

**Table 3.7a. Space Heating by Census Region and Climate Zone,  
Million U.S. Households, 1993**

Space Heating Characteristics	Total	Census Region				Climate Zone					RSE Row Factors
		Northeast	Midwest	South	West	Fewer than 2,000 CDD and --				More than 2,000 CDD and Fewer than 4,000 HDD	
						More than 7,000 HDD	5,500 to 7,000 HDD	4,000 to 5,499 HDD	Fewer than 4,000 HDD		
RSE Column Factor:	0.5	0.9	1.1	0.8	0.8	1.6	1.3	1.2	1.2	1.1	
<b>Total</b> .....	96.6	19.5	23.3	33.5	20.4	8.7	26.5	22.5	17.8	21.2	7.7
<b>Main Heating Fuel and Equipment</b>											
Natural Gas .....	50.8	9.4	16.8	12.7	11.9	4.3	17.5	10.1	10.2	8.7	7.5
Central Warm-Air Furnace .....	34.9	4.7	13.4	8.7	8.2	3.2	12.7	6.5	6.3	6.3	9.1
For One Housing Unit .....	34.1	4.4	13.1	8.6	8.0	3.1	12.4	6.2	6.3	6.2	9.4
For Two or More Units .....	0.9	0.4	0.3	Q	Q	Q	0.3	0.3	Q	Q	30.0
Steam or Hot-Water System .....	8.7	4.3	2.9	0.7	0.8	1.0	4.2	3.0	0.4	Q	15.0
For One Housing Unit .....	5.1	2.7	1.6	0.4	0.5	0.6	2.7	1.5	0.2	Q	18.6
For Two or More Units .....	3.6	1.6	1.3	0.4	0.3	0.4	1.6	1.5	Q	Q	20.6
Floor, Wall, or Pipeless Furnace .....	4.3	0.2	Q	1.4	2.6	Q	0.3	0.3	2.7	1.0	19.2
Room Heater/Other .....	2.8	0.2	0.3	1.9	0.4	Q	0.3	0.3	0.8	1.3	24.6
Electricity .....	25.3	1.9	3.0	14.7	5.7	0.9	4.0	6.0	4.8	9.5	10.7
Built-In Electric Units .....	7.0	1.2	1.4	1.9	2.6	0.6	2.1	2.1	1.5	0.7	16.7
Central Warm-Air Furnace .....	9.5	0.1	1.1	6.3	2.0	0.2	1.1	1.2	1.7	5.2	19.4
For One Housing Unit .....	9.3	0.1	1.1	6.2	1.9	0.2	1.1	1.2	1.7	5.1	19.6
Heat Pump .....	7.5	0.5	0.4	5.9	0.7	Q	0.7	2.4	1.2	3.2	18.5
Other .....	1.3	Q	Q	0.6	0.5	Q	Q	0.2	0.4	0.5	23.7
Fuel Oil .....	10.2	7.0	1.3	1.4	0.4	1.9	3.3	4.5	0.4	0.2	17.4
Steam or Hot-Water System .....	5.3	4.7	0.2	0.4	Q	0.6	1.9	2.8	Q	Q	16.4
For One Housing Unit .....	3.5	2.9	0.2	0.3	Q	0.6	1.6	1.4	Q	Q	19.6
For Two or More Units .....	1.8	1.8	Q	Q	Q	Q	0.3	1.4	Q	Q	15.6
Central Warm-Air Furnace .....	4.5	2.2	1.0	0.9	Q	1.2	1.3	1.5	0.3	Q	17.3
Other .....	0.4	0.1	Q	Q	Q	Q	Q	Q	Q	Q	40.4
Wood .....	3.1	0.5	0.4	1.2	1.1	0.7	0.3	0.9	0.8	0.5	17.0
Heating Stove .....	2.4	0.4	0.2	1.0	0.8	0.5	0.2	0.7	0.6	0.3	19.3
Other .....	0.7	Q	0.2	0.2	0.3	0.2	Q	0.2	0.2	0.1	29.4
LPG .....	4.8	0.2	1.8	2.4	0.4	0.7	1.0	0.7	0.9	1.4	26.2
Central Warm-Air Furnace .....	3.1	0.1	1.5	1.2	0.3	0.6	0.8	0.6	0.4	0.7	28.0
Room Heater .....	1.1	Q	Q	1.0	Q	Q	Q	Q	Q	0.6	30.4
Other .....	0.6	Q	Q	0.3	Q	Q	Q	Q	0.2	Q	35.1
Kerosene .....	1.0	0.3	Q	0.6	Q	0.1	Q	Q	0.3	0.2	26.5
Other .....	0.4	Q	Q	Q	0.1	0.1	Q	Q	Q	Q	30.6
None .....	0.9	Q	Q	Q	0.7	Q	Q	Q	0.3	0.6	23.5
<b>Amount of Heat Provided by Main Heating Equipment</b>											
All or Almost All .....	87.3	17.9	22.3	30.2	16.9	7.7	24.9	20.6	15.2	18.8	5.0
About Three-Fourths .....	5.4	1.0	0.6	2.0	1.8	0.7	1.0	1.2	1.4	1.2	14.5
Closer to One-Half .....	3.1	0.6	0.4	1.1	0.9	0.3	0.6	0.6	0.9	0.7	16.8
No Main Equipment .....	0.9	Q	Q	Q	0.7	Q	Q	Q	0.3	0.6	23.5
<b>Age of Main Heating Equipment</b>											
Less than 2 Years .....	9.0	1.7	2.1	3.8	1.4	1.0	2.2	1.8	1.6	2.4	12.1
2 to 4 Years .....	10.6	1.8	2.5	4.6	1.8	1.2	2.8	1.9	2.1	2.6	11.3
5 to 9 Years .....	17.7	2.9	4.2	7.5	3.2	1.5	4.4	4.5	2.7	4.7	9.6
10 to 19 Years .....	21.6	4.0	5.4	7.6	4.5	2.3	5.8	5.1	3.2	5.2	7.3
20 Years or More .....	21.5	5.2	5.6	5.0	5.7	1.9	7.0	4.9	5.1	2.7	8.0
Don't Know .....	15.3	3.9	3.5	4.8	3.1	0.7	4.3	4.3	2.8	3.1	9.8
No Main Equipment .....	0.9	Q	Q	Q	0.7	Q	Q	Q	0.3	0.6	23.5

See footnotes at end of table.

**Table 3.7b. Space Heating by Census Region and Climate Zone, Percent of Households, 1993**

Space Heating Characteristics	Total	Census Region				Climate Zone					RSE Row Factors	
		Northeast	Midwest	South	West	Fewer than 2,000 CDD and --				More than 2,000 CDD and Fewer than 4,000 HDD		
						More than 7,000 HDD	5,500 to 7,000 HDD	4,000 to 5,499 HDD	Fewer than 4,000 HDD			
RSE Column Factor:	0.5	1.0	1.2	0.9	0.8	1.4	1.2	1.1	1.0	1.1		
<b>Total</b> .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0
<b>Main Heating Fuel and Equipment</b>												
Natural Gas .....	52.6	48.3	71.9	37.9	58.6	49.3	66.2	44.9	57.2	41.1	5.8	
Central Warm-Air Furnace .....	36.2	24.4	57.3	25.9	40.0	36.6	47.9	29.0	35.4	29.5	7.2	
For One Housing Unit .....	35.3	22.4	56.0	25.8	39.5	35.3	46.7	27.6	35.3	29.0	7.5	
For Two or More Units .....	0.9	2.0	1.3	Q	Q	Q	1.2	1.3	Q	Q	29.8	
Steam or Hot-Water System .....	9.0	22.1	12.6	2.1	3.8	11.2	16.0	13.5	2.0	Q	15.0	
For One Housing Unit .....	5.3	13.7	6.8	1.1	2.4	6.8	10.1	6.8	1.2	Q	17.9	
For Two or More Units .....	3.8	8.4	5.8	1.1	1.4	Q	5.9	6.6	Q	Q	19.3	
Floor, Wall, or Pipeless Furnace .....	4.4	0.9	Q	4.2	12.7	Q	1.1	1.3	15.1	4.6	19.0	
Room Heater/Other .....	2.9	1.0	1.4	5.7	2.1	Q	1.3	1.1	4.7	6.2	23.0	
Electricity .....	26.2	9.9	12.8	43.9	28.1	10.9	15.2	26.6	27.2	45.0	9.4	
Built-In Electric Units .....	7.2	6.0	6.1	5.5	12.6	7.2	8.1	9.5	8.2	3.1	16.4	
Central Warm-Air Furnace .....	9.8	0.6	4.6	18.9	9.7	2.3	4.3	5.4	9.8	24.5	17.9	
For One Housing Unit .....	9.6	0.6	4.6	18.5	9.4	2.3	4.3	5.2	9.8	23.8	18.1	
Heat Pump .....	7.8	2.7	1.9	17.6	3.4	Q	2.7	10.7	6.7	15.2	17.8	
Other .....	1.4	Q	Q	1.9	2.4	Q	Q	1.0	2.5	2.2	23.4	
Fuel Oil .....	10.6	36.1	5.8	4.3	2.0	21.6	12.5	19.9	2.0	1.0	16.9	
Steam or Hot-Water System .....	5.5	24.4	1.0	1.1	Q	7.2	7.1	12.5	Q	Q	16.5	
For One Housing Unit .....	3.6	15.1	1.0	1.0	Q	6.6	5.9	6.1	Q	Q	19.3	
For Two or More Units .....	1.9	9.3	Q	Q	Q	Q	1.2	6.4	Q	Q	16.8	
Central Warm-Air Furnace .....	4.7	11.1	4.5	2.8	Q	13.3	5.1	6.8	1.7	Q	16.3	
Other .....	0.4	0.7	Q	Q	Q	Q	Q	Q	Q	Q	36.8	
Wood .....	3.2	2.3	1.7	3.5	5.4	7.8	1.2	3.8	4.4	2.3	17.7	
Heating Stove .....	2.5	1.9	1.0	2.9	4.0	6.0	0.9	3.1	3.5	1.6	20.2	
Other .....	0.8	Q	0.7	0.6	1.4	1.9	Q	0.7	1.0	0.7	30.1	
LPG .....	5.0	1.2	7.5	7.3	1.9	7.9	3.9	3.1	5.3	6.8	24.5	
Central Warm-Air Furnace .....	3.2	0.8	6.5	3.5	1.4	6.5	3.2	2.6	2.4	3.2	26.4	
Room Heater .....	1.2	Q	Q	2.9	Q	Q	Q	Q	2.0	2.9	31.9	
Other .....	0.6	Q	Q	0.9	Q	Q	Q	Q	1.0	Q	33.5	
Kerosene .....	1.0	1.7	Q	1.7	Q	1.6	Q	Q	1.9	1.1	27.3	
Other .....	0.4	Q	Q	Q	0.3	0.8	Q	Q	Q	Q	33.7	
None .....	0.9	Q	Q	Q	3.3	Q	Q	Q	1.8	2.7	24.1	
<b>Amount of Heat Provided by Main Heating Equipment</b>												
All or Almost All .....	90.3	91.7	95.7	90.1	83.2	89.1	94.1	91.8	85.3	88.6	1.4	
About Three-Fourths .....	5.6	5.2	2.7	5.9	8.8	7.6	3.6	5.5	7.7	5.5	14.3	
Closer to One-Half .....	3.2	3.2	1.6	3.4	4.7	3.3	2.3	2.7	5.1	3.2	17.0	
No Main Equipment .....	0.9	Q	Q	Q	3.3	Q	Q	Q	1.8	2.7	24.1	
<b>Age of Main Heating Equipment</b>												
Less than 2 Years .....	9.3	8.5	9.2	11.4	6.8	12.0	8.3	7.8	9.2	11.2	10.4	
2 to 4 Years .....	11.0	9.2	10.7	13.7	8.6	14.0	10.4	8.7	11.7	12.4	9.5	
5 to 9 Years .....	18.3	14.7	17.9	22.5	15.5	17.2	16.6	20.0	15.0	21.9	7.3	
10 to 19 Years .....	22.4	20.8	23.0	22.8	22.3	27.0	21.8	22.8	17.8	24.5	5.1	
20 Years or More .....	22.2	26.5	24.2	14.8	28.0	21.3	26.5	21.7	28.6	12.6	6.4	
Don't Know .....	15.8	20.2	15.0	14.2	15.4	8.6	16.4	19.0	15.9	14.7	8.6	
No Main Equipment .....	0.9	Q	Q	Q	3.3	Q	Q	Q	1.8	2.7	24.1	

See footnotes at end of table.

**Table 3.7a. Space Heating by Census Region and Climate Zone,  
Million U.S. Households, 1993 (Continued)**

Space Heating Characteristics	Total	Census Region				Climate Zone					RSE Row Factors
		Northeast	Midwest	South	West	Fewer than 2,000 CDD and --				More than 2,000 CDD and Fewer than 4,000 HDD	
						More than 7,000 HDD	5,500 to 7,000 HDD	4,000 to 5,499 HDD	Fewer than 4,000 HDD		
RSE Column Factor:	0.5	0.9	1.1	0.8	0.8	1.6	1.3	1.2	1.2	1.1	
<b>Secondary Heating Fuel and Equipment (more than one may apply)</b>											
No .....	60.8	13.8	15.9	19.5	11.6	5.2	18.6	13.8	10.3	12.9	5.7
Yes .....	35.9	5.7	7.4	14.0	8.7	3.5	7.9	8.7	7.5	8.3	7.7
Natural Gas .....	4.1	0.3	0.7	1.8	1.2	0.3	0.6	0.5	1.3	1.2	19.8
Fireplace .....	1.8	Q	0.4	0.6	0.7	0.2	0.3	0.1	0.5	0.6	22.1
Room Heater .....	1.0	Q	Q	0.6	Q	Q	Q	Q	0.2	0.5	25.2
Central Warm-Air Furnace .....	0.6	Q	0.1	0.2	0.2	Q	Q	0.2	0.2	Q	31.6
Other Equipment .....	0.9	Q	Q	0.4	0.3	Q	0.1	Q	0.4	0.1	33.3
Electricity .....	14.6	2.3	3.3	6.0	3.0	1.4	3.3	3.4	3.0	3.5	10.4
Portable Heater .....	9.8	1.5	2.4	3.9	2.0	0.8	2.2	2.3	2.2	2.3	11.9
Built-in Electric Units .....	4.0	0.8	0.7	1.7	0.8	0.5	1.0	0.9	0.7	1.0	18.0
Other Equipment .....	0.8	Q	Q	0.3	0.3	Q	Q	Q	0.2	0.2	19.3
Fuel Oil .....	0.4	0.2	Q	Q	Q	0.1	Q	Q	Q	Q	21.6
Wood .....	19.0	3.1	3.8	6.7	5.4	1.7	4.4	4.9	3.6	4.3	9.9
Fireplace .....	15.9	2.2	3.3	5.9	4.5	1.0	3.6	4.0	3.2	4.1	10.7
Heating Stove .....	3.4	1.0	0.7	0.9	0.9	0.7	1.0	1.0	0.4	0.3	15.8
Other Equipment .....	0.2	Q	Q	Q	Q	Q	Q	Q	Q	Q	60.8
LPG .....	1.2	Q	0.2	0.8	0.2	0.2	0.1	0.2	0.5	0.4	29.7
Kerosene .....	2.6	0.4	0.9	1.3	Q	0.2	0.7	0.9	0.5	0.3	22.7
Other .....	0.4	Q	Q	Q	0.1	Q	Q	Q	Q	Q	47.5

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 of the 1993 Residential Energy Consumption Survey. (For specific titles of forms, see Appendix D.)

**Table 3.7b. Space Heating by Census Region and Climate Zone, Percent of Households, 1993 (Continued)**

Space Heating Characteristics	Total	Census Region				Climate Zone					RSE Row Factors
		Northeast	Midwest	South	West	Fewer than 2,000 CDD and --				More than 2,000 CDD and Fewer than 4,000 HDD	
						More than 7,000 HDD	5,500 to 7,000 HDD	4,000 to 5,499 HDD	Fewer than 4,000 HDD		
RSE Column Factor:	0.5	1.0	1.2	0.9	0.8	1.4	1.2	1.1	1.0	1.1	
<b>Secondary Heating Fuel and Equipment (more than one may apply)</b>											
No .....	62.9	70.8	68.2	58.1	57.1	59.7	70.2	61.4	57.8	61.0	3.5
Yes .....	37.1	29.2	31.8	41.9	42.9	40.3	29.8	38.6	42.2	39.0	5.9
Natural Gas .....	4.2	1.7	3.1	5.3	6.1	4.0	2.4	2.3	7.4	5.9	18.9
Fireplace .....	1.9	Q	1.5	1.9	3.6	2.5	1.3	0.6	2.9	2.8	22.1
Room Heater .....	1.0	Q	Q	1.9	Q	Q	Q	Q	1.0	2.4	23.8
Central Warm-Air Furnace .....	0.6	Q	0.6	0.7	1.0	Q	Q	0.9	1.3	Q	30.4
Other Equipment .....	0.9	Q	Q	1.1	1.5	Q	0.5	Q	2.5	0.6	32.5
Electricity .....	15.1	11.8	14.0	17.9	15.0	16.6	12.4	15.0	17.1	16.3	8.8
Portable Heater .....	10.1	7.7	10.2	11.7	9.8	9.2	8.3	10.4	12.2	10.9	10.5
Built-in Electric Units .....	4.1	4.3	2.9	5.0	4.0	5.9	3.7	3.9	3.7	4.5	17.0
Other Equipment .....	0.8	Q	Q	1.0	1.6	Q	Q	Q	1.1	1.2	18.4
Fuel Oil .....	0.4	1.2	Q	Q	Q	1.5	Q	Q	Q	Q	23.0
Wood .....	19.7	16.0	16.4	20.0	26.3	20.0	16.7	22.0	20.2	20.2	8.9
Fireplace .....	16.5	11.2	14.1	17.6	22.3	11.7	13.5	17.9	18.0	19.3	9.7
Heating Stove .....	3.6	5.2	2.8	2.7	4.2	8.3	3.8	4.6	2.2	1.3	15.4
Other Equipment .....	0.2	Q	Q	Q	Q	Q	Q	Q	Q	Q	56.7
LPG .....	1.3	Q	0.8	2.4	1.0	1.8	0.3	0.7	2.6	1.8	28.9
Kerosene .....	2.7	2.0	3.8	3.8	Q	2.2	2.6	3.9	3.0	1.4	21.6
Other .....	0.4	Q	Q	Q	0.7	Q	Q	Q	Q	Q	43.4

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 of the 1993 Residential Energy Consumption Survey. (For specific titles of forms, see Appendix D.)

**Table 3.8a. Space Heating by Year of Construction,  
Million U.S. Households, 1993**

Space Heating Characteristics	Total	Year of Construction									RSE Row Factors
		1991 to 1993 <sup>1</sup>	1988 to 1990	1985 to 1987	1980 to 1984	1970 to 1979	1960 to 1969	1950 to 1959	1940 to 1949	1939 or Before	
RSE Column Factor:	0.4	1.5	1.3	1.5	1.1	0.9	0.9	1.0	1.2	0.8	
<b>Total</b> .....	96.6	4.5	4.7	5.5	8.5	18.1	15.0	13.1	6.9	20.4	5.3
<b>Main Heating Fuel and Equipment</b>											
Natural Gas .....	50.8	2.1	1.8	2.2	3.4	7.6	8.9	8.1	4.3	12.4	7.9
Central Warm-Air Furnace .....	34.9	2.0	1.6	2.0	3.0	5.9	6.2	5.5	2.4	6.4	9.1
For One Housing Unit .....	34.1	2.0	1.6	1.9	2.9	5.8	6.0	5.4	2.3	6.0	9.3
For Two or More Units .....	0.9	Q	Q	Q	Q	Q	Q	Q	Q	0.4	39.3
Steam or Hot-Water System .....	8.7	Q	0.1	Q	0.3	1.0	1.8	0.9	0.7	3.6	21.0
For One Housing Unit .....	5.1	Q	0.1	Q	0.2	0.3	0.9	0.8	0.4	2.2	25.1
For Two or More Units .....	3.6	Q	Q	Q	Q	0.7	0.9	Q	0.3	1.4	25.3
Floor, Wall, or Pipeless Furnace .....	4.3	Q	Q	Q	0.1	0.5	0.6	1.3	0.7	1.0	20.8
Room Heater/Other .....	2.8	Q	Q	Q	Q	0.2	0.3	0.4	0.5	1.4	23.9
Electricity .....	25.3	1.9	2.2	2.8	4.0	7.0	3.5	1.9	0.7	1.4	10.6
Built-In Electric Units .....	7.0	Q	0.3	0.3	0.8	2.3	1.4	0.6	0.4	0.7	19.6
Central Warm-Air Furnace .....	9.5	0.8	0.9	1.1	1.7	2.8	1.2	0.7	Q	0.2	16.4
For One Housing Unit .....	9.3	0.8	0.9	1.1	1.7	2.7	1.1	0.6	Q	0.2	16.3
Heat Pump .....	7.5	0.8	1.0	1.3	1.3	1.7	0.7	0.5	Q	0.2	19.2
Other .....	1.3	Q	Q	Q	0.1	0.3	0.3	Q	Q	0.2	30.0
Fuel Oil .....	10.2	0.1	0.2	0.2	0.3	1.2	1.2	1.8	1.2	4.1	16.7
Steam or Hot-Water System .....	5.3	0.1	0.1	0.1	0.1	0.6	0.5	1.0	0.6	2.2	21.0
For One Housing Unit .....	3.5	0.1	0.1	0.1	0.1	0.5	0.4	0.7	0.3	1.3	23.8
For Two or More Units .....	1.8	Q	Q	Q	Q	Q	Q	0.3	0.4	0.9	21.8
Central Warm-Air Furnace .....	4.5	Q	0.1	0.1	0.2	0.5	0.6	0.7	0.5	1.7	23.1
Other .....	0.4	Q	Q	Q	Q	Q	Q	Q	Q	0.2	42.2
Wood .....	3.1	Q	0.2	0.1	0.3	0.8	0.4	0.4	0.2	0.7	20.7
Heating Stove .....	2.4	Q	0.2	0.1	0.2	0.5	0.4	0.3	0.1	0.6	23.3
Other .....	0.7	Q	Q	Q	0.1	0.2	Q	Q	Q	Q	35.8
LPG .....	4.8	0.3	0.2	0.2	0.3	1.0	0.6	0.5	0.4	1.2	20.4
Central Warm-Air Furnace .....	3.1	0.3	0.2	0.2	0.3	0.7	0.5	0.2	Q	0.6	23.4
Room Heater .....	1.1	Q	Q	Q	Q	0.2	Q	0.3	0.2	0.4	33.7
Other .....	0.6	Q	Q	Q	Q	Q	Q	Q	Q	0.2	46.4
Kerosene .....	1.0	Q	Q	0.1	Q	0.3	Q	Q	Q	0.2	34.7
Other .....	0.4	Q	Q	Q	Q	Q	Q	Q	Q	0.2	74.3
None .....	0.9	Q	Q	Q	Q	0.2	0.2	0.2	Q	Q	40.6
<b>Amount of Heat Provided by Main Heating Equipment</b>											
All or Almost All .....	87.3	4.2	4.3	5.1	7.9	16.4	13.5	11.7	6.1	18.2	5.6
About Three-Fourths .....	5.4	0.2	0.3	0.2	0.3	1.0	0.9	0.9	0.4	1.1	17.0
Closer to One-Half .....	3.1	0.1	0.1	0.1	0.2	0.5	0.4	0.3	0.4	0.9	22.3
No Main Equipment .....	0.9	Q	Q	Q	Q	0.2	0.2	0.2	Q	Q	40.6
<b>Age of Main Heating Equipment</b>											
Less than 2 Years .....	9.0	2.7	Q	0.1	0.4	1.1	1.2	1.4	0.5	1.5	14.9
2 to 4 Years .....	10.6	1.5	2.1	0.2	0.4	1.5	1.2	1.4	0.9	1.6	14.4
5 to 9 Years .....	17.7	Q	2.2	4.4	1.3	1.5	1.9	1.8	1.3	3.2	9.5
10 to 19 Years .....	21.6	Q	Q	0.2	5.0	6.9	1.8	2.6	1.2	3.9	9.2
20 Years or More .....	21.5	Q	Q	Q	Q	3.8	5.9	3.7	1.9	6.1	8.3
Don't Know .....	15.3	0.3	0.3	0.6	1.2	3.1	2.8	2.0	1.0	4.0	12.5
No Main Equipment .....	0.9	Q	Q	Q	Q	0.2	0.2	0.2	Q	Q	40.6

See footnotes at end of table.

**Table 3.8b. Space Heating by Year of Construction,  
Percent of Households, 1993**

Space Heating Characteristics	Total	Year of Construction									RSE Row Factors
		1991 to 1993 <sup>1</sup>	1988 to 1990	1985 to 1987	1980 to 1984	1970 to 1979	1960 to 1969	1950 to 1959	1940 to 1949	1939 or Before	
RSE Column Factor:	0.4	1.4	1.3	1.4	1.1	0.9	0.9	1.0	1.2	0.8	
<b>Total</b> .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0
<b>Main Heating Fuel and Equipment</b>											
Natural Gas .....	52.6	46.4	38.0	39.2	40.4	42.1	59.3	62.1	62.2	61.0	5.9
Central Warm-Air Furnace .....	36.2	44.6	34.8	36.2	35.2	32.4	41.0	42.0	34.3	31.6	7.4
For One Housing Unit .....	35.3	44.2	34.8	35.3	34.4	31.8	40.1	41.6	33.8	29.7	7.6
For Two or More Units .....	0.9	Q	Q	Q	Q	Q	Q	Q	Q	1.9	37.5
Steam or Hot-Water System .....	9.0	Q	2.6	Q	3.3	5.6	12.3	7.1	10.8	17.8	19.6
For One Housing Unit .....	5.3	Q	1.7	Q	2.3	1.6	6.0	6.4	6.0	11.0	23.7
For Two or More Units .....	3.8	Q	Q	Q	Q	4.1	6.3	Q	4.9	6.8	24.0
Floor, Wall, or Pipeless Furnace .....	4.4	Q	Q	Q	1.6	2.8	4.1	9.9	9.9	4.9	20.4
Room Heater/Other .....	2.9	Q	Q	Q	Q	1.3	1.8	3.0	7.1	6.7	23.6
Electricity .....	26.2	42.6	46.1	50.3	46.9	38.7	23.1	14.9	10.4	6.7	8.8
Built-In Electric Units .....	7.2	Q	6.1	6.2	9.3	12.8	9.1	4.8	5.5	3.4	19.1
Central Warm-Air Furnace .....	9.8	18.5	18.8	20.1	20.1	15.2	7.7	5.5	Q	1.0	15.4
For One Housing Unit .....	9.6	18.5	18.8	20.1	20.1	15.0	7.6	4.7	Q	1.0	15.3
Heat Pump .....	7.8	18.9	20.3	23.4	15.7	9.1	4.4	3.5	Q	1.2	17.8
Other .....	1.4	Q	Q	Q	1.7	1.6	1.8	Q	Q	1.1	29.0
Fuel Oil .....	10.6	2.9	4.5	3.0	3.2	6.6	8.0	13.6	17.1	20.1	16.2
Steam or Hot-Water System .....	5.5	2.2	2.1	1.3	1.3	3.5	3.5	7.4	9.2	10.8	20.7
For One Housing Unit .....	3.6	1.7	1.8	1.3	1.0	2.8	2.7	5.4	3.8	6.5	23.8
For Two or More Units .....	1.9	Q	Q	Q	Q	Q	Q	2.0	5.4	4.4	21.0
Central Warm-Air Furnace .....	4.7	Q	2.4	1.7	1.9	2.9	4.1	5.7	7.4	8.4	22.3
Other .....	0.4	Q	Q	Q	Q	Q	Q	Q	Q	0.9	40.6
Wood .....	3.2	Q	4.2	1.8	3.9	4.2	2.8	3.1	3.1	3.3	21.0
Heating Stove .....	2.5	Q	3.6	1.5	2.8	2.9	2.4	2.3	2.0	2.8	23.4
Other .....	0.8	Q	Q	Q	1.1	1.3	Q	Q	Q	Q	34.4
LPG .....	5.0	7.6	5.2	4.4	3.7	5.3	4.3	4.0	5.2	5.9	20.5
Central Warm-Air Furnace .....	3.2	7.1	4.7	3.8	3.7	3.7	3.1	1.4	Q	3.1	23.1
Room Heater .....	1.2	Q	Q	Q	Q	1.0	Q	2.1	3.0	1.9	33.4
Other .....	0.6	Q	Q	Q	Q	Q	Q	Q	Q	0.9	45.2
Kerosene .....	1.0	Q	Q	1.3	Q	1.4	Q	Q	Q	1.2	34.0
Other .....	0.4	Q	Q	Q	Q	Q	Q	Q	Q	1.1	70.5
None .....	0.9	Q	Q	Q	Q	1.2	1.4	1.3	Q	Q	38.8
<b>Amount of Heat Provided by Main Heating Equipment</b>											
All or Almost All .....	90.3	93.9	90.3	93.3	92.8	90.3	89.7	89.9	87.7	89.3	1.3
About Three-Fourths .....	5.6	4.4	6.8	4.5	3.9	5.7	6.0	6.7	5.4	5.6	16.7
Closer to One-Half .....	3.2	1.8	2.4	2.2	2.7	2.9	2.9	2.1	5.7	4.5	22.0
No Main Equipment .....	0.9	Q	Q	Q	Q	1.2	1.4	1.3	Q	Q	38.8
<b>Age of Main Heating Equipment</b>											
Less than 2 Years .....	9.3	60.1	Q	2.6	5.2	6.0	7.9	10.9	7.6	7.2	13.0
2 to 4 Years .....	11.0	33.2	43.6	2.8	4.3	8.4	8.3	10.5	12.5	7.7	12.9
5 to 9 Years .....	18.3	Q	45.9	80.4	15.9	8.4	12.7	14.1	18.4	15.9	7.8
10 to 19 Years .....	22.4	Q	Q	3.2	59.5	38.1	11.7	19.8	17.2	19.2	7.7
20 Years or More .....	22.2	Q	Q	Q	Q	21.0	39.0	28.3	28.2	29.8	6.2
Don't Know .....	15.8	6.2	7.0	11.0	14.0	16.9	18.9	15.2	14.9	19.6	11.9
No Main Equipment .....	0.9	Q	Q	Q	Q	1.2	1.4	1.3	Q	Q	38.8

See footnotes at end of table.

**Table 3.8a. Space Heating by Year of Construction,  
Million U.S. Households, 1993 (Continued)**

Space Heating Characteristics	Total	Year of Construction									RSE Row Factors
		1991 to 1993 <sup>1</sup>	1988 to 1990	1985 to 1987	1980 to 1984	1970 to 1979	1960 to 1969	1950 to 1959	1940 to 1949	1939 or Before	
RSE Column Factor:	0.4	1.5	1.3	1.5	1.1	0.9	0.9	1.0	1.2	0.8	
<b>Secondary Heating Fuel and Equipment (more than one may apply)</b>											
No .....	60.8	2.7	2.6	3.1	5.0	11.3	9.7	8.3	4.6	13.5	6.7
Yes .....	35.9	1.8	2.2	2.3	3.4	6.8	5.3	4.7	2.4	6.9	7.6
Natural Gas .....	4.1	0.4	0.3	0.3	0.3	0.5	0.6	0.6	0.3	0.9	20.7
Fireplace .....	1.8	0.4	0.1	0.2	Q	0.2	0.2	0.2	Q	0.2	30.0
Room Heater .....	1.0	Q	Q	Q	Q	Q	Q	0.2	Q	0.3	27.0
Central Warm-Air Furnace .....	0.6	Q	Q	Q	Q	Q	Q	Q	Q	Q	48.5
Other Equipment .....	0.9	Q	Q	Q	Q	Q	Q	0.1	Q	0.4	38.3
Electricity .....	14.6	0.4	0.6	0.8	1.3	2.4	2.2	2.1	1.0	3.8	10.8
Portable Heater .....	9.8	0.3	0.3	0.5	0.9	1.5	1.5	1.5	0.7	2.7	13.8
Built-in Electric Units .....	4.0	0.1	0.2	0.3	0.4	0.6	0.6	0.6	0.2	1.0	20.0
Other Equipment .....	0.8	Q	Q	Q	Q	0.2	Q	Q	Q	Q	27.2
Fuel Oil .....	0.4	Q	Q	Q	Q	Q	Q	Q	Q	0.2	43.8
Wood .....	19.0	1.2	1.5	1.5	2.0	4.3	2.8	2.6	1.0	2.1	10.7
Fireplace .....	15.9	1.2	1.3	1.4	1.8	3.6	2.4	2.2	0.7	1.3	11.7
Heating Stove .....	3.4	0.1	0.1	0.1	0.2	0.9	0.4	0.5	0.3	0.7	20.3
Other Equipment .....	0.2	Q	Q	Q	Q	Q	Q	Q	Q	Q	72.6
LPG .....	1.2	Q	0.1	Q	0.1	0.3	Q	Q	Q	0.3	31.6
Kerosene .....	2.6	Q	0.1	0.1	0.1	0.4	0.5	0.3	0.2	0.9	27.3
Other .....	0.4	Q	Q	Q	Q	Q	Q	Q	Q	Q	60.0

<sup>1</sup> Does not include all new construction for 1993.

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 of the 1993 Residential Energy Consumption Survey. (For specific titles of forms, see Appendix D.)

**Table 3.8b. Space Heating by Year of Construction,  
Percent of Households, 1993 (Continued)**

Space Heating Characteristics	Total	Year of Construction									RSE Row Factors
		1991 to 1993 <sup>1</sup>	1988 to 1990	1985 to 1987	1980 to 1984	1970 to 1979	1960 to 1969	1950 to 1959	1940 to 1949	1939 or Before	
RSE Column Factor:	0.4	1.4	1.3	1.4	1.1	0.9	0.9	1.0	1.2	0.8	
<b>Secondary Heating Fuel and Equipment (more than one may apply)</b>											
No .....	62.9	59.3	54.3	57.3	59.6	62.4	64.6	63.7	65.9	66.2	3.9
Yes .....	37.1	40.7	45.7	42.7	40.4	37.6	35.4	36.3	34.1	33.8	6.2
Natural Gas .....	4.2	8.7	6.0	5.9	3.2	2.5	3.9	4.4	4.8	4.2	20.7
Fireplace .....	1.9	8.1	3.1	4.0	Q	1.2	1.3	1.4	Q	0.7	29.9
Room Heater .....	1.0	Q	Q	Q	Q	Q	Q	1.5	Q	1.5	26.6
Central Warm-Air Furnace .....	0.6	Q	Q	Q	Q	Q	Q	Q	Q	Q	45.1
Other Equipment .....	0.9	Q	Q	Q	Q	Q	Q	1.1	Q	1.8	37.5
Electricity .....	15.1	8.2	12.3	14.0	15.8	13.3	14.7	16.4	15.2	18.4	10.0
Portable Heater .....	10.1	5.8	6.8	9.3	10.3	8.2	9.9	11.1	9.9	13.4	12.8
Built-in Electric Units .....	4.1	1.4	4.0	4.7	5.2	3.5	3.8	4.9	3.2	4.8	20.2
Other Equipment .....	0.8	Q	Q	Q	Q	1.3	Q	Q	Q	Q	26.1
Fuel Oil .....	0.4	Q	Q	Q	Q	Q	Q	Q	Q	Q	41.5
Wood .....	19.7	27.8	30.8	27.3	23.9	23.8	18.5	20.0	14.6	10.1	9.4
Fireplace .....	16.5	26.2	28.0	25.0	21.1	20.0	16.1	16.6	10.8	6.5	10.5
Heating Stove .....	3.6	2.2	3.1	2.4	2.9	5.1	2.7	3.7	3.7	3.7	20.1
Other Equipment .....	0.2	Q	Q	Q	Q	Q	Q	Q	Q	Q	67.5
LPG .....	1.3	Q	1.7	Q	1.2	1.7	Q	Q	Q	Q	31.0
Kerosene .....	2.7	Q	2.0	1.9	1.5	2.0	3.3	2.5	2.8	4.3	27.2
Other .....	0.4	Q	Q	Q	Q	Q	Q	Q	Q	Q	55.8

<sup>1</sup> Does not include all new construction for 1993.

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 of the 1993 Residential Energy Consumption Survey. (For specific titles of forms, see Appendix D.)



**Table 3.9a. Space Heating by Type and Ownership of Housing Unit,  
Million U.S. Households, 1993**

Space Heating Characteristics	Type and Ownership of Housing Unit												RSE Row Factors	
	Total	Single-Family			Multifamily			Mobile Home						
		Total	Own	Rent	Two to Four Units		Five or More Units		Total	Own	Rent			
					Total	Own	Rent	Total				Own		Rent
RSE Column Factor:	0.4	0.4	0.4	0.9	1.1	1.8	1.1	0.9	2.5	1.0	1.2	1.3	2.0	
<b>Total</b> .....	96.6	66.8	55.8	11.0	8.0	1.5	6.5	16.2	1.6	14.7	5.6	4.4	1.2	5.9
<b>Main Heating Fuel and Equipment</b>														
Natural Gas .....	50.8	37.3	31.1	6.3	4.7	0.9	3.7	7.0	0.6	6.4	1.8	1.5	0.3	9.2
Central Warm-Air Furnace .....	34.9	28.8	24.6	4.1	1.7	0.3	1.4	2.8	0.3	2.5	1.7	1.4	0.2	12.9
For One Housing Unit .....	34.1	28.7	24.6	4.1	1.3	0.3	1.0	2.4	0.3	2.1	1.7	1.4	0.2	13.4
For Two or More Units .....	0.9	Q	Q	Q	0.4	Q	0.4	0.4	Q	0.4	Q	Q	Q	31.8
Steam or Hot-Water System .....	8.7	3.6	3.3	0.3	1.9	0.6	1.4	3.1	Q	2.9	Q	Q	Q	16.0
For One Housing Unit .....	5.1	3.6	3.3	0.3	0.9	0.4	0.5	0.6	Q	0.6	Q	Q	Q	20.7
For Two or More Units .....	3.6	Q	Q	Q	1.0	Q	0.9	2.5	Q	2.4	Q	Q	Q	16.7
Floor, Wall, or														
Pipeless Furnace .....	4.3	2.9	1.8	1.1	0.5	Q	0.5	0.8	Q	0.7	Q	Q	Q	23.3
Room Heater/Other .....	2.8	2.0	1.3	0.7	0.5	Q	0.5	0.3	Q	0.3	Q	Q	Q	27.4
Electricity .....	25.3	14.3	11.7	2.6	2.3	0.2	2.1	7.2	0.7	6.5	1.5	1.2	0.3	13.4
Built-In Electric Units .....	7.0	3.3	2.6	0.7	1.1	Q	1.1	2.5	Q	2.3	0.1	0.1	Q	22.5
Central Warm-Air Furnace .....	9.5	4.5	3.7	0.8	0.7	Q	0.6	3.2	0.3	2.9	1.2	0.9	0.2	17.7
For One Housing Unit .....	9.3	4.5	3.7	0.8	0.7	Q	0.6	3.0	0.3	2.7	1.2	0.9	0.2	17.9
Heat Pump .....	7.5	5.8	5.1	0.7	0.3	Q	0.2	1.3	Q	1.1	0.1	0.1	Q	24.8
Other .....	1.3	0.7	0.4	0.3	0.2	Q	0.2	0.3	Q	0.3	0.2	Q	Q	30.6
Fuel Oil .....	10.2	7.6	6.7	0.9	0.9	0.3	0.6	1.5	0.2	1.3	0.3	0.2	Q	16.4
Steam or Hot-Water System .....	5.3	3.3	3.0	0.3	0.6	0.2	0.4	1.4	0.2	1.2	Q	Q	Q	17.8
For One Housing Unit .....	3.5	3.3	3.0	0.3	0.2	Q	0.1	Q	Q	Q	Q	Q	Q	27.9
For Two or More Units .....	1.8	Q	Q	Q	0.4	Q	0.3	1.4	0.2	1.2	Q	Q	Q	15.7
Central Warm-Air Furnace .....	4.5	4.0	3.5	0.6	0.2	Q	Q	Q	Q	Q	0.3	0.2	Q	25.4
Other .....	0.4	0.3	0.2	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	58.7
Wood .....	3.1	2.8	2.5	0.3	Q	Q	Q	Q	Q	Q	0.2	0.2	Q	23.6
Heating Stove .....	2.4	2.1	1.8	0.3	Q	Q	Q	Q	Q	Q	0.2	0.2	Q	27.2
Other .....	0.7	0.7	0.7	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	39.0
LPG .....	4.8	3.5	3.1	0.4	Q	Q	Q	Q	Q	Q	1.2	0.9	0.3	19.2
Central Warm-Air Furnace .....	3.1	2.1	1.8	0.2	Q	Q	Q	Q	Q	Q	1.0	0.8	0.2	22.6
Room Heater .....	1.1	1.0	0.9	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	45.7
Other .....	0.6	0.4	0.3	0.1	Q	Q	Q	Q	Q	Q	Q	Q	Q	58.7
Kerosene .....	1.0	0.5	0.2	0.2	Q	Q	Q	Q	Q	Q	0.4	0.3	0.1	30.5
Other .....	0.4	Q	Q	Q	Q	Q	Q	0.1	Q	0.1	Q	Q	Q	65.0
None .....	0.9	0.5	0.3	0.2	Q	Q	Q	0.3	Q	0.2	Q	Q	Q	41.0
<b>Amount of Heat Provided by Main Heating Equipment</b>														
All or Almost All .....	87.3	59.1	49.4	9.7	7.5	1.3	6.1	15.5	1.5	14.1	5.1	4.1	1.0	6.2
About Three-Fourths .....	5.4	4.8	4.1	0.6	0.2	Q	Q	0.2	Q	0.2	0.2	0.2	Q	22.1
Closer to One-Half .....	3.1	2.5	2.0	0.5	0.3	Q	0.3	0.2	Q	0.2	0.1	0.1	Q	25.2
No Main Equipment .....	0.9	0.5	0.3	0.2	Q	Q	Q	0.3	Q	0.2	Q	Q	Q	41.0
<b>Age of Main Heating Equipment</b>														
Less than 2 Years .....	9.0	6.9	6.0	0.9	0.4	Q	0.3	1.1	Q	1.0	0.5	0.4	Q	17.7
2 to 4 Years .....	10.6	8.5	7.6	0.9	0.6	0.2	0.4	0.6	Q	0.5	0.9	0.8	0.1	17.5
5 to 9 Years .....	17.7	13.9	12.0	1.9	1.1	0.3	0.8	1.4	0.2	1.2	1.4	1.2	0.2	13.3
10 to 19 Years .....	21.6	16.4	14.5	1.9	1.4	0.3	1.1	2.3	0.3	2.0	1.5	1.3	0.2	11.3
20 Years or More .....	21.5	15.9	13.4	2.5	1.9	0.4	1.4	3.0	0.5	2.5	0.6	0.5	0.2	11.5
Don't Know .....	15.3	4.7	1.9	2.7	2.5	Q	2.5	7.6	0.2	7.4	0.5	0.2	0.3	12.3
No Main Equipment .....	0.9	0.5	0.3	0.2	Q	Q	Q	0.3	Q	0.2	Q	Q	Q	41.0

See footnotes at end of table.

**Table 3.9b. Space Heating by Type and Ownership of Housing Unit, Percent of Households, 1993**

Space Heating Characteristics	Type and Ownership of Housing Unit												RSE Row Factors	
	Total	Multifamily									Mobile Home			
		Single-Family			Two to Four Units			Five or More Units						
		Total	Own	Rent	Total	Own	Rent	Total	Own	Rent	Total	Own		Rent
RSE Column Factor:	0.4	0.4	0.5	0.9	1.1	1.8	1.1	0.9	2.3	1.0	1.1	1.3	2.1	
<b>Total</b> .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0
<b>Main Heating Fuel and Equipment</b>														
Natural Gas .....	52.6	55.9	55.7	56.7	58.1	63.3	56.9	43.2	36.9	43.9	32.4	34.5	24.6	7.8
Central Warm-Air Furnace .....	36.2	43.0	44.2	37.4	21.7	21.0	21.9	17.2	19.7	16.9	29.7	32.5	19.0	11.8
For One Housing Unit .....	35.3	43.0	44.1	37.1	16.4	19.7	15.6	14.7	19.7	14.2	29.7	32.5	19.0	12.4
For Two or More Units .....	0.9	Q	Q	Q	5.3	Q	6.2	2.4	Q	2.7	Q	Q	Q	31.5
Steam or Hot-Water System .....	9.0	5.4	5.9	3.0	23.9	37.6	20.8	19.4	Q	20.0	Q	Q	Q	15.3
For One Housing Unit .....	5.3	5.4	5.9	2.6	10.8	27.1	7.1	3.8	Q	3.9	Q	Q	Q	20.1
For Two or More Units .....	3.8	Q	Q	Q	13.1	Q	13.7	15.6	Q	16.1	Q	Q	Q	16.0
Floor, Wall, or														
Pipeless Furnace .....	4.4	4.4	3.2	10.4	6.3	Q	7.2	4.9	Q	5.0	Q	Q	Q	22.5
Room Heater/Other .....	2.9	3.0	2.4	6.0	6.2	Q	7.1	1.8	Q	1.9	Q	Q	Q	26.3
Electricity .....	26.2	21.4	21.0	23.5	28.1	13.4	31.5	44.6	45.5	44.5	27.4	28.2	24.5	11.2
Built-In Electric Units .....	7.2	5.0	4.7	6.4	13.8	Q	16.2	15.2	Q	15.3	2.0	2.0	Q	21.4
Central Warm-Air Furnace .....	9.8	6.7	6.6	7.5	8.2	Q	9.5	19.5	17.7	19.7	20.7	20.7	20.5	15.7
For One Housing Unit .....	9.6	6.7	6.6	7.5	8.2	Q	9.5	18.5	17.7	18.6	20.7	20.7	20.5	15.9
Heat Pump .....	7.8	8.7	9.1	6.8	3.8	Q	3.0	8.2	Q	7.7	1.8	2.3	Q	23.9
Other .....	1.4	1.0	0.7	2.9	2.3	Q	2.8	1.7	Q	1.8	2.9	Q	Q	30.3
Fuel Oil .....	10.6	11.4	12.0	8.4	10.8	19.5	8.8	9.0	11.8	8.7	5.3	4.0	Q	16.6
Steam or Hot-Water System .....	5.5	5.0	5.4	2.6	7.8	12.4	6.8	8.6	11.8	8.2	Q	Q	Q	17.7
For One Housing Unit .....	3.6	4.9	5.4	2.6	2.4	Q	1.8	Q	Q	Q	Q	Q	Q	27.4
For Two or More Units .....	1.9	Q	Q	Q	5.5	Q	5.0	8.4	11.8	8.1	Q	Q	Q	16.3
Central Warm-Air Furnace .....	4.7	6.0	6.2	5.2	2.2	Q	Q	Q	Q	Q	4.8	3.8	Q	25.3
Other .....	0.4	0.4	0.4	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	55.5
Wood .....	3.2	4.2	4.5	3.0	Q	Q	Q	Q	Q	Q	4.1	4.4	Q	23.5
Heating Stove .....	2.5	3.2	3.3	2.8	Q	Q	Q	Q	Q	Q	3.6	3.7	Q	27.1
Other .....	0.8	1.0	1.2	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	36.9
LPG .....	5.0	5.3	5.5	3.9	Q	Q	Q	Q	Q	Q	21.6	21.2	23.0	18.6
Central Warm-Air Furnace .....	3.2	3.1	3.3	1.9	Q	Q	Q	Q	Q	Q	18.2	18.6	16.8	21.7
Room Heater .....	1.2	1.5	1.7	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	42.8
Other .....	0.6	0.6	0.6	1.1	Q	Q	Q	Q	Q	Q	Q	Q	Q	56.2
Kerosene .....	1.0	0.7	0.4	1.9	Q	Q	Q	Q	Q	Q	7.7	6.6	11.9	28.8
Other .....	0.4	Q	Q	Q	Q	Q	Q	0.9	Q	1.0	Q	Q	Q	63.9
None .....	0.9	0.7	0.5	2.0	Q	Q	Q	1.7	Q	1.3	Q	Q	Q	39.9
<b>Amount of Heat Provided by Main Heating Equipment</b>														
All or Almost All .....	90.3	88.5	88.5	88.1	93.4	90.1	94.2	95.7	93.5	95.9	92.2	93.7	86.3	1.5
About Three-Fourths .....	5.6	7.1	7.4	5.6	2.3	Q	Q	1.4	Q	1.5	4.3	3.4	Q	21.5
Closer to One-Half .....	3.2	3.7	3.5	4.3	3.6	Q	4.3	1.2	Q	1.3	2.4	1.9	Q	24.6
No Main Equipment .....	0.9	0.7	0.5	2.0	Q	Q	Q	1.7	Q	1.3	Q	Q	Q	39.9
<b>Age of Main Heating Equipment</b>														
Less than 2 Years .....	9.3	10.4	10.8	8.1	5.3	Q	5.0	6.7	Q	6.5	9.7	9.8	Q	17.1
2 to 4 Years .....	11.0	12.7	13.6	8.1	8.0	15.9	6.1	3.6	Q	3.1	16.4	17.5	12.2	16.2
5 to 9 Years .....	18.3	20.7	21.5	16.9	13.7	20.6	12.1	8.4	12.3	8.0	25.0	26.5	19.1	11.9
10 to 19 Years .....	22.4	24.6	26.0	17.4	17.3	22.3	16.2	14.2	19.4	13.6	26.5	29.8	14.3	9.7
20 Years or More .....	22.2	23.8	24.0	22.7	23.5	29.7	22.1	18.7	33.8	17.1	11.6	10.8	14.6	10.3
Don't Know .....	15.8	7.0	3.5	24.8	31.5	Q	38.1	46.7	11.8	50.4	9.7	4.6	28.8	10.8
No Main Equipment .....	0.9	0.7	0.5	2.0	Q	Q	Q	1.7	Q	1.3	Q	Q	Q	39.9

See footnotes at end of table.

**Table 3.9a. Space Heating by Type and Ownership of Housing Unit,  
Million U.S. Households, 1993 (Continued)**

Space Heating Characteristics	Type and Ownership of Housing Unit												RSE Row Factors	
	Total	Single-Family			Multifamily						Mobile Home			
		Total	Own	Rent	Two to Four Units			Five or More Units			Total	Own		Rent
					Total	Own	Rent	Total	Own	Rent				
RSE Column Factor:	0.4	0.4	0.4	0.9	1.1	1.8	1.1	0.9	2.5	1.0	1.2	1.3	2.0	
<b>Secondary Heating Fuel and Equipment</b> (more than one may apply)														
No .....	60.8	36.0	28.5	7.5	6.5	1.1	5.4	14.3	1.4	12.9	3.9	3.2	0.8	6.9
Yes .....	35.9	30.8	27.2	3.5	1.5	0.4	1.1	1.9	0.1	1.8	1.6	1.2	0.4	11.3
Natural Gas .....	4.1	3.6	3.2	0.4	0.1	Q	Q	0.3	Q	0.3	Q	Q	Q	26.4
Fireplace .....	1.8	1.7	1.5	0.1	Q	Q	Q	Q	Q	Q	Q	Q	Q	34.4
Room Heater .....	1.0	0.9	0.9	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	37.6
Central Warm-Air Furnace .....	0.6	0.6	0.5	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	49.1
Other Equipment .....	0.9	0.6	0.4	0.2	Q	Q	Q	0.2	Q	0.2	Q	Q	Q	41.3
Electricity .....	14.6	11.8	10.3	1.5	0.8	0.2	0.6	1.2	Q	1.1	0.8	0.6	0.2	13.5
Portable Heater .....	9.8	7.6	6.5	1.1	0.6	0.2	0.4	0.9	Q	0.9	0.7	0.4	0.2	14.9
Built-in Electric Units .....	4.0	3.6	3.3	0.3	0.2	Q	0.1	0.1	Q	0.1	Q	Q	Q	29.7
Other Equipment .....	0.8	0.5	0.4	Q	Q	Q	Q	0.1	Q	0.1	0.1	Q	Q	37.0
Fuel Oil .....	0.4	0.3	0.3	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	47.5
Wood .....	19.0	17.5	16.0	1.5	0.5	0.2	Q	0.5	Q	0.4	0.4	0.4	Q	17.5
Fireplace .....	15.9	14.6	13.3	1.3	0.5	0.1	Q	0.5	Q	0.4	0.3	0.3	Q	19.4
Heating Stove .....	3.4	3.3	3.0	0.3	0.1	Q	Q	Q	Q	Q	0.1	0.1	Q	23.3
Other Equipment .....	0.2	0.2	0.2	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	74.8
LPG .....	1.2	1.1	0.9	0.1	Q	Q	Q	Q	Q	Q	0.2	0.1	Q	35.1
Kerosene .....	2.6	2.2	1.8	0.4	Q	Q	Q	Q	Q	Q	0.3	0.1	Q	30.5
Other .....	0.4	0.3	0.2	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	64.6

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 of the 1993 Residential Energy Consumption Survey. (For specific titles of forms, see Appendix D.)

**Table 3.9b. Space Heating by Type and Ownership of Housing Unit, Percent of Households, 1993 (Continued)**

Space Heating Characteristics	Type and Ownership of Housing Unit												RSE Row Factors	
	Total	Single-Family			Multifamily			Mobile Home						
		Total	Own	Rent	Two to Four Units		Five or More Units		Total	Own	Rent			
					Total	Own	Rent	Total				Own		Rent
RSE Column Factor:	0.4	0.4	0.5	0.9	1.1	1.8	1.1	0.9	2.3	1.0	1.1	1.3	2.1	
<b>Secondary Heating Fuel and Equipment</b> (more than one may apply)														
No .....	62.9	53.9	51.1	68.0	81.0	73.4	82.8	88.2	90.4	88.0	70.6	71.9	65.7	3.3
Yes .....	37.1	46.1	48.9	32.0	19.0	26.6	17.2	11.8	9.6	12.0	29.4	28.1	34.3	9.9
Natural Gas .....	4.2	5.4	5.7	3.8	1.5	Q	Q	2.0	Q	2.2	Q	Q	Q	25.2
Fireplace .....	1.9	2.5	2.8	1.2	Q	Q	Q	Q	Q	Q	Q	Q	Q	32.2
Room Heater .....	1.0	1.4	1.5	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	35.1
Central Warm-Air Furnace .....	0.6	0.8	0.9	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	46.5
Other Equipment .....	0.9	0.9	0.8	1.7	Q	Q	Q	1.1	Q	1.2	Q	Q	Q	39.8
Electricity .....	15.1	17.7	18.5	13.7	10.2	13.5	9.4	7.2	Q	7.5	14.8	13.5	19.7	12.8
Portable Heater .....	10.1	11.4	11.7	9.8	7.8	11.6	6.9	5.6	Q	5.9	11.9	10.2	18.2	14.1
Built-in Electric Units .....	4.1	5.4	5.9	3.1	2.1	Q	2.1	0.9	Q	1.0	Q	Q	Q	29.2
Other Equipment .....	0.8	0.7	0.6	Q	Q	Q	Q	0.8	Q	0.8	2.4	Q	Q	36.8
Fuel Oil .....	0.4	0.5	0.6	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	44.8
Wood .....	19.7	26.2	28.7	13.8	6.6	11.2	5.6	3.2	Q	3.0	7.5	9.0	Q	17.8
Fireplace .....	16.5	21.9	23.9	11.6	5.9	9.0	Q	3.2	Q	3.0	5.5	6.9	Q	18.2
Heating Stove .....	3.6	4.9	5.3	2.5	0.9	Q	Q	Q	Q	Q	1.9	2.2	Q	23.2
Other Equipment .....	0.2	0.3	0.3	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	70.5
LPG .....	1.3	1.6	1.7	1.3	Q	Q	Q	Q	Q	Q	2.9	2.8	Q	34.8
Kerosene .....	2.7	3.3	3.2	3.4	Q	Q	Q	Q	Q	Q	4.6	3.2	Q	29.9
Other .....	0.4	0.4	0.4	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	60.9

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 of the 1993 Residential Energy Consumption Survey.  
 (For specific titles of forms, see Appendix D.)

**Table 3.10. Space Heating by Average Floorspace, U.S. Households, 1993**

Space Heating Characteristics	Total Households (mil-lions)	Average Square Feet per Housing Unit		Average Heated Square Feet per Household Member				Average Heated Square Feet per Housing Unit			RSE Row Factors
		Total	Heated	All Households	Single-Family	Multi-family	Mobile Home	Single-Family	Multi-family	Mobile Home	
		1.3	0.7	0.6	0.7	0.8	1.5	2.0	0.6	1.3	
<b>Total</b> .....	96.6	1,875	1,630	624	698	432	354	1,947	917	938	1.8
<b>Main Heating Fuel and Equipment</b>											
Natural Gas .....	50.8	1,959	1,714	649	712	435	394	1,992	939	972	2.5
Central Warm-Air Furnace .....	34.9	2,160	1,884	695	735	479	407	2,072	1,012	995	2.9
For One Housing Unit .....	34.1	2,190	1,908	701	735	496	407	2,073	1,038	995	2.9
For Two or More Units .....	0.9	973	917	421	Q	409	Q	Q	896	Q	13.1
Steam or Hot-Water System .....	8.7	1,745	1,538	650	852	453	Q	2,391	934	Q	5.4
For One Housing Unit .....	5.1	2,397	2,066	768	858	522	Q	2,398	1,298	Q	6.4
For Two or More Units .....	3.6	827	794	416	Q	415	Q	Q	783	Q	4.4
Floor, Wall, or Pipeless Furnace .....	4.3	1,220	1,093	424	471	319	Q	1,245	763	Q	7.1
Room Heater/Other .....	2.8	1,261	1,101	405	446	316	Q	1,219	840	Q	7.5
Electricity .....	25.3	1,597	1,409	578	666	442	378	1,803	881	999	2.9
Built-In Electric Units .....	7.0	1,346	1,174	525	607	429	351	1,569	812	1,025	7.0
Central Warm-Air Furnace .....	9.5	1,510	1,358	542	623	471	379	1,799	944	1,005	4.0
For One Housing Unit .....	9.3	1,521	1,367	545	623	474	379	1,799	950	1,005	3.9
Heat Pump .....	7.5	2,039	1,770	708	764	464	474	2,019	926	1,175	6.5
Other .....	1.3	1,021	951	359	423	270	331	1,133	719	824	11.4
Fuel Oil .....	10.2	2,268	1,917	714	797	445	349	2,216	1,084	768	4.8
Steam or Hot-Water System .....	5.3	2,212	1,870	698	859	411	Q	2,373	1,047	Q	5.0
For One Housing Unit .....	3.5	2,828	2,333	857	867	690	Q	2,377	1,712	Q	6.4
For Two or More Units .....	1.8	1,027	981	377	Q	379	Q	Q	970	Q	6.5
Central Warm-Air Furnace .....	4.5	2,409	2,035	754	768	969	363	2,142	1,592	775	7.4
Other .....	0.4	1,415	1,206	454	481	Q	Q	1,390	Q	Q	15.4
Wood .....	3.1	2,097	1,843	589	627	Q	304	1,900	Q	1,144	8.4
Heating Stove .....	2.4	2,001	1,744	558	594	Q	329	1,792	Q	1,195	8.7
Other .....	0.7	2,416	2,170	692	726	Q	Q	2,228	Q	Q	14.7
LPG .....	4.8	1,823	1,630	606	708	Q	319	1,904	Q	886	5.0
Central Warm-Air Furnace .....	3.1	2,034	1,809	634	776	Q	332	2,255	Q	914	6.6
Room Heater .....	1.1	1,359	1,227	530	560	Q	Q	1,279	Q	Q	9.5
Other .....	0.6	1,620	1,476	578	657	Q	Q	1,713	Q	Q	19.9
Kerosene .....	1.0	1,107	935	363	412	Q	322	1,044	Q	868	11.0
Other .....	0.4	1,455	1,403	713	Q	521	Q	Q	785	Q	27.3
None .....	0.9	1,092	--	--	--	--	--	--	--	--	16.9
<b>Amount of Heat Provided by Main Heating Equipment</b>											
All or Almost All .....	87.3	1,852	1,619	628	705	439	368	1,947	926	947	1.8
About Three-Fourths .....	5.4	2,254	1,979	681	717	522	263	2,097	1,231	930	6.8
Closer to One-Half .....	3.1	2,088	1,811	644	718	356	289	2,038	880	1,056	8.3
No Main Equipment .....	0.9	1,092	--	--	--	--	--	--	--	--	16.9
<b>Age of Main Heating Equipment</b>											
Less than 2 Years .....	9.0	2,087	1,831	665	715	481	371	2,078	1,002	989	4.6
2 to 4 Years .....	10.6	2,134	1,833	664	722	472	340	2,034	1,075	970	4.4
5 to 9 Years .....	17.7	2,069	1,802	651	703	476	371	2,011	1,061	1,038	3.3
10 to 19 Years .....	21.6	1,997	1,744	641	690	467	371	1,989	966	959	3.1
20 Years or More .....	21.5	1,946	1,679	716	794	469	340	1,940	952	798	3.6
Don't Know .....	15.3	1,122	1,038	428	489	394	334	1,484	846	801	4.0
No Main Equipment .....	0.9	1,092	--	--	--	--	--	--	--	--	16.9

See footnotes at end of table.

**Table 3.10. Space Heating by Average Floorspace,  
U.S. Households, 1993 (Continued)**

Space Heating Characteristics	Total Households (millions)	Average Square Feet per Housing Unit		Average Heated Square Feet per Household Member				Average Heated Square Feet per Housing Unit			RSE Row Factors
		Total	Heated	All Households	Single-Family	Multi-family	Mobile Home	Single-Family	Multi-family	Mobile Home	
		1.3	0.7	0.6	0.7	0.8	1.5	2.0	0.6	1.3	
<b>Secondary Heating Fuel and Equipment (more than one may apply)</b>											
No .....	60.8	1,606	1,403	563	646	426	356	1,751	896	904	2.0
Yes .....	35.9	2,332	2,015	716	757	467	349	2,176	1,045	1,020	2.7
Natural Gas .....	4.1	2,258	1,960	741	763	503	Q	2,082	1,000	Q	8.1
Fireplace .....	1.8	2,764	2,383	879	885	Q	Q	2,475	Q	Q	9.0
Room Heater .....	1.0	2,027	1,817	692	693	Q	Q	1,828	Q	Q	11.7
Central Warm-Air Furnace .....	0.6	2,400	2,016	695	687	Q	Q	2,007	Q	Q	16.8
Other Equipment .....	0.9	1,412	1,216	534	611	311	Q	1,461	624	Q	13.0
Electricity .....	14.6	2,122	1,838	685	745	424	347	2,047	979	925	4.1
Portable Heater .....	9.8	1,980	1,693	654	717	436	332	1,916	946	850	4.7
Built-in Electric Units .....	4.0	2,424	2,146	759	790	420	Q	2,246	1,109	Q	8.3
Other Equipment .....	0.8	1,796	1,711	549	679	327	358	2,121	1,028	1,095	14.3
Fuel Oil .....	0.4	2,590	2,083	712	740	Q	Q	2,155	Q	Q	12.6
Wood .....	19.0	2,673	2,304	779	796	568	443	2,391	1,241	1,374	3.7
Fireplace .....	15.9	2,686	2,306	778	795	555	486	2,400	1,207	1,411	4.1
Heating Stove .....	3.4	2,640	2,326	796	816	728	345	2,374	1,726	1,267	8.3
Other Equipment .....	0.2	3,130	2,535	898	898	Q	Q	2,535	Q	Q	30.0
LPG .....	1.2	1,937	1,719	608	685	Q	253	1,836	Q	954	10.0
Kerosene .....	2.6	2,043	1,756	611	666	Q	276	1,906	Q	838	7.1
Other .....	0.4	2,458	2,312	872	949	Q	Q	2,594	Q	Q	22.3

-- = Data not applicable.

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 of the 1993 Residential Energy Consumption Survey. (For specific titles of forms, see Appendix D.)

**Table 3.11. Space Heating by Total Floorspace,  
U.S. Households, 1993**

Space Heating Characteristics	Total Households		Total Square Footage				RSE Row Factors
	(millions)	(percent)	Total		Heated		
			(billions)	(percent)	(billions)	(percent)	
	RSE Column Factor:	0.9	0.9	1.1	1.0	1.0	
<b>Total</b> .....	96.6	100.0	181.2	100.0	157.5	100.0	1.1
<b>Main Heating Fuel and Equipment</b>							
Natural Gas .....	50.8	52.6	99.5	54.9	87.1	55.3	3.2
Central Warm-Air Furnace .....	34.9	36.2	75.5	41.6	65.8	41.8	3.7
For One Housing Unit .....	34.1	35.3	74.6	41.2	65.0	41.3	3.7
For Two or More Units .....	0.9	0.9	0.8	0.5	0.8	0.5	21.1
Steam or Hot-Water System .....	8.7	9.0	15.3	8.4	13.4	8.5	7.5
For One Housing Unit .....	5.1	5.3	12.3	6.8	10.6	6.7	9.0
For Two or More Units .....	3.6	3.8	3.0	1.7	2.9	1.8	9.3
Floor, Wall, or Pipeless Furnace .....	4.3	4.4	5.2	2.9	4.7	3.0	9.8
Room Heater/Other .....	2.8	2.9	3.6	2.0	3.1	2.0	11.9
Electricity .....	25.3	26.2	40.5	22.3	35.7	22.7	4.3
Built-In Electric Units .....	7.0	7.2	9.4	5.2	8.2	5.2	9.0
Central Warm-Air Furnace .....	9.5	9.8	14.3	7.9	12.9	8.2	8.3
For One Housing Unit .....	9.3	9.6	14.2	7.8	12.7	8.1	8.5
Heat Pump .....	7.5	7.8	15.4	8.5	13.4	8.5	7.0
Other .....	1.3	1.4	1.3	0.7	1.2	0.8	13.6
Fuel Oil .....	10.2	10.6	23.2	12.8	19.6	12.5	6.8
Steam or Hot-Water System .....	5.3	5.5	11.8	6.5	10.0	6.3	8.9
For One Housing Unit .....	3.5	3.6	9.9	5.5	8.2	5.2	10.9
For Two or More Units .....	1.8	1.9	1.9	1.0	1.8	1.1	13.5
Central Warm-Air Furnace .....	4.5	4.7	10.8	6.0	9.2	5.8	8.8
Other .....	0.4	0.4	0.6	0.3	0.5	0.3	20.8
Wood .....	3.1	3.2	6.5	3.6	5.8	3.7	9.4
Heating Stove .....	2.4	2.5	4.8	2.6	4.2	2.7	10.3
Other .....	0.7	0.8	1.8	1.0	1.6	1.0	17.2
LPG .....	4.8	5.0	8.8	4.8	7.8	5.0	10.7
Central Warm-Air Furnace .....	3.1	3.2	6.3	3.5	5.6	3.5	11.7
Room Heater .....	1.1	1.2	1.6	0.9	1.4	0.9	18.7
Other .....	0.6	0.6	0.9	0.5	0.8	0.5	26.3
Kerosene .....	1.0	1.0	1.1	0.6	0.9	0.6	17.6
Other .....	0.4	0.4	0.6	0.3	0.6	0.4	41.3
None .....	0.9	0.9	1.0	0.5	--	--	21.0
<b>Amount of Heat Provided by Main Heating Equipment</b>							
All or Almost All .....	87.3	90.3	161.7	89.2	141.3	89.7	1.3
About Three-Fourths .....	5.4	5.6	12.2	6.7	10.7	6.8	7.7
Closer to One-Half .....	3.1	3.2	6.4	3.5	5.6	3.5	10.1
No Main Equipment .....	0.9	0.9	1.0	0.5	--	--	21.0
<b>Age of Main Heating Equipment</b>							
Less than 2 Years .....	9.0	9.3	18.8	10.4	16.5	10.5	5.3
2 to 4 Years .....	10.6	11.0	22.7	12.5	19.5	12.4	5.6
5 to 9 Years .....	17.7	18.3	36.7	20.2	31.9	20.3	4.2
10 to 19 Years .....	21.6	22.4	43.1	23.8	37.7	23.9	3.1
20 Years or More .....	21.5	22.2	41.8	23.1	36.1	22.9	3.4
Don't Know .....	15.3	15.8	17.2	9.5	15.9	10.1	4.9
No Main Equipment .....	0.9	0.9	1.0	0.5	--	--	21.0

See footnotes at end of table.

**Table 3.11. Space Heating by Total Floorspace,  
U.S. Households, 1993 (Continued)**

Space Heating Characteristics	Total Households		Total Square Footage				RSE Row Factors
	(millions)	(percent)	Total		Heated		
			(billions)	(percent)	(billions)	(percent)	
	RSE Column Factor:	0.9	0.9	1.1	1.0	1.0	
<b>Secondary Heating Fuel and Equipment</b>							
<b>(more than one may apply)</b>							
No .....	60.8	62.9	97.6	53.9	85.3	54.1	2.3
Yes .....	35.9	37.1	83.6	46.1	72.3	45.9	3.3
Natural Gas .....	4.1	4.2	9.2	5.1	8.0	5.1	9.4
Fireplace .....	1.8	1.9	5.0	2.8	4.3	2.7	12.7
Room Heater .....	1.0	1.0	1.9	1.1	1.7	1.1	15.9
Central Warm-Air Furnace .....	0.6	0.6	1.4	0.8	1.2	0.8	23.8
Other Equipment .....	0.9	0.9	1.2	0.7	1.1	0.7	21.1
Electricity .....	14.6	15.1	31.0	17.1	26.9	17.1	5.0
Portable Heater .....	9.8	10.1	19.4	10.7	16.6	10.5	5.6
Built-in Electric Units .....	4.0	4.1	9.7	5.3	8.6	5.4	9.3
Other Equipment .....	0.8	0.8	1.4	0.8	1.4	0.9	14.1
Fuel Oil .....	0.4	0.4	0.9	0.5	0.8	0.5	17.8
Wood .....	19.0	19.7	50.8	28.0	43.8	27.8	4.6
Fireplace .....	15.9	16.5	42.8	23.6	36.7	23.3	4.9
Heating Stove .....	3.4	3.6	9.1	5.0	8.0	5.1	8.1
Other Equipment .....	0.2	0.2	0.5	0.3	0.4	0.3	32.0
LPG .....	1.2	1.3	2.4	1.3	2.1	1.3	15.1
Kerosene .....	2.6	2.7	5.3	2.9	4.5	2.9	14.7
Other .....	0.4	0.4	0.9	0.5	0.8	0.5	26.6

-- = Data not applicable.

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 of the 1993 Residential Energy Consumption Survey. (For specific titles of forms, see Appendix D.)



**Table 3.12a. Space Heating by Family Income, Million U.S. Households, 1993**

Space Heating Characteristics	Total	1993 Family Income							Below Poverty Line		Eli-gible for Federal Assist-ance <sup>1</sup>	RSE Row Factors
		Less than \$5,000	\$5,000 to \$9,999	\$10,000 to \$14,999	\$15,000 to \$24,999	\$25,000 to \$34,999	\$35,000 to \$49,999	\$50,000 or More	100 Per-cent	125 Per-cent		
RSE Column Factor:	0.5	1.9	1.3	1.1	0.9	1.0	0.9	0.9	1.1	0.9	0.8	
<b>Total</b> .....	96.6	4.1	10.6	11.1	18.4	14.1	17.5	21.0	14.4	19.4	30.7	3.5
<b>Main Heating Fuel and Equipment</b>												
Natural Gas .....	50.8	2.0	5.2	6.0	9.6	6.9	9.0	12.1	7.1	9.5	15.5	5.7
Central Warm-Air Furnace .....	34.9	0.8	2.7	3.6	6.2	5.3	6.8	9.6	3.4	4.9	8.4	7.1
For One Housing Unit .....	34.1	0.8	2.6	3.4	5.9	5.2	6.7	9.5	3.3	4.7	8.1	7.4
For Two or More Units .....	0.9	Q	Q	Q	0.3	Q	Q	Q	Q	Q	0.3	37.8
Steam or Hot-Water System .....	8.7	0.6	1.2	1.1	1.8	0.9	1.5	1.6	1.6	2.0	3.4	12.4
For One Housing Unit .....	5.1	0.2	0.5	0.5	1.1	0.5	0.9	1.3	0.7	1.0	1.6	17.1
For Two or More Units .....	3.6	0.3	0.7	0.6	0.7	0.4	0.5	0.3	0.8	1.0	1.8	19.5
Floor, Wall, or Pipeless Furnace .....	4.3	0.2	0.6	0.8	1.0	0.5	0.6	0.6	1.0	1.2	1.9	18.1
Room Heater/Other .....	2.8	0.3	0.7	0.6	0.6	0.2	0.2	0.2	1.1	1.4	1.7	18.5
Electricity .....	25.3	1.2	3.2	2.8	4.7	4.0	4.5	5.0	4.0	5.3	8.4	8.0
Built-In Electric Units .....	7.0	0.5	1.3	1.1	1.4	1.0	1.0	0.7	1.6	2.1	3.2	15.0
Central Warm-Air Furnace .....	9.5	0.4	0.9	1.0	2.0	1.6	1.9	1.6	1.4	1.8	2.8	13.1
For One Housing Unit .....	9.3	0.4	0.9	1.0	2.0	1.6	1.9	1.6	1.3	1.7	2.7	13.4
Heat Pump .....	7.5	0.3	0.6	0.5	1.0	1.2	1.4	2.6	0.6	0.9	1.6	18.0
Other .....	1.3	Q	0.3	0.3	0.3	0.1	Q	Q	0.4	0.5	0.8	23.7
Fuel Oil .....	10.2	0.4	0.9	0.9	1.7	1.6	2.3	2.4	1.2	1.8	2.8	11.5
Steam or Hot-Water System .....	5.3	0.2	0.5	0.5	0.8	0.7	1.2	1.4	0.8	1.0	1.5	14.6
For One Housing Unit .....	3.5	Q	0.2	0.3	0.5	0.5	0.8	1.1	0.2	0.3	0.6	21.0
For Two or More Units .....	1.8	0.2	0.3	0.3	0.3	0.2	0.4	0.2	0.5	0.7	0.9	17.8
Central Warm-Air Furnace .....	4.5	Q	0.3	0.4	0.9	0.9	1.0	1.0	0.4	0.6	1.1	16.7
Other .....	0.4	Q	Q	Q	Q	Q	Q	Q	Q	0.1	0.2	35.9
Wood .....	3.1	Q	0.3	0.4	0.5	0.4	0.7	0.7	0.5	0.8	1.1	16.7
Heating Stove .....	2.4	Q	0.3	0.4	0.3	0.3	0.6	0.4	0.5	0.7	1.0	18.2
Other .....	0.7	Q	Q	Q	0.2	Q	0.1	0.2	Q	Q	0.1	34.1
LPG .....	4.8	0.2	0.7	0.6	1.1	0.9	0.7	0.6	1.0	1.4	1.8	15.5
Central Warm-Air Furnace .....	3.1	Q	0.2	0.3	0.8	0.7	0.5	0.5	0.4	0.5	0.8	20.3
Room Heater .....	1.1	Q	0.3	0.2	0.3	0.2	Q	Q	0.4	0.6	0.7	26.4
Other .....	0.6	Q	Q	Q	Q	Q	Q	Q	0.2	0.2	0.3	29.7
Kerosene .....	1.0	Q	0.2	0.1	0.3	Q	Q	Q	0.3	0.4	0.6	25.1
Other .....	0.4	Q	Q	Q	0.1	Q	Q	Q	Q	Q	Q	57.6
None .....	0.9	Q	Q	0.1	0.2	Q	0.1	Q	0.2	0.2	0.3	23.3
<b>Amount of Heat Provided by Main Heating Equipment</b>												
All or Almost All .....	87.3	3.7	9.9	10.2	16.6	12.7	15.7	18.5	13.2	17.9	28.1	3.6
About Three-Fourths .....	5.4	0.2	0.3	0.3	0.9	0.9	1.0	1.7	0.4	0.6	1.2	15.7
Closer to One-Half .....	3.1	0.2	0.3	0.4	0.6	0.3	0.6	0.6	0.6	0.7	1.1	17.9
No Main Equipment .....	0.9	Q	Q	0.1	0.2	Q	0.1	Q	0.2	0.2	0.3	23.3
<b>Age of Main Heating Equipment</b>												
Less than 2 Years .....	9.0	0.2	1.0	0.7	1.5	1.3	1.9	2.4	1.2	1.6	2.4	12.4
2 to 4 Years .....	10.6	0.2	0.8	1.0	1.7	1.8	2.2	2.9	1.1	1.6	2.6	11.2
5 to 9 Years .....	17.7	0.5	1.3	1.8	3.4	2.6	3.6	4.5	1.8	2.7	4.5	8.2
10 to 19 Years .....	21.6	0.8	2.3	2.1	3.8	3.3	4.1	5.2	2.8	4.2	6.4	7.2
20 Years or More .....	21.5	1.0	2.4	2.9	4.5	3.3	3.4	4.1	3.1	4.2	7.2	7.3
Don't Know .....	15.3	1.3	2.8	2.5	3.3	1.6	2.1	1.7	4.2	5.0	7.2	8.1
No Main Equipment .....	0.9	Q	Q	0.1	0.2	Q	0.1	Q	0.2	0.2	0.3	23.3

See footnotes at end of table.

**Table 3.12b. Space Heating by Family Income, Percent of U.S. Households, 1993**

Space Heating Characteristics	Total	1993 Family Income							Below Poverty Line		Eligible for Federal Assistance <sup>1</sup>	RSE Row Factors
		Less than \$5,000	\$5,000 to \$9,999	\$10,000 to \$14,999	\$15,000 to \$24,999	\$25,000 to \$34,999	\$35,000 to \$49,999	\$50,000 or More	100 Percent	125 Percent		
RSE Column Factor:	0.5	1.9	1.3	1.1	0.9	1.1	0.9	0.9	1.1	0.9	0.8	
<b>Total</b> .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0
<b>Main Heating Fuel and Equipment</b>												
Natural Gas .....	52.6	48.6	48.8	54.1	52.3	49.1	51.8	57.7	49.5	49.1	50.4	4.6
Central Warm-Air Furnace .....	36.2	20.4	25.3	32.1	33.8	37.5	38.8	45.8	24.0	25.3	27.5	6.6
For One Housing Unit .....	35.3	20.1	24.1	30.8	32.1	36.9	38.3	45.4	23.1	24.5	26.4	6.8
For Two or More Units .....	0.9	Q	Q	Q	1.7	Q	Q	Q	Q	Q	1.1	37.4
Steam or Hot-Water System .....	9.0	14.4	11.4	10.2	9.7	6.7	8.4	7.7	10.8	10.4	11.2	11.9
For One Housing Unit .....	5.3	6.0	5.0	4.9	5.8	3.5	5.3	6.2	5.0	5.1	5.4	16.8
For Two or More Units .....	3.8	8.3	6.4	5.3	3.9	3.2	3.1	1.5	5.9	5.2	5.9	19.1
Floor, Wall, or Pipeless Furnace .....	4.4	5.7	5.7	6.8	5.4	3.2	3.5	3.1	6.7	6.3	6.1	17.8
Room Heater/Other .....	2.9	8.1	6.4	5.1	3.3	1.7	1.1	1.1	8.0	7.2	5.6	18.0
Electricity .....	26.2	29.1	29.8	25.4	25.8	28.3	25.7	23.8	27.6	27.2	27.3	7.1
Built-In Electric Units .....	7.2	11.1	12.0	9.6	7.8	7.4	5.9	3.4	10.8	10.8	10.5	14.7
Central Warm-Air Furnace .....	9.8	10.1	8.9	8.9	10.9	11.5	10.9	7.7	9.6	9.4	9.2	12.7
For One Housing Unit .....	9.6	9.2	8.6	8.9	10.8	11.2	10.8	7.6	9.1	9.0	8.9	13.1
Heat Pump .....	7.8	6.3	6.0	4.1	5.6	8.4	8.1	12.3	4.2	4.5	5.2	17.4
Other .....	1.4	Q	2.8	2.7	1.4	1.1	Q	Q	2.9	2.6	2.5	23.2
Fuel Oil .....	10.6	9.8	8.7	8.3	9.5	11.7	12.9	11.2	8.6	9.1	9.3	11.2
Steam or Hot-Water System .....	5.5	5.3	5.1	4.6	4.3	5.1	7.0	6.5	5.3	5.1	5.0	14.5
For One Housing Unit .....	3.6	Q	1.8	2.2	2.7	3.7	4.8	5.5	1.6	1.5	2.1	20.9
For Two or More Units .....	1.9	3.8	3.2	2.3	1.6	1.4	2.2	1.0	3.7	3.6	2.9	17.7
Central Warm-Air Furnace .....	4.7	Q	3.2	3.2	4.8	6.1	5.5	4.7	2.6	3.2	3.6	16.5
Other .....	0.4	Q	Q	Q	Q	Q	Q	Q	Q	0.7	0.7	35.0
Wood .....	3.2	Q	2.7	3.8	2.7	2.7	4.2	3.2	3.5	4.0	3.7	16.4
Heating Stove .....	2.5	Q	2.4	3.6	1.8	1.9	3.4	2.0	3.3	3.6	3.2	17.8
Other .....	0.8	Q	Q	Q	0.9	Q	0.8	1.2	Q	Q	0.5	34.0
LPG .....	5.0	6.1	6.3	5.4	6.2	6.4	3.8	2.8	6.7	7.1	5.9	15.3
Central Warm-Air Furnace .....	3.2	Q	2.1	2.8	4.2	4.7	3.1	2.5	2.5	2.8	2.6	20.2
Room Heater .....	1.2	Q	3.1	1.8	1.4	1.2	Q	Q	3.1	3.1	2.4	26.0
Other .....	0.6	Q	Q	Q	Q	Q	Q	Q	1.1	1.2	0.9	29.7
Kerosene .....	1.0	Q	2.0	1.3	1.7	Q	Q	Q	2.2	2.0	1.8	24.6
Other .....	0.4	Q	Q	Q	0.7	Q	Q	Q	Q	Q	Q	56.1
None .....	0.9	Q	Q	1.1	1.1	Q	0.8	Q	1.2	1.0	0.9	23.1
<b>Amount of Heat Provided by Main Heating Equipment</b>												
All or Almost All .....	90.3	90.9	93.7	91.9	90.3	90.2	89.8	88.1	91.9	92.2	91.7	1.2
About Three-Fourths .....	5.6	3.8	2.9	3.1	5.1	6.6	6.0	8.0	2.9	3.2	3.9	15.5
Closer to One-Half .....	3.2	4.3	3.0	3.8	3.4	2.2	3.5	3.0	4.0	3.6	3.5	17.7
No Main Equipment .....	0.9	Q	Q	1.1	1.1	Q	0.8	Q	1.2	1.0	0.9	23.1
<b>Age of Main Heating Equipment</b>												
Less than 2 Years .....	9.3	5.5	9.0	6.5	8.2	9.5	10.8	11.4	8.7	8.1	8.0	11.8
2 to 4 Years .....	11.0	5.6	7.3	9.0	9.1	13.1	12.6	13.8	7.4	8.2	8.4	10.6
5 to 9 Years .....	18.3	12.3	12.3	15.8	18.7	18.4	20.6	21.7	12.6	13.7	14.7	7.7
10 to 19 Years .....	22.4	18.9	22.0	19.2	20.5	23.5	23.6	24.7	19.4	21.4	21.0	6.4
20 Years or More .....	22.2	25.0	22.9	25.7	24.3	23.3	19.4	19.4	21.4	21.8	23.5	6.4
Don't Know .....	15.8	31.7	26.0	22.7	18.0	11.3	12.2	8.2	29.3	25.8	23.5	7.7
No Main Equipment .....	0.9	Q	Q	1.1	1.1	Q	0.8	Q	1.2	1.0	0.9	23.1

See footnotes at end of table.

**Table 3.12a. Space Heating by Family Income,  
Million U.S. Households, 1993 (Continued)**

Space Heating Characteristics	Total	1993 Family Income							Below Poverty Line		Eli- gible for Fed- eral Assist- ance <sup>1</sup>	RSE Row Factors
		Less than \$5,000	\$5,000 to \$9,999	\$10,000 to \$14,999	\$15,000 to \$24,999	\$25,000 to \$34,999	\$35,000 to \$49,999	\$50,000 or More	100 Per- cent	125 Per- cent		
RSE Column Factor:	0.5	1.9	1.3	1.1	0.9	1.0	0.9	0.9	1.1	0.9	0.8	
<b>Secondary Heating Fuel and Equipment (more than one may apply)</b>												
No .....	60.8	3.2	8.2	8.5	12.3	9.1	10.2	9.3	10.9	14.6	22.9	4.3
Yes .....	35.9	0.9	2.4	2.6	6.1	4.9	7.2	11.6	3.4	4.8	7.8	6.8
Natural Gas .....	4.1	Q	0.3	0.2	0.7	0.6	0.9	1.2	0.4	0.5	0.8	18.5
Fireplace .....	1.8	Q	Q	Q	0.3	0.3	0.4	0.8	Q	Q	0.1	23.6
Room Heater .....	1.0	Q	Q	Q	0.2	0.2	0.2	0.2	Q	0.2	0.2	32.7
Central Warm-Air Furnace .....	0.6	Q	Q	Q	Q	Q	0.2	0.2	Q	Q	Q	36.5
Other Equipment .....	0.9	Q	0.1	Q	0.2	Q	0.2	Q	0.2	0.2	0.4	30.8
Electricity .....	14.6	0.5	1.3	1.5	2.9	1.9	2.5	3.9	1.9	2.5	4.0	8.9
Portable Heater .....	9.8	0.4	1.0	1.1	2.2	1.3	1.5	2.3	1.4	1.9	3.1	10.3
Built-in Electric Units .....	4.0	Q	0.2	0.3	0.7	0.5	0.9	1.3	0.3	0.4	0.6	20.0
Other Equipment .....	0.8	Q	0.1	Q	0.1	Q	Q	0.2	0.2	0.3	0.3	22.9
Fuel Oil .....	0.4	Q	Q	Q	Q	Q	Q	0.1	Q	Q	0.1	42.2
Wood .....	19.0	0.2	0.5	0.7	2.5	2.5	4.2	8.4	0.8	1.2	2.2	11.5
Fireplace .....	15.9	0.2	0.4	0.4	1.9	2.0	3.5	7.6	0.6	0.8	1.6	13.4
Heating Stove .....	3.4	Q	Q	0.4	0.6	0.5	0.9	1.0	0.2	0.4	0.7	17.4
Other Equipment .....	0.2	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	57.9
LPG .....	1.2	Q	0.2	Q	0.2	0.2	0.2	0.3	0.2	0.3	0.4	27.4
Kerosene .....	2.6	Q	0.3	0.3	0.6	0.4	0.5	0.5	0.4	0.6	0.9	22.2
Other .....	0.4	Q	Q	Q	Q	Q	Q	0.1	Q	Q	Q	44.1

<sup>1</sup> Below 150 percent of poverty line or 60 percent of median State income.

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 of the 1993 Residential Energy Consumption Survey. (For specific titles of forms, see Appendix D.)

**Table 3.12b. Space Heating by Family Income, Percent of U.S. Households, 1993 (Continued)**

Space Heating Characteristics	Total	1993 Family Income							Below Poverty Line		Eli-gible for Federal Assist-ance <sup>1</sup>	RSE Row Factors
		Less than \$5,000	\$5,000 to \$9,999	\$10,000 to \$14,999	\$15,000 to \$24,999	\$25,000 to \$34,999	\$35,000 to \$49,999	\$50,000 or More	100 Per-cent	125 Per-cent		
RSE Column Factor:	0.5	1.9	1.3	1.1	0.9	1.1	0.9	0.9	1.1	0.9	0.8	
<b>Secondary Heating Fuel and Equipment (more than one may apply)</b>												
No .....	62.9	77.8	77.1	76.3	66.7	65.0	58.7	44.5	76.1	75.3	74.5	2.6
Yes .....	37.1	22.2	22.9	23.7	33.3	35.0	41.3	55.5	23.9	24.7	25.5	6.0
Natural Gas .....	4.2	Q	3.2	2.1	3.7	4.2	5.4	5.7	2.8	2.6	2.6	18.3
Fireplace .....	1.9	Q	Q	Q	1.6	1.9	2.2	3.8	Q	Q	0.5	23.2
Room Heater .....	1.0	Q	Q	Q	0.8	1.4	1.1	0.8	Q	1.0	0.8	32.6
Central Warm-Air Furnace .....	0.6	Q	Q	Q	Q	Q	1.2	0.8	Q	Q	Q	36.4
Other Equipment .....	0.9	Q	1.3	Q	1.2	Q	1.1	Q	1.3	1.1	1.2	30.6
Electricity .....	15.1	13.2	11.9	13.5	16.0	13.9	14.3	18.7	13.1	13.0	13.2	8.4
Portable Heater .....	10.1	10.0	9.3	9.5	12.0	9.4	8.6	11.1	9.6	9.6	10.0	9.8
Built-in Electric Units .....	4.1	Q	1.7	2.7	4.0	3.7	5.2	6.1	2.4	2.3	2.1	19.9
Other Equipment .....	0.8	Q	1.0	Q	0.7	Q	Q	1.0	1.6	1.3	1.1	23.2
Fuel Oil .....	0.4	Q	Q	Q	Q	Q	Q	0.5	Q	Q	0.4	41.4
Wood .....	19.7	5.2	4.8	6.4	13.5	17.5	24.3	40.1	5.4	6.2	7.3	10.9
Fireplace .....	16.5	3.9	3.8	3.4	10.4	14.4	20.0	36.1	4.2	4.1	5.3	12.8
Heating Stove .....	3.6	Q	Q	3.2	3.1	3.8	4.9	4.6	1.3	2.2	2.1	17.3
Other Equipment .....	0.2	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	55.7
LPG .....	1.3	Q	1.6	Q	1.1	1.8	1.2	1.4	1.6	1.7	1.3	27.2
Kerosene .....	2.7	Q	2.6	2.7	3.3	2.6	2.7	2.4	2.9	3.1	3.0	22.1
Other .....	0.4	Q	Q	Q	Q	Q	Q	0.6	Q	Q	Q	43.5

<sup>1</sup> Below 150 percent of poverty line or 60 percent of median State income.

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 of the 1993 Residential Energy Consumption Survey. (For specific titles of forms, see Appendix D.)