Table 5.14. Total Electricity and Natural Gas Consumption and Expenditures for Space Heating in U.S. Households, 1993

			Electricity				Natural Gas		
,		Total C	onsumed			Total	Consumed		
Characteristics	House- holds (million)	(quad- rillion Btu)	(billion kWh)	Total Expenditures (billion dollars)	House- holds (million)	(quad- rillion Btu)	(billion cubic feet)	Total Expenditures (billion dollars)	RSE
RSE Column Factors:	0.9	1.31	1.31	1.2 1	0.7	0.9 1	0.9 1	0.9 1	Row Factors
Total U.S. Households	37.1	0.41	119	8.66	52.6	3.67	3,570	21.95	4.3
Census Region and Division									
Northeast	4.1	.04	12	1.13	9.5	.78	754	5.82	11.9
New England	1.0	.01	3	.30	1.6	.13	123	1.05	19.3
Middle Atlantic	3.1	.03	9	.83	7.9	.65	631	4.78	14.2
Midwest	5.8	.07	22	1.54	17.0	1.56	1,519	8.40	11.1
East North Central	3.5	.04	13	.95	13.0	1.20	1,167	6.49	10.9
West North Central	2.4	.03	9	.59	4.1	.36	351	1.91	26.0
South	18.8	.21	61	4.42	13.6	.78	757	4.75	6.4
South Atlantic	10.7	.11	31	2.41	4.9	.29	280	2.03	8.6
East South Central	3.4	.05	15	.88	2.4	.16	160	.93	18.0
West South Central	4.8	.05	15 25	1.12	6.3	.33	317 541	1.79 2.99	10.6
West Mountain	8.3 2.0	.08 .02	6	1.57 .39	12.4 3.5	.56 .23	227	1.10	6.3 8.9
Pacific	6.3	.06	19	1.18	9.0	.32	314	1.89	8.2
1 defile	0.5	.00	1)	1.10	7.0	.52	314	1.07	0.2
Largest Populated States			_						
California	3.9	.02	5	.50	8.1	.25	245	1.51	6.7
Florida	4.7	.03	8	.67	Q	Q	Q	Q	9.7
New York	1.1 3.2	Q .03	Q 10	Q .75	3.6 3.7	.29 .18	282 176	2.33 .99	26.8 16.2
Texas	3.2	.03	10	.73	3.7	.10	170	.99	10.2
Urban Status									
Urban	28.3	.28	82	6.21	45.1	3.06	2,973	18.56	4.5
Central City	10.8	.09	25	1.93	19.7	1.30	1,265	8.10	7.2
Suburban	17.6	.19	57	4.28	25.4	1.76	1,708	10.46	5.1
Rural	8.8	.13	38	2.45	7.5	.61	597	3.40	12.4
Climate Zone <sup>2</sup>									
Under 2,000 CDD and									
Over 7,000 HDD	2.3	.03	8	.44	4.4	.40	393	2.19	17.6
5,500 to 7,000 HDD	6.9	.10	28	2.06	17.7	1.59	1,544	9.19	14.0
4,000 to 5,499 HDD	8.6	.12	36	2.50	10.5	.81	792	5.37	11.6
Under 4,000 HDD	7.5	.06	18	1.45	10.6	.45	437	2.77	15.8
2,000 CDD or More and									
Under 4,000 HDD	11.8	.10	28	2.21	9.3	.41	403	2.43	9.9
Total Number of Rooms (Excluding Bathrooms)									
1 or 2	1.2	.01	2	.18	1.6	.04	35	.25	18.7
3 to 5	19.5	.19	57	4.18	23.4	1.26	1,222	7.65	5.6
6 to 8	14.6	.19	54	3.89	23.9	1.95	1,896	11.55	5.5
9 or More	1.8	.02	6	.42	3.7	.43	417	2.51	14.0
Type of Housing Unit									
Single-Family	24.3	.30	88	6.23	38.8	2.99	2,906	17.63	4.8
Detached	21.2	.26	77	5.41	34.5	2.72	2,645	15.89	5.2
Attached	3.1	.04	11	.82	4.3	.27	262	1.74	14.8
Mobile Home	2.1	.03	8	.58	1.8	.10	97 567	.56	17.8
Multifamily	10.7 2.8	.08	23 8	1.85 .66	12.0 4.8	.58 .37	567 361	3.77 2.42	8.1 12.8
5 or More Units	2.8 7.9	.05	8 15	.00 1.19	4.8 7.2	.37	206	1.35	12.8
Heated Floorspace	7.5	.03	13	1.17	7.2	.21	200	1.55	10.1
(square feet)	,			4.44			-10		
Fewer than 1,000	11.9	.10	31	2.29	14.1	.63	618	3.93	5.6
1,000 to 1,999	16.2	.18	54	3.90	22.4	1.44	1,397	8.63	5.7
2,000 to 2,999	6.0	.08	23	1.67	10.5	.95 65	924 632	5.64 3.76	6.7 10.1
3,000 or More	2.9	.04	11	.79	5.6	.65	632	3.76	10.1

Table 5.14. Total Electricity and Natural Gas Consumption and Expenditures for Space Heating in U.S. Households, 1993 (Continued)

			Electricity				Natural Gas		
		Total C	onsumed			Total	Consumed		
Characteristics	House- holds (million)	(quad- rillion Btu)	(billion kWh)	Total Expenditures (billion dollars)	House- holds (million)	(quad- rillion Btu)	(billion cubic feet)	Total Expenditures (billion dollars)	RSE
RSE Column Factors:	0.9	1.31	1.3 1	1.2 1	0.7	0.9 1	0.91	0.9 1	Row Factors
Ownership of Unit			'		1			1	<u>'</u>
Owned	23.1	0.28	83	5.93	35.3	2.80	2,720	16.60	4.7
Rented	14.0	.12	36	2.73	17.3	.87	851	5.36	6.2
Public Housing	1.6	.01	4	.33	1.7	.07	63	.41	18.6
Not Public Housing	12.4	.11	32	2.40	15.5	.81	787	4.95	6.8
Rent Subsidy	.8	.01	2	.17	1.0	.06	54	.35	17.5
No Rent Subsidy	11.6	.10	30	2.23	14.5	.75	733	4.60	7.0
Year of Construction									
1939 or Before	4.8	.03	10	.68	12.9	1.15	1,123	6.98	9.3
1940 to 1949	1.8	.02	5	.31	4.4	.31	301	1.87	13.6
1950 to 1959	3.9	.02	10	.79	8.4	.58	568	3.59	9.0
		.04	17	1.25	9.2	.63	612	3.73	9.0
	5.3								
1970 to 1979	8.8	.12	34	2.43	7.8	.45	442	2.56	8.0
1980 to 1984	4.8	.06	17	1.27	3.6	.17	166	1.02	10.0
1985 to 1987	3.2	.03	10	.74	2.3	.13	122	.76	11.7
1988 to 1990	2.5	.03	9	.69	1.9	.12	114	.68	12.6
1991 to 1993 <sup>3</sup>	2.1	.02	7	.50	2.1	.13	124	.77	15.7
Electric Space-Heating Paid by Household	35.3	.39	114	8.24					5.7
Space-Heating Paid by Household					45.1	3.29	3,202	19.64	6.0
1993 Family Income									
Less than \$5,000	1.6	.01	4	.29	2.1	.12	113	.72	14.6
\$5,000 to \$9,999	4.1	.04	13	.99	5.4	.33	321	1.99	8.8
\$10,000 to \$14,999	4.2	.04	11	.79	6.2	.41	395	2.42	9.1
\$15,000 to \$19,999	3.7	.04	10	.71	5.3	.38	372	2.23	11.1
\$20,000 to \$24,999	3.5	.04	12	.79	4.6	.31	301	1.85	9.6
\$25,000 to \$34,999	5.4	.06	19	1.37	7.2	.50	484	2.95	7.9
\$35,000 to \$49,999	6.6	.07	22	1.55	9.5	.66	638	3.94	6.5
\$50,000 to \$74,999	5.0	.06	18	1.27	7.2	.53	513	3.11	7.6
\$75,000 or More	3.1	.04	12	.90	5.2	.45	433	2.74	10.2
Below Poverty Line									
100 Percent	5.5	.05	15	1.12	7.4	.44	425	2.66	8.8
125 Percent	7.3	.07	21	1.53	9.8	.60	587	3.67	7.8
150 Percent	9.7	.09	28	2.07	12.5	.78	763	4.73	7.2
Cligible for Federal Assistance 4	11.7	.11	34	2.51	16.0	1.05	1,022	6.34	6.7
Age of Householder									
Under 25 Years	2.8	.02	7	.54	2.6	.15	146	.87	14.5
25 to 34 Years	7.8	.02	23	1.73	11.1	.69	667	4.09	6.2
35 to 44 Years	7.8 8.1	.08	23 27				736	4.58	6.3
				1.95	11.7	.76			
45 to 59 Years	8.1 10.2	.10 .11	29 33	2.06 2.38	11.8 15.4	.85 1.23	830 1,192	5.06 7.35	6.5 6.4
							,	,	
Education of Householder Less than 13 Years	18.2	.21	60	4.34	27.3	1.87	1,823	11.16	5.3
13 to 16 Years	14.0	.15	45	3.30	18.2	1.28	1,245	7.62	5.6
10 to 10 10ms	14.0			5.50					
17 Years or More	5.0	.05	14	1.02	7.1	.52	503	3.17	7.7

Table 5.14. Total Electricity and Natural Gas Consumption and Expenditures for Space Heating in U.S. Households, 1993 (Continued)

			Electricity				Natural Gas		
		Total C	onsumed			Total	Consumed		
Characteristics	House- holds (million)	(quad- rillion Btu)	(billion kWh)	Total Expenditures (billion dollars)	House- holds (million)	(quad- rillion Btu)	(billion cubic feet)	Total Expenditures (billion dollars)	RSE
RSE Column Factors:	0.9	1.3 <sup>1</sup>	1.3 1	1.2 1	0.7	0.9 1	0.9 1	0.9 1	Row Factor
Race of Householder									
White	31.1	0.36	105	7.47	42.7	3.04	2,957	18.02	4.8
Black	3.8	.03	10	.77	6.8	.50	487	3.11	10.1
Other <sup>5</sup>	2.2	.02	5	.41	3.1	.13	127	.82	12.0
Householder of Hispanic Descent									
Yes	2.9	.02	6	.54	4.1	.19	190	1.21	11.8
No	34.2	.38	113	8.12	48.4	3.48	3,381	20.75	4.5
Household Size									
1 Person	9.5	.10	28	2.13	12.4	.78	762	4.68	6.1
2 Persons	12.7	.15	43	3.10	16.9	1.18	1,152	7.01	5.6
3 Persons	5.8	.06	18	1.29	9.4	.66	645	4.08	7.4
4 Persons	5.3	.06	17	1.22	8.5	.65	630	3.85	6.2
5 Persons	2.7	.03	9	.67	3.5	.25	241	1.46	9.5
6 or More Persons	1.1	.01	4	.25	1.9	.14	141	.86	14.4

<sup>&</sup>lt;sup>1</sup> This factor is underestimated because it contains no error for estimating this end use.

Q = Data withheld either because the Relative Standard Error (RSE) was greater than 50 percent or fewer than 10 households were sampled.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals. • See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C, E, and F of the 1993 Residential Energy Consumption Survey (for specific titles of forms, see Appendix E).

<sup>&</sup>lt;sup>2</sup> Climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

Does not include all new construction for 1993.

<sup>&</sup>lt;sup>4</sup> Below 150 percent of poverty line or 60 percent of median State income.

<sup>&</sup>lt;sup>5</sup> Includes some householders who described themselves as Hispanic rather than White, Black, or other.

<sup>-- =</sup> Not applicable.

Table 5.15. Total Fuel Oil, Kerosene, and LPG Consumption and Expenditures for Space Heating in U.S. Households, 1993

		Fue	el Oil			Ker	osene		L	iquefied P	etroleum	Gas	
		To Cons	tal umed				tal umed				otal umed		
Characteristics	House- holds (mil- lion)	(quad- ril- lion Btu)	(bil- lion gal- lons)	Total Expend- itures (billion dollars)	House- holds (mil- lion)	(quad- ril- lion Btu)	(bil- lion gal- lons)	Total Expend- itures (billion dollars)	House- holds (mil- lion)	(quad- ril- lion Btu)	(bil- lion gal- lons)	Total Expend- itures (billion dollars)	RSE
RSE Column Factors:	0.6	0.7 1	0.7 1	0.7 1	1.1	1.5 1	1.5 1	1.5 1	0.9	1.1 1	1.1 1	1.0 1	Row Factors
Total U.S. Households	10.7	0.90	6.51	5.88	3.6	0.05	0.34	0.37	5.6	0.30	3.25	2.81	11.2
Census Region and Division  Northeast  New England  Middle Atlantic  Midwest  East North Central  West North Central  South  South Atlantic  East South Central  West South Central  West South Central  West South Central  Largest Populated States	2.6 4.7 1.4 .7 .6 1.5 1.4 Q NC .5 Q	.64 .25 .39 .13 .07 .06 .10 .10 .10 .03 Q	4.62 1.81 2.81 .91 .51 .41 .74 .70 Q NC .23 Q	4.15 1.63 2.52 .78 .44 .34 .71 .67 Q NC .23 Q	.7 .2 .5 1.0 .9 .1 1.8 1.4 .3 Q Q	.02 Q .01 Q Q Q .02 .02 Q Q Q Q Q Q Q Q	.14 Q .08 Q Q Q Q .15 .13 Q Q Q	.15 Q .08 .05 Q Q .16 .14 Q Q Q Q	.3 .2 .1 1.9 1.0 .9 2.8 1.4 .8 .6 .6 .4 .2	.01 Q Q .166 .099 .077 .10 .055 .033 .002 Q	.13 Q Q 1.72 .98 .74 1.09 .55 .34 .20 .31 .24 Q	.14 Q Q 1.33 .76 .56 1.05 .57 .31 .17 .29 .20 Q	20.8 19.3 24.4 24.5 32.2 29.9 17.3 21.3 26.0 30.1 39.3 34.2 48.6
California Florida New York Texas	Q 2.6	Q Q .20 NC	Q Q 1.47 NC	Q Q 1.31 NC	Q Q .3 Q	Q Q Q Q	Q Q Q Q	Q Q .06 Q	.2 .3 Q Q	(*) .01 Q .01	.03 .06 Q .13	.04 .08 Q .10	28.0 40.0 30.4 36.0
Urban Status Urban Central City Suburban Rural	2.7 5.4	.67 .16 .51 .23	4.81 1.16 3.65 1.70	4.37 .99 3.39 1.50	1.8 .5 1.3 1.8	.02 .01 .01 .02	.16 .05 .10	.17 .06 .12 .19	1.9 .2 1.6 3.7	.09 .01 .08 .21	.94 .10 .84 2.30	.86 .10 .76 1.95	14.8 21.4 16.8 14.3
Climate Zone <sup>2</sup> Under 2,000 CDD and Over 7,000 HDD	3.4 4.6 .4	.19 .33 .35 .03	1.37 2.35 2.55 .21	1.19 2.13 2.33 .19	.4 .9 1.0 .8	.01 .01 .01 .01	.08 .08 .06 .08	.08 .09 .07 .09	.8 1.1 .8 1.3	.06 .09 Q .05	.60 1.01 Q .55	.49 .80 .50 .54	29.1 30.2 22.9 33.1 30.0
Total Number of Rooms (Excluding Bathrooms)  1 or 2		.01 .28 .49	.08 2.01 3.52 .90	.07 1.74 3.24 .83	Q 1.9 1.4 .2	Q .03 .01 (*)	Q .24 .09 (*)	Q .26 .10	Q 2.8 2.5 .3	Q .12 .15 .02	Q 1.32 1.68 .25	Q 1.18 1.43 .20	34.9 12.5 14.9 26.3
Type of Housing Unit Single-Family Detached Attached Mobile Home Multifamily 2 to 4 Units 5 or More Units	8.0 7.4 .6 .3 2.4	.76 .72 .05 .02 .12 .07	5.49 5.16 .33 .13 .89 .53	5.05 4.75 .30 .12 .71 .48	2.6 2.5 .2 .7 .3 .2	.03 .03 (*) .02 (*) (*)	.19 .19 .01 .13 .01 .01 Q	.21 .21 .01 .14 .01 .01	4.2 4.1 Q 1.3 Q Q Q	.24 .24 Q .05 Q Q	2.63 2.59 Q .60 Q	2.24 2.21 Q .55 Q Q	12.7 12.9 26.5 23.0 20.3 25.4 19.1
Heated Floorspace (square feet) Fewer than 1,000 1,000 to 1,999 2,000 to 2,999 3,000 or More	3.9 2.9	.11 .31 .30 .19	.78 2.21 2.14 1.38	.64 2.02 1.95 1.26	1.2 1.4 .6 .3	.02 .02 (*) Q	.17 .12 .02 Q	.19 .13 .02 Q	1.7 2.3 1.0 .6	.07 .11 .07 .06	.72 1.18 .73 .62	.68 1.04 .63 .46	14.3 14.3 18.7 20.8

Table 5.15. Total Fuel Oil, Kerosene, and LPG Consumption and Expenditures for Space Heating in U.S. Households, 1993 (Continued)

		Fue	el Oil			Ker	osene		Li	iquefied P	etroleum	Gas	
		To Cons	tal umed				tal umed			l .	tal umed		
Characteristics	House- holds (mil- lion)	(quad- ril- lion Btu)	(bil- lion gal- lons)	Total Expend- itures (billion dollars)	House- holds (mil- lion)	(quad- ril- lion Btu)	(bil- lion gal- lons)	Total Expend- itures (billion dollars)	House- holds (mil- lion)	(quad- ril- lion Btu)	(bil- lion gal- lons)	Total Expend- itures (billion dollars)	RSE
RSE Column Factors:	0.6	0.7 1	0.7 1	0.7 1	1.1	1.5 1	1.5 <sup>1</sup>	1.5 1	0.9	1.1 <sup>1</sup>	1.1 <sup>1</sup>	1.0 1	Row Factors
Ownership of Unit													
Owned	7.7	0.74	5.31	4.89	2.5	0.03	0.23	0.25	4.7	0.25	2.76	2.38	12.3
Rented	3.0	.17	1.20	.99	1.0	.01	.11	.11	.9	.04	.49	.44	13.5
Public Housing	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Not Public Housing	2.8	.16	1.16	.97	1.0	.01	.10	.11	.9	.04	.48	.43	13.6
Rent Subsidy	.2	.01	.09	.07	Q	Q	Q	Q	Q	Q	Q	Q	30.4
No Rent Subsidy	2.6	.15	1.07	.90	1.0	.01	.10	.11	.9	.04	.46	.41	14.7
Year of Construction													
1939 or Before	4.2	.39	2.81	2.50	1.1	.01	.09	.10	1.4	.10	1.13	.90	14.5
1940 to 1949	1.2	.09	.67	.59	.3	(*)	.03	.03	.4	.03	.27	.24	26.6
1950 to 1959	1.9	.17	1.20	1.13	.4	(*)	.03	.03	.6	.02	.24	.22	27.1
1960 to 1969	1.3	.09	.66	.60	.7	(*)	.03	.04	.7	.04	.46	.41	22.0
1970 to 1979	1.3	.10	.75	.67	.6	.01	.09	.09	1.2	.05	.52	.46	17.7
1980 to 1984	.3	.02	.12	.11	.2	(*)	.02	.03	.3	.01	.12	.11	25.0
1985 to 1987	.2	.01	.10	.09	.2	(*)	.01	.01	.3	.01	.16	.15	31.4
1988 to 1990	.2	.02	.12	.11	.2	Q ′	Q	Q	.3	.01	.15	.14	33.1
1991 to 1993 <sup>3</sup>	.1	.01	.07	.07	Q .2	Q	Q	Q	.4	.02	.19	.17	37.3
Fuel Oil Paid by Household	8.6	.81	5.85	5.38									14.4
Liquified Petroleum Gas Paid by Household									5.4	.29	3.15	2.73	16.8
1993 Family Income													
Less than \$5,000	.4	.03	.18	.16	.1	(*)	.02	.02	.2	.01	.14	.12	32.6
\$5,000 to \$9,999	.9	.07	.48	.43	.5	.01	.05	.06	.8	.03	.37	.34	22.3
\$10,000 to \$14,999	1.0	.08	.59	.52	.4	.01	.06	.06	.6	.03	.28	.26	20.9
\$15,000 to \$19,999	.9	.08	.57	.50	.6	.01	.08	.09	.6	.03	.34	.30	22.4
\$20,000 to \$24,999	.9	.07	.53	.46	.3	(*)	.03	.03	.7	.03	.36	.31	22.1
\$25,000 to \$34,999	1.7	.14	1.03	.94	.5	.01	.04	.05	1.2	.06	.66	.57	20.6
\$35,000 to \$49,999	2.4	.18	1.32	1.19	.5	(*)	.03	.03	.8	.05	.56	.47	16.6
\$50,000 to \$74,999	1.6	.15	1.05	.97	.4	(*)	.01	.02	.5	.03	.38	.31	17.0
\$75,000 or More	.9	.10	.75	.72	.3	Q	Q	Q	.3	.01	.16	.13	28.0
Below Poverty Line													
100 Percent	1.2	.08	.58	.50	.7	.01	.09	.09	1.1	.05	.52	.48	19.3
125 Percent	1.8	.12	.86	.73	1.0	.02	.12	.13	1.6	.07	.74	.66	18.0
150 Percent	2.2	.16	1.12	.98	1.2	.02	.13	.14	1.8	.08	.84	.76	17.0
Eligible for Federal Assistance 4	2.9	.22	1.60	1.40	1.4	.02	.17	.19	2.0	.09	.96	.88	15.0
Age of Householder													
Under 25 Years	.4	.02	.13	.12	.2	(*)	.02	.02	.2	.01	.09	.08	29.0
25 to 34 Years	1.6	.12	.86	.74	.6	.01	.06	.07	.9	.04	.49	.43	17.9
35 to 44 Years	2.4	.18	1.27	1.16	1.0	.01	.09	.10	1.1	.05	.57	.50	15.7
45 to 59 Years	2.7	.23	1.67	1.52	1.0	.01	.07	.08	1.5	.08	.92	.79	15.4
	3.6	.36	2.58	2.34	.7	.01	.09	.09	1.9	.11	1.18	1.01	17.7
60 Years and Over													
<b>Education of Householder</b>													
	5.9	.46	3.33	2.95	2.4	.03	.25	.28	4.0	.20	2.22	1.92	11.9
<b>Education of Householder</b>	5.9 3.5	.46 .32	3.33 2.30	2.95 2.11	2.4	.03 .01	.25 .07	.28 .07	4.0 1.4	.20 .08	2.22 .88	1.92 .76	11.9 13.7

Table 5.15. Total Fuel Oil, Kerosene, and LPG Consumption and Expenditures for Space Heating in U.S. Households, 1993 (Continued)

		Fue	el Oil			Ker	rosene		Li	iquefied P	etroleum	Gas	
		To Cons				To Cons	tal umed			To Cons			
Characteristics	House- holds (mil- lion)	(quad- ril- lion Btu)	(bil- lion gal- lons)	Total Expend- itures (billion dollars)	House- holds (mil- lion)	(quad- ril- lion Btu)	(bil- lion gal- lons)	Total Expend- itures (billion dollars)	House- holds (mil- lion)	(quad- ril- lion Btu)	(bil- lion gal- lons)	Total Expend- itures (billion dollars)	RSE
RSE Column Factors:	0.6	0.7 1	0.7 <sup>1</sup>	0.7 1	1.1	1.5 1	1.5 <sup>1</sup>	1.5 1	0.9	1.1 <sup>1</sup>	1.1 <sup>1</sup>	1.0 1	Row Factors
Race of Householder													
White	9.4	0.82	5.95	5.39	3.0	0.04	0.26	0.28	5.2	0.29	3.13	2.70	11.7
Black	.8	.06	.42	.38	.5	.01	.06	.07	.4	.01	.09	.09	28.6
Other <sup>5</sup>	.4	.02	.14	.11	Q	Q	Q	Q	Q	Q	Q	Q	27.9
Householder of Hispanic Descent													
Yes		.05	.39	.32	Q	Q	Q	Q	.3	.01	.08	.08	26.4
No	9.7	.85	6.12	5.56	3.4	.04	.32	.35	5.3	.29	3.17	2.74	11.3
Household Size													
1 Person	2.3	.18	1.30	1.18	.6	.01	.08	.08	.9	.05	.53	.46	17.8
2 Persons	3.5	.30	2.19	1.96	1.1	.01	.10	.11	2.2	.12	1.29	1.14	17.5
3 Persons	2.0	.18	1.27	1.15	.9	.01	.07	.08	1.0	.05	.55	.48	15.8
4 Persons	1.7	.14	1.04	.95	.6	.01	.04	.04	.8	.04	.45	.40	16.6
5 Persons	.8	.06	.45	.40	.4	.01	.04	.04	.5	.03	.33	.26	22.6
6 or More Persons	.4	.04	.26	.23	Q	Q	Q	Q	.2	.01	.10	.08	26.8

<sup>&</sup>lt;sup>1</sup> This factor is underestimated because it contains no error for estimating this end use.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals. • See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C, D, and G of the 1993 Residential Energy Consumption Survey (for specific titles of forms, see Appendix E).

<sup>&</sup>lt;sup>2</sup> Climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

<sup>3</sup> Does not include all new construction for 1993.

<sup>&</sup>lt;sup>4</sup> Below 150 percent of poverty line or 60 percent of median State income.

<sup>&</sup>lt;sup>5</sup> Includes some householders who described themselves as Hispanic rather than White, Black, or other.

<sup>(\*) =</sup> Value rounds to zero in the units displayed.

<sup>-- =</sup> Not applicable.

NC = No cases in sample.

NF = No applicable RSE row factor.

Q = Data withheld either because the Relative Standard Error (RSE) was greater than 50 percent or fewer than 10 households were sampled.

Table 5.16. Electricity Consumption and Expenditures for Main Space Heating, per U.S. Household, 1993

		Consu	mption			H	Annual leating ree-Days	Space-l	ricity Heating nsity	
Characteristics	House- holds (million)	(million Btu)	(kWh)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average <sup>2</sup>	Consumption (kWh/HDD* 1000 square feet)	Expenditures (cents/HDD* 1000 square feet)	RSE
RSE Column Factors:	1.6	1.1 <sup>1</sup>	1.1 1	1.01	0.7	1.0	1.0	0.81	0.9 1	Row Factors
Total U.S. Households	25.0	15.5	4,541	327	1,405	3,429	3,452	0.94	6.8	3.2
Census Region and Division										
Northeast	1.9	19.5	5,715	538	1,426	6,043	6,044	.66	6.2	4.6
New England	.5	18.6	5,464	577	1,187	6,329	6,346	.73	7.7	6.8
Middle Atlantic	1.4	19.8	5,797	525	1,504	5,950	5,945	.65	5.9	6.0
Midwest	2.9	24.2	7,097	499	1,573	6,254	6,066	.72	5.1	7.3
East North Central	1.6	25.9	7,590	551	1,628	6,416	6,332	.73	5.3	8.1
West North Central	1.3	22.1	6,481	435	1,505	6,052	5,733	.71	4.8	12.1
South	14.6	13.7	4,028	292	1,457	2,442	2,434	1.13	8.2	4.1
South Atlantic	8.7	11.9	3,487	270	1,482	2,206	2,248	1.07	8.3	5.8
East South Central	2.5	19.5	5,714	339	1,478	3,545	3,449	1.09	6.5	6.3
West	3.4 5.6	14.2 14.2	4,166 4,160	313 259	1,379 1,177	2,236 3,650	2,163 3,873	1.35 .97	10.1 6.0	7.6 6.2
Mountain	1.4	13.7	4,026	267	1,337	3,437	3,524	.88	5.8	12.5
Pacific	4.2	14.3	4,203	256	1,126	3,718	3,985	1.00	6.1	7.3
Largest Populated States										
California	2.2	6.3	1,853	192	1,118	1,932	2,305	.86	8.9	7.5
Florida	4.4	6.2	1,817	151	1,467	660	780	1.88	15.6	16.9
New York	Q	14.9	4,360	516	923	6,574	6,537	.72	8.5	20.5
Texas	2.4	13.2	3,874	296	1,395	2,029	1,968	1.37	10.5	9.4
Urban Status										
Urban	19.5	13.7	4,007	302	1,394	3,095	3,156	.93	7.0	3.9
Central City	7.4	11.0	3,224	245	1,129	2,886	2,945	.99	7.5	6.5
SuburbanRural	12.1 5.5	15.3 21.9	4,486 6,421	336 416	1,555 1,447	3,223 4,605	3,286 4,495	.89 .96	6.7 6.2	5.2 4.5
Climate Zone <sup>2</sup>										
Under 2,000 CDD and										
Over 7,000 HDD	.9	27.2	7,976	417	1,146	7,893	7,821	.88	4.6	6.7
5,500 to 7,000 HDD	4.0	23.2	6,799	491	1,440	6,217	6,132	.76	5.5	6.6
4,000 to 5,499 HDD	5.8	20.4	5,981	409	1,522	4,727	4,689	.83	5.7	4.6
Under 4,000 HDD	4.8	12.2	3,586	278	1,247	2,693	2,810	1.07	8.3	7.1
2,000 CDD or More and Under 4,000 HDD	9.5	9.7	2,856	224	1,424	1,398	1,467	1.43	11.2	6.7
	9.3	9.1	2,830	224	1,424	1,396	1,407	1.43	11.2	0.7
Type of Housing Unit	14.1	20.0	5 071	412	1.700	2.464	2.462	0.4		2.6
Single-Family Detached	14.1 11.9	20.0 20.8	5,871 6,092	412 424	1,798	3,464 3,429	3,462 3,423	.94 .95	6.6 6.6	3.6 3.7
Detached Attached	2.2	16.0	4,695	351	1,873 1,399	3,648	3,423	.93 .92	6.9	9.6
Mobile Home	1.5	18.1	5,294	359	999	3,808	3,735	1.39	9.4	7.7
Multifamily	9.3	8.2	2,410	193	879	3,314	3,391	.83	6.6	5.5
2 to 4 Units	2.2	12.8	3,761	292	859	3,861	3,906	1.13	8.8	8.3
5 or More Units	7.2	6.8	1,996	162	885	3,146	3,232	.72	5.8	6.2
Heated Floorspace										
(square feet)										
Fewer than 1,000	9.4	10.7	3,125	232	726	3,501	3,550	1.23	9.1	4.1
1,000 to 1,999	10.8	16.3	4,770	340	1,404	3,280	3,294	1.04	7.4	3.7
2,000 to 2,999 3,000 or More	3.4 1.3	21.7 27.7	6,372 8,125	456 570	2,411 3,720	3,495 3,970	3,495 3,954	.76 .55	5.4 3.9	3.8 6.8
Total Number of Rooms			, -		,	,	, -			
(Excluding Bathrooms)	1.1	<i>c</i> 4	1.075	150	400	2.407	2.602	1.00	0.2	164
1 or 2	1.1 14.9	6.4 12.4	1,875 3,645	159 268	499 1,071	3,487 3,403	3,603 3,439	1.08 1.00	9.2 7.3	16.4 3.7
	14.7	14.4	5,045	200	1,0/1	$_{J,+UJ}$	ン・サンフ	1.00	1.5	3.7
6 to 8	8.2	21.4	6,266	443	1,980	3,483	3,471	.91	6.4	4.0

Table 5.16. Electricity Consumption and Expenditures for Main Space Heating, per U.S. Household, 1993 (Continued)

		Consu	ımption			H	Annual leating ree-Days	Space-l	ricity Heating nsity	
Characteristics	House- holds (million)	(million Btu)	(kWh)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average <sup>2</sup>	Consumption (kWh/HDD* 1000 square feet)	Expenditures (cents/HDD* 1000 square feet)	RSE
RSE Column Factors:	1.6	1.1 1	1.1 1	1.01	0.7	1.0	1.0	0.8 1	0.9 1	Row Factors
Ownership of Unit										
Owned	13.7	19.6	5,748	404	1,814	3,399	3,401	0.93	6.6	3.4
Rented	11.2	10.5	3,066	233	906	3,465	3,515	.98	7.4	4.4
Public Housing	1.5	9.4	2,748	219	762	3,989	4,014	.90	7.2	12.7
Not Public Housing	9.7	10.6	3,115	235	928	3,385	3,438	.99	7.5	5.1
Rent Subsidy	.7	10.3	3,021	244	785	4,541	4,553	.85	6.9	15.3
No Rent Subsidy	9.1	10.6	3,121	234	939	3,302	3,358	1.01	7.6	5.3
Year of Construction										
1939 or Before	1.3	22.0	6,444	432	1,231	4,623	4,619	1.13	7.6	8.4
1940 to 1949	.7	23.7	6,948	384	1,291	4,454	4,521	1.21	6.7	11.2
1950 to 1959	1.9	17.3	5,075	380	1,403	3,060	3,116	1.18	8.9	8.9
1960 to 1969	3.4	15.8	4,639	347	1,336	3,285	3,322	1.06	7.9	7.3
1970 to 1979	7.0	16.0	4,702	333	1,375	3,691	3,712	.93	6.6	5.6
1980 to 1984	3.9	14.2	4,158	312	1,401	3,224	3,258	.92	6.9	5.6
1985 to 1987	2.7	12.2	3,588	265	1,489	3,012	3,030	.80	5.9	8.8
1988 to 1990	2.2	14.4	4,209	314	1,521	3,346	3,356	.83	6.2	6.4
1991 to 1993 <sup>3</sup>	1.9	12.4	3,620	260	1,565	3,012	2,992	.77	5.5	11.4
Main Space-Heating Fuel Paid by Household										
Yes No	23.6 1.4	15.7 12.3	4,597 3,613	330 284	1,447 720	3,400 3,905	3,418 4,019	.93 1.28	6.7 10.1	3.3 12.8
1993 Family Income										
Y 1 05 000	1.2	10.2	2,982	229	863	3,483	3,446	.99	7.6	9.3
\$5,000 to \$9,999	3.1	13.6	3,973	303	873	3,877	3,885	1.17	9.0	6.9
\$10,000 to \$14,999	2.8	12.2	3,582	262	1,011	3,341	3,415	1.06	7.8	7.4
\$15,000 to \$19,999	2.4	13.9	4,083	280	1,179	3,275	3,330	1.06	7.3	7.9
\$20,000 to \$24,999	2.3	16.5	4,845	329	1,260	3,520	3,508	1.09	7.4	7.5
\$25,000 to \$34,999	3.9	15.7	4,610	335	1,449	3,344	3,381	.95	6.9	5.5
\$35,000 to \$49,999	4.4	16.1	4,716	331	1,617	3,294	3,300	.89	6.2	4.8
\$50,000 to \$74,999	3.1	18.3	5,358	382	1,950	3,463	3,478	.79	5.7	4.6
\$75,000 or More	1.8	21.1	6,186	462	2,189	3,294	3,336	.86	6.4	8.2
Below Poverty Line										
100 Percent	3.9	11.9	3,493	267	910	3,470	3,487	1.11	8.5	6.1
125 Percent	5.2	12.8	3,751	278	954	3,525	3,543	1.12	8.3	5.7
150 Percent	6.9	13.0	3,816	282	1,011	3,517	3,535	1.07	7.9	5.6
Eligible for Federal Assistance 4	8.3	13.2	3,854	285	1,015	3,543	3,580	1.07	7.9	4.8
Age of Householder			•		•	-	•			
<u> </u>	2.3	10.1	2,957	223	919	3,403	3,388	.95	7.1	7.9
Under 25 Years25 to 34 Years	2.3 5.7	13.5	2,957 3,969	289	1,208	3,403	3,588	.93 .94	7.1 6.9	4.9
35 to 44 Years	5.4	16.2	4,747	339	1,541	3,455	3,476	.89	6.4	4.7
45 to 59 Years	5.2	18.0	5,289	375	1,694	3,417	3,415	.91	6.5	4.5
60 Years and Over	6.4	16.5	4,838	348	1,407	3,380	3,434	1.02	7.3	5.3
Education of Householder										
Less than 13 Years	12.3	15.9	4,666	333	1,257	3,575	3,581	1.04	7.4	3.5
13 to 16 Years	9.8	15.0	4,391	320	1,510	3,325	3,366	.87	6.4	4.5
17 Years or More	2.9	15.4	4,516	328	1,685	3,155	3,194	.85	6.2	7.3
Race of Householder										
White	20.9	16.3	4,764	338	1,484	3,516	3,527	.91	6.5	3.2
Black	2.6	12.1	3,545	278	1,039	3,068	3,099	1.11	8.7	7.4
Other 5	1.5	10.6	3,114	263	935	2,817	2,999	1.18	10.0	10.4

Table 5.16. Electricity Consumption and Expenditures for Main Space Heating, per U.S. Household, 1993 (Continued)

Por			, 2220				Annual		ricity	
		Consu	ımption				Ieating gree-Days		Heating nsity	
Characteristics	House- holds (million)	(million Btu)	(kWh)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average <sup>2</sup>	Consumption (kWh/HDD* 1000 square feet)	Expenditures (cents/HDD* 1000 square feet)	RSE
RSE Column Factors:	1.6	1.1 1	1.1 <sup>1</sup>	1.0 1	0.7	1.0	1.0	0.8 1	0.9 1	Row Factors
Householder of Hispanic										
Descent										
Yes	2.1	9.8	2,884	239	1,168	2,470	2,603	1.00	8.3	10.2
No	22.9	16.0	4,695	335	1,427	3,518	3,531	.93	6.7	3.2
Household Size	7.0	12.0	2.752	202	1055	0.645	2.550	0.7	7.0	4.0
1 Person	7.2	12.8	3,753	283	1,056	3,647	3,679	.97	7.3	4.8
2 Persons	8.6	16.5	4,838	343	1,481	3,389	3,420	.96	6.8	4.5
3 Persons	3.8	15.1	4,439	322	1,450	3,244	3,251	.94	6.8	5.8
4 Persons	3.1	17.4	5,111	357	1,702	3,371	3,371	.89	6.2	4.9
5 Persons	1.6	18.7	5,487	386	1,715	3,504	3,514	.91	6.4	6.9
6 or More Persons	.7	16.6	4,878	345	1,812	2,738	2,801	.98	6.9	11.6
Main Heating Equipment Using Electricity										
Central Warm-Air		10.4	2.022	200		2.552	2.500	100		
Furnace	9.2	13.4	3,923	280	1,341	2,772	2,798	1.06	7.5	5.6
Built-In Electric		17.0		252		4.010	4.025	0.2		4.5
Units	6.9	17.8	5,223	373	1,177	4,813	4,825	.92	6.6	4.7
Heat Pump	7.5	16.6	4,863	352	1,774	3,016	3,033	.91	6.6	4.5
Other	1.3	11.8	3,447	270	951	3,126	3,228	1.16	9.1	9.3
Age of Main Heating Equipment										
Less than 5 Years	5.4	14.7	4,309	312	1,530	2,875	2,895	.98	7.1	5.5
5 to 9 Years	5.3	15.3	4,472	313	1,596	3,042	3,069	.92	6.4	6.1
10 to 19 Years	6.5	17.9	5,240	375	1,484	3,883	3,885	.91	6.5	4.6
20 Years or More	3.2	19.3	5,657	407	1,435	3,996	4,051	.99	7.1	7.8
Don't Know	4.7	10.7	3,141	238	917	3,479	3,509	.98	7.5	5.7
Secondary Heating Fuel										
(more than one may apply)										
No	15.9	12.8	3,741	279	1,157	3,292	3,339	.98	7.3	4.3
Yes	9.1	20.3	5,940	411	1,840	3,668	3,650	.88	6.1	3.7
Wood	6.0	22.3	6,524	445	2,056	3,823	3,799	.83	5.7	4.3
Electricity	2.8	18.7	5,495	374	1,646	3,278	3,265	1.02	6.9	6.5
Natural Gas	.6	16.3	4,770	367	1,753	2,861	2,837	.95	7.3	9.2
Kerosene	.6	22.7	6,657	456	1,673	4,667	4,560	.85	5.8	10.6
Other	.2	23.7	6,941	470	1,986	4,476	4,606	.78	5.3	18.7
Average Electricity Expenditures for Main Space Heat										
(cents per kWh)										
Less than 6	4.6	25.2	7,378	377	1,454	5,063	5,031	1.00	5.1	5.8
6 to Less than 9	14.3	15.1	4,426	330	1,487	3,123	3,099	.95	7.1	4.4
9 or More	6.1	9.1	2,664	281	1,178	2,909	3,084	.78	8.2	6.2

Table 5.16. Electricity Consumption and Expenditures for Main Space Heating, per U.S. Household, 1993 (Continued)

		Const	ımption			Н	Annual leating ree-Days	Space-l	ricity Heating nsity	
Characteristics	House- holds (million)	(million Btu)	(kWh)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average <sup>2</sup>	Consumption (kWh/HDD* 1000 square feet)	Expenditures (cents/HDD* 1000 square feet)	RSE
RSE Column Factors:	1.6	1.1 1	1.1 <sup>1</sup>	1.01	0.7	1.0	1.0	0.8 1	0.9 1	Row Factors
Adequacy of Insulation Well Insulated Adequately Insulated Poorly Insulated	10.2 9.8 4.9	16.6 14.6 15.0	4,872 4,265 4,401	349 307 321	1,610 1,351 1,091	3,534 3,263 3,540	3,543 3,294 3,578	0.86 .97 1.14	6.1 7.0 8.3	3.9 3.8 5.9

<sup>&</sup>lt;sup>1</sup> This factor is underestimated because it contains no error for estimating this end use.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C, and E of the 1993 Residential Energy Consumption Survey (for specific titles of forms, see Appendix E).

<sup>&</sup>lt;sup>2</sup> The 30-year average and climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

<sup>3</sup> Does not include all new construction for 1993.

<sup>&</sup>lt;sup>4</sup> Below 150 percent of poverty line or 60 percent of median State income.

<sup>&</sup>lt;sup>5</sup> Includes some householders who described themselves as Hispanic rather than White, Black, or other.

 $Q = Data \ withheld \ either \ because \ the \ Relative \ Standard \ Error \ (RSE) \ was \ greater \ than \ 50 \ percent \ or \ fewer \ than \ 10 \ households \ were \ sampled.$ 

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals. • See "Glossary" for definition of terms used in this report.

Table 5.17. Natural Gas Consumption and Expenditures for Main Space Heating, per U.S. Household, 1993

		Consu	ımption			F	Annual Ieating gree-Days	Natura Space-I Inter	Heating	
Characteristics	House- holds (million)	(million Btu)	(1000 cubic feet)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average <sup>2</sup>	Consumption (cubic feet/ HDD*1000 square feet)	Expenditures (cents/ HDD*1000 square feet)	RSE
RSE Column Factors:	1.7	1.01	1.01	1.0 1	0.8	0.8	0.8	1.0 1	1.1 1	Row Factors
Total U.S. Households	51.4	70.9	68.9	424	1,712	4,818	4,801	8.4	5.1	1.9
Census Region and Division										
Northeast	9.4	81.6	79.4	613	1,735	5,790	5,833	7.9	6.1	3.0
New England	1.6	78.7	76.5	651	1,566	5,912	5,956	8.3	7.0	6.7
Middle Atlantic	7.9	82.2	80.0	606	1,769	5,766	5,808	7.8	5.9	3.4
Midwest	16.9	92.3	89.8	496	1,880	6,601	6,460	7.2	4.0	2.6
East North Central	12.9	93.1	90.5	504	1,879	6,519	6,438	7.4	4.1	2.8
West North Central	4.0	89.7	87.2	473	1,882	6,863	6,531	6.8	3.7	5.8
South	13.0	58.9	57.3	359	1,604	3,200	3,081	11.2	7.0	4.5
South Atlantic	4.7	60.4	58.7	426	1,627	3,554	3,488	10.2	7.4	6.9
East South Central	2.3	71.5	69.6	406	1,824	3,379	3,296	11.3 12.0	6.6	7.9
West South Central West	6.1 12.1	53.0 45.4	51.5 44.2	289 243	1,504 1,576	2,858 3,310	2,685 3,529	8.5	6.7 4.7	7.4 4.1
Mountain	3.4	68.4	66.5	320	1,667	5,868	5,695	6.8	3.3	6.4
Pacific	8.7	36.4	35.4	214	1,540	2,313	2,685	9.9	6.0	4.0
Largest Populated States										
California	7.9	31.3	30.5	188	1,496	1,961	2,339	10.4	6.4	4.0
Florida		29.6	28.8	230	1,627	1,227	1,263	14.4	Q	13.5
New York Texas	3.6 3.6	80.7 50.0	78.5 48.6	647 274	1,718 1,539	5,900 2,724	5,893 2,549	7.7 11.6	6.4 6.5	5.3 11.8
Llubon Status										
Urban Status Urban	44.2	68.7	66.9	417	1,692	4,709	4,729	8.4	5.2	2.0
Central City		67.2	65.3	418	1,490	4,569	4,597	9.6	6.1	3.3
Suburban	25.0	70.0	68.1	416	1,848	4,816	4,830	7.6	4.7	2.5
Rural	7.2	83.8	81.5	463	1,833	5,489	5,244	8.1	4.6	6.0
Climate Zone <sup>2</sup>										
Under 2,000 CDD and										
Over 7,000 HDD	4.4	92.7	90.2	501	1,991	8,206	7,971	5.5	3.1	5.2
5,500 to 7,000 HDD	17.6	89.8	87.3	520	1,819	6,463	6,378	7.4	4.4	2.5
4,000 to 5,499 HDD Under 4,000 HDD	10.3 10.2	79.0 43.0	76.9 41.9	521 266	1,786 1,550	4,994 2,360	4,957 2,553	8.6 11.4	5.8 7.3	3.8 6.5
2,000 CDD or More and	10.2	43.0	41.9	200	1,330	2,300	2,333	11.4	1.3	0.5
Under 4,000 HDD	9.0	45.5	44.3	266	1,467	2,547	2,552	11.9	7.1	5.5
Type of Housing Unit										
Single-Family	37.8	78.5	76.3	463	1,990	4,721	4,690	8.1	4.9	2.1
Detached	33.6	80.3	78.1	469	2,026	4,728	4,690	8.2	4.9	2.2
Attached	4.2	63.5	61.7	410	1,704	4,658	4,691	7.8	5.2	5.2
Mobile Home	1.8	55.1	53.6	309	972	5,137	5,030	10.7	6.2	6.6
Multifamily	11.8	49.1	47.7	317	939	5,082	5,120	10.0	6.6	3.5
2 to 4 Units 5 or More Units	4.7 7.1	78.0 29.7	75.9 28.9	507 190	1,114 821	5,250 4,970	5,304 4,997	13.0 7.1	8.7 4.6	5.1 3.8
Wasted Elements						,	,			
Heated Floorspace (square feet)										
Fewer than 1000	13.9	45.4	44.2	281	738	4,727	4,730	12.7	8.1	2.7
1,000 to 1,999	21.8	65.2	63.5	392	1,443	4,434	4,433	9.9	6.1	2.5
2,000 to 2,999	10.1	92.9	90.4	552	2,391	5,361	5,310	7.1	4.3	2.9
3,000 or More	5.6	116.3	113.2	672	3,966	5,565	5,496	5.1	3.0	3.7
Total Number of Rooms (Excluding Bathrooms)										
1 or 2	1.5	23.0	22.4	159	518	4,644	4,645	9.3	6.6	7.2
3 to 5	23.1	54.2	52.8	330	1,147	4,675	4,673	9.8	6.2	2.6
6 to 8	23.2	83.3	81.0	493 686	2,099	4,905 5,252	4,877 5 108	7.9 6.5	4.8	2.2
9 01 IVIOIC	3.6	117.6	114.4	686	3,342	5,252	5,198	6.5	3.9	4.9

Table 5.17. Natural Gas Consumption and Expenditures for Main Space Heating, per U.S. Household, 1993 (Continued)

		Consu	mption			H	Annual leating ree-Days	Natura Space-I Inter	<b>Ieating</b>	
Characteristics	House- holds (million)	(million Btu)	(1000 cubic feet)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average <sup>2</sup>	Consumption (cubic feet/ HDD*1000 square feet)	Expenditures (cents/ HDD*1000 square feet)	RSE
RSE Column Factors:	1.7	1.01	1.0 <sup>1</sup>	1.0 1	0.8	0.8	0.8	1.01	1.1 1	Row Factors
Ownership of Unit										
Owned	34.5	80.5	78.3	478	2,023	4,895	4,857	7.9	4.8	2.1
Rented	17.0	51.2	49.8	314	1,082	4,663	4,688	9.9	6.2	2.9
Public Housing	1.7	37.4	36.4	233	851	4,749	4,771	9.0	5.8	7.9
Not Public Housing	15.2	52.8	51.4	323	1,109	4,653	4,678	10.0	6.3	3.1
Rent Subsidy	1.0	54.5	53.0	347	1,087	4,961	4,968	9.8	6.4	8.8
No Rent Subsidy	14.2	52.7	51.3	321	1,110	4,631	4,658	10.0	6.2	3.2
ear of Construction										
1939 or Before	12.6	90.9	88.4	549	1,707	5,459	5,410	9.5	5.9	3.4
1940 to 1949	4.3	71.4	69.5	432	1,534	4,615	4,642	9.8	6.1	4.8
1950 to 1959	8.2	70.4	68.5	433	1,639	4,267	4,299	9.8	6.2	3.9
1960 to 1969	9.0	69.1	67.2	410	1,660	4,839	4,831	8.4	5.1	3.8
1970 to 1979	7.7	59.1	57.5	333	1,660	4,722	4,660	7.3	4.2	4.0
1980 to 1984	3.5	48.0	46.7	287	1,640	4,218	4,231	6.8	4.1	6.0
1985 to 1987	2.2	57.1	55.5	345	1,912	4,477	4,496	6.5	4.0	6.4
1988 to 1990	1.8	64.1	62.4	374	2,273	5,302	5,258	5.2	3.1	6.6
1991 to 1993 <sup>3</sup>	2.1	60.0	58.3	361	2,243	4,753	4,705	5.5	3.4	8.6
Iain Space-Heating Fuel aid by Household										
Yes	44.0 7.5	74.3 50.8	72.3 49.4	443 310	1,849 908	4,743	4,720	8.2 10.3	5.1 6.5	2.0 4.7
No	1.3	30.8	49.4	310	908	5,263	5,281	10.3	0.3	4./
993 Family Income Less than \$5,000	2.0	57.2	55.6	353	1,051	4,525	4,536	11.7	7.4	5.9
A = 000 Ao 000	5.2	62.3	60.6	375	1,165	4,697	4,651	11.1	6.9	3.8
\$5,000 to \$9,999 \$10,000 to \$14,999	6.1	66.3	64.5	396	1,299	4,874	4,867	10.2	6.3	4.3
\$15,000 to \$19,999	5.3	72.5	70.5	423	1,483	4,936	4,901	9.6	5.8	4.4
\$20,000 to \$24,999	4.5	67.8	66.0	406	1,477	5,135	5,093	8.7	5.4	4.4
	7.0	70.7	68.8	419	1,675	4,956	4,912	8.3	5.0	4.0
****	9.2	70.7	68.9	425	1,935	4,742	4,726	7.5	4.6	2.9
A-0.000 A-1.000	7.1	74.7	72.6	440	2,057	4,824	4,812	7.3	4.4	3.6
\$50,000 to \$74,999\$75,000 or More	5.1	86.7	84.3	534	2,654	4,531	4,588	7.0	4.4	4.6
elow Poverty Line										
100 Percent	7.3	59.9	58.3	364	1,185	4,451	4,445	11.1	6.9	3.9
125 Percent	9.7	62.0	60.3	376	1,230	4,614	4,598	10.6	6.6	3.7
150 Percent	12.4	63.0	61.3	380	1,238	4,639	4,619	10.7	6.6	3.1
ligible for Federal	15.7	66.5	64.7	401	1,283	4,793	4,783	10.5	6.5	2.9
ge of Householder										
	2.6	57 0	56.2	336	1 176	4 014	4 900	9.7	50	66
Under 25 Years25 to 34 Years	10.9	57.8 62.2	56.2 60.6	330 371	1,176	4,914	4,898	9.7 8.1	5.8 5.0	6.6 3.1
25 to 34 Years	10.9	62.2 65.7	63.9	398	1,521 1,828	4,922 4,704	4,893 4,690	8.1 7.4	3.0 4.6	3.3
45 to 59 Years	11.4	73.8	71.8	438	1,937	4,747	4,090	7.4	4.8	3.0
60 Years and Over	15.0	81.0	78.8	486	1,683	4,747	4,744	9.6	5.9	2.6
ducation of Householder										
Less than 13 Years	26.7	69.7	67.8	415	1,502	4,894	4,863	9.2	5.6	2.3
13 to 16 Years	17.7	71.5	69.6	426	1,878	4,752	4,742	7.8	4.8	2.7
17 Years or More	7.0	73.6	71.6	452	2,098	4,697	4,715	7.3	4.6	3.9
ace of Householder										_
White	41.7	72.3	70.4	429	1,795	4,982	4,949	7.9	4.8	2.1
Black	6.7	74.4	72.3	462	1,370	4,330	4,341	12.2	7.8	4.4
Other 5	3.0	42.9	41.8	270	1,337	3,658	3,788	8.5	5.5	6.2

Table 5.17. Natural Gas Consumption and Expenditures for Main Space Heating, per U.S. Household, 1993 (Continued)

	101 1100	SCHOLA	, 1,,,,,,	Contin				I		
		Const	ımption			I	Annual Heating gree-Days	Natur: Space-l Inter	Heating	
Characteristics	House- holds (million)	(million Btu)	(1000 cubic feet)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average <sup>2</sup>	Consumption (cubic feet/ HDD*1000 square feet)	Expenditures (cents/ HDD*1000 square feet)	RSE
RSE Column Factors:	1.7	1.01	1.01	1.01	0.8	0.8	0.8	1.0 1	1.1 <sup>1</sup>	Row Factors
Householder of Hispanic										
Descent										
Yes	4.1	47.4	46.1	293	1,339	3,859	3,966	8.9	5.7	5.3
No	47.4	72.9	70.9	435	1,744	4,901	4,873	8.3	5.1	2.0
Household Size										
1 Person	12.2	63.7	62.0	381	1,229	5,057	5,010	10.0	6.1	3.1
2 Persons	16.4	71.5	69.6	424	1,767	4,809	4,794	8.2	5.0	2.6
3 Persons		72.0	70.0	443	1,803	4,685	4,690	8.3	5.2	3.2
4 Persons	8.3	77.1	75.0	458	2,019	4,845	4,822	7.7	4.7	3.4
5 Persons	3.5	70.7	68.8	417	2,093	4,496	4,497	7.3	4.4	4.7
6 or More Persons	1.8	78.7	76.6	469	1,859	4,476	4,510	9.2	5.6	7.8
Main Heating Equipment Using Natural Gas Central Warm-Air										
Furnace	35.4	72.8	70.8	425	1,882	4,915	4,880	7.7	4.6	2.1
Steam or Hot-Water System	8.7	87.4	85.1	556	1,540	5,938	5,926	9.3	6.1	4.0
Floor, Wall, or Pipeless	4.0	250	25.0	225	1.000	2.550	2 000	11.0		
Furnace Room Heater/Other	4.3 3.0	36.8 49.0	35.8 47.6	227 300	1,093 1,093	2,750 3,397	2,888 3,355	11.9 12.8	7.5 8.1	5.5 6.5
Room Heater/ Other	5.0	17.0	17.0	300	1,055	3,371	3,333	12.0	0.1	0.5
Age of Main Heating Equipment										
Less than 5 Years	9.7	70.4	68.5	425	1,987	4,954	4,907	7.0	4.3	3.2
5 to 9 Years	8.7	74.9	72.9	449	1,931	4,869	4,834	7.8	4.8	3.6
10 to 19 Years	11.1	75.1	73.1	443	1,807	4,854	4,822	8.3	5.1	2.9
20 Years or More	13.6	76.6	74.5	455	1,686	4,679	4,699	9.4	5.8	3.1
Don't Know	8.4	52.3	50.8	319	1,083	4,788	4,781	9.8	6.2	3.8
Secondary Heating Fuel										
(more than one may apply)										
No	18.0	75.8	73.7	441	2,111	4,596	4,584	7.6	4.5	2.5
Yes	33.4	68.2	66.3	414	1,497	4,939	4,918	9.0	5.6	2.4
Wood	9.7	78.2	76.1	452	2,381	4,627	4,635	6.9	4.1	3.4
Electricity	7.6	73.9	71.9	437	1,874	4,576	4,565	8.4	5.1	3.8
Kerosene	.9	92.4	89.9	527	2,001	5,449	5,356	8.2	4.8	9.4
Other	3.2	71.0	69.0	400	2,011	4,204	4,160	8.2	4.7	6.7
Average Natural Gas Expenditures for Main Space Heat (dollars per 1000 cf)										
	2.4	100.1	07.2	206	2.014	6 772	6 106	7.1	2.0	11.1
Less than 4.50		100.1	97.3 76.4	396 404	2,014	6,773	6,486	7.1	2.9	11.1
		78.5	76.4	404	1,751	5,100	5,043	8.6	4.5	3.3
6 or More	27.9	62.5	60.8	441	1,657	4,434	4,471	8.3	6.0	3.3

Table 5.17. Natural Gas Consumption and Expenditures for Main Space Heating, per U.S. Household, 1993 (Continued)

Pol		Consumption				Annual Heating Degree-Days		Natural Gas Space-Heating Intensity		
Characteristics	House- holds (million)	(million Btu)	(1000 cubic feet)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average <sup>2</sup>	Consumption (cubic feet/ HDD*1000 square feet)	Expenditures (cents/ HDD*1000 square feet)	RSE
RSE Column Factors:	1.7	1.01	1.01	1.01	0.8	0.8	0.8	1.0 <sup>1</sup>	1.1 1	Row Factors
Adequacy of Insulation Well Insulated Adequately Insulated Poorly Insulated	18.2 21.3 11.9	72.3 69.1 71.8	70.3 67.2 69.9	431 416 426	1,933 1,678 1,436	4,945 4,827 4,611	4,905 4,814 4,620	7.4 8.3 10.5	4.5 5.1 6.4	2.7 2.4 3.3

<sup>&</sup>lt;sup>1</sup> This factor is underestimated because it contains no error for estimating this end use.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C, and F of the 1993 Residential Energy Consumption Survey (for specific titles of forms, see Appendix E).

<sup>&</sup>lt;sup>2</sup> The 30-year average and climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

<sup>3</sup> Does not include all new construction for 1993.

<sup>&</sup>lt;sup>4</sup> Below 150 percent of poverty line or 60 percent of median State income.

<sup>&</sup>lt;sup>5</sup> Includes some householders who described themselves as Hispanic rather than White, Black, or other.

Q = Data withheld either because the Relative Standard Error (RSE) was greater than 50 percent or fewer than 10 households were sampled.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals. • See "Glossary" for definition of terms used in this report.

Table 5.18. Fuel Oil Consumption and Expenditures for Main Space Heating, per U.S. Household, 1993

		Consumption				H	annual leating ree-Days	Fuel Oil Space-Heating Intensity		
Characteristics	House- holds (million)	(million Btu)	(gallons)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average <sup>2</sup>	Consumption (gallons/ HDD*1000 square feet)	Expenditures (cents/ HDD*1000 square feet)	RSE
RSE Column Factors:	2.0	1.21	1.2 1	1.2 1	0.9	0.5	0.5	1.01	1.1 1	Row Factors
Total U.S. Households	10.2	86.6	625	564	1,911	5,877	5,858	0.056	5.0	3.5
Census Region and Division										
Northeast	7.0	89.3	644	578	1,860	5,984	5,997	.058	5.2	4.4
New England	2.6	97.1	701	634	1,966	6,630	6,654	.054	4.9	7.4
Middle Atlantic	4.5	84.8	611	546	1,799	5,615	5,622	.061	5.4	5.0
Midwest	1.3	94.6	685	588	2,234	7,743	7,521	.040	3.4	4.4
East North Central	.7	100.2	725	628	2,240	7,348	7,203	.044	3.8	8.7
West North Central		88.6	643	545	2,228	8,162	7,858	.035	3.0	5.4
South	1.5	70.2	507	485	1,835	3,830	3,818	.072	6.9	6.7
South Atlantic	1.4	70.5	509	488	1,884	3,801	3,788	.071	6.8	7.0 NF
East South Central West South Central	Q NC	Q NC	Q NC	Q NC	Q NC	Q NC	Q NC	Q NC	Q NC	NF NF
West		74.4	537	543	2,028	5,395	5,437	.049	5.0	16.5
Mountain		Q	Q	Q	2,028 Q	Q	Q Q	Q	Q	NF
Pacific		72.9	526	538	2,057	5,176	5,307	.049	5.1	19.6
Largest Populated States	0	0	0	0	0	0	0	0	0	NE
CaliforniaFlorida	Q O	Q O	Q Q	Q Q	Q Q	Q O	Q O	Q O	Q Q	NF NF
New York	2.5	80.3	579	517	1,559	5,561	5,549	.067	6.0	7.7
Texas		NC	NC	NC	NC	NC	NC	NC	NC	NF
Urban Status										
Urban	7.7	84.3	608	553	1,850	5,526	5,553	.059	5.4	4.4
Central City		61.1	441	374	1,388	5,148	5,208	.062	5.2	5.7
Suburban Rural	5.1 2.4	96.0 94.0	692 680	643 602	2,083 2,105	5,717 6,991	5,727 6,827	.058 .046	5.4 4.1	5.0 3.7
	2.1	71.0	000	002	2,103	0,771	0,027	.0-10	1.1	3.,
Climate Zone <sup>2</sup> Under 2,000 CDD and										
Over 7,000 HDD	1.9	98.2	709	618	2,127	8,089	7,935	.041	3.6	3.9
5,500 to 7,000 HDD	3.3	98.2	709	641	2,121	6,343	6,327	.053	4.8	6.2
4,000 to 5,499 HDD	4.5	77.6	559	512	1,698	5,030	5,064	.065	6.0	4.9
Under 4,000 HDD	.4	69.6	502	454	1,565	3,633	3,578	.088	8.0	11.8
2,000 CDD or More and										
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit	<b>5</b> 4	00.0	505	550	2.205	c 021	~ oo4	0.50	4.0	2.5
Single-Family	7.6	98.0	707	650	2,206	6,021	5,984	.053	4.9	3.6
Detached	7.0 .6	99.8 76.9	720 555	662 507	2,233 1,887	6,056 5,597	6,010 5,673	.053 .052	4.9 4.8	3.7 11.1
Mobile Home	.3	57.9	421	396	765	6,049	6,005	.032	4.6 8.6	14.1
Multifamily		53.0	382	305	1,084	5,385	5,426	.065	5.2	5.5
2 to 4 Units		85.1	614	558	1,436	5,952	5,951	.072	6.5	6.3
5 or More Units	1.5	34.0	245	156	875	5,049	5,115	.055	3.5	4.1
Heated Floorspace										
(square feet) Fewer than 1000	2.2	47.5	343	282	722	5,379	5,399	.088	7.3	5.1
1,000 to 1,999	3.7	80.7	582	532	1,462	5,782	5,763	.069	6.3	3.9
2,000 to 2,999	2.8	105.8	763	697	2,431	6,204	6,169	.051	4.6	4.7
3,000 or More	1.5	123.3	889	814	3,804	6,239	6,192	.037	3.4	5.5
Total Number of Rooms (Excluding Bathrooms)										
1 or 2	.4	30.4	219	181	577	5,018	5,090	.076	6.2	10.5
3 to 5	4.1	67.4	487	422	1,314	5,827	5,821	.064	5.5	4.5
6 to 8	4.9	97.6	705	648	2,260	5,952	5,922	.052	4.8	3.5
9 or More	.9	137.6	993	917	3,282	6,038	5,986	.050	4.6	7.5

Table 5.18. Fuel Oil Consumption and Expenditures for Main Space Heating, per U.S. Household, 1993 (Continued)

		Consumption				Annual Heating Degree-Days		Fuel Oil Space-Heating Intensity		
Characteristics	House- holds (million)	(million Btu)	(gallons)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average <sup>2</sup>	Consumption (gallons/ HDD*1000 square feet)	Expenditures (cents/ HDD*1000 square feet)	RSE
RSE Column Factors:	2.0	1.21	1.2 1	1.2 1	0.9	0.5	0.5	1.0 1	1.1 1	Row Factors
Ownership of Unit										
Owned	7.3	98.4	710	653	2,179	6,044	6,009	0.054	5.0	3.6
Rented	2.9	56.9	411	340	1,235	5,456	5,477	.061	5.0	4.8
Public Housing	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Not Public Housing	2.8	57.5	415	346	1,230	5,484	5,502	.062	5.1	4.9
Rent Subsidy	.2	54.5	393	311	909	5,023	5,088	.086	6.8	8.0
No Rent Subsidy	2.6	57.8	417	349	1,258	5,525	5,539	.060	5.0	5.3
ear of Construction										
1939 or Before	4.1	94.5	682	607	1,850	6,181	6,126	.060	5.3	4.1
1940 to 1949	1.2	77.8	561	495	1,647	5,539	5,529	.062	5.4	7.8
1950 to 1959	1.8	91.2	659	623	2,020	5,588	5,619	.058	5.5	8.1
1960 to 1969	1.2	73.7	532	484	1,879	5,203	5,246	.054	5.0	10.5
1970 to 1979	1.2	82.7	596	532	2,044	5,995	5,972	.049	4.3	7.6
1980 to 1984	.3	62.4	450	411	1,883	5,975	5,959	.040	3.7	7.7
1985 to 1987	.2	82.1	592	535	2,661	6,016	5,984	.037	3.3	17.8
1988 to 1990	.2	78.3	565	510	1,961	6,923	6,818	.042	3.8	11.5
1991 to 1993 <sup>3</sup>	.1	78.3	565	518	2,772	6,434	6,391	.032	2.9	11.2
uel Oil Paid 7 Household										
Yes	8.2	96.5	696	640	2,132	6,024	5,989	.054	5.0	3.5
No	2.0	45.8	330	249	991	5,267	5,313	.063	4.8	5.9
993 Family Income	4	62.4	450	205	1 204	5.640	5 (20)	050	5.1	14.0
Less than \$5,000	.4	63.4	458	395	1,384	5,649	5,630	.059	5.1	14.0
\$5,000 to \$9,999	.9	74.0	534	472	1,364	5,723	5,712	.068	6.0	6.7
\$10,000 to \$14,999	.9	87.9	636	559	1,587	6,026	5,969	.066	5.8	8.3
\$15,000 to \$19,999	.9	89.7	648	572	1,531	5,933	5,909	.071	6.3	7.6
\$20,000 to \$24,999	.9	81.9	591	515	1,744	6,052	6,026	.056	4.9	7.4
\$25,000 to \$34,999	1.6	86.1	621	564	2,027	5,888	5,875	.052	4.7	8.2
\$35,000 to \$49,999	2.2	79.6	574	518	2,003	5,995	5,965	.048	4.3	4.9
\$50,000 to \$74,999	1.5	96.3	695	641	2,214	5,872	5,843	.053	4.9	4.4
\$75,000 or More	.9	112.9	814	771	2,625	5,443	5,499	.057	5.4	8.3
elow Poverty Line										
100 Percent	1.2	65.6	473	406	1,393	5,605	5,586	.061	5.2	7.0
125 Percent	1.7	67.7	489	419	1,397	5,714	5,704	.061	5.2	6.3
150 Percent	2.2	70.6	510	443	1,428	5,721	5,698	.062	5.4	5.5
ligible for Federal	2.8	77.7	561	491	1,480	5,846	5,814	.065	5.7	4.9
ge of Householder Under 25 Years	4	40.0	251	212	1 200	5 224	5 224	052	16	17.2
	.4	49.0	354	313	1,289	5,234	5,224	.052	4.6	17.3
25 to 34 Years	1.5	76.0	549	475	1,607	6,135	6,079	.056	4.8	5.3
35 to 44 Years	2.3	75.4	544	497	1,949	5,960	5,953	.047	4.3	4.7
45 to 59 Years60 Years and Over	2.5 3.5	89.4 100.5	645 726	587 658	1,951 2,055	5,792 5,839	5,777 5,825	.057 .060	5.2 5.5	4.3 5.1
ducation of Householder										
	5.7	79.8	576	510	1716	5 802	5,860	.057	5.1	3.9
					1,716	5,882	,			
13 to 16 Years	3.4 1.1	91.8 105.4	663 760	607 710	2,089 2,355	5,926 5,698	5,909 5,692	.054 .057	4.9 5.3	4.8 8.3
ace of Householder					•		•			
White	9.0	89.7	648	586	1,993	6,019	5,989	.054	4.9	3.6
			505		1 200	4.002	4.050	0.77		- 1
Black Other <sup>5</sup>	.8	70.4	507	459	1,380	4,803	4,879	.077	6.9	6.4

Table 5.18. Fuel Oil Consumption and Expenditures for Main Space Heating, per U.S. Household, 1993 (Continued)

per e	.D. 110u	scholu	, 1773 (	Continu	icu)					
		Const	umption			H	Annual Ieating gree-Days	Fuel Space-I Inter	<b>Heating</b>	
Characteristics	House- holds (million)	(million Btu)	(gallons)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average <sup>2</sup>	Consumption (gallons/ HDD*1000 square feet)	Expenditures (cents/ HDD*1000 square feet)	RSE
RSE Column Factors:	2.0	1.21	1.21	1.2 1	0.9	0.5	0.5	1.0 1	1.1 1	Row Factors
Householder of Hispanic Descent										
Yes	0.9	59.3	428	349	1,323	5.182	5,235	0.062	5.1	7.0
No	9.3	89.3	644	585	1,968	5,944	5,918	.055	5.0	3.5
	,	37.0	٧	202	-,,,,,,	-,	-,,,,	.000	2.0	5.5
Household Size										
1 Person	2.3	79.3	573	522	1,449	5,835	5,834	.068	6.2	5.8
2 Persons	3.3	89.9	649	580	2,003	5,848	5,826	.055	5.0	5.1
3 Persons	1.9	91.2	658	599	2,078	5,988	5,972	.053	4.8	4.7
4 Persons	1.6	86.6	625	570	2,020	5,757	5,715	.054	4.9	5.2
5 Persons	.7	84.0	606	538	2,015	6,111	6,107	.049	4.4	9.2
6 or More Persons	.4	84.1	607	537	2,307	5,891	5,846	.045	4.0	9.3
Main Heating Equipment Using Fuel Oil Central Warm-Air Furnace	4.5	83.2	600	550	2,025	6,051	5,999	.049	4.5	4.4
Steam or Hot-Water										
System	5.3	91.0	657	585	1,865	5,760	5,770	.061	5.4	4.1
Other	.4	64.9	471	437	1,185	5,446	5,417	.073	6.8	12.6
Age of Main Heating Equipment										
Less than 5 Years	1.8	97.6	704	648	2,186	6,135	6,100	.053	4.8	6.0
5 to 9 Years	1.3	91.0	657	595	1,952	6,044	5,994	.056	5.0	5.2
10 to 19 Years	2.1	88.9	641	587	2,187	6,128	6,100	.048	4.4	4.9
20 Years or More	3.4	94.4	681	621	1,926	5,739	5,724	.062	5.6	4.2
Don't Know	1.6	51.7	373	300	1,182	5,427	5,454	.058	4.7	6.9
Secondary Heating Fuel (more than one may apply)										
No	3.8	94.5	682	630	2,298	5,866	5,824	.051	4.7	4.5
Yes		81.8	591	525	1,677	5,883	5,878	.060	5.3	3.7
Wood		100.8	727	686	2,606	5,853	5,841	.048	4.5	5.7
Electricity		86.9	627	579	2,156	5,709	5,669	.051	4.7	5.5
Kerosene		80.0	578	519	1,895	5,579	5,472	.055	4.9	10.0
Other	.2	95.3	687	636	2,165	5,788	5,653	.055	5.1	13.5
Average Fuel Oil Expenditures for Main Space Heat (dollars per gallon) Less than 95	7.9	82.2	593	506	1,830	5,998	5,964	.054	4.6	4.3
					,	,	* · ·			
1.10 or More	.4	98.3	709	835	2,039	4,837	4,884	.072	8.5	7.7

Table 5.18. Fuel Oil Consumption and Expenditures for Main Space Heating, per U.S. Household, 1993 (Continued)

Por		Consumption				Annual Heating Degree-Days		Fuel Oil Space-Heating Intensity		
Characteristics	House- holds (million)	(million Btu)	(gallons)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average <sup>2</sup>	Consumption (gallons/ HDD*1000 square feet)	Expenditures (cents/ HDD*1000 square feet)	RSE
RSE Column Factors:	2.0	1.21	1.21	1.21	0.9	0.5	0.5	1.0 <sup>1</sup>	1.1 1	Row Factors
Adequacy of Insulation Well Insulated Adequately Insulated Poorly Insulated	4.0 4.1 2.2	88.6 86.5 83.2	639 624 600	577 567 537	2,143 1,821 1,655	6,055 5,819 5,659	6,028 5,810 5,637	0.049 .059 .064	4.4 5.3 5.7	4.3 4.4 5.1

<sup>&</sup>lt;sup>1</sup> This factor is underestimated because it contains no error for estimating this end use.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals. • See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C, and G of the 1993 Residential Energy

Consumption Survey (for specific titles of forms, see Appendix E).

<sup>&</sup>lt;sup>2</sup> The 30-year average and climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

<sup>3</sup> Does not include all new construction for 1993.

<sup>&</sup>lt;sup>4</sup> Below 150 percent of poverty line or 60 percent of median State income.

<sup>&</sup>lt;sup>5</sup> Includes some householders who described themselves as Hispanic rather than White, Black, or other.

NC = No cases in sample.

NF = No applicable RSE row factor.

Q = Data withheld either because the Relative Standard Error (RSE) was greater than 50 percent or fewer than 10 households were sampled.

Table 5.19. Liquefied Petroleum Gas Consumption and Expenditures for Main Space Heating, per U.S. Household, 1993

Northeast	ts/ 1000 feet) RSE Row
Total U.S. Households	.
Northeast	1 Factors
Northeast   2   52.9   579   608   1,389   6,951   6,960   0.060   New England   1   52.9   580   592   1,174   6,865   6,928   0.072   New England   1   52.9   580   592   1,174   6,865   6,928   0.072   Niddle Atlantic   1.1   52.8   579   629   1,673   7,065   7,003   Q   Q   Q   Q   Q   Q   Q   Q   Q	7.0 5.3
Northeast	
Middle Atlantic         .1         52.8         579         629         1,673         7,065         7,003         Q         Q           Midwest         1.8         86.5         947         726         2,098         6,929         6,642         .065         3           East North Central         9         95.9         1,051         817         2,155         6,761         6,512         .072            West North Central         9         76.4         836         628         2,037         7,109         6,781         .058           South         2.3         39.0         427         408         1,326         2,870         2,751          1.12         1.0           South Atlantic         1.1         40.9         448         461         1,379         2,739         2,722          1.11         1.2         1.0           South Atlantic         1.1         40.9         448         461         1,275         3.411         3.142         .102            South Central         .7         40.7         446         410         1,275         3.411         3.142         .102	5.3 13.4
Midwest         1.8         86.5         947         726         2.098         6.929         6.642         .065           East North Central         .9         95.9         1,051         817         2,155         6,761         6,512         .072         .072         .072         .072         .072         .072         .072         .073         .0058         .001         .0058         .001         .0058         .001         .0058         .001         .0058         .001         .0058         .001         .0058         .001         .0058         .001         .0058         .001         .0058         .001         .0058         .001         .0058         .001         .0058         .001         .0058         .001         .0058         .001         .0058         .001         .0058         .00	7.3 18.9
East North Central 9 95.9 1,051 817 2,155 6,761 6,512 .072	
West North Central	5.0 5.8
South         2.3         39.0         427         408         1,326         2,870         2,751         1.12         16           South Atlantic         1.1         40.9         448         461         1,379         2,739         2,722         1.19         17           East South Central         7         40.7         446         410         1,275         3,411         3,142         1.02         6           West South Central         .5         32.1         351         286         1,276         2,393         2,257         1.15         9           West         .4         65.9         721         669         1,532         5,817         5,613         .081           Mountain         .3         72.9         799         673         1,463         6,046         5,742         .090         9           Pacific         .1         44.6         489         657         1,739         5,129         5,223         .055           Largest Populated States           California         .1         23.8         261         331         1,493         4,400         4,469         .040         .0           Florida         .3         17.1 <td>5.6 7.9</td>	5.6 7.9
South Atlantic	4.3 8.5
East South Central 7, 40.7 446 410 1,275 3,411 3,142 1.02 West South Central 5 32.1 351 286 1,276 2,393 2,257 1.115 9. West 4 65.9 721 669 1,532 5,817 5,613 0.81 Mountain 3 72.9 799 673 1,463 6,046 5,742 0.090 7. Acrific 1 44.6 489 657 1,739 5,129 5,223 0.55	0.7 7.4
West South Central         .5         32.1         351         286         1,276         2,393         2,257         .115         West         .4         65.9         721         669         1,532         5,817         5,613         .081         .082         .085         .085         .085         .085         .085         .085         .085         .085         .085         .087         .081         .081         .081         .082         .087         .082         .087         .082         .087         .082         .087         .083         .084         .082	
West         .4         65.9         721         669         1,532         5,817         5,613         .081           Mountain         .3         72.9         799         673         1,463         6,046         5,742         .090         7           Pacific         .1         44.6         489         657         1,739         5,129         5,223         .055           Largest Populated States           California         .1         23.8         261         331         1,493         4,400         4,469         .040            Florida         .3         17.1         188         248         1,067         937         1,027         .188         Q           New York         Q         58.8         643         638         2,165         7,720         7,545         Q         Q         Q           Texas         .4         27.7         304         249         1,277         2,194         2,064         .108         3           Urban Status         Urban         1.6         51.6         565         512         1,711         4,420         4,282         .075         6           Central City         .2	9.4 10.6 9.4 20.9
Mountain         .3         72.9         799         673         1,463         6,046         5,742         .090           Pacific         .1         44.6         489         657         1,739         5,129         5,223         .055           Largest Populated States         California         .1         23.8         261         331         1,493         4,400         4,469         .040         .1           Florida         .3         17.1         188         248         1,067         937         1,027         .188         Q           New York         Q         58.8         643         638         2,165         7,720         7,545         Q         Q         Q           Texas         .4         27.7         304         249         1,277         2,194         2,064         .108         3           Urban Status         Urban         1.6         51.6         565         512         1,711         4,420         4,282         .075         0           Central City         .2         43.1         472         470         1,150         3,741         3,702         .110         10           Suburban         1.4         53.0	7.5 14.2
Pacific         .1         44.6         489         657         1,739         5,129         5,223         .055           Largest Populated States         California         .1         23.8         261         331         1,493         4,400         4,469         .040         .1           Florida         .3         17.1         188         248         1,067         937         1,027         .188         Q           New York         Q         58.8         643         638         2,165         7,720         7,545         Q         Q         Q           Texas         .4         27.7         304         249         1,277         2,194         2,064         .108         3           Urban Status           Urban Status <t< td=""><td>7.6 18.3</td></t<>	7.6 18.3
California         .1         23.8         261         331         1,493         4,400         4,469         .040         5           Florida         .3         17.1         188         248         1,067         937         1,027         .188         Q           New York         Q         58.8         643         638         2,165         7,720         7,545         Q         Q         Q           Texas         .4         27.7         304         249         1,277         2,194         2,064         .108         3           Urban Status           Urban         1.6         51.6         565         512         1,711         4,420         4,282         .075         0           Central City         .2         43.1         472         470         1,150         3,741         3,702         .110         10           Suburban         1.4         53.0         580         519         1,800         4,528         4,374         .071         0           Rural         3.0         64.3         704         585         1,605         5,070         4,862         .087           Climate Zone 2	7.4 27.7
Florida	
New York         Q         58.8         643         638         2,165         7,720         7,545         Q         A         2         10         10         Q         Q         A         2         10	5.0 15.2
Texas         .4         27.7         304         249         1,277         2,194         2,064         .108         30           Urban Status           Urban         1.6         51.6         565         512         1,711         4,420         4,282         .075         6           Central City         .2         43.1         472         470         1,150         3,741         3,702         .110         10           Suburban         1.4         53.0         580         519         1,800         4,528         4,374         .071         6           Rural         3.0         64.3         704         585         1,605         5,070         4,862         .087           Climate Zone <sup>2</sup> Under 2,000 CDD and         0ver 7,000 HDD         .7         77.5         849         691         2,199         8,196         7,812         .047         .047         .047         .047         .047         .047         .048         .049         .049         .049         .049         .049         .049         .049         .049         .049         .049         .049         .049         .049         .049         .049         .049	
Urban Status           Urban         1.6         51.6         565         512         1,711         4,420         4,282         .075         6           Central City         .2         43.1         472         470         1,150         3,741         3,702         .110         11           Suburban         1.4         53.0         580         519         1,800         4,528         4,374         .071         6           Rural         3.0         64.3         704         585         1,605         5,070         4,862         .087           Climate Zone <sup>2</sup> Under 2,000 CDD and         0ver 7,000 HDD         .7         77.5         849         691         2,199         8,196         7,812         .047         .047         .047         .047         .047         .047         .048         .049	16.1 8.9 28.3
Urban         1.6         51.6         565         512         1,711         4,420         4,282         .075         0           Central City         2         43.1         472         470         1,150         3,741         3,702         .110         10           Suburban         1.4         53.0         580         519         1,800         4,528         4,374         .071         0           Rural         3.0         64.3         704         585         1,605         5,070         4,862         .087         2           Climate Zone <sup>2</sup> Under 2,000 CDD and         0ver 7,000 HDD         .7         77.5         849         691         2,199         8,196         7,812         .047         .047         .047         .047         .047         .048         .000	
Central City       .2       43.1       472       470       1,150       3,741       3,702       .110       10         Suburban       1.4       53.0       580       519       1,800       4,528       4,374       .071       0         Rural       3.0       64.3       704       585       1,605       5,070       4,862       .087       7         Climate Zone <sup>2</sup> Under 2,000 CDD and       7       77.5       849       691       2,199       8,196       7,812       .047       .00         5,500 to 7,000 HDD       1.1       85.9       941       743       1,906       6,883       6,688       .072       .04         4,000 to 5,499 HDD       .7       78.1       855       709       1,894       5,322       5,025       .085	5.8 9.8
Suburban     1.4     53.0     580     519     1,800     4,528     4,374     .071     60       Rural     3.0     64.3     704     585     1,605     5,070     4,862     .087       Climate Zone 2       Under 2,000 CDD and Over 7,000 HDD     7     77.5     849     691     2,199     8,196     7,812     .047     .047       5,500 to 7,000 HDD     1.1     85.9     941     743     1,906     6,883     6,688     .072     .94       4,000 to 5,499 HDD     .7     78.1     855     709     1,894     5,322     5,025     .085	0.8 9.8
Rural	5.4 10.1
Under 2,000 CDD and Over 7,000 HDD	7.2 5.9
Over 7,000 HDD	
5,500 to 7,000 HDD	
4,000 to 5,499 HDD	3.8 8.2
	5.7 11.8
	7.0 14.0 1.3 10.0
Under 4,000 HDD	1.5
year and a second control of the con	1.0 12.2
Type of Housing Unit	
	5.4 6.2
	6.5
Attached Q Q Q Q Q Q Q Q Q Q	
	0.6 6.9
Multifamily Q Q Q Q Q Q Q Q Q	NF
2 to 4 Units	
	111
Heated Floorspace	
(square feet) Fewer than 1000	3.0 7.0
	3.4 7.2
	5.1 8.8
	3.4 8.4
Total Number of Rooms (Excluding Bathrooms)	
(Excluding Bathrooms)         1 or 2	NF
	3.9 7.2
	5.2 7.4
	4.2 13.0

Table 5.19. Liquefied Petroleum Gas Consumption and Expenditures for Main Space Heating, per U.S. Household, 1993 (Continued)

			<u>.</u>	1	<u> </u>		(Contine	<u> </u>		
		Const	Consumption			H	Annual leating ree-Days	Liquefied Petroleum Gas Space-Heating Intensity		
Characteristics	House- holds (million)	(million Btu)	(gallons)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average <sup>2</sup>	Consumption (gallons/ HDD*1000 square feet)	Expenditures (cents/ HDD*1000 square feet)	RSE
RSE Column Factors:	1.9	1.01	1.0 1	0.91	0.8	0.8	0.8	1.0 <sup>1</sup>	1.1 1	Row Factors
Ownership of Unit										
Owned	3.9	61.1	669	565	1,728	4,846	4,659	0.080	6.7	5.8
Rented	.8	54.5	597	534	1,196	4,860	4,689	.103	9.2	9.0
Public Housing	Q _	Q	Q	Q	Q	Q	Q	Q	Q	NF
Not Public Housing	.7	54.5	596	533	1,206	4,794	4,614	.103	9.2	9.1
Rent Subsidy	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
No Rent Subsidy	.7	53.4	585	526	1,186	4,721	4,547	.105	9.4	9.5
Year of Construction										
1939 or Before	1.1	86.1	942	748	1,992	5,922	5,668	.080	6.3	6.3
1940 to 1949	.4	66.2	725	636	1,243	4,025	3,851	.145	12.7	17.1
1950 to 1959	.5	39.8	436	393	1,373	3,889	3,750	.082	7.4	17.0
1960 to 1969	.6	62.8 47.1	687	594 452	1,760	4,485	4,377	.087 .078	7.5 6.8	12.2 8.9
1970 to 1979	.9 .2	42.7	515 468	397	1,456 1,174	4,530 5,413	4,308 5,207	.078	6.2	12.6
1980 to 1984	.2	53.7	588	536	1,618	5,142	5,048	.074	6.4	14.3
1988 to 1990	.2	49.3	540	512	1,700	4,711	4,547	.067	6.4	14.9
1991 to 1993 <sup>3</sup>	.3	51.1	559	504	1,893	4,596	4,467	.064	5.8	13.6
Liquefied Petroleum Gas Paid by Household										
Yes	4.5	59.9	656	559	1,648	4,829	4,641	.082	7.0	5.4
No	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
1993 Family Income			621	<b>7</b> .50	1.004	2.025	2.520	1.40	12.5	20.5
Less than \$5,000	.2	56.7	621	568	1,094	3,827	3,730	.148	13.6	20.5
\$5,000 to \$9,999	.6	49.8	545	489	1,003	3,928	3,773	.138	12.4	13.3
\$10,000 to \$14,999	.6	43.2	473	424	1,266	4,597	4,314	.081 .079	7.3	10.0 12.3
\$15,000 to \$19,999 \$20,000 to \$24,999	.5 .6	58.6 54.1	642 592	568 511	1,459 1,330	5,540 4,832	5,270 4,646	.079	7.0 8.0	10.4
\$25,000 to \$34,999	.9	60.6	664	556	1,743	4,774	4,608	.080	6.7	8.7
\$35,000 to \$34,999	.6	73.0	799	648	2,382	5,512	5,410	.061	4.9	9.0
\$50,000 to \$74,999	.4	81.7	895	730	2,368	5,163	4,971	.073	6.0	12.2
\$75,000 or More	.1	80.8	885	710	2,591	5,681	5,467	.060	4.8	13.8
Below Poverty Line										
100 Percent	.9	50.0	547	494	1,075	4,122	3,925	.123	11.2	10.5
125 Percent	1.3	48.1	526	468	1,104	4,285	4,055	.111	9.9	10.1
150 Percent	1.5	47.2	517	463	1,123	4,291	4,079	.107	9.6	9.3
Eligible for Federal Assistance 4	1.7	49.0	536	484	1,202	4,386	4,185	.102	9.2	8.7
Age of Householder Under 25 Years	2	40.6	111	200	001	4.704	4 600	102	0.2	17.0
Under 25 Years	.2 .8	40.6 53.6	444 587	399 516	901 1,445	4,794 5,309	4,600 5,040	.103 .077	9.2 6.7	17.2 8.0
35 to 44 Years		56.6	620	532	1,443	4,721	4,551	.077	6.8	8.7
45 to 59 Years	1.2	63.4	694	582	1,776	4,938	4,777	.079	6.6	10.5
60 Years and Over	1.6	64.8	710	600	1,719	4,626	4,459	.089	7.6	9.2
Education of Householder										
Less than 13 Years	3.3	56.7	621	531	1,534	4,671	4,481	.087	7.4	6.2
13 to 16 Years	1.1	69.4	760	639	1,909	5,401	5,218	.074	6.2	6.9
17 Years or More	.2	63.9	700	618	1,989	4,837	4,744	.073	6.4	12.7
Race of Householder White	4.3	62.6	686	581	1,691	5,017	4,826	.081	6.8	5.3
Black		24.4	267	274	1,010	2,522	2,423	.105	10.8	14.2
Other <sup>5</sup>	Q	Q	Q	Q	Q	Q	Q Q	Q	Q	NF
	`									

Table 5.19. Liquefied Petroleum Gas Consumption and Expenditures for Main Space Heating, per U.S. Household, 1993 (Continued)

	puce 1	Teathi	5, per e	100	isciioia,	1//0	(Contini			
		Const	umption			I	Annual Jeating gree-Days	Liquefied Pe Space-I Inter	Heating	
Characteristics	House- holds (million)	(million Btu)	(gallons)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average <sup>2</sup>	Consumption (gallons/ HDD*1000 square feet)	Expenditures (cents/ HDD*1000 square feet)	RSE
RSE Column Factors:	1.9	1.01	1.01	0.91	0.8	0.8	0.8	1.0 <sup>1</sup>	1.1 <sup>1</sup>	Row Factors
Householder of Hispanic										
Descent										
Yes	0.2	34.7	380	358	1,363	3,196	3,180	0.087	8.2	21.4
No	4.4	61.1	669	569	1,653	4,921	4,729	.082	7.0	5.2
Household Size										
1 Person	.8	56.4	617	531	1,107	4,458	4,299	.125	10.8	10.2
2 Persons		61.4	673	579	1,777	4,685	4,537	.081	7.0	8.4
3 Persons		58.8	644	552	1,659	4,699	4,500	.083	7.1	9.5
4 Persons		60.0	657	571	1,661	5,530	5,265	.071	6.2	9.2
5 Persons		65.3	715	562	1,909	5,458	5,232	.069	5.4	9.9
6 or More Persons		54.1	592	480	2,019	5,178	4,947	.057	4.6	23.1
Main Heating Equipment Using LPG Central Warm-Air										
Furnace	2.9	66.6	730	615	1.806	5,491	5.284	.074	6.2	5.0
Room Heater/Other	1.7	48.2	528	462	1,348	3,708	3,562	.106	9.2	11.6
Age of Main Heating Equipment										
Less than 5 Years	1.7	60.3	660	563	1,747	4,923	4,706	.077	6.5	7.0
5 to 9 Years	1.1	55.1	604	510	1,656	5,204	5,037	.070	5.9	8.0
10 to 19 Years	.8	65.9	721	615	1,507	4,547	4,382	.105	9.0	8.8
20 Years or More	.7	65.2	714	598	1,675	4,481	4,332	.095	8.0	12.9
Don't Know	.2	43.8	479	460	1,128	4,693	4,484	.091	8.7	15.1
Secondary Heating Fuel (more than one may apply)										
No	1.9	58.5	641	549	1,782	4,762	4,566	.075	6.5	6.6
Yes	2.7	61.1	669	568	1,538	4,911	4,735	.089	7.5	6.4
Wood		65.5	717	626	2,420	5,345	5,119	.055	4.8	9.0
Electricity		51.9	569	493	1,599	4,462	4,272	.080	6.9	8.4
Kerosene		61.2	670	539	1,640	4,994	4,839	.082	6.6	12.5
Other	.3	85.8	940	810	2,340	4,589	4,364	.087	7.5	16.0
Average LPG Expenditures for Main Space Heat (dollars per gallon)										
Less than .75	.8	86.2	944	608	2,096	6,888	6,508	.065	4.2	10.0
1.00 or More	1.1	33.9	371	431	1,229	3,064	3,034	.099	11.4	8.5
Adequacy of Insulation		<b>.</b>	640		1.000	4610	4554	0.50		
Well Insulated		58.4	640	535	1,903	4,918	4,754	.068	5.7	9.0
Adequately Insulated		61.5	673	568 570	1,663	5,090	4,901	.080	6.7	7.3
Poorly Insulated	1.3	59.8	655	579	1,285	4,418	4,214	.115	10.2	8.3

<sup>1</sup> This factor is underestimated because it contains no error for estimating this end use.

<sup>&</sup>lt;sup>2</sup> The 30-year average and climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

<sup>3</sup> Does not include all new construction for 1993.

Below 150 percent of poverty line or 60 percent of median State income.

<sup>&</sup>lt;sup>5</sup> Includes some householders who described themselves as Hispanic rather than White, Black, or other.

NF = No applicable RSE row factor.

Q = Data withheld either because the Relative Standard Error (RSE) was greater than 50 percent or fewer than 10 households were sampled.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals. • See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-D of the 1993 Residential Energy Consumption Survey (for specific titles of forms, see Appendix E).