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Superintendent of Documents U.S. Government Printing Office Washington, D.C. 20402 (202) 783-3238 Residential Energy Consumption Survey:

Consumption and Expenditures, **April 1981 Through** March 1982







Part 2: Regional Data

Prepared by: Bruce Egan

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Energy Information Administration | DOE/EIA-0321/2(81)

Office of Energy Markets and End Use Energy End Use Division U.S. Department of Energy Washington, D.C. 20585

November 1983

Dist. Category UC-98





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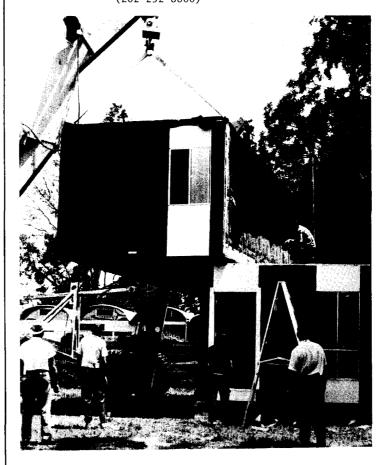
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The data collection agent for this document was Response Analysis Corporation. The tabulations were programmed by Social & Scientific Systems, Incorporated.

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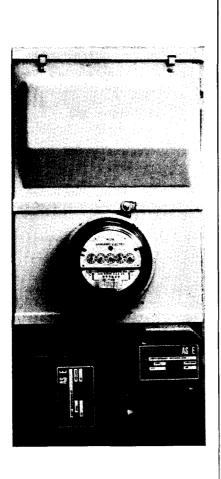
Residential Energy Consumption Survey: Consumption and Expenditures, April 1981 Through March 1982, Part 2: Regional Data Energy Information Administration



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	West
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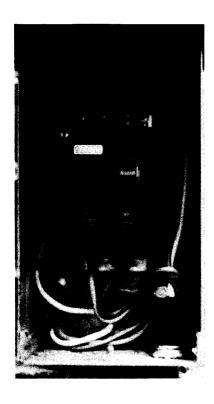




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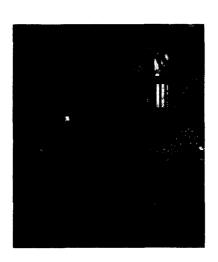
Residential Energy Consumption Survey: Consumption and Expenditures, April 1981 Through March 1982, Part 2: Regional Data Energy Information Administration

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Introduction





Summary of Findings

This is the third report on the 1981 Residential Energy Consumption Survey, which covers the period April 1981 through March 1982. It contains regional data on residential energy consumption and expenditures in the United States. Previous reports include Residential Energy Consumption Survey: Housing Characteristics, 1981 and Residential Energy Consumption Survey: Consumption and Expenditures, April 1981 Through March 1982, Part 1: National Data.

The 1981 survey is the latest in a series of surveys of residential energy use. The series provides a detailed 4-year record of residential energy use patterns for 1978 through 1981. Each survey is based on a different sample of households.

This report contains data for the four Census regions and the nine Census divisions. Total and average consumption and expenditures of total and specific fuels are classified by significant energy-related characteristics of the households.

The previous report, which covered the entire United States, showed that the average household consumed about the same amount of energy in 1981 as in the preceding year. Consumption of fuel oil and kerosene continued to decline nationwide, while the consumption of electricity, natural gas, and liquefied petroleum gas remained stable.

The regional tables presented identify the type and quantity of energy consumption and expenditures in different parts of the Nation in 1981. In particular, it is interesting to note the differences, if any, within a region as well as between regions. Energy consumption and expenditure data for the three to five weather zones in each region are also included in the tables.

Due to the quantity of information contained in the tables, a selection of summary figures is presented to give the reader an overview of trends across geographic regions and weather zones. Figures 1 and 2 highlight total and average household consumption and expenditures in each of the nine Census divisions. Figures 3 through 6 present average household energy consumption and expenditures by fuel type and Census division. Figures 7 and 8 summarize average household energy consumption and expenditures by Census region and weather zone.

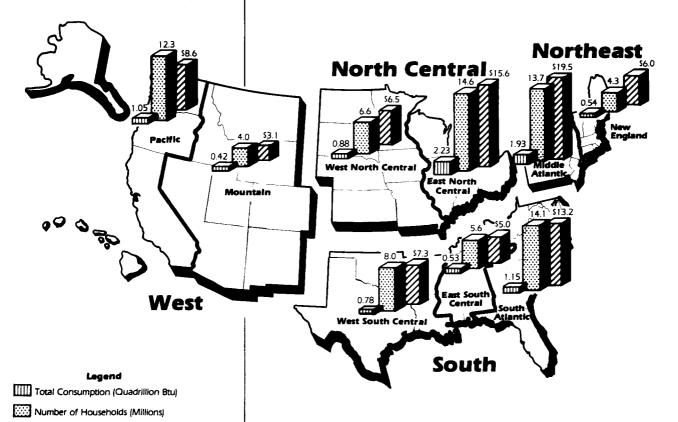
All the data shown in the figures are presented in the tables as well. Tables 1 through 3 present summary total and average consumption and expenditures for all fuels and for specific fuels. Tables 4 through 7 address each fuel individually and show consumption and expenditure data for all households using a particular fuel and for households using the fuel as their main heating fuel. These fuels and energy sources include natural gas, electricity, fuel oil or kerosene, and liquefied petroleum gas (LPG). Tables 1 through 7 are presented for the United States as a whole, for the four Census regions, and for the nine Census divisions. Table $8\,$ presents consumption and expenditures data for wood, which, in 1980 and 1981, replaced LPG as the fourth most-used heating fuel in the Nation. Due to statistical limitations, the wood data are presented only for the United States and the four Census regions. In addition, actual relative standard errors for the wood data are presented (see Appendix C, Table C10) along with the generalized variance estimation procedures given for the other data presented in the report.

¹Unless otherwise noted, 1978 refers to the period of April 1978 through. March 1979, and subsequent years refer to corresponding periods.



Figure 1. Total Residential Energy Consumption and Expenditures for All Fuels by Census Division, 1981

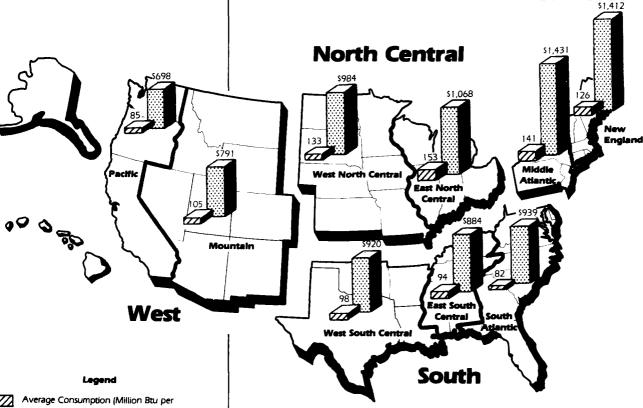
Total Expenditures (Billion Dollars)





Northeast

Figure 2. Average Household **Energy Consumption and Expenditures for All Fuels by** Census Division, 1981



Average Consumption (Million Btu per Household)

Average Expenditures (Dollars per Household)



Figure 3. Northeast: Average Household Energy Consumption and Expenditures by Fuel Type and Census Division, 1981

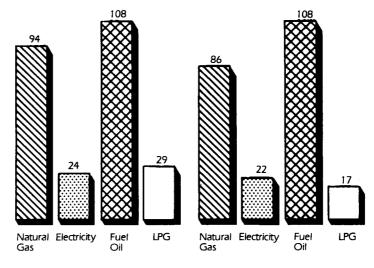
Average Consumption (Million Btu) per Household

NH VT ME NY MA RI PA NJ New England

Middle Atlantic

Average Expenditures (\$) per Household

Summary of Findings



Middle Atlantic New England

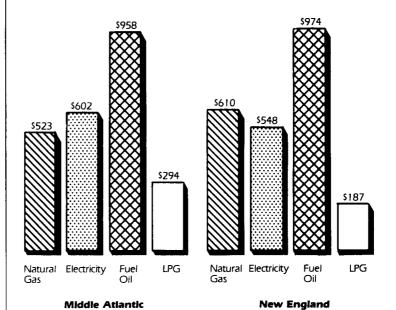




Figure 4. North Central: Average Household Energy Consumption and **Expenditures by Fuel Type** and Census Division, 1981

122 72 Natural Electricity LPG Natural Electricity Fuel LPG Fuel Gas

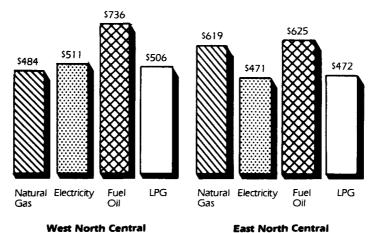
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Average Consumption (Million Btu) per Household

West North Central

East North Central



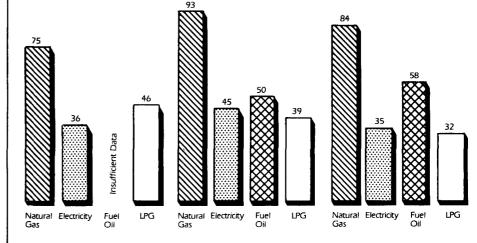


Average Expenditures (\$) per Household



Figure 5. South: Average Household Energy Consumption and Expenditures by Fuel Type and Census Division, 1981

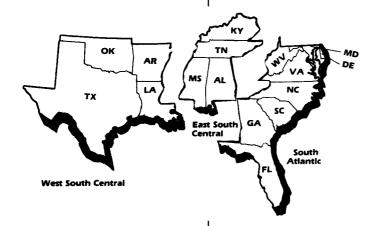
Average Consumption (Million Btu) per Household



West South Central

East South Central

South Atlantic



Average Expenditures (S) per Household

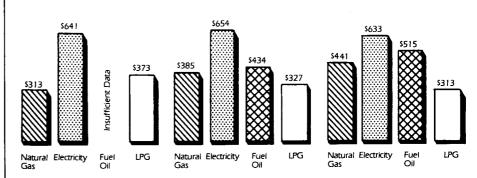
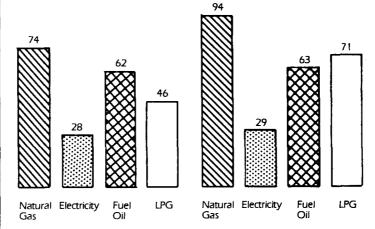




Figure 6. West: Average Household Energy Consumption and Expenditures by Fuel Type and Census Division, 1981

Average Consumption (Million Btu) per Household



Mountain

Pacific Mountain

Average Expenditures (\$) per Household

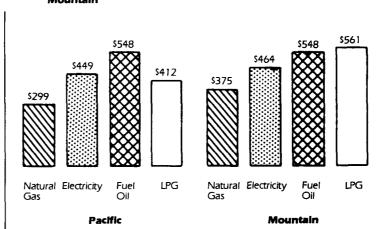
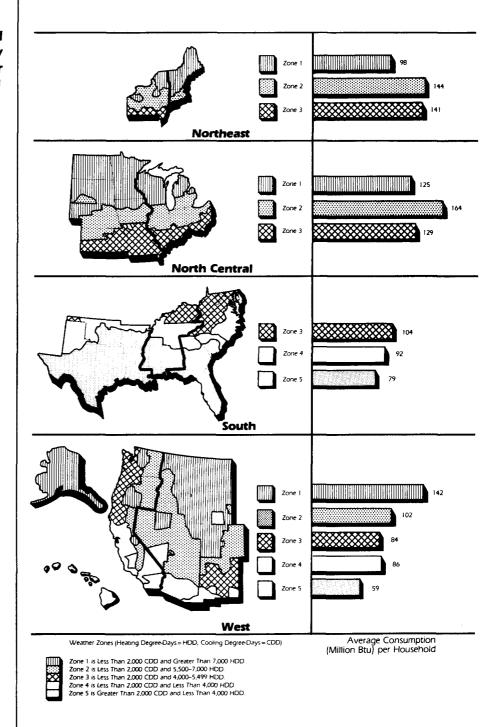




Figure 7. Average Household Energy Consumption by Census Region and Weather Zone, 1981

Summary of Findings

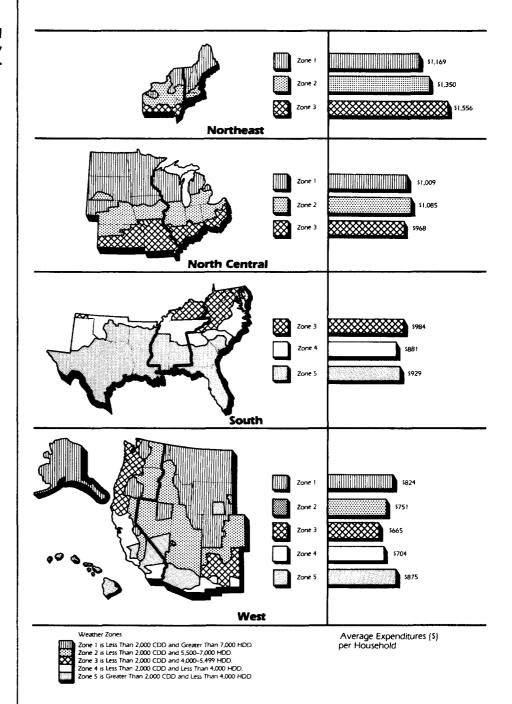


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Figure 8. Average Household Energy Expenditures by Census Region and Weather Zone, 1981

Summary of Findings



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Table 1. U.S. Total Residential Energy Consumption and Expenditures—April 1981 Through March 1982, United States

	NUMBER	ALL FUELS		HATURAL GAS I		 		FUEL GIL OR KEROSENE		PETR	EFIED OLEUM AS
HOUSEHOLD CHARACTERISTICS	(MIL- LIONS)	SUMED	EXPEND- ITURES (BILLION	SUMED (QUAD-	EXPEND- ITURES (BILLION	SUMED (QUAD- RILLION	EXPEND- ITURES (BILLION	AMOUNT CON- SUMED QUAD-	 TOTAL EXPEND- ITURES (BILLION DOLLARS)	SUMED (QUAD- RILLION	EXPEND- ITURES (BILLION
TOTAL HOUSEHOLDS	83.1	9.51	85.0	5.39	24.5	2.48	45.9	1.33	11.8	0.31	2.7
AREA TYPE											
URBAN	57.3 25.9	6.93 2.58	58.6 26.4	4.45 .94	20.5 4.0	1.53 .95	29.6 16.3	.91 .42	8.1 3.7	.04 .28	.3 2.4
SMSA											
SMSA	56.6 26.5	6.75 2.76	59.5 25.4	4.10 1.29	18.9 5.6	1.60 .88	31.2 14.7	. 97 . 36	8.6 3.2	.08 .23	.8 2.0
1001-31134	20.5	2.70	25.4	1.2,	3.0	.00	****	. 50	3.6		
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NONE, OTHER	69.6	8.12	71.6	4.67	20.7	2.23	40.1	. 93	8.3	.30	2.6
PAID BY HOUSEHOLD	13.5	1.39	13.4	.72	3.8	.25	5.8	.40	3.6	.02	.1
TYPE OF HOUSING STRUCTURE											
SINGLE FAMILY OR MOBILE HOME	61.8	7.58	66.0	4.37	19.2	2.01	36.2	.89	7.9	. 31	2.7
2 OR MORE UNITS	21.4	1.93	19.0	1.02	5.3	.47	9.7	.44	3.9	.01	.1
NUMBER OF ROOMS											
1 TO 3	10.2	.73	7.4	.34	1.7	.19	3.9	.19	1.7	.02	.2
4 TO 5	36.7 36.2	3.57 5.21	32.5 45.0	1.99 3.06	9.1 13.7	.97 1.31	18.0 24.0	.47 .67	4.2 6.0	.14 .16	1.2 1.4
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED											
ALL	30.7	3.42	32.5	1.91	8.4	1.21	21.4	.21	1.9	.09	.8
SOME	17.7 34.7	2.33 3.76	20.5 32.0	1.33 2.15	6.3 9.8	.47 .80	9.5 14.9	.44 .67	4.0 6.0	.08 .15	.7 1.3
MEASURED HEATED SPACE OF RESI-	34.7	3.70	32.0	2.15	7.0		2447		• • • • • • • • • • • • • • • • • • • •	123	
DENCE (IN SQUARE FEET) LESS THAN 999	28.9	2.38	22.7	1.23	5.8	0.63	12.3	0.43	3.8	0.09	0.8
1,000 TO 1,999	35.8	4.05	36.6	2.31	10.5	1.12	20.6	.47	4.1	.16	1.4
2,000 OR MORE	18.4	3.08	25.7	1.85	8.2	. 72	13.0	.44	3.9	.07	.5
YEAR HOUSE BUILT											
1939 OR EARLIER	24.2 20.4	3.23 2.40	26.4 20.1	1.95 1.47	9.2 6.4	.53 .55	10.6 10.3	.61 .35	5.5 3.1	.14	1.2
1960 OR LATER	38.5	3.88	38.4	1.97	8.9	1.40	25.0	.37	3.3	.14	1.2
OWN/RENT											
OWN	55.1	6.96	60.7	4.03	17.9	1.81	32.9	.87	7.7	.25	2.2
RENT	28.0	2.55	24.2	1.36	6.6	.67	13.0	.46	4.1	.06	.5
1980 FAMILY INCOME											
LESS THAN \$10,000	23.3	2.26	19.7	1.30	6.0	.51	9.8	. 34	3.0	.10	. 9
\$10,000 TO \$19,999 \$20,000 TO \$34,999	23.2	2.49	22.5	1.36	6.2 7.5	.67 .79	12.2 14.5	. 37 . 36	3.3 3.2	.09	.8 .7
\$35,000 OR MORE	24.0 12.6	2.89 1.87	25.9 16.8	1.66 1.07	4.8	.50	9.4	.26	2.3	.05	.4
TOTAL BELOW 100 PERCENT											
OF POVERTY LINE	11.0	1.05	9.1	.63	2.9	.25	4.7	.12	1.1	.05	.4
OF POVERTY LINE	15.8	1.53	13.3	.91	4.2	.35	6.7	.19	1.7	.08	.7
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	27.6	2.76	24.8	1.62	7.4	.80	14.4	.27	2.4	.07	.6
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	27.6 33.0	2.76 4.30	24.8 39.0	1.62 2.38	7.4 10.8	.80 1.14	14.4 21.2 10.3	.27 .64	2.4 5.7 3.8	.07 .14	.6 1.2 .9



Table 1. (Continued) United States

HOUSEHOLD CHARACTERISTICS	NUMBER	ALL FUELS		NATURAL GAS 		 ELECTRICITY 		FUEL OIL OR KEROSENE		LIQUEFIED PETROLEUM GAS	
	OF HOUSE- HOLDS (MIL- LIONS)	CON- SUMED QUAD-	 TOTAL EXPEND- ITURES (BILLION DOLLARS)	SUMED (QUAD-	EXPEND- ITURES (BILLION	CON- SUMED QUAD-				CON- SUMED (QUAD-	
HOUSEHOLD MEMBERS											
1	15.4	1.35	11.8	0.77	3.6	0.29	5.6	0.26	2.3	0.03	0.3
2	27.7	2.95	26.5	1.63	7.4	.77	14.3	.43	3.8	.11	1.0
3 OR MORE	40.1	5.21	46.7	2.99	13.5	1.42	26.0	.64	5.7	.17	1.5
MAIN HEATING FUEL											
NATURAL GAS	46.2	6.30	44.6	5.17	23.1	1.11	21.3	.02	. 2	Q	Q
ELECTRICITY	14.2	.83	12.5	.06	. 3	.76	12.1	Q	Q	.01	.1
FUEL OIL OR KEROSENE	12.2	1.67	19.0	.10	.9	.30	6.8	1.25	11.1	.02	. 2
OTHER	10.5	.71	8.9	.05	.3	. 32	5.7	.05	.4	.29	2.5
HOT WATER FUEL											
NATURAL GAS	45.6	6.14	44.2	4.94	22.1	1.04	20.8	.15	1.4	Q	Q
ELECTRICITY	27.1	2.10	26.0	.39	1.8	1.23	19.8	.38	3.3	.11	1.0
FUEL OIL OR KEROSENE	6.1	.92	10.6	.06	.5	.11	3.2	. 75	6.7	Q	Q
OTHER	4.4	. 35	4.2	.01	.1	.10	2.0	.05	.4	.20	1.7
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD	8.8	1.07	8.9	.56	2.4	.23	4.1	.22	1.9	.06	.5
5,500 TO 7,000 HDD	21.0	3.17	24.2	2.16	9.5	.55	10.6	. 39	3.5	.07	.6
4,000 TO 5,499 HDD	21.6	2.59	24.9	1.24	6.4	.64	12.2	.65	5.7	.06	.5
<2,000 CDD AND <4,000 HDD	19.5	1.74	15.6	1.02	4.2	.59	10.3	.06	.5	.07	.6
>2,000 CDD AND <4,000 HDD	12.2	. 94	11.3	.42	2.0	.46	8.7	.02	. 2	. 05	. 5



Table 1. (Continued) Census Region: Northeast

	NUMBER	l I ALL I	FUELS	:	NATURAL GAS		 		FUEL OIL OR KEROSENE 		LIQUEFIED PETROLEUM GAS	
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CON- SUMED QUAD-		CON- SUMED QUAD-	 TOTAL EXPEND- ITURES (BILLION DOLLARS)	CON- SUMED QUAD- RILLION		CON- SUMED (QUAD- RILLION	EXPEND- ITURES (BILLION	SUMED	EXPEND- ITURES (BILLION	
TOTAL HOUSEHOLDS	17.9	2.47	25.6	1.06	6.1	0.42	10.6	0.96	8.6	0.03	0.3	
AREA TYPE												
URBANRURAL	13.7 4.2	2.00 .47	20.2 5.4	.95 .11	5.6 .5	.28 .14	7.7 2.9	.77 .19	6.9 1.7	Q .03	Q . 3	
SMSA												
SMSA	14.1 3.8	2.01 .46	21.0 4.6	.87 .19	5.2 .9	.31	8.3 2.3	.82 .15	7.3 1.3	.02 .01	.2	
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NONE, OTHER	12.3	1.77	17.9	.82	4.5	.33	7.8	.60	5.3	.02	.3	
PAID BY HOUSEHOLD	5.7	.69	7.7	.24	1.6	.08	2.8	.37	3.3	Q	Q	
TYPE OF HOUSING STRUCTURE												
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	10.5 7.4	1.58 .89	16.0 9.6	. 70 . 36	3.8 2.3	.29 .13	6.9 3.7	.57 .40	5.1 3.5	.02 .01	.2 .1	
NUMBER OF ROOMS												
1 TO 3 4 TO 5	2.8 6.7	.29 .79	3.3 8.4	.09 .32	.6 1.9	.04 .13	1.3 3.4	.15 .34	1.4 3.0	Q .01	Q .1	
6 OR MORE	8.5	1.39	13.9	.65	3.5	.25	5.9	.48	4.3	.02	.2	
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED												
ALL	3.2 5.5	.43	4.8	.20	1.1	.10	2.6	.13	1.1 3.0	Q .01	Q	
NONE	9.2	.84 1.20	8.6 12.1	.37 .49	2.2 2.8	.12 .19	3.4 4.7	.34 .50	4.4	.02	.1 .2	
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)												
LESS THAN 999	6.1 6.8	0.67 .94	7.5 9.4	0.22 .45	1.5 2.6	0.11 .16	3.0 3.9	0.33	2.9 2.8	0.01	0.1 .2	
2,000 OR MORE	5.0	.86	8.6	.38	2.0	.15	3.7	.32	2.9	Q	à	
YEAR HOUSE BUILT												
1939 OR EARLIER	8.1 3.3	1.18	11.5 5.0	.54	3.2	.14 .08	3.8 2.0	.48	4.3 2.0	.02 Q	. 2 Q	
1960 OR LATER	6.5	.80	9.1	.18 .34	1.0 1.9	.20	4.8	. 23 . 25	2.3	.01	.1	
OWN/RENT												
OWN	11.1 6.8	1.65 .81	16.7 8.9	.76 .30	4.2 2.0	.29 .12	7.1 3.5	.58 .38	5.2 3.4	.02 .01	.2 .1	
1980 FAMILY INCOME												
LESS THAN \$10,000 \$10,000 TO \$19,999	4.2 5.3	.51 .69	5.2 7.2	.21 .30	1.3 1.7	.07 .13	1.9 3.0	.23 .26	2.0 2.3	Q .01	Q .1	
\$20,000 TO \$34,999	5.5	.76	7.8	.34	1.9	.13	3.3	.28	2.5	.01	.1	
\$35,000 OR MORE	2.9	.50	5.4	.21	1.2	.09	2.4	.20	1.8	Q	Q	
TOTAL BELOW 100 PERCENT OF POVERTY LINE TOTAL BELOW 125 PERCENT	1.6	.21	2.1	.09	.6	.03	.8	.08	.7	Q	Q	
OF POVERTY LINE	2.6	.32	3.2	.15	.9	.04	1.2	.13	1.1	Q	Q	
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	5.4	.65	6.8	.32	1.8	.13	3.1	.20	1.8	.01	.1	
35 TO 59 YEARS	7.7	1.19	12.5	.49	2.8	.20	5.2	.49	4.4	.01	.1	
60 YEARS AND OVER	4.8	.62	6.2	. 25	1.5	.09	2.3	.27	2.4	Q	.1	



Table 1. (Continued) Census Region: Northeast

HOUSEHOLD CHARACTERISTICS	NAME -	 ALL FUELS		NATURAL GAS		 ELECTRICITY		FUEL OIL OR KEROSENE		LIQUEFIED PETROLEUM GAS	
	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	SUMED (QUAD~	 TOTAL EXPEND- ITURES (BILLION DOLLARS)			(QUAD-		(QUAD-		CON- SUMED QUAD-	
HOUSEHOLD MEMBERS											
1	3.4	0.38	3.9	0.15	0.9	0.05	1.4	0.18	1.6	Q	Q
2	5.4	.70	7.2	.30	1.7	.11	2.9	.29	2.6	0.01	0.1
3 OR MORE	9.1	1.39	14.4	.61	3.5	.26	6.3	.50	4.4	.02	.2
MAIN HEATING FUEL											
NATURAL GAS	7.0	1.09	8.8	. 95	5.2	.13	3.5	.01	.1	Q	Q
ELECTRICITY	1.5	.11	1.9	Q	Q	.10	1.9	Q	Q	Q	Q
FUEL OIL OR KEROSENE	7.9	1.17	13.5	.09	.8	.15	4.4	.92	8.2	.01	.1
OTHER	1.5	.10	1.4	.01	Q	.04	.8	.03	. 3	.02	.2
HOT WATER FUEL											
NATURAL GAS	8.0	1.22	10.4	. 96	5.4	.15	4.0	.12	1.0	Q	Q
ELECTRICITY	3.6	.34	4.6	.04	. 2	.17	3.3	.12	1.1	.01	.1
FUEL OIL OR KEROSENE	5.7	.87	10.0	.05	.5	.10	3.1	.71	6.4	Q	Q
OTHER	.5	.04	.5	Q	Q	.01	.2	.01	.1	.02	.2
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	1.9	.18	2.2	.02	.1	.06	1.1	.10	.9	.01	.1
5,500 TO 7,000 HDD	7.8	1.12	10.5	.58	3.1	.19	4.2	. 34	3.0	.02	.2
4,000 TO 5,499 HDD	8.3	1.16	12.9	.46	2.9	.18	5.3	.53	4.7	Q	Q
<2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	_	-	-
>2,000 CDD AND <4,000 HDD	_	-	-	-	_	-	-	-	_	-	-



Table 1. (Continued) Census Division: New England

	 NUMBER	ALL	FUELS	1	URAL AS	I I ELECT	RICITY	 FUEL KERO	OIL OR SENE	PETR	EFIED OLEUM AS
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	SUMED (QUAD- RILLION	EXPEND- ITURES (BILLION	CON- SUMED (QUAD- RILLION	TOTAL EXPEND- ITURES (BILLION DOLLARS)	CON- SUMED QUAD-	EXPEND- ITURES (BILLION	SUMED (QUAD~ RILLION	EXPEND- ITURES (BILLION	SUMED (QUAD-	EXPEND- ITURES (BILLION
TOTAL HOUSEHOLDS	4.3	0.54	6.0	0.17	1.2	0.09	2.3	0.27	2.4	0.01	0.1
AREA TYPE URBANRURAL	3.2 1.1	.43 .11	4.5 1.5	.16 .01	1.2	.06	1.5 .8	.20 .07	1.8	Q .01	Q .1
	1.1		1.5	.01	••	.03	.0	,			,-
SMSA SMSA	3.1 1.2	.42 .12	4.6 1.5	.17 .01	1.2 Q	.07 .03	1.7	.18 .08	1.6	Q .01	Q .1
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NONE, OTHER	3.3	.43	4.8	.14	1.0	.08	1.9	.21	1.8	.01	.1
PAID BY HOUSEHOLD	1.0	.10	1.2	.03	.2	.02	.4	.06	.5	Q	Q
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	2.5 1.8	.33 .21	3.8 2.2	.09 .08	.6 .6	.06	1.5	.17 .10	1.5	.01 Q	.1 Q
NUMBER OF ROOMS		•	_					••			Q
1 TO 3	.5 1.9 1.9	.04 .21 .29	.5 2.4 3.1	.02 .07 .09	.1 .5 .6	.01 .04 .05	.2 .9 1.2	.02 .10 .15	.2 .9 1.3	Q Q Q	9 9 9
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED											
ALLSOMENONE	.5 1.3 2.5	.05 .18 .31	.6 2.0 3.4	.02 .05 .10	.1 .4 .7	.01 .03 .05	.3 .8 1.2	.02 .09 .16	.2 .8 1.4	Q Q .01	Q Q .1
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)											
LESS THAN 999	1.6	0.16	1.8	0.05	0.4	0.03	0.7	0.08	0.7	Q	Q
1,000 TO 1,999		.20 .17	2.2 1.9	.07 .05	.5 .3	.03	.8 .8	.09	.8 .9	Q Q	Q Q
YEAR HOUSE BUILT 1939 OR EARLIER	2.1	.28	2.9	.11	.8	.04	.9	.13	1.2	Q	Q
1940 TO 1959	.8	.10	1.2	.02	.2	.02	.5	.06	.5	Q	Q
1960 OR LATER	1.4	.16	1.9	.04	. 3	.04	.9	.07	.7	Q	Q
OWN/RENT OWN		.36 .18	4.0 2.0	.11	.7 .5	.07	1.6	.18 .09	1.6	0.01 Q	0.1 Q
1980 FAMILY INCOME LESS THAN \$10,000	1.0	.12	1.3	.04	.3	.02	.4	.06	.6	Q	Q
\$10,000 TO \$19,999	1.4	.16	1.8	.06	.4	.03	.7	.07	.6	Q	Q
\$20,000 TO \$34,999 \$35,000 OR MORE		.15 .10	1.7 1.2	.04	.3	.03	. 7 . 5	.08	.7 .5	વ વ	વ વ
TOTAL BELOW 100 PERCENT OF POVERTY LINE TOTAL BELOW 125 PERCENT	.4	. 05	.5	.02	.2	.01	.1	. 02	.2	Q	Q
OF POVERTY LINE	.6	.07	.7	.03	.2	.01	.2	.03	.3	Q	Q
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS		.13	1.5	.04	.3	.03	.7	.06	.5	Q	Q
35 TO 59 YEARS		.27 .14	3.0 1.5	.09 .04	.6 .3	.05 .02	1.1	.14 .07	1.2	Q Q	Q Q



Table 1. (Continued) Census Division: New England

		<u> </u>				!					
	NUMBER	ALL	FUELS		URAL AS	I ELECT 	RICITY	KERO	OIL OR SENE	PETR	EFIED OLEUM AS
HOUSEHOLD Characteristics	OF HOUSE- HOLDS (MIL- LIONS)	(QUAD-	 TOTAL EXPEND- ITURES (BILLION DOLLARS)	(QUAD-		(QUAD-		(QUAD-	 TOTAL EXPEND- ITURES (BILLION DOLLARS)	SUMED (QUAD-	
HOUSEHOLD MEMBERS											
1	0.8	0.08	0.9	0.03	0.2	0.01	0.3	0.04	0.4	Q	Q
3 OR MORE	1.3 2.1	.16 .30	1.8 3.3	.05 .10	.3 .7	.03 .06	.7 1.4	.08 .14	.8 1.3	Q Q	Q Q
MAIN HEATING FUEL											
NATURAL GAS	1.2	.17	1.5	.15	1.0	.02	.5	Q	Q	Q	Q
FUEL OIL OR KEROSENE	.4 2.1	.02	.5	Q	Q	.02	.5	Q	Q	Q Q	Q
OTHER	.6	.32 .03	3.5 .5	. 02 Q	.2 q	.04 .01	1.1	.25 .01	2.3 .1	0.01	0.1
HOT WATER FUEL											
NATURAL GAS	1.6	.22	2.1	.16	1.1	.02	.7	.03	. 3	Q	Q
ELECTRICITY	. 9	.08	1.2	.01	Q	.04	.8	.04	.3	Q	Q
FUEL OIL OR KEROSENE	1.5 .3	.23	2.5	.01 0	.1 o	.03 Q	.7	.19	1.7	Q .01	Q .1
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE <2,000 CDD AND >7,000 HDD <5,500 TO 7,000 HDD	1.1	.12	1.3	.02	.1	.02	.6 1.8	.06	.6	.01 Q	.1 Q
<2,000 CDD AND											
4,000 TO 5,499 HDD	-	-	-	-	-	-	-	-	-	-	-
<pre><2,000 COD AND <4,000 HDD</pre>	-	-	-	-	-	-	-	-	-	-	-



Table 1. (Continued)
Census Division: Middle
Atlantic

		•									
	i i i i i Number	i i i All	FUELS	1	URAL AS	I I ELECT	RICITY		OIL OR SENE	PETR	EFIED OLEUM AS
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CON- SUMED QUAD-	EXPEND- ITURES (BILLION	CON- SUMED QUAD-	EXPEND- ITURES (BILLION	CON- SUMED QUAD-	EXPEND- ITURES (BILLION	CON- SUMED QUAD-	 TOTAL EXPEND- ITURES (BILLION DOLLARS)	AMOUNT CON- SUMED QUAD-	EXPEND- ITURES (BILLION
TOTAL HOUSEHOLDS	13.7	1.93	19.5	0.88	4.9	0.32	8.2	0.70	6.2	0.02	0.2
AREA TYPE											
URBAN	10.6 3.1	1.57 .36	15.7 3.9	.78 .10	4.4 .5	.22 .11	6.2 2.1	.57 .13	5.1 1.2	Q .02	q .2
SMSA											
NON-SMSA	11.0 2.6	1.59 .34	16.4 3.1	.70 .18	4.0 .8	.24 .09	6.6 1.7	.63 .07	5.6 .6	.02 Q	. 2 Q
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	9.0	1.34	13.0	.67	3.5	.26	5.9	.39	3.5	.02	.2
SOME, NONE, OTHER PAID BY HOUSEHOLD	4.7	.59	6.5	.21	1.4	.07	2.3	.31	2.7	q	Q
TYPE OF HOUSING STRUCTURE											
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	8.1 5.6	1.25 .68	12.2 7.4	.61 .28	3.1 1.8	.23 .09	5.4 2.9	.40 .30	3.5 2.7	.02 Q	. 2 Q
NUMBER OF ROOMS											
1 TO 3	2.3	.24	2.8	.08	.5	.03	1.0	.14	1.2	Q	Q
4 TO 5	4.7 6.7	.58 1.10	6.1 10.7	. 25 . 56	1.5 2.9	.09 .20	2.5 4.7	.23 .33	2.1 2.9	.02	Q .2
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED											
ALL	2.8	.38	4.2	.18	1.0	.09	2.2	.11	1.0	Q	Q
NONE	4.3 6.6	.66 .89	6.7 8.7	. 32 . 39	1.8 2.1	.09 .14	2.6 3.4	. 25 . 34	2.2 3.0	.01 .01	.1 .1
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)											
LESS THAN 999	4.5	0.51	5.7	0.17	1.1	0.08	2.3	0.25	2.2	Q	Q
1,000 TO 1,999	5.2 3.9	. 74 . 69	7.2 6.6	. 38	2.1 1.7	.12	3.0 2.9	.22 .23	1.9 2.0	0.01 Q	0.1 Q
		•								•	•
YEAR HOUSE BUILT 1939 OR EARLIER	6.0	.90	8.5	.43	2.4	.11	2.8	. 35	3.1	.01	.1
1940 TO 1959	2.6	.39	3.8	.16	.8	.06	1.5	.17	1.5	Q	Q
	5.1	.65	7.2	. 30	1.6	.16	3.9	.18	1.6	.01	.1
OWN/RENT OWN	8.4	1.29	12.6	.65	3.4	.23	5.5	.41	3.6	.01	.1
RENT	5.3	.63	6.9	.24	1.5	.10	2.8	.29	2.6	.01	.1
1980 FAMILY INCOME											
LESS THAN \$10,000	3.2	.39	3.9	.17	1.0	.05	1.5	.16	1.5	Q	Q
\$10,000 TO \$19,999 \$20,000 TO \$34,999	4.0	.61	6.0	.23	1.3	.10	2.3	.20	1.7	.01 .01	.1
\$35,000 OR MORE	2.2	.40	4.2	.18	1.0	.07	1.9	.14	1.3	Q	Q
TOTAL BELOW 100 PERCENT OF POVERTY LINE	1.3	.16	1.6	.07	.4	.02	.6	.07	.6	Q	Q
TOTAL BELOW 125 PERCENT OF POVERTY LINE	2.0	.25	2.5	.12	.7	.04	. 9	.09	.8	Q	Q
AGE OF HOUSEHOLD HEAD					• •					•	-
UNDER 35 YEARS	4.2	.53	5.3	.28	1.5	.10	2.4	.14	1.3	.01	.1
35 TO 59 YEARS	5.9	.92	9.5	.40	2.2	.16	4.1	. 36	3.2	.01	.1
60 YEARS AND OVER	3.6	.48	4.7	.21	1.1	.07	1.8	.20	1.8	Q	Q



Table 1. (Continued)
Census Division: Middle
Atlantic

	NUMBER	 ALL 	FUELS		URAL AS	i 1 ELECT 1	RICITY	FUEL KERO	OIL OR SENE	PETR	DEFIED ROLEUM GAS
HOUSEHOLD (CHARACTERISTICS (OF HOUSE- HOLDS (MIL- LIONS)	I QUAD-		SUMED (QUAD-		SUMED (QUAD-	 TOTAL EXPEND- ITURES (BILLION DOLLARS)			CON- SUMED QUAD-	
HOUSEHOLD MEMBERS											
1	2.6	0.30	3.0	0.12	0.7	0.04	1.1	0.14	1.2	Q	Q
2	4.1	-54	5.4	. 25	1.4	.08	2.2	.20	1.8	Q	Q
3 OR MORE	6.9	1.09	11.1	.52	2.8	.20	4.9	. 36	3.2	0.02	0.2
MAIN HEATING FUEL											
NATURAL GAS	5.9	.93	7.3	.80	4.2	.11	3.0	.01	.1	Q	Q
ELECTRICITY	1.1	.08	1.5	Q	Q	.08	1.4	Q	q	Q	q
FUEL OIL OR KEROSENE	5.8	-85	9.9	.07	.6	.11	3.3	.67	5.9	Q	Q
OTHER	.9	.07	.9	.01	Q	.03	.5	.02	.2	.02	. 2
HOT WATER FUEL											
NATURAL GAS	6.4	1.01	8.3	.80	4.3	.12	3.3	.08	.7	Q	Q
ELECTRICITY	2.7	.26	3.4	.03	.1	.13	2.4	.09	.8	.01	.1
FUEL OIL OR KEROSENE	4.2	.64	7.5	.05	. 5	.07	2.3	.52	4.6	Q	Q
OTHER	.3	.02	.3	Q	Q	.01	.1	Q	Q	.01	.1
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD	.8	.07	. 9	Q	Q	.03	.5	.03	. 3	Q	Q
5,500 TO 7,000 HDD	4.6	.70	5.8	.43	2.0	.12	2.4	.14	1.2	.02	.2
4,000 TO 5,499 HDD	8.3	1.16	12.9	.46	2.9	.18	5.3	.53	4.7	Q	Q
<2,000 CDD AND <4,000 HDD	-	~	-	-	-	-	_	-	-	-	-
>2,000 CDD AND <4,000 HDD	-	~	-	-	-	_	_	_	_	-	-



Table 1. (Continued)
Census Region: North Central

		I									
	NUMBER	 ALL	FUELS		URAL AS	 ELECT	RICITY	FUEL (KERO	OIL OR SENE	PETR	EFIED OLEUM AS
HOUSEHOLD CHARACTERISTICS	OF	SUMED (QUAD-	EXPEND- ITURES (BILLION	CON- SUMED QUAD- RILLION	 TOTAL EXPEND- ITURES (BILLION DOLLARS)	CON- SUMED (QUAD- RILLION		CON- SUMED QUAD-		SUMED (QUAD-	EXPEND- ITURES (BILLION
TOTAL HOUSEHOLDS	21.2	3.12	22.1	2.24	9.3	0.57	10.3	0.17	1.5	0.13	1.0
AREA TYPE URBANRURAL	14.2 7.0	2.19	14.3 7.9	1.79 .45	7.6 1.8	.34	6.2 4.1	.05 .13	.4 1.1	.01 .12	.1 .9
SMSA SMSANON-SMSA	13.9 7.4	2.14 .97	14.5 7.6	1.70 .54	7.1 2.2	.36 .21	6.7 3.6	.06 .12	.5 1.0	.02	. 2 . 8
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NONE, OTHER	18.1	2.79	19.7	2.00	8.2	.51	9.1	.16	1.4	.12	1.0
PAID BY HOUSEHOLD TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	3.2 16.3 4.9	.32 2.62 .49	2.4 18.4 3.7	1.87 .38	7.6 1.7	.06 .47 .10	1.2 8.4 1.9	.02 .16 .02	.2 1.4 .2	.13 Q	Q 1.0 Q
NUMBER OF ROOMS 1 TO 3	2.4 9.2 9.7	.18 1.14 1.79	1.5 8.2 12.4	.11 .84 1.29	.5 3.6 5.3	.05 .20	.8 3.8 5.7	.02 .05	.2 .5	.01 .05 .07	.1 .4 .6
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED											
ALL. SOME	7.8 5.1 8.4	1.14 .83 1.14	8.2 5.8 8.1	.82 .61 .81	3.3 2.5 3.5	.25 .14 .18	4.4 2.6 3.3	.03 .05 .09	.3 .4 .8	.03 .03 .06	.2 .3 .5
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	6.8 7.9	0.65 1.16	4.9 8.3	0.45 .82	1.9 3.4	0.13 .21	2.4 3.8	0.04	0.3	0.03 .06	0.2 .5
2,000 OR MORE YEAR HOUSE BUILT 1939 OR EARLIER	7.7	1.31	8.9	.97	4.0	.23	4.1 3.4	.07	.6	.04	.3
1940 TO 1959	5.5 8.0	.81 1.04	5.6 8.0	.61 .69	2.6	.13	2.5	.06	.5	.01	.1
OWNRENT	15.0 6.2	2.45 .66	17.1 5.0	1.76 .48	7.2 2.1	.43 .14	7.7 2.5	.15 .03	1.3	.11 .01	.9 .1
1980 FAMILY INCOME LESS THAN \$10,000 \$10,000 TO \$19,999	6.3 6.1	.80 .81	5.6 6.0	.59 .55	2.5 2.3	.12 .16	2.3	. 05 . 05	.4 .5	.03	.3
\$20,000 TO \$34,999		. 95 . 56	6.8 3.8	.70 .40	2.9 1.6	.19 .10	3.3 1.7	.04	.3	.03 .02	.2 .2
OF POVERTY LINE TOTAL BELOW 125 PERCENT OF POVERTY LINE		.35	2.4 3.6	.27		.05	1.0	.02	.1 .2	.01	.1
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	6.9 8.1	.87 1.37	6.3 9.8	.64 .97	2.7 4.0	.18 .26	3.1 4.7	.03	.3	.03	. 2 . 5
60 YEARS AND OVER		.87	6.0	.63		.13	2.5	.07	.6	.06 .04	.3



Table 1. (Continued) Census Region: North Central

	NUMBER	ALL	FUELS		URAL AS	i I ELECT I	RICITY	FUEL KERO	OIL OR SENE	PETR	JEFIED POLEUM JAS
HOUSEHOLD Characteristics	OF HOUSE- HOLDS (MIL- LIONS)	SUMED	TOTAL TOTAL EXPEND- TYURES (BILLION DOLLARS)	SUMED (QUAD-		SUMED		SUMED (QUAD-	EXPEND- ITURES (BILLION	CON- SUMED (QUAD-	
HOUSEHOLD MEMBERS											
1	4.3	0.47	3.2	0.36	1.5	0.07	1.4	0.03	0.3	0.01	0.1
2	7.0	.99	7.1	.70	2.9	.18	3.2	.07	.6	.04	.3
3 OR MORE	10.0	1.66	11.8	1.19	4.9	.32	5.7	.07	.6	.07	.6
MAIN HEATING FUEL											
NATURAL GAS	15.4	2.58	15.9	2.22	9.2	. 35	6.7	.01	.1	Q	Q
ELECTRICITY	1.6	.09	1.4	Q	Q	.09	1.3	Q	Q	Q	Q
FUEL OIL OR KEROSENE	1.7	.23	2.5	.01	Q	.06	1.0	.16	1.4	.01	.1
OTHER	2.5	.21	2.4	.01	.1	.07	1.3	.01	.1	.12	1.0
HOT WATER FUEL											
NATURAL GAS	14.5	2.41	14.8	2.07	8.5	.32	6.1	.02	.1	Q	Q
ELECTRICITY	5.2	.56	5.7	.17	.7	.22	3.5	.13	1.1	.04	. 3
FUEL OIL OR KEROSENE	.1	.01	.1	Q	Q	Q	Q	.01	.1	Q	Q
OTHER	1.5	.14	1.5	.01	Q	.03	.6	.02	. 2	.09	.7
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD	5.6	. 70	5.7	.39	1.8	.15	2.5	.12	1.0	.05	.4
5,500 TO 7,000 HDD	11.5	1.88	12.5	1.49	6.1	.30	5.5	.05	.4	.04	.3
4,000 TO 5,499 HDD	4.2	.54	4.0	. 36	1.4	.13	2.2	.01	.1	.04	. 3
<2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	_	-	-	-
>2,000 CDD AND <4,000 HDD	-	~	-	-	-	-	-	_	-	-	-



Table 1. (Continued)
Census Division: East North
Central

	NUMBER	 	FUELS		URAL AS	L ELECT	RICITY	FUEL KERO	OIL OR SENE	PETR	EFIED OLEUM AS
HOUSEHOLD Characteristics	OF HOUSE- HOLDS (MIL- LIONS)	CON- SUMED QUAD-	TOTAL LEXPEND- LITURES (BILLION	CON- SUMED (QUAD-	TOTAL EXPEND- ITURES (BILLION	CON- SUMED QUAD-	TOTAL EXPEND- ITURES (BILLION	CON- SUMED QUAD-	 TOTAL EXPEND- ITURES (BILLION DOLLARS)	AMOUNT CON- SUMED (QUAD-	EXPEND- ITURES (BILLION
TOTAL HOUSEHOLDS	14.6	2.23	15.6	1.67	7.1	0.37	6.9	0.13	1.1	0.06	0.6
AREA TYPE											
URBAN	10.2 4.4	1.62 .61	10.4 5.2	1.36 .32	5.8 1.3	.22 .15	4.3 2.6	.03 .09	.3 .8	.01 .06	.1 .5
SMSA											
SMSA	10.6 4.1	1.70 .53	11.3 4.3	1.38 .29	5.8 1.3	.26 .11	5.0 1.9	.04	.4 .7	.02 .05	. 2 . 4
NON-SMSA	4.1	.33	4.3	9	1.3	.11	4.7	.00	• • •	.03	
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NONE, OTHER	12.5	2.00	14.0	1.48	6.2	.33	6.1	.12	1.1	.06	.5
PAID BY HOUSEHOLD	2.1	.23	1.6	.19	.9	.04	.8	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE											
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	11.2 3.4	1.87 .37	13.0 2.6	1.37 .30	5.7 1.3	.31	5.6 1.2	.12 Q	1.1 Q	.06 Q	.5 Q
NUMBER OF ROOMS											
1 TO 3	1.5	.12	1.0	.07	. 3	.03	.5	.01	.1	Q	Q
4 TO 5	6.3 6.8	.81 1.30	5.8 8.9	.62 .98	2.7 4.1	.13 .21	2.5 3.8	.04 .07	.3 .7	.02 .04	.2 .3
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED											
ALL	4.4	.69	4.9	.52	2.2	.13	2.4	.02	.2	.01	.1
SOME	3.6 6.6	.60 .94	4.2 6.6	.46 .69	1.9 3.0	.10 .14	1.8 2.6	.03 .07	.3 .6	.01	.1
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)											
LESS THAN 999		0.46 .85	3.4 6.1	0. 3 3 .62	1.5 2.6	0.09 .14	1.6 2.6	0.03	0.2 .5	0.02	0.1 .3
2,000 OR MORE		.92	6.1	.72	3.0	.15	2.7	.04	.4	.01	.1
YEAR HOUSE BUILT											
1939 OR EARLIER		.91	6.1	.70	2.9	.13	2.4	.05	.5	.04	.3
1940 TO 1959		.61 .71	4.1 5.4	.47 .50	2.0 2.1	.09 .16	1.7 2.8	.05 .03	.4 .2	Q .03	Q .2
OHN/RENT	2.4	• • • •	5.4	.50	٤.1	.10	2.0	.03	, .	.03	••
OWN	10.3	1.75	12.1	1.30	5.4	.28	5.1	.12	1.0	. 06	.5
RENT	4.3	.48	3.6	. 37	1.7	.09	1.7	.01	.1	.01	.1
LESS THAN \$10,000		.62	4.2	.48	2.1	.08	1.7	.04	. 3	.02	.1
\$10,000 TO \$19,999 \$20,000 TO \$34,999		.59	4.3	.42	1.8	.11	2.0	.04	.3	.02	
\$35,000 OR MORE		.65 .37	4.7 2.4	.49 .29	2.1 1.1	.12	1.0	.03	.2	.01 .01	.1
TOTAL BELOW 100 PERCENT OF POVERTY LINE	2.0	.28	1.9	.23	1.0	.04	.8	.01	.1	Q	Q
TOTAL BELOW 125 PERCENT OF POVERTY LINE	3.0	.42	2.9	.33	1.4	.06	1.2	.02	. 2	.01	.1
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	4.6	.60	4.3	.46	2.0	.11	2.1	.02	.2	.01	.1
35 TO 59 YEARS	5.4	. 97	6.8	.72	3.0	.17	3.1	.05	.4	.03	. 3
60 YEARS AND OVER	4.6	.66	4.5	.50	2.1	.09	1.7	.06	.5	.02	.2



Table 1. (Continued)
Census Division: East North
Central

		J i i All	FUELS		URAL AS	J I ELECT	RICITY	FUEL KERO	OIL OR SENE	PETR	EFIED OLEUM
	 NUMBER	l]		 		 		l] G	AS
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	SUMED (QUAD-	 TOTAL EXPEND- ITURES (BILLION DOLLARS)	CON- SUMED (QUAD-		(QUAD-	 TOTAL EXPEND- ITURES (BILLION DOLLARS)	(QUAD-		CON- SUMED (QUAD-	
HOUSEHOLD MEMBERS											
1	2.9	0.34	2.3	0.27	1.2	0.04	0.9	0.02	0.2	0.01	Q
2	4.7	.71	5.0	.52	2.2	.12	2.1	.06	.5	.02	0.2
3 OR MORE	6.9	1.18	8.3	-88	3.7	.21	3.9	.05	.4	:04	.3
MAIN HEATING FUEL											
NATURAL GAS	11.2	1.91	11.8	1.67	7.0	.24	4.7	Q	Q	Q	Q
ELECTRICITY	.8	.05	.8	Q	Q	.05	.8	Q	Q	Q	Q
FUEL OIL OR KEROSENE	1.2	.16	1.8	Q	Q	.04	.7	.11	1.0	Q	Q
OTHER	1.3	.11	1.3	Q	Q	.04	.7	.01	.1	.06	.5
HOT WATER FUEL											
NATURAL GAS	10.3	1.76	10.9	1.54	6.5	.22	4.3	.01	.1	Q	Q
ELECTRICITY	3.5	.39	3.9	.13	.6	.14	2.3	.10	.8	.02	.2
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	.7	.07	.8	Q	Q	.01	.3	.02	.2	.04	.4
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<pre><2,000 CDD AND >7,000 HDD <2,000 CDD AND</pre>	3.2	.39	3.2	.20	1.0	.08	1.4	.08	.7	.03	.3
5,500 TO 7,000 HDD	10.2	1.66	11.0	1.34	5.6	.25	4.9	.04	.4	.02	.2
4,000 TO 5,499 HDD	1.2	.18	1.4	.13	.5	.04	.7	.01	Q	.01	.1
<2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-	-	-
>2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-	-	-



Table 1. (Continued) Census Division: West North Central

; ; ; ; ; ; ; ; ; ; ; ; ; ;	
HOUSEHOLD HOUSE TOTAL TOTAL TO	
AREA TYPE URBAN.	END- URES LLION
URBAN	0.5
URBAN	
RURAL	Q
SMSA	. 4
SMSA	
NON-SMSA	Q
ALL PAID BY HOUSEHOLD	.4
ALL PAID BY HOUSEHOLD	
SOME, NONE, OTHER PAID BY HOUSEHOLD. 1.0 .09 .8 .05 .2 .02 .4 .01 .1 Q TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME. 5.1 .75 5.4 .49 1.9 .17 2.7 .03 .3 .06 2 OR MORE UNITS. 1.5 .13 1.1 .08 .4 .04 .6 .02 .1 Q NUMBER OF ROOMS 1 TO 38 .06 .6 .03 .1 .02 .3 .01 .1 Q 4 TO 52.9 .33 2.4 .22 .9 .07 1.2 .01 .1 .02 6 OR MORE2.8 .49 3.5 .31 1.2 .11 1.8 .03 .2 .04 NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED ALL3.4 .45 3.4 .30 1.2 .12 1.9 .01 .1 .02 SOME3.4 .45 3.4 .30 1.2 .12 1.9 .01 .1 .02 SOME15 .02 .02	.4
PAID BY HOUSEHOLD	.4
SINGLE FAMILY OR MOBILE HOME. 5.1 .75 5.4 .49 1.9 .17 2.7 .03 .3 .06 2 OR MORE UNITS	Q
SINGLE FAMILY OR MOBILE HOME. 5.1 .75 5.4 .49 1.9 .17 2.7 .03 .3 .06 2 OR MORE UNITS	
2 OR MORE UNITS	.5
1 TO 3	Q
1 TO 3	
4 TO 5	_
6 OR MORE	Q .2
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED ALL	.3
ALL	
	٠2.
NONE 1.8 .20 1.6 .12 .5 .04 .7 .02 .2 .02	.1
	. 2
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)	
LESS THAN 999	0.1
1,000 TO 1,999 2.3 .31 2.2 .20 .8 .07 1.2 .01 .1 .02	.2
2,000 OR MORE 2.1 .38 2.8 .25 1.0 .09 1.4 .02 .2 .03	. 2
YEAR HOUSE BUILT	
1939 OR EARLIER	. 2
1940 TO 1959 1.7 .20 1.5 .14 .6 .05 .8 .01 .1 .01	ď
1960 OR LATER 2.6 .32 2.6 .19 .8 .10 1.6 .01 .1 .02	.2
OWN/RENT	
ONN 4.7 .71 5.1 .46 1.8 .16 2.6 .03 .3 .06	.4
RENT 1.9 .18 1.5 .11 .5 .05 .8 .02 .1 .01	Q
1000 FAMILY THOME	
1980 FAMILY INCOME LESS THAN \$10,000 1.7 .18 1.3 .11 .4 .04 .7 .01 .1 .02	.1
\$10,000 TO \$19,999 1.9 .22 1.7 .14 .5 .06 .9 .01 .1 .02	.1
\$20,000 TO \$34,999 2.0 .30 2.1 .21 .8 .06 1.1 .01 .1 .02	.1
\$35,000 OR MORE 1.0 .18 1.4 .12 .5 .05 .7 .01 .1 .01	.1
TOTAL BELOW 100 PERCENT OF POVERTY LINE	Q
TOTAL BELOW 125 PERCENT	
OF POVERTY LINE 1.0 .09 .7 .05 .2 .02 .3 .01 .1 .01	.1
AGE OF HOUSEHOLD HEAD	
UNDER 35 YEARS 2.3 .27 2.0 .18 .7 .06 1.1 .01 .1 .01	.1
35 TO 59 YEARS 2.6 .41 3.0 .25 1.0 .10 1.6 .03 .2 .03	.2
60 YEARS AND OVER	.1



Table 1. (Continued)
Census Division: West North
Central

	NUMBER	i ALL	FUELS		URAL AS	j ELECT 	RICITY	FUEL KERO	OIL OR SENE	PETR	JEFIED POLEUM BAS
HOUSEHOLD Characteristics	OF HOUSE- HOLDS (MIL- LIONS)		TOTAL EXPEND- ITURES (BILLION DOLLARS)	CON- SUMED (QUAD-		CON- SUMED QUAD-		(QUAD-		CON- SUMED (GUAD-	
HOUSEHOLD MEMBERS											
1	1.3	0.13	1.0	0.08	0.3	0.03	0.5	0.01	0.1	0.01	Q
2	2.3	.27	2.0	.17	.7	.06	1.0	.02	.1	.03	0.2
3 OR MORE	3.0	.48	3.5	.31	1.2	.11	1.8	.02	.2	.03	. 2
MAIN HEATING FUEL											
NATURAL GAS	4.2	.67	4.1	.55	2.2	.11	2.0	Q	Q	Q	Q
ELECTRICITY	.8	.04	.6	Q	Q	.04	.6	Q	Q	Q	Q
FUEL OIL OR KEROSENE	.4	.07	.7	Q	Q	.02	. 3	.04	.4	Q	G G
OTHER	1.2	.11	1.1	.01	.1	.03	.6	Q	Q	. 06	.4
HOT WATER FUEL											
NATURAL GAS	4.1	.64	4.0	.53	2.1	.11	1.8	.01	.1	Q	Q
ELECTRICITY	1.7	.17	1.8	.03	.1	.08	1.2	.03	. 3	.02	.1
FUEL OIL OR KEROSENE	Q	.01	.1	Q	Q	Q	Q	.01	Q	Q	Q
OTHER	.8	.07	.7	.01	Q	.02	.3	Q	Q	.05	.3
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	2.4	.31	2.4	.19	.8	.07	1.1	.04	.3	.02	.1
5,500 TO 7,000 HDD	1.3	.22	1.4	.15	.5	.04	.7	.01	.1	.02	.1
4,000 TO 5,499 HDD	3.0	. 35	2.7	.23	.9	.09	1.6	Q	Q	.03	.2
<2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-	-	-
>2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-	-	-



Table 1. (Continued) Census Region: South

	 Number	! All 	FUELS		URAL AS	I l i elect i	RICITY	I I FUEL I KERO I	OIL OR SENE	. PETR	EFIED OLEUM AS
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	AMOUNT CON- SUMED QUAD-	TOTAL EXPEND- ITURES (BILLION	CON- SUMED (QUAD-	TOTAL EXPEND- ITURES (BILLION	CON- SUMED (QUAD-	TOTAL EXPEND- ITURES (BILLION DOLLARS)	CON- SUMED (QUAD-		AMOUNT CON- SUMED QUAD-	EXPEND- ITURES (BILLION
TOTAL HOUSEHOLDS	27.7	2.46	25.5	1.16	5.3	1.03	17.7	0.16	1.4	0.12	1.1
AREA TYPE											
URBANRURAL	16.3 11.4	1.57 .90	15.1 10.4	. 90 . 26	4.1 1.2	.58 .45	10.2 7.5	.07 .09	.6 .8	.02 .10	. 2 . 9
SMSA											
SMSA	15.8 11.9	1.44 1.02	15.0 10.6	.74 .42	3.3	.61 .42	10.7 7.0	.07 .09	.6 .8	.03 .09	. 3 . 8
UTILITIES PAID BY HOUSEHOLD								-,		•	
ALL PAID BY HOUSEHOLD SOME, NONE, OTHER	25.2	2.26	23.6	1.03	4.7	.96	16.5	.14	1.3	.12	1.1
PAID BY HOUSEHOLD	2.5	.21	2.0	.13	.6	.06	1.2	.01	.1	Q	Q
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	22.6 5.1	2.14 .32	21.7 3.8	1.02	4.6 .7	.86 .16	14.8 3.0	.14	1.2	.12 Q	1.1 Q
NUMBER OF ROOMS											
1 TO 3	2.9 13.6	.15 1.07	1.7 11.3	.06 .48	.3 2.2	.06 .45	1.2 7.9	.01 .07	.1 .6	.01 .07	.1 .6
6 OR MORE	11.2	1.25	12.5	.61	2.8	.51	8.6	.08	.7	.05	.4
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED											
ALL	16.1 5.1	1.50 .50	16.2 4.8	.69 .25	3.2 1.1	.71 .17	12.2 2.9	.05 .05	.4 .5	.04 .03	.4 .3
NONE	6.5	.47	4.5	.22	.9	.15	2.7	.05	.5	.05	.4
MEASURED HEATED SPACE OF RESI-											
DENCE (IN SQUARE FEET) LESS THAN 999	10.1	0.68	7.1	0.31	1.4	0.27	4.8	0.05	0.5	0.04	0.4
1,000 TO 1,999 2,000 OR MORE	13.4 4.2	1.24 .55	13.0 5.4	.58 .27	2.6 1.3	.53 .23	9.1 3.7	.07	.6 .3	.07 .01	.6 .1
				•••				•••			-
YEAR HOUSE BUILT 1939 OR EARLIER	4.8	.46	4.1	.26	1.2	.12	2.1	.04	.3	.04	.4
1940 TO 1959	7.0 15.8	.67 1.33	6.2 15.3	.38 .52	1.7 2.4	.22 .68	3.9 11.7	.05 .07	.4 .6	.02 .06	.2 .5
OWN/RENT	15.0	1.33	23.3	.52				,	,,		
OMN	19.0	1.82	18.7	.86	3.9	.76	13.0	.11	1.0	.09	.8
RENT	8.7	.64	6.8	.30	1.4	.27	4.7	. 04	.4	.03	.3
1980 FAMILY INCOME LESS THAN \$10,000	8.8	.64	6.5	.30	1.4	.23	4.1	.06	.5	.06	.5
\$10,000 TO \$19,999	7.7	.65	6.7	.30	1.4	.27	4.7	.04	.4	.03	.3
\$20,000 TO \$34,999 \$35,000 OR MORE	7.3 3.9	.72 .45	7.6 4.7	. 34 . 22	1.6 1.0	.31 .21	5.4 3.5	.04 .02	.3 .2	.02 .01	.2 .1
TOTAL BELOW 100 PERCENT OF POVERTY LINE	4.7	. 34	3.5	.16	.8	.12	2.2	.02	.2	.03	.3
TOTAL BELOW 125 PERCENT OF POVERTY LINE	6.3	.46	4.7	.22	1.0	.16	2.9	.03	.3	.04	.4
AGE OF HOUSEHOLD HEAD					•••					,	
UNDER 35 YEARS	8.8	.72	7.7	.34	1.6	.32	5.6	.03	.3	.03	.2
35 TO 59 YEARS	10.8 8.1	1.07 .67	11.1 6.8	.50 .32	2.3 1.4	.47 .24	7.8 4.3	.06 .07	.6 .6	.04 .05	.4 .5



Table 1. (Continued) Census Region: South

	NUMBER	i ALL	FUELS		URAL AS	 ELECT 	RICITY	FUEL KERO	OIL OR SENE	I PETR	EFIED OLEUM GAS
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	(QUAD-	 TOTAL EXPEND- ITURES (BILLION DOLLARS)		 TOTAL EXPEND- ITURES (BILLION DOLLARS)		TOTAL EXPEND- ITURES (BILLION DOLLARS)		 TOTAL EXPEND- ITURES (BILLION DOLLARS)	CON- SUMED QUAD-	 TOTAL EXPEND- ITURES (BILLION DOLLARS)
HOUSEHOLD MEMBERS											
1	5.0	0.33	3.3	0.16	0.7	0.11	2.1	0.04	0.4	0.02	0.2
2	9.6	.80	8.4	. 35	1.6	.33	5.8	.06	.5	.05	. 5
3 OR MORE	13.1	1.34	13.8	.65	3.0	.58	9.8	.06	.5	. 05	. 5
MAIN HEATING FUEL											
NATURAL GAS	13.0	1.53	12.1	1.12	5.1	.41	6.9	Q	Q	Q	Q
ELECTRICITY	7.7	.43	7.0	.02	.1	.40	6.9	Q	Q	Q	Q
FUEL OIL OR KEROSENE	2.2	.23	2.7	Q	Q	.07	1.3	.15	1.3	.01	.1
OTHER	4.8	.28	3.7	.01	.1	.15	2.6	.01	Q	.11	1.0
HOT WATER FUEL											
NATURAL GAS	11.9	1.38	11.0	1.02	4.6	. 35	6.2	.02	.2	Q	Q
ELECTRICITY	13.9	.92	12.7	.14	.7	.63	10.6	.09	.8	. 06	.6
FUEL OIL OR KEROSENE	.3	.04	.4	Q	Q	.01	.1	.03	.3	Q.	Q_
OTHER	1.6	.12	1.4	Q	Q	.04	.8	.01	.1	.06	.5
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	-	-	-	-	-	-	-	-	-	-	-
5,500 TO 7,000 HDD	-	-	-	-	-	-	-	-	-	-	-
4,000 TO 5,499 HDD	5.9	.62	5.8	.32	1.5	.19	3.4	.09	.8	.02	.2
<2,000 CDD AND <4,000 HDD	10.5	. 96	9.2	.45	1.9	.40	6.3	.06	.5	.05	.5
>2,000 CDD AND <4,000 HDD	11.3	.89	10.5	. 39	1.8	.43	8.0	. 02	.2	. 05	.4



Table 1. (Continued)
Census Division: South
Atlantic

		1									
	NUMBER	 	FUELS		URAL	 ELECT	RICITY	 FUEL KERO	OIL OR SENE	PETR	EFIED OLEUM AS
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CON- SUMED (QUAD-		CON- SUMED QUAD-	 TOTAL EXPEND- ITURES (BILLION DOLLARS)	CON- SUMED QUAD- RILLION		CON- SUMED QUAD- RILLION	EXPEND- ITURES (BILLION	CON- SUMED (GUAD-	
TOTAL HOUSEHOLDS	14.1	1.15	13.2	0.45	2.4	0.49	8.9	0.14	1.3	0.07	0.7
AREA TYPE											
URBAN	7.8	.69	7.5	. 34	1.8	.26	4.9	.07	.6	.02	.2
RURAL	6.3	.47	5.8	.11	.5	.23	4.1	.08	.7	.05	.5
SMSA											
SMSA	8.2	.66	7.9	.28	1.5	.30	5.6	.06	.6	.02	.2
NON-SMSA	6.0	.49	5.3	.17	.9	.19	3.3	.08	.7	.05	.5
STILITIES PAID BY HOUSEHOLD											
ALL PAID BY HOUSEHOLD	12.6	1.03	12.1	.37	1.9	.46	8.3	. 1.3	1.2	.07	.7
SOME, NONE, OTHER PAID BY HOUSEHOLD		17		00		0.7	4	0.1	,		Q
PAID BY HOUSEHULD	1.5	.13	1.2	.08	.4	.03	.6	.01	.1	Q	ų
TYPE OF HOUSING STRUCTURE											
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	10.8 3.4	. 95 . 20	10.7 2.5	.37	1.9 .5	.39 .10	7.0 1.9	.12	1.1	.07 Q	.7 Q
E OR HORE UN173	3.4		2.5	.00	.,	,10	1.,	.02		•	•
IUMBER OF ROOMS			_		_		_		_	_	_
1 TO 3 4 TO 5	1.6	.07	.9 5.7	.03 .14	.2	.03	.7	.01	.1	Q .04	Q,
6 OR MORE	6.8 5.8	.46 .61	6.6	.28	.8 1.5	.24	4.0 4.2	.06 .07	.6 .6	.03	.4
NUMBER OF ROOMS THAT CAN BE											
ALL	7.3	.62	7.4	.25	1.3	.30	5.5	.04	.4	.02	. 2
SOME	2.6	.26	2.7	.10	.5	.08	1.5	.05	.4	.02	.2
NONE	4.2	.28	3.2	.10	.5	.11	1.9	.05	.4	.03	. 3
MEASURED HEATED SPACE OF RESI-											
DENCE (IN SQUARE FEET)					•	0.14	• /	0.05	0.6	0.02	
LESS THAN 999	5.4 6.6	0.32 .55	3.9 6.5	0.11 .20	0.6 1.1	0.14 .25	2.6 4.5	0.05 .06	0.4 .5	.04	0.2 .4
2,000 OR MORE	2.2	.28	2.9	.14	.7	.10	1.8	.03	.3	.01	.1
			•	•							
YEAR HOUSE BUILT 1939 OR EARLIER	2.6	.25	2.4	.12	.6	.07	1.2	.04	. 3	.03	. 3
1940 TO 1959	3.1	.26	2.7	.12	.6	.09	1.6	.04	.4	.01	.1
1960 OR LATER	8.5	.64	8.1	.21	1.1	,33	6.1	.06	.6	.03	. 3
OWN/RENT											
OWN	9.0	.80	9.2	.31	1.6	. 34	6.1	.10	. 9	.05	. 5
RENT	5.1	. 35	4.1	.14		.15	2.8	.04	.4	.02	. 2
1980 FAMILY INCOME											
LESS THAN \$10,000	4.4	.28	3.3	.09	.5	.11	2.1	.05	.5	.03	. 3
\$10,000 TO \$19,999	4.0	.30	3.5	.10	_	.14	2.5	.04	.4	.02	.2
\$20,000 TO \$34,999	3.8	. 36	4.1	.15		.15	2.8	.03		.01	. 2
\$35,000 OR MORE	1.9	.21	2.3	.11	.6	.08	1.5	.02	.1	.01	.1
TOTAL BELOW 100 PERCENT											
OF POVERTY LINE	2.4	.15	1.8	.06	.3	.06	1.1	.02	.2	.02	.2
TOTAL BELOW 125 PERCENT	7 1	0.0	9 4	47		.08	1.5	.03	. 3	.02	. 2
OF POVERTY LINE	3.1	.20	2.4	.07	.4	.00	1.9			.02	٠.
AGE OF HOUSEHOLD HEAD		_		_	_				_		_
UNDER 35 YEARS	4.4	. 33	3.9	.13		.16	2.9	.03		.02	.1
35 TO 59 YEARS	5.5 4.3	.51 .32		.21 .11		.22 .12	3.8 2.3	.05 .06		.02 .03	. 2 . 3
OU TEARS AND UVER	4.3	. 32	3.7	.11	• 0	.16	د. ۶	.06		.03	



Table 1. (Continued)
Census Division: South
Atlantic

	NUMBER	ALL FUELS			URAL AS	i I ELECT I	RICITY	FUEL KERO	OIL OR SENE	I PETR	JEFIED ROLEUM GAS
HOUSEHOLD Characteristics	OF HOUSE- HOLDS (MIL- LIONS)	SUMED (QUAD-	 TOTAL EXPEND- ITURES (BILLION DOLLARS)					SUMED (QUAD-	TOTAL EXPEND- ITURES (BILLION DOLLARS)	CON- SUMED QUAD-	TOTAL EXPEND- ITURES (BILLION DOLLARS)
HOUSEHOLD MEMBERS											
1	2.6	0.16	1.8	0.06	0.3	0.05	1.0	0.04	0.3	0.01	0.1
2	5.0	. 38	4.5	.13	.7	.16	3.1	.05	.5	.03	. 3
3 OR MORE	6.5	.62	7.0	. 26	1.4	.28	4.9	.05	.5	.03	.3
MAIN HEATING FUEL											
NATURAL GAS	4.8	.57	4.6	.44	2.3	.13	2.3	Q	Q	Q	Q
ELECTRICITY	4.4	.22	4.0	.01	Q	.21	3.9	Q	Q	Q	Q
FUEL OIL OR KEROSENE	2.0	.20	2.4	Q	Q	.06	1.1	.13	1.2	.01	.1
OTHER	2.9	.16	2.2	Q	Q	.09	1.6	.01	Q	.06	.6
HOT WATER FUEL											
NATURAL GAS	4.1	.50	3.9	. 38	2.0	.10	1.8	.02	.2	Q	Q
ELECTRICITY	8.8	. 55	8.0	.07	.4	. 36	6.5	.08	.7	.04	.4
FUEL OIL OR KEROSENE	. 3	.04	.4	Q	Q	.01	.1	.03	. 3	Q	Q
OTHER	.9	.06	.8	Q	Q	.02	.4	.01	.1	.03	.3
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD	-	-	-	-	-	-	-	-	-	-	-
5,500 TO 7,000 HDD	-	-	-	-	-	-	-	-	-	-	-
4,000 TO 5,499 HDD	4.5	.46	4.5	.23	1.2	.14	2.5	.08	.7	.02	. 2
<2,000 CDD AND <4,000 HDD	5.6	.48	5.1	.20	1.0	.20	3.3	.05	.5	.03	.3
>2,000 CDD AND <4,000 HDD	4.1	.22	3.7	.03	.2	.16	3.2	.02	.2	.02	.2



Table 1. (Continued)
Census Division: East South
Central

	NUMBER	 ALL 	FUELS		URAL AS	 ELECT 	RICITY	FUEL KERO	OIL OR SENE	PETR	EFIED OLEUM AS
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	(QUAD-	 TOTAL EXPEND- ITURES (BILLION DOLLARS)	CON- SUMED QUAD-	TOTAL EXPEND- ITURES (BILLION DOLLARS)	CON- SUMED (QUAD-		(QUAD-		CON- SUMED (QUAD-	
TOTAL HOUSEHOLDS	5.6	0.53	5.0	0.24	1.0	0.25	3.7	0.01	0.1	0.02	0.2
AREA TYPE											
URBAN	2.7	.29	2.4	.17	.7	.11	1.6	Q	Q	Q	Q
RURAL	2.9	.24	2.6	.07	.3	.14	2.0	.01	.1	.02	.2
5MSA											
SMSA	2.3	.25	2.1	.13	.5	.11	1.5	Q	Q	Q	Q
NON-SMSA	3.3	.28	2.8	.11	.4	.15	2.2	.01	.1	.02	.2
TILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	5.4	.51	4.8	.22	.9	.25	3.6	.01	.1	. 02	. 2
SOME, NONE, OTHER	3		•••		• •	***	•••				
PAID BY HOUSEHOLD	.2	.02	.1	.01	.1	.01	.1	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE											
SINGLE FAMILY OR MOBILE HOME	5.0	.49	4.6	.22	.9	.23	3.3	.01	.1	.02	. 2
2 OR MORE UNITS	.6	.04	.4	.02	.1	.02	. 3	Q	Q	Q	Q
NUMBER OF ROOMS											
1 TO 3	.5	.03	. 3	.01	Q	.01	. 2	Q	Q	Q	Q
4 TO 5	2.6	.21	2.0	.10	.4	.10	1.4	Q .	۹,	.01	.1
6 OR MORE	2.5	.29	2.7	.13	.5	.14	2.0	.01	.1	.01	.1
NUMBER OF ROOMS THAT CAN BE											
ALL	3.7	.37	3.5	.16	.7	.19	2.7	.01	-1	.01	.1
NONE	1.0 .9	.09	.8 .6	.04	.2 .1	.04 .02	.6 .4	Q	Q Q	Q .01	Q .1
			••			•••	• •	•	•		
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)											
LESS THAN 999	1.8	0.12	1.2	0.05	0.2	0.06	0.8	Q	Q	0.01	0.1
1,000 TO 1,999	2.7	.26	2.5	.12	.5	.13	1.8	Q	Q	.01	.1
2,000 OR MORE	1.1	.15	1.3	.07	. 3	.07	1.0	Q	Q	Q	Q
TEAR HOUSE BUILT											
1939 OR EARLIER	.8	.07	.6	.04	.2	.02	. 3	Q	Q.	Q	Q _.
1940 TO 1959	1.6 3.2	.17 .28	1.4 3.0	.09 .10	.4 .4	.06 .17	.9 2.4	0.01 Q	0.1 Q	.01 .01	.1 .1
	3.2		3.0		• •	• • • •		•	•	•••	,-
OWN/RENT			4.1	10		21	7 1	A 3	,	.02	. 2
OWN	4.4 1.2	.44	4.1 .8	.19 .05	.8 .2	.21 .04	3.1 .6	.01 Q	.1 Q	Q	Q.
L980 FAMILY INCOME LESS THAN \$10,000	1.9	.15	1.4	.07	.3	.07	1.0	.01	Q	.01	.1
\$10,000 TO \$19,999	1.6	.15	1.3	.07	.3	.06	1.0	q	q	Q	Q Q
\$20,000 TO \$34,999	1.3	.12	1.2	.05	.2	.06	.9	Q	Q	.01	Q
\$35,000 OR MORE	. 9	.11	1.0	.05	.2	.06	.8	Q	Q	Q	Q
TOTAL BELOW 100 PERCENT											
OF POVERTY LINE	1.0	.07	.7	.03	.1	.03	.5	Q	Q	.01	.1
TOTAL BELOW 125 PERCENT	, ,	14	. 9	84	.2	A .	.6	Q	Q	.01	.1
OF POVERTY LINE	1.3	.10	. 7	.04	٠.	.04	.0	4	ч	.01	
AGE OF HOUSEHOLD HEAD						_		_	_	_	_
UNDER 35 YEARS	1.6	.13	1.3	.07	.3	.06	1.0	Q ₁	Q ₁	Q n	Q 1
35 TO 59 YEARS	2.5 1.6	.25 .14	2.4 1.3	.10 .07	.4 .3	.13	1.8 .9	.01 Q	.1 q	.01 .01	.1 .1
ON ITAKS MAN DAEK	1.0	.14	1.3	.07		.00	. 7	ų	4	.01	• •



Table 1. (Continued)
Census Division: East South
Central

	NUMBER	i I ALL I	FUELS		URAL AS	i I ELECT I	RICITY	FUEL KERO	OIL OR SENE	PETR	EFIED OLEUM AS
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	SUMED (QUAD-	 TOTAL EXPEND- ITURES (BILLION DOLLARS)	SUMED (QUAD-		(QUAD-					EXPEND- ITURES (BILLION
HOUSEHOLD MEMBERS											
1	1.0	0.07	0.6	0.04	0.1	0.03	0.4	Q	Q	Q	Q
2 3 OR MORE	1.9 2.8	.17 .28	1.6 2.7	.08 .12	.3 .5	.08 .15	1.2 2.1	0.01 Q	Q Q	0.01	0.1
MAIN HEATING FUEL											
NATURAL GAS	2.5	.32	2.3	.23	1.0	.09	1.3	Q	Q	Q	Q
ELECTRICITY	1.8	.11	1.6	Q	Q	.11	1.6	Q	Q	Q	Q
FUEL OIL OR KEROSENE	.2	.02	٠2	Q	Q	.01	.1	.01	0.1	Q	Q
OTHER	1.1	.07	.8	Q	Q	.04	.7	Q	Q	.02	.2
HOT WATER FUEL											
NATURAL GAS	1.9	.25	1.8	.19	.8	.06	1.0	Q	Q	Q	Q
ELECTRICITY	3.5	.26	3.0	.05	.2	.18	2.6	.01	. 1	.01	.1
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	.2	.01	٠2.	Q	Q	.01	.1	Q	Q	.01	.1
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	-	-	-	-	-	-	-	-	-	-	-
5,500 TO 7,000 HDD	-	-	-	-	-	-	-	-	-	-	-
4,000 TO 5,499 HDD	1.5	.16	1.3	.09	. 3	.06	. 9	.01	.1	Q	Q
<2,000 CDD AND <4,000 HDD	3.2	.28	2.8	.10	.5	.16	2.2	Q	Q	.01	.1
>2,000 CDD AND <4,000 HDD	1.0	.09	.8	.05	.2	.04	.6	Q	Q	Q	Q



Table 1. (Continued)
Census Division: West South
Central

	NUMBER	ALL	FUELS		URAL AS	i ELECT	RICITY	FUEL KERO	OIL OR SENE	PETR	EFIED OLEUM AS
HOUSEHOLD Characteristics	OF HOUSE-	CON- SUMED QUAD-	 TOTAL EXPEND- ITURES (BILLION DOLLARS)	CON- SUMED (QUAD-	EXPEND- ITURES (BILLION	CON- SUMED QUAD-	TOTAL EXPEND- ITURES (BILLION	CON- SUMED QUAD-	 TOTAL EXPEND- ITURES (BILLION DOLLARS)	AMOUNT CON- SUMED QUAD-	EXPEND- ITURES (BILLION
TOTAL HOUSEHOLDS	8.0	0.78	7.3	0.47	2.0	0.28	5.1	Q	Q	0.03	0.2
AREA TYPE											
URBAN	5.8 2.1	.59 .19	5.3 2.0	.38 .09	1.6	.21 .08	3.7 1.4	Q Q	Q Q	q .03	Q .2
SMSA											
SMSA	5.3	.54	4.9	. 33	1.3	.20	3.5	Q	Q	.01	.1
NON-SMSA	2.6	.25	2.4	.14	.7	.08	1.6	q	Q	.02	.2
UTILITIES PAID BY HOUSEHOLD											
ALL PAID BY HOUSEHOLD	7.2	.72	6.7	.44	1.8	.26	4.6	Q	Q	.03	.2
SOME, NONE, OTHER PAID BY HOUSEHOLD	.8	.06	.6	.03	.1	.03	.5	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE											
SINGLE FAMILY OR MOBILE HOME	6.9	.71	6.4	.43	1.8	.24	4.4	Q	Q	.03	.2
2 OR MORE UNITS	1.1	.08	. 9	.04	.2	.04	.7	Q	Q	Q	Q
NUMBER OF ROOMS											
1 TO 3	.8	.05	. 5	.03	.1	.02	. 3	Q	Q	Q	Q
4 TO 5	4.3 2.9	. 39 . 34	3.6 3.3	.24 .20	1.0 .8	.14	2.5 2.3	· Q Q	Q Q	.02 .01	.1 .1
	•••		3.3			123		•	•		•-
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED											
ALL	5.1	.51	5.2	.28	1.2	.22	3.9	Q	Q	.01	.1
SOME	1.5	.15	1.3	.10	.4	.04	.8	Q	Q	.01	.1
NONE	1.4	.12	.8	.09	.3	.02	.4	Q	Q	.01	.1
MEASURED HEATED SPACE OF RESI-											
DENCE (IN SQUARE FEET) LESS THAN 999	3.0	0.24	2.1	0.15	0.6	0.07	1.4	Q	Q	0.01	0.1
1,000 TO 1,999	4.1	.43	4.0	.26	1.1	.15	2.8	Q	Q	.02	.2
2,000 OR MORE	.9	.12	1.2	.06	.3	.06	.9	Q	Q	Q	Q
YEAR HOUSE BUILT											_
1939 OR EARLIER	1.5	.14	1.1	.09	.4	.03	.6 1.3	Q Q	Q Q	.01 Q	.1 Q
1940 TO 1959	2.4 4.1	. 25 . 40	2.0 4.2	.17 .21	.7 .9	.18	3.2	q	q	.01	.1
OWN	5.6	.58	5.4	. 35	1.5	.21	3.8	Q	Q	.02	.2
RENT	2.4	.20	1.9	.11	.5	.07	1.3	Q	Q	.01	.1
1980 FAMILY INCOME											
LESS THAN \$10,000	2.5	.21	1.8	.14	.6	.06	1.1	Q	Q	.01	.1
\$10,000 TO \$19,999	2.1	.21	1.8	.13	.5	.07 .10	1.2 1.7	Q Q	Q Q	.01 Q	.1 Q
\$20,000 TO \$34,999 \$35,000 OR HORE		.24 .13	2.3 1.4	.14 .06	.6 .3	.07		Q	q	Q	q
TOTAL BELOW 100 PERCENT											
OF POVERTY LINE	1.4	.11	1.0	.08	.4	.03	.6	Q	Q	.01	.1
TOTAL BELOW 125 PERCENT	1.0	34	1 4	.11	.5	.04	.8	Q	Q	.01	.1
OF POVERTY LINE	1.9	.16	1.4	.11	. 5	.04	.0	4	4	.01	••
AGE OF HOUSEHOLD HEAD				4-	,	.10	1.8	Q	Q	.01	.1
UNDER 35 YEARS	2.8 2.9	. 26 . 32	2.5 3.0	.15 .19		.10		Q	Q	.01	
60 YEARS AND OVER		.21		.14		.06		q	Q	.01	



Table 1. (Continued)
Census Division: West South
Central

	 NUMBER	i ALL 	FUELS		URAL AS	i I ELECT I	RICITY	FUEL KERO	OIL OR SENE	PETR	EFIED OLEUM SAS
HOUSEHOLD Characteristics	OF HOUSE- HOLDS (MIL- LIONS)	SUMED	! TOTAL TOTAL EXPEND- ITURES (BILLION DOLLARS)	CON- SUMED (QUAD-		(QUAD-				CON- SUMED (QUAD-	
HOUSEHOLD MEMBERS											
1	1.5	0.10	0.9	0.06	0.3	0.03	0.6	Q	Q	Q	Q
2	2.6	.25	2.3	.14	.6	.09	1.6	Q	Q	0.01	0.1
3 OR MORE	3.8	.44	4.1	. 26	1.1	.16	2.9	Q	Q	.01	.1
MAIN HEATING FUEL											
NATURAL GAS	5.7	.63	5.2	.45	1.9	.18	3.3	Q	Q	Q	Q
ELECTRICITY	1.5	.10	1.4	.02	.1	.08	1.4	Q	Q	Q	Q
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	.8	.06	.6	.01	Q	.02	.4	Q	Q	.03	. 2
HOT WATER FUEL											
NATURAL GAS	5.9	.63	5.3	.45	1.9	.19	3.4	Q	Q	Q	Q
ELECTRICITY	1.6	.11	1.6	.02	.1	.09	1.5	Q	Q	.01	Q
FUEL OIL OR KEROSENE	Q_	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	.5	.04	.4	Q	Q	.01	.2	Q	Q	.02	.2
HEATING DEGREES-DAYS (HOD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD	-	-	-	-	-	-	-	-		-	-
5,500 TO 7,000 HDD	-	-	-	-	-	-	-	-	-	-	-
4,000 TO 5,499 HDD	-	-	-	-	-	-	-	-	-	-	-
<2,000 CDD AND <4,000 HDD	1.7	.20	1.4	.15	.5	. 05	.8	Q	Q	.01	Q
>2,000 CDD AND <4,000 HDD	6.2	.58	6.0	. 32	1.5	.24	4.3	Q	Q	.03	.2



Table 1. (Continued) Census Region: West

		<u> </u>									
	NUMBER	 - ALL	FUELS		URAL SAS	 	RICITY	I FUEL I KERO I	OIL OR SENE	PETR	EFIED OLEUM AS
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	AMOUNT CON- SUMED QUAD-	EXPEND- ITURES (BILLION	SUMED	 TOTAL EXPEND- ITURES (BILLION DOLLARS)	CON- SUMED QUAD-		CON- SUMED GUAD-		CON- SUMED QUAD-	
TOTAL HOUSEHOLDS	16.3	1.47	11.7	0.93	3.8	0.46	7.4	0.03	0.3	0.04	0.3
AREA TYPE											
URBAN	13.0	1.18	9.0	.82	3.3	. 33	5.5	.02	. 2	Q	Q
RURAL	3.3	.29	2.7	.12	.5	.13	1.8	.01	.1	.04	.3
SMSA											
SMSA	12.8	1.15	9.1	.80	3.2	. 32	5.6	.03	.2	.01	.1
NON-SMSA	3.5	.31	2.6	.14	.5	.14	1.8	.01	.1	.03	.2
UTILITIES PAID BY HOUSEHOLD											
ALL PAID BY HOUSEHOLD	14.1	1.30	10.5	.82	3.3	.42	6.6	.03	.3	.03	.3
SOME, NONE, OTHER							_	_	_		
PAID BY HOUSEHOLD	2.2	.16	1.3	.12	.4	.04	.7	Q	Q	.01	.1
TYPE OF HOUSING STRUCTURE											
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	12.3 4.0	1.24	9.9	.78	3.2	.38	6.1	.03	.3	.04	.3 Q
2 OR PIORE UNITS	4.0	.23	1.8	.15	.6	.08	1.2	Q	Q	Q	ч
NUMBER OF ROOMS											
1 TO 3	2.2	.12	.9	.08	.3	.04	.6	Q	Q	Q	ଦ୍
4 TO 5	7.3 6.9	.57 .78	4.5 6.3	. 35 . 51	1.4 2.1	.19 .23	2.9 3.8	.01 .02	.1 .2	.01 .02	.1 .2
	•								•		
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED											
ALL	3.6	.35	3.3	.20	.8	.14	2.4	Q	Q	.01	.1
SOME	1.9	.16	1.2	.11	.4	- 05	.8	q	à	Q	Q
NONE	10.7	. 96	7.2	.63	2.5	.28	4.2	.03	.2	.02	. 2
MEASURED HEATED SPACE OF RESI-											
DENCE (IN SQUARE FEET)										0.03	
LESS THAN 999	6.0 7.8	0.38 .72	3.1 5.9	0.24 .45	1.0 1.8	0.13	2.0 3.8	0.01	0.1 .1	0.01	0.1 .1
2,000 OR MORE	2.5	. 36	2.7	.24	1.0	.10	1.6	.01	.ī	.01	.1
YEAR HOUSE BUILT	3.6	.33	2.4	.23	.9	.08	1.3	.01	.1	.01	.1
1939 OR EARLIER	4.5	.43	3.3	.29	1.1	.12	1.9	.02	.1	.01	.1
1960 OR LATER	8.2	.71	6.1	.42	1.7	.26	4.2	.01	Q	.02	.2
OLD (DEN)											
OWN/RENT	10.0	1.03	8.3	.65	2.6	.32	5.1	.03	.2	.03	.3
RENT	6.2	.44	3.5	.28	1.1	.14	2.2	.01	.1	.01	Q
1000 FAMTLY THOME											
1980 FAMILY INCOME LESS THAN \$10,000	4.0	. 31	2.4	.21	.8	.09	1.5	.01	.1	.01	.1
\$10,000 TO \$19,999	4.1	.33	2.6	.21	.8	.11	1.6	.01	.ī	.01	.1
\$20,000 TO \$34,999	5.0	.46	3.8	.28	1.1	.16	2.5	.01	.1	.01	.1
\$35,000 OR MORE	3.2	. 37	2.9	.24	1.0	.10	1.8	.01	.1	.01	.1
TOTAL BELOW 100 PERCENT											
OF POVERTY LINE	1.9	.15	1.2	.10	.4	.04	.7	Q	Q	Q	Q
TOTAL BELOW 125 PERCENT			• •		,			_	_		,
OF POVERTY LINE	2.9	.23	1.8	.15	.6	.07	1.1	Q	Q	.01	.1
AGE OF HOUSEHOLD HEAD											
UNDER 35 YEARS	6.5	.51	4.0	.33	1.3	.17	2.5	Q	Q.	.01	.1
35 TO 59 YEARS	6.4	.66	5.6	.42	1.7	.21	3.6	.01	.1	.02 .01	.2 .1
OU TEAKS AND OVEK	3.4	.29	2.2	.18	.7	.08	1.3	.02	.1	.01	• •



Table 1. (Continued) Census Region: West

	NUMBER	ALL	FUELS	NATURAL GAS		ELECT	RICITY	FUEL KERO	OIL OR SENE	I PETR	PEFIED POLEUM BAS
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	SUMED (QUAD-	 TOTAL EXPEND- ITURES (BILLION DOLLARS)	SUMED (QUAD-				(QUAD-	 TOTAL EXPEND- ITURES (BILLION DOLLARS)	CON- SUMED QUAD-	 TOTAL EXPEND- ITURES (BILLION DOLLARS)
HOUSEHOLD MEMBERS											
1	2.6	0.17	1.3	0.11	0.5	0.05	0.8	0.01	0.1	Q	Q
2	5.7 8.0	.46 .83	3.7 6.7	.29 .53	1.1	.15 .26	2.4 4.2	.01 .01	.1 .1	0.01 .02	0.1 .2
MAIN HEATING FUEL											
NATURAL GAS	10.8	1.10	7.8	.88	3.5	.22	4.3	Q	Q	Q	Q
ELECTRICITY	3.4	.20	2.2	.03	.1	.17	2.0	Q	Q	Q	Q
FUEL OIL OR KEROSENE	.4	.05	.4	Q	Q	.02	.1	.03	.3	Q	Q
OTHER	1.7	.11	1.4	.02	.1	.05	1.0	Q	Q	.04	.3
HOT WATER FUEL											
NATURAL GAS	11.2	1.12	8.0	.89	3.5	.22	4.5	Q	Q	Q	Q
ELECTRICITY	4.3	.29	3.0	.04	.2	.22	2.4	.03	.2	.01	Q
FUEL OIL OR KEROSENE	Q .7	Q .05	Q .7	Q	Q	Q	Q .5	Q	Q	Q .03	Q .3
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD)	.,	.05	.,	ď	ų	.02	.5	ų	ч	.03	. 3
LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD	1.3	.19	1.1	.15	.5	.03	.5	Q	Q	.01	Q
<2,000 CDD AND		,					••	7	7		7
5,500 TO 7,000 HDD	1.7	.17	1.3	.09	. 3	.07	.8	Q	Q	.01	.1
<2,000 CDD AND											
4,000 TO 5,499 HDD	3.3	.27	2.2	.10	.5	.14	1.4	.02	. 2	Q	Q
<2,000 CDD AND <4,000 HDD	9.1	.78	6.4	.57	2.2	.19	4.0	Q	Q	.02	. 2
>2,000 CDD AND <4,000 HDD	.9	.06	.8	.03	.1	.03	.7	Q	Q	Q	Q



Table 1. (Continued) Census Division: Mountain

		I									
	 NUMBER	 - All 	FUELS		URAL AS	 ELECT 	RICITY	 FUEL KERO 	OIL OR SENE	PETR	EFIED OLEUM AS
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	AMOUNT CON- SUMED QUAD-		SUMED	EXPEND- ITURES (BILLION	SUMED (QUAD-	EXPEND- ITURES (BILLION	CON- SUMED (QUAD-	 TOTAL EXPEND- ITURES (BILLION DOLLARS)	SUMED (QUAD- RILLION	EXPEND- ITURES (BILLION
TOTAL HOUSEHOLDS	4.0	0.42	3.1	0.28	1.1	0.11	1.8	0.01	Q	0.02	0.1
AREA TYPE											
URBAN	2.8	.30	2.2	.23	.9	.07	1.3	Q	Q	Q	Q
RURAL	1.1	.11	.9	.06	.2	.04	.5	Q	Q	.02	.1
SMSA	2.4	.25	1.9	.19	.8	.06	1.1	Q	Q	Q	Q
SMSA	1.6	.16	1.2	.09	.4	.06	.7	Q	Q.	.02	.1
,,,,,				•••	• •	,,,,		•	•		
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	3.3	. 36	2.7	.24	1.0	.10	1.6	.01	Q	.01	.1
SOME, NONE, OTHER			_		_		_	•		_	
PAID BY HOUSEHOLD	.6	.06	.5	.04	.2	.01	. 3	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE											
SINGLE FAMILY OR MOBILE HOME	3.3	. 36	2.7	.24	1.0	.10	1.6	.01	Q	.02	.1
2 OR MORE UNITS	.7	.05	.4	.04	.2	.01	.2	Q	Q	Q	Q
NUMBER OF ROOMS	.5	04	7	.03	,	.01	.2	Q	Q	Q	Q
4 TO 5	1.9	.04 .18	.3 1.4	.12	.1 .5	.05	.8	G G	q	.01	.1
6 OR MORE	1.5	.20	1.4	.13	.5	.05	.9	q	à	.01	.1
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED											
ALL	. 9	.09	. 9	.04	. 2	.04	. 7	Q	Q	Q	q
SOME	.4	.04	.3	.03	.1	.01	.2	Q	Q Q	Q .01	Q .1
NONE	2.6	.29	2.0	.21	.8	.06	1.0	Q	ď	.01	••
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)											
LESS THAN 999	1.5	0.13	0.9	0.09	0.4	0.03	0.5	Q	Q	0.01	Q
1,000 TO 1,999	1.7	.17	1.4	.11	.5	.06	-9	Q	Q	Q	Q
2,000 OR MORE	.7	.12	.8	.08	. 3	.03	.4	Q	Q	.01	Q
YEAR HOUSE BUILT											
1939 OR EARLIER	.7	.08	.5	.05	.2	.01	.2	Q	Q	.01	Q
1940 TO 1959	1.0	.11	.7	.08	.3	.02	.4	Q	Q	Q	Q
1960 OR LATER	2.3	.23	1.9	.14	.6	.08	1.2	Q	Q	.01	0.1
OWN/RENT											
OWN	2.7	. 30	2.3	.20	.8	.08	1.3	Q	Q	.01	.1
RENT	1.2	.11	.8	.08	.3	.03	.5	q	Q	Q	Q
1980 FAMILY INCOME			_		_		_	_	_	_	_
LESS THAN \$10,000	1.2 1.3	.11	.9	.08	.3	.03	.5	Q Q	Q Q	Q	Q Q
\$10,000 TO \$19,999 \$20,000 TO \$34,999		.13 .12	.9 .9	.08 .08	.3	.03	.5 .5	Q	Q.	.01 .01	Q
\$35,000 OR MORE	.4	.06	.5	.04	.2	.02	.3	Q	q	Q	q
TOTAL BELOW 100 PERCENT											
OF POVERTY LINE	.5	.05	.4	.04	.2	.01	.2	Q	Q	Q	Q
TOTAL BELOW 125 PERCENT	_		,				_			•	•
OF POVERTY LINE	.8	.08	.6	.05	.2	.02	.3	Q	Q	Q	Q
AGE OF HOUSEHOLD HEAD											
UNDER 35 YEARS	1.8	.17	1.2	.12	.5	.05	.7	Q	Q	.01	Q
35 TO 59 YEARS	1.4	.17	1.3	.11	.4	.05	.8	Q	Q	.01	Q
60 YEARS AND OVER	.7	.08	.6	. 05	.2	.02	.3	Q	Q	.01	Q



Table 1. (Continued) Census Division: Mountain

	 - NUMBER				URAL AS	 ELECT 	RICITY	FUEL (KERO:	OIL OR SENE	PETR	JEFIED ROLEUM GAS
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)		 TOTAL EXPEND- ITURES (BILLION DOLLARS)		 TOTAL EXPEND- ITURES (BILLION DOLLARS)		 TOTAL EXPEND- ITURES (BILLION DOLLARS)	SUMED	 TOTAL EXPEND- ITURES (BILLION DOLLARS)	CON- SUMED QUAD-	
HOUSEHOLD MEMBERS											
1	0.7	0.06	0.4	0.04	0.2	0.01	0.2	Q	Q	Q	Q
3 OR MORE	1.3 1.9	.13 .23	1.0 1.7	.09 .15	.4 .6	.03 .07	.6 1.0	Q Q	Q Q	Q 0.01	Q 0.1
MAIN HEATING FUEL											
NATURAL GAS	2.8	.34	2.2	.27	1.1	.06	1.1	Q	Q	Q	Q
ELECTRICITY	.6	.04	.6	Q	Q	.04	.5	Q	Q	Q	Q
FUEL OIL OR KEROSENE	.1 .4	.01 .03	.1 .3	Q Q	Q Q	Q .01	Q .2	Q Q	Q Q	Q .02	Q .1
HOT WATER FUEL											
NATURAL GAS	2.8	. 33	2.2	.27	1.1	.06	1.1	Q	Q	Q	Q
ELECTRICITY	. 9	.07	.8	.01	.1	.05	.6	Q	Q	Q	Q
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	. 2	.02	.2	Q	Q	Q	.1	Q	Q	.01	.1
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	1.2	.16	1.0	.13	.5	.03	.4	Q	Q	.01	Q
5,500 TO 7,000 HDD	1.4	.15	1.1	.09	.3	.05	.7	Q	Q	.01	.1
4,000 TO 5,499 HDD	. 3	.03	.2	.02	.1	.01	.1	Q	Q	Q	Q
<2,000 CDD AND <4,000 HDD	.4	.03	. 3	.02	.1	.01	.2	Q	Q	Q	Q
>2,000 CDD AND <4,000 HDD	.6	.04	.5	.02	.1	.02	.4	Q	Q	Q	Q



Table 1. (Continued) Census Division: Pacific

	NUMBER	i I ALL I	FUELS		URAL AS	 ELECT 	RICITY	FUEL KERO 	OIL OR SENE	PETR	EFIED GLEUM AS
HOUSEHOLD Characteristics	OF HOUSE-	CON- SUMED QUAD-		CON- SUMED (QUAD-	EXPEND- ITURES (BILLION	CON- SUMED QUAD-	TOTAL EXPEND- ITURES (BILLION	CON- SUMED QUAD-	 TOTAL EXPEND- ITURES (BILLION DOLLARS)	TOTAL AMOUNT CON- SUMED (QUAD-	EXPEND- ITURES (BILLION
TOTAL HOUSEHOLDS	12.3	1.05	8.6	0.65	2.6	0.35	5.5	0.03	0.3	0.02	0.2
AREA TYPE											
URBAN	10.2 2.2	.87 .18	6.8 1.8	.59 .06	2.4 .3	.26 .09	4.2 1.3	.02 .01	.2 .1	Q .02	Q . 2
SMSA											
SMSA	10.4	.90	7.2	.60	2.5	.27	4.5	.02	.2	.01	.1
NON-SMSA	1.9	.15	1.4	.05	. 2	.08	1.1	.01	Q	.01	.1
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NONE, OTHER	10.7	. 95	7.8	.58	2.4	.32	5.1	.03	.2	.02	.2
PAID BY HOUSEHOLD	1.6	.10	.8	.07	.3	.02	.5	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE											
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	9.0 3.3	.87 .18	7.2 1.4	.54 .11	2.2	.29 .06	4.5 1.0	.03 Q	. 2 Q	. 02 Q	. 2 Q
NUMBER OF ROOMS											
1 70 3	1.7	.08	.6	.05	.2	.03	.4	Q	Q	Q	٩
4 TO 5	5.3 5.3	. 38 . 58	3.1 4.8	.23 .38	.9 1.6	.14	2.1 3.0	.01 .02	.1	.01 .02	.1 .1
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED											
ALL	2.7	.26	2.4	.15	.6	.09	1.7	Q	Q	.01	.1
NONE	1.5 8.1	.12 .67	1.0 5.2	.08 .42	.3 1.7	.03 .22	.6 3.2	Q .03	Q .2	Q .01	Q .1
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)	0.1			• •-			3.1	,,,,			
LESS THAN 999	4.5	0.26	2.2	0.15	0.6	0.09	1.5	Q	Q	0.01	0.1
1,000 TO 1,999	6.1 1.8	.55 .25	4.5 2.0	. 34 . 16	1.4 .7	.18 .08	2.9 1.2	0.01 .01	0.1 .1	.01 Q	.1 Q
2,000 OR HORE	1.0	.25	2.0	.10	• •	.00	1.2	.01	••	٦	•
YEAR HOUSE BUILT 1939 OR EARLIER	3.0	.25	1.9	.17	.7	.07	1.1	.01	.1	Q	Q
1940 TO 1959	3.5	.32	2.6	.21	.8	.10	1.6	.01	:ī	.01	.1
1960 OR LATER	5.8	.48	4.2	.27	1.1	.19	2.9	Q	Q	.01	.1
OWN/RENT											
OWN	7.3 5.0	.73 .33	6.0 2.6	.45 .20	1.8 .8	.23 .11	3.8 1.8	.02 .01	.2	.02 Q	. 2 Q
1980 FAMILY INCOME											
LESS THAN \$10,000 \$10,000 TO \$19,999	2.8 2.8	.20	1.6	.13	.5	.06	1.0	.01 .01	Q 1	Q Q	Q Q
\$20,000 TO \$34,999	4.0	.21 .34	1.7 2.9	.12 .20	.5 .8	.07 .13	1.1 1.9	.01	.1	.01	.1
\$35,000 OR MORE	2.8	.30	2.5	.20	.8	.09	1.5	.01	.1	.01	.1
TOTAL BELOW 100 PERCENT OF POVERTY LINE	1.4	.09	.8	.06	.2	.03	.5	Q	Q	Q	Q
TOTAL BELOW 125 PERCENT OF POVERTY LINE	2.1	.15	1.2	.10	.4	.05	.8	Q	Q	Q	Q
					• •			7	7	7	•
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	4.7	.34	2.7	.21	.8	.12	1.8	Q	Q	Q	Q
35 TO 59 YEARS	5.0	.50	4.3	.31	1.3	.16	2.8	.01	.1	.02	.1
60 YEARS AND OVER	2.6	.21	1.6	.13	.5	.06	.9	.01	.1	Q	Q



Table 1. (Continued) Census Division: Pacific

i	NUMBER	ALL FUELS		NATURAL		 	RICITY	FUEL KERO	OIL OR SENE	PETR	EFIED OLEUM
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	SUMED	 TOTAL EXPEND- ITURES (BILLION DOLLARS)	SUMED (QUAD-		SUMED (QUAD-		SUMED		(QUAD-	EXPEND- ITURES (BILLION
HOUSEHOLD MEMBERS											
1	1.9	0.12	0.9	0.07	0.3	0.04	0.5	0.01	Q	Q	Q
2	4.4 6.1	.33 .60	2.8 5.0	.19 .38	.8 1.6	.12 .19	1.8 3.2	.01 .01	0.1 .1	0.01 .01	0.1
MAIN HEATING FUEL											
NATURAL GAS	7.9	.77	5.6	.61	2.4	.16	3.2	Q	Q	Q	Q
ELECTRICITY	2.8	.16	1.6	.03	.1	.13	1.5	Q	Q	Q	Q
FUEL OIL OR KEROSENE	.4	.04	.4	Q	Q	.01	.1	.03	. 2	Q	Q
OTHER	1.3	.08	1.0	.02	.1	.04	.8	Q	Q	.02	. 2
HOT WATER FUEL											
NATURAL GAS	8.4	.79	5.8	.62	2.4	.16	3.3	Q	Q	Q	Q
ELECTRICITY	3.4	.22	2.2	.03	.2	.17	1.8	.02	.2	Q	Q
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	.5	.04	.6	Q	Q	.02	.4	Q	Q	.02	. 2
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD	.1	.03	.1	.02	Q	Q	.1	Q	Q	Q	Q
<2,000 CDD AND	_		_	_	_			_	_	_	_
5,500 TO 7,000 HDD	. 3	.02	.2	Q	Q	.02	.2	Q	Q	Q	Q
4,000 TO 5,499 HDD	2.9	.24	1.9	.08	.4	.13	1.3	.02	.2	Q	Q
<2,000 CDD AND <4,000 HDD	8.6	.75	6.1	.55	2.1	.18	3.8	Q	ġ.	.02	.2
>2,000 CDD AND <4,000 HDD	. 3	.01	.3	Q	Q	.01	.2	Q.	à	Q	Q

[&]quot;-" = DATA NOT APPLICABLE.

[&]quot;Q" = DATA MITHHELD BECAUSE OF A LARGE VARIANCE.

NOTE: BECAUSE OF ROUNDING, DATA MAY NOT SUM TO TOTALS. PERCENTAGES ARE CALCULATED ON UNROUNDED NUMBERS. SEE GLOSSARY FOR DEFINITION OF TERMS USED IN THIS REPORT.

SOURCE: ENERGY INFORMATION ADMINISTRATION, OFFICE OF ENERGY MARKETS AND END USE, ENERGY END USE DIVISION, FORM EIA-457, THE 1981 RESIDENTIAL ENERGY CONSUMPTION SURVEY.



Table 2. U.S. Average Residential Energy Consumption of All Fuels Used in the Household, by Main Heating Fuel Type—April 1981 Through March 1982, United States (Million Btu per Household)

į	ALL HOU	JSEHOLDS				HOUSEHOLD	S USING:			
i 1 1 Household	NUMBER	I AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO	OIL OR SENE AS ATING FUEL	GAS	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS (MIL-	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS (MIL-	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL HOUSEHOLDS	83.1	114	46.2	136	14.2	58	12.2	138	3.7	97
AREA TYPE URBAN	57.3 25.9	121 100	38.3 8.0	135 143	8.8 5.4	56 63	8.0 4.2	143 127	.6 3.1	66 104
SMSA SMSA NON-SMSA	56.6 26.5	119 104	35.2 11.1	135 140	10.1 4.1	56 64	8.4 3.7	144 124	1.2 2.5	90 101
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NONE, OTHER PAID BY HOUSEHOLD	69.6 13.5	117 103	38.7 7.5	143 100	12.5	58 61	8.6 3.6	139 135	3.5	97 96
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	61.8	123 90	35.5 10.7	147 101	8.1	67 46	8.2 3.9	139 135	3.7 Q	97 Q
NUMBER OF ROOMS 1 TO 3	10.2 36.7 36.2	72 97 144	4.3 19.9 22.0	80 116 165	3.0 7.0 4.2	41 53 79	1.9 4.8 5.5	115 123 158	.4 1.9 1.4	53 81 130
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED ALLSOME	30.7 17.7	111 132	17.2 10.5	140 145	8.8 1.8	59 59	2.1 3.8	134 151	1.4 1.0	93 104
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	34.7	108	18.5	128 98	3.6 6.5	56 45	4.6	131	1.4	97 69
1,000 TO 1,999	35.8 18.4	113 167	21.1	130 196	5.8 1.9	63 89	4.4	135 172	1.8	106 145
YEAR HOUSE BUILT 1939 OR EARLIER	24.2 20.4 38.5	134 118 101	14.2 13.3 18.6	150 131 130	1.2 1.6 11.4	58 61 58	5.1 3.3 3.7	149 132 127	1.2 .5 2.0	120 81 87
OWN/RENT OWNRENT	55.1 28.0	126 91	31.9 14.3	150 105	7.4 6.8	66 50	7.7 4.4	143 128	2.9 .8	101 84
1980 FAMILY INCOME LESS THAN \$10,000	23.3 23.2 24.0 12.6	97 107 120 148	12.2 12.2 14.1 7.8	118 129 141 168	4.2 4.3 3.7 2.1	47 57 64 75	3.5 3.6 3.3 1.8	123 131 140 177	1.3 1.0 1.0	84 98 95 139



Table 2. (Continued) United States

	ALL HOL	SEHOLDS				HOUSEHOL	os USING:			
HOUSEHOLD	NUMBER	I I AVG.		GAS AS		CITY AS ATING FUEL	KEROS	OIL OR SENE AS ATING FUEL	GAS A	PETROLEUM AS MAIN AG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT ICONSUMED PER IHOUSEHOLD (MILLION BTU)		I AVG. I AMOUNT I CONSUMED I PER I HOUSEHOLD I (MILLION I BTU)		I AVG. I AMOUNT ICONSUMED I PER IHOUSEHOLD I(MILLION I BTU)
TOTAL BELOW 100 PERCENT OF POVERTY LINE	11.0	96	5.7	122	2.1	48	1.2	123	0.7	74
TOTAL BELOW 125 PERCENT OF POVERTY LINE	15.8	97	8.3	122	2.8	49	2.0	123	1.0	81
	19.0	71	0.3	120	2.6	47	2.0	123	1.0	01
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	27.6	100	15.4	122	6.3	53	2.8	122	. 9	91
35 TO 59 YEARS	33.0	130	18.6	153	4.5	71	5.3	151	1.4	112
60 YEARS AND OVER	22.5	109	12.2	129	3.4	52	4.1	130	1.3	85
HOUSEHOLD MEMBERS										
1	15.4	88	8.5	102	3.1	40	2.6	117	.6	63
2	27.7	106	14.9	128	5.4	54	4.1	132	1.4	89
3 OR MORE	40.1	130	22.8	155	5.8	72	5.5	152	1.7	117
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	8.8	122	4.1	153	.5	73	1.9	133	.4	125
5,500 TO 7,000 HDD	21.0	151	14.3	169	2.1	65	3.3	150	.5	151
4,000 TO 5,499 HDD	21.6	120	9.8	144	3.6	62	5.7	142	.6	110
<2,000 CDD AND <4,000 HDD	19.5	89	12.2	102	3.9	58	.8	100	1.1	90
>2,000 CDD AND <4,000 HDD	12.2	77	5.8	103	4.1	51	.4	69	1.2	66



Table 2. (Continued) Census Region: Northeast

	ALL HOU	SEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER	I I I AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO	DIL OR SENE AS ATING FUEL	I GAS	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS (MIL-	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS (MIL-	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL HOUSEHOLDS	17.9	138	7.0	155	1.5	68	7.9	149	0.1	136
AREA TYPE										
URBAN	13.7	145	6.2	156	.9	67	6.3	151	Q	Q
RURAL	4.2	112	.8	150	.6	71	1.6	139	`.1	136
5115.1										
SMSA SMSA	14.1	142	5.7	155	1.3	66	6.6	152	.1	155
NON-SMSA	3.8	120	1.3	157	.3	82	1.3	133	Q ·	Q
UTILITIES PAID BY HOUSEHOLD	10.7	365		7.70		70		150	,	129
ALL PAID BY HOUSEHOLD	12.3	145	5.1	172	1.1	70	4.6	158	.1	129
PAID BY HOUSEHOLD	5.7	123	1.9	112	.4	64	3.3	136	Q	Q
						- '				
TYPE OF HOUSING STRUCTURE					_				-	
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	10.5 7.4	150 120	4.2 2.8	179 119	.7 .9	82 58	4.3 3.6	158 137	.1 Q	137 Q
E OR FIORE UNITS	7.4	120	2.0	217	• •	50	3.0	13,	•	•
NUMBER OF ROOMS										
1 TO 3	2.8	104	.8	98	.4	55	1.5	122	Q	Q
4 TO 5	6.7 8.5	119	2.6	125	.6 .6	60 85	3.0 3.4	136 171	Q .1	Q 176
6 OR HORE	0.5	164	3.6	190	.0	65	3.4	1/1	••	170
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										_
ALL	3.2	133	1.5	154	0.6	70	1.0	149	Q	Q 129
SOME	5.5	151	2.4	157 154	.3 .6	74 64	2.6 4.3	160 142	0.1 Q	Q 127
NONE	9.2	131	3.2	154	.0	04	7.3	172	•	-
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	6.1	109	1.9	107	.8	55	3.1	129	Q .	Q
1,000 TO 1,999	6.8	139	3.1	153	.4	82 86	2.6 2.2	148 178	.1 0	176 Q
2,000 OR MORE	5.0	171	2.0	206	.3	00	2.2	178	4	4
YEAR HOUSE BUILT										
1939 OR EARLIER	8.1	145	3.2	162	.2	52	3.9	153	.1	139
1940 TO 1959	3.3	146	1.3	154	.1	71 71	1.8 2.1	150 140	Q Q	Q G
1960 OR LATER	6.5	124	2.6	147	1.2	/1	2.1	140	•	•
OWN/RENT										
OWN	11.1	149	4.7	173	.7	82	4.5	159	٩.	Q
RENT	6.8	119	2.3	120	.9	58	3.4	135	.1	139
1980 FAMILY INCOME										
LESS THAN \$10,000	4.2	122	1.5	133	.5	52	2.0	136	Q	Q
\$10,000 TO \$19,999	5.3	130	2.1	146	.5	79	2.2	142	Q	Q
\$20,000 TO \$34,999	5.5	138	2.3	159	.4	76	2.3	144	Q	q
\$35,000 OR MORE	2.9	176	1.2	191	.2	67	1.3	189	Q	Q



Table 2. (Continued) Census Region: Northeast

		1	_							
	ALL HOL	JSEHOLDS				HOUSEHOLI	S USING:			
HOUSEHOLD	NUMBER	I I I AVG. I		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO	OIL OR SENE AS ATING FUEL	I GAS	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BIU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL BELOW 100 PERCENT										
OF POVERTY LINE	1.6	129	0.6	144	0.2	55	0.7	147	Q	Q
OF POVERTY LINE	2.6	125	1.0	138	.3	50	1.1	143	Q	Q
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	5.4	121	2.4	142	.7	57	1.9	131	0.1	147
35 TO 59 YEARS	7.7 4.8	155 130	2.9 1.8	174 141	.4 .4	90 64	3.6 2.3	163 140	Q	ନ ବ
HOUSEHOLD MEMBERS										_
1	3.4 5.4	110 130	1.3 2.1	109 145	.4 .5	50 68	1.7 2.5	124 142	Q Q	Q Q
3 OR MORE	9.1	153	3.6	178	.7	79	3.7	164	.1	159
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	1.9	98	.1	158	.1	76	.8	138	Q	Q
5,500 TO 7,000 HDD	7.8	144	3.8	161	.8	65	2.8	151	.1	143
4,000 TO 5,499 HDD	8.3 -	141	3.1	147	.6 -	71 -	4.4	149 -	Q -	Q -
>2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-	-



Table 2. (Continued) Census Division: New England

	ALL HOL	JSEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD	I I I I NUMBER	I AVS.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO	OIL OR SENE AS ATING FUEL	GAS.	D PETROLEU AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- PEI HOLDS HOUSEI (MIL- (MILL	I CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS (MIL- LIONS)	AVG. AMOUNT ICONSUMED PER IHOUSEHOLD (MILLION BTU)	HOLDS (MIL-	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLE (MILLION BTU)
TOTAL HOUSEHOLDS	4.3	126	1.2	140	0.4	54	2.1	150	Q	Q
AREA TYPE										
URBAN	3.2	135	1.1	138	.3	49	1.6	152	Q	Q
RURAL	1.1	102	Q	Q	.1	63	.5	145	Q.	Q
ene i										
SMSA SMSA	3.1	135	1.1	141	.3	58	1.5	152	q	Q
NON-SMSA	1.2	103	ģ.,	9	.1	39	.6	145	Q	q
			•	•		_				
UTILITIES PAID BY HOUSEHOLD			_			_,		150	_	_
ALL PAID BY HOUSEHOLD SOME, NONE, OTHER	3.3	131	. 9	152	.3	56	1.6	158	Q	Q
PAID BY HOUSEHOLD	1.0	109	.2	96	.1	51	.6	129	Q	Q
									•	
TYPE OF HOUSING STRUCTURE									_	_
SINGLE FAMILY OR MOBILE HOME	2.5	135	.6	164	.1	71 47	1.2	161	Q	Q Q
2 OR MORE UNITS	1.8	115	.6	118	.3	47	.9	135	ч	4
NUMBER OF ROOMS										
1 70 3	.5	86	.2	101	.1	48	.2	112	Q	Q
4 TO 5	1.9	110	.5	119	.2	49	.9	134	Q	Q
6 OR MORE	1.9	155	.5	178	.1	82	1.0	170	Q	Q
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	0.5	103	0.1	122	0.1	53	0.1	149	Q	Q
SOME	1.3	142	.4	144	.2	60	.7	166	Q Q	Q Q
NONE	2.5	123	.7	142	.1	48	1.3	142	ч	ч
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	1.6	100	.5	108	.3	45	.8	122	Q	Q.
1,000 TO 1,999	1.6 1.1	129 162	.4	150 185	.1	59 87	.8 .6	151 185	Q Q	Q Q
E, VVV OR HORE	1.1	102		109	• •	67	.0	103	4	٦
YEAR HOUSE BUILT										
1939 OR EARLIER	2.1	136	.7	146	.1	51	1.1	147	Q	Q
1940 TO 1959	.8 1.4	130 111	.2	136	.1	65 53	.5 .5	149 157	Q	Q Q
1700 UK LAICK	1.4	111	.4	131	. 3	93	. 9	191	4	4
OWN/RENT										
OWN	2.7	133	.7	154	.1	67	1.3	159	Q	Q
RENT	1.6	115	.5	121	. 3	48	.8	135	Q	Q
1980 FAMILY INCOME										
LESS THAN \$10,000	1.0	118	. 3	125	.1	41	.6	138	Q	Q
\$10,000 TO \$19,999	1.4	117	.5	136	.2	49	.6	139	Q	Q
\$20,000 TO \$34,999	1.2	127	. 3	144	1	_60	.6	149	Q	q
\$35,000 OR MORE	.6	159	.1	181	Q	Q	.4	188	Q	Q



Table 2. (Continued) Census Division: New England

		<u> </u>								
	ALL HOU	SEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER	I I I AVG.		GAS AS		CITY AS ATING FUEL	KEROS	OIL OR SENE AS TING FUEL	GAS A	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT ICONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	I AVG. I AMOUNT ICONSUMED PER IHOUSEHOLD I(MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMCUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL BELOW 100 PERCENT OF POVERTY LINE TOTAL BELOW 125 PERCENT	0.4	134	0.2	143	Q	Q	0.2	149	Q	Q
OF POVERTY LINE	.6	132	.2	133	Q	q	.3	151	Q	Q
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	1.3 1.9 1.1	101 146 122	.3 .5 .3	119 165 124	0.2 .1 .1	51 82 47	.5 1.0 .6	131 164 142	Q Q	ए प
HOUSEHOLD MEMBERS 1	.8 1.3 2.1	99 124 138	.2 .4 .6	103 128 164	.1 .1 .2	38 64 64	.4 .7 1.0	119 147 165	Q Q	ख ख ब
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE		105					_			
<pre><2,000 CDD AND >7,000 HDD <2,000 CDD AND 5,500 TO 7,000 HDD</pre>	1.1 3.2	105 134	.1 1.0	158 138	.1	43 57	.5 1.7	145 152	Q Q	Q Q
<pre><2,000 CDD AND 4,000 TO 5,499 HDD <2,000 CDD AND <4,000 HDD</pre>	-	-	-	-	-	-	-	-	-	-
>2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-	-



Table 2. (Continued)
Census Division: Middle
Atlantic

		<u> </u>								
	I ALL HOU	JSEHOLDS				HOUSEHOLE	S USING:			
HOUSEHOLD	I I I NUMBER	I I I AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO:	OIL OR SENE AS ATING FUEL	GAS .	PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU) I	OF	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS (MIL-	AVG. AMOUNT ICONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS (MIL-	AVG. AMOUNT ICONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL HOUSEHOLDS	13.7	141	5.9	158	1.1	73	5.8	148	0.1	155
AREA TYPE										
URBAN	10.6	148	5.1	160	.7	73	4.6	151	Q	Q
RURAL	3.1	116	.8	147	.5	74	1.1	136	.1	155
SMSA										
SMSA	11.0	144	4.5	158	. 9	68	5.1	151	.1	155
NON-SMSA	2.6	128	1.3	158	.2	98	.7	123	Q .	q
ALL PAID BY HOUSEHOLD	9.0	149	4.1	176	.9	74	3.0	158	.1	152
SOME, NONE, OTHER	7.0	147	4.1	176	. 7	/4	3.0	130	.1	152
PAID BY HOUSEHOLD	4.7	125	1.7	114	.2	71	2.7	137	Q	Q
TYPE OF HOUSTHS STRIKTING										
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME	8.1	155	3.6	182	.6	84	3.1	157	.1	152
2 OR MORE UNITS	5.6	122	2.2	120	.6	63	2.7	138	q Î	q -
NUMBER OF ROOMS		200	,	97				304	Q	Q
1 TO 3	2.3 4.7	108 122	.6 2.1	126	.2 .4	60 66	1.3 2.1	124 137	Q	q Q
6 OR MORE	6.7	166	3.2	191	.5	85	2.4	171	.1	176
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	2.8	138	1.3	157	0.5	74	0.9	148	Q	Q
SOME	4.3	154	2.0	160	. 2	89	2.0	158	0.1	139
NONE	6.6	134	2.5	158	.5	68	2.9	142	Q	Q
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	4.5	111	1.5	107	.6	60	2.3	131	Q	Q
1,000 TO 1,999	5.2	142	2.7	153	. 3	89	1.8	146	.1 Q	176 Q
2,000 OR MORE	3.9	174	1.7	209	.3	86	1.6	176	ч	ų.
YEAR HOUSE BUILT										
1939 OR EARLIER	6.0	148	2.5	166	1	53	2.8	155	.1	150
1940 TO 1959	2.6	151	1.1	157	Q	Q 74	1.3	150	Q	Q Q
1960 OR LATER	5.1	128	2.2	150	1.0	76	1.6	134	ч	ч
OWN/RENT										
OWN	8.4	154	4.0	176	.5	86	3.1	159	Q _	Q
RENT	5.3	121	1.9	120	.6	63	2.7	135	.1	150
1980 FAMILY INCOME										
LESS THAN \$10,000	3.2	123	1.2	135	.4	56	1.5	135	Q	Q
\$10,000 TO \$19,999	4.0	134	1.6	148	.4	91	1.7	143	Q	Q
\$20,000 TO \$34,999	4.3	141	2.0	161	. 3	80	1.7	142	9	Q
\$35,000 OR MORE	2.2	180	1.1	193	.1	59	. 9	189	Q	Q



Table 2. (Continued) Census Division: Middle Atlantic

	ALL HOL	SEHOLDS				HOUSEHOLD	S USING:				
HOUSEHOLD	NUMBER	I I I AVG.		GAS AS		ICITY AS ATING FUEL	KERO:	OIL OR SENE AS ATING FUEL	GAS A	LIQUEFIED PETROLEUM GAS AS MAIN HEATING FUEL	
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	I AVG. I AMOUNT ICONSUMED I PER IHOUSEHOLD I(MILLION I BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT ICONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED FER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	
TOTAL BELOW 100 PERCENT	1.3	128	0.5	144	0.2	56	0.6	146	Q	Q	
TOTAL BELOW 125 PERCENT			_			_			•	•	
OF POVERTY LINE	2.0	123	.8	139	.2	51	.8	140	Q	Q	
AGE OF HOUSEHOLD HEAD											
UNDER 35 YEARS	4.2	126	2.0	146	. 5	60	1.4	131	Q	Q	
35 TO 59 YEARS	5.9	157	2.4	176	.4	91	2.6	163	Q	Q	
60 YEARS AND OVER	3.6	132	1.4	145	. 3	72	1.7	139	Q	Q	
HOUSEHOLD MEMBERS											
1	2.6	113	1.1	111	. 2	58	1.3	126	Q	Q	
2	4.1	132	1.7	149	.4	68	1.8	140	Q	Q	
3 OR MORE	6.9	157	3.0	181	.5	84	2.7	164	0.1	176	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	.8	89	Q	Q	.1	117	.3	128	Q	Q	
5,500 TO 7,000 HDD	4.6	151	2.7	170	.5	70	1.1	151	.1	155	
4,000 TO 5,499 HDD	8.3	141	3.1	147	.6	71	4.4	149	Q	Q	
<2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-	-	
>2,000 CDD AND <4,000 HDD	-	-		_	-	_	_	_	_	_	



Table 2. (Continued)
Census Region: North Central

		<u> </u>	 							
	ALL HOU	SEHOLDS] 			HOUSEHOLI	S USING:			
HOUSEHOLD	NUMBER	I AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO:	OIL OR SENE AS ATING FUEL	I GAS	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS H	CONSUMED PER HOUSEHOLD (MILLION		AVG. AMOUNT ICONSUMED PER IHOUSEHOLD (MILLION BTU)	HOLDS (MIL-	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOUSE- HOLDS (MIL-	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL HOUSEHOLDS	21.2	147	15.4	167	1.6	57	1.7	139	1.0	133
AREA TYPE										
URBAN	14.2 7.0	154 132	12.4 3.1	166 171	.9 .7	50 68	.5 1.2	130 142	.1	105 136
SMSA										
SMSA	13.9	155	11.6	169	1.1	56	.5	146	.2	154
NON-SMSA	7.4	132	3.9	161	.5	61	1.2	135	.9	129
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	18.1	154	13.1	177	1.2	56	1.5	137	1.0	134
SOME, NONE, OTHER PAID BY HOUSEHOLD	3.2	103	2.4	113	.3	62	.1	153	Q	Q
									•	,
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME	16.3	160	11.9	181	.6	78	1.5	137	1.0	133
2 OR MORE UNITS	4.9	101	3.5	120	1.0	44	.1	156	Q.	Q
NUMBER OF ROOMS										
1 TO 3	2.4	76	1.3	90	.6	42	.3	101	.1	86
4 TO 5	9.2	124	6.8	142	.7	53	.5	125	.4	108
6 OR MORE	9.7	185	7.3	204	. 3	91	.9	156	.5	159
NUMBER OF ROOMS THAT CAN BE										
AIR CONDITIONED ALL	7.8	146	5.8	169	1.0	51	0.4	141	0.3	122
SOME	5.1	164	4.0	174	.3	76	.4	171	. 3	153
NONE	8.4	136	5.6	160	.3	61	.9	123	.4	128
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									_	100
LESS THAN 999	6.8	96	4.4 5.9	116 162	1.0	44 73	.4 .7	107 129	.3 .5	102 130
1,000 TO 1,999 2,000 OR MORE	7.9 6.6	147 197	5.2	216	.2	98	.6	173	.3	174
YEAR HOUSE BUILT										
1939 OR EARLIER	7.7	165	5.9	180	. 2	64	.6	156	.5	157
1940 TO 1959	5.5	146	4.4	162	.1	55	.6	128	.1	107
1960 OR LATER	8.0	129	5.2	157	1.3	57	.5	128	.5	112
OWN/RENT									_	
OWN	15.0	164	11.2	183	.5	77 40	1.4	141	.9 .1	139 91
RENT	6.2	106	4.3	126	1.1	49	.2	124	• • •	71
1980 FAMILY INCOME									-	
LESS THAN \$10,000		127	4.3	150 154	.6 .7	44 62	.5 .5	132 129	.3	108 132
\$10,000 TO \$19,999 \$20,000 TO \$34,999		134 154	4.1 4.9	168	.3	59	.4	142	.2	150
\$35,000 OR MORE	2.7	206	2.1	224	.1	118	.3	162	. 2	160



Table 2. (Continued)
Census Region: North Central

į	ALL HOU	SEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER	I I I AVG.		GAS AS		ICITY AS ATING FUEL	KEROS	OIL OR SENE AS ATING FUEL	GAS .	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL BELOW 100 PERCENT OF POVERTY LINE	2.7	129	1.9	157	0.2	46	0.1	127	0.1	105
TOTAL BELOW 125 PERCENT OF POVERTY LINE	4.0	129	2.7	156	.3	45	. 3	133	.2	107
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	6.9	126	5.0	148	.8	52	. 4	110	.2	123
35 TO 59 YEARS	8.1	170	5.9	192	.3	70	.6	157	. 5	152
60 YEARS AND OVER	6.2	140	4.5	156	.5	58	.6	139	.4	113
HOUSEHOLD MEMBERS										
1	4.3	110	3.1	125	.6	42	. 3	121	.1	96
2	7.0	141	5.0	159	.5	58	. 7	141	.4	108
3 OR MORE	10.0	166	7.3	190	.4	78	.7	143	.5	164
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE				,						
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	5.6	125	2.9	151	.2	67	1.2	130	. 3	125
5,500 TO 7,000 HDD	11.5	164	9.7	175	.8	57	.4	152	.3	167
4,000 TO 5,499 HDD	4.2	129	2.8	154	.6	55	.1	216	.4	112
<2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-	-
>2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-	-



Table 2. (Continued)
Census Division: East North
Central

	ALL HOL	SEHOLDS	<u> </u>			HOUSEHOLI	ns listng:			
HOUSEHOLD	NUMBER	I AVG.		L GAS AS ATING FUEL		ICITY AS	FUEL	OIL OR SENE AS ATING FUEL	GAS	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS	I AVG. I AMOUNT ICONSUMED I PER IHOUSEHOLD I(MILLION I BTU)	HOUSE- HOLDS (MIL-	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS	AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL HOUSEHOLDS	14.6	153	11.2	170	0.8	61	1.2	134	0.5	137
AREA TYPE										
URBAN	10.2 4.4	159 138	9.2 2.1	168 178	.6 .3	51 79	.3	133 135	.1	98 148
SMSA										
SMSA	10.6 4.1	161 131	9.1 2.1	172 161	.8 .1	59 78	.4 .9	151 128	.1 .3	162 128
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLDSOME, NONE, OTHER	12.5	161	9.3	182	.7	57	1.2	135	.4	139
PAID BY HOUSEHOLD	2.1	108	1.9	111	. 2	79	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	11.2 3.4	166 108	8.5 2.8	186 121	.3 .5	84 47	1.2 Q	135 Q	.4 Q	139 Q
NUMBER OF ROOMS										
1 TO 3	1.5 6.3 6.8	77 129 191	1.0 4.9 5.4	85 144 208	.3 .4 .2	46 53 96	.2 .4 .7	100 121 150	Q .2 .2	Q 105 171
NUMBER OF ROOMS THAT CAN BE	0.0	1/1	5.4	200		70	• •	130	••	1,1
ALL	4.4	157	3.5	177	0.5	52	0.2	147	0.1	111
SOME	3.6 6.6	167 142	3.0 4.8	176 161	.2 .1	78 68	.3 .7	162 119	.1	152 140
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									_	
LESS THAN 999	4.5	101	3.2	116	.6	48 81	.3 .5	102 131	.2 .2	103 143
1,000 TO 1,999 2,000 OR MORE	5.6 4.5	152 205	4.3 3.7	165 223	.2 .1	91	.4	165	.1	198
YEAR HOUSE BUILT 1939 OR EARLIER	5.4	170	4.3	184	Q	Q	.5	146	.2	168
1940 TO 1959 1960 OR LATER	3.8 5.4	158 131	3.2 3.8	168 155	.1 .7	65 59	.4	131 121	Q .2	Q 111
OWN/RENT	10.3	170	7.9	188	.2	86	1.1	137	.4	146
RENT	4.3	112	3.3	127	.7	54	.1	108	.1	98
1980 FAMILY INCOME LESS THAN \$10,000	4.6	136	3.5	153	.3	50	.3	133	.2	95
\$10,000 TO \$19,999	4.1	142	3.0	160	.4	68	.4	125	.1	142
\$20,000 TO \$34,999 \$35,000 OR MORE	4.2 1.7	156 214	3.3 1.4	170 231	. 2 Q	61 Q	.3	133 163	.1 .1	181 169



Table 2. (Continued)
Census Division: East North
Central

	ALL HOL	SEHOLDS I				HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER	AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KEROS	OIL OR SENE AS ATING FUEL	GAS A	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT ICONSUMED PER KOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL BELOW 100 PERCENT										
OF POVERTY LINETOTAL BELOW 125 PERCENT	2.0	138	1.6	158	0.1	57	0.1	113	0.1	86
OF POVERTY LINE	3.0	139	2.3	158	.2	56	.2	129	.1	95
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	4.6	131	3.5	148	.4	55	. 3	95	.1	123
35 TO 59 YEARS	5.4	178	4.2	196	.2	73	.4	156	. 2	168
60 YEARS AND OVER	4.6	145	3.5	159	.2	64	.5	137	.2	108
HOUSEHOLD MEMBERS										
1	2.9	116	2.3	128	.3	40	.2	122	.1	98
2	4.7	151	3.6	167	. 3	65	.5	146	.1	105
3 OR MORE HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE	6.9	170	5.3	190	.3	77	.5	129	.3	166
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	3.2	119	1.5	148	Q	Q	.8	123	.2	104
5,500 TO 7,000 HDD	10.2	163	8.7	175	.8	56	.4	146	.1	185
4,000 TO 5,499 HDD	1.2	156	1.0	158	.1	102	Q	Q	.1	138
<2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-	-
>2,000 CDD AND <4,000 HDD	-	-	-	-	~	-	-	-	-	_



Table 2. (Continued) Census Division: West North Central

	<u> </u>								
ALL HOU	SEHOLDS				HOUSEHOLD	S USING:			
NUMBER	I I I AVG.					KEROS	SENE AS	GAS A	D PETROLEUM AS MAIN NG FUEL
OF HOUSE- HOLDS (MIL-	CONSUMED PER HOUSEHOLD (MILLION		PER HOUSEHOLD	HOLDS (MIL-	PER HOUSEHOLD	HOLDS (MIL-	PER HOUSEHOLD	HOLDS	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
6.6	133	4.2	159	0.8	54	0.4	150	0.6	129
4.0 2.6	140 123	3.2 1.0	160 157	.4 .4	49 59	.1	121 161	Q .6	Q 128
3.3 3.3	134 132	2.5 1.7	158 161	.4	50 57	.1	134 157	Q .5	Q 129
5.6 1.0	141 92	3.8	164 121	.6	55 48	.3	145 166	. 5 Q	130 Q
5.1 1.5	148 84	3.5 .7	169 114	.3	72 41	.3	145 164	.6 Q	129 Q
.8 2.9 2.8	75 113 172	.4 1.9 1.9	102 137 192	.3 .3 .2	38 53 86	.1 .1 .2	104 141 174	Q .2 .3	Q 110 150
3.4 1.5 1.8	133 157 114	2.4 1.0 .8	158 170 152	0.5 .1 .2	51 70 56	0.1 .1 .2	128 189 138	0.2 .2 .2	126 154 112
2.2 2.3 2.1	135 181	1.1 1.6 1.5	116 153 200	.5	40 65 105	.1 .2 .2	121 123 193	. 2 . 2 . 2	102 115 166
2.3	152	1.6	170	.1	60	.2	184	. 3	148
1.7 2.6	120 125	1.2	144 160	.1 .6	45 53	.1 .2	116 141	Q .2	Q 113
4.7 1.9	150 92	3.2 1.0	170 123	.3	73 41	.3 .1	159 134	.5 .1	134 80
1.7	102	.9	138	.3	39	.1	131	.2	119
1.9 2.0 1.0	116 150 190	1.1 1.5 .7	141 163 209	.3 .1 .1	54 57 126	.1 .1 .1	143 169 161	.1 .1 .1	123 127 154
	NUMBER OF HOUSE-HOLDS (MIL-LIONS) 6.6 4.0 2.6 3.3 3.3 5.6 1.0 5.1 1.5 .8 2.9 2.8 3.4 1.5 1.8 2.2 2.3 1.7 2.6 4.7 1.9	NUMBER OF AMOUNT ICONSUMED HOUSE PER HOUSEHOLD (MIL- LIONS) BTU)	NATURAL NATURAL NATURAL AVG. NUMBER AMOUNT OF ICONSUMED NUMBER HOUSE- LIONS)	NUMBER AMOUNT OF CONSUMED HOUSE PER NUMBER AVG. HOUSE HOUSE PER HOUSE CONSUMED HOUSE PER HOUSE CONSUMED HOUSE CONSUMED HOUSE CONSUMED HOUSE CONSUMED HOUSE CONSUMED HOUSE PER HOUSE HOUSE	NATURAL GAS AS HAIN HEATING FUEL NUMBER AVG. NUMBER AVG. PER NUMBER AVG. HOUSE- PER HOLDS PER HOLDS PER HOLDS HOUSE- HOU	NATURAL GAS AS HAIN HEATING FUEL	NATURAL GAS AS HAIN HEATING FUEL KEROS	NUMBER AVG. HAIN HEATING FUEL HAIN HEATING FUEL REROSENE AS HAIN HEATING FUEL RAYG. NUMBER AVG. NUMBER AVG. NUMBER AVG. HAIN HEATING FUEL RAYG. NUMBER AVG. HAIN HEATING FUEL RAYG. NUMBER AVG. NUMBER AVG. NUMBER RAYG. LONGUNED HOUSE- CONSUMED HOUSE- C	NUMBER AVG. HATURAL GAS AS HAIN HEATING FUEL GAS A HAIN HEATING FUEL HAI



Table 2. (Continued)
Census Division: West North
Central

	ALL HOL	JSEHOLDS	_			HOUSEHOLD	S USING:			
HOUSEHOLD I	NUMBER	AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO	OIL OR SENE AS ATING FUEL	 Liquefied Petroleum Gas as main Heating Fuel 	
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	ICONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL BELOW 100 PERCENT	0.7	100	0.3	149	0.1	34	0.1	143	Q	q
TOTAL BELOW 125 PERCENT OF POVERTY LINE	1.0	96	.4	146	.2	35	.1	143	0.1	125
AGE OF HOUSEHOLD HEAD				•					*	
UNDER 35 YEARS	2.3	117	1.4	145	.4	49	.1	139	.1	123
35 TO 59 YEARS	2.6	155	1.7	180	. 2	67	. 2	157	.3	139
60 YEARS AND OVER	1.7	123	1.1	145	.2	51	.1	149	.2	118
HOUSEHOLD MEMBERS										
1	1.3	96	.8	119	.3	43	.1	118	.1	93
2	2.3	121	1.4	142	.3	50	.2	126	.3	109
3 OR MORE HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE	3.0	159	2.0	189	.2	79	.2	183	.2	162
<2,000 CDD AND >7,000 HDD	2.4	132	1.4	154	.2	65	.4	145	.1	161
5,500 TO 7,000 HDD	1.3	170	1.0	180	.1	70	.1	188	.2	150
4,000 TO 5,499 HDD	3.0	119	1.9	152	.5	49	Q	Q	. 3	103
<2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-		-	-
>2,000 CDD AND <4,000 HDD	-	-	_	-	-	-	-	-	-	-



Table 2. (Continued) Census Region: South

	ALL HOU	SEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER	AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO	OIL OR SENE AS ATING FUEL	I GAS	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU) I	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS (MIL-	PER HOUSEHOLD	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL HOUSEHOLDS	27.7	89	13.0	118	7.7	56	2.2	103	2.1	76
AREA TYPE										
URBAN	16.3	96	10.1	117	4.4	54	. 9	105	.5	57
RURAL	11.4	79	2.9	119	3.3	59	1.3	101	1.7	82
SMSA										
SMSA	15.8	91	8.3	117	5.3	54	1.0	100	.8	69
NON-SMSA	11.9	86	4.6	118	2.4	59	1.2	105	1.4	80
UTILITIES PAID BY HOUSEHOLD										
ALL PAID BY HOUSEHOLD	25.2	90	11.4	121	7.1	55	2.1	102	2.1	77
SOME, NONE, OTHER										
PAID BY HOUSEHOLD	2.5	83	1.6	92	.6	60	.1	109	.1	51
TYPE OF HOUSING STRUCTURE										
SINGLE FAMILY OR MOBILE HOME	22.6	95	11.0	123	4.8	62	2.0	103	2.1	76
2 OR MORE UNITS	5.1	63	1.9	85	2.9	45	.2	95	Q	Q
NUMBER OF ROOMS										
1 TO 3	2.9	51	1.0	71	1.3	36	.2	81	. 2	38
4 TO 5	13.6	79	6.1	104	4.8	50	1.1	89	1.3	74
6 OR MORE	11.2	111	5.9	140	2.5	75	. 9	123	.6	94
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	16.1	93	7.7	125	6.0	58	0.7	108	0.9	78
SOME	5.1	97	2.6	118	. 9	51	.7	111	.6	80
NONE	6.5	72	2.6	97	.8	47	.8	90	.7	72
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	10.1	67	4.2	92	2.9	43	1.0	79	1.0	59
1,000 TO 1,999	13.4	92	6.6	118	3.8	58	.9	111	1.1	89
2,000 OR MORE	4.2	129	2.2	166	1.0	87	.4	146	.1	97
YEAR HOUSE BUILT										
1939 OR EARLIER	4.8	96	2.6	118	.4	52	.4	121	.6	88
1940 TO 1959	7.0	96	4.3	117	1.0	55	.8	96	. 3	69
1960 OR LATER	15.8	84	6.1	118	6.3	56	1.0	100	1.3	73
OWN/RENT										
OMN	19.0	96	9.2	126	4.7	61	1.6	107	1.6	76
RENT	8.7	73	3.8	97	3.1	49	.6	93	.5	76
1980 FAMILY INCOME										
LESS THAN \$10,000	8.8	73	3.9	94	2.2	44	. 9	89	. 9	74
\$10,000 TO \$19,999	7.7	85	3.4	115	2.2	51	.6	100	.5	74
\$20,000 TO \$34,999	7.3	98	3.6	129	2.0	62	.5	124	.6	74
\$35,000 OR MORE	3.9	117	2.1	147	1.3	76	. 2	126	.1	113



Table 2. (Continued) Census Region: South

	ALL HOL	JSEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER	AVG.		. GAS AS ATING FUEL		ICITY AS ATING FUEL	KEROS	OIL OR SENE AS ATING FUEL	LIQUEFIED PETROLEUM GAS AS MAIN HEATING FUEL	
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT ICONSUMED PER IHOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT ICONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT ICONSUMED PER IHOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL BELOW 100 PERCENT OF POVERTY LINE	4.7	72	2.0	99	1.1	44	0.4	78	0.6	68
TOTAL BELOW 125 PERCENT	7.,	,,	2.0	,,	1.1	7.7	0.4	,,	0.0	00
OF POVERTY LINE	6.3	74	2.8	97	1.4	44	.6	83	.7	70
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	8.8	82	4.0	112	3.2	50	.4	94	.6	76
35 TO 59 YEARS	10.8	99	5.3	128	2.5	70	.9	106	.7	82
60 YEARS AND OVER	8.1	83	3.7	110	2.0	47	. 9	103	.8	72
HOUSEHOLD MEMBERS										
1	5.0	65	2.3	85	1.4	38	. 5	94	.4	51
2	9.6	83	4.2	112	3.0	51	.9	99	.9	78
3 OR MORE	13.1	102	6.5	134	3.3	68	.8	112	.9	85
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	-	-	-	-	-	-	-	-	-	-
5,500 TO 7,000 HDD	-	-	-	-	-	-	-	~	-	-
4,000 TO 5,499 HDD	5.9	104	2.7	142	1.0	60	.9	121	. 1	111
<2,000 CDD AND <4,000 HDD	10.5	92	4.9	119	2.8	62	.8	100	.8	85
>2,000 CDD AND <4,000 HDD	11.3	79	5.4	105	3.9	50	.4	69	1.2	66



Table 2. (Continued)
Census Division: South
Atlantic

	ALL HOL	JSEHOLDS				HOUSEHOL	S USING:			
HOUSEHOLD	NUMBER	I I I AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO:	OIL OR SENE AS ATING FUEL	GAS	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU) I		AVG. LAMOUNT LONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL HOUSEHOLDS	14.1	82	4.8	121	4.4	50	2.0	103	1.2	74
AREA TYPE										
	7.8	88	3.7	119	2.6	48	. 9	105	.4	51
URBANRURAL	6.3	74	1.1	127	1.9	52	1.1	101	.8	84
NONAL	0.5	, ,		12,	•••	26		201		04
SMSA										
SMSA	8.2	81	3.0	118	3.4	48	1.0	99	.5	62
NON-SMSA	6.0	83	1.7	125	1.1	54	1.0	107	.7	83
UTILITIES PAID BY HOUSEHOLD										
ALL PAID BY HOUSEHOLD	12.6	81	3.6	130	4.3	50	1.8	103	1.2	74
SOME, NONE, OTHER	12.0		3.0	130	4.5	20	1.0	103		
PAID BY HOUSEHOLD	1.5	85	1.1	90	. 2	47	.1	109	Q	Q
TYPE OF HOUSING STRUCTURE										
SINGLE FAMILY OR MOBILE HOME	10.8	88	3.4	136	2.7	56	1.8	104	1.2	_74
2 OR MORE UNITS	3.4	60	1.4	81	1.7	40	. 2	95	Q	Q
NUMBER OF ROOMS										
1 TO 3	1.6	47	.5	70	.7	32	.2	83	.1	23
4 TO 5	6.8	69	1.9	101	2.4	45	1.0	89	.8	71
6 OR MORE	5.8	106	2.4	146	1.3	68	.8	124	. 3	98
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	7.3	84	2.6	130	3.4	50	0.6	107	0.4	76
SOME	2.6	99	1.0	128	.5	48	.6	114	. 3	77 70
NONE	4.2	67	1.2	95	.6	48	.7	90	.5	70
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	5.4	60	1.6	90	1.7	37	.9	78	.6	53
1,000 TO 1,999	6.6	84	2.1	120	2.4	52	.8	112	.6	90
2,000 OR MORE	2.2	128	1.0	170	.4	85	.3	147	.1	96
YEAR HOUSE BUILT 1939 OR EARLIER	2.6	100	1.1	134	.3	48	.4	122	.3	96
1940 TO 1959	3.1	83	1.2	121	.6	45	.6	94	.1	58
1960 OR LATER	8.5	76	2.5	115	3.6	50	.9	101	.8	68
OWN/RENT							, .	107	•	76
OWN	9.0	89 49	2.9	137	2.7 1.7	53 44	1.4	107 93	.9	/6 67
RENT	5.1	69	1.9	95	1.7	44	.0	73		97
1980 FAMILY INCOME										
LESS THAN \$10,000	4.4	65	1.2	89	1.3	39	.8	89	. 5	75
\$10,000 TO \$19,999	4.0	74	1.1	113	1.4	49	.6	101	.3	68
\$20,000 TO \$34,999	3.8	94	1.4	139	1.2	54	.4	125	.4	71
\$35,000 OR MORE	1.9	112	1.1	140	. 5	66	.2	125	.1	113



Table 2. (Continued)
Census Division: South
Atlantic

	ALL HO	JSEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER	I I I AVG. I		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KEROS	OIL OR SENE AS ATING FUEL	GAS A	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU) I	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT ICONSUMED PER (HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (HIL- LIONS)	AVG. AMOUNT ICONSUMED PER IHOUSEHOLD I(MILLION BTU)		AVG. AMOUNT CONSUMED PER (MOUSEHOLD (MILLION BTU)
TOTAL BELOW 100 PERCENT OF POVERTY LINE TOTAL BELOW 125 PERCENT	2.4	65	0.7	99	0.6	42	0.3	77	0.3	67
OF POVERTY LINE	3.1	66	.9	97	.8	42	.5	81	.4	71
AGE OF HOUSEHOLD HEAD									_	
UNDER 35 YEARS	4.4 5.5	75	1.5	110	1.8	49	.4	96	.3	76
60 YEARS AND OVER	4.3	93 75	2.0 1.2	133 112	1.2 1.4	61 41	.8 .8	106 104	.4 .4	76 69
HOUSEHOLD MEMBERS										
1	2.6	61	. 9	81	.8	32	.5	96	. 2	53
2	5.0	75	1.5	110	1.8	46	.8	98	.5	76
3 OR MORE	6.5	95	2.4	142	1.9	61	.7	113	.5	80
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	-	~	-	-	-	-	-	-	_	-
5,500 TO 7,000 HDD	-	•	-	-	-	-	-	-	-	-
4,000 TO 5,499 HDD	4.5	102	2.0	137	.6	60	.8	124	.1	126
<2,000 CDD AND <4,000 HDD	5.6	86	2.3	112	1.4	58	.7	100	.5	81
>2,000 CDD AND <4,000 HDD	4.1	54	.5	94	2.5	43	.4	69	.6	58



Table 2. (Continued)
Census Division: East South
Central

		·								
	ALL HOU	SEHOLDS	 			HOUSEHOLI	S USING:			
HOUSEHOLD	NUMBER	I I I AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO	OIL OR SENE AS ATING FUEL	GAS .	PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU) 		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS	AVG. AMOUNT ICONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS	AVG. AMOUNT CONSUNED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT ICONSUMED PER IHOUSEHOLD (MILLION BTU)
TOTAL HOUSEHOLDS	5.6	94	2.5	131	1.8	62	0.2	99	0.3	87
AREA TYPE										
URBAN	2.7	106	1.8	131	.8	58	Q	Q	Q	Q
RURAL	2.9	82	.7	129	1.0	66	٠.2	¯98	`.3	87
Aug.										
SMSA SMSA	2.3	106	1.4	133	.7	61	Q	Q	.1	85
NON-SMSA	3.3	85	î.ĭ	129	1.1	63	٠.2	9 94	.3	87
UTILITIES PAID BY HOUSEHOLD							_		_	
ALL PAID BY HOUSEHOLD	5.4	94	2.3	132	1.8	62	.2	99	.3	86
PAID BY HOUSEHOLD	.2	95	.2	109	Q	Q	Q	Q	Q	Q
	-					•	•	•	·	•
TYPE OF HOUSING STRUCTURE							_		_	
SINGLE FAMILY OR MOBILE HOME	5.0	98	2.3	134	1.4	68 44	.2	99	. 3 Q	87 Q
2 OR MORE UNITS	.6	62	.2	100	.4	44	Q	Q	ď	ď
NUMBER OF ROOMS										
1 TO 3	.5	50	.1	79	.3	38	Q	Q	.1	73
4 TO 5	2.6	83	1.1	116	.8	56	.1	94	.2	84
6 OR MORE	2.5	113	1.3	148	.7	80	.1	113	.1	102
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	3.7	100	1.7	137	1.4	65	0.1	116	0.2	96
SOME	1.0 .9	89 72	.5 .3	124 109	.3	57 47	.1 .1	80 94	.1 .1	70 82
TOTAL	• •	,,		107	••	7,	••	74		02
MEASURED HEATED SPACE OF RESI-										
DENCE (IN SQUARE FEET)									_	
LESS THAN 999	1.8 2.7	68 95	.6 1.3	99 125	.6 .8	46 65	.1 .1	85 99	.2 .2	74 96
2,000 OR MORE	1.1	131	.5	185	.3	87	Q.T	q ´´	Q.	q [°]
YEAR HOUSE BUILT	_			7.05	_		_	_	_	
1939 OR EARLIER 1940 TO 1959	.8 1.6	92 107	.4 1.0	125 130	.1 .3	63 64	Q .1	Q 106	.1 .1	71 111
1960 OR LATER	3.2	88	1.1	134	1.4	62	.1	90	.2	84
OWN/RENT	4.7	100		17/	, -	4.0		100	_	0.0
RENT	4.4 1.2	100 72	2.0 .5	136 110	1.3 .5	69 46	. 2 Q	102 Q	.3 Q	88 Q
NEITH CONTRACTOR OF THE CONTRA	1.2	,,		110		70	ч	4	4	4
1980 FAMILY INCOME										
LESS THAN \$10,000	1.9	77	.8	111	.6	50	.1	89	.2	74
\$10,000 TO \$19,999	1.6	94	.8	126	.5	59	1.	93	.1	109
\$20,000 TO \$34,999 \$35,000 OR MORE	1.3	98 125	.5 .4	137 173	.4	65 85	Q Q	Q Q	.1 Q	97 Q
#35,000 OK FIURE	. 7	145	.4	1/3	. 3	03	¥	ď	ч	ų



Table 2. (Continued)
Census Division: East South
Central

	ALL HOU	SEHOLDS		_		HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER	AVG.		L GAS AS ATING FUEL		CITY AS ATING FUEL	KERO	OIL OR SENE AS ATING FUEL	GAS .	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BYU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. I AMOUNT ICONSUMED PER HOUSEHOLD ICMILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL BELOW 100 PERCENT OF POVERTY LINE	1.0	73	0.4	110	0.3	46	Q	Q	0.1	80
TOTAL BELOW 125 PERCENT OF POVERTY LINE	1.3	73	.5	107	.4	44	0.1	93	.2	75
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	1.6	84	.7	128	.6	51	Q	Q	.1	71
35 TO 59 YEARS	2.5	102	1.1	138	.7	72	.1	107	.1	100
60 YEARS AND OVER	1.6	91	.7	123	.4	61	.1	96	.2	82
HOUSEHOLD MEMBERS										
1	1.0	72	.5	101	.3	45	Q	Q	.1	55
2	1.9	92	.8	132	.6	59	.1	105	.1	78
3 OR MORE	2.8	103	1.2	141	.8	73	.1	107	.1	108
HEATING DEGREES-DAYS (HDD) AND CODLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	-	-	-	-	-	-	-	-	-	-
5,500 TO 7,000 HDD	-	-	-	-	_	-	-	-	-	-
4,000 TO 5,499 HDD	1.5	110	.7	156	.4	60	.1	103	Q	Q
<2,000 CDD AND <4,000 HDD	3.2	87	1.2	122	1.2	64	.1	91	.2	93
>2,000 CDD AND <4,000 HDD	1.0	91	.5	117	.2	57	Q	Q	.1	78



Table 2. (Continued) Census Division: West South Central

	ALL HOL	JSEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD		I AVG.		L GAS AS ATING FUEL		CITY AS	FUEL KERO	. <u> </u>	GAS .	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF CONS HOUSE~ F HOLDS HOUS (MIL- (MIL	CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS (MIL-	AVG. LAMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL HOUSEHOLDS	8.0	98	5.7	110	1.5	67	Q	Q	0.6	76
AREA TYPE										
URBAN	5.8 2.1	102 88	4.6 1.1	111 104	1.1	65 72	Q Q	Q Q	.1 .5	81 75
SMSA										
SMSA	5.3	100	3.9	111	1.3	67	Q	Q	.2	85
NON-SMSA	2.6	95	1.8	106	.2	64	Q	Q	.4	71
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	7.2	101	5.4	111	1.0	67	Q	Q	.5	79
PAID BY HOUSEHOLD	.8	74	.3	88	.4	66	Q	Q	.1	44
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	6.9 1.1	103 71	5.4 .4	111 91	.8 .7	72 61	Q Q	Q Q	.6 Q	76 Q
NUMBER OF ROOMS										
1 TO 3	.8	59	.4	71	. 3	46	Q	Q	Q	Q
4 TO 5	4.3 2.9	92 119	3.1 2.3	101 128	.8 .4	63 90	Q	Q Q	.4 .2	74 84
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
SOME	5.1 1.5	101 99	3.5 1.2	115 106	1.3	70 48	Q Q	Q Q	0.3	68 86
NONE	1.4	89	1.1	96	.1	39	Q	Q Q	.2 .1	73
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	3.0	80	2.0	92	.7	54	Q	Q	. 2	62
1,000 TO 1,999	4.1 .9	105 130	3.1 .7	114 145	.6 .2	72 92	Q Q	Q Q	. 3 Q	84 Q
YEAR HOUSE BUILT 1939 OR EARLIER	1.5	93	1.1	100	,	52	Q	Q	2	85
1940 TO 1959	2.4	103	2.1	108	.1 .1	76	Q	Q	.2 .1	53
1960 OR LATER	4.1	97	2.6	115	1.3	67	Q	Q	. 3	78
OWN/RENT										
OWN	5.6 2.4	105 83	4.3 1.4	114 96	.7 .8	74 61	Q Q	Q Q	.4 .2	70 89
1980 FAMILY INCOME										
LESS THAN \$10,000	2.5	82	1.9	90	. 3	49	Q	Q	.3	70
\$10,000 TO \$19,999 \$20,000 TO \$34,999	2.1 2.2	98 107	1.6 1.6	112 118	. 3 . 4	48 79	Q Q	Q Q	.2 .1	76 69
\$35,000 OR MORE	1.1	120	.6	145	.4	81	Q.	Q.	.1	113



Table 2. (Continued) Census Division: West South Central

i) ALL HOU	ISEHOLDS I				HOUSEHOLI	S USING:			
HOUSEHOLD	NUMBER	I AVG. I		L GAS AS ATING FUEL		CITY AS	KEROS	OIL OR SENE AS ATING FUEL	I GAS	PETROLEUM AS MAIN AG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT ICONSUMED PER IHOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	I AVG. I AMOUNT ICONSUMED I PER IHOUSEHOLD I(MILLION I BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT ICONSUMED PER IHOUSEHOLD (MILLION BTU)		AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLE (MILLION BTU)
TOTAL BELOW 100 PERCENT	1.4	84	1.0	94	0.2	50	Q	Q	0.2	62
TOTAL BELOW 125 PERCENT OF POVERTY LINE							,			
JF POVERTY LINE	1.9	86	1.4	94	.2	53	Q	Q	.2	65
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	2.8 2.9 2.2	91 109 94	1.8 2.2 1.7	108 117 103	.7 .5 .2	54 88 56	Q Q Q	Q Q	. 2 . 2 . 2	78 83 69
HOUSEHOLD MEMBERS										
12	1.5 2.6 3.8	69 93 113	1.0 1.8 2.9	80 104 123	.3 .5 .6	45 58 86	Q Q	Q Q Q	.1 .2 .2	47 84 82
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	-	=	-	-	-	-	-	-	-	-
5,500 TO 7,000 HDD	-	-	-	-	-	-	-	-	_	-
4,000 TO 5,499 HDD <2,000 CDD AND <4,000 HDD >2,000 CDD AND <4,000 HDD	1.7 6.2	- 118 93	1.4	127	- .2 1.2	75 65	- Q Q	- Q Q	- .1 .5	92 73



Table 2. (Continued) Census Region: West

	I ALL HOU	JSEHOLDS				HOUSEHOLE	s using:			
HOUSEHOLD	NUMBER	I I I AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO:	OIL OR SENE AS ATING FUEL	GAS	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU) I		I AVG. I AMOUNT ICONSUMED I PER HOUSEHOLD I(MILLION I BTU)	HOLDS	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL HOUSEHOLDS	16.3	90	10.8	103	3.4	60	0.4	110	0.4	107
AREA TYPE										
URBAN	13.0	91	9.6	100	2.5	57	.3	111	.1	66
RURAL	3.3	89	1.2	123	.8	69	.1	108	.4	115
SMSA										
SMSA	12.8	90	9.5	99	2.3	55	. 3	113	.1	89
NON-SMSA	3.5	91	1.2	133	1.0	71	.1	101	. 3	116
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	14.1	93	9.2	107	3.0	61	.4	111	.3	106
SOME, NONE, OTHER PAID BY HOUSEHOLD	2.2	74	1.6	76	.4	57	Q	Q	.1	113
TALE OF HOUSEHOLD	2.2	/4	1.0	70	• •	3,	4	4	••	113
TYPE OF HOUSING STRUCTURE										
SINGLE FAMILY OR MOBILE HOME	12.3	101	8.3	113	2.0	72	.4	112	.4 Q	107 Q
2 OR MORE UNITS	4.0	58	2.4	66	1.4	42	Q	Q	ч	¥
NUMBER OF ROOMS										
1 TO 3	2.2	55	1.2	65	.7	41	Q	Q	.1	54
4 TO 5	7.3	78	4.5	90	1.8	57	. 2	106	. 2	75
6 OR MORE	6.9	114	5.1	123	.8	84	.2	115	. 2	144
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	3.6	97	2.2	110	1.1	68	Q	Q	0.2	116 71
SOME	1.9 10.7	83 89	1.4 7.1	92 102	.3 2.0	50 57	Q 0.4	114	.1 .2	109
NONE	10.7	67	7.1	102	2.0	5,	0.4	114	••	20,
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)						45	.1	100	.1	70
LESS THAN 999	6.0 7.8	64 92	3.4 5.5	77 99	1.7 1.4	45 70	.2	106	.2	117
2,000 OR MORE	2.5	144	1.8	162	.3	94	.1	124	.1	137
YEAR HOUSE BUILT 1939 OR EARLIER	3.6	90	2.6	99	.4	65	.1	101	.1	108
1940 TO 1959	4.5	97	3.4	102	.4	75	.2	115	.1	102
1960 OR LATER	8.2	86	4.7	105	2.6	57	.1	116	.2	110
OWN/RENT	10.0	102	6.9	115	1.6	71	. 3	110	.4	113
RENT	6.2	70	3.9	81	1.8	50	.1	112	.i	72
1980 FAMILY INCOME		78	2.5	89	1.0	55	.1	109	.1	111
LESS THAN \$10,000 \$10,000 TO \$19,999	4.0 4.1	78 82	2.5	9 5	.9	55 55	.2	98	.1	106
\$20,000 TO \$34,999	5.0	91	3.3	102	1.0	64	.1	107	. 2	88
\$35,000 OR HORE	3.2	114	2.4	126	.5	69	.1	155	.1	138



Table 2. (Continued) Census Region: West

	ALL HOL	SEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER	I AVG. I AMOUNT		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KEROS	OIL OR SENE AS ATING FUEL	GAS A	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT ICONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT ICONSUMED PER IHOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL BELOW 100 PERCENT OF POVERTY LINE TOTAL BELOW 125 PERCENT	1.9	78	1.2	91	0.5	53	Q	Q	Q	Q
OF POVERTY LINE	2.9	78	1.8	88	.7	57	0.1	113	0.1	116
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	6.5	80	4.1	91	1.7	58	.1	104	. 1	74
35 TO 59 YEARS	6.4	103	4.5	117	1.2	65	.1	112	.2	130
60 YEARS AND OVER	3.4	85	2.2	96	.6	56	.2	111	.1	93
HOUSEHOLD MEMBERS										
1	2.6	67	1.7	77	. 7	40	.1	108	.1	60
2	5.7	81	3.6	93	1.4	56	.2	109	.1	105
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE <2,000 CDD AND >7,000 HDD	8.0	104	1.0	117	1.3	75 79	. 2 Q	113 Q	. 2 Q	124 Q
<2,000 CDD AND					• •	• •	7	•	7	3
5,500 TO 7,000 HDD	1.7	102	.8	131	.5	77	.1	98	.1	104
4,000 TO 5,499 HDD	3.3	84	1.1	111	1.4	62	. 3	112	Q	Q
<2,000 CDD AND <4,000 HDD	9.1	86	7.3	92	1.1	48	Q	Q	. 3	107
>2,000 CDD AND <4,000 HDD	.9	59	.4	80	.2	62	Q	Q	Q	Q



Average Residential Fuel Consumption

Table 2. (Continued)
Census Division: Mountain

		<u> </u>								
	ALL HOU	SEHOLDS	 			HOUSEHOLI	OS USING:			
HOUSEHOLD	NUMBER	I I I AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KEROS	OIL OR SENE AS ATING FUEL	I GAS	PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL-	CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	I AVG. I AMOUNT ICONSUMED I PER IHOUSEHOLD I(MILLION I BTU)		AVG. AMOUNT CONSUMED HOUSEHOLD (MILLION BTU)	HOLDS	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BYU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL HOUSEHOLDS	4.0	105	2.8	119	0.6	69	0.1	98	0.1	111
AREA TYPE										
URBAN	2.8	107	2.3	116	.4	67	Q	Q	Q	Q
RURAL	1.1	101	.5	129	.3	73	Q	q	.1	111
SMSA										
SMSA	2.4	106	2.1	112	.3	64	Q	Q	Q	Q
NON-SMSA	1.6	105	.8	137	.4	73	Q	Q	.1	114
UTILITIES PAID BY HOUSEHOLD										
ALL PAID BY HOUSEHOLD	3.3	107	2.3	124	.6	67	.1	98	.1	97
SOME, NONE, OTHER										
PAID BY HOUSEHOLD	.6	96	. 5	94	.1	87	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE										
SINGLE FAMILY OR MOBILE HOME	3.3	110	2.3	125	.5	73	.1	98	.1	111
2 OR MORE UNITS	.7	82	.5	90	.1	55	Q	Q	Q	Q
NUMBER OF ROOMS										
1 TO 3	.5	73	.4	78	.1	63	Q	Q	Q	Q
4 TO 5	1.9	95	1.3	109	.4	61	Q	Q	.1	77
6 OR MORE	1.5	129	1.1	145	.2	84	Q	Q	Q	Q
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	0.9	98	0.5	111	0.3	78	Q	Q	Q	Q
SOME	.4	96	.3	119	.1	55	Q	Q	Q.	Q 119
NONE	2.6	110	2.0	121	.2	63	Q	Q	0.1	119
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	1.5	85	1.1	95	.2	59	. Q Q	Q	.1 q	77 Q
1,000 TO 1,999 2,000 OR MORE	1.7 .7	101 157	1.2 .5	114 177	.3 .1	66 105	q	Q Q	.1	134
YEAR HOUSE BUILT					_	_	•	•		130
1939 OR EARLIER	.7 1.0	116 115	.5 .8	127 123	ब .1	Q 88	Q Q	Q Q	.1 Q	Q Q
1960 OR LATER	2.3	99	1.6	114	.5	66	q	Q	7 .1	ີ 95
OLDI /DENT										
OWN/RENT OWN	2.7	112	1.9	128	.4	70	Q	Q	.1	127
RENT	1.2	92	.9	99	.2	69	Q	q	q ·	Q
1980 FAMILY INCOME LESS THAN \$10,000	1.2	92	.9	100	.2	71	G.	Q	Q	Q
\$10,000 TO \$19,999	1.3	99	.9	112	.2	60	ă.	q	q	Q.
\$20,000 TO \$34,999	1.0	112	.7	127	.2	71	q	q	Q	Q
\$35,000 OR MORE	.4	142	.3	173	.1	87	Q	Q	Q	Q



Average Residential Fuel Consumption

Table 2. (Continued) Census Division: Mountain

	ALL HOL	SEHOLDS				HOUSEHOLE	S USING:			
HOUSEHOLD	NUMBER	I I I AVG. I I AMOUNT		L GAS AS ATING FUEL		CITY AS ATING FUEL	KEROS	OIL OR SENE AS ATING FUEL	I GAS	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT ICONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT ICONSUMED PER IHOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL BELOW 100 PERCENT OF POVERTY LINE	0.5	100	0.4	114	0.1	75	Q	Q	Q	Q
OF POVERTY LINE	.8	98	.5	109	.1	80	Q	Q	Q	Q
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	1.8 1.4 .7	96 118 105	1.2 1.0	109 135 112	.3 .2 .1	65 77 63	Q Q	Q Q	0.1 Q Q	76 Q Q
HOUSEHOLD MEMBERS 1	.7 1.3 1.9	81 100 118	.5 1.0 1.3	90 110 138	.1 .2 .3	48 61 80	Q Q	Q Q Q	Q Q .1	Q Q 118
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<pre><2,000 CDD AND >7,000 HDD <2,000 CDD AND 5,500 TO 7,000 HDD</pre>	1.2	138 105	.9	152 131	.1	84 71	Q 0.1	Q 98	Q .1	Q 107
<pre><2,000 CDD AND 4,000 TO 5,499 HDD <2,000 CDD AND <4,000 HDD >2,000 CDD AND <4,000 HDD</pre>	.3 .4 .6	103 64 75	.3 .4 .4	112 65 80	.1 Q .2	65 Q 62	Q Q	Q Q Q	Q Q 0	Q Q



Average Residential Fuel Consumption

Table 2. (Continued)
Census Division: Pacific

	I ALL HOU	SEHOLDS				HOUSEHOLD	os USING:			
HOUSEHOLD	NUMBER	I I I AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO	OIL OR SENE AS ATING FUEL	GA5	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU) I		I PER IHOUSEHOLD	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL HOUSEHOLDS	12.3	85	7.9	97	2.8	58	0.4	112	0.3	106
AREA TYPE										
URBAN	10.2	86	7.3	95	2.2	55	.3	113	.1	66
RURAL	2.2	82	.6	118	.6	68	.1	111	.2	117
SMSA	•• •	•					_		_	
SMSA	10.4 1.9	86 79	7.5 .5	95 127	2.1 .7	54 70	.3 .1	114 103	.1 .2	91 118
		, ,			**					
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	10.7	88	6.9	101	2.4	59	.3	114	.2	110
SOME, NONE, OTHER	10.7	00	0.7	101	2.4	27		114	• • •	110
PAID BY HOUSEHOLD	1.6	65	1.0	67	. 3	49	Q	Q	.1	89
TYPE OF HOUSING STRUCTURE										
SINGLE FAMILY OR MOBILE HOME	9.0	97	6.0	109	1.5	72	.3	114	. 3	106
2 OR MORE UNITS	3.3	53	1.9	60	1.3	41	Q	Q	Q	Q
NUMBER OF ROOMS										
1 TO 3	1.7	50	.8	58	.7	39	Q	Q	Q	Q
4 TO 5	5.3	72	3.1	81	1.5	56	.1	108	.1 .2	72 131
6 OR MORE	5.3	110	4.0	117	.6	84	.2	117	.2	131
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALLSOME	2.7 1.5	96 80	1.7 1.2	110 86	0.8 .2	64 49	Q Q	Q Q	0.2 Q	120 0
NONE	8.1	83	5.1	95	1.7	56	0.3	114	. 1	9 1
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	4.5	57	2.3	69	1.4	42	.1	101	.1	64
1,000 TO 1,999	6.1	90	4.3	95	1.1	71	.2	108	. 2	112
2,000 OR MORE	1.8	139	1.3	155	. 3	90	.1	124	Q	Q
YEAR HOUSE BUILT										
1939 OR EARLIER	3.0	85	2.1	93	.4	63 73	.1 .2	104 117	Q .1	Q 98
1940 TO 1959 1960 OR LATER	3.5 5.8	92 82	2.6 3.2	96 100	.3 2.1	73 55	.1	117	.1	120
OWN/RENT	7.3	99	5.0	110	1.2	72	. 3	112	.3	109
RENT	5.0	65	3.0	75	1.6	47	.1	112	Q .	q ´
1000 EANTLY THOME										
1980 FAMILY INCOME LESS THAN \$10,000	2.8	72	1.6	83	.8	51	.1	111	Q	Q
\$10,000 TO \$19,999	2.8	74	1.7	85	.7	54	.1	98	.1	104
\$20,000 TO \$34,999	4.0	85	2.6	95	.8	63	.1	110 155	.1	69 136
\$35,000 OR MORE	2.8	110	2.1	119	.5	66	.1	122	.1	130



Average Residential Fuel Consumption

Table 2. (Continued) Census Division: Pacific

	ALL HOL	SEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER	AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO:	OIL OR SENE AS ATING FUEL	GAS A	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT ICONSUMED PER IHOUSEHOLD I(MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT ICONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT ICONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL BELOW 100 PERCENT	• •		• •	•		47				o
TOTAL BELOW 125 PERCENT	1.4	69	0.8	81	0.4	47	Q	Q	Q	4
OF POVERTY LINE	2.1	71	1.2	79	.6	53	0.1	117	Q	Q
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	4.7	73	2.8	83	1.3	56	.1	101	Q	Q
35 TO 59 YEARS	5.0	99	3.4	112	.9	62	.1	115	0.2	130
60 YEARS AND OVER	2.6	80	1.6	90	.5	55	.2	114	.1	67
HOUSEHOLD MEMBERS										
1	1.9	61	1.2	71	.5	38	.1	118	.1	58
2	4.4	76	2.6	87	1.2	55	.1	108	.1	96
3 OR MORE	6.1	100	4.2	110	1.0	73	. 2	114	.1	128
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	.1	173	.1	229	Q	Q	Q	Q	Q	Q
5,500 TO 7,000 HDD	.3	86	Q	Q	.2	85	Q	Q	Q	Q
<2,000 CDD AND										
4,000 TO 5,499 HDD	2.9	81	.9	111	1.4	61	. 3	112	Q	Q
<2,000 CDD AND <4,000 HDD	8.6	87	6.9	93	1.1	48	Q	Q	. 3	108
>2,000 CDD AND <4,000 HDD	. 3	32	Q	Q	Q	Q	Q	Q	Q	Q

[&]quot;-" = DATA NOT APPLICABLE.

[&]quot;Q" = DATA HITHRELD BECAUSE OF A LARGE VARIANCE.
NOTE: BECAUSE OF ROUNDING, DATA MAY NOT SUM TO TOTALS. PERCENTAGES ARE CALCULATED ON UNROUNDED NUMBERS. SEE GLOSSARY FOR DEFINITION OF TERMS USED IN THIS REPORT.

NOTE: COLUMN TOTALS WILL NOT SUM TO TOTAL NUMBER OF HOUSEHOLDS BECAUSE 6.8 MILLION HOUSEHOLDS WITH NO MAIN HEATING FUEL OR WITH OTHER MAIN HEATING FUEL, SUCH AS HOOD, HERE NOT INCLUDED.

SOURCE: ENERGY INFORMATION ADMINISTRATION, OFFICE OF ENERGY MARKETS AND END USE, ENERGY END USE DIVISION, FORM EIA-457,



Table 3. U.S. Average Residential Energy Expenditures for All Fuels Used in the Household, by Main Heating Fuel Type—April 1981 Through March 1982, United States (Dollars per Household)

Average Residential Fuel Expenditures

	ALL HOU	SEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER OF	AVG.		GAS AS		ICITY AS ATING FUEL	KERO:	OIL OR SENE AS ATING FUEL	GAS A	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. LEXPEND- LITURES PER HOUSEHOLD
TOTAL HOUSEHOLDS	83.1	1022	46.2	965	14.2	875	12.2	1565	3.7	1114
AREA TYPE										
URBAN	57.3 25.9	1023 1020	38.3 8.0	961 983	8.8 5.4	838 936	8.0 4.2	1611 1478	.6 3.1	873 1165
SMSA										
SMSA	56.6 26.5	1051 959	35.2 11.1	971 947	10.1 4.1	881 861	8.4 3.7	1639 1398	1.2 2.5	1165 1091
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	69.6	1029	38.7	1006	12.5	864	8.6	1572	3.5	1111
PAID BY HOUSEHOLD	13.5	987	7.5	752	1.7	956	3.6	1549	.2	1170
TYPE OF HOUSING STRUCTURE										
SINGLE FAMILY OR MOBILE HOME	61.8	1068	35.5	1029	8.1	974	8.2	1579	3.7	1111
2 OR MORE UNITS	21.4	889	10.7	752	6.1	743	3.9	1536	Q	Q
NUMBER OF ROOMS										
1 10 3	10.2	733	4.3	573	3.0	655	1.9	1302	.4	643
4 TO 5	36.7 36.2	884 1243	19.9 22.0	825 1168	7.0 4.2	794 1163	4.8 5.5	1415 1788	1.9 1.4	947 1462
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	30.7	1059	17.2	1069	8.8	935	2.1	1584	1.4	1137
SOME	17.7 34.7	1158 92 0	10.5 18.5	1013 842	1.8 3.6	921 709	3.8 6.3	1749 1449	1.0 1.4	1156 1063
MEASURED HEATED SPACE OF RESI-	3	,,,,	10.5	042	3.0	,	0.5	1117	•••	1003
DENCE (IN SQUARE FEET)										0/0
LESS THAN 999	28.9 35.8	786 1021	13.9 21.1	693 951	6.5 5.8	689 946	4.6 4.4	1335 1546	1.4 1.8	842 1235
2,000 OR MORE	18.4	1395	11.1	1333	1.9	1298	3.2	1918	.5	1470
YEAR HOUSE BUILT										
1939 OR EARLIER	24.2	1091	14.2	981	1.2	746	5.1	1647	1.2	1262
1940 TO 1959	20.4 38.5	987 997	13.3 18.6	919 986	1.6 11.4	841 894	3.3 3.7	1494 1515	.5 2.0	1013 1051
OWN/RENT OWN	55.1	1102	31.9	1062	7.4	968	7.7	1627	2.9	1140
RENT	28.0	865	14.3	748	6.8	774	4.4	1458	.8	1016
1980 FAMILY INCOME										
LESS THAN \$10,000	23.3	847	12.2	787	4.2	711	3.5	1359	1.3	955
\$10,000 TO \$19,999	23.2	971 1078	12.2	900 1020	4.3 3.7	856 95 5	3.6 3.3	1482 1609	1.0 1.0	1095 1166
\$20,000 TO \$34,999 \$35,000 OR MORE	24.0 12.6	1333	14.1 7.8	1247	2.1	1109	1.8	2061	.4	1534
TOTAL BELOW 100 PERCENT										
OF POVERTY LINE	11.0	830	5.7	808	2.1	744	1.2	1366	.7	874
TOTAL BELOW 125 PERCENT OF POVERTY LINE	15.8	842	8.3	805	2.8	724	2.0	1357	1.0	936



Table 3. (Continued)
United States

	ALL HOU	JSEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER OF	 AVG. EXPEND-		GAS AS		ICITY AS ATING FUEL	KERO:	OIL OR SENE AS ATING FUEL	GAS A	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS) 	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
ACT OF HOUSTHAND HEAD										
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	27.6	899	15.4	876	6.3	804	2.8	1375	0.9	1050
35 TO 59 YEARS	33.0	1179	18.6	1106	4.5	1034	5.3	1751	1.4	1317
60 YEARS AND OVER	22.5	943	12.2	863	3.4	801	4.1	1449	1.3	938
HOUSEHOLD MEMBERS										
1	15.4	768	8.5	690	3.1	626	2.6	1282	.6	730
2	27.7	956	14.9	895	5.4	836	4.1	1484	1.4	999
3 OR MORE	40.1	1165	22.8	1113	5.8	1043	5.5	1759	1.7	1356
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	8.8	1016	4.1	932	.5	1048	1.9	1417	.4	1256
5,500 TO 7,000 HDD	21.0	1156	14.3	1068	2.1	940	3.3	1695	. 5	1586
4,000 TO 5,499 HDD	21.6	1152	9.8	1100	3.6	831	5.7	1644	.6	1122
<2,000 CDD AND <4,000 HDD	19.5	799	12.2	759	3.9	813	.8	1162	1.1	1068
>2,000 CDD AND <4,000 HDD	12.2	925	5.8	938	4.1	921	.4	999	1.2	910



Table 3. (Continued) Census Region: Northeast

HOUSEHOLD (CHARACTERISTICS HOUSEHOLD (I) LICE (I	MIL- ONS) 17.9 13.7 4.2 14.1 3.8 12.3 5.7	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	MAIN HEA	L GAS AS ATING FUEL AVG. EXPEND- ITURES PER HOUSEHOLD 100LARS) 1248 1270 1081 1274 1141 1336 1020 1394 1031	NUMBER OF HOUSE- HOLDS (MIL-	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	NUMBER OF HOUSE-HOLDS (MIL-LIONS) 7.9 6.3 1.6 6.6 1.3 4.6 3.3	ENE AS LTING FUEL AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS) 1709 1724 1649 1741 1541 1813 1564	GAS A HEATIN NUMBER OF HOUSE-HOLDS (MIL-LIONS) 0.1 Q .1 Q .1 Q .1	PETROLEUM IS MAIN IS FUEL AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS) 1637 Q 1637 1833 Q 1529 Q 1616
TOTAL HOUSEHOLDS. AREA TYPE URBAN. RURAL. SMSA SMSA. NON-SMSA. UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD. TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR HOBILE HOME. 2 OR MORE UNITS. NUMBER OF ROOMS 1 TO 3. 4 TO 5. 6 OR MORE. NUMBER OF ROOMS 1 TO 3. 4 TO 5. 6 OR MORE NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED ALL. SOME. NONE. MEASURED HEATED SPACE OF RESIDENCE (IN SQUARE FEET)	OLDS MIL- ONS) 17.9 13.7 4.2 14.1 3.8 12.3 5.7 10.5 7.4	PER HOUSENOLD	OF HOUSE- HOLDS (MIL- LIONS) 7.0 6.2 .8 5.7 1.3 5.1	EXPEND- ITURES PER HOUSEHOLD (DOLLARS) 1248 1270 1081 1274 1141 1336 1020	OF HOUSE- HOLDS (MIL- LIONS) 1.5 .9 .6 1.3 .3	EXPEND- ITURES I PER HOUSEHOLD (I DOLLARS)	7.9 6.3 1.6 6.6 1.3	EXPEND- ITURES PER HOUSEHOLD (DDLLARS) 1709 1724 1649 1741 1541 1813 1564 1829	OF HOUSE- HOLDS (MIL- LIONS) 0.1 Q .1 Q .1	i EXPEND- i ITURES I PER HOUSEHOLD ((DOLLARS)) 1637 Q 1637 1833 Q
AREA TYPE URBAN. RURAL. SMSA SMSA NON-SMSA. UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD. SOME, NONE, OTHER PAID BY HOUSEHOLD. TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME. 2 OR MORE UNITS. NUMBER OF ROOMS 1 TO 3 4 TO 5 6 OR MORE. NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED ALL SOME NONE MEASURED HEATED SPACE OF RESIDENCE (IN SQUARE FEET)	13.7 4.2 14.1 3.8 12.3 5.7 10.5 7.4	1469 1286 1485 1209 1457 1359	6.2 .8 5.7 1.3 5.1 1.9	1270 1081 1274 1141 1336 1020	.9 .6 1.3 .3 1.1 .4	1300 1199 1253 1288 1253 1276	6.3 1.6 6.6 1.3 4.6 3.3	1724 1649 1741 1541 1813 1564	Q .1 Q .1 Q .1 Q .1	Q 1637 1833 Q 1529 Q
URBAN. RURAL. SMSA SMSA. NON-SMSA. UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD. SOME, NONE, OTHER PAID BY HOUSEHOLD. TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME. 2 OR MORE UNITS. NUMBER OF ROOMS 1 TO 3. 4 TO 5. 6 OR MORE. NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED ALL. SOME. NONE. MEASURED HEATED SPACE OF RESIDENCE (IN SQUARE FEET)	4.2 14.1 3.8 12.3 5.7 10.5 7.4 2.8 6.7	1485 1209 1457 1359	.8 5.7 1.3 5.1 1.9	1081 1274 1141 1336 1020	.6 1.3 .3 1.1 .4	1199 1253 1288 1253 1276	1.6 6.6 1.3 4.6 3.3	1649 1741 1541 1813 1564	.1 Q .1 Q	1637 1833 Q 1529
URBAN. RURAL. SMSA SMSA. NON-SMSA. UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD. SOME, NONE, OTHER PAID BY HOUSEHOLD. TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME. 2 OR MORE UNITS. NUMBER OF ROOMS 1 TO 3. 4 TO 5. 6 OR MORE. NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED ALL. SOME. NONE. MEASURED HEATED SPACE OF RESIDENCE (IN SQUARE FEET)	4.2 14.1 3.8 12.3 5.7 10.5 7.4 2.8 6.7	1485 1209 1457 1359	.8 5.7 1.3 5.1 1.9	1081 1274 1141 1336 1020	.6 1.3 .3 1.1 .4	1199 1253 1288 1253 1276	1.6 6.6 1.3 4.6 3.3	1649 1741 1541 1813 1564	.1 Q .1 Q	1637 1833 Q 1529 Q
SMSA NON-SMSA UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NONE, OTHER PAID BY HOUSEHOLD TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS NUMBER OF ROOMS 1 TO 3 4 TO 5 6 OR MORE NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED ALL SOME NONE MEASURED HEATED SPACE OF RESIDENCE (IN SQUARE FEET)	3.8 12.3 5.7 10.5 7.4 2.8 6.7	1209 1457 1359 1513	1.3 5.1 1.9	1141 1336 1020	.3 1.1 .4	1288 1253 1276	1.3 4.6 3.3 4.3	1541 1813 1564 1829	Q .1 Q .1	Q 1529 Q
NON-SMSA UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NONE, OTHER PAID BY HOUSEHOLD TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS NUMBER OF ROOMS 1 TO 3 4 TO 5 6 OR MORE NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED ALL SOME MEASURED HEATED SPACE OF RESIDENCE (IN SQUARE FEET)	3.8 12.3 5.7 10.5 7.4 2.8 6.7	1209 1457 1359 1513	1.3 5.1 1.9	1141 1336 1020	.3 1.1 .4	1288 1253 1276	1.3 4.6 3.3 4.3	1541 1813 1564 1829	Q .1 Q .1	Q 1529 Q
ALL PAID BY HOUSEHOLD SOME, NONE, OTHER PAID BY HOUSEHOLD TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS NUMBER OF ROOMS 1 TO 3 4 TO 5 6 OR MORE NUMBER OF ROOMS THAT CAN BE ALL SOME NONE MEASURED HEATED SPACE OF RESIDENCE (IN SQUARE FEET)	5.7 10.5 7.4 2.8 6.7	1359 1513	1.9	1020 1394	.4	1276	3.3	1564 1829	Q .1	Q
ALL PAID BY HOUSEHOLD SOME, NONE, OTHER PAID BY HOUSEHOLD TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS NUMBER OF ROOMS 1 TO 3 4 TO 5 6 OR MORE NUMBER OF ROOMS THAT CAN BE ALL SOME NONE MEASURED HEATED SPACE OF RESIDENCE (IN SQUARE FEET)	5.7 10.5 7.4 2.8 6.7	1359 1513	1.9	1020 1394	.4	1276	3.3	1564 1829	Q .1	Q
PAID BY HOUSEHOLD TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS NUMBER OF ROOMS 1 TO 3	10.5 7.4 2.8 6.7	1513	4.2	1394	.7	1392	4.3	1829	.1	
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	7.4 2.8 6.7									1616
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	7.4 2.8 6.7									1616
NUMBER OF ROOMS 1 TO 3 4 TO 5 6 OR MORE NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED ALL SOME NONE MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)	2.8	1302	2.8	1031	. 9					
1 TO 3 4 TO 5 6 OR MORE	6.7					1151	3.6	1563	Q	Q
4 TO 5. 6 OR MORE	6.7									
6 OR MORE		1186 1265	.8 2.6	860 1034	.4 .6	1156 1160	1.5 3.0	1395 1567	Q Q	Q
AIR CONDITIONED ALL	8.5	1631	3.6	1488	.6	1418	3.4	1969	1.1	2005
SOME										
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)	3.2	1496	1.5	1403	.6	1248	1.0	1802	Q.	Q
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)	5.5 9.2	1564 1318	2.4 3.2	1283 1149	.3 .6	1426 1183	2.6 4.3	1866 1590	.1 Q	1628 Q
DENCE (IN SQUARE FEET)									,	,
IECC TUAN GOO										
1 000 TO 1 000	6.1	1229 1392	1.9 3.1	943 1225	0.8 .4	1105 1353	3.1 2.6	1483 1704	Q 0.1	Q 2005
1,000 TO 1,999	6.8 5.0	1714	2.0	1585	.3	1529	2.2	2038	Q.	Q
YEAR HOUSE BUILT										
1939 OR EARLIER	8.1	1411	3.2	1217	.2	1006	3.9	1698	.1	1680
1940 TO 1959	3.3 6.5	1503 1405	1.3 2.6	1187 1317	.1 1.2	1439 1282	1.8 2.1	1749 1694	Q Q	Q Q
			2.3	_ .					•	•
OWN	11.1	1501	4.7	1366	.7	1412	4.5	1834	Q	Q
RENT	6.8	1304	2.3	1013	. 9	1146	3.4	1547	.1	1680
1980 FAMILY INCOME										
LESS THAN \$10,000	4.2	1244	1.5	1003	.5	1048	2.0	1510	Q	Q
\$10,000 TO \$19,999 \$20,000 TO \$34,999	5.3 5.5	1346 1402	2.1 2.3	1140 1263	.5 .4	1398 1344	2.2 2.3	1629 1676	Q Q	Q Q
\$35,000 OR MORE	2.9	1891	1.2	1709	.2	1220	1.3	2235	Q	q
TOTAL BELOW 100 PERCENT										
OF POVERTY LINE	1.6	1276	.6	1041	.2	1071	.7	1602	Q	Q
TOTAL BELOW 125 PERCENT OF POVERTY LINE	2.6	1244	1.0	1036	. 3	978	1.1	1562	Q	Q



Table 3. (Continued) Census Region: Northeast

	ALL HO	JSEHOLDS				HOUSEHOLE	S USING:			
HOUSEHOLD	NUMBER OF	I I I AVG. I		. GAS AS TING FUEL		ICITY AS ATING FUEL	KERO:	OIL OR SENE AS ATING FUEL	GAS	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLDI		AVG. LEXPEND- LITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. LEXPEND- LITURES PER HOUSEHOLD (DOLLARS)
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	5.4	1256	2.4	1172	0.7	1141	1.9	1487	0.1	1776
35 TO 59 YEARS	7.7	1623	2.9	1443	.4	1514	3.6	1899	Q.	Q
60 YEARS AND OVER	4.8	1302	1.8	1037	.4	1176	2.3	1592	Q	Q
HOUSEHOLD MEMBERS										
1	3.4	1141	1.3	904	.4	961	1.7	1372	Q	Q
2	5.4	1336	2.1	1131	.5	1305	2.5	1622	Q	Q
3 OR MORE	9.1	1589	3.6	1444	.7	1382	3.7	1919	.1	1842
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	1.9	1169	.1	1412	.1	1259	.8	1500	Q	Q
5,500 TO 7,000 HDD	7.8	1350	3.8	1138	.8	1178	2.8	1715	.1	1716
4,000 TO 5,499 HDD	8.3	1556	3.1	1373	.6	1371	4.4	1741	Q	Q
<2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-	-
>2,000 CDD AND <4,000 HDD	-	-	-	_	-	-	-	-	-	-



Table 3. (Continued) Census Division: New England

	ALL HOU	JSEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER OF	AVG.		L GAS AS ATING FUEL		CITY AS ATING FUEL	KERO	OIL OR SEME AS ATING FUEL	GAS	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD	HOLDS	:		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	4.3	1412	1.2	1266	0.4	1182	2.1	1669	Q	q
AREA TYPE										
URBAN	3.2 1.1	1433 1351	1.1 Q	1238 Q	.3 .1	1106 1313	1.6 .5	1660 1702	Q	Q
SMSA SMSA	3.1 1.2	1472 1251	1.1 Q	1273 Q	.3 .1	1267 794	1.5 .6	1696 1602	Q Q	Q
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	3.3	1463	.9	1352	.3	1171	1.6	1780	Q	Q
SOME, NONE, OTHER PAID BY HOUSEHOLD	1.0	1236	. 2	938	.1	1202	.6	1372	Q	Q
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME	2.5	1532	.6	1465	.1	1511	1.2	1844	Q C	q
2 OR MORE UNITS	1.8	1247	.6	1072	.3	1045	.9	1431	Q	Q
NUMBER OF ROOMS 1 TO 3	.5	1042	.2	914	.1	1086	.2	1195	Q	Q
4 TO 5	1.9	1235 1695	.5 .5	1113 1564	.2	1039 1783	.9 1.0	1471 1914	q q	q
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	.5	1339	.1	1220	.1	1133	.1	1801	Q	q
SOME	1.3 2.5	1588 1338	.4 .7	1298 1257	.2 .1	1328 1037	.7 1.3	1870 1555	Q Q	Q Q
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										_
LESS THAN 999	1.6 1.6	1147 1409	0.5 .4	1026 1317	0.3 .1	994 1271	8.0 8.	1339 1681	Q Q	Q Q
2,000 OR MORE	1.1	1812	.3	1633	.î	1894	.6	2080	q	q
YEAR HOUSE BUILT										
1939 OR EARLIER	2.1	1416	.7 .2	1269	.1	1145 1540	1.1	1595 1709	Q Q	Q Q
1940 TO 1959	.8 1.4	1509 1351	.4	1260 1263	.1 .3	1112	.5	1797	q	q
OWN/RENT										
DWN	2.7	1501	.7	1375	.1	1451	1.3	1805	Q Q	Q Q
RENT	1.6	1259	.5	1109	.3	1045	.8	1437	4	ч
1980 FAMILY INCOME LESS THAN \$10,000	1.0	1260	.3	1108	.1	929	.6	1471	Q	Q
\$10,000 TO \$19,999	1.4	1303	.5	1235	.2	1068	.6	1551	q	à
\$20,000 TO \$34,999	1.2	1437	. 3	1304	.1	1292	.6	1670	q	Q
\$35,000 OR MORE	.6	1846	.1	1629	Q	Q	.4	2176	Q	Q
TOTAL BELOW 100 PERCENT OF POVERTY LINE TOTAL BELOW 125 PERCENT	.4	1351	.2	1252	Q	Q	.2	1567	Q	Q
OF POVERTY LINE	.6	1342	.2	1153	Q	Q	.3	1572	Q	Q



Table 3. (Continued) Census Division: New England

	ALL HOU	JSEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER OF	AVG.		GAS AS		CITY AS	KERO	OIL OR SENE AS ATING FUEL	GAS	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
ACE OF HOMESHOUR HEAR										
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	1.3	1215	0.3	1136	0.2	1122	0.5	1455	Q	Q
35 TO 59 YEARS	1.9	1603	.5	1463	.1	1762	1.0	1842	q	q
60 YEARS AND OVER	1.1	1315	.3	1098	.1	1016	.6	1559	Q	à
HOUSEHOLD MEMBERS										
1	.8	1102	.2	965	.1	835	.4	1281	Q	Q
2	1.3	1368	.4	1165	.1	1377	.7	1612	Q	Q
3 OR MORE	2.1	1555	.6	1457	.2	1391	1.0	1863	Q	Q
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	. 1.1	1206	.1	1412	.1	874	.5	1542	Q	Q
5,500 TO 7,000 HDD	3.2	1484	1.0	1246	.3	1264	1.7	1705	Q	Q
4,000 TO 5,499 HDD	-	-	-	-	-	-	-	-	-	-
<2,000 CDD AND <4,000 HDD	-	-	-	-	_	-	-	-	-	-
>2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-	-



Table 3. (Continued)
Census Division: Middle
Atlantic

	ALL HOU	SEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD I	NUMBER OF	I AVG. I		GAS AS		CITY AS	KEROS	OIL OR SENE AS TING FUEL	GAS A	PETROLEUM AS MAIN AG FUEL
CHARACTERISTICS - - - - - -	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS) 		L AVG. EXPEND- ITURES PER HOUSEHOLD	HOLDS (MIL-	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	HOLDS (MIL-	L AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	HOUSE- HOLDS (MIL-	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	13.7	1431	5.9	1245	1.1	1285	5.8	1723	0.1	1833
AREA TYPE										
URBAN	10.6	1480	5.1	1278	.7	1374	4.6	1747	Q	Q
RURAL	3.1	1262	.8	1032	.5	1165	1.1	1626	.1	1833
SMSA										
	11.0	1400	4 E	1076	•	1269		1756	,	1077
SMSA	11.0 2.6	1488 1190	4.5 1.3	1274 1144	.9 .2	1248 1473	5.1 .7	1754 1485	.1 Q	1833 Q
non onoa	2.0	11/0	1.3	****		4473	• •	1403	•	•
UTILITIES PAID BY HOUSEHOLD										
ALL PAID BY HOUSEHOLD	9.0	1455	4.1	1332	.9	1276	3.0	1830	.1	1758
SOME, NONE, OTHER PAID BY HOUSEHOLD	4.7	1384		1031	•	1318	2.7	1605	Q	Q
PAID BY HOUSEHOLD	4.7	1304	1.7	1031	.2	1310	2.7	1003	ч	ч
TYPE OF HOUSING STRUCTURE										
SINGLE FAMILY OR MOBILE HOME	8.1	1507	3.6	1383	.6	1368	3.1	1823	.1	1758
2 OR MORE UNITS	5.6	1320	2.2	1019	.6	1203	2.7	1607	Q	Q
NUMBER OF ROOMS										
1 TO 3	2.3	1218	.6	845	.2	1195	1.3	1419	Q	Q
4 TO 5	4.7	1276	2.1	1013	.4	1224	2.1	1609	q	Q
6 OR MORE	6.7	1613	3.2	1476	.5	1371	2.4	1994	.1	2005
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	2.8	1522	1.3	1423	.5	1276	. 9	1802	Q	Q
SOME	4.3	1557	2.0	1281	.2	1528	2.0	1865	.1	1747
NONE	6.6	1311	2.5	1120	.5	1219	2.9	1605	Q	Q
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									_	_
LESS THAN 999	4.5 5.2	1257 1387	1.5 2.7	916 1210	0.6 .3	1155 1377	2.3 1.8	1530 1713	Q 0.1	Q 2005
2,000 OR MORE	3.9	1687	1.7	1578	.3	1455	1.6	2022	Q	Q
									•	
YEAR HOUSE BUILT					_				_	
1939 OR EARLIER	6.0	1409	2.5	1203	2.1	903 Q	2.8	1740 1764	.1	1807
1940 TO 1959	2.6 5.1	1502 1420	1.1 2.2	1176 1326	Q 1.0	1327	1.3	1660	Q Q	Q Q
									•	•
DWN/RENT					_			3011	_	_
OWN	8.4	1502	4.0	1365	.5	1402	3.1	1846	Q,	Q 1807
RENT	5.3	1317	1.9	988	.6	1188	2.7	1579	.1	100/
1980 FAMILY INCOME										
LESS THAN \$10,000	3.2	1239	1.2	977	.4	1084	1.5	1524	Q	Q
\$10,000 TO \$19,999	4.0	1360	1.6	1112	.4	1541	1.7	1655	Q	Q
\$20,000 TO \$34,999	4.3	1393	2.0	1258	.3	1360	1.7	1678	Q	Q Q
\$35,000 OR MORE	2.2	1904	1.1	1719	.1	984	.9	2258	Q	ч
TOTAL BELOW 100 PERCENT										
OF POVERTY LINE	1.3	1255	.5	974	•	1058	.6	1612	Q	Q
OF POTERII LINE	1.3	*633		9/4	. 2	1050	.0	1015	ų	ч
TOTAL BELOW 125 PERCENT OF POVERTY LINE	2.0	1216	.8	1007	.2	974	.8	1558	q	Q



Table 3. (Continued)
Census Division: Middle
Atlantic

	ALL HO	JSEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER OF	AVG.		L GAS AS ATING FUEL		CITY AS ATING FUEL	KERO	OIL OR SENE AS ATING FUEL	GAS	PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	4.2	1268	2.0	1177	0.5	1150	1.4	1499	Q	Q
35 TO 59 YEARS	5.9	1629	2.4	1439	.4	1478	2.6	1922	Q	Q
60 YEARS AND OVER	3.6	1298	1.4	1022	.3	1249	1.7	1603	Q	Q
HOUSEHOLD MEMBERS										
1	2.6	1152	1.1	891	.2	1048	1.3	1400	Q	Q
2	4.1	1325	1.7	1124	.4	1290	1.8	1625	Q	Q
3 OR MORE	6.9	1599	3.0	1442	.5	1379	2.7	1940	0.1	2005
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	.8	1118	Q	Q	.1	1757	.3	1432	Q	Q
5,500 TO 7,000 HDD	4.6	1258	2.7	1097	.5	1123	1.1	1729	.1	1833
4,000 TO 5,499 HDD	8.3	1556	3.1	1373	.6	1371	4.4	1741	Q	Q
<2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	_	-	-
>2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-	-



Table 3. (Continued)
Census Region: North Central

	I ALL HOU	JSEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD	I NUMBER	AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO	OIL OR SENE AS ATING FUEL	GAS.	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS) 	OF	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	OF HOUSE- HOLDS (MIL-	AVG. EXPEND- ITURES PER HOUSEHOLD	HOLDS	EXPEND-	HOUSE- HOLDS (MIL-	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	21.2	1042	15.4	1030	1.6	846	1.7	1489	1.0	1334
AREA TYPE										
URBANRURAL	14.2 7.0	1002 1124	12.4 3.1	1024 1056	.9 .7	764 965	.5 1.2	1293 1566	.1	1086 1364
SMSA										
SMSA NON-SMSA	13.9 7.4	1046 1035	11.6 3.9	1049 974	1.1 .5	853 828	.5 1.2	1562 1459	.2 .9	1784 1253
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NONE, OTHER	18.1	1090	13.1	1087	1.2	797	1.5	1471	1.0	1350
PAID BY HOUSEHOLD	3.2	769	2.4	719	.3	1021	.1	1696	Q	Q
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	16.3 4.9	1127 760	11.9 3.5	1106 771	.6 1.0	1083 698	1.5	1469 1729	1.0 Q	1343 Q
	7.7	700	3.5	771	1.0	070	• •	1727	•	•
NUMBER OF ROOMS 1 TO 3	2.4	653	1.3	558	4	678	. 3	1103	.1	817
4 TO 5		888	6.8	894	.6 .7	767	.5	1350	.4	1072
6 OR MORE	9.7	1284	7.3	1240	. 3	1279	. 9	1672	.5	1619
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									_	
ALL	7.8 5.1	1053 1142	5.8 4.0	1084 1058	1.0	754 1167	.4 .4	1559 1860	.3	1173 1523
NONE	8.4	972	5.6	955	.3	872	. 9	1301	.4	1336
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	6.8 7.9	730 1055	4.4 5.9	721 1011	1.0	669 1075	0.4	1159 1399	0.3 .5	1042 1351
2,000 OR MORE		1346	5.2	1314	.2	1373	.6	1845	.3	1657
YEAR HOUSE BUILT										
1939 OR EARLIER		1109	5.9	1058	.2	853	.6	1678	.5	1563
1940 TO 1959		1011 1000	4.4 5.2	1020 1007	.1 1.3	809 849	.6 .5	1322 1436	.1 .5	98 9 1147
OWN/RENT										
OWNRENT		1141 803	11.2 4.3	1120 795	.5 1.1	1064 756	1.4	1514 1344	.9 .1	1380 1027
1980 FAMILY INCOME							_		_	
LESS THAN \$10,000 \$10,000 TO \$19,999		884 985	4.3 4.1	890 957	.6 .7	718 882	.5 .5	1351 1399	.3	1084 1291
\$20,000 TO \$34,999		1103	4.9	1071	.3	862	.4	1575	.2	1599
\$35,000 OR MORE	2.7	1403	2.1	1365	.1	1559	. 3	1779	.2	1572
TOTAL BELOW 100 PERCENT OF POVERTY LINE	2.7	879	1.9	912	.2	790	.1	1319	.1	1122
TOTAL BELOW 125 PERCENT OF POVERTY LINE	4.0	902	2.7	924	.3	767	. 3	1359	.2	1097



Table 3. (Continued)
Census Region: North Central

	ALL HOU	JSEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER OF	AVG.		GAS AS		ICITY AS ATING FUEL	KERO:	OIL OR SENE AS ATING FUEL	GAS A	PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
GE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	6.9	912	5.0	936	0.8	751	0.4	1178	0.2	1233
35 TO 59 YEARS	8.1	1213	5.9	1188	.3	1030	.6	1747	.5	1554
60 YEARS AND OVER	6.2	966	4.5	926	.5	882	.6	1422	.4	1110
OUSEHOLD MEMBERS										
1	4.3	758	3.1	740	.6	651	. 3	1242	.1	919
2	7.0	1010	5.0	982	.5	877	.7	1511	.4	1070
3 OR MORE	10.0	1186	7.3	1188	.4	1079	.7	1567	.5	1677
EATING DEGREES-DAYS (HDD) ND COOLING DEGREES-DAYS (CDD) ONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	5.6	1009	2.9	955	.2	907	1.2	1368	.3	1265
5,500 TO 7,000 HDD	11.5	1085	9.7	1063	.8	869	.4	1677	.3	1701
4,000 TO 5,499 HDD	4.2	968	2.8	993	.6	798	.1	2591	.4	1098
<2,000 CDD AND <4,000 HDD	-	-	-	~	-	-	-	-	-	-
>2,000 CDD AND <4,000 HDD	-	-	_	-	-	-	-	-	-	-



Table 3. (Continued)
Census Division: East North
Central

		<u>'</u>								
	ALL HOU	SEHOLDS				HOUSEHOLD	S USING:		_	
HOUSEHOLD	NUMBER OF	 AVG. EXPEND-	NATURAL MAIN HEA	GAS AS		CITY AS ATING FUEL	KEROS	OIL OR SENE AS ATING FUEL	GAS A	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD! (DOLLARS)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	HOLDS (MIL-	AVG. EXPEND- ITURES PER HOUSEHOLD	HOLDS	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	14.6	1068	11.2	1046	0.8	917	1.2	1447	0.5	1472
AREA TYPE										
URBANRURAL	10.2 4.4	1023 1172	9.2 2.1	1029 1124	.6 .3	794 1159	. 3	1300 1505	.1 .4	1028 1594
SMSA					_				_	
SMSA NON-SMSA	10.6 4.1	1068 1069	9.1 2.1	1056 1007	.8 .1	904 1050	.4 .9	1586 1390	.1	1932 1307
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	12.5	1121	9.3	1115	.7	815	1.2	1455	.4	1496
SOME, NONE, OTHER PAID BY HOUSEHOLD	2.1	764	1.9	715	.2	1360	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	11.2 3.4	1158 770	8.5 2.8	1136 774	.3 .5	1203 757	1.2 Q	1450 Q	.4 Q	1496 Q
NUMBER OF ROOMS										
1 TO 3	1.5	642	1.0	540	.3	759	. 2	1112	Q	Q
4 TO 5	6.3 6.8	918 1301	4.9 5.4	908 1262	.4 .2	795 1382	.4 .7	1305 1606	.2 .2	1110 1853
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	4.4	1105	3.5	1127	.5	763	.2	1587	.1	1179
SOME	3.6 6.6	1157 995	3.0 4.8	1077 969	.2 .1	1229 1013	. 3 . 7	1821 1258	.1 .3	1602 1512
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	4.5	755	3.2	726	0.6	730	0.3	1126 1397	0.2 .2	1122 1579
1,000 TO 1,999 2,000 OR MORE	5.6 4.5	1086 1362	4.3 3.7	1030 1348	.2 .1	1241 1360	.5 .4	1768	:1	1909
YEAR HOUSE BUILT										
1939 OR EARLIER	5.4 3.8	1143 1063	4.3 3.2	1095 1044	Q .1	Q 940	.5 .4	1596 1348	. 2 Q	1781 Q
1960 OR LATER	5.4	998	3.8	993	.7	913	.3	1363	₹.2	1203
OWN/RENT									_	
OWN	10.3 4.3	1170 824	7.9 3.3	1148 803	.2 .7	1205 846	1.1	1468 1191	.4	1539 1160
1980 FAMILY INCOME					_		_		_	
LESS THAN \$10,000 \$10,000 TO \$19,999	4.6 4.1	930 1029	3.5 3.0	913 988	.3 .4	861 978	.3 .4	1356 1349	.2 .1	1058 1407
\$20,000 TO \$34,999	4.2	1123	3.3	1095	.2	890	. 3	1529	. 1	2162
\$35,000 OR MORE	1.7	1396	1.4	1384	Q	Q	.2	1729	.1	1655
TOTAL BELOW 100 PERCENT OF POVERTY LINE TOTAL BELOW 125 PERCENT	2.0	926	1.6	928	.1	1021	.1	1206	.1	1077
OF POVERTY LINE	3.0	952	2.3	937	.2	998	. 2	1331	.1	1072



Table 3. (Continued) Census Division: East North Central

	ALL HOU	JSEHOLDS				HOUSEHOLE	S USING:			
HOUSEHOLD	NUMBER OF	AVG.		GAS AS		ICITY AS ATING FUEL	KEROS	OIL OR SENE AS ATING FUEL	GAS A	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS) 	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. I EXPEND- I ITURES I PER IHOUSEHOLD		AVG. LEXPEND- LITURES PER HOUSEHOLD	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	4.6 5.4	933 1245	3.5 4.2	94 3 1212	0.4	785 1195	0.3	1067 1750	0.1	1313 1860
60 YEARS AND OVER	4.6	994	3.5	95 0	.2	988	.4 .5	1397	.2 .2	1096
HOUSEHOLD MEMBERS										
1	2.9	773	2.3	749	.3	651	. 2	1255	.1	965
2	4.7	1059	3.6	1022	.3	1013	.5	1543	.1	1125
3 OR MORE	6.9	1200	5.3	1193	.3	1090	.5	1433	.3	1807
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	3.2	1002	1.5	964	Q	Q	.8	1278	.2	1100
5,500 TO 7,000 HDD	10.2	1080	8.7	1064	.8	861	.4	1636	.1	2058
4,000 TO 5,499 HDD	1.2	1149	1.0	1020	.1	1504	Q	Q	.1	1403
<2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-	-
>2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	_	-	-



Table 3. (Continued)
Census Division: West North
Central

	ALL HOU	SEHOLDS				HOUSEHOLI	S USING:			
HOUSEHOLD	NUMBER OF	I I I AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO	OIL OR SENE AS ATING FUEL	GAS	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS)	OF	AVG. EXPEND- ITURES PER HOUSEHOLD	HOLDS	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	HOLDS (MIL-	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	6.6	984	4.2	986	0.8	768	0.4	1609	0.6	1222
AREA TYPE										
URBAN	4.0	948	3.2	1009	.4	722	.1	1274	Q	Q
RURAL	2.6	1042	1.0	907	.4	817	.3	1733	.6	1215
SMSA										
SMSA	3.3	975	2.5	1022	.4	753	.1	1500	Q	Q
NON-SMSA	3.3	994	1.7	935	.4	784	.3	1656	. 5	1219
UTILITIES PAID BY HOUSEHOLD										
ALL PAID BY HOUSEHOLD	5.6	1021	3.8	1016	.6	777	.3	1530	.5	1230
SOME, NONE, OTHER										
PAID BY HOUSEHOLD	1.0	779	.5	738	.2	743	.1	1838	Q	Q
TYPE OF HOUSING STRUCTURE										
SINGLE FAMILY OR MOBILE HOME	5.1	1058	3.5	1034	. 3	968	. 3	1538	.6	1222
2 OR MORE UNITS	1.5	738	.7	761	.4	627	.1	1804	Q	Q
NUMBER OF ROOMS										
1 TO 3	.8	672	.4	607	.3	614	.1	1091	Q	Q
4 TO 5	2.9	826	1.9	859	. 3	730	.1	1520	.2	1040
6 OR MORE	2.8	1241	1.9	1181	.2	1155	.2	1863	. 3	1426
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	3.4	985	2.4	1020	.5	746	.1	1497	.2	1171
SOME	1.5 1.8	1106 883	1.0 .8	1001 871	.1 .2	961 765	.1 .2	1942 1454	. 2 . 2	1464 1084
MORE	1.0	003	.0	0/1	٠.	703	٠.	1454		1004
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)								10/7		0/5
LESS THAN 999	2.2 2.3	678 978	1.1 1.6	705 961	0.5 .2	600 899	0.1	1247 1408	0.2	965 1093
1,000 TO 1,999	2.3	1310	1.5	1229	.1	1386	.2	2014	.2	1577
·										
YEAR HOUSE BUILT	2.3	1029	1.6	959	.1	815	.2	1927	. 3	1389
1939 OR EARLIER	1.7	893	1.2	954	.1	687	.1	1213	Q.	9
1960 OR LATER	2.6	1004	1.4	1042	.6	767	.2	1565	.2	1093
OWN/RENT										
OWN	4.7	1078	3.2	1053	.3	986	.3	1694	.5	1262
RENT	1.9	757	1.0	768	.5	626	.1	1442	.1	812
1980 FAMILY INCOME										
LESS THAN \$10,000	1.7	764	. 9	799	.3	596	.1	1334	. 2	1107
\$10,000 TO \$19,999	1.9	890	1.1	879	.3	763	.1	1557	.1	1181
\$20,000 TO \$34,999	2.0	1060	1.5	1017	.1	810	.1	1714	.1	1174
\$35,000 OR MORE	1.0	1415	.7	1327	.1	1690	.1	1862	.1	1519
TOTAL BELOW 100 PERCENT										
OF POVERTY LINE	.7	744	. 3	829	.1	546	.1	1453	Q	Q
TOTAL BELOW 125 PERCENT		7/3		444	•	ELA	.1	1453	.1	1136
OF POVERTY LINE	1.0	741	.4	844	.2	560	.1	1453	.1	1130



Table 3. (Continued)
Census Division: West North
Central

	ALL HO	JSEHOLDS	_			HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER OF			L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO	OIL OR SENE AS ATING FUEL	GAS A	PETROLEUM AS MAIN AG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	I ITURES PER HOUSEHOLD (DOLLARS)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
ACT OF HOMOSHOLD HEAD										
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	2.3	872	1.4	920	0.4	708	0.1	1410	0.1	1164
35 TO 59 YEARS	2.6	1145	1.7	1128	.2	883	.2	1742	.3	1321
60 YEARS AND OVER	1.7	889	1.1	845	.2	776	.1	1576	.2	1123
HOUSEHOLD MEMBERS										
1	1.3	726	.8	714	. 3	651	.1	1208	.1	864
2	2.3	906	1.4	883	.3	727	.2	1415	. 3	1043
3 OR MORE	3.0	1155	2.0	1175	.2	1062	.2	1926	. 2	1535
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	2.4	1019	1.4	945	.2	895	.4	1568	.1	1554
5,500 TO 7,000 HDD	1.3	1127	1.0	1055	.1	986	.1	1950	.2	1370
4,000 TO 5,499 HDD	3.0	896	1.9	980	.5	707	Q	Q	. 3	994
<2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-	-
>2,000 CDD AND <4,000 HDD	-	-		-	-	-	-	-	-	-



Table 3. (Continued) Census Region: South

	ALL HOL	JSEHOLDS (HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER OF	AVG.		L GAS AS ATING FUEL		CCITY AS	FUEL KERO	OIL OR SENE AS ATING FUEL	GAS .	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES J PER IHOUSEHOLD I(DOLLARS) I		AVG. EXPEND- ITURES PER HOUSEHOLD	HOLDS	AVG. EXPEND- ITURES PER HOUSEHOLD	HOLDS (MIL-	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	27.7	922	13.0	932	7.7	910	2.2	1228	2.1	956
AREA TYPE URBANRURAL	16.3 11.4	927 915	10.1 2.9	932 933	4.4 3.3	882 948	.9 1.3	1237 1221	.5 1.7	826 993
SMSA SMSA NON-SMSA	15.8 11.9	946 891	8.3 4.6	941 917	5.3 2.4	913 904	1.0	1224 1231	.8 1.4	966 951
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLDSOME, NONE, OTHER	25.2	935	11.4	959	7.1	915	2.1	1234	2.1	964
PAID BY HOUSEHOLD TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	2.5 22.6 5.1	791 961 751	1.6 11.0 1.9	746 973 702	.6 4.8 2.9	854 1002 757	2.0 .2	1131 1244 1077	.1 2.1 Q	723 956 Q
NUMBER OF ROOMS 1 TO 3 4 TO 5	2.9 13.6 11.2	587 834 1116	1.0 6.1 5.9	558 815 1115	1.3 4.0 2.5	594 835 1197	.2 1.1 .9	929 1103 1441	.2 1.3 .6	515 930 1164
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED ALL	16.1 5.1 6.5	1008 931 701	7.7 2.6 2.6	1040 893 652	6.0 .9 .8	953 789 722	.7 .7 .8	1291 1320 1091	.9 .6 .7	1039 958 856
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	10.1 13.4 4.2	709 970 1281	4.2 6.6 2.2	701 951 1317	2.9 3.8 1.0	692 962 1361	1.0 .9 .4	977 1345 1631	1.0 1.1 .1	782 1097 1098
YEAR HOUSE BUILT 1939 OR EARLIER	4.8 7.0 15.8	848 880 964	2.6 4.3 6.1	831 899 998	.4 1.0 6.3	760 847 930	.4 .8 1.0	1385 1158 1214	.6 .3 1.3	981 890 960
OWN/RENT OWNRENT	19.0 8.7	986 784	9.2 3.8	1006 752	4.7 3.1	990 789	1.6	1274 1117	1.6 .5	958 952
1980 FAMILY INCOME LESS THAN \$10,000	8.8 7.7 7.3 3.9	738 873 1039 1223	3.9 3.4 3.6 2.1	704 887 1049 1237	2.2 2.2 2.0 1.3	706 830 1026 1223	.9 .6 .5	1071 1194 1478 1490	.9 .5 .6	885 930 1027 1272
TOTAL BELOW 100 PERCENT OF POVERTY LINE TOTAL BELOW 125 PERCENT OF POVERTY LINE	4.7 6.3	735 742	2.0	744 729	1.1	736 729	.4	967 1015	.6 .7	836 854



Table 3. (Continued) Census Region: South

	ALL HOL	JSEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER OF	I I I I I I I I I I I I I I I I I I I		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO	OIL OR SENE AS ATING FUEL	GAS	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
AGE OF HOMESHALD HELD										
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	8.8	876	4.0	898	3.2	848	0.4	1130	0.6	962
35 TO 59 YEARS	10.8	1025	5.3	1028	2.5	1087	.9	1284	.7	1070
60 YEARS AND OVER	8.1	835	3.7	831	2.0	787	.9	1214	.8	854
HOUSEHOLD MEMBERS										
1	5.0	660	2.3	652	1.4	604	.5	1066	.4	646
2	9.6	881	4.2	874	3.0	867	.9	1178	. 9	951
3 OR MORE	13.1	1053	6.5	1072	3.3	1082	.8	1381	.9	1100
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	-	-	-	-	-	-	-	-	-	-
5,500 TO 7,000 HDD	-	-	•	-	-	-	-	-	-	-
4,000 TO 5,499 HDD	5.9	984	2.7	1029	1.0	951	.9	1386	.1	1274
<2,000 CDD AND <4,000 HDD	10.5	881	4.9	861	2.8	887	.8	1168	.8	967
>2,000 CDD AND <4,000 HDD	11.3	929	5.4	948	3.9	916	.4	999	1.2	910



Table 3. (Continued)
Census Division: South
Atlantic

	ALL HOU	SEHOLDS				HOUSEHOL	S USING:			
HOUSEHOLD	NUMBER OF	I I I AVG. I EXPEND-		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO:		GAS A	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	I ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	HOUSE- HOLDS MIL-	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	HOUSE- HOLDS (MIL-		HOUSE- HOLDS (MIL-	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	14.1	939	4.8	962	4.4	896	2.0	1242	1.2	984
AREA TYPE										
URBAN	7.8 6.3	958 916	3.7 1.1	964 955	2.6 1.9	896 896	.9 1.1	1239 1246	.4 .8	796 1069
SMSA										
SMSA	8.2	974	3.0	999	3.4	899	1.0	1218	.5	949
NON-SMSA	6.0	891	1.7	897	1.1	884	1.0	1266	.7	1011
UTILITIES PAID BY HOUSEHOLD										
ALL PAID BY HOUSEHOLD	12.6	956	3.6	1026	4.3	901	1.8	1250	1.2	986
SOME, NONE, OTHER PAID BY HOUSEHOLD	1.5	798	1.1	760	.2	772	.1	1131	Q	Q
TYPE OF HOUSING STRUCTURE										
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	10.8 3.4	997 754	3.4 1.4	1062 712	2.7 1.7	995 743	1.8 .2	1263 1077	1.2 Q	984 Q
NUMBER OF ROOMS										
1 70 3	1.6	603	.5	566	.7	616	.2	949	.1	385
4 TO 5	6.8	850	1.9	843	2.4	808	1.0	1104	.8	945
6 OR MORE	5.8	1134	2.4	1135	1.3	1197	.8	1468	.3	1295
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	7.3	1020	2.6	1077	3.4	927	.6	1289	.4	1129
SOME	2.6	1029 746	1.0 1.2	969 709	.5	850 755	.6 .7	1361 1096	.3	979 863
NONE	4.2	746	1.2	709	.6	755	.,	1070	. 2	803
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	5.4 6.6	72 5 992	1.6 2.1	732 957	1.7 2.4	687 943	0.9 .8	980 1367	0.6 .6	75 3 1192
2,000 OR MORE	2.2	1300	1.0	1330	.4	1437	.3	1645	.1	1105
YEAR HOUSE BUILT 1939 OR EARLIER	2.6	944	1.1	944	.3	760	.4	1398	. 3	1091
1940 TO 1959	3.1	885	1.2	950	.6	806	,6	1157	.1	941
1960 OR LATER	8.5	957	2.5	976	3.6	919	.9	1232	.8	954
OWN/RENT										
OWN	9.0	1013	2.9	1079	2.7	966	1.4	1295	. 9	1002
RENT	5.1	807	1.9	783	1.7	786	.6	1126	. 3	924
1980 FAMILY INCOME										
LESS THAN \$10,000	4.4	765	1.2	688	1.3	699	.8	1083	.5	955
\$10,000 TO \$19,999	4.0	884	1.1	893	1.4	856	.6	1208	.3	890
\$20,000 TO \$34,999	3.8	1061	1.4	1098	1.2	994	.4	1502	.4	1072
\$35,000 OR MORE	1.9	1206	1.1	1170	.5	1271	. 2	1484	.1	1203
TOTAL BELOW 100 PERCENT										
OF POVERTY LINE	2.4	751	.7	770	.6	755	. 3	968	. 3	862
TOTAL BELOW 125 PERCENT			_		_		_			225
OF POVERTY LINE	3.1	775	.9	764	.8	764	.5	1014	.4	905



Table 3. (Continued) Census Division: South Atlantic

	ALL HOU	ISEHOLDS				HOUSEHOLE	S USING:			
HOUSEHOLD	NUMBER OF	AVG.		. GAS AS ATING FUEL		CITY AS	KERO:	OIL OR SENE AS ATING FUEL	GAS A) PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL-* LIONS)	PER HOUSEHOLD	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	4.4	896	1.5	885	1.8	898	0.4	1147	0.3	960
35 TO 59 YEARS	5.5	1033	2.0	1075	1.2	1047	.8	1294	.4	1096
60 YEARS AND OVER	4.3	863	1.2	868	1.4	759	.8	1235	.4	889
HOUSEHOLD MEMBERS										
1	2.6	683	.9	656	.8	567	.5	1092	.2	702
2	5.0	896	1.5	878	1.8	860	.8	1184	.5	980
3 OR MORE	6.5	1075	2.4	1130	1.9	1065	.7	1399	.5	1107
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	-	-	-	-	-	-	-	-	-	-
5,500 TO 7,000 HDD	-	-	-	-	-	-	-	-	-	-
4,000 TO 5,499 HDD	4.5	1009	2.0	1061	.6	998	.8	1432	.1	1448
<2,000 CDD AND <4,000 HDD	5.6	911	2.3	880	1.4	902	.7	1182	.5	958
>2,000 CDD AND <4,000 HDD	4.1	901	.5	932	2.5	869	.4	999	.6	927



Table 3. (Continued) Census Division: East South Central

İ	ALL HOU	SEHOLDS I				ноизеноц	S USING:			
HOUSEHOLD	NUMBER OF	AVG.		GAS AS		CITY AS	KERO:		GAS A	PETROLEUM AS MAIN AG FUEL
CHARACTERISTICS	(MIL-	ITURES PER HOUSEHOLD (DOLLARS) 	HOUSE- HOLDS (MIL-	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	HOUSE- HOLDS (MIL-	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	HOUSE- HOLDS MIL-	EXPEND-		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	5.6	884	2.5	926	1.8	880	0.2	1103	0.3	960
AREA TYPE URBAN	2.7 2.9	868 898	1.8	924 931	.8 1.0	777 957	Q .2	Q 1092	Q .3	Q 971
SMSA SMSANON-SMSA	2.3 3.3	909 866	1.4	946 900	.7 1.1	832 907	Q .2	Q 1043	.1 .3	1011 947
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NONE, OTHER PAID BY HOUSEHOLD	5.4	892 658	2.3	943 674	1.8 Q	882 Q	.2 Q	1103 Q	. 3 Q	954 Q
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	5.0	917 625	2.3	956 593	1.4	956 642	. 2 Q	1103 Q	. 3 P	960 Q
NUMBER OF ROOMS 1 TO 3	.5 2.6 2.5	559 778 1054	.1 1.1 1.3	483 803 1066	.3 .8 .7	550 771 1127	Q .1 .1	Q 1089 1215	.1 .2 .1	823 939 1095
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED ALL	3.7 1.0 .9	958 813 655	1.7 .5 .3	989 849 691	1.4 .3 .1	920 798 657	.1 .1 .1	1303 893 1041	.2 .1 .1	1061 810 877
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	1.8 2.7 1.1	657 901 1196	0.6 1.3 .5	660 924 1261	0.6 .8 .3	641 908 1244	0.1 .1 Q	933 1130 Q	0.2 .2 Q	849 1035 Q
YEAR HOUSE BUILT 1939 OR EARLIER 1940 TO 1959	.8 1.6 3.2	705 904 917	.4 1.0 1.1	771 931 984	.1 .3 1.4	844 829 892	Q .1 .1	Q 1159 1035	.1 .1 .2	772 1164 957
OWN/RENT OWN	4.4 1.2	944 665	2.0	986 697	1.3	968 668	. 2 Q	1129 Q	Q.3	967 Q
1980 FAMILY INCOME LESS THAN \$10,000 \$10,000 TO \$19,999 \$20,000 TO \$34,999 \$35,000 OR MORE	1.9 1.6 1.3	724 854 963 1180	.8 .8 .5	771 869 1011 1235	.6 .5 .4 .3	709 831 927 1201	.1 .1 Q Q	978 1072 Q Q	.2 .1 .1 Q	825 1218 1051 Q
TOTAL BELOW 100 PERCENT OF POVERTY LINE	1.0	691 691	.4	751 733	.3	669 636	Q .1	Q 1016	.1	871 839



Table 3. (Continued)
Census Division: East South
Central

	ALL HO	JSEHOLDS I				HOUSEHOLD	S USING:	_		
HOUSEHOLD	NUMBER OF			L GAS AS ATING FUEL		CITY AS	KERO	OIL OR SENE AS ATING FUEL	GAS A	PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLDI (DOLLARS)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- I ITURES PER HOUSEHOLD ((DOLLARS)
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	1.6	791	0.7	860	0.6	754	Q	Q	0.1	916
35 TO 59 YEARS	2.5	987	1.1	1018	.7	1015	0.1	1217	.1 .2	1067
60 TEARS AND OVER	1.6	816	.7	852	.4	822	.1	1014	. 2	890
HOUSEHOLD MEMBERS										
1	1.0	632	.5	679	. 3	605	Q	Q	.1	614
2	1.9	856	.8	917	.6	836	.1	1130	.1	864
3 OR MORE	2.8	989	1.2	1023	.8	1028	.1	1254	.1	1190
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	-	-	•	-	-	-		-	-	-
5,500 TO 7,000 HDD	-	-	-	-	-	-	-	-	-	-
4,000 TO 5,499 HDD	1.5	906	.7	939	.4	886	.1	1137	Q	Q
<2,000 CDD AND <4,000 HDD	3.2	882	1.2	931	1.2	887	.1	1029	. 2	992
>2,000 CDD AND <4,000 HDD	1.0	854	.5	897	.2	831	Q	Q	.1	933



Table 3. (Continued)
Census Division: West South
Central

AREA TYPE URBAN	F SE- ! LDS ! IL- !	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS) 920 914 937	NUMBER OF HOUSE- HOLDS (MIL-	GAS AS TING FUEL AVG. EXPEND- I TURES I PER HOUSEHOLD (DOLLARS) 910 909 912	NUMBER OF HOUSE- HOLDS (MIL-	CCITY AS ITING FUEL AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS) 992 926 1197	NUMBER OF HOUSE- HOLDS (MIL-	SENE AS ATING FUEL AVG. EXPEND-	GAS A HEATIN HUMBER OF HOUSE- HOLDS (MIL-	PETROLEUM S MAIN G FUEL AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS) 898
TOTAL HOUSEHOLDS	EDS	920 914 937 919 922	OF HOUSE- HOLDS (MIL- LIONS) 5.7 4.6 1.1	EXPEND- I TURES I PER HOUSEHOLD I(DOLLARS) 910 909 912	OF HOUSE- HOLDS (MIL- LIONS)	EXPEND- I ITURES I PER IHOUSEHOLD (DOLLARS)	OF HOUSE- HOLDS (MIL- LIONS)	EXPEND- I TTURES I PER IHOUSEHOLD I(DOLLARS)	OF HOUSE- HOLDS (MIL- LIONS)	EXPEND- I ITURES I PER IHOUSEHOLD I(DOLLARS)
AREA TYPE URBAN	5.8 2.1 5.3 2.6	914 937 919 922	4.6 1.1 3.9	909 912	1.1	926	q	Q	.1	1009
URBAN. 5 RURAL 2 SMSA SMSA. 5 NON-SMSA. 5 UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD. 7 SONE, NONE, OTHER	2.1 5.3 2.6	937 919 922	3.9	912						
URBAN. 5 RURAL 2 SMSA SMSA. 5 NON-SMSA. 5 UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD. 7 SONE, NONE, OTHER	2.1 5.3 2.6	937 919 922	3.9	912						
SMSA	2.6	922		201						
NON-SMSA	2.6	922		202						
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD			1.8		1.3	991	Q	ā	.2	1001
ALL PAID BY HOUSEHOLD	7.2			946	.2	998	Q	Q	.4	855
SOME, NONE, OTHER	7.2									
		932	5.4	920	1.0	1028	Q	Q	.5	921
	.8	814	.3	732	.4	900	Q	Q	.1	663
TYPE OF HOUSING STRUCTURE										
SINGLE FAMILY OR MOBILE HOME 6	6.9	937	5.4	923	.8	1108	Q	Q	.6	898
2 OR MORE UNITS	1.1	814	.4	725	.7	864	Q	Q	Q	Q
NUMBER OF ROOMS										
1 TO 3	.8	573	.4	566	.3	582	Q	Q	Q	Q
	4.3	841	3.1	801	.8	982	Q	Q	.4	896
6 OR MORE 2	2.9	1134	2.3	1123	.4	1327	Q	Q	.2	961
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
	5.1	1029	3.5	1037	1.3	1055	Q	Q	.3	876
	1.5 1.4	846 594	1.2 1.1	845 579	.1 .1	531 516	Q Q	Q Q	.2 .1	978 814
		3,4		5.,	••	210	-	•	••	
MEASURED HEATED SPACE OF RESI-										
DENCE (IN SQUARE FEET) LESS THAN 999	3.0	710	2.0	690	0.7	751	Q	a	0.2	803
	4.1	979	3.1	959	.6	1122	Q	Q	. 3	961
2,000 OR MORE	.9	1339	.7	1342	. 2	1398	Q	Q	Q	Q
YEAR HOUSE BUILT										
	1.5	757	1.1	744	.1	659	Q	Q	.2	908
1940 TO 1959 2	2.4	857	2.1	854	.1	1087	Q	Q	.1	685
1960 OR LATER	4.1	1015	2.6	1026	1.3	1006	Q	Q	.3	981
OWN/RENT										
OWN	5.6	973	4.3	967	.7	1126	Q	Q	.4	851
RENT	2.4	797	1.4	730	.8	877	Q	Q	.2	1004
1980 FAMILY INCOME										
LESS THAN \$10,000	2.5	702	1.9	685	. 3	734	Q	Q	.3	806
\$10,000 TO \$19,999	2.1	865	1.6	892	.3	713	Q Q	Q Q	.2 .1	922 875
	2.2 1.1	1044 1286	1.6 .6	1019 1350	.4 .4	1202 1180	Q Q	Q Q	.1	1337
TUDIOU OR HORELINITION		1200		-554	• •		-	•		-
TOTAL BELOW 100 PERCENT		,			_		_	_		750
	1.4	739	1.0	722	.2	776	Q	Q	.2	759
TOTAL BELOW 125 PERCENT OF POVERTY LINE	1.9	723	1.4	704	.2	761	Q	Q	.2	771



Table 3. (Continued)
Census Division: West South
Central

	ALL HO	JSEHOLDS				HOUSEHOLD	s USING:			
HOUSEHOLD	NUMBER OF	AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO	OIL OR SENE AS ATING FUEL	GAS	PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	2.8	894	1.8	923	0.7	798	Q	Q	0.2	977
35 TO 59 YEARS	2.9	1042	2,2	989	. 5	1277	Q	q	.2	998
60 YEARS AND OVER	2.2	796	1.7	797	. 2	915	Q	Q	.2	765
HOUSEHOLD MEMBERS										
1	1.5	637	1.0	635	.3	688	Q	Q	.1	570
2	2.6	872	1.8	851	.5	931	Q	Q	.2	930
3 OR MORE	3.8	1063	2.9	1044	.6	1205	Q	Q	.2	1033
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	-	-	-	-	-	-	-	-	-	-
5,500 TO 7,000 HDD	-	-	-	-	-	-	-	-	-	-
4,000 TO 5,499 HDD	-	-	-	-	-	-	-	-	-	-
<2,000 CDD AND <4,000 HDD	1.7	783	1.4	766	. 2	804	Q	Q	.1	967
>2,000 CDD AND <4,000 HDD	6.2	958	4.4	956	1.2	1027	Q	Q	.5	888



Table 3. (Continued) Census Region: West

		<u> </u>								
	ALL HOL	SEHOLDS				HOUSEHOLE	S USING:			
HOUSEHOLD	NUMBER OF	AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO:	OIL OR SENE AS ATING FUEL	GAS .	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS) 		AVG. LEXPEND- LITURES PER HOUSEHOLD LOOLLARS		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	HOLDS	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	16.3	721	10.8	726	3.4	636	0.4	941	0.4	1251
AREA TYPE URBANRURAL	13.0 3.3	695 820	9.6 1.2	711 847	2.5 .8	624 669	.3	930 972	.1	847 1323
SMSANON-SMSA	12.8 3.5	710 759	9.5 1.2	722 760	2.3 1.0	621 668	.3	94 9 916	.1	1161 1294
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NONE, OTHER	14.1	745	9.2	769	3.0	620	.4	941	.3	1211
PAID BY HOUSEHOLD TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	2.2 12.3 4.0	565 804 463	8.3 2.4	476 810 440	2.0 1.4	746 732 497	Q .4 Q	Q 941 Q	.1 .4	1393 1251 Q
NUMBER OF ROOMS 1 TO 3	2.2 7.3	432 624	1.2 4.5	405 612	.7 1.8	476 605	Q .2	Q 898	.1	675 773
6 OR MORE NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED	6.9	914	5.1	899	.8	837	.2	986	.2	1735
ALLSOMENONE	3.6 1.9 10.7	911 640 671	2.2 1.4 7.1	905 654 686	1.1 .3 2.0	830 555 539	Q Q .4	Q Q 959	.2 .1 .2	1534 750 1110
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	6.0	524	3.4	505	1.7	489	0.1	897	0.1	786
1,000 TO 1,999	7.8 2.5	754 1083	5.5 1.8	732 1131	1.4	760 846	.1	915 1012	.2 .1	1447 1495
YEAR HOUSE BUILT 1939 OR EARLIER 1940 TO 1959 1960 OR LATER	3.6 4.5 8.2	660 737 738	2.6 3.4 4.7	671 714 765	.4 .4 2.6	558 680 640	.1 .2 .1	876 948 1034	.1 .1 .2	1027 1348 1286
OMN/RENT OWN	10.0 6.2	822 558	6.9 3.9	835 534	1.6	702 575	.3	939 944	.4 .1	1340 727
1980 FAMILY INCOME LESS THAN \$10,000 \$10,000 TO \$19,999 \$20,000 TO \$34,999	4.0 4.1 5.0	613 646 747	2.5 2.6 3.3	611 633 749	1.0 .9 1.0	559 572 705	.1 .2 .1	936 839 932	.1 .1 .2	1251 1197 972
\$35,000 OR MORE TOTAL BELOW 100 PERCENT OF POVERTY LINE	1.9	909 614	1.2	915 622	.5	747 589	.1 Q	125 0 Q	.1 Q	1784 Q
TOTAL BELOW 125 PERCENT OF POVERTY LINE	2.9	622	1.8	613	.7	595	.1	938	.1	1304



Table 3. (Continued) Census Region: West

	ALL HOL	JSEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER OF	AVG.		L GAS AS ATING FUEL		CCITY AS ATTING FUEL (KEROS	OIL OR SENE AS ATING FUEL	GAS A	PETROLEUM S MAIN IG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	6.5	615	4.1	610	1.7	605	0.1	909	0.1	747
35 TO 59 YEARS	6.4	865	4.5	873	1.2	736	.1	970	. 2	1615
60 YEARS AND OVER	3.4	649	2.2	646	.6	520	.2	931	.1	997
HOUSEHOLD MEMBERS										
1	2.6	498	1.7	482	.7	461	.1	903	.1	731
2	5.7	655	3.6	663	1.4	598	. 2	926	.1	1106
3 OR MORE	8.0	840	5.4	844	1.3	758	.2	970	.2	1498
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD	1.3	824	1.0	800	.1	1002	Q	Q	q	q
5,500 TO 7,000 HDD	1.7	751	.8	807	.5	687	.1	930	.1	1029
4,000 TO 5,499 HDD	3.3	665	1.1	786	1.4	545	. 3	934	Q	Q
<2,000 CDD AND <4,000 HDD	9.1	704	7.3	691	1.1	622	Q	Q	. 3	1387
>2,000 CDD AND <4,000 HDD	.9	875	.4	825	.2	1015	Q	Q	Q	Q



Table 3. (Continued)
Census Division: Mountain

	ALL HOU	SEHOLDS				HOUSEHOLE	S USING:			
HOUSEHOLD	NUMBER OF	AVG.		. GAS AS		CITY AS	KERO:		I GAS A	PETROLEUM AS MAIN AG FUEL
CHARACTERISTICS	HOLDS	ITURES PER HOUSEHOLD (DOLLARS) 		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	HOUSE- HOLDS MIL-	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	HOUSE- HOLDS (MIL-			AVG. SEXPEND- SITURES PER SHOUSEHOLD COLLARS
TOTAL HOUSEHOLDS	4.0	791	2.8	778	0.6	876	0.1	941	0.1	1084
AREA TYPE										
URBAN	2.8 1.1	795 779	2.3 .5	775 790	.4 .3	967 738	Q Q	Q Q	Q .1	Q 1084
SMSA										
SMSA	2.4	796	2.1	773	. 3	1009	Q	Q	Q	Q
NON-SMSA	1.6	783	.8	791	.4	790	Q	Q	.1	1105
UTILITIES PAID BY HOUSEHOLD										
ALL PAID BY HOUSEHOLD	3.3	802	2.3	814	.6	847	.1	941	.1	920
SOME, NONE, OTHER PAID BY HOUSEHOLD	.6	731	.5	621	.1	1077	Q	Q	Q	Q
							•			
TYPE OF HOUSING STRUCTURE		•••			_			043	-	1004
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	3.3 .7	824 622	2.3 .5	821 587	.5 .1	908 754	.1 q	941 Q	.1 q	1084 Q
NUMBER OF ROOMS										
1 TO 3	.5	587	.4	548	.1	1010	Q	Q	Q	Q
4 TO 5	1.9	719	1.3	719	.4	740	à	Q	.1	764
6 OR MORE	1.5	945	1.1	933	.2	1053	Q	Q	Q	Q
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	. 9	973	.5	912	.3	1126	Q	Q	Q	Q
SOME	.4 2.6	678 747	.3 2.0	745 748	.1 .2	557 670	Q Q	Q Q	Q .1	Q 1162
MEASURED HEATED SPACE OF RESI-										
DENCE (IN SQUARE FEET)				(17		440	Q	Q	0.1	775
LESS THAN 999	1.5 1.7	623 830	1.1 1.2	617 816	0.2 .3	669 949	Q .	Ğ	Q	á'
2,000 OR MORE	.7	1039	.5	1022	.1	1157	Q	Q	I.	1317
YEAR HOUSE BUILT										
1939 OR EARLIER	.7	745	.5	714	Q	Q	Q	Q	.1	1297
1940 TO 1959	1.0	778 808	.8 1.6	782 796	.1 .5	691 884	Q Q	Q Q	q .1	Q 916
1960 OR LATER	2.3	000	1.0	7 70		004	•	7	••	
OWN/RENT				***		971	Q	Q	.1	1247
OWN	2.7 1.2	839 683	1.9 .9	846 642	.4 .2	871 887	q	Q	Q.T	Q
RENT	1.6	003	• 7	076	•-		•	,	•	•
1980 FAMILY INCOME			_				_	•	Q	Q
LESS THAN \$10,000	1.2 1.3	707 729	.9 .9	680 732	.2 .2	825 743	Q Q	Q Q	Q Q	Q
\$10,000 TO \$19,999 \$20,000 TO \$34,999	1.3	729 866	.7	732 846	.2	956	Q Q	Q	q	Q
\$35,000 OR MORE	.4	1017	.3	1043	.1	1199	Q	q	Q	Q
TOTAL BELOW 100 PERCENT OF POVERTY LINE	.5	748	.4	724	.1	874	Q	Q	Q	Q
TOTAL BELOW 125 PERCENT	.,	740	• •		••					•
OF POVERTY LINE	.8	745	.5	731	.1	900	Q	Q	Q	Q



Table 3. (Continued)
Census Division: Mountain

	ALL HOL	SEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD				. GAS AS TING FUEL		ICITY AS ATING FUEL	KEROS	OIL OR SENE AS ATING FUEL	LIQUEFIED PETROLEUM GAS AS MAIN HEATING FUEL	
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	1.8	698	1.2	701	0.3	730	Q	Q	0.1	758
35 TO 59 YEARS	1.4	914	1.0	894	.2	1071	Q	Q.	Q	Q
60 YEARS AND OVER	.7	778	.6	740	.1	865	Q.	Q	Q	Q
HOUSEHOLD MEMBERS										
1	.7	599	.5	557	.1	788	Q	Q	Q	Q
2	1.3	740	1.0	747	.2	72 0	Q	Q	Q	Q
3 OR MORE	1.9	894	1.3	894	.3	986	Q	Q	.1	1180
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	1.2	832	.9	807	.1	1131	Q	Q	Q	Q
5,500 TO 7,000 HDD	1.4	771	.8	806	.3	717	0.1	941	.1	1061
4,000 TO 5,499 HDD	. 3	776	. 3	766	.1	826	Q	Q	Q	Q
<2,000 CDD AND <4,000 HDD	.4	599	.4	603	Q	Q	Q	Q	Q	Q
>2,000 CDD AND <4,000 HDD	.6	902	.4	841	.2	1055	Q	Q	Q	Q



Table 3. (Continued) Census Division: Pacific

	ALL HOU	SEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER OF	AVG.				ICITY AS ATING FUEL	KEROS	OIL OR SENE AS ATING FUEL	GAS A	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS) 	OF	EXPEND-	HOUSE- HOLDS (MIL-	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	HOLDS (MIL-	EXPEND-	HOUSE- HOLDS (MIL-	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	12.3	698	7.9	708	2.8	580	0.4	941	0.3	1334
AREA TYPE										
URBANRURAL	10.2 2.2	668 842	7.3 .6	691 896	2.2	564 63 9	.3 .1	935 958	.1	847 1477
SMSA										
SMSA	10.4 1.9	691 739	7.5 .5	707 708	2.1 .7	574 597	.3 .1	941 936	.1 .2	1186 1458
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	10.7	728	6.9	754	2.4	568	. 3	941	.2	1345
SOME, NONE, OTHER PAID BY HOUSEHOLD	1.6	498	1.0	404	.3	666	Q	Q	.1	1293
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME	9.0	797	6.0	805	1.5	672	.3	941	. 3	1334
2 OR MORE UNITS	3.3	431	1.9	401	1.3	471	Q	Q	Q	Q
NUMBER OF ROOMS										
1 TO 3	1.7	386	.8	332	.7	430	Q	Q	Q	Q
4 TO 5	5.3 5.3	590 904	3.1 4.0	567 890	1.5 .6	573 757	.1 .2	891 986	.1 .2	787 169 3
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	2.7	891	1.7	903	.8	716	Q	Q	2	1606
NONE	1.5 8.1	629 647	1.2 5.1	634 661	.2 1.7	554 521	Q .3	. Q 945	Q .1	Q 1009
MEASURED HEATED SPACE OF RESI-										
DENCE (IN SQUARE FEET)	4.5	491	2.3	453	1.4	459	0.1	903	0.1	797
LESS THAN 999	6.1	733	4.3	708	1.1	707	.2	928	.2	1438
2,000 OR MORE	1.8	1102	1.3	1178	. 3	728	.1	982	Q	Q
YEAR HOUSE BUILT					_		_		_	_
1939 OR EARLIER	3.0 3.5	641 726	2.1 2.6	662 694	.4 .3	533 643	.1 .2	896 957	Q .1	Q 1327
1960 OR LATER	5.8	710	3.2	750	2.1	578	.1	974	.1	1526
OWN/RENT										_
ONN	7.3 5.0	815 527	5.0 3.0	831 500	1.2 1.6	639 535	.3	946 926	. 3 Q	1374 Q
1980 FAMILY INCOME					_		_	03.0	•	
LESS THAN \$10,000 \$10,000 TO \$19,999	2.8 2.8	571 609	1.6 1.7	572 579	.8 .7	494 521	.1 .1	918 842	Q .1	Q 1354
\$20,000 TO \$34,999	4.0	716	2.6	723	.8	651	.1	927	.1	803
\$35,000 OR MORE	2.8	891	2.1	896	.5	680	.1	1250	.1	1779
TOTAL BELOW 100 PERCENT OF POVERTY LINE	1.4	562	.8	575	.4	507	Q	Q	Q	Q
TOTAL BELOW 125 PERCENT OF POVERTY LINE	2.1	578	1.2	559	.6	531	.1	944	Q	Q



Table 3. (Continued) Census Division: Pacific

	ALL HO	JSEHOLDS				HOUSEHOLE	S USING:			
HOUSEHOLD	NUMBER OF	AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO	OIL OR SENE AS ATING FUEL	GAS A	D PETROLEUM AS MAIN AG FUEL
CHARACTERISTICS SE OF HOUSEHOLD HEAD	HOLDS PER (MIL- HOUSEHO	ITURES PER HOUSEHOLD (DOLLARS)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
ACE OF MOUSEHOLD HEAD										
UNDER 35 YEARS	4.7	583	2.8	570	1.3	575	0.1	871	Q	Q
35 TO 59 YEARS	5.0	851	3.4	867	.9	646	.1	963	0.2	1711
60 YEARS AND OVER	2.6	612	1.6	613	.5	470	.2	950	.1	774
HOUSEHOLD MEMBERS										
1	1.9	461	1.2	448	.5	400	.1	975	.1	757
2	4.4	629	2.6	631	1.2	580	.1	910	.1	1088
3 OR MORE	6.1	823	4.2	829	1.0	679	.2	955	.1	1682
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	.1	760	.1	722	Q	Q	Q	Q	Q	Q
5,500 TO 7,000 HDD	.3	649	Q	Q	.2	647	Q	Q	Q	Q
4,000 TO 5,499 HDD	2.9	653	.9	792	1.4	534	.3	934	Q	Q
<2,000 CDD AND <4,000 HDD	8.6	709	6.9	697	1.1	624	Q	Q	. 3	1406
>2,000 CDD AND <4,000 HDD	. 3	826	Q	Q	Q	Q	Q	Q	Q	Q

[&]quot;-" = DATA NOT APPLICABLE.

[&]quot;Q" = DATA MITHHELD BECAUSE OF A LARGE VARIANCE.
NOTE: BECAUSE OF ROUNDING, DATA MAY NOT SUM TO TOTALS. PERCENTAGES ARE CALCULATED ON UNROUNDED NUMBERS. SEE GLOSSARY FOR DEFINITION OF TERMS USED IN THIS REPORT.

NOTE: COLUMN TOTALS WILL NOT SUM TO TOTAL NUMBER OF HOUSEHOLDS BECAUSE 6.8 MILLION HOUSEHOLDS WITH NO MAIN HEATING FUEL OR WITH OTHER MAIN HEATING FUEL, SUCH AS WOOD, WERE NOT INCLUDED.

SOURCE: ENERGY INFORMATION ADMINISTRATION, OFFICE OF ENERGY MARKETS AND END USE, ENERGY END USE DIVISION, FORM EIA-457, THE 1981 RESIDENTIAL ENERGY CONSUMPTION SURVEY.



Table 4. U.S. Average Residential Natural Gas Consumption and Expenditures—April 1981 Through March 1982, United States

Average Residential Natural Gas Consumption and Expenditures

		ANY	NATURAL GAS	USED		I NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. LEXPEND- LITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE COLLARS PER MILLION BTU	 NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. LEXPEND- LITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	53.4	99	101	459	4.55	46.2	110	112	499
AREA TYPE									
URBANRURAL	45.0 8.4	97 109	99 112	456 476	4.61 4.26	38.3 8.0	109 112	111 115	502 487
	0.4	107		470	4.20	0.0			
SMSA	45 -	•		4=4		7- 0			
SMSA	41.7 11.7	96 108	98 110	454 476	4.61 4.33	35.2 11.1	109 111	111 114	502 490
NATURAL GAS PAID BY HOUSEHOLD									
YES	43.6	106	108	482	4.47	39.0	114	117	514
NO	9.9	68	70	356	5.09	7.3	84	86	419
TYPE OF HOUSING STRUCTURE									
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	38.3 15.2	112 66	114 67	501 351	4.39 5.21	35.5 10.7	117 84	120 86	522 423
	23.6	90	0,	331	3.61	20.7	-	00	763
NUMBER OF ROOMS	, ,	-4		.70					705
1 TO 3	6.1 23.1	54 85	55 86	278 395	5.06 4.58	4.3 19.9	67 94	68 96	325 428
6 OR MORE	24.2	124	126	565	4.47	22.0	132	135	598
NUMBER OF ROOMS THAT CAN BE									
AIR CONDITIONED	10.0	99	101	448	4.42	17.2	106	108	473
SOME	18.9 12.4	105	107	506	4.72	10.5	120	122	563
NONE	22.1	95	97	442	4.55	18.5	108	110	487
MEASURED HEATED SPACE OF RESI-									
DENCE (IN SQUARE FEET) LESS THAN 999	17.7	68	69	329	4.75	13.9	80	81	371
1,000 TO 1,999	23.5	96	98	445	4.53	21.1	103	105	472
2,000 OR MORE	12.2	149	152	674	4.42	11.1	159	162	712
YEAR HOUSE BUILT					4 70	14.0	107	130	592
1939 OR EARLIER	17.8 15.0	107 96	110 98	515 428	4.70 4.37	14.2 13.3	127 105	107	460
1960 OR LATER	20.6	94	96	432	4.53	18.6	99	101	457
OWH/RENT									
OWN	34.7	114	116	515	4.44	31.9	120	123	540
RENT	18.7	71	73	354	4.86	14.3	86	88	408
1980 FAMILY INCOME									
LESS THAN \$10,000	14.8	86	88	404 437	4.59 4.60	12.2 12.2	99 105	101 107	450 480
\$10,000 TO \$19,999 \$20,000 TO \$34,999	14.3 15.8	93 103	95 105	473	4.52	14.1	111	114	506
\$35,000 OR MORE	8.5	124	126	565	4.47	7.8	131	134	594
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE	6.9	90	91	417	4.55	5.7	102	104	465
TOTAL BELOW 125 PERCENT OF POVERTY LINE	10.2	88	89	411	4.59	8.3	100	102	459
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	17.8	89	91	416	4.56	15.4	98	100	448 550
35 TO 59 YEARS	21.5 14.1	109 96	111 98	504 444	4.54 4.54	18.6 12.2	121 107	124 110	550 487
	44.7	70	,0	****	,				
HOUSEHOLD MEMBERS	10.2	75	76	356	4.67	8.5	85	87	395
2	10.2 17.0	75 94	76 96	433	4.52	14.9	103	106	468
3 OR MORE	26.3	111	114	515	4.53	22.8	123	125	559
MAIN HEATING FUEL				_					
NATURAL GAS	46.2	110	112	499	4.46	46.2	110	112	499
FUEL OIL OR KEROSENE	1.6 4.4	38 23	38 24	182 198	4.74 8.43	-	-	-	-
OTHER	1.1	45	46	222	4.88	-	-	-	-
See footnotes at end of table.									



Average Residential Natural Gas Consumption and Expenditures

Table 4. (Continued)
United States

	1 1	ANY	NATURAL GAS	USED		i NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	 NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE ODLLARS PER MILLION BTU)	 NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- I TURES PER HOUSEHOLD (DOLLARS)
HOT WATER FUEL									
NATURAL GAS	45.6	106	108	484	4.47	42.1	111	114	505
ELECTRICITY	4.4	86	88	416	4.75	4.0	92	93	440
FUEL DIL OR KEROSENE	3.1	18	18	175	9.67	.1	75	76	499
OTHER	.3	24	24	170	6.98	Q	Q	Q	180
MAIN HEATING EQUIPMENT USING NATURAL GAS									
CENTRAL WARM AIR FURNACE	28.5	118	120	518	4.32	28.5	118	120	518
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	7.2	132	135	688	5.09	7.2	132	135	688
FURNACE	5.6	69	70	280	4.00	5.6	69	70	28 0
ROOM HEATER	4.7	76	78	362	4.66	4.7	76	78	362
NONE/OTHER	7.4	31	32	204	6.36	.2	88	90	399
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	4.6	120	122	529	4.33	4.1	129	132	563
5,500 TO 7,000 HDD	15.8	134	137	605	4.42	14.3	145	148	646
4,000 TO 5,499 HDD	13.3	92	94	484	5.17	9.8	115	118	584
<2,000 CDD AND <4,000 HDD	13.4	75	76	311	4.08	12.2	78	79	323
>2,000 CDD AND <4,000 HDD	6.4	63	65	307	4.75	5.8	67	68	320



Table 4. (Continued) Census Region: Northeast

Average Residential Natural Gas Consumption and Expenditures

	! ! !	ANY	NATURAL GAS	USED		 NATURAL 	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	 NUMBER OF HOUSE- HOLDS (MILLIONS) 	PER HOUSEHOLD	CONSUMED PER HOUSEHOLD	PER	AVG. PRICE (DOLLARS PER MILLION BYU)	HOUSE-			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	11.3	91	93	538	5.78	7.0	133	135	742
AREA TYPE									
URBAN	10.4	89 120	91 122	535 571	5.91 4.68	6.2 .8	134 124	136 127	762 594
SMSA									
SMSA	9.9 1.5	86 126	88 128	528 608	6.00 4.73	5.7 1.3	133 132	135 135	767 637
NATURAL GAS PAID BY HOUSEHOLD									
YES	8.0	103	105	587	5.59	5.1	147	150	801
NO	3.3	63	64	419	6.54	1.9	94	96	587
TYPE OF HOUSING STRUCTURE									
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	5.6 5.8	123 60	126 61	675 406	5.36 6.60	4.2 2.8	153 103	156 105	815 634
NUMBER OF ROOMS									
1 TO 3	2.0	45	46	318	6.90	.8	83	85	512
4 TO 5	4.4 5.0	71 127	73 129	447 704	6.15 5.44	2.6 3.6	107 162	109 165	628 875
NUMBER OF ROOMS THAT CAN BE									
AIR CONDITIONED									
ALL	1.9 3.9	99 92	101 94	572 561	5.65 5.95	1.5 2.4	125 135	127 138	696 778
NONE	5.5	87	89	509	5.70	3.2	135	137	737
MEASURED HEATED SPACE OF RESI-									
DENCE (IN SQUARE FEET) LESS THAN 999	4.1	53	54	363	6.72	1.9	92	93	568
1,000 TO 1,999	4.5	98	100	569	5.71	3.1	131	134	734
2,000 OR MORE	2.6	140	143	758	5.31	2.0	175	179	927
YEAR HOUSE BUILT				F7/	F 0F	3.2	143	146	810
1939 OR EARLIER	5.9 2.1	88 87	90 88	536 483	5.95 5.46	1.3	131	134	688
1960 OR LATER	3.3	99	101	576	5.68	2.6	121	123	686
OWN/RENT									
OWN	6.3	118	121	663	5.50	4.7	148	151	808
RENT	5.1	58	59	384	6.49	2.3	102	105	612
1980 FAMILY INCOME				. = .			118	121	674
LESS THAN \$10,000	2.9 3.5	71 84	72 86	436 505	6.04 5.88	1.5 2.1	126	129	713
\$20,000 TO \$34,999	3.3	101	103	576	5.59	2.3	135	137	740
\$35,000 OR MORE	1.7	122	124	707	5.68	1.2	157	161	882
TOTAL BELOW 100 PERCENT					F 00	,	100	172	728
OF POVERTY LINE	1.1	82	83	493	5.92	.6	129	132	140
OF POVERTY LINE	1.9	78	79	476	6.01	1.0	123	126	704
AGE OF HOUSEHOLD HEAD									, = .
UNDER 35 YEARS	3.4	90	92	531	5.76 5.81	2.4 2.9	119 148	122 151	674 835
35 TO 59 YEARS	4.8 3.1	98 81	100 83	583 475	5.75	1.8	125	127	685
HOUSEHOLD MEMBERS									
1	2.4	60	62	382	6.20	1.3	93	95	548 485
2	3.4 5.6	85 108	87 110	497 630	5.73 5.70	2.1 3.6	125 151	127 155	685 848
3 OR MORE	2.0	100	110	030	2.70	3.0			= -=
MAIN HEATING FUEL	7.0	177	135	742	5.49	7.0	133	135	742
NATURAL GAS	7.0 .1	133 34	34	231	6.70	-	-	-	-
FUEL OIL OR KEROSENE	4.0	22	23	202	8.83	-	-	-	-
OTHER	.1	53	54	263	4.83	-	-	-	-



Average Residential Natural Gas Consumption and Expenditures

Table 4. (Continued) Census Region: Northeast

	!	ANY	NATURAL GAS	USED		I ! NATURAL !	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS) 	AVG. PRICE (DOLLARS PER MILLION BTU)	HUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
HOT WATER FUEL									
NATURAL GAS	8.0	117	120	669	5.60	6.7	132	135	743
ELECTRICITY	.3	142	145	684	4.71	.2	166	169	787
FUEL OIL OR KEROSENE	3.0	17	18	175	9.84	.i	74	76	535
OTHER	Q	ą´	Q	q	Q	q	q q	q	Q
MAIN HEATING EQUIPMENT USING NATURAL GAS									
CENTRAL WARM AIR FURNACE	3.1	138	141	711	5.03	3.1	138	141	711
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	3.6	129	132	774	5.86	3.6	129	132	774
FURNACE	.1	100	102	670	6.57	.1	100	102	670
ROOM HEATER	.3	115	118	674	5.72	. 3	115	118	674
NONE/OTHER	4.3	24	25	208	8.40	Q	Q	Q	1828
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	.2	123	126	790	6.27	.1	136	139	866
5,500 TO 7,000 HDD	5.0	114	116	615	5.30	3.8	141	144	740
4,000 TO 5,499 HDD	6.2	72	74	469	6.36	3.1	122	125	739
<2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q
>2,000 CDD AND <4,000 HDD	Q	Q	q	Q	Q	Q	Q	q	Q



Table 4. (Continued) Census Division: New England

Average Residential Natural Gas Consumption and Expenditures

		АНҮ	NATURAL GAS	USED		! NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		CONSUMED PER HOUSEHOLD	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		(MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD
TOTAL HOUSEHOLDS	2.0	85	86	610	7.06	1.2	122	125	858
AREA TYPE									
URBAN	1.9	83 134	85 137	599 988	7.05 7.21	1.1 Q	121 Q	124 Q	846 1182
SMSA									
SMSA	1.9 .1	85 71	87 73	615 492	7.07 6.77	1.1 Q	123 Q	125 Q	862 734
NATURAL GAS PAID BY HOUSEHOLD									
YES	1.5	94	96	670	6.95	.9	133	136	923
ко	.5	53	54	416	7.69	.2	81	83	607
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME	.8	116	118	806	6.83	.6	143	146	984
2 OR MORE UNITS	1.2	64	66	480	7.33	.6	103	105	736
NUMBER OF ROOMS									
1 70 3	.2	64	65	481	7.42	.2	86	88	634
4 TO 5	.9 .8	70 109	71 111	522 753	7.34 6.78	.5 .5	104 157	106 160	748 1062
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALL	.2	81 91	83 93	604	7.29 7.01	.1 .4	103 125	105 127	749 874
NONE	.6 1.2	82	84	653 591	7.05	.7	126	128	872
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	.9 .8	62 91	63 93	469 649	7.45 6.97	.5 .4	9 3 132	95 135	681 917
2,000 OR MORE	.4	125	127	859	6.74	.3	161	165	1093
YEAR HOUSE BUILT		0.5	87	411	7.04	0.7	131	133	912
1939 OR EARLIER	1.2 .3	85 66	67	611 481	7.13	.2	113	116	777
1960 OR LATER	.4	97	99	702	7.06	.4	112	114	797
OWN/RENT						_		170	937
RENT	1.0 1.0	105 64	108 65	742 476	6.90 7.32	.7 .5	135 104	138 107	744
1980 FAMILY INCOME LESS THAN \$10,000	.6	72	73	535	7.27	.3	110	113	786
\$10,000 TO \$19,999	.7	84	85	602	7.05 7.00	.5 .3	117 126	120 129	824 878
\$20,000 TO \$34,999 \$35,000 OR MORE	.5 .2	85 128	87 131	607 887	6.79	.1	158	162	1084
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE	.2	93	95	667	7.00	.2	126	129	871
TOTAL BELOW 125 PERCENT OF POVERTY LINE	.4	79	81	572	7.09	.2	118	121	822
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	.6	69	70	513	7.29	.3	101	103	730 986
35 TO 59 YEARS	.9 .6	99 78	101 80	698 574	6.89 7.18	.5 .3	144 111	147 113	789
HOUSEHOLD MEMBERS									
1	.4	62	63	471	7.46	.2	90	92	662
2 3 OR MORE	.7 .9	73 103	74 105	530 726	7.12 6.93	.4 .6	110 144	112 147	770 996
	• 7	103	103	, 20		••		=	
MAIN HEATING FUEL NATURAL GAS	1.2	122	125	858	6.86	1.2	122	125	858
ELECTRICITY	.1	11	12	134	11.63	-	-	-	-
FUEL OIL OR KEROSENE	.7	29	30	246	8.31	-			



Table 4. (Continued) Census Division: New England

	 	АНҮ	NATURAL GAS	USED		NATURAL GAS USED AS MAIN HEATING FUEL					
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER (HOUSEHOLD (CDOLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER (HOUSEHOLD (DOLLARS)		
HOT WATER FUEL											
NATURAL GAS	1.6	98	100	698	6.98	1.1	122	125	859		
ELECTRICITY	.1	114	117	785	6.73	.1	123	126	841		
FUEL OIL OR KEROSENE	.3	17	17	164	9.51	Q.	Q	Q	Q		
OTHER	Q	Q	Q	Q	Q	Q	à	Q	q		
MAIN HEATING EQUIPMENT USING NATURAL GAS											
CENTRAL WARM AIR FURNACE	.2	113	115	786	6.81	.2	113	115	786		
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	.8	125	128	876	6.86	.8	125	128	876		
FURNACE	Q	Q	Q	773	Q	Q	Q	Q	773		
ROOM HEATER	.1	118	121	821	6.80	.1	118	121	821		
NONE/OTHER	.8	31	32	262	8.17	Q	Q	Q	1828		
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	.2	123	126	790	6.27	.1	136	139	866		
5,500 TO 7,000 HDD	1.8	81	83	593	7.17	1.0	121	123	857		
4,000 TO 5,499 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q		
<2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q		
>2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-		



Table 4. (Continued) Census Division: Middle Atlantic

Average Residential Natural Gas Consumption and Expenditures

	i 1	YNA	NATURAL GAS	USED		NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		OF HOUSE-		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	9.4	93	94	523	5.53	5.9	135	137	719
AREA TYPE									
URBAN	8.5 .8	90 119	92 121	521 542	5.67 4.47	5.1 .8	136 122	139 125	743 564
SMSA SMSA	8.0	94	88	507	5.75	4.5	135	138	743
NON-SMSA	1.4	86 129	131	614	4.67	1.3	133	135	635
NATURAL CAS BATE BY HOUSEHOLD									
NATURAL GAS PAID BY HOUSEHOLD YES	6.5	105	107	568	5.30	4.2	150	153	773
NO	2.9	64	66	420	6.39	1.7	96	98	584
TYPE OF HOUSING STRUCTURE									
SINGLE FAMILY OR MOBILE HOME	4.8	125	127	653	5.14	3.6	154	157	788
2 OR MORE UNITS	4.6	59	60	387	6.40	2.2	103	105	606
NUMBER OF ROOMS									
1 TO 3	1.7	43	44	296	6.79	.6	82	84	481
4 TO 5	3.4 4.2	72 130	73 133	426 694	5.83 5.23	2.1 3.2	108 163	110 166	596 847
				• , .					
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALL	1.7 3.3	101 93	103 95	569	5.51	1.3	127	130 139	691 760
NONE	4.3	93 89	95 91	546 486	5.77 5.35	2.5	137 137	140	701
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	3.3	51	52	335	6.49	1.5	91	93	530
1,000 TO 1,999 2,000 OR MORE	3.8	99	101	552 743	5.47	2.7	131	133 181	7 03 902
	2.3	142	145	742	5.11	1.7	177	101	702
YEAR HOUSE BUILT 1939 OR EARLIER	4.7	89	91	516	5.68	2.5	146	149	784
1940 TO 1959	1.8	90	92	483	5.23	1.1	134	136	674
1960 OR LATER	2.9	100	102	557	5.49	2.2	122	125	668
OWN/RENT									
OWN	5.3	121	123	648	5.27	4.0	150	153	785 570
RENT	4.1	57	58	362	6.26	1.9	102	104	578
1980 FAMILY INCOME								• • •	
LESS THAN \$10,000	2.3 2.7	70 84	72 86	412 479	5.73 5.57	1.2 1.6	120 129	12 3 131	645 680
\$20,000 TO \$34,999	2.8	104	106	571	5.39	2.0	136	138	722
\$35,000 OR MORE	1.5	121	124	685	5.54	1.1	157	160	855
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE	.9	78	80	444	5.55	.5	130	133	683
TOTAL BELOW 125 PERCENT OF POVERTY LINE	1.5	77	79	452	5.73	.8	125	127	674
	2.5	,,	,,	176	2.13		163		0,,
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	2.9	95	97	534	5.53	2.0	122	125	665
35 TO 59 YEARS	4.0	95 98	100	559	5.58	2.4	149	152	802
60 YEARS AND OVER	2.5	82	83	453	5.45	1.4	128	131	660
HOUSEHOLD MEMBERS									
1	2.0	60	61	364	5.94	1.1	94	96	523
2	2.8 4.6	88 109	90 112	489 610	5.46 5.47	1.7 3.0	128 153	131 156	667 819
		==:							
MAIN HEATING FUEL NATURAL GAS	5.9	135	137	719	5.23	5.9	135	137	719
ELECTRICITY	.1	52	54	311	5.81	-	-	-	-
FUEL OIL OR KEROSENE	3.3	21	21	192	8.98	-	-	-	_
OTHER	.1	47	48	214	4.48	-	_	-	-



Table 4. (Continued)
Census Division: Middle
Atlantic

	i	ANY	NATURAL GAS	USED		NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. AVG. PRICE (DOLLARS PER MILLION BTU) 	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
HOT WATER FUEL									
NATURAL GAS	6.4	122	124	662	5.32	5.6	134	137	720
ELECTRICITY	.2	149	152	658	4.32	.2	177	181	772
FUEL OIL OR KEROSENE	2.7	18	18	177	9.88	.1	74	76	535
OTHER	Q	Q	Q	Q	Q	q	Q	Q	Q
MAIN HEATING EQUIPMENT USING NATURAL GAS									
CENTRAL WARM AIR FURNACE	2.8	140	143	705	4.92	2.8	140	143	705
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	2.8	130	133	744	5.59	2.8	130	133	744
FURNACE	Q	Q	Q	534	Q	Q	Q	Q	534
ROOM HEATER	.2	113	116	574	4.96	.2	113	116	574
NONE/OTHER	3.5	23	23	196	8.47	Q	Q	Q	Q
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	Q	Q	Q	Q	Q	Q	Q	Q	Q
5,500 TO 7,000 HDD	3.2	132	135	629	4.65	2.7	149	152	696
4,000 TO 5,499 HDD	6.2	72	74	469	6.36	3.1	122	125	739
<2,000 CDD AND <4,000 HDD	Q	Q	à	Q	Q	Q	Q	Q	Q
>2,000 CDD AND <4,000 HDD	Q.	Q.	q	à	à	Q.	q	à	Q.



Table 4. (Continued) Census Region: North Central

Average Residential Natural Gas Consumption and Expenditures

		ANY	NATURAL GAS	USED		NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (THOUSAND CU.FT.)	CONSUMED PER		AVG. PRICE (DOLLARS PER HILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	16.1	136	139	580	4.16	15.4	141	144	596
			-			4	_,_		
AREA TYPE URBANRURAL	13.0 3.1	136 140	138 143	585 560	4.23 3.91	12.4 3.1	140 142	143 145	603 567
SMSA									
SMSA	12.1 4.0	138 132	141 134	592 543	4.20 4.04	11.6 3.9	142 136	145 139	609 557
NATURAL GAS PAID BY HOUSEHOLD									
YES	13.4 2.7	147 86	150 88	618 393	4.13 4.45	13.1 2.3	148 98	152 100	625 431
TYPE OF HOUSING STRUCTURE									
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	12.1 4.0	151 93	154 95	630 426	4.10 4.50	11.9 3.5	152 102	156 104	637 458
NUMBER OF ROOMS									
1 TO 3 4 TO 5	1.4 7.1	72 116	74 118	320 506	4.35 4.29	1.3 6.8	77 120	79 123	339 522
6 OR MORE	7.5	169	172	700	4.07	7.3	171	175	711
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALL	6.0 4.1	135 146	138 149	557 617	4.04 4.15	5.8 4.0	138 149	141 152	568 630
NONE	6.0	132	135	579	4.30	5.6	138	141	602
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	4.8 6.0	92 135	94 138	405 576	4.31 4.17	4.4 5.9	99 136	101 139	428 578
2,000 OR MORE	5.3	178	182	743	4.09	5.2	182	186	759
YEAR HOUSE BUILT		150	155	440	4.14	5.9	155	159	655
1939 OR EARLIER	6.0 4.7	152 129	155 132	642 550	4.17	4.4	136	139	574
1960 OR LATER	5.4	126	128	537	4.18	5.2	129	131	548
OWN/RENT		154	155		4.09	11.2	154	157	642
OWN	11.4 4.7	152 100	155 102	634 450	4.41	4.3	108	110	478
1980 FAMILY INCOME									
LESS THAN \$10,000	4.7 4.3	124 126	127 129	540 540	4.27 4.18	4.3 4.1	132 130	135 133	568 554
\$10,000 TO \$19,999 \$20,000 TO \$34,999	5.0	137	140	578	4.14	4.9	139	142	586
\$35,000 OR MORE	2.1	184	188	752	4.01	2.1	186	190	761
TOTAL BELOW 100 PERCENT OF POVERTY LINE	2.1	127	130	549	4.23	1.9	138	141	589
TOTAL BELOW 125 PERCENT OF POVERTY LINE	3.0	127	130	556	4.29	2.7	138	140	595
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	5.3	119	121	514	4.24	5.0	124	126	531
35 TO 59 YEARS	6.2	155	158	645	4.08	5.9 4.5	159 135	163 138	662 581
	4.7	132	135	568	4.21	4.5	133	130	301
HOUSEHOLD MEMBERS	3.3	106	108	461	4.27	3.1	110	112	476
2	5.1	134 152	136 155	570 638	4.18 4.12	5.0 7.3	135 158	138 162	575 663
		196	199	636	7.16	,.,	250		303
MAIN HEATING FUEL NATURAL GAS	15.4	141	144	596	4.15	15.4	141	144	596
ELECTRICITY	.2	17	18	150	8.53	-	-	-	-
FUEL OIL OR KEROSENE	.1	41	42	186	4.46	-	-	-	-
OTHER	.3	34	34	214	6.23	-	-	-	-



Table 4. (Continued)
Census Region: North Central

	į	ANY	NATURAL GAS	USED		NATURAL GAS USED AS MAIN HEATING FUEL					
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE COLLARS PER MILLION BTU	 NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		
HOT WATER FUEL											
NATURAL GAS	14.5	140	143	591	4.13	14.1	143	146	601		
ELECTRICITY	1.4	119	121	532	4.39	1.3	123	126	551		
FUEL OIL OR KEROSENE	Q	Q	Q	352	Q	Q	Q	Q	352		
OTHER	.2	23	24	185	7.78	Q	Q	Q	Q		
MAIN HEATING EQUIPMENT USING NATURAL GAS											
CENTRAL WARM AIR FURNACE	11.8	142	145	599	4.12	11.8	142	145	599		
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	2.3	150	154	658	4.28	2.3	150	154	658		
FURNACE	.6	109	111	443	3.98	.6	109	111	443		
ROOM HEATER	.7	109	111	460	4.15	.7	109	111	460		
NONE/OTHER	.7	37	38	216	5.76	Q	Q	Q	710		
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	3.3	115	118	535	4.55	2.9	127	129	578		
5,500 TO 7,000 HDD	9.9	147	151	619	4.11	9.7	150	153	629		
4,000 TO 5,499 HDD	2.9	123	126	496	3.95	2.8	125	128	503		
<2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q.		
>2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q		



Table 4. (Continued) Census Division: East North Central

Average Residential Natural Gas Consumption and Expenditures

i		ANY	NATURAL GAS	USED		I NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS		PER HOUSEHOLD (THOUSAND	CONSUMED PER HOUSEHOLD		AVG. PRICE (DOLLARS PER MILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)		I AVG. I AMOUNT I CONSUMED I PER IHOUSEHOLD I (MILLION I BTU)	
TOTAL HOUSEHOLDS	11.4	143	146	619	4.23	11.2	145	148	627
ADEA TYPE									
AREA TYPE URBAN	9.3	142	145	619	4.26	9.2	145	148	628
RURAL	2.1	148	151	619	4.10	2.1	148	151	621
SMSA									
SMSA	9.3	145	148	621	4.19	9.1	147	150	630
NON-SMSA	2.1	135	138	609	4.41	2.1	136	139	612
NATURAL GAS PAID BY HOUSEHOLD									
YES	9.4	154	157	661	4.20	9.3	155	158	665
Ю	2.0	93	94	422	4.47	1.9	97	99	439
TYPE OF HOUSING STRUCTURE									
SINGLE FAMILY OR MOBILE HOME	8.5	158	161	672	4.18	8.5	159	162	677
2 OR MORE UNITS	2.9	101	103	461	4.47	2.8	104	107	474
NUMBER OF ROOMS									
1 TO 3	1.0	69	70	316	4.49	1.0	74	75	333
4 TO 5	4.9 5.5	123 176	125 180	546 744	4.36 4.13	4.9 5.4	124 178	126 181	549 749
o or nore	3.3	170	100	/44	4.13	3.4	170	101	147
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALL SOME	3.5 3.0	145 149	148 152	615 642	4.15 4.22	3.5 3.0	148 151	151 154	624 651
NONE	4.9	138	141	608	4.31	4.8	140	143	614
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	3.4	97	99	436	4.39 4.27	3.2 4.3	100 141	102 144	447 613
1,000 TO 1,999	4.3 3.7	140 188	143 192	611 792	4.27	3.7	190	194	801
YEAR HOUSE BUILT									
1939 OR EARLIER	4.3	158	161	683	4.23	4.3	159	163	687
1940 TO 1959	3.2	143	146	615	4.21	3.2	144	147	620
1960 OR LATER	3.9	127	130	551	4.25	3.8	130	133	563
OWN/RENT									
ONN	8.0 3.4	159 106	163 109	677 485	4.16 4.47	7.9 3.3	160 110	163 112	680 499
REMITTION	3.7	100	107	40.5	4.47	3.3	110	112	477
1980 FAMILY INCOME									
LESS THAN \$10,000	3.6 3.0	132 135	135 138	585 587	4.34 4.26	3.5 3.0	135 136	138 139	597 591
\$20,000 TO \$34,999	3.4	141	144	611	4.24	3.3	142	145	615
\$35,000 OR MORE	1.5	193	197	789	4.00	1.4	196	200	800
TOTAL BELOW 100 PERCENT OF POVERTY LINE	1.6	137	140	595	4.27	1.6	140	143	609
TOTAL BELOW 125 PERCENT	• •	,	3-4		A ~~		7/4	3/3	/30
OF POVERTY LINE	2.4	136	139	599	4.31	2.3	140	143	612
UNDER 35 YEARS	3.6	125	128	549	4.30	3.5	126	129	553
35 TO 59 YEARS	4.3	164	167	691	4.13	4.2	166	169	699
60 YEARS AND OVER	3.5	137	140	603	4.32	3.5	139	142	614
1	2.4	110	112	491	4.37	2.3	114	116	504
2 3 OR MORE	3.6 5.4	142	145	617 478	4.26 4.17	3.6 5.3	143 161	146 164	620 685
J OK HORE	9.4	159	162	678	7.1/	9.3	101	104	303
MAIN HEATING FUEL	11.2	145	148	627	4.23	11.2	145	148	627
NATURAL GAS									
ELECTRICITYFUEL OIL OR KEROSENE	.1	16 40	17 41	137 176	8.24		-	-	-



Table 4. (Continued) Census Division: East North Central

Average Residential Natural Gas Consumption and Expenditures

		ANY	NATURAL GAS	USED		NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD Characteristics	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE ODLLARS PER MILLION BTU	I NUMBER OF OF HOUSE- HOLDS (MILLIONS)	•	************	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
HOT WATER FUEL									
NATURAL GAS	10.3	146	149	627	4.22	10.2	148	151	635
ELECTRICITY	1.1	123	126	554	4.41	1.1	123	126	554
FUEL OIL OR KEROSENE	Q	Q	Q	352	Q	Q	Q	Q	352
OTHER	q	q q	q	112	à	q q	à	Q.	Q
MAIN HEATING EQUIPMENT USING NATURAL GAS									
CENTRAL WARM AIR FURNACE	8.5	148	151	632	4.18	8.5	148	151	632
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	1.8	152	155	677	4.35	1.8	152	155	677
FURNACE	.4	103	105	475	4.52	.4	103	105	475
ROOM HEATER	.5	110	112	488	4.37	.5	110	112	488
NONE/OTHER	.2	49	50	256	5.07	Q	Q	Q	710
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD	1.6	123	126	605	4.81	1.5	125	127	609
5,500 TO 7,000 HDD	8.9	148	151	628	4.16	8.7	150	153	637
4,000 TO 5,499 HDD	1.0	133	136	558	4.10	1.0	133	136	558
<2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q
>2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q



Table 4. (Continued) Census Division: West North Central

Average Residential Natural Gas Consumption and Expenditures

	 	ANY	NATURAL GAS	USED		NATURAL GAS USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)		AYG. AYG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
TOTAL HOUSEHOLDS	4.7	120	122	484	3.96	4.2	129	132	515	
AREA TYPE										
URBAN	3.6 1.0	118 125	121 128	497 439	4.12 3.43	3.2 1.0	129 129	132 132	534 449	
SMSA										
SMSA	2.8 1.9	114 128	117 130	494 470	4.24 3.61	2.5 1.7	125 135	127 138	532 491	
NATURAL GAS PAID BY HOUSEHOLD										
YES	3.9 .7	129 70	132 71	516 313	3.92 4.40	3.8 .4	132 102	135 104	528 398	
TYPE OF HOUSING STRUCTURE										
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	3.6 1.1	134 70	137 72	530 329	3.86 4.59	3.5 .7	137 92	140 94	539 398	
NUMBER OF ROOMS										
1 TO 3	.4	80	82	331	4.05	.4	86	88	356	
4 TO 5	2.2 2.1	100 148	102 151	419 583	4.10 3.86	1.9 1.9	112 154	114 157	454 604	
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	2.5	120	122	472	3.87	2.4	123	126	485	
SOME	1.1 1.1	136 104	139 106	545 451	3.92 4.25	1.0 .8	142 130	145 133	569 531	
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	1.5	79	81	331	4.08	1.1	96	98	376	
1,000 TO 1,999 2,000 OR MORE	1.6 1.6	122 154	125 158	483 628	3.87 3.98	1.6 1.5	123 161	126 164	486 653	
YEAR HOUSE BUILT		••	170		7.00	1.4	145	148	569	
1939 OR EARLIER	1.7 1.4	136 97	139 99	538 401	3.88 4.05	1.6 1.2	113	115	449	
1960 OR LATER	1.5	123	125	501	4.01	1.4	124	127	508	
OWN/RENT					7 00	7.0	177	140	547	
OWN	3.4 1.3	134 83	137 85	533 357	3.90 4.21	3.2 1.0	137 102	104	410	
1980 FAMILY INCOME										
LESS THAN \$10,000	1.1 1.3	97 106	99 108	395 427	3.98 3.96	.9 1.1	118 114	120 117	451 456	
\$10,000 TO \$19,999 \$20,000 TO \$34,999	1.6	127	130	507	3.91	1.5	131	133	520	
\$35,000 OR MORE	.7	164	167	675	4.04	.7	165	168	679	
TOTAL BELOW 100 PERCENT OF POVERTY LINE	.5	93	95	383	4.03	.3	128	131	485	
TOTAL BELOW 125 PERCENT OF POVERTY LINE	.6	91	92	384	4.16	.4	125	127	489	
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	1.7	106	108	440	4.08	1.4	118	120	477	
35 TO 59 YEARS	1.9 1.1	134 118	137 120	540 458	3.95 3.82	1.7 1.1	143 122	146 124	571 474	
HOUSEHOLD MEMBERS										
1	.9	94	96	377	3.94 3.93	.8 1.4	100 116	103 118	395 463	
2 3 OR MORE	1.5 2.3	113 134	116 137	455 544	3.99	2.0	151	154	603	
MAIN HEATING FUEL										
NATURAL GAS	4.2	129	132	515	3.90	4.2	129	132	515	
FUEL OIL OR KEROSENE	.1 .1	18 41	19 42	164 195	8.79 4.6 0	-	-	-	-	
OTHER	.3	31	32	206	6.46	_	_	_	-	



Table 4. (Continued)
Census Division: West North
Central

	} { }	ANY	NATURAL GAS	USED		I NATURAL 	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
HOT WATER FUEL									
NATURAL GAS	4.1	126	129	502	3.90	3.9	130	132	513
ELECTRICITY	.3	104	106	460	4.34	.3	122	125	539
FUEL OIL OR KEROSENE	ġ .	Q.	Q	g	· · · ·	Ġ	Q	Q	Ğ.
OTHER	.2	24	24	189	7.89	q	Q	q	q
MAIN HEATING EQUIPMENT USING NATURAL GAS									
CENTRAL WARM AIR FURNACE	3.4	128	131	517	3.95	3.4	128	131	517
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	.5	144	147	592	4.03	.5	144	147	592
FURNACE	.2	121	124	376	3.03	.2	121	124	376
ROOM HEATER	.1	105	107	356	3.32	.1	105	107	356
NONE/OTHER	.4	30	31	196	6.32	Q	Q	Q	Q
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	1.7	108	111	473	4.27	1.4	129	131	542
5,500 TO 7,000 HDD	1.0	143	146	541	3.70	1.0	146	149	551
4,000 TO 5,499 HDD	1.9	118	120	465	3.87	1.9	120	123	475
<2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q
>2,000 CDD AND <4,000 HDD	Q	Q.	Q	Q	Q	Q	Q	Q	Q.



Table 4. (Continued) Census Region: South

Average Residential Natural Gas Consumption and Expenditures

	! !	ANY	NATURAL GAS	USED		NATURAL GAS USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
TOTAL HOUSEHOLDS	14.2	80	82	374	4.59	13.0	84	86	394	
AREA TYPE										
URBAN	11.1 3.1	79 83	81 85	367 400	4.55 4.72	10.1 2.9	84 85	86 87	389 409	
SMSA										
SMSA	9.3 4.9	78 84	79 86	360 402	4.54 4.68	8.3 4.6	83 86	85 88	383 412	
NATURAL GAS PAID BY HOUSEHOLD										
YES	12.1	84	85	387	4.53	11.4	86	88	399	
NO	2.1	58	59	301	5.08	1.5	69	71	355	
TYPE OF HOUSING STRUCTURE										
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	11.7 2.5	86 54	87 55	395 279	4.52 5.09	11.0 1.9	88 62	90 64	406 321	
		•		=,,,	3.07	•••	•	•		
NUMBER OF ROOMS	1.3	48	49	237	4.88	1.0	56	57	276	
4 TO 5	6.5	72	73	332	4.52	6.1	75	76	343	
6 OR MORE	6.4	95	97	446	4.61	5.9	99	101	466	
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	8.5	80	82	381	4.64	7.7	85	87	401	
SOME	2.9	83	85 74	396	4.65	2.6	88	90	418	
NONE	2.8	75	76	333	4.36	2.6	79	80	345	
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	4.8 7.1	64 80	65 81	299 371	4.59 4.55	4.2 6.6	69 83	70 85	319 386	
2,000 OR MORE	2.3	113	116	541	4.67	2.2	118	120	559	
YEAR HOUSE BUILT										
1939 OR EARLIER	2.9	86	88	409	4.63	2.6	93	95	438	
1940 TO 1959	4.7 6.6	7 9 77	81 79	364 366	4.49 4.64	4.3 6.1	84 81	86 82	382 383	
1760 UK LATER	0.0	• • • • • • • • • • • • • • • • • • • •	,,	300	7.01	٠.٠		**		
OWN/RENT	9.8	86	88	399	4.52	9.2	89	91	411	
RENT	4.4	65	67	320	4.80	3.8	73	74	352	
1000 FAMILY THOME										
1980 FAMILY INCOME LESS THAN \$10,000	4.3	68	69	321	4.63	3.9	72	73	336	
\$10,000 TO \$19,999	3.8	79	81	361	4.46	3.4	84	86	379	
\$20,000 TO \$34,999	4.0	84 97	86 99	397 461	4.63 4.65	3.6 2.1	91 99	92 101	424 475	
\$35,000 OR MORE	2.2	71	77	401	4.05	2.1	,,	101		
TOTAL BELOW 100 PERCENT				750	4 74		74	78	368	
OF POVERTY LINE	2.2	73	74	352	4.74	2.0	76	76	360	
OF POVERTY LINE	3.1	71	73	337	4.65	2.8	75	76	352	
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	4.4	75	77	353	4.61	4.0	80	81	374	
35 TO 59 YEARS		86	88	405	4.62	5.3	89	91	421	
60 YEARS AND OVER	4.1	77	78	354	4.53	3.7	82	84	377	
HOUSEHOLD MEMBERS	, -							11.	200	
1	2.7 4.5	57 77	59 79	275 359	4.69 4.57	2.3 4.2	63 81	64 83	29 9 376	
2		90	92	422	4.58	6.5	94	96	439	
MAIN HEATING FUEL NATURAL GAS	13.0	84	86	394	4.57	13.0	84	86	394	
ELECTRICITY	.7	32	33	159	4.84	-	-	-	-	
FUEL OIL OR KEROSENE	.2	21	21	145 220	6.78 5.11	-	-	-	-	
OTHER	.3	42	43	220	5.11	-	-	-		



Table 4. (Continued) Census Region: South

	 	ANY	NATURAL GAS	USED		NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (THOUSAND CU.FT.)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE COLLARS PER MILLION BTU)	HOUSE-		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
HOT WATER FUEL									
NATURAL GAS	11.9	84	86	389	4.54	11.0	88	90	406
ELECTRICITY	2.2	62	63	311	4.93	2.0	65	67	326
FUEL OIL OR KEROSENE	.1	14	15	111	7.50	Q	Q	Q	Q
OTHER	.1	27	28	146	5.21	Q	Q	Q	244
MAIN HEATING EQUIPMENT USING NATURAL GAS									
CENTRAL WARM AIR FURNACE	7.2	92	94	426	4.52	7.2	92	94	426
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	.8	98	100	535	5.33	.8	98	100	535
FURNACE	1.8	75	77	322	4.20	1.8	75	77	322
ROOM HEATER	3.1	67	69	326	4.73	3.1	67	69	326
NONE/OTHER	1.3	36	36	178	4.91	.1	86	88	313
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q
5,500 TO 7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q
4,000 TO 5,499 HDD	-	-	-	_	_	_	_	-	-
<2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	_	-
>2,000 CDD AND <4,000 HDD	5.9	64	66	312	4.74	5.4	68	69	325



Table 4. (Continued) Census Division: South Atlantic

Average Residential Natural Gas Consumption and Expenditures

		ANY	NATURAL GAS	USED		NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (THOUSAND CU.FT.)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	PER	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	5.4	82	84	441	5.25	4.8	90	92	478
				–					
AREA TYPE URBANRURAL	4.2 1.1	80 92	81 94	434 466	5.33 4.97	3.7 1.1	89 94	91 96	479 477
SMSA									
SMSA	3.5 1.8	77 93	78 95	426 469	5.44 4.93	3.0 1.7	86 97	88 99	473 488
NATURAL GAS PAID BY HOUSEHOLD									
YES	4.1 1.3	89 60	91 61	473 335	5.20 5.46	3.7 1.1	96 68	98 70	508 377
TYPE OF HOUSING STRUCTURE									
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	3.8 1.6	95 52	97 53	501 296	5.17 5.57	3.4 1.4	103 58	105 60	538 328
NUMBER OF ROOMS									
1 TO 3	.6 2.1	45 68	46 69	251 368	5.51 5.33	.5 1.9	54 72	56 73	298 386
6 OR MORE	2.7	102	104	540	5.18	2.4	112	114	587
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALL	2.9 1.1	86 90	88 92	464 474	5.27 5.18	2.6 1.0	94 98	96 10 0	502 515
NONE	1.4	68	70	366	5.26	1.2	75	76	396
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	1.8 2.4	60 81	61 83	329 436	5.37 5.26	1.6 2.1	66 89	67 91	358 474
2,000 OR MORE	1.1	122	124	637	5.13	1.0	129	132	673
YEAR HOUSE BUILT	1 7	94	96	484	5.05	1.1	108	110	551
1939 OR EARLIER	1.3 1.5	77	79 79	426	5.39	1.2	90	. 92	487
1960 OR LATER	2.6	79	81	428	5.28	2.5	82	84	442
OWN/RENT					F 10		104	106	546
OWN	3.2 2.2	97 62	99 63	511 339	5.19 5.37	2.9 1.9	69	70	374
1980 FAMILY INCOME									
LESS THAN \$10,000	1.4	65	66	349	5.29	1.2 1.1	70 84	72 8 5	376 442
\$10,000 TO \$19,999 \$20,000 TO \$34,999	1.3 1.6	75 93	76 95	400 493	5.23 5.19	1.4	105	107	550
\$35,000 OR MORE	1.1	98	100	528	5.30	1.1	100	102	539
TOTAL BELOW 100 PERCENT OF POVERTY LINE	.7	75	77	404	5.28	.7	78	79	417
TOTAL BELOW 125 PERCENT									
OF POVERTY LINE	1.0	70	72	379	5.29	.9	75	76	400
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	1.6	77	79	417	5.28	1.5	81	83	434
35 TO 59 YEARS	2.3	91	93	482	5.22	2.0	98	100	519
60 YEARS AND OVER	1.5	75	76	402	5.27	1.2	87	8 9	464
HOUSEHOLD MEMBERS		E1	EO	204	5.45	.9	61	62	330
2	1.1 1.6	51 78	52 80	286 424	5.45	.9 1.5	83	85	448
3 OR MORE		98	100	517	5.17	2.4	105	107	553
MAIN HEATING FUEL	, -			/ 74	E 01	۸. ۵	90	92	478
NATURAL GAS		90 22	92 22	478 145	5.21 6.47	4.8	-	72	4/0
FUEL OIL OR KEROSENE	.2	21	21	145	6.78	-	-	-	-
OTHER	.1	25	26	156	6.00	-	-	-	-



Table 4. (Continued)
Census Division: South
Atlantic

	i I	ANY	NATURAL GAS	USED		I NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
	NUMBER OF HOUSE- HOLDS (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (THOUSAND CU.FT.)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE ODLLARS PER MILLION BTU)	 NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	I AVG. I EXPEND- I ITURES I PER IHOUSEHOLD I(DOLLARS)
HOT WATER FUEL									
NATURAL GAS	4.1	90	92	481	5.23	3.7	97	99	516
ELECTRICITY	1.1	61	62	328	5.28	1.1	65	66	347
FUEL OIL OR KEROSENE	.1	14	15	111	7.50	Q	Q	Q	Q
OTHER	Q	Q	Q	90	Q	Q	Q	Q	Q
MAIN HEATING EQUIPMENT USING NATURAL GAS									
CENTRAL WARM AIR FURNACE	2.9	97	99	508	5.13	2.9	97	99	508
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	.6	101	104	582	5.62	.6	101	104	582
FURNACE	.4	74	75	396	5.27	.4	74	75	396
ROOM HEATER	.8	67	68	349	5.12	.8	67	68	349
NONE/OTHER	.6	22	22	146	6.50	Q	Q	Q	82
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	Q	Q	Q	Q	Q	Q	Q	Q	Q
5,500 TO 7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q
4,000 TO 5,499 HDD	-	_	-	-	_	-	-	_	-
<2,000 CDD AND <4,000 HDD	-	-	_	-	-	_	_	-	-
>2,000 CDD AND <4,000 HDD	.6	40	41	237	5.85	.5	48	49	276



Table 4. (Continued) Census Division: East South Central

Average Residential Natural Gas Consumption and Expenditures

:		ANY	NATURAL GAS	USED		 NATURAL 	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	(MILLIONS)	I PER IHOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	I PER		(MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	
TOTAL HOUSEHOLDS	2.6	91	93	385	4.12	2.5	93	95	389
AREA TYPE									
URBAN	1.8	91 92	93 94	381 392	4.09 4.19	1.8	93 92	95 94	387 394
SMSA									
SMSA	1.4	91 93	92 94	374 398	4.05 4.21	1.4 1.1	92 94	94 95	379 401
NATURAL GAS PAID BY HOUSEHOLD									
YES	2.4	92	94	387	4.13	2.3	93	95	391
NO	.2	84	86	343	4.00	.2	88	90	360
TYPE OF HOUSING STRUCTURE	_ =								
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	2.3	93 78	95 79	392 309	4.14 3.91	2.3	94 80	96 82	395 320
NUMBER OF ROOMS									
1 TO 3 4 TO 5	.1 1.1	62 85	63 86	265 362	4.18 4.18	.1 1.1	66 85	67 87	281 362
6 OR MORE	1.3	100	102	414	4.07	1.3	101	103	420
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALL	1.8	91	93	379	4.07	1.7	93	95	386
SOME	.5 .3	92 91	94 93	394 401	4.19 4.31	.5 .3	94 90	96 92	400 391
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	.7	72	73	301	4.11	.6	73	74	306
1,000 TO 1,999 2,000 OR MORE	1.3 .5	87 128	88 131	372 518	4.21 3.96	1.3 .5	87 131	89 134	373 530
YEAR HOUSE BUILT									
1939 OR EARLIER	0.4	96	98	398	4.04	0.4	99	101	406
1940 TO 1959 1960 CR LATER	1.0 1.1	90 90	92 92	389 375	4.21 4.07	1.0 1.1	92 91	94 93	395 377
1700 CR LATER	***	,,	<i>'</i> -	3,3	****				
OWN/RENT	2.0	93	95	392	4.12	2.0	94	96	397
RENT	.5	84	86	354	4.11	.5	86	87	359
1980 FAMILY INCOME									
LESS THAN \$10,000 \$10,000 TO \$19,999	.8 .8	80 94	81 96	342 398	4.20 4.15	.8 .8	81 94	83 96	347 395
\$20,000 TO \$34,999	.6	90	92	380	4.14	.5	92	94	390
\$35,000 OR MORE	.4	112	115	451	3.93	.4	115	117	461
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE	.4	83	84	351	4.15	.4	83	84	351
OF POVERTY LINE	.5	81	83	347	4.20	.5	80	81	340
AGE OF HOUSEHOLD HEAD						_			393
UNDER 35 YEARS	.7 1.1	92 93	94 95	382 391	4.05 4.13	.7 1.1	95 92	97 94	393 389
60 YEARS AND OVER	.8	89	91	378	4.17	.7	91	93	385
HOUSEHOLD MEMBERS									
1	.5	76	77 04	327	4.23	.5 .8	76 95	78 97	329 401
2	.9 1.2	92 97	94 99	388 403	4.13 4.08	1.2	95 97	99	403
MAIN HEATING FUEL NATURAL GAS	2.5	93	95	389	4.11	2.5	93	95	389
ELECTRICITY	Q	q	Q O	196 Q	Q Q	-	-	-	-
FUEL OIL OR KEROSENE	Q Q	Q Q	Q Q	291	Q	-	-	-	-
UINEK	ч	વ	4	674	٦				



Table 4. (Continued) Census Division: East South Central

	i I	ANY	NATURAL GAS	USED		NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	 NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE ODLLARS PER HILLION BTU	NUMBER OF HOUSE- HOLDS (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (THOUSAND CU.FT.)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
HOT WATER FUEL									
NATURAL GAS	1.9	98	100	408	4.09	1.9	99	101	413
ELECTRICITY	.7	73	75	317	4.23	.6	73	75	316
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	q
OTHER	Q	Q	Q	Q	Q	Q	Q	Q	Q
MAIN HEATING EQUIPMENT USING NATURAL GAS									
CENTRAL WARM AIR FURNACE	1.6	102	104	418	4.00	1.6	102	104	418
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	.1	84	86	331	3.84	.1	84	86	331
FURNACE	.3	73	75	353	4.74	.3	73	75	353
ROOM HEATER	.4	72	74	313	4.23	.4	72	74	313
NONE/OTHER	.1	63	64	294	4.61	Q	Q	Q	598
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	Q	Q	Q	Q	Q	Q	Q	Q	Q
5,500 TO 7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q
4,000 TO 5,499 HDD	-	_	_	_	_	_	_	-	-
<2,000 CDD AND <4,000 HDD	-	-	-	-	_	-	-	-	-
>2,000 CDD AND <4,000 HDD	.6	80	82	350	4.26	.5	82	84	356



Table 4. (Continued) Census Division: West South Central

Average Residential Natural Gas Consumption and Expenditures

] 	ANY	NATURAL GAS	USED		NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	(MILLIONS)	PER HOUSEHOLD	AVG. A/OUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. PRICE (DOLLARS PER MILLION BYU)	HOUSE-	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	6.3	73	75	313	4.20	5.7	76	78	325
ADSA TVDE									
AREA TYPE URBAN RURAL	5.1 1.2	74 69	75 71	306 342	4.06 4.82	4.6 1.1	77 72	79 73	319 352
SMSA									
SMSA	4.3	74	76	301	3.97	3.9	78	80	315
NON-SMSA	2.0	71	72	341	4.72	1.8	72	73	347
NATURAL GAS PAID BY HOUSEHOLD									
YES	5.6	76 4 7	78 48	323 221	4.17 4.60	5.4 .3	77 63	79 65	328 282
NO	.6	47	46	521	4.60	. 3	63	93	202
TYPE OF HOUSING STRUCTURE		7/	70	304	6 17	. .	77	78	327
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	5.5 .7	76 50	78 51	324 233	4.17 4.56	5.4 .4	77 67	68	297
NUMBER OF ROOMS									
1 TO 3	.6	48	49	218	4.45	.4	54	55	251
4 TO 5	3.3	70	72	299	4.18	3.1	73	75	308
6 OR MORE	2.3	84	85	357	4.19	2.3	84	86	363
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALL	3.8 1.3	71 74	73 76	321 326	4.42 4.29	3.5 1.2	74 78	76 79	335 342
NONE	1.2	78	80	274	3.45	1.1	80	82	278
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	2.3	65	66 78	275	4.17 4.16	2.0 3.1	69 78	71 79	291 331
1,000 TO 1,999	3.3 .7	76 88	90	322 400	4.46	.7	90	91	406
YEAR HOUSE BUILT									
1939 OR EARLIER	1.2	75	76	333	4.37	1.1	77	79	340
1940 TO 1959 1960 OR LATER	2.2 2.9	76 70	77 72	310 308	4.01 4.28	2.1 2.6	77 75	79 76	315 328
			· ·						
OWN/RENT	4.5	76	78	323	4.14	4.3	77	79	328
RENT	1.7	64	65	287	4.38	1.4	73	74	319
1980 FAMILY INCOME									
LESS THAN \$10,000	2.1	65	67	294	4.41	1.9	68	70	306
\$10,000 TO \$19,999	1.7	76	78	315	4.06	1.6	79	81	326
\$20,000 TO \$34,999 \$35,000 OR MORE	1.8 .7	74 87	75 89	315 362	4.18 4.07	1.6 .6	78 87	80 89	328 376
	**								
TOTAL BELOW 100 PERCENT OF POVERTY LINE	1.1	68	69	318	4.59	1.0	73	75	340
TOTAL BELOW 125 PERCENT	1.1	00	0,7	310	4.57	1.0	,,,		
OF POVERTY LINE	1.6	68	70	308	4.42	1.4	73	74	325
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	2.1	67	69	296	4.29	1.8	7 3 79	74 81	317 34 3
35 TO 59 YEARS	2.3 1.8	78 73	80 75	336 305	4.20 4.10	2.2 1.7	79 76	77	312
HOUSEHOLD MEMBERS	1.1	56	57	243	4.24	1.0	60	61	258
2	2.0	69	71	294	4.14	1.8	73	75	306
3 OR MORE	3.1	81	83	350	4.22	2.9	84	85	362
MAIN HEATING FUEL									
NATURAL GAS	5.7	76 36	78 37	325 162	4.19 4.36	5.7	76 -	78 -	325
FIECTRICATY									
FUEL OIL OR KEROSENE	.4 Q	Q	α̈́	Q	Q	-	-	-	-



Table 4. (Continued)
Census Division: West South
Central

	 	ANY	NATURAL GAS	USED		NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	I AVG. I AMOUNT I CONSUMED I PER IHOUSEHOLD I (THOUSAND I CU.FT.)		AVG. EXPEND- ITURES PER HOUSEHOLD (OOLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU) 	 NUMBER OF HOUSE- HOLDS (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (THOUSAND CU.FT.)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
HOT WATER FUEL									
NATURAL GAS	5.9	75	77	318	4.15	5.4	78	79	329
ELECTRICITY	.4	45	46	251	5.42	. 3	51	53	275
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	Q	Q	Q	244	Q	Q	Q	Q	244
MAIN HEATING EQUIPMENT USING NATURAL GAS									
CENTRAL WARM AIR FURNACE	2.7	82	83	343	4.12	2.7	82	83	343
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	.1	93	95	442	4.67	.1	93	95	442
FURNACE	1.0	76	78	278	3.56	1.0	76	78	278
ROOM HEATER	1.9	67	68	319	4.69	1.9	67	68	319
NONE/OTHER	.6	45	46	194	4.17	.1	95	97	297
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	Q	Q	Q	Q	Q	Q	Q	Q	Q
5,500 TO 7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q
4,000 TO 5,499 HDD	-	_	-	_	-	-	-	-	-
<2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-
>2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-



Table 4. (Continued) Census Region: West

Average Residential Natural Gas Consumption and Expenditures

	!	ANY	NATURAL GAS	USED	J.,,	NATURAL GAS USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	PER	AVG. PRICE COLLARS PER MILLION BTU	OF HOUSE-		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
TOTAL HOUSEHOLDS	11.8	78	79	318	4.01	10.8	80	82	329	
AREA TYPE URBANRURAL	10.5 1.3	76 90	78 92	310 386	3.99 4.19	9.6 1.2	79 94	80 95	320 399	
SMSA SMSANON-SMSA	10.5 1.3	74 104	76 106	308 402	4.05 3.80	9.5 1.2	77 107	78 110	318 414	
NATURAL GAS PAID BY HOUSEHOLD YES	10.0	80	82	332	4.05	9.3	83	84	342	
NO	1.7	63	65	241	3.73	1.5	65	66	247	
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	8.9 2.9	86 52	88 53	356 203	4.05 3.82	8.3 2.4	88 53	90 54	364 208	
NUMBER OF ROOMS 1 TO 3	1.4	53	54	215	3.99	1.2	54	55	219	
4 TO 5	5.0 5.3	68 93	70 95	275 387	3.94 4.07	4.5 5.1	71 95	72 97	284 393	
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	2.5 1.5	77 70	79 71	315 277	3.99 3.91	2.2	80 72	82 73	328 287	
NONE	7.8	79	81	328	4.04	7.1	82	84	337	
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)	4.0	40	(3	041	7.06	7 6	40	44	25.3	
LESS THAN 999	4.0 5.9 1.9	60 75 125	61 77 127	241 307 521	3.96 4.00 4.10	3.4 5.5 1.8	62 76 127	64 78 130	253 310 531	
YEAR HOUSE BUILT	2.5	7/		77.4	4 10	2.4	80	81	334	
1939 OR EARLIER	2.9 3.6	76 80	77 81	316 321	4.10 3.94	2.6 3.4	81	83	325	
1960 OR LATER	5.3	78	79	318	4.01	4.7	80	82	328	
OWN/RENT OWN	7.3 4.4	87 63	89 64	358 252	4.04 3.95	6.9 3.9	89 65	91 66	366 262	
1980 FAMILY INCOME				224	7 00	0.5	71	77	291	
LESS THAN \$10,000	3.0 2.8	68 72	69 74	276 299	3.99 4.05	2. 5 2.6	71 75	73 76	310	
\$20,000 TO \$34,999	3.5	77	79	314	4.00	3.3	78 98	80 100	318 403	
\$35,000 OR MORE TOTAL BELOW 100 PERCENT	2.5	97	99	398	4.02	2.4	70	100	403	
OF POVERTY LINE TOTAL BELOW 125 PERCENT	1.5	67	69	267	3.88	1.2	73	74	286	
OF POVERTY LINE	2.2	66	68	264	3.90	1.8	70	72	279	
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	4.7	69	70	281	4.00	4.1	71	72	290	
35 TO 59 YEARS	4.8	87 76	89 78	359 311	4.03	4.5 2.2	90 77	92 79	370 317	
HOUSEHOLD MEMBERS		/-		053	7 60	, 7	47	64	255	
2	1.8 4.0	62 70	63 72	251 288	3.93 4.00	1.7 3.6	63 73	74	255 299	
3 OR MORE	6.0	87	89	360	4.03	5.4	90	92	371	
MAIN HEATING FUEL NATURAL GAS	10.8	80	82	329	4.01	10.8	80	82	329	
ELECTRICITY	.6	51	52	209	3.99	-	-	-	-	
OTHER	Q .4	Q 53	Q 54	193 216	4.03	-	-	-	-	



Table 4. (Continued) Census Region: West

		<u> </u>							
•	! ! ;	ANY	NATURAL GAS	USED		NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (ODLLARS)	AVG. AVG. PRICE COLLARS PER MILLION BTU	 NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
HOT WATER FUEL									
NATURAL GAS	11.2	78	80	315	3.94	10.3	80	82	324
ELECTRICITY	.5	76 71	72	407	5.63	.5	77	78	437
FUEL OIL OR KEROSENE	ġ.	ģ	ģ.	Q,	Q	Q Q	ģ,	ė	Q.
OTHER	à	Q	q	95	Q	q	q	q	110
MAIN HEATING EQUIPMENT USING NATURAL GAS									
CENTRAL WARM AIR FURNACE	6.4	90	92	379	4.12	6.4	90	92	379
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	. 5	125	128	458	3.59	.5	125	128	458
FURNACE	3.2	57	59	221	3.78	3.2	57	59	221
ROOM HEATER	.5	63	64	264	4.14	.5	63	64	264
NONE/OTHER	1.1	52	53	213	4.06	.1	50	51	237
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	1.1	132	134	467	3.47	1.0	135	138	478
5,500 TO 7,000 HDD	.9	100	102	393	3.87	.8	106	108	414
4,000 TO 5,499 HDD	1.3	79	81	425	5.26	1.1	82	84	444
<2,000 CDD AND <4,000 HDD	8.0	70	71	277	3.91	7.3	71	73	285
>2,000 CDD AND <4,000 HDD	.5	51	52	250	4.80	.4	52	53	258



Table 4. (Continued) Census Division: Mountain

Average Residential Natural Gas Consumption and Expenditures

		ANY	NATURAL GAS	USED		NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	PER	AVG. PRICE CDOLLARS PER HILLION BTU	HOUSE-		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	3.0	92	94	375	4,00	2.8	95	97	386
TOTAL HOUSEHOLDS	3.0	76	74	3/3	4.00	2.0	73	71	300
AREA TYPE URBAN	2.5	90 100	92 102	366 412	3.99 4.04	2.3	93 103	95 106	377 426
SMSA									
SMSA	2.2	87 105	89 108	351 438	3.96 4.08	2.1 .8	89 111	91 113	359 458
NATURAL GAS PAID BY HOUSEHOLD									
YES	2.6 .5	93 84	95 86	382 335	4.01 3.90	2.4	96 87	98 89	394 344
TYPE OF HOUSING STRUCTURE									
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	2.5 .6	97 71	99 72	394 290	3.99 4.02	2.3 .5	100 73	102 75	405 300
NUMBER OF ROOMS									
1 TO 3	.4 1.4	63 85	64 86	274 352	4.26 4.08	.4 1.3	63 88	65 89	276 363
6 OR MORE	1.2	111	113	437	3.87	1.1	115	118	453
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALL	.6 .3	77 89	79 91	335 353	4.23 3.89	.5 .3	79 94	81 96	342 373
NONE	2.2	96	98	388	3.96	2.0	99	101	399
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	1.2 1.3	76 84	77 86	315 358	4.08 4.18	1.1 1.2	78 87	60 89	323 370
2,000 OR MORE	.6	145	148	542	3.67	.5	147	150	550
YEAR HOUSE BUILT					7 00	0.5	108	111	430
1939 OR EARLIER	0.5 .9	104 97	106 99	414 391	3.90 3.96	.8	100	102	400
1960 OR LATER	1.7	85	87	354	4.06	1.6	88	90	365
OWN/RENT									
DWN	2.0	97 80	99 82	396 331	3.99 4.03	1.9 .9	101 82	103 84	410 337
RENT	1.0	80	02	331	4.03	• •		-	
1980 FAMILY INCOME LESS THAN \$10,000	.9	80	82	336	4.12	.9	81	82	339
\$10,000 TO \$19,999	1.0	85	86	355	4.10	.9	89	91	371
\$20,000 TO \$34,999 \$35,000 OR MORE	.8 .3	98 134	100 137	391 508	3.93 3.71	.7 .3	102 138	104 140	408 520
TOTAL BELOW 100 PERCENT			20.						
OF POVERTY LINE	.4	92	94	378	4.03	.4	94	96	385
TOTAL BELOW 125 PERCENT OF POVERTY LINE	.6	87	89	363	4.08	.5	88	90	366
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	1.4	84	86	347	4.05	1.2	88 106	90 108	363 423
35 TO 59 YEARS	1.1 .6	103 90	105 92	411 372	3.93 4.04	1.0 .6	90	92	372
HOUSEHOLD MEMBERS						_			311
1	.6	72 85	74 87	301 355	4.07 4.08	.5 1.0	75 87	77 89	361
2 3 OR MORE	1.1 1.4	105	107	420	3.93	1.3	109	112	436
MAIN HEATING FUEL									
NATURAL GAS	2.8	95	97	386	3.98	2.8	95	97	386
FUEL OIL OR KEROSENE	.1 Q	48 Q	49 Q	225 Q	4.61 Q	-	-	_	-
OTHER	.1	45	46	199	4.34	_	_	_	_



Table 4. (Continued)
Census Division: Mountain

) 	ANY	NATURAL GAS	USED		NATURAL GAS USED AS MAIN HEATING FUEL					
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE (DOLLARS) PER MILLION BTU)	HOUSE-	AVG. AHOUNT CONSUMED PER HOUSEHOLD (THOUSAND CU.FT.)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		
HOT WATER FUEL											
NATURAL GAS	2.8	94	96	379	3.95	2.7	96	98	386		
ELECTRICITY	.2	61	62	328	5.27	.1	72	73	377		
FUEL OIL OR KEROSENE	ġ.	q	Q	Q	Q.	Q .	ģ	ġ.	Q		
OTHER	Q	q	q	52	à	à	q	q	à		
MAIN HEATING EQUIPMENT USING NATURAL GAS											
CENTRAL HARM AIR FURNACE	2.0	101	104	409	3.95	2.0	101	104	409		
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	.3	105	107	401	3.75	.3	105	107	401		
FURNACE	.3	68	69	301	4.35	.3	68	69	301		
ROOM HEATER	.2	65	67	290	4.33	. 2	65	67	290		
NONE/OTHER	. 3	48	49	225	4.57	.1	53	54	260		
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	1.0	125	128	476	3.72	.9	129	132	489		
5,500 TO 7,000 HDD	.9	99	102	390	3.84	.8	106	108	410		
4,000 TO 5,499 HDD	.3	90	92	396	4.30	.3	90	92	396		
<2,000 CDD AND <4,000 HDD	.4	46	47	234	5.02	.4	46	47	237		
>2,000 CDD AND <4,000 HDD	.5	51	52	253	4.91	.4	52	53	258		



Table 4. (Continued) Census Division: Pacific

		ANY	NATURAL GAS	USED		NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD Characteristics	NUMBER OF HOUSE- HOLDS (MILLIONS)		AYG. AYG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU)	OF HOUSE-	AVG. AMOUNT CONSUMED PER HOUSEHOLD (THOUSAND CU.FT.)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	8.8	73	74	299	4.02	7.9	75	76	308
TOTAL MODELINES	0.0	,,		2,,	4.02	,	,,,	,,	300
AREA TYPE URBAN RURAL	8.1 .7	72 82	74 84	293 364	3.99 4.34	7.3 .6	74 85	76 87	302 376
SMSA									
SMSA	8.3 .5	71 101	73 103	297 338	4.08 3.28	7.5 .5	73 102	75 104	306 341
NATURAL GAS PAID BY HOUSEHOLD									
YES	7.5 1.3	76 56	77 57	315 208	4.07 3.64	6.9 1.0	78 55	80 57	324 206
TYPE OF HOUSING STRUCTURE									
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	6.4 2.3	82 48	84 49	342 182	4.08 3.75	6.0 1.9	84 48	85 49	348 183
NUMBER OF ROOMS						_			
1 TO 3	1.0 3.6 4.2	49 62 88	50 63 90	191 244 373	3.85 3.86 4.14	.8 3.1 4.0	48 63 89	50 65 91	190 250 376
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALL	1.9	77	79	309	3.92	1.7	81	82	323
NONE	1.2 5.6	65 73	66 75	260 304	3.91 4.08	1.2 5.1	67 75	68 77	268 312
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	2.8 4.6	53 73	54 74	209 293	3.89 3.94	2.3 4.3	55 73	56 75	219 294
2,000 OR MORE	1.3	116	119	513	4.32	1.3	118	121	522
YEAR HOUSE BUILT	• •		***	201	4 17		73	75	313
1939 OR EARLIER	2.4 2.7	70 74	71 76	296 299	4.17 3.94	2.1 2.6	75 75	73 77	302
1960 OR LATER	3.6	74	75	301	3.99	3.2	76	77	309
OWN/RENT					4 47		0.4	04	349
RENT	5.3 3.5	83 58	85 59	344 230	4.07 3.92	5.0 3.0	84 59	86 61	239
1980 FAMILY INCOME								67	264
LESS THAN \$10,000	2.0 1.8	62 65	63 67	248 268	3.91 4.01	1.6 1.7	66 67	68	276
\$20,000 TO \$34,999	2.8	71	73	293	4.02	2.6	72	73	294
\$35,000 OR MORE	2.1	91	93	382	4.09	2.1	92	94	386
TOTAL BELOW 100 PERCENT	1.1	58	59	225	3.79	.8	63	64	240
OF POVERTY LINE	1.1	30	37	LLJ	3.77	••			
OF POVERTY LINE	1.6	59	60	228	3.81	1.2	62	63	240
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	3.3	63	64	254	3.97	2.8	64	65	258
35 TO 59 YEARS	3.7	83	84	343	4.06	3.4	85	87	355
60 YEARS AND OVER	1.8	72	73	292	3.99	1.6	73	74	297
HOUSEHOLD MEMBERS			F6	228	3.93	1.2	58	59	229
2	1.3 2.9	57 65	58 66	228 263	3.93	2.6	67	69	275
3 OR MORE	4.6	82	84	341	4.06	4.2	84	86	351
MAIN HEATING FUEL		75	٠,	700	4.03	7.9	75	76	308
NATURAL GAS	7.9 .5	75 52	76 53	308 205	4.03 3.88	-	-	-	-
FUEL OIL OR KEROSENE	Q	Q	Q	193	Q	-	-	-	-
OTHER	.3	55	56	222	3.95	-	-	-	-



Table 4. (Continued) Census Division: Pacific

	 	ANY	NATURAL GAS	USED		NATURAL GAS USED AS MAIN HEATING FUEL					
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE COLLARS PER MILLION BTU)	 NUMBER OF HOUSE- HOLDS (MILLIONS) 		,	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		
HOT WATER FUEL											
NATURAL GAS	8.4	73	74	293	3.94	7.6	75	76	302		
ELECTRICITY	.4	75	77	443	5.77	.4	79	80	460		
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q		
OTHER	q	Q	Q	110	q	Q	Q	q	110		
MAIN HEATING EQUIPMENT USING NATURAL GAS											
CENTRAL WARM AIR FURNACE	4.4	85	87	366	4.22	4.4	85	87	366		
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	.2	151	154	530	3.44	.2	151	154	530		
FURNACE	3.0	56	58	214	3.72	3.0	56	58	214		
ROOM HEATER	. 3	61	62	249	4.01	.3	61	62	249		
NONE/OTHER	.8	53	54	210	3.91	Q	Q	Q	156		
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	.1	198	203	368	1.82	.1	198	203	368		
5,500 TO 7,000 HDD	Q	Q	Q	546	Q	Q	Q	Q	546		
4,000 TO 5,499 HDD	1.0	76	78	432	5.56	.9	80	82	458		
<2,000 CDD AND <4,000 HDD	7.6	71	72	280	3.87	6.9	73	74	287		
>2,000 CDD AND <4,000 HDD	Q	Q	Q	209	Q	Q	Q	Q	245		

[&]quot;-" = DATA NOT APPLICABLE.

[&]quot;G" = DATA MITHHELD BECAUSE OF A LARGE VARIANCE.

NOTE: BECAUSE OF ROUNDING, DATA MAY NOT SUM TO TOTALS. PERCENTAGES ARE CALCULATED ON UNROUNDED NUMBERS. SEE GLOSSARY FOR DEFINITION OF TERMS USED IN THIS REPORT.

SOURCE: ENERGY INFORMATION ADMINISTRATION, OFFICE OF ENERGY MARKETS AND END USE, ENERGY END USE DIVISION, FORM EIA-457, THE 1981 RESIDENTIAL ENERGY CONSUMPTION SURVEY.



Residential Electricity
Consumption and
Expenditures—April 1981
Through March 1982, United

Average Residential Electricity Consumption and Expenditures

	States									
		ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL	
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		PER MILLION	 NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		
TOTAL HOUSEHOLDS	83.1	8.7	30	552	18.51	14.2	15.6	53	848	
AREA TYPE										
URBAN	57.3 25.8	7.8 10.8	27 37	517 630	19.38 17.11	8.8 5.4	14.2 17.9	49 61	804 921	
SMSA										
SMSA	56.6 26.5	8.3 9.8	28 33	551 554	19.55 16.63	10.1 4.1	14.6 18.1	50 62	849 847	
ELECTRICITY PAID BY HOUSEHOLD										
YES	76.6 6.5	8.9 7.1	30 24	555 521	18.30 21.64	12.9 1.3	15.7 14.8	54 51	83 6 966	
TYPE OF HOUSING STRUCTURE										
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	61.7 21.4	9.6 6.4	33 22	586 455	17.96 20.90	8.1 6.1	18.4 11.9	63 41	949 714	
NUMBER OF ROOMS										
1 TO 3	10.1 36.7	5.5 7.8	19 27	384 49 0	20.45 18.47	3.0 7.0	10.3 14.2	35 48	624 769	
6 OR MORE	36.2	10.6	36	663	18.26	4.2	21.8	74	1137	
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALLSOME	30.7 17.7	11.5 7.9	39 27	698 539	17.79 20.12	8.8 1.8	16.0 15.8	55 54	912 891	
NONE	34.7	6.8	23	430	18.64	3.6	14.6	50	673	
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	28.9 35.8	6.4 9.2	22 31	425 575	19.37 18.30	6.5 5.8	11.6 17.1	39 59	65 7 92 3	
2,000 OR MORE	18.4	11.5	39	709	18.07	1.9	25.0	85	1274	
YEAR HOUSE BUILT	24.2	6.4	20	630	20.03		36.6	48	(0)	
1939 OR EARLIER	20.4	7.9	22 27	439 504	20.01 18.68	1.2 1.6	14.0 15.4	53	686 792	
1960 OR LATER	38.5	10.6	36	649	17.87	11.4	15.8	54	873	
OWN/RENT	1				10.10	- ,	30.0	,,	0/7	
OWN	55.1 28.0	9.6 7.0	33 24	597 464	18.19 19.36	7.4 6.8	18.0 13.1	61 45	943 745	
1980 FAMILY INCOME										
LESS THAN \$10,000	23.3	6.5	22	422	19.12	4.2	11.9	41	676	
\$10,000 TO \$19,999 \$20,000 TO \$34,999	23.2 24.0	8.5 9.7	29 33	527 603	18.13 18.30	4.3 3.7	15.7 17.3	54 59	836 925	
\$35,000 OR MORE	12.6	11.6	40	742	18.72	2.1	20.2	69	1091	
TOTAL BELOW 100 PERCENT										
OF POVERTY LINETOTAL BELOW 125 PERCENT	11.0	6.6	23	430	19.06	2.1	12.3	42	710	
OF POVERTY LINE	15.8	6.6	22	428	19.13	2.8	11.9	41	684	
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	27.6 33.0	8.4 10.1	29 35	522 643	18.12 18.60	6.3 4.5	14.0 19.2	48 66	775 1007	
60 YEARS AND OVER	22.5	7.1	24	456	18.89	3.4	14.1	48	777	
HOUSEHOLD MEMBERS										
1	15.3 27.7	5.5	19	363 516	19.47 18.52	3.1 5.4	10.6 14.6	36 50	599 811	
2 3 OR MORE	40.1	8.2 10.4	28 35	516 650	18.31	5.8	19.3	66	1014	
MAIN HEATING FUEL										
NATURAL GAS	46.2	7.0	24	461	19.26	76.0	15.4	-	- 0/.0	
FUEL OIL OR KEROSENE	14.2 12.2	15.6 7.2	53 24	848 56 0	15.89 22.86	14.2	15.6	53 -	848 -	
OTHER,	10.5	8.8	30	545	18.08	-	-	-	-	
See footnotes at end of table.										



Table 5. (Continued)
United States

		ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU) 	NUMBER OF HOUSE- HOLDS (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (THOUSAND KWH)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
HOT WATER FUEL									
NATURAL GAS	45.6	6.7	23	456	19.94	1.4	9.2	31	621
ELECTRICITY	27.1	13.4	46	733	16.07	12.7	16.4	56	873
FUEL OIL OR KEROSENE	6.1	5.1	17	531	30.79	Q	Q	Q Q	Q.
OTHER	4.4	6.6	22	466	20.80	.1	14.8	50	932
ALL ELECTRIC HOME									
YES	12.4	16.4	56	872	15.55	12.4	16.4	56	872
NO	70.7	7.4	25	496	19.66	1.8	10.2	35	687
MAIN HEATING EQUIPMENT									
USING ELECTRICITY									
CENTRAL WARM AIR	5.1	16.5	56	892	15.82	5.1	16.5	56	892
HEAT PUMP	2.7	16.1	55	929	16.94	2.7	16.1	55	929
WALL UNITS	5.5	15.5	53	805	15.25	5.5	15.5	53	805
PIPELESS FURNACE	.1	14.7	50	898	17.93	.1	14.7	50	898
PORTABLE HEATERS	.7	8.2	28	506	18.04	.7	8.2	28	506
OTHER	.1	20.5	70	1124	16.05	.1	20.5	70	1124
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	8.8	7.8	27	465	17.40	.5	19.4	66	999
5,500 TO 7,000 HDD	20.9	7.7	26	505	19.12	2.1	18.4	63	920
4,000 TO 5,499 HDD	21.6	8.7	30	566	19.04	3.6	17.0	58	810
<2,000 CDD AND <4,000 HDD	19.5	8.8	30	527	17.47	3.9	14.5	49	780
>2,000 CDD AND <4,000 HDD	12.2	11.0	38	713	18.93	4.1	13.7	47	893



Table 5. (Continued) Census Region: Northeast

Average Residential Electricity Consumption and Expenditures

		ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE ODLLARS PER MILLION BTU	OF HOUSE-		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	17.9	6.8	23	589	25.23	1.5	18.6	64	1220
TOTAL HOUSEHOLDS	17.7	0.0	23	307	23.23	1.5	10.0	04	1220
AREA TYPE URBANRURAL	13.7 4.2	6.0 9.8	20 33	560 685	27.58 20.53	.9 .6	17.6 20.0	60 68	1251 1175
SMSA									
SMSA	14.1 3.8	6. 3 8.7	22 30	587 599	27.10 20.18	1.3	17.6 23.7	60 81	1208 1277
ELECTRICITY PAID BY HOUSEHOLD									
YES	15.9	6.9	24	587	24.77	1.2	19.6	67	1232
NO	2.1	6.1	21	606	29.28	.4	15.2	52	1178
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME	10.5	8.2	28	455	23.53	7	22.8	78	1353
2 OR MORE UNITS	7.4	5.0	17	655 496	29.22	.7 .9	15.2	52	1112
NUMBER OF ROOMS									
1 TO 3	2.8	4.3	15	458	31.09	.4	12.9	44	1082
4 TO 5	6.7 8.5	5.7 8.5	20 29	511 693	26.16 23.78	.6 .6	17.3 23.6	59 81	1149 1376
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALL	3.2	9.5	32	792	24.51	.6	19.0	65	1202
SOME	5.5 9.2	6.5 6.2	22 21	606 508	27.48 24.20	.3 .6	19.1 18.0	65 61	1372 1160
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	6.1 6.8	5.1 6.8	17 23	494 571	28.37 24.64	.8 .4	14.4 22.6	49 77	1064 1309
2,000 OR MORE	5.0	9.0	31	731	23.67	.3	24.6	84	1502
YEAR HOUSE BUILT 1939 OR EARLIER	8.1	5.1	18	466	26.55	0.2	14.7	50	988
1940 TO 1959	3.3	6.7	23 31	596	25.97	.1 1.2	20.2 19.1	69 65	1411 1239
1960 OR LATER	6.5	9.0	31	741	24.01	1.2	17.1	03	1237
OWN/RENT OWN	11.1 6.8	7.8 5.3	27 18	637 511	24.04 28.04	.7 .9	22.9 15.4	78 53	1371 1109
1980 FAMILY INCOME									
LESS THAN \$10,000	4.2	4.9	17	448	26.83	.5	14.1	48	1018
\$10,000 TO \$19,999	5.3	6.9	23	566	24.11	.5	21.1	72	1353
\$20,000 TO \$34,999 \$35,000 OR MORE	5.5 2.9	7.1 9.2	24 32	592 836	24.60 26.50	.4 .2	20.3 19.6	69 67	1283 1220
TOTAL BELOW 100 PERCENT OF POVERTY LINE	1.6	5.3	18	459	25.31	.2	16.1	55	1067
TOTAL BELOW 125 PERCENT OF POVERTY LINE	2.6	5.1	17	448	25.86	.3	14.6	50	975
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	5.4	6.9	23	572	24.44	.7	15.1	52	1102
35 TO 59 YEARS	7.7 4.8	7.7 5.4	26 18	671 477	25.42 25.95	.4 .4	25.3 17.2	86 59	1480 1133
HOUSEHOLD MEMBERS									
2	3.4 5.4	4.3	15 20	404 535	27.66 26.15	.4	13.2 17.0	45 58	924 1238
3 OR MORE	9.1	6.0 8.3	20 28	692	24.36	.5 .7	22.5	56 77	1361
MAIN HEATING FUEL									
NATURAL GAS	7.0 1.5	5.3	18 64	491	27.01	-	10 4	64	1220
FUEL OIL OR KEROSENE	1.5 7.9	18.6 5.7	64 20	1220 557	19.21 28.53	1.5	18.6	-	1450
OTHER	1.5	7.8	27	573	21.49	_	-	_	



Table 5. (Continued) Census Region: Northeast

		ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE DOLLARS PER MILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (THOUSAND KWH)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
HOT WATER FUEL									
NATURAL GAS	8.0	5.3	18	497	27.39	0.1	16.5	56	1453
ELECTRICITY	3.6	13.4	46	898	19.67	1.4	18.8	64	1200
FUEL DIL DR KERDSENE	5.7	5.0	17	537	31.57	Q.	Q	Q.	Q
OTHER	.5	5.3	18	442	24.26	q	Q	Q	Q
ALL ELECTRIC HOME									
YES	1.4	18.6	64	1175	18.48	1.4	18.6	64	1175
NO	16.6	5.9	20	541	27.00	.2	18.5	63	1580
MAIN HEATING EQUIPMENT USING ELECTRICITY									
CENTRAL WARM AIR	.2	18.8	64	1081	16.82	. 2	18.8	64	1081
HEAT PUMP	.2	20.4	70	1127	16.15	. 2	20.4	70	1127
WALL UNITS	1.1	18.6	63	1271	20.03	1.1	18.6	63	1271
PIPELESS FURNACE	Q	Q	Q	Q	Q	Q	Q	Q	Q
PORTABLE HEATERS	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	Q	Q	Q	Q	Q	Q	Q	Q	Q
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD	1.9	8.9	30	582	19.25	.1	21.7	74	1246
5,500 TO 7,000 HDD	7.8	7.0	24	543	22.74	.8	18.0	62	1141
4,000 TO 5,499 HDD	8.3	6.2	21	634	29.78	.6	18.6	64	1322
<2,000 CDD AND <4,000 HDD	Q	Q	Q	Ğ	Q	ġ	Q	Q T	Q
>2,000 CDD AND <4,000 HDD	õ	à	ò	ã	õ	õ	à	ò	ã



Table 5. (Continued) Census Division: New England

Average Residential Electricity Consumption and Expenditures

	 -	YHA	ELECTRICITY	USED		i ELECTRI 	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	PER HOUSEHOLD	AVG. PRICE COLLARS PER HILLION BTU	OF HOUSE-		AVG. ANCUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	4.3	6.5	22	548	24.80	0.4	15.3	52	1160
AREA TYPE URBANRURAL	3.2 1.1	5.7 8.8	19 30	491 708	25.47 23.57	.3	13.6 18.3	47 63	1072 1313
SMSA				,,,,				-	
SMSANON-SMSA	3.1 1.2	6.4 6.7	22 23	556 527	25.53 22.95	.3	16.2 11.3	55 39	124 0 794
ELECTRICITY PAID BY HOUSEHOLD									
YES	3.9 .4	6.4 7.1	22 24	541 619	24.72 25.46	.3 .1	15.5 14.9	53 51	1122 1245
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME	2.5	7.5	26	623	24.31	.1	20.7	71	1511
2 OR MORE UNITS	1.8	5.1	17	445	25.78	.3	13.1	45	1014
NUMBER OF ROOMS	_								
1 TO 3	.5 1.9	5.7 5.6	20 19	49 0 475	25.11 25.08	.1 .2	12.8 14.0	44 48	1042 1026
6 OR MORE	1.9	7.6	26	638	24.52	.1	24.2	82	1783
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED	_								
ALLSOME	.5 1.3	9.1 7.4	31 25	748 619	23.98 24.37	.1 .2	14.4 17.5	49 60	1094 1320
NONE	2.5	5.5	19	477	25.32	.1	13.4	46	1015
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)			•			_			
LESS THAN 999	1.6 1.6	5.2 6.3	18 22	455 532	25.49 24.71	.3 .1	12.5 17.2	42 59	960 1271
2,000 OR MORE	1.1	8.6	29	710	24.26	.1	25.6	87	1894
YEAR HOUSE BUILT 1939 OR EARLIER	2.1	5.2	18	454	25.53	0.1	14.2	49	1113
1940 TO 1959	.8	7.1	24	603	24.81	.1	18.9	64	1524
1960 OR LATER	1.4	8.0	27	655	24.08	.3	14.9	51	1092
OWN/RENT	2.7	7.1	24	597	24.63	.1	19.8	67	1451
RENT	1.6	5.4	18	463	25.18	.3	13.1	45	1012
1980 FAMILY INCOME									
LESS THAN \$10,000 \$10,000 TO \$19,999	1.0 1.4	4.4 6.2	15 21	398 524	26.32 24.69	.1 .2	10.9 13.9	37 47	885 1048
\$20,000 TO \$34,999	1.2	6.9	24	581	24.68	.1	17.5	60	1281
\$35,000 OR MORE	.6	9.5	33	780	23.95	Q	Q	Q	Q
TOTAL BELOW 100 PERCENT OF POVERTY LINE	.4	4.6	16	423	27.17	Q	Q	Q	Q
TOTAL BELOW 125 PERCENT OF POVERTY LINE	.6	4.3	15	390	26.54	Q	Q	Q	Q
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	1.3	6.7	23	561	24.64	.2	14.7	50	1110
35 TO 59 YEARS	1.9 1.1	7.2 5.0	25 17	606 438	24.50 25.74	.1 .1	24.1 12.5	82 43	1762 965
HOUSEHOLD MEMBERS									
2	.8 1.3	4.6 5.8	16 20	397 495	25.49 25.23	.1 .1	9.9 18.3	34 62	788 1355
3 OR MORE	2.1	7.6	26	636	24.44	.2	18.7	64	1391
MAIN HEATING FUEL									
NATURAL GAS	1.2	4.2 15.3	14 52	401 1160	28.01	-	- 15.3	- 52	1160
FUEL OIL OR KEROSENE	.4 2.1	15.3 5.9	20	1160 505	22.16 25.11	.4 -	-	-	1100
OTHER	.6	7.2	24	583	23.87	_	-		



Table 5. (Continued) Census Division: New England

	· · · · · · · · · · · · · · · · · · ·								
	 	ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	I AVG. I AMOUNT I CONSUMED I PER I HOUSEHOLD I (THOUSAND I KNH)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE COLLARS PER MILLION BTU)	HUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. LEXPEND- LITURES PER HOUSEHOLD (DOLLARS)
HOT WATER FUEL									
NATURAL GAS	1.6	4.5	15	424	27.84	0.1	11.1	38	890
ELECTRICITY	.9	11.6	40	880	22.27	.3	16.2	55	1212
FUEL OIL OR KEROSENE	1.5	5.7	19	492	25.32	Q	Q	Q	Q
OTHER	.3	5.0	17	438	25.44	Q	Q	Q	Q
ALL ELECTRIC HOME									
YES	.3	16.2	55	1212	21.96	.3	16.2	55	1212
но	3.9	5.6	19	491	25.48	.1	11.1	38	890
MAIN HEATING EQUIPMENT USING ELECTRICITY									
CENTRAL WARM AIR	Q	Q	Q;	Q	Q	Q	Q	Q	Q
HEAT PUMP	Q	Q	Q	Q	Q	Q	Q	Q	Q
WALL UNITS	.4	15.6	53	1165	21.85	.4	15.6	53	1165
PIPELESS FURNACE	Q	Q	Q	Q	Q	Q	Q	Q	Q
PORTABLE HEATERS	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	Q	Q	Q	Q	Q	Q	Q	Q	Q
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	1.1	6.5	22	513	23.13	.1	12.7	43	874
5,500 TO 7,000 HDD	3.2	6.5	22	560	25.38	.3	16.1	55	1236
4,000 TO 5,499 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q
<2,000 CDD AND <4,000 HDD	Q	q	Q	Q	q	Q	Q	q	Q
>2,000 CDD AND <4,000 HDD	q	Q	q	è	Q	Q	Q	q	Q



Table 5. (Continued) Census Division: Middle Atlantic

Average Residential Electricity Consumption and Expenditures

	! 	ANY	ELECTRICITY	USED		 ELECTRI 	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU)	 NUMBER OF HOUSE- HOLDS (MILLIONS)	I PER IHOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	13.7	7.0	24	602	25.36	1.1	19.8	67	1241
AREA TYPE URBANRURAL	10.6 3.1	6.0 10.1	21 35	581 676	28.17 19.58	.7 .5	19.2 20.5	6 5 70	1320 1133
SMSA SMSA NON-SMSA	11.0	6.3 9.6	22 33	595 631	27.55 19.32	.9 .2	18.0 28.3	61 97	1197 1458
ELECTRICITY PAID BY HOUSEHOLD YES	12.0	7.1	24	602	24.79	. 9	20.9	71	1266
TYPE OF HOUSING STRUCTURE	1.7	5.8	20	604	30.36	.2	15.4	53	1142
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	8.1 5.6	8.4 4.9	28 17	665 512	23.32 30.36	.6 .6	23.2 16.3	79 56	1321 1161
NUMBER OF ROOMS 1 TO 3	2.3 4.7 6.7	4.0 5.8 8.8	14 20 30	451 525 709	32.99 26.57 23.61	.2 .4 .5	12.9 18.9 23.6	44 65 80	1105 1214 1323
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALLSOMENONE	2.8 4.3 6.6	9.5 6.2 6.4	32 21 22	799 603 520	24.60 28.58 23.83	.5 .2 .5	20.1 20.8 19.1	69 71 65	1229 1426 1194
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	4.5 5.2 3.9	5.1 6.9 9.2	17 24 31	508 584 736	29.42 24.62 23.52	.6 .3 .3	15.3 24.1 24.4	52 82 83	1111 1320 142 2
YEAR HOUSE BUILT 1939 OR EARLIER	6.0 2.6	5.1 6.6	17 23	470 594	26.90 26.36	0.1 Q	15.1 Q	52 Q	895 Q
1960 OR LATER	5.1	9.3	32	765	23.99	1.0	20.2	69	1278
OWN/RENT OWNRENT	8.4 5.3	8.0 5.3	27 18	650 526	23.88 28.91	.5 .6	23.7 16.4	81 56	1350 1150
1980 FAMILY INCOME LESS THAN \$10,000 \$10,000 TO \$19,999	3.2 4.0	5.0 7.1	17 24	464 581	26.97 23.94	.4 .4	15.0 24.2	51 83	1058 1485
\$20,000 TO \$34,999 \$35,000 OR MORE	4.3	7.1 9.2	24 31	595 852	24.57 27.27	.3	21.2 17.3	72 5 9	1283 984
TOTAL BELOW 100 PERCENT OF POVERTY LINE	1.3	5.5	19	468	24.89	.2	16.3	56	1053
TOTAL BELOW 125 PERCENT OF POVERTY LINE	2.0	5.3	18	464	25.71	.2	14.9	51	970
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	4.2 5.9 3.6	6.9 7.9 5.5	24 27 19	575 692 489	24.38 25.68 26.01	.5 .4 .3	15.3 25.5 19.4	52 87 66	1098 1439 1210
HOUSEHOLD MEMBERS	2.6	4.2	14	406	28.38	2	15.4	52	1017
2. 3 OR MORE	4.1 6.9	6.1 8.5	21 29	548 710	26.43 24.34	.4	16.7 23.7	57 81	1213 1351
MAIN HEATING FUEL NATURAL GAS	5.9	5.6	19	510	26.86		-	-	-
FUEL DIL OR KEROSENE	1.1 5.8 .9	19.8 5.7 8.2	67 19 28	1241 576 566	18.41 29.85 20.22	1.1	19.8 - -	67 - -	1241 - -



Table 5. (Continued)
Census Division: Middle
Atlantic

		ANY	ELECTRICITY	USED		i ELECTRI	CITY USED A	S MAIN HEAT	'ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- I TURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE CDOLLARS PER MILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- I TURES PER HOUSEHOLD (DOLLARS)
HOT WATER FUEL									
NATURAL GAS	6.4	5.5	19	515	27.30	0.1	22.6	77	2089
ELECTRICITY	2.7	14.0	48	903	18.93	1.1	19.6	67	1196
FUEL OIL OR KEROSENE	4.2	4.7	16	552	34.25	Q	Q	Ģ.	Q
OTHER	.3	5.6	19	446	23.33	Q	Q	Q	à
ALL ELECTRIC HOME									
YES	1.0	19.4	66	1163	17.55	1.0	19.4	66	1163
NO	12.6	5.9	20	556	27.45	.1	23.0	79	2002
MAIN HEATING EQUIPMENT USING ELECTRICITY									
CENTRAL WARM AIR	.1	18.7	64	980	15.37	.1	18.7	64	980
HEAT PUMP	.2	20.4	70	1127	16.15	.2	20.4	70	1127
WALL UNITS	.8	20.4	70 68	1319	19.37	.8	20.4	68	1319
PIPELESS FURNACE	. °	20.0 Q	9	1317 Q	17.37 Q	Q Q	20.0 Q	Q	1317 G
PORTABLE HEATERS	Ğ	ď	Ğ	ů,	ŏ	Q Q	Q.	Q	Q Q
OTHER	q	Q	q	ų Q	Q	Q	q	Q	Q
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	.8	12.2	42	680	16.31	.1	33.4	114	1726
5,500 TO 7,000 HDD	4.6	7.4	25	532	21.16	.5	19.3	66	1081
4,000 TO 5,499 HDD	8.3	6.2	21	634	29.78	.6	18.6	64	1322
<2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q
>2,000 CDD AND <4,000 HDD	Ġ.	Q.	Ġ.	q	g.	Q.	Q	Q	Q



Table 5. (Continued) Census Region: North Central

		ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	PER HOUSEHOLD	AVG. PRICE (DOLLARS PER MILLION BTU)	OF HOUSE-	I PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	
TOTAL HOUSEHOLDS	21.2	7.9	27	484	17.93	1.6	16.2	55	827
		* * *	-			=,			
AREA TYPE URBAN RURAL	14.2 7.0	7.0 9.8	24 33	434 583	18.26 17.45	.9 .7	13.8 19.6	47 67	737 958
SMSA									
SMSA	13.9 7.4	7.7 8.3	26 28	480 490	18.27 17.33	1.1 .5	16.0 16.7	54 57	841 792
ELECTRICITY PAID BY HOUSEHOLD									
YES	19.8	7.9	27	483	17.84	1.3	15.8	54	772
NO	1.4	7.5	26	493	19.16	.3	17.6	60	1066
TYPE OF HOUSING STRUCTURE									
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	16.3 4.9	8.5 6.0	29 21	514 383	17.78 18.63	.6 1.0	22.6 12.1	77 41	1074 672
NUMBER OF ROOMS									
1 TO 3	2.4	5.6	19	352	18.31	٠ <u>6</u>	11.5	39	661
4 TO 5	9.2 9.7	6.5 9.8	22 34	408 588	18.47 17.53	.7 .3	14.8 26.6	50 91	739 1276
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
SOME	7.8 5.1	9.5 8.1	32 28	558 506	17.23 18.34	1.0 .3	14.7 21.5	50 73	744 1146
NONE	8.4	6.3	22	401	18.59	.3	16.5	56	822
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	6.8	5.7	19	356	18.29	1.0	12.0	41 73	640 1075
1,000 TO 1,999 2,000 OR MORE	7.9 6.6	7.7 10.3	26 35	482 616	18.25 17.44	.3 .2	21.5 28.7	98	1373
YEAR HOUSE BUILT						• •	15.8	54	749
1939 OR EARLIER	7.7 5.5	7.1 7.0	24 24	445 450	18.37 18.73	0.2 .1	15.8	52	796
1960 OR LATER	8.0	9.3	32	544	17.19	1.3	16.3	56	841
OWN/RENT									
OWNRENT	15.0 6.2	8.5 6.5	29 22	515 408	17.82 18.26	.5 1.1	22.7 13.5	77 46	1063 729
1980 FAMILY INCOME									
LESS THAN \$10,000	6.3	5.7	19	368	19.09	.6	11.9	41	684
\$10,000 TO \$19,999	6.1	7.9	27 30	474 540	17.48 17.88	.7 .3	17.8 16.8	61 57	872 848
\$20,000 TO \$34,999 \$35,000 OR MORE	6.2 2.7	8.8 10.9	37	645	17.34	.1	34.6	118	1559
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE	2.7	5.8	20	380	19.32	.2	12.9	44	772
TOTAL BELOW 125 PERCENT OF POVERTY LINE	4.0	5.8	20	382	19.29	.3	12.7	43	747
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS		7.4	25	452	17.86	.8	14.6	50	728
35 TO 59 YEARS		9.5 6.3	32 22	577 398	17.76 18.36	. 3 . 5	20.3 16.0	69 55	1025 861
	9.6	0.3	٤٤	370	10.30		10.0	23	
HOUSEHOLD MEMBERS	4.3	5.0	17	321	18.90	.6	11.2	38	618
2	7.0	7.4	25	456	18.10	. 5	16.5	56	861
3 OR MORE	10.0	9.5	33	573	17.62	.4	22.7	78	1075
MAIN HEATING FUEL NATURAL GAS	15.4	6.7	23	431	18.88	-	-	-	-
ELECTRICITY		16.2	55	827	15.00	1.6	16.2	55	827
FUEL OIL OR KEROSENE	1.7	10.9	37	618	16.59	-	-	-	-
OTHER	2.5	8.2	28	502	18.03	-	-	_	-



Table 5. (Continued)
Census Region: North Central

	! ! !	ANY	ELECTRICITY	USED	_	ELECTRICITY USED AS MAIN HEATING FUEL					
HOUSEHOLD Characteristics	 NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (ODLLARS)	AVG. PRICE (DOLLARS PER MILLION BYU)	 NUMBER OF HOUSE- HOLOS (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (THOUSAND KMH)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		
HOT WATER FUEL											
NATURAL GAS	14.5	6.5	22	424	19.02	0.1	10.5	36	602		
ELECTRICITY	5.2	12.3	42	679	16.19	1.5	16.7	57	850		
FUEL OIL OR KEROSENE	.1	4.3	15	269	18.27	Q.	Q	Q	Q		
OTHER	1.5	6.0	20	386	18.89	q	q	Q	q		
ALL ELECTRIC HOME											
YES	1.4	16.8	57	852	14.85	1.4	16.8	57	852		
NO	19.8	7.3	25	457	18.44	. 2	11.2	38	637		
MAIN HEATING EQUIPMENT											
USING ELECTRICITY											
CENTRAL WARM AIR	.5	15.2	52	746	14.35	.5	15.2	52	746		
HEAT PUMP	Q	Q	Q	Q	Q	Q	Q	Q	Q		
WALL UNITS	1.0	16.5	56	845	15.05	1.0	16.5	56	845		
PIPELESS FURNACE	Q	Q	Q	Q	Q	٩	Q	Q	Q		
PORTABLE HEATERS	Q _	Q	q	Q	. Q.	Q _	Q.	Q	Q		
OTHER	.1	20.2	69	1227	17.76	.1	20.2	69	1227		
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD	5.6	7.6	26	444	17.07	.2	16.9	58	818		
5,500 TO 7,000 HDD	11.5	7.6	26	483	18.66	.8	16.4	56	857		
4,000 TO 5,499 HDD	4.2	9.2	31	540	17.24	.6	15.7	53	790		
<2,000 CDD AND <4,000 HDD	Ġ.	Ŕ	Q .	Q	Q Q	ė	Q'	q	ģ		
>2,000 CDD AND <4,000 HDD	õ	ã	ã	õ	ã	õ	ā	ā	ā		



Table 5. (Continued) Census Division: East North Central

Average Residential Electricity Consumption and Expenditures

	! !	ANY	ELECTRICITY	USED		 ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	 NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (ODLLARS)	AVG. PRICE COLLARS PER MILLION BTU	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	14.6	7.4	25	471	18.59	0.8	17.3	59	902
AREA TYPE									
URBAN	10.2 4.4	6.5 9.6	22 33	420 588	19.03 17.91	.6 .3	14.2 23.2	49 79	773 1155
SMSA									
SMSA	10.6 4.1	7.2 7.9	25 27	471 472	19.05 17.50	.8 .1	16.9 21.2	58 72	891 1008
ELECTRICITY PAID BY HOUSEHOLD									
YES	13.8	7.5	25	470	18.48	.7	16.5	56	812
NO	.9	6.9	24	482	20.46	.1	20.6	70	1316
TYPE OF HOUSING STRUCTURE									
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	11.2 3.4	8.0 5.6	27 19	502 367	18.43 19.35	.3 .5	24.6 13.1	84 45	1199 735
NUMBER OF ROOMS									
1 TO 3	1.5	5.0	17	327	19.03	.3	12.5	43	726
4 TO 5	6.3	6.2	21	405	19.17	.4	15.3	52	787
6 OR MORE	6.8	9.1	31	564	18.17	.2	27.8	95	1375
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED						_			
ALL	4.4 3.6	8.9 7.9	30 27	549 511	18.03 18.85	.5 .2	14.8 22.2	50 76	753 1206
NONE	6.6	6.2	21	398	18.94	.ī	19.0	65	987
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	4.5 5.6	5.5 7.3	19 25	353 469	18.66 18.85	.6 .2	13.4 23.8	46 81	707 1241
2,000 OR MORE	4.5	9.5	32	592	18.30	.1	26.8	91	1360
YEAR HOUSE BUILT									
1939 OR EARLIER	5.4 3.8	7.0 6.6	24 23	447 438	18.77 19.32	Q 0.1	Q 19.1	Q 65	Q 940
1940 TO 1959	5.4	8.4	29	518	18.03	.7	16.9	58	901
OWN/RENT									
OWN	10.3	7.9	27	500	18.63	.2	25.3	86	1205
RENT	4.3	6.4	22	403	18.48	.7	15.2	52	826
1980 FAMILY INCOME							•••	46	830
LESS THAN \$10,000 \$10,000 TO \$19,999	4.6 4.1	5.4 7.7	19 26	367 471	19.72 17.86	.3 .4	13.6 20.0	68	975
\$20,000 TO \$34,999	4.2	8.5	29	537	18.44	.2	17.2	59	874
\$35,000 OR MORE	1.7	9.2	32	587	18.62	Q	Q	Q	Q
TOTAL BELOW 100 PERCENT									000
OF POVERTY LINE	2.0	5.7	19	390	20.04	.1	15.8	54	992
OF POVERTY LINE	3.0	5.7	19	387	19.98	. 2	15.4	52	962
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	4.6	7.1	24	447	18.36	.4	15.6	53	775
35 TO 59 YEARS	5.4 4.6	9.0 5.9	31 20	568 380	18.56 18.92	. 2 . 2	21.5 17.6	73 60	1195 952
HOUSEHOLD MEMBERS									
1	2.9	4.4	15	292	19.57	.3	10.9	37	624
2	4.7	7.1	24	452	18.57	. 3	18.6	63	998
3 DR MORE	6.9	8.9	30	561	18.40	. 3	22.4	76	1085
MAIN HEATING FUEL		, -		,					
NATURAL GAS	11.2 .8	6.2 17.3	21 59	417 902	19.62 15.32	.8	17.3	59	902
FUEL OIL OR KEROSENE	1.2	10.5	36	591	16.50	-		-	-
OTHER	1.3	8.5	29	545	18.72	-	-	-	-



Table 5. (Continued) Census Division: East North Central

	i	ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. PRICE OLLARS PER MILLION BTU)	I NUMBER I OF HOUSE- HOLDS (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (THOUSAND KWH)		AVG. EXPEND- I TURES PER HOUSEHOLD (DOLLARS)
OT WATER FUEL									
NATURAL GAS	10.3	6.1	21	415	19.83	0.1	14.4	49	813
ELECTRICITY	3.5	11.5	39	649	16.50	.7	17.6	60	912
FUEL DIL OR KEROSENE	Q	Q	ą´	Ğ.	Q	ģ	Q	q	Q
OTHER	.7	5.9	20	404	20.19	Q	Q	q	Q
LL ELECTRIC HOME									
YES	.7	17.5	60	911	15.25	.7	17.5	60	911
NO	13.9	6.9	24	448	19.03	.1	15.5	53	835
MAIN HEATING EQUIPMENT									
SING ELECTRICITY	_					_			
CENTRAL WARM AIR	.3	16.0	55	775	14.19	.3	16.0	55	775
HEAT PUMP	Q	. Q	Q	Q	Q	Q	Q	Q	Q
WALL UNITS	.5	17.3	59	916	15.48	.5	17.3	59	916 Q
PORTABLE HEATERS	Q 0	Q Q	Q 0	Q	Q	Q Q	Q	Q Q	Q
OTHER	Q	q	Q	Q Q	Q	q	Q Q	Q	q
EATING DEGREES-DAYS (HDD) ND COOLING DEGREES-DAYS (CDD) ONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	3.2	7.3	25	419	16.83	Q	Q	Q	Q
5,500 TO 7,000 HDD	10.2	7.3	25	476	19.05	.8	16.1	55	848
4,000 TO 5,499 HDD	1.2	8.7	30	574	19.23	.1	30.0	102	1504
<2,000 CDD AND <4,000 HDD	Q	Q	Q .	Q	Q	ġ-	Q	Q	Q
>2,000 CDD AND <4,000 HDD	q	à	Q	Q	Q	Q	Q.	à	Q



Table 5. (Continued) Census Division: West North Central

Average Residential Electricity Consumption and Expenditures

!		ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU)	HOUSE-		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	
TOTAL HOUSEHOLDS	6.6	9.0	31	511	16.72	8.0	15.0	51	745
AREA TYPE									
AREA TYPE URBAN	4.0	8.2	28	470	16.76	.4	13.2	45	687
RURAL	2.6	10.1	34	575	16.68	.4	16.9	58	807
SMSA									
SMSA	3.3	9.2	31	511	16.32	.4	14.2	48	742
NON-SMSA	3.3	8.7	30	511	17.14	.4	15.8	54	748
ELECTRICITY PAID BY HOUSEHOLD									
YES	6.0	9.0	31	511	16.64	.6	15.1	51	727
NO	.6	8.4	29	508	17.64	.1	14.6	50	817
TYPE OF HOUSING STRUCTURE									
SINGLE FAMILY OR MOBILE HOME	5.1	9.5	32	538	16.58	.3	20.6	70	956
2 OR MORE UNITS	1.5	7.1	24	419	17.38	.4	11.0	37	596
NUMBER OF ROOMS									
1 TO 3	.8	6.7	23	398	17.34	.3	10.8	37	608
4 TO 5	2.9 2.8	7.1 11.6	24 40	413 646	17.16 16.34	.3 .2	14.1 25.1	48 86	674 1155
				0.10	20151			•	
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALL	3.4	10.2	35	569	16.33	.5	14.6	50	735
SOME	1.5	8.5	29	494	17.14	.1	19.3	66	946
NONE	1.8	6.9	24	412	17.44	.2	14.6	50	697
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	2.2	6.0	21	361	17.57	.5	10.4	36	564
1,000 TO 1,999 2,000 OR MORE	2.3 2.1	8.8 12.2	30 42	512 665	17.05 16.03	.2 .1	19.0 30.7	65 105	899 1386
	2.1	12.2	72	603	10.03	••	30.7	103	1300
YEAR HOUSE BUILT	2.3	7.4	25	440	17.49	0.1	14.5	50	706
1939 OR EARLIER	1.7	7.9	27	476	17.62	.1	11.4	39	661
1960 OR LATER	2.6	11.1	38	598	15.84	.6	15.5	53	764
OWN/RENT									
OWN	4.7	9.8	33	549	16.41	.3	21.2	72	985
RENT	1.9	6.9	23	418	17.81	.5	10.9	37	590
1980 FAMILY INCOME									
LESS THAN \$10,000	1.7	6.2	21	373	17.66	.3	10.5	36 52	559 746
\$10,000 TO \$19,999 \$20,000 TO \$34,999	1.9 2.0	8.4 9.5	29 32	480 545	16.73 16.82	.3 .1	15.2 16.1	55	799
\$35,000 OR MORE	1.0	13.9	47	750	15.82	ū	36.9	126	1690
TOTAL DELOW ING DEDCEUT									
TOTAL BELOW 100 PERCENT OF POVERTY LINE	.7	5.9	20	351	17.29	.1	9.9	34	540
TOTAL BELOW 125 PERCENT								35	554
OF POVERTY LINE	1.0	6.2	21	364	17.30	.2	10.2	35	224
AGE OF HOUSEHOLD HEAD						_			
UNDER 35 YEARS	2.3	8.0	27	461	16.96	.4 .2	13.2 19.2	45 66	668 874
35 TO 59 YEARS	2.6 1.7	10.7 7.6	36 26	595 447	16.36 17.18	.2	14.5	49	768
				,					
HOUSEHOLD MEMBERS	1.3	6.3	22	386	17.87	. 3	11.4	39	613
2	2.3	7.9	27	464	17.22	.3	14.2	48	710
3 OR MORE	3.0	10.9	37	600	16.16	.2	23.2	79	1059
MAIN HEATING FUEL									
THE STATE OF THE S	4.2	7.9	27	466	17.30	_	-	_	_
NATURAL GAS									74.5
	.8 .4	15.0 12.1	51 41	745 694	14.59 16.81	.8	15.0	51 -	745 -



Table 5. (Continued)
Census Division: West North
Central

	! !	ANY	ELECTRICITY	USED		ELECTRICITY USED AS MAIN HEATING FUEL					
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	•		AVG. EXPEND- ITURES PER HOUSEHOLD ((DOLLARS)	AVG. PRICE COLLARS PER MILLION BTU			AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILION BTU)	AVG. EXPEND- I TURES PER HOUSEHOLD (DOLLARS)		
HOT WATER FUEL											
NATURAL GAS	4.1	7.5	26	447	17.36	0.1	4.0	14	247		
ELECTRICITY	1.7	13.9	47	743	15.64	.7	15.8	54	785		
FUEL DIL OR KEROSENE	Ğ.	Q	ġ.	Q	Q	ġ.	Q	Q.	Q		
OTHER	.8	6.1	21	370	17.78	Q	q	q	q		
ALL ELECTRIC HOME											
YES	.7	16.1	55	789	14.38	.7	16.1	55	789		
NO	5.9	8.1	28	479	17.25	.1	6.0	21	393		
MAIN HEATING EQUIPMENT											
USING ELECTRICITY											
CENTRAL WARM AIR	٠.2	14.1	48	701	14.62	.2	14.1	48	701		
HEAT PUMP	Q	Q	Q	Q	Q	Q	Q	Q	Q		
WALL UNITS	.5	15.5	53	765	14.51	.5	15.5	53	765		
PIPELESS FURNACE	Q	Q	Q	Q	Q	Q	Q	Q	Q		
PORTABLE HEATERS	Q	Q	Q	Q	Q	Q	Q	Q	Q		
OTHER	.1	15.7	53	820	15.36	.1	15.7	53	820		
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	2.4	8.1	27	477	17.35	.2	16.9	58	820		
5,500 TO 7,000 HDD	1.3	9.7	33	538	16.24	.1	20.5	70	986		
4,000 TO 5,499 HDD	3.0	9.4	32	527	16.50	.5	13.8	47	698		
<2,000 CDD AND <4,000 HDD	Q	(q)	Ģ	Ğ.	Q	ġ	q	q.	q		
>2,000 CDD AND <4,000 HDD	õ	ã	ò	ã	õ	õ	è	ò	õ		



Table 5. (Continued) Census Region: South

		ANY	ELECTRICITY	USED		ELECTRICITY USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS MILLIONS)	PER	AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE (DOLLARS PER HILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED FER HOUSEHOLD (MILLION BTU)		
TOTAL HOUSEHOLDS	27.7	10.9	37	640	17.23	7.7	15.3	52	889	
AREA TYPE URBAN RURAL	16.3 11.4	10.4 11.5	36 39	626 659	17.57 16.78	4.4 3.3	14.3 16.7	49 57	857 934	
SMSA										
SMSA	15.8 11.9	11.2 10.4	38 36	676 591	17.69 16.57	5.3 2.4	14.6 16.8	50 57	889 891	
ELECTRICITY PAID BY HOUSEHOLD										
YES	26.0 1.7	11.1 8.1	38 28	648 505	17.18 18.17	7.3 .4	15.3 14.7	52 50	889 889	
TYPE OF HOUSING STRUCTURE	22.4	11.0	70	457	17.07	4.0	17.0	59	007	
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	22.6 5.1	11.2 9.4	38 32	653 580	17.07 18.06	4.8 2.9	17.2 12.0	41	983 733	
NUMBER OF ROOMS										
1 TO 3	2.9 13.6	6.5 9.8	22 33	416 583	18.78 17.48	1.3 4.0	9.0 14.0	31 48	566 816	
6 OR MORE	11.2	13.3	46	765	16.82	2.5	20.7	71	1176	
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALLSOME	16.1 5.1	13.0 9.4	44 32	757 556	17.07 17.25	6. 0 .9	15.9 13.8	54 47	934 768	
NONE	6.5	6.8	23	415	17.97	.8	12.2	42	685	
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	10.1 13.4	7.9 11.5	27 39	480 683	17.88 17.34	2.9 3.8	11.0 16.1	38 55	663 946	
2,000 OR MORE	4.2	15.9	54	882	16.21	1.0	24.9	85	1346	
YEAR HOUSE BUILT 1939 OR EARLIER	4.8	7.5	26	446	17.37	0.4	12.9	44	710	
1940 TO 1959	7.0	9.3	32	551	17.31	1.0	13.7	47	796	
1960 OR LATER	15.8	12.6	43	738	17.18	6.3	15.7	54	916	
OWN/RENT	10.0	11 0	40	404	17.05	4.7	14 9	57	971	
RENT	19.0 8.7	11.8 9.0	40 31	684 543	17.05 17.73	3.1	16.8 13.0	44	765	
1980 FAMILY INCOME										
LESS THAN \$10,000 \$10,000 TO \$19,999	8.8 7.7	7.7 10.5	26 36	468 609	17.76 17.06	2.2 2.2	11.8 14.3	40 49	685 817	
\$20,000 TO \$34,999	7.3	12.6	43	743	17.26	2.0	16.8	57	994	
\$35,000 OR HORE	3.9	15.7	53	897	16.80	1.3	20.8	71	1210	
TOTAL BELOW 100 PERCENT OF POVERTY LINE	4.7	7.6	26	465	17.90	1.1	12.1	41	710	
TOTAL BELOW 125 PERCENT OF POVERTY LINE	6.3	7.6	26	466	18.00	1.4	11.8	40	702	
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	8.8	10.7	37	641	17.50	3.2	13.8	47 45	829 1063	
35 TO 59 YEARS	10.8 8.1	12.7 8.6	43 29	724 526	16.70 17.91	2.5 2.0	19.2 12.8	65 44	767	
HOUSEHOLD MEMBERS					u.m				F03	
2	5.0 9.6	6.7 10.2	23 35	410 609	17.97 17.56	1.4 3.0	9.9 14.2	34 49	581 851	
3 OR MORE	13.1	13.0	44	751	16.89	3.3	18.6	63	1057	
MAIN HEATING FUEL	13.0	9.2	31	535	17.14	_		_	_	
NATURAL GASELECTRICITY	7.7	15.3	52	889	17.14	7.7	15.3	52	889	
FUEL OIL OR KEROSENE	2.2	8.9	30	574	18.98	-	-	-	-	
OTHER	4.8	9.4	32	550	17.18	-		<u>-</u>		



Table 5. (Continued) Census Region: South

		ANY	ELECTRICITY	USED		ELECTRIC	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE ODLLARS PER MILLION BTU)	HOUSE-		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
OT WATER FUEL									
NATURAL GAS	11.9	8.6	30	522	17.69	0.6	10.0	34	616
ELECTRICITY	11.9	13.3	30 45	76 3	16.78	7.0	15.7	54	910
FUEL OIL OR KEROSENE	.3	6.7	23	518	22.73	, Q	15.7 Q	Q	Q
OTHER	1.6	7.0	24	466	19.50	.1	16.5	56	1024
OTHER	1.0	7.0	24	400	17.50		10.5	50	1024
LL ELECTRIC HOME									
YES	6.9	15.8	54	915	16.93	6.9	15.8	54	915
NO	20.8	9.2	32	549	17.40	.9	10.8	37	681
AIN HEATING EQUIPMENT SING ELECTRICITY									
CENTRAL WARM AIR	3.5	16.4	56	952	17.06	3.5	16.4	56	952
HEAT PUMP	2.0	15.2	52	930	17.93	2.0	15.2	52	930
WALL UNITS	1.7	15.1	51	809	15.71	1.7	15.1	51	809
PIPELESS FURNACE	.1	15.1	52	930	18.05	.1	15.1	52	930
PORTABLE HEATERS	.5	8.5	29	530	18.31	.5	8.5	29	530
OTHER	Q	Q	Q	Q	Q	Q	Q	Q	Q
EATING DEGREES-DAYS (HDD) ND COOLING DEGREES-DAYS (CDD) DNG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	Q	Q	Q	Q	Q	Q	Q	Q	Q
5,500 TO 7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q
4,000 TO 5,499 HDD	5.9	9.6	33	565	17.27	1.0	16.9	58	934
<2,000 CDD AND <4,000 HDD	10.5	11.2	38	603	15.78	2.8	17.0	58	873
>2,000 CDD AND <4,000 HDD	-		-	-	15.70	2.0	17.0	-	-



Table 5. (Continued) Census Division: South Atlantic

Average Residential Electricity Consumption and Expenditures

		ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		,	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	CONSUMED PER HOUSEHOLD	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	14.1	10.2	35	633	18.14	4.4	14.0	48	881
AREA TYPE							Same and	, when were	
URBAN	7.8	9.7	33	623	18.73	2.6	13.4	46	880
RURAL	6.3	10.8	37	646	17.48	1.9	14.8	51	882
SMSA									
SMSA	8.2	10.8	37	692	18.76	3.4	13.6	46	884
NON-SMSA	5.9	9.4	32	553	17.17	1.1	15.3	52	869
ELECTRICITY PAID BY HOUSEHOLD									
YES	13.0	10.5	36	649	18.09	4.3	14.1	48	884
NO	1.1	7.0	24	453	19.03	.1	11.6	40	780
TYPE OF HOUSING STRUCTURE									
SINGLE FAMILY OR MOBILE HOME	10.8	10.7	37	655	17.91	2.7	15.7	54	976
2 OR MORE UNITS	3.4	8.7	30	565	19.02	1.7	11.3	38	734
NUMBER OF ROOMS									
1 TO 3	1.6	6.1	21	423	20.21	.7	8.6	29	598
4 TO 5	6.8	9.6	33	598	18.29	2.4	12.8	44	798
6 OR MORE	5.8	12.1	41	732	17.72	1.3	18.9	65	1174
NUMBER OF ROOMS THAT CAN BE									
AIR CONDITIONED									
ALLSOME	7.3	12.1 9.5	41 33	758 578	18.33 17.76	3.4 .5	14.2 13.8	49 47	914 839
NONE	2.6 4.2	7.4	25	452	17.89	.6	12.6	43	721
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	5.3	7.7	26	490	18.72	1.7	10.3	35	671
1,000 TO 1,999 2,000 OR MORE	6.6 2.2	11.1 13.9	38 47	690 813	18.23 17.15	2.4	14.7 24.2	50 83	928 1421
2,000 OR PIORE	2.2	13.7	47	013	17.13		C7.E	05	1421
YEAR HOUSE BUILT	• •			.70				4.7	770
1939 OR EARLIER	2.6 3.1	7.9 8.5	27 29	472 532	17.56 18.27	0.3 .6	12.7 11.5	43 39	730 760
1960 OR LATER	8.5	11.6	39	718	18.22	3.6	14.5	49	910
Other mest									
ONN/RENT	9.0	11.0	38	678	18.04	2.7	15.0	51	949
RENT	5.1	8.8	30	554	18.35	1.7	12.4	42	774
1980 FAMILY INCOME									
LESS THAN \$10,000	4.4	7.5	25	482	18.89	1.3	10.8	37	680
\$10,000 TO \$19,999	4.0	10.5	36	625	17.49	1.4	14.2	48	851
\$20,000 TO \$34,999 \$35,000 OR MORE	3.8 1.9	11.8 12.8	40 44	729 804	18.08 18.36	1.2 .5	15.0 19.1	5 1 6 5	966 1268
\$35,000 GR HORE	1.9	12.0	44	004	10.36	. 5	17.1	63	1200
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE	2.4	7.5	26	478	18.72	.6	11.8	40	737
OF POVERTY LINE	3.1	7.6	26	491	18.91	.8	11.7	40	745
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	4.4	10.5	36	654	18.22	1.8	13.9	48	889
35 TO 59 YEARS	5.5	11.6	40	697	17.56	1.2	17.1	58	1027
60 YEARS AND OVER	4.3	8.2	28	531	19.07	1.4	11.3	39	741
HOUSEHOLD MEMBERS									
1	2.6	6.0	21	392	19.12	.8	8.5	29	547
2	5.0	9.5	32	606	18.66	1.8	13.0	44	848
3 OR MORE	6.5	12.5	43	750	17.64	1.9	17.2	59	1049
MAIN HEATING FUEL									
NATURAL GAS	4.8	8.2	28	477	17.06	- ,	-	-	881
FIFCTDICTTY									
FUEL OIL OR KEROSENE	4.4 2.0	14.0 8.6	48 29	881 575	18.46 19.54	4.4	14.0	48 -	-



Table 5. (Continued)
Census Division: South
Atlantic

HOUSEHOLD !		1				ELECTRICITY USED AS MAIN HEATING FUEL					
CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (THOUSAND KWH)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE COLLARS PER MILLION BTU	 NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		
HOT WATER FUEL											
NATURAL GAS	4.1	7.2	25	441	17.91	0.2	7.7	26	478		
ELECTRICITY	8.8	12.1	41	745	17.98	4.2	14.2	48	894		
FUEL OIL OR KEROSENE	.3	6.7	23	518	22.73	Q	Q	Q	Q		
OTHER	.9	6.6	22	463	20.60	Q	Q	Q	Q		
ALL ELECTRIC HOME											
YES	4.1	14.3	49	897	18.42	4.1	14.3	49	897		
NO	10.0	8.6	29	526	17.95	.4	10.8	37	704		
MAIN HEATING EQUIPMENT USING ELECTRICITY											
CENTRAL WARM AIR	1.8	14.6	50	909	18.27	1.8	14.6	50	909		
HEAT PUMP	1.3	14.2	49	948	19.54	1.3	14.2	49	948		
WALL UNITS	1.0	14.0	48	809	16.97	1.0	14.0	48	809		
PIPELESS FURNACE	.1	15.1	52	930	18.05	.1	15.1	52	930		
PORTABLE HEATERS	<u>.</u> 2	7.4	25	545	21.55	.2	7.4	25	545		
OTHER	Q	Q	Q	Q	Q	Q	Q	Q	Q		
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q		
<2,000 CDD AND	_	_	_	_		_	_		_		
5,500 TO 7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q		
<2,000 CDD AND											
4,000 TO 5,499 HDD	4.5	9.0	31	554	18.10	.6	16.8	57	968		
<pre><2,000 CDD AND <4,000 HDD >2,000 CDD AND <4,000 HDD</pre>	5.6	10.4	35	589	16.68	1.4	16.3	56 -	890		



Table 5. (Continued) Census Division: East South Central

Average Residential Electricity Consumption and Expenditures

	l	ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE COLLARS PER MILLION BTU			AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- I TURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	5.6	13.1	45	654	14.60	1.8	17.8	61	870
AGEA TYPE									
AREA TYPE URBANRURAL	2.7 2.9	12.4 13.8	42 47	600 704	14.23 14.91	.8 1.0	16.3 19.0	56 65	767 947
SMSA									
SMSA	2.3 3.3	13.3 13.0	45 44	652 655	14.37 14.77	.7 1.1	17.1 18.3	58 62	817 901
ELECTRICITY PAID BY HOUSEHOLD									
YES	5.4	13.3	45	663	14.61	1.8	17.9	61	873
NO	.2	7.8	27	386	14.43	Q	q	q	Q
TYPE OF HOUSING STRUCTURE	. .	,,,,		, ===	14 50		10.5	,,	04.4
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	5.0 .6	13.5 10.3	46 35	671 521	14.58 14.78	1.4	19.5 12.7	66 43	944 639
NUMBER OF ROOMS							•		
1 TO 3	.5 2.6	8.3 11.2	28 38	435 561	15.41 14.72	.3 .8	10.5 15.8	36 54	538 763
6 OR MORE	2.5	16.1	55	791	14.44	.7	22.9	78	1118
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALL SOME	3.7	15.0 11.4	51 39	736 577	14.40 14.77	1.4	18.6 16.5	63 56	909 791
NONE	1.0	7.3	25	577 399	15.98	.3 .1	13.3	46	647
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	1.8 2.7	9.2 13.5	31 46	469 671	14.92 14.58	.6 .8	12.5 18.9	43 64	626 903
2,000 OR MORE	1.1	18.4	63	902	14.39	.3	25.0	85	1231
YEAR HOUSE BUILT			••	4.04	26.70				
1939 OR EARLIER	0.8 1.6	8.5 11.5	29 39	426 580	14.60 14.73	0.1 .3	17.7 16.6	60 57	831 791
1960 OR LATER	3.2	15.0	51	745	14.55	1.4	18.1	62	888
OWN/RENT OWN	4.4	14.1	48	699	14.53	1.3	19.8	67	956
RENT	1.2	9.6	33	490	15.00	.5	13.2	45	664
1980 FAHILY INCOME		- •					• • •	4.0	407
LESS THAN \$10,000	1.9 1.6	9.9 12.1	34 41	506 613	14.90 14.86	.6 .5	14.2 16.6	49 57	697 816
\$20,000 TO \$34,999	1.3	14.9	51	739	14.51	.4	19.0	65	922
\$35,000 OR MORE	. 9	19.5	67	937	14.06	. 3	24.7	84	1196
TOTAL BELOW 100 PERCENT OF POVERTY LINE	1.0	9.1	31	472	15.13	.3	13.1	45	654
TOTAL BELOW 125 PERCENT OF POVERTY LINE	1.3	9.0	31	466	15.20	.4	12.6	43	625
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	1.6 2.5	11.8 15.4	40 53	603 753	15.02 14.32	.6 .7	14.7 20.9	50 71	747 1007
60 YEARS AND OVER	1.6	10.9	37	550	14.77	:4	16.8	57	806
HOUSEHOLD MEMBERS				4.4.=	14.44	-	10 =	4.4	592
1	1.0 1.9	8.5 12.2	29 42	425 617	14.66 14.79	.3 .6	12.5 16.4	43 56	592 820
3 OR MORE	2.8	15.3	52	758	14.49	.8	21.1	72	1025
MAIN HEATING FUEL NATURAL GAS	2.5	10.6	36	535	14.85		-	-	_
ELECTRICITY	1.8	17.8	61	870	14.30	1.8	17.8	61	870
FUEL OIL OR KEROSENE	.2	11.4	39	578 505	14.90	-	•	-	-
OTHER	1.1	11.6	40	585	14.78	-	-	•	-



Table 5. (Continued) Census Division: East South Central

	 	УИА	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER [HOUSEHOLD [ODLLARS]	AVG. PRICE ODLLARS PER MILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	
OT WATER FUEL									
NATURAL GAS	1.9	9.8	33	516	15.51	Q	Q	Q	Q
ELECTRICITY	3.5	15.3	52	741	14.21	1.7	17.9	61	870
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	.2	7.8	27	455	17.14	Q	Q	Q	Q
ALL ELECTRIC HOME									
YES	1.7	17.9	61	872	14.26	1.7	17.9	61	872
NO	3.9	11.0	37	556	14.85	.1	15.4	53	815
MAIN HEATING EQUIPMENT USING ELECTRICITY									
CENTRAL WARM AIR	.6	19.2	66	966	14.70	.6	19.2	66	966
HEAT PUMP	.4	18.9	64	931	14.44	.4	18.9	64	931
WALL UNITS	.6	16.8	57	793	13.81	.6	16.8	57	793
PIPELESS FURNACE	Q	Q	Q	Q	Q	Q	Q	Q	Q
FORTABLE HEATERS	.1	12.1	41	573	13.87	. 1	12.1	41	573
OTHER	Q	Q	Q	Q	Q	Q	Q	Q	Q
HEATING DEGREES-DAYS (HDD) NND COOLING DEGREES-DAYS (CDD) ONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	Q	Q	Q	Q	Q	Q	Q	Q	Q
5,500 TO 7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q
4,000 TO 5,499 HDD	1.5	11.5	39	599	15.28	.4	17.2	59	876
<2,000 CDD AND <4,000 HDD	3.2	14.5	49	692	14.03	1.2	18.4	63	878
>2,000 CDD AND <4,000 HDD	-	-	-				10.4	-	-



Table 5. (Continued) Census Division: West South Central

Average Residential Electricity Consumption and Expenditures

		ANY	ELECTRICITY	USED		 ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS		PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	PER		NUMBER OF HOUSE- HOLDS (MILLIONS)	I PER	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	8.0	10.4	36	641	17.98	1.5	16.2	55	941
AREA TYPE									
URBANRURAL	5.8 2.1	10.5 10.3	36 35	643 635	17.95 18.04	1.1	15.0 19.9	51 68	866 1173
SMSA									
SMSA	5.3 2.6	10.9 9.5	37 32	663 596	17.82 18.34	1.3	16.1 16.8	55 57	938 958
ELECTRICITY PAID BY HOUSEHOLD									
YES	7.5 .4	10.4 11.4	35 39	638 695	17.98 17.85	1.3 .2	16.0 17.3	55 59	931 998
TYPE OF HOUSING STRUCTURE									
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	6.9 1.1	10.4 11.0	35 38	638 659	18.05 17.56	.8 .7	18.5 13.6	63 46	1075 792
NUMBER OF ROOMS						_			
1 TO 3 4 TO 5	.8 4.3	6.1 9.3	21 32	389 574	18.85 18.14	.3 .8	8.6 15.9	29 54	519 926
6 OR MORE	2.9	13.4	46	810	17.70	.4	22.5	77	1294
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALLSOME	5.1 1.5	12.8 8.0	44 27	770 505	17.62 18.58	1.3 .1	17.5 6.8	60 23	1012 435
NONE	1.4	4.4	15	311	20.54	.1	5.2	18	375
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	3.0 4.1	7.4 11.0	25 38	467 681	18.50 18.17	.7 .6	11.5 17.9	39 61	679 1082
2,000 OR MORE	.9	17.9	61	1025	16.75	.2	26.1	89	1379
YEAR HOUSE BUILT								•	
1939 OR EARLIER	1.5 2.4	6.4 8.9	22 30	412 557	18.93 18.38	0.1 .1	7.6 17.2	26 59	506 982
1960 OR LATER	4.1	12.8	44	771	17.65	1.3	16.7	57	966
OWN/RENT OWN	5.6	11.1	38	681	17.99	.7	18.5	63	1088
RENT	2.4	9.0	31	548	17.93	.8	14.2	48	814
1980 FAMILY INCOME						_			.70
LESS THAN \$10,000 \$10,000 TO \$19,999	2.5 2.1	6.5 9.2	22 32	41 7 577	18.82 18.30	.3 .3	11.3 11.2	39 38	679 665
\$20,000 TO \$34,999	2.2	12.6	43	768	17.79	.4	19.8	68	1134
\$35,000 OR MORE	1.1	17.6	60	1030	17.19	.4	19.8	68	1145
TOTAL BELOW 100 PERCENT OF POVERTY LINE	1.4	6.7	23	436	19.05	.2	11.4	39	706
TOTAL BELOW 125 PERCENT OF POVERTY LINE	1.9	6.5	22	423	18.98	.2	11.0	38	678
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS		10.5	36	641	17.97	.7	12.6	43	747
35 TO 59 YEARS		12.5 7.8	43 27	751 499	17.65 18.65	.5 .2	21.5 14.7	73 50	1223 868
HOUSEHOLD MEMBERS				478	10.07	-	10.0	37	652
2		6.7 9.9	23 34	430 608	18.87 17.98	.3 .5	10.8 15.8	57 54	902
3 OR MORE		12.3	42	746	17.79	.6	19.4	66	1126
MAIN HEATING FUEL NATURAL GAS	5.7	9.3	32	584	18.32	-	_	-	-
ELECTRICITY	1.5	16.2	55	941	17.04	1.5	16.2	55	941
FUEL OIL OR KEROSENE		Q 7.9	Q 27	Q 500	Q 18.50	-	-	-	-



Table 5. (Continued)
Census Division: West South
Central

	i !	ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD Characteristics	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (ODCLARS)	AVG. PRICE COLLARS PER MILLION BTU	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER IHOUSEHOLD
OT WATER FUEL									
NATURAL GAS	5.9	9.3	32	580	18.31	0.4	10.7	37	673
ELECTRICITY	1.6	15.6	53	910	17.14	1.1	18.1	62	1034
FUEL OIL OR KEROSENE	Q	9	g j	Q	Q	Q	q	Q.	Ţ.
OTHER	.5	7.5	25	477	18.74	ą	q	à	q
ALL ELECTRIC HOME									
YES	1.0	18.6	63	1060	16.73	1.0	18.6	63	1060
NO	6.9	9.2	31	578	18.35	.4	10.2	35	641
AIN HEATING EQUIPMENT SING ELECTRICITY									
CENTRAL WARM AIR	1.0	17.8	61	1021	16.84	1.0	17.8	61	1021
HEAT FUMP	.2	13.9	47	816	17.23	. 2	13.9	47	816
WALL UNITS	.1	14.9	51	904	17.81	.1	14.9	51	904
PIPELESS FURNACE	Q	Q	Q	Q	Q	Q	Q	Q	Q
PORTABLE HEATERS	.1	6.5	22	444	20.07	.1	6.5	22	444
OTHER	Q	Q	Q	Q	Q	Q	Q	Q	Q
HEATING DEGREES-DAYS (HDD) NND CCOLING DEGREES-DAYS (CDD) ONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	Q	Q	Q	Q	Q	Q	Q	Q	Q
5,500 TO 7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q
4,000 TO 5,499 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q
<2,000 CDD AND <4,000 HDD	1.7	7.9	27	485	17.97	.e	14.4	49	744
>2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	_	-



Table 5. (Continued) Census Region: West

Average Residential Electricity Consumption and Expenditures

	 	ANY	ELECTRICITY	USED		 ELECTRI 	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	HOUSE-		PER HOUSEHOLD	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE COLLARS PER PER BILLION BIU)		PER HCUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	
TOTAL HOUSEHOLDS	16.3	8.3	28	453	15.98	3.4	14.8	51	596
ANEA TURE									
AREA TYPE URBAN RURAL	13.0 3.3	7.4 11.7	25 40	425 561	16.76 14.01	2.5 .8	13.1 19.9	45 68	576 655
SMSA									
SMSA	12.8 3.4	7.4 11.8	25 40	435 519	17.31 12.88	2.3 1.0	12.4 20.4	42 70	566 661
ELECTRICITY PAID BY HOUSEHOLD									
YE5	15.0 1.3	8.4 6.7	29 23	454 436	15.77 19.14	3.1	15.1 12.1	52 41	582 727
TYPE OF HOUSING STRUCTURE									
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	12.3 4.0	9.2 5.6	31 19	499 311	15.91 16.33	2.0 1.4	18.5 9.5	63 32	690 460
NUMBER OF ROOMS									
1 TO 3 4 TO 5	2.1 7.3	5.6 7.6	19 26	282 401	14.78 15.54	.7 1.8	10.1 13.5	34 46	450 561
6 OR MORE.	6.9	9.9	34	561	16.54	.8	21.8	74	796
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALLSOME	3.6 1.9	11.0 7.0	38 24	655 391	17.44 16.39	1.1 .3	16.4 12.8	56 44	786 518
NONE	10.7	7.6	26	396	15.20	2.0	14.3	49	502
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
1,000 TO 1,999	5.9 7.8	6.2 8.7	21 30	339 485	16.03 16.25	1.7 1.4	10.8 17.5	37 60	454 718
2,000 OR MORE	2.5	11.9	41	622	15.26	.3	23.7	81	789
YEAR HOUSE BUILT	,	4.4	22	355	16.23	0.4	14.1	48	485
1939 OR EARLIER	3.6 4.5	6.4 7.7	26	430	16.44	.4	18.5	63	617
1960 OR LATER	8.2	9.5	32	508	15.70	2.6	14.4	49	609
OWN/RENT	10.0	0.7	70	510	34 06	1.6	18.0	61	658
RENT	10.0 6.2	9.3 6.7	32 23	360	16.04 15.83	1.8	11.9	41	539
1980 FAMILY INCOME									
LESS THAN \$10,000	4.0	6.6	23	375	16.66	1.0 .9	11.2 14.4	38 49	489 546
\$10,000 TO \$19,999 \$20,000 TO \$34,999	4.1 5.0	7.9 9.3	27 32	401 492	14.92 15.57	1.0	17.5	60	683
\$35,000 OR MORE	3.2	9.5	32	554	17.13	.5	17.2	59	707
TOTAL BELOW 100 PERCENT OF POVERTY LINE	1.9	6.4	22	388	17.71	.5	10.6	36	517
TOTAL BELOW 125 PERCENT									
OF POVERTY LINE	2.9	6.7	23	391	17.21	.7	10.7	37	509
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	6.4	7.8	27	395	14.85	1.7	13.5	46	558
35 TO 59 YEARS	6.4	9.4	32	556	17.26	1.2	16.7	57	698
60 YEARS AND OVER	3.4	7.2	24	368	15.09	.6	14.9	51	496
HOUSEHOLD MEMBERS	2.6	5.5	19	290	15.37	.7	10.1	34	437
2	5.7	7.8	27	416	15.53	1.4	13.8	47	563
3 OR MORE	8.0	9.5	33	532	16.35	1.3	18.2	62	706
MAIN HEATING FUEL NATURAL GAS	10.8	6.0	21	395	19.25	_	_	_	_
ELECTRICITY	3.4	14.8	51	596	11.76	3.4	14.8	51	596
FUEL OIL OR KEROSENE	.4	10.9	37	317	8.53	-	-	-	-
OTHER	1.7	9.1	31	568	18.24	-	-	-	-



Table 5. (Continued) Census Region: West

		ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD Characteristics	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (OOLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU)	 NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- I TURES PER IHOUSEHOLD ((DOLLARS)
HOT WATER FUEL									
NATURAL GAS	11.2	5.8	20	397	19.93	0.6	6.6	22	456
ELECTRICITY	4.3	14.8	50	565	11.19	2.8	16.6	57	624
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	.7	7.7	26	654	24.85	Q	Q	Q	Q
ALL ELECTRIC HOME									
YES	2.8	16.6	57	625	11.02	2.8	16.6	57	625
ко	13.5	6.6	23	417	18.54	.6	6.9	23	464
MAIN HEATING EQUIPMENT									
JSING ELECTRICITY									
CENTRAL WARM AIR	1.0	17.4	59	725	12.20	1.0	17.4	59	725
HEAT PUMP	.5	18.0	61	857	14.00	.5	18.0	61	857
WALL UNITS	1.7	13.2	45	463	10.30	1.7	13.2	45	463
PIPELESS FURNACE	Q	_Q	Q	Q	Q	Q_	_Q	Q	Q
PORTABLE HEATERS	.2	7.8	27	428	15.99	.2	7.8	27	428
OTHER	Q	Q	Q	Q	Q	Q	Q	Q	Q
MEATING DEGREES-DAYS (HDD) ND COOLING DEGREES-DAYS (CDD) ONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD	1.3	7.2	25	386	15.63	.1	20.2	69	964
5,500 TO 7,000 HDD	1.7	12.3	42	487	11.62	.5	22.2	76	679
4,000 TO 5,499 HDD	3.3	12.8	44	428	9.79	1.4	16.9	58	527
<2,000 CDD AND <4,000 HDD	9.1	6.1	21	438	21.07	1.1	8.0	27	540
>2,000 CDD AND <4,000 HDD	.9	8.3	28	711	25.10	.2	14.6	50	957



Table 5. (Continued) Census Division: Mountain

Average Residential Electricity Consumption and Expenditures

	 	ANY	ELECTRICITY	USED						
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	I AVG. I AMOUNT I CONSUMED I PER IHOUSEHOLD I (MILLION I BTU)	PER HOUSEHOLD		HOUSE-	PER HOUSEHOLD	CONSUMED PER HOUSEHOLD	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
TOTAL HOUSEHOLDS	3.9	8.4	29	464	16.16	0.6	18.1	62	840	
AREA TYPE URBANRURAL	2.8 1.1	7.6 10.5	26 36	464 463	17.94 12.92	.4 .3	16.1 21.1	55 72	913 730	
SMSA SMSA	2.4 1.5	6.9 10.8	24 37	465 462	19.78 12.57	.3	14.6 20.4	50 69	942 774	
ELECTRICITY PAID BY HOUSEHOLD YES	3.5 .5	8.5 7.4	29 25	465 460	15.94 18.08	.6 .1	17.5 24.8	60 85	806 1199	
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	3.3 .7	8.8 6.3	30 21	481 379	15.95 17.65	.5 .1	19.2 13.8	66 47	872 719	
NUMBER OF ROOMS 1 TO 3	.5 1.9 1.5	5.7 7.4 10.5	20 25 36	364 411 562	18.61 16.23 15.70	.1 .4 .2	17.6 14.8 23.3	6 0 51 80	995 691 1031	
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED	1.5	10.5	30	302	15.70	. 2	23.3	00	1031	
ALLSOME	.9 .4 2.6	13.3 8.5 6.7	45 29 23	742 391 381	16.32 13.50 16.60	.3 .1 .2	21.8 13.9 14.8	75 47 51	1110 525 607	
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999		6.1	21	344	77.75	•	13.3	45	603	
1,000 TO 1,999	1.5 1.7 .7	9.6 10.5	33 36	532 547	16.65 16.30 15.31	.2 .3 .1	18.6	64 96	935 1122	
YEAR HOUSE BUILT 1939 CR EARLIER	0.6 1.0 2.3	6.2 6.8 9.7	21 23 33	330 395 529	15.62 17.12 15.98	Q 0.1 .5	Q 15.9 18.6	Q 54 63	Q 739 869	
OWN/RENT OWN RENT	2.7 1.2	9.1 6.8	31 23	495 396	15.90 16.95	.4 .2	18.5 17.2	63 59	841 837	
1980 FAMILY INCOME LESS THAN \$10,000 \$10,000 TO \$19,999	1.2	7.0 8.0	24 27	408 416	16.99 15.20	.2	16.1 16.4	55 56	749 72 3	
\$20,000 TO \$34,999 \$35,000 OR MORE	1.0	9.5 10.8	32 37	527 604	16.33 16.39	.2	20.6 22.0	70 75	950 1152	
TOTAL BELOW 100 PERCENT OF POVERTY LINE TOTAL BELOW 125 PERCENT OF POVERTY LINE	.5 .8	7.2 7.6	25 26	425 437	17.22 16.95	.1	15.0 16.9	51 58	770 793	
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	1.8	7.9	27	410	15.17	.3	17.1	58	695	
35 TO 59 YEARS	1.4	9.6 7.4	33 25	557 416	17.06 16.47	.2	19.3 18.3	66 63	1023 865	
HOUSEHOLD MEMBERS 1	.7 1.3	5.3 7.6	18 26	325 423	17.89 16.25	.1 .2 .3	13.3 16.1	45 55 70	766 692 941	
MAIN HEATING FUEL NATURAL GAS	2.8	6.2	34 21	543 387	15.79 18.25	-	20.6	-	941	
ELECTRICITY FUEL OIL OR KEROSENE OTHER	.6 .1 .4	18.1 10.3 8.2	62 35 28	84 0 399 418	13.59 11.34 14.86	.6 - -	18.1 - -	62 - -	840 - -	



Table 5. (Continued)
Census Division: Mountain

		ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (OOLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU)	 NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
OT WATER FUEL									
NATURAL GAS	2.8	6.1	21	391	18.91	0.1	6.3	21	454
ELECTRICITY	. 9	16.2	55	706	12.75	.5	20.1	69	906
FUEL OIL OR KEROSENE	ġ.	Q.	Q	Q	Q	ġ.	Q	Q	Q
OTHER	.2	5.6	19	379	19.81	Q	Q	Q	Q
LL ELECTRIC HOME									
YES	.5	20.1	69	906	13.19	.5	20.1	69	906
NO	3.4	6.5	22	393	17.63	.1	6.3	21	454
AIN HEATING EQUIPMENT									
SING ELECTRICITY									
CENTRAL WARM AIR	.2	23.8	81	944	11.61	.2	23.8	81	944
HEAT PUMP	.2	18.4	63	1039	16.59	.2	18.4	63	1039
WALL UNITS	.2	14.4	49	589	11.95	.2	14.4	49	589
PIPELESS FURNACE	Q	Q	Q	Q	Q	Q	Q	Q	Q
PORTABLE HEATERS	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	Q	Q	Q	Q	Q	Q	Q	Q	Q
EATING DEGREES-DAYS (HDD) ND COOLING DEGREES-DAYS (CDD) ONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD	1.2	6.9	24	383	16.26	.1	20.9	71	1080
<pre><2,000 CDD AND 5,500 TO 7,000 HDD</pre>	1.4	10.3	35	468	13.31	.3	20.1	69	705
<2,000 CDD AND	1.4	10.3	22	400	13.31	. 3	20.1	07	705
4,000 TO 5,499 HDD	.3	7.1	24	430	17.81	.1	13.8	47	752
<2,000 CDD AND <4,000 HDD	.4	5.2	18	364	20.55	Ġ	43.6 Q	ď	9
>2,000 CDD AND <4,000 HDD	.6	9.9	34	702	20.69	.2	15.2	52	1003



Table 5. (Continued) Census Division: Pacific

Average Residential Electricity Consumption and Expenditures

		АНҮ	ELECTRICITY	USED		 ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	PER		 NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	12.3	8.3	28	449	15.92	2.8	14.1	48	539
AREA TYPE									
URBANRURAL	10.2	7.4 12.4	25 42	415 611	16.42 14.49	2.2	12.6 19.4	43 66	516 623
SMSA									
SMSA	10.4	7.5 12.6	25 43	428 565	16.79 13.10	2.1	12.1 20.4	41 70	521 596
ELECTRICITY PAID BY HOUSEHOLD									
YES NO	11.6 .8	8.4 6.2	29 21	451 421	15.72 19.90	2.5 .3	14.6 9.4	50 32	529 630
TYPE OF HOUSING STRUCTURE									
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	9.0 3.3	9.3 5.4	32 19	505 297	15.89 16.02	1.5	18.3 9.1	62 31	629 433
NUMBER OF ROOMS									
1 TO 3 4 TO 5	1.7	5.6	19	260	13.67	.7	9.5	32 45	403 529
6 OR MORE	5.3 5.3	7.6 9.8	26 33	397 561	15.29 16.80	1.5 .6	13.2 21.2	72	709
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALL	2.7	10.2	35	626	17.92	.8	14.3	49	660
SOME	1.5 8.1	6.6 7.9	22 27	390 401	17.43 14.81	.2 1.7	12.4 14.2	42 48	515 487
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	4.5	6.2	21	337	15.83	1.4	10.4	35 59	430 656
1,000 TO 1,999 2,000 OR MORE	6.1 1.8	8.5 12.6	29 43	472 653	16.23 15.25	1.1	17.2 21.9	75	663
YEAR HOUSE BUILT									
1939 OR EARLIER	3.0	6.5 7.9	22 27	361 440	16.35 16.28	0.4	14.0 18.9	48 65	468 596
1940 TO 1959 1960 OR LATER	3.5 5.8	9.4	32	499	15.58	2.1	13.3	45	542
OWN/RENT									
OWN RENT	7.3 5.0	9.4 6.6	32 23	516 351	16.09 15.55	1.2 1.6	17.8 11.3	61 38	590 501
1980 FAMILY INCOME									
LESS THAN \$10,000	2.8	6.4	22	361	16.50	.8	9.9	34 67	425 493
\$10,000 TO \$19,999 \$20,000 TO \$34,999	2.8 4.0	7.8 9.2	27 31	394 483	14.79 15.37	.7 .8	13.8 16.8	47 57	626
\$35,000 OR MORE	2.8	9.3	32	545	17.27	.5	16.5	56	642
TOTAL BELCW 100 PERCENT OF POVERTY LINE	1.4	6.1	21	374	17.94	.4	9.4	32	444
TOTAL BELOW 125 PERCENT OF POVERTY LINE	2.1	6.3	22	375	17.31	.6	9.4	32	450
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	4.7	7.7	26	389	14.73	1.3	12.7	43 55	525
35 TO 59 YEARS	5.0 2.6	9.4 7.1	32 24	555 355	17.32 14.68	.9 .5	16.0 14.5	49	611 444
HOUSEHOLD MEMBERS	1.9	5.6	19	278	14.49	.5	9.5	32	375
2	4.4	7.9	27	413	15.32	1.2	13.4	46	543
3 OR MORE	6.1	9.4	32	529	16.55	1.0	17.4	59	624
MAIN HEATING FUEL	7.0	F 0		300	10 / 2		_	_	_
NATURAL GAS	7.9 2.8	5.9 14.1	20 48	398 539	19.62 11.22	2.8	14.1	48	539
FUEL OIL OR KEROSENE	.4	11.0	37	304	8.13	-	-	-	-
OTHER	1.3	9.4	32	617	19.19	-	-	-	-



Table 5. (Continued) Census Division: Pacific

!		ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)	,	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
HOT WATER FUEL									
NATURAL GAS	8.4	5.8	20	399	20.30	0.5	6.6	23	457
ELECTRICITY	3.4	14.4	49	527	10.72	2.2	15.8	54	555
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	.5	8.4	29	741	25.92	q	Q	Q	Q
ALL ELECTRIC HOME									
YES	2.2	15.8	54	557	10.34	2.2	15.8	54	557
NO	10.1	6.6	23	426	18.84	.5	7.0	24	465
MAIN HEATING EQUIPMENT USING ELECTRICITY									
CENTRAL WARM AIR	.8	16.2	55	682	12.37	.8	16.2	55	682
HEAT PUMP	.3	17.6	60	702	11.69	. 3	17.6	60	702
WALL UNITS	1.5	13.0	44	445	10.04	1.5	13.0	44	445
PIPELESS FURNACE	Q_	Q	Q	Q	Q	Q	Q	Q	Q
PORTABLE HEATERS	. 2 Q	6.9 Q	24 Q	399 Q	16.88 Q	. 2 Q	6.9 Q	24 Q	399 Q
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE		-	·	·	-	•	•	·	
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	.1	9.8	33	406	12.14	Q	Q	Q	Q
5,500 TO 7,000 HDD	.3	22.2	76	585	7.73	.2	24.9	85	647
<2,000 CDD AND									
4,000 TO 5,499 HDD	2.9	13.4	46	427	9.33	1.4	17.0	58	519
<2,000 CDD AND <4,000 HDD	8.6	6.1	21	442	21.09	1.1	8.0	27	543
>2,000 CDD AND <4,000 HDD	.3	5.3	18	727	39.81	Q	Q	Q	Q

[&]quot;-" = DATA NOT APPLICABLE.
"Q" = DATA MITHHELD BECAUSE OF A LARGE VARIANCE.
NOTE: BECAUSE OF ROUNDING, DATA MAY NOT SUM TO TOTALS. PERCENTAGES ARE CALCULATED ON UNROUNDED NUMBERS. SEE GLOSSARY FOR DEFINITION OF TERMS USED IN THIS REPORT.
SOURCE: ENERGY INFORMATION ADMINISTRATION, OFFICE OF ENERGY MARKETS AND END USE, ENERGY END USE DIVISION, FORM EIA-457,

THE 1981 RESIDENTIAL ENERGY CONSUMPTION SURVEY.



Table 6. U.S. Average Residential Fuel Oll or Kerosene Consumption and Expenditures—April 1981 Through March 1982, United States

Average Residential Fuel Oil or Kerosene Consumption and Expenditures

] 	ANY FUEL	DIL OR KERO	SENE USED		 FUEL OIL (USED AS MA	IN HEATING
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	ITURES PER HOUSEHOLD	AVG. PRICE COOLLARS PER MILLION BYU)	NUMBER OF HOUSE- KOLDS (MILLIONS)	PER HOUSEHOLD	AVG. AHOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (OOLLARS)
TOTAL HOUSEHOLDS	14.6	658	91	811	8.89	12.2	744	103	915
AREA TYPE									
URBAN	8.9	741	103	915	8.91	8.0	796	110	982
RURAL	5.7	530	73	648	8.84	4.2	644	89	788
SMSA									
SMSA	9.6	729	101	899	8.90	8.4	794	110	979
NON-SMSA	5.0	524	73	642	8.85	3.7	631	87	772
FUEL OIL PAID BY HOUSEHOLD									
YES	10.7	629	87	775	8.89	8.7	723	100	891
ю	3.9	739	102	909	8.87	3.5	794	110	976
TYPE OF HOUSING STRUCTURE									
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	10.2 4.4	630 724	87 100	776 892	8.89 8.88	8.2 3.9	727 777	101 108	895 957
NUMBER OF ROOMS									
1 70 3	2.2	619	86	763	8.90	1.9	662	92	815
4 TO 5	5.7	599	83	736	8.88	4.8	681	94	838
6 OR MORE	6.7	721	100	888	8.89	5.5	827	115	1018
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALL	2.6	594	82	730	8.87	2.1	693	96	851
NONE	4.1 7.9	785 614	109 85	969 755	8.91 8.88	3.8 6.3	821 714	114 99	1014 878
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	5.3 5.3	584 629	81 87	721 773 980	8.93 8.87	4.6 4.4 3.2	646 720 914	89 100	799 885
2,000 OR HORE	4.0	798	111	900	8.86	3.2	914	127	1155
YEAR HOUSE BUILT									
1939 OR EARLIER	6.1	719	100	888	8.91	5.1	817	113	1008
1940 TO 1959	3.8 4.6	658 579	91 80	806 712	8.85 8.89	3.3 3.7	716 667	99 92	877 821
	1.0	3.,	00	,12	0.07	3	007	/-	022
OWN/RENT									
OWN	9.5 5.1	665 647	92 90	819 796	8.89 8.88	7.7 4.4	758 718	105 100	933 884
	5.1	047	,,	770	0.00	4.4	710	100	004
1980 FAMILY INCOME								_,	-74
LESS THAN \$10,000 \$10,000 TO \$19,999	4.0 4.3	623 614	86 85	766 756	8.88 8.89	3.5 3.6	682 707	94 98	839 870
\$20,000 TO \$34,999	4.1	646	89	793	8.86	3.3	739	102	907
\$35,000 OR MORE	2.2	832	115	1029	8.92	1.8	950	132	1174
TOTAL BELOW 100 PERCENT DF POVERTY LINE	1.5	579	80	717	2.00	1.2	678	94	835
TOTAL BELOW 125 PERCENT	1.9	3/7	00	713	8.90	1.2	070	74	633
OF POVERTY LINE	2.4	583	81	716	8.88	2.0	664	92	816
ACE OF HOMESHOUR HEAD									
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	3.5	542	75	665	8.86	2.8	639	89	785
35 TO 59 YEARS	6.6	706	98	871	8.90	5.3	803	111	990
60 YEARS AND OVER	4.5	681	94	838	8.88	4.1	737	102	906
HOUSEHOLD MEMBERS									
1	2.9	637	88	783	8.88	2.6	688	95	846
2	4.8	648	90	795	8.85	4.1	730	101	895
3 OR MORE	6.8	675	94	834	8.91	5.5	779	108	963
MAIN HEATING FUEL NATURAL GAS	.7	238	33	292	8.87	_	_	-	-
ELECTRICITY	.2	155	21	190	8.85	-	-	-	
FUEL OIL OR KEROSENE	12.2	744	103	915	8.89	12.2	744	103	915
OTHER	1.5	233	32	287	8.92	Q	Q	Q	Q



Average Residential Fuel Oil or Kerosene Consumption and Expenditures

Table 6. (Continued) United States

	 	ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL OR KEROSENE USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE COOLLARS PER MILLION BTU	 NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. J AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
HOT WATER FUEL										
NATURAL GAS	2.0	557	77	689	8.93	1.4	721	100	894	
ELECTRICITY	5.7	481	67	586	8.81	4.6	551	76	672	
FUEL OIL OR KEROSENE	6.1	890	123	1100	8.91	5.7	920	128	1136	
OTHER	.8	405	56	504	9.04	.5	579	80	723	
MAIN HEATING EQUIPMENT USING FUEL OIL										
STEAM OR HOT WATER SYSTEM	6.7	894	124	1103	8.90	6.7	894	124	1103	
CENTRAL WARM AIR FURNACE	4.1	625	87	763	8.81	4.1	625	87	763	
OTHER/NONE	3.8	281	39	349	9.02	1.4	370	51	465	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	2.7	575	80	701	8.81	1.9	715	99	871	
5,500 TO 7,000 HDD	3.8	738	102	911	8.91	3.3	818	113	1010	
4,000 TO 5,499 HDD	6.4	727	101	895	8.88	5.7	790	110	972	
<2,000 CDD AND <4,000 HDD	1.1	378	52	471	9.03	.8	453	63	565	
>2,000 CDD AND <4,000 HDD	.5	243	34	307	9.17	.4	260	36	329	



Table 6. (Continued) Census Region: Northeast

Average Residential Fuel Oil or Kerosene Consumption and Expenditures

	1 	ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL OR KEROSENE USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	 NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	CONSUMED PER HOUSEHOLD	PER HOUSEHOLD		HOUSE-	PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
TOTAL HOUSEHOLDS	8.9	779	108	963	8.92	7.9	842	117	1040	
AREA TYPE										
URBAN	6.8	822	114	1016	8.92	6.3	859	119	1062	
RURAL	2.2	646	89	798	8.92	1.6	772	107	954	
SMSA										
SMSA	7.2	817	113	1009	8.91	6.6	862	120	1065	
NON-SMSA	1.7	618	86	767	8.96	1.3	734	102	911	
FUEL OIL PAID BY HOUSEHOLD										
YES	5.6	777	108	964	8.95	4.7	869	121	1078	
Νο	3.4	781	108	960	8.87	3.2	801	111	985	
TYPE OF HOUSING STRUCTURE										
SINGLE FAMILY OR MOBILE HOME	5.2	788	109	976	8.94	4.3	882	122	1093	
2 OR MORE UNITS	3.8	766	106	943	8.88	3.6	792	110	975	
NUMBER OF ROOMS										
1 TO 3	1.6	691	96	851	8.88	1.5	722	100	889	
4 TO 5	3.3	732	101	903	8.90	3.0	782	108	965	
6 OR MORE	4.0	851	118	1055	8.94	3.4	945	131	1171	
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	1.2	782 84.0	108	964	8.89	1.0	852 903	118 125	1049 1120	
NONE	2.8 4.9	869 727	120 101	1078 897	8.95 8.90	2.6 4.3	801	111	989	
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	3.3 3.0 2.6	709 749 904	98 104 125	876 927 1117	8.91 8.92 8.91	3.1 2.6 2.2	746 821 1002	103 114 139	922 1016 1238	
YEAR HOUSE BUILT										
1939 OR EARLIER	4.5	782	108	969	8.93	3.9	856	119	1060	
1940 TO 1959	2.0	837	116	1031	8.88	1.8	862	119	1060	
1960 OR LATER	2.5	727	101	899	8.93	2.1	797	110	986	
OWN/RENT										
OWN	5.3	795 755	110 105	985	8.94	4.5 3.4	889 780	123 108	1102 960	
RENT	3.6	755	105	929	8.88	3.4	700	105	700	
1980 FAMILY INCOME										
LESS THAN \$10,000	2.2 2.6	757 736	105 102	936 909	8.92 8.91	2.0 2.2	789 805	109 112	975 995	
\$20,000 TO \$34,999	2.7	727	101	894	8.87	2.3	806	112	991	
\$35,000 OR MORE	1.5	982	136	1224	8.99	1.3	1057	147	1316	
TOTAL BELOW 100 PERCENT OF POVERTY LINE	.8	792	110	978	8.91	.7	850	118	1050	
TOTAL BELOW 125 PERCENT	1.0	757	101	674	0.01	, .	0.47	730	207	
OF POVERTY LINE	1.2	753	104	931	8.91	1.1	807	112	997	
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	2.3	639	89	787	8.89	1.9	715	99	880	
35 TO 59 YEARS	4.2 2.5	843 797	117 111	1044 984	8.94 8.90	3.6 2.3	916 828	127 115	1134 1022	
	- • •					-				
HOUSEHOLD MEMBERS	1.0	71.0	100	607	0.00		7//	7.47	010	
2	1.8 2.7	719 769	10 0 107	887 947	8.90 8.88	1.7 2.5	744 829	103 115	918 1020	
3 OR MORE	4.4	809	112	1003	8.94	3.7	894	124	1108	
MAIN HEATING FUEL										
MATURAL GAS	.3	298	41	366	8.87	-	-	_	_	
ELECTRICITY	.1	224	31	275	8.86	-	-	-	-	
FUEL OIL OR KEROSENE	7.9	842	117	1040	8.91	7.9	842	117	1040	
OTHER	.7	315	44	394	9.03	Q	Q	Q	Q	



Average Residential Fuel Oil or Kerosene Consumption and Expenditures

Table 6. (Continued) Census Region: Northeast

		ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL OR KEROSENE USED AS MAIN HEATING FUEL				
HOUSEHOLD Characteristics	 NUMBER OF HOUSE- HOLDS (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)	AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (ODLLARS)	AVG. PRICE COLLARS PER MILLION BTU	NUMBER OF HOUSE- HOLDS (MILLIONS)	AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
HOT WATER FUEL										
NATURAL GAS	1.3	642	89	795	8.93	1.1	747	104	926	
ELECTRICITY	1.7	540	75	667	8.92	1.4	603	83	745	
FUEL OIL OR KEROSENE	5.7	900	125	1112	8.91	5.3	928	129	1146	
OTHER	.3	320	44	400	9.02	.1	589	82	735	
MAIN HEATING EQUIPMENT USING FUEL OIL										
STEAM OR HOT WATER SYSTEM	6.0	907	126	1121	8.91	6.0	907	126	1121	
CENTRAL WARM AIR FURNACE	1.7	642	89	793	8.91	1.7	642	89	793	
OTHER/NONE	1.2	327	45	408	9.03	.2	473	65	602	
HEATING DEGREES-DAYS (HOD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD	1.1	618	86	769	8.97	.8	797	111	992	
5,500 TO 7,000 HDD	3.1	791	110	979	8.94	2.8	840	116	1040	
4,000 TO 5,499 HDD	4.7	809	112	998	8.89	4.4	850	118	1048	
<2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	
>2,000 CDD AND <4,000 HDD	Q	q	o	Q	Ġ	Ġ	Ġ	q.	Q	



Table 6. (Continued) Census Division: New England

Average Residential Fuel Oil or Kerosene Consumption and Expenditures

		ANY FUEL	OIL OR KERO	SENE USED							
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION	PER HOUSEHOLD	AVG. PRICE COLLARS PER MILLION BTU	NUMBER OF HOUSE- HOLDS (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD	I AVG. I AMOUNT I CONSUMED I PER I HOUSEHOLD			
		l I	BTU) 	<u>L</u>	l 	! !	<u> </u>	BTU)	! 1		
TOTAL HOUSEHOLDS	2.4	782	108	974	8.98	2.1	856	119	1066		
AREA TYPE											
URBAN	1.8	820	114	1021	8.98	1.6	862	119	1072		
RURAL	.7	685	95	852	8.98	.5	839	116	1046		
SMSA											
SMSA	1.6	817	113	1016	8.98	1.5	853	118	1061		
NON-SMSA	.8	714	99	890	8.99	.6	865	120	1077		
FUEL OIL PAID BY HOUSEHOLD											
YES	1.9	801	111	1001	9.01	1.6	884	122	1104		
NO	.6	719	100	885	8.87	.5	772	107	949		
TYPE OF HOUSING STRUCTURE											
SINGLE FAMILY OR MOBILE HOME	1.5	820	114	1026	9.02	1.2	931	129	1165		
2 OR MORE UNITS	1.0	723	100	892	8.91	.9	755	105	931		
NUMBER OF ROOMS											
1 TO 3	.2	601	83	740	8.88	.2	697	97	860		
4 TO 5	1.0	698	97	867	8.97	.9	770	107	957		
6 OR MORE	1.2	887	123	1107	9.00	1.0	955	132	1192		
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED											
ALL	.2	705	98	880	9.01	.1	853	118	1064		
SOME	.7 1.5	904 734	125 102	1132 910	9.03 8.95	.7 1.3	958 806	13 3 112	1200 999		
	1.5	,,,,	102	/10	0.75	1.5	555	***			
MEASURED HEATED SPACE OF RESI-											
DENCE (IN SQUARE FEET) LESS THAN 999	.9	646	90	802	8.97	.8	707	98	878		
1,000 TO 1,999	. ý	768	106	956	8.98	.8	843	117	1050		
2,000 OR MORE	.7	964	134	1202	8.99	.6	1066	148	1328		
YEAR HOUSE BUILT											
1939 OR EARLIER	1.3	758	105	942	8.95	1.1	808	112	1003		
1940 TO 1959	.5 .6	809 806	112 112	1008 1007	8.99 9.02	.5 .5	870 950	120 132	1084 1188		
1700 OR CATER	.0	000	111	1007	7.02	.,	,20				
OWN/RENT								***	1175		
OWN	1.6 .8	809 732	112 101	1011 902	9.02 8.90	1.3 .8	907 770	126 107	1135 948		
RENT	.0	732	101	702	0.70	.5	,,,	20.	, , ,		
1980 FAMILY INCOME		_ = -				_		• • •	992		
LESS THAN \$10,000	.6 .7	750 701	104 97	931 877	8.97 9.03	.6 .6	799 782	111 108	978		
\$10,000 TO \$19,999 \$20,000 TO \$34,999	.7	765	106	947	8.93	.6	840	116	1040		
\$35,000 OR MORE	.4	1004	139	1255	9.01	.4	1097	152	1371		
TOTAL BELOW 100 PERCENT											
OF POVERTY LINE	.2	673	93	831	8.90	.2	785	109	970		
TOTAL BELOW 125 PERCENT											
OF POVERTY LINE	.3	774	107	957	8.92	. 3	844	117	1044		
AGE OF HOUSEHOLD HEAD											
UNDER 35 YEARS	.6	621	86	770	8.95	. 5	729	101	903		
35 TO 59 YEARS	1.2	837	116	1040	8.97	1.0	913 869	127 120	1135 1087		
60 YEARS AND OVER	.6	845	117	1057	9.03	.6	007	140	1007		
HOUSEHOLD MEMBERS											
1	.4	682	95	850	8.99	.4	719	100	896 1068		
2	.8 1.2	785 815	109 113	977 1014	8.98 8.98	.7 1.0	856 911	119 126	1068 1133		
		3-2			- •						
MAIN HEATING FUEL	_	_	_	_	^						
NATURAL GAS	Q Q	Q	Q Q	Q	Q Q	-	-	-	-		
FUEL OIL OR KEROSENE	2.1	856	119	1066	8.98	2.1	856	119	1066		
OTHER	. 3	322	45	400	8.94	Q	Q	Q	Q		



Average Residential Fuel Oll or Kerosene Consumption and Expenditures

Table 6. (Continued) Census Division: New England

	i !	ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL OR KEROSENE USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE COOLLARS PER MILLION BTU	HOUSE-		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
HOT WATER FUEL										
NATURAL GAS	0.4	539	75	665	8.90	0.4	587	81	725	
ELECTRICITY	.4	647	90	814	9.09	.3	747	103	940	
FUEL OIL OR KERDSENE	1.5	917	127	1140	8.97	1.3	970	134	1206	
OTHER	.1	431	60	536	8.98	.1	652	90	821	
MAIN HEATING EQUIPMENT USING FUEL OIL										
STEAM OR HOT WATER SYSTEM	1.6	917	127	1138	8.95	1.6	917	127	1138	
CENTRAL WARM AIR FURNACE	.5	67 0	93	847	9.12	.5	670	93	847	
OTHER/NONE	.4	350	49	434	8.95	.1	655	91	816	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	.7	701	97	869	8.94	.5	886	123	1099	
5,500 TO 7,000 HDD	1.8	812	112	1011	8.99	1.7	848	117	1057	
4,000 TO 5,499 HDD	Q	Q	Q	Q	Q	Q	q	Q	Q	
<2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	
>2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	



Table 6. (Continued) Census Division: Middle Atlantic

Average Residential Fuel Oil or Kerosene Consumption and Expenditures

	1 	ANY FUEL	OIL OR KERO	SENE USED		 FUEL OIL 	OR KEROSENE FU	USED AS MA EL	IN HEATING
HOUSEHOLD CHARACTERISTICS	OF HOUSE-	PER	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. PRICE COLLARS PER MILLION BTU	HOUSE-		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DDLLARS)
TOTAL HOUSEHOLDS	6.5	777	108	958	8.89	5.8	836	116	1030
AREA TYPE									
URBANRURAL	5.0 1.5	822 628	114 87	1014 772	8.89 8.88	4.6 1.1	859 743	119 103	1059 913
SMSA									
SMSA	5.6	817	113	1007	8.89	5.1	865	120	1066
NON-SMSA	.9	529	73	654	8.94	.7	614	85	759
FUEL OIL PAID BY HOUSEHOLD									
YES	3.7	765	106	945	8.91	3.1	862	119	1064
но	2.8	793	110	976	8.87	2.7	807	112	992
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	3.7 2.8	774 781	107 108	957 961	8.91 8.87	3.1 2.7	863 805	120 112	1065 990
HIMDER OF BOOMS									
NUMBER OF ROOMS	1.4	704	98	868	8.88	1.3	725	100	892
4 TO 5	2.3	748	104	920	8.87	2.1	788	109	969
6 OR MORE	2.8	836	116	1033	8.91	2.4	941	130	1162
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
SOME	1.0 2.1	795 856	110 119	978 1059	8.87 8.92	.9 2.0	852 884	118 123	1046 1092
NONE	3.4	724	100	891	8.88	2.9	799	111	984
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	2.5	730	101	901	8.90	2.3	759	105	936
1,000 TO 1,999	2.1	741	103	914	8.90	1.8	812	113	1001
2,000 OR MORE	1.9	882	122	1085	8.88	1.6	978	136	1203
YEAR HOUSE BUILT									
1939 OR EARLIER	3.2 1.4	792 848	110 118	979 1039	8.92 8.84	2.8 1.3	876 859	121 119	1083 1052
1960 OR LATER	1.9	699	97	861	8.89	1.6	748	104	921
OWN/RENT									
OMN	3.7	789	109	974	8.91	3.1	881	122	1087
RENT	2.8	762	106	937	8.87	2.7	783	109	963
1980 FAMILY INCOME									
LESS THAN \$10,000	1.6	761	105	938	8.90	1.5	786	109	969
\$10,000 TO \$19,999 \$20,000 TO \$34,999	1.9 2.0	749 713	104 99	921 875	8.87 8.85	1.7 1.7	813 793	113 110	1000 973
\$35,000 OR MORE	1.1	973	135	1212	8.98	.9	1041	144	1294
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE	.6	830	115	1025	8.91	.6	867	120	1071
TOTAL BELOW 125 PERCENT	_			921	8.91	.8	794	110	980
OF POVERTY LINE	.9	746	103	451	6.91	.0	7.74	110	700
AGE OF HOUSEHOLD HEAD							700		0.70
UNDER 35 YEARS	1.6 3.0	646 845	90 117	794 1045	8.86 8.93	1.4 2.6	709 917	98 127	872 1134
60 YEARS AND OVER	1.8	781	108	959	8.85	1.7	814	113	999
HOUSEHOLD MEMBERS						, ,	761	104	925
1	1.4 1.9	730 762	101 106	899 934	8.87 8.84	1.3	751 818	104 113	1002
2 3 OR MORE	3.2	807	112	999	8.93	2.7	888	123	1099
MATA DEATTING EITE									
MAIN HEATING FUEL NATURAL GAS	.2	329	46	405	8.87	-	-	-	_
ELECTRICITY	.1	224	31	275	8.86	-	-	-	1070
FUEL OIL OR KEROSENE	5.8	836	116	1030	8.89	5.8	836 0	116 Q	1030 Q
OTHER	.4	310	43	390	9.09	Q	Q	ч	· · ·

See footnotes at end of table.

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Average Residential Fuel Oll or Kerosene Consumption and Expenditures

Table 6. (Continued) Census Division: Middle Atlantic

	; ; ;	ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL OR KEROSENE USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS			AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE COLLARS PER HILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- I TURES PER HOUSEHOLD (DOLLARS)	
HOT WATER FUEL										
NATURAL GAS	0.9	694	96	860	8.95	0.7	840	117	1043	
ELECTRICITY	1.3	506	70	621	8.85	1.1	558	77	684	
FUEL OIL OR KEROSENE	4.2	894	124	1102	8.89	4.0	914	127	1126	
OTHER	.1	223	31	280	9.08	Q	Q	Q	Q	
MAIN HEATING EQUIPMENT USING FUEL OIL										
STEAM OR HOT WATER SYSTEM	4.4	904	125	1115	8.89	4.4	904	125	1115	
CENTRAL WARM AIR FURNACE	1.2	631	87	772	8.83	1.2	631	87	772	
OTHER/NONE	.8	316	44	396	9.07	.1	368	50	478	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	.5	507	70	634	9.03	.3	653	90	817	
5,500 TO 7,000 HDD	1.3	762	106	934	8.85	1.1	829	115	1016	
4,000 TO 5,499 HDD	4.7	809	112	998	8.89	4.4	850	118	1048	
<2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	
>2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	



Table 6. (Continued)
Census Region: North Central

Average Residential Fuel Oil or Kerosene Consumption and Expenditures

	! ! !	ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL OR KEROSENE USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	 NUMBER OF HOUSE- HOLDS (MILLIONS)	PER	PER HOUSEHOLD	PER	AVG. PRICE COLLARS PER MILLION BTU)	 NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	PER	
TOTAL HOUSEHOLDS	2.3	542	75	653	8.71	1.7	686	95	826	
AREA TYPE										
URBAN	.6 1.7	574 531	79 74	685	8.66 8.73	.5 1.2	677	93 95	807 833	
RORAG	1.7	331	/4	642	0.73	1.2	689	75	633	
SHSA	_					_				
SMSA	.7 1.6	569 530	79 73	684 639	8.69 8.72	.5 1.2	736 665	102 92	882 802	
	1.0	550	,,	037	0.72		005	72	002	
FUEL OIL PAID BY HOUSEHOLD										
YES	2.1 .2	543 533	75 74	653 655	8.69 8.87	1.5 .1	677 784	94 109	813 965	
			, ,	000	3.07	••	,,,,	247	,53	
TYPE OF HOUSING STRUCTURE			7-				.=.			
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	2.1 .2	541 555	75 77	650 682	8.69 8.86	1.5 .1	676 803	93 111	812 986	
1 TO 3	.3	434	60	534	8.91	.3	528	73	651	
4 TO 5	.8	474	65	571	8.73	.5	675	93	813	
6 OR MORE	1.2	619	86	742	8.66	.9	735	102	881	
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	.5	514	71	624	8.77	.4	628	87	764	
SOME	.5 1.4	781 47 0	108 65	940 565	8.72 8.68	.4 .9	848 637	117 88	1021 764	
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	.6 .9	425 556	59 77	524 664	8.94 8.63	.4 .7	572 673	79 93	706 803	
2,000 OR MORE	.8	623	86	747	8.66	.6	785	109	941	
YEAR HOUSE BUILT										
1939 OR EARLIER	0.9	603 609	83 84	729 729	8.75 8.67	0.6 .6	78 9 696	109 96	956 834	
1940 TO 1959	.7 .7	407	56	489	8.68	.5	540	75	648	
OWN	1.9	571	79	687	8.71	1.4	692	96	832	
RENT	.5	423	59	511	8.72	.2	649	90	787	
1980 FAMILY INCOME LESS THAN \$10,000	.6	578	80	699	8.76	.5	744	103	900	
\$10,000 TO \$19,999	.7	523	72	629	8.72	.5	668	92	804	
\$20,000 TO \$34,999 \$35,000 OR MORE	.6 .3	462 663	64 92	554 797	8.67 8.67	.4 .3	622 720	86 100	748 862	
V33,000 OR HORE	.,	003	/-	• • • •	0.0					
TOTAL BELOW 100 PERCENT		F3.0	71		0 04	.1	710	97	868	
OF POVERTY LINE	.2	519	71	629	8.84	• •	,10	"	000	
OF POVERTY LINE	.4	556	77	666	8.70	. 3	735	101	884	
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	.6	375	52	451	8.66	.4	502	70	603	
35 TO 59 YEARS	.9	573	79	690	8.69	.6	719	100	865 934	
60 YEARS AND OVER	.8	643	89	775	8.76	.6	775	107	734	
HOUSEHOLD MEMBERS							,			
1		624	86	753 749	8.75 8.71	.3 .7	707 744	98 103	854 894	
3 OR MORE		622 458	86 63	749 552	8.71	.7	625	87	753	
			= =							
MAIN HEATING FUEL	•	189	26	233	8.86	•	-	_	-	
NATURAL GAS		G 193	q	233 Q	Q	-	_	_	-	
FUEL OIL OR KEROSENE	1.7	686	95	826	8.71	1.7	686	95	826	
OTHER	5	189	26	226	8.64	Q	Q	Q	Q	



Average Residential Fuel Oil or Kerosene Consumption and Expenditures

Table 6. (Continued)
Census Region: North Central

		<u> </u>							
		ANY FUEL	OIL OR KERO	SENE USED	FUEL OIL OR KEROSENE USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. PRICE (DOLLARS PER MILLION BTU) 	HOUSE-			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
HOT WATER FUEL									
NATURAL GAS	0.3	399	55	493	8.94	0.1	731	101	903
ELECTRICITY	1.7	564	78	675	8.65	1.3	660	91	790
FUEL OIL OR KEROSENE	.1	588	81	723	8.90	Q	Q	Q	Q
OTHER	.3	543	75	662	8.85	.2	857	118	1049
MAIN HEATING EQUIPMENT USING FUEL OIL									
STEAM OR HOT WATER SYSTEM	.2	702	97	833	8.60	.2	702	97	833
CENTRAL WARM AIR FURNACE	1.2	708	98	851	8.69	1.2	708	98	851
OTHER/NONE	. 9	286	39	348	8.84	.2	560	77	691
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	1.6	543	75	651	8.67	1.2	663	92	794
5,500 TO 7,000 HDD	.7	531	74	645	8.77	.4	725	100	881
4,000 TO 5,499 HDD	.1	616	85	759	8.96	.1	856	117	1055
<2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q
>2,000 CDD AND <4,000 HDD	Q	Q	o o	o i	6	o.	Ġ	Q.	9

Main Heating Fuel

Electricity

Size of Home/	Natura1			
Number of Household Members/Age of Head of Household	Gas (thousand cubic feet)	Fuel 0il/ Kerosene (Gallons)	With Air- conditioning (thousand kWh)	Without Air- conditioning (thousand kWh)
Small Homes One household member/ head of household '5				
less than 35 years old 35-59 years old 60 years or more				
Two household members/ head of household 's				
less than 35 years old 35-59 years old 60 years or more				
Three or more household members/head of household (\$	A TOTAL COMMENSAGE OF COMMENSA		and the configuration of the same place of the party of t	nana a a a an
less than 35 years old 35-59 years old 60 years or more				
Medium Homes				
One household member/ head of household 'S less than 35 years old 35-59 years old 60 years or more				
Two household members/ head of household is				
less than 35 years old 35-59 years old 60 years or more				
Three or more household members/head of household 'S	e.			
less than 35 years old 35-59 years old 60 years or more		The second secon	and the second s	Contract Contract Part Contract Contrac
		· 2	ser er s	
One household member/ head of household is		:		
less than 35 years old 35-59 years old 60 years or more				
Two household members/ head of household is	,			
less than 35 years old 35-59 years old	· · · · · · · · · · · · · · · · · · ·			
60 years or more Three or more household				e e e e e e e e e e e e e e e e e e e
members/head of household 'S less than 35 years old				
35-59 years old 60 years or more				· · · · · · · · · · · · · · · · · · ·

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Table 6. (Continued) Census Division: East North Central

Average Residential Fuel Oil or Kerosene Consumption and Expenditures

		ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL OR KEROSENE USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	HOUSE-	CONSUMED PER HOUSEHOLD	PER HOUSEHOLD	AVG. AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU) 	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	PER HOUSEHOLD	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
TOTAL HOUSEHOLDS	1.7	518	72	625	8.73	1.2	672	93	812	
AREA TYPE URBAN	.4	614	85	730	8.61	.3	683	94	809	
RURAL	1.3	489	68	593	8.78	.9	668	92	813	
SMSA	.5	593	02	709	9 44	.4	749	104	894	
SMSA	1.2	488	82 67	709 591	8.64 8.78	. 4	641	88	778	
			•	2.2	25	• ,				
FUEL OIL PAID BY HOUSEHOLD	, ,	F00	~~	/~~	0		(70	84	010	
YES	1.7 .1	528 254	73 35	637 312	8.73 8.86	1.2 Q	678 Q	94 Q	818 Q	
	••	234	3.9	316	0.00	4	4	ч.	٦	
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	1.7	526 302	73 42	634 371	8.73 8.86	1.2 Q	676 Q	93 Q	816 Q	
HINDED OF DOORS										
NUMBER OF ROOMS 1 TO 3	. 2	392	54	487	8.98	.2	477	66	593	
4 TO 5	.6	456	63	550	8.74	.4	651	90	785	
6 OR MORE	. 9	590	82	709	8.69	.7	729	101	878	
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	. 3	519	72	632	8.79	. 2	666	92	814	
NONE	.3 1.1	732 459	101 63	883 552	8.73 8.71	.3 .7	779 635	108 88	941 763	
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAM 999	.5 .7 .5	398 553 573	55 76 79	491 661 690	8.97 8.65 8.70	.3 .5 .4	528 691 758	73 95 105	654 825 916	
1939 OR EARLIER	0.7	555	77	670	8.73	0.5	728	101	881	
1940 TO 1959	. 5	625	86	747	8.65	.4	716	99	855	
1960 OR LATER	.5	365	50	448	8.88	. 3	525	73	645	
OWN/RENT OWN RENT	1.5 .2	558 280	77 39	674 333	8.74 8.59	1.1	687 495	95 68	831 593	
		255		332	0.37	,-				
1980 FAMILY INCOME	_			,	٥	_	770	3.67	883	
LESS THAN \$10,000	.5 .6	566 503	78 69	681 607	8.72 8.76	. 3 . 4	732 650	101 90	785	
\$20,000 TO \$34,999	.5	433	60	519	8.64	.3	601	83	723	
\$35,000 OR MORE	.2	634	88	776	8.82	.2	733	102	896	
TOTAL BELOW 100 PERCENT										
OF POVERTY LINE	.1	409	56	496	8.84	.1	614	84	755	
TOTAL BELOW 125 PERCENT										
OF POVERTY LINE	.3	512	71	611	8.65	. 2	708	98	848	
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	.4	326	45	388	8.58	.3	436	60	521	
35 TO 59 YEARS	.7	524	73	636	8.76	.4	703	97	854 933	
60 YEARS AND OVER	.7	634	87	765	8.76	.5	773	107	733	
HOUSEHOLD MEMBERS										
1	. 2	703	97	845	8.72	.2	707	97	850	
2	.6	631	87 54	760	8.73 8.74	.5 .5	769 569	106 79	926 692	
J OK HUKE	.9	391	54	473	0.74		207	• •	0,0	
MAIN HEATING FUEL										
									-	
NATURAL GAS	.1	173	24	213	8.87	-	-	-	-	
	.1 Q 1.2	173 Q 672	24 Q 93	213 Q 812	8.87 Q 8.74	1.2	- - 672	- - 93		



Average Residential Fuel Oil or Kerosene Consumption and Expenditures

Table 6. (Continued)
Census Division: East North
Central

		ANY FUEL OIL OR KEROSENE USED					FUEL OIL OR KEROSENE USED AS MAIN HEATING FUEL				
HOUSEHOLD Characteristics	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE CDOLLARS PER MILLION BTU	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		
HOT HATER EVEL											
HOT WATER FUEL											
NATURAL GAS	0.1	431	60	534	8.95	0.1	788	109	981		
ELECTRICITY	1.3	532	73	637	8.68	1.0	641	89	770		
FUEL OIL OR KEROSENE	Q_	Q	Q	Q_	Q	Q	Q	Q_	Q		
OTHER	.2	523	72	643	8.92	.1	850	117	1047		
MAIN HEATING EQUIPMENT USING FUEL OIL											
STEAM OR HOT WATER SYSTEM	.1	675	93	809	8.71	.1	675	93	809		
CENTRAL WARM AIR FURNACE	. 9	693	96	835	8.70	.9	693	96	835		
OTHER/NONE	.7	266	37	325	8.85	. 2	567	78	702		
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<pre><2,000 CDD AND >7,000 HDD <2,000 CDD AND</pre>	1.1	523	72	627	8.69	.8	654	90	785		
5,500 TO 7,000 HDD	.6	493	68	600	8.78	.4	687	95	837		
4,000 TO 5,499 HDD	.1	698	96	864	9.01	Q	Q	Q	Q		
<2.000 CDD AND <4.000 HDD	ġ.	Ğ	ά	Q.	, Q	à	q q	Q.	q		
>2,000 CDD AND <4,000 HDD	à	ò	ā	õ	õ	õ	à	õ	ō		



Table 6. (Continued) Census Division: West North Central

Average Residential Fuel Oil or Kerosene Consumption and Expenditures

	 	ANY FUEL	OIL OR KERO	SENE USED		 FUEL OIL (OR KEROSENE FU		IN HEATING
HOUSEHOLD CHARACTERISTICS	 NUMBER OF HOUSE- HOLDS (MILLIONS)		CONSUMED PER HOUSEHOLD	PER	AVG. PRICE COLLARS PER MILLION BTU	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	0.6	615	85	736	8.65	0.4	723	100	863
AREA TYPE									
URBAN	. 2 . 4	486 679	67 94	589 809	8.80 8.60	.1	662 746	91 103	802 886
SMSA									
SMSA	.2 .4	513 675	71 93	624 802	8.80 8.58	.1	700 734	97 102	849 869
FUEL OIL PAID BY HOUSEHOLD									
YES	.4 .2	605 641	84 89	716 788	8.56 8.87	.3 .1	674 864	93 120	794 1063
TYPE OF HOUSTHIS STRUCTURE									
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	.4	605 640	84 89	716 786	8.56 8.86	.3	675 854	93 118	796 1049
		0.0	•	,,,,	0.00	••	03.		20.7
NUMBER OF ROOMS 1 TO 3	.1	506	70	618	8.81	.1	610	84	744
4 TO 5	.2	534	74	642	8.71	.1	764	105	915
6 OR MORE	. 3	717	99	851	8.57	.2	752	104	889
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED	_								
SOME	.1 .2	501 868	69 120	602 1043	8.71 8.69	.1 .1	544 994	75 137	653 1189
NONE	.3	515	71	613	8.58	.2	647	90	768
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	.2	496	68	608	8.88	.1	691	95	846
1,000 TO 1,999 2,000 OR MORE	.2 .2	570 741	79 103	676 880	8.56 8.58	. 2 . 2	609 843	84 117	722 998
YEAR HOUSE BUILT									
1939 OR EARLIER	0.2	738 542	102 75	898 657	8.80 8.76	0.2 .1	972 614	134 85	1182 745
1960 OR LATER	.1 .2	516	72	595	8.32	.2	569	79	652
OWN/RENT						_	71.0		070
RENT	.4	625 596	86 83	741 727	8.57 8.80	.3 .1	710 748	98 104	838 912
1980 FAMILY INCOME									
LESS THAN \$10,000	.1	624 585	86 81	761 697	8.86 8.59	.1 .1	781 725	108 101	953 862
\$10,000 TO \$19,999 \$20,000 TO \$34,999	.2 .1	559	77	676	8.74	.1	685	95	827
\$35,000 OR MORE	.I	717	99	837	8.42	.1	698	97	805
TOTAL BELOW 100 PERCENT	_						00/		1000
OF POVERTY LINE TOTAL BELOW 125 PERCENT	.1	754	104	917	8.85	.1	824	113	1002
OF POVERTY LINE	.1	754	104	917	8.85	.1	824	113	1002
AGE OF HOUSEHOLD HEAD			,,		0.7/	.1	640	89	776
UNDER 35 YEARS	.2 .3	473 695	66 96	575 824	8.76 8.55	.2	750	104	886
60 YEARS AND OVER	.1	698	96	838	8.75	.1	783	107	939
HOUSEHOLD MEMBERS	-						34.5	0.0	0/7
2	.1 .2	489 595	68 82	597 711	8.81 8.66	.1 .2	708 669	98 92	863 799
3 OR MORE	.3	695	96	827	8.58	.2	774	107	917
MAIN HEATING FUEL	,	217	29	261	8.86	_	-	_	_
NATURAL GAS	.1 Q	213 Q	29 Q	6	8.86 Q	-	-	-	-
FUEL OIL OR KEROSENE	.4	723	100	863	8.63	.4	723	100	863
OTHER	.1	412	57	501	8.77	Q	Q	Q	Q



Average Residential Fuel Oil or Kerosene Consumption and Expenditures

Table 6. (Continued) Census Division: West North Central

		ANY FUEL	OIL OR KERO	SENE USED	ANY FUEL OIL OR KEROSENE USED					
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE COLLARS PER MILLION BYU)	 NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
HOT WATER FUEL										
NATURAL GAS	0.1	366	50	448	8.92	G	Q	Q	Q	
ELECTRICITY	.4	681	94	810	8.58	0.3	718	100	852	
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q.30	ů.	Q	Q	Q	
OTHER	q	q	q	à	q	Q	q	q	Q	
MAIN HEATING EQUIPMENT USING FUEL OIL										
STEAM OR HOT WATER SYSTEM	.1	734	102	861	8.48	.1	734	102	861	
CENTRAL WARM AIR FURNACE	.3	756	105	906	8.66	.3	756	105	906	
OTHER/NONE	.2	356	49	434	8.80	.1	535	74	650	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD	.5	587	81	702	8.63	.4	685	95	815	
5,500 TO 7,000 HDD	.1	894	123	1072	8.72	.1	973	134	1171	
4,000 TO 5,499 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	
<2,000 CDD AND <4,000 HDD	Q	Q.	Q	Q.	Q.	à	q.	à	à	
>2,000 CDD AND <4,000 HDD	q q	Q.	à	Q.	Q	Ĝ	à	q.	q	



Table 6. (Continued) Census Region: South

Average Residential Fuel Oil or Kerosene Consumption and Expenditures

	 	ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL OR KEROSENE USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS		PER	AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	PER	AVG. PRICE COLLARS PER MILLION BTU	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		
TOTAL HOUSEHOLDS	2.8	410	57	505	8.93	2.2	482	67	595	
AREA TYPE										
URBAN	1.2	437	60	544	9.01	.9	520	72	648	
RURAL	1.6	390	54	478	8.86	1.3	454	63	556	
SMSA										
SMSA	1.2	391	54	489	9.06	1.0	461	64	578	
NON-SMSA	1.5	425	59	518	8.83	1.2	500	69	609	
FUEL OIL PAID BY HOUSEHOLD										
YES	2.5	410	57	506	8.93	2.1	470	65	581	
NO	.2	407	56	500	8.86	.1	678	94	833	
TYPE OF HOUSING STRUCTURE										
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	2.5 .3	410 405	57 56	506 501	8.93 8.92	2.0 .2	474 560	65 78	584 693	
NUMBER OF ROOMS										
1 70 3	.2	422	58	526	9.01	.2	422	58	526	
4 TO 5	1.3 1.3	374 445	52 61	462 548	8.94 8.91	1.1 .9	427 559	59 7 7	527 689	
o or nore	1.3	445	01	540	0.71	. 7	237	• • • • • • • • • • • • • • • • • • • •	607	
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED	_					_				
SOME	.9 .8	395 508	55 70	485 623	8.87 8.85	.7 .7	495 537	69 74	608 657	
NONE	1.1	354	49	441	9.06	.6	422	58	528	
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	1.2 1.2 .5	341 406 590	47 56 82	423 499 723	9.01 8.90 8.86	1.0 .9 .4	375 512 703	52 71 97	466 629 861	
YEAR HOUSE BUILT										
1939 OR EARLIER	0.5	513	71	639	9.01	0.4	606	84	753	
1940 TO 1959	1.0 1.3	364 400	50 55	449 491	8.93 8.88	.8 1.0	427 471	59 6 5	527 578	
2700 ON EMILIATION	1.5	400	33	4/1	0.00	1.0	7/1	0.3	3,0	
OWN/RENT										
RENT	1.9 .9	434 358	60 50	534 445	8.91 8.98	1.6 .6	494 453	68 63	608 563	
	• •	220	30	115	0.70		133		333	
1980 FAMILY INCOME		700		474		•		59	520	
LESS THAN \$10,000	1.1	388 384	54 53	476 479	8.89 9.03	.9 .6	424 465	64	579	
\$20,000 TO \$34,999	.6	504	70	624	8.95	.5	578	80	716	
\$35,000 OR MORE	.3	385	53	467	8.76	.2	589	82	713	
TOTAL BELOW 100 PERCENT										
OF POVERTY LINE	.5	304	42	374	8.92	.4	351	48	430	
TOTAL BELOW 125 PERCENT	-	771		407	0.00	.6	775	52	460	
OF POVERTY LINE	.7	331	46	407	8.92	.6	375	52	460	
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	.6 1.2	359 376	50 52	444 461	8.92 8.89	.4 .9	449 464	62 64	556 570	
60 YEARS AND OVER	1.0	376 481	66	461 595	8.87	.9	515	71	637	
HOUSEHOLD MEMBERS										
1	.7	438	60	539	8.92	.5	512	71	630	
2	1.1	404	56	496	8.90	.9	481	66	590 577	
3 OR MORE	1.1	398	55	493	8.97	.8	465	64	577	
MAIN HEATING FUEL	.2	165	23	203	8.86	_	_	_		
NATURAL GAS	.1	105	23 15	130	8.93	-	-	-	-	
FUEL OIL OR KEROSENE	2.2	482	67	595	8.93	2.2	482	67	595	
OTHER	. 3	128	18	158	8.96	Q	Q	Q	Q	



Average Residential Fuel Oil or Kerosene Consumption and Expenditures

Table 6. (Continued) Census Region: South

	1 	ANY FUEL	OIL OR KERO	SENE USED	FUEL OIL OR KEROSENE USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS) 	AVG. PRICE COLLARS PER MILLION BTU	HOUSE-	AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
HOT WATER FUEL									
NATURAL GAS	0.3	392	54	485	8.92	0.2	614	85	762
ELECTRICITY	1.9	357	49	439	8.91	1.5	417	58	513
FUEL OIL OR KEROSENE	.3	813	113	993	8.81	.3	831	115	1016
OTHER	.3	376	52	480	9.31	.3	404	55	517
MAIN HEATING EQUIPMENT USING FUEL OIL									
STEAM OR HOT WATER SYSTEM	.4	811	113	996	8.85	.4	811	113	996
CENTRAL WARM AIR FURNACE	. 9	541	75	659	8.81	.9	541	75	659
OTHER/NONE	1.5	239	33	300	9.15	1.0	301	41	380
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<pre><2,000 CDD AND >7,000 HDD <2,000 CDD AND</pre>	Q	Q	Q	Q	Q	Q	Q	Q	Q
5,500 TO 7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q
4,000 TO 5,499 HDD	1.2	497	69	605	8.81	.9	609	84	742
<2,000 CDD AND <4,000 HDD	1.1	376	52	469	9.03	.8	454	63	567
>2,000 CDD AND <4,000 HDD	.5	254	35	322	9.17	.4	260	36	329



Table 6. (Continued) Census Division: South Atlantic

Average Residential Fuel Oil or Kerosene Consumption and Expenditures

		ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL OR KEROSENE USED AS MAIN HEATING				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	PER HOUSEHOLD	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AYG. PRICE (DOLLARS PER MILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
TOTAL HOUSEHOLDS	2.5	416	58	515	8.95	2.0	490	68	606	
					01,75		,,•		•••	
AREA TYPE URBAN	1.1	440	61	549	9.02	.9	521	72	650	
RURAL	1.4	397	55	487	8.89	1.1	465	64	570	
0404										
SMSA	1.2	400	55	501	9.08	1.0	462	64	580	
NON-SMSA	1.3	431	60	527	8.85	1.0	517	71	632	
F1151 And 5155 BV 11515										
FUEL OIL PAID BY HOUSEHOLD YES	2.3	417	58	516	8.96	1.8	478	66	591	
NO	.2	417	56	500	8.96	.1	478 678	94	833	
							J. -			
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME	2.2	418	58	F17	0.04	3.6	603	67	596	
2 OR MORE UNITS	.3	405	56	517 501	8.96 8.92	1.8	481 560	78	693	
NUMBER OF ROOMS										
1 TO 3	.2 1.2	432 376	60 52	540 464	9.03 8.96	.2 1.0	432 434	60 60	540 537	
6 OR MORE	1.1	459	64	568	8.93	.8	569	79	703	
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	.8	399	55	491	8.89	.6	499	69	614	
SOME	.7 1.0	526 354	73 49	644 44 4	8.85 9.10	.6 .7	558 422	77 58	684 530	
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	1.0 1.0 .4	338 415 624	47 57 86	421 512 766	9.02 8.94 8.88	.9 .8 .3	376 522 718	52 72 99	469 645 882	
YEAR HOUSE BUILT										
1939 OR EARLIER	0.5	523	72	651	9.02	0.4	612	85	762	
1940 TO 1959	8	360	50	447	8.97	.6 .9	426	59 66	529 591	
1960 OR LATER	1.1	408	56	502	8.90	.9	480	60	341	
OWN/RENT								_		
OWN	1.6	442	61 51	545 456	8.94 8.98	1.4 .6	504 459	70 63	622 571	
RENT	.8	366	21	450	0.70	.0	437	0.3	3/1	
1980 FAMILY INCOME						_				
LESS THAN \$10,000	1.0	396 388	55 53	486 485	8.90 9.07	.8 .6	432 470	60 65	531 589	
\$10,000 TO \$19,999 \$20,000 TO \$34,999	.8 .5	510	71	634	8.98	.4	583	81	725	
\$35,000 OR MORE	. 3	398	55	482	8.76	.2	610	84	738	
TOTAL BELOW 100 PERCENT OF POVERTY LINE	.5	296	41	365	8.95	.3	346	48	425	
TOTAL BELOW 125 PERCENT	.5	270	72	303	0.75	.,	310		,	
OF POVERTY LINE	.6	332	46	410	8.94	.5	375	52	462	
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	.6	362	50	448	8.92	.4	463	64	575	
35 TO 59 YEARS	1.0	384 486	53 67	473 603	8.92 8.99	.8 .8	468 524	6 5 72	576 650	
BU TEARS AND OVER	. 4	400	67	803	0.77	.0	324	-	030	
HOUSEHOLD MEMBERS						_		74		
1	.6 1.0	447 403	62 56	552 496	8.95 8.92	.5 .8	523 486	72 67	646 599	
2 3 OR MORE	.9	410	50 57	510	8.99	.7	473	65	589	
MAIN HEATING FUEL NATURAL GAS	.2	160	22	197	8.86	-	-	_	-	
ELECTRICITY	.1	110	15	135	8.86	-	-	•	-	
FUEL OIL OR KEROSENE	2.0	490	68	606	8.95	2.0	490	68	606	
OTHER	. 3	130	18	160	8.96	Q	Q	Q	Q	



Average Residential Fuel Oil or Kerosene Consumption and Expenditures

Table 6. (Continued)
Census Division: South
Atlantic

	! ! !	ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL OR KEROSENE USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE ODLLARS PER MILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
HOT WATER FUEL										
NATURAL GAS	0.3	397	55	492	8.93	0.2	614	85	762	
ELECTRICITY	1.6	357	49	441	8.95	1.3	418	58	516	
FUEL OIL OR KEROSENE	. 3	813	113	993	8.81	.3	831	115	1016	
OTHER	.3	373	51	476	9.32	.2	401	55	513	
MAIN HEATING EQUIPMENT USING FUEL OIL										
STEAM OR HOT WATER SYSTEM	.4	811	113	996	8.85	.4	811	113	996	
CENTRAL WARM AIR FURNACE	.7	556	77	680	8.84	.7	556	77	680	
OTHER/NONE	1.4	241	33	304	9.17	.9	302	41	383	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	
5,500 TO 7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	
4,000 TO 5,499 HDD	1.1	501	69	613	8.84	.8	634	88	776	
<2,000 CDD AND <4,000 HDD	.9	394	54	493	9.05	. 7	471	65	588	
>2,000 CDD AND <4,000 HDD	.5	259	36	328	9.17	.4	260	36	329	



Table 6. (Continued) Census Division: East South Central

Average Residential Fuel Oil or Kerosene Consumption and Expenditures

	, 	ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL OR KEROSENE USED AS MAIN HEATING				
HOUSEHOLD CHARACTERISTICS		PER HOUSEHOLD	I AVG. I AMOUNT I CONSUMED I PER IHOUSEHOLD I (MILLION I BTU)	PER HOUSEHOLD	AVG. PRICE COLLARS PER MILLION BTU	NUMBER OF HOUSE- HOLDS (MILLIONS)	I PER IHOUSEHOLD	CONSUMED PER HOUSEHOLD		
TOTAL HOUSEHOLDS	0.3	362	50	434	8.69	0.2	409	56	489	
AREA TYPE										
URBAN	Q	Q	Q	Q	Q	Q	o.	Q	Q	
RURAL	.2	345	47	413	8.70	.2	394	54	471	
THE A										
imsa Smsa	.1	287	40	344	8.68	Q	Q	Q	Q	
NON-SMSA	.2	390	54	466	8.69	.2	404	56	483	
								-		
UEL OIL PAID BY HOUSEHOLD	.3	362	E۸	A.T.A.	9 40	•	400	E/	400	
YES	Q Q	362 Q	50 Q	434 Q	8.69 Q	.2 Q	409 Q	56 Q	489 Q	
	7	-	7	7	•	•	•	•	7	
TYPE OF HOUSING STRUCTURE	_					_	,			
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	.3 Q	362 Q	50 Q	434 Q	8.69 Q	.2 Q	409 Q	56 Q	489 Q	
UMBER OF ROOMS										
1 TO 3	q	Q	Q	Q	Q	Q	Q	Q	Q	
4 TO 5	.ì	360	50	429	8.66	.1	360	50	429	
6 OR MORE	.1	372	51	445	8.68	.1	479	66	570	
UMBER OF ROOMS THAT CAN BE IR CONDITIONED										
ALL	.1	367	51	442	8.70	.1	465	64	559	
NONE	.1 .1	298 395	41 54	359 469	8.81 8.62	.1 .1	298 429	41 59	359 506	
EASURED HEATED SPACE OF RESI- ENCE (IN SQUARE FEET) LESS THAN 999	.1	352 361	48 50	428 424	8.86 8.51	.1	352 410	48 57	428 479	
2,000 OR MORE	.1	380	53	458	8.69	Q	Q	Q	Q	
EAR HOUSE BUILT	_	_	_	_	_	_	•	•	•	
1939 OR EARLIER	Q 0.1	Q 389	Q 54	Q 464	Q 8.66	Q 0.1	Q 435	Q 60	Q 518	
1960 OR LATER	.1	312	43	374	8.68	.1	363	50	433	
WN/RENT OWN	.2	388	54	464	8.67	.2	426	59	509	
RENT	ą į	Q	Q	Q	Q,	Q.	Q	ą´	Q	
AND PARTY THOME										
.980 FAMILY INCOME LESS THAN \$10,000	.1	350	48	421	8.75	.1	358	49	430	
\$10,000 TO \$19,999	.1	352	49	416	8.57	.1	407	56	479	
\$20,000 TO \$34,999	.1	448 Q	62 Q	538 Q	8.66 Q	Q Q	Q Q	Q	Q	
\$35,000 OR MORE	Q	ч	4	ų	ų	ч	4	4	•	
OTAL BELOW 100 PERCENT										
F POVERTY LINE	.1	367	51	444	8.77	Q	Q	Q	Q	
OTAL BELOW 125 PERCENT OF POVERTY LINE	.1	364	50	439	8.79	.1	374	51	451	
GE OF HOUSEHOLD HEAD	Q	Q	Q	Q	Q	Q	Q	Q	Q	
UNDER 35 YEARS	.2	353	49	422	8.67	.1	440	61	524	
60 YEARS AND OVER	.1	427	59	511	8.69	.1	427	59	511	
OUSEHOLD MEMBERS										
1	.1	346	48	410	8.59	Q	Q	Q	Q	
2	.1	416	57	498	8.71	.1	434	60 53	520 462	
3 OR MORE	.1	322	44	387	8.71	.1	385	53	402	
MAIN HEATING FUEL										
NATURAL GAS	q	Q	Q.	Q	Q	<u>-</u>	-	-	-	
FUEL OIL OR KEROSENE	Q .2	Q 409	Q 56	Q 489	Q 8.67	.2	409	56	489	
									Q	



Average Residential Fuel Oil or Kerosene Consumption and Expenditures

Table 6. (Continued)
Census Division: East South
Central

	 	ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL OR KEROSENE USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE (DOLLARS PER HILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		
HOT WATER FUEL										
NATURAL GAS	Q	Q	Q	Q	Q	Q	O O	Q	g.	
ELECTRICITY	0.3	358	49	429	8.68	0.2	406	56	484	
FUEL DIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
OTHER	q	Q	Q	q	q	q	q	Q	Q	
MAIN HEATING EQUIPMENT USING FUEL OIL										
STEAM OR HOT WATER SYSTEM	Q	Q	Q	Q	Q	Q	Q	Q	Q	
CENTRAL WARM AIR FURNACE	.1	472	65	561	8.60	.1	472	65	561	
OTHER/NONE	.1	231	32	283	8.89	.1	285	39	347	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	Q	Q	Q	Q	Q	Q	Q	Q	Q	
5,500 TO 7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	
4,000 TO 5,499 HDD	.2	464	64	551	8.61	.1	475	65	563	
<2,000 CDD AND <4,000 HDD	.ī	214	30	264	8.93	.1	263	36	325	
>2,000 CDD AND <4,000 HDD	ė.	Q	Ģ.	G	G.	Ģ.	Q	Q	Q	



Table 6. (Continued) Census Division: West South Central

Average Residential Fuel Oil or Kerosene Consumption and Expenditures

		ANY FUEL	DIL OR KERO	SENE USED		FUEL OIL OR KEROSENE USED AS MAIN HEATING FUEL				
HOUSEHOLD Characteristics	NUMBER OF HOUSE- HOLOS (MILLIONS)	I PER IHOUSEHOLD	I AVG. I AMOUNT I CONSUMED I PER IHOUSEHOLD I (MILLION I BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD	AVG. PRICE (DOLLARS PER MILLION BTU)	NUMBER OF HOUSE- HOLDS	PER HOUSEHOLD	AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BYU)		
TOTAL HOUSEHOLDS	Q	Q	q	Q	Q	Q	Q	Q	Q	
AREA TYPE URBAN	Q	Q	Q	Q	Q	Q	Q	Q	Q	
RURAL	q	q	q	q	q	q	Q	q	q	
SMSA										
SMSA	Q	Q	Q	q	Q	Q	Q	Q	Q	
NON-SMSA	Q	Q	Q	Q	Q	Q	Q	Q	Q	
FUEL OIL PAID BY HOUSEHOLD										
YES	q	Q	q	q	Q	Q	Q	Q	Q	
NO	Q	Q	Q	Q	Q	Q	Q	Q	Q	
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q	Q Q	Q Q	
NUMBER OF ROOMS										
1 TO 3	Q	Q	Q	Q	Q	Q	Q	Q	Q	
4 TO 5	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	Q	Q	q	Q	q	Q	Q	Q	Q	
NONE	ୟ ସ	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	
MEASURED HEATED SPACE OF RESIDENCE (IN SQUARE FEET) LESS THAN 999	Q	Q	q	Q	q	Q	Q	Q	Q	
1,000 TO 1,999	ď	q	Ğ	ď	q	Q	q.	q	Q Q	
2,000 OR MORE	Q	q	q	q	Q	q	Q	q	Q	
YEAR HOUSE BUILT	_		_	_	_	_	_	_	_	
1939 OR EARLIER	Q Q	Q Q	Q	Q Q	Q Q	Q Q	Q Q	Q	Q Q	
1960 OR LATER	q	q	9	Q	q	Q	q	q q	Q	
DWN/RENT			•							
OMN	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	
	4	4	•	4	4	•	4	4	•	
1980 FAMILY INCOME	•	•	~	_				Q	Q	
LESS THAN \$10,000 \$10,000 TO \$19,999	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q	q	
\$20,000 TO \$34,999	q	Q	q	q	q	q	q	q	q	
\$35,000 OR MORE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
OTAL BELOW 100 PERCENT										
OF POVERTY LINE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
TOTAL BELOW 125 PERCENT OF POVERTY LINE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	Q	Q	Q	Q	Q	Q	Q	Q	Q	
35 TO 59 YEARS	q.	Q	q	q.	q.	q	ą.	Ğ.	Q	
60 YEARS AND OVER	q	q	q	q	Q	q	Q	Q	Q	
HOUSEHOLD MEMBERS										
1	Q	Q	Q	Q	Q	Q	Q	Q	Q	
2	Q	q	Q	q	Q	Q O	Q	Q Q	Q Q	
	Q	Q	Q	Q	Q	Q	Q	ď	¥	
3 OR MORE										
MAIN HEATING FUEL	_	_	_	_	_					
MAIN HEATING FUEL NATURAL GAS	Q	Q	Q O	Q O	Q Q	-	-	-	-	
MAIN HEATING FUEL	Q Q	Q Q	Q Q	Q Q Q	a a		- - Q	- - Q	- - Q	



Average Residential Fuel Oil or Kerosene Consumption and Expenditures

Table 6. (Continued) Census Division: West South Central

	 - 	ANY FUEL	OIL OR KERO	SENE USED		 FUEL OIL OR KEROSENE USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (OOLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU)	HOUSE-		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
HOT WATER FUEL										
NATURAL GAS	Q	Q	Q	Q	Q	Q	Q	Q	Q	
ELECTRICITY	Q	Q	Q	Q	Q	Q	Q	Q	Q	
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
OTHER	Q	Q	Q	Q	Q	Q	Q	Q	Q	
MAIN HEATING EQUIPMENT USING FUEL OIL					*					
STEAM OR HOT WATER SYSTEM	Q	Q	Q	Q	Q	Q	Q	Q	Q	
CENTRAL WARM AIR FURNACE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
OTHER/NONE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	
<2,000 CDD AND					·	•				
5,500 TO 7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	
<2,000 CDD AND										
4,000 TO 5,499 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	
<2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	
>2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	



Table 6. (Continued) Census Region: West

Average Residential Fuel Oil or Kerosene Consumption and Expenditures

		ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL OR KEROSENE USED AS MAIN HEATING				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD COLLARS)	AVG. PRICE (DOLLARS PER HILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
TOTAL HOUSEHOLDS	0.5	452	63	548	8.76	0.4	504	70	611	
	0.15	.52	• • • • • • • • • • • • • • • • • • • •	3.0	0.70	• • • •	501		V	
AREA TYPE URBAN	.4	492	40	598	0.77	-	514	72		
RURAL	.2	373	68 52	450	8.77 8.72	.3 .1	518 465	64	629 559	
SMSA SMSA	.4	473	66	573	8.74	.3	503	70	609	
NON-SMSA	.2	398	55	483	8.80	.1	506	70 70	615	
FUEL OIL PAID BY HOUSEHOLD	.5	458	47	554	0 75	^	505	70	411	
YES	Q Q	450 Q	63 Q	Q Q	8.75 Q	.4 Q	905 Q	Q Q	611 Q	
	•	,	7	~	-	•	•	•	•	
TYPE OF HOUSING STRUCTURE	_					_				
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	.5 Q	455 Q	63 Q	552 Q	8.75 Q	.4 9	503 Q	70 Q	609 Q	
NUMBER OF ROOMS										
1 TO 3	Q	Q	Q	Q	Q	Q	Q	Q	Q	
4 TO 5	. 3	416	57	504	8.76	. 2	500	69	605	
6 OR MORE	.3	510	71	617	8.74	.2	519	72	629	
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	Q	Q	Q	Q	Q	q	Q	Q	Q	
NONE	.1 .4	404 456	56 63	485 554	8.66 8.77	Q .4	Q 520	Q 72	Q 632	
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	.1 .2	317 483	44 67	387 584	8.85 8.72	.1 .2	457 485	63 67	559 585	
2,000 OR MORE	.2	525	73	637	8.77	.i	567	78	688	
YEAR HOUSE BUILT										
1939 OR EARLIER	0.2	408	56	496	8.79	0.1	475	66	577	
1940 TO 1959	.2	505	70	615	8.78	.2	550	76	668	
1960 OR LATER	.1	408	57	488	8.62	.1	436	61	520	
DWN/RENT										
ONN	.4	461	64	558	8.74	.3	508	70	613	
RENT	.1	424	59	519	8.82	.1	494	69	605	
1980 FAMILY INCOME										
LESS THAN \$10,000	.1	506	70	605	8.65	.1	549	76	657	
\$10,000 TO \$19,999	.2	353	49	432	8.87	.2	419 457	58 63	515 562	
\$20,000 TO \$34,999 \$35,000 OR MORE	.1 .1	420 631	58 87	516 755	8.85 8.64	.1 .1	758	105	897	
TOTAL BELOW 100 PERCENT										
OF POVERTY LINE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
TOTAL BELOW 125 PERCENT	_					•	547	76	659	
OF POVERTY LINE	.1	481	67	578	8.68	.1	547	76	037	
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	.1	459	64	563	8.84	.1	476	66 63	583 542	
35 TO 59 YEARS	.2 .3	437 461	61 64	527 559	8.71 8.76	.1 .2	451 552	76	669	
		401	54	227	3.,0	••		. •		
HOUSEHOLD MEMBERS	.1	509	71	605	8.57	.1	581	81	692	
2	.2	445	61	543	8.83	.2	511	71	623	
3 OR MORE	.2	434	60	528	8.77	.2	465	64	565	
MATE HEATTHE FIEL										
MAIN HEATING FUEL NATURAL GAS	.1	391	54	481	8.87	_	-		-	
ELECTRICITY	Q	Q	Q	Q	Q		-			
FUEL OIL OR KEROSENE	.4 Q	504	70	611 Q	8.75 Q	.4 Q	504 Q	70 Q	611 Q	
OTHER		Q	Q							



Average Residential Fuel Oil or Kerosene Consumption and Expenditures

Table 6. (Continued) Census Region: West

	! ! !	ANY FUEL	OIL OR KERC	SENE USED		FUEL OIL OR KEROSENE USED AS MAIN HEATING FUEL 				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE COLLARS PER MILLION BTU	HOUSE-			AVG. EXPEND- I TURES PER HOUSEHOLD (COLLARS)	
HOT WATER FUEL										
NATURAL GAS	0.1	377	52	464	8.87	Q	Q	Q	Q	
ELECTRICITY	.4	472	65	570	8.73	0.4	506	70	612	
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
OTHER	Q	Q	Q	Q	Q	Q	Q	Q	Q	
MAIN HEATING EQUIPMENT USING FUEL OIL										
STEAM OR HOT WATER SYSTEM	Q	Q	Q	Q	Q	Q	Q	Q	Q	
CENTRAL WARM AIR FURNACE	.3	477	66	574	8.69	. 3	477	66	574	
OTHER/NONE	.2	316	44	390	8.95	q	Q	Q	Q	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	Q	Q	Q	ą	Q	Q	Q	Q	Q	
5,500 TO 7,000 HDD	.1	433	60	516	8.63	.1	463	64	553	
4,000 TO 5,499 HDD	.4	477	66	577	8.75	.3	511	71	620	
<2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	q	Q	
>2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	e	Q	



Table 6. (Continued) Census Division: Mountain

Average Residential Fuel Oil or Kerosene Consumption and Expenditures

	 	ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL OR KEROSENE USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS	CONSUMED PER HOUSEHOLD	I AVG. I AMOUNT I CONSUMED I PER IHOUSEHOLD I (MILLION I BTU)		AVG. PRICE (DOLLARS PER MILLION BTU)	 NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	2	AVG. EXPEND- ITURES PER HOUSEHOLD	
TOTAL HOUSEHOLDS	0.1	456	63	548	8.68	0.1	456	63	543	
AREA TYPE										
URBAN	.1	462	64	558	8.74	Q	Q	Q	Q	
RURAL	Q	Q	Q	Q	Q	q	Q	Q	Q	
SMSA										
SHSA	Q	Q	Q	Q	Q	Q	Q	Q	Q	
NON-SMSA	.1	445	61	530	8.63	à	Q	q	à	
FUEL OIL PAID BY HOUSEHOLD										
YES	.1	456	63	548	8.68	.1	456	63	543	
NO	q	Q	Q	Q	Q	Ġ .	Q	Q	Q	
TYPE OF HOUSING STRUCTURE										
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	.1 Q	456 Q	63 Q	548 Q	8.68 Q	.1 Q	456 Q	63 Q	543 Q	
NUMBER OF ROOMS										
1 TO 3	Q	Q	Q	Q	Q	Q	Q	Q	Q	
4 TO 5	.1	413	57	491	8.62	Q	Q	Q	q	
6 OR MORE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED	_	_	_				_	_	_	
ALL	Q	Q Q	q	Q Q	Q	Q	q	Q Q	Q Q	
NONE	Q	ď	Q Q	q	Q Q	Q Q	Q Q	Q Q	Q	
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	Q Q	Q Q	Q Q Q	Q Q Q	Q Q Q	Q Q Q	Q Q	ସ ସ ସ	વ વ વ	
	•	4	•	4	4	4	•	4	4	
YEAR HOUSE BUILT 1939 OR EARLIER	Q	Q	Q	Q	Q	Q	Q	Q	Q	
1940 TO 1959	à	q	Q	q	q	q	Q	Q	Q	
1960 OR LATER	Q	Q	Q	Q	Q	Q	Q	Q	Q	
OWN/RENT	0.1	464	64	556	8.68	Q	Q	q	Q	
RENT	Q	Q	Q	Q	Q	Q	Q	Q	Q	
1980 FAMILY INCOME										
LESS THAN \$10,000	Q	Q	Q	Q	Q	Q	Q	q	Q	
\$10,000 TO \$19,999	Q Q	q	Q Q	Q	q	Q Q	Q Q	Q Q	Q Q	
\$20,000 TO \$34,999 \$35,000 OR MORE	Q	Q Q	q q	Q Q	Q Q	Q.	Q	q	q	
	•	•	·	-	-					
TOTAL BELOW 100 PERCENT OF POVERTY LINE	G	Q	Q	Q	Q	Q	o	O.	Q	
TOTAL BELOW 125 PERCENT	•	4	4	4	4	4	•	•	•	
OF POVERTY LINE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	Q	Q	Q	Q	Q	Q	Q	Q	Q	
35 TO 59 YEARS	Q	Q	Q	Q	Q	q	Q	q	Q	
60 YEARS AND OVER	Q	Q	Q	Q	Q	Q	Q	Q	Q	
HOUSEHOLD MEMBERS										
1	Q	Q	Q	Q	Q	Q	Q	Q	Q	
2 3 OR MORE	Q	Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	
3 UN TIUNE	Q	Q	4	4	ч	4	4	٠.	٦	
MAIN HEATING FUEL NATURAL GAS	Q	Q	Q	Q	Q	-	-	-	-	
MAIN HEATING FUEL	Q Q .1	Q Q 456	Q Q 63	Q Q 543	Q Q 8.62	- - 0.1	- - 456	- - 63	- - 543	



Average Residential Fuel Oil or Kerosene Consumption and Expenditures

Table 6. (Continued)
Census Division: Mountain

	 	ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL OR KEROSENE USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS) 	AVG. PRICE COLLARS PER MILLION BTU	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
HOT WATER FUEL										
NATURAL GAS	Q	Q.	Q	•	Q	Q	Q	Q	Q	
ELECTRICITY	0.1	441	61	Q 523	8.60	0.1	456	63	543	
FUEL OIL OR KEROSENE	Q	447	Q Q	Q Q	Q.00	0.1 Q	Q	Q	Q 943	
OTHER	q	Q	q	Q	q	Q	Q	Q	q	
MAIN HEATING EQUIPMENT USING FUEL OIL										
STEAM OR HOT WATER SYSTEM	Q	Q	Q	Q	Q	Q	Q	Q	Q	
CENTRAL WARM AIR FURNACE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
OTHER/NONE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	
5,500 TO 7,000 HDD	.1	441	61	523	8.60	.1	456	63	543	
4,000 TO 5,499 HDD	q	Q	Q	Q	Q	Q	Q	Q	Q	
<2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	
>2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	q	Q	Q	Q	



Table 6. (Continued) Census Division: Pacific

Average Residential Fuel Oil or Kerosene Consumption and Expenditures

		ANY FUEL	OIL OR KERO	SENE USED		 FUEL OIL (OR KEROSENE FU	USED AS MA EL	IN HEATING
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		PER HOUSEHOLD	PER	AVG. PRICE COLLARS PER MILLION BTU	NUMBER OF HOUSE- HOLDS (MILLIONS)		I PER IHOUSEHOLD	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	0.5	451	62	548	8.77	0.4	511	71	621
	0.5	731	0.2	340	0.77	0.4	711	**	021
AREA TYPE URBAN	-	498	69			~	528		
RURAL	.3 .2	363	50	606 439	8.77 8.76	.3 .1	460	73 63	643 554
eve i									
SMSA SMSA	.4	472	65	572	8.74	.3	506	70	613
NON-SMSA	.1	374	52	459	8.90	.1	535	74	658
EUEL OTL DATE BY HOUSEHOLD									
FUEL OIL PAID BY HOUSEHOLD YES	.4	458	63	556	8.76	. 3	513	71	622
NO	Q	q	Q	Q	Q	Q Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE									
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	.4 Q	455 Q	63 Q	552 Q	8.76 Q	. 3 Q	511 Q	71 Q	620 Q
NUMBER OF ROOMS									
1 TO 3	Q	Q	Q	Q	Q	Q	Q	Q	Q
4 TO 5	.2	416	58	507	8.80	.1	503	70	611
6 OR MORE	.2	506	70	612	8.74	.2	530	74	643
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALL	Q	Q	Q	Q	q	Q	Q	Q	Q
SOME	Q .4	Q 458	Q 63	Q 556	Q 8.77	Q .3	Q 523	Q 72	Q 635
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	.1 .2	301 480	41 67	368 581	8.91 8.72	.1 .2	480 492	66 68	587 594
2,000 OR MORE	.1	528	73	643	8.78	.1	560	78	682
YEAR HOUSE BUILT									
1939 OR EARLIER	0.2	410	57	500	8.83	0.1	481	66	587
1940 TO 1959 1960 OR LATER	.2 .1	516 381	72 53	629 454	8.79 8.58	.2 .1	56 0 437	78 61	683 519
1700 OK ERIEKTITITITITITITITITITITITITITITITITITIT	••	301	53	131	0.50	••	,,,,	0.2	22,
OWN/RENT	_					-			407
OWN	.3 .1	461 426	64 59	558 521	8.75 8.83	.3 .1	515 503	71 70	623 616
		,							
1980 FAMILY INCOME LESS THAN \$10,000	.1	502	70	603	8.66	.1	566	78	679
\$10,000 TO \$19,999	.2	351	70 48	431	8.90	.1	419	58	515
\$20,000 TO \$34,999	.1	449	62	554	8.88	.1	472	65	581
\$35,000 OR MORE	.1	608	84	725	8.60	.1	758	105	897
TOTAL BELOW 100 PERCENT OF POVERTY LINE	Q	Q	Q	Q	Q	Q	Q	Q	Q
TOTAL BELOW 125 PERCENT OF POVERTY LINE	.1	507	70	610	8.67	.1	591	82	710
OF POVERIT LINE	.1	507	70	810	0.07	••	3/1	OL.	710
AGE OF HOUSEHOLD HEAD	_	4				-	400	, ·•	F00
UNDER 35 YEARS	.1 .2	462 431	64 60	566 519	8.84 8.69	.1 .1	480 457	67 63	588 549
60 YEARS AND OVER	.2	461	64	562	8.80	.2	562	78	684
HOUSEHOLD MEMBERS	-			.=-		-	476	07	749
1	.1 .2	551 435	76 60	655 533	8.58 8.85	.1 .1	63 0 501	87 69	749 614
3 OR MORE	.2	429	60	52 3	8.78	.2	476	66	579
MAIN HEATING FUEL NATURAL GAS	Q	Q	Q	Q	Q	-	-	-	-
ELECTRICITY	Q	Q	Q	Q	Q			-	- (0)
FUEL DIL OR KEROSENE	.4	511	71	621	8.77	.4 Q	511 Q	71 Q	621 Q
OTHER	Q	Q	Q	Q	Q	ч	ч	4	4



Average Residential Fuel Oil or **Kerosene Consumption and Expenditures**

Table 6. (Continued) Census Division: Pacific

	 	ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL OR KEROSENE USED AS MAIN HEATING FUEL					
HOUSEHOLD CHARACTERISTICS	 NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (ODLLARS)	AVG. PRICE COLLARS PER HILLION BTU	HOUSE-	AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		
HOT WATER FUEL											
NATURAL GAS	0.1	334	46	410	8.87	Q	Q	Q	G		
ELECTRICITY	.4	478	66	579	8.75	0.3	515	71	624		
FUEL OIL OR KEROSENE	Q	Q	Q	Q.	Q	Q	Q	Q	Q		
OTHER	q	q	Q	Q	q	q	Q	q	Q		
MAIN HEATING EQUIPMENT USING FUEL OIL											
STEAM OR HOT WATER SYSTEM	Q	Q	Q	Q	Q	Q	Q	Q	Q		
CENTRAL WARM AIR FURNACE	.3	478	66	577	8.70	. 3	478	66	577		
OTHER/NONE	.1	278	38	346	9.03	Q	Q	Q	Q		
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	Q	Q	q	Q	Q	Q	Q	q	Q		
5,500 TO 7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	q		
4,000 TO 5,499 HDD	.4	477	66	577	8.75	.3	511	71	620		
<2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q		
>2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q		

[&]quot;-" = DATA NOT APPLICABLE.

[&]quot;Q" = DATA MITHHELD BECAUSE OF A LARGE VARIANCE.

NOTE: BECAUSE OF ROUNDING, DATA MAY NOT SUM TO TOTALS. PERCENTAGES ARE CALCULATED ON UNROUNDED NUMBERS. SEE GLOSSARY FOR DEFINITION OF TERMS USED IN THIS REPORT.

SOURCE: ENERGY INFORMATION ADMINISTRATION, OFFICE OF ENERGY MARKETS AND END USE, ENERGY END USE DIVISION, FORM EIA-457, THE 1981 RESIDENTIAL ENERGY CONSUMPTION SURVEY.



Table 7. U.S. Average Residential Liquefied Petroleum Gas Consumption and Expenditures—April 1981 Through March 1982, United States

Average Residential Liquefied Petroleum Gas Consumption and Expenditures

		ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFIED PETROLEUM GAS USED AS MAIN HEATING FUEL				
HOUSEHOLD Characteristics	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	CONSUMED PER HOUSEHOLD	I TURES	AVG. PRICE COLLARS PER MILLION BTU	NUMBER OF HOUSE- HOLDS (MILLIONS)	AMOUNT CONSUMED PER HOUSEHOLD	I AVG. I AMOUNT I CONSUMED I PER I HOUSEHOLD I MILLION I BTU)		
TOTAL HOUSEHOLDS	7.3	467	43	373	8.74	3.7	729	67	555	
AREA TYPE URBAN	1.3	305	28	267	9.58	.6	454	41	373	
RURAL	6.0	502	46	395	8.63	3.1	787	72	593	
SHSA										
SHSA	2.1	431	39	371	9.44	1.2	621	57	517	
NON-SMSA	5.2	482	44	373	8.49	2.5	778	71	572	
LPG PAID BY HOUSEHOLD										
YES	7.2	467	43	373	8.75	3.6	737	67	561	
NO	.2	467	43	357	8.36	.1	541	49	407	
TYPE OF HOUSING STRUCTURE										
SINGLE FAMILY OR MOBILE HOME	7.2	469	43	374	8.73	3.7	727	66	553	
2 OR HORE UNITS	.2	371	34	323	9.53	Q	Q.	q	Q	
NUMBER OF ROOMS										
1 TO 3	. 9	244	22	212	9.53	.4	394	36	323	
4 TO 5	3.6	408	37	329	8.84	1.9	593	54	453	
6 OR MORE	2.8	612	56	478	8.56	1.4	1000	91	753	
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	2.1	470	43	367	8.55	1.4	635	58	480	
NONE	1.6 3.7	554 429	51 39	435 350	8.59 8.94	1.0 1.4	802 772	73 71	608 592	
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	2.9 3.1	329 563	30 51	272 453	9.04 8.82	1.4 1.8	502 801	46 73	392 622	
2.000 OR HORE	1.3	550	50	410	8.17	.5	1129	103	784	
VEAR MOUNT BUT T										
YEAR HOUSE BUILT 1939 OR EARLIER	2.6	575	53	451	8.59	1.2	991	91	742	
1940 TO 1959	1.2	340	31	287	9.24	.5	561	51	439	
1960 OR LATER	3.6	430	39	344	8.77	2.0	613	56	471	
OHN/RENT										
OHN	5.8	482	44	383	8.71	2.9	758	69	573	
RENT	1.6	411	38	334	8.90	.8	620	57	486	
1980 FAMILY INCOME										
LESS THAN \$10,000	2.7	416	38	331	8.72	1.3	655	60	498	
\$10,000 TO \$19,999 \$20,000 TO \$34,999	2.0 1.9	486 432	44 39	384 365	8.64 9.24	1.0 1.0	763 661	70 60	578 531	
\$35,000 OR HORE	7.7	688	63	514	8.18	.4	1036	95	733	
TOTAL BELOM 100 PERCENT	1.4	369	34	304	9.03	.7	548	50	436	
TOTAL BELOW 125 PERCENT										
OF POVERTY LINE	2.0	404	37	324	8.77	1.0	621	57	477	
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	1.8	439	40	343	8.56	.9	641 820	59 75	477 624	
35 TO 59 YEARS	3.0 2.5	487 463	45 42	392 371	8.81 8.78	1.4 1.3	692	/5 63	534	
			•-							
HOUSEHOLD MEMBERS	, ,	338	31	282	9.13	.6	509	47	407	
2	1.1 2.7	338 453	31 41	282 359	8.69	1.4	677	62	507	
3 OR HORE	3.6	517	47	411	8.70	1.7	855	78	650	
MAIN HEATING FUEL										
NATURAL GAS	Q	Q	Q	Q	Q	-	-	-	-	
ELECTRICITY	. 3	162	15	163	10.99	-	-	-	-	
FUEL OIL OR KEROSENE	1.5 5.4	133 581	12 53	142 452	11.72 8.51	3.7	729	- 67	555	
UIRER	7.7	201	23	736	0.51	3.1	167	0,	223	



Table 7. (Continued) United States

		ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFIED PETROLEUM GAS USED AS MAIN HEATING FUEL				
	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE OLLARS PER MILLION BTU	 NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
NOT WATER FUEL										
NATURAL GAS	Q	9	Q	Q	o o	Q	Q	Q	Q	
ELECTRICITY	3.4	352	32	296	9.20	1.7	549	50	443	
FUEL OIL OR KEROSENE	.4	89	8	109	13.42	Q	Q	Q	Q	
OTHER	3.6	614	56	473	8.43	2.0	891	81	655	
MAIN HEATING EQUIPMENT USING LPG										
CENTRAL WARM AIR FURNACE	1.9	762	70	580	8.34	1.9	762	70	580	
OTHER/NONE	5.4	363	33	300	9.04	1.8	694	63	528	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	1.6	423	39	335	8.67	.4	1006	92	724	
5,500 TO 7,000 HDD	1.2	653	60	512	8.59	.5	1314	120	991	
4,000 TO 5,499 HDD	1.4	484	44	376	8.52	.6	921	84	655	
<2,000 CDD AND <4,000 HDD	1.6	500	46	405	8.88	1.1	634	58	503	
>2,000 CDD AND <4,000 HDD	1.7	331	30	276	9.14	1.2	391	36	318	



Table 7. (Continued) Census Region: Northeast

Average Residential Liquefied Petroleum Gas Consumption and Expenditures

	! 	ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFIED PETROLEUM GAS USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS HILLIONS)	PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE COLLARS PER MILLION BTU	NUMBER OF HOUSE- HOLDS (MILLIONS)		I AVG. I AMOUNT I CONSUMED I PER IHOUSEHOLD I (MILLION I BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (OOLLARS)	
TOTAL HOUSEHOLDS	1.2	262	24	252	10.52	0.1	1224	112	1047	
AREA TYPE URBAN	.3	122	11	131	11.79	Q	Q	Q	Q	
RURAL	.9	303	28	286	10.37	.1	1224	112	1047	
SMSA	-	777	7.4	77/	0.01	-	3404	100	1105	
SMSA	.5 .6	371 168	34 15	336 179	9.91 11.66	.1 Q	1404 Q	128 Q	1185 Q	
		200		2.,	11,00	7	7	7	7	
LPG PAID BY HOUSEHOLD						_				
YES	1.1	246	22	243	10.79	. 1 Q	1215	111 Q	1085	
мо	.1	587	54	438	8.18	ч	Q	u	Q	
TYPE OF HOUSING STRUCTURE										
SINGLE FAMILY OR MOBILE HOME	1.0	245	22	240	10.73	<u>.</u> 1	1293	118	1145	
2 OR MORE UNITS	.2	361	33	319	9.68	Q	Q	Q	Q	
NUMBER OF ROOMS										
1 TO 3	.1	230	21	255	12.14	Q	Q	Q	Q	
4 10 5	.5	172	16	175	11.11	ଦ୍	Q	Q 165	Q 1296	
6 OR MORE	.6	344	31	316	10.05	.1	1584	145	1500	
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	.2	81	. 7	93	12.58	Q	Q	Q	Q	
SOME	.2 .8	533 243	49 22	477 237	9.81 10.71	.1 Q	1124 Q	103 Q	959 Q	
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	. 3 . 5	223 389	20 36	227 352	11.16 9.93	Q .1	Q 1584	Q 145	Q 1296	
2,000 OR MORE	.3	117	11	130	12.18	Q	Q	Q	Q	
YEAR HOUSE BUILT										
1939 OR EARLIER	0.5	356	32	332	10.20 12.83	0.1 Q	1262 Q	115 Q	1073 Q	
1940 TO 1959	.2 .5	113 219	10 20	132 213	10.64	q	q	q	Q	
2700 OK CATOKTOTT	•					•				
OHN/RENT						•		•	o.	
OWN	1.0 .2	207 563	19 51	208 491	11.01 9.54	Q .1	Q 1262	Q 115	1073	
Neith		503	J.	1/1		•-				
1980 FAMILY INCOME						_		•		
LESS THAN \$10,000	.2	226	21 29	219 292	10.61 10.18	Q Q	Q Q	Q Q	Q Q	
\$10,000 TO \$19,999 \$20,000 TO \$34,999	.3 .5	314 221	29	226	11.18	Q	q	Q Q	Q	
\$35,000 OR MORE	.1	352	32	305	9.49	Q	Q	Q	Q	
TOTAL BELOW 100 PERCENT OF POVERTY LINE	.1	305	28	275	9.86	Q	Q	Q	Q	
TOTAL BELOW 125 PERCENT	.1	202	20	275	7.00	4	•	~	3	
OF POVERTY LINE	.1	283	26	257	9.94	Q	Q	Q	Q	
ACE OF HOUSEHOLD WITH										
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	.4	373	34	338	9.94	.1	1258	115	1025	
35 TO 59 YEARS		224	20	225	11.03	Q	Q	Q	Q	
60 YEARS AND OVER		193	18	191	10.83	Q	Q	Q	Q	
HOUSEHOLD MEMBERS										
1	.2	172	16	181	11.53	Q	Q	q	Q	
2	.3	209	19	215	11.27	Q	Q	q	Q	
3 OR MORE	.7	307	28	285	10.15	. 1	1419	130	1166	
MAIN HEATING FUEL										
NATURAL GAS	Q	Q	Q	Q	Q	-	_	-	-	
ELECTRICITY	Q	Q	Q	Q	Q	-	-	_	-	
FUEL OIL OR KEROSENE		98	9	111	12.33	.1	1224	112	1047	
	.5	485	44	443	9.98		1664	110	204,	



Table 7. (Continued) Census Region: Northeast

		ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFIED PETROLEUM GAS USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
HOT WATER FUEL										
NATURAL GAS	Q	Q	Q	Q	Q	Q	Q	Q	Q	
ELECTRICITY	0.4	162	15	160	10.78	Q	Q	Q	Q	
FUEL OIL OR KEROSENE	.3	89 474	8 43	103 440	12.76 10.15	Q 0.1	Q 1215	Q 111	Q 1085	
omen	• •	7/4	73	440	10.15	0.1	1213	111	1005	
MAIN HEATING EQUIPMENT USING LPG										
CENTRAL WARM AIR FURNACE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
OTHER/NONE	1.2	236	22	230	10.67	.1	1139	104	973	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	.5	195	18	204	11.43	Q	Q	Q	Q	
5,500 TO 7,000 HDD	.6	345	32	314	9.97	.1	1286	117	1090	
4,000 TO 5,499 HDD	.1	102	9	123	13.18	Q	Q	Q	Q	
<2,000 CDD AND <4,000 HDD	-	-	-	-	-	-		-	-	
>2,000 CDD AND <4,000 HDD	_	-	-	-	-	-	-	_	-	



Table 7. (Continued) Census Division: New England

Average Residential Liquefied Petroleum Gas Consumption and Expenditures

	! ! !	ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFIED PETROLEUM GAS USED AS MAIN HEATING FUEL					
HOUSEHOLD CHARACTERISTICS	 NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AHOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		
TOTAL HOUSEHOLDS	0.5	181	17	187	11.32	Q	Q	Q	Q		
AREA TYPE											
URBAN	.1	165	15	169	11.21	Q	Q	Q	Q		
RURAL	.4	184	17	191	11.34	Q	q	Q	q		
SMSA											
SMSA	.1	162	15	171	11.59	Q	Q	Q	Q		
NON-SMSA	.4	186	17	191	11.25	q	Q.	q	Ğ		
LPG PAID BY HOUSEHOLD	4	100	17	300	13.63		•				
YES	.4 Q	182 Q	17 Q	190 Q	11.41 Q	Q Q	Q Q	Q Q	Q Q		
	~	7	~	•	•	7	•	•	3		
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME		7.47		7.00		_	_	_	_		
2 OR MORE UNITS	.4 .1	183 168	17 15	189 178	11.27 11.55	Q Q	Q Q	Q	Q		
	•-	100	13	110	11.55	-	•	•	•		
NUMBER OF ROOMS	_	_	_	_	_	_		_	_		
1 TO 3	Q .2	Q 183	Q	Q 180	Q 10 77	Q Q	q	Q	Q Q		
6 OR MORE	.2	163	17 15	178	10.77 11.94	ď	Q Q	q	ā		
						,	-	·	•		
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED	_			_		_	_	_	_		
SOME	Q .1	Q 250	Q 23	Q 263	Q 11.51	Q Q	Q Q	Q Q	Q G		
NONE	.3	174	16	178	11.18	Q	q	q	q		
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	.1 .2 .1	168 209 139	15 19 13	170 215 153	11.08 11.24 11.99	Q Q	Q Q	ସ ସ ସ	Q Q Q		
	••	137	13	133	*****	•	•	•	7		
YEAR HOUSE BUILT 1939 OR EARLIER	0.2	187	17	200	11.68	Q	Q	Q	Q		
1940 TO 1959	.1	158	14	177	12.26	ą	q	q	q		
1960 OR LATER	.1	187	17	173	10.17	Q	Q	Q	Q		
OUR PENT											
OWN/RENT	.4	189	17	193	11.20	Q	Q	Q	Q		
RENT	.1	149	14	162	11.91	Q	Q	q	q		
1980 FAMILY INCOME LESS THAN \$10,000	.1	156	14	163	11.42	Q	Q	Q	Q		
\$10,000 TO \$19,999	.2	177	16	184	11.38	q	Q.	q	q		
\$20,000 TO \$34,999	.1	201	18	199	10.82	Q	Q	Q	Q		
\$35,000 OR MORE	.1	190	17	210	12.11	Q	Q	Q	Q		
TOTAL BELOW 100 PERCENT	Q	Q	Q	Q	Q	Q	Q	Q	Q		
OF POVERTY LINE	ч	ч	ч	ч	ч	ч	•	4	4		
OF POVERTY LINE	.1	141	13	137	10.63	Q	Q	Q	Q		
ACT OF HOUSTHOLD											
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	.1	229	21	245	11.70	Q	Q	Q	Q		
35 TO 59 YEARS		155	14	155	10.95	Q	Q	Q	Q		
60 YEARS AND OVER	.1	178	16	185	11.38	Q	Q	Q	Q		
HOUSEHOLD MEMBERS											
1	.1	106	10	108	11.19	Q	Q	Q	Q		
2	.2	264	24	273	11.31	Q	Q	q	q		
3 OR MORE	.2	153	14	159	11.36	Q	Q	Q	Q		
MAIN HEATING FUEL											
NATURAL GAS	Q	Q	Q	Q	Q	-	-	-	-		
ELECTRICITY		Q	Q	Q	Q	-	-	-	-		
FUEL OIL OR KEROSENE		108 270	10 25	115 274	11.72 11.12	Q	- Q	Q	Q		
UIREK	٠.	270	25	614	****	*	4	~	•		



Table 7. (Continued) Census Division: New England

		ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFIED PETROLEUM GAS USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS			AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. PRICE (DOLLARS PER MILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
HOT WATER FUEL NATURAL GAS	Q 0.1	Q 119	Q 11	Q 110	Q 10.13	Q Q	Q Q	Q O	Q G	
FUEL OIL OR KEROSENE	.2	98 262	9 24	115 267	12.80 11.14	Q Q	٠ •	q q	q	
MAIN HEATING EQUIPMENT USING LPG CENTRAL WARM AIR FURNACE OTHER/NONE	Q .5	Q 181	Q 17	Q 187	Q 11.32	Q Q	Q Q	Q Q	Q Q	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD	.3	214	20	213	10.93	Q	Q	Q	Q	
5,500 TO 7,000 HDD	.2	132	12	147	12.26	Q -	Q -	Q -	Q -	
<2,000 CDD AND <4,000 HDD >2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	~	-	-	



Table 7. (Continued) Census Division: Middle Atlantic

Average Residential Liquefied Petroleum Gas Consumption and Expenditures

	1 1 1	ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFIED PETROLEUM GAS USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	CONSUMED PER HOUSEHOLD	I PER		NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	AVG. AMOUNT CONSUMED FER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
TOTAL HOUSEHOLDS	0.7	315	29	294	10.22	0.1	1404	128	1185	
AREA TYPE URBAN	.2	101	9	113	12.26	Q	Q	Q	Q	
RURAL	.5	386	35	354	10.04	ù	1404	128	1185	
SMSA										
SMSA	.4	416	38	371	9.77	.1	1404	128	1185	
NON-SMSA	. 3	144	13	163	12.39	Q	Q	Q	Q	
LPG PAID BY HOUSEHOLD										
YES	.7	286	26	275	10.55	.1	1450	132	1279	
NO	Q	Q	Q	Q	Q	Q	Q	Q	Q	
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MOPE UNITS	.6 .1	283 538	26 49	272 449	10.51 9.13	. 1 Q	1450 Q	132 Q	1279 Q	
NUMBER OF ROOMS										
1 TO 3	.1	230	21	258	12.26	Q	Q	Q	Q	
4 TO 5	. 2 . 4	161 420	15 38	169 374	11.51 9.75	Q .1	Q 1584	Q 145	Q 1296	
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED										
ALL	.2	84	_8	96	12.50	Q	Q	Q	Q	
NONE	.1 .5	785 295	72 27	668 283	9.32 10.50	.1 Q	1200 Q	110 Q	1010 Q	
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	.2 .3	268 525	24 48	274 457	11.21 9.53	Q .1	Q 1584	Q 145	Q 1296	
2,000 OR MORE	.2	108	10	121	12.28	Q	Q	Q	Q	
YEAR HOUSE BUILT 1939 OR EARLIER 1940 TO 1959	0.3	497 33	45 3	442 54	9.74 17.62	0.1 Q	1361 Q	124 Q	1141 Q	
1960 OR LATER	.4	231	21	228	10.78	q	Q Q	q	q.	
OWN/RENT OWN	.6	217	20	216	10.91	Q	Q	Q	Q	
RENT	.1	980	90	822	9.18	.1	1361	124	1141	
1980 FAMILY INCOME							_	_	_	
LESS THAN \$10,000	.1 .2	296 428	27 39	275 382	10.19 9.77	Q Q	Q Q	Q Q	Q Q	
\$20,000 TO \$34,999	.4	229	21	236	11.30	Q	Q	q q	Q	
\$35,000 OR MORE	.1	552	50	422	8.38	Q	Q	Q	Q	
TOTAL BELOW 100 PERCENT OF POVERTY LINE	.1	378	34	337	9.77	Q	Q	Q	Q	
TOTAL BELOW 125 PERCENT	,	770	7/-	777	0 77	•	Q	Q	Q	
OF POVERTY LINE	.1	378	34	337	9.77	Q	ų	ч	ų	
AGE OF HOUSEHOLD HEAD	_	£4.4		70/	0.40	_	^	^	0	
UNDER 35 YEARS	.2	44 3 269	40 25	384 272	9.49 11.06	Q Q	Q Q	Q Q	Q	
60 YEARS AND OVER	.1	206	19	196	10.41	Q	q	Q	Q	
HOUSEHOLD MEMBERS	.1	260	24	278	11.71	Q	Q	Q	Q	
2	.2	159	14	162	11.20	Q	Q	Q	Q	
3 OR MORE	.5	379	35	343	9.93	.1	1584	145	1296	
MAIN HEATING FUEL NATURAL GAS	Q	Q	Q	Q	Q	_	-	_	-	
ELECTRICITY	Q ,	Q	Q	Q	Q 12 87	-	-	-	-	
FUEL OIL OR KEROSENE	.4 .3	92 648	8 59	108 569	12.81 9.63	.1	1404	128	1185	
		070	37	207	/.03	• •	**V*			



Table 7. (Continued)
Census Division: Middle
Atlantic

	i 	ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFIED PETROLEUM GAS USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)	AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLE (DOLLARS	
HOT WATER FUEL										
NATURAL GAS	Q	Q	Q	Q	Q	Q	Q	Q	Q	
ELECTRICITY	0.3	174	16	173	10.90	Q	Q	Q	Q	
FUEL OIL OR KEROSENE	.1	79	7	92	12.70	Q	Q	Q	Q	
OTHER	.2	685	63	611	9.77	0.1	1450	132	1279	
MAIN HEATING EQUIPMENT USING LPG										
CENTRAL WARM AIR FURNACE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
OTHER/NONE	.7	274	25	260	10.38	-1	1361	124	1141	
HEATING DEGREES-DAYS (HDD) NND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	.2	166	15	189	12.45	Q	Q	Q	Q	
5,500 TO 7,000 HDD	.4	440	40	389	9.66	.1	1404	128	1185	
4,000 TO 5,499 HDD	.1	102	9	123	13.18	Q	Q	Q	Q	
<2,000 CDD AND <4,000 HDD	-	-		-						
>2,000 CDD AND <4,000 HDD	_	-	_	_	_	_	-	_	_	



Table 7. (Continued) Census Region: North Central

Average Residential Liquefied Petroleum Gas Consumption and Expenditures

	1 	ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFIED PETROLEUM GAS USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	 	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE COOLLARS PER MILLION BTU	 NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
TOTAL HOUSEHOLD\$	2.1	667	61	487	7.98	1.0	1103	101	782	
AREA TYPE	,									
URBAN	. 2	622	57	466	8.20	.1	895	82	656	
RURAL	1.9	671	61	488	7.97	. 9	1128	103	797	
SMSA										
SMSA	.3	784	72	643	8.98	.2	1265	116	1038	
NON-SMSA	1.8	647	59	459	7.77	.9	1073	98	736	
LPG PAID BY HOUSEHOLD										
YES	2.0	664	61	484	7.99	1.0	1106	101	784	
NO	Q	Q	Q	Q	Q	Q	Q	Q	Q	
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	2.1 Q	668 Q	61 Q	487 Q	7.98 Q	1.0 Q	1111 Q	10 <i>2</i> Q	788 Q	
NUMBER OF ROOMS										
1 TO 3	. 3	322	29	249	8.47	.1	701	64	483	
4 TO 5	.8 1.0	598 819	55 75	435 594	7.97 7.94	.4 .5	942 1288	86 118	663 919	
o or nore	1.0	619	/5	574	7.94	. 5	1200	110	71 9	
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED						_				
ALL	.5 .4	702 825	64 75	482 575	7.52 7.63	.3 .3	1053 1200	96 110	702 822	
NONE	1.1	591	54	455	8.42	.4	1080	99	815	
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	.7 .7 .6	453 816 743	41 75 68	334 612 516	8.07 8.21 7.61	.3 .5 .3	846 1115 1390	77 102 127	593 832 919	
YEAR HOUSE BUILT										
1939 OR EARLIER	1.0	764 413	70 38	560 299	8.03 7.93	0.5 .1	1292 954	118 87	930 620	
1940 TO 1959	.2 .9	628	57	455	7.94	.5	932	85	654	
OWN/RENT	1.7	712	65	515	7.93	. 9	1168	107	824	
RENT	.3	435	40	336	8.45	.1	660	60	495	
TOOL FAUTLY TURNET										
1980 FAMILY INCOME LESS THAN \$10,000	.8	485	44	351	7.91	.3	906	83	628	
\$10,000 TO \$19,999	.6	685	63	502	6.03	. 3	1149	105	817	
\$20,000 TO \$34,999 \$35,000 OR MORE	.4	902 833	82 76	693 568	8.41 7.46	.2 .2	1267 1214	116 111	970 804	
935,000 OR HORE	. 3	033	73	300	7.40	••	2227			
TOTAL BELOW 100 PERCENT	_				0.0/		000	74	E4.0	
OF POVERTY LINE	. 3	371	34	273	8.06	.1	808	74	560	
OF POVERTY LINE	.5	455	42	333	8.02	.2	873	80	612	
ACE OF HOUSEHOLD HEAD										
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	.5	614	56	435	7.76	.2	989	90	667	
35 TO 59 YEARS	. 9	746	68	553	8.13	.5	1245	114	902	
60 YEARS AND OVER	.7	600	55	433	7.91	.4	985	90	693	
HOUSEHOLD MEMBERS										
1	.2	592	54	421	7.78	.1	892	81	628	
3 OR MORE	.8 1.0	564 768	52 70	403 570	7.82 8.12	.4 .5	900 1336	82 122	618 966	
			, •	2.0		•=				
MAIN HEATING FUEL	Q	Q	Q	Q	Q	_	-	-	_	
NATURAL GAS	Q	Q	Q	Q	Q	-	-	-	-	
FUEL OIL OR KEROSENE	.4	163	15	146	9.81	-	-	-	700	
OTHER	1.7	787	72	568	7.90	1.0	1103	101	762	



Table 7. (Continued)
Census Region: North Central

	 	ANY LIQUEF	IED PETROLE	UM GAS USED	LIQUEFIED PETROLEUM GAS USED AS MAIN HEATING FUEL				
	 NUMBER OF HOUSE- HOLDS (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)		AVG. AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU)	 NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
HOT WATER FUEL									
NATURAL GAS	Q	Q	Q	Q	Q	Q	Q	Q	Q
ELECTRICITY	0.9	473	43	377	8.72	0.3	1014	93	788
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	1.2	810	74	567	7.67	.7	1153	105	788
MAIN HEATING EQUIPMENT USING LPG									
CENTRAL WARM AIR FURNACE	.6	1180	108	851	7.89	.6	1180	108	851
OTHER/NONE	1.5	459	42	339	8.08	.4	995	91	686
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD	1.1	484	44	369	8.34	. 3	979	89	706
5,500 TO 7,000 HDD	.4	1060	97	780	8.06	.3	1439	131	1052
4,000 TO 5,499 HDD	.6	702	64	478	7,46	.4	939	86	630
<2,000 CDD AND <4,000 HDD	_	_	_	-	-	_	-	_	-
>2,000 CDD AND <4,000 HDD	_	-	_	-	_	_	_	_	_



Table 7. (Continued) Census Division: East North Central

Average Residential Liquefied Petroleum Gas Consumption and Expenditures

	 	ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFI		M GAS USED G FUEL	AS MAIN
HOUSEHOLD Characteristics	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BYU)	PER	AVG. PRICE COLLARS PER MILLION BTU	 NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BYU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	1.2	594	54	472	8.69	0.5	1164	106	903
AREA TYPE									
URBAN	. 2	571	52	433	8.30	.1	818	75	604
RURAL	1.0	598	55	478	8.75	.4	1259	115	985
SMSA SMSA	.2	854	78	735	9.42	,	1343	107	1155
NON-SMSA	1.0	536	49	412	8.43	.1 .3	1099	123 100	812
							•		
LPG PAID BY HOUSEHOLD	, .		_,	,					
YES	1.2 Q	595 Q	54 Q	473 Q	8.70	. 4 Q	1186 Q	108	920 Q
	4	٩	4	ч	Q	4	ч	Q	4
TYPE OF HOUSING STRUCTURE		_							
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	1.2 Q	595 Q	54 Q	473 Q	8.70 Q	.4 Q	1186 Q	108 Q	920 Q
NUMBER OF ROOMS									
1 70 3	. 2	257	23	216	9.23	Q	Q	Q	Q
4 TO 5	.5 .5	512 788	47 72	401 626	8.59 8.69	. 2 . 2	903 1440	82 132	683 1136
o or northing	.5	,00	12	626	0.67	.2	1440	132	1130
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALL	.2	455	42	351	8.44	.1	939	86	686
SOME	.2 .8	813 574	74 52	606 469	8.17 8.94	.1 .3	1245 1203	114 110	919 968
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	.5	365	33	288	8.64	.2	790	72	579
1,000 TO 1,999 2,000 OR MORE	.4	862 568	79 52	698 435	8.86 8.38	.2 .1	1236 1800	113 164	1004 1300
	• •				0.30		1000	20.	
YEAR HOUSE BUILT 1939 OR EARLIER	0.5	729	67	591	8.89	0.2	1447	132	1166
1940 TO 1959	.1	173	16	150	9.47	Ğ	Q	Q	Q
1960 OR LATER	.5	559	51	428	8.38	.2	914	83	672
OWN/RENT									
OWN	1.0	626	57	496	8.68	.4	1278	117	988
RENT	.2	429	39	344	8.79	.i	632	58	507
1980 FAMILY INCOME LESS THAN \$10,000	.5	335	31	268	8.77	.2	751	69	565
\$10,000 TO \$19,999	.4	679	62	522	8.43	.1	1303	119	978
\$20,000 TO \$34,999	.1	1140	104	1005	9.65	.1	1473	135	1306
\$35,000 OR MORE	.2	771	70	562	7.99	.1	1435	131	1009
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE	.2	248	23	204	9.01	.1	539	49	415
TOTAL BELOW 125 PERCENT		_			_	_			
OF POVERTY LINE	.4	346	32	276	8.73	.1	725	66	550
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	.2	595	54	439	8.07	.1	917	84	643
35 TO 59 YEARS	.5	678	62	561 701	9.06	.2	1447	132 88	11 <i>7</i> 5 723
60 YEARS AND OVER	.4	490	45	381	8.52	.2	963	00	163
HOUSEHOLD MEMBERS									
1	.1	569	52	424	8.17	.1	891	81 83	657 473
2 3 OR MORE	.4 .6	440 712	40 65	346 573	8.61 8.81	.1 .3	887 1393	81 127	673 1099
J OK HUKE	.0	116	03	913	0.01		13/3	467	
MAIN HEATING FUEL									
NATURAL GAS	q	Q	Q	Q	Q	-	-	-	-
	Q Q .3	Q Q 166	Q Q 15	Q Q 149	Q Q 9.84	-	-	- -	-



Table 7. (Continued) Census Division: East North Central

	; ! !	ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFIED PETROLEUM GAS USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
HOT WATER FUEL										
NATURAL GAS	Q	Q	Q	Q	Q	Q	Q	Q	Q	
ELECTRICITY	0.5	432	39	375	9.51	0.2	1085	99	925	
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
OTHER	.6	729	67	553	8.31	. 3	1243	114	917	
MAIN HEATING EQUIPMENT USING LPG										
CENTRAL WARM AIR FURNACE	.3	1247	114	988	8.68	. 3	1247	114	988	
OTHER/NONE	.9	392	36	312	8.71	.2	1040	95	776	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	.8	394	36	316	8.80	.2	856	78	654	
5,500 TO 7,000 HDD	.2	1089	99	901	9.06	.1	1614	147	1330	
4,000 TO 5,499 HDD	.1	1046	95	730	7.64	.1	1159	106	803	
<2,000 CDD AND <4,000 HDD			-	-		-			-	
>2,000 CDD AND <4,000 HDD	_	_	_	_	_	_	_	_	_	



Table 7. (Continued) Census Division: West North Central

Average Residential Liquefied Petroleum Gas Consumption and Expenditures

		ANY LIQUEF	IED PETROLE	UM GAS USED		 LIQUEFI 		M GAS USED G FUEL	NIAM EA
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	I PER IHOUSEHOLD	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU)	 NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	PER HOUSEHOLD	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	0.9	762	70	506	7.27	0.6	1053	96	683
AREA TYPE URBAN	Q	0	Q	Q	Q	Q	Q	Q	Q
RURAL	.9	755	69	501	7.26	.6	1042	95	675
SMSA SMSA	.1	629	57	440	7.66	Q	Q	Q	Q
NON-SMSA	.8	778	71	514	7.00	.5	1057	97	687
			. –						
LPG PAID BY HOUSEHOLD	_	750		4.65	7 01		34/-		, ==
YES	.9 Q	752 Q	69 Q	498 Q	7.26 Q	.6 Q	1042 Q	95 Q	675 Q
	7	•	~	•	•	•	~	4	4
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	. 9 Q	762 Q	70 Q	506 Q	7.27 Q	.6 Q	1053 Q	96 Q	683 Q
NUMBER OF ROOMS									
1 TO 3	.1	478	44	327	7.50	Q	Q	Q	Q
4 TO 5	.4	708	65	478	7.40	. 2	975	89	646
6 OR MORE	.5	852	78	558	7.16	. 3	1162	106	741
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALL	.3	864	79	568	7.20	.2	1095	100	708
NONE	.2 .4	835 627	76 57	549 425	7.20 7.42	.2 .2	1166 904	106 83	750 596
MEASURED HEATED SPACE OF RESIDENCE (IN SQUARE FEET) LESS THAN 999	.3	604 757 903	55 69 83	413 501 592	7.47 7.25 7.17	.2 .2 .2	901 979 1259	82 89 115	608 636 798
YEAR HOUSE BUILT									
1939 OR EARLIER	0.4	807	74	523	7.09	0.3	1169	107	741
1940 TO 1959	.1 .4	699 726	64 66	477 494	7.48 7.46	Q .2	Q 950	Q 87	Q 637
1700 OR LATER		720	00	4,4	7.40		750	٥.	
DWN/RENT OWN RENT	.8 .1	82 3 443	75 40	541 325	7.19 8.03	.5 .1	1087 706	99 64	704 475
1980 FAMILY INCOME									
LESS THAN \$10,000	.3	748	68	495	7.24	. 2	1041	95	683
\$10,000 TO \$19,999	.3	695	63	472	7.43	.1	1004 1112	92 102	665 716
\$20,000 TO \$34,999 \$35,000 OR MORE	.2 .1	767 9 03	70 82	516 574	7.37 6.96	.1 .1	1074	98	673
TOTAL BELOW 100 PERCENT							Q	Q	Q
OF POVERTY LINETOTAL BELOW 125 PERCENT	.1	626	57	417	7.28	Q	4	শ	4
OF POVERTY LINE	.2	726	66	476	7.18	.1	1101	101	708
ACT OF HOUSEHOLD WE'R									
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	.2	637	58	431	7.42	.1	1051	96	687
35 TO 59 YEARS	.4	832	76	544	7.16	. 3	1091	100	694
60 YEARS AND OVER	.3	755	69	507	7.35	.2	1003	92	667
HOUSEHOLD MEMBERS									
1	.1	619	57	417	7.37	.1	892	81	592
2	.4	706	65 70	468 540	7.25 7.27	.3 .2	906 1273	83 116	591 819
3 OR MORE	.4	850	78	564	1.21	٠.	7513	110	517
MAIN HEATING FUEL NATURAL GAS	Q	Q	Q	Q	Q	-	-	-	-
	Q Q .1	Q Q 149	Q Q 14	Q Q 131	Q Q 9.64	-	-	-	-



Table 7. (Continued) Census Division: West North Central

		ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFIED PETROLEUM GAS USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE DOLLARS PER HILLION BTU)	HOUSE-			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
HOT WATER FUEL										
NATURAL GAS	Q	Q	Q	Q	Q	Q	Q	Q	Q	
ELECTRICITY	0.3	536	49	380	7.78	0.1	933	85	632	
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
OTHER	.6	903	82	584	7.08	.4	1093	100	701	
MAIN HEATING EQUIPMENT USING LPG										
CENTRAL WARM AIR FURNACE	. 3	1122	103	733	7.15	. 3	1122	103	733	
OTHER/NONE	.6	562	51	380	7.40	.2	961	88	618	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD	.2	810	74	557	7.52	.1	1194	109	796	
5,500 TO 7,000 HDD	.2	1029	94	649	6.90	.2	1278	117	796	
4,000 TO 5,499 HDD	.5	616	56	415	7.38	. 3	864	79	571	
<2,000 CDD AND <4,000 HDD	-	-	_				-			
>2,000 CDD AND <4,000 HDD										



Table 7. (Continued) Census Region: South

Average Residential Liquefied Petroleum Gas Consumption and Expenditures

	 	ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFI	ED PETROLEU HEATIN	M GAS USED G FUEL	AS MAIN
HOUSEHOLD CHARACTERISTICS	 NUMBER OF HOUSE- HOLDS (MILLIONS) 	AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)	CONSUMED PER HOUSEHOLD	PER	AVG. PRICE OLLARS PER MILLION BTU)	 NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	3.4	390	36	327	9.20	2,1	505	46	407
AREA TURE									
AREA TYPE URBAN	.8	294	27	269	10.04	. 5	354	32	312
RURAL	2.6	418	38	344	9.03	1.7	547	50	434
SMSA									
SNSA	1.1	338	31	294	9.52	.8	401	37	334
NON-SMSA	2.3	414	38	343	9.08	1.4	564	51	448
LPG PAID BY HOUSEHOLD									
YES	3.3	393	36	330	9.20	2.1	514	47	414
NO	.1	236	22	199	9.23	.1	214	20	184
TYPE OF HOUSING STRUCTURE									
SINGLE FAMILY OR MOBILE HOME	3.4	390	36	327	9.20	2.1	505	46	407
2 OR MORE UNITS	Q	Q	Q	Q	Q	Q	Q	Q	Q
NUMBER OF ROOMS									
1 70 3	.4	180	16	166	10.13	.2	248	23	217
4 TO 5	2.0	382	35	321	9.19	1.3	478	44	384
6 OR MORE	1.0	492	45	408	9.07	.6	652	60	522
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALL	1.2	378	35	319	9.25	. 9	444	41 54	367
SOME	.9 1.3	431 373	39 34	359 314	9.12 9.22	.6 .7	592 511	54 47	474 404
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	1.5	288 475	26 43	248 395	9.43 9.10	1.0 1.1	360 601	35 55	315 479
2,000 OR MORE	.3	461	42	379	9.00	.1	644	59	502
YEAR HOUSE BUILT									
1939 OR EARLIER	1.0	491	45	400	8.93	0.6	703	64	545
1940 TO 1959	.6 1.8	317 357	29 33	274 304	9.47 9.33	.3 1.3	451 432	41 39	357 359
	1.0	33.	33	30 .	,,,,,				
DHN/RENT OWN RENT	2.5	392 383	36 35	332 314	9.28 8.96	1.6 .5	500 521	46 48	407 406
NEITH I THE TENER OF THE TENER	• /	303	33	314	0.70	.,	322	,,,	
1980 FAMILY INCOME		700	•	774		•	F/ 0	40	447
LESS THAN \$10,000	1.5 .8	398 380	36 35	332 315	9.14 9.08	.9 .5	540 490	49 45	437 392
\$20,000 TO \$34,999	.8	336	31	298	9.70	.6	398	36	335
\$35,000 OR MORE	.2	565	52	450	8.73	.1	805	74	581
TOTAL BELOW 100 PERCENT DF POVERTY LINE	1.0	364	33	310	9.32	.6	491	45	409
TOTAL BELOW 125 PERCENT									
OF POVERTY LINE	1.2	375	34	315	9.20	.7	512	47	417
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	.8	376	34	300	8.73	.6	465	42	363
35 TO 59 YEARS	1.3 1.3	356 432	32 39	306 366	9.41 9.28	.7 .8	477 557	44 51	382 460
OF TERMS AND OTERTIONS	1.3	736	37	200	7.20	.0	221		
HOUSEHOLD MEMBERS							704	**	770
2	.6 1.3	282 427	26 39	254 353	9.87 9.04	. 4 . 9	384 547	35 50	330 432
3 OR MORE	1.4	403	37	337	9.15	. 9	518	47	417
AATN UEATTNO FUEL									
MAIN HEATING FUEL NATURAL GAS	Q	Q	Q	Q	Q	-	_	-	_
ELECTRICITY	. 2	153	14	152	10.84	_	-	-	-
FUEL OIL OR KEROSENE	.5	154	14	177	12.57	-	-		407
OTHER	2.6	460	42	375	8.92	2.1	505	46	407



Table 7. (Continued) Census Region: South

		ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFIED PETROLEUM GAS USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE DOLLARS PER MILLION BTU)	 NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
HOT WATER FUEL										
NATURAL GAS	Q	Q	Q	Q	Q	Q	Q	Q	Q	
ELECTRICITY	1.9	334	30	286	9.37	1.3	424	39	353	
FUEL OIL OR KEROSENE	.1	88	8	131	16.42	Q	Q	Q	Q	
OTHER	1.4	485	44	397	8.97	.8	637	58	496	
MAIN HEATING EQUIPMENT USING LPG										
CENTRAL WARM AIR FURNACE	1.0	465	42	381	8.97	1.0	465	42	381	
OTHER/NONE	2.4	357	33	305	9.33	1.1	541	49	431	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD	-	-	-	-	-	-	-	-	-	
5,500 TO 7,000 HDD	-	-	-	-	-	-	-	-	_	
4,000 TO 5,499 HDD	.6	362	33	338	10.22	.1	941	86	765	
<2,000 CDD AND <4,000 HDD	1.3	459	42	374	8.93	.8	594	54	474	
>2,000 CDD AND <4,000 HDD	1.5	343	31	285	9.08	1.2	391	36	318	



Table 7. (Continued) Census Division: South Atlantic

Average Residential Liquefied Petroleum Gas Consumption and Expenditures

	1 	ANY LIQUEF	IED PETROLE	UM GAS USED		 LIQUEFII		M GAS USED G FUEL	AS MAIN
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD HOUSEHOLD BUILLION BUILLION	I PER	AVG. PRICE (DOLLARS PER MILLION BTU)	I HOUSE-		PER HOUSEHOLD	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	2.1	345	32	313	9.94	1.2	471	43	405
AREA TYPE URBANRURAL	.7 1.5	258 385	24 35	248 344	10.50 9.76	.4 .8	306 546	28 50	28 5 460
SMSA SMSA	.8 1.3	275 389	25 36	262 346	10.41 9.73	.5 .7	327 582	30 53	298 488
LPG PAID BY HOUSEHOLD YES	2.1 Q	345 Q	32 Q	314 Q	9.94 Q	1.2 Q	473 Q	43 Չ	407 0
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	2.1 Q	345 Q	32 Q	313 Q	9.94 Q	1.2 Q	471 Q	43 Q	405 Q
NUMBER OF ROOMS 1 TO 3	.3 1.2 .6	129 330 472	12 30 43	138 299 419	11.73 9.94 9.72	.1 .8 .3	154 438 666	14 40 61	162 374 569
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALLSOME	.6 .5 1.0	319 379 344	29 35 31	305 345 302	10.47 9.97 9.60	.4 .3 .5	399 583 470	36 53 43	370 501 382
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	1.0	245	22	225	10.07	.6	331	30	290
1,000 TO 1,999	1.0	427 439	39 40	388 380	9.94 9.47	.6 .1	586 622	53 57	505 497
1939 CR EARLIER	0.6 .3 1.2	467 208 317	43 19 29	405 219 290	9.50 11.52 9.99	0.3 .1 .8	787 291 389	72 27 36	642 274 343
OMN/RENT OWNRENT	1.5	365 297	33 27	335 260	10.04 9.61	.9 .3	490 408	45 37	425 339
1980 FAMILY INCOME LESS THAN \$10,000 \$10,000 TO \$19,999	.9	360 342	33 31	322 307	9.80 9.81	.5 .3	551 438	50 40	476 373
\$20,000 TO \$34,999 \$35,000 OR MORE	.6	283 532	26 49	273 457	10.57 9.41	.4	332 908	30 83	304 672
TOTAL BELOW 100 PERCENT OF POVERTY LINE TOTAL BELOW 125 PERCENT	.6	328	30	295	9.84 9.70	.3	492 529	45 48	433 452
AGE OF HOUSEHOLD HEAD	.8	344	31 33	304 295	8.95	.3	466	43	373
UNDER 35 YEARS	.5 .9 .8	361 305 380	28 35	286 354	10.26	.4 .4	403 543	37 50	345 489
HOUSEHOLD MEMBERS 1	.4 .9 .8	243 374 367	22 34 34	241 336 326	10.86 9.85 9.73	.2 .5 .5	387 509 466	35 47 43	360 431 397
MAIN HEATING FUEL NATURAL GAS ELECTRICITY. FUEL OIL OR KEROSENE OTHER	Q .2 .5 1.5	Q 131 156 430	Q 12 14 39	Q 142 185 374	Q 11.83 12.93 9.52	1.2	- - - 471	- - - 43	- - - 405



Table 7. (Continued)
Census Division: South
Atlantic

		ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFIED PETROLEUM GAS USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. LEXPEND- LITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU)	 HUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
HOT WATER FUEL										
NATURAL GAS	Q	Q	Q	Q	Q	Q	Q	Q	Q	
ELECTRICITY	1.3	312	28	281	9.86	0.9	406	37	352	
FUEL OIL OR KEROSENE	.1	88	8	131	16.42	Q	Q	Q	Q	
OTHER	.7	431	39	390	9.92	. 3	664	61	562	
MAIN HEATING EQUIPMENT USING LPG										
CENTRAL WARM AIR FURNACE	.7	425	39	367	9.44	.7	425	39	367	
OTHER/NONE	1.5	308	28	288	10.26	.5	529	48	454	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	-	-	-	-	-	-	-	-	-	
5,500 TO 7,000 HDD	-	-	-	-	-	-	-	-	-	
4,000 TO 5,499 HDD	.5	396	36	378	10.45	.1	1106	101	911	
<2,000 CDD AND <4,000 HDD	.9	421	38	362	9.42	.5	561	51	470	
>2,000 CDD AND <4,000 HDD	.8	237	22	226	10.42	.6	277	25	257	



Table 7. (Continued)
Census Division: East South
Central

Average Residential Liquefied Petroleum Gas Consumption and Expenditures

	 	ANY LIQUEF	IED PETROLE	UM GAS USED		 LIQUEFI 	D PETROLEU HEATIN	M GAS USED G FUEL	AS MAIN
HOUSEHOLD CHARACTERISTICS	 NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (OOLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	0.6	428	39	327	8.37	0.3	582	53	435
AREA TYPE URBANRURAL	Q	Q	Q	Q	Q	Q	Q	Q	Q
	.6	413	38	317	8.40	.3	570	52	427
SMSA	.1	457	42	364	8.71	.1	535	49	420
SMSANON-SMSA	.5	423	39	321	8.31	.3	594	54	439
LPG PAID BY HOUSEHOLD YES	.6	428	39	327	8.37	. 3	582	53	435
	Q	Q	Q	Q	Q	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	6	428	39	327	8.37	. 3	582	53	435
	Q	Q	Q	Q	Q	Q	Q	Q	Q
NUMBER OF ROOMS 1 TO 3	.1	321	29	245	8.34	.1	459	42	341
	.3	450	41	347	8.44	.2	594	54	451
	.2	447	41	337	8.26	.1	632	58	458
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED	_					_		_,	
ALLSOME	.3	481	44	359	8.16	.2	591	54	431
	.1	349	32	275	8.63	.1	499	46	385
	.2	404	37	317	8.59	.1	628	57	481
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	.3	355 499	32 46	279 373	8.62 8.17	. 2 . 2	512 615	47 56	393 452
2,000 OR MORE YEAR HOUSE BUILT	.1	525	48	395	8.24	Q.	Q	Q	Q
1939 OR EARLIER	0.1	392	36	297	8.29	0.1	453	41	339
1940 TO 1959	.1	526	48	394	8.20	.1	825	75	603
1960 OR LATER	.3	396	36	307	8.49	.2	541	49	409
OWN/RENT OWN	.5	423	39	324	8.38	. 3	588	54	439
	.1	468	43	355	8.31	Q	Q	Q	Q
1980 FAMILY INCOME LESS THAN \$10,000 \$10,000 TO \$19,999 \$20,000 TO \$34,999	.3 .1 .1	399 395 523	36 36 48	306 301 395	8.41 8.36 8.28	.2 .1 .1	511 718 645	47 66 59	385 536 480
\$35,000 OR MORE TOTAL BELOW 100 PERCENT OF POVERTY LINE	Q	Q	Q	Q	Q	Q	Q	Q	Q
	.2	443	40	340	8.40	.1	552	50	420
TOTAL BELOW 125 PERCENT OF POVERTY LINE	.3	406	37	314	8.45	.2	517	47	393
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	.1	291	27	231	8.67	.1	390	36	297
	.2	423	39	324	8.39	.1	665	61	497
	.2	492	45	372	8.28	.2	584	53	435
HOUSEHOLD MEMBERS 1	.1	347	32	271	8.53	.1	405	37	317
	.2	415	38	320	8.43	.1	532	49	399
	.3	463	42	351	8.29	.1	699	64	516
MAIN HEATING FUEL NATURAL GAS ELECTRICITY. FUEL OIL OR KEROSENE OTHER.	Q Q .1 .5	Q Q 150 476	q q 14 43	Q Q 131 361	Q Q 9.58 8.31	.3	- - - 582	- - - 53	- - - - 435



Table 7. (Continued)
Census Division: East South
Central

		ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFIED PETROLEUM GAS USED AS MAIN HEATING FUEL				
	NUMBER OF HOUSE- HOLDS (MILLIONS)			I AVG. I EXPEND- I ITURES I PER IHOUSEHOLD I(DOLLARS) I	AVG. PRICE COLLARS PER MILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)	AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
HOT WATER FUEL										
NATURAL GAS	Q	Q	Q	Q	Q	Q	Q	Q	Q	
ELECTRICITY	0.4	404	37	312	8.45	0.2	537	49	408	
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
OTHER	. 2	481	44	360	8.21	.1	726	66	523	
MAIN HEATING EQUIPMENT USING LPG										
CENTRAL WARM AIR FURNACE	.1	545	50	417	8.38	.1	545	50	417	
OTHER/NONE	.4	388	35	296	8.36	. 2	612	56	450	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	-	-	-	-	-	-	-	-	-	
5,500 TO 7,000 HDD	-	-	-	-	-	-	-	-	-	
4,000 TO 5,499 HDD	.1	253	23	209	9.03	Q	Q	Q	Q	
<2,000 CDD AND <4,000 HDD	. 3	522	48	396	8.31	. 2	633	58	475	
>2,000 CDD AND <4,000 HDD	.1	394	36	292	8.11	. 1	476	43	348	



Table 7. (Continued) Census Division: West South Central

Average Residential Liquefied Petroleum Gas Consumption and Expenditures

		ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFI	ED PETROLEU HEATIN		AS MAIN
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE COLLARS PER MILLION BTU	OF HOUSE-			AVG. EXPEND- ITURES PER HOUSEHOLD
TOTAL HOUSEHOLDS	0.7	499	46	373	8.20	0.6	532	49	395
AREA TYPE									
URBAH	-1	492	45	389	8.66	.1	492	45	389
RURAL	.6	499	46	372	8.15	.5	536	49	396
SMSA									
SMSA	. 2	570	52	408	7.84	. 2	570	52	408
NON-SMSA	.5	473	43	361	8.35	.4	515	47	390
LPG PAID BY HOUSEHOLD									
YES	.6	524	48	390	8.15	.5	564	51	417
NO	.1	207	19	179	9.47	.1	207	19	179
TYPE OF HOUSING STRUCTURE									
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	.7 q	499 Q	46 Q	373 Q	8.20 Q	.6 Q	532 Q	49 Q	395 Q
NUMBER OF ROOMS									
1 TO 3	.1	176	16	164	10.21	Q	Q	Q	Q
4 TO 5	.4	492	45	367	8.16	.4	502	46	373
6 OR MORE	.2	588	54	435	8.10	. 2	634	58	467
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALL	,3	412	38	312	8.30	.3	422	39	319
SOME	.2 .2	591 512	54 47	436 384	8.09 8.22	.2 .1	634 592	58 54	467 437
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	. 3 . 4 Q	374 591 Q	34 54 Q	299 427 Q	8.76 7.92 Q	. 2 . 3 Q	404 620 Q	37 57 Q	320 447 Q
YEAR HOUSE BUILT									
1939 OR EARLIER	0.3	587	54	428	8.00	0.2	678	62	489
1940 TO 1959	.1	367 471	33 43	282 359	8.42 8.35	.1	367 490	33 45	282 372
1/00 OK 1/2/CK:::::::::::::::::::::::::::::::::::	.,	472	,,,	33,	0.33	•••	* / •		
OWN/RENT OWN	.5 .2	445 616	41 56	334 460	8.20 8.18	.4 .2	463 686	42 63	345 509
1980 FAMILY INCOME LESS THAN \$10,000	.3	516	47	390	8.28	. 3	539	49	406
\$10,000 TO \$19,999	.2	468	43	346	8.09	.2	529	48	387
\$20,000 TO \$34,999	.1	428	39	331	8.48	.1	428	39	331
\$35,000 OR MORE	.1	648	59	460	7.77	.1	729	67	512
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE	.2	415	38	334	8.83	.2	441	40	354
TOTAL BELOW 125 PERCENT OF POVERTY LINE	.2	448	41	354	8.64	.2	474	43	372
OF TOTAL STATE OF THE STATE OF		***************************************	71	354	0.07		7/7	7.2	۵,۰
AGE OF HOUSEHOLD HEAD						_			
UNDER 35 YEARS	.2 .2	447 517	41 47	341 381	8.37 8.07	.2 .2	484 543	44 50	366 398
60 YEARS AND OVER	.3	530	48	395	8.15	.2	565	52	419
HOUSEHOLD MEMBERS		*/ **	74	201	0 50	,	717	7.4	286
1	.1 .2	367 628	34 57	286 442	8.52 7.70	.1 .2	367 639	34 58	286 450
3 OR MORE	.3	449	41	354	8.64	.2	513	47	400
MAIN HEATING FUEL NATURAL GAS	Q	Q	Q	Q	Q	_		-	_
ELECTRICITY	Q	Q	Q	q Q	Q	-	-	-	-
	Q	Q	Q	Q	Q	_	-	-	-
FUEL OIL OR KEROSENE	.6	518	47	386	8.16	.6	532	49	395



Table 7. (Continued)
Census Division: West South
Central

		ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFIED PETROLEUM GAS USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- I TURES PER HOUSEHOLD (ODLLARS)	AVG. PRICE COLLARS PER MILLION BTU)	 NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
HOT WATER FUEL										
NATURAL GAS	Q	Q	Q	Q	Q	Q	Q	Q	Q	
ELECTRICITY	0.2	338	31	263	8.53	0.2	357	33	276	
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
OTHER	.5	568	52	420	8.11	.4	601	55	443	
MAIN HEATING EQUIPMENT USING LPG										
CENTRAL WARM AIR FURNACE	.2	547	50	403	8.08	.2	547	50	403	
OTHER/NONE	.5	480	44	361	8.25	.4	525	48	392	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<pre><2,000 CDD AND >7,000 HDD <2,000 CDD AND</pre>	-	_	-	-	-	-	-	-	-	
5,500 TO 7,000 HDD	-	-	-	-	-	-	-	-	~	
4,000 TO 5,499 HDD	-	-	-	-	-	-	-	-	-	
<2,000 CDD AND <4,000 HDD	.1	586	54	406	7.58	.1	724	66	490	
>2,000 CDD AND <4,000 HDD	.6	483	44	368	8.32	.5	503	46	381	



Table 7. (Continued) Census Region: West

Average Residential Liquefied Petroleum Gas Consumption and Expenditures

	 	ANY LIQUEF	IED PETROLE	UM GAS USED		 LIQUEFII 		M GAS USED IG FUEL	AS MAIN
HOUSEHOLD CHARACTERISTICS	 NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	CONSUMED PER HOUSEHOLD	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE ODLLARS PER HILLION BTU	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	0.7	589	54	458	8.50	0.4	833	76	629
AREA TURE									
URBAN	.1	332	30	265	8.73	.1	424	39	328
RURAL	.6	630	58	488	8.48	.4	906	83	682
SMSA									
SMSA	.2	571	52	487	9.34	.1	633	58	320
NON-SMSA	.6	595	54	449	8.27	.3	927	85	676
LDC DATE BY HOUSEHOLD									
YES	.7	602	55	467	8.50	.4	872	80	657
NO	Q	Q	Q	Q	Q	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE									
SINGLE FAMILY OR MOBILE HOME	.7	589	54	458	8.50	.4	833	76	629
2 OR MORE UNITS	Q	Q	Q	Q	Q	Q	Q	Q	Q
NUMBER OF ROOMS									
1 TO 3	.1	345	31	273	8.68	.1	392	36	305
4 TO 5	.4	420	38	335	8.73	. 2	641	59	479
6 OR MORE	.3	875	80	666	8.34	. 2	1079	99	815
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALL	.2	808	74	627 397	8.50	.2 .1	808 570	74 52	627 459
NONE	.1 .4	461 521	42 48	398	9.42 8.36	.2	935	85	680
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	.4 .3	348 712	32 65	286 552	9.00 8.49	.1	574 856	52 78	433 661
2,000 OR MORE	.1	1122	102	819	7.99	.1	1122	102	819
YEAR HOUSE BUILT									
1939 CR EARLIER	0.1 .2	652 511	60 47	486 440	8.16 9.44	0.1 .1	936 679	86 62	682 574
1960 CR LATER	.4	605	55	455	8.25	.2	878	80	638
OWN/RENT	.5	673	61	522	8.49	.4	875	80	662
RENT	.2	345	32	271	8.58	.1	587	54	432
1980 FAMILY INCOME									
LESS THAN \$10,000	.2	514	47	389	8.30	.1	928	85	655
\$10,000 TO \$19,999	.2	596	54	453	8.32	.1	844	77	624
\$20,000 TO \$34,999 \$35,000 OR MORE	. 3	492	45 82	38 8	8.64	.2 .1	669 1026	61 94	510 814
735,000 OR HORE	.1	902	02	716	8.68	••	1020	77	014
TOTAL BELOW 100 PERCENT							_	_	_
OF POVERTY LINE TOTAL BELOW 125 PERCENT	.1	541	49	396	8.02	Q	Q	Q	Q
OF POVERTY LINE	.1	604	55	442	8.03	.1	961	88	681
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	.2	406	37	313	8.45	.1	606	55	441
35 TO 59 YEARS	.3	718	66	557	8.49	.2	980	90	744
60 YEARS AND OVER	.2	577	53	453	8.58	.1	746	68	567
HOUSEHOLD MEMBERS									
1	.1	417	38	325	8.53	.1	446	41	345
2	.2	552	50	454	8.99	.1	864	79	668
3 OR MORE	.4	643	59	487	8.28	.2	948	87	705
MAIN HEATING FUEL									
NATURAL GAS	Q Q	Q Q	Q Q	Q Q	Q	-	-	-	-
FUEL OIL OR KEROSENE	q	Q	Q	Q	Q	-	-	-	-
OTHER	.7	607	S ₅	468	8.44	.4	833	76	629



Table 7. (Continued) Census Region: West

		ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFIED PETROLEUM GAS USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE (DOLLARS PER HILLION BYU)	HOUSE-			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
HOT WATER FUEL										
NATURAL GAS	Q	Q	Q	Q	Q	Q	Q	Q	Q	
ELECTRICITY	0.1	433	40	348	8.82	0.1	662	60	518	
FUEL OIL OR KEROSENE	Q	Q	q	Q	Q.OL	q	Q	Q	Q	
OTHER	.6	627	57	484	8.45	.3	871	80	653	
MAIN HEATING EQUIPMENT USING LPG										
CENTRAL WARM AIR FURNACE	.3	878	80	661	8.24	. 3	878	80	661	
OTHER/NONE	.4	400	37	324	8.88	.1	742	68	563	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	.1	962	88	663	7.55	Q	Q	Q	Q	
5,500 TO 7,000 HDD	.1	700	64	523	8.18	.1	892	81	658	
4,000 TO 5,499 HDD	.1	367	34	287	8.57	Q	Q	Q	0	
<2,000 CDD AND <4,000 HDD	.3	673	61	537	8.73	.3	759	69	595	
>2,000 CDD AND <4,000 HDD	.1	192	18	183	10.46	ġ.	Ġ.	Q	Q	



Table 7. (Continued) Census Division: Mountain

Average Residential Liquefied Petroleum Gas Consumption and Expenditures

	 	ANY LIQUEF	IED PETROLE	UM GAS USED		 LIQUEFI 	ED PETROLEU HEATIN	M GAS USED G FUEL	AS MAIN
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLU (DOLLARS)	(DOLLARS PER MILLION	OF HOUSE-		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	0.2	775	71	561	7.92	0.1	993	91	710
AREA TYPE URBANRURAL	Q .2	Q 775	Q 71	Q 561	Q 7.92	Q .1	Q 993	Q 91	Q 710
SMSA SMSA NON-SMSA	q .2	Q 785	Q 72	Q 568	Q 7.91	Q .1	Q 1020	Q 93	Q 728
LPG PAID BY HOUSEHOLD YESNO	. 2 Q	78 7 Q	72 Q	569 Q	7.91 Q	q q	993 Q	91 Q	710 Q
TYPE OF HOUSING STRUCTURE SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	. 2 Q	775 Q	71 Q	561 Q	7.92 Q	.1 q	993 Q	91 Q	710 Q
NUMBER OF ROOMS 1 TO 3	Q .1 .1	Q 624 1340	Q 57 122	Q 455 951	q 7.97 7.77	Q .1 Q	Q 691 Q	Q 63 Q	ଷ 502 ସ
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED ALL	Q	Q	Q	Q	Q	Q	Q	Q	Q
SOME	Q .2	Q 804	Q 73	Q 580	Q 7.90	Q .1	Q 1077	Q 98	q 766
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	.1 .1 .1	559 760 1169	51 69 107	410 545 841	8.03 7.84 7.88	.1 Q .1	679 Q 1169	62 Q 107	491 Q 841
YEAR HOUSE BUILT 1939 OR EARLIER 1940 TO 1959 1960 OR LATER	0.1 Q .1	905 Q 720	83 Q 66	662 Q 519	8.01 Q 7.89	0.1 Q .1	1142 Q 875	104 Q 80	827 Q 622
OWN/RENT OWN	.1	870 578	79 53	624 428	7.86 8.12	.1 Q	1122 Q	102 Q	798 Q
1980 FAMILY INCOME LESS THAN \$10,000 \$10,000 TO \$19,999 \$20,000 TO \$34,999	.1 .1 .1	517 866 1030 Q	47 79 94 Q	379 622 746 Q	8.02 7.87 7.93 Q	Q Q Q	Q Q Q	0 0 0	ପ ପ ପ
TOTAL BELOW 100 PERCENT OF POVERTY LINE	.1	614	56	445	7.93	Q	Q	Q	Q
OF POVERTY LINEAGE OF HOUSEHOLD HEAD UNDER 35 YEARS	.1	507	46 54	374 430	8.02	.1	Q 697	Q 64	G 500
35 TO 59 YEARS	.1	803 1101	73 101	570 802	7.77 7.98	Q Q	Q Q	Q Q	Q Q
1	Q Q .2	Q Q 756	Q Q 69	Q Q 547	Q Q 7.92	Q Q .1	Q Q 1036	Q Q 95	Q Q 739
MAIN HEATING FUEL NATURAL GAS ELECTRICITY FUEL OIL OR KEROSENE OTHER	q q q .2	Q Q Q 787	Q Q Q 72	Q Q Q 569	Q Q Q 7.91	- - .1	- - - 993	- - - 91	- - - 710



Average Residential Liquefied Petroleum Gas Consumption and Expenditures

Table 7. (Continued)
Census Division: Mountain

		ANY LIQUEF	IED PETROLE	UM GAS USED	LIQUEFIED PETROLEUM GAS USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE ODLLARS PER HILLION BTU	 NUMBER OF HOUSE- HOLDS (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
HOT WATER FUEL									
NATURAL GAS	Q	Q	Q	Q	Q	Q	Q	Q	Q
ELECTRICITY	Q	Q	Q	Q	Q	Q	Q	Q	Q
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	0.2	789	72	567	7.87	0.1	1082	99	76 6
AAIN HEATING EQUIPMENT USING LPG									
CENTRAL WARM AIR FURNACE	.1	988	90	709	7.85	.1	988	90	709
OTHER/NONE	.1	619	57	453	8.00	Q	Q	q	Q
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD	.1	941	86	645	7.51	Q	Q	Q	Q
5,500 TO 7,000 HDD	.1	714	65	533	8.17	.1	929	85	684
4,000 TO 5,499 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q
<2,000 CDD AND <4,000 HDD	ġ.	ä	à	ã	q	Q.	Q	Q	à
>2,000 CDD AND <4,000 HDD	ò	ā	õ	ã	ã	õ	õ	ã	ã



Table 7. (Continued) Census Division: Pacific

Average Residential Liquefied Petroleum Gas Consumption and Expenditures

	! ! !	ANY LIQUEF	IED PETROLE	UM GAS USED] LIQUEFI 	LIQUEFIED PETROLEUM GAS USED AS MAIN HEATING FUEL			
HOUSEHOLD CHARACTERISTICS			AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE ODLLARS PER MILLION BTU	NUMBER OF HOUSE- HOLDS (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- I TURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	0.5	508	46	412	8.89	0.3	754	69	588
AREA TYPE									
URBANRURAL	.1 .4	332 550	30 50	265 448	8.73 8.91	.1 .2	424 850	39 78	328 665
SMSA									
SMSA	. 2	578	53	494	9.37	.1	644	59	538
NON-SMSA	.3	477	44	376	8.64	.2	845	77	631
LPG PAID BY HOUSEHOLD									
YES	.5	517	47	421	8.91	. 2	804	73	628
NO	Q	Q	Q	Q	Q	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE									
SINGLE FAMILY OR MOBILE HOME 2 OR MORE UNITS	.5 Q	508 Q	46 Q	412 Q	8.89 Q	. 3 Q	754 Q	69 Q	588 Q
NUMBER OF ROOMS									
1 TO 3	.1	354	32	279	8.65	q	Q	Q	Q
4 TO 5	.2 .2	298 753	27 69	264 592	9.69 8.61	.1 .2	565 916	52 84	445 714
NUMBER OF ROOMS THAT CAN BE AIR CONDITIONED									
ALL	.2 .1	832 466	76 43	646 406	8.50 9.54	. 2 Q	832 Q	76 Q	646 Q
NONE	.3	297	27	254	9.36	.1	661	60	511
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	.3	261	24	235	9.86	.1	468	43	375
1,000 TO 1,999	.2	698	64	554	8.68	. 2	783	72	617
2,000 OR MORE	Q	Q	Q	Q	q	Q	q	Q	Q
1939 OR EARLIER	0.1 .2	401 494	37	311	8.49	, Q	9	Q	Q
1960 OR LATER	.3	548	45 50	438 424	9.72 8.48	0.1 .1	644 880	59 80	555 648
OWN/RENT									
OWN	.4 .1	598 197	55 18	482 170	8.84 9.46	.3 Q	784 Q	72 Q	612 Q
1000 EANTLY TUCOME									
1980 FAMILY INCOME LESS THAN \$10,000	.1	510	47	401	8.62	q	Q	Q	Q
\$10,000 TO \$19,999	.1	447	41	360	8.81	.1	704	64	537
\$20,000 TG \$34,999 \$35,000 OR MORE	.2 .1	341 909	31 83	268 729	9.25	.1	473	43	378
TOTAL BELOW 100 PERCENT	••	909	0.3	729	8.78	.1	999	91	801
OF POVERTY LINE	Q	Q	Q	Q	Q	Q	Q	Q	Q
TOTAL BELOW 125 PERCENT OF POVERTY LINE	Q	Q	Q	Q	Q	Q	Q	Q	Q
105 05 1/01/05/1010 1/510							·	-	
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	.1	253	23	215	9.29	Q	Q	Q	Q
35 TO 59 YEARS	.2	695	63	553	8.72	.2	930	85	722
60 YEARS AND OVER	.1	372	34	315	9.29	.1	502	46	404
HOUSEHOLD MEMBERS									
1	.1	339	31	267	8.64	.1	370	34	288
2	.2 .3	460 577	42 53	402 452	9.58 8.57	.1 .1	744 898	68 82	607 686
		311	22	736	0.37	• •	370	02	900
MAIN HEATING FUEL NATURAL GASELECTRICITY	Q Q	Q	Q Q	Q Q	Q Q	-	-	:	:
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	-	-	-	-
OTHER	.5	526	48	423	8.81	.3	754	69	588



Average Residential Liquefied Petroleum Gas Consumption and Expenditures

Table 7. (Continued) Census Division: Pacific

	 	ANY LIQUEF	IED PETROLE	UM GAS USED	LIQUEFIED PETROLEUM GAS USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE COLLARS PER MILLION BTU	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD COLLARS
HOT WATER FUEL									
NATURAL GAS	Q	Q	Q	Q	Q	Q	Q	Q	Q
ELECTRICITY	0.1	277	25	248	9.78	Q	Q	Q	Q
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	.4	558	51	449	8.79	0.2	785	72	608
MAIN HEATING EQUIPMENT USING LPG									
CENTRAL WARM AIR FURNACE	. 2	825	75	638	8.47	. 2	825	75	638
OTHER/NONE	.3	309	28	271	9.60	.1	605	55	485
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	Q	Q	Q	Q	Q	Q	Q	Q	Q
5,500 TO 7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q
4,000 TO 5,499 HDD	.1	297	27	239	8.81	Q	Q	Q	Q
<2,000 CDD AND <4,000 HDD	.3	678	62	541	8.73	.3	767	70	602
>2,000 CDD AND <4,000 HDD	.1	192	18	183	10.46	ō	Ġ.	Ö	o

[&]quot;-" = DATA NOT APPLICABLE.

"Q" = DATA WITHHELD BECAUSE OF A LARGE VARIANCE.

NOTE: BECAUSE OF ROUNDING, DATA MAY NOT SUM TO TOTALS. PERCENTAGES ARE CALCULATED ON UNROUNDED NUMBERS. SEE GLOSSARY FOR DEFINITION OF TERMS USED IN THIS REPORT.

SOURCE: ENERGY INFORMATION ADMINISTRATION, OFFICE OF ENERGY MARKETS AND END USE, ENERGY END USE DIVISION, FORM EIA-457, THE 1981 RESIDENTIAL ENERGY CONSUMPTION SURVEY.



Table 8. U.S. Total and Average Residential Wood Consumption and Expenditures—April 1981 Through March 1982, United States

HOUSEHOLD / CHARACTERISTICS	NUMBER OF A		TOTAL NUMBER OF CORDS BURNED		AVERAGE NUMBER
	(MILLIONS)	PERCENT)	(MILLIONS)	 (PERCENT) 	PER HOUSEHOLD
TOTAL HOUSEHOLDS	15.6	100.0	43.0	100.0	2.8
AREA TYPE URBANRURAL	6.4 9.2	40.8 59.2	10.2 32.8	23.8 76.2	1.6 3.5
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)				/	
LESS THAN 999	2.2 6.9 6.5	14.3 44.3 41.4	8.8 17.8 16.4	20.4 41.5 38.1	3.9 2.6 2.5
1980 FAMILY INCOME LESS THAN \$10,000 \$10,000 TO \$19,999 \$20,000 TO \$34,999 \$35,000 OR MORE	2.3 3.9 5.4 4.0	14.6 25.2 34.4 25.8	9.5 13.3 12.4 7.8	22.2 30.9 28.9 18.1	4.2 3.4 2.3 1.9
AMOUNT OF WOOD BURNED 1/3-1 CORD	7.1 4.8 3.6	45.8 31.0 23.2	5.3 11.1 26.6	12.3 25.9 61.9	.7 2.3 7.3
WOOD IS MAIN HEATING FUEL YESNO	5.0 10.6	32.0 68.0	24.6 18.3	57.3 42.7	4.9 1.7
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE <2,000 CDD AND >7,000 HDD	2.8	18.1	15.9	36.9	5.6
<2,000 CDD AND <5,500 TO 7,000 HDD	3.6	23.0	8.9	20.7	2.5
4,000 TO 5,499 HDD	4.6 3.4 1.2	29.4 21.5 7.9	10.3 6.0 2.0	23.9 13.9 4.6	2.2 1.8 1.6



Table 8. (Continued) Census Region: Northeast

HOUSEHOLD CHARACTERISTICS	NUMBER OF BURNIN		TOTAL NUMBER OF	F CORDS BURNED	AVERAGE NUMBER
	(MILLIONS)	(PERCENT)	(MILLIONS)	(PERCENT)	PER HOUSEHOLD
TOTAL HOUSEHOLDS	3.5	100.0	13.4	100.0	3.9
AREA TYPE URBAN RURAL	1.5 2.0	43.5 56.5	3.0 10.5	22.3 77.7	2.0 5.3
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)					
LESS THAN 999	.3 1.4 1.8	8.6 39.8 51.5	1.9 5.2 6.3	14.4 38.7 46.9	6.4 3.7 3.5
1980 FAMILY INCOME LESS THAN \$10,000	.3 .9 1.2 1.1	8.6 25.9 33.3 32.2	2.1 4.6 4.1 2.6	15.9 34.3 30.3 19.5	7.1 5.1 3.5 2.3
AMOUNT OF MOOD BURNED 1/3-1 CORD	1.3 .9 1.3	38.2 25.3 36.5	1.0 2.0 10.5	7.1 15.1 77.7	.7 2.3 8.2
NOOD IS MAIN HEATING FUEL YESNO	1.1	31.6 68.4	8.4 5.0	62.6 37.4	7.6 2.1
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE					
<2,000 CDD AND >7,000 HDD	1.1	30.7 38.4	8.6 3.1	63.6 23.4	8.0 2.3
<2,000 CDD AND 4,000 TO 5,499 HDD	1.1	30.9	1.7	13.0	1.6
<2,000 CDD AND <4,000 HDD	Q Q	Q Q	Q Q	Q Q	ବା ବ



Table 8. (Continued) Census Region: North Central

HOUSEHOLD I CHARACTERISTICS I	NUMBER OF I		TOTAL NUMBER OF CORDS BURNED		 AVERAGE NUMBER OF CORDS BURNED
	(MILLIONS)	(PERCENT)	(MILLIONS)	(PERCENT)	PER HOUSEHOLD
OTAL HOUSEHOLDS	3.9	100.0	12.5	100.0	3.2
REA TYPE					
URBAN	1.2	31.7	2.0	16.0	1.6
RURAL	2.7	68.3	10.5	84.0	3.9
MEASURED HEATED SPACE OF RESI- MENCE (IN SQUARE FEET)					
LESS THAN 999	.5	12.5	3.0	23.7	6.1
1,000 TO 1,999	1.4	36.4	4.5	35.6	3.1
2,000 OR MORE	2.0	51.1	5.1	40.7	2.6
.980 FAMILY INCOME					
LESS THAN \$10,000	.7	17.8	3.9	31.1	5.6
\$10,000 TO \$19,999	1.0	26.2	3.3	26.0	3.2
\$20,000 TO \$34,999	1.4	36.2	3.5	27.6	2.4
\$35,000 OR MORE	.8	19.8	1.9	15.3	2.5
MOUNT OF WOOD BURNED					
1/3-1 CORD	1.7	42.6	1.2	9.4	.7
2 TO 3 CORDS	1.1	28.0	2.5	19.8	2.3
4 CORDS OR MORE	1.1	29.4	8.9	70.8	7.7
NOOD IS MAIN HEATING FUEL	1.1	27.6	6.9	54.7	6.4
NO	2.8	72.4	5.7	45.3	2.0
		72.4	5.,	.5.5	
IEATING DEGREES-DAYS (HDD) ND COOLING DEGREES-DAYS (CDD) ONG-TERM AVERAGE					
<2,000 CDD AND >7,000 HDD	1.5	37.7	6.7	53.8	4.6
5,500 TO 7,000 HDD	1.7	42.3	3.9	31.4	2.4
4,000 TO 5,499 HDD	.8	20.0	1.9	14.9	2.4
<2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	, Q
>2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q



Table 8. (Continued) Census Region: South

HOUSEHOLD I CHARACTERISTICS	NUMBER OF I		TOTAL NUMBER O	AVERAGE NUMBER	
	(MILLIONS)	 (PERCENT) 	(MILLIONS)	(PERCENT)	PER HOUSEHOLD
OTAL HOUSEHOLDS	4.8	100.0	10.5	100.0	2.2
REA TYPE					
URBAN	1.5	31.7	2.4	23.0	1.6
RURAL	3.3	68.3	8.1	77.0	2.5
EASURED HEATED SPACE OF RESI- ENCE (IN SQUARE FEET)					
LESS THAN 999	1.6	19.8	2.7	25.4	2.8
1,000 TO 1,999	2.2	45.8	5.0	47.2	2.2
2,000 OR MORE	1.7	34.4	2.9	27.4	1.7
980 FAMILY INCOME					
LESS THAN \$10,000	1.0	20.0	2.5	24.1	2.6
\$10,000 TO \$19,999	1.3	25.9	3.5	32.8	2.8
\$20,000 TO \$34,999	1.5	30.7	2.7	26.0	1.9
\$35,000 OR MORE	1.1	23.4	1.8	17.1	1.6
MOUNT OF WOOD BURNED					
1/3-1 CORD	2.2	45.6	1.7	16.3	.8
2 TO 3 CORDS	1.9	38.9	4.4	41.5	2.3
4 CORDS OR MORE	.8	15.5	4.5	42.3	5.9
OOD IS MAIN HEATING FUEL					
YES	2.0	41.9	6.4	60.9	3.2
NO	2.8	58.1	4.1	39.1	1.5
EATING DEGREES-DAYS (HDD) ND COOLING DEGREES-DAYS (CDD) ONG-TERM AVERAGE					
<2,000 CDD AND >7,000 HDD	q	Q	Q	Q	Q
5,500 TO 7,000 HDD	Q	Q	Q	Q	Q
4,000 TO 5,499 HDD	1.6	33.8	4.2	39.7	2.6
<2,000 CDD AND <4,000 HDD	2.0	42.4	4.5	42.7	2.2
>2,000 CDD AND <4,000 HDD	1.2	23.9	1.9	17.6	1.6



Table 8. (Continued) Census Region: West

HOUSEHOLD CHARACTERISTICS	NUMBER OF I		TOTAL NUMBER O	 AVERAGE NUMBER OF CORDS BURNED	
	(MILLIONS)	(PERCENT)	(MILLIONS)	 (PERCENT) 	PER HOUSEHOLD
OTAL HOUSEHOLDS	3.4	100.0	6.4	100.0	1.9
REA TYPE					
URBAN	2.1	61.4	2.8	43.3	1.3
RURAL	1.3	38.6	3.6	56.7	2.8
EASURED HEATED SPACE OF RESI- ENCE (IN SQUARE FEET)					
LESS THAN 999	.5	14.2	1.2	18.5	2.5
1,000 TO 1,999	1.9	56.0	3.2	49.5	1.7
2,000 OR MORE	1.0	29.8	2.1	32.0	2.0
980 FAMILY INCOME					
LESS THAN \$10,000	.3	9.2	.9	14.8	3.1
\$10,000 TO \$19,999	.8	22.3	1.9	30.0	2.6
\$20,000 TD \$34,999	1.3	39.0	2.1	33.0	1.6
\$35,000 OR MORE	1.0	29.5	1.4	22.2	1.4
MOUNT OF WOOD BURNED					
1/3-1 CORD	1.9	57.5	1.4	22.1	.7
2 TO 3 CORDS	1.0	29.0	2.2	34.6	2.3
4 CORDS OR MORE	.5	13.5	2.8	43.3	6.1
OOD IS MAIN HEATING FUEL					
YES	.8	23.4	2.9	45.2	3.7
NO	2.6	76.6	3.5	54.8	1.4
EATING DEGREES-DAYS (HDD) ND COOLING DEGREES-DAYS (CDD) ONG-TERM AVERAGE					
<2,000 CDD AND >7,000 HDD	.3	8.4	.6	8.7	2.0
5,500 TO 7,000 HDD	.6	18.0	1.8	28.0	3.0
4,000 TO 5,499 HDD	1.1	32.5	2.5	38.2	2.2
<2,000 CDD AND <4,000 HDD	1.3	38.9	1.5	22.8	1.1
>2,000 CDD AND <4,000 HDD	.1	2.3	.1	2.3	1.9

[&]quot;-" = DATA NOT APPLICABLE.

"Q" = DATA MITHHELD BECAUSE OF A LARGE VARIANCE.

NOTE: BECAUSE OF ROUNDING, DATA MAY NOT SUM TO TOTALS. PERCENTAGES ARE CALCULATED ON UNROUNDED NUMBERS. SEE GLOSSARY FOR DEFINITION OF TERMS USED IN THIS REPORT.

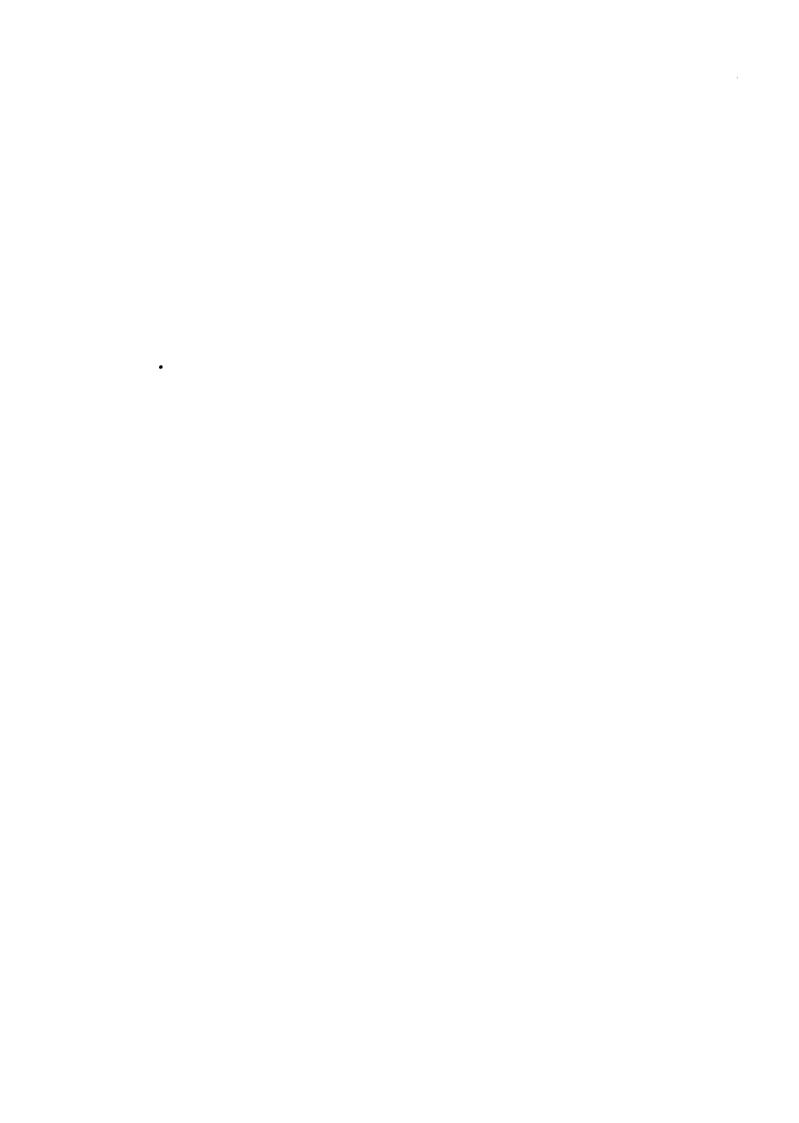
SOURCE: ENERGY INFORMATION ADMINISTRATION, OFFICE OF ENERGY MARKETS AND END USE, ENERGY END USE DIVISION, FORM EIA-457, THE 1981 RESIDENTIAL ENERGY CONSUMPTION SURVEY.



Appendix A

How the Survey Was Conducted







Introduction

Data Collection

The interview

Appendix A

The Residential Energy Consumption Surveys (RECS) have been designed by the Energy Information Administration (EIA) to provide information concerning energy consumption within the residential sector. Information concerning the housing unit is collected through personal interviews with a representative national sample of households. Data concerning actual energy consumption are obtained from fuel records maintained by the household's fuel suppliers. An inventory of motor vehicles used by the household residents is also obtained at the time of the personal interview.

The fieldwork for this study was conducted by a contractor, Response Analysis Corporation of Princeton, New Jersey. The original sample consisted of 7,668 units, of which some 118 either were not used for dwelling purposes or were not habitable. Of the 7,550 habitable housing units, 709 were ineligible for this study due to a current vacancy or seasonal occupancy (occupants did not live in the units for more than half the year). Personal interviews were conducted at 5,937 of the 6,841 eligible units, for a response rate of 86.8 percent. Subsequently, mail questionnaires were sent to 754 of the 904 households that had not participated in personal interviews. Completed questionnaires were returned by 332 of these households, or 44.0 percent of those mailed. Of the total eligible households, responses were received from 91.6 percent (or 6,269 households).

Interviewer contacts at sample households were begun in late September 1981 and continued through January 1982; more than 75 percent of the personal interviews were completed in October and November. Most of the 332 completed mail questionnaires were received in January and February 1982, with a few additional questionnaires received in March. In keeping with past practice in this series of surveys, November was regarded as the rough midpoint for data collection activity. Thus, November 1981 was the date for determining the independent estimates of the size of the universe of households used in the ratio estimation of survey results.

The average personal interview lasted 50 minutes, with 85 percent of the interviews lasting between 30 and 70 minutes. The interview with the householder (or his or her spouse) covered structural features of the house related to energy, such as insulation, doors, and windows; the heating and cooling systems, with the fuels used in these systems; use of wood; energy conservation efforts; household appliances; household vehicles; receipt of government assistance for the cost of heating; and demographic data on household members.

Fuel consumption for household vehicles is collected through the Household Transportation Panel, which uses rotating subsamples from the residential surveys. Data for the Household Transportation Panel collected for the period June 1979 through September 1981 are reported in Residential Energy Consumption Survey: Consumption Patterns of Household Vehicles, June 1979 to December 1980, DOE/EIA-0319 (Washington, D.C., April 1982) and Residential Energy Consumption Survey: Consumption Patterns of Household Vehicles, Supplement: January 1981 to September 1981, DOE/EIA-328 (Washington, D.C., February 1983). Data are being collected for 1983 using households from the 1982 RECS survey. Households from this survey have not participated in the Household Transportation Panel.



The interviewers

Appendix A (Continued)

At the end of the interview, respondents were asked to sign a waiver authorizing the contractor to obtain records of energy consumption from the housing unit's energy supplier(s). At this time, the interviewer also measured the dimensions of the housing unit, using a retractable 50-foot metal tape measure, and recorded the dimensions on a rough-drawn diagram of the floor plan. (See Appendix B for further details on the measurement of housing units.)

A total of 307 interviewers completed one or more personal interviews for this study. The type of training received by interviewers for this study depended primarily on the experience of the interviewer on RECS the year before. As shown in Table Al, 179 interviewers (58 percent) had completed interviews on the preceding RECS. Most of the remainder were conducting their first RECS, but had interviewing experience either with other survey research organizations, or with the U.S. Bureau of the Census.

Table A1. Experience and Training of 1981 RECS Interviewers

Experience on RECS the Year Before	Training for This RECS ^a	Number of Interviewers
Yes ^b	Home study	160
Yes ^C	Regional training meeting	19
No	Regional training meeting	122
No	Home study	<u>6</u> 307

 $^{^{\}rm a}_{\rm b}{\rm All}$ interviewers completed a practice interview and quiz. Attended regional training meeting and completed interviews on RECS the year before.

^CCompleted interviews on RECS, but did not attend the regional training meeting the year before.

Source: Energy Information Administration, 1981 Residential Energy Consumption Survey.

Two-day regional training meetings were held in 13 locations around the country in September 1981. These meetings were attended by 141 interviewers, including almost all those who had not interviewed on the preceding RECS. Each session was led by a trainer who had attended a 2-day workshop in Princeton, New Jersey. The 2-day training session for interviewers covered general interviewing techniques, background of the Residential Energy Consumption Surveys, the household questionnaire, ways to measure the respondents' homes, the sampling tasks, and administrative requirements.

All interviewers were required to complete a practice interview and quiz on the questionnaire and sampling procedures. These materials were reviewed by the contractor's central office staff. The basic training document for both the regional meetings and home study was a 62-page manual, Instructions for Interviewers.



Interviewers were paid on an hourly basis for their work on RECS, including time for home study, attendance at training sessions, review of completed interviews, actual interviewing time, and travel time to and from training sessions and sample clusters. Interviewers were also reimbursed at standard mileage rates for use of personal vehicles and other travel expenses. Interviewers working in locations believed to present a hazard to their safety were compensated for use of an escort. Each interviewer conducted an average of 19 interviews. Twenty interviewers each completed fewer than 6 interviews; the average for this group of 20 interviewers was 2.7 completed interviews. The most interviews completed by one interviewer was 81. Twenty percent of the personal interviews were verified by telephone or mail to ensure that interviews were conducted as intended.

The universe for this sample design includes all housing units occupied as the primary residence in the 50 States and the District of Columbia. The sample of households used as the basis for the 1981 estimates was selected by using a probability sampling design developed especially for the Residential Energy Consumption Survey. The sample design was used for the first time for the 1980 survey. The design required a sample with a minimum level of precision within each of the 10 Federal regions and 9 Census divisions. This requirement meant disproportionate sampling in each of the 17 intersections created by the overlap between the Federal regions and the Census divisions.

The 3.141 counties and independent cities in the 50 States and the District of Columbia were divided into 1,782 Primary Sampling Units (PSU's) on the basis of Standard Metropolitan Statistical Areas (SMSA's), county and independent city boundary lines, and population characteristics. The PSU's were grouped into 131 strata having roughly similar population totals within each of the 17 intersections. stratum contained PSU's similar in several characteristics, including, among others, the dominant space-heating fuel and, in some strata, weather conditions. Some PSU's comprising all or part of large metropolitan areas were large enough in population to be a stratum by themselves: 31 of the PSU's are of this type and are called Self-Representing (SR) because the sample from each PSU represented only that PSU. In the other 100 strata, one PSU was selected from among two or more PSU's in the stratum. Each of the 100 PSU's selected from these strata is called Non-Self-Representing (NSR) because each PSU also represents the nonselected PSU's in its stratum.

A number of intermediate probability sampling stages preceded the final selection of RECS households. These stages included the selection of Minor Civil Divisions (MCD's), such as cities, towns, townships, and other Census divisions within each PSU. Within the MCD's, Census tracts or Enumeration Districts (ED's) were selected. A segment of 25 or more housing units was selected within a tract or ED. Segments were formed from field counts in easily identified geographic units. Detailed field listings were created for each segment by a person who visited the area and identified each housing unit by street address or apartment number or other observable feature. A cluster of 25 housing units was selected from the sample segment. The ultimate cluster to be contacted for interviews (averaging about five housing units) was systematically selected from the cluster, and these housing units constituted the assignments given to the interviewers. The number of ultimate clusters totaled 1,515.

The 131 PSU's were selected in early 1980. The population sizes of PSU's were 1978 population estimates from the U.S. Bureau of the Census. Other data used in stratification, such as the dominant home heating fuel,

Sample Design



came from the 1970 Census. Definition of SMSA's is based on definitions using the 1970 Census results. These definitions will be updated in the future using results from the 1980 Census. For selection within PSU's, 1980 projected household counts for subareas of the PSU were used. The projections were based on data for MCD's provided by the National Planning Data Corporation. Within selected MCD's, the procedure for deriving estimated numbers of households in tracts and enumeration districts was based on data from a combination of sources, including Reuben H. Donnelley household address counts, 1970 Census data, and contacts with local sources of information such as a zoning board or agency issuing building permits.

Supplemental Sample

A feature of the 1981 survey was a supplemental sample of households designed to be merged with the main RECS sample and to meet special analytical needs of the Office of Family Assistance, Social Security Administration. The supplemental sample comprised some 1,262 (18.4 percent) of the total sample of 6,841 eligible units.

The plan for the supplemental sample included procedures to "oversample" households below poverty level, particularly those using electricity, or fuel oil or kerosene, as the main home heating fuel. A relatively small proportion of all households use these heating fuels. Thus, procedures were designed to increase the sample size for households of these types to the extent feasible.

Housing units for the supplemental sample were selected in a subset of 382 of the same sample clusters used for the main RECS sample. Starting with the total of 1,515 sample segments used for this RECS, 137 were eliminated from consideration for the supplemental sample because the overall sampling rates applied to households in these sample segments for the main RECS were already at or close to the highest sampling rate used for any intersection in the main sample design. For the remaining 1,378 sample segments, two screening steps were used to identify locations that were likely to contain large proportions of households below the poverty level:

- Sample segments were divided into two groups—those with fewer than 10 percent of households below poverty level in 1970 (438 sample segments were in this first group) and those with 10 percent or more of households below poverty level in 1970 (940 sample segments were in this second group).
- For the second of the two groups, interviewers were instructed to rate the general income level of households in the sample segment (after completing their listing of housing units in the segment). Summaries of these ratings were used to place each sample segment in one of four groups: highest 25 percent (well-off or wealthy), upper middle, lower middle, or lowest 25 percent (poor or near poor).

Sample segments that were rated on income were also rated, whenever possible, on the predominant main home heating fuel. Interviewer judgments on household income and main heating fuel were used to place sample segments in groups and establish <u>relative sampling rates</u> as shown in Table A2.



Table A2. Relative Sampling Rates for 940 Sample Segments Likely to Contain

the Highest Density of Low-

Income Households

Appendix A (Continued)

	Inco		
Main Home Heating Fuel	Upper Middle or Highest	Lower Middle	Lowest
Electricity, or Fuel Oil or Kerosene	1.0	2.2	3.4
All Other	1.0	1.6	2.2

Source: Energy Information Administration, 1981 Residential Energy Consumption Survey.

A relative sampling rate of 1.0 in Table A2 means that the overall sampling rate applied to households in the sample segment is the rate established for the main sample. Relative sampling rates higher than 1.0 were used for 382 sample segments in four "oversampled" groups of sample segments shown in Table A2. (A relative sampling rate of 2.2 means, for example, that sample segments in the group were sampled at a rate of 120 percent higher than the rate established for the main sample.) An estimated 1,262 additional households (that is, households selected as a result of the supplemental sampling process) were selected in these 382 segments, and 1,165 interviews were completed in these households (including both personal interviews and mailed questionnaires).

Overall effects of the oversampling procedure are summarized in Table A3. Some 28.4 percent of completed interviews (in the supplemental sample) were with households below the poverty level, compared with 12.4 percent of completed interviews (in the main sample). The corresponding figures for 125 percent of poverty level were 38.7 percent and 17.9 percent of supplemental sample and main sample interviews, respectively.

In general, for example, the ratio for a sample segment rated "lower middle" for income level and "electricity, or fuel oil or kerosene" as main home heating fuel was equal to 1/2.2. The number of units in the supplemental sample was then equal to the total number of units in the ultimate cluster minus the estimated number in the main sample.

 $^{^2{\}rm The}$ estimated numbers of main sample interviews were derived by multiplying the number of units of a given type in each ultimate cluster by the ratio

Sampling rate for main sample
Sampling rate for total (main + supplemental) sample



Table A3. Poverty Status in 1980 and Home Heating Fuel of Poverty-Level Households in RECS Main and Supplemental Samples

	Main Sar Househ	•	Supplemental Sample Households		
Poverty Status and					
Home Heating Fuel	Number	Percent	Number	Percent	
Total Sample	5,104	100.0	1,165	100.0	
Below Poverty Level	633	12.4	331	28.4	
Electricity	120	2.3	50	4.3	
Fuel Oil or Kerosene	70	1.4	51	4.4	
Other Fuels	443	8.7	230	19.7	
Not Below Poverty Level	4,471	87.6	834	71.6	
Below 125 Percent of					
Poverty Level	915	17.9	451	38.7	
Electricity	170	3.3	71	6.1	
Fuel Oil or Kerosene	115	2.3	73	6.3	
Other Fuels	630	12.3	307	26.3	
Not Below 125 Percent					
of Poverty Level	4.189	82.1	714	61.3	

Source: Energy Information Administration, 1981 Residential Energy Consumption Survey.

Survey Estimates

Survey estimates were developed to project sample results to the universe. The universe includes all households in the 50 States and the District of Columbia. Households on military installations are included. The definition of household is the same as that used by the U.S. Bureau of the Census. At the time of the survey, November 1981, the universe was estimated to contain 83,141,000 households, based on Current Population Survey (CPS) estimates of the population.

Weights were calculated for each sample household. The household weight reflected the probability of selection for that household and additional adjustments to correct for potential biases arising from the failure to contact all sample housing units and the failure to list all housing units in the sample area. Contacts were not successful with 8.4 percent of the eligible units.

The adjustment for these noninterviews was designed to spread the effects of noninterviews over the interviewed sample of households in the final cluster. This same procedure was used in the National Interim Energy Consumption Survey (NIECS) and the Screener Survey (see Glossary), but because the cluster size is smaller for the RECS (approximately 5 households to be contacted, on the average, for the RECS as compared with about 10 in the NIECS), the effects were spread over additional clusters within the PSU whenever the adjustment exceeded 2.0. In these cases, only that part of the noninterview adjustment that exceeded 2.0 was spread over the remaining ultimate clusters in the PSU.

The failure to list all housing units in the field-listing task is a common problem in surveys of this type. The result is an undercount of housing units in the sample area and, hence, an underestimate of the number of households in the universe. This problem is treated in



two ways in the RECS. One treatment occurs during the interviewing process and the second in the estimation process. During the interviewing stage, unlisted housing units or households are discovered by querying the household where interviews are conducted to determine if other households are present in the unit. In addition, the interviewer is instructed to conduct an interview at all housing units contained in the geographical area between the interviewed household and the next listed address. This tactic reduces the number of missed households but does not completely eliminate the noncoverage problem.

The noncoverage problem is also treated by using ratio estimation to adjust selected estimates of households to official population values. Ratio adjustment took place in two stages for the RECS. The first-stage adjustment was computed from information for PSU's in NSR strats only. A separate factor was created for each of 20 cells (four regions classified by five home heating fuel categories). The implementation of this factor reduced somewhat the amount of variance due to the sampling of PSU's. The first-stage adjustment for cell c is given by

$$R_{1c} = N_c/M_c$$

where N $_{\rm c}$ is the total number of households (1970 Census population) in cell c for all PSU's in RECS NSR strata, and

M_C is an estimate of N_C generated by applying RECS PSU sampling weights to 1970 Census household totals for cell c in RECS NSR sample PSU's.

The second-stage factor adjusted data from the survey after nonresponse adjustment and first-stage ratio estimation to independently derived estimates of the number of households in 12 categories shown in Table A4. The second-stage adjustment for category k was given by

$$R_{2k} = H_k/G_k$$

where H, is an independent estimate of the total, and

 ${\tt G}_k$ is the RECS estimate prior to the second-stage ratio adjustment of the total number of households in category k.

The numerator is based on a linear interpolation of values for each of the 12 cells between Current Population Survey estimates for March 1981 and March 1982. The second-stage factor reduced both the between-PSU variance and the within-PSU variance. An additional effect of applying this factor is that the final sample estimate of the number of households for each cell shown in Table A4 equals the control estimate.

Table A4. Population Estimates Used as Controls in Ratio Estimates

Census Region	SMSA- Central City	SMSA-Outside Central City	Non-SMSA	Total
Northeast	6,001,000	8,118,000	3,808,000	17,927,000
North Central	5,865,000	7.998.000	7,373,000	21,236,000
South	7,362,000	8,467,000	11.861.000	27,690,000
West	5,375,000	7,438,000	3,475,000	16,288,000
Total	24,603,000	32,021,000	26,517,000	83,141,000

Source: Estimates derived from March 1981 and March 1982 Current Population Surveys.



Minimizing Nonresponse

In an effort to maximize the validity of the survey data, a multiwave, multicontact approach was employed. Before the initial contacts, a letter was sent to each household from the Administrator of the EIA, briefly describing the purposes and stressing the importance of the survey. Beginning in September 1981, interviewers made up to seven or more callbacks at different times of the day throughout the week in an effort to minimize the number of uncontacted households. The interviewers also queried neighbors regarding the most opportune times to contact the prospective respondent. By the end of the first wave, 118 addresses were found to be nonresidential and an additional 663 were found to be ineligible. Some 5,482 personal interviews were completed, leaving 1,405 nonrespondents in this wave. A \$2 incentive was not used in the personal interviews in this survey as it had been in previous RECS.

A second wave was initiated in an effort to contact households that were not available during the first wave and to attempt to convince selected first-wave refusals to reconsider. A new set of letters preceded the renewed effort and, in most cases, the sampled housing units were assigned to a different interviewer. Again, up to seven or more attempts were made to contact the prospective respondents. At the end of this wave, an additional 46 addresses were found to be ineligible. As a result of the second wave, an additional 446 interviews were completed, leaving 913 nonrespondents.

A third wave was initiated in an effort to reach nonrespondents in a few locations that had low completion rates. The third wave produced nine additional personal interviews.

In a final attempt to reduce nonresponse, an abbreviated version of the questionnaire (adapted for self-administration) was mailed to most of the remaining nonrespondents. A \$2 incentive was included in the mailing. As a result of this effort, 332 additional households responded.

After three waves of personal interview attempts and one mailed questionnaire, 572 households or 8.4 percent of all eligible housing units had not responded. These results are displayed in Table A5.

These efforts were successful in accomplishing the following:

- Approximately 87 percent of the households were contacted and agreed to be interviewed personally. An additional 4.8 percent of the sample households completed and returned mailed questionnaires.
- of the 6,269 responses, 87.4 percent were obtained during the first wave of contacts; 7.1 percent were obtained during the second wave; and less than 0.2 percent resulted from third-wave contacts. Some 5.3 percent were responses to the mailed questionnaire.
- Of all households that participated in the personal interviews, 35.5 percent required only one visit and 78.2 percent were completed with no more than two callbacks.
- A total of 182 personal interviews were completed in the second and third waves with respondents who had previously refused to participate, representing 3.1 percent of all completed personal interviews. In addition, of the 332 mailed questionnaires that were completed and returned, 189 were from households that previously refused to participate.



Table A5. Interviews Completed by Stage

Total Listed Units Nonhousing Units Business, Other Not Habitable Nonhousing Unit Subtotal Housing Units Vacant Seasonal Vacant Subtotal Eligible Units Not Completed—Personal No One Home	First Wave 7,668 34 15 69 118 7,550	Second Inter Second Wave 1,405 1,405	Third Wave 913	7,668 34 15	904 -	Final Status 7,668
Nonhousing Units Business, Other Not Habitable Nonhousing Unit Subtotal Housing Units Vacant Seasonal Vacant Subtotal Eligible Units Not Completed—Personal No One Home	34 15 69 118 7,550	- - -	913 - - -	34 15 69	904 - -	•
Business, Other Not Habitable Nonhousing Unit Subtotal Housing Units Ineligible Units Vacant Seasonal Vacant Subtotal Eligible Units Not Completed—Personal No One Home	15 69 118 7,550	1,405	- - -	15 _69	- -	34
Not Habitable Nonhousing Unit Subtotal Housing Units Ineligible Units Vacant Seasonal Vacant Subtotal Eligible Units Not Completed—Personal No One Home	15 69 118 7,550	1,405	-	15 _69	-	34
Nonhousing Unit Subtotal Housing Units Ineligible Units Vacant Seasonal Vacant Subtotal Eligible Units Not CompletedPersonal No One Home	$\frac{69}{118}$	1,405	-	69	-	
Subtotal Housing Units Ineligible Units Vacant Seasonal Vacant Subtotal Eligible Units Not CompletedPersonal No One Home	118 7,550	1,405	-			15
Housing Units Ineligible Units Vacant Seasonal Vacant Subtotal Eligible Units Not CompletedPersonal No One Home	7,550	1,405		110	_	69
Ineligible Units Vacant Seasonal Vacant Subtotal Eligible Units Not CompletedPersonal No One Home	•	1,405		118		118
Vacant Seasonal Vacant Subtotal Eligible Units Not CompletedPersonal No One Home			913	7,550	904	7,550
Seasonal Vacant Subtotal Eligible Units Not CompletedPersonal No One Home						
Subtotal Eligible Units Not CompletedPersonal No One Home	489	31	-	520	-	520
Eligible Units Not CompletedPersonal No One Home	174	15	_	189	-	189
Not CompletedPersonal No One Home	663	46		709	•	709
No One Home	6,887	1,359	913	6,841	904	6,841
Eligible Respondent	556	296	19	221	-	221
Not Home	50	16	1	26	_	26
Refused	650	349	9	^a 562	_	562
Illness	27	2	1	15	_	15
Language Barrier	21	4	2	15	_	15
Wrong Respondent	2.1	4	2	1)	_	1.
or Unit	9	2	_	7	_	-
Not Contacted	35	223	872	22	_	2
Other	57	223	0/2	36	_	36
Subtotal	$\frac{37}{1,405}$	$\frac{21}{913}$	904	904	-	904
Subtotal	1,405	913	904	904		904
Not CompletedMail Unusable Address	_	_	_	_	75	75
Post Master Return	_	_	_	_	73 74	74
Returned Blank	_	_	_	_	68	68
Returned Unusable			_	_	6	6
Not Returned	_	-	_	_	274	274
Other Not Mailed	=	<u>-</u>	-	_	75	
Subtotal	_	_	_	_	$\frac{73}{572}$	
Total Interviews						
Completed						

 $^{^{\}rm a}{\rm A}$ household that refused an interview during any one of the three waves was classified as a "refusal" for the final status even though no one was at home in the second or third wave.
Includes households that moved after initial contact.

[&]quot;-" = Data not applicable.

Source: Energy Information Administration, 1981 Residential Energy Consumption Survey.



Response Rates and Household Characteristics

Table A6. Response Rates by Region, Location, and Type of Structure (Percentage of Eligible Housing Units)

Appendix A (Continued)

This section of the report will compare various response and nonresponse rates across Census region, location type, and structure type. These rates are reported in Table A6.

Several patterns are clear from Table A6. First, personal interviews enjoyed the most success in the South (88.9 percent), in non-SMSA areas (91.1 percent), and among residents of mobile homes (89.2 percent). Conversely, the interviewers had their lowest success rates in the Northeast (83.2 percent), SMSA central cities (82.4 percent), and in buildings with five or more residential units (78.6 percent). It is important to keep in mind when looking at the categories that make up these groupings that there is no guarantee that the characteristics are independent. Rather, it is highly likely that they overlap, that is to say, the Northeast has a high concentration of central cities and large apartment buildings.

The total response-rate patterns with regard to highest and lowest rates are generally not affected by the addition of the responses to the mailed questionnaire; however, the range from highest to lowest decreases by several percentage points. The highest refusal rates correspond to the lowest success rates for the personal interviews. The lowest refusal-rate categories match the highest personal interview success groups.

		Response Rates		~	nal view Non- nse Rates
	Personal	Mail	Total		Unable to
Characteristic	Interview	Questionnaire	Response	Refuse	Contact
Total	86.8	4.8	91.6	8.2	5.0
Census Region					
Northeast	83.2	6.3	89.5	10.5	6.3
North Central	86.7	5.2	91.9	8.8	4.4
South	88.9	3.4	92.3	6.2	4.9
West	86.9	5.3	92.2	8.4	4.7
Location Type SMSA-Central					
City SMSA-Outside	82.4	6.5	88.9	10.0	7.6
Central City	85.8	5.9	91.7	9.7	4.6
Non-SMSA	91.1	2.6	93.7	5.4	3.5
Structure Type Single-Family					
House	88.3	4.1	92.4	8.1	3.6
Mobile Home	89.2	2.6	91.8	6.1	4.7
Buildings with Two to Four					
Units Buildings with Fiv		4.8	91.2	7.2	6.4
or More Units		9.9	88.5	10.5	10.9

Source: Energy Information Administration, 1981 Residential Energy Consumption Survey.



Adjustments for Item

Nonresponse

Appendix A (Continued)

Item nonresponse occurs when respondents do not know the answer or refuse to answer a question or when an interviewer does not ask a question or does not record an answer. Imputations were made for nonresponse to most items that were to be used for making national estimates and items that had less than 10-percent nonresponse. Items for which national estimates are made but for which imputations were not made include questions on the presence, type, and amount of attic and floor insulation; the presence of wall insulation; and the cost of adding storm windows, doors, and insulation. For these items, the number of missing cases was considered large enough that the imputations would have introduced too much additional error.

The most frequently used imputation procedure was hot-deck. This procedure requires sorting the file of households by variables related to the missing item. A household is then selected that has the same value of the related variables, and this "donor" household supplies the value for the variable that is missing in the "donee" household.

Less frequently used imputation methods included random selection from the distribution of the known values of a variable, regression estimates, and use of modal values. Regression procedures were used to impute the total square footage of the housing unit in 2 percent of the cases in which all data were missing. The random selection procedure was used only to assign dates (month and/or year) when those responses were missing. Discussion of the regression procedure and other imputations involved in the square footage estimates is found in Appendix B. A few variables were imputed by assigning modal values; this was done when the distribution of available data showed a highly skewed distribution.

The RECS personal interview questionnaire contained 356 items of information. These items were treated as follows with respect to imputations.

Imputation Method	Number
Not Imputed	81 275
Hot-deck Random	207 45
Modal	23 356

Table A7 shows the most frequently imputed items, the number of cases requiring imputation, and the method used.

The 332 mail questionnaires had considerable missing data since the mail questionnaire was a small subset of questions from the household interview. For the mail questionnaires, the hot-deck imputation method was used. Households were selected by sorting the file by Census region, type of structure, space-heating fuel, hot-water fuel, air-conditioning fuel, family income, number of rooms, and number of persons in the household. The donor household was matched on these characteristics as closely as possible, and the entire set of responses from the donor household was imputed to the mailed questionnaire household. This meant that all the responses for the mailed questionnaire households were imputed except weather data, fuel consumption data acquired from the household's fuel suppliers, the geographic location of the mail questionnaire household, and those items in the hot-deck imputation procedure for which an exact match had been obtained.



Table A7. 1981 Residential Energy Consumption Survey Items Most Frequently Imputed

1980 Family Income				
Availability of Natural Gas	Item		Total Sample ^a	
Availability of Natural Gas	1000 7 11 7	0.17		
Year House Was Built 351 6 Hot-deck Same Main Hearting Fuel 284 5 Hot-deck Used Last Winter 284 5 Hot-deck Most-Used Oven Is/Is Not 176 3 Hot-deck Microwave 176 3 Hot-deck Householder Completed 159 3 Hot-deck Number of Cords of Wood 147 2 Hot-deck Number of Cords of Wood 147 2 Hot-deck Central Water-Heating 147 2 Hot-deck Central Water-Heating 145 2 Hot-deck Square Footage of Housing Unit (b) (b) (b) (b) Unit (b)				
Same Main Heating Fuel Used Last Winter	· · · · · · · · · · · · · · · · · · ·			
Used Last Winter		351	6	Hot-deck
Most-Used Oven Is/Is Not 176 3 Hot-deck Microwave 159 3 Hot-deck Number of Cords of Wood 147 2 Hot-deck Central Water-Heating 2 Hot-deck System for the Building 145 2 Hot-deck Square Footage of Housing Unit (b) (b) (b) Unit (b) (b) (b) (b) Condominium or Cooperative 126 2 Hot-deck Spouse Completed Highest 123 2 Hot-deck Central Heating System for 11 2 Hot-deck Central Heating System for 111 2 Hot-deck Cher Source of Income 111 2 Hot-deck Cher Source of Income 111 2 Hot-deck Regular Contributions From Nonfamily Members Received in 1980 101 2 Hot-deck Received in 1980 0 101 2 Hot-deck Warm Air Forced Through Ducts 63	Same Main Heating Fuel			
Microwave 176 3 Hot-deck Householder Completed 159 3 Hot-deck Number of Cords of Wood Burned 147 2 Hot-deck Central Water-Heating System for the Building 145 2 Hot-deck Square Footage of Housing (b) (b) (b) (b) Unit (b) (b) (b) (b) Condominium or Cooperative 126 2 Hot-deck Spouse Completed Highest 3 2 Hot-deck Central Heating System for 123 2 Hot-deck Central Heating System for 119 2 Hot-deck Other Source of Income 119 2 Hot-deck Other Source of Income 111 2 Hot-deck Regular Contributions From Nonfamily Members Received in 1980 101 2 Hot-deck Received in 1980 0 101 2 Hot-deck Warm Air Forced Through Ducts 63 1 Hot-deck Other Public Assistance Received in 1980 99 2	Used Last Winter	284	5	Hot-deck
Householder Completed Highest Grade		176	3	Hot-deck
Highest Grade		-, -	•	
Number of Cords of Wood Burned	•	159	3	Hot-deck
Burned		137	J	not ucck
Central Water-Heating 145 2 Hot-deck System for the Building 145 2 Hot-deck Square Footage of Housing (b) (b) (b) (b) Unit (b) (b) (b) (b) (b) Contral Heating or Cooperative 126 2 Hot-deck Spouse Completed Highest 123 2 Hot-deck Central Heating System for 119 2 Hot-deck Cher reliabiliting System for 11 2 Hot-deck Other Source of Income 111 2 Hot-deck Other Source of Income 111 2 Hot-deck Regular Contributions 6 11 Hot-deck Received in 1980 101 2 Hot-deck Secoived in 1980 90 1 Hot-deck Other Public Assistance 63 1 Hot-deck		1.47	2	Wot-dock
System for the Building		147	2	HOL-deck
Square Footage of Housing (b) (b) (b) Unit (condominium or Cooperative 126 2 Hot-deck Spouse Completed Highest 123 2 Hot-deck Grade 123 2 Hot-deck Central Heating System for 119 2 Hot-deck Central Heating System for 119 2 Hot-deck Central Heating System for 111 2 Hot-deck Cher Fource of Income 111 2 Hot-deck Repular Contributions 111 2 Hot-deck Regular Contributions 101 2 Hot-deck Received in 1980 101 2 Hot-deck Second Oven Is/Is Not a 67 1 Hot-deck Warm Air Forced Through Ducts 63 1 Hot-deck Other Public Assistance Received in 1980 99 2 Hot-deck Alimony Received in 1980 99 2 Hot-deck Government Pension 86 1 Hot-deck Mort-deck Month Window or Door 86 1 Hot-deck		1/5	2	Unt. dools
Unit		143	2	not-deck
Condominium or Cooperative		(1-)	/ ħ\	(%)
Spouse Completed Highest 123 2 Hot-deck Central Heating System for 119 2 Hot-deck Cher Source of Income 111 2 Hot-deck Other Source of Income 111 2 Hot-deck Regular Contributions 111 2 Hot-deck Received in 1980 101 2 Hot-deck Second Oven Is/Is Not a 67 1 Hot-deck Warm Air Forced Through Ducts 63 1 Hot-deck Other Public Assistance Received in 1980 99 2 Hot-deck Government Pension 99 2 Hot-deck Government Pension 95 2 Hot-deck Private Pension 86 1 Hot-deck Month Window or Door 86 1 Hot-deck Caulking Added 81 1 Random Dividends Received in 1980 79 1 Hot-deck SSI Received in 1980 79 1 Hot-deck Weteran's Payment				, ,
123 2	•	120	4	not-deck
Central Heating System for the Building		100	0	** . 1 1
the Building		123	2	Hot-deck
Other Source of Income in 1980		110	•	
In 1980	-	119	2	Hot-deck
Regular Contributions from Nonfamily Members Received in 1980		***		
### Received in 1980		111	2	Hot-deck
Received in 1980 101 2 Hot-deck Second Oven Is/Is Not a 67 1 Hot-deck Microwave 67 1 Hot-deck Warm Air Forced Through Ducts 63 1 Hot-deck Other Public Assistance 99 2 Hot-deck Received in 1980 99 2 Hot-deck Government Pension 95 2 Hot-deck Private Pension 86 1 Hot-deck Month Window or Door 86 1 Random Caulking Added 81 1 Random Dividends Received in 1980 79 1 Hot-deck Disability Payments 79 1 Hot-deck SSI Received in 1980 79 1 Hot-deck Veteran's Payments 79 1 Hot-deck	_ = =			
Second Oven Is/Is Not a 67 1 Hot-deck Microwave				
Microwave		101	2	Hot-deck
Warm Air Forced Through Ducts 63 1 Hot-deck Other Public Assistance 99 2 Hot-deck Received in 1980 99 2 Hot-deck Government Pension 95 2 Hot-deck Received in 1980 86 1 Hot-deck Private Pension 86 1 Hot-deck Month Window or Door 81 1 Random Caulking Added 81 1 Random Dividends Received in 1980 79 1 Hot-deck Disability Payments 79 1 Hot-deck SSI Received in 1980 79 1 Hot-deck Veteran's Payments	•		_	
Other Public Assistance Received in 1980				
Received in 1980 99 2 Hot-deck Alimony Received in 1980 99 2 Hot-deck Government Pension 95 2 Hot-deck Private Pension 86 1 Hot-deck Received in 1980 86 1 Hot-deck Month Window or Door 81 1 Random Caulking Added 79 1 Hot-deck Dividends Received in 1980 79 1 Hot-deck Disability Payments 79 1 Hot-deck SSI Received in 1980 79 1 Hot-deck Veteran's Payments 1 Hot-deck	· ·	63	1	Hot-deck
Alimony Received in 1980 99 2 Hot-deck Government Pension Received in 1980 95 2 Hot-deck Private Pension Received in 1980 86 1 Hot-deck Month Window or Door Caulking Added 81 1 Random Dividends Received in 1980 79 1 Hot-deck Disability Payments Received in 1980 79 1 Hot-deck SSI Received in 1980 79 1 Hot-deck Veteran's Payments				
Government Pension Received in 1980				
Received in 1980 95 2 Hot-deck Private Pension 86 1 Hot-deck Month Window or Door 81 1 Random Dividends Received in 1980 79 1 Hot-deck Disability Payments 79 1 Hot-deck SSI Received in 1980 79 1 Hot-deck Veteran's Payments Veteran's Payments 1 Hot-deck	•	99	2	Hot-deck
Private Pension 86 1 Hot-deck Month Window or Door 81 1 Random Dividends Received in 1980				
Received in 1980		95	2	Hot-deck
Month Window or Door 81 1 Random Caulking Added				
Caulking Added		86	1	Hot-deck
Dividends Received in 1980 79 1 Hot-deck Disability Payments 1 Hot-deck Received in 1980 79 1 Hot-deck SSI Received in 1980 79 1 Hot-deck Veteran's Payments				
Disability Payments Received in 1980			1	Random
Received in 1980		79	1	Hot-deck
SSI Received in 1980	Disability Payments			
Veteran's Payments	Received in 1980	79	1	Hot-deck
·	SSI Received in 1980	79	1	Hot-deck
Donatoral do 1000	Veteran's Payments			
	Received in 1980	79	1	Hot-deck
Workmen's Compensation	Workmen's Compensation			
Received in 1980 78 1 Hot-deck	Received in 1980	78	1	Hot-deck
Unemployment Compensation	Unemployment Compensation			
Received in 1980 78 1 Hot-deck	Received in 1980	78	1	Hot-deck



Table A7. (Continued)

Item	Percentage of Cases Total Sample ^a Imputed (6,269)		Method of Imputing	
Net Rental Income				
Received in 1980	77	1	Hot-deck	
Aid to Families with Dependent				
Children Payments Received in				
1980	73	1	Hot-deck	
Social Security				
Received in 1980	73	1	Hot-deck	
Money from Self-Employment				
Received in 1980	72	1	Hot-deck	
Monthly Rent of Dwelling	68	1	Hot-deck	

^aMail questionnaires are not included in the percentage. To account for these, add 5 percentage points to the percentage listed, except for the 1980 family income item. Family income was not imputed for the mail questionnaires, but some shift within broad income categories may have occurred in the process of matching mail questionnaires to personal interviews.

See Appendix B for details on the square footage imputations.

Source: Energy Information Administration, 1981 Residential Energy Consumption Survey.

Rental Agent Survey

Telephone interviews were carried out with rental agents and landlords of RECS households living in multiunit dwellings who did not pay directly to utility companies or fuel suppliers for one or more household fuels. The primary purpose of the rental agent survey was to verify information from household respondents on fuels used and main heating equipment.

The telephone interviews with rental agents or their deputies were conducted in July 1982.

Altogether, 203 rental agents were interviewed. These interviews covered 466 households in 294 buildings. The 466 households were 62.5 percent of the total of 746 households living in multiunit buildings who had one or more fuels included in their rent.

Interviewers mailed completed questionnaires to the contractor, where they were carefully reviewed. The first step in the review process was to verify the accuracy of the basic identifying information. Next, the questionnaires were manually reviewed by two editors to ensure completeness and the logical consistency of selected patterns of responses and to prepare the questionnaires for translation into machine-readable form. Keypunching of important items was fully verified. Overall, 25 percent of the keypunching work was fully verified. Finally, the data were machine edited to further ensure completeness, logical consistency, and the legitimacy of coded values. The computer editing utilized a proprie-

Editing Completed Questionnaires

tary software package called EDITOR II.



The contractor attempted to resolve inconsistencies or ambiguities in the data internally, by reference to other parts of the questionnaire. When these efforts failed to resolve an important problem, particularly those involving heating fuels or heating equipment and/or relationships between questionnaire responses and data on fuel consumption, the contractor made telephone contact with a member of the household in question. Telephone contacts of this type were completed with approximately 14 percent of households during the course of data editing for this survey.

Comparisons were made between rental agent and household respondent reports on main heating fuel, main heating equipment, supplemental heating fuel, water-heating fuel, and air-conditioning fuel. Each discrepancy was individually examined. Changes were made in the household record whenever it was judged that the rental agent was more knowledgeable than the household respondent on specific fuels and/or equipment.

Editors followed the guideline that the rental agent was the more know-ledgeable person when the landlord paid for the fuel and the fuel was used as the main home heating, water-heating, or air-conditioning fuel. The rental agent's view generally prevailed also in the case in which the rental agent paid for the main heating fuel and the rental agent's description of the main heating equipment differed from that of the household respondent.

Since a supplemental heating fuel was more likely to be under the house-hold's control, even in a multiunit dwelling, the respondent's definition of supplemental heating fuel was generally accepted.

The changes in the household records that resulted from these inquiries are given in Table A8.

Table A8. Changes Made in Household Records Based on Information from Rental Agents

Type of Changes Made in Household Records	Fuel Paid by Rental Agent	Number with Changes Made	Percentage with Changes Made
All Households in Rental			
Agent Survey	466	140	30
Main Heating Fuel	368	58	16
Main Heating Equipment	(a)	52	14
Supplementary Heating Fuel	(a)	18	5
Water-Heating Fuel	389	82	21
Central Air-Conditioning Fuel	18	1	6

^aResponses of rental agents and household respondents were compared for the 368 households for which the rental agent paid for the main heating fuel.

Source: Energy Information Administration, 1981 Residential Energy Consumption Survey.



Fuel Supplier Survey

The overall objective of the fuel supplier survey was to provide data on which to estimate the annual fuel consumption and expenditures of sample households. Four utility fuels were covered in the annualization—electricity, natural gas, fuel oil, and LPG. For each of the fuels, the goal was to obtain complete consumption records for the year April 1, 1981, through March 31, 1982.

Toward the end of the household interview, each household reported for each use of the fuel whether or not the fuel was paid for by the household, included in rent, or paid another way. For those households that paid directly, the respondent was asked for the names, addresses, and telephone numbers of the fuel companies supplying the household; these respondents were also asked to sign a waiver, authorizing Response Analysis to collect consumption data from the suppliers.

Altogether, the fuel supplier survey included initial contact attempts with 1,123 companies. The number of companies in the survey supplying each fuel and the total number of households supplied are shown in Table A9.

Table A9. Companies in Fuel Supplier Survey and Number of Households Supplied

Fuel Supplier	Number of Companies	Number of Survey House- holds Supplied ^b
Electricity	282	5,261
Natural Gas	146	2,856
Fuel Oil or Kerosene	521	741
LPG	236	550

^aThe total number of companies in the survey was 1,123. These included 43 that supplied both electricity and natural gas; 5 that supplied natural gas and LPG; and 14 that supplied fuel oil and LPG.

These figures represent the number of households that signed an authorization form and that paid directly to the utility company for all uses of the fuel. Excluded are 25 fuel oil households and 10 LPG households supplied by unknown companies.

Source: Energy Information Administration, 1981 Residential Energy Consumption Survey.

³Households using LPG only for outdoor cooking grills were not included in the LPG data collection; LPG used by these households is excluded from consumption and expenditures estimates. Data on usage of wood fuel were collected during the household interview, since it was not practical to collect these data from suppliers as is done with the major home fuels. Unless otherwise noted, consumption of wood is not included in the tables for this report.



Data Collection Procedures

Data collection procedures for electricity and natural gas companies included at least the following steps:

- an initial letter from the Administrator of the Energy Information Administration, addressed to the president or other official in the company outlining the general nature of the request for participation. This letter also announced that a telephone contact would be made to determine the name of the person to whose attention the survey materials should be sent. Enclosures in the letter included a printed statement "About the Residential Energy Consumption Survey," specimen copies of reporting and authorization forms, and a postage-paid postcard with a checklist of available publications and data tapes;
- the telephone contact referred to in the initial letter;
- the mailing of survey materials to the person named as contact person;
- a follow-up telephone contact a few days later to answer questions or discuss survey procedures as necessary;
- completed forms or copies of records returned by mail; and
- a letter from the EIA thanking the company for its effort.

The personal contacts established at an early point largely precluded mailings of materials to an inappropriate person and the delays that might develop from such mailings.

Procedures for fuel oil or kerosene and LPG dealers were the same as for electric and natural gas companies up through and including the mailing of survey materials to the company person named as the contact. These companies, however, most often had only one or two households for which information was to be supplied, and data collection was generally completed by telephone. An earlier pretest of the procedure had indicated a somewhat greater likelihood that companies would respond by telephone than as a result of a request to complete and return the forms by mail. Companies that chose to return the forms by mail, however, were not discouraged from doing so. After the company returned the information, additional contact with companies and households was sometimes required to identify the correct record in the company files.

Energy Consumption Records

The fuel supplier survey was conducted for households that paid their own fuel bills directly to the supplier and authorized access to

Energy Consumption Records

⁴The test is described in Residential Energy Consumption Survey:
Consumption and Expenditures—April 1980 Through March 1981, Part 1:
National Data, DOE/EIA-0321/1 (Washington, D.C., September 1982,
Appendix A, 103).



their records. These limitations meant that imputations of fuel consumption were required for households without consumption records (their fuel bills were included in the rent) and for households that did not permit access to their records.

Households lacking consumption records because they do not pay fuel bills directly to fuel suppliers occur most frequently among users of natural gas and fuel oil or kerosene (see Table AlO). These households are 18.3 percent of users of natural gas and 24.9 percent of users of fuel oil or kerosene.

The proportion of households that did not sign authorization forms (access to records denied) was in the range of 7 to 8 percent for the four fuels. Most households that signed authorization forms did so at the time of the personal interview or at the time of completing the mailed questionnaire. To maximize the number of households with records, however, a follow-up request was mailed to those who did not sign a form at the time of the personal interview. About 3 percent of this group returned signed forms in response to the mail request and therefore were included in the fuel supplier survey.

Table A10. Energy
Consumption Records and
Missing Data for Survey
Households Using Electricity,
Natural Gas, Fuel Oil or
Kerosene, or LPG
(Percentage of Households
Using the Fuel)

	Elec- tric-	Natural		_
Survey Households	ity	Gas	or Kerose	ne LPG
Total Households	100.0	100.0	100.0	100.0
Using the Fuel	100.0	100.0	100.0	100.0
(Sample Number)	(6,263)	(3,850)	(1,122)	(627)
Usable Records Received	90.0	71 7	46.7	61.3
from Fuel Supplier	80.8	71.7	40.7	01.3
Unusable Records Received	0.0	0.0		13.2
from Fuel Supplier	0.9	0.8	6.7	13.2
Household Pays Directly to SupplierNo Record Available	10.5	0.0	21 7	22.0
for the Household	10.5	9.2	21.7	22.8
Household Not Identified in				
Company Records	2.3	1.7	11.9	12.7
Company Refused to Participate	*	*	0.8	0.5
Company Unknown or Not Located	*	*	2.2	1.6
Authorization Form Not Signed	8.2	7.5	6.8	8.0
Fuel Used Included in Rent or Paid	7 0	18.3	24.9	2.7
in Other Way ^D	7.8	10.3	44.9	2.7

^aData were unusable for electricity and natural gas if the records covered less than 5 months and for fuel oil or kerosene and LPG if the record covered less than 1 year.

^bIncludes households with mixed payment methods: one or more uses of a specified fuel paid directly to a supplier, and other uses included in rent or paid in other way.

[&]quot;*" represents or rounds to zero.

Source: Energy Information Administration, 1981 Residential Energy Consumption Survey.



Table A10 shows that factors affecting nonresponse are somewhat different for fuel oil or kerosene and LPG than they are for electricity and natural gas. For example, the most frequent reason for nonresponse from fuel oil or kerosene and LPG dealers was their inability to identify survey households in their company records. Some dealers provide these fuels to households on a cash-and-carry basis and simply do not keep records of individual purchases. A second reason related to fuel oil or kerosene and LPG was the inability to locate the fuel oil or kerosene or LPG dealer. Some companies were no longer in business; others could not be contacted during the survey period even after repeated attempts over a period of several months; and some cash-and-carry customers could not identify their suppliers.

Refusal of companies to participate in the survey was not a significant factor.

Some additional factors related to the usability of fuel records are discussed in the section on imputations and adjustments for missing data.

Comparison with 1980 RECS. The proportion of households with usable fuel consumption records is lower in 1981 than 1980. The difference is 2 percentage points for electricity, 4 for natural gas, 8 for fuel oil or kerosene, and 4 for LPG. This decrease is attributed to a small increase in the proportion of sample households not signing authorization forms and in the proportion of sample households whose energy bills are included in their rent. The latter condition, for which energy billing records are not available, was fostered by the intentional oversampling of low-income households, which more often have energy costs included in their rent. In the case of fuel oil or kerosene, additional factors include a change in the mix of single-family and multifamily homes using fuel oil and increased use of kerosene that is usually purchased on a cash-and-carry basis.

Data Collection Dates

The first set of advance letters was mailed to utility companies during the first two weeks of April 1982. The cut-off date for receipt of usable information was August 31, 1982.

Fuel Consumption Imputations

Not all the fuel records that were collected in the fuel suppliers' survey could be used. For example, some covered too few months of usage and for others it was uncertain how the records were incomplete. The extent of these unusable records is shown in Table AlO. The problem of unusable records is small for the metered fuels. For electricity and natural gas, I percent of the records covered fewer than 146 days and therefore were considered unusable. For fuel oil, kerosene, and LPG, however, the problem of unusable records is more serious inasmuch as 7 percent of fuel oil or kerosene records and 13 percent of LPG records were unusable. One reason for this is that partial year records of electricity and natural gas usage are considered usable, whereas a partial year record for the storage fuels (fuel oil, kerosene, LPG) is not used.

⁵The number of households with partial year records, as a proportion of total households using the fuel, is 7.6 percent for electricity and 6.2 percent for natural gas.



A variety of information from household respondents as well as from suppliers is reviewed and used as a basis for declaring a fuel oil, kerosene, or LPG record complete or incomplete. Questionnaire information from respondents includes number of suppliers and an estimate of the annual number of deliveries. Suppliers provided dates of onset and termination of service to the household. In addition, follow-up contacts were made at some households that used combinations of fuel oil and kerosene when it was determined that delivery records did not include supplementary "cash-and-carry" purchases of kerosene that may have been made by the household. Estimates of the quantities of kerosene purchased (usually small relative to quantities of fuel oil) were then added to the delivery records for fuel oil to preclude the need for imputations.

Households with unusable records, as described earlier, and households with no records had their fuel consumption imputed using regression modeling techniques. The regression consumption models were developed using RECS sample households for which approximately a full year of data was available and acceptable. Separate regression models were developed for the four fuels: electricity, natural gas, fuel oil or kerosene, and LPG. Fuel oil and kerosene were treated as if they were identical fuels. The number of kerosene users in the sample is very small and the number of usable consumption records for these households is even smaller, since many kerosene users are "cash-and-carry" customers who leave no records of their transactions.

The strategy for modeling consumption was not the same for all fuels. There were five models of electricity consumption—one for each of the major types of housing structure. For the other fuels, dominance of the heating component was acknowledged, and modeling was by end use instead of structure type. This entails one model for all cases in which the modeled fuel is used as the main heating fuel and a separate model for cases in which the fuel is used only for appliances and/or hot water. Apart from electricity then, all structure types are modeled simultaneously with an allowance for differentiation of structure types within the models by inclusion of dummy variables (for each type of structure). The regression models make full use of the data including such variables as measured square footage of the housing unit, uses of fuels, heating and cooling degree—days, household size, and appliances.

Some electricity and utility gas models also contain a price variable calculated from the survey data. Some electricity models also include an income variable. The fuel oil and LPG models contain a variable on fuel wood burned. Fuel expenditures were imputed by applying a cost factor to the imputed consumption. The cost factor for electricity and utility gas was derived from the fuel consumption records of households in the same neighborhood or geographic area as the household for which data were missing; the cost factor for fuel oil and LPG was based on regression fits for cost versus quantity for all fuel users.

The consumption data were standardized to a 365-day period. For fuel oil, kerosene, and LPG, no adjustment was necessary since the annual consumption data were the accumulation of all delivery records between April 1, 1981, and March 31, 1982. For electricity and natural gas, an adjustment was made for those records covering 330 days or more. For those covering fewer than 330 days and those cases requiring regression imputations, the imputed quantity was for a 365-day period.



The 12-month fuel consumption quantities were scaled down in accordance with respondent-supplied information as to the proportion of the fuel used for nonhousehold purposes such as for drying grain or operating a commercial welding shop. This adjustment was made to the consumption and expenditures for 3 percent of the households using electricity, 3 percent using LPG, 1 percent using natural gas, and 0.4 percent using fuel oil or kerosene.

A final adjustment was made to all imputed fuel quantities. To maintain the variance structure of the unimputed fuel consumption data, rather than impute a single value for all households that may be equivalent on the independent variables in the regression model, an error term was added to the predicted fuel consumption. This allowed estimates for sampling error to be calculated without separating imputed from unimputed data.

Table All shows the availability of consumption records by the type of housing structure. Usable records were most often obtained for single-family units, more often for electricity (88.5 percent of the units) and natural gas (88.2 percent) than for fuel oil or kerosene (64.2 percent) or LPG (62.8 percent). The problems inherent in collecting data for the storage fuels were described earlier: multiple suppliers, cash-and-carry customers, purchase data being supplied instead of usage data, and economic instability of the supplying companies.

The consumption and expenditures data for large apartment buildings, especially the natural gas and fuel oil, are mostly imputed data. Usable records were obtained for only 13.0 percent of the apartments in large buildings that used natural gas and for none of those using fuel oil or kerosene. Liquefied petroleum gas is infrequently used in large apartment buildings. Electricity data for these apartments were obtained in 52.1 percent of the cases.



Table A11. Energy Consumption Records and Missing Data for Survey Households, by Fuel Used and by Type of Housing Structure (Percent)

Appendix A (Continued)

	Total				
	House-			Two	Five
	holds			to	or
	Using	Mobile	Single-	Four	More
Type of Fuel Used	the Fue		Family	Units	Units
Electricity	100.0	100.0	100.0	100.0	100.0
(Sample Number)	(6,263)	(390)	(4,343)	(697)	(833)
Usable Record	80.8	80.0	88.5	67.3	52.1
Unusable Record ^a	0.9	1.5	0.6	1.6	2.1
Records Not Available	10.5	11.6	9.7	13.8	11.5
Fuel Used Is Included in					
Rent or Paid in Other Ways	7.8	6.9	1.2	17.3	34.3
V., 1.0	100 0	100.0	100.0	100.0	100.0
Natural Gas	100.0	100.0	100.0	100.0	100.0
(Sample Number)	(3,850)	(119)	(2,650)	(544)	(537)
Usable Record	71.7	69.7	88.2	49.5	13.0
Usable Record	0.8	3.4	0.6	1.8	0.2
Records Not Available	9.2	10.1	9.6	11.9	4.5
Fuel Used Is Included in	,	10.1	,	22.,	7.0
Rent or Paid in Other Ways	18.3	16.8	1.6	36.8	82.3
none of full in other mayo	10.5	10.0	2.0	30.0	02.3
Fuel Oil or Kerosene	100.0	100.0	100.0	100.0	100.0
(Sample Number)	(1,122)	(70)	(724)	(159)	(169)
•					
Usable Record	46.7	37.1	64.2	20.7	*
Unusable Record	6.7	12.9	8.6	1.9	0.6
Records Not Available	21.7	50.0	26.0	12.6	*
Fuel Used Is Included in					
Rent or Paid in Other Ways	24.9	*	1.2	64.8	99.4
LPG	100.0	100.0	100.0		
(Sample Number)	(627)	(144)	(465)	(16)	(2)
Hanhla Pagard	61 2	56.9	62 P	(9)	(1)
Usable Record	61.3		62.8		* (1)
Unusable Record	13.2	13.2	13.5	(1)	
Records Not Available	22.8	23.6	22.8	(2)	(1)
Fuel Used Is Included in	0.7	6.3	0.0	743	*
Rent or Paid in Other Ways	2.7	6.3	0.9	(4)	*

aData were unusable for electricity and natural gas if the records covered fewer than 5 months and for fuel oil, kercsene, and LPG if the

record covered less than 1 year.

Includes households with mixed payment methods: one or more uses of a specified fuel paid directly to a supplier, and other uses included in rent or paid in another way.
"*" represents or rounds to zero.

Source: Energy Information Administration, 1981 Residential Energy Consumption Survey.



The reason consumption and expenditures data are so often imputed for multiunit structures is that energy use is not directly metered for individual apartments. A master meter registers the usage for a number of units in the building. Under these circumstances, there is no way of measuring the consumption of individual apartments, and imputations based on metered units may be biased since the imputations assume similar energy use for metered and nonmetered apartments.

Other segments of the data for which the lack of usable records may lead to an imputation bias include natural gas and fuel oil or kerosene for apartments in smaller buildings (two to four units per building) and fuel oil or kerosene and LPG used in mobile homes. Usable records in these segments were obtained for between 20.7 percent and 56.9 percent of the households.

Bias in Estimates of Fuel Usage in Apartments

Concern with the large amount of imputed fuel data for apartment units led to a special effort in 1981 to obtain consumption records for apartment buildings. This effort used the permission of the apartment building's agent to obtain actual fuel records for the building. These records were used to estimate fuel consumption for each apartment in the building, including the sample units that were the main concern of the collection effort. The building's fuel use was allocated to individual apartments proportionate to the number of units in the building. A comparison of these estimates, derived from actual records, with the imputed values assigned by the regression modeling indicates the following bias in some imputed values:

Households Using		Corrective Multipliers Are
Electricity with air conditioning	Too low by 50 percent	1.84
Electricity without air conditioning	Too high by 10 percen	t None
Natural gas for space heating	About right	None
Natural gas, but not for space heating	Too low by 50 percent	2.04

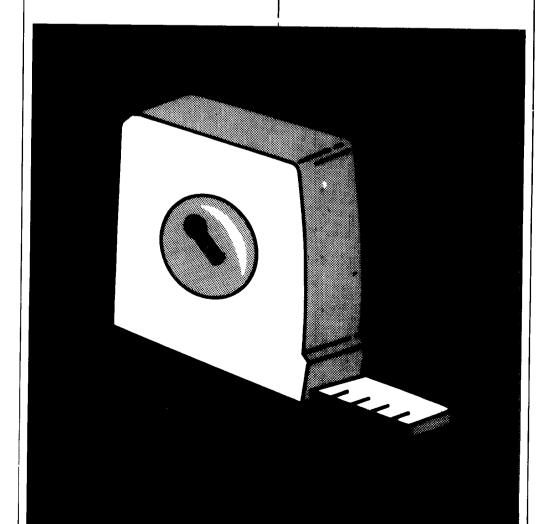
The number of records for fuel oil and LPG were insufficient for making estimates of the bias in their imputed values. The imputations for fuel use in apartments were corrected to counteract the imputation bias. The corrective multipliers are given in the preceding tabulation.

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Appendix B

Estimates of the Size of U.S. Housing Units in Square Feet



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Introduction

Scaling Up Outside Measurements

Appendix B

Interviewers for the 1981 Residential Energy Consumption Survey were given 50-foot tape measures and were instructed to measure the dimensions of each housing unit where they conducted an interview. instructions were to measure the "area enclosed from the weather." This included garages attached to the house, attics either heated or finished, and basements enclosed from the weather (see Square Feet in Glossary for further definition). Interviewers also recorded the dimensions of areas that were heated and unheated. This further breakdown into heated and unheated areas provides a closer approximation to the area of the housing unit that places the demand on the heating system and, therefore, is the figure that may prove to be more useful in analyzing residential energy consumption. All measurements were rounded to the nearest foot by the interviewer or in the editing process. Interviewers were given an option of measuring the home from the inside, taking into account the thickness of inside walls, or from the outside. These measurements provide the first data on a national sample of all types of residential housing units, including apartment units and mobile homes.

Interviewers attempted to measure the size of the 5,937 housing units where personal interviews were conducted. In 108 cases, the measurements were taken from a floor plan. In 98 percent of the cases, usable measurements were acquired. In 2 percent, the measurements either were not usable or were not made. Although most cases contained the basic information, some imputations were required to produce a final set of three figures for each housing unit:

HOMEAREA = total square footage of area enclosed from the weather

HEATED = total square footage of heated area

UNHEATED = HOMEAREA - HEATED = total square footage of unheated

Table B1 indicates the number of cases with missing data. The imputations required standardizing all measurements to outside measurements when the measurement was made from inside the home, characterizing a measurement as inside or outside when this was unknown, apportioning the total space between heated and unheated when this proportion was unknown or partially known, and estimating the total square footage when the measurements were not made or not usable.

As shown in Table B1, 4,883 homes had complete dimensions for the total area, the heated area, and the unheated area. The only adjustment required was to scale up the measurement for the 1,857 homes that were measured on the inside. The inside measurements were standardized to



outside dimensions. The scaling value was determined for each $_1$ housing unit as a quadratic function of HOMEAREA for the housing unit.

SCALE =
$$902 + 1.93E - 04 \times HOMEAREA - 3.63E - 08 \times (HOMEAREA)^2$$
 (B)

This formula indicates that the larger the HOMEAREA, the larger the scaling-up value. These scale values, which increased the inside measurements, ranged from 5.9 to 15.9 percent, depending on the size of HOMEAREA. For any case in which HOMEAREA was less than 1,000, SCALE was set to 1.059; for HOMEAREA greater than 2,700, SCALE was set to 1.159.

Table B1. Completeness of Data on Square Footage of Housing Units

Amount of Information Collected	Number of Households	Percent
Complete Set of Dimensions	4,883	82
Outside measurement of home	3,026	51
Inside measurement of home	1,857	31
Partial Information Information available on heated and unheated areas. Unknown whether dimensions are for inside or outside of home	545	9
Total area known, but information on heated and unheated areas is missing. Also may be unknown whether dimensions are for inside or outside of home	162	3
Basement dimensions missing	150	3
Complete set of dimensions for all floors except basement. Basement total area known, but information on heated and unheated areas for		
basement is missing	56	1
All dimensions missing or unusable	141	2
Total	5,937	100

Note: The floor area for the 332 households responding by mail was imputed through a hot-deck procedure. The mail questionnaires are not included in this table.

This equation was developed in the following manner: Regression prediction equations were developed independently for homes measured from the inside and homes measured from the outside. Both equations were used to generate estimates of floorspace for homes measured from the inside in the range of 1,000 to 3,500 square feet. The relationship between the ratio of predicted "outside" to "inside" floorspace and the actual inside floorspace for these homes was fitted in a quadratic equation. The predicted scale factors from the quadratic equation were then applied to cases measured from the outside to estimate "inside" floorspace. A second quadratic fit of "outside" to "inside" floorspace was executed, this time using all households measured from the outside or inside with predicted or measured inside area in the range of 1,000 to 3,500 square feet. The last two steps were repeated until the quadratic fit of "outside" to "inside" converged to a stable solution.



Treatment of Housing Units with Some Missing Data

Regression Model

Appendix B (Continued)

The 545 cases lacking information as to whether the measurements were inside or outside, or in which the measurements may have been a combination of inside and outside, were treated to a hot-deck imputation scheme. Those cases in which the imputed method of measurement became inside were then scaled up to outside dimensions by using Equation Bl.

The 162 cases lacking information on the ratio of heated to unheated space were treated to a hot-deck procedure. The donor household provided the ratio of heated to unheated area. For most of these cases, information was also lacking as to whether the measurements were inside or outside. The donor household then furnished this information as well. The inside measurements were scaled up to outside dimensions.

For the 150 cases with missing basement dimensions, the basement area was imputed by using a simple regression based on the area of the first floor. The heated and unheated areas were determined or imputed and then added to known totals for the remaining floors. The total area was then scaled up to outside dimensions, if necessary.

There were 56 cases in which the ratio of heated to unheated space for the basement was unknown. This ratio was imputed by using an appropriate empirical distribution of heated to unheated ratios. Two such distributions were used: one for homes with basements only, and one for homes with a basement plus crawl space and/or slab.

Two regression equations were used for the 141 cases with no usable data. The first was used whenever there were no questions about the presence of a basement; the second was used when basement existence could not be determined.

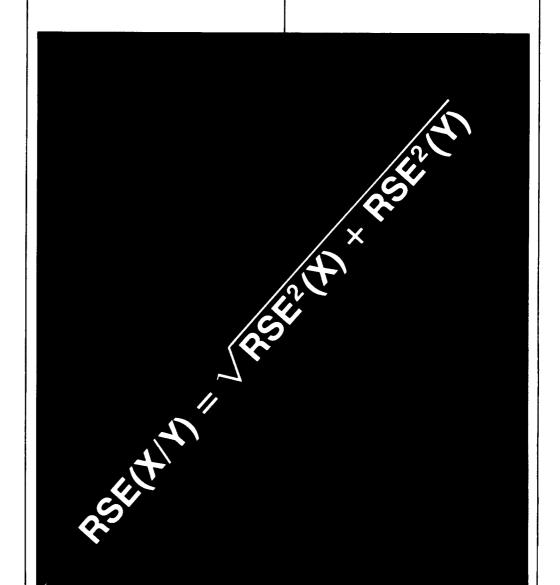
After HOMEAREA had been imputed by using the regression model, a hot-deck procedure was used to impute the ratio of heated to unheated space. All estimates were then scaled up. This was necessary since the regression equations estimated inside dimensions. The prediction equations for outside dimensions were not used in the imputations because regression models based on cases with inside measurements yielded substantially better fits.

 $^{^2{\}rm See}$ Glossary for explanation of hot-deck imputation.

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Appendix C

Limitations of the Data



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Introduction

Nonsampling Errors

Completeness of Data

Appendix C

Data from the 1981 Residential Energy Consumption Survey (RECS) are subject to many sources of sampling error, nonsampling error, and bias. Sampling error is a measure of the variability in the data because a sample of households was surveyed rather than the entire population. Because the survey used probability sampling techniques, sampling errors of the survey estimates can be estimated and used as a guide in making inferences from the sample estimates to the total population.

Nonsampling error and bias are measures of variability due to the conduct of the survey. They can include population undercoverage during sampling, response bias and variance, interviewer error, coding and/or keypunching error, and nonresponse bias. The wording and format of survey questionnaires, the procedures used to select and train interviewers, and the quality control built into the data collection, receipt, and processing operations were all designed to minimize these sources of error (for discussion of these procedures, see Appendix A, "How the Survey Was Conducted"). In addition, response adjustments and ratio estimations were incorporated into the survey estimator to help reduce both sampling and nonsampling error. These procedures also are discussed in Appendix A.

This section discusses a number of factors related to the completeness of the consumption and expenditures data. Data are not collected for the following two types of housing units:

- Vacant housing units. These units may have minimal heating for protection from the weather and lighting for security. They also may not be vacant all year long. The Annual Housing Survey (AHS) estimated that there were about 5.5 million vacant housing units in 1977.
- Second homes for the owner's use. The AHS estimated that these homes numbered about 3 million in 1977.

These two types of units are not included primarily because of the difficulty in acquiring data and limitations in the availability of funds. The RECS data are collected by interviewing someone who knows the housing unit and who may sign an authorization form for release of fuel records from the fuel supplier. In these units, that type of person is not likely to be available.

In addition, the consumption and expenditures data for the household's primary residence do not include the following fuels:

 Gasoline and other fuels used in household vehicles. The RECS collects gasoline data through monthly purchase diaries from a subset of respondents composing a Household Transportation Panel and is reported separately.



- Wood used for heating. Although wood consumption data are collected, they are not included in this report. (Wood consumption is reported in Residential Energy Consumption Survey: Housing Characteristics, 1981, DOE/EIA-0314(81), (Washington, D.C., August 1983). This was done because the wood data are for the 12 months before the interview, rather than the April 1981 through March 1982 period, and are probably inflated estimates. Evidence indicates that more detailed questioning often leads a respondent to lower initial estimates of wood use. Some change in the questioning procedures and exhibits used is being planned for future RECS. These changes are designed to reduce confusion between a cord and a face cord (a face cord is 4 feet high and 8 feet wide, but the depth varies according to the length of the cut wood). Although the price of the most recent purchase of wood was collected, no attempt was made to use these data to estimate the total expenditures for wood.
- LPG used in outdoor gas grills, for camping, or for other recreational activities occurring away from the home.
- Coal, coke, corncobs, charcoal, alcohol, purchased steam, and solar energy used for household purposes.

The effect of these omissions is to underestimate the amount of energy consumed in the residential sector.

Upward adjustments were not made to account for these omissions. The effect of these omissions on average consumption and expenditures per household is difficult to assess and will require further methodological research. The most serious omission because of its size is for wood fuel consumption. The size of the underestimation for the omission of wood can be estimated from data collected in the survey and is estimated to equal 10 million Btu for 1981, about the same level as for 1980. If added to the average household energy use, the average would increase from 114 million to 124 million Btu. This estimate of wood fuel use is subject to the errors affecting data on wood fuel consumption (see Wood Burned in the Glossary).

One source of overcounting arises because some household bills contain nonhousehold uses such as for operating a welding shop or drying grain. Double counting could also occur when an owner's billing record also contains consumption for a rental unit. The RECS respondents estimated the amount of this nonhousehold use that is included on their bill. Using these estimates, downward adjustments were made for individual households to subtract their nonhousehold uses from their consumption and expenditures data.

The reader should also be aware that the data for fuel oil, kerosene, and LPG are for fuel delivered to the household between April 1, 1981, and March 31, 1982, not for fuel consumed. For this reason and because attempts to acquire actual fuel bills for these fuels are more often unsuccessful, these data should be viewed as less reliable than the electricity and natural gas data. Readers should also be aware that natural gas and fuel oil data for apartment buildings of five or more units are based largely on imputed estimates and, therefore, may contain an unknown amount of error from the imputation procedures.



Quality of Specific Data Items

Expenditures as a Percentage of Income. The 1981 RECS is the first one for which expenditures for energy are shown as a percentage of the family's income. Several problems have stood in the way of reporting this statistic. First, RECS collects income data in categories, so that a family's income is known only by a range. The problem of not having a precise value was resolved for incomes less than \$20,000 by using the category midpoint when dividing the expenditures by the income; that is, \$3,500 was used for each household in the category \$3,000 to \$3,999. For incomes above \$20,000, the following values were assigned:

		Value Assi	gned
Income Category	Family Size Is Not Used	Family Size Is One	Family Size Is More than One
\$20,000-24,999	\$22,323		
\$25,000-29,999	\$27,248		
\$30,000-34,999	\$32,177		
\$35,000-39,999			\$37,157
\$35,000-49,999		\$40,898	
\$40,000-49,999			\$44,153
\$50,000-74,999			\$58,370
\$50,000 and over		\$68,064	
\$75,000 and over			\$99,547

The second problem is that energy expenditures are based on the period April 1981 through March 1982, while income is based on calendar year 1980. The difference in time periods has the effect of increasing the size of the percentage, since an income from an earlier period is likely to be smaller, having been subject to less inflation. If the income had been "aged" to represent income for the consumption period, the 5.3-percent figure for the United States would probably have been reduced to 4.8 percent. This represents a 9-percent reduction in the national figure. It is not known how much the percentages would change for various income categories by using "aged" income data.

Indoor Temperatures. The data on indoor temperatures are believed to be generally accurate for the purpose of ordering households along a temperature gradient. The following limitations, however, are causes for further study of the role these data play in residential energy consumption. The questionnaire asked respondents for indoor temperatures during sleeping hours and during the day when the home was occupied and when it was unoccupied; the questionnaire did not ask for temperatures on a specific day. The implication was that typical temperatures were being requested. The reported temperatures, especially for some respondents, are impressions of typical temperatures and may not represent the actual temperatures, or the averages of actual temperatures, in the home. The tendency to give impressions is more likely to occur for households that turn off their heat during the day or night. Indoor temperatures for these households may not be known or may not follow a typical pattern since the outdoor weather conditions and the thermal characteristics of the housing unit will determine the indoor temperature.





Other factors likely to make these reports unreliable indicators of the actual temperatures include the following: respondents may not check temperatures or thermostat settings on a regular basis or may not have thermostats that are marked with degree settings; temperatures may differ from thermostat settings (a home can become warmer than the thermostat setting); thermostats may need to be recalibrated; and, finally, disagreement may exist among household members as to the typical temperature. The unreliability of these data for some respondents was highlighted when a small number of households were called back to inquire about nighttime temperatures that exceeded daytime temperatures. Many of these households changed their reports by 5 to 10 degrees or more.

<u>Urban-Rural</u>. The U.S. Bureau of the Census has developed rules for defining places as urban or rural. The general import of these rules is to classify a place as urban if it contains more than 2,500 individuals. The rules contain exceptions, however, and the boundaries of places classified as urban by the Bureau of the Census may be ambiguous. As a result, the rules may not always have been applied to the RECS, Screener, and NIECS households in the way intended by the Bureau of the Census. For this reason, estimates of urban and rural populations from the RECS, Screener, and NIECS surveys may differ from the Bureau of the Census figures. The classification scheme for metropolitan areas (SMSA and non-SMSA) used for the RECS, Screener, and NIECS surveys does correspond to the classifications used by the Bureau of the Census. The designation of metropolitan areas is based on county boundary lines (except New England), which is a less ambiguous defining characteristic.

The form of the sampling error that is presented here is the relative standard error (RSE). For a given survey statistic, Y, the relative standard error, RSE (Y), is given by

RSE (Y) =
$$(S_v / Y) \times 100\%$$
.

Thus the standard error of Y is given by

$$S_v = RSE (Y) \times Y/100.$$

This section provides generalized procedures and examples for use in calculating relative standard errors for several types of statistics from the 1981 RECS survey. The generalized procedures involve the use of tables that relate the RSE of a statistic to the number of households over which the statistic applies. These tables are based on regression equations developed using RSE's computed by a half-sample replication procedure. They were developed for the 1981 RECS data and will change for subsequent surveys. The end of this section provides a discussion of the half-sample replication technique and the generalized sampling error equations developed and used in this section. Generalized procedures are provided for household counts, percentages based upon counts, aggregate totals, and averages per household for consumption and expenditures for each fuel and the total of all fuels.

Sampling Errors

¹The source of data for the calculation of relative standard errors is the 1981 Residential Energy Consumption Survey.



Table C1. Relative Standard Errors for Survey Estimates of the Number of Households

Million	One Relative Standard
Household	Error (Percent)
0.1	44.4
0.2	34.1
0.3	29.0
0.4	25.8
0.5	23.5
0.6	21.7
0.7	20.3
0.8	19.2
0.9	18.2
1.0	17.4
1.5	14.5
2.0	12.7
3.0	10.5
4.0	9.1
5.0	8.2
10.0	5.7
20.0	4.0
40.0	2.7

Table C2. Clustering Factors for Calculation of Relative Standard Errors for Survey Estimates of the Number of Households

Cell Definition	Value of 10 ^B
Heating and Cooling Degree-Days	1.67
Electricity Is Main Heating Fuel	1.21
Other Main Heating Fuel	1.15
Natural Gas Is Main Heating Fuel	1.07
LPG Is Main Heating Fuel	1.06
Temperature Setting When At Home	1.06
Wood Is Main Heating Fuel	1.04
Year Built	1.03
Age of Head of Household	0.98
Number of Heated Square Footage	0.89
Fuel Oil Is Main Heating Fuel	0.87
Family Income	0.85
Number of Household Members	0.82

 $^{^{}a}$ Main heating fuel other than electricity, natural gas, LPG, wood, or fuel oil.

Source: Energy Information Administration, 1981 Residential Energy Consumption Survey.



Determination of Relative Sampling Errors for Household Counts

Appendix C (Continued)

Procedures are presented here for determining relative sampling errors (RSE) for statistics that are counts of households. The counts can be obtained from this report, previous reports of the 1981 RECS, or the public-use data tape for the 1981 RECS. For some household counts, the RSE is zero. Household counts with a zero RSE are called control totals. A simplified method for determining RSE's for household counts that are not control totals is presented, followed by a more complete, longer method. The simplified method can be used for any household count, but it will produce overestimates of sampling errors in some cases.

Control Totals. For each of the four Census regions, the number of households that live in central cities of SMSA's, the number that live in SMSA's but outside central cities, and the number that do not live in SMSA's were used as design parameters for the 1981 RECS. These household counts are listed in Table C3. The counts will have zero RSE's or sampling error in the RECS. They are based on results of the Current Population Survey (CPS) compiled by the U.S. Bureau of the Census. The CPS surveys are subject to their own sampling variances. Any errors in these numbers can be considered to be biases of the 1981 RECS. In this report, these household counts or sums of these counts are referred to as control totals.

<u>Simplified Method</u>. For a household count that is not a control total, read or extrapolate its RSE value from Table C1. (The RSE's listed in Table C1 can be obtained by using the first equation listed in Table C9.) The value should be adjusted by multiplying by the appropriate value or values for 10 from Table C2.

If the characteristic of the statistic being considered is not listed in Table C2, use B=0 (10^B =1), or use a value for a characteristic that has similar clustering tendencies. If two characteristics define the statistic, multiply by both values of 10^B from Table C2. If more than two characteristics define the variable, choose no more than two and select the two that are the least correlated. A more complete discussion of the clustering factors is given later in this appendix. (See "Discussion of Generalized Variance Equations.")

Longer Method. The second method for calculating sampling errors for household counts uses the control totals listed in Table C3.

- Step 1: Find the statistic's appropriate control from Table C3. The control total is the number of households in the Census division/SMSA status cell for which the sampling error is being determined. The control may be the sum of several control totals provided. If the correct control is not obvious, use the larger of several, which may be correct. If the household count is a control total, set the RSE equal to zero; otherwise, proceed to Step 2.
- Step 2: If the household count is less than one-half of its control total, use method one described earlier. If not, compute a control complement for the household count and proceed to Step 3. Control complement = (control total household count).
- Step 3: Use the control complement as the new household count.

 Then read or extrapolate its RSE value from Table C1.

 Multiply this value by the appropriate 10 value or values from Table C2. Denote this as CCRSE.
- Step 4: Multiply the CCRSE value from Step 3 by the control complement and divide by the household count. This yields:

 RSE = CCRSE x (control complement) / (household count).



Table C3. Relative Standard Error Control Totals (Million Households)

Type of	Control	Upper Bound for Direct Applica- tion of Formula
Aggregate	Totals	or Table
National	83.1	41.6
Census Region		
Northeast	17.9	9.0
North Central	21.2	10.6
South	27.7	13.8
West	16.3	8.1
SMSA Status		
SMSA-Central City	24.6	12.3
SMSA-Outside Central City	32.0	16.0
Non-SMSA	26.5	13.3
Census Region by SMSA		
Northeast		
SMSA-Central City	6.0	3.0
SMSA-Outside Central City	8.1	4.1
Non-SMSA	3.8	1.9
North Central		
SMSA-Central City	5.9	2.9
SMSA-Outside Central City	8.0	4.0
Non-SMSA	7.4	3.7
South		
SMSA-Central City	7.4	3.7
SMSA-Outside Central City	8.5	4.2
Non-SMSA	11.9	5.9
West		
SMSA-Central City	5.4	2.7
SMSA-Outside Central City	7.4	3.7
Non-SMSA	3.5	1.7

Source: Estimates derived from the 1980 Decennial Census and Current Population Surveys.

Consider the computation of sampling error for the estimate; 15.4 million households heat with natural gas in the North Central region.

- Step 1: From Table C3, the control total is 21.2 million, the number of households that live in the North Central region.
- Step 2: The number 15.4 million is more than one-half of 21.2. Its control complement then is (21.2 15.4 = 5.8).
- Step 3: Extrapolating from Table C1, the RSE for $5.8_{\rm B}$ is 7.58 percent. Multiply 7.58 by the values for 10° from Table C2 for household counts over categories restricted to households whose main space-heating fuel is natural gas. (7.58 x 1.07 = 8.11 percent.)



The standard error corresponding to this relative standard error applies to both the control complement and the original household count.

Determination of Relative Sampling Errors for Percentages Based Upon Household Counts Let X be an estimate of the number of households that have characteristics C_1 and C_2 . Let Z be an estimate of the number of households that have characteristic C_1 but do not have characteristic C_2 . Set Y = X + Z. Then Y is an estimate of the number of households that have characteristic C_1 . Set p = 100 X/Y. Then p is an estimate of the percentage of households that have characteristic C_1 among all households that have characteristic C_1 . The RSE of p can be approximated using

$$RSE(p) = \sqrt{RSE^2(X) - RSE^2(Y)}$$
.

This approximation works best when RSE(X) and RSE(Y) are estimated using a generalized variance equation. The approximation may differ greatly from the correct value if RSE(X) and RSE(Y) are half-sample estimates. This equation may also produce inaccurate approximations when it is applied to percentages that are not based on household counts or are based on ratios of household counts that cannot be characterized by the format.

Determination of Relative Standard Errors for Fuel Consumption and Expenditure Statistics The RSE's of statistics that give the aggregate total or average per household fuel consumption or expenditures can be approximated by using Tables C4 through C8. The RSE's listed in Tables C4 through C8 can be obtained using the equations listed in Table C9.

The tables give the RSE of a statistic as a function of the number of households involved in calculating the statistic. For total consumption or expenditures, the number of households is the number over which the total applies. For consumption or expenditures by fuel, the number of households is the number that use the fuel in question and whose consumption or expenditures are used in calculating the statistic for which one desires an RSE. For example, consider the Northeast Census region. The weights for the observations used in the RECS were adjusted so that the number of households in the Northeast Census region equals 17.9 million. This is the number used when computing the RSE for the total residential energy consumption in the Northeast. For electricity consumption, again use 17.9 million. But for natural gas consumption, the number of households equals 11.3 million. This is the number of households that live in the Northeast and use natural gas. The counts of households are provided for the "all fuels" category in Tables 1 through 3 in the report. But for specific fuels such as natural gas, the reader should turn to the table that covers that fuel for the appropriate household counts to be used in computing an RSE.

The tables for aggregate total consumption, total expenditures, electricity consumption, and electricity expenditures contain an indicator variable. This variable equals 1 when the household count is a control total from Table C3. It equals zero otherwise. Consider the following examples of the use of these tables.



Table C4. Relative Standard Errors for Aggregate Statistics of Total Consumption and Expenditures (Natural Gas, Electricity, Fuel Oil or Kerosene, and LPG—Combined)

	Consumption	elative Standa (Btu)	Expenditures	-
	Indicator V		Indicator	Variable
Million				
Households	One	Zero	One	Zero
0.1	36.0	43.8	27.5	43.2
0.2	26.6	32.4	20.1	31.6
0.3	22.3	27.2	16.8	26.4
0.4	19.7	24.0	14.8	23.2
0.5	17.9	21.8	13.4	21.0
0.6	16.5	20.1	12.3	19.3
0.7	15.5	18.8	11.5	18.0
0.8	14.6	17.7	10.8	17.0
0.9	13.9	16.9	10.3	16.1
1.0	13.2	16.1	9.8	15.4
1.5	11.1	13.5	8.2	12.8
2.0	9.8	11.9	7.2	11.3
3.0	8.2	10.0	6.0	9.4
4.0	7.3	8.8	5.3	8.3
5.0	6.6	8.0	4.8	7.5
10.0	4.9	5.9	3.5	5.5
20.0	3.6	4.4	2.6	4.0
40.0	2.7	3.2	1.9	2.9
80.0	2.0	2.4	1.4	2.2

Source: Energy Information Administration, 1981 Residential Energy Consumption Survey.

There are 1.5 million households that heat with electricity in the Northeast region. Reading from Table C5, column 3 yields an RSE of 14.6 for total electricity consumption for households in the Northeast that heat with electricity. An indicator value of zero was used because 1.5 is not a control total listed in Table C3.

As another example, there are 27.7 million households that consume electricity in the South region. The control totals in Table C3 indicate that 27.7 million households live in the South. In this case, choose an indicator value of 1, since the household count is identical to the control total. Extrapolating from Table C5, column 2 yields an RSE of 3.4 percent for total electricity consumption for the 27.7 million households.

Relative Standard Errors for Average Price

The relative standard errors of statistics giving average price were not generalized. The magnitude of the RSE's can be obtained by examining Tables C5, C7, C10, and C11 in the report, Residential Energy Consumption Survey: Consumption and Expenditures— April 1980 Through March 1981, Part 1: National Data (DDE/EIA-0321/1, Washington, D.C., September 1982). An inspection of these tables reveals that there is not a linear relationship between the logarithms of the RSE's and the corresponding household counts. As a result, the RSE's were not generalized.



Table C5. Relative Standard Errors for Aggregate Statistics of Electricity Consumption and Expenditures

	_	elative Standard (Btu or kWh)		<u>)</u> es (Dollars)
	-	r Variable		r Variable
Million	Indicato	variable	Indicato	I Vallable
Households	One	Zero	On e	Zero
0.1	41.1	49.0	32.7	48.8
0.2	30.2	35.9	23.8	35.6
0.3	25.2	30.0	19.8	29.6
0.4	22.1	26.4	17.4	26.0
0.5	20.0	23.9	15.7	23.5
0.6	18.5	22.0	14.5	21.6
0.7	17.2	20.5	13.5	20.2
0.8	16.2	19.3	12.7	19.0
0.9	15.4	18.3	12.0	18.0
1.0	14.7	17.5	11.5	17.1
1.5	12.3	14.6	9.6	14.3
2.0	10.8	12.8	8.4	12.5
3.0	9.0	10.7	7.0	10.4
4.0	7.9	9.4	6.1	9.1
5.0	7.2	8.5	5.5	8.3
10.0	5.2	6.2	4.0	6.0
20.0	3.8	4.6	2.9	4.4
40.0	2.8	3.4	2.2	3.2
80.0	2.1	2.5	1.6	2.3



Table C6. Relative Standard Errors for Aggregate Statistics of Natural Gas, Fuel Oll or Kerosene, and LPG Consumption and Expenditures

		Relat	ive Standard Erro	r (Percent)	<u>)</u>	
	Natural	Gas	Fuel Oil or Ke	erosene	LPG	
		Expendi-	-	Expendi-		Expendi-
Million	Consumption	tures	Consumption	tures	Consumption	tures
Households	(Btu or Cubic Ft.)	(Dollars)	(Btu or Gallons)	(Dollars)	(Btu or Gallons)	(Dollars)
0.1	46.5	45.9	48.6	48.4	52.5	50.0
0.2	35.2	34.5	35.8	35.7	40.7	39.3
0.3	29.9	29.2	29.9	29.8	35.1	34.2
0.4	26.7	25.9	26.4	26.3	31.6	31.0
0.5	24.4	23.7	23.9	23.8	29.1	28.7
0.6	22.7	21.9	22.0	22.0	27.2	26.9
0.7	21.3	20.6	20.6	20.5	25.7	25.5
0.8	20.2	19.5	19.4	19.4	24.5	24.4
0.9	19.3	18.6	18.4	18.4	23.4	23.4
1.0	18.5	17.8	17.6	17.5	22.5	22.5
1.5	15.7	15.0	14.7	14.7	19.4	19.6
2.0	14.0	13.4	12.9	12.9	17.5	17.7
3.0	11.9	11.3	10.8	10.8	15.1	15.4
4.0	10.6	10.0	9.5	9.5	13.6	14.0
5.0	9.7	9.2	8.6	8.6	12.5	12.9
10.0	7.3	6.9	6.3	6.3	9.6	10.1
20.0	5.6	5.2	4.7	4.7	7.5	8.0
40.0	4.2	3.9	3.4	3.4	5.8	6.3
80.0	3.2	2.9	2.5	2.5	4.5	4.9



Table C7. Relative Standard Errors for Total Consumption and Expenditures per Household (Natural Gas, Electricity, Fuel Oil or Kerosene, and LPG—Combined)

	Relative Standard	
	Consumption	Expenditures
Million	per Household	per Household
Households	(Btu)	(Dollars)
0.1	17.3	15.6
0.2	13.7	12.1
0.3	12.0	10.5
0.4	10.9	9.4
0.5	10.1	8.7
0.6	9.5	8.1
0.7	9.0	7.7
0.8	8.6	7.3
0.9	8.3	7.0
1.0	8.0	6.8
1.5	7.0	5.8
`2.0	6.4	5.3
3.0	5.5	4.5
4.0	5.0	4.1
5.0	4.7	3.8
10.0	3.7	2.9
20.0	2.9	2.3
40.0	2.3	1.8
80.0	1.8	1.4



Table C8. Relative Standard Errors for Natural Gas, Electricity, Fuel Oll or Kerosene, and LPG Consumption and Expenditures per Household

Relative Standard Error (Percent)

	Natural Gas		Electricity		Fuel 0il or	Fuel 0il or Kerosene		LPG	
Million Households	Consumption per Household (Btu or Cubic Feet)	Expendi- tures per Household (Dollars)	Consumption per Household (Btu or kWh)	per Household	Consumption per Household (Btu or Gallons)	Expendi- tures per Household (Dollars)	Consumption per Household (Btu or Gallons)	Expendi- tures per Household (Dollars)	
0.1 0.2 0.3 0.4 0.5	20.7 16.2 14.0 12.6 11.6	21.2 16.1 13.7 12.2 11.2	25.7 19.6 16.7 14.9 13.7	22.9 17.3 14.7 13.1 11.9	27.5 19.6 16.1 14.0 12.5	27.4 19.5 16.0 13.9 12.5	37.4 28.4 24.2 21.6 19.8	32.4 25.0 21.4 19.2 17.7	
0.6 0.7 0.8 0.9	10.9 10.3 9.8 9.4	10.4 9.7 9.2 8.8	12.7 12.0 11.4 10.8	11.1 10.4 9.9 9.4	11.4 10.6 9.9 9.4	11.4 10.6 9.9 9.4	18.4 17.3 16.4 15.7	16.5 15.5 14.8 14.1	
1.0 1.5 2.0 3.0	9.1 7.9 7.1 6.1	8.5 7.2 6.4 5.4	10.6 10.4 8.9 7.9 6.8	9.0 7.7 6.8 5.8	9.4 8.9 7.3 6.4 5.2	9.4 8.9 7.3 6.3 5.2	15.7 15.0 12.8 11.4 9.7	13.6 11.7 10.5 9.0	
4.0 5.0 10.0 20.0	5.5 5.1 4.0 3.1	4.9 4.4 3.4 2.6	6.0 5.5 4.2 3.2	5.1 4.7 3.5 2.7	4.5 4.1 2.9 2.1	4.5 4.1 2.9 2.1	8.7 7.9 6.0 4.6	8.0 7.4 5.7 4.4	
40.0 80.0	2.4	1.9	2.4	2.0 1.5	1.5	1.5 1.0	3.5 2.7	3.4	



Table C9. Relative Standard Error Equations

Type of Statistic	Generalized Variance Equation
Household Counts	$Log(RSE) = 1.240 - 0.444 \times Log(NHSLD)$ - 0.037 x [(Log(NHSLD)) ²].
Total Consumption	$Log(RSE) = 1.207 - 0.434 \times Log(NHSLD) - 0.085 \times (CONTOT).$
Total Expenditures	$Log(RSE) = 1.187 - 0.448 \times Log(NHSLD) - 0.196 \times (CONTOT).$
Electricity Consumption	$Log(RSE) = 1.243 - 0.447 \times Log(NHSLD) - 0.076 \times (CONTOT)$
Electricity Expenditures	$Log(RSE) = 1.234 - 0.454 \times Log(NHSLD) - 0.174 \times (CONTOT).$
Natural Gas Consumption	$Log(RSE) = 1.267 - 0.400 \times Log(NHSLD)$.
Natural Gas Expenditures	$Log(RSE) = 1.250 - 0.412 \times Log(NHSLD)$.
Fuel Oil or Kerosene Consumption	$Log(RSE) = 1.245 - 0.442 \times Log(NHSLD)$.
Fuel Oil or Kerosene Expenditures	$Log(RSE) = 1.244 - 0.441 \times log(NHSLD).$
LPG Consumption	$Log(RSE) = 1.353 - 0.367 \times Log(NHSLD)$.
LPG Expenditures	$Log(RSE) = 1.353 - 0.346 \times Log(NHSLD)$.
Average Total Energy Consumption	$Log(RSE) = 0.904 - 0.335 \times Log(NHSLD)$.
Average Total Energy Expenditures	$Log(RSE) = 0.830 - 0.362 \times Log(NHSLD).$
Average Electricity Consumption	$Log(RSE) = 1.017 - 0.393 \times Log(NHSLD).$
Average Electricity Expenditures	$Log(RSE) = 0.955 - 0.405 \times Log(NHSLD).$
Average Natural Gas Consumption	$Log(RSE) = 0.958 - 0.358 \times Log(NHSLD)$.
Average Natural Gas Expenditures	$Log(RSE) = 0.927 - 0.400 \times Log(NHSLD)$.
Average Fuel Oil or Kerosene Consumption	$Log(RSE) = 0.950 - 0.489 \times Log(NHSLD)$.
Average Fuel 0il or Kerosene Expenditures	$Log(RSE) = 0.949 - 0.488 \times Log(NHSLD).$
Average LPG Consumption	$Log(RSE) = 1.177 - 0.396 \times Log(NHSLD).$
Average LPG Expenditures	$Log(RSE) = 1.133 - 0.378 \times Log(NHSLD).$

Note: NHSLD is the number of households in millions. Logarithms are calculated to the base 10. CONTOT is an indicator variable.

Source: Energy Information Administration, 1981 Residential Energy Consumption Survey.



Relative Standard Errors for Residential Wood Consumption and Expenditures

Table C10. Relative Standard Errors: U.S. Residential Wood Consumption and Expenditures for the Year

Ending November 1981,

United States

The relative standard errors for residential wood consumption and expenditures are found in Table ClO. The RSE's for these statistics were not generalized as were most other statistics.

HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSEHOLDS BURNING WOOD		TOTAL NUMBER OF CORDS BURNED		AVERAGE NUMBER	
	(MILLIONS)	 (PERCENT) 	(MILLIONS)	(PERCENT)	PER HOUSEHOLD	
TOTAL HOUSEHOLDS	5.0	0.0	15.9	0.0	14.5	
AREA TYPE		! i	i		i	
URBAN		6.9 4.8	8.6	14.4 4.5	8.9 16.4	
MEASURED HEATED SPACE OF RESI-] 			1	
DENCE (IN SQUARE FEET) LESS THAN 999	15.0	1 12.3	24.2	17.6	16.1	
1,000 TO 1,999		4.1	14.2	6.6	14.0	
2,000 OR MORE		4.8	19.7	7.8	18.3	
1980 FAMILY INCOME		: !	1		;	
LESS THAN \$10,000		10.5	1 22.9	14.1	18.3	
\$10,000 TO \$19,999i		9.5	25.1	9.8	17.9	
\$20,000 TO \$34,999		5.0	15.3	9.0	16.1	
\$35,000 OR MORE	10.2	9.5	12.2	17.7	11.1	
AMOUNT OF WOOD BURNED		i	i		i	
1/3-1 CORD		7.7	9.4	21.5	2.8	
2 TO 3 CORDS		8.6	10.3	20.6	1.6	
4 CORDS OR MORE	18.4	17.2	27.4	12.3	10.2	
WOOD IS MAIN HEATING FUEL		1	i			
YES		10.3	24.7	10.1	15.8	
NO	6.4	4.9	8.1	13.5	8.2	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD)		! !			<u> </u>	
LONG-TERM AVERAGE <2,000 CDD AND >7,000 HDD	30.1	28.6	47.2	32.4	21.7	
<2,000 CDD AND >7,000 HUU	30.1	(60.6	4/.2	; 32. 4	(21./	
5,500 TO 7,000 HDD	15.4	16.0	16.9	25.2	12.6	
<2,000 CDD AND		1	i			
4,000 TO 5,499 HDD		l 15.1	16.8	25.7	7.0	
<2,000 CDD AND <4,000 HDD		13.9	15.8	20.6	8.0	
>2,000 CDD AND <4,000 HDD	18.4	18.0	20.9	28.7	10.0	



Table C10. (Continued) Census Region: Northeast

HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSEHOLDS BURNING WOOD		TOTAL NUMBER OF CORDS BURNED		AVERAGE NUMBER	
	(MILLIONS) (PERCENT)		(MILLIONS) (PERCENT)		PER HOUSEHOLD	
OTAL HOUSEHOLDS	12.8	0.0	48.1	0.0	34.6	
REA TYPE I		ł			i	
URBAN	13.5	15.5	24.4	33.7	20.2	
RURAL	21.6	11.9	55.6	9.6	36.0	
HEASURED HEATED SPACE OF RESI-		1 1 1	1	 		
LESS THAN 999	31.1	j 21.4	55.9	31.3	34.8	
1,000 TO 1,999	12.3	5.6	44.8	9.4	33.7	
2,000 OR MORE	12.6	4.2	50.6	8.0	38.3	
.980 FAMILY INCOME		į	1	! 	}	
LESS THAN \$10,000	41.5	28.7	61.6	ĺ 28.0	j 31.9	
\$10,000 TO \$19,999	30.0	17.3	67.5	22.1	38.6	
\$20,000 TO \$34,999	12.5	7.9	50.5	12.8	39.7	
\$35,000 OR MORE	11.6	17.9	12.6	49.0	11.6	
MOUNT OF WOOD BURNED		i		ł [1	
1/3-1 CORD	15.6	23.7	16.9	69.2	4.8	
2 TO 3 CORDS	16.7	20.1	15.2	62.4	3.4	
4 CORDS OR MORE	46.9	33.4	63.7	18.2	19.7	
NOOD IS MAIN HEATING FUEL		!	1	l l	İ	
YES	45.6	31.4	66.3	21.4	26.4	
NO	7.9	14.6	20.7	35.9	22.8	
EATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE		[} }	 			
<pre><2,000 CDD AND >7,000 HDD</pre>	62.5	 47.7	80.4	36.4	26.2	
5,500 TO 7,000 HDD	25.0	31.9	28.2	72.4	19.1	
4,000 TO 5,499 HDD	27.2	32.1	32.9	72.6	9.2	
<2,000 CDD AND <4,000 HDD	-	! -	- 1	-	ļ -	
>2,000 CDD AND <4,000 HDD	-	-	- 1	-	-	



Table C10. (Continued) Census Region: North Central

HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSEHOLDS BURNING WOOD		TOTAL NUMBER OF CORDS BURNED		I AVERAGE NUMBER OF CORDS BURNED
	(MILLIONS)	 (PERCENT) 	(MILLIONS)	 (PERCENT)	PER HOUSEHOLD
TOTAL HOUSEHOLDS	12.4	0.0	19.3	0.0	14.5
AREA TYPE		! !	1	! }	
URBANRURAL	18.6 15.2	15.8 7.4	22.3	36.7 7.0	20.2
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)		 	!	{ 	
LESS THAN 999	37.4	33.1	51.9	39.5	28.2
1,000 TO 1,999		1 11.2	17.5	16.5	18.5
2,000 OR MORE	15.1	10.9	13.9	16.2	10.5
1980 FAMILY INCOME		! !	1	; 	1
LESS THAN \$10,000		1 20.2	41.4	27.2	28.1
\$10,000 TO \$19,999		13.9	22.0	11.3	14.6
\$20,000 TO \$34,999		7.5	14.0	22.2	10.2
\$35,000 OR MORE	25.1	21.4	43.4	49.6	40.2
AMOUNT OF WOOD BURNED		•	Ì	İ	i
1/3-1 CORD		9.6	17.2	22.5	7.3
2 TO 3 CORDS		17.8	17.8	33.1	4.2
4 CORDS OR MORE	24.3	18.2	27.7	11.2	11.3
WOOD IS MAIN HEATING FUEL		i	i		i
YES	25.0	19.7	33.6	18.5	17.3
NO	13.5	7.5	12.9	22.3	6.3
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD)				! !	
LONG-TERM AVERAGE		!	1		1 0/ 7
<2,000 CDD AND >7,000 HDD	35.1	31.5	45.3	l 33.3	l 24.7
5,500 TO 7,000 HDD	23.3	19.0	26.0	i 36.6	21.9
<2,000 CDD AND		1	1	1	!
4,000 TO 5,499 HDD		45.0	56.7	70.7	21.6
<2,000 CDD AND <4,000 HDD		! -	-	! -	-
>2,000 CDD AND <4,000 HDD	-	-	-	<u>-</u>	-



Table C10. (Continued) Census Region: South

HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSEHOLDS BURNING WOOD		TOTAL NUMBER OF CORDS BURNED		AVERAGE NUMBER
	(MILLIONS)	(PERCENT)	(MILLIONS)	} (PERCENT) 	PER HOUSEHOLD
TOTAL HOUSEHOLDS	9.4	0.0	7.7	0.0	6.9
AREA TYPE		i	i	! 	i
URBAN		14.1	l 15.1	l 18.1	1 9.3
RURAL	14.2	6.6	11.8	5.4	9.3
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)		; 		!] 	
LESS THAN 999	25.9	21.4	27.3	i 23.5	13.5
1,000 TO 1,999		7.9	12.0	l 11.7	9.8
2,000 OR MORE	12.2	8.3	14.6	13.4	6.4
1980 FAMILY INCOME		ł	-	! !	1
LESS THAN \$10,000	20.2	17.7	19.3	16.1	16.2
\$10,000 TO \$19,999		9.1	12.4	7.6	16.9
\$20,000 TO \$34,999		15.2	21.1	21.1	8.9
\$35,000 OR MORE	15.4	14.9	18.6	17.1	9.5
AMOUNT OF WOOD BURNED I		!	ļ	ļ	
1/3-1 CORD	14.1	i 1 8.2	15.7	13.1	3.1
2 TO 3 CORDS		1 12.5	18.1	18.4	3.3
4 CORDS OR MORE	15.9	19.2	22.4	19.4	8.4
		!	!	!	!
WOOD IS MAIN HEATING FUEL YES	13.4	1 10.7	13.5	! 9.7	10.2
NO	13.1	7.7	15.7	, 7.7 15.2	6.7
	13.1	1 /./	1 19.7	15.2	1 0.7
HEATING DEGREES-DAYS (HOD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE		! 		i 	1
<2,000 CDD AND >7,000 HDD	-	i - (<u> </u>	i -	<u> </u>
5,500 TO 7,000 HDD		-	-	-	<u> </u>
4,000 TO 5,499 HDD		I 28.4	30.3	26.0	18.5
<2,000 CDD AND <4,000 HDD		19.2	18.9	22.7	8.8
>2,000 CDD AND <4,000 HDD	18.3	16.5	1 20.4	18.8	10.4



Table C10. (Continued) Census Region: West

HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSEHOLDS BURNING WOOD		TOTAL NUMBER OF CORDS BURNED		AVERAGE NUMBER	
	(MILLIONS)	(PERCENT)	(MILLIONS)	(PERCENT)	PER HOUSEHOLD	
TOTAL HOUSEHOLDS	8.1	0.0	11.8	0.0	8.4	
AREA TYPE URBAN RURAL	9.9 16.0	7.7 1 7.7 1 12.3	12.4	 10.0 7.6	8.0 12.2	
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)		↓ 	1	l 	! !	
LESS THAN 999	16.9 10.4 15.4	15.1 6.2 13.6	26.6 1 14.3 20.6	22.4 9.7 16.4	17.3 8.6 13.6	
1980 FAMILY INCOME LESS THAN \$10,000	13.9 20.1 12.1 14.0	 12.8 20.5 7.4 10.2	23.4 23.2 23.2 12.8	20.1 20.1 15.4 7.9 16.7	23.0 16.9 11.5 9.2	
AMOUNT OF WOOD BURNED 1/3-1 CORD	11.3 11.9 21.8	 	14.0 12.8 23.1	 15.2 13.4 14.2	5.0 2.5 5.2	
WOOD IS MAIN HEATING FUEL YES	14.2 9.4	 	19.9	 12.6 10.4	 14.5 10.0	
HEATING DEGREES-DAYS (HDD) i AND COOLING DEGREES-DAYS (CDD) I LONG-TERM AVERAGE i		! ! !	l 	l 		
<2,000 CDD AND >7,000 HDD		16.5	28.5	27.1	15.8	
5,500 TO 7,000 HDD	30.5 25.7	{ 29.8 24.1	27.2 1 28.8	l 23.6 	18.4 15.5	
<pre><2,000 CDD AND <4,000 HDD</pre>	19.1 45.9	17.5	19.9	25.9 45.3	4.8	

[&]quot;-" = DATA NOT APPLICABLE.

"Q" = DATA WITHHELD BECAUSE OF A LARGE VARIANCE.
NOTE: BECAUSE OF ROUNDING, DATA MAY NOT SUM TO TOTALS. PERCENTAGES ARE CALCULATED ON UNROUNDED NUMBERS. SEE GLOSSARY FOR
DEFINITION OF TERMS USED IN THIS REPORT.
SOURCE: ENERGY INFORMATION ADMINISTRATION, OFFICE OF ENERGY MARKETS AND END USE, ENERGY END USE DIVISION, FORM EIA-457,

THE 1981 RESIDENTIAL ENERGY CONSUMPTION SURVEY.

Discussion of the Generalized Variance Equations

The generalized variance equations shown in Table C9 were obtained using a least squares regression. They can be used to approximate the RSE's of statistics that give household counts, fuel consumption, or expenditures. The RSE's used as input data in the regression procedure were obtained using a half-sample variance estimating procedure. The details of this procedure follow this discussion. The generalized variance equations were developed to provide users of the 1981 RECS data with a procedure for obtaining RSE's.



The regression equations will not exactly reproduce the RSE's for some published statistics from the 1981 RECS reports. These are half-sample estimates. Half-sample estimates were used to determine the generalized variance equations. Generally, a regression line will not pass through all points used in estimating the parameters of the regression line.

The generalized variance equations listed in this report apply only to data for the 1981 RECS. These equations will have to be changed if they are to be applied to data from other RECS surveys. They cannot be used with any other data sets, since they reflect the sample design of the 1981 Residential Energy Consumption Survey.

In calculating sampling errors for household count statistics, the appropriate control total depends upon the geographic division to which the household count is restricted. Table C3 lists control totals for the country as a whole, the four Census regions, SMSA status, and Census region by SMSA status. Control totals can also be sums of the control totals listed in Table C3. For example, if one is considering the number of households in the country whose main heating fuel is fuel oil, then from Table C3, the control total is the estimated number of households in the country (83.1 million). If one wants the number of households that heat with fuel oil in central cities in New England, the appropriate control total is the number of households in the Northeast located in SMSA-central cities (6.0 million), from Table C3. The New England Census division is contained in the Northeast Census region, but Census division was not used as a control total. If the appropriate control total is not obvious, use the larger of the ones that may be appropriate. This will be a conservative choice.

A household count statistic is an estimate of the number of households that belong to a certain subset of all households in the country. The subset is defined by restrictions on certain characteristics. The value of 10^{5} from Table C2, the cell definition factor, depends partly on the amount of clustering of the characteristics used in defining the cell. In particular, the value of $10^{\rm B}$ depends on the strength of the tendency of households with similar characteristics to live in groups within each replicate pair. (See "Half-Sample Estimation Procedures for Sampling Errors" heading for a discussion of replication.) If the characteristic is highly clustered, the value of 10^8 is greater than one. If the characteristic is widely spread out, the value of 10^8 is less than one. For example, one possible characteristic is heating and cooling degree-days. People who live close to each other $_{\mbox{\scriptsize R}} \mbox{experience}$ the same weather conditions; consequently, the value of 10^{10} for heating and cooling degree-days is greater than one. On the other hand, there is some clustering of households headed by people of the same age group, but this tendency is less pronounced than for most other characteristics. As a result, the value of 10^{10} for age of household head is less than one. As a final example, consider the Census region in which households are contained. Everyone in the same pair of replicate groups lives in the same Census region. Therefore, there is no way of defining a cluster based on Census region within a pair of replicate groups. As a result, the value of 10° for Census regions is 1.0.



The generalized variance equations for RSE's for consumption, expenditures, average consumption, and average expenditures are conservative. If restrictions are placed on the subset over which statistics are calculated that restrict the possible consumption, the RSE's may be lower than the equations predict. An example of where this could happen would be the total energy consumption of all households using between 15 million and 20 million Btu per year. In this case, the RSE approaches the RSE of the number of households as the range narrows. For averages, the RSE approaches zero as the range narrows. The generalized variance equations were estimated using RSE's for statistics where only broad restrictions were used in defining the subsets. The indicator variable (CONTOT) used in some of the generalized variance equations takes on only values of 0 and 1. A variable that has a range of possible values may yield better results.

The generalized variance equations for aggregate fuel consumption and expenditures express the logarithm of the RSE as a linear function of the logarithm of the number of households using the fuel or fuels in question. In addition, in four equations, an indicator variable that equals one when the household count is a control total is also part of the equation. The logarithms were all computed using base 10. The value of the RSE is given as a percentage. The value of the number of households is given in millions. The units used for consumption or expenditures do not matter. In the total consumption statistics, the Btu amounts for electricity are added to the Btu amounts for the other fuels without any adjustments.

In these equations, the number of households refers to the estimated number of households that use the fuel or one of the fuels in question and whose consumption or expenditures is counted in the statistic. For example, if one wants the RSE of the consumption of LPG in the Northeast Census region, one uses the number of households that use LPG in the Northeast (1.2 million). For this case, it would be incorrect to use the total number of households in the Northeast.

For electricity consumption, electricity expenditures, total consumption, or total expenditures, the number of households can be set equal to the estimated number of households in the subset over which the consumption or expenditure estimate applies. Only six households in the RECS sample did not use electricity. These six households represented somewhere in the order of 36,000 households nationally. Treating these households as if they are electricity consumers with zero consumption will have only a small effect on the RSE estimates. Note the difference between this case and the case in which the consumption of LPG in the Northeast was being estimated.



Half-Sample Estimation Procedures for Sampling Errors The complex multistage, multiframe design of the survey makes it almost impossible to construct an exact algebraic variance estimator. The method used to produce variances for the RECS is balanced half-sample replication (see References 1 and 2). The generalized variance equations described were based on sampling errors produced by this half-sample technique. To apply the half-sample technique to this survey, the 131 Primary Sampling Units (PSU's) were grouped into 81 strata. Thirty-one of the strata were treated as self-representing; either they consisted of large metropolitan areas that came into the sample with certainty or they were PSU's in a stratum that could not be paired with another stratum that had similar characteristics. In these strata, segments were divided into two replication groups. Each of the remaining 50 strata consisted of two sample PSU's belonging to the same Census division. The two replication groups in these strata consisted of one PSU each.

To save time and effort, a fully balanced half-sample design was not used. Instead, the half-samples were balanced only among strata in the same Census region. If a fully balanced design were used, it would require 88 half-samples. By balancing only within Census regions, a balanced design could be constructed using 32 half-samples.

The survey was constructed so that the results in each Census region can stand alone. No PSU lines cross Census region boundaries. The non-self-representing PSU's were paired within Census regions. All controlled selection was done within each Census region. The ratio estimation was also done within each Census region. Consequently, the national totals can be considered to be the sum of four independent totals for the four Census regions. Therefore, the variance of a national total is the sum of the variances for its four corresponding regional totals. This fact was used as one justification for balancing the half-sample design only within Census regions.

The 32 half-sample design is defined by a 32 x 81 matrix of +1's and -1's. The 32 rows correspond to the 32 half-samples and the 81 columns correspond to the 81 pairs of replication groups. The +1's and -1's determine which of the groups in the pairs is used in each half-sample. All column totals are 0. Therefore, each of the groups is used in exactly 16 of the half-samples. The columns for sets of pairs that fall within the same Census region are orthogonal. This is not necessarily true for columns corresponding to pairs that fall into different Census regions.

The 32×81 design matrix was constructed using a 32×32 orthogonal matrix adapted from an article by Plackett and Burman (Reference 3). The rows of this 32×32 matrix were randomly sorted. The sorting preserves orthogonality. For each Census region, K columns were randomly selected from the sort matrix. Therefore, K is the number of replication groups in a Census region. After the columns for a Census region have been selected, the rows are randomly sorted again.

Without the random sortings, any two of the columns would either be orthogonal or identical. For any column, at most three other columns could be identical to it. The three other columns would correspond to pairs in the three other Census regions. When two columns are identical, it means the groups corresponding to the +1's will always be in 16 half-samples together. (The groups corresponding to the -1's would follow a similar pattern.) Random sorting makes the possibility of two identical rows zero for all practical purposes.



Variance estimates for selected survey statistics were created by computing 32 half-sample estimates for each statistic. If a +1 falls in the $\frac{ith}{it}$ row and $\frac{ith}{it}$ column of the design matrix, the replication group corresponding to the +1 in the the $\frac{ith}{it}$ pair was used in the $\frac{ith}{it}$ half-sample. The sampling weights in each half-sample were ratio-adjusted upward so that the total number of households in each Census region classified by SMSA status corresponded to the control total for that cell.

As a result of using control totals, the total number of households in each of the 12 cells (Census region classified by SMSA status) is the same for all half-samples. The variance for these 12 totals, then, is zero. Any errors in these numbers are biases. In particular, they are affected by any undercount or overcount in the 1980 Census.

The half-sample variance estimate for the survey estimate Y' of characteristic Y is given by

$$s_{y}^{2} = \sum (Y_{i} - Y')^{2}/32,$$

where Y' is the $1^{\frac{th}{1}}$ half-sample estimate of Y, and Y' is the full-sample estimate of Y. The half-sample procedure measures variability due to sampling error and random response variance.

- National Center for Health Statistics. "Replication: An Approach to the Analysis of Data from Complex Surveys."

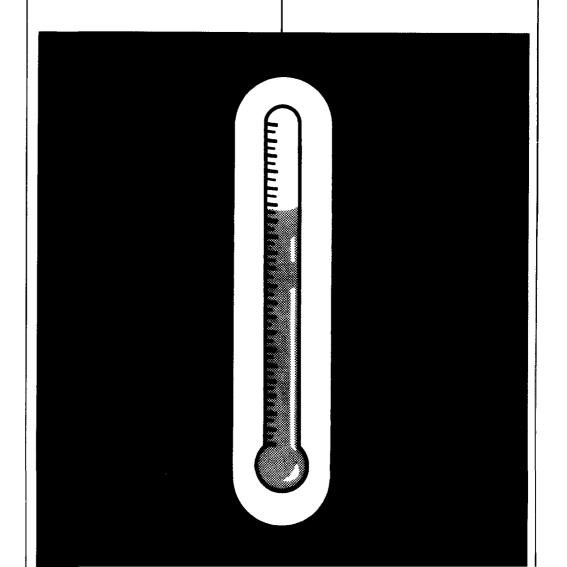
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Appendix D

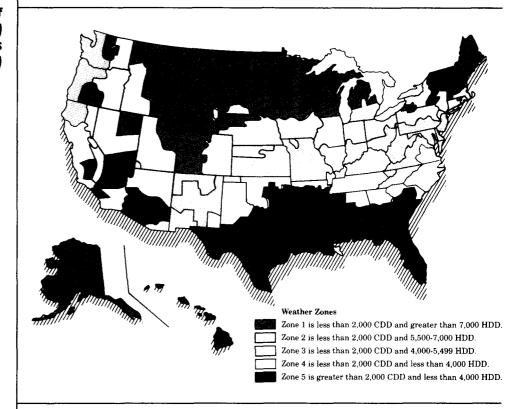
U.S. Weather Zone Map





Appendix D

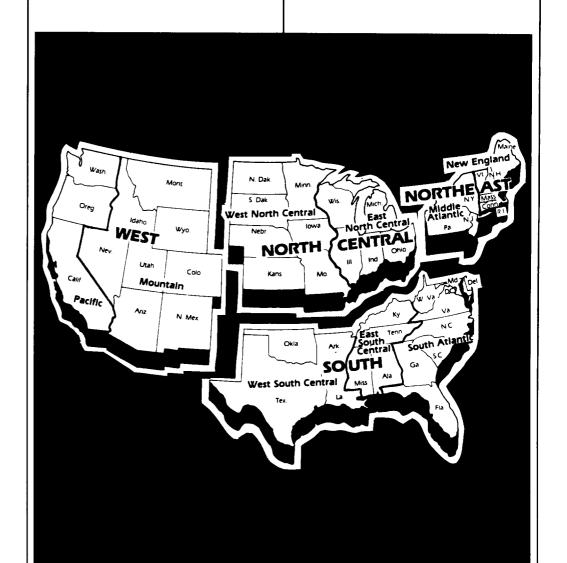
U.S. Weather Zone Map of Heating Degree-Days (HDD) and Cooling Degree-Days (CDD)



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Appendix E

U.S. Census Regions and Divisions





U.S. Census Regions and Divisions

Appendix E



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Glossary



Glossary

<u>Air Conditioning</u>: Cooling of air by a refrigeration unit. This does not include fans, blowers, or evaporative cooling systems not connected to a refrigeration unit. Air-conditioning units that are not currently in working condition or are not used, but are in place in the housing unit, are included in this survey.

"Number of rooms that can be air conditioned" refers to the number of rooms the air-conditioning equipment is capable of cooling when the equipment is used. Question 36 "How many rooms in your house (apartment) are cooled by air conditioning?" refers to rooms that could be cooled if the air-conditioning equipment were used. There are, therefore, no cases in the data set of a household with air-conditioning equipment that cooled zero rooms.

"All rooms air conditioned" means that 100 percent of the rooms are air conditioned. "Some rooms air conditioned" means that fewer than 100 percent are air conditioned.

"Central air-conditioning system" refers to a system that air-conditions a number of rooms in a home. See also <u>Central System for the Building</u>. For a definition of rooms, see <u>Number of Rooms</u>.

<u>All-Electric Home</u>: Uses electricity for space heating, water heating, and cooking. Other fuels may be used for supplementary heating or other purposes.

Appliances Used: Appliances possessed and used by the household. Appliances possessed by the household but not used are not counted. Air-conditioning units are an exception. Air conditioning is counted as present whether or not it is used. (See Air Conditioning.) Appliances loaned to the household for their regular use are included. Appliances temporarily not in working condition but generally used by the household are included only if a repair person has been called or the appliance has been taken to a repair shop. "Swimming pool heater" applies only to swimming pools that are for the exclusive use of the housing unit. Swimming pools in apartment buildings, condominiums, or cooperatives that are for the use of many resident households are not included. "Oven" includes microwave and convection ovens, but does not include toaster ovens. "An evaporative cooler (swamp cooler)" is an air-cooling unit that turns air into moist, cool air by saturating the air with water vapor. (See also Refrigerators.)

April 1981 through March 1982: The annual consumption period is a 365-day period beginning as close as possible to April 1, 1981. For natural gas and electricity, the actual beginning date for a household may vary from April 1 in either direction by several weeks depending on that household's billing cycle. For fuel oil or kerosene and LPG, the beginning date is always April 1, but the amounts represent deliveries received by the household during the 365-day period, not gallons consumed. (See Consumed.)

Availability of Natural Gas in the Neighborhood: Respondents who did not use natural gas answered "yes," "no," or "don't know" to the question, "Is gas from underground pipes available in this neighborhood?" Respondents were not provided with a definition of "available" or "neighborhood," so some variation is expected in what these concepts mean to each respondent. This question was asked only of households living in single-family or mobile homes in the 1980 RECS.

Basement: An enclosed space in which a person can walk upright under all or part of the building. A "crawl space" is the space between the ground and the floor of a house. An "enclosed" crawl space is one not accessible from the outside of the house because the walls of the space



protect it from the weather. A crawl space "open to the outside" is accessible from outside the house even though it may be covered by a trellis or lathwork, or some kind of brickwork that leaves space for circulation of air.

Bathroom: A "complete" bathroom has a flush toilet, a bathtub or shower, and a sink or washbasin with running water. A "half-bath" has a flush toilet or a bathtub or shower but does not have all the facilities for a complete bathroom.

Billing Period: The time between meter readings. It does not refer to the time the bill was sent or when the payment was to have been received. In some cases, the billing period is the same as the billing cycle that corresponds closely (within several days) to meter-reading dates. For fuel oil and LPG, the billing period is the number of days between fuel deliveries.

Btu (British Thermal Units): A Btu is the amount of energy required to raise the temperature of 1 pound of water 1 degree Fahrenheit at or near 39.2 degrees Fahrenheit and 1 atmosphere of pressure. One Btu is about equal to the heat given off by a blue-tip match.

Btu conversion factors for this survey are

Electricity	3,412 Btu/kilowatt-hour
Natural Gas	1,027 Btu/cubic foot
Fuel 0il No. 1	135,000 Btu/gallon
Kerosene	135,000 Btu/gallon
Fuel 0il No. 2	138,690 Btu/gallon
LPG (propane)	21,540 Btu/pound
	91,330 Btu/gallon
	2,510 Btu/cubic foot
	88,640 Btu/cubic meter
Wood	20 million Btu/cord

Other conversion factors used include

1 therm = 100,000 Btu 1 barrel = 42 gallons

Almost all LPG reported by the fuel suppliers was propane. Hence, the LPG conversion factors are those for propane. See $\underline{\text{Wood Burned}}$ for discussion of the Btu value of wood.

<u>Built-in Electric Units</u>: Individual resistance electric heating units are permanently installed in the floors, walls, ceilings, or baseboards and are part of the electrical installation of the building. Electric heating devices that are plugged into an electric socket or outlet are not considered built in.

<u>Central System for the Building</u>: A central system serving one or more buildings of two or more housing units each that is used for main heating, water heating, or air conditioning. A system that is for the respondent's living quarters only is not a central system for the building.

<u>Central Warm-Air Furnace</u>: A central furnace providing warm air through ducts leading to the various rooms. Heat pumps are not included in this category. A "forced-air" furnace is one in which a fan is used to force the air through the ducts. In a "gravity" furnace, air is circulated by gravity. The warm air rises through ducts and the cold air falls through ducts that return it to the furnace to be reheated. This completes the circulation cycle.



Condominium Ownership: A type of ownership that enables a person to own an apartment or house in a project of similar units. The owner has his or her own deed and, very likely, has a mortgage on the unit. The owner also holds common or joint ownership in all common areas such as hallways, entrances, and elevators. Condominium ownership may apply to single-family houses, rowhouses, townhouses, or apartments.

Conservation Items Added: Energy-saving items added to the housing unit the household now occupies. Items added to a previous place of residence and changes made by previous occupants of the housing unit are not counted. Changes made by a landlord are counted.

"Automatic or clock thermostat" is a thermostat that can be set to turn the heating system off and on at certain preset times of day.

"Adjustments to thermostat control (recalibration)" assure that the temperature the thermostat is set for is the actual temperature maintained in the house.

"An additional thermostat (zoning the home)" allows a household to regulate the temperature in different parts of the home. For example, the sleeping areas of the home can be kept at a lower temperature than the living areas.

"Smaller nozzle or burner or smaller line on furnace" will cut down on the amount of fuel an oil furnace burns.

"Flame-retention head burner for furnace (fuel oil)" is a device that controls the pattern of flame in the combustion chamber of a boiler or furnace.

"Automatic flue door (vent damper)" automatically closes the flue when the furnace goes off, preventing heat loss up the chimney.

"Electrical or mechanical furnace ignition system (spark ignition)" added to the furnace means that fuel will ignite from an electrically or mechanically produced spark rather than from a pilot light that burns continuously.

"Insulation around heating ducts" is extra insulation to reduce heat loss as the hot air travels through the ducts to different parts of the residence.

"Insulation around hot water pipes" is blanket insulation wrapped around the hot water heater to reduce heat loss. This is in addition to any insulation provided by the manufacturer.

"Meter that displays the cost of energy" is a device to show the homeowner how much energy is being used in the home at a given time and/or to add up the cost of energy usage over a specific period of time.

"Closeable shutters, plastic sheets, insulating drapes" are counted if any one of these has been added to any door or window in the housing unit. Shutters that close to provide an insulating effect are counted. Decorative shutters that do not close are not counted.

"Caulking around any windows or doors to the outside" is available in these types: oil or resin base, latex, butyl or polyvinyl base, elastomeric or a filler such as oakum, caulking cotton, sponge rubber, or glass fiber. Caulking is counted whether done on the inside or outside of the home.



"Weather stripping around any windows or doors to the outside" can be applied on the inside or outside of the home. Weather stripping is available in these basic types: thin spring metal, rolled vinyl, or foam rubber with adhesive backing.

Constant 1981 Dollar: Expenditures expressed in constant 1981 dollars have the effects of inflation removed. This allows one to compare changes in expenditures without the confounding influence of inflation. To get a constant 1981 dollar figure, the 1978 figures are multiplied by 1.2998, the 1979 figures by 1.1964, and the 1980 figures by 1.0944. The gross national product implicit price deflator (GNP ID) is the basis of constant dollars in this report.

Consumed: Is the amount of electricity or natural gas used by the household during the 365-day period. For fuel oil, kerosene, and LPG, the quantity represents fuel purchased, not fuel consumed. If the level of fuel in the tank was the same at the beginning and end of the annual period, then the quantity consumed would be the same as the quantity purchased. Measurements or reports of the level of fuel in the tank were not included in the data collection.

Cooling Degree-Days: Refers to the number of degrees per day the daily average temperature is above 65 degrees Fahrenheit. Normally, cooling is not required in a building when the outdoor average daily temperature is below 65 degrees. Cooling degree-days are determined by subtracting the base of 65 from the daily average temperature. For example, a day with an average temperature of 85 degrees has 20 cooling degree-days (85-65 = 20), while one with an average temperature of 65 degrees or lower has none. The average daily temperature is the mean of the maximum and minimum temperatures for a 24-hour period. The cooling degree-days for RECS households in the 48 States and the District of Columbia were assigned according to the NOAA division in which each household was located (See NOAA Division). Cooling degree-day totals for Alaskan and Hawaiian households were assigned by appropriate nearby weather stations.

<u>Doors</u>: (Outside doors) go from a heated area to the outside or to an unheated area, such as a porch or garage. Doors to a heated hallway in an apartment building, doors permanently sealed shut, and doors to an unheated attic or basement were not counted because these doors are not usually fitted with storm doors. The NIECS survey counted doors to an unheated attic or basement, but this rule was not followed in the RECS survey. Double doors were counted as one door. A pair of sliding glass doors was counted as one door in this survey. A pair of sliding glass doors was counted as two doors in the NIECS survey. "Standard" doors include doors with and without glass panels.

Electricity: See "Fuels."

Electricity Paid by Household: The household paid directly to the electric utility company for all household uses of electricity, such as for water heating, space heating, air conditioning, cooking, lighting, and operating other appliances. (See Fuels.)

Estimated Bills: Are calculated by the fuel supplier when the meter is not read. The estimate may be based on one or more of the following factors: past usage, usage by similar households, and weather data.



Expenditures: Refers to the cost for electricity or natural gas consumed during the 365-day period. Expenditures include State and local taxes, but exclude merchandise, repairs, or special service charges. For households on a budget plan, the expenditures are for the actual consumption. Fuel oil, kerosene, and LPG expenditures are for the amount of fuel purchased, which may differ from the amount of fuel consumed (see Consumed). For households that do not pay directly to their fuel supplier, the expenditures for fuels are estimated and included in the tables.

Expenditures as a Percentage of Income: Is determined by taking each household's energy expenditures and dividing it by the family's income. The median value of this statistic over the sample households, weighted to represent the universe, is reported in Table 6. The median percentage is the percentage of income that is spent on energy for the middle household when households are listed according to the percentage they spend on energy. That is, 50 percent of the weighted households in the cell spend a lower percentage on energy than the median value.

The percentage of income spent on energy is overestimated because the calculation uses family income for the year 1980 but the energy expenditure data are for a later year, April 1981 through March 1982. For further discussion of this overestimate, see Appendix C, "Limitations of the Data."

The reader should also be aware that the consumption and expenditures data include households that do not pay directly for the energy used. For 16 percent of the households in 1981, the cost of energy is included in a tenant's rent or paid by someone outside of the household.

Family Income: Is the total combined income in 1980 of all members of the family from all sources before taxes and deductions. It includes wages, salaries, tips, commissions, and income from Social Security, pensions, interest, dividends, rent, public assistance, and unemployment insurance. This includes the total income for all family members who lived in the household in 1980, regardless of whether they were living there at the time of the interview. Income of nonfamily members of the household is not included. "Family" includes the following types of relationships: mother, father, sister, brother, son, daughter, father-in-law, uncle, aunt, niece, grandchild, foster child, and similar relationships.



Federal Regions: The States are divided into 10 groups as follows:

Region	States
1	Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut
2	New York, New Jersey
3	Delaware, Pennsylvania, Maryland, Virginia, West Virginia, District of Columbia
4	Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Alabama, Mississippi, Florida
5	Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota
6	Louisiana, Arkansas, Texas, Oklahoma, New Mexico
7	Missouri, Iowa, Nebraska, Kansas
8	Colorado, Utah, North Dakota, South Dakota, Wyoming, Montana
9	Hawaii, Arizona, California, Nevada
10	Alaska, Idaho, Oregon, Washington.

<u>Fireplace</u>: Is any masonry or prebuilt installed fireplace. Fireplaces in mobile homes are included. A fireplace must have a permanent chimney built into the wall of the house. A freestanding fireplace that can be detached from its chimney is a heating stove. A fireplace insert is classified as a fireplace.

Floor, Wall, or Pipeless Furnace: A "floor furnace" is located below the floor and delivers heated air to the room immediately above or, if under a partition, to the room on each side. A "wall furnace" is installed in a partition or in an outside wall and delivers heated air to the rooms on one or both sides of the wall. A "pipeless furnace" is installed in a basement and delivers heated air through a large register in the floor of the room or hallway immediately above.

<u>Fuels</u>: Refers to the primary fuel delivered to the residential site. It may be converted at the site to some other energy form. "Electricity" is included in this report as a fuel.

"Electricity" refers to metered electric power supplied by a central utility company to a residence via underground or aboveground power lines. It does not refer to electricity generated onsite for the exclusive use of the residence. In this case, the fuel used for the generator will be indicated. The Btu equivalent for electricity is the energy value of electricity as received by the household (3,412 Btu per kilowatt-hours). Electrical energy losses that occur in the generation

[&]quot;Coal" includes coke.



and transmission of electricity are not included in the conversion of electricity into Btu for this report. If these losses were to be included, in general, the conversion rate would be about 10,353 Btu per kilowatt-hour.

"Fuel 0i1" is No. 1, No. 2, or No. 4 grade fuel oil or residual oil that is burned for space- or water-heating purposes. No. 1 distillate fuel oil is a form of heating oil used mostly as a blending stock to assure that heavier grades of fuel flow under severe cold weather conditions. No. 2 distillate collectively refers to No. 2 heating oil and No. 2 diesel fuel. Although these products are not precisely identical, they are essentially interchangeable in most applications. No. 2 fuel oil is the most common form of heating oil. No. 4 distillate is a blend of No. 2 and No. 5 or No. 6 residual fuel oil used in large stationary diesel engines and boilers equipped with fuel preheating equipment. Residual fuel oil refers to the heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are boiled off in refinery operations.

"Kerosene" refers to a distilled product of oil or coal with the generic name "kerosene." Kerosene is similar to No. 1 distillate fuel oil and is used for space heating or water heating or lighting equipment using wicks. It is sometimes sold under the names "range oil" or "stove oil."

"LPG or liquefied petroleum gas" refers to any fuel gas supplied to a residence in liquid form such as propane or butane. It is usually delivered by tank truck and stored near the residence in a tank or cylinder until used. Propane was the most common liquefied petroleum gas supplied to RECS households. Household use of LPG solely for outdoor gas grills is not considered sufficient use to mark the household as an LPG user.

"Natural gas" is utility gas supplied by underground pipeline to individual housing units by a central utility company. It does not refer to privately owned gas wells operated by the household.

"Solar collector" refers to active, thermal, concentrating collectors using either air or liquid as the working fluid. It does not refer to passive collection of solar thermal energy.

<u>Fuel Oil Paid by Household</u>: The household paid directly to the fuel supplier for all household uses of fuel oil or kerosene such as for space heating or water heating. (See Fuels.)

Gas Paid by Household: The household paid directly to the utility company for all household uses of natural gas such as for water heating, space heating, air conditioning, cooking, and operating appliances including outdoor gas lights. (See Fuels.)

<u>Head of Household</u>: If the respondent was married and living with his or her spouse, the male was considered to be the head of the household. Otherwise, the respondent was the head of the household. (See also Householder.)

<u>Heating Degree-Days</u>: The number of degrees per day the daily average temperature is below 65 degrees Fahrenheit. Normally, heating is not required in a building when the outdoor average daily temperature is above 65 degrees. Heating degree-days are determined by subtracting the average daily temperature below 65 degrees from the base 65. For example, a day with an average temperature of 50 degrees has 15 heating degree-days (65-50=15), while one with an average temperature of 65 or higher has none. The average daily temperature is the mean of the maximum and minimum temperature for a 24-hour period.



The heating degree-days for RECS households in the 48 States and the District of Columbia were assigned according to the NOAA division in which each household is located (See NOAA Division). Heating degree-days for Alaskan and Hawaiian households were assigned by appropriate nearby weather stations.

Heating Stove Burning Wood, Coal, and Coke: Any freestanding box or controlled draft stove or built-in fireplace stove. Stoves are made of cast iron, sheet metal, or plate steel. Freestanding fireplaces that can be detached from their chimneys are considered heating stoves. "Airtight" stoves have a gasket around the doors to close off air leakage and control the amount of air intake. "Non-airtight" stoves do not have gaskets around their door openings.

Heat Pump (Reverse Cycle System): A year-round heating/air-conditioning system in which refrigeration equipment supplies both heating and cooling through ducts leading to individual rooms. It generally consists of a compressor, both indoor and outdoor coils, and a thermostat.

When the heat pump is attached to a central furnace, the heat pump is either the main or secondary heating equipment depending on how often the heat pump operates. If it operates for a short time and then the furnace comes on, the heat pump is secondary (or additional heating equipment). If the heat pump is sufficient to provide the desired warmth, the heat pump is the main heating equipment.

<u>Hot-Deck Imputation</u>: A procedure by which the household file is sorted by variables related to the missing item. A household is then selected that has the same value on the matching variables, and this "donor" household supplies the value for the missing item. (See <u>Imputation</u>).

Household: A group of up to 12 persons occupying the same housing unit. "Occupy" means the housing unit was the person's usual or permanent place of residence at the time of the first field contact. The household includes babies, lodgers, boarders, employed persons who live in the housing unit, and persons who usually live in the household, but are away traveling or in a hospital. The household does not include persons who are normally members of the household but who were away from home as college students or members of the armed forces at the time of the contact.

The household does not include persons temporarily visiting with the household if they have a place of residence elsewhere, persons who take their meals with the household but usually lodge or sleep elsewhere, domestic employees or other persons employed by the household who do not sleep in the same housing unit, or persons who are former members of the household, but have since become inmates of correction or penal institutions, mental institutions, homes for the aged or needy, homes or hospitals for the chronically ill or handicapped, nursing homes, convents or monasteries, or other places in which residents may remain for long periods of time. By definition, the count of households is the same as the count of occupied housing units.

Householder: The person (or one of the persons) in whose name the home is owned or rented. If there is no lease or similar agreement or if the person who owns the home or pays the rent does not live in the housing unit, the householder is the person responsible for paying the household bills or generally in charge.

Housing Structure: One of four structure types used to categorize the building in which the housing unit was located.

A "single-family housing unit" refers to a structure that provides living space for one household or family. The structure may be



detached, attached on one side (semidetached), or attached on two sides. Attached houses are considered single-family houses as long as the house itself is not divided into more than one housing unit and has an independent, outside entrance. A single-family house is contained within walls that go from the basement to the roof.

A "house or building with two to four housing units" is divided into living quarters for two, three, or four families or households. This category also includes houses originally intended for occupancy by one family or for some other use that have since been converted to a separate dwelling for two to four families. Typical arrangements in these types of living quarters are separate apartments, downstairs and upstairs, or one apartment on each of three or four floors.

A "building with five or more housing units" refers to a building containing living quarters for five or more separate households or families.

A "mobile home or trailer" refers to a structure that has all the facilities of a dwelling unit, but is built on a movable chassis. It may be placed on a permanent or temporary foundation and contain one or more rooms. If additional rooms are added to the structure, it is still considered a mobile home.

Housing Unit: A structure or part of a structure where a household (family or individual) lives or could live. It has direct access from the outside of the building or through a common hall. Housing units do not include group quarters such as prisons, hospitals, dormitories, nursing homes, fraternity houses, or convents where 10 or more unrelated persons live. Hotel rooms, motel rooms, mobile homes, or trailers are considered housing units if occupied.

<u>Imputation</u>: Is a statistical method used to estimate the response to specific questions for which answers are missing. In general, it is a procedure for filling in missing data values.

<u>Insulation</u>: Refers to any material that, when placed between the interior of the dwelling and the outdoor environment, reduces the rate of heat loss to the environment or heat gain from the environment. The four forms of insulation, illustrated in a drawing shown to respondents, are listed below:

"Blankets or batts"--rolls or pieces of insulation that are nailed or stapled between the rafters or wall joists (beams). It is usually made of fiberglass or rock wool.

"Loose particles or loose fill"--loose insulation comes in a bag and is poured between joists (beams). Loose insulation can also be blown into open spaces. Loose fill can be glass fiber, rock-wool fibers, cellulose fiber, or vermiculite.

"Firm foam or firm plastic"--rigid boards (such as styrofoam) that can be cut to size and either edged, nailed, or glued into place.

"Sprayed-in urethane foam" is not shown separately as a category because the description used in the survey was inaccurate. Urethane foam is not sprayed in because it expands so much that confined areas may be broken apart by the force of the expanding substance. The more general category of "sprayed foam" will be used in the future to include all types of foam insulation.

"Floor insulation" is insulation between the bottom floor and the unheated basement or crawl space. Carpeting or carpeting pads are not insulation.



LPG Paid by Household: The household paid directly to the fuel supplier for all household uses of LPG such as for water heating, space heating, air conditioning, cooking (cooking on an outdoor grill is not counted), and operating appliances. (See Fuels.)

Main Cooking Fuel: Is the answer to the question: "Thinking of all the different kinds of cooking done here, including cooking in the oven, on a range, and with small appliances, which fuel is used most?"

Main Heating Equipment: (See description of specific heating equipment.) Main heating equipment, if temporarily out of order, is reported as the main heating equipment. If two types of heating equipment are used, the main equipment is the one used more. If both are used equally, the main equipment is the one that appears first on the list in the question.

Main Heating Fuel: The fuel mentioned by the respondent in response to Question 11: "What is the main fuel used for heating this house (apartment)?" Question 13 asked about the main heating fuel used to heat the house (apartment) in November 1980. This question does not apply to housing units not built by November 1980 or to housing units not heated in November 1981 (and assumed not to have been heated in November 1980).

Main Outside Wall Material: The predominant type of wall material. Houses built with two materials used in approximately the same amount are classified as having a "combination" of materials.

<u>Master Metered</u>: The method used by utility companies (e.g., electricity and natural gas) to measure the total volume of energy used by several individual customers collectively.

NIECS: The National Interim Energy Consumption Survey, the first developmental survey in the planned series of Residential Energy Consumption Surveys. The NIECS contacted 4,081 households in October and November 1978. Fuel suppliers provided data on consumption and expenditures for the period April 1978 through March 1979.

NOAA Division: One of the 344 weather divisions designated by the National Oceanic and Atmospheric Administration (NOAA) encompassing the 48 contiguous States. These divisions usually follow county borders to encompass counties with similar weather conditions. The NOAA division does not follow county borders when weather conditions vary considerably within a county such as is likely to happen when the county borders the ocean or contains high mountains. A State contains an average of seven NOAA divisions; a NOAA division contains an average of nine counties.

Nominal Dollars: is the value of dollars for the year specified. Sometimes called "current dollars," nominal dollars have not been modified to remove the effects of inflation. (See also Constant 1981 Dollars.)

Number of Rooms: Whole rooms are rooms such as living rooms, dining rooms, bedrooms, kitchens, lodger's rooms, finished basements or attic rooms, recreation rooms, and permanently enclosed sun porches that are used year-round. Rooms used for offices by a person living in the unit are included in this survey.



Bathrooms, halls, foyers or vestibules, balconies, closets, alcoves, pantries, strip or pullman kitchens, laundry or furnace rooms, unfinished attics or basements, open porches, and unfinished space used for storage are not included.

A partially divided room, such as a dinette next to a kitchen or a living room, is a separate room only if there is a partition from floor to ceiling, but not if the partition consists solely of shelves or cabinets. If a room is used by occupants of more than one unit, the room is included with the unit from which it is most easily reached.

Rooms are counted as year-round living space if they are completely enclosed with permanently installed walls, windows, and roof and can be heated.

Occupied Housing Unit: A unit someone was living in as his or her usual or permanent place of residence at the time of the first field contact.

Origin: Each respondent was asked, "Which of the groups on this exhibit best describes (HOUSEHOLDER)?" The groups included white, black or Negro, American Indian, Alaskan native, Asian, Pacific Islander. The word "race" was not used in either the questionnaire or the instructions.

Owner/Renter: Own/rent refers to the structure itself, not the land on which it is located. The household is classified "renter" even if the rent is paid by someone not living in the unit. "Rent free" means the unit is not owned or being bought and no money is paid or contracted for rent. Such units are usually provided in exchange for services rendered or as an allowance or favor from a relative or friend not living in the unit. "Rent free" also includes occupants who pay only for utilities. Unless shown separately, "rent free" households are grouped together with "renters."

Poverty: "Below 100 Percent of Poverty" defines a group of households with incomes below the poverty level defined by the Bureau of the Census. "Below 125 Percent of Poverty" defines a group of households with incomes below 125 percent of the poverty level. This group of the poor and near poor represents an alternative level for defining poverty. The definitions of poor are based on the number of family members in the household and family income. Because income data were collected by using categories of income (for example, \$3,000 to \$3,999), an exact match of Census thresholds could not be made. In addition, the RECS survey did not ask about the farm-nonfarm distinction, thus further limiting a closer match to Census thresholds that are lower for farm households.



Table G1. Definition of Poverty

Glossary (Continued)

	Below 100 Perc	ent of Poverty	Below 125 Percer	nt of Poverty
Number of Persons per Family	1980 RECS Income Range Less Than:	Census Threshold ^a	1980 RECS Income Range Less Than:	125 Percent Threshold
1	\$4,000	\$4,184	\$5,000	\$5,230
2	\$5,000	\$5,338	\$7,000	\$6,673
3	\$7,000	\$6,539	\$8,000	\$8,174
4	\$8,000	\$8,385	\$10,000	\$10,481
5	\$10,000	\$9,923	\$12,000	\$12,404
6	\$11,000	\$11,215	\$14,000	\$14,019
7 or Mor	e \$14,000	\$13,883	\$17,000	\$17,354

^aFigures from the U.S. Bureau of the Census, <u>Characteristics of the Population Below the Poverty Level: 1980 (Current Population Reports, Series P-60, No. 133) (July 1982, Table A2, 187).

Source: Energy Information Administration, 1981 Residential Energy Consumption Survey.</u>

The preceding definitions produced an estimate of 11.031 million poor households (below 100 percent of poverty). The Bureau of the Census estimate for March 1981 is 10.968 million poor households (below 100 percent of poverty).

<u>Portable Heater(s)</u>: Heaters that can be picked up and moved, including electric heaters that get current through a cord plugged into an electrical wall outlet. Portable space heaters are included in this category.

<u>Quadrillion</u>: Equals 1,000,000,000,000,000 or 10¹⁵.

Race: See Origin.

Receive Assistance in Energy Payments: Indicates the household received assistance from the Low-Income Energy Assistance Program (LIEAP) during the Fiscal Year 1981 that began in October 1980 and ended September 1981. The purpose of the program was to provide assistance to low-income households to offset the rising costs of home energy that are excessive in relation to household income. Further information on the program is found in U.S. Department of Health and Human Services, Low-Income Energy Assistance Program: Report to Congress for Fiscal Year 1981, August 31, 1982. Copies are available from

Office of Family Assistance Welfare Management Institute Transpoint Building 2100 Second Street, S.W. Washington, D.C. 20201



Note: There is a basic incongruity of time periods that the readers should note. Recipients of LIEAP were identified in this survey for the period October 1980 up to the time of the interview, which generally was November 1981. The fuel bills for these households, however, were for a somewhat later period--April 1981 through March 1982. Family income, on the other hand, covers the calendar year 1980. For an estimate of how these different time periods affect the figures on percentage of income spent on home energy, see Appendix C, "Limitations of the Data."

Residential: Refers to occupied housing units including mobile homes, single-family housing units (attached and detached), and apartments. The definition of housing units is the same as that used by the U.S. Bureau of the Census. (See <u>Household</u> and <u>Housing Unit</u> for further definition.)

Rooms: (See Number of Rooms.)

Refrigerators: With no freezer sections are included in the non-frost-free category. "Frost-free" means that frost does not build up on the insides of the freezer section or ice cube section.

Room Heaters Burning Gas, Oil, Kerosene: Are circulating heaters, convectors, radiant gas heaters, space heaters, or other nonportable room heaters that may or may not be connected to a flue, vent, or chimney.

Rural: Refers to places that had a population of less than 2,500 in the 1970 Census.

Screener Survey: The Residential Energy Consumption Survey that contacted 4,033 households in October and November 1979. Fuel suppliers provided data on consumption and expenditures for the period April 1979 through March 1980. This survey was named the Household Screener Survey because it was used to screen households for participation in the Household Transportation Panel.

<u>Secondary Heating Equipment</u>: Equipment used in addition to the main equipment. Description of the secondary heating equipment is the same as for the main heating equipment.

SMSA: A group of households located within Standard Metropolitan Statistical Areas (SMSA's) as defined in the 1970 Census. Except in New England, an SMSA is a county or group of contiguous counties that contain at least one city of 50,000 inhabitants or more, or "twin cities" with a combined population of at least 50,000. The contiguous counties are included in an SMSA if, according to certain criteria, they are essentially metropolitan in character and are socially and economically integrated with the central city. In New England, SMSA's consist of towns and cities, rather than counties. "Non-SMSA" refers to households not located within SMSA's as defined in the 1970 Census.

Square Feet: The floor area of the housing unit that is enclosed from the weather. Basements are included whether or not they contain finished space. Garages are included if they have a wall in common with the house. Attics that have finished space and attics that have some heated space are included. Crawl spaces are not included even if they are enclosed from the weather. Sheds and other buildings that are not attached to the house are not included. "Measured" square feet means that the measurement of the dimensions of the home did not rely on the respondent's reports but was an actual measurement by the interviewer using a metallic, retractable, 50-foot tape measure. For details on how the measurement was made and how the data were treated, see Appendix B.



"Heated square feet" are that portion of the measured square feet that is heated during most of the season. Rooms that are shut off during the heating season to save on fuel use are not counted as heated square footage. Attached garages that are unheated and unheated areas in basements and attics are not counted as heated square feet.

Steam or Hot Water System with Radiators or Convectors: A central heating system supplying steam or hot water to conventional radiators, baseboard radiators, heating pipes embedded in the walls or ceilings, or heating coils or equipment that are part of a combined heating/ventilating or heating/air-conditioning system. This category also includes radiant heating through hot water pipes inlaid in a concrete, slab floor.

Storm Doors and Windows: Storm doors made of double or insulating glass such as thermopane. Glass or plexiglass placed over a sliding glass door on either the exterior or interior is counted as a storm door. A plastic sheet covering the door is not counted as a storm door.

Storm windows are made of double or insulating glass, such as thermopane. Glass or plexiglass placed over windows on either the interior or exterior side are counted as storm windows. Plastic sheets covering windows are not counted.

Note: Responses of "don't know" for storm doors, windows, and/or attic insulation were treated the same as "do not have." For example, a respondent who indicated that his or her house had storm windows (some or all) and storm doors (some or all), but who did not know if it had attic insulation, was counted in the "have one or two of these" category.

 $\overline{\text{Urban}}$: Includes housing in places of 2,500 inhabitants or more as $\overline{\text{defined}}$ in the 1970 Census.

<u>Utilities Paid by Household</u>: Fuel suppliers or utility companies paid directly for <u>all</u> electricity, natural gas, fuel oil, kerosene, or liquefied petroleum gas used by the household. Households paying directly to the utility company were classified in this survey as "all paid." Households that paid directly for at least one but not all their fuels used and had at least one fuel charge included in their rent were classified as "some paid, some included in rent." Households in which all fuels used were included in their rent were classified as "all included in rent." Some households were classified as "other" if they did not fall into any of those three categories. Included are households for which fuel bills were paid by a department of social services or a relative and households that paid for some of their fuels used but paid for other fuels through some other arrangement.

Vacant Housing Unit: A housing unit not occupied at the time of the first field contact. An occupied seasonal or migratory housing unit is classified as vacant at the time of the first field contact when all persons had a usual place of residence elsewhere.

Water-Heating Fuel: The answer to the question, "Which fuel is used most for heating water?" Households that did not have running water in their home were also asked this question. The fuel is used for heating water for bathing and washing. The hot water may have been available anywhere in the same building as the respondent's living quarters. This may have been in a hallway, in a room used by several units in the building, in the basement, or in an enclosed porch, provided the respondent's household had access to it.



Windows: All windows in the year-round living space. Windows in the basement, attic, garage, and porch are counted only if these areas are heated. Windows in doors are not counted. Each window that opens separately is counted as one window. Windows fixed in place are also counted. Panes of glass in a large window are not counted individually unless they open separately. Skylights and stained-glass windows are counted as windows.

<u>Wood Burned</u>: Amount of wood burned in the home at <u>any time</u> in the past 12 months in a fireplace, stove, or furnace as reported by the respondent at the time of the interview. The figures for wood burned cover the last part of the 1980-1981 heating season and the first part of the 1981-1982 heating season.

A "cord" measures 4 feet by 4 feet by 8 feet and is approximately 128 cubic feet. A third of a cord measures 16 inches by 4 feet by 8 feet. The accompanying drawing of a cord and a rack (third of a cord) was shown to respondents.

Converting cords of wood into a Btu equivalent is an imprecise exercise. The number of cords burned by each household is imprecise, as the estimate requires the respondent to sum up the use of wood over a 12-month period during which time wood may have been added to the supply as well as removed. In addition to the recall errors inherent in this task, the estimates are subject to problems in definition and perception of what a cord is. The nominal cord as delivered to a suburban residential buyer may differ from the dimensions of the standard cord. This can occur because wood is most often cut between the length that makes a third of a cord (16 inches) and a half a cord (24 inches).

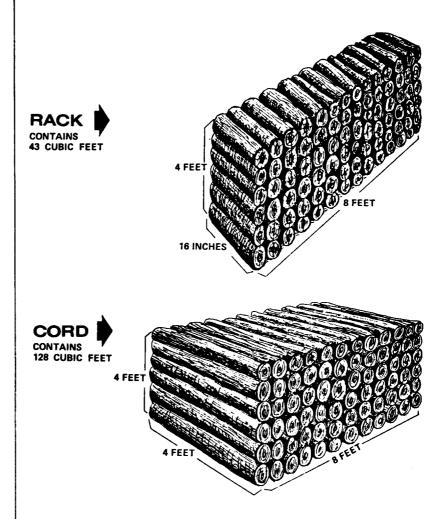
In other cases, wood is bought or cut in unusual units (e.g., pickup truck load or trunk load). Finally, volume estimates are difficult to make when the wood is not stacked up but is left in a pile.

Other factors that make it difficult to estimate the Btu value of the wood burned is that the amount of empty space between the stacked logs may vary from 12 to 40 percent of the volume. The moisture content may vary from 20 percent in dried wood to 50 percent in green wood. Moisture reduces the useful Btu output because energy is used to drive off the moisture. Finally, some tree species contain twice the Btu content of species with the lowest Btu value. Generally, hardwoods have greater Btu value than softwoods. Wood was converted to Btu at the rate of 20 million Btu per cord, which is a rough average taking all these factors into account.



Size and Volume Contained in a Rack and a Cord of Firewood

Glossary (Continued)



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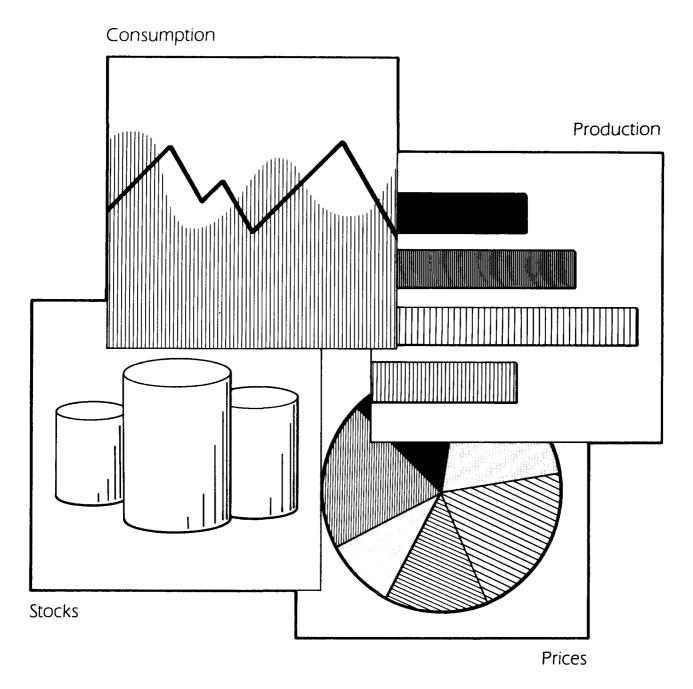
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- 9. Residential Energy Consumption Survey: Consumption and Expenditures, April 1980 Through March 1981, Part 2: Regional Data; June 1983, DOE/EIA-0321/2, GPO Stock No. 061-003-00319-2, \$7.00.
- 10. Residential Energy Consumption Survey: Housing Characteristics, 1981; August 1983, DOE/EIA-0314(81), GPO Stock No. 061-003-00330-3, \$6.50.
- 11. Residential Energy Consumption Survey: Consumption and Expenditures,
 April 1981 Through March 1982, Part 1: National Data; September 1983,
 DOE/EIA-0321/1(81), GPO Stock No. 061-003-00340-1, \$6.00.

Copies of the above reports are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Residential Energy Consumption Survey: Consumption Patterns of Household Vehicles, June 1979 to December 1980; April 1982, DOE/EIA-0319. Copies are available free of charge from the National Energy Information Center, 1P-048, Forrestal Building, U.S. Department of Energy, Washington, DC 20585.

Copies of the household data files on magnetic tape with name, address, and other potentially identifying data removed are available from the National Technical Information Service, Computer Products Division, 5285 Port Royal Road, Springfield, VA 22161. Telephone: 703-487-4808.

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