs in the industrial sector. Asphalt and road oil are used primarily for paving (79 percent of consumption in 1970 and 89 percent in 1997), with the remaining products used for roofing and sealing. Taxes are not included in the prices because most street and highway paving is done under contract to State, county, and other public authorities who are typically exempted from paying taxes.

Physical Unit Prices: All Years

Asphalt prices in physical units are developed from monthly reports in the *Engineering News-Record*, a construction industry weekly magazine published by McGraw-Hill, Inc. The source data consist of monthly reports from correspondents in 20 U.S. cities with price quotes for tank cars, drums, or both, for the three major types of asphalt products: asphalt cement (AC-20), asphalt emulsion (rapid set and slow set), and asphalt cutback.

For 1986 forward, the tank car price is used. However, for 1986 and 1987, the drum price is used if a tank car price is not available. For 1970 through 1985, when both tank car and drum prices are available, a simple average of the two prices is used. When only one price is available, that price is used.

Asphalt prices are developed by calculating a simple average annual price from the monthly prices for each city for the three products. City prices are assigned to States. CA, OH (1970 through 1985, 1992 forward), and PA have prices from two cities; in these cases, simple averages of the two city prices are used. No States have prices from more than two cities. An outlier data value for Minneapolis in June 1995 was omitted and the MN price for 1995 is an 11-month average. States with no prices are assigned a Census division simple average price. If there is no Census division price, the simple average of the prices for the other Census divisions within that Census region is used.

State average asphalt prices are calculated as the quantity-weighted average prices of the three products for each State. Quantity data for 1970 through 1980 are taken from the Bureau of Mines and EIA reports on sales of asphalt. Quantity data for 1981 forward are taken from the *Report on Sales of Asphalt in the U.S.,* published by the Asphalt Institute. Non-paving asphalts are assumed to have the prices of paving asphalt cement.

For 1970 through 1982, asphalt and road oil are estimated as separate data series. Asphalt prices are estimated as discussed above. Road oil prices are assumed to equal asphalt emulsion prices because specific prices are not available from any source.

Btu Prices: All Years

Asphalt prices in dollars per ton are converted to dollars per gallon by dividing by 235 gallons per ton for asphalt cement, 241 gallons per ton for emulsion, and 248.6 gallons per ton for cutback. These prices are then multiplied by 42 gallons per barrel and divided by 6.636 million Btu per barrel to get dollars per million Btu. Road oil unit prices of dollars per ton are converted to dollars per million Btu by using the constant conversion factors of 5.5 barrels per ton and 6.636 million Btu per barrel. The average price of all asphalt and road oil is the consumption-weighted average of the individual product prices.

U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from CSEDS.

Data Sources

Prices

1970 forward: McGraw-Hill, Inc., *Engineering News-Record*.

Quantities for Calculating Weighted Average Prices

1981 forward: Asphalt Institute, *Asphalt Usage, United States and Canada.*

1977–1980: Energy Information Administration, Energy Data Reports, *Sales of Asphalt* (1978-1980) and *Asphalt Sales, Annual* (1977), Table 2.

1970–1976: Bureau of Mines, U.S. Department of the Interior, Mineral Industry Survey, *Asphalt Sales, Annual* (1971-1976) and *Asphalt Shipments, Annual* (1970), Table 2.

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, industrial sector, asphalt and road oil consumption.

Conversion Factors: All Years

Conversion factors used are: 235 gallons per ton of asphalt cement; 241 gallons per ton of emulsion; 248.6 gallons per ton of cutback; 42 gallons per barrel; 5.5 barrels per ton of road oil; 6.636 million Btu per barrel.

Aviation Gasoline

Aviation gasoline prices are developed for the transportation sector. Estimates of the amount of aviation gasoline consumed by the transportation sector are taken from the Combined State Energy Data System (CSEDS). Aviation gasoline prices are national averages, excluding taxes, developed from several sources, depending on the years. In all cases, physical unit prices are developed and then converted to Btu prices. Federal and State excise taxes, as well as State and local sales taxes, are not included.

Physical Unit Prices: 1976 Forward

Aviation gasoline prices for 1978 forward are assumed to be the national average refiners sales prices to end users published in the EIA's *Annual Energy Review*. The 1976 and 1977 prices are assumed to be the national average retail prices published in the EIA's *Monthly Energy Review*.

Physical Unit Prices: 1970 Through 1975

For 1970 through 1975, aviation gasoline prices are not available. Prices are derived by dividing the national motor gasoline prices for those years by the 1976 national motor gasoline price and applying those percent changes to the 1976 national aviation gasoline price.

Btu Prices: All Years

Aviation gasoline Btu prices are calculated by converting the physical unit prices from cents per gallon to dollars per barrel (42 gallons per barrel) and then to dollars per million Btu (5.048 million Btu per barrel).

Data Sources

Prices

1991 forward: Energy Information Administration, *Annual Energy Review 1998,* Table 5.20, row titled "Sales Prices to End Users: Aviation Gasoline."

1979–1990: Energy Information Administration, *Annual Energy Review 1994,* Table 5.20, row titled "Sales Prices to End Users: Aviation Gasoline."

1978: Energy Information Administration, *Annual Energy Review 1993,* Table 5.21, row titled "Sales Prices to End Users: Aviation Gasoline."

1976, 1977: Energy Information Administration, *Monthly Energy Review*, April 1984, page 106, column titled "Aviation Gasoline, Retail."

1970–1975: Energy Information Administration, *Annual Energy Review 1989*, Table 70, column titled "Motor Gasoline, Leaded Regular, Nominal."

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, transportation sector, aviation gasoline consumption.

Conversion Factor: All Years

5.048 million Btu per barrel.

Distillate Fuel

Distillate fuel prices are developed for all sectors. Distillate fuel in the transportation sector is assumed to be diesel fuel. Estimates of the amount of distillate fuel consumed in each sector are taken from the Combined State Energy Data System (CSEDS). Estimated consumption for the industrial sector is adjusted to remove the estimated refinery consumption of distillate fuel in each State. (See the discussion in Section 7, "Consumption Adjustments for Calculating Expenditures," on page 417.)

Residential Sector

Residential distillate prices are developed by using a variety of data sources and several estimation methods, depending on the years involved. In all cases, physical unit prices for States are developed first, then Btu prices are calculated by using the physical unit prices and the conversion factor. The prices contained in this series are the retail prices paid by consumers for residential heating oil, including taxes.

Physical Unit Prices: 1983 Through 1990 and 1992 Forward

For 1983 through 1990 and 1992 forward, physical unit distillate prices in cents per gallon (excluding taxes) are generally available for 24 States from the *Petroleum Marketing Annual (PMA).* For 1989 through 1993, prices represent No. 2 fuel oil, only. For 1994 forward, prices include other No. 2 distillates. State-level prices for the States without *PMA* prices are estimated by using price data from the American Gas Association (AGA), CSEDS consumption data, and *PMA* Petroleum Administration for Defense (PAD) district prices. The estimation procedures are described below and include the addition of State general sales taxes.

1. State prices in cents per gallon are generally available from the *PMA* for the following 24 States: AK, CT, DC, DE, ID, IL, IN, MA, MD, ME, MI, MN, NH, NJ, NY, OH, OR, PA, RI, VA, VT, WA, WI, and WV. Prices for these States are converted from cents to dollars per gallon, and State general sales taxes from the Bureau of the Census and successor sources are added.

2. For the States that do not have prices in the *PMA*, prices are estimated by using AGA fuel oil prices, CSEDS consumption data, and *PMA* PAD district prices for Districts II, III, IV, and V and Subdistrict IC (all the States in PAD Subdistricts IA and IB have published prices). The following steps are used to estimate the prices:

   a. Distillate prices from the *PMA* for PAD Districts II, III, IV, and V and Subdistrict IC are converted from cents per gallon to dollars per gallon.

   b. The AGA lists fuel oil prices by company for the principal city served in dollars per million Btu, including State sales taxes. A simple average of the city-level prices is used to derive a State-level price for each of the States without *PMA* prices. These AGA State averages are converted from dollars per million Btu to dollars per gallon by using the AGA conversion factor of 7.194 gallons per million Btu. State general sales taxes are subtracted to give State averages comparable to the *PMA* prices.

c. The AGA State prices derived in step 2b. are combined into PAD district averages by using CSEDS consumption to weight each State's values. This procedure gives AGA consumption-weighted average prices for PAD Districts II, III, IV, and V and Subdistrict IC that are comparable to the volume-weighted PAD district prices published in the *PMA*. The AGA PAD district averages are calculated by using only the available States; if a State does not appear in the survey, it is not included in the PAD calculation.

d. Adjustment factors, ratios of the *PMA* PAD district price divided by the AGA derived PAD district price, are calculated for PAD Districts II, III, IV, and V, and Subdistrict IC.

e. Prices for the States not published in the *PMA* are calculated by multiplying the AGA State prices derived in step 2b by the appropriate PAD district adjustment factor from step 2d and then adding State general sales taxes.

f. States that do not have prices in either the *PMA* or the AGA are assigned a *PMA* PAD district price, and State general sales taxes are added. The States with assigned PAD prices are as shown in Table A13.

Table A13. Distillate Residential Sector PADD Price Assignments, 1983–1990 and 1992 Forward

State	Years	Prices Assigned
AR	1988, 1993–1997	PAD District III
AZ	1992–1997	PAD District V
CA	1984, 1992–1997	PAD District V
CO	1997	PAD District IV
FL	1993, 1997	PAD District IC
GA	1996, 1997	PAD District IC
HI	1983–1990, 1992–1997	PAD District V
IA	1997	PAD District II
IL	1986	PAD District II
KS	1986, 1989, 1996, 1997	PAD District II
LA	1986, 1996, 1997	PAD District III
MS	1983, 1985, 1986, 1995–1997	PAD District III
MT	1994, 1995	PAD District IV
ND	1994, 1995, 1997	PAD District II
NE	1996	PAD District II
NM	1984–1990, 1992–1997	PAD District III
NV	1994, 1995, 1997	PAD District V
OK	1986, 1989, 1990, 1992, 1993, 1995–1997	PAD District II
SC	1997	PAD District IC
SD	1986, 1995–1997	PAD District II
TX	1992–1995, 1997	PAD District III
UT	1985, 1995	PAD District IV
WY	1994	PAD District IV

Physical Unit Prices: 1991

Physical unit distillate prices in cents per gallon (excluding taxes) are available for 24 States from the *PMA*. Because prices are not available from AGA for 1991, State-level prices for the remaining 27 States are estimated by using physical unit prices derived for 1990 in CSEDS and the 1991 *PMA* Petroleum Administration for Defense (PAD) district prices. The estimation procedures, including the addition of State general sales taxes, are described below.

1. State prices in cents per gallon are available from the *PMA* for the following 24 States: AK, CT, DC, DE, ID, IL, IN, MA, MD, ME, MI, MN, NH, NJ, NY, OH, OR, PA, RI, VA, VT, WA, WI, and WV. Prices for these States are converted from cents to dollars per gallon, and State general sales taxes from the Bureau of the Census' *State Government Tax Collections (SGTC)* are added.

2. For the remaining 27 States that do not have prices in the *PMA*, prices are estimated by using the 1990 CSEDS physical unit prices and *PMA* PAD district prices for 1990 and 1991. The following steps are used to estimate the prices:

   a. For 1990, the Subdistrict IC price is withheld in the *PMA* and the average of the VA and WV prices is used as the Subdistrict IC price.

b. The 1990 State prices derived from AGA and *PMA*, as described below, are adjusted by the percentage change in the 1990 and 1991 prices for each State's *PMA* PAD district or subdistrict.

c. The State general sales taxes from *SGTC* are added.

Physical Unit Prices: 1978 Through 1982

Procedures for the 1978 through 1982 period are similar to those for 1983 forward except for changes in data sources. Annual physical unit prices are either taken directly from the *Monthly Energy Review (MER)* or calculated from monthly regional price data, also from the *MER*. These data were collected on Form EIA-9A (formerly EIA Form 9 and FEA Form P112-M-1) and include taxes. Price data from *Platt's Oil Price Handbook and Oilmanac (Platt's)* and CSEDS consumption data for 1978 through 1982 are used to compute State prices when only regional data are available. These calculations are described step-by-step below.

1. Annual State physical unit prices are generally available from the *MER* for the same 24 States covered by the *PMA* in 1983 and forward. These 24 States compose all of Federal Regions 1, 2, 3, 5, and 10 (see Figure A2 on page 330). Prices for these States exclude taxes and are converted to dollars per gallon.

2. Of the States without *MER* prices, the 22 in Federal Regions 4, 7, 8, and 9 have annual prices estimated from the monthly Federal regional prices published in the *MER*. No regional prices are available for Federal Region 6 for the 1978 through 1982 period, and some monthly prices are missing in regions 7, 8, and 9 in 1980, 1981, and 1982.

   a. Missing monthly prices for Federal regions are estimated with assigned prices as follows: the Region 9 November 1980 price is assigned to December 1980; an average of the Region 7 July and October 1982 prices is assigned to August and September 1982; an average of Region 8 June and September 1982 prices is assigned to July and August 1982; and an average of Region 3 August and October 1982 prices is assigned to September 1982. Imputation of missing Region 6 prices for 1978 through 1982 and missing Region 9 prices for 1981 and 1982 is discussed later.

   b. The simple average of monthly State-level normal heating degree-day data is averaged for all the States within each of the 10 Federal regions and is used to estimate average Federal region heating degree-days. AK, DC, and HI are assigned the monthly heating degree-days from MN, MD, and FL, respectively.

   c. Weighted average annual physical unit distillate prices for the residential sector are calculated for Federal Regions 4, 7, 8, and 9 (except for Region 9 in 1981 and 1982) by using the regional normal heating degree-days and the monthly regional prices from the *MER*.

   d. In 1981, only March and May prices are available for Federal Region 9. To estimate the average annual price for this region, the relationship between the U.S. annual heating oil price (from the *MER*) and the U.S. March and May prices is expressed as a ratio and is used with the Region 9 March and May prices to estimate the 1981 annual Region 9 price.

   e. City-level prices from *Platt's* are assigned to States as shown in Table A14. The assigned State-level *Platt's* prices for States are consumption-weighted into Federal regions by using residential sector consumption data from CSEDS.

   f. Adjustment factors, ratios of the regional *MER* distillate prices to the regional *Platt's*-based distillate prices, are calculated for Federal Regions 4, 7, 8, and 9 (except for 1982).

   g. Since there are no monthly regional distillate prices from the *MER* for Federal Region 6 for 1978 through 1982 and Federal Region 9 for 1982, the adjustment factors for these regions are based on the adjustment factors for previous time periods. The Region 6 adjustment factor for each of the years in the 1978 through 1982 period is equal to 1.1313, which is the average of the adjustment factor for the West South Central Census Division for 1976 and 1977. The Region 9 adjustment factor for 1982 is equal to 1.1995, which is the average adjustment factor for Region 9 from 1978 through 1981.

   h. The residential sector distillate State prices for the 27 States in Federal Regions 4, 6, 7, 8, and 9 are calculated by multiplying

Table A14. Platt's Prices for No. 2 Fuel Assigned to States, 1970–1982

State	Years	Assigned City or State Prices
AK	1970–1976	Los Angeles/San Francisco, CA
	1977, 1978	Portland, OR
	1979, 1980	Seattle, WA
	1981, 1982	Seattle-Tacoma/Spokane, WA
AL	1970–1974	Birmingham/Mobile/Montgomery
	1975–1977	Mobile/Birmingham
	1978–1982	Birmingham
AR	1970–1982	Arkansas
AZ	1970–1978	Los Angeles/San Francisco, CA
	1979–1982	Phoenix
CA	1970–1982	Los Angeles/San Francisco
CO	1970–1976	Minneapolis-St. Paul, MN
	1977–1982	Denver
CT	1970–1982	New Haven
DC	1970–1982	Baltimore, MD
DE	1970–1982	Baltimore, MD
FL	1970–1972	Jacksonville/Miami/Tampa/Pensacola/Panama City/Port Everglades
	1973	Miami/Tampa/Pensacola
	1974-1975, 1981–1982	Miami/Tampa
	1976–1980	Miami
GA	1970–1973	Atlanta/Savannah/Albany/Athens/Bainbridge/Columbus/-Macon
	1974–1982	Atlanta/Savannah
HI	1970–1982	Los Angeles/San Francisco, CA
IA	1970–1981	Chicago, IL
	1982	Des Moines
ID	1970–1976	Los Angeles/San Francisco, CA
	1977–1982	Portland, OR
IL	1970–1982	Chicago
IN	1970–1982	Chicago, IL
KS	1970–1973	Los Angeles/San Francisco, CA
	1974–1982	St. Louis, MO
KY	1970	Baton Rouge/New Orleans, LA
	1971–1982	New Orleans, LA
LA	1970	Baton Rouge/New Orleans
	1971–1982	New Orleans
MA	1970–1982	Boston
MD	1970–1982	Baltimore
ME	1970–1982	Portland
MI	1970–1982	Detroit
MN	1970–1982	Minneapolis-St. Paul
MO	1970	Baton Rouge/New Orleans, LA
	1971–1973	New Orleans, LA
	1974–1982	St. Louis
MS	1970–1973	Greenville/Meridian
	1974–1982	New Orleans, LA
MT	1970–1976	Minneapolis-St. Paul, MN
	1977–1982	Billings
NC	1970–1973	Greensboro/Wilmington/Charlotte/Salisbury/Selma
	1974–1975	Greensboro/Wilmington/Charlotte
	1976–1982	Greensboro/Wilmington
ND	1970–1982	Minneapolis-St. Paul, MN
NE	1970	Baton Rouge/New Orleans, LA
	1971–1973	New Orleans, LA
	1974–1982	St. Louis, MO
NH	1970–1982	Portland, ME
NJ	1970–1975	New York/Albany/Buffalo, NY
	1976–1982	New York/Albany, NY
NM	1970–1972	New Mexico-West Texas
	1973–1976	Los Angeles/San Francisco, CA
	1977–1980	Albuquerque
	1981, 1982	Albuquerque/Farmington
NV	1970–1982	Los Angeles/San Francisco, CA
NY	1970–1975	New York/Albany/Buffalo
	1976–1982	New York/Albany
OH	1970–1972	Toledo/Cleveland/Zanesville/Columbus/Dayton
	1973–1982	Detroit, MI
OK	1970–1982	Oklahoma (Group 3)
OR	1970–1976	Los Angeles/San Francisco, CA
	1977–1982	Portland
PA	1970–1978	Philadelphia
	1979–1982	Philadelphia/Pittsburgh
RI	1970–1975	Providence
	1976–1982	New Haven, CT
SC	1970–1975	Charleston/Spartanburg/Belton
	1976–1982	Charleston/Spartanburg
SD	1970–1982	Minneapolis-St. Paul, MN
TN	1970–1973	Chattanooga
	1974–1982	New Orleans, LA
TX	1970–1972	New Mexico-West Texas
	1973–1978	New Orleans, LA
	1979, 1980	Houston
	1981	Dallas-Fort Worth/Houston
	1982	Amarillo/Corpus Christi/Dallas-Fort Worth/Houston
UT	1970–1976	Minneapolis-St. Paul, MN
	1977–1982	Salt Lake City
VA	1970–1973	Norfolk/Roanoke
	1974–1982	Norfolk
VT	1970–1982	Portland, ME
WA	1970–1976	Los Angeles/San Francisco, CA
	1977, 1979, 1980	Seattle
	1978	Portland, OR
	1981–1982	Seattle-Tacoma/Spokane
WI	1970–1982	Chicago, IL
WV	1970–1973	Norfolk/Roanoke, VA
	1974–1982	Norfolk, VA
WY	1970–1976	Minneapolis-St. Paul, MN
	1977–1982	Cheyenne

the regional adjustment factors for each year and the State-level assigned *Platt's* prices.

Physical Unit Prices: 1975 Through 1977

For the years 1975 through 1977, no State-level data are available, and regional data from Form EIA-9A are available only at the Census division level, except for Federal region prices for November and December of 1977. Using a methodology similar to that described above for the allocation of regional data to States, adjustment factors are calculated at the regional level and applied to *Platt's* price data assigned to States. The resulting prices implicitly include average regional taxes but do not reflect individual State differences.

1. Monthly regional price data for 1975 and 1976 are reported in the *MER* only for Census divisions. In 1977, however, monthly price data are reported for Census divisions for January through October and for Federal regions for November and December. The Federal region prices for November and December are assigned to their respective States and reaggregated into Census divisions in order to create a consistent set of monthly Census division prices for 1977. Annual residential sector distillate consumption data from CSEDS are used to do the reaggregation.

2. The Census division monthly price data from the *MER* for 1975, 1976, and the first 10 months of 1977 are used with the estimated Census division price data for November and December 1977 to estimate State-level prices.

   a. Missing monthly prices in the East South Central Division for June and November 1975 and the Mountain Division for March and July 1975 are estimated by using an average of the prices for the month preceding and the month following the missing month. Missing November and December West South Central Division prices in 1977 are estimated with the assignment of the October price to both months. No monthly price data are available for the West South Central Division in 1975; step 2f., below, discusses how the calculations are handled for this division.

   b. The monthly State-level normal heating degree-day data are averaged for the States within each Census division to estimate regional monthly heating degree-days. AK, DC, and HI are assigned the monthly heating degree-days from MN, MD, and FL, respectively.

   c. Weighted average annual distillate prices for Census divisions are calculated by using the monthly Census division price data from the *MER* and the normal heating degree-days estimated for Census divisions.

   d. City-level No. 2 fuel oil refinery and terminal prices from *Platt's* for 1975 through 1977 are assigned to States as shown in Table A14. The assigned *Platt's* prices for States are consumption-weighted into Census divisions by using residential sector consumption data from CSEDS.

   e. Adjustment factors are calculated as the ratios of the *MER* distillate Census division prices to the *Platt's* distillate Census division prices.

   f. Since there are no 1975 *MER* price data for the West South Central Division from which to calculate an adjustment factor, the 1975 adjustment factor for this region is assumed to be equal to the simple average of the West South Central adjustment factors for 1976 and 1977 (i.e., 1.1313).

   g. The residential sector distillate State prices for all States are calculated by multiplying the regional adjustment factors for each year by the State-level assigned *Platt's* prices.

Physical Unit Prices: 1970 Through 1974

There are no regional or State-level distillate price data directly available for the 1970 through 1974 period. To estimate State prices, regional average prices are first derived from the relationship between U.S. prices and Federal region prices for 1975 through 1980. State prices are then estimated from the regional prices by using a methodology similar to that described for 1978 through 1982. The resulting prices implicitly include average regional taxes but do not reflect individual State differences.

1. The first step in the estimation of residential distillate prices for the 1970 through 1974 time period is to develop an equation that uses U.S. prices to estimate prices for Federal regions. Regression techniques are used for this purpose. U.S. prices for 1975 through 1980 from the *Annual Energy Review (AER)* are used as the independent variable for developing the equation; annual Federal region prices are used as the dependent variable. Federal region prices for 1978 through 1980 are calculated above, but *MER* prices for 1975 through 1977 are for Census divisions. To convert these annual Census division prices into Federal region prices, the estimated State prices for 1975 through 1977 are aggregated into Federal regions by using CSEDS consumption data.

2. Regression techniques are applied to the pooled Federal region price data (dependent variable) and the U.S. prices from the *AER* (independent variable) for 1975 through 1980. U.S. prices for 1970 through 1974 are input to estimate annual Federal region prices for 1970 through 1974.

3. City-level prices from *Platt's* for 1970 through 1974 are assigned to States as shown in Table A14. The assigned State-level *Platt's* prices are consumption-weighted into Federal regions by using residential sector distillate consumption data from CSEDS.

4. Adjustment factors, which are ratios of the regional *MER* distillate Federal region prices to the *Platt's*-based distillate Federal region prices, are calculated.

5. The residential sector distillate prices for all States are calculated by multiplying the regional adjustment factors for each year by the State-level assigned *Platt's* prices.

Btu Prices: All Years

Btu prices for States are calculated by converting the physical unit prices from dollars per gallon to dollars per barrel (42 gallons per barrel) and then to dollars per million Btu (5.825 million Btu per barrel). U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from CSEDS.

Data Sources

Prices

1983 forward: Energy Information Administration (EIA), *Petroleum Marketing Annual 1985*, Volume 1, Table 25 (1983–1985) and annual issues of the *Petroleum Marketing Annual*, Table 36 (1986–1988), Table 38 (1989–1993), and Table 39 (1994 forward), column titled "To Residential Consumers." The data series are also available on the EIA *Energy InfoDisc,* a CD-ROM product.

1983–1990, 1992 forward: American Gas Association, *Residential Natural Gas Market Survey* (1989, 1990, 1992 forward), and *Gas Househeating Survey* (1983–1988), Appendix 2, "Competitive Fuel Prices," column titled "Fuel Oil."

1970–1982: McGraw-Hill, Inc., *Platt's Oil Price Handbook and Oilmanac*, refinery and terminal prices for No. 2 fuel oil, average of highs and lows.

1975–1982: National Oceanic and Atmospheric Administration, U.S. Department of Commerce, *State, Regional, and National Monthly and Seasonal Heating Degree-Days Weighted by Population (1980 Census)*, Historical Climatology Series 5-1, table titled "1951-80 State Pop. Wgt'd Heating Degree-Days."

1975–1982: Energy Information Administration, *Monthly Energy Review,* table titled "Residential Heating Oil Prices by Region," February 1978, page 67 (1975, 1976); April 1980, page 83 (1977, 1978); July 1982, page 87 (1979–1982).

1970–1982: Energy Information Administration, *Annual Energy Review 1988*, Table 67, "Motor Gasoline and Residential Heating Oil Prices, 1949–1988."

Taxes

For 1992 forward, an annual average general sales tax is calculated for each State as a simple average of the 12 monthly values. This method takes into account tax changes during the year. Prior to 1992, the State general sales tax as of September 1 of each year is used.

1996 and 1997: Federation of Tax Administrators, http://www.taxadmin.org/fta/rate/sales.html.

1995: The Council of State Governments, *The Book of the States, Table 6.21.*

1994: U.S. Advisory Committee on Intergovernmental Relations, *Significant Features of Fiscal Federalism,* Tables 14 and 26.

1993: Bureau of the Census, U.S. Department of Commerce, *State Tax Review*, Volume 54, No. 31, map titled "State Gasoline, Sales and Cigarette Tax Rates as of July 1, 1993."

1983–1992: Bureau of the Census, U.S. Department of Commerce, *State Government Tax Collections*, table titled "State Government Excises on General Sales, Motor Fuel, and Cigarettes, Beginning and End of Fiscal Year," column "Percentage rate, Sept. 1."

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, residential sector distillate consumption.

Conversion Factor: All years

5.825 million Btu per barrel

Commercial Sector

Commercial sector distillate prices are estimated by using several different data sources and estimation methodologies, depending on the years involved. For 1983 forward, retail prices paid by commercial/institutional establishments (excluding taxes) for No. 2 distillate fuel are taken from the Energy Information Administration's *Petroleum Marketing Annual (PMA).* State general sales taxes from the Bureau of the Census and successor sources are added. For 1970 through 1982, commercial distillate prices are based on refinery and terminal (wholesale) prices from *Platt's* and markups from Fostor Associates, Inc. *Energy Prices: 1960-73* that include taxes. For both time periods, physical unit prices are calculated from the data sources, and Btu prices are computed by using the physical unit prices and the conversion factor.

Physical Unit Prices: 1983 Forward

Physical unit No. 2 distillate prices in cents per gallon (excluding taxes) are generally available for 24 States from the *PMA*. State-level prices for the remaining 27 States are estimated by using the *PMA* Petroleum Administration for Defense (PAD) district prices as shown in Table A15. State general sales taxes are then added.

Table A15. Distillate Commercial Sector PADD Price Assignments, 1983 Forward

State	Years	Prices Assigned
AL	1983–1997	PAD District III
AR	1983–1997	PAD District III
AZ	1983–1997	PAD District V
CA	1983–1997	PAD District V
CO	1983–1997	PAD District IV
FL	1983–1997	PAD District IC
GA	1983–1997	PAD District IC
HI	1983–1997	PAD District V
IA	1983–1997	PAD District II
KS	1983–1997	PAD District II
KY	1983–1997	PAD District II
LA	1983–1997	PAD District III
MO	1983–1997	PAD District II
MS	1983–1997	PAD District III
MT	1983–1997	PAD District IV
NC	1983–1997	PAD District IC
ND	1983–1997	PAD District II
NE	1983–1997	PAD District II
NM	1983–1997	PAD District III
NV	1983–1997	PAD District V
OK	1983–1997	PAD District II
SC	1983–1997	PAD District IC
SD	1983–1997	PAD District II
TN	1983–1997	PAD District II
TX	1983–1997	PAD District III
UT	1983–1997	PAD District IV
WY	1983–1997	PAD District IV

Physical Unit Prices: 1970 Through 1982

Commercial sector distillate physical unit prices for 1970 through 1982 are calculated by using *Platt's* prices assigned to States and commercial sector markups estimated from *Energy Prices: 1960-73*. The resulting estimates implicitly include State-specific taxes.

1. The first step is to compute the markups. *Energy Prices* contains single price estimates for small commercial users and two price estimates for large commercial users for 10 cities: Boston, MA; Albany, NY; New York, NY; Charlotte, NC; Washington, DC; Chicago, IL; Detroit MI; Minneapolis/St. Paul, MN; St. Louis, MO; and Seattle, WA. First, a simple average of the two large commercial prices is calculated for each city except for Albany and New York. In this case, all four large commercial prices are averaged together, since cities are assigned to their respective States.

2. For the nine States covered by the *Energy Prices* data (noted in step 1), the markup of the reported prices from *Energy Prices* over the assigned *Platt's* prices (Table A14 on page 352) and the markup of the residential prices calculated above for 1970 through 1972 over the *Platt's* prices is calculated.

3. At this point, residential and commercial sector retail markups have been computed for nine States for each of the years 1970 through 1972. The next step is to calculate the average retail markup for the 3-year period for each sector. A simple average of the markup ratios is calculated.

4. The average commercial and residential sector retail markups for the nine available States are assigned, as shown in Table A16.

5. To translate the average commercial and residential markups for 1970 through 1972 into the estimated commercial sector retail markups to be used for 1970 through 1982, the relationship between these two markups is used, with the residential markups calculated for all States for each year. The calculation of the residential markups follows the same procedure used in step 2 above.

6. The commercial sector adjustment factors for each State for each of the years 1970 through 1982 are multiplied by the corresponding

Table A16. Distillate Fuel Commercial Sector Average Retail Markup Price Assignments, 1970-1972

State	City Price Assignments
AK	Seattle, WA
AL	Charlotte, NC
AR	St. Louis, MO
AZ	Seattle, WA
CA	Seattle, WA
CO	Minneapolis-St. Paul, MN
CT	Boston, MA
DC	Washington, DC
DE	Washington, DC
FL	Charlotte, NC
GA	Charlotte, NC
HI	Seattle, WA
IA	St. Louis, MO
ID	Seattle, WA
IL	Chicago, IL
IN	Chicago, IL
KS	St. Louis, MO
KY	Chicago, IL
LA	St. Louis, MO
MA	Boston, MA
MD	Washington, DC
ME	Boston, MA
MI	Detroit, MI
MN	Minneapolis-St. Paul, MN
MO	St. Louis, MO
MS	Charlotte, NC
MT	Minneapolis-St. Paul, MN
NC	Charlotte, NC
ND	Minneapolis-St. Paul, MN
NE	St. Louis, MO
NH	Boston, MA
NJ	Albany and New York, NY
NM	Seattle, WA
NV	Seattle, WA
NY	Albany and New York, NY
OH	Detroit, MI
OK	St. Louis, MO
OR	Seattle, WA
PA	Albany and New York, NY
RI	Boston, MA
SC	Charlotte, NC
SD	Minneapolis-St. Paul, MN
TN	Chicago, IL
TX	St. Louis, MO
UT	Minneapolis-St. Paul, MN
VA	Washington, DC
VT	Boston, MA
WA	Seattle, WA
WI	Chicago, IL
WV	Washington, DC
WY	Minneapolis-St. Paul, MN

Platt's prices for 1970 through 1982 to calculate the final commercial sector physical unit prices.

Btu Prices: All Years

Btu prices for States are calculated by converting the physical unit prices from cents to dollars per gallon, then to dollars per barrel (42 gallons per barrel) and, finally, to dollars per million Btu (5.825 million Btu per barrel). U.S. prices are calculated as the average of the State Btu prices, weighted by consumption data from CSEDS.

Data Sources

Prices

1983 forward: Energy Information Administration (EIA), *Petroleum Marketing Annual 1985, Volume 1,* Table 25 (1983–1985) and annual issues of the *Petroleum Marketing Annual*, Table 36 (1986–1988), Table 38 (1989–1993), and Table 39 (1994 forward), column titled "To Commercial/Institutional Consumers." The data series are also available on the EIA *Energy InfoDisc,* a CD-ROM product.

1970–1982: McGraw-Hill, Inc., *Platt's Oil Price Handbook and Oilmanac*, refinery and terminal prices for No. 2 fuel oil, average of highs and lows.

1970–1982: Foster Associates, Inc., 1974, *Energy Prices 1960-73*, Tables 4-c and 5-b.

Taxes

For 1992 forward, an annual average general sales tax is calculated for each State as a simple average of the 12 monthly values. This method takes into account tax changes during the year. Prior to 1992, the State general sales tax as of September 1 of each year is used.

1996 and 1997: Federation of Tax Administrators, http://www.taxadmin.org/fta/rate/sales.html.

1995 forward: The Council of State Governments, *The Book of the States*, Table 6.21.

1994: U.S. Advisory Committee on Intergovernmental Relations, *Significant Features of Fiscal Federalism,* Tables 14 and 26.

1993: Bureau of the Census, U.S. Department of Commerce, *State Tax Review*, Volume 54, No. 31, map titled "State Gasoline, Sales and Cigarette Tax Rates as of July 1, 1993."

1983–1992: Bureau of the Census, U.S. Department of Commerce, State Government Tax Collections, table titled "State Government Excises on General Sales, Motor Fuel, and Cigarettes, Beginning and End of Fiscal Year," column "Percentage rate, Sept. 1."

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, commercial sector distillate consumption.

Conversion Factor: All Years

5.825 million Btu per barrel

Electric Utility Sector

The electric utility price for distillate fuel is the average delivered cost of No. 2 fuel oil receipts at electric utilities. (See **Light Oil, Electric Utilities** on page 372.) For 1973 forward, these prices are taken from the EIA's *Cost and Quality of Fuels for Electric Utility Plants*; for 1970 through 1972, prices from Edison Electric Institute's *Statistical Yearbook of the Electric Utility Industry* are used with regression analysis. Btu prices are developed directly from the data sources and include all applicable taxes.

Prices: 1973 Forward

Btu prices for the years 1973 forward are based on the Btu prices reported in *Cost and Quality of Fuels (C&Q)*. For 1973, 1974, and 1980

forward, Btu prices are taken directly from the data source and are converted from cents per million Btu to dollars per million Btu. For 1975 through 1979, consumption-weighted average Btu prices are calculated from prices and consumption reported separately for steam-electric plants and for combustion turbine and internal combustion units. Wherever individual State prices are unavailable, quantity-weighted Census division prices from *C&Q* are assigned, as shown in Table A17.

The *C&Q* does not have prices for AK from 1973 forward or HI from 1973 through 1982 and 1992 through 1996. Prices for AK from 1994 forward and for HI from 1994 through 1996 are estimated as the simple averages of prices reported to EIA by selected utilities on FERC Form 1 and Form EIA-412. Additional data for AK is taken from the AK Department of Community and Regional Affairs publication, *Statistical Report of the Power Cost Equalization Program*.

Prior to 1994, prices are estimated by calculating the ratio of the AK or HI prices from the *Statistical Yearbook* to the *Statistical Yearbook* U.S. price and multiplying the ratio by the *C&Q* U.S. price for each year. AK prices for 1973, 1975, and 1978 are not published in the *Statistical Yearbook* and are estimated by calculating an average of the ratios of the AK to U.S. *Statistical Yearbook* prices in adjacent years. The 1973 estimated price is based on the average ratio for 1972 and 1974, the 1975 price is based on the average ratio for 1974 and 1976, and the 1978 price is based on the average ratio for 1977 and 1979. The average ratio is then applied to the U.S. *C&Q* price for the missing year.

U.S. Btu prices for all years are calculated as the average of the State Btu prices, weighted by consumption data from CSEDS.

Prices: 1970 Through 1972

Btu prices for 1970 through 1972 are estimated by using data from *Statistical Yearbook of the Electric Utility Industry*. U.S. prices are then computed by using the State-level prices and the electric utility distillate consumption data from CSEDS.

1. Regression techniques are used to arrive at the equation for estimating electric utility sector distillate prices for the 1970 through 1972 period. AL is treated as the reference State. The regression equation uses *Statistical Yearbook* State-level prices for 1974 through 1980 as the independent variable and the State-level prices calculated above for 1974 through 1980 as the dependent variable. Substituting Btu prices for 1970 through 1972 from the *Statistical Yearbook* into the regression equation yields the estimated electric utility sector State-level distillate prices.

2. Wherever individual State prices are unavailable, quantity-weighted Census division prices are assigned as follows: ID in 1970 through 1972; TN in 1970; and WA in 1970 and 1971. AK in 1971 is calculated as the average of the AK price in 1970 and 1972.

3. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from CSEDS.

Table A17. Distillate Electric Utility Census Division Price Assignments from *C&Q*, 1973 Forward

State	Years	Census Division
CA	1983–1985, 1987, 1988, 1990–1992, 1995-1997	Pacific
CO	1996, 1997	Mountain
CT	1973	New England
DC	1973	South Atlantic
DE	1973	South Atlantic
ID	1973, 1974, 1976, 1980–1997	Mountain
MD	1973	South Atlantic
ME	1973, 1974	New England
MT	1973–1975, 1977, 1983	Mountain
NH	1973, 1974	New England
NJ	1973, 1974	Mid-Atlantic
OR	1987, 1988, 1996	Pacific
RI	1976-1994, 1997	New England
SD	1973, 1974, 1992, 1994, 1995, 1997	W. North Central
TN	1973	E. South Central
VT	1973, 1974, 1978, 1983–1992	New England
WA	1973–1977	Pacific
WV	1973	South Atlantic
WY	1973	Mountain

Data Sources

Prices

1973 forward: Energy Information Administration, *Cost and Quality of Fuels for Electric Utility Plants*; Table 6 (1973, 1974); Tables 5, 6, 12, 13 (1975–1979); Table 45 (1980–1982); Table 51 (1983, 1984); Table 41 (1985–1989); Table 14 (1990, 1991); and Table 8 (1992 forward).

1994 forward: Energy Information Administration, unpublished prices reported by utilities in AK and HI on FERC Form 1, "Annual Report of Major Electric Utilities, Licensees, and Others," Form EIA-412, "Annual Report of Public Electric Utilities," and AK's *Statistical Report of the Power Cost Equalization Program*.

1970 through 1993: Edison Electric Institute, *Statistical Yearbook of the Electric Utility Industry*, table titled, "Analysis of Fuel for Electric Generation-Total Electric Utility Industry" (1970–1988) and table titled, "Fossil Fuels Used for Electric Generation Total Electric Utility Industry" (1990–1993).

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, electric utility sector distillate consumption.

Conversion Factors

Btu prices are calculated directly from data sources; no explicit conversion factors are needed for any years for the electric utility sector.

Industrial Sector

The industrial sector distillate prices are developed by using a variety of data sources and several estimation methods, depending on the years involved. For 1983 forward, prices of No. 2 distillate fuel (excluding taxes) are reported by the *Petroleum Marketing Annual (PMA).* State general sales taxes from the Bureau of the Census and successor sources are added. For 1970 through 1982, prices are the average cost of distillate to manufacturing firms and implicitly include taxes that reflect individual State differences.

Physical Unit Prices: 1983 Forward

Physical unit distillate prices in cents per gallon (excluding taxes) are generally available for 24 States from the *PMA*. State-level prices for the remaining 27 States are estimated by using the *PMA* Petroleum Administration for Defense (PAD) district prices, as shown in Table A19. State general sales taxes are then added.

Physical Unit Prices: 1982

In 1984, the Bureau of the Census announced that State-level fuel cost and quantity information would no longer be published in either the *Annual Survey of Manufactures (ASM)* or *Census of Manufactures (CM).* In addition, the *PMA*, the source for 1983 forward industrial sector distillate price data, did not contain 1982 prices. Because of this lack of price data, the 1982 industrial sector distillate prices are estimated on the basis of the relationship of industrial sector prices to electric utility sector prices for 1978 through 1981. The 1983 prices are not used in the estimation because they exclude taxes, while the 1978 through 1981 prices include taxes.

1. In order to calculate the average ratios of industrial-to-electric utility distillate prices, electric utility price assignments are made for: AK in 1978 through 1982 from WA; ID in 1979 through 1982 from MT; RI in 1978 through 1982 from CT; and VT in 1978 from ME.

2. The average 1978 through 1981 ratios of industrial-to-electric utility sector distillate prices are calculated for each State.

3. Prices for 1982 are estimated by multiplying the average ratios by the electric utility data for 1982.

Physical Unit Prices: 1971, 1974 Through 1981

For the years 1971 and 1974 through 1981, industrial sector distillate prices are calculated directly from cost and quantity data from the *Annual Survey of Manufactures (ASM)* or *Census of Manufactures (CM)* for all

Table A19. Distillate Industrial Sector PADD Price Assignments, 1983 Forward

State	Years	Prices Assigned
AL	1983–1997	PAD District III
AR	1983–1997	PAD District III
AZ	1983–1997	PAD District V
CA	1983–1997	PAD District V
CO	1983–1997	PAD District IV
DC	1994, 1997	PAD District IB
FL	1983–1997	PAD District IC
GA	1983–1997	PAD District IC
HI	1983–1997	PAD District V
IA	1983–1997	PAD District II
KS	1983–1997	PAD District II
KY	1983–1997	PAD District II
LA	1983–1997	PAD District III
ME	1997	PAD Distric IA
MO	1983–1997	PAD District II
MS	1983–1997	PAD District III
MT	1983–1997	PAD District IV
NC	1983–1997	PAD District IC
ND	1983–1997	PAD District II
NE	1983–1997	PAD District II
NM	1983–1997	PAD District III
NV	1983–1997	PAD District V
NY	1987	PAD District IB
OH	1983	PAD District II
OK	1983–1997	PAD District II
SC	1983–1997	PAD District IC
SD	1983–1997	PAD District II
TN	1983–1997	PAD District II
TX	1983–1997	PAD District III
UT	1983–1997	PAD District IV
WY	1983–1997	PAD District IV

States where data are available. Taxes are included in the prices. There are no missing prices for 1971. Six States are missing some *ASM* cost and quantity data for the 1974 through 1981 period. Cost and quantity data for these States are estimated as the simple average of the cost and quantity data for their adjacent States. The States, the years for which data are estimated, and the adjacent States used to make the estimation are shown in Table A18.

Table A18. Distillate Industrial Sector Price Assignments, 1974-1981

State	Years	State Prices Used
HI	1979–1981	CA
ND	1979–1981	MN, MT, SD
NM	1974–1979	AZ, CO, TX
NV	1974–1981	AZ, CA, ID, OR, UT
OK	1974–1978	AR, CO, KS, MO, TX
WY	1974–1981	CO, ID, MT, NE, SD, UT

Physical Unit Prices: 1970, 1972, 1973

Since *ASM* and *CM* data are not available for these years, the prices must be estimated. Physical unit prices are based on the ratio of 1971 *CM* prices to the 1971-assigned *Platt's* prices (Table A14 on page 352). The resulting ratios for each State are used with the *Platt's* assigned prices for 1970, 1972, and 1973 to impute prices.

1. The first step is to calculate State-level ratios between prices calculated from the 1971 *CM* cost and quantity data and the 1971 assigned *Platt's* prices. There are no missing States in either of these two sets of prices.

2. State-level physical unit prices for 1970, 1972, and 1973 are estimated by multiplying the 1971 ratio by the assigned State-level *Platt's* prices for each respective year.

Btu Prices: All Years

Btu prices for States are calculated by converting the physical unit prices from cents to dollars per gallon, then to dollars per barrel (42 gallons per barrel) and, finally, to dollars per million Btu (5.825 million Btu per barrel). U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from CSEDS, adjusted for process fuel consumption.

Data Sources

Prices

1983 forward: Energy Information Administration (EIA), *Petroleum Marketing Annual 1985, Volume 1,* Table 25 (1983–1985, and annual issues of the *Petroleum Marketing Annua*l, Table 36 (1986–1988), Table 38 (1989–1993), and Table 39 (1994 forward), column titled "To Industrial Consumers." The data series are also available on the EIA *Energy InfoDisc,* a CD-ROM product.

1970–1982: McGraw–-Hill, Inc., *Platt's Oil Price Handbook and Oilmanac*, refinery and terminal prices for No. 2 fuel oil, average of highs and lows.

1971, 1977, and 1981: Bureau of the Census, U.S. Department of Commerce, *Census of Manufactures*, Table 4 (1971) and Table 3 (1977, 1981).

1974–1976 and 1978–1980: Bureau of the Census, U.S. Department of Commerce, *Annual Survey of Manufactures*, Table 3.

Taxes

For 1992 forward, an annual average general sales tax is calculated for each State as a simple average of the 12 monthly values. This method takes into account tax changes during the year. Prior to 1992, the State general sales tax as of September 1 of each year is used.

1996 and 1997: Federation of Tax Administrators, http://www.taxadmin.org/fta/rate/sales.html.

1995: The Council of State Governments, *The Book of the States, Table 6.21.*

1994: U.S. Advisory Committee on Intergovernmental Relations, *Significant Features of Fiscal Federalism,* Tables 14 and 26.

1993: Bureau of the Census, U.S. Department of Commerce, *State Tax Review*, Volume 54, No. 31, map titled "State Gasoline, Sales and Cigarette Tax Rates as of July 1, 1993."

1983–1992: Bureau of the Census, U.S. Department of Commerce, *State Government Tax Collections*, table titled "State Government Excises on General Sales, Motor Fuel, and Cigarettes, Beginning and End of Fiscal Year," column "Percentage rate, Sept. 1."

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, industrial sector distillate consumption.

Conversion Factor: All Years

5.825 million Btu per barrel

Transportation Sector

Consumption of distillate fuel in the transportation sector includes distillate fuel used for vessel bunkering and for military and railroad use, plus on-highway diesel fuel use. Because on-highway diesel fuel use accounts for the largest portion of this sector—increasing from 55 percent in 1970 to 82 percent in 1995—prices and expenditures are calculated by using diesel prices. State physical unit prices for 1986 forward are taken from EIA's *Petroleum Marketing Annual (PMA)*. Physical unit prices for earlier years are calculated by using *PMA* prices and consumption data from the U.S. Department of Transportation's *Highway Statistics* to weight monthly or quarterly prices from the U.S. Department of Agriculture's *Agricultural Prices* into annual prices. Btu prices for all years are calculated by using the physical unit prices and the distillate conversion factor.

Physical Unit Prices: 1986 Forward

Diesel fuel physical unit prices for 1986 forward are based on the annual State-level price data available from the *PMA* for approximately 24 States and monthly tax rate information from *Highway Statistics*. Generally, the *PMA* provides prices in cents per gallon, excluding taxes, for AK, CT, DC, DE, ID, IL, IN, MA, MD, ME, MI, MN, NH, NJ, NY, OH, OR, PA, RI, VA, VT, WA, WI, and WV. State and Federal excise taxes on diesel fuel are added to *PMA* prices to derive final physical unit

prices, which are converted to dollars per gallon. In cases where the tax rate is not constant throughout the year, an annual average tax is calculated on the basis of the number of months each rate was in effect. State and local sales and other general taxes are not included.

For the remaining States for which no prices are published, the *PMA* PAD district prices for diesel fuel and motor gasoline and State motor gasoline prices are used. The State diesel fuel price is estimated as the ratio of the PAD district diesel fuel price to the PAD district motor gasoline price times the State motor gasoline price. The use of the ratio assumes that the relationship between the motor gasoline State and PAD district prices is similar to that of the diesel fuel State and PAD district prices. Motor gasoline prices to end users at all refiners' company outlets are used. When a State has no price available in that data series, the motor gasoline price to end users by all types of sellers through company outlets is used. The District of Columbia has no published diesel fuel or motor gasoline prices and is assigned the Maryland diesel fuel price for 1991 forward. State and Federal excise taxes are added as described above.

Physical Unit Prices: 1983 Through 1985

Diesel fuel physical unit prices for 1983 through 1985 are based on the annual State-level price data available from the *PMA* and monthly State and Federal tax rate information from *Highway Statistics* for 24 States. The prices for the remaining 27 States are calculated by using *Agricultural Prices* as outlined in the 1977 through 1982 methodology.

For the 24 States of AK, CT, DC, DE, ID, IL, IN, MA, MD, ME, MI, MN, NH, NJ, NY, OH, OR, PA, RI, VA, VT, WA, WI, and WV, the *PMA* provides physical unit prices, excluding taxes. In 1983 through 1985, the DC price is missing, and the MD price is assigned. In 1983, RI has no price and the PAD District IA average is assigned. A simple average of monthly State and Federal excise taxes is calculated as a combined average tax and added to the *PMA* price for a final physical unit price. State and local sales and other general taxes are not included.

Physical Unit Prices: 1977 Through 1982

Monthly prices from *Agricultural Prices* and monthly special fuels consumption data from *Highway Statistics* are collected for the States. MD prices are assigned to DC. Prices include State and local per-gallon taxes. Federal taxes and State and local sales and other general taxes are not included.

The volume-weighted annual diesel physical unit prices for States and the United States are calculated by using the monthly *Agricultural Prices* price data, weighted by the monthly *Highway Statistics* consumption data. The AK 1977 through 1982 prices are estimated on the basis of the assumption that the ratio of AK-to-U.S. diesel fuel price is the same as the ratio of the AK-to-U.S. motor gasoline price each year.

Physical Unit Prices: 1970 Through 1976

Quarterly prices from *Agricultural Prices* and monthly special fuels consumption data from *Highway Statistics* are collected for the States. Prices include State and local per-gallon taxes. Federal taxes and State and local sales taxes and other general taxes are not included.

1. Prices for 1970 through 1972 are reported in cents per gallon and must be converted to dollars per gallon. Prices for 1973 through 1976 are already reported in dollars per gallon.

2. For 1971 through 1973, State-level prices are not available for CT, MA, ME, NH, RI, and VT. Each is assigned the New England regional price for the 3 years.

3. The third quarter DE price is assigned to the missing fourth quarter DE price in 1972.

4. The combined MD/DE prices reported in 1973 are assigned to each of the States.

5. For 1970 through 1976, MD (or MD/DE) prices are assigned to DC.

The monthly special fuels consumption for 1970 through 1976 are converted into quarterly consumption by summing the months for each quarter.

The consumption-weighted annual diesel physical unit prices for the States are calculated by using the quarterly weights and quarterly prices. For 1970 through 1972, the quarterly prices from *Agriculture Prices* are converted from cents per gallon to dollars per gallon. For 1973 forward, the prices are already in dollars per gallon in the source. AK/1970 through 1976 prices are estimated on the basis of the assumption that the ratio of AK-to-U.S. diesel fuel price is the same as the ratio of AK-to-U.S. motor gasoline price each year.

Btu Prices: All Years

Btu prices for States are calculated by converting the physical unit prices from cents per gallon to dollars per barrel (42 gallons per barrel) and then to dollars per million Btu (5.825 million Btu per barrel). U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption from CSEDS.

Data Sources

Prices

1986 forward: Energy Information Administration), *Petroleum Marketing Annual)*, Table 36 (1986–1988), Table 38 (1989–1993), column titled "Sales to End Users, Through Company-Operated Retail Outlets," and Table 39 (1994 forward), column titled "Sales to End Users, Through Retail Outlets," for diesel fuel prices.

1986 forward: Energy Information Administration, *Petroleum Marketing Annual*, Table 29 (1986–1988) and Table 30 (1989–1993), column titled "All Refiners, Sales to End Users, Through Company Outlets,"and Table 35 (1994 forward), column titled "All Grades, Sales to End Users, Through Retail Outlets," for motor gasoline prices.

1986 forward: Energy Information Administration, *Petroleum Marketing Annual*, Table 28 (1986–1988) and Table 29 (1989–1993), column titled "Motor Gasoline Average, Through Company Outlets," and Table 31 (1994 forward), column titled "All Grades, Sales to End Users, Through Retail Outlets," for additional motor gasoline prices.

1983–1985: Energy Information Administration, *Petroleum Marketing Annual 1985*, Volume 1, Table 25, column titled "Sales to End Users, Sales Through Company-Operated Retail Outlets."

1970–1985: Crop Reporting Board, U.S. Department of Agriculture, Agriculture Prices, tables generally titled "Motor Supplies: Average Price Paid by Farmers for Motor Fuel" for 1970–1979, and "Diesel Fuel: Average Price Paid by States" for 1980–1985.

1970–1985: Federal Highway Administration, U.S. Department of Transportation, *Highway Statistics*, Table MF-25 for special fuels consumption data. Table MF-25 is not included in the 1976 volume but is publicly available directly from the Federal Highway Administration.

Taxes

1970 forward: Federal Highway Administration, U.S. Department of Transportation, *Highway Statistics*, Table MF-121T for State tax rates, Table FE-101 (also EIA, *Petroleum Marketing Annual*, Table EN1) for Federal tax rates.

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, transportation sector distillate consumption.

Conversion Factor: All Years

5.825 million Btu per barrel.

Heavy Oil (Electric Utilities)

For all years, the price of heavy oil consumed at electric utilities is the average cost of No. 6 fuel oil (residual fuel oil) as reported in *Cost and*

Quality of Fuels for Electric Utility Plants. (See **Residual Fuel, Electric Utility Sector** on page 392.)

Jet Fuel

Jet fuel prices are estimated for all years for the transportation sector and for 1972 through 1982 for the electric utility sector. After 1982, electric utility use of jet fuel is reported as light oil. (See **Light Oil, Electric Utilities** on page 372.)

Transportation Sector

Consumption estimates from CSEDS are developed for two types of jet fuel: kerosene-type (used primarily by commercial aircraft and accounting for 99 percent of all jet fuel in 1995) and naphtha-type (used primarily by military aircraft and accounting for the remaining 1 percent in 1995). Prices are developed for kerosene-type jet fuel and are used as the price for both types of jet fuel. Taxes are not included in the prices.

Physical Unit Prices: 1983 Forward

Transportation sector jet fuel prices for 1983 forward are based on data from EIA's *Petroleum Marketing Annual (PMA)*. Annual prices to end users are available for most States. Prices are converted to dollars per gallon. States without prices are assigned adjacent State or PAD subdistrict prices, as shown in Table A20.

Physical Unit Prices: 1976 Through 1982

State-level jet fuel prices for 1976 through 1982 are calculated from the *Producer Prices and Price Indexes (PPI)* monthly indices for Census divisions and the jet fuel base prices by State for July 1975. The monthly price for each Census division is equal to the *PPI* monthly index times the jet fuel base price for July 1975 for that Census division. Census division monthly prices are assigned to each State within the Census division, and annual jet fuel prices are computed as simple averages of the monthly State prices.

Table A20. Jet Fuel Transportation Sector Price Assignments, 1983 Forward

State	Years	PAD District or State Prices Assigned
DC	1983–1988, 1990, 1993, 1995	MD
DE	1987	PAD Subdistrict IB
ME	1985, 1990, 1991, 1993–1995	PAD Subdistrict IA
NH	1987, 1995	PAD Subdistrict IA
RI	1983–-1988	PAD Subdistrict IA
VT	1984–1988, 1991, 1992	PAD Subdistrict IA
WV	1993–1995	PAD Subdistrict IC

Physical Unit Prices: 1970 Through 1975

Jet fuel physical unit State-level prices for the 1970 through 1975 period are based on U.S. annual wholesale prices from the *PPI* and the relationship of these prices to wholesale kerosene prices reported in *Platt's*. The U.S. prices are converted to Census division prices, which are then assigned directly to States.

Preliminary U.S. jet fuel prices from the *PPI* for 1973 through 1980 are calculated by using the annual jet fuel price indices, the jet fuel U.S. base price for July 1975 (0.276 dollars per gallon) and the U.S. index for July 1975 (235.8). The index for 1973 is assumed to be equal to a simple average of the 11 available monthly indices.

The calculated preliminary U.S. jet fuel prices from the *PPI* are used as the dependent variable in a regression equation for 1973 through 1980, where the wholesale kerosene prices from *Platt's* are the independent variable. The regression equation is used to estimate U.S. annual jet fuel prices for 1970 through 1972.

Jet fuel prices for Census divisions are estimated by using the preliminary U.S. prices derived above for 1970 through 1975 (calculated directly from the *PPI* data for 1973 through 1975 and estimated for 1970

through 1972). These prices are used as inputs to a regression equation which establishes a linear relationship between preliminary U.S. prices and Census division prices for the years 1970 through 1975. Census division prices are assigned to each State within the Census division.

Btu Prices: All Years

Btu prices for States are calculated from the physical unit prices and the Btu conversion factor. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from CSEDS.

Data Sources

Prices

1985 forward: Energy Information Administration (EIA), *Petroleum Marketing Annual,* Table 21, column titled "Kerosene-Type Jet Fuel" (1985), Table 33, column titled "Kerosene-Type Jet Fuel, Sales to End Users," (1986–1988), Table 35 (1989–1993), and Table 36 (1994 forward). The data series are also available on the EIA *Energy InfoDisc,* a CD-ROM product.

1983, 1984: EIA, *Petroleum Marketing Annual 1994*, Table A2, column titled "Kerosene-Type Jet Fuel, Sales to End Users."

1973–1982: Bureau of Labor Statistics, U.S. Department of Labor, *Producer Prices and Price Indexes, Supplement*, table titled "Producer price indexes for refined petroleum products by region."

1970–1975: McGraw Hill, Inc., *Platt's Oil Price Handbook and Oilmanac*, 57th Edition, page 480.

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, transportation sector jet fuel consumption.

Conversion Factor: All Years

5.670 million Btu per barrel

Electric Utility Sector

Jet fuel electric utility consumption estimates are taken from CSEDS for 1972 through 1982 only. For 1970 and 1971, no parallel series is available; and for the years after 1982, the series is a part of light oil. All applicable taxes are included in the prices.

Btu Prices: 1975 Through 1982

For the States that consumed kerosene-type jet fuel at electric utilities during these years, the Btu prices are taken directly from EIA's *Cost and Quality of Fuels for Electric Utility Plants (C&Q).*

Btu Prices: 1972 Through 1974

Because *C&Q* prices are not available for 1972 through 1974, prices are estimated from *C&Q* prices for 1975 and 1976 and the U.S. Department of Agriculture's *Agricultural Prices* data for 1972 through 1976.

1. Simple annual averages of *Agricultural Prices* quarterly values are calculated for 1972 through 1976. New England Census Division prices are assigned to CT, MA, ME, NH, RI, and VT.

2. The average annual prices based on *Agricultural Prices* values for 1975 and 1976 are used as the independent variables in a regression where the dependent variables are State-level prices based on *C&Q* prices for 1975 and 1976.

3. State-level price estimates for 1972 through 1974 are derived from the results of the regression analysis and the *Agricultural Prices* values for 1972 through 1974.

U.S. Btu Prices: All Years

U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from CSEDS.

Data Sources

Prices

1975–1982: Energy Information Administration, *Cost and Quality of Fuels for Electric Utility Plants,* Tables 6 and 13 (1975), Table 13 (1976–1979), and Table 47 (1980–1982).

1972–1976: Crop Reporting Board, U.S. Department of Agriculture, *Agriculture Prices*, table titled "Household Supplies: Average Prices Paid by Farmers for Lawn Mowers and Petroleum Products."

Consumption

1972–1982: Energy Information Administration, Combined State Energy Data System, electric utility sector kerosene-type jet fuel consumption.

Conversion Factors: All Years

Because Btu prices are available directly from the data sources, no conversion factors are used.

Kerosene

Kerosene prices are developed for the residential, commercial, and industrial sectors. For 1970 through 1982, prices are developed for the residential and industrial sectors, and the industrial sector prices are assigned to the commercial sector. For 1983 forward, end-user prices used for the residential and commercial sectors and retail prices are used for the industrial sector. Estimates of the amount of kerosene consumed by the residential, commercial, and industrial sectors are taken from the Combined State Energy Data System (CSEDS).

Residential Sector

Residential sector kerosene prices are estimated by using several data sources and estimation methodologies, depending on the year. For 1983 forward, prices of kerosene sales to end-users (excluding taxes) are taken from the Energy Information Administration's *Petroleum Marketing Annual (PMA).* State general sales taxes from the Bureau of the Census and successor sources are added. For 1970 through 1982, residential kerosene prices are developed from the U.S. Bureau of Labor Statistics *Producer Prices and Price Indexes* data series and the U.S. Department of Agriculture *Agricultural Prices* for kerosene. For both time periods, physical unit prices are calculated from the data sources, and Btu prices are computed by using the physical unit prices and the conversion factor.

Physical Unit Prices: 1983 Forward

Prices of kerosene sold to end users, published in the EIA, *Petroleum Marketing Annual (PMA)* are used as residential sector prices. The prices, in cents per gallon (excluding taxes) are available for as few as 15 or as many as 30 States, depending on the year. States with residential kerosene consumption, but no *PMA* published price are assigned their Petroleum Administration for Defense District (PADD) price as shown in Table A21. State general sales taxes are then added.

Physical Unit Prices: 1977 Through 1982

Monthly Census division prices and price indices from the Bureau of Labor Statistics *Producer Prices and Price Indexes (PPI)* are used as the basis for the residential kerosene series from 1977 through 1982. To maintain consistency in the agricultural price series used for 1970 through 1976, the *PPI* prices are multiplied by an adjustment factor that accounts for the relationship between *PPI* and *Agricultural Prices* data for quarters in which the two series overlap. In the description of computational procedures below, the adjustment factor is derived first, the PPI prices for 1977 through 1982 are estimated, and the final kerosene physical unit and Btu prices for States are calculated. The final residential

Table A21. Kerosene Residential and Commercial Sectors PAD District Price Assignments, 1983 Forward

State	Years	PAD Assignments
AK	1983–1997	District V
AL	1986, 1991, 1993, 1996, 1997	District III
AR	1984, 1986–1997	District III
AZ	1983–1997	District V
CA	1983–1997	District V
CO	1985–1997	District IV
CT	1983, 1987–1992, 1994–1997	Subdistrict IA
DC	1983–1997	Subdistrict IB
DE	1991–1997	Subdistrict IB
FL	1985	Subdistrict IC
GA	1993	Subdistrict IC
HI	1983–1997	District V
IA	1983–1997	District II
ID	1983–1997	District IV
IL	1987	District II
IN	1996, 1997	District II
KS	1983–1997	District II
KY	1983	District II
LA	1991–1997	District III
ME	1986–1997	Subdistrict IA
MI	1993	District II
MN	1983, 1985, 1990, 1992–1997	District II
MS	1988, 1989, 1991–1997	District III
MT	1983–1997	District IV
ND	1983–1997	District II
NE	1983–1997	District II
NH	1983, 1984, 1986–1995, 1997	Subdistrict IA
NJ	1983, 1984, 1987, 1989, 1994, 1996, 1997	Subdistrict IB
NM	1983, 1985, 1987–1997	District III
NV	1983–1997	District V
OK	1983, 1987–1997	District II
OR	1983–1997	District V
RI	1983, 1988–1992, 1994–1997	Subdistrict IA
SC	1993	Subdistrict IC
SD	1983–1997	District II
TX	1993–1996	District III
UT	1983–1997	District IV
VT	1984, 1985, 1989–1997	Subdistrict IA
WA	1983–1997	District V
WI	1983–1997	District II
WY	1983–1997	District IV

sector kerosene prices approximate the average prices paid by farmers. Taxes are included in the source data from *Agricultural Prices* and are, therefore, reflected in the final price estimates.

The first step is to compute the adjustment factor relating *PPI* and *Agricultural Prices* data.

1. Monthly *PPI* prices for the 18 months covered from July 1975 through December 1976 are calculated from the July 1975 base prices and monthly indices for Census divisions.

2. The calculated Census division monthly prices are assigned to each State within the respective Census division.

3. Volume-weighted quarterly *PPI*-based prices for States are calculated by using the monthly volume weights developed from *Retail Sales and Inventories* sales data for "other distillate fuel oil."

4. The adjustment factor relating *PPI* and *Agricultural Prices* data is calculated as the simple average of the ratios of the quarterly kerosene price by State from *Agricultural Prices* to the calculated quarterly *PPI*-based kerosene prices by State.

The next step is the calculation of monthly State-level prices from *PPI* kerosene Census division data for 1977 through 1982.

1. Monthly Census division *PPI* prices are calculated by using the July 1975 base prices and the monthly price indices for 1977 through 1982. The missing monthly indices for February, June, July, and October 1980 for the East South Central Division are assumed to be equal to the index for the preceding month.

2. Each State is assigned its respective Census division monthly prices.

The next step is the calculation of annual physical unit State prices.

1. Annual *PPI*-based physical unit prices for States are computed from the monthly *PPI* prices and the monthly consumption weights.

2. Final residential kerosene prices for States are estimated as the product of the annual *PPI*-based State price and the adjustment factor calculated above.

Physical Unit Prices: 1970 Through 1976

Physical unit prices for States are calculated from quarterly price data from the U.S. Department of Agriculture's *Agricultural Prices* and consumption weights derived from EIA's *Retail Sales and Inventories of Fuel Oil*. Taxes are included in the source data.

The quarterly physical unit price data from *Agricultural Prices* for 1970 through 1976 are published in several different forms. The first step in the calculation of prices for these years is to organize the published *Agricultural Prices* data into a consistent form.

1. For 1971 through 1973, no quarterly prices are available for CT, MA, ME, NH, RI, and VT. Each of these States is assigned the quarterly prices reported for the New England Census Division.

2. For 1973, combined MD/DE quarterly prices are reported instead of separate State prices. For this year, the combined prices are assigned to both States.

3. No prices are reported for AK and DC for 1970 through 1976. Quarterly weighted Census division prices are assigned to AK, and MD prices are assigned to DC for all 7 years.

In order to weight the quarterly prices from *Agricultural Prices* into annual State prices, monthly quantity weights are calculated from *Retail Sales and Inventories of Fuel Oil*. This assumes that the "other distillate oil" consumption data by PAD districts is kerosene.

1. Monthly weights are computed by using simple averaging of all available "other distillate oil" sales data for each month for each PAD district. Since data are available from November 1978 to March 1981, some months have averages based on three data points, while others are based on one or two data points. For example, the average weight for March is the simple average of the 1979, 1980, and 1981 March volumes published in *Retail Sales and Inventories of Fuel Oil*.

2. Each month's share of average annual sales is calculated by PAD district from the average monthly sales figures. These shares, which become the monthly weights, are then assigned to each State within its respective district.

Final State annual kerosene physical unit prices are calculated as the weighted average of the *Agricultural Prices* quarterly prices. The monthly weights (shares) are converted to quarterly weights by summing the shares for months within a particular quarter. These same weights are used with the State-level price data for each year from 1970 to 1976.

Alaska Btu Prices: 1970 Through 1979

Kerosene residential prices for AK are estimated on the basis of the assumption that the ratio of AK-to-U.S. kerosene residential prices is the same as the ratio of AK-to-U.S. distillate fuel residential prices.

Btu Prices: All Years

Btu prices for States are computed by converting the physical unit prices in dollars per gallon to dollars per barrel (42 gallons per barrel) and then to dollars per million Btu (5.670 million Btu per barrel). U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from CSEDS.

Data Sources

Prices

1983 forward: EIA *Petroleum Marketing Annual*,Table 21 (1985–1987) and Table 36 (1986 forward), column titled "Kerosene, Sales to End Users." The data series are also available on the EIA *Energy InfoDisc,* a CD-ROM product.

1975–1982: Bureau of Labor Statistics, U.S. Department of Labor, *Producer Prices and Price Indexes, Supplement*, table titled "Producer price indexes for refined petroleum products by region."

1978–1981: Energy Information Administration, *Retail Sales and Inventories of Fuel Oil*, Table 2.

1970–1976: Crop Reporting Board, U.S. Department of Agriculture, *Agricultural Prices*, table titled "Household Supplies: Average Price Paid by Farmers for Lawn Mowers and Petroleum Products."

Taxes

For 1992 forward, an annual average general sales tax is calculated for each State as a simple average of the 12 monthly values. This method takes into account tax changes during the year. Prior to 1992, the State general sales tax as of September 1 of each year is used.

1996 and 1997: Federation of Tax Administrators, http://www.taxadmin.org/fta/rate/sales.html.

1995: The Council of State Governments, *The Book of the States, Table 6.21.*

1994: U.S. Advisory Committee on Intergovernmental Relations, *Significant Features of Fiscal Federalism,* Tables 14 and 26.

1993: Bureau of the Census, U.S. Department of Commerce, *State Tax Review*, Volume 54, No. 31, map titled "State Gasoline, Sales and Cigarette Tax Rates as of July 1, 1993."

1983–1992: Bureau of the Census, U.S. Department of Commerce, *State Government Tax Collections*, table titled "State Government Excises on General Sales, Motor Fuel, and Cigarettes, Beginning and End of Fiscal Year," column "Percentage rate, Sept. 1."

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, residential sector kerosene consumption.

Conversion Factor: All Years

5.670 million Btu per barrel.

Commercial Sector

Commercial sector kerosene prices are estimated by using different data sources and estimation methodologies, depending on the year. For 1983 forward, prices of kerosene sales to end-users (excluding taxes) are taken from the Energy Information Administration's *Petroleum Marketing Annual (PMA).* State general sales taxes from the Bureau of the Census and successor sources are added. For 1970 through 1982, prices for the industrial sector are assigned to the commercial sector.

Physical Unit Prices: 1983 Forward

Prices of kerosene sold to end users, published in the EIA, *Petroleum Marketing Annual (PMA)* are used as commercial sector prices. The prices, in cents per gallon (excluding taxes) are available for as few as 15 or as many as 30 States, depending on the year. States with commercial kerosene consumption, but no *PMA* published price are assigned their Petroleum Administration for Defense District (PADD) price as shown in Table A21. State general sales taxes are then added.

Physical Unit Prices: 1970 Through 1982

For 1970 through 1982, State prices for kerosene sold to the industrial sector are assigned to the commercial sector.

Btu Prices: All Years

Btu prices for States are computed by converting the physical unit prices in dollars per gallon to dollars per barrel (42 gallons per barrel) and then to dollars per million Btu (5.670 million Btu per barrel). U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from CSEDS.

Data Sources

Prices

1983 forward: EIA *Petroleum Marketing Annual*,Table 21 (1985–1987) and Table 36 (1986 forward), column titled "Kerosene, Sales to End

Users." The data series are also available on the EIA *Energy InfoDisc,* a CD-ROM product.

1970–1982: Industrial sector kerosene prices from CSEDS.

Taxes

For 1992 forward, an annual average general sales tax is calculated for each State as a simple average of the 12 monthly values. This method takes into account tax changes during the year. Prior to 1992, the State general sales tax as of September 1 of each year is used.

1996 and 1997: Federation of Tax Administrators, http://www.taxadmin.org/fta/rate/sales.html.

1995: The Council of State Governments, *The Book of the States, Table 6.21.*

1994: U.S. Advisory Committee on Intergovernmental Relations, *Significant Features of Fiscal Federalism,* Tables 14 and 26.

1993: Bureau of the Census, U.S. Department of Commerce, *State Tax Review*, Volume 54, No. 31, map titled "State Gasoline, Sales and Cigarette Tax Rates as of July 1, 1993."

1983–1992: Bureau of the Census, U.S. Department of Commerce, *State Government Tax Collections*, table titled "State Government Excises on General Sales, Motor Fuel, and Cigarettes, Beginning and End of Fiscal Year," column "Percentage rate, Sept. 1."

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, commercial sector kerosene consumption.

Conversion Factor: All Years

5.670 million Btu per barrel.

Industrial Sector

Commercial sector kerosene prices are estimated by using different data sources and estimation methodologies, depending on the year. For 1983 forward, prices of kerosene sales for resale (excluding taxes) are taken from the Energy Information Administration's *Petroleum Marketing Annual (PMA).* State general sales taxes from the Bureau of the Census and successor sources are added.

For 1970 through 1982, the industrial sector kerosene prices are based on wholesale price and price index data and on the industrial sector distillate prices. The procedures vary slightly for 1970 through 1974 and 1975 through 1982. In 1970 through 1982, physical unit prices are calculated first; then Btu prices are computed by using the physical unit prices and the conversion factor. Prices approximate an average kerosene price for the manufacturing sector. Taxes are included in the distillate fuel oil prices and are, therefore, reflected in the kerosene price estimates.

Physical Unit Prices: 1985 Forward

Prices of kerosene sold for resale, published in the EIA, *Petroleum Marketing Annual (PMA)* are used as industrial sector kerosene prices. The prices, in cents per gallon (excluding taxes) are available for 34 or more States depending on the year. States with industrial kerosene consumption, but no *PMA* published price are assigned their Petroleum Administration for Defense District (PADD) price as shown in Table A22. State general sales taxes are then added.

Physical Unit Prices: 1975 Through 1982

Physical unit industrial kerosene prices for 1975 through 1982 are estimated from the Bureau of Labor Statistics *Producer Prices and Price Indexes (PPI)* base prices and indices for kerosene and No. 2 distillate oil and from the industrial sector distillate prices in physical units. The ratio of *PPI* kerosene prices to *PPI* distillate prices is used as an adjustment factor to estimate kerosene prices.

Annual wholesale prices are calculated from *PPI* annual indices for kerosene and No. 2 distillate fuel oil and their respective July 1975 base

Table A22. Kerosene Industrial Sector PAD District Price Assignments, 1983 Forward

State	Years	PAD Assignments
AK	1983–1997	District V
AR	1997	District III
AZ	1983–1997	District V
CA	1992, 1993	District V
CO	1985–1997	District IV
CT	1995	Subdistrict IA
DC	1983, 1986–1997	Subdistrict IB
DE	1995–1997	Subdistrict IB
HI	1983–1997	District V
ID	1983–1997	District IV
ME	1989	Subdistrict IA
MS	1987–1994, 1997	District III
MT	1983–1993	District IV
ND	1983–1993, 1997	District II
NE	1988, 1991	District II
NH	1983, 1990, 1992, 1993, 1995–1997	Subdistrict IA
NM	1994, 1995, 1997	District III
NV	1983–1997	District V
OR	1983–1993	District V
RI	1990–1992, 1995	Subdistrict IA
SD	1983–1993	District II
UT	1983–1997	District IV
VT	1992, 1993, 1995	Subdistrict IA
WA	1983–1991, 1993	District V
WY	1983–1997	District IV

prices for Census divisions. Annual average distillate price indices for 1976 are estimated as the simple average of monthly indices. Census division prices for both kerosene and fuel oil No. 2 are assigned to each State within the respective Census divisions. The industrial sector physical unit kerosene prices for States are computed by using the distillate industrial physical unit prices and the ratio of *PPI* kerosene prices to *PPI* fuel oil No. 2 prices.

Physical Unit Prices: 1970 Through 1974

Physical unit State-level prices for 1970 through 1974 are estimated from the distillate industrial prices and the average ratio of kerosene to distillate prices from *PPI* for 1975 through 1978. The average annual wholesale price ratio between kerosene and fuel oil No. 2 (distillate) is calculated from *PPI*-based data for the years 1975 through 1978. State-level kerosene industrial physical unit prices are calculated as the product of the ratios and the industrial sector distillate prices for 1970 through 1974.

Btu Prices: All Years

Btu prices for States are computed by converting the physical unit prices in dollars per gallon to dollars per barrel (42 gallons per barrel) and then to dollars per million Btu (5.670 million Btu per barrel). U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from CSEDS.

Data Sources

Prices

1983 forward: EIA *Petroleum Marketing Annual*,Table 22 (1985–1987) and Table 36 (1986 forward), column titled "Kerosene, Sales for Resale." The data series are also available on the EIA *Energy InfoDisc,* a CD-ROM product.

1970–1982: Industrial sector distillate fuel price estimates for the current and previous year and the industrial sector kerosene price estimates for the previous year are from the State Energy Price and Expenditure Data System.

1975–1982: Bureau of Labor Statistics, U.S. Department of Labor, *Producer Prices and Price Indexes, Supplement*, table titled "Producer price indexes for refined petroleum products by region."

Taxes

For 1992 forward, an annual average general sales tax is calculated for each State as a simple average of the 12 monthly values. This method takes into account tax changes during the year. Prior to 1992, the State general sales tax as of September 1 of each year is used.

1996 and 1997: Federation of Tax Administrators, http://www.taxadmin.org/fta/rate/sales.html.

1995: The Council of State Governments, *The Book of the States, Table 6.21.*

1994: U.S. Advisory Committee on Intergovernmental Relations, *Significant Features of Fiscal Federalism,* Tables 14 and 26.

1993: Bureau of the Census, U.S. Department of Commerce, *State Tax Review*, Volume 54, No. 31, map titled "State Gasoline, Sales and Cigarette Tax Rates as of July 1, 1993."

1983–1992: Bureau of the Census, U.S. Department of Commerce, *State Government Tax Collections*, table titled "State Government Excises on General Sales, Motor Fuel, and Cigarettes, Beginning and End of Fiscal Year," column "Percentage rate, Sept. 1."

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, industrial sector kerosene consumption.

Conversion Factor: All Years

5.670 million Btu per barrel.

Light Oil (Electric Utilities)

Beginning with 1980, the price of light oil consumed at electric utilities is the average delivered cost of No. 2 fuel oil as reported in *Cost and Quality of Fuels for Electric Utility Plants*. For earlier years, the price is the consumption-weighted average of the kerosene-type jet fuel price and No. 2 fuel oil. (See also **Distillate Fuel, Electric Utility Sector** on page 357 and **Jet Fuel, Electric Utility Sector** on page 365.)

Liquefied Petroleum Gases

Liquefied petroleum gases (LPG) prices are developed for the residential, commercial, industrial, and transportation sectors. Estimates of the amount of LPG consumed by sector are taken from the Combined State Energy Data System (CSEDS) and are adjusted for process fuel and intermediate product consumption in the industrial sector. (See the discussion under "Consumption Adjustments for Calculating Expenditures" on page 417.)

Residential Sector

For 1994 forward, residential sector LPG prices are derived by EIA from unpublished data collected on Forms EIA-782A and EIA-782B. Physical unit prices are in cents per gallon and taxes are added. Btu prices are then calculated using the physical unit prices and Btu conversion factors. For 1973 through 1993, residential sector LPG prices in dollars per million Btu are the average reported prices of propane delivered to residential consumers in areas where natural gas is available as a competing fuel as reported by natural gas suppliers to the American Gas Association. For 1970 through 1972, physical unit prices from the U.S. Deparment of Agriculture are calculated first and Btu prices are calculated by using the physical unit prices and Btu conversion factors. Taxes are included in the prices for 1970 through 1993. Prices for AK and HI in 1970 through 1993 are estimated by a different methodology described in a separate section on page 374.

Prices: 1994 Forward

Residential LPG prices are estimated in cents per gallon by using data collected on Forms EIA-782A and EIA-782B. No price is reported for DC and it is assigned the average price of MD and VA. State general

sales taxes are added and the prices are converted to dollars per barrel (42 gallons per barrel). The prices are converted to dollars per million Btu by using the factors shown in Table A25 on page 375.

Btu Prices: 1973 Through 1990, 1992, and 1993

Propane prices by company are reported by the American Gas Association (AGA) directly in dollars per million Btu, including taxes. The simple average of available company prices is used as the State annual average. Prices that fall outside a reasonable range are omitted from consideration for Central Hudson Gas and Electric for NY in 1979 through 1981; Arkansas Louisiana Gas for AR in 1989; Public Service Electric & Gas for NJ in 1989; Northwestern Public Service for SD in 1989; City of Long Beach for CA in 1989 and 1990; Orange & Rockland Utilities for NY in 1989 and 1990; Pike County Light & Power for PA in 1989 and 1990; Fitchburg Gas & Electric and Commonwealth Gas Co for MA in 1993; and Providence Gas Co. for RI in 1993.

To estimate missing prices (other than AK and HI, which are described in a separate section that follows), simple averages of adjacent States' prices are used, as shown in Table A23. Estimated data for one State are not used to estimate prices for another State.

Btu Prices: 1991

Propane prices from the American Gas Association (AGA) are not available for 1991. Propane prices from the EIA *Petroleum Marketing Annual (PMA)* are used to calculate the percentage change in propane prices between 1990 and 1991 for each PAD district or subdistrict. These percentages are applied to the 1990 State residential LPG prices from the Combined State Energy Data System (CSEDS) to estimate 1991 prices for the contiguous 48 States and the District of Columbia. Prices for LPG in AK and HI are developed by using the methodology described on page 374.

Prices for PAD Subdistricts IA and IB and PAD District V are not available for 1990 in the *PMA*, and prices for PAD Subdistrict IA and PAD District V for 1991 are not available. To estimate the missing PAD district prices, a ratio of the end-user price to the resale price for propane published for an adjacent district is calculated and applied to the known resale price for the PAD districts and subdistricts without an end-user price. For 1990, the PAD District I end-user-to-resale ratio is multiplied by the PAD Subdistricts IA and IB resale prices to estimate an end-user price for those Subdistricts. For 1991, the PAD Subdistrict IB end-user-to-resale ratio is multiplied by the PAD Subdistrict IA resale prices to estimate an end-user price. For both years, the U.S. end-user-to-resale price ratio is applied to the PAD District V resale price to estimate a PAD District V end-user price.

Physical Unit Prices: 1971, 1972

Physical unit residential LPG prices are based on the city-level propane prices reported by AGA in cents per gallon. Prices for missing States are estimated. The AGA prices are the average delivered prices for propane purchased by residential consumers as of December 31.

1. City-level propane prices from AGA are assigned to their respective States. The AL 1971 price for the Phoenix City Utilities System is omitted because it falls outside a reasonable range.

Table A23. LPG Residential Sector Price Assignments, 1973 Through 1993

State	Years	State Prices Used in the Estimation
AR	1977	MO, MS, OK, TN, TX
CT	1990	MA, NY, RI
DC	1973–1983, 1990	MD
DE	1976, 1984	MD, NJ, PA
ID	1977	MT, NV, OR, UT, WA, WY
LA	1977	MS, TX
ME	1973–1977, 1985, 1986, 1992	MA, NH, VT
MO	1986	IA, IL, KS
ND	1973	MN, MT, SD
NM	1987, 1988	AZ, CO, UT
NV	1973, 1975	AZ, CA, ID, OR, UT, WY
OR	1976	CA, ID, NV, WA
SD	1986	MN, MT, ND
UT	1974, 1978, 1985, 1993	AZ, CO, ID, NV, WY
VT	1979	MA, NH, NY
WV	1992	KY, MD, OH, PA, VA

2. Physical unit prices for a State are calculated directly from the available city/utility price observations reported by AGA. Final physical unit prices are equal to the simple average of the price observations for each State.

3. MD prices are assigned for missing DC prices. AK and HI prices are discussed in a separate section that follows.

Physical Unit Prices: 1970

Since AGA did not publish LPG prices prior to 1971, the residential sector LPG prices for 1970 are estimated. To maintain continuity with the AGA prices for 1971 forward, prices for 1970 are estimated by using simple regression analysis. The relationship between AGA data for 1971 and 1972 and corresponding U.S. Department of Agriculture's *Agricultural Prices* data is the basis for the estimation.

1. Before regression analysis can be applied, *Agricultural Prices* data for 1970 through 1972 are prepared for 49 States (no AK or HI prices are available). These prices include taxes. Development of AK and HI prices are described in a separate section on this page.

   a. State-level prices for small purchases, representing residential end users, for 1970 through 1972 are published by *Agricultural Prices* in cents per pound. When price per pound data are not available, price per gallon data, representing larger volume purchases, are used. These prices per gallon are multiplied by 0.543, the average ratio of price per pound to price per gallon for the United States for 1970 through 1972, to create uniform input data in price per pound.

   b. For 1971 and 1972, the price reported for the New England Region is assigned to CT, MA, ME, NH, RI, and VT.

   c. Data in cents per pound are converted to dollars per gallon by multiplying by the propane conversion factor of 4.2 pounds per gallon (taken from the *Petroleum Products Handbook*) and dividing by 100.

   d. Missing prices use adjacent States' average prices as shown in Table A24.

2. The physical unit AGA prices and *Agricultural Prices* data for 1971 through 1972 (excluding AK and HI) are used with simple regression analysis to estimate final physical unit LPG residential prices.

Btu Prices: 1970 Through 1972

For 1970 through 1972, Btu prices for States are calculated by converting the physical unit prices by using the factors cited in Table A25 on page 375. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from CSEDS.

Alaska and Hawaii Prices: 1970 Through 1993

Prices cannot be estimated for AK and HI by using adjacent State price assignments. Missing prices for these two States are estimated by computing ratios of the AK or HI prices to the simple average U.S. prices calculated from the AGA data for years when AK or HI prices are available and applying these ratios to the U.S. simple average prices in years when prices need to be estimated.

1. AGA prices for AK are available in 1972 and 1980. The 1972 AK-to-US ratio is used to estimate prices for 1970, 1971, and 1973 through 1979. The 1980 AK-to-US price ratio is used to estimate prices for 1981 through 1993.

2. AGA prices for HI are available in 1971, 1977 through 1979, and 1989. The 1971 HI-to-US AGA is used to estimate prices for 1970 and 1972 through 1974. The average ratio of the HI-to-US prices for 1977 through 1979 is used to estimate prices for 1975, 1976, and

Table A24. LPG Residential *Agricultural Prices* Assigned to Estimate 1970 Prices

State	Years	State Prices Used
DC	1970–1972	MD
NV	1970, 1971	AZ, CA, ID, UT
OR	1971–1972	CA, ID
UT	1972	AZ, CO, ID, NV, WY
WA	1970–1972	CA, ID

1980 through 1984. The 1989 HI-to-US ratio is used to estimate prices for 1985 through 1988 and 1990 through 1993.

Data Sources

Prices

1994 forward: Energy Information Administration, Forms EIA-782A "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report," and EIA-782B "Resellers'/Retailers' Monthly Petroleum Product Sales Report."

1971–1990, 1992, 1993: American Gas Association (AGA), *Gas House-heating Survey* (1971-1988), *Residential Gas Market Survey* (1989 and 1990), and *Residential Natural Gas Market Survey* (1992, 1993), Appendix 2, "Competitive Fuel Prices."

1991: Energy Information Administration, Combined State Energy Data System, 1990 residential sector LPG prices.

1991: Energy Information Administration, *Petroleum Marketing Annual,* Table 35 (1990 and 1991), columns titled "Propane (Consumer Grade)."

1970–1972: Crop Reporting Board, U.S. Department of Agriculture, *Agricultural Prices*, table titled "Average Price Paid by Farmers for Lawn Mowers and Petroleum Products, Specified Dates, by State," column titled "L.P. Gas."

Taxes

An annual average general sales tax is calculated for each State as a simple average of the 12 monthly values. This method takes into account tax changes during the year.

1996 and 1997: Federation of Tax Administrators, http://www.taxadmin.org/fta/rate/sales.html.

1995: The Council of State Governments, *The Book of the States, Table 6.21.*

1994: U.S. Advisory Committee on Intergovernmental Relations, *Significant Features of Fiscal Federalism,* Tables 14 and 26.

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, residential sector LPG consumption.

Conversion Factors

1970–1972, 1994 forward: Energy Information Administration, *State Energy Data Report 1995, Consumption Estimates,* Table C1, as shown in Table A25.

1970–1972: 4.2 pounds per gallon from Guthrie, Virgil, ed., 1960. *Petroleum Products Handbook*. John Wiley and Sons, Inc., New York, New York, pages 3-5.

Conversion factors are not necessary for other years because Btu prices are available directly from the data sources.

Table A25. LPG Btu Conversion Factors, 1970 Forward
(Million Btu per Barrel)

Year	Conversion Factor	Year	Conversion Factor	Year	Conversion Factor
1970	3.779	1980	3.674	1990	3.625
1971	3.772	1981	3.643	1991	3.614
1972	3.760	1982	3.615	1992	3.624
1973	3.746	1983	3.614	1993	3.606
1974	3.730	1984	3.599	1994	3.635
1975	3.715	1985	3.603	1995	3.623
1976	3.711	1986	3.640	1996	3.613
1977	3.677	1987	3.659	1997	3.616
1978	3.669	1988	3.652		
1979	3.680	1989	3.683		

Commercial Sector

Starting in 1994, commercial sector prices for LPG are estimated from PADD prices for consumer grade propane sold to commercial and institutional consumers published in cents per gallon in the EIA's, *Petroleum Marketing Annual*. PADD prices are assigned to all States within each PADD and general State sales taxes are added. The prices are converted to dollars per million Btu using 42 gallons per barrel and the Btu conversion factors shown in Table A25.

For 1970 through 1993, State LPG prices from the industrial sector are assigned to the commercial sector.

Data Sources

Prices

1994 forward: Energy Information Administration, *Petroleum Marketing Annual,* Table 38, column titled, "Commercial/Institutional Consumers."

1970–1993: EIA, industrial sector LPG prices from the State Energy Price and Expenditure Data System.

Taxes

An annual average general sales tax is calculated for each State as a simple average of the 12 monthly values. This method takes into account tax changes during the year.

1996 and 1997: Federation of Tax Administrators, http://www.taxadmin.org/fta/rate/sales.html.

1995: The Council of State Governments, *The Book of the States, Table 6.21.*

1994: U.S. Advisory Committee on Intergovernmental Relations, *Significant Features of Fiscal Federalism,* Tables 14 and 26.

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, commercial sector LPG consumption.

Conversion Factors

1994 forward: Energy Information Administration, *State Energy Data Report 1994, Consumption Estimates,* Table C1, as shown in Table A25.

Industrial Sector

The industrial sector LPG prices are estimated as the average of LPG prices to industrial customers, petrochemicals, and other end users; to manufacturing firms; to farmers; or refiner and gas plant operator sales to end users, depending on the data sources for the different years. Prices for 1985 forward are taken from the *Petroleum Marketing Annual (PMA)*. Prices for 1978 through 1981 are taken from the *Annual Survey of Manufactures (ASM*) or the *Census of Manufactures (CM)* and prices for 1970 through 1977 and 1982 through 1984 are derived from *Agricultural Prices* and scaled to the *ASM/CM* prices by using the ratio of *ASM/CM* to *Agricultural Prices* LPG prices for the years 1978 through 1981, when both price series were available. Taxes are included in the industrial sector prices for all years.

Physical Unit Prices: 1994 Forward

Starting in 1994, industrial sector physical unit prices are reported by PAD District, but not by State, in the EIA *Petroleum Marketing Annual*. Consumer grade propane prices are reported for three industrial sector categories—petrochemical plants, other end users (agricultural consumers), and industrial consumers. The prices for these three categories are consumption-weighted to develop PADD-level industrial sector price estimates that are assigned to the States in each PADD and State general sales taxes are added. In 1994, withheld prices for petrochemicals in PAD subdistrict IB and IC are replaced with the U.S. average price, and the withheld industrial price for PAD subdistrict IA is replaced by the PAD district I price. In 1995, withheld prices for petrochemicals in PAD subdistrict IC and PAD II are replaced with the U.S. average price.

In 1996, withheld prices for petrochemicals in PAD subdistrict IC, as well as districts IV and V are replaced with the U.S. average price. In 1997, withheld prices for petrochemicals in PAD subdistricts IB and IC as well as districts IV and V are replaced with the U.S. average price.

Physical Unit Prices: 1985 Through 1993

Industrial sector LPG physical unit State prices for 1985 forward are estimated by using physical unit annual prices in the *Petroleum Marketing Annual (PMA)* for consumer grade propane sales to end-users and State general sales taxes are added. Where prices are not available, the PAD district price is assigned to the State, as shown in Table A26. One exception is Arkansas for 1992 and 1993. Because the neighboring States in PADD III are LPG producers, the PADD III price is uncharacteristically lower than previously reported prices for Arkansas. Therefore, the 3 monthly prices available for Arkansas in 1992 are averaged to derive an annual price. In 1993, the Missouri price is assigned to Arkansas.

When a PAD district price is not available, a consumption-weighted average price is calculated by using available prices for States within the district and the CSEDS industrial sector LPG consumption for those States. A PAD District V price for 1985 is calculated as a consumption-weighted average of AK, CA, OR, and WA prices; a 1986 PAD Subdistrict IA price uses the average of CT and NH prices; and PAD Subdistrict IA prices for 1987 through 1988 use the average of CT and MA prices.

When a PAD district price is not available and there are no State data within the PAD district to develop a consumption-weighted average, a different methodology is used. The source table also contains resale prices. To estimate the missing sales to end-users PAD district price, a ratio of the end-users price to the resale price for an adjacent PAD district or subdistrict is calculated and applied to the known resale price for the PAD district or subdistrict that does not have an end-users price. PAD district prices used in the estimations are shown in Table A27.

Physical Unit Prices: 1982 Through 1984, 1970 Through 1977

Industrial sector LPG physical unit prices for 1982 through 1984 and 1970 through 1977 are estimated on the basis of the relationship

Table A26. LPG Industrial Sector PAD District Price Assignments, 1985–1993

State	Years	PAD Assignments
AK	1986–1988, 1990–1993	District V
AL	1985–1988	District III
AZ	1985–1993	District V
CA	1990–1993	District V
CO	1991	District IV
CT	1990–1993	Subdistrict IA
DC	1985–1993	Subdistrict IB
DE	1986–1993	Subdistrict IB
FL	1990–1993	Subdistrict IC
GA	1985, 1990–1993	Subdistrict IC
HI	1985–1993	District V
IA	1986, 1991–1993	District II
ID	1986, 1990–1993	District IV
IN	1990	District II
KS	1986–1989, 1992	District II
MA	1986, 1990–1993	Subdistrict IA
MD	1988, 1990–1993	Subdistrict IB
ME	1986–1993	Subdistrict IA
MI	1985–1988, 1990	District II
MN	1985, 1986, 1988–1991, 1993	District II
MS	1990–1993	District III
MT	1990–1993	District IV
NC	1991, 1992	Subdistrict IC
ND	1985, 1986, 1991–1993	District II
NE	1986–1992	District II
NH	1987–1993	Subdistrict IA
NM	1993	District III
NV	1985–1988, 1990–1993	District V
NY	1990–1993	Subdistrict IB
OH	1990	District II
OK	1986, 1987	District II
OR	1986, 1990–1993	District V
PA	1990–1993	Subdistrict IB
RI	1986–1993	Subdistrict IA
SC	1992	Subdistrict IC
SD	1985–1993	District II
TN	1990–1993	District II
UT	1986–1988, 1990–1993	District IV
VT	1986–1993	Subdistrict IA
WA	1986–1993	District V
WI	1985, 1986, 1990	District II
WV	1989–1993	Subdistrict IC
WY	1987, 1988	District IV

Table A27. LPG Industrial Sector, PAD District Price Estimates, 1990–1993

Year	Missing PAD Prices	Prices Used in Estimation
1990	Subdistrict IA	PAD District I
	Subdistrict IB	PAD District I
	District V	U.S.
1991	Subdistrict IA	PAD Subdistrict IB
	District V	U.S.
1992	Subdistrict IA	PAD Subdistrict IC
	Subdistrict IB	PAD Subdistrict IC
1993	Subdistrict IA	PAD Subdistrict IC
	Subdistrict IB	PAD Subdistrict IC

between State-level LPG prices from *Agricultural Prices* and the prices calculated from *Annual Survey of Manufactures (ASM)* or *Census of Manufactures (CM)* for 1978 through 1981.

1. Before the adjustment factor that relates *Agricultural Prices* and *ASM/CM* data is computed, monthly *Agricultural Prices* data are converted into annual prices and missing data are estimated.

   a. Annual LPG prices are calculated as simple averages of the monthly prices from *Agricultural Prices* for the years 1977 through 1984. The only States missing data are WV in 1977 through 1981 and AK, DC, and HI in 1977 through 1984. WV is assigned the simple average of the KY, MD, OH, PA, and VA prices. AK, DC, and HI prices are discussed below.

   b. The average ratio of *ASM/CM*-based final prices for 1978 through 1981 and the 1978 through 1981 *Agricultural Prices* annual prices is calculated for 48 States (excluding AK, DC, and HI) as the simple average of the ratio over the 4 years. This average ratio is used as an adjustment factor.

2. Final industrial sector LPG prices for 1982 through 1984 and 1970 through 1977 are estimated by using the State-level adjustment factors and annual average LPG prices from *Agricultural Prices* for these years.

   a. Annual average LPG prices are calculated for 1982 through 1984 and 1970 through 1977 as the simple average of the monthly prices.

   b. *Agricultural Prices* published annual average prices in dollars per gallon for all States in 1975 and 1976. For DE in 1970 through 1974, MD in 1970 through 1974, VA in 1970 through 1974, and WV in 1970 through 1972, only prices for small volume purchases in cents per pound were published. These are converted to cents per gallon by multiplying by 1.96, the average ratio of cents per gallon to cents per pound for the United States for 1970 through 1974.

   c. For 1970 through 1972, *Agricultural Prices* are converted from cents per gallon to dollars per gallon.

   d. For 1971 through 1973, the New England price per gallon reported by *Agricultural Prices* is assigned to CT, MA, ME, NH, RI, and VT.

   e. MD prices are assigned to DC in 1970 through 1972, 1974 through 1977, and 1982 through 1984. The combined MD/DE price in 1973 is assigned to MD, DE, and DC.

   f. Excluding AK and HI, States missing *Agricultural Prices* LPG prices are assigned the simple average price of adjacent States. The States with missing data and the adjacent State assignments are shown in Table A28.

   g. Industrial sector LPG physical unit prices for 1970 through 1977 and 1982 through 1984 for all States (except AK, DC, and HI) are calculated by using the estimated annual *Agricultural Prices* data for the respective year and the State-level average ratios as adjustment factors.

3. AK prices for 1970 through 1977 and 1982 through 1984 and HI prices for 1970 through 1977 and 1982 through 1984 are estimated by using the relationship between *ASM/CM* based prices for these States and the U.S. price reported by *Agricultural Prices* (1979 through 1981 for AK and 1978 through 1981 for HI). The average

Table A28. LPG Industrial Sector Price Assignments, 1970–1976

State	Years	State Prices Used in the Estimation
CT	1974	NY
MA	1974	NY
ME	1974	NY
NH	1974	NY
NV	1970–1971	AZ, CA, ID, UT
	1973–1974	AZ, CA, ID
OR	1970–1974	CA, ID
RI	1974	NY
	1975–1976	CT, MA, NY
UT	1972	AZ, CO, ID, NV, WY
	1973–1974	AZ, CO, ID, WY
VT	1974	NY
WA	1970–1974	CA, ID

ratio for the available years for the two States is calculated and used with the *Agricultural Prices* U.S. prices for the years to be estimated.

Physical Unit Prices: 1978 Through 1981

For 1978 through 1981, the industrial sector LPG prices are either calculated directly from cost and quantity data from the *ASM* or the *CM* or are estimated by using the relationship of *ASM/CM* data to LPG price data from *Agricultural Prices*.

1. For 1978 through 1981, industrial sector physical unit prices for LPG are calculated as the average cost per unit from cost and quantity data published in *ASM/CM*. Since sales are reported in pounds, the prices are converted to dollars per gallon. The conversion factor of 4.5 pounds per gallon is from *ASM/CM*.

2. The AK price for 1978 is the consumption-weighted average Census division price. In addition, four States have prices estimated as the simple average of the prices of adjacent States, and DC is assigned the MD price, as shown in Table A29.

Table A29. LPG Industrial Sector Price Assignments, 1978–1981

State	Years	State Prices Used
AR	1978	LA, MO, MS, OK, TX
DC	1978–1981	MD
LA	1980	AR, MS, TX
NM	1979–1981	AZ, CO, OK, TX
WY	1978–1981	CO, ID, MT, ND, NE, SD, UT

Btu Prices: All Years

Btu prices for States and the United States are calculated from the physical unit prices and the conversion factors shown in Table A25 on page 375. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from CSEDS, adjusted for process fuel and intermediate product consumption.

Data Sources

Prices

1994 forward: Energy Information Administration, *Petroleum Marketing Annual,* Table 38, columns titled "Industrial Consumers," "Petrochemical," and "Other End Users."

1985–1993: Energy Information Administration, *Petroleum Marketing Annual,* Table 21 (1985), Table 33 (1986-1988), and Table 35 (1989-1993), columns titled "Propane (Consumer Grade)," "Sales to End Users," and "Sales for Resale."

1970–1984: Crop Reporting Board, U.S. Department of Agriculture, *Agricultural Prices*, tables titled "Average Price Paid by Farmers for Lawn Mowers and Petroleum Products, Specified Dates, by State," column titled "L.P. Gas," (1970-1976); "Household Supplies: Average Price Paid by Farmers" (1977-1979); "L.P. Gas: Average Price Paid by States" (1980); and "L.P. Gas: Average Price Paid by Months by States" (1981-1984).

1981: Bureau of the Census, U.S. Department of Commerce, *1982 Census of Manufactures, Fuels and Electric Energy Consumed, Part 2, States and*

Standard Metropolitan Statistical Areas by Major Industry Groups, Table 3, State-level quantity and cost of liquefied petroleum gases.

1978–1980: Bureau of the Census, U.S. Department of Commerce, *Annual Survey of Manufactures, Fuels and Electric Energy Consumed, States by Industry Group and Standard Metropolitan Statistical Areas by Major Industry Group*, Table 3, State-level quantity and cost of liquefied petroleum gases.

Taxes

For 1992 forward, an annual average general sales tax is calculated for each State as a simple average of the 12 monthly values. This method takes into account tax changes during the year. Prior to 1992, the State general sales tax as of September 1 of each year is used.

1996 and 1997: Federation of Tax Administrators, http://www.taxadmin.org/fta/rate/sales.html.

1995: The Council of State Governments, *The Book of the States, Table 6.21.*

1994: U.S. Advisory Committee on Intergovernmental Relations, *Significant Features of Fiscal Federalism,* Tables 14 and 26.

1993: Bureau of the Census, U.S. Department of Commerce, *State Tax Review*, Volume 54, No. 31, map titled "State Gasoline, Sales and Cigarette Tax Rates as of July 1, 1993."

1985–1992: Bureau of the Census, U.S. Department of Commerce, *State Government Tax Collections*, table titled "State Government Excises on General Sales, Motor Fuel, and Cigarettes, Beginning and End of Fiscal Year," column "Percentage rate, Sept. 1."

Consumption

1994 forward: Energy Information Administration, unpublished volume data collected on Form EIA-782B for consumption-weighted average price calculations.

1970 forward: Energy Information Administration, Combined State Energy Data System, industrial sector LPG consumption.

Conversion Factors

1970 forward: Energy Information Administration, *State Energy Data Report 1994, Consumption Estimates,* Table C1, as shown in Table A25.

1978–1981: 4.5 pounds per gallon from *Annual Survey of Manufactures,* Appendix C.

Transportation Sector

Starting in 1994, transportation sector prices are estimated from PADD prices for consumer grade propane sold through retail outlets published in the EIA *Petroleum Marketing Annual*. Physical unit PADD prices are assigned to all States within a PADD and State general sales taxes are added. The prices are converted to dollars per million Btu using 42 gallons per barrel and the Btu conversion factors shown in Table A25.

In 1997, the price for PAD subdistrict IC is withheld and this subdistrict is assigned the PAD district I price.

For 1970 through 1993, State prices from the industrial sector are assigned to the transportation sector.

Data Sources

Prices

1994 forward: Energy Information Administration, *Petroleum Marketing Annual,* Table 38, column titled, "Through Retail Outlets."

Taxes

An annual average general sales tax is calculated for each State as a simple average of the 12 monthly values. This method takes into account tax changes during the year.

1996 and 1997: Federation of Tax Administrators, http://www.taxadmin.org/fta/rate/sales.html.

1995: The Council of State Governments, *The Book of the States, Table 6.21.*

1994: U.S. Advisory Committee on Intergovernmental Relations, *Significant Features of Fiscal Federalism,* Tables 14 and 26.

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, transportation sector LPG consumption.

Conversion Factors

1994 forward: Energy Information Administration, *State Energy Data Report 1994, Consumption Estimates,* Table C1, as shown in Table A25 on page 375.

1970–1993: Btu prices are assigned from the industrial sector.

Lubricants

Lubricant prices are developed for the industrial sector and are assigned to the transportation sector. State-level prices are not available for either sector; national-level prices are assigned to all States and do not include end-user taxes paid at the time of sale. Estimates of lubricant consumption by the industrial and transportation sectors are taken from the Combined State Energy Data System (CSEDS).

Physical Unit Prices: 1983 forward

Prices of lubricants are estimated from U.S. Department of Commerce, Bureau of the Census, *Census of Manufactures* for 1987 and 1992, the *Economic Census* for 1997, and the *Annual Survey of Manufactures* for intervening years by using data for two product categories:

1. Lubricating oils and greases, made in a refinery, NAICS 324110G (SIC 29117 for 1983 through 1996) .
2. Lubricating oils and greases, not made in a refinery, NAICS 324191 (SIC 29920 for 1983 through 1996).

The value of the shipments of the two categories are summed. Quantities of these shipments are not published; therefore, lubricants consumption from CSEDS is adjusted to estimate the comparable shipment quantities by using a factor developed from the 1982 Census data as described below. The price derived by dividing the value of shipments by the estimated quantity is assumed to be a wholesale price. An end-user price is derived by applying a trade ratio factor, which is developed from the 1977 Census data as described below, to the wholesale price.

Physical Unit Prices: 1970 through 1982

Prices of lubricants are estimated from U.S. Department of Commerce, Bureau of the Census, data for three product categories:

1. Lubricating oils made in refineries (SIC 29117.21) and not made in refineries (SIC 29920.21).
2. Lubricating greases made in refineries (SIC 29117.31) and not made in refineries (SIC 29920.31).
3. Lubricating oils and greases, not specifically known (n.s.k.), made in refineries (SIC 29117.00) and not made in refineries (SIC 29920.00 for establishments with 10 employees or more and SIC 29920.02 for establishments with fewer than 10 employees).

For the years where *Census of Manufactures (CM)* data are available (1967, 1972, 1977, and 1982), total shipments are calculated by adding the shipments for the three product categories. Shipments for the third product category are withheld and estimated by dividing their value of shipments sum by the weighted average cost of the product categories SIC 29920.21 and 29920.31.

Total shipments in each year for which *CM* data are available is divided by the estimated CSEDS total lubricants consumption (in physical units) for that year to establish a shipments-to-consumption ratio. Ratios for the years not covered by the *CM* (i.e., 1968 through 1971, 1973 through 1976, and 1978 through 1981) are estimated by linear

interpolation. Total shipments for the years not covered by the *CM* are estimated by multiplying CSEDS consumption data by the appropriate shipment-to-consumption ratio.

Estimated shipment prices are calculated by dividing the value of shipments shown in the *CM* (for 1972, 1977, and 1982) or the *Annual Survey of Manufactures* (for all other years) by the estimated shipments for each product category. The shipment prices are assumed to represent wholesale prices.

End-user prices in dollars per barrel are estimated by multiplying the shipment (wholesale) prices by trade ratio factors that represent the wholesale-to-retail markup. The trade ratio factors are developed from Bureau of Economic Analysis (BEA) data for 1972 and 1977. For 1972, the sum of data called "purchasers value" for the three product categories is divided by the sum of the "producers value" for the three categories to derive a trade ratio. A similar calculation is made for 1977, but the terms "purchase value" and "basic value" are used in the source data.

The 1972 ratio is used for 1970 through 1972, and the 1977 ratio is used for 1977 forward. The values for 1973 through 1976 are estimated by linear interpolation by using the 1972 and 1977 values. The trade ratio for 1982 is not used because the range of petroleum products included in the ratio was expanded by BEA and the ratio would no longer represents the specific mark-up for lubricants.

Btu Prices: All Years

Btu prices are obtained by dividing the prices in dollars per barrel by the conversion factor 6.065 million Btu per barrel.

Data Sources

Prices

1997: Bureau of the Census, U.S. Department of Commerce, *1997 Economic Census, Manufacturing Industry Series, Petroleum Lubricating Oil and Grease Manufacturing* (NAICS 324191) and *Petroleum Refineries* (NAICS 324110G).

1970, 1971, 1973 through 1976, 1978 through 1981, and 1983 through 1996: Bureau of the Census, U.S. Department of Commerce, *Annual Survey of Manufactures; Lubricating Oils and Greases* (SIC 29117 and 29920).

1972, 1977, and 1982: Bureau of the Census, U.S. Department of Commerce, *Census of Manufactures, Petroleum Refining; Lubricating Oils and Greases* (SIC 29117 and 29920).

1972 and 1977: Bureau of Economic Analysis, U.S. Department of Commerce, Input-Output Table Work Tapes for SIC Codes 29117 and 29920).

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, lubricants consumption.

Conversion Factor: All Years

6.065 million Btu per barrel

Motor Gasoline

Motor gasoline prices are developed for the transportation sector, and the transportation sector prices are assigned to the commercial and industrial sectors. Motor gasoline consumed in privately-owned vehicles is accounted for in the transportation sector. Estimates of motor gasoline consumed by the transportation, commercial, and industrial sectors used in calculating expenditures are taken from CSEDS. Prices in this series are retail prices (usually service station prices), including taxes.

Physical Unit Prices: 1983 Forward

Motor gasoline physical unit prices for 1983 forward are based on annual State-level prices or are assigned PAD District prices from the *Petroleum Marketing Annual (PMA),* except for prices for certain States and years, as noted in Table A30, that are derived from the Bureau of Labor Statistics' *Consumer Prices: Energy (CPI).*

State and Federal motor gasoline taxes are added to the prices from the *PMA*. Monthly State tax information and annual Federal tax information are taken from the U.S. Department of Transportation's *Highway Statistics*. The monthly State taxes are averaged to create an average annual tax for each State which is combined with the Federal tax to adjust the *PMA* price. Due to the lack of uniformity in application, State and local general sales taxes are not included.

The *PMA* average sales price (excluding taxes) of finished motor gasoline to end users through company outlets is used, under the assumption that this price most closely approximates retail motor gasoline prices. Finished motor gasoline includes leaded and unleaded motor gasoline and gasohol.

In the States and years (shown in Table A30) where prices are derived from the *CPI*, monthly *CPI* city prices are weighted by monthly consumption from *Highway Statistics*. All taxes are included in the *CPI* data.

Motor gasoline prices for HI are not collected or published in the *CPI* after December 1986. The following method is used to derive HI prices for 1987 through 1990, when *PMA* prices for HI became available. The monthly HI *CPI* prices are used to calculate annual averages for 1983 through 1986. The annual averages are divided by the *PMA* PAD District V price (with HI State and Federal taxes added) for each year to develop annual ratios of the two prices. The four ratios for 1983 through 1986 are simple averaged to give one ratio that is multiplied by the *PMA* PAD District V prices for the 1987 through 1990 to estimate HI prices for those years. State and Federal taxes are added to the estimates.

Physical Unit Prices: 1982

Monthly physical unit motor gasoline prices for 1982 are taken from the *Platt's Oil Price Handbook and Oilmanac (Platt's)* table "AAA 'Fuel Gauge' Report," the *CPI*, or both. Table A31 summarizes price data availability by source. The *Platt's* prices are reported for both leaded and unleaded motor gasoline and for both full-service and self-service for all States except AK and HI. All available *Platt's* prices for 1982 are used in the calculation of motor gasoline prices. The continuity of these prices with prices published by *Platt's* in previous years suggests that taxes are included.

Table A30. Motor Gasoline Price Assignments, 1983 Forward

State	Years	Source
AK	1983–1986	*CPI*
CT	1989–1997	*PMA*, PAD Subdistrict IA
DC	1983–1997	*CPI*
DE	1991–1993	*PMA*, PAD Subdistrict IB
HI	1983–1986	*CPI*
	1987–1990	See text
ID	1993, 1994	*PMA*, PAD District IV
MD	1985–1997	*CPI* (Baltimore)
ME	1985–1988, 1990–1997	*PMA*, PAD Subdistrict IA
MT	1991–1997	*PMA*, PAD Subdistrict IV
ND	1996, 1997	*PMA*, PAD District II
NH	1995	*PMA*, PAD Subdistrict IA
SD	1987, 1991, 1992	*PMA*, PAD District II
VT	1989–1997	*PMA*, PAD Subdistrict IA
WY	1985	*PMA*, PAD District IV

The available *CPI* monthly physical unit motor gasoline prices for 1982 are for all types of motor gasoline and cover 25 States, as shown in Table A32. The *CPI* prices are assigned to any State that has a county included in the Standard Metropolitan Statistical Area (SMSA) definitions used by the Bureau of Labor Statistics. These "all types" prices cover leaded regular, unleaded regular, and leaded premium and include taxes. All the available *CPI* prices for 1982 are also used in the calculation of motor gasoline prices. Complete monthly data exist for the 25 States covered by the *CPI*. The *CPI Detailed Report* of April 1986 explicitly states that Federal, State, and local taxes are included.

To combine the product-specific *Platt's* prices with the "all types" prices published in the *CPI*, the *Platt's* prices are weighted into "all types" prices by using annual U.S. data from the *Monthly Energy Review* (*MER*)

Table A31. Summary of Motor Gasoline Price Data by Year, 1970-1982

Years	Source	Grades Covered	Composite Price	Missing States All Sources
1982	*Platt's*	leaded	no	none
		unleaded	no	
	CPI	leaded regular	yes	
		leaded premium	yes	
		unleaded regular	yes	
1979–1981	*Platt's*	leaded regular	no	AR, DE, ME, MS,
		leaded premium	no	MT, ND, NH, OK,
		unleaded regular	no	RI, SC, SD, VT,
		unleaded premium	no	WV, WY
	CPI	leaded regular	yes	
		leaded premium	yes	
		unleaded regular	yes	
1978	*Platt's*	leaded regular	no	none
	CPI	leaded regular	yes	
		leaded premium	yes	
		unleaded regular	yes	
1976, 1977	*Platt's*	leaded regular	no	AK
	CPI	leaded regular	no	
		leaded premium	no	
		unleaded regular	no	
1974, 1975	*Platt's*	leaded regular	no	AK
	CPI	leaded regular	no	
		leaded premium	no	
1970–1973	*Platt's*	leaded regular	no	AK, HI

Table A32. Motor Gasoline Price Assignments from *Consumer Prices: Energy*, 1978-1982

State	City Price Assignments
AK	Anchorage
CA	Los Angeles-Long Beach-Anaheim, San Diego, San Francisco, Oakland
CO	Denver-Boulder
DC	Washington
FL	Miami
GA	Atlanta
HI	Honolulu
IL	Chicago-Northwestern Indiana, St. Louis
IN	Chicago-Northwestern Indiana, Cincinnati
KS	Kansas City
KY	Cincinnati
MA	Boston
MD	Baltimore, Washington
MI	Detroit
MN	Minneapolis-St. Paul
MO	St. Louis, Kansas City
NJ	New York-Northeastern NJ, Philadelphia
NY	New York-Northeastern NJ, Buffalo
OH	Cincinnati, Cleveland
OR	Portland
PA	Philadelphia, Northeastern PA, Pittsburgh
TX	Dallas-Ft. Worth, Houston
VA	Washington
WA	Seattle-Everett, Portland
WI	Milwaukee, Minneapolis-St. Paul

Note: All types of motor gasoline are included.

to calculate shares for leaded and unleaded motor gasoline (no breakdowns for regular and premium are possible because of data limitations).

Motor gasoline price data reported by *Platt's* for 1982 cover the following months: February, April, June, August, November, and December. The missing 6 months are assigned prices as follows: January is assigned the February price, and the other missing months are assigned the average price of the preceding and succeeding months. A missing February price for MO is assumed to be equal to the April price, and a missing price for OR is assumed to be equal to the average of the April and August prices.

For States with data from *Platt's* only, prices by product type (leaded and unleaded) are first calculated as the simple average of full-service and self-service prices for that product for each month and State. The

resulting prices are then weighted into monthly composite prices by using U.S. leaded and unleaded shares of motor gasoline product supplied from the *MER*. The following 26 States have data only from *Platt's*: AL, AR, AZ, CT, DE, IA, ID, LA, ME, MS, MT, NC, ND, NE, NH, NM, NV, OK, RI, SC, SD, TN, UT, VT, WV, and WY.

Platt's reports two prices for each motor gasoline product for each year: one full-service price and one self-service price. These two prices are combined by using a simple average into a single product price for each State for each month.

The unleaded U.S. share of total motor gasoline consumption is reported in the *MER* as 52.1 percent in 1982. Assuming that the remaining motor gasoline consumption is leaded, the leaded portion of total consumption is 47.9 percent. These shares are used for all States and months to calculate the composite prices from the leaded and unleaded prices.

For AK and HI, the only States with data only from the *CPI*, the "all types" monthly prices reported are used directly as monthly composite prices.

For States with price data from both *Platt's* and the *CPI*, the *Platt's* data are first combined into product type prices and weighted with the *MER* shares. The resulting combined prices for all motor gasoline types are averaged together, with the combined *CPI* city prices assigned to the respective month and State. The following 23 States have monthly composite prices computed in this way: CA, CO, DC, FL, GA, IL, IN, KS, KY, MA, MD, MI, MN, MO, NJ, NY, OH, OR, PA, TX, VA, WA, and WI.

1. Leaded and unleaded gasoline prices are calculated as simple averages of full-service and self-service prices from *Platt's* and are then weighted into a composite price by use of *MER* shares of leaded and unleaded motor gasoline consumption.

2. Monthly "all types" motor gasoline prices covering leaded regular, leaded premium, and unleaded regular are taken directly from the *CPI*. If there is more than one *CPI* price observation for a month and State, the *CPI* prices are simple averages.

3. Using a simple average, the composite *Platt's* prices are combined with the "all types" *CPI* prices for each State. The resulting prices are the monthly composite prices for 1982.

Annual physical unit prices for all States are calculated from the monthly motor gasoline prices calculated above and weighted by the monthly motor gasoline consumption volumes for States from *Highway Statistics*.

Physical Unit Prices: 1979 Through 1981

For 1979 through 1981, *Platt's* monthly motor gasoline prices are taken from a table titled "Platt's/Lundberg Summary." Prices are available for cities by product-type, by grade, and by type of service (full service, self service). Four products and grades of motor gasoline are covered: leaded regular, unleaded regular, leaded premium, and unleaded premium. These data cover 37 States and taxes are included. The *CPI* reports "all types" prices, including taxes, for the cities listed in Table A32. *Platt's* city price assignments to States for 1979 through 1981 are shown in Table A33.

The computation of monthly composite prices for 1979 through 1981 varies, depending on the available data sources for each State. Monthly composite prices are estimated for the 14 States which do not have reported price data from either data source. If both *Platt's* and the *CPI* report prices for a city, the *CPI* price is used.

1. For States with city price observations only from *Platt's*, prices for leaded and unleaded motor gasoline are combined by use of simple averaging, regardless of the type of service, and are converted to dollars per gallon. The leaded and unleaded prices are then weighted together into a monthly composite price. The following 12 States have prices only from *Platt's* for 1979 through 1981: AL, AZ, CT, IA, ID, LA, NC, NE, NM, NV, TN, and UT.

   a. The *Platt's* prices for 1981 end in September of that year; monthly prices by grade and service type for October, November, and December are assumed to be equal to the corresponding September prices.

Table A33. Motor Gasoline Price Assignments from *Platt's*, 1979-1981

State	City Price Assignments
AL	Birmingham
AZ	Phoenix, Tucson
CA	Bakersfield, Fresno, Los Angeles, Sacramento, San Diego, San Francisco, Stockton
CO	Denver
CT	New Haven
DC	Washington
FL	Miami, Tampa-St. Petersburg
GA	Atlanta
IA	Des Moines
ID	Boise
IL	Chicago
IN	Indianapolis
KY	Louisville
LA	New Orleans
MA	Boston
MD	Baltimore
MI	Detroit
MN	Minneapolis
MO	Kansas City, St. Louis
NC	Charlotte
NE	Omaha
NJ	Newark
NM	Albuquerque
NV	Las Vegas, Reno
NY	Long Island, Rochester
OH	Cincinnati
OR	Portland
PA	Philadelphia, Pittsburgh
TN	Memphis
TX	El Paso, Houston
UT	Salt Lake City
VA	Norfolk
WA	Seattle, Spokane
WI	Milwaukee

b. Leaded and unleaded prices are calculated for each State by simple averaging of all prices available for each product (leaded, unleaded), regardless of service type or grade of motor gasoline (regular, premium). All city prices for each State are averaged together.

c. Leaded and unleaded shares of total motor gasoline consumption for the United States are calculated from the *MER* for each year 1979 through 1981. The monthly product type prices are weighted into composite prices by using the national leaded and unleaded shares as weights.

2. For States with city price observations only from the *CPI*, the monthly "all types" prices are used directly for States with only one price observation per month. For States with multiple observations, monthly prices are combined by simple averaging. States with *CPI* data only are: AK, CO, DC, GA, HI, IL, KS, MA, MD, MI, MN, MO, NJ, OH, OR, PA, and WI.

3. For the eight States with price observations from both *Platt's* and the *CPI* (CA, FL, IN, KY, NY, TX, VA, and WA), monthly composite prices for 1979 through 1981 are calculated by using three steps:

   a. The *Platt's* prices are combined into single "all types" prices as described above by using leaded and unleaded grades of motor gasoline shares as weights.

   b. The *CPI* prices are combined by State.

   c. Using simple averaging, the composite *Platt's* price for each State is combined with the "all types" *CPI* price for that State. The resulting prices are the monthly composite prices for 1979 through 1981.

4. Fourteen States are not covered by price data from either *Platt's* or the *CPI* in 1979 through 1981. These States are AR, DE, ME, MS, MT, ND, NH, OK, RI, SC, SD, VT, WV, and WY. Monthly composite prices for these States are estimated by using the monthly State-level composite prices for 1982 and Census region monthly prices from the *CPI* for 1979 through 1982.

a. The ratio between the 1982 State prices and the 1982 *CPI* Census region prices corresponding to each State is calculated for use as an adjustment factor in 1979, 1980, and 1981.

b. The monthly price for each of the 14 missing States is assumed to be the product of the 1982 Census region adjustment factor for that State times the monthly motor gasoline price for that Census region from the *CPI*.

Annual physical unit prices for all States are calculated from the monthly motor gasoline prices calculated above and weighted by the monthly motor gasoline consumption volumes for States from *Highway Statistics*.

Physical Unit Prices: 1978

The *Platt's* monthly leaded regular motor gasoline prices cover all States except AK and HI. The *Platt's* city assignments to States are shown in Table A34. In 1978, the *CPI* motor gasoline coverage was expanded from 21 States to 25 States (28 SMSAs) and an "all types" price was published that covers leaded regular, leaded premium, and unleaded regular. The *CPI* SMSA assignments to States for 1978 through 1982 are shown in Table A32 on page 384. Both the *CPI* and the *Platt's* prices include taxes.

Since both sources report a single price for each city or SMSA, product weights are not needed to compute monthly composite prices. Instead, city price observations are assigned to States, as shown in Table A32 and Table A34. Price observations are combined by using simple averaging by State and month. If both *Platt's* and the *CPI* cover a city/SMSA, the *CPI* price is used. *Platt's* prices are converted to dollars per gallon; the *CPI* prices are already expressed in dollars. All States are covered by the data sources, so no imputation is required for 1978. The following 26 States have prices only from *Platt's*: AL, AR, AZ, CT, DE, IA, ID, LA, ME, MS, MT, NC, ND, NE, NH, NM, NV, OK, RI, SC, SD, TN, UT, VT, WV, and WY. The following 19 States are covered only by the *CPI*: AK, CA, CO, DC, FL, GA, HI, IL, MA, MD, MI, MN, MO, NJ, NY, OH, OR, PA, and WI. Six States have price data from both sources: IN, KS, KY, TX, VA, and WA.

Table A34. Motor Gasoline Price Assignments from *Platt's*, 1970-1978

State	City Price Assignments
AL	Birmingham
AR	Little Rock
AZ	Phoenix
CA	Los Angeles, San Francisco
CO	Denver
CT	Hartford
DC	Washington
DE	Wilmington
FL	Miami
GA	Atlanta
IA	Des Moines
ID	Boise
IL	Chicago
IN	Indianapolis
KS	Wichita
KY	Louisville
LA	New Orleans
MA	Boston
MD	Baltimore
ME	Portland
MI	Detroit
MN	Twin Cities
MO	St. Louis
MS	Jackson
MT	Great Falls
NC	Charlotte
ND	Fargo
NE	Omaha
NH	Manchester
NJ	Newark
NM	Albuquerque
NV	Reno
NY	Buffalo, New York
OH	Cincinnati, Cleveland
OK	Tulsa
OR	Portland
PA	Philadelphia
RI	Providence
SC	Charleston
SD	Huron
TN	Memphis
TX	Dallas, El Paso, Houston
UT	Salt Lake City
VA	Norfolk
VT	Burlington
WA	Seattle, Spokane
WI	Milwaukee
WV	Charleston
WY	Cheyenne

Annual physical unit prices for all States are calculated from the monthly motor gasoline prices calculated above and weighted by the monthly motor gasoline consumption volumes for States from *Highway Statistics*.

Physical Unit Prices: 1976, 1977

The calculation of monthly composite State prices for 1976 and 1977 depends upon the source of data. Different procedures are used for States with only *Platt's* data, States with only *CPI* data, and States with both *Platt's* and *CPI* data. If both data sources cover a city, only the *CPI* price is used for that city. City price assignments to States are given in Table A34 for *Platt's* and in Table A35 for the *CPI*. Prices from both sources include taxes. AK is the only State for which prices need to be estimated.

For States with data from *Platt's* only, the monthly prices reported in *Platt's* are used either directly or combined by simple averaging if there is more than one price observation for a State in a given month. The reported prices in cents per gallon are converted to dollars per gallon. Prices for the following 29 States are calculated by using this procedure and cover only leaded regular motor gasoline: AL, AR, AZ, CO, CT, DE, FL, IA, ID, LA, ME, MS, MT, NC, ND, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VT, WV, and WY.

If State-level motor gasoline prices for 1976 and 1977 are available only from the *CPI*, monthly composite prices are calculated as weighted averages of leaded and unleaded prices. Prices for 15 States are calculated by using data only from the *CPI*: CA, DC, GA, HI, IL, MA, MD, MI, MN, MO, NJ, NY, OH, PA, and WI.

1. The weights used in this process are national-level shares of leaded and unleaded motor gasoline product supplied. For 1977, the leaded and unleaded share of 0.725 and 0.275, respectively, are taken from the *MER*. For 1976, *MER* data for 1977 through 1984 are used to estimate the unleaded share by using simple regression. The unleaded percentages for 1977 through 1984 are converted to shares and used to estimate leaded and unleaded shares of motor gasoline. The resulting 1976 leaded share is 0.744 and the unleaded share is 0.256.

Table A35. Motor Gasoline Price Assignments from *Consumer Prices: Energy*, 1974-1977

State	City Price Assignments
CA	Los Angeles-Long Beach, San Diego, San Francisco-Oakland
DC	Washington
GA	Atlanta
HI	Honolulu
IL	Chicago, St. Louis
IN	Cincinnati, Chicago
KS	Kansas City
KY	Cincinnati
MA	Boston
MD	Baltimore, Washington
MI	Detroit
MN	Minneapolis-St. Paul
MO	St. Louis, Kansas City
NJ	New York-Northeastern NJ, Philadelphia
NY	Buffalo, New York-Northeastern NJ
OH	Cincinnati, Cleveland
PA	Philadelphia, Pittsburgh
TX	Dallas, Houston
VA	Washington
WA	Seattle
WI	Milwaukee, Minneapolis-St. Paul

Note: Prices are available separately for leaded regular, leaded premium, and unleaded regular (1976, 1977); "all types" prices are not available.

2. The next step is to calculate monthly composite leaded and unleaded prices for each State. If more than one *CPI* price observation is available for a particular grade of motor gasoline (leaded or unleaded) for a State in a given month, the *CPI* observations are combined by grade by using simple averaging. Regular and premium prices are averaged for an estimate of State-level leaded prices.

3. Final monthly composite prices for 1976 and 1977 are calculated by using the leaded and unleaded composite prices calculated above and the *MER*-based leaded and unleaded shares as volume weights.

For States with price data from both *Platt's* and the *CPI*, all price observations are averaged together by product type. If both sources report

prices for a city, the *CPI* price is used. Once composite leaded and unleaded prices have been calculated separately for each State, the leaded and unleaded consumption shares are used to weight the product-type prices into the final monthly composite motor gasoline prices. Six States are calculated with data from both *Platt's* and the *CPI*: IN, KS, KY, TX, VA, and WA.

1. Monthly leaded composite prices are calculated by combining *Platt's* prices with the *CPI* prices for leaded regular and premium motor gasoline by month, since the *Platt's* prices cover only regular leaded fuel. If both data sources cover a city, the *CPI* prices are used.

2. Since the *CPI* is the only source of unleaded gasoline price data for 1976 through 1977, monthly unleaded composite prices are calculated from *CPI* data only.

3. Final monthly composite prices for the six States with price data from both *Platt's* and the *CPI* are calculated by using annual U.S. leaded and unleaded shares and leaded and unleaded monthly composite prices.

Prices for 1976 and 1977 for AK, the only State not covered by price data from either data source, are estimated on the basis of the average relationship between the State and the national average price for years in which data are available. The national average price used for these estimations is a simple average of the prices of the 49 States for which data are available in all years (i.e., excluding AK and HI for all years). Annual prices for AK are estimated on the basis of the average AK-to-U.S. price relationship for 1978 and 1979.

Annual physical unit prices (excluding AK) are calculated from the monthly motor gasoline prices calculated above and weighted by the monthly motor gasoline consumption volumes for States from *Highway Statistics*.

Physical Unit Prices: 1974, 1975

The *Platt's* price data for 1974 through 1975 cover only leaded regular motor gasoline. Beginning in 1974, motor gasoline price data are also available from the *CPI* for selected SMSAs. An SMSA price is assigned to each State with counties included in the definition of that SMSA; for the years 1974 through 1977, prices for 23 SMSAs cover 21 States. The State assignments of SMSA prices for 1974 through 1977 are given in Table A35 on page 388. For 1974 and 1975, *CPI* prices are reported separately for leaded regular and leaded premium motor gasoline. According to the April 1986 *CPI Detailed Report*, these prices include taxes; the *Platt's* prices also include taxes. AK is the only State not covered by either of these two data sources; prices for AK are imputed for 1974 and 1975.

The *Platt's* regular leaded prices and the *CPI* regular and premium leaded motor gasoline prices, including taxes, are assigned to their respective States, as shown in Table A34 and Table A35. If both sources cover a city, the *CPI* price is used. The following 29 States are covered only by *Platt's*: AL, AR, AZ, CO, CT, DE, FL, IA, ID, LA, ME, MS, MT, NC, ND, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VT, WV, and WY. The following 15 States are covered only by *CPI*: CA, DC, GA, HI, IL, MA, MD, MI, MN, MO, NJ, NY, OH, PA, and WI. The following six States have both *Platt's* and *CPI* data for a particular city: IN, KS, KY, TX, VA, and WA.

All price observations assigned to a State, regardless of grade or data source, are added together and divided by the number of observations. As part of this calculation, *Platt's* prices are converted from cents per gallon to dollars per gallon.

Neither *Platt's* nor the *CPI* reports price data for AK. The methodology of the estimation of annual AK prices is the same as used in 1976 and 1977.

Annual physical unit prices for the remaining 50 States (excluding AK) are calculated from the monthly motor gasoline prices calculated above and weighted by the monthly motor gasoline consumption volumes for States from *Highway Statistics*.

Physical Unit Prices: 1970 Through 1973

Monthly motor gasoline physical unit prices for 1970 through 1973 are available only from *Platt's*, where city prices covering 49 States are reported in a table titled "Service Station Prices: Gasoline (Including

Taxes)." These prices, as shown in Table A31, are for leaded regular gasoline only and include taxes.

Monthly average city prices from *Platt's* are assigned to the State in which the city is located. *Platt's* city price assignments to States are given in Table A34.

Monthly composite prices for 1970 through 1973 are equal to the reported monthly *Platt's* prices or, if more than one city is available for a given State in a certain month, are a simple average of the assigned city prices. The reported prices are converted from cents to dollars per gallon.

Platt's does not report data for either AK or HI for 1970 through 1973. The methodology of the estimation of AK and HI prices is the same as that used for 1976 and 1977.

Annual physical unit prices (excluding AK and HI) are calculated from the monthly motor gasoline prices weighted by the monthly motor gasoline consumption volumes for States from *Highway Statistics*.

Btu Prices: All Years

Btu prices for States are computed by converting the physical unit prices in dollars per gallon to dollars per barrel (42 gallons per barrel) and then to dollars per million Btu (5.253 million Btu per barrel). U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from CSEDS.

Data Sources

Prices

1986 forward: Energy Information Administration, *Petroleum Marketing Annual*, Table 29 (1986-1988), Table 30 (1989-1993), column titled "All Refiners, Sales to End Users, Through Company Outlets," and Table 35 (1994 and 1995), column titled "All Grades, Sales to End Users, Through Retail Outlets."

1974 forward: Bureau of Labor Statistics, U.S. Department of Labor, *Consumer Prices: Energy*, computer printouts of monthly gasoline prices.

1983 forward: Federal Highway Administration, U.S. Department of Transportation, *Highway Statistics,* Tables MF-26 (1983-1993) and MF-33GA (1994 and 1995).

1983-1985: Energy Information Administration, *Petroleum Marketing Annual 1985*, Volume 1, Table 16, column titled "All Refiners and Gas Plant Operators, Sales to End-users, Through Company Outlets."

1970-1982: McGraw-Hill, Inc., *Platt's Oil Price Handbook and Oilmanac*, table titled "AAA 'Fuel-gauge' Report" (1982); table titled "Platt's/Lundberg Summary," (1979-1981); and table titled "Service Station Prices: Gasoline (Including Taxes)," (1970-1978).

1974-1982: Bureau of Labor Statistics, *CPI Detailed Report*, April 1986, Technical Notes, page 110.

1982: Energy Information Administration, Form EIA-25, "Prime Supplier Monthly Report," computer tape, unpublished data.

1976-1984: Energy Information Administration, *Monthly Energy Review*, January 1985, table titled "Petroleum: Finished Motor Gasoline Supply and Disposition."

Taxes

1983 forward (State Taxes): Federal Highway Administration, U.S. Department of Transportation, *Highway Statistics,* Table MF-121T.

1991 forward (Federal Taxes): Energy Information Administration, *Petroleum Marketing Annual,* Table EN1.

1983 through 1990 (Federal Taxes): Energy Information Administration, *Petroleum Marketing Annual, 1990* , Table EN1.

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, transportation sector, motor gasoline consumption.

Conversion Factor: All Years

5.253 million Btu per barrel

Petroleum Coke (Utilities)

Petroleum coke is consumed by the electric utility and industrial sectors. The portion of petroleum coke consumed by the industrial sector (97 percent in 1995) is included in the category "other petroleum products," which is discussed on page 403. The remaining petroleum coke is used for electricity generation in 12 States over the period of 1970 forward. A maximum of seven States reported consumption in any single year. Estimates of the annual consumption of petroleum coke by electric utilities are taken from CSEDS. Estimates of the deliveries of petroleum coke, used in the price calculation described below, are taken from the *Cost and Quality of Fuels for Electric Utility Plants (C&Q)*. The *C&Q* prices are the delivered costs of the fuels and include all taxes, transportation, and other charges paid by the utilities.

Btu Prices: 1972 Forward

The principal data source for petroleum coke used by electric utilities is an EIA public use computer tape covering the period 1972 forward. From 1972 through 1982, steam plants with a maximum capacity of 25 megawatts were included. For 1983 and subsequent years, the reporting threshold was raised to 50 megawatts capacity. In addition to the computer tape, the data are also published, but not for the full period. From 1978 through 1982, *C&Q* was published monthly and annually; data for calculating petroleum coke prices are in only the monthly reports. For 1983 and subsequent years, *C&Q* was published annually and includes petroleum coke prices for individual States and for the Nation.

The computer tape, "Cost and Quality of Fuels for Electric Utility Plants (Form 423) Historic Files," shows quantity in short tons, estimated Btu per pound, and price in cents per million Btu. The data are presented by plant, by State, and by month. The Btu price is calculated as the annual sum of the unit prices, weighted by the total Btu in each reported delivery, divided by the annual sum of the Btu delivered to all electric utility plants within the State.

Some States have electric utility petroleum coke consumption in CSEDS but no deliveries or price data in the *C&Q*. Those States are assigned prices from neighboring States, as shown in Table A36. The petroleum coke consumed in LA in 1992 forward was obtained with no cost to the electric utility. The CSEDS consumption is included with a zero price in calculating the electricity utility sector average price for LA and the US. The high DE prices prior to 1981 are actual reported prices.

Btu Prices: 1970, 1971

For the years 1970 and 1971, prices are estimated by using the gross domestic product implicit price deflator. The deflator for 1970 or 1971 is divided by the 1972 deflator and the quotient is multiplied by the 1972 price for each State to develop the price estimates for 1970 and 1971. The deflators are 35.1 in 1970, 37.1 in 1971, and 38.8 in 1972.

Although CSEDS has a consumption estimate for NJ in 1971, there are no NJ price data for any year in the Form 423 Historic Files. Form 423 data for PA in 1972 are used to estimate a PA price for 1971, which is assigned to NJ. The Form 423 PA prices for 1972 and 1971 do not appear in SEPEDS since CSEDS has no petroleum coke consumption in PA for those years.

U.S. Btu Prices: All Years

U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from CSEDS.

Table A36. Petroleum Coke Electric Utility Price Assignments, 1972 Forward

State	Years	State Prices Assigned
DE	1981–1992	PA
KS	1975	MO
MO	1983, 1985	MN
NY	1974	PA
WI	1985	MN

Data Sources

Prices

1972 forward: Energy Information Administration, electronic data from "Cost and Quality of Fuels for Electric Utility Plants (Form 423) Historic Files," as published in the following reports:

> 1983 forward: Energy Information Administration, *Cost and Quality of Fuels for Electric Utility Plants*, Table 20 (1983, 1984), Table 12 (1985-1989), Table 40 (1990, 1991), and Table 28 (1992 forward).
>
> 1978-1982: Energy Information Administration, Cost and Quality of Fuels for Electric Utility Plants, table titled "Wood Chips, Refuse, and Petroleum Coke Used as Fuel by Steam-Electric Units."

1970-1972: Energy Information Administration, *Annual Energy Review 1992*, Appendix C. Gross Domestic Product and Implicit Price Deflator.

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, electric utility petroleum coke consumption.

Conversion Factors: All Years

No conversion factors are required; Btu prices are calculated directly from data sources.

Residual Fuel

Residual fuel prices are developed for the electric utility, industrial, commercial, and transportation sectors. Estimates of the amount of residual fuel consumed by sector are taken from CSEDS and are adjusted for process fuel consumption in the industrial sector. (See the "Consumption Adjustments for Calculating Expenditures" section on page 417.)

Electric Utility Sector

The electric utility price for residual fuel (heavy oil) is the average delivered cost of No. 6 fuel oil receipts at electric utilities. For 1973 forward, Btu prices are developed directly from the data sources. For 1970 through 1972, prices are estimated by using simple regression analysis. All taxes, transportation, and other charges paid by utilities are included in the prices for all years.

Btu Prices: 1973 Forward

Electric utility sector residual fuel prices for 1973 forward are taken from *Cost and Quality of Fuels for Electric Utility Plants (C&Q)*. For 1973 through 1979, Btu prices are calculated as the weighted average of contract and spot prices for No. 6 fuel oil. For 1980 through 1982, *C&Q* prices cover all reporting plants of 25 megawatts capacity or greater. For 1983 forward, *C&Q* reports prices for steam electric plants of 50 megawatts capacity or greater.

Table A37 lists the States and years for which consumption is indicated by CSEDS but no price is shown in *C&Q*. For these States, the Census division price, as shown in *C&Q*, is assigned as the State price. For 1996 and 1997, no utiliites in the Mountain and Pacific Census divisions reported receipts of residual fuel in the *C&Q*, therefore there were no Census division prices to assign to States with CSEDS consumption. Mountain division prices were estimated for 1996 and 1997 by averaging the percentage difference between Mountain and Pacific Noncontiguous Census division prices for the years 1991 through 1995 and then applying this percentage to the 1996 and 1997 Pacific Noncontiguous prices. In the Pacific division, phone conversations with one utility in California and with the Form FERC-423 survey manager lead to the conclusion that residual fuel consumed in 1996 and 1997 had been purchased in 1994 and the 1994 price was assigned.

The *C&Q* does not have prices for AK in 1973 forward or HI in 1973 through 1982. For 1973 through 1993, prices are estimated by calculating the ratio of the AK or HI prices from the *Statistical Yearbook* to the *Statistical Yearbook* U.S. price and multiplying the ratio by the *C&Q* U.S. price for each year. AK prices for 1973, 1975, and 1978 are not published in the *Statistical Yearbook* and are estimated by calculating an average of the ratios of the AK to U.S. *Statistical Yearbook* prices in

Table A37. Residual Fuel Electric Utility Census Division Price Assignments, 1970 Forward

State	Years of Assigned Prices	Census Division
AL	1975–1979	East South Central
AR	1987, 1992, 1993, 1996-1997	West South Central
AZ	1984, 1985, 1991–1997	Mountain
CO	1982, 1987, 1989–1992, 1994, 1995-1997	Mountain
DC	1982–1997	South Atlantic
GA	1991	South Atlantic
IA	1970-1985	West North Central
IN	1970–1979, 1995	East North Central
KS	1980, 1981, 1985–1987, 1989–1992, 1995	West North Central
KY	1970–1979	East South Central
MN	1984, 1985, 1987–1990, 1992, 1993, 1996-1997	West North Central
MT	1970–1979	Mountain
NC	1976, 1977, 1979, 1980, 1982, 1984	South Atlantic
ND	1970–1979	West North Central
NE	1981–1983, 1990, 1991, 1994, 1997	West North Central
NM	1979–1982, 1989–1997	Mountain
NV	1983, 1985, 1996-1997	Mountain
OH	1992–1994	East North Central
OK	1977, 1978, 1980, 1982–1987, 1989, 1991–1997	West South Central
OR	1970, 1973, 1974	Pacific
RI	1995	New England
SC	1983, 1985–1997	South Atlantic
SD	1981–1988	West North Central
TN	1979	East South Central
TX	1992–1997	West South Central
UT	1982, 1983, 1986	Mountain
VT	1970–1979	New England
WA	1970, 1971, 1975–1978, 1981–1983, 1986–1988, 1992, 1993	Pacific
WV	1970–1977, 1979	South Atlantic
WY	1970–1979	Mountain

adjacent years. The 1973 estimated price is based on the average ratio for 1972 and 1974, the 1975 price is based on the average ratio for 1974 and 1976, and the 1978 price is based on the average ratio for 1977 and 1979. The average ratio is then applied to the U.S. *C&Q* price for the missing year. Beginning with 1994 data, the *Statistical Yearbook* table was discontinued. Alaska prices for 1994 forward are obtained from phone conversations with the only Alaskan utility reporting use of residual fuel.

Btu Prices: 1970 Through 1972

State-level Btu prices for 1970 through 1972 are estimated by using regression techniques and price data from the *Statistical Yearbook*. The regression equations use *Statistical Yearbook* State-level prices for 1973 through 1980 as the independent variable and the State-level prices calculated above (including the estimations for AK and HI) as the dependent variable. Pacific regional price averages are assigned for the missing WA prices in 1970 and 1971. The average of 1970 and 1972 AK *Statistical Yearbook* prices is substituted for the missing 1971 AK price.

U.S. Btu Prices: All Years

U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from CSEDS.

Data Sources

Prices

1973 forward: Energy Information Administration, *Cost and Quality of Fuels for Electric Utility Plants,* Table 6 (1973–1979), Table 45 (1980–1982), Table 51 (1983, 1984), Table 41 (1985-1989), Table 14 (1990, 1991), and Table 8 (1992 forward).

1994 forward: Alaska prices are obtained by phone from the Golden Valley Electric Association.

1970 forward: Edison Electric Institute, *Statistical Yearbook of the Electric Utility Industry*, Table 43 (1970–1979), Table 26 (1980–1983), Table 28 (1984-1986), and Table 29 (1987–1993).

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, electric utility sector heavy oil consumption.

Conversion Factors: All Years

Because Btu prices are available directly from the data sources, no conversion factors are used, with the exception of Alaskan prices for 1994 forward, which use 6.287 million Btu per barrel.

Industrial Sector

The industrial sector residual fuel prices for 1984 forward are developed from refiner/reseller prices of residual fuel as published in the *Petroleum Marketing Annual*. Residual fuel prices for 1970 through 1983 are calculated or estimated by using average costs of residual fuel to manufacturing firms published in two Bureau of the Census reports and *Platt's Oil Price Handbook and Oilmanac*. Price data in these sources are available for the years 1971 and 1974 through 1981; prices for 1970, 1972, 1973, 1982, and 1983 are estimated. Prices for all years include taxes.

Physical Unit Prices: 1984 Forward

Residual fuel industrial sector physical unit prices are calculated by using refiner/reseller prices to end users from the *Petroleum Marketing Annual (PMA)*. The States that do not have *PMA* prices are assigned their PAD district or subdistrict price as shown in Table A38, with the exception of Alaska. Alaska industrial residual fuel prices for 1984 forward is based on the Washington industrial residual fuel prices and the ratio of the AK-to-WA industrial distillate fuel prices for each year. State general sales taxes are added.

Physical Unit Prices: 1982, 1983

After 1981, the U.S. Department of Commerce's *Annual Survey of Manufactures* and the *Census of Manufactures (ASM/CM)* ceased publication of fuel-specific State-level residual fuel data from which prices can be calculated. Prices for 1982 and 1983 are estimated from the average relationship between the *ASM/CM*-based prices generated for 1978 through 1981 and the assigned *Platt's* No. 6 fuel oil prices for 1978 through 1981 (Table A39). These average ratios are calculated at the State-level for all States except AK, which shows no industrial sector residual fuel use reported in CSEDS for 1982 and 1983. Physical unit residual fuel industrial prices for 1982 and 1983 are calculated by using the assigned *Platt's* prices for 1982 and 1983 (Table A39) and the State-level average ratios. The resulting estimates implicitly include taxes that reflect individual State differences.

Table A38. Residual Fuel Industrial Sector Price Assignments, 1984 Forward

State	Years	PAD District Prices Assigned
AL	1995, 1997	PAD District III
AR	1985, 1996-1997	PAD District III
AZ	1984–1993, 1995–1996	PAD District V
CO	1986, 1988, 1990–1995, 1997	PAD District IV
DC	1994, 1995	PAD Subdistrict IB
IA	1995–1997	PAD District II
ID	1985, 1986, 1989–1992, 1994, 1995–1997	PAD District IV
MN	1995–1997	PAD District II
MO	1995	PAD District II
MS	1988, 1991, 1992, 1995	PAD District III
MT	1992, 1994, 1995, 1997	PAD District IV
ND	1988–1992, 1995–1997	PAD District II
NE	1995, 1996	PAD District II
NM	1984–1986, 1990–1997	PAD District III
NV	1986, 1988, 1991–1997	PAD District V
OK	1992–1997	PAD District II
OR	1989	PAD District V
SC	1993–1995	PAD Subdistrict IC
SD	1990–1997	PAD District II
TN	1995	PAD District II
UT	1989–1992	PAD District IV
WI	1994, 1995	PAD District II
WV	1984	PAD Subdistrict IC
WY	1989–1997	PAD District IV

Table A39. No. 6 Fuel Oil Price Assignments from Platt's, 1970–1983

State	Years	City or State Prices Assigned
AK	1970–1972, 1975, 1977–1980	Los Angeles, CA
	1973–1974, 1976	Los Angeles/San Francisco, CA
	1981–1983	Los Angeles, CA; San Francisco, CA
AL	1970–1983	Savannah, GA
AR	1970–1983	Arkansas
AZ	1970–1972, 1975, 1977–1980	Los Angeles, CA
	1973–1974, 1976	Los Angeles/San Francisco
	1981–1983	Los Angeles, CA; San Francisco, CA
CA	1970–1972, 1975, 1977–1980	Los Angeles
	1973–1974, 1976	Los Angeles/San Francisco
	1981–1983	Los Angeles; San Francisco
CO[1]	1970–1983	Minneapolis/St. Paul, MN
CT	1970–1983	New Haven
DC	1970–1983	Baltimore, MD
DE	1970–1983	Baltimore, MD
FL	1970–1972	Jacksonville; Miami; Tampa; Port Everglades
	1973–1975	Jacksonville; Miami; Tampa
	1976–1983	Jacksonville/Miami
GA	1970–1983	Savannah
HI	1970–1972, 1975, 1977–1980	Los Angeles, CA
	1973, 1974, 1976	Los Angeles/San Francisco, CA
	1981–1983	Los Angeles, CA; San Francisco, CA
IA[1]	1970–1983	Chicago, IL
ID	1970–1972, 1975, 1977–1980	Los Angeles, CA
	1973, 1974, 1976	Los Angeles/San Francisco, CA
	1981–1983	Los Angeles, CA; San Francisco, CA
IL[1]	1970–1983	Chicago
IN[1]	1970–1983	Chicago, IL
KS	1970	Baton Rouge, LA; New Orleans, LA
	1971–1983	New Orleans, LA
KY	1970	Baton Rouge, LA; New Orleans, LA
	1971–1983	New Orleans, LA
LA	1970	Baton Rouge; New Orleans
	1971–1983	New Orleans
MA	1970–1983	Boston
MD	1970–1983	Baltimore
ME	1970–1983	Portland
MI[1]	1970–1983	Detroit
MN[1]	1970–1983	Minneapolis/St. Paul
MO[1]	1970–1973	Chicago, IL
	1974–1983	St. Louis
MS	1970	Baton Rouge, LA; New Orleans, LA
	1971–1983	New Orleans, LA
MT	1970–1983	Minneapolis/St. Paul, MN
NC	1970–1983	Wilmington
ND[1]	1970–1983	Minneapolis/St. Paul, MN
NE	1970–1972, 1975, 1977–1980	Los Angeles, CA
	1973, 1974, 1976	Los Angeles/San Francisco, CA
	1981–1983	Los Angeles, CA; San Francisco, CA
NH	1970–1983	Portland, ME
NJ	1970–1972	New Jersey
	1974, 1975	New York, NY; Albany, NY; Buffalo, NY
	1976–1983	New York, NY; Albany, NY
NM	1970–1972, 1975, 1977–1980	Los Angeles, CA
	1973, 1974, 1976	Los Angeles/San Francisco, CA
	1981–1983	Los Angeles, CA; San Francisco, CA
NV	1970–1972, 1975, 1977–1980	Los Angeles, CA
	1973, 1974, 1976	Los Angeles/San Francisco, CA
	1981–1983	Los Angeles, CA; San Francisco, CA
NY	1970–1975	New York; Albany; Buffalo
	1976–1983	New York; Albany
OH[1]	1970	Toledo
	1971–1983	Detroit, MI
OK[2]	1970–1977, 1979	Group 3 (Oklahoma)
	1978, 1980–1983	New Orleans, LA
OR	1970–1972, 1975, 1977–1980	Los Angeles, CA
	1973, 1974, 1976	Los Angeles/San Francisco, CA
	1981–1983	Los Angeles, CA; San Francisco, CA
PA	1970–1983	Philadelphia
RI	1970–1975	Providence
	1976–1983	New Haven, CT
SC	1970–1983	Charleston
SD[1]	1970–1983	Minneapolis/St. Paul, MN
TN	1970	Baton Rouge, LA; New Orleans, LA
	1971–1983	New Orleans, LA
TX	1970–1972	New Mexico/West Texas
	1973–1983	New Orleans, LA
UT[1]	1970–1983	Minneapolis/St. Paul, MN
VA	1970–1983	Norfolk
VT	1970–1983	Portland, ME
WA	1970–1972, 1975, 1978, 1979	Los Angeles, CA
	1973, 1974, 1976	Los Angeles/San Francisco, CA
	1980–1983	Seattle/Tacoma
WI[1]	1970–1983	Chicago, IL
WV	1970–1983	Norfolk, VA
WY[1]	1970–1983	Minneapolis/St. Paul, MN

[1]Data from Platt's are converted from cents per gallon to dollars per barrel.
[2]As shown in Platts.

Physical Unit Prices: 1971, 1974 Through 1981

For the years 1971 and 1974 through 1981, industrial sector residual prices are calculated directly from cost and quantity data reported by the *ASM/CM*. For all States with available cost and quantity data, prices are equal to the average cost of residual fuel to manufacturers. Taxes are included in the published cost data. Missing data for these years are assigned from the average prices of adjacent States, as shown in Table A40.

Physical Unit Prices: 1970, 1972, 1973

Since *ASM/CM* data are not available for 1970, 1972, or 1973, prices for these years must be estimated. Physical unit prices are based on the ratio of the 1971 *CM* prices to the 1971 assigned No. 6 fuel oil prices from *Platt's Oil Price Handbook and Oilmanac* (Table A39). The estimated 1971 *CM* prices for NM and WY are used in the calculations. The resulting ratios for each State are used with the *Platt's* assigned prices for 1970, 1972, and 1973 to estimate prices. The final estimates implicitly include State-specific taxes.

Btu Prices: All Years

Btu prices for States are calculated from the physical unit prices and the conversion factor. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from CSEDS, which are adjusted for process fuel consumption.

Table A40. Residual Fuel Industrial Sector Price Assignments, 1971, 1974 Through 1981

State	Years	State Prices Used
AK	1980, 1981	HI, WA
DC	1979–1981	MD, VA
MT	1974–1979	ID, ND, SD
ND	1980	MN, MT, SD
NM	1971, 1974–1981	AZ, CO, TX
NV	1974–1978	AZ, CA, ID, OR, UT
OK	1974–1978, 1980	AR, CO, KS, MO, TX
SD	1981	IA, MN, MT, ND, NE
WY	1971, 1974–1981	CO, NE, UT

Data Sources

Prices

1984 forward: Energy Information Administration, *Petroleum Marketing Annual, 1998,* Table A3, column titled "Sales to End Users."

1984 forward: Industrial sector distillate fuel price estimates from *CSEDS* (AK and WA only).

1970-1983: McGraw-Hill, Inc., *Platt's Oil Price Handbook and Oilmanac*, refinery and terminal prices for No. 6 fuel oil, average of highs and lows.

1971, 1977, 1981: Bureau of the Census, U.S. Department of Commerce, *Census of Manufactures, Fuels and Electric Energy Consumed*, Part 2, Table 3. (Dates shown on the report covers are, respectively, 1972, 1977, and 1982.)

1974-1976 and 1978-1980: Bureau of the Census, U.S. Department of Commerce, *Annual Survey of Manufactures, Fuels and Electric Energy Consumed, States by Industry Group*, Table 3.

Taxes

For 1992 forward, an annual average general sales tax is calculated for each State as a simple average of the 12 monthly values. This method takes into account tax changes during the year. Prior to 1992, the State general sales tax as of September 1 of each year is used.

1996 and 1997: Federation of Tax Administrators, http://www.taxadmin.org/fta/rate/sales.html.

1995: The Council of State Governments, *The Book of the States 1994–95*, Table 6.21.

1994: U.S. Advisory Committee on Intergovernmental Relations, *Significant Features of Fiscal Federalism,* Tables 14 and 26.

1993: Bureau of the Census, U.S. Department of Commerce, *State Tax Review*, Volume 54, No. 31, map titled "State Gasoline, Sales, and Cigarette Tax Rates as of July 1, 1993," sales tax rates.

1987-1992: Bureau of the Census, U.S. Department of Commerce, *State Government Tax Collections*, Table 8, column titled "Percentage rate, September 1."

1984-1986: Bureau of the Census, U.S. Department of Commerce, *Statistical Abstract of the United States*, table titled "State Government Tax Collections and Excise Taxes," column titled "Excise Taxes, General sales and gross receipts."

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, industrial sector residual consumption.

Conversion Factor: All Years

6.287 million Btu per barrel.

Commercial Sector

For 1984 forward, State-level commercial sector residual fuel prices are developed from refiner/reseller prices of residual fuel to end users published in the *PMA*. For 1970 through 1983, commercial sector residual fuel prices are estimated for all States from national-level residual fuel prices and the State-level electric utility sector residual fuel prices. State and Federal taxes are included in the final prices for all years.

Physical Unit Prices: 1984 Forward

Commercial sector residual fuel physical unit prices are based on refiner/reseller prices to end users from the *PMA*. The States that do not have *PMA* prices are assigned their PAD district or subdistrict price (Table A41), with the exception of AK. The AK commercial residual fuel prices for 1984 through 1988 are based on the WA commercial residual fuel price and the ratio of the AK-to-WA commercial distillate fuel prices for each year. Tax data are added to develop final prices.

Table A41. Residual Fuel Commercial Sector Price Assignments, 1984 Forward

State	Years	PAD District Prices Assigned
AL	1995	PAD District III
AR	1996	PAD District III
AZ	1984, 1985, 1988, 1991, 1996	PAD District V
CO	1986, 1992, 1993	PAD District IV
IA	1996	PAD District II
ID	1985, 1986, 1989–1992, 1994, 1995–1997	PAD District IV
MN	1995–1997	PAD District II
MO	1995	PAD District II
MS	1988, 1991, 1992	PAD District III
MT	1992, 1994, 1995, 1997	PAD District IV
ND	1988, 1989–1992, 1995–1997	PAD District II
NE	1995	PAD District II
NM	1984, 1985, 1996	PAD District III
NV	1986, 1988, 1991, 1992, 1997	PAD District V
OK	1992, 1995	PAD District II
OR	1989	PAD District V
SC	1993–1995	PAD Subdistrict IC
SD	1990–1995, 1997	PAD District II
TN	1995	PAD District II
UT	1989–1992	PAD District IV
WI	1994, 1995	PAD District II
WV	1984	PAD Subdistrict IC
WY	1989–1991, 1994–1997	PAD District IV

Physical Unit Prices: 1976 Through 1983

The commercial sector residual fuel physical unit prices for 1976 through 1983 are estimated from the electric utility residual fuel prices and the U.S. average retail residual fuel prices (with taxes added) for each year. The resulting price estimates implicitly include taxes that reflect individual State differences.

1. The first step in the estimation of the commercial residual fuel physical unit State prices is to convert the State-level tax rates reported in the Bureau of the Census publications into the volume-weighted average U.S. sales tax rate by using commercial residual consumption data from CSEDS.

2. A preliminary U.S. residual fuel oil price, including taxes, is computed by using the average U.S. tax rate estimated above and the annual average U.S. residual fuel price to end users (average retail price excluding taxes) from the *Monthly Energy Review (MER).*

3. Commercial sector physical unit residual fuel prices for States are computed by using the electric utility sector residual fuel prices. To do this calculation, the ratio of the State-level and U.S. prices in the commercial sector is assumed to be the same as the ratio of State and U.S. prices in the electric utility sector. Some States are missing electric utility prices for 1976 through 1983; these are estimated by using adjacent States' average prices (Table A42).

Physical Unit Prices: 1970 Through 1975

Because no national or State-level retail residual prices are available from published data sources, commercial sector residual prices for 1970 through 1975 are estimated. The estimation method is based on the assumption that the average ratio of State-to-U.S. prices is the same in the commercial and electric utility sectors. The average ratio for 1976 through 1979 of the *MER* U.S. tax-adjusted prices to the electric utility sector U.S. prices is calculated and used as an adjustment factor with State-level electric utility sector prices for 1970 through 1975. The resulting price estimates implicitly include taxes that reflect individual State differences.

1. The average ratio of the *MER* tax-adjusted U.S. prices and the electric utility sector U.S. prices is calculated for 1976 through 1979.

2. State-level commercial sector residual fuel prices are calculated by using the electric utility sector physical unit price series for 1970 through 1975 and the average ratio computed above. Price assignments for States missing electric utility sector data are shown in Table A42.

Table A42. Residual Fuel Commercial Sector Price Assignments, 1970 Through 1983

State	Years	State Prices Used in the Estimation
AL	1970–1974, 1980, 1982, 1983	FL, GA, MS
ID	1980, 1981, 1983	CA, CO
	1982	CA
IN	1980–1983	IL, MI, OH
KY	1980–1983	IL, MO, OH, VA
MT	1980, 1983	CO, MN
	1982	MN
NC	1981, 1983	GA, VA
ND	1980, 1983	MN, SD
	1981, 1982	MN
OR	1975–1983	CA
TN	1970–1978, 1980–1983	AR, GA, MO, MS, VA
VT	1980–1983	ME, NH, NY
WI	1982, 1983	IL, MI, MN
WV	1980–1983	MD, OH, PA, VA
WY	1980	CO, NE, SD, UT
	1981, 1983	CO
	1982	MN

Btu Prices: All Years

Btu prices for States are calculated from the physical unit prices and the conversion factor. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from CSEDS.

Data Sources

Prices

1984 forward: Energy Information Administration, *Petroleum Marketing Annual, 1998*, Table A3, column titled "Sales to End Users."

1984 through 1988: Commercial sector distillate fuel price estimates from CSEDS (AK and WA only).

1978-1983: Energy Information Administration, *Monthly Energy Review, December 1988*, table titled "Refiner Sales Prices of Residual Fuel Oil," column titled "Average Sales to End Users."

1976, 1977: Energy Information Administration, *Monthly Energy Review, December 1983*, table titled "Average No. 6 Residual Fuel Oil Prices," column titled "Average, Retail."

1970-1983: Electric utility sector residual fuel price estimates (in physical units) from CSEDS.

Taxes

For 1992 forward, an annual average general sales tax is calculated for each State as a simple average of the 12 monthly values. This method takes into account tax changes during the year. Prior to 1992, the State general sales tax as of September 1 of each year is used.

1996 and 1997: Federation of Tax Administrators, http://www.taxadmin.org/fta/rate/sales.html.

1995: The Council of State Governments, *The Book of the States 1994–95*, Table 6.21.

1994: U.S. Advisory Committee on Intergovernmental Relations, *Significant Features of Fiscal Federalism,* Tables 14 and 26.

1993: Bureau of the Census, U.S. Department of Commerce, *State Tax Review*, Volume 54, No. 31, map titled "State Gasoline, Sales, and Cigarette Tax Rates as of July 1, 1993," sales tax rates.

1987-1992: Bureau of the Census, U.S. Department of Commerce, *State Government Tax Collections,* Table 8, column titled "Percentage rate, September 1."

1976-1986: Bureau of the Census, U.S. Department of Commerce, *Statistical Abstract of the United States*, table titled "State Government Tax Collections and Excise Taxes," column titled "Excise Taxes, General sales and gross receipts."

Consumption

1970 forward: Energy Information Administration, CSEDS, commercial sector residual fuel consumption.

Conversion Factor: All Years

6.287 million Btu per barrel

Transportation Sector

Residual fuel is consumed in the transportation sector for vessel bunkering, military use, and railroads. In 1970, vessels consumed 74 percent of the transportation use of residual fuel, and the military and railroads accounted for 24 percent and 2 percent, respectively. By 1997, vessel use had grown to 99 percent, military use had dropped to 1 percent, and the railroads' share was insignificant. Prices are developed for vessel bunkering, and electric utility prices are assigned to the military and railroad uses. Tax adjustments are made as described below. The transportation sector average price for each State and year is the consumption-weighted average of the prices of the three uses.

Physical Unit Prices: All Years

Vessel Bunkering. Physical unit prices are calculated from actual or estimated U.S. average bunker C prices and electric utility State and U.S. residual fuel prices for each year. The ratio of U.S. bunker C price to U.S. residual fuel electric utility price is multiplied by the State residual fuel electric utility price to obtain the State bunker C price. Taxes are calculated as described for the commercial sector (1976 through 1983) and added, so that final State vessel bunkering price estimates implicitly include State-specific taxes. Other procedures are described separately by groups of years:

1. For 1982 forward, national average prices for residual fuel with sulfur content greater than 1 percent are taken from the *Annual Energy Review* and are used as proxies for bunker C prices.

2. For 1975 through 1981, national average bunker C prices are available from the *Monthly Petroleum Product Price Report (MPPPR)*. Annual average U.S. prices for 1975 and 1976 are calculated as the simple average of the monthly prices for each respective year because annual average prices are not shown in the *MPPPR*.

3. For 1970 through 1974, no U.S. bunker C prices are available. To estimate State-level prices for these years, the average ratio of published bunker C prices and electric utility sector prices for 1975 through 1979 is calculated and multiplied by the State-level electric utility prices for 1970 through 1974.

Missing State prices are assigned adjacent States' average prices from 1970-1986, as shown in Table A43.

Military and Railroad Use. For all years, electric utility sector residual fuel prices are assigned to military and railroad uses. The electric utility prices include taxes. Since the military does not pay State taxes, the electric utility prices are adjusted to remove taxes.

In some cases, States have no reported consumption of residual fuel oil in the electric utility sector and, therefore, no price in that sector. Estimated prices are calculated for electric utilities to be used in the transportation sector for OR in 1971 and for all States that need prices for 1987 forward.

Average Prices. Transportation sector prices are the average of bunker fuel, military, and railroad prices, weighted by each category's share of total transportation consumption from CSEDS.

Btu Prices: All Years

Btu prices for States are calculated from the physical unit prices and the residual fuel conversion factor. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from CSEDS.

Table A43. Residual Fuel Transportation Sector Price Assignments, 1970–1986

State	Years	State Prices Used in the Estimation
AL	1970–1974, 1980–1986	FL, GA, MS
CO	1986	KS, NM, UT
CT	1978	NH, VT
DC	1975	MD
	1978	PA
GA	1978	KY, MS
ID	1970, 1979	CA, CO
IL	1975	IA, IN, WI
IN	1980–1986	IL, MI, OH
KS	1975	MO, NE
KY	1980–1984	IL, MO, OH, VA
MD	1978	DE, PA
ME	1975	VT
MN	1986	IL, MI
MT	1983–1985	CO, MN, SD
NC	1975	GA
	1978	KY
	1981, 1983, 1985, 1986	GA, VA
ND	1982–1984	MN, SD
	1986	SD
NH	1975	VT
NM	1983, 1984	CO
NV	1975, 1978	CA
OH	1975	IN, MI
OK	1975	MO, TX
OR	1972	CA, WA
	1975–1986	CA
SC	1975, 1984	GA
	1978	AL, FL
SD	1975, 1978	MN, ND
TN	1970, 1971, 1973, 1974, 1976, 1977, 1980–1982	AR, GA, MO, MS, VA
	1975	AR, GA, MO, MS
	1978	AR, MO, MS
UT	1984	AZ, CO, NV
	1975	CO
VA	1975	GA
	1978	KY
WA	1984, 1985	CA
WI	1978, 1982–1985	IL, MI, MN
	1986	IL, MI
WV	1985	MD, OH, PA, VA
WY	1981, 1982, 1985	CO, MN, SD

Data Sources

Prices

1982 forward: Energy Information Administration, *Annual Energy Review 1998,* Table 5.20, row titled "Sales Prices to End Users, Residual Fuel Oil, Greater Than 1 Percent Sulfur Content."

1976-1981: Energy Information Administration, *Monthly Petroleum Product Price Report*, Table 3.

1975: Federal Energy Administration, *Monthly Petroleum Product Price Report*, Table 3.

1970-1986: Electric utility sector residual fuel price estimates (in physical units) from CSEDS.

Taxes

For 1992 forward, an annual average general sales tax is calculated for each State as a simple average of the 12 monthly values. This method takes into account tax changes during the year. Prior to 1992, the State general sales tax as of September 1 of each year is used.

1996 and 1997: Federation of Tax Administrators, http://www.taxadmin.org/fta/rate/sales.html.

1995: The Council of State Governments, *The Book of the States 1994–95*, Table 6.21.

1994: U.S. Advisory Committee on Intergovernmental Relations, *Significant Features of Fiscal Federalism,* Tables 14 and 26.

1993: Bureau of the Census, U.S. Department of Commerce, *State Tax Review*, Volume 54, No. 31, map titled "State Gasoline, Sales, and Cigarette Tax Rates as of July 1, 1993," sales tax rates.

1987–1992: Bureau of the Census, U.S. Department of Commerce, *State Government Tax Collections,* Table 8, column titled "Percentage rate, September 1."

1976–1986: Bureau of the Census, U.S. Department of Commerce, *Statistical Abstract of the United States*, table titled "State Government Tax Collections and Excise Taxes," column titled "Excise Taxes, General sales and gross receipts."

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, transportation sector residual fuel consumption, including the subcategories for vessel bunkering, military, and railroad uses.

Conversion Factor: All Years

6.287 million Btu per barrel.

Other Petroleum

Sixteen separate products are included in the category called "other petroleum." Of the 16 products, prices are developed for the 7 noted with asterisks (*) below and described in the following paragraphs. All of these products are assigned to the industrial sector:

1. Aviation gasoline blending components
2. Crude oil
3. Miscellaneous products (*)
4. Motor gasoline blending components
5. Natural gasoline, including isopentane (1970–1983)
6. Pentanes plus (1984 forward)
7. Petrochemical feedstocks, naphtha (*)
8. Petrochemical feedstocks, other oils (*)
9. Petrochemical feedstocks, still gas (1970–1985) (*)
10. Petroleum coke (*)
11. Plant condensate (1970–1983)
12. Special naphthas (*)
13. Still gas
14. Unfinished oils

15. Unfractionated stream (1970–1983)
16. Waxes (*).

Physical Unit Prices: All Years

Only national-level prices are developed for the seven other petroleum products because State-level price information is not available, and taxes are not included in any of the estimates. Consumption for the other nine products are completely removed as process fuel or intermediate products. (See the "Consumption Adjustments for Calculating Expenditures" section on page 417.)

Starting in 1984, three products—natural gasoline, plant condensate, and unfractionated stream—are dropped, and pentanes plus is added in the Energy Information Administration (EIA) reporting system that is the basis of the consumption estimates. Natural gasoline (including isopentane) and plant condensate are reported together as the new product, pentanes plus. Unfractionated stream is dropped because its components are reported separately as liquefied petroleum gases.

Miscellaneous Products

The products in this category vary from inexpensive (absorption oils similar to kerosene) to very expensive (hydraulic fluids). The price estimates are based on the evidence presented in the Bureau of Mines *Minerals Yearbooks* of the 1970's indicating that the greater part of the miscellaneous product line consists of finished petrochemicals, especially the aromatic hydrocarbons: benzene, toluene, and the xylenes.

Price estimates for 1972, 1977, 1982, 1987, and 1992 are taken from *Census of Manufactures (CM)* data on quantity and value of "aromatics" and "other finished petroleum products" shipped by petroleum refining industries, i.e., Standard Industrial Code (SIC) 2911. The ratio of miscellaneous-products-to-crude-oil price for these 5 years varies widely. The following ratios, shown rounded, are used to estimate miscellaneous products prices for the years indicated:

1970 – 1974:	1.91 times the crude oil price
1975 – 1979:	2.42 times the crude oil price
1980 – 1984:	1.56 times the crude oil price
1985 – 1989:	1.99 times the crude oil price
1990 – forward:	1.86 times the crude oil price.

Quantity data for 1992 are published in pounds and are converted to barrels by use of the conversion factors of 7.282 pounds per gallon and 42 gallons per barrel.

Data from the U.S. Census Bureau *Economic Census 1997* are not used in CSEDS estimates because only the value of shipments are published. The quantity data are not published because they are reported in a various units (pounds, barrels, etc.) and cannot be summed.

Price Data Sources

1970 Forward: Energy Information Administration, *Annual Energy Review 1998,* Table 5.19, column titled "Composite, Nominal."

1972, 1977, 1982, 1987, 1992: Bureau of the Census, U.S. Department of Commerce, *Census of Manufactures*, data for Standard Industrial Code (SIC) 2911 on "Quantity and Value of Shipments by All Producers" as shown in Table 6a from MC77-I-29A, Product Codes 2911054, 2911056 (1972 and 1977); Table 6a-1 from MC87-I-29A, Product Codes 2911D55 and 2911D57 (1982 and 1987); and Table 6a-1 from MC92-I-29A, Product Codes 2911D 55 and 2911D 57 (1992) .

Physical Unit Conversion Factors

1992: Gas Processors Suppliers Association in cooperation with the Gas Processors Association, *Engineering Data Book*, 9th Edition, 4th Revision, 1979, pages 16-2 and 16-3, lines 42-47.

Petrochemical Feedstocks, Naphtha

Naphthas for petrochemical feedstock use are those oils with boiling points less than 401° F. Consumer prices for 1978 through 1980 are derived from the special *Annual Survey of Manufactures (ASM)* series on "Hydrocarbon, Coal, and Coke Materials Consumed" by using data for industries in SIC 2869 (industrial organic chemicals) and SIC 2821 (plastics materials, synthetic resins, and nonvulcanizable elastomers). A price estimate for 1982 is obtained from the *CM* and is based on data for SIC 2869 only. Since the ratio of petrochemical-naphtha-to-crude-oil

price is reasonably constant in 1978, 1979, 1980, and 1982, the simple average of the four ratios, 1.23, is used to estimate prices for petrochemical feedstocks, naphthas, for all other years.

Price Data Sources

1970-1977, 1981, 1983 forward: Energy Information Administration, *Annual Energy Review 1997,* Table 5.19, column titled "Composite, Nominal."

1982: Bureau of the Census, U.S. Department of Commerce, *1982 Census of Manufactures*, M82-I-28F-3(P), page 6, SIC 2869.

1980: Bureau of the Census, U.S. Department of Commerce, *1980 Annual Survey of Manufactures*, M80(AS)-4.3, page 9, SIC 2821.

1978, 1979: Bureau of the Census, U.S. Department of Commerce, *1979 Annual Survey of Manufactures*, M79(AS)-4.3, page 8, SIC 2821 and 2869.

Petrochemical Feedstocks, Other Oils

Petrochemical feedstocks referred to as "other oils" or "gas oils" are those oils with boiling points equal to or greater than 401° F. Consumer prices for 3 years are obtained from the data on gas oils presented in the special *ASM* series on hydrocarbons consumed by using data for industries in SIC 2865 (cyclic crudes and intermediates). The other-oils-to-crude-oil price ratio is quite stable, and the average ratio for the 3-year period, 1.607, is used to estimate prices for petrochemical feedstocks, other oils, for all other years.

Price Data Sources

1970–1977, 1981 forward: Energy Information Administration, *Annual Energy Review 1997,* Table 5.19, column titled "Composite, Nominal."

1979, 1980: Bureau of the Census, U.S. Department of Commerce, *1980 Annual Survey of Manufactures*, M80(AS)-4.3, page 9, SIC 2865.

1978: Bureau of the Census, U.S. Department of Commerce, *1979 Annual Survey of Manufactures*, M79(AS)-4.3, page 8, SIC 2865.

Petrochemical Feedstocks, Still Gas (1970 Through 1985)

The source data for still gas is a mixture of consumer prices and producer prices for industries in SIC 2869 and SIC 2911 (petroleum refining). The still-gas-to-crude-oil price ratio is somewhat variable because still gas is a highly variable gaseous mixture. Value and quantity are available for 1972, 1977 through 1980, and 1982. In imputing prices for years when data from the *CM* or *ASM* are not available, the average still-gas-to-crude-oil price ratio, 0.759, is used. After 1985, EIA data series no longer report feedstock and refinery use of still gas separately and all CSEDS industrial consumption is removed from *SEPER*. (See the "Consumption Adjustments for Calculating Expenditures" section on page 417.)

Price Data Sources

1970, 1971, 1981, 1983–1985: Energy Information Administration, *Annual Energy Review 1997,* Table 5.19, "Composite, Nominal."

1982: Bureau of the Census, U.S. Department of Commerce, *1987 Census of Manufactures*, MC87-I-29A, Table 6a, SIC 2911.

1979, 1980: Bureau of the Census, U.S. Department of Commerce, *1980 Annual Survey of Manufactures*, M80(AS)-4.3, page 9, SIC 2869.

1978: Bureau of the Census, U.S. Department of Commerce, *1979 Annual Survey of Manufactures*, M79(AS)-4.3, page 28, SIC 2869.

1972, 1977: Bureau of the Census, U.S. Department of Commerce, *1977 Census of Manufactures*, MC77-1-29A, page 29A-20, SIC 2911.

Petroleum Coke

Petroleum coke is consumed by the industrial and electric utility sectors. The portion of petroleum coke consumed by the electric utility sector (about 3 percent in 1994) is described in the **Petroleum Coke (Utilities)** section on page 391. The remaining petroleum coke is marketed to industrial consumers in two forms, calcined and uncalcined. Calcined coke is about three times as expensive as uncalcined. A quantity-weighted U.S. average price is calculated by using U.S. Department of Commerce exports data and is assigned to all States with industrial

petroleum coke consumption. The weighted average price is calculated by dividing the sum of the values of calcined and uncalcined petroleum coke exports by the sum of the two quantities exported. The physical unit conversion factor for petroleum coke is 5 barrels per short ton.

Price Data Sources

1989 forward: Bureau of the Census, U.S. Department of Commerce, December issues of EM-545, *Foreign and Domestic Exports*, for Petroleum Coke, Not Calcined, Commodity 2713110000 and Petroleum Coke, Calcined, Commodity 2713120000.

1988: Bureau of the Census, U.S. Department of Commerce, December issue of EM-522, *U.S. Exports, Schedule B, Community by Country*, Petroleum Coke, Except Calcined, Commodity 5213150, and Petroleum Coke, Calcined, Commodity 5175120.

1987: Bureau of the Census, U.S. Department of Commerce, December issue of EM-622, *U.S. Exports, Schedule B, Commodity by Country*, Petroleum Coke, Except Calcined, Commodity 5213150, and Petroleum Coke, Calcined, Commodity 5175120.

1986: Bureau of the Census, U.S. Department of Commerce, December issue of EM-546, *U.S. Exports, Schedule B, Commodity by Country*, Petroleum Coke, Except Calcined, Commodity 5213150, and Petroleum Coke, Calcined, Commodity 5175120.

1978–1985: Bureau of the Census, U.S. Department of Commerce, FT-446, U.S. Exports, Schedule B, Commodity by Country, Petroleum Coke, Except Calcined, Commodity 5213150, and Petroleum Coke, Calcined, Commodity 5175120.

1970-1977: Bureau of the Census, U.S. Department of Commerce, December issues of FT-410, *U.S. Exports, Schedule B, Commodity by Country*, Petroleum Coke, Except Calcined, Commodity 3329420, and Petroleum Coke, Calcined, Commodity 3329410.

Special Naphthas

Prices for special naphthas are developed as the simple averages of the city prices for "varnish makers and painters naphtha" and two types of "solvent naphtha" that are published in the *Chemical Marketing Reporter*. For 1984 forward, the prices are averaged from the first issue of each month; for 1974, 1979, and 1980, when petroleum prices were increasing rapidly, prices are averaged from 10 randomly selected issues; and for all other years, prices are averaged from at least 5 randomly selected issues.

Price Data Source

1970 forward: Schnell Publishing Co., Inc., *Chemical Marketing Reporter,* selected monthly issues.

Waxes

Waxes data include fully refined crystalline wax, other refined crystalline wax, and microcrystalline wax. Price estimates for 1970 through 1973 and 1986 forward are obtained by dividing the value of exports by the quantity exported. For 1974 through 1985, prices are estimated by applying price indices to a representative base price. Producer prices for 1967 for the three waxes are available from data in the 1967 *Census of Manufactures*. A weighted-average price for 1967 of $15.75 per barrel is obtained by summing the values of shipments of the three waxes and dividing the sum by the total quantity shipped. An annual composite price index for these three waxes is listed in the Bureau of Labor Statistics publication *Producer Prices and Producer Price Indexes* for April 1974 through June 1985. Price estimates for 1975 through 1984 are derived by multiplying the published price indices by the estimated 1967 base price. The indices for 1974 and 1985 are estimated as the simple average of monthly price indices that are available for that year. The physical unit conversion factors for wax are 280 pounds per barrel; and 1 pound equals 0.45359237 kilograms.

Price Data Sources

1989 forward: Bureau of the Census, U.S. Department of Commerce, December issues of Report No. EM-545, titled *Foreign and Domestic Exports* for Paraffin Wax Less Than 0.75 Percent Oil (Commodity 2712200000) and Other Mineral Waxes NESOI (Commodity 2712900000).

1987, 1988: Bureau of the Census, U.S. Department of Commerce, December issues of Report No. EM-546 (1987) and EM-522 (1988), titled *U.S. Exports, Schedule B, Commodity by Country* for "Paraffin Wax and Other Petroleum Waxes Unblended incl Microcrystalline Wax (Commodity 4925200)".

1986: Bureau of the Census, U.S. Department of Commerce, December issue of EM-546, *U.S. Exports, Schedule B, Commodity by Country* for "Paraffin Wax, Crystalline, Fully Refined (Commodity 4925210)," "Paraffin Wax, Crystalline, Except Fully Refined (Commodity 4925220)," and "Petroleum Waxes, NSPF incl Microcrystalline Wax (Commodity 4925240)".

1974–1985: Bureau of Labor Statistics, U.S. Department of Labor, *Producer Prices and Producer Price Indexes, Annual Supplement*, Commodity Code 0577.

1974–1985: Bureau of the Census, U.S. Department of Commerce, *Census of Manufactures*, 1967, page 29 A-15, quantity and value of shipments of waxes in 1967.

1970–1973: Bureau of the Census, U.S. Department of Commerce, December issues of FT-410, *U.S. Exports, Schedule B, Commodity by Country* for Paraffin Wax, Crystalline, Fully Refined (Commodity 3326220), Paraffin Wax, Crystalline, Except Fully Refined (Commodity 3326230), and Microcrystalline Wax (Commodity 3326210).

Table A44. Other Petroleum Products Btu Conversion Factors

Petroleum Product	Million Btu per barrel
Miscellaneous Products	5.796
Petrochemical Feedstocks	
Naphtha	5.248
Other Oils	5.825
Still Gas	6.000
Petroleum Coke	6.024
Special Naphthas	5.248
Waxes	5.537

Btu Prices: All Years

Btu prices for the seven petroleum products are calculated by converting physical unit prices from dollars per barrel to dollars per million Btu by using the conversion factors shown in Table A44. The U.S. average price that is developed for each product is assigned to the industrial sector of States in years where there is consumption. The State-level and U.S. "other petroleum" average prices are the average of the seven petroleum products, weighted by CSEDS consumption data. The variable State average prices reflect the different mix of products consumed.

Table A45 shows national-level estimated prices and expenditures for the other petroleum product components for the years 1970 through 1995.

Table A45. Other Petroleum Price and Expenditure Estimates for the Industrial Sector, United States, 1970 Through 1997

Year	Petrochemical Feedstocks			Petroleum Coke	Special Naphthas	Waxes	Miscellaneous Products	Average Price	Total Expenditure
	Naphtha	Other Oils	Still Gas						
	Prices in Dollars per Million Btu								
1970	0.80	0.94	0.43	0.43	1.96	4.14	1.12	1.06	—
1971	0.84	0.99	0.46	0.52	2.00	3.97	1.18	1.08	—
1972	0.84	0.99	0.48	0.49	2.00	4.23	1.18	1.08	—
1973	0.97	1.15	0.53	0.50	2.08	4.63	1.37	1.24	—
1974	2.13	2.50	1.15	0.59	2.60	4.63	2.99	2.23	—
1975	2.43	2.86	1.31	1.12	3.12	4.95	3.85	2.66	—
1976	2.55	3.00	1.38	1.24	3.12	5.51	4.55	2.97	—
1977	2.80	3.30	1.66	1.45	3.12	6.26	4.99	3.24	—
1978	3.24	3.42	1.19	1.34	3.12	7.75	5.20	3.37	—
1979	3.66	4.97	2.88	1.47	5.04	9.43	7.40	4.78	—
1980	6.68	7.64	4.04	1.70	10.48	12.01	7.57	7.29	—
1981	8.26	9.72	4.46	2.14	10.72	13.85	9.51	8.51	—
1982	7.26	8.79	2.72	1.61	10.72	15.76	8.60	7.68	—
1983	6.80	8.00	3.67	1.14	10.72	14.29	7.82	7.52	—
1984	6.71	7.90	3.62	1.12	11.13	13.48	7.72	7.38	—
1985	6.27	7.38	3.39	1.21	10.87	13.38	9.17	7.09	—
1986	3.41	4.01	([a])	0.98	10.73	14.70	4.99	4.56	—
1987	4.20	4.94	([a])	0.94	10.73	13.85	6.14	5.14	—
1988	3.44	4.05	([a])	0.91	10.84	11.89	5.03	4.31	—
1989	4.21	4.96	([a])	1.16	10.00	18.19	6.16	5.08	—
1990	5.21	6.13	([a])	1.35	9.71	14.74	7.13	5.73	—
1991	4.47	5.26	([a])	1.15	9.71	16.33	6.12	5.13	—
1992	4.32	5.08	([a])	0.86	9.71	24.75	5.91	4.93	—
1993	3.85	4.53	([a])	0.71	9.71	19.10	5.27	4.56	—
1994	3.65	4.30	([a])	0.77	9.71	24.75	5.00	4.40	—
1995	4.04	4.75	([a])	0.90	9.71	23.89	5.53	4.69	—
1996	4.85	5.71	([a])	1.75	9.71	22.95	6.65	5.51	—
1997	4.46	4.46	([a])	1.69	9.50	24.62	6.11	4.82	—
	Expenditures in Millions of Dollars								
1970	239.3	171.1	32.4	57.3	323.0	105.6	96.3	—	1,025.0
1971	251.7	217.4	44.2	77.6	312.5	115.4	102.4	—	1,121.2
1972	255.4	292.9	41.9	85.1	334.6	126.6	104.4	—	1,240.9
1973	289.9	404.7	39.2	78.3	352.0	178.1	149.9	—	1,492.0
1974	690.7	819.6	99.0	77.8	436.5	174.3	419.8	—	2,717.8
1975	683.3	793.1	123.9	167.8	450.3	166.4	729.4	—	3,114.1
1976	981.3	1,086.8	144.3	172.8	493.2	220.1	1,250.6	—	4,349.1
1977	1,092.6	1,887.1	175.1	269.4	514.2	209.0	1,553.6	—	5,701.1
1978	1,272.3	2,434.3	142.9	207.9	618.3	266.5	1,408.0	—	6,350.2
1979	1,667.4	4,209.0	227.4	166.7	1,011.6	317.6	1,853.1	—	9,452.6
1980	3,173.1	6,564.0	371.0	167.0	2,022.4	395.3	1,798.6	—	14,491.2
1981	3,638.7	7,074.4	190.7	443.9	1,520.6	504.5	1,995.3	—	15,368.0
1982	2,294.5	4,588.5	121.5	272.8	1,415.8	448.9	1,581.8	—	10,723.8
1983	1,928.0	4,092.7	201.5	105.0	1,663.6	442.8	1,289.7	—	9,723.4
1984	1,852.7	3,712.2	251.4	146.2	2,308.4	413.7	1,093.6	—	9,778.2
1985	1,478.5	3,728.8	256.2	157.3	1,732.8	419.9	1,308.2	—	9,081.7
1986	1,164.1	2,449.3	([a])	122.0	1,393.8	449.7	682.4	—	6,261.4
1987	1,459.4	2,742.1	([a])	177.0	1,553.9	453.2	843.0	—	7,228.6
1988	1,222.6	2,360.0	([a])	178.1	1,236.5	403.8	837.9	—	6,238.9
1989	1,636.6	2,704.1	([a])	216.6	1,072.7	608.5	944.2	—	7,182.8
1990	1,811.3	4,621.6	([a])	318.9	1,040.4	491.0	982.8	—	9,265.9
1991	1,335.5	4,350.1	([a])	246.2	854.8	573.7	933.5	—	8,293.7
1992	1,629.0	4,141.4	([a])	261.2	1,015.8	922.0	591.8	—	8,561.2
1993	1,348.4	3,821.3	([a])	168.1	1,016.0	764.4	498.8	—	7,617.1
1994	1,455.5	3,607.0	([a])	200.3	787.4	1,004.3	529.6	—	7,584.0
1995	1,506.1	3,807.5	([a])	243.8	688.0	969.6	537.0	—	7,752.1
1996	2,326.5	4,168.8	([a])	505.6	724.2	1,117.1	591.7	—	9,433.9
1997	2,393.6	3,843.3	([a])	444.6	686.3	1,076.8	597.2	—	9,041.8

[a] Consumption data for this series are not available after 1985. See text.
—=Not applicable.

Note: Expenditure totals may not equal sum of components due to independent rounding.
Source: Combined State Energy Data System 1997.

Section 5. Renewable Energy Sources

Prices and expenditures for renewables energy sources are based on consumption estimates from the Combined State Energy Data System (CSEDS). Renewable energy sources reported in CSEDS include estimates of the residential and commercial sectors' use of solar and wood energy for 1990 forward; industrial sector consumption of hydroelectric power for all years; industrial use of solar, wind, geothermal, and wood and waste from 1990 forward; and electric utilities' use of hydropower and geothermal, wind, wood, waste, photovoltaic and solar thermal energy for all years. Transportation use of ethanol is included in the motor gasoline volumes in CSEDS for all years.

Hydroelectric, Geothermal, Wind, Photovoltaic, and Solar Thermal Energy

In CSEDS, it is assumed that there are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy. CSEDS consumption values are adjusted by removing these fuels before calculating energy expenditures, as described in Section 7, "Consumption Adjustments for Calculating Expenditures," on page 417.

Wood and Waste

Prices are estimated for wood and waste in CSEDS. It is assumed that taxes are included in the prices reported on the Energy Information Administration Residential Energy Consumption Survey and the Manufacturing Energy Consumption Survey, which are used as the basis for the CSEDS price estimates.

Residential and Commercial Sectors

Physical Unit Prices, All Years

Prices paid for wood by the residential sector for 1970 forward are based on unpublished data from the Form EIA-457 "1980 Residential Energy Consumption Survey" (RECS 1980), and the "1993 Residential Energy Consumption Survey" (RECS 1993). The reported prices include taxes. The nine Census division average prices for residential wood from RECS 1980 are used to estimate prices for 1970 through 1989. The 1980 Census division residential wood prices are adjusted in proportion to the changes in U.S. average residential fuel oil prices each year compared to the 1980 fuel oil price. The Census division estimated prices are assigned to the States within each Census division for 1970 through 1989. The four Census region average prices for residential wood from RECS 1993 are used to estimate prices for 1990 forward. The 1993 Census division wood prices are adjusted in proportion to the changes in U.S. average residential fuel oil prices each year compared to the 1990 fuel oil price. The estimated Census region wood prices are assigned to the States within each Census region for 1990 forward.

The State-level residential wood prices are used for the commercial sector in all years.

Btu Prices, All Years

Prices in dollars per cord are converted to dollars to million Btu using the conversion factor of 20 million Btu per cord.

Data Sources

Prices

1990 forward: Energy Information Administration, unpublished data from Form EIA-457, "1993 Residential Energy Consumption Survey," Census region compilation of the answers to questions J-28 and J-33 through J-36.

1970–1989: Energy Information Administration, unpublished data from Form EIA-457, "1980 Residential Energy Consumption Survey," Census division compilation of data on average prices paid for wood purchased in 1980.

1970 forward: Energy Information Administration, U.S. average residential distillate fuel prices (DFRCDUS) from CSEDS.

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, residential and commercial wood and waste consumption adjusted as described in Section 7, "Consumption Adjustments for Calculating Expenditures," on page 417.

Conversion Factor

20 million Btu per cord.

Industrial Sector

The industrial sector wood and waste consumption estimates and prices in CSEDS are developed by dividing industrial sector consumers into two groups—manufacturing industries, i.e., three or four Standard Industrial Classification (SIC) categories and nonutility power producers. Wood and waste consumption are estimated separately within the categories. The State-level industrial sector wood and waste prices are consumption-weighted averages of the consumption and prices of the individual categories. The consumption data used in the calculations are adjusted to account for wood and waste obtained at no cost. See the discussion in Section 7, "Consumption Adjustments for Calculating Expenditures" on page 417.

Btu Prices, 1994 Forward

Manufacturing Industries

For 1994 forward, industrial sector wood and waste prices are consumption-weighted averages based on unpublished data from the Form EIA-846 "1994 Manufacturing Energy Consumption Survey" (MECS 1994). MECS 1994 collects data on quantities consumed and quantities purchased in million Btu and expenditures in dollars for five types of wood and waste—pulping liquor, agricultural waste, wood harvested from trees, wood refuse and byproducts from mills, and wood and paper refuse. The quantities purchased and the expenditures are used to calculate average prices for each type of wood and waste. MECS 1994 also identifies consumption of the different types of wood and waste by SIC categories 20, 24, 25, 26, and other (a subtotal of SIC codes 21–23 and 27–30). For each of the SIC codes, an average wood and waste price is calculated by using the consumption of each of the five types of wood and waste to weight the average of their respective prices. These average prices by SIC code for 1994 are applied to the CSEDS estimates of wood and waste consumption by SIC code in each State to calculate State-level weighted average prices for 1994 forward. The CSEDS consumption data used to calculate expenditures are reduced to account for quantities obtained at no cost. See the discussion in Section 7, "Consumption Adjustments for Calculating Expenditures" on page 417.

Nonutility Power Producers

Although quantities of wood and waste used by nonutility power producers are available, prices are not available. The CSEDS electric utility sector annual average prices for wood and for waste are calculated and assigned to the nonutility power producers consumption each year. The consumption data are adjusted to account for quantities obtained at no

cost. See the discussion in Section 7, "Consumption Adjustments for Calculating Expenditures" on page 417.

Btu Prices, 1990 through 1993

Manufacturing Industries

For 1990 through 1993, industrial sector wood and waste prices are consumption-weighted averages based on unpublished data from the Form EIA-846 "1991 Manufacturing Energy Consumption Survey" (MECS 1991). MECS 1991 collects data on quantities consumed and quantities purchased in million Btu and expenditures in dollars for five types of wood and waste—waste materials, pulping liquor, round wood, wood chips, and biomass. The quantities purchased and the expenditures are used to calculate average prices for each type of wood and waste. MECS 1991 also identifies consumption of the different types of wood and waste by SIC categories 20, 24, 26, and other (a subtotal of SIC industries 21–25 and 27–30). For each of the SIC categories, an average wood and waste price is calculated by using the consumption of each of the five types of wood and waste to weight the average of their respective prices. These average prices by SIC code for 1991 are applied to the CSEDS estimates of wood and waste consumption by SIC code in each State to calculate State-level weighted average prices for 1990 through 1993. The CSEDS consumption data used to calculate expenditures are reduced to account for quantities obtained at no cost. See the discussion in Section 7, "Consumption Adjustments for Calculating Expenditures" on page 417.

Nonutility Power Producers

Although quantities of wood and waste used by nonutility power producers are available, prices are not available. The CSEDS electric utility sector annual average prices for wood and for waste are calculated and assigned to the nonutility power producers consumption each year. The consumption data are adjusted to account for quantities obtained at no cost. See the discussion in Section 7, "Consumption Adjustments for Calculating Expenditures" on page 417.

Btu Prices, 1986 through 1989

Manufacturing Industries

For 1986 through 1989, industrial sector wood and waste prices are consumption-weighted averages based on data from the Form EIA-846 "1988 Manufacturing Energy Consumption Survey" (MECS 1988). MECS 1988 collects data on inputs of energy for heat, power, and electricity generation and quantities purchased in billion Btu and expenditures in dollars for five types of wood and waste—waste materials, pulping liquor, round wood, wood chips, and biomass. The quantities consumed and the expenditures are used to calculate average prices for each type of wood and waste. MECS 1998 also identifies consumption of the different types of wood and waste by SIC categories 20, 24, 26, and other (mainly SIC 25). For each of the SIC codes, an average wood and waste price is calculated by using the consumption of each of the five types of wood and waste to weight the average of the respective prices. These average prices by SIC code for 1988 are applied to the CSEDS estimates of wood and waste consumption by SIC code in each State to calculate State-level weighted average prices for 1986 through 1989. The CSEDS consumption data used to calculate expenditures are reduced to account for quantities obtained at no cost. See the discussion in Section 7, "Consumption Adjustments for Calculating Expenditures" on page 417.

Nonutility Power Producers

Information on nonutility power producers' use of wood and waste became available beginning with 1989 data. Although quantities of wood and waste used by nonutility power producers are available for 1989, prices are not available. The CSEDS electric utility sector annual average prices for wood and for waste are calculated and are assigned to the nonutility power producers' consumption in 1989. The consumption data are adjusted to account for quantities obtained at no cost. See the discussion in Section 7, "Consumption Adjustments for Calculating Expenditures" on page 417.

Btu Prices, 1980 through 1985

For 1980 through 1985, industrial sector wood and waste prices are consumption-weighted averages based on data published in the

Manufacturing Energy Consumption Survey: Consumption of Energy, 1985 (MECS 1985), Table 2. MECS 1985 contains data on inputs of energy for heat, power, and electricity generation in trillion Btu for two types of wood and waste—major byproducts and other. MECS 1985 also identifies consumption of the two types of wood and waste by the SIC categories 20, 24, 26, and other (mainly SIC 25). Since no price data were collected on MECS 1985, the average prices for each of the SIC categories developed from MECS 1988 are applied to the MECS 1985 estimates of wood and waste consumption by SIC code in each State to calculate State-level weighted average prices for 1980 through 1985. The CSEDS consumption data used to calculate expenditures are reduced to account for quantities obtained at no cost. See the discussion in Section 7, "Consumption Adjustments for Calculating Expenditures" on page 417.

Btu Prices, 1970 through 1979

There are no data available for estimating industrial prices for wood and waste in 1970 through 1979. Therefore, the 1980 State-level average industrial sector wood and waste prices are used for all States in 1970 through 1979.

Data Sources

Prices

1994 forward: Energy Information Administration, unpublished data from Form EIA-846, "1994 Manufacturing Energy Consumption Survey," national data on quantities purchased, quantities consumed as fuel, and expenditures for pulping liquor, agricultural waste, wood harvested from trees, wood refuse and byproducts from mills, and wood and paper refuse, by Standard Industrial Classifications (SIC) categories.

1989 forward: Energy Information Administration, CSEDS electric utility sector national annual consumption-weighted average prices for wood and waste.

1990 forward: Energy Information Administration, CSEDS wood and waste consumption by SIC categories 20, 24, 25, 26, and other (SIC 21–23 and 27–30) developed from the U.S. Department of Commerce, Bureau of the Census, *1992 Census of Manufactures, Industry Series,* Table 2, data on value added in manufacture and number of employees.

1990 through 1993: Energy Information Administration, unpublished data from Form EIA-846, "1991 Manufacturing Energy Consumption Survey," national data on quantities purchased, quantities consumed as fuel, and expenditures for waste materials, pulping liquor, round wood, wood chips, and biomass.

1986 through 1989: Energy Information Administration, unpublished data from Form EIA-846, "1988 Manufacturing Energy Consumption Survey," national data on inputs of energy for heat, power, and electricity generation, quantities purchased, and expenditures for waste materials, pulping liquor, round wood, wood chips, and biomass by SIC categories.

1986 through 1989: Energy Information Administration, CSEDS wood and waste consumption by Standard Industrial Code for 1987 developed from the U.S. Department of Commerce, Bureau of the Census, *1992 Census of Manufactures, Industry Series,* Table 2, revised 1987 data on value added in manufacture and number of employees.

1980 through 1985: Energy Information Administration, DOE/EIA-0512(85) *Manufacturing Energy Consumption Survey: Consumption of Energy, 1985*, Table 2. National data on inputs of energy for heat, power, and electricity generation for "Major Byproducts" and "Other" by SIC categories.

1980 through 1985: Energy Information Administration, CSEDS wood and waste consumption by Standard Industrial Code for 1982 developed from the U.S. Department of Commerce, Bureau of the Census, *1982 Census of Manufactures, Industry Series,* Table 2, data on value added in manufacture and number of employees.

1970 through 1979: Energy Information Administration, CSEDS 1980 State-level prices for industrial wood and waste.

Consumption

1970 forward: Energy Information Administration, CSEDS, industrial biofuels consumption adjusted as described in Section 7, "Consumption Adjustments for Calculating Expenditures," on page 417.

Transportation Sector

Biomass fuels consumed in the transportation sector as ethanol mixed in gasoline is included in the motor gasoline volumes for all applicable years. Ethanol quantities and costs are included in the volumes and prices of motor gasoline.

Electric Utility Sector

State-level data on the amount of electricity generated at electric utilities from wood and waste are taken from CSEDS and are collected on the Form EIA-759, "Monthly Power Plant Report." All electric utilities are required to report on EIA-759 but no price data are collected. State and national wood and waste prices in dollars per million Btu are developed for the electric utility sector from data reported on other EIA and Federal Energy Regulatory Commission (FERC) forms and from telephone surveys. Taxes are included in the prices for all years.

Prices: All Years

1989 Forward. State-level prices for biomass fuels used at electric utilities, in dollars per million Btu, are calculated from data obtained from FERC Form 1, FERC-423, and Form EIA-412 and by follow-up telephone surveys of the electric utilities that are not required to submit those forms. For States with more than one utility using biomass fuels, a consumption-weighted average price is calculated. There are anomalies that are unique to biomass fuels used at utilities. In some cases, there is no charge for the fuel. In other cases of municipal and industrial waste, the electric utilities charge a "tipping fee" for accepting the waste. That is, instead of paying for the fuel, the electric utilities are paid to take the fuel. For States where all utilities pay nothing for the fuel or charge a fee for receiving it (see Table A46), a price of zero is assigned. Although the corresponding consumption is included in calculating the average price for fuels consumed by electric utilities in the State and the United States, the expenditure included is zero. The State and U.S. average electric utility fuel prices are, therefore, slightly lower because some of the fuel did not cost anything.

1983 Through 1988. A U.S. average price in dollars per million Btu is calculated and assigned to all States. The national price is a consumption-weighted average price based on data obtained from FERC Form 1 and Form EIA-412 and by follow-up telephone surveys of the electric utilities that report use of biomass fuels for generating electricity.

Prices are erratic for biomass fuels used at utilities. In addition to the anomalies of no charge for the fuel and the "tipping fee" mentioned above, handling refuse-derived fuel is more labor intensive than handling conventional fossil fuels. The labor expenses are included in the plant's operating costs, not the fuel costs. Biomass fuels prices are also erratic because the demand is relatively small and the pricing mechanism, even for a single facility, may change from year to year. A price or quantity change by a single major user affects the national price more significantly than for any other fuel.

1978 Through 1982. National average prices are derived from data collected on FPC Form 423 and published monthly by EIA in *Cost and Quality of Fuels for Electric Utility Plants (C&Q).* For these years, fossil-fueled plants with a combined capacity of 25 megawatts or greater were required to report on FPC Form 423. Annual prices of biomass fuels sold to electric utilities are developed as quantity-weighted monthly prices for those plants where wood chips and refuse were used as fuel. Beginning in 1983, the reporting threshold was raised to 50 megawatts,

Table A46. Wood and Waste Used at Electric Utilities at No Cost or For a Fee, 1989 Forward

State	Years
California	1989–1997
Connecticut	1989–1997
Hawaii	1989, 1990
Montana	1989–1994
Ohio	1989–1993

and very few plants reported use of biomass fuels on the Form 423 in 1983 and subsequent years.

A detailed review of data in *C&Q* showed that some entries were in error by factors of 10, 100, or 1,000. Accordingly, the following corrections were made. For 1982, the February, March, and April quantities for the Florida Power Corporation were divided by 1,000 to make them 80, 40, and 60 short tons, respectively. The March, April, and May costs for Northern States Power were multiplied by 100 to make them $0.70 per million Btu. For the 5 months from November 1979 through March 1980, the reported quantities of wood delivered to Burlington Electric Co. were divided by 10 in order to place them in the range of 7,980 to 9,390 short tons. For the 8 months from June 1978 through January 1979, seed corn delivered to the Logansport Indiana Electric Department were included in the biomass fuel. For February 1978, the reported quantity of wood delivered to the United Power Associates was divided by 1,000 to make it 90 short tons.

1970 Through 1977. The annual prices for wood chips are derived by deflating the 1978 price by using the gross domestic product implicit price deflator based on 1987 dollars. The deflators are shown in Table A47.

Table A47. Price Deflators Used for Wood and Waste Prices, 1970–1977

Years	Deflator	Years	Deflator
1970	35.1	1975	49.2
1971	37.1	1976	52.3
1972	38.8	1977	55.9
1973	41.3	1978	60.3
1974	44.9		

Data Sources

Prices

1983 forward: Energy Information Administration, data reported on FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others;" Form EIA-412, "Annual Report of Public Electric Utilities;" FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants;" and follow-up telephone surveys of the electric utilities that report use of biomass fuels for generating electricity.

1978-1982: Energy Information Administration, *Cost and Quality of Fuels for Electric Utility Plants*, table titled "Wood Chips, Refuse, and Petroleum Coke Used as Fuel by Steam-Electric Plants."

1970-1978: Energy Information Administration, *Annual Energy Review 1991*, Appendix C, Gross Domestic Product and Implicit Price Deflator.

Consumption

1970 forward: Energy Information Administration, CSEDS, electricity generated from consumption of wood and waste.

Section 6. Electricity

Electricity Consumed by End-Use Sectors

Electricity prices are retail prices for sales to ultimate users. Prices are developed for the residential, commercial, industrial, and transportation sectors. In general, taxes are included in the prices. However, taxes collected by a utility from an end user and turned over to a government authority are generally not included in the revenues reported in the Energy Information Administration (EIA) *Electric Sales and Revenue* and *Electric Power Annual* or the Edison Electric Institute *Statistical Yearbook* and are not included in the prices. Taxes paid by the utility (rather than the end user) are considered operating costs and are passed on to the end user as part of the rate. Therefore, Federal, State, business, and property taxes are typically included in the prices, while sales and other point-of-purchase taxes usually are not.

Consumption is based on sales by electric utilities to ultimate users. Electricity consumption data by State for the residential, commercial, industrial, and transportation sectors are obtained from the EIA Combined State Energy Data System (CSEDS). Consumption of electricity in the industrial sector is adjusted for estimated refinery use in each State. (See the discussion in Section 7, "Consumption Adjustments for Calculating Expenditures," on page 417.)

Physical Unit Prices: 1987 Forward

For 1987 forward, physical unit prices for States are calculated for all four sectors as the average revenue per unit of sales by all electric utilities reporting sales to a State. Revenue and sales data from the *Electric Sales and Revenue* (1990 forward) and *Electric Power Annual* (1987 through 1989) are used to calculate physical unit prices. Data for the residential and industrial sectors are drawn from their respective columns. Data for the transportation sector are taken from the column titled "Other" that includes sales to railroads and railways. CSEDS consumption is used to determine the portion of the data in the column titled "Other" that is not sold to the transportation sector. These data are added to the column titled "Commercial" to arrive at the revenues and sales data for the commercial sector.

Physical Unit Prices: 1970 Through 1986

For 1970 through 1986, preliminary physical unit prices for States are calculated for all four sectors as the average revenue per unit of sales by all electric utilities reporting sales to a State. The calculation of physical prices is based upon the revenues and sales data from the *Statistical Yearbook* for each year in the series. Data for the residential sector and industrial sector are drawn from their respective columns. The commercial sector is the sum of the columns titled "Commercial," "Street and Highway Lighting," "Other Public Authorities," and "Interdepartmental." The transportation sector is the column titled "Railroads and Railways."

For 1980 through 1986, prices are based on preliminary revenues and sales data in the given year and are replaced with revised data in the following year. The only exception to this rule is the revenues data for AR in 1981; preliminary data are used in this case because of an apparent error in the revised data.

For 1970 through 1981, MD prices are assigned to DC. There are no other missing prices for the residential, commercial, and industrial sectors.

In the transportation sector, numerous price assignments are made due to the lack of sector-specific price data. Generally, electricity usage in the transportation sector is small; the sector's electricity use ranged from 0.1 percent to 0.2 percent of total U.S. electricity consumption in 1970 through 1986. From 1970 through 1986, only 15 States used measurable amounts of electricity in the transportation sector (CA, DC, FL, GA, IL, LA, MA, MD, NJ, NY, OH, PA, TN, VA, and WA). A few individual State prices are unavailable and are assigned the commercial sector prices: LA for 1970 through 1986 and TN for 1970 through 1986. (Prices are available for LA in 1970, 1972, 1973, but those prices are replaced by commercial sector prices to maintain a consistent series for the State.) In addition, MA transportation prices for 1985 and 1986 are estimated by multiplying the MA 1985 and 1986 commercial prices by the average of the ratios of the commercial-to-transportation sector prices for 1980 through 1984. Similarly, the VA 1977 transportation price is estimated by multiplying the VA commercial price in 1977 by the average of the ratios of the commercial-to-transportation sectors prices for 1978 through 1982.

In order to reconcile national-level electricity prices based on the *Statistical Yearbook* with the EIA national-level electricity prices published in the *Annual Energy Review (AER),* yearly adjustment factors are calculated for the residential, commercial, and industrial sectors as follows: a preliminary U.S. price for each sector is calculated as the average of the State prices, weighted by CSEDS consumption. These preliminary U.S. prices are divided by the national-level electricity prices published in the *AER*, and the quotient is used as an adjustment factor. The preliminary State prices are multiplied by the adjustment factor to produce the final physical unit State prices in those sectors. Since no transportation sector prices are published in the *AER*, no adjustments are made to that sector and the final physical unit prices are derived solely from the *Statistical Yearbook* sales and revenue data. The annual adjustment factors for the residential, commercial, and industrial sectors are shown in Table A48.

Btu Prices: All Years

Btu prices for States are calculated by dividing the physical unit prices by the conversion factor. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from CSEDS, adjusted for process fuel consumption in the industrial sector.

Table A48. Annual Electricity Price Adjustment Factors, 1970 Through 1986

Year	Residential	Commercial	Industrial
1970	1.05121	1.05712	1.06832
1971	1.05632	1.05926	1.05504
1972	1.05271	1.05514	1.05765
1973	1.06626	1.06188	1.05991
1974	1.09572	1.08098	1.08732
1975	1.09257	1.08098	1.08732
1976	1.07753	1.07755	1.06891
1977	1.06746	1.07675	1.06820
1978	1.06654	1.08273	1.06861
1979	1.06986	1.08349	1.06441
1980	1.04457	1.06109	1.06781
1981	1.05821	1.06943	1.06523
1982	1.06654	1.06351	1.05597
1983	1.05421	1.05301	1.05537
1984	0.99693	1.01924	0.99015
1985	1.00010	1.02008	0.98355
1986	0.99854	1.01518	0.98618

Source: EIA calculations based on data from the *Annual Energy Review* and the *Statistical Yearbook of the Electric Utility Industry.*

Data Sources

Prices

1991 forward: Energy Information Administration, Electric Utilities Database (Form EIA-861) available at http://www.eia.doe.gov/cneaf/electricity/page/data.html. Data are published in the EIA *Electric Sales and Revenue*: Residential Sector, Table 14; Commercial Sector, Tables 7 and 15; Industrial Sector, Table 16 ; and Transportation Sector, revenue data from Table 7 and sales data shown rounded in Table 6.

1990: Energy Information Administration, Revenue—*Electric Sales and Revenue 1990*, Table 7; Sales—*Electric Power Annual 1991*, Table 27.

1987–1989: Energy Information Administration, *Electric Power Annual 1988,* Tables 19 and 21 (1987 data); *Electric Power Annual,* Tables 27 and

29 (1988 and 1989). 1970-1986: Edison Electric Institute, *Statistical Yearbook of the Electric Utility Industry*, tables titled "Revenues: Total Electric Utility Industry" and "Energy Sales: Total Electric Utility Industry."

1970–1986: Energy Information Administration, *Annual Energy Review 1989*, Table 95, "Retail Prices of Electricity Sold by Electric Utilities, 1960–1989."

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, electricity consumption by end-use sector.

Conversion Factor: All Years

3,412 Btu per kilowatthour

Nuclear Fuel for Generation of Electricity

Nuclear fuel prices are developed for the electric utility sector. State-level data on the amount of electricity generated from nuclear power plants are taken from CSEDS. Utilities operating nuclear plants report fuel costs per kilowatthour to the U.S. Department of Energy annually. These data are collected on a plant-by-plant basis and include all taxes, transportation, and handling costs paid by the utilities. The State where the nuclear power plant is located is assigned the reported nuclear fuel cost. For States with two or more nuclear power plants, the average fuel cost, weighted by generation, is attributed to the State.

Physical Unit and Btu Prices: All Years

State-level nuclear fuel prices are estimated in two steps: (1) the total cost of fuels consumed at all nuclear power plants in a State is divided by their total generation of electricity, and (2) the cost per output created in step 1 is divided by an annual U.S. average thermal conversion factor to create the price in dollars per million Btu. Occasionally, the fuel costs at nuclear power plants include small amounts of non-nuclear fuels that are necessary to continue essential plant operations during refueling or maintenance of the reactor.

A price is estimated by another method for States where generation and fuel cost data are not available for years in which the *State Energy Data Report (SEDR)* shows nuclear electric power generation. The ratio of the change in the national nuclear fuel price is used to estimate nuclear fuel prices for missing years within a State. The ratio of national prices used in the estimation is the ratio before missing prices are assigned. The States and years for which nuclear prices are estimated are shown in Table A49.

Nuclear electricity generation levels are negative for CO in 1985, TN in 1986 and 1987, OR in 1993 and CT in 1997, indicating that the nuclear power plants used more energy than they supplied. In these cases, the fuel prices and expenditures are set to zero. In 1986, there is generation in CO but price data are not available. The price for CO in 1986 is estimated by using the ratio of the 1984-to-1986 U.S. average prices and applying that ratio to the 1984 CO price.

For MO in 1985, a large credit resulting from litigation is assigned to fuel costs, creating an artificially low price. The 1986 MO uranium

Table A49. Nuclear Electricity Fuel Price Estimates, 1970 Through 1989

State	Years
Alabama	1973, 1974, 1976
Arizona	1985
Arkansas	1980
Colorado	1977, 1978, 1982–1984, 1986–1989
Georgia	1974
Maine	1972
Mississippi	1984
Missouri	1984, 1985
North Carolina	1982
Ohio	1986
Oregon	1975
South Carolina	1970, 1985
Tennessee	1980
Wisconsin	1970

price, which is in the range of the prices of other nuclear fuel plants, is used to estimate the 1985 price by applying the ratio of the 1986-to-1985 national prices.

The 1985 *Historical Plant Costs and Annual Production Expenses for Selected Electric Plants* has a footnote for the Duke Power Catawba plant in SC stating that the reported production expenses represent only 12.5 percent of the actual production expenses. The production expenses used in the calculation for the Catawba plant are adjusted accordingly.

Prices for GA in 1978, NC in 1982, and OH in 1986 are assigned because the prices calculated by using reported data are significantly different from prices for other years for these States.

There are no prices available for WA in 1970 through 1987 and national prices are assigned for those years.

Data Sources

Prices

1992 forward: Prices are developed by the Energy Information Administration, Office of Coal, Nuclear, and Alternate Fuels, from data compiled by the Utility Data Institute/McGraw-Hill. The data are collected on Federal Energy Regulatory Commission, FERC Form 1, "Annual Report of Major Electric Utilities, Licensees, and Others," and Energy Information Administration, Form EIA-412, "Annual Report of Public Electric Utilities."

1988–1991: Energy Information Administration, Electric Plant Cost and Power Production Expenses, Table 16 (1988–1990) and Table 14 (1991).

1982–1987: Energy Information Administration, *Historical Plant Costs and Annual Production Expenses for Selected Electric Plants*, Table 18 (1982-1984) and Table 20 (1985–1987).

1979–1981: Energy Information Administration, *Thermal Electric Plant Construction Cost and Annual Production Expenses*, pages 267–279 (1979), Table 11 (1980 and 1981).

1975–1978: Energy Information Administration, *Steam Electric Plant Construction Cost and Annual Production Expenses*, "Section II-Nuclear Plants."

1970–1974: Federal Power Commission, *Steam Electric Plant Construction Costs and Annual Production Expenses*, data sheets for Nuclear Plants (1970–1973), and "Section II-Nuclear Plants" (1974).

Consumption

1970 forward: Energy Information Administration, Combined State Energy Data System, electricity generated by nuclear power.

Conversion Factors

1970 forward: Energy Information Administration, *State Energy Data Report 1997, Consumption Estimates,* Table C1, as shown in Table A50.

Table A50. Nuclear Steam-Electric Thermal Conversion Factors
(Thousand Btu per Kilowatthour)

Year	Conversion Factor	Year	Conversion Factor
1970	10.977	1984	10.843
1971	10.837	1985	10.813
1972	10.792	1986	10.799
1973	10.903	1987	10.776
1974	11.161	1988	10.743
1975	11.013	1989	10.724
1976	11.047	1990	10.680
1977	10.769	1991	10.740
1978	10.941	1992	10.678
1979	10.879	1993	10.682
1980	10.908	1994	10.676
1981	11.030	1995	10.658
1982	11.073	1996	10.623
1983	10.905	1997	10.623

Section 7. Consumption Adjustments for Calculating Expenditures

Expenditures developed in the EIA Combined State Energy Data System (CSEDS) and published in this report are calculated by using the CSEDS consumption estimates that are published in the *State Energy Data Report 1997, Consumption Estimates (SEDR),* September 1999. Expenditures are calculated by multiplying the price estimates by the consumption estimates, which have been adjusted to remove process fuel, intermediate petroleum products, and other consumption that has no direct fuel costs, i.e., hydroelectric, geothermal, wind, solar and photovoltaic energy sources, and some biomass energy.

Almost all aspects of energy production, processing, and distribution consume energy as an inherent part of those activities. CSEDS industrial and transportation sector consumption estimates include energy consumed in the process of providing energy to the end-use consumer and are called "process fuel." Familiar examples include energy sources used in drilling for oil and gas, transporting natural gas and petroleum by pipeline. Another "process fuel" is the energy used in generating and delivering electricity to end users. Energy products that are subsequently incorporated into another energy product for end-use consumption are called "intermediate products." Motor gasoline blending components are familiar examples of intermediate products that are consumed as part of the finished motor gasoline sold at service stations and other outlets.

Process fuel and intermediate products are not purchased by the end user and, therefore, do not have prices. Although the end user does not consume either process fuel or intermediate products directly, he does pay for them, because the cost to the processor or distributor is passed on to the end user in the price of the final end-user product. If their use was left in the consumption estimates and was assigned prices, the expenditures would be counted twice, first as paid by the "processor" (producer, processor, or transporter) and again as included in the price to the end user.

Some renewable energy sources are not purchased. These include hydroelectric, geothermal, wind, photovoltaic, and solar thermal energy. The consumption of these sources, which are measured in CSEDS as kilowatthours of electricity produced, are not included in *SEPER* expenditure estimates since there are no "fuel costs" involved. Wood and waste are sometimes purchased and sometimes obtained at no cost. Wood consumption estimates in the residential and commercial sectors and wood and waste in the industrial sector are adjusted in CSEDS to remove estimated quantities that were obtained at no cost.

To estimate energy expenditures in *SEPER*, the consumption of process fuel, intermediate products, and some of the renewable energy sources are subtracted from the end-use sector in which they are included in CSEDS, either the residential, commercial, industrial, or transportation sector, and there are no prices associated with them.

Process fuel consumption adjustments include:

1. Fuel (petroleum, natural gas, coal) and electricity consumed at refineries
2. Crude oil lease, plant, and pipeline fuel
3. Natural gas lease and plant fuel
4. Natural gas pipeline fuel
5. Electrical system energy losses (i.e., energy consumed in the generation, transmission, and distribution of electricity).

Intermediate product consumption adjustments include:

1. Aviation gasoline blending components
2. Motor gasoline blending components
3. Natural gasoline (1970 through 1983)

4. Pentanes plus (1984 forward)
5. Plant condensate (1970 through 1983)
6. Unfinished oils
7. Unfractionated stream (1970 through 1983).

Starting in 1984, natural gasoline (including isopentane) and plant condensate are reported together as the new product, pentanes plus, and the components of unfractionated stream are reported separately under liquefied petroleum gases.

Renewable energy consumption adjustments include:

1. Photovoltaic and solar thermal energy in the residential (including commercial) sector, the industrial sector, and at electric utilities
2. Geothermal energy in the residential, commercial, and industrial sectors
2. Electricity generated from hydropower, geothermal, and wind energy in the industrial sector and at electric utilities
3. Estimated portions of wood consumed in the residential and commercial sectors and wood and waste in the industrial sector that were obtained at no cost.

Table A51 shows the quantities of energy, by State, removed from CSEDS consumption to calculate expenditures for 1997. State estimates for 1970 through 1997 are available on the CSEDS Internet data files.

Table A52 shows the adjustments made to CSEDS national consumption estimates for 1970 through 1997 to derive the net consumption data used to calculate expenditures.

Adjustment Procedures

Refinery Fuel. Refinery fuel consumption of distillate fuel, residual fuel, liquefied petroleum gases, petroleum coke, still gas, natural gas, coal, and electricity is individually estimated for each source and subtracted from each State's CSEDS industrial sector total.

Because crude oil consumption is not an individual fuel in CSEDS for 1970 through 1980, the small amounts of crude oil that were used at refineries during those years were allocated to residual and distillate fuels consumed at refineries. The allocation from crude oil refinery use to residual and distillate fuels refinery use was made according to each fuel's share of the total crude oil used directly (including losses) as residual and distillate fuels from the *Petroleum Supply Annual, Volume 1,* of each year, Table 2).

Refinery consumption of still gas, excluding still gas consumed as petrochemical feedstocks, is subtracted from the CSEDS industrial sector total for 1970 through 1985. Beginning in 1986, EIA data series no longer report refinery fuel and feedstock use separately, and all industrial still gas consumption is removed.

Refinery fuel consumption data are available in the data sources by State or group of States (1970 through 1980) and by Petroleum Administration for Defense District (PADD) (1981 forward). Where State-level consumption data are not available, the State-level estimates are derived by allocating the district's or group's total consumption to the individual States within the district or group that had operating refineries in a given year. Individual fuels are allocated to the refining States according to each State's share of the refining States' subtotal of industrial sector fuel consumption during the year. In some instances, estimated refinery fuel consumption exceeds the CSEDS estimate for total industrial consumption of a fuel within a State. When this occurs, the excess refinery fuel consumption is reallocated as shown in Table A53.

Intermediate Products. Aviation gasoline blending components, motor gasoline blending components, natural gasoline (1970 through 1983), pentanes plus (1984 forward), plant condensate (1970 through 1983), unfinished oils, and unfractionated stream (1970 through 1983) are used at refineries and blending plants to make end-use petroleum products, particularly motor gasoline. Accordingly, consumption of these products is completely removed.

Residential and Commercial Geothermal, Solar, and Wood. There are no fuel costs for geothermal, photovoltaic, and solar thermal energy sources; therefore, all consumption is removed from the expenditure calculations. Some residential and commercial wood is purchased and some acquired at no cost. Based on responses to the Form EIA-457, "1980 Residential Energy Consumption Survey," Census division percentages of wood purchased were developed and applied to each State's residential and commercial wood consumption in the divisions in 1970 through 1989. Based on responses to the Form EIA-457, "1993

Table A51. Estimates of Energy Consumed as Process Fuel, Intermediate Products, and Uncosted Renewables, 1997
(Billion Btu)

State	Refinery Use							
	Distillate	Residual	LPG	Other Petroleum [a]	Natural Gas	Coal	Electricity [b]	Total
AK	235	492	7	24,647	27,518	—	109	53,009
AL	43	1,417	7	16,084	27,477	—	7,935	52,964
AR	39	50	7	8,045	19,650	—	3,803	31,593
AZ	—	—	—	—	—	—	—	—
CA	921	361	2,341	227,697	65,903	—	8,955	306,178
CO	—	21	35	9,952	7,351	—	1,651	19,010
CT	—	—	—	1,524	—	—	—	1,524
DC	—	—	—	—	—	—	—	—
DE	32	1,702	36	20,496	721	50	286	23,323
FL	—	—	—	2,908	—	—	—	2,908
GA	347	4,282	147	8,086	8,446	590	2,592	24,490
HI	41	2,998	480	14,851	28	—	557	18,955
IA	—	—	—	324	—	—	—	324
ID	—	—	—	—	—	—	—	—
IL	97	2,167	1,568	135,223	13,703	45	3,769	156,571
IN	60	3,440	210	59,640	12,408	60	3,873	79,691
KS	63	536	691	33,508	6,722	2	833	42,354
KY	68	528	295	40,752	4,353	28	3,611	49,635
LA	124	2,394	330	340,434	175,001	—	7,905	526,188
MA	—	—	—	1,936	—	—	—	1,936
MD	—	—	—	2,057	—	—	—	2,057
ME	—	—	—	139	—	—	—	139
MI	48	1,327	458	26,037	15,402	30	3,151	46,452
MN	76	1,662	398	38,442	4,614	14	2,465	47,671
MO	—	—	—	2,649	—	—	—	2,649
MS	46	73	31	36,554	11,336	—	3,557	51,596
MT	—	1,032	24	18,481	1,524	—	727	21,789
NC	—	—	—	4,069	—	—	—	4,069
ND	31	568	78	7,749	1,292	43	185	9,946
NE	—	—	—	—	—	—	—	—
NH	—	—	—	128	—	—	—	128
NJ	127	1,898	99	99,612	9,858	3	1,020	112,618
NM	21	373	5	12,152	13,471	—	1,505	27,527
NV	266	731	131	610	2,368	—	1,449	5,555
NY	—	—	—	7,116	—	—	—	7,116
OH	68	3,793	640	69,927	14,877	48	6,571	95,924
OK	41	829	172	48,119	12,235	8	1,139	62,543
OR	—	—	—	298	—	—	—	298
PA	298	3,117	114	90,677	11,714	1,275	3,661	110,855
RI	—	—	—	—	—	—	—	—
SC	—	—	—	5,710	—	—	—	5,710
SD	—	—	—	—	—	—	—	—
TN	52	346	73	22,546	6,047	46	2,464	31,573
TX	216	4,364	1,970	637,184	304,402	—	24,432	972,567
UT	—	889	55	18,606	5,036	—	1,191	25,777
VA	356	3,377	79	11,544	4,254	717	1,469	21,796
VT	—	—	—	—	—	—	—	—
WA	226	1,075	654	63,002	9,277	—	4,526	78,761
WI	55	2,948	200	5,895	6,645	21	2,233	17,997
WV	202	324	88	14,378	3,247	474	853	19,566
WY	—	26	27	16,310	5,004	—	1,156	22,522
US	4,200	49,139	11,452	2,206,096	811,883	3,453	109,631	3,195,854

Table A51. Estimates of Energy Consumed as Process Fuel, Intermediate Products, and Uncosted Renewables, 1997 (Continued)
(Billion Btu)

State	Residential		Commercial		Industrial					Transportation	Electrical System Energy Losses	Total
	Geothermal and Solar [c]	Wood	Geothermal	Wood	Crude Oil Lease, Plant, and Pipeline Fuel	Natural Gas Lease and Plant Fuel	Hydro-electricity	Geothermal Wind and Solar	Wood and Waste	Natural Gas Pipeline Fuel		
AK	16	892	20	86	—	271,284	—	16	1,152	4,938	40,081	371,494
AL	156	6,094	—	591	—	9,880	2,431	—	98,035	21,544	528,282	719,977
AR	1,279	2,329	4	226	—	6,950	46	—	42,549	11,748	261,169	357,892
AZ	3,781	3,961	2	384	—	52	—	227	9,274	19,016	385,869	422,566
CA	19,205	27,306	528	2,649	4,623	75,499	27,218	196,758	53,850	22,892	1,614,709	2,351,417
CO	292	3,472	179	337	—	29,949	1,415	156	3,930	12,523	269,755	341,018
CT	183	3,425	—	332	—	—	683	—	8,553	2,562	201,467	218,730
DC	—	824	—	80	—	—	—	—	—	251	71,616	72,771
DE	101	917	—	89	—	—	—	—	1,466	13	71,727	97,636
FL	30,955	4,937	385	479	—	2,566	8,149	—	32,757	5,950	1,240,324	1,329,410
GA	231	8,423	2	817	—	—	371	—	55,567	8,189	724,533	822,622
HI	1,176	—	—	—	—	—	1,005	5,469	6,324	—	35,046	67,976
IA	96	3,443	161	334	—	—	106	—	43,138	11,412	256,141	315,157
ID	106	1,000	161	97	—	—	10,704	258	11,213	5,347	150,471	179,357
IL	500	9,814	—	952	—	88	903	—	42,534	14,825	896,004	1,122,191
IN	730	4,976	161	483	—	12	—	—	24,223	10,891	631,684	752,850
KS	65	3,164	167	307	—	46,932	145	—	5,141	39,181	228,662	366,118
KY	334	5,518	161	535	—	2,580	—	—	10,806	24,003	544,449	638,021
LA	237	3,926	161	381	—	258,137	15,340	—	68,478	81,140	537,719	1,491,707
MA	209	6,395	163	620	—	—	3,585	—	28,311	2,404	337,710	381,332
MD	150	5,958	—	578	—	3	—	—	16,528	3,229	398,685	427,188
ME	113	1,556	—	151	—	—	19,655	—	88,812	—	84,740	195,165
MI	1,066	8,420	161	817	—	12,552	1,449	—	56,940	24,747	690,101	842,705
MN	560	5,649	—	548	—	—	3,500	562	46,030	19,865	394,503	518,888
MO	210	6,713	—	651	—	—	—	—	5,555	7,531	465,349	488,659
MS	15	3,657	164	355	—	3,773	—	—	39,731	46,472	284,065	429,829
MT	38	833	54	81	—	2,347	604	35	5,580	3,542	84,446	119,348
NC	329	8,967	—	870	—	—	18,403	—	47,289	7,526	772,718	860,171
ND	97	832	86	81	—	9,001	—	—	27	4,981	58,689	83,738
NE	77	2,004	186	194	—	45	—	—	393	4,076	160,016	166,992
NH	37	1,321	—	128	—	—	4,833	—	15,045	24	64,349	85,866
NJ	579	4,761	—	462	—	—	462	—	13,429	3,526	467,068	602,904
NM	551	1,496	41	145	—	65,848	—	131	1,116	63,232	124,201	284,290
NV	379	1,358	409	132	—	9	203	33,279	127	673	171,614	213,737
NY	543	17,180	179	1,666	—	798	16,983	—	56,347	7,671	934,888	1,043,371
OH	533	9,538	161	925	—	1,255	—	—	57,036	20,330	1,123,173	1,308,875
OK	83	3,219	—	312	—	81,902	—	—	7,467	26,287	314,989	496,801
OR	668	4,781	250	464	—	—	4,421	81	49,958	13,084	337,309	411,313
PA	755	7,694	164	746	—	2,355	4,896	—	56,013	40,544	906,112	1,130,134
RI	38	1,076	—	104	—	—	78	—	439	856	47,428	50,019
SC	136	4,530	—	439	—	—	587	—	41,935	3,032	485,629	541,997
SD	53	891	250	86	—	228	—	9	1,030	2,962	55,076	60,587
TN	97	7,468	—	724	—	46	10,047	—	45,669	23,258	615,886	734,770
TX	749	6,980	177	677	—	310,803	6,358	844	43,385	84,564	2,031,554	3,458,658
UT	104	1,432	151	139	—	25,659	141	303	1,176	3,059	144,379	202,321
VA	279	7,897	164	766	—	1,388	1,332	—	22,899	7,711	619,452	683,684
VT	20	716	—	69	—	—	1,869	—	6,310	9	37,641	46,635
WA	377	8,225	223	798	—	—	5,666	—	83,148	9,242	625,731	812,173
WI	336	4,543	—	441	—	—	3,091	—	147,491	4,595	425,820	604,313
WV	42	2,360	—	229	—	7,701	7,932	—	5,232	34,519	185,985	263,566
WY	2	466	622	45	—	21,056	—	27	1,316	11,183	83,516	140,754
US	68,665	243,336	5,700	23,603	4,623	1,250,701	184,611	238,156	1,510,755	781,160	22,222,509	29,729,693

[a] In this table, "other petroleum" consists of: still gas and petroleum coke consumed as process fuel; and aviation gasoline blending components, motor gasoline blending components, pentanes plus, and unfinished oils used as intermediate products.
[b] Electricity is converted at the rate of 3,412 Btu per kilowatthour.
[c] Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified.
—No consumption.
Source: State Energy Price and Expenditure Data System 1997.

Table A52. Energy Consumption Adjustments, 1970 Through 1997
(Trillion Btu)

Year	Total (Gross) Consumption	Adjustments													Net Consumption
		Residential		Commercial		Industrial						Transportation			
		Geothermal and Solar [a]	Wood	Geothermal	Wood	Refinery Use	Crude Oil Lease, Plant, and Pipeline Fuel	Natural Gas Lease and Plant Fuel	Hydro-electricity	Geothermal, Wind, and Solar	Wood and Waste	Natural Gas Pipeline Fuel	Electrical System Energy Losses	Total	
1970	67,761	—	298	—	6	2,714	—	1,442	34	—	788	740	11,517	17,539	50,222
1971	69,218	—	284	—	5	2,694	—	1,456	34	—	804	761	12,127	18,165	51,053
1972	72,775	—	282	—	5	2,847	—	1,497	34	—	859	786	13,110	19,420	53,355
1973	75,877	—	263	—	5	3,010	—	1,539	35	—	900	745	13,999	20,495	55,382
1974	74,065	—	275	—	5	2,983	—	1,520	33	—	896	684	14,198	20,595	53,470
1975	72,066	—	316	—	6	2,884	—	1,434	32	—	822	595	14,384	20,473	51,593
1976	76,103	—	357	—	7	2,907	—	1,679	33	—	942	559	15,255	21,739	54,364
1977	78,151	—	402	—	8	3,008	—	1,706	33	—	989	544	16,060	22,750	55,401
1978	80,192	—	462	—	9	2,939	—	1,694	32	—	1,081	541	16,850	23,608	56,584
1979	81,067	—	543	—	10	3,078	—	1,534	34	—	1,086	613	17,063	23,960	57,107
1980	78,465	—	632	—	15	3,052	—	1,058	33	—	1,283	650	17,387	24,110	54,355
1981	76,601	—	640	—	15	2,204	—	959	33	—	1,354	660	17,464	23,329	53,272
1982	73,400	—	690	—	17	2,089	—	1,144	33	—	1,311	614	17,100	22,996	50,404
1983	73,279	—	681	—	16	2,121	140	1,010	33	—	1,480	505	17,583	23,571	49,708
1984	76,912	—	690	—	16	2,254	135	1,113	33	—	1,510	545	18,157	24,454	52,458
1985	76,827	—	673	—	—	2,046	128	1,001	33	—	1,503	521	18,631	24,535	52,292
1986	77,031	—	655	—	—	2,285	103	954	33	—	1,478	501	18,593	24,603	52,428
1987	79,550	—	633	—	—	2,485	72	1,194	33	—	1,472	538	19,156	25,584	53,965
1988	83,087	—	658	—	—	2,696	85	1,134	33	—	1,531	633	19,887	26,657	56,430
1989	84,518	52	682	3	—	2,710	59	1,103	74	140	1,363	650	20,294	27,130	57,388
1990	83,990	54	337	3	—	2,803	51	1,269	85	185	1,379	682	20,246	27,093	56,897
1991	84,004	56	355	3	—	2,668	39	1,164	85	206	1,352	622	20,506	27,055	56,949
1992	85,181	58	374	3	—	2,954	27	1,209	98	219	1,424	608	20,122	27,096	58,085
1993	87,028	60	308	3	25	2,878	21	1,199	119	247	1,430	643	20,607	27,540	59,488
1994	88,832	61	302	4	25	2,991	19	1,153	136	259	1,444	706	20,869	27,970	60,862
1995	90,676	64	335	5	25	2,915	15	1,253	152	252	1,419	723	21,394	28,551	62,126
1996	93,584	66	334	5	28	3,203	14	1,280	171	261	1,480	734	21,972	29,549	64,035
1997	94,064	69	243	6	24	3,196	5	1,251	185	238	1,511	781	22,223	29,730	64,334

[a] Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified.

—No consumption.

Note: Totals may not equal sum of components due to independent rounding.

Sources: **Total (Gross) Consumption—**EIA, *State Energy Data Report 1997, Consumption Estimates, (SEDR)* DOE/EIA-0214(97) (Washington, DC, September,1999), p. 21, column titled, "Total."
Residential Geothermal and Solar—EIA, *SEDR,* p. 22, columns titled "Geothermal" and "Solar."
Residential Wood—Combined State Energy Data System 1997 (CSEDS).
Commercial Geothermal—EIA, *SEDR,* p. 23, column titled "Geothermal."
Commercial Wood—CSEDS.
Refinery Use—CSEDS.
Crude Oil Lease, Plant, and Pipeline Fuel—CSEDS.
Natural Gas Lease and Plant Fuel—CSEDS.
Hydroelectricity—EIA, *SEDR,* p. 24, column titled, "Hydroelectric Power."
Geothermal, Wind, and Solar—EIA, *SEDR,* p. 24, column titled, "Other."
Wood and Waste—CSEDS.
Natural Gas Pipeline Fuel—CSEDS.
Electrical System Energy Losses—EIA, *SEDR,* Tables 12-15, pp. 22-25, sum of four end-use sectors' column titled, "Electrical System Energy Losses."
Total Adjustments—CSEDS.
Net Consumption—CSEDS.

Table A53. Reallocations of Excess Refinery Fuel Consumption

Year	Fuel	Thousand Barrels	Excess in:	Reallocated to:
1971	Residual Fuel	294	Kansas	Oklahoma
1973	Residual Fuel	45	Group 4: Kentucky, Tennessee	Illinois
1979	LPG	173	Montana	Wyoming
1985	Residual Fuel	212	PADD IV	PADD V
1986	Residual Fuel	403	PADD IV	PADD V
1987	Residual Fuel	497	PADD IV	PADD V
1988	Residual Fuel	305	PADD IV	PADD V
1989	Residual Fuel	381	PADD IV	PADD V
1990	Residual Fuel	332	PADD IV	PADD V
1991	Residual Fuel	374	PADD IV	PADD V
1992	Residual Fuel	355	PADD IV	PADD V
1996	Residual Fuel	179	PADD IV	PADD V
1997	Residual Fuel	92	PADD IV	PADD V

Source: EIA calculations based on data from the *State Energy Data Report* and the *Petroleum Supply Annual*.

Residential Energy Consumption Survey," Census region percentages were developed and applied the State residential and commercial wood consumption in 1990 through 1997.

Crude Oil Lease, Plant, and Pipeline Fuel. Industrial crude oil is assumed to be used as lease, plant, and pipeline fuel. Because these are process fuel uses, this crude oil is removed from CSEDS industrial sector consumption.

Natural Gas Lease and Plant Fuel. Natural gas consumed as lease and plant fuel is process fuel and is subtracted from CSEDS industrial sector natural gas totals by State and year.

Industrial Hydroelectricity, Geothermal, Wind, Photovoltaic and Solar Thermal Energy. Electricity generated by industries from hydropower and geothermal, wind, photovoltaic, and solar thermal energy has no fuel cost. Operation and maintenance costs associated with these energy sources are included indirectly in the prices of the industries' products. Therefore, CSEDS industrial use of these renewable sources are removed from the expenditure calculations.

Industrial Wood and Waste. The cost of wood and waste products used for energy vary widely from more expensive woods to free industrial waste products. Industrial consumption is broken into two segments, manufacturing industries and nonutility power producers in order to estimate quantities received at no cost. Adjustments to manufacturing consumption in 1980 forward are based on information gathered on the Form EIA-846, "1991 Manufacturing Energy Survey." These percentages are applied to CSEDS industrial consumption of wood and waste by each consuming category (manufacturing SIC groups) for each State in each year to estimate the purchased consumption used to calculate expenditures. Adjustments to industrial wood and waste consumption in 1970 through 1979 are based on the 1980 average ratios for each State. Estimates of wood and waste purchased by nonutility power producers for 1989 forward are developed from data reported by electric utilities on several annual EIA electric power plant data collection forms. State purchased industrial wood and waste consumption quantities are the sum of the estimated manufacturing and nonutility power producers' consumption for each year.

Natural Gas Pipeline Fuel. Most of the natural gas consumed in the transportation sector of CSEDS is used to power pipelines. As such, it is a process fuel and is subtracted from CSEDS consumption in order to calculate expenditures.

Electrical System Energy Losses. The amount of energy lost during generation, transmission, and distribution of electricity (including plant use and unaccounted for electrical energy) is process fuel and is subtracted from sectoral energy consumption estimates used in *SEPER*. The energy losses are "paid for" when residential, commercial, industrial, and transportation sector consumers buy the electricity produced at electric utilities.

Data Sources

Capacity of Petroleum Refineries. 1982 forward: Energy Information Administration, *Petroleum Supply Annual, Volume 1*, tables titled "Number and Capacity of Operable Petroleum Refineries," columns titled, "Crude Capacity, Barrels per Calendar Day, Operating" (1982–1985),

and "Atmospheric Crude Oil Distillation Capacity, Barrels per Calendar Day, Operating" (1986 forward).

1979–1981: Energy Information Administration, Energy Data Reports, *Petroleum Refineries in the United States and U.S. Territories*, table titled "Number and Capacity of Petroleum Refineries," column heading, "Crude Capacity, Barrels per Calendar Day, Operating."

1978: Energy Information Administration, Energy Data Reports, *Petroleum Refineries in the United States and Puerto Rico*, table titled "Number and Capacity of Petroleum Refineries," column heading, "Crude Capacity, Barrels per Calendar Day, Operating."

1970–1977: Bureau of Mines, U.S. Department of the Interior, Mineral Industry Surveys, *Petroleum Refineries in the United States and Puerto Rico*, table titled "Number and Capacity of Petroleum Refineries," column heading, "Crude Capacity, Barrels per Calendar Day, Operating."

Fuel Consumed at Refineries. 1995, 1997: Energy Information Administration, *Petroleum Supply Annual, Volume 1*, table titled "Fuels Consumed at Refineries by PAD District." Data for coal, electricity, and natural gas are not published and values for the previous year are repeated.

1981–1994, 1996: Energy Information Administration, *Petroleum Supply Annual, Volume 1*, table titled "Fuels Consumed at Refineries by PAD District." Data for 1991 are from a separately published an EIA *Errata* dated November 10, 1992, GPO Stock No. 061-003-00758-9.

1976–1980: Energy Information Administration, Energy Data Reports, *Crude Petroleum, Petroleum Products, and Natural Gas Liquids*, table titled "Fuels Consumed for All Purposes at Refineries in the United States, by States."

1970–1975: Bureau of Mines, U.S. Department of the Interior, Mineral Industry Surveys, *Crude Petroleum, Petroleum Products, and Natural Gas Liquids*, table titled "Fuels Consumed for All Purposes at Refineries in the United States, by States."

1970 forward: Energy Information Administration, Combined State Energy Data System, industrial sector consumption estimates for aviation gasoline blending components, crude oil, motor gasoline blending components, natural gasoline (1970–1983), pentanes plus (1984 forward), petroleum coke, plant condensate (1970–1983), still gas (excluding still gas consumed as petrochemical feedstocks, 1970–1985), unfinished oil, and unfractionated stream (1970–1983).

Natural Gas Lease, Plant, and Pipeline Fuel Use. 1970 forward: Energy Information Administration, *Natural Gas Annual 1994, Volume II,* Table 14 (1970–1992), Table 15 (1993 forward).

Residential and Commercial Wood. 1970–1989: EIA, unpublished data from the "1980 Residential Energy Consumption Survey," Form EIA-457. 1990 forward: EIA, unpublished data from the "1993 Residential Energy Consumption Survey," Form EIA-457.

Industrial Wood and Waste. 1990 forward: EIA, unpublished data from the "1991 Manufacturing Energy Consumption Survey" (Form EIA-846), "Monthly Power Plant Report" (Form EIA-759), the "Annual Report of Major Electric Utilities Licensees and Other" (FERC Form No.1), the "Annual Report of Public Electric Utilities" (Form EIA-412), and the "Annual Nonutility Power Producer Report" (Form EIA-867).

Metric and Other Physical Conversion Factors

Data presented in this *State Energy Price and Expenditure Report* and in other Energy Information Administration publications are expressed predominately in units that historically have been used in the United States, such as British thermal units, barrels, cubic feet, and short tons. However, because U.S. commerce involves other nations, most of which use metric units of measure, the U.S. Government is committed to the transition to the metric system, as stated in the Metric Conversion Act of 1975 (Public Law 94–168), amended by the Omnibus Trade and Competitiveness Act of 1988 (Public Law 100–418), and Executive Order 12770 of July 25, 1991.

The metric conversion factors presented in Table B1 can be used to calculate the metric-unit equivalents of values expressed in U.S. customary units. For example, 500 short tons are the equivalent of 453.6 metric tons (500 short tons x 0.9071847 metric tons/short ton = 453.6 metric tons).

In the metric system of weights and measures, the names of multiples and subdivisions of any unit may be derived by combining the name of the unit with prefixes, such as deka, hecto, and kilo, meaning, respectively, 10, 100, 1,000, and deci, centi, and milli, meaning, respectively, one-tenth, one-hundredth, and one-thousandth. Common metric prefixes can be found in Table B2.

The conversion factors presented in Table B3 can be used to calculate equivalents in various physical units commonly used in energy analyses. For example, 10 barrels are the equivalent of 420 U.S. gallons (10 barrels x 42 gallons/barrel = 420 gallons).

Table B1. Metric Conversion Factors

U.S. Unit	*multiplied by*	Conversion Factor	*equals*	Metric Unit
Mass				
short tons (2,000 lb)	x	0.907 184 7	=	metric tons (t)
long tons	x	1.016 047	=	metric tons (t)
pounds (lb)	x	0.453 592 37[a]	=	kilograms (kg)
pounds uranium oxide (lb U_3O_8)	x	0.384 647[b]	=	kilograms uranium (kgU)
ounces, avoirdupois (avdp oz)	x	28.349 52	=	grams (g)
Length				
miles (mi)	x	1.609 344[a]	=	kilometers (km)
yard (yd)	x	0.914 4[a]	=	meters (m)
feet (ft)	x	0.304 8[a]	=	meters (m)
inches (in)	x	2.54[a]	=	centimeters (cm)
Energy				
British Thermal Units (Btu)	x	1,055.055 852 62[a,c]	=	joules (J)
calories (cal)	x	4.186 8[a]	=	joules (J)
kilowatthours (kWh)	x	3.6[a]	=	megajoules (MJ)
Volume				
barrels of oil (bbl)	x	0.158 987 3	=	cubic meters (cm^3)
cubic yards (yd^3)	x	0.764 555	=	cubic meters (cm^3)
cubic feet (ft^3)	x	0.028 316 85	=	cubic meters (cm^3)
U.S. gallons (gal)	x	3.785 412	=	liters (L)
ounces, fluid (fl oz)	x	29.573 53	=	milliliters (mL)
cubic inches (in^3)	x	16.387 06	=	milliliters (mL)
Area				
acres	x	0.404 69	=	hectares (ha)
square miles (mi^2)	x	2.589 988	=	square kilometers (km^2)
square yards (yd^2)	x	0.836 127 4	=	square meters (m^2)
square feet (ft^2)	x	0.092 903 04[a]	=	square meters (m^2)
square inches (in^2)	x	6.451 6[a]	=	square centimeters (cm^2)
Temperature				
degrees Fahrenheit (°F)	x	5/9 (after subtracting 32)[a,d]	=	degrees Celsius (°C)

[a]Exact conversion.

[b]Calculated by the Energy Information Administration.

[c]The Btu used in this table is the International Table Btu adopted by the Fifth International Conference on Properties of Steam, London, 1956.

[d]To convert degrees Celsius (°C) to degrees Fahrenheit (°F) exactly, multiply by 9/5, then add 32.

Notes: • Spaces have been inserted after every third digit to the right of the decimal for ease of reading. • Most metric units shown belong to the International System of Units (SI), and the liter, hectare, and metric ton are accepted for use with the SI units. For more information about the SI units, contact Dr. Barry Taylor at Building 221, Room B160, National Institute of Standards and Technology, Gaithersburg, MD 20899, or on telephone number 301–975–4220.

Sources: General Services Administration, Federal Standard 376B, *Preferred Metric Units for General Use by the Federal Government* (Washington, DC, January 27, 1993), pp. 9–11, 13, and 16. National Institute of Standards and Technology, Special Publications 330, 811, and 814. American National Standards Institute/Institute of Electrical and Electronic Engineers, ANSI/IEEE Std 268–1992, pp. 28 and 29.

Table B2. Metric Prefixes

Unit Multiple	Prefix	Symbol	Unit Subdivision	Prefix	Symbol
10^{1}	deka	da	10^{-1}	deci	d
10^{2}	hecto	h	10^{-2}	centi	c
10^{3}	kilo	k	10^{-3}	milli	m
10^{6}	mega	M	10^{-6}	micro	
10^{9}	giga	G	10^{-9}	nano	n
10^{12}	tera	T	10^{-12}	pico	p
10^{15}	peta	P	10^{-15}	femto	f
10^{18}	exa	E	10^{-18}	atto	a
10^{21}	zetta	Z	10^{-21}	zepto	z
10^{24}	yotta	Y	10^{-24}	yocto	Y

Source: U.S. Department of Commerce, National Institute of Standards and Technology, *The International System of Units (SI),* NIST Special Publication 330, 1991 Edition (Washington, DC, August 1991), p. 10.

Table B3. Other Physical Conversion Factors

Energy Source	Original Unit		Conversion Factor		Final Unit
Petroleum	barrels (bbl)	x	42[a]	=	U.S. gallons (gal)
Coal	short tons	x	2,000[a]	=	pounds (lb)
	long tons	x	2,240[a]	=	pounds (lb)
	metric tons (t)	x	1,000[a]	=	kilograms (kg)
Wood	cords (cd)	x	1.25[b]	=	short tons
	cords (cd)	x	128	=	cubic feet (ft^3)

[a]Exact conversion.
[b]Calculated by the Energy Information Administration.
Source: U.S. Department of Commerce, National Institute of Standards and Technology, *Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices*, NIST Handbook 44, 1994 Edition (Washington, DC, October 1993), pp. B-10, C-17, and C-21.

Summary of Changes Since the *State Energy Price and Expenditure Report 1995*

Revisions that are incorporated into the Combined State Energy Data System (CSEDS) and the *State Energy Price and Expenditure Report (SEPER)* since its previous release in August 1998 are summarized in this appendix. Users of the CSEDS data files, available on EIA's Internet home page, may notice data changes that do not appear in the report due to the level of rounding in the published tables. All full-precision data changes are covered in this appendix.

Price revisions occur for several reasons: new price series are added; data sources for prices change; price estimation methodologies are revised or price assignment and estimation procedures are updated; data entries are corrected; or consumption estimates are revised. The first four kinds of changes affect State-level and U.S. prices directly. The fifth, a revised consumption value, affects only the State prices that are estimated as consumption-weighted averages of adjacent States' data and, similarly, affects all the consumption-weighted U.S. average prices.

Consumption estimates used to calculate expenditures in *SEPER* are also taken from CSEDS, as published in the *State Energy Data Report 1997, Consumption Estimates (SEDR),* which contains full documentation of the consumption estimation procedures. Since energy expenditure estimates depend on both the price and consumption estimates (including the consumption adjustments for process fuel and intermediate products), revision of either or both may cause revisions to the expenditures series.

Combined State Energy Data System Conversion

Most of the small revisions in this edition of *SEPER* are caused by the conversion from a mainframe computer system to a personal computer (PC) database. This new database, the Combined State Energy Data System, also contains the consumption data published in *SEDR* that are used for calculating *SEPER* expenditures. The mainframe database stored expenditures in cents. For consistency with the units of the consumption data, expenditures in CSEDS are stored in million dollars, rounded to 5 decimal places. This rounding caused many small revisions in expenditures and average prices that are too small to be seen in the *SEPER* tables but can be seen in the full-precision data in the CSEDS data files. These rounding differences account for all of the revisions not listed specifically in the following explanations.

Coal

Commercial and Industrial Sectors, 1984 through 1995. A review of data sources revealed that prices published in the EIA *Quarterly Coal Report*, the previous source for CSEDS commercial and industrial coal prices, are published with final revisions in the EIA *Coal Industry Annual*, which was first published with 1984 data. The *Coal Industry Annual* final annual average prices, which were calculated using full-precision data, are incorporated in this version of CSEDS causing small revisions to prices and expenditures for most States in all years from 1984 through 1995. The method for estimating coal prices in Alaska for 1984 through 1992 is revised to be consistent with the methodology for other years. Coal expenditures are further affected by

revisions to consumption estimates in 1995 as documented in Appendix H of *SEDR 1996*.

Residential Sector, 1995. The estimated price of residential coal in Alaska is revised from $2.95 per million Btu to $2.04 per million Btu for 1995, which causes a proportional drop in expenditures from $9 million to $6 million. Residential coal expenditures are revised for most other States in 1995 due to revisions to consumption estimates described in Appendix H of the *SEDR 1996*. The only large change in expenditures is for Kansas where expenditures are revised from $913 thousand to $375 thousand. Revisions to residential coal expenditures in other States are generally too small to be seen in *SEPER* tables.

Electric Utilities, 1995. The price paid for coal by electric utilities in Alaska is revised for 1995 from $2.10 to $2.05 by replacement of preliminary data. This causes a 3-percent decrease in the corresponding expenditures and slightly affects the total U.S. values.

Coal Coke Imports and Exports

The average price for coal coke imported into the United States in 1995 was revised from $3.49 per million Btu to $3.43 per million Btu in the source document. Expenditures for coal coke imports and exports from 1980 through 1995 were revised by refinements to the consumption data described in Appendix H of the *SEDR 1996*. Most of the revisions are too small to be seen in *SEPER* tables due to the level of rounding, but they may be noticed by users of the CSEDS data files.

Petroleum

Jet Fuel

Although there are no revisions to jet fuel prices or the consumption used to calculate expenditures, the recalculations of the average price for jet fuel caused several noticeable revisions for the District of Columbia. These revisions are caused by the change in decimal precision of the expenditures during the conversion from the mainframe system to the current PC database. Since jet fuel consumption in the District of Columbia is very small, the change in precision affected the calculations of the average price. The largest difference is the price in 1974, which changes from $1.56 to $1.58 per million Btu.

Kerosene

Residential, Commercial, and Industrial Sectors, 1983 through 1995. The previous source for kerosene prices and the method of estimating withheld data are replaced in this edition of *SEPER* with EIA data collected on the Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report," and published in the EIA *Petroleum Marketing Annual*. The method of estimating withheld data is described in the petroleum section of this report's documentation on page 366. The incorporation of the new data series causes significant revisions in all kerosene prices for 1983 forward.

Residential Sector. Residential sector prices show the greatest difference in dollars but not as large in percentage change. The largest percentage change is the 83-percent increase in Alabama in 1995 where the price for kerosene in the residential sector revises from $5.59 to $10.22 per million Btu. Eighty percent of the price revisions are decreases (539 out of a total of 669) with most prices being revised by $4 per million Btu or less. Residential kerosene prices decrease by as much as $11 per million Btu (from $16.66 to $5.48 per million Btu in Florida in 1994 and from $16.46 to $5.42 per million Btu in Nevada for 1989).

Commercial Sector. In the previous methodology, the commercial sector was assigned the industrial sector prices. In the current method, commercial prices are assigned from the residential sector. About one-third of the commercial prices are revised downward—the greatest change being the District of Columbia's price revision in 1991 from $8.82 to $6.08 per million Btu. About 45 of the revisions (out of a total of 677) are by 50 percent or more The largest commercial kerosene price increase is for Missouri in 1986—from $4.20 to $11.02 per million Btu. The largest percentage change occurs for Georgia in 1988 where the price for kerosene in the commercial sector more than doubles (from $4.21 to $8.77 per million Btu).

Industrial Sector. The industrial sector revisions are the smallest, overall. They range from the District of Columbia's price revision of $8.82 to $5.76 per million Btu to New York's 1984 price revision, which is too

small to be seen in *SEPER* tables. Most price revisions are 34 percent or less.

All of these price revisions cause proportional revisions to expenditures for kerosene in the three sectors. U.S. average prices and expenditures are similarly affected.

Liquefied Petroleum Gases

Industrial and Transportation Sectors, 1984, 1987, 1989, 1990, and 1992 through 1995. Although no prices for liquefied petroleum gases (LPG) are revised, the consumption data used to calculate expenditures were revised in 1984, 1987, 1989, 1990, and 1992 through 1995 in the source documents as explained in Appendix H of *SEDR 1996*. Expenditures are revised by less than 1 percent for all States in those years. The State with the largest quantity change was California where industrial expenditures for LPG increase from $307,212 thousand to $307,497 thousand in 1990 and transportation expenditures decrease from $32,007 thousand to $32,738 thousand in 1990. An additional consumption data revision in the source document causes the District of Columbia's industrial LPG expenditures to decrease from $11 thousand to $9 thousand in 1995.

Lubricants

Industrial and Transportation Sectors, 1995. The U.S. price published in the source document for lubricants was revised for 1995. Since a national average price is estimated in CSEDS and is assigned to the industrial and transportation sectors of all States, the lubricants price for all States and sectors in 1995 is revised from $19.40 to $19.41 per million Btu and all expenditures are increased by 0.08 percent.

Motor Gasoline

The U.S. Department of Transportation, Federal Highway Administration, republished the motor gasoline series used for estimating motor gasoline consumption and prices in CSEDS for all years through 1995 in *Highway Statistics, Summary to 1995*. The changes in consumption estimates from 1984 through 1995 are documented in Appendix H of *SEDR 1996*. The motor gasoline tax series used in this report had small revisions for 1990 through 1992 and 1994. The impact of the tax revisions are too small to be seen in the motor gasoline prices due to the level of rounding in *SEPER* tables, although they may be noticed the CSEDS data files. Changes in expenditures caused by the consumption revisions are by less than 1 percent in the commercial and industrial sectors. The exceptions are commercial sector motor gasoline expenditures for Virginia in 1992 (changing from $15 million to $16 million) and Mississippi in 1987, where the expenditures are revised from $8 million to $10 million. Expenditure revisions in the transportation sector are also generally by less than 1 percent with the largest revision occurring in Illinois in 1990, where expenditures decrease from $5.8 billion to $5.1 billion.

Residual Fuel

Commercial and Transportation Sectors, 1983. In the conversion from a mainframe computer system to a PC system, an error was noticed in the calculation of commercial sector residual fuel prices for 1983. Small revisions also occur in transportation sector prices for 1983 because commercial sector prices are used to develop the transportation sector estimates. Most of the revisions are by less than one cent and too small to be seen in the data in *SEPER* tables. The largest revisions are in the District of Columbia's transportation price, which decreases from $4.34 to $4.09 per million Btu with a proportional decrease in expenditures and Delaware's transportation price increase from $4.17 to $4.23 per million Btu with a proportional increase in expenditures.

Wood and Waste

Prices and expenditures for wood and waste used in the residential, commercial, and industrial sectors for 1970 through 1989 are added to this edition of *SEPER*. These data cause increases to total U.S. expenditures for energy ranging from $435 million in 1970 to $1.7 billion in 1989, which represent increases of less than 1 percent. California, Florida, New York, and Texas are affected the most by the additional data by as much as $212 million in California in 1989, $95 million in Florida in 1989, $91 million in New York in 1982, $86 million in Texas in 1982, all representing 1 percent or less of that State's total energy expenditures.

Residential Sector, All Years. In this edition of *SEPER*, residential wood price and expenditure estimates are included for all years, increasing U.S. total expenditures for wood by amounts ranging from $68 million in 1970 to $909 million in 1982. Previous estimates, which were available for 1990 through 1995 only, are revised. Prices were previously developed for Census regions from the EIA *Residential Energy Consumption Survey 1993* and applied to States in each region. The 1993 prices were repeated for 1990 through 1995. In this edition, the 1993 prices are adjusted by the percentage change in the U.S. average home heating oil price each year. The previous estimates also included expenditures for the commercial sector, which are moved to the commercial sector of this version of CSEDS.

Commercial Sector, Selected Years. Estimates of commercial sector wood prices and expenditures are included for the first time in this *SEPER* for 1970 through 1983 and 1995 through 1997. Consumption estimates are not yet available for 1984 through 1994. Estimates of total U.S. wood and waste expenditures in the commercial sector range from $1 million in 1970 to $71 million in 1996. The States with the most commercial sector wood expenditures are California ($10 million in 1996), New York ($8 million in 1996), Pennsylvania ($4 million in 1996), and Washington and Massachusetts (both with $3 million in 1996).

Industrial Sector, All Years. Estimates of prices and expenditures for wood and waste in the industrial sector for 1970 through 1989 are added for the first time in this version of CSEDS. These data increase U.S. industrial energy expenditures by amounts ranging from $366 million in 1970 to $901 million in 1989, which represent increases of 2 percent in 1970 through 1973 and 1 percent in 1974 through 1989. The States with the largest industrial sector wood expenditures are California ($67 million in 1979, causing an increase of 1 percent in California's total industrial sector expenditures), Maine ($58 million in 1989, an increase of 13 percent in total industrial expenditures), Alabama ($54 million in 1989, an increase of 3 percent in industrial expenditures), Oregon, Georgia, and Florida (each with $46 million in 1989, which represents increases of 5 percent, 2 percent, and 3 percent, respectively in those States' industrial expenditures), Wisconsin ($45 million in 1984, an increase of 3 percent for the industrial sector), and Louisiana ($45 million in 1989, an increase of 1 percent in total industrial energy expenditures).

The estimates of wood and waste prices paid by the nonutility power producers and the manufacturing portion of the industrial sector for 1990 through 1995 are revised in this report by the incorporation of data from the U.S. Bureau of the Census, *1992 Census of Manufacturers*. Prices for 1994 and 1995 are further affected by the incorporation of data from the EIA *Manufacturing Energy Consumption Survey 1994*. The price revisions are by at least a penny per million Btu in most States with the largest revisions of a dollar or two per million Btu occurring in Iowa, Kansas, Illinois, Indiana, Rhode Island, and New Jersey in 1990 through 1995.

Estimates of industrial expenditures for wood and waste are further revised by changes in consumption estimates for 1990 through 1995 as documented in Appendix H of *SEDR 1996* and Appendix G of *SEDR 1997*. CSEDS wood and waste consumption estimates are adjusted to remove quantities that are obtained at no cost, and those adjustments are revised by the incorporation of data from the EIA *Manufacturing Energy Consumption Survey 1994*. The largest quantity revisions occur in Wisconsin where industrial expenditures for wood and waste increase from $54 million to $87 million in 1995 and from $51 million to $82 million in 1994. The greatest percentage change occurs in Iowa were expenditures increase from $1 million to $12 million in 1995 and from $1 million to $13 million in 1995. Additionally, industrial wood and waste expenditures more than double in Kansas and Indiana in 1994 and 1995.

Electric Utilities, 1989 through 1995. Although there were no revisions to prices paid by electric utilities for wood and waste, expenditures for 1989 through 1995 are revised by 1 percent or less due to revisions in the conversion factors used in CSEDS to convert kilowatthours to Btu. These conversion factor changes are documented in Appendix H of *SEDR 1996* and Appendix G of *SEDR 1997*.

Electricity

Transportation and Commercial Sectors, All Years. Expenditures for electricity in the transportation sector are revised in 1970 through 1995 by incorporating a new data source for consumption as explained in Appendix G of *SEDR 1997*. Revising the transportation consumption estimates also causes the commercial sector consumption and expenditures to be revised in the States with transportation use of electricity.

Although the transportation electricity expenditures increase by as much as 29 percent (for most States in 1995), the commercial sector expenditure decreases are by 1 percent (in New York) or less (in all other affected States) in all years.

Consumption Adjustments for Calculating Expenditures

Petroleum Coke. In the previous edition of *SEPER*, estimates of petroleum coke used by refineries were revised for 1970 through 1994. The estimates of petroleum coke used at refineries and the remainder used by other industries were mistakenly reversed. In this edition of *SEPER*, the data series are corrected causing large revisions in petroleum coke expenditures for States that have industrial use of petroleum coke. Expenditures in 37 States are affected, 22 are revised from a value to zero in all or some years and 8 are revised from zero to a value in all or some years. All of the revisions are by large percentages with only Montana, Ohio, and Illinois having expenditure revisions of less than 10 percent.

Glossary

Asphalt: A dark-brown-to-black cement-like material containing bitumens as the predominant constituents obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts.

ASTM: The American Society for Testing and Materials.

Aviation Gasoline Blending Components: Naphthas that are used for blending or compounding into finished aviation gasoline (e.g., straight-run gasoline, alkylate, and reformate). Excludes oxygenates (alcohols and ethers), butane, and pentanes plus.

Aviation Gasoline: All special grades of gasoline used in aviation reciprocating engines, as given in ASTM Specification D910 and Military Specification MIL-G-5572. Aviation gasoline includes blending components.

Barrel (petroleum): A unit of volume equal to 42 U.S. gallons.

Biofuels: Nonfossil biomass energy sources and biomass-derived fuels, which together encompass all energy sources from recent-term organic (plant and animal) matter. Nonfossil biomass energy sources are essentially unprocessed; they are burned or gasified, as received, to produce thermal energy or electricity. Examples are fuelwood, waste wood, garbage, and crop waste. Biomass-derived fuels, on the other hand, result from the processing of biomass energy sources. They may be by-products of industrial or agricultural processes or they may be fuels made from biomass feedstocks. Biomass-derived fuels generally have concentrated energy density and are more easily transported and used. Examples are wood by-products (such as wood chips and dewatered wood liquors), pellets, briquettes, refuse-derived fuel (made from garbage), ethanol (made from crops, such as corn), and methanol (made from wood). Different mixes of biofuels are used by each consuming sector. The residential and commercial sectors burn wood and pellets for space heating. The industrial sector's largest biofuel source is combustible by-products used for electricity generation and process steam, followed in importance by wood chips. The transportation sector uses ethanol as an additive to motor gasoline. Some electric utilities use wood, industrial wood waste, and municipal waste as cofiring or primary fuels.

British Thermal Unit (Btu): The quantity of heat needed to raise the temperature of 1 pound of water by 1° F at or near 39.2° F. See **Heat Content of a Quantity of Fuel, Gross** and **Heat Content of a Quantity of Fuel, Net**.

Butane: A normally gaseous straight-chain or branched-chain hydrocarbon (C_4H_{10}). It is extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

> **Isobutane**: A normally gaseous branched-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9° F. It is extracted from natural gas or refinery gas streams.
>
> **Normal Butane**: A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 31.1° F. It is extracted from natural gas or refinery gas streams.

Butylene: An olefinic hydrocarbon (C_4H_8) recovered from refinery processes.

Coal: Includes all ranks of coal—anthracite, bituminous coal, subbituminous coal, and lignite— conforming to ASTM Specification D388.

Coking Coal: Coal that meets the requirements for making coal coke. It must be low in ash and sulfur and form a coke that is capable of supporting the charge of iron ore and limestone in a blast furnace. Coking coal is usually a blend of two or more bituminous coals.

Steam Coal: In this report, steam coal represents all noncoking coal.

Coal Coke: A hard, porous product made from baking bituminous coal in ovens at temperatures as high as 2,000° F. It is used both as a fuel and as a reducing agent in smelting iron ore in a blast furnace.

Coke Plants: Plants where coal is carbonized in slot or beehive ovens for the manufacture of coke.

Coking Coal: See **Coal**.

Commercial Sector: Defined economically, consists of business establishments that are not engaged in transportation or in manufacturing or other types of industrial activity (agriculture, mining, or construction). Commercial establishments include hotels, motels, restaurants, wholesale businesses, retail stores, laundries, and other service enterprises; religious and nonprofit organizations; health, social, and educational institutions; and Federal, State, and local governments. Street lights, pumps, bridges, and public services are also included if the establishment operating them is considered commercial.

Constant Dollars: Amounts expressed in constant dollars having been adjusted to remove the effect of changes in the purchasing power of the dollar. Prices expressed in constant dollars usually reflect buying power relative to a base year. Prices in this publication are expressed in **Nominal Dollars**.

Conversion Factor: A number that translates units of one system into corresponding values of another system. Conversion factors can be used to translate physical units of measure for various fuels into Btu equivalents.

Crude Oil Used Directly: Crude oil consumed as fuel by crude oil pipelines and on crude oil leases.

Cubic Foot (natural gas): A unit of volume equal to 1 cubic foot at a pressure base of 14.73 pounds standard per square inch absolute and a temperature base of 60° F.

Degree-Day Normals: Simple arithmetic averages of monthly or annual degree-days over a long period of time. The 30-year period 1951 through 1980 is used for the estimates in this report. The averages may be simple degree-day normals or population-weighted degree-day normals. Monthly, State-level simple averages are used for this report.

Degree-Days, Cooling (CDD): The number of degrees per day that the daily average temperature is above 65° F. The daily average temperature is the mean of the maximum and minimum temperatures for a 24-hour period.

Degree-Days, Heating (HDD): The number of degrees per day that the daily average temperature is below 65° F. The daily average temperature is the mean of the maximum and minimum temperatures for a 24-hour period.

Degree-Days, Population-Weighted: Heating or cooling degree-days weighted by the population of the area in which the degree-days are recorded. To compute State population-weighted degree-days, each State is divided into from one to nine climatically homogeneous divisions, which are assigned weights based on the ratio of the population of the division to the total population of the State. Degree-day readings for each division are multiplied by the corresponding population weight for each division and those products are then summed to arrive at the State population-weighted degree-day figure. To compute national population-weighted degree-days, the Nation is divided into nine Census regions, each comprising from three to eight States, which are assigned weights based on the ratio of the population of the region to the total population of the Nation. Degree-day readings for each region are multiplied by the corresponding population weight for each region and those products are then summed to arrive at the national population-weighted degree-day figure.

Diesel Fuel: Fuel used for internal combustion in diesel engines; usually that fraction of crude oil that distills after kerosene. (See **Distillate Fuel Oil**.)

Distillate Fuel Oil: A general classification for one of the petroleum fractions produced in conventional distillation operations. Included are products known as No. 1, No. 2, and No. 4 fuel oils and No. 1, No. 2, and No. 4 diesel fuels. It is used primarily for space heating, on-and off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation.

Electrical System Energy Losses: The amount of energy lost during generation, transmission, and distribution of electricity, including plant and unaccounted-for uses.

Electricity Generation: The process of producing electric energy or transforming other forms of energy into electric energy. It is also the amount of electric energy produced or expressed in watthours (Wh).

Electricity Sales: The amount of kilowatthours sold in a given period of time; usually grouped by classes of service, such as residential, commercial, industrial, and other. "Other" sales include sales for public street and highway lighting and other sales to public authorities, sales to railroads and railways, and interdepartmental sales.

Electric Power Plant: A station containing prime movers, electric generators, and auxiliary equipment for converting mechanical, chemical, and/or fission energy into electric energy.

Electric Utility: A corporation, person, agency, authority, or other legal entity or instrumentality that owns and/or operates facilities for the generation, transmission, distribution, or sale of electric energy, primarily for use by the public, and that files forms listed in the Code of Federal Regulations, Title 18, Part 141. Facilities that qualify as cogenerators or small power producers under the Public Utility Regulatory Policies Act are not considered utilities.

Electric Utility Sector: Privately and publicly owned establishments that generate, transmit, distribute, or sell electricity primarily for use by the public and meet the definition of an electric utility. Nonutility power producers are not included in the electric utility sector.

End-Use Sectors: The residential, commercial, industrial, and transportation sectors of the economy.

Energy: The capacity for doing work as measured by the capability of doing work (potential energy) or the conversion of this capability to motion (kinetic energy). Energy has several forms, some of which are easily convertible and can be changed to another form useful for work. Most of the world's convertible energy comes from fossil fuels that are burned to produce heat that is then used as a transfer medium to mechanical or other means in order to accomplish tasks. Electrical energy is usually measured in kilowatthours, while heat energy is usually measured in British thermal units.

Ethane: A normally gaseous straight-chain hydrocarbon (C_2H_6). It is a colorless, paraffinic gas that boils at a temperature of -127.48° F. It is extracted from natural gas and refinery gas streams.

Ethylene: An olefinic hydrocarbon (C_2H_4) recovered from refinery processes or petrochemical processes.

Expenditures: In this report, the money directly spent by consumers to purchase energy. Expenditures equal the amount of energy used by the consumer times the price per unit paid by the consumer. In the calculation of the amount of energy used, process fuel and intermediate products are not included.

Exports: Shipments of goods from the 50 States and the District of Columbia to foreign countries and to Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

f.a.s.: See **Free Alongside Ship.**

Federal Energy Regulatory Commission (FERC): The Federal agency with jurisdiction over interstate electricity sales, wholesale electric rates, hydroelectric licensing, natural gas pricing, oil pipeline rates, and gas pipeline certification. FERC is an independent regulatory agency within the Department of Energy and is the successor to the Federal Power Commission.

Federal Power Commission (FPC): The predecessor agency of the Federal Energy Regulatory Commission. The Federal Power Commission was created by an Act of Congress under the Federal Water Power

Act on June 10, 1920. It was charged originally with regulating the electric power and natural gas industries. It was abolished on September 30, 1977, when the Department of Energy was created. Its functions were divided between the Department of Energy and the Federal Energy Regulatory Commission, an independent regulatory agency.

Fossil Fuel: Any naturally occurring organic fuel, such as petroleum, coal, and natural gas.

Free Alongside Ship (f.a.s.): The value of a commodity at the port of exportation, generally including the purchase price, plus all charges incurred in placing the commodity alongside the carrier at the port of exportation.

Gasohol: A blend of finished motor gasoline (leaded or unleaded) and alcohol (generally ethanol but sometimes methanol) limited to 10 percent by volume of alcohol. Gasohol is included in finished leaded and unleaded motor gasoline.

Geothermal Energy: Hot water or steam extracted from geothermal reservoirs in the Earth's crust and supplied to steam turbines that drive generators to produce electricity.

Heat Content of a Quantity of Fuel, Gross: The total amount of heat released when a fuel is burned. Coal, crude oil, and natural gas all include chemical compounds of carbon and hydrogen. When those fuels are burned, the carbon and hydrogen combine with oxygen in the air to produce carbon dioxide and water. Some of the energy released in burning goes into transforming the water into steam and is usually lost. The amount of heat spent in transforming the water into steam is counted as part of gross heat content but is not counted as part of net heat content. It is also referred to as the higher heating value. Btu conversion factors typically used in EIA represent gross heat content.

Heat Content of a Quantity of Fuel, Net: The amount of useable heat energy released when a fuel is burned under conditions similar to those in which it is normally used. Also referred to as the lower heating value. Btu conversion factors typically used in EIA represent gross heat content.

Heavy Oil: The fuel oils remaining after the lighter oils have been distilled off during the refining process. Except for start-up and flame stabilization, virtually all petroleum used in steam-electric power plants is heavy oil.

Hydroelectric Power: The production of electricity from the kinetic energy of falling water.

Imports: Receipts of goods into the 50 States and the District of Columbia from foreign countries and from Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

Industrial Sector: Comprises manufacturing industries, which make up the largest part of the sector, along with mining, construction, agriculture, fisheries, and forestry. Establishments in the sector range from steel mills to small farms to companies assembling electronic components.

Jet Fuel: Includes kerosene-type jet fuel and naphtha-type jet fuel. Kerosene-type jet fuel is a kerosene-quality product used primarily for commercial turbojet and turboprop aircraft engines. Naphtha-type jet fuel is a fuel in the heavy naphthas range used primarily for military turbojet and turboprop aircraft engines.

Kerosene: A petroleum distillate having a maximum distillation temperature of 401° F at the 10-percent recovery point, a final boiling point of 572° F, and a minimum flash point of 100° F. Included are the two grades designated in ASTM D3699 (No. 1-K and No. 2-K) and all grades of kerosene called range or stove oil. Kerosene is used in space heaters, cook stoves, and water heaters; it is suitable for use as an illuminant when burned in wick lamps.

Lease and Plant Fuel: Natural gas used in well, field, and lease operations (such as gas used in drilling operations, heaters, dehydrators, and field compressors) and used as fuel in natural gas processing plants.

Light Oil: Lighter fuel oils distilled off during the refining process. Virtually all petroleum used in internal combustion and gas-turbine engines is light oil.

Liquefied Petroleum Gases (LPG): Ethane, ethylene, propane, propylene, normal butane, butylene, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate new natural gas plant liquids.

Lubricants: Substances used to reduce friction between bearing surfaces or as process materials either incorporated into other materials used as processing aids in the manufacturing of other products or as carriers of other materials. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. Excluded are byproducts of lubricating oil refining, such as aromatic extracts derived from solvent extraction or tars derived from deasphalting. Included are all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. Lubricant categories are paraffinic and naphthenic.

Miscellaneous Petroleum Products: All finished petroleum products not classified elsewhere—for example, petrolatum, lube refining byproducts (aromatic extracts and tars), absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, and specialty oils.

Motor Gasoline: A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, obtained by blending appropriate refinery streams to form a fuel suitable for use in spark-ignition engines. Motor gasoline includes both leaded and unleaded grades of finished motor gasoline, blending components, and gasohol.

Motor Gasoline Blending Components: Naphthas that will be used for blending or compounding into finished motor gasoline (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, and xylene). Excluded are oxygenates (alcohols and ethers), butane, and pentanes plus.

Natural Gas: A mixture of hydrocarbons (principally methane) and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

Natural Gasoline: A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas that meets specifications for natural gasoline set by the Gas Processors Association. Isopentane is included.

Nominal Dollars: Amounts that have not been adjusted to remove the effect of changes in the purchasing power of the dollar.

Nominal Price: The price paid for a product or service at the time of the transaction. The nominal price has not been adjusted to remove the effect of changes in the purchasing power of the dollar.

Nuclear Electric Power: Electricity generated by an electric power plant whose turbines are driven by steam generated in a reactor by heat from the fissioning of nuclear fuel.

Nuclear Electric Power Plant: A single-unit or multiunit facility in which heat produced in one or more reactors by the fissioning of nuclear fuel is used to drive one or more steam turbines.

Nuclear Fuel: Fissionable materials that have been enriched to a composition that, when placed in a nuclear reactor, will support a self-sustaining fission chain reaction, producing heat in a controlled manner for process use.

Pentanes Plus: A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Includes isopentane, natural gasoline, and plant condensate.

Petrochemical Feedstocks: Chemical feedstocks derived from petroleum principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are naphthas less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

Petroleum: A generic term applied to oil and oil products in all forms, such as crude oil, lease condensate, unfinished oils, petroleum products, natural gas plant liquids, and nonhydrocarbon compounds blended into finished petroleum products.

Petroleum Coke: A residue that is the final product of the condensation process in cracking. The product is either marketable petroleum coke or catalyst petroleum coke.

Petroleum Coke, Catalyst: The carbonaceous residue that is deposited on and deactivates the catalyst used in many catalytic operations (e.g., catalytic cracking). Carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refining process. That carbon or coke is not recoverable in a concentrated form.

Petroleum Coke, Marketable: Those grades of coke produced in delayed or fluid cokers that may be recovered as relatively pure carbon. Marketable petroleum coke may be sold as is or may be further purified by calcining.

Petroleum Products: Products obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Photovoltaic and Solar Thermal Energy: Energy radiated by the sun as electromagnetic waves (electromagnetic radiation) that is converted at electric utilities into electricity by means of solar (photovoltaic) cells or concentrating (focusing) collectors.

Plant Condensate: One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

Primary Energy: All energy consumed by end users, excluding electricity but including the energy consumed at electric utilities to generate electricity. (In estimating energy expenditures, there are no fuel-associated expenditures for hydroelectric power, geothermal energy, solar energy, or wind energy, and the quantifiable expenditures for process fuel and intermediate products are excluded.)

Process Fuel: All energy consumed in the acquisition, processing, and transportation of energy. Quantifiable process fuel includes three categories: natural gas lease and plant operations, natural gas pipeline operations, and oil refinery operations.

Propane: A normally gaseous straight-chain hydrocarbon (C_3H_8). It is a colorless paraffinic gas that boils at a temperature of -43.67° F. It is extracted from natural gas or refinery gas streams. It includes all products designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial propane and HD-5 propane.

Propylene: An olefinic hydrocarbon (C_3H_6) recovered from refinery or petrochemical processes.

Real Price: A price that has been adjusted to remove the effect of changes in the purchasing power of the dollar. Real prices usually reflect buying power relative to a base year. Prices shown in this publication are **Nominal Prices**.

Refinery (petroleum): An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

Residential Sector: Consists of all private residences, whether occupied or vacant, owned or rented, including single-family homes, multifamily housing units, and mobile homes. Secondary homes, such as summer homes, are also included. Institutional housing, such as school dormitories, hospitals, and military barracks, generally are not included in the residential sector; they are included in the commercial sector.

Residual Fuel Oil: The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations and that conform to ASTM Specifications D396 and 975. Included are No. 5, a residual fuel oil of medium viscosity; Navy Special, for use in steam-powered vessels in government service and in shore power plants; and No. 6, which includes Bunker C fuel oil and is used for commercial and industrial heating, for electricity generation, and to power ships. Imports of residual fuel oil include imported crude oil burned as fuel.

Road Oil: Any heavy petroleum oil, including residual asphaltic oil, used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades, from 0, the most liquid, to 5, the most viscous.

Short Ton (coal): A unit of weight equal to 2,000 pounds.

SIC: See **Standard Industrial Classification**.

Solar Energy: The radiant energy of the sun that can be converted into other forms of energy, such as heat or electricity.

Special Naphthas: All finished products within the naphtha boiling range that are used as paint thinners, cleaners, or solvents. Those products are refined to a specified flash point. Special naphthas include all commercial hexane and cleaning solvents conforming to ASTM Specifications D1836 and D484, respectively. Naphthas to be blended or

marketed as motor gasoline or aviation gasoline or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

Standard Industrial Classification (SIC): A set of codes developed by the Office of Management and Budget which categorizes industries into groups with similar economic activities.

Steam Coal: See **Coal**.

Still Gas (refinery gas): Any form or mixture of gas produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, and propylene. It is used primarily as refinery fuel and petrochemical feedstock.

Total Energy: All energy consumed by end users, including electricity but excluding the energy consumed at electric utilities to generate electricity. (In estimating energy expenditures, there are no fuel-associated expenditures for hydroelectric power, geothermal energy, solar power, or wind energy, and the quantifiable expenditures for process fuel and intermediate products are excluded.)

Transportation Sector: Consists of private and public vehicles that move people and commodities. Included are automobiles, trucks, buses, motorcycles, railroads and railways (including streetcars), aircraft, ships, barges, and natural gas pipelines.

Unfinished Oils: All oils requiring further refinery processing, except those requiring only mechanical blending. Included are naphthas and lighter oils, kerosene and light gas oils, heavy gas oils, and residuum.

Unfractionated Streams: Mixtures of unsegregated natural gas liquid components, excluding those in plant condensate. This product is extracted from natural gas.

United States: The 50 States and the District of Columbia.

Waxes: Solid or semisolid materials derived from petroleum distillates or residues. Waxes are light-colored, more or less translucent crystalline masses, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Included are all marketable waxes, whether crude scale or fully refined. Waxes are used primarily as industrial coating for surface protection.

Wind Energy: The kinetic energy of wind converted into mechanical energy by wind turbines (i.e., blades rotating from a hub) that drive generators to produce electricity for distribution.

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