

Consumption and Expenditures, April 1982 Through March 1983





Regional Data

December 1984

**Energy Information Administration** Washington, D.C.



This publication is available from the Superintendent of Documents, U.S. Government Printing Office (GPO). Ordering information and purchase of this and other Energy Information Administration (EIA) publications may be obtained from the GPO or the EIA's National Energy Information Center (NEIC). Questions on energy statistics should be directed to the NEIC. Addresses and telephone numbers appear below.

National Energy Information Center, El-20 Energy Information Administration Forrestal Building Room 1F-048 Washington, D.C. 20585 (202) 252-8800

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

## Consumption and Expenditures, **April 1982** Through March 1983









Part 2: Regional Data

Published: December 1984

> This report was prepared by the Energy Information Administration, the independent statistical and analytical agency within the Department of Energy. The information contained herein should not be construed as advocating or necessarily reflecting any policy position of the Department of Energy or any other organization.

#### **Energy Information Administration**

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

Prepared by: Catherine Thompson DOE/EIA-0321/2(82) Distribution Category UC-98





#### **Contacts**

General information about Energy Information Administration data on energy consumption may be obtained from W. David Montgomery, Director, Office of Energy Markets and End Use (202-252-1617) and Lynda T. Carlson, Director of the Energy End Use Division (202-252-1112).

Specific information regarding the contents or preparation of this publication may be obtained from Nancy L. Leach, Chief of the Residential and Commercial Branch (202-252-1114). Wendel Thompson is the Survey Manager for the Residential Energy Consumption Survey (202-252-1119). Cassie Thompson was the principal author (202-252-1800). She may also be contacted regarding sampling errors. Robert Latta (202-252-1385) may be contacted regarding specific information concerning the sample design. The data collection agent for the report was Response Analysis Corporation, Princeton, New Jersey.



#### **Contents**

#### **Summary of Findings**

#### **Appendixes**

#### **Figures**

			Page
			1
No No So	rth Central		2 9 14 21
В.	Estimates of The Siz	onductede of U.S. Housing Units in Square	229
		ata	255 261
-		p	281
		and Divisions	285
	- · · · · · · · · · · · · · · · · · · ·	with Four Households Using Unusual	289
01			207
Glos	sary	•••••	297
1.		Distributions of Total Residential Energy Consumption and Expenditures,	
2.		1982	2
۷.		1981 and 1982	3
3.		Average Household Energy Expenditures,	5
4.	Northeast Region:	Average Residential Energy Prices, 1981 and 1982	5
5.		Average Household Energy Consumption	,
6.		by Census Division, 1982	6
7.		by Census Division, 1982	7
		by Census Division, 1982	7
8.		Average Residential Energy Prices by Census Division, 1982	8
9.	North Central Regio	n: Distributions of Total Residential Energy Consumption and Expenditures,	
		1982	9
10.	North Central Regio	n: Average Household Energy Consumption, 1981 and 1982	10
11.	North Central Regio	n: Average Household Energy Expenditures,	
		1981 and 1982	11
12.	North Central Regio	-	11
13.	North Central Region	n: Average Household Energy Consumption	11
14.	North Central Regio	by Census Division, 1982	12
	north Central Regio.	by Census Division, 1982	12
15.	North Central Regio	n: Distributions of Main Heating Fuels by Census Division, 1982	13
16.	North Central Region	n: Average Residential Energy Prices by	
		Census Division, 1982	13



Tables

			Page
17.	South Region:	Distributions of Total Residential Energy Consumption and Expenditures, 1982	1:
18.	South Region:	Average Household Energy Consumption, 1981 and 1982	1.7
19.	South Region:	Average Household Energy Expenditures, 1981 and 1982	1, 1
20. 21.	South Region: South Region:	Average Energy Prices, 1981 and 1982  Average Energy Consumption by Census Division,	1.5
	South Region.	1982	1.1
22.	South Region:	Average Energy Expenditures by Census Division, 1982	1.1.
23.	South Region:	Distributions of Main Heating Fuels by Census Division, 1982	
24.	South Region:	Average Energy Prices by Census Division,	
25.	West Region:	1982	20
26.	West Region:	Consumption and Expenditures, 1982	21.
27.	West Region:	Average Household Energy Expenditures, 1981 and	2.7
28.	West Region:	1982	2.3
29.		1982	23
	West Region:	Census Division, 1982	20
30.	West Region:	Average Household Energy Expenditures by Census Division, 1982	20
31.	West Region:	Distributions of Main Heating Fuels by Census Division, 1982	2.5
32.	West Region:	Average Residential Energy Prices by Census	
		Division, 1982	23
\$1.		ge Consumption of All Major Fuels, for th or Without Air Conditioning, 1982	Ţţ
1.		sidential Energy Consumption and -April 1982 Through March 1983	
	Northeast New Eng Middle A North Cen East No West No South A East So West So	es land Atlantic tral rth Central rth Central tlantic tuth Central	27 29 31 33 37 21 43 47 49
	Mountai	n	\$ 3





		Page
2.	U.S. Average Residential Energy Consumption of Major	
ź •	Fuels Used in the Household, by Main Heating Fuel Type	
	April 1982 Through March 1983 (Million Btu per Household)	
	where the first the contract th	
	United States	55
	Northeast	57
	New England	59
	Middle Atlantic	61
	North Central	63
	East North Central	65
	West North Central	67
	South	69
	South Atlantic	71
	East South Central	73
	West South Central	75
	West	77
	Mountain	79
	Pacific	81
3.	U.S. Average Residential Energy Expenditures for Major	
	Fuels Used in the Household, by Main Heating Fuel Type	
	April 1982 Through March 1983 (Dollars per Household)	
	United States	83
	Northeast	85
	New England	87
	Middle Atlantic	89
	North Central	91
	East North Central	93
	West North Central	95
	South	97
	South Atlantic	99
	East South Central	101
	West South Central	103
	West	105
	Mountain	107
	Pacific	109
4.	U.S. Average Residential Natural Gas Consumption and	
	ExpendituresApril 1982 Through March 1983	
	United States	111
	Northeast	113
	New England	115
	Middle Atlantic	117
	North Central	119
	East North Central	121
	West North Central	123
	South	125
	South Atlantic	127
	East South Central	129
	West South Central	131
	West	133
	Mountain	135



		Page
_		
5.	U.S. Average Residential Electricity Consumption and ExpendituresApril 1982 Through March 1983	
	Expendicates-April 1902 inrodgi match 1903	
	United States	139
	Northeast	4
	New England	143
	Middle Atlantic	145 147
	North Central	147
	East North Central	151
	South	153
	South Atlantic	155
	East South Central	157
	West South Central	0.59
	West	161
	Mountain	1.63
	Pacific	1.65
6.	U.S. Average Residential Fuel Oil or Kerosene Consumption	
	and Expenditures ~- April 1982 Through March 1983	
	United States	167
	Northeast	. 5.9
	New England	171
	Middle Atlantic	1.1.3
	North Central	1.15
	East North Central	11.7
	West North Central	€ 9
	South	131
	South Atlantic	183
	East South Central	185
	West South Central	187 189
	Mountain	191
	Pacific	133
	Tudgille IIII	
7.	U.S. Average Residential Liquefied Petroleum Gas	
	Consumption and ExpendituresApril 1982 Through March	
	1983	
		3 0 0
	United States,	1.95
	Northeast	1.97 1.99
	Middle Atlantic	201.
	North Central	203
	East North Central	205
	West North Central	207
	South	209
	South Atlantic	311
	East South Central	3.1.3
	West South Central	115
	West	217
	Mountain Pacific	119
	Pacific	: £ L
8.	U.S. Residential Wood ConsumptionApril 1982 Through March 1983	
	United Chaken	r. o.n
	United States	223
	Northeast	224 225
	South	226
	OOULH	



		Page
Table	28	
	Experience and Training of 1982 Residential Energy Consumption Survey Interviewers	232
A2.	Population Estimates Used as Controls in Ratio	007
A3. A4.	Estimates	237 239
	and Rotation Groups (Percentage of Eligible Housing Units)	241
A5.	1982 Residential Energy Consumption Survey Items Most Frequently Imputed	243
A6.	Changes Made in Household Records Based on Information	015
A7.	from Rental Agents	245
A8.	Households Supplied	246
A9.	Households Using the Fuel)	248
	Structure (Percent)	251
BT.	Completeness of Data on Square Footage of Housing Units	259
C1.	Comparison of Annual Heating Degree-Days Population Weighted by the National Oceanic and Atmospheric Administration (NOAA) and by the Residential Energy	237
C2.	Consumption Survey (RECS)	265
	by Housing Types	266
	Relative Standard Errors for Survey Estimates of the Number (Count) of Households	270
C4.	Clustering Factors for Calculation of Relative Standard Errors for Survey Estimates of the Number (Count) of	
C5.	Households	270
	Households)	271
C6.	Relative Standard Errors for Aggregate Statistics of Total Consumption and Expenditures for All Major Fuels, for Electricity, Natural Gas, Fuel Oil or Kerosene, LPG	
С7.	and for Consumption of Wood	273
C8.	Fuels, for Electricity, Natural Gas, Fuel Oil or Kerosene, LPG, and for Consumption of Wood	274
	for All Major Fuels, for Electricity, Natural Gas, Fuel	275
С9.	Oil or Kerosene, and LPG	275
C1	the 1982 Residential Energy Consumption Survey	276



#### **Summary of Findings**

This report is the third in a continuing series of reports lata from the 1982 Residential Energy Consumption Survey (RECS). Included here are data, at the Census region and division level, for consumption and expenditures of the major fuels used in the household—electricity, natural gas, fuel oil/kerosene, and liquefied petroleum gas (LPG). Data are also presented for wood consumption.

This report includes a summary of the highlights within each of the four Census regions: Northeast, North Central, South, and West. A map of the States included in a region may be found at the beginning of the summary for that region. Tables displaying the data by Census region and division follow the summary.

The other reports are Residential Energy Consumption Survey:
Housing Characteristics 1982, DOE/EIA-314(82), (Washington, D.C.,
August 1984) and Residential Energy Consumption Survey: Consumption
and Expenditures, April 1982 through March 1983, Part 1: National
Data, DOE/EIA-0321(82), Washington, D.C., December 1984. A series
of analytical reports is planned that will provide an in-depth
analysis of issues within each Census region over the 5 years of
the RECS surveys.

Throughout these summaries, "1982" refers to the period from April 1982 through March 1983, and "1981" refers to the period from April 1981 to March 1982

April 1981 to March 1982.

"Fuel oil/kerosene" is a category that combines data for fuel oil and kerosene.

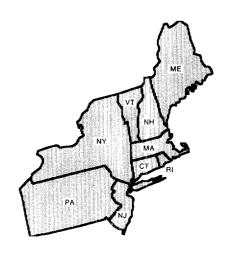


#### **Summary of Findings (Continued)**

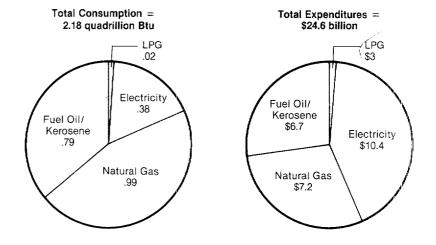
## Northeast Census Region

Total Energy Consumption and Expenditures

Figure 1. Northeast Region:
Distributions of Total
Residential Energy
Consumption and
Expenditures, 1982



The 18.0 million households in the Northeast consumed a total of  $2.18~(\pm.22)^4$  quadrillion Btu of electricity, natural gas, fuel oil/kerosene, and LPG in 1982. Expenditures for these fuels totaled \$24.6 ( $\pm2.5$ ) billion. As shown in Figure 1, natural gas consumption accounted for the largest portion of total energy consumption,  $45~(\pm1)$  percent, while money spent on electricity accounted for the largest portion of total energy expenditures,  $42~(\pm3)$  percent.



Source: Table 1, Energy Information Administration, 1982 Residential Energy Consumption Survey.

<sup>&</sup>lt;sup>4</sup>The ± value in parentheses after a statistic quoted in the text represents two standard errors of the statistic. The standard error is a measure of the variability of an estimate that is based on a sample survey. A 95 percent confidence interval can be approximated by taking twice the standard error and subtracting this value from the statistic to obtain the lower end of the interval. Adding twice the standard error to the statistic will give the upper end of the interval. A 95 percent confidence interval means that if we repeated the survey using all possible samples, 95 percent of all intervals calculated in this way should contain the true value of the statistic.

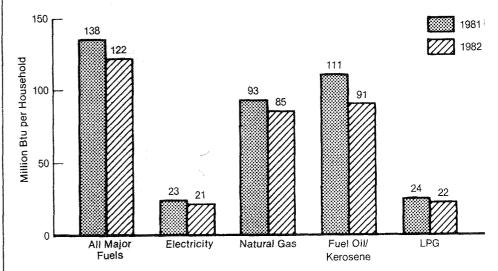


#### Consumption and Expenditures per Household

#### Figure 2. Northeast Region: Average Household Energy Consumption, 1981 and 1982

#### **Summary of Findings (Continued)**

Average consumption of all major fuels used in the household dropped in the Northeast from 138 (±8) million Btu in 1981 to 122 (±6) million Btu in 1982. Fuel oil/kerosene showed the largest decrease in per household consumption, declining from 111 (±7) million Btu in 1981 to 91 (±5) million Btu in 1982 (Figure 2).



Source: Energy Information Administration, 1981 and 1982 Residential Energy Consumption Surveys. For 1982 data, see Tables 2, 4, 5, 6, and 7.

One of the major determinants of residential energy consumption is the demand placed on heating by the weather, as measured by the number of heating degree-days (See NOTE TO THE READER, page \_\_\_). The weather was warmer in 1982 than in 1981, with an average of  $\overline{5,739}$  (±184) heating degree days, compared with 6,416 (±206) heating degree-days in 1981.

For a discussion of the heating degree-day concept, see the Glossary.

<sup>&</sup>lt;sup>5</sup>Throughout this report, average fuel consumption or expenditures for a specific fuel applies only to the households which the fuel, unless noted otherwise. To approximate the average for all major fuels, multiply the average for a specific fuel by the proportion of households that use each fuel, and add the totals for the four fuels.



#### **Summary of Findings (Continued)**

#### Note to the Reader: Weather and Annual Residential Energy Consumption

Clearly weather affects consumption. The relationship between heating degree-days, the commonly used measure of winter weather, and consumption of a space heating fuel is linear. But none of the space heating fuels is used exclusively for space heating. Fuels are listed below in descending order of the proportion used for space heating. The proportion varies from a high of 85 percent of fuel oil/kerosene used for space heating to a low of 11 percent of electricity used for space heating. Proportional changes in fuel use and heating degree-days between two time periods may, for example, be equal, but this should not be interpreted to mean that weather accounted for the whole change, although it clearly plays a part. Residential energy consumption statistics that are corrected for the effects of the weather (Btu per heating degree-day) are presented in Residential Energy Consumption and Expenditures by End Use (DOE/EIA-0458, in preparation).

	Households	Percent of Annual Fuel Use for
Fuel	Using Fuel	Space Heating
Fuel Oil/Kerosene	Main Heat	85
Fuel 0i1/Kerosene	A11	85
LPG	Main Heat	79
Natural Gas	Main Heat	69
LPG	A11	68
Natural Gas	A11	67
All Major Fuels	A11	56
Electricity	Main Heat,	no A/C 45
Electricity	Main Heat,	A/C 29
Electricity	A11	11

Note: "A/C" = air conditioning. "Main Heat" = households using the fuel as their main heating fuel. "All" = all households using the fuel.

Source: Energy Information Administration, 1980 Residential Energy Consumption Survey.

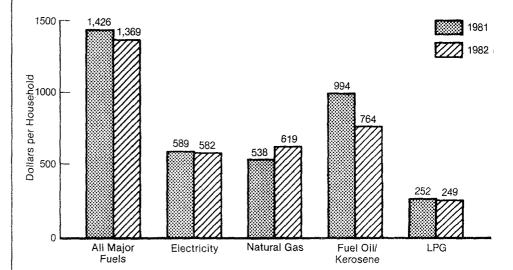
Average expenditures for all major fuels used in households in the Northeast did not change significantly from 1981 to 1982. Households spent an average of \$1,426 ( $\pm$ 68) in 1981 and \$1,369 ( $\pm$ 73) in 1982 for all major fuels. Average household expenditures for natural gas increased from an average of \$538 ( $\pm$ 34) in 1981 to \$619 ( $\pm$ 40) in 1982, while expenditures for fuel oil/kerosene decreased from an average of \$994 ( $\pm$ 62) in 1981 to \$764 ( $\pm$ 45) in 1982 (Figure 3). In addition, while average consumption of all major fuels dropped, prices for these fuels rose, from \$10.36 ( $\pm$ .42) per million Btu in 1981 to \$11.28 ( $\pm$ .45) per million Btu in 1982 (Figure 4).

These prices are derived by dividing a household's total energy expenditures for all major fuels by that same household's consumption of all major fuels. Prices for specific fuels are computed in the same manner.



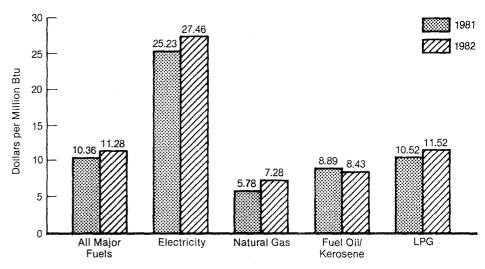
#### Figure 3. Northeast Region: Average Household Energy Expenditures, 1981 and 1982

#### **Summary of Findings (Continued)**



Source: Energy Information Administration, 1981 and 1982 Residential Energy Consumption Surveys. For 1982 data, see Tables 3, 4, 5, 6, and 7.

Figure 4. Northeast Region: Average Residential Energy Prices, 1981 and 1982



Source: Energy Information Administration, 1981 and 1982 Residential Energy Consumption Surveys. For 1982 data, see Tables 4, 5, 6, and 7.

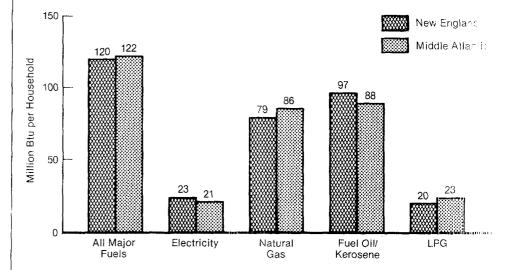


#### New England and Middle Atlantic Census Divisions

#### Figure 5. Northeast Region: Average Household Energy Consumption by Census Division, 1982

#### **Summary of Findings (Continued)**

Although the weather in 1982 was colder in the New England division, with 6,318 (±271) heating degree-days than in the Middle Atlantic division, with 5,562 (±207) heating degree-days, average consumption of all major fuels did not differ significantly between the two divisions, with averages of 120 (±11) million Btu and 122 (±7) million Btu, respectively (Figure 5). Note, however, that wood is not included in the consumption of all major fuels (see "wood consumed" in the Glossary). If wood consumption was averaged over all households in each division and added to these figures, average energy consumption would in fact be higher in the colder New England division. Households in the New England division consumed more wood, consuming an average of 16 (±4) million Btu of wood energy (averaged over all households in the division), compared with an average of 12 (±2) million Btu consumed in households in the Middle Atlantic.



Source: Energy Information Administration, 1982 Residential Energy Consumption Survey. See Tables 2, 4, 5, 6, and 7

Average energy expenditures in 1982 were similar in the two divisions. Households in New England spent an average of \$1,395\$ ( $\pm 130$ ) for all major fuels, and households in the Middle Atlantic spent \$1,361\$ ( $\pm 80$ ) (Figure 6).

The data from the New England and Middle Atlantic Census divisions differ in the distributions of main heating fuels (Figure 7). A larger percentage of homes in the New England division use wood as their main heating fuel (12 (±4) percent), than in the Middle Atlantic division (4 (±2) percent). In New England, 51 (±10) percent of all households reported using fuel oil/kerosene as the main heating fuel, compared with 39 (±5) percent of all households in the Middle Atlantic. The percentage of households using natural gas as the main heating fuel was 28 (±7) percent in the New England States and 46 (±5) percent in the Middle Atlantic States.

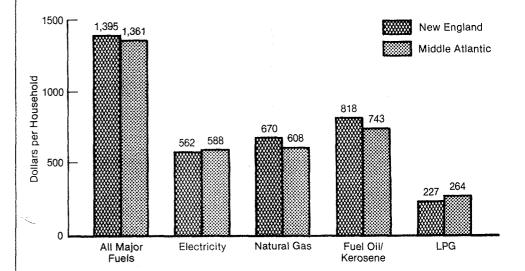
 $<sup>^{8}</sup>$ The Btu value of wood is approximately 20 million Btu per cord.



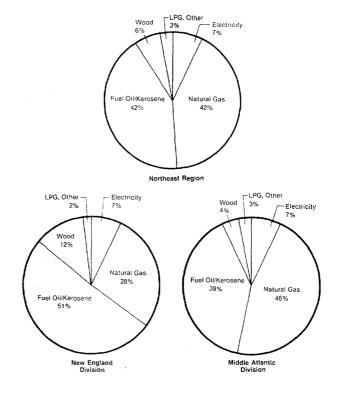
#### Figure 6. Northeast Region: Average Household Energy Expenditures by Census Division, 1982

# Figure 7. Northeast Region: Distributions of Main Heating Fuels by Census Division, 1982

#### **Summary of Findings (Continued)**



 $Source: \ Energy\ Information\ Administration,\ 1982\ Residential\ Energy\ Consumption\ Survey.\ See\ Tables\ 3,\ 4,\ 5,\ 6,\ and\ 7.$ 



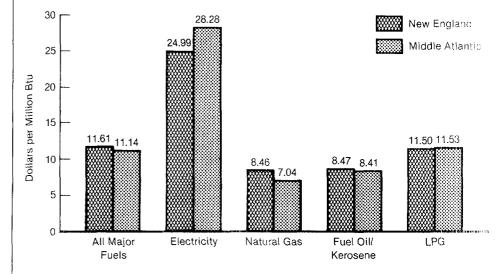
Source: Energy Information Administration. 1982 Residential Energy Consumption Survey.



#### **Summary of Findings (Continued)**

Average prices for all major fuels did not differ significantly between the two divisions (Figure 8). Households in New England paid an average of \$11.61 (±70) per million Btu, and households in the Middle Atlantic paid \$11.14 (±.48) per million Btu. Households in the Middle Atlantic division paid more for their electricity, \$28.28 (±1.35) per million Btu, than households in any other Census division. The next higher price paid for electricity was in the New England division, with households paying \$24.99 (±1.61) per million Btu. The average price for natural gas, however, was higher in New England than in the Middle Atlantic division, with averages of \$8.46 (±.60) per million Btu and \$7.04 (±.28) per million Btu, respectively.

Figure 8. Northeast Region: Average Residential Energy Prices by Census Division, 1982



Source: Energy Information Administration, 1982 Residential Energy Consumption Survey. See Tables 4, 5, 6, and 7.

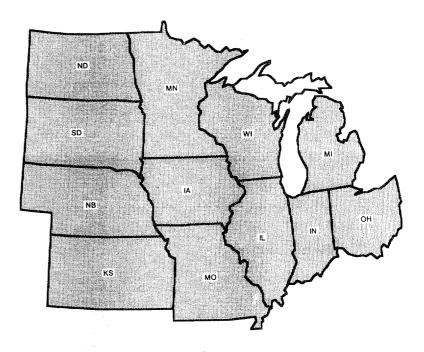


## North Central Census Region

#### Total Energy Consumption and Expenditures

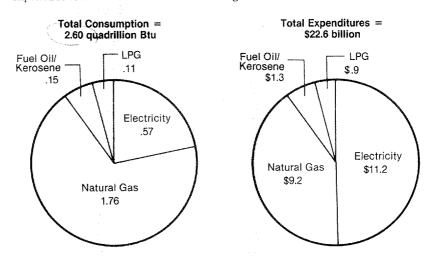
#### Figure 9. North Central Region: Distributions of Total Residential Energy Consumption and Expenditures, 1982

#### **Summary of Findings (Continued)**



Total Energy Consumption and Expenditures

The 21.3 million households in the North Central consumed a total of 2.60 ( $\pm$ .24) quadrillion Btu of electricity, natural gas, fuel oil/kerosene, and LPG in 1982. Expenditures for these fuels totaled \$26.6 ( $\pm$ 2.5) billion (Figure 9). Electricity and natural gas accounted for, respectively, 22 ( $\pm$ 1) percent and 68 ( $\pm$ 2) percent of total consumption, and 50 ( $\pm$ 3) percent and 41 ( $\pm$ 1) percent of total expenditures in the North Central region.



Source: Table 1. Energy Information Administration, 1982 Residential Energy Consumption Survey.



## Consumption and Expenditures per

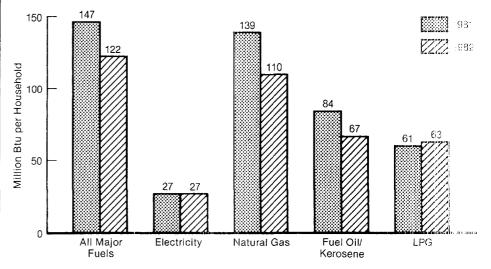
Household

#### Figure 10. North Central Region: Average Household Energy Consumption, 1981 and 1982

#### **Summary of Findings (Continued)**

Average consumption of all major fuels used in the household dropped in the North Central from 147 ( $\pm 8$ ) million Btu in 1981 to 122 ( $\pm 6$ ) million Btu in 1982 (Figure 10). Specifically, decreases occurred in per household natural gas and fuel oil/kerosene consumption.

The predominant heating fuel in the North Central is natural gas, with approximately 73 (±7) percent of all households reporting it as the main heating fuel. Average natural gas consumption dropped from 139 (±9) million Btu in 1981 to 110 (±6) million Btu in 1982. Fuel oil/kerosene consumption showed a decrease as well, from 84 (±10) million Btu in 1981 to 67 (±4) million Btu in 1982. These differences can be partially explained by changes in the weather. The weather in the North Central was much warmer in 1982 than in 1981, with the average number of heating degree-days dropping from 7,014 (±183) in 1981 to 6,109 (±165) in 1982.



Source: Energy Information Administration, 1981 and 1982 Residential Energy Consumption Surveys. For 1982 data see Tables 2, 4, 5, 6, and 7.

Average expenditures for all major fuels was essentially the same in the North Central during both years, with each household spending  $\$1,042\ (\pm47)$  in 1981 and  $\$1,060\ (\pm53)$  in 1982 (Figure 11). The decrease in consumption from 1981 to 1982 was offset by an increase in prices.

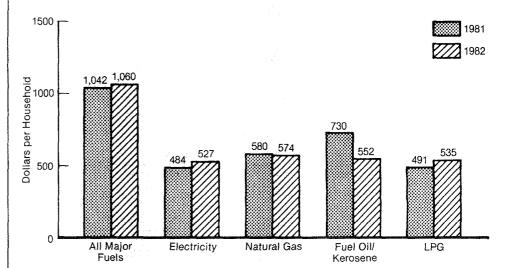
Electricity prices rose from \$17.93 ( $\pm$ .78) per million Btu in 1981 to \$19.55 ( $\pm$ .84) per million Btu in 1982 (Figure 12). Natural gas prices also rose during this period, from \$4.16 ( $\pm$ .14) per million Btu to \$5.21 ( $\pm$ .17) per million Btu. Fuel oil/kerosene prices dropped from \$8.71 ( $\pm$ .06) per million Btu in 1981 to \$8.28 ( $\pm$ .08) per million Btu in 1982. The net effect was an overall increase in energy prices. Each household spent an average of \$7.08 ( $\pm$ .27) per million Btu for energy in 1981, compared with \$8.69 ( $\pm$ .33) per million Btu in 1982.



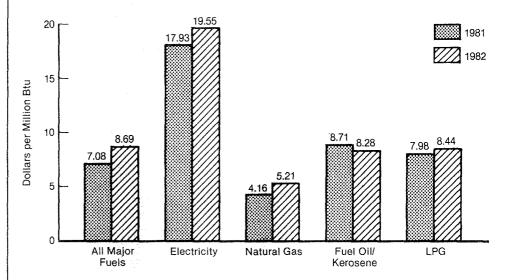
#### Figure 11. North Central Region: Average Household Energy Expenditures, 1981 and 1982

#### Figure 12. North Central Region: Average Residential Energy Prices, 1981 and 1982

#### **Summary of Findings (Continued)**



Source: Energy Information Administration, 1981 and 1982 Residential Energy Consumption Surveys. For 1982 data, see Tables 3, 4, 5, 6, and 7.



Source: Energy Information Administration, 1981 and 1982 Residential Energy Consumption Surveys. For 1982, see Tables 4, 5, 6, and 7.

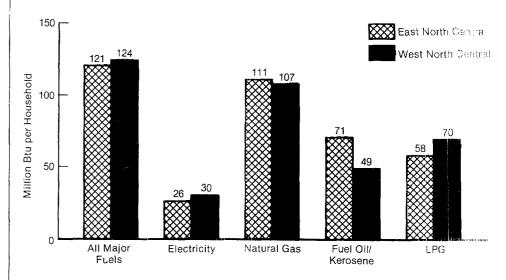


#### **Summary of Findings (Continued)**

East North Central and West North Central Census Divisions

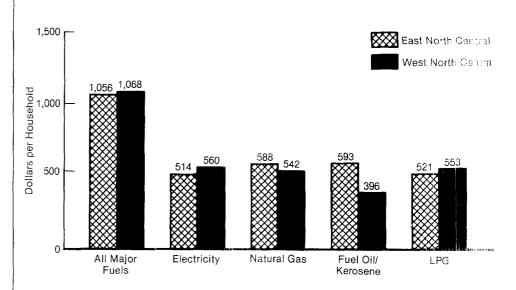
The data for average consumption and expenditures, distributions of main heating fuels, and prices for the two Census divisions in the North Central are shown in Figures 13 through 16. There were no significant differences between the two divisions in 1982.

Figure 13. North Central Region: Average Household Energy Consumption by Census Division, 1982



Source: Energy Information Administration, 1982 Residential Energy Consumption Survey. See Tables 2, 4, 5, 6, and 7

Figure 14. North Central Region: Average Household Energy Expenditures by Census Division, 1982



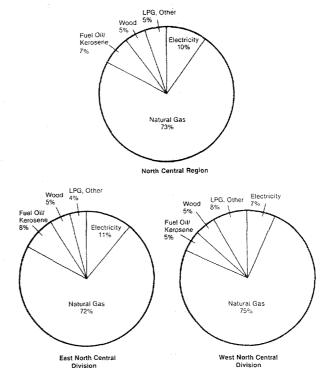
Source: Energy Information Administration, 1982 Residential Energy Consumption Survey, See Tables 3, 4, 5, 6, and 7



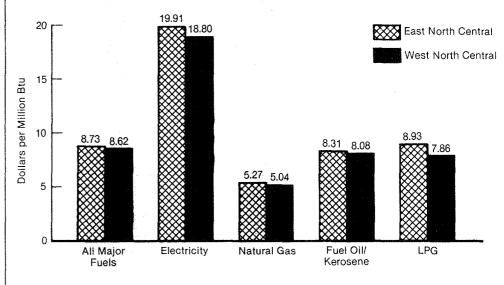
#### Figure 15. North Central Region: Distributions of Main Heating Fuels by Census Division, 1982

#### Figure 16. North Central Region: Average Residential Energy Prices by Census Division, 1982

#### **Summary of Findings (Continued)**



Source: Energy Information Administration, 1982 Residential Energy Consumption Survey.



Source: Energy Information Administration, 1982 Residential Energy Consumption Survey. See Tables 4, 5, 6, and 7.



#### South Census Region

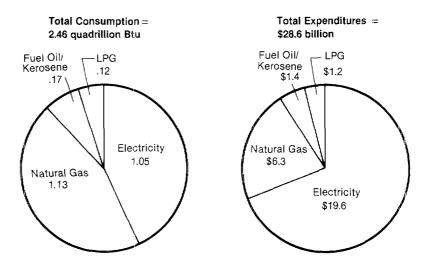
#### Total Energy Consumption and Expenditures

# Figure 17. South Region: Distributions of Total Residential Energy Consumption and Expenditures, 1982

#### **Summary of Findings (Continued)**



The 28.1 million households in the South consumed a total of 2.46 ( $\pm$ .20) quadrillion Btu of electricity, natural gas, fuel oil/kerosene, and LPG in 1982. Expenditures for these fuels totaled \$28.6 ( $\pm$ 2.4) billion (Figure 17). Electricity and natural gas shared roughly equal portions of the total consumption of major fuels in the South--1.05 ( $\pm$ .10) quadrillion Btu and 1.13 ( $\pm$ .11) quadrillion Btu, respectively. The majority of expenditures, however, was for electricity--\$19.6 ( $\pm$ 1.9) billion or approximately 70 ( $\pm$ 4) percent of the total spent.



Source: Table 1. Energy Information Administration, 1982. Residential Energy Consumption Survey.

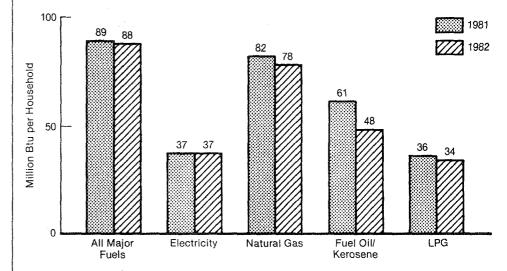


# Consumption and Expenditures per Household

#### Figure 18. South Region: Average Household Energy Consumption, 1981 and 1982

#### **Summary of Findings (Continued)**

Average consumption of all major fuels used in the household was about the same both years in the South, with averages of 89 ( $\pm$ 5) million Btu in 1981 and 88 ( $\pm$ 4) million Btu in 1982 (Figure 18). The weather was similar during both years, with averages of 3,093 ( $\pm$ 193) heating degree-days in 1981 and 3,032 ( $\pm$ 200) heating degree-days in 1982. Average fuel oil/kerosene consumption dropped from 61 ( $\pm$ 7) million Btu in 1981 to 48 ( $\pm$ 5) million Btu in 1982.



Source: Energy Information Administration, 1981 and 1982 Residential Energy Consumption Surveys. For 1982 data, see Tables 2, 4, 5, 6, and 7.

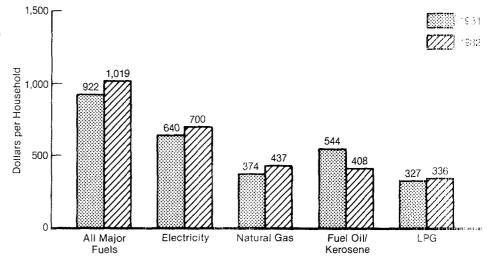


#### **Summary of Findings (Continued)**

1982, an increase over the \$922 (±37) spent in 1981 (Figure 19). This rise in expenditures is due largely to price increases, since consumption of all major fuels remained constant from 1981 to 1982. Prices for fuel oil/kerosene decreased from \$8.93 (±.06) per million Btu to \$8.51 (±.067) per million Btu. Natural gas prices rose from \$4.59(±) per million Btu to \$5.62 (±.19) per million Btu. Electricity prices also showed an increase from \$17.23 (±.68) per million Btu in 1981 to \$18.73 (±.75) per million Btu in 1982. LPG prices did not change significantly during the same period. Overall, the average price for all major fuels rose from \$10.37 (±.37) per million Btu in 1981 to \$11.63 (±.41) per million Btu in 1982 (Figure 20).

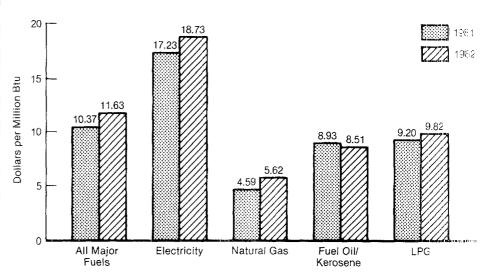
Households in the South spent an average of \$1,019 (±45) for energy in

Figure 19. South Region: Average Household Energy Expenditures, 1981 and 1982



Source: Energy Information Administration, 1981 and 1982 Residential Energy Consumption Surveys. For 1982 data see Tables 3, 4, 5, 6, and 7.

Figure 20. South Region: Average Energy Prices, 1981 and 1982



Source: Energy Information Administration, 1981 and 1982 Residential Energy Consumption Survey. For 1982 data, sell Tables 4, 5, 6, and 7.

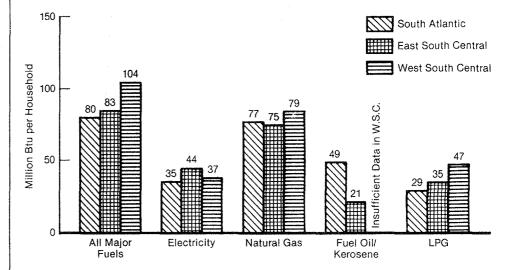


South Atlantic, East South Central, and West South Central Census Divisions

Figure 21. South Region:
Average Energy
Consumption by Census
Division, 1982

#### **Summary of Findings (Continued)**

The weather in the West South Central division was warmer than in the other divisions in the South. The West South Central averaged 2,553 ( $\pm 291$ ) heating degree-days, compared with 3,560 ( $\pm 335$ ) in the East South Central division and 3,108 ( $\pm 252$ ) in the South Atlantic division. Despite the warmer weather in the West South Central, average consumption of all major fuels was higher than for the other divisions in the South--104 ( $\pm 7$ ) million Btu compared with 83 ( $\pm 7$ ) million Btu in the East South Central, and 80 ( $\pm 5$ ) million Btu in the South Atlantic (Figure 21).



Source: Energy Information Administration, 1982 Residential Energy Consumption Survey. See Tables 2, 4, 5, 6, and 7.



Table S1. South: Average Consumption of All Major Fuels, For Households With or Without Air Conditioning, 1982

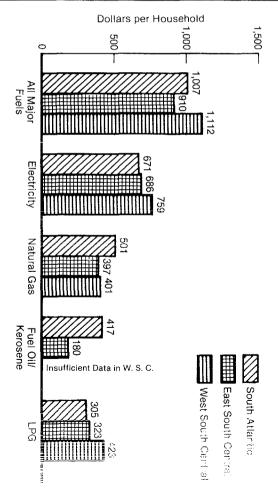
Figure 22. South Region:
Average Energy
Expenditures by Census
Division, 1982

# Summary of Findings (Continued)

who use or do not use air conditioning. Weather information is also included for comparison. Note that average consumption is higher in households in the West South Central that use air conditioning than households in any other category in Table S1. Central, as shown by the number of cooling degree days, is higher than for the other two divisions. Table SI shows the average consumption of all major fuels used in the household, for households who use or do not use air conditioning. Weather information is also One factor that may have influenced the differences in average consumption among the Census divisions in the South is the use of air conditioning. The demand for air conditioning in the West South

Census Division	Use Air Conditioning	Number of Households (Millions)	Number of Average Households Consumption (Millions) (Million Btu)	Heating Degree- Days	Ccoling Degree- Days
South Atlantic	No	4.4 9.5	71 ( <u>+</u> 6) 84 ( <u>+</u> 6)	3691 2840	1139 1739
East South Central	No Yes	1.0	61 (+10) 88 ( <u>+</u> 8)	3653 3540	1335
West South Central	No Yes	1.4 7.1	$76(\pm 11)$ $109(\pm 8)$	2653 2533	12 12 52 52 51 52 51 52 52 53

Consumption Survey. Source: Energy Information Administration. 1982 Residential Energy



Source: Energy Information Administration, 1982 Residential Energy Consumption Survey. See Tables 3, 4, 5, 6, and 7

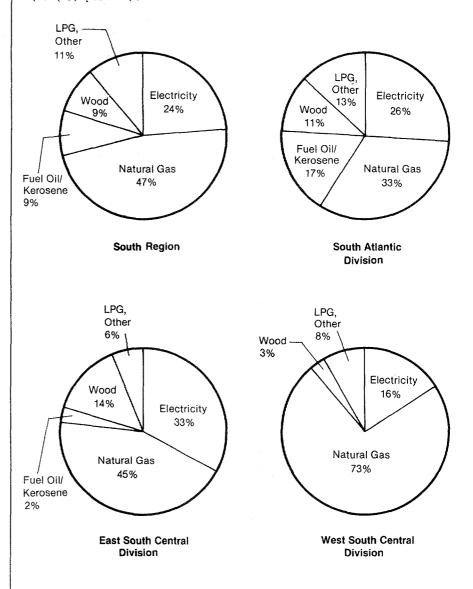


# Figure 23. South Region: Distributions of Main Heating Fuels by Census Division, 1982

#### **Summary of Findings (Continued)**

Because of the high average consumption in the West South Central, average energy expenditures were also high, at \$1,112 (±79) (Figure 22). In the South Atlantic, average expenditures were \$1,007 (±59), and in the East South Central, households spent an average of \$910 (±75). Households in the South Atlantic division, however, paid the highest price for energy in 1982 (Figure 24). The average household in the South Atlantic paid \$12.60 (±.54) per million Btu for all major fuels used in the home, in the East South Central division, households paid \$10.91 (±.61) per million Btu, followed by households in the West South Central division with paid \$10.71 (±.53) per million Btu.

As shown in Figure 23, one outstanding difference between the divisions in the South is the overwhelming proportion of households in the West South Central whose main heating fuel is natural gas (73 (±5) percent).

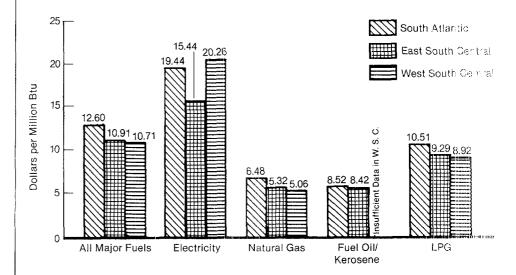


Source: Energy Information Administration, 1982 Residential Energy Consumption Survey.



#### Figure 24. South Region: Average Energy Prices by Census Division, 1982

#### **Summary of Findings (Continued)**



Source: Energy Information Administration, 1982 Residential Energy Consumption Survey. See Tables 4, 5, 6, and 1



#### **West Census Region**

#### Total Energy Consumption and Expenditures

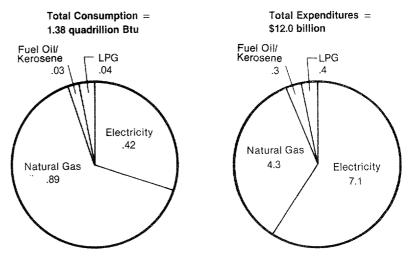
Figure 25. West Region:
Distributions of Total
Residential Energy
Consumption and
Expenditures, 1982

#### **Summary of Findings (Continued)**



Total Energy Consumption and Expenditures

The 16.5 million households in the West consumed a total of 1.38 ( $\pm$ .15) quadrillion Btu of electricity, natural gas, fuel oil/kerosene, and LPG in 1982. Expenditures for these fuels totaled \$12.0 ( $\pm$ 1.3) billion (Figure 25). Natural gas and electricity accounted for, respectively, 64 ( $\pm$ 2) percent and 30 ( $\pm$ 2) percent of total consumption, and 36 ( $\pm$ 1) percent and 59 ( $\pm$ 4) percent of total expenditures in the West.



Source: Table 1. Energy Information Administration. 1982 Residential Energy Consumption Survey.

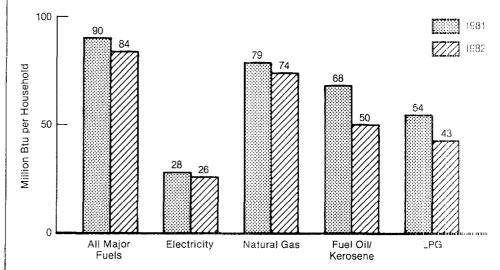


# Consumption and Expenditures per Household

#### Figure 26. West Region: Average Household Energy Consumption, 1981 and 1982

#### **Summary of Findings (Continued)**

Average consumption of all major fuels used in the household was 84 ( $\pm$ 5) million Btu in the West in 1982 which did not differ significantly from the 90 ( $\pm$ 6) million Btu consumed in 1981 (Figure 26). The weather in 1982, with an average of 3,805 ( $\pm$ 234) heating degree-days, was similar to the weather in 1981, with 3,715 ( $\pm$ 240) heating degree-days. Average expenditures were \$731 ( $\pm$ 40) in 1982, which also did not differ significantly from the \$720 ( $\pm$ 35) spent in 1981 (Figure 27). The differences in energy prices shown in Figure 28 were also not significant.



Source: Energy Information Administration, 1981 and 1982 Residential Energy Consumption Surveys. For 1982 data . 166 Tables 2, 4, 5, 6, and 7.



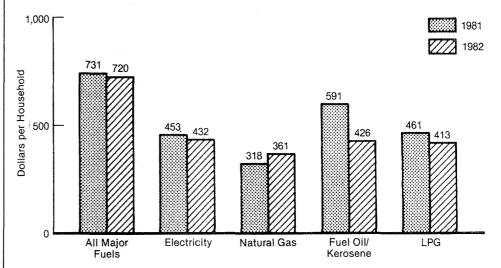
#### Figure 27. West Region: Average Household Energy Expenditures, 1981 and 1982

# Figure 28. West Region:

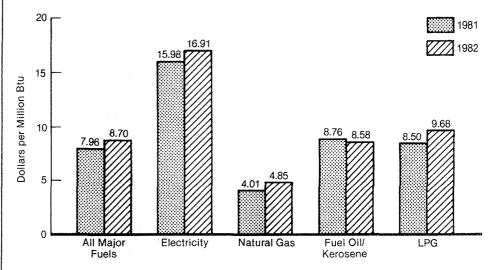
**Average Residential Energy** 

Prices, 1981 and 1982

#### **Summary of Findings (Continued)**



Source: Energy Information Administration, 1981 and 1982 Residential Energy Consumption Surveys. For 1982 data, see Tables 3, 4, 5, 6, and 7.



Source: Energy Information Administration, 1981 and 1982 Residential Energy Consumption Survey. For 1982 data, see Tables 4, 5, 6, and 7.



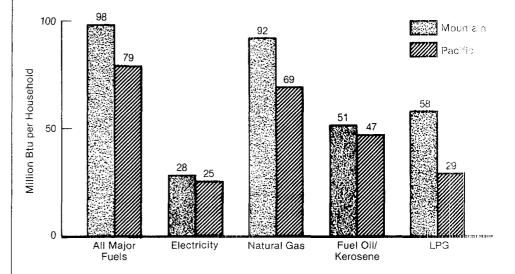
## Mountain and Pacific Census Divisions

#### Figure 29. West Region: Average Household Energy Consumption by Census Division, 1982

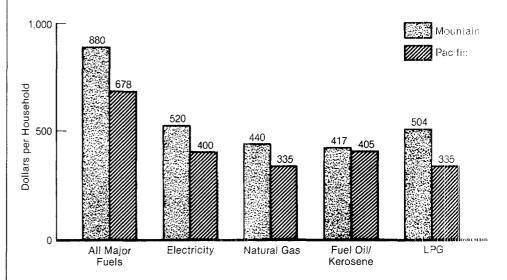
#### Figure 30. West Region: Average Household Energy Expenditures by Census Division, 1982

#### **Summary of Findings (Continued)**

The demand placed on heating by the weather was greater in the Mountain division with 5,136 ( $\pm$ 320) heating degree-days, than in the Pacific with 3,332 ( $\pm$ 262) heating degree-days. Households in the Mountain Census division consumed an average of 98 ( $\pm$ 9) million Btu in 1982, more than the 79 ( $\pm$ 5) million Btu consumed per household in the Pacific (Figure 29). Average consumption of natural gas was higher in the Mountain division, with 92 ( $\pm$ 11) million Btu, than in the Pacific, with 65 ( $\pm$ 5) million Btu. Natural gas is the predominant heating fuel in both divisions (Figure 31).



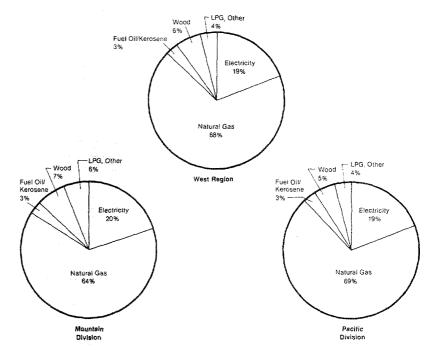
Source: Energy Information Administration, 1982 Residential Energy Consumption Survey. See Tables 2, 4, 5, 3, and 3,





# Figure 31. West Region: Distributions of Main Heating Fuels by Census Division, 1982

#### **Summary of Findings (Continued)**



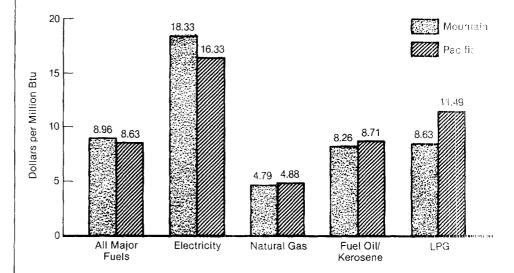
Source: Energy Information Administration. 1982 Residential Energy Consumption Survey.

Partly because of higher consumption, households in the Mountain division spent an average of \$880(+81) for all major fuels, whereas households in the Pacific division only spent \$678 ( $\pm42$ ) (Figure 30). Another factor influencing this difference is the higher electricity prices paid by households in the Mountain division (Figure 32). Households in the Mountain division paid \$18.33 ( $\pm1.18$ ) per million Btu as compared to \$16.33 ( $\pm.81$ ) per million Btu in the Pacific.



#### Figure 32. West Region: Average Residential Energy Prices by Census Division, 1982

#### **Summary of Findings (Continued)**



Source: Energy Information Administration, 1982 Residential Energy Consumption Survey. See Tables 4, 5, 6, and 7.



Table 1. U.S.
Residential Energy
Consumption and
Expenditures—April
1982 Through March
1983, United States



							1	n,	j 		
		     ALL MAJ 	OR FUELS		URAL AS	 	RICITY	FUEL   KERC	OIL OR SENE	PETR	EFIED OLEUM AS
CHARACTERISTICS	HOLDS (MIL- LIONS)	SUMED (QUAD-	EXPEND-   ITURES  (BILLION  DOLLARS)	CON- SUMED (QUAD-	I ITURES (BILLION [DOLLARS)	CON- SUMED QUAD- RILLION	EXPEND-   ITURES  (BILLION  DOLLARS)	CON- SUMED QUAD-	EXPEND-   ITURES  (BILLION  DOLLARS)	CON- SUMED (QUAD-	TOTAL  EXPEND-   ITURES  (BILLION  DOLLARS)
Ross.							<u> </u>	<u> </u>			
TOTAL HOUSEHOLDS	83.8	8.62	87.8	4.77	27.1	2.42	48.4	1.14	9.6	0.29	2.7
AREA TYPE METROPOLITAN CENTRAL CITY OUTSIDE CENTRAL CITY NON-METROPOLITAN	63.2 29.4 33.8 20.6	6.73 3.15 3.58 1.89	68.2 30.4 37.8 19.6	3.92 2.01 1.91 .86	22.7 11.5 11.1 4.4	1.78 .75 1.03 .65	36.7 15.5 21.2 11.7	.94 .39 .55	7.9 3.3 4.6 1.7	.10 .01 .09	1.0 .1 .9 1.7
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	68.9	7.26	73.7	4.02	22.3	2.15	41.9	.83	7.0	.26	2.5
SOME, NONE, OTHER PAID BY HOUSEHOLD	14.8	1.36	14.1	.75	4.7	.28	6.5	.31	2.6	.03	.2
TYPE OF HOUSING STRUCTURE MOBILE HOMESINGLE FAMILY	3.7 57.7 22.4	.27 6.47 1.89	3.2 64.7 19.9	.08 3.63 1.07	.4 20.0 6.7	.11 1.85 .46	2.1 36.1 10.2	.03 .76 .35	.3 6.4 3.0	.05 .23 .01	.5 2.2 .1
NUMBER OF ROOMS 1 TO 3	10.8 36.6 36.4	.72 3.28 4.62	8.1 33.2 46.6	.35 1.82 2.60	2.2 10.1 14.7	.20 .92 1.30	4.4 18.3 25.7	.15 .41 .58	1.3 3.5 4.8	.01 .13 .14	.1 1.3 1.3
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	30.2 35.6 17.9	2.29 3.71 2.62	24.0 38.1 25.7	1.23 2.01 1.53	7.2 11.3 8.6	.64 1.11 .67	13.1 21.7 13.5	.32 .46 .36	2.7 3.9 3.0	.10 .12	1.0 1.2 .6
YEAR HOUSE BUILT  BEFORE 1950	30.6 40.2 12.9	3.48 4.08 1.07	32.8 42.2 12.8	2.02 2.32 .44	11.8 12.9 2.4	.66 1.25 .51	14.1 24.9 9.4	.68 .38 .07	5.8 3.2 .6	.12 .12 .05	1.1 1.2 .4
OWN/RENT OWN	53.9 29.8	6.08 2.55	62.1 25.7	3.30 1.48	18.5 8.6	1.76 .66	34.9 13.6	0.80 .34	6.7 2.9	0.22	2.0
1981 FAMILY INCOME LESS THAM \$10,000. \$10,000 TO \$19,999.	26.3 24.8 7 12.4	2.33 2.44 1.34 2.52	23.0 24.8 13.6 26.4	1.28 1.33 .74 1.43	7.3 7.5 4.2 8.1	.57 .68 .40	11.5 13.5 7.8 15.6	.36 .35 .16	3.0 3.0 1.3 2.3	.12 .08 .04	1.1 .8 .4 .4
TOTAL BELOW 100 PERCENT OF POVERTY LINE	12.1	1.11	10.9	.64	3.6	.27	5.4	.15	1.3	.06	.5
OF POVERTY LINE	17.4	1.61	15.9	.90	5.1	.39	7.9	.24	2.0	.08	.8
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS. 35 TO 59 YEARS. 60 YEARS AND OVER 60.69.	26.2 34.0 23.6	2.35 3.90 2.38	24.4 39.9 23.4	1.30 2.18 1.30	7.3 12.3 7.4	.74 1.12 .56	14.4 22.5 11.5	.24 .47 .43	2.1 3.9 3.6	.07 .13 .09	.7 1.2 .8



Table 1. (Continued)
United States

	NUMBER	ALL MAJOR FUELS			URAL AS	  -   ELECT	RICITY	FUEL     KERO	OIL OR SENE	PETR	EFIED OLEUM AS
HOUSEHOLD CHARACTERISTICS		(GUAD-	TOTAL EXPEND- ITURES (BILLION DOLLARS)	CON- SUMED (QUAD-		CON- SUMED (QUAD-	TOTAL EXPEND- ITURES (BILLION DOLLARS)	CON- SUMED (QUAD-		CON- SUMED QUAD-	
Pow											
HOUSEHOLD MEMBERS ONE PERSON 2 TO 4 PEOPLE 5 OR MORE PEOPLE MAIN HEATING FUEL NATURAL GAS ELECTRICITY FUEL OIL OR KEROSENE WOOD OTHER OR NONE HOT WATER FUEL NATURAL GAS ELECTRICITY FUEL OIL OR KEROSENE OTHER	19.3 54.1 10.4 47.5 13.4 12.0 3.8 5.6 1.5	1.54 5.72 1.36 5.62 .63 1.51 .33 .30 .05	15.1 58.6 14.1 48.0 13.1 17.3 4.1 4.4 1.0	.87 3.15 .75 4.53 .08 .12 Q .04 .01 4.37 .35 .06	5.1 17.9 4.1 25.2 .4 1.1 Q .2 Q	.35 1.67 .41 1.07 .73 .29 .10 .19 .04	7.3 33.0 8.2 22.7 12.5 6.8 2.1 3.5 .8	.26 .73 .14 .01 .01 1.08 Q .03 .01	2.2 6.1 1.2 .1 9.1 9.1 9 9.1 9.4 3.0	.06 .17 .06 Q .01 .02 .22 .03 Q	.5 1.6 .5 Q .1 .2 2.0 .3 .1
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE <2,000 CDD AND >7,000 HDD	8.5	.96	8.8	.50	2.7	.22	4.1	.17	1.5	.07	.6
<2,000 CDD AND 5,500 TO 7,000 HDD <2,000 CDD AND	21.0	2.58	23.9	1.63	9.0	.54	11.4	. 35	3.0	.06	.5
4,000 TO 5,499 HDD	22.1 19.6 12.6	2.41 1.67 1.01	25.8 16.2 13.1	1.20 .99 .46	7.8 4.9 2.7	.62 .56 .49	12.9 10.2 9.8	.54 .06 .01	4.6 .5 .1	.05 .06 .05	.5 .6 .6



Table 1. (Continued)
Census Region:
Northeast

		I I I ALL MAJ	OR FUELS	l NAT I G	URAL AS	!   ELECT	RICITY	FUEL KERO	OIL OR SENE	PETR	EFIED OLEUM AS
HOUSEHOLD CHARACTERISTICS	LIONS)	SUMED (QUAD-	EXPEND- ITURES (BILLION	CON- SUMED (QUAD-		CON- SUMED QUAD-		CON- SUMED (QUAD-	TOTAL EXPEND- ITURES (BILLION DOLLARS)	SUMED   (QUAD-	EXPEND-   ITURES  (BILLION
TOTAL HOUSEHOLDS	18.0	2.18	24.6	0.99	7.2	0.38	10.4	0.79	6.7	0.02	0.3
AREA TYPE METROPOLITAN CENTRAL CITY OUTSIDE CENTRAL CITY NON-METROPOLITAN	15.5 6.4 9.1 2.4	1.94 .83 1.11 .24	22.0 9.3 12.7 2.6	.91 .42 .49	6.8 3.4 3.4 .4	.32 .10 .22	9.2 3.3 5.9 1.3	.70 .31 .39	5.9 2.6 3.3	.01 Q .01	.1 Q .1 .1
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NONE, OTHER	12.7	1.61	18.0	.75	5.3	.31	8.0	.53	4.5	.02	.3
PAID BY HOUSEHOLD  TYPE OF HOUSING STRUCTURE	5.3	.57	6.5	.24	2.0	.07	2.4	.26	2.2	Q	Q
MOBILE HOME	.4 10.6 7.0	.04 1.42 .73	.4 15.7 8.5	.01 .67 .31	Q 4.6 2.6	.01 .27 .10	.2 7.0 3.3	.02 .47 .31	.1 3.9 2.6	Q .02 Q	Q .2 Q
NUMBER OF ROOMS 1 TO 3	2.8 6.3 8.8	.25 .67 1.26	3.0 7.7 14.0	.09 .28 .63	.8 2.0 4.4	.04 .12 .23	1.2 3.3 6.0	.12 .27 .40	1.0 2.2 3.4	Q .01 .01	q .1 .1
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	6.0 7.1	.56 .89	6.5 9.9	.22	1.8 3.0	.09	2.6 4.3	.24 .31	2.0 2.6	.01	.1
2,000 OR MORE YEAR HOUSE BUILT	4.8	.73	8.2	. 35	2.5	.13	3.6	.24	2.0	Q	.1
BEFORE 1950	9.4 7.1 1.5	1.18 .85 .15	12.7 9.8 2.0	.52 .41 .05	3.9 2.9 .4	.16 .17 .05	4.6 4.6 1.2	.48 .26 .05	4.1 2.2 .4	.01 .01 Q	.1 .1 Q
OWN/RENT OWN RENT	11.3 6.7	1.51 .67	16.9 7.6	0.69	4.9 2.3	0.27	7.4 3.1	0.53	4.5 2.2	0.02	0.2
1981 FAMILY INCOME LESS THAN \$10,000 \$10,000 TO \$19,999 \$20,000 TO \$34,999	5.3 5.4 2.6 4.6	.57 .62 .33	6.2 7.0 3.7 7.7	.23 .27 .17	1.7 2.0 1.2 2.4	.08 .11 .06 .13	2.3 2.9 1.6 3.6	.24 .24 .11 .20	2.1 2.0 .9 1.7	.01 .01 Q Q	.1 .1 Q Q
TOTAL BELOW 100 PERCENT OF POVERTY LINE	2.3	.25	2.8	.12	.9	.04	1.1	.09	.8	Q -01	Q .1
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	4.8 7.5	.50 .99	5.9 11.3	.23 .47	1.7 3.4	.10	2.8 5.1	.16	1.4	.01	.1
HOUSEHOLD MEMBERS ONE PERSON	5.6 4.4	.43	7.3 4.6	.17	1.3	.09	1.6	.19	1.6	.01	.1
2 TO 4 PEOPLE	2.3	1.43	16.1 4.0	.67 .14	4.9 1.0	.25 .07	6.9 1.9	.49 .11	4.2 .9	.01	.1 .1



# Table 1. (Continued) Census Region: Northeast

İ	NUMBER	ALL MAJOR FUELS			URAL AS	   ELECT 	RICITY	FUEL   KERO 	OIL OR SENE	PETR	EFIED OLEUM AS
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)		   TOTAL  EXPEND-   ITURES  (BILLION  DOLLARS)	(QUAD-		SUMED (QUAD-	   TOTAL  EXPEND-   ITURES  (BILLION  DOLLARS)	SUMED   (QUAD~	   TOTAL  EXPEND-   ITURES  (BILLION  DOLLARS)	SUMED   (QUAD-	
MAIN HEATING FUEL											
NATURAL GAS	7.5	1.01	10.0	.87	6.1	.13	3.9	.01	.1	Q	Q
ELECTRICITY	1.3	.07	1.5	Q ,	Q	.06	34	Q Q	o	õ	Q
FUEL OIL OR KEROSENE	7.6	1.02	11.7	.10	1.0	.15	4.2	.76	6.4	.01	.1
LPG	. 2	.02	. 2	Q	Q	Q	.1	Q	q	.01	. 1
WOOD	1.0	.06	1.0	.01	.1	.03	.7	.02	.2	q	Ġ.
OTHER OR NONE	. 3	.01	. 2	Q	Q	.01	.2	Q	Q	Q	Q
HOT WATER FUEL											
NATURAL GAS	8.7	1.16	11.6	0.88	6.2	0.15	4.3	0.13	1.1	Q	Q
ELECTRICITY	3.7	.33	4.8	.06	.4	.14	3.3	.12	1.0	0.01	0.1
FUEL OIL OR KEROSENE	5.0	.66	7.5	. 05	.6	.08	2.5	.52	4.4	Q	Q
OTHER	.6	.05	.6	Q	Q	.01	. 3	.02	. 2	.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	1.6	.15	1.8	.02	.1	.04	. 9	.08	.7	.01	.1
5,500 TO 7,000 HDD	8.0	.97	10.4	.47	3.2	.19	4.6	.30	2.5	.01	.1
4,000 TO 5,499 HDD	8.3	1.07	12.4	.50	3.9	. 1.5	5.0	.41	3.4	Q	Q
<2,000 CDD AND <4,000 HDD	_	_	-	-	_	-	_	_	-		_
>2,000 CDD AND <4,000 HDD	_	_	-	_	-	-	-	_	-	-	_



Table 1. (Continued)
Census Division: New
England

	·	····									
		I I ALL MAJ	OR FUELS		URAL AS	 	RICITY	FUEL KERO	OIL OR SENE	PETR	EFIED DLEUM AS
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	(QUAD-		CON- SUMED (QUAD-		SUMED	TOTAL EXPEND- ITURES (BILLION DOLLARS)	CON- SUMED (QUAD-	(BILLION DOLLARS)	CON- SUMED (QUAD-	
		<u> </u>	<u> </u>	<u> </u>	1	L	<u> </u>	<u> </u>	L	L	L
TOTAL HOUSEHOLDS	4.2	0.51	5.9	0.16	1.4	0.09	2.4	0.24	2.0	0.01	0.1
AREA TYPE					_		_			_	_
METROPOLITAN	3.3	.42	4.8	.16	1.3	.07	1.9	.19	1.6	Q	Q
CENTRAL CITY	1.3	.15	1.7	.07	.6	.02	.6	.06	.5	Q Q	Q Q
OUTSIDE CENTRAL CITY	.9	.27 .09	3.1 1.0	.09 .01	.7 Q	.05 .02	1.3 .5	.13 .05	1.1	.01	.1
JTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	3.2	.41	4.7	.13	1.1	.08	1.9	.20	1.7	.01	.1
SOME, NONE, OTHER PAID BY HOUSEHOLD	1.0	.09	1.1	.03	.3	.02	.5	.04	.4	Q	Q
TYPE OF HOUSING STRUCTURE											
MOBILE HOME	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
SINGLE FAMILY	2.3 1.8	.32 .17	3.7 2.0	.09	.7 .6	.06 .03	1.5 .8	.16 .07	1.4 .6	.01 Q	.1 Q
IUMBER OF ROOMS										·	•
1 TO 3	.5	.03	.4	.01	.1	.01	.2	.01	.1	Q	Q
4 70 5	1.7	.18	2.1	.05	.5	.03	.9	.08	.7	Q	Q
6 OR MORE	2.0	.30	3.4	.10	.8	.05	1.3	.15	1.3	à	વે
EASURED HEATED SPACE OF RESI- ENCE (IN SQUARE FEET)											
LESS THAN 999	1.2	.10	1.2	.03	. 3	.02	.6	.04	,4	Q	Q
1,000 TO 1,999	1.9 1.1	.23 .18	2.7 2.0	.07 .06	.6 .5	.04	1.0 .8	.11	.9 .7	Q Q	Q Q
EAR HOUSE BUILT											
BEFORE 1950	2.4	.31	3.4	.11	. 9	.05	1.1	.15	1.3	Q	Q
1950 TO 1974	1.5	.16	2.0	.04	.4	.04	.9	.08	.7	Q	Q
AFTER 1974	.3	.03	.5	.01	.1	.01	.3	.01	.1	Q	Q
WN/RENT	2.7	0.37	4.2	0.11	0.9	0.07	1.7	0.18	1.5	0.01	0.1
RENT	1.5	.14	1.7	.05	.4	.03	.7	.06	.5	Q	Q Q
981 FAMILY INCOME											
LESS THAN \$10,000	1.0	.10	1.2	-03	.3	.02	.4	.05	.4	Q	Q
\$10,000 TO \$19,999	1.2	.14	1.6	.04	.3	.03	.7	.07	.6	Q	Q
\$20,000 TO \$34,999 \$35,000 OR MORE	.6 1.4	.06 .20	.8 2.3	.02 .08	.2 .6	.01	.3	.03 .08	.3 .7	Q Q	Q Q
OTAL BELOW 100 PERCENT											
F POVERTY LINE	.3	.02	. 3	.01	,1	.01	.1	.01	.1	Q	Q
OTAL BELOW 125 PERCENT F POVERTY LINE	.6	.06	.7	.02	.2	.01	.3	.03	.2	Q	Q
GE OF HOUSEHOLD HEAD			-,	***						-	•
UNDER 35 YEARS	1.2	.12	1.5	.03	. 3	.03	.7	.06	.5	Q	Q
35 TO 59 YEARS	1.7	.22	2.6	.07	.6	.05	1.1	.10	.9	q	Q
60 YEARS AND OVER	1.3	.16	1.8	.06	.5	.02	.6	.08	.7	Q	à
OUSEHOLD MEMBERS	_		_		_			£.,	_	_	_
ONE PERSON	.8 2.9	.08	.9	.02	.2	.01	.3	.04	.3	Q Q	Q
5 OR MORE PEOPLE	2.9	.36	4.1 .8	.11	1.0 .2	.06 .02	1.6 .4	.18	1.5 .2	Q	Q Q
5 50 1000 1 LOS LIGHT 14 14 14 14 14 14 14 14 14 14 14 14 14		.07	.0	.02	• •	.02	. 7	. 04	٠.	પ	ч



Table 1. (Continued) Census Division: New England

MIL-   CON-   EXPEND-   CON-   CON-	HOUSEHOLD   HO CHARACTERISTICS   HO   (M	NUMBER	ALL MAJOR FUELS			URAL AS	! 	RICITY	FUEL KERO	OIL OR SENE	PETR	EFIED OLEUM AS
NATURAL GAS.		HOUSE- HOLOS (MIL- LIONS)	I AMOUNT CON- SUMED QUAD- RILLION	EXPEND- ITURES (BILLION	AMOUNT CON- SUMED (QUAD- RILLION	EXPEND-   ITURES  (BILLION	AMOUNT CON- SUMED GUAD- RILLION	EXPEND-   ITURES  (BILLION	AMOUNT   CON-   SUMED   (QUAD-  RILLION	EXPEND-   ITURES  (BILLION	AMOUNT CON- SUMED (QUAD- RILLION	TOTAL EXPEND- ITURES (BILLION DOLLARS)
NATURAL GAS	MAIN HEATING FUEL											
FUEL OIL OR KEROSENE 2.1 .30 3.3 .03 .2 .04 1.1 .23 1.9 Q (LFG		1.2	.16	1.7	.13	1.1	.02	.6	Q	Q	Q	q
LFG	ELECTRICITY	. 3	.01	.3	Q	Q	.01	. 3	Q	Q	Q.	Q
MODD								1.1	.23	1.9		Q
OTHER OR NONE			.,								٦.	q
HOT WATER FUEL  NATURAL GAS						•				_	-	G
NATURAL GAS	DIHER OR NONE	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	G
ELECTRICITY	HOT WATER FUEL											
FUEL OIL OR KEROSENE	NATURAL GAS	1.6	0.22	2.4	0.14	1.2	0.03	0.8	0.05	0.4	Q	Q
OTHER	ELECTRICITY	1.0	.08	1.2	.01	I.	.03	.8	.03	.3	Q	Q
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERN AVERAGE <2,000 CDD AND >7,000 HDD 1.1 .11 1.3 .02 .1 .02 .6 .06 .5 .01 <2,000 CDD AND 5,500 TO 7,000 HDD 3.1 .40 4.6 .15 1.2 .07 1.8 .18 1.5 Q <2,000 CDD AND			.18		.01					1.3		Q
AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE  <2,000 CDD AND >7,000 HDD 1.1 .11 1.3 .02 .1 .02 .6 .06 .5 .01  <2,000 CDD AND 3.1 .40 4.6 .15 1.2 .07 1.8 .18 1.5 Q  <2,000 CDD AND	OTHER	. 2	.02	.2	Q	Q	Q	.1	.01	Q	0.01	I , $C$
<pre>&lt;2,000 CDD AND 5,500 TO 7,000 HDD 3.1 .40 4.6 .15 1.2 .07 1.8 .18 1.5 Q &lt;2,000 CDD AND</pre>	AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
5,500 TO 7,000 HDD		1.1	.11	1.3	.02	.1	.02	.6	.06	.5	.01	.1
<2,000 CDD AND		7 1	6.5	6.4	10	1 2	07	1 8	10	7 5	n	G
	<2,000 CDD AND	3.1		4.6						_	ч	ч
	4,000 TO 5,499 HDD	-	-	-	-	-	-	-	-	-	-	-
<pre>&lt;2,000 CDD AND &lt;4,000 HDD</pre>		-	-	-	-	-		-	_	_	_	_



Table 1. (Continued)
Census Division:
Middle Atlantic

	· · · · · · · · · · · · · · · · · · ·										
		!     ALL MAJ 	OR FUELS		URAL AS	     ELECT 	RICITY	   FUEL   KERO	OIL OR SENE	PETR	EFIED OLEUM AS
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (HIL- LIONS)	CON- SUMED CQUAD-		CON- SUMED QUAD-	ITURES (BILLION	CON- SUMED QUAD-		CON- SUMED QUAD-	TOTAL  EXPEND-  ITURES  (BILLION  DOLLARS)	CON- SUMED (QUAD-	
TOTAL HOUSEHOLDS	13.7	1.68	18.7	0.63	5.8	0.29	6.1	0.55	4.6	0.01	0.2
	****			,0103	3.0	V.L.	0.4	0.5,5	***		0.2
AREA TYPE METROPOLITAN	12.2	1.52	17.2	.75	5.5	.25	7.3	.51	4.3	.01	.1
CENTRAL CITY	5.1	.68	7.6	.35	2.8	.07	2.7	.26	2.2	Q	Q
OUTSIDE CENTRAL CITY	7.1	.84	9.6	.40	2.7	.17	4.6	.26	2.2	.01	.1
NON-METROPOLITAN	1.5	.16	1.5	.08	. 3	.04	8.	.04	.3	.01	.1
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	9.4	1.20	13.3	.61	4.2	.24	6.2	.33	2.8	.01	. 2
PAID BY HOUSEHOLD	4.3	.48	5.4	.21	1.7	.05	1.9	.21	1.8	Q	Q
TYPE OF HOUSTING STRIPTING											
TYPE OF HOUSING STRUCTURE MOBILE HOME	.3	.02	. 2	.01	Q	.01	.1	.01	.1	Q	Q
SINGLE FAMILY	8.3	1.10	12.0	.58	3.8	.21	5.5	.30	2.5	.01	.1
2 OR MORE UNITS	5.2	.55	6.4	.24	1.9	.07	2.5	.24	2.0	Q	Q
NUMBER OF ROOMS 1 TO 3	2.3	.22	2.5	.08	.6	.03	√ <b>.</b> 9	.11	1.0	Q	Q
4 TO 5	4.6	.49	5.6	.22	1.6	.08	2.4	.18	1.5	.01	.1
6 OR MORE	6.8	. 96	10.6	.53	3.6	.18	4.8	.25	2.1	.01	.1
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)											
LESS THAN 999	4.8	.46	5.3	.19	1.5	.06	2.0	.20	1.7	.01	.1
1,000 TO 1,999 2,000 OR MORE	5.2 3.7	.66 .56	7.2 6.2	.34	2.3	.12 .10	3.2 2.8	.19 .16	1.6 1.3	Q Q	Q Q
			0.2	***	2.0	1.10		,10	1.5	•	•
YEAR HOUSE BUILT BEFORE 1950	7.0	.87	9.3	.41	3.0	.12	3.5	.33	2.8	.01	.1
1950 TO 1974	5.6	.69	7.3	.37	2.5	.13	3.7	.18	1.5	.01	.1
AFTER 1974	1.2	.12	1.6	.05	.4	.04	.9	.03	.3	Q	Q
OWN/RENT											
ONN	8.5	1.15	12.7	0.58	4.0	0.21	5.7	0.35	3.0	0.01	0.1
RENT	5.2	.53	6.0	.25	1.9	.08	2.4	.20	1.7	.01	.1
1981 FAMILY INCOME											
LESS THAN \$10,000	4.4	.46	5.0	.20	1.4	.07	1.9	.19	1.6	.01	.1
\$10,000 TO \$19,999 \$20,000 TO \$34,999	4.2 2.0	.48	5.3	.23	1.6	.08	2.2	.17	1.4	Q Q	<b>Q</b> Q
\$35,000 OR MORE	3.2	.27 .46	2.9 5.4	.15 .25	1.0 1.8	.04 .09	1.2 2.7	.08 .12	.6 1.0	Q	Q
TOTAL DELCH LOS DEBERNY											
TOTAL BELOW 100 PERCENT OF POVERTY LINE	2.0	.23	2.5	.11	.8	.03	.9	.08	.7	Q	Q
TOTAL BELOW 125 PERCENT							• •		••	•	•
OF POVERTY LINE	3.0	.34	3.6	.15	1.1	.05	1.4	.13	1.1	Q	.1
AGE OF HOUSEHOLD HEAD											
UNDER 35 YEARS	3.5	.38	4.5	.20	1.5	.08	2.1	.10	.9	Q	Q
35 TO 59 YEARS	5.8	.77	8.7	.40	2.8	.14	4.0	.23	1.9	.01	.1
60 YEARS AND OVER	4.4	.53	5.5	.23	1.6	.07	2.0	.22	1.8	.01	.1
HOUSEHOLD MEMBERS	_							_			_
ONE PERSON	3.6 8.3	.35	3.7	.15	1.1	.05	1.3	.15 .31	1.3	Q	Q .1
5 OR MORE PEOPLE	1.8	1.07 .26	11.9 3.1	.56 .12	3.9 .8	.19 .05	5.3 1.5	.09	2.6 .7	.01 Q	Q
	0		٠. ـ	* 7 €	.0	.03		,	• /	ч	4



Table 1. (Continued)
Census Division:
Middle Atlantic

HOUSEHOLD   CHARACTERISTICS	  -   Number	i   all maj 	ALL MAJOR FUELS     		URAL AS	i I ELECT I	RICITY	FUEL KERO	OIL OR SENE	PETR	EFIED OLEUM AS
	OF HOUSE- HOLDS (MIL- LIONS)	(QUAD-	TOTAL TOTAL EXPEND- TURES (BILLION DOLLARS)		TOTAL EXPEND- ITURES (BILLION DOLLARS)		TOTAL EXPEND- ITURES (BILLION DOLLARS)		TOTAL TOTAL EXPEND- ITURES (BILLION DOLLARS)	SUMED   (QUAD-	   TOTAL  EXPEND-   ITURES  (BILLION  DOLLARS)
MATH HEATING FUE!											
NATURAL GAS	6.3	.86	8.4	.74	5.0	.11	3.3	.01	Q	Q	Q
ELECTRICITY	1.0	.05	1.2	Q	Q	.05	1.1	Q	à	õ	Q.
FUEL DIL DR KERDSENE	5.4	.72	8.4	.08	.8	.10	3.1	.53	4.5	à	.1
LPG	.2	.01	.1	Q	Q	Q:	Q	Q	Q.	.01	. 1
WCOD	.5	.03	.5	.01	Q	.02	.4	.01	.1	Q	Q
OTHER OR NONE	.3	.01	. 2	Q	Q	.01	.2	Q	Q	Q	Ģ
HOT WATER FUEL											
NATURAL GAS	7.1	0.93	9.2	0.74	5.0	0.12	3.6	0.08	0.7	Q	Q
ELECTRICITY	2.7	.24	3.6	.04	. 3	.11	2.5	.09	. 7	0.01	0.1
FUEL OIL OR KEROSENE	3.6	.47	5.4	.05	.5	.05	18	. 37	3.1	Q	ଦ
OTHER	.3	.03	, 4	Q	Q	.01	.2	.02	.1	.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	.04	.5	q	Q	.01	.3	.02	.2	.01	.1
5,500 TO 7,000 HDD	4.9	.57	5.8	.33	1.9	.12	2.8	.12	1.0	.01	.1
4,000 TO 5,499 HDD	8.3	1.07	12.4	.50	3.9	.15	5.0	.41	3.4	Q	Q
<2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-	-	-
>2,000 CDD AND <4,000 HDD	_	_	-	_	_	_	_	_	_	_	-



Table 1. (Continued) Census Region: North Central

	1										
		     ALL MAJ	OR FUELS		URAL AS	  -   ELECT	RICITY		OIL OR SENE	PETR	EFIED OLEUM
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	(QUAD-		CON- SUMED (QUAD-		CON- SUMED QUAD-		CON- SUMED (QUAD-	   TOTAL  EXPEND-   ITURES  (BILLION  DOLLARS)	CON- SUMED QUAD-	
TOTAL HOUSEHOLDS	21.3	2.60	22.6	1.76	9.2	0.57	11.2	0.15	1.3	0.11	0.9
	21.3		22.0	1.70		0.57	****	0.13	1.5	V.11	<b>0.</b> /
AREA TYPE METROPOLITAN	14.7	1.86	16.0	1.34	7.1	.39	7.8	.11	.9	.02	.2
CENTRAL CITY	7.2	.93	7.6	.71	3.8	.19	3.6	.03	.3	9	q
OUTSIDE CENTRAL CITY	7.6	. 94	8.3	.63	3.3	.20	4.2	.08	.6	.02	.2
NON-METROPOLITAN	6.6	.74	6.6	.42	2.1	.18	3.5	.04	.4	.09	.7
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	17.5	2.24	19.5	1.51	7.8	.51	9.8	.12	1.0	.11	.9
SOME, NONE, OTHER PAID BY HOUSEHOLD	3.8	. 35	3.0	.26	1.4	.07	1.4	.03	.2	Q	Q
TYPE OF HOUSING STRUCTURE											
MOBILE HOME	.7	.06	.7	.02	.1	.02	.4	Q	Q	.01	.1
SINGLE FAMILY	15.0	2.01	17.4	1.34	6.9	.45	8.7	.12	1.0	.09	.8
2 OR MORE UNITS	5.6	.53	4.5	.41	2.2	.10	2.1	.02	.2	Q	Q
NUMBER OF ROOMS											
1 TO 3	2.4	.18	1.7	.12	.7	.04	.9	.01	.1	Q	Q
4 TO 5	9.6	1.05	9.1	.70	3.7	.22	4.4	.07	.6	. 05	.4
6 OR MORE	9.3	1.37	11.8	. 94	4.8	.31	6.0	.07	.5	.06	.5
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										••	٠
LESS THAN 999	6.8 8.1	.61 .99	5.2 8.8	.44 .64	2.3 3.3	.13	2.5 4.5	.02	.2 .6	.02	.2 .4
2,000 OR MORE	6.3	.99	8.5	.68	3.5	.22	4.2	.05	.4	.04	.4
YEAR HOUSE BUILT											
BEFORE 1950	9.3	1.24	9.9	. 90	4.7	.20	4.1	.10	.8	.04	.4
1950 TO 1974	9.2	1.07	9.7	.72	3.8	.26	5.2	.04	. 3	.05	.4
AFTER 1974	2.9	.29	3.0	.14	.7	.11	1.9	.02	.2	.02	.2
DWN/RENT											
OWN.	14.3	1.89	16.6	1.23	6.3	0.43	8.4	0.12	1.0	0.10	0.9
RENT	7.0	.71	6.0	.53	2.8	.14	2.9	.03	.2	.01	.1
1981 FAMILY INCOME											_
LESS THAN \$10,000 \$10,000 TO \$19,999	6.8 6.7	.74 .76	6.1 6.7	.52 .52	2.7 2.7	.13 .17	2.7 3.4	.05 .05	.4 .4	.04 .02	.3 .2
\$20,000 TO \$34,999	2.9	.76	3.5	.23	1.2	.10	1.9	.02	.2	.02	.2
\$35,000 OR MORE	4.9	.72	6.3	.50	2.5	.17	3.3	.03	.2	.03	. 2
TOTAL BELOW 100 PERCENT											
OF POVERTY LINE	2.8	.32	2.6	.23	1.2	.05	1.1	.03	.2	.01	.1
TOTAL BELOW 125 PERCENT											
OF POVERTY LINE	4.0	.46	3.7	.33	1.7	.08	1.6	.03	.3	.02	.1
AGE OF HOUSEHOLD HEAD											
UNDER 35 YEARS	6.5	.68	6.1	.46	2.4	.17	3.2	.03	.2	.02	.2
35 TO 59 YEARS	8.8 6.0	1.19	10.5 6.0	.80 .50	4.2 2.6	.27 .13	5.3 2.7	.06 .07	.5 .5	.06	.5 .2
	0.0	.72	3.0	,50	6.0	.13	٠.,	/		.03	• •
HOUSEHOLD MEMBERS ONE PERSON	4.7	.46	3.7	.33	1.8	.07	1.5	.03	.3	.02	.1
2 TO 4 PEOPLE	13.6	1.69	14.8	1.14	5.9	.39	7.5	.10	.9	.06	.5
5 OR MORE PEOPLE	3.0	.45	4.1	.29	1.5	.11	2.2	.01	.1	.03	.2
		· ·						_		-	



#### Table 1. (Continued) Census Region: North Central

	NUMBER	     ALL MAJ   	L MAJOR FUELS		URAL AS	 	RICITY	   FUEL   KERO 	OIL OR SENE	PETR	DEFIED OLEUM SAS
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)		   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)
MAIN HEATING FUEL											
NATURAL GAS	15.5	2.06	15.9	1.74	9.0	.32	6.8	Q	Q	Q	G
ELECTRICITY	2.1	.15	2.3	.01	Q	.14	2.2	q	q	.01	.1
FUEL OIL OR KEROSENE	1.6	.20	2.2	.01	Q	.05	1.0	.14	1.2	Q	G
LPG	1.0	.12	1.3	Q	Q	.03	.6	Q	Q	.09	. 7
WCOD	1.1	.06	. 9	.01	.1	.04	.7	.01	Q	.01	. 1
OTHER OR NONE	Q	Q	Q	Q	Q	Q	Q	Q	Q	q	G
HOT WATER FUEL											
NATURAL GAS	14.7	1.96	15.1	1.64	8.5	0.30	6.5	0.02	0.1	Q	Q
ELECTRICITY	5.5	.52	6.1	.12	.6	.25	4.2	.11	. 9	0.04	0.3
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	1.0	.11	1.2	Q	Q	.03	.6	.01	.1	.07	.6
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	5.5	.64	5.8	. 35	2.0	.15	2.7	.09	.8	.04	.4
5,500 TO 7,000 HDD	11.5	1.45	12.2	1.07	5.5	.30	6.1	.05	.4	.04	. 3
4,000 TO 5,499 HDD	4.3	.51	4.6	.34	1.7	.13	2.5	.01	.1	.03	.2
<2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
>2,000 CDD AND <4,000 HDD		_	-	-	-			-	-	-	_



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

	NUMBER	ALL MAJ	OR FUELS		URAL AS	   ELECT	RICITY	FUEL KERO	OIL OR SENE	PETR	EFIED OLEUM AS
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CON- SUMED (QUAD- RILLION	I(BILLION	SUMED (QUAD-	TOTAL  EXPEND-   ITURES  (BILLION	AMOUNT CON- SUMED (QUAD-		CON- SUMED QUAD-	TOTAL EXPEND- ITURES (BILLION (DOLLARS)	CON- SUMED (QUAD-	
TOTAL HOUSEHOLDS	15.0	1.82	15.8	1.24	6.5	0.39	7.7	0.13	1.1	0.06	0.5
AREA TYPE  METROPOLITAN  CENTRAL CITY  OUTSIDE CENTRAL CITY  NON-METROPOLITAN	11.4 5.4 6.0 3.6	1.44 .71 .73 .37	12.3 5.8 6.5 3.5	1.04 .54 .50 .20	5.5 2.9 2.6 1.1	.29 .14 .15 .10	5.9 2.7 3.2 1.8	.09 .03 .07	.8 .2 .6	.01 Q .01 .04	.1 q .1 .4
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	12.1	1.55	13.5	1.05	5.5	.34	6.6	.10	.8	.06	.5
SOME, NONE, OTHER PAID BY HOUSEHOLD	2.9	.27	2.3	.19	1.0	.05	1.1	.03	.2	Q	Q
TYPE OF HOUSING STRUCTURE MOBILE HOMESINGLE FAMILY2 OR MORE UNITS	.4 10.1 4.5	.04 1.35 .43	.4 11.8 3.6	.01 .91	Q 4.7 1.8	.02 .30	.3 5.7 1.7	Q .11 .02	Q .9 .2	.01 .05 Q	.1 .4 q
NUMBER OF ROOMS 1 TO 3	1.8 6.9 6.3	.13 .75 .94	1.3 6.5 8.1	.08 .51 .65	.5 2.7 3.4	.03 .15 .20	.7 3.0 4.0	.01 .06 .06	.1 .5 .5	Q .03 .03	Q .3 .2
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999. 1,000 TO 1,999.	5.0 5.6 4.3	.44 .69 .68	3.8 6.1 5.9	.33 .45 .47	1.8 2.4 2.4	.09 .15 .15	1.8 2.9 3.0	.02 .06 .05	.1 .5 .4	.01 .03 .02	.1 .2 .2
YEAR HOUSE BUILT BEFORE 1950	6.9	.92 .70	7.5 6.4	.68	3.6 2.5	.14	3.0 3.5	.09	.7	.02	.2
AFTER 1974	1.9	.19	1.9	.08	.4	.07	1.2	.02	.1	.01	.1
OWN OWN RENT	9.6 5.4	1.26 .55	11.2 4.7	0.82 .42	4.3	0.28	5.5 2.2	0.11	0.9	0.06 Q	0.5 Q
1981 FAMILY INCOME LESS THAN \$10,000 \$10,000 TO \$19,999 \$20,000 TO \$34,999 \$35,000 OR MORE	5.1 4.8 1.8 3.2	.56 .55 .23	4.7 4.9 2.1 4.2	.39 .37 .14	2.1 2.0 .8 1.7	.10 .12 .06	2.0 2.4 1.1 2.2	.04 .04 .02	.4 .4 .1 .2	.02 .01 .01	.2 .1 .1
TOTAL BELOW 100 PERCENT OF POVERTY LINE	2.1	.25	2.1	.19	1.0	.04	.8	.02	.2	.01	.1
OF POVERTY LINE	3.0	. 35	2.9	. 25	1.3	.06	1.2	.03	.2	.01	.1
UNDER 35 YEARS	4.6 6.0 4.4	.46 .82 .53	4.1 7.2 4.5	.32 .55 .37	1.7 2.9 1.9	.11 .18 .10	2.1 3.6 2.0	.02 .05 .06	.2 .4 .5	.01 .03 .01	.1 .3 .1
HOUSEHOLD MEMBERS ONE PERSON	3.3 9.4	.33 1.15	2.6 10.1	.24 .78	1.3	.05	1.0 5.0	.03	.2 .8	.01 .03	.1



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

	ALL MAJOR FUELS		NATURAL GAS		ELECT	RICITY	FUEL KERO	OIL OR SENE	PETR	EFIED OLEUM AS	
	OF HOUSE- HOLDS (MIL- LIOHS)	CON- SUMED QUAD-		(QUAD-		CON- SUMED (GUAD-	TOTAL EXPEND- ITURES (BILLION DOLLARS)	(QUAD-	EXPEND- ITURES (BILLION	CON- SUMED (QUAD-	
MAIN HEATING FUEL											
	10.8	1.43	11.0	1.23	6.5	.20	4.5	Q	Q	Q	Q
ELECTRICITY	1.6	.12	1.8	.01	Q	.10	1.6	Q	_Q	.01	. ).
FUEL OIL OR KEROSENE	1.3	.17 .05	1.8	Q Q	Q Q	.04 .01	.8 .3	.12 Q	1.0 G	Q	Q .45
LPG	.8	.05	.6	Q Q	Q	.03	.5	.01	Q.	.04	. 1.
OTHER OR NONE	Q	Q	Q	Q	q	q	q	Q	Q	q	Ġ.
HOT WATER FUEL											
NATURAL GAS	10.1	1.35	10.4	1.15	6.1	0.19	4.3	0.01	0.1	Q	Q
ELECTRICITY	4.2	.39	4.6	.09	.5	.18	3.1	.10	.8	0.03	0.2
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	G
OTHER	.6	.06	. 7	Q	Q	.02	.3	.01	.1	.03	. 3
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	3.4	. 35	3.3	.17	1.0	.08	1.5	.08	.6	.03	.3
5,500 TO 7,000 HDD	10.2	1.28	10.9	.95	4.9	.27	5,4	.05	.4	.02	. 2
4,000 TO 5,499 HDD	1.5	.18	1.6	.13	.7	.04	.8	.01	.1	.01	**
<2,000 CDD AND <4,000 HDD	-	-	~	-	_	-	-	-	-	-	-
>2,000 CDD AND <4,000 HDD	-	-	-	-	-	_	_	-	-	-	-



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

		     ALL MAJ 	OR FUELS		URAL AS	ELECT	RICITY	   FUEL   KERO	OIL OR SENE	PETR	EFIED OLEUM AS
HOUSEHOLD I CHARACTERISTICS I	(MIL- LIONS)	SUMED (QUAD-	EXPEND- ITURES (BILLION	CON- SUMED (QUAD-		CON- SUMED (QUAD-		CON- SUMED (QUAD-	   TOTAL   EXPEND-   ITURES  (BILLION  DOLLARS)	SUMED (QUAD-	EXPEND-   ITURES  (BILLION
TOTAL HOUSEHOLDS	6.3	0.78	6.7	0.52	2.6	0.19	3.5	0.02	0.2	0.05	0.4
AREA TYPE METROPOLITAN CENTRAL CITY OUTSIDE CENTRAL CITY NON-HETROPOLITAN	3.3 1.7 1.6 3.0	.42 .22 .20 .36	3.6 1.8 1.9 3.1	.30 .17 .13	1.6 .9 .7 1.0	.10 .05 .06	1.8 .8 1.0 1.7	.01 Q .01	.1 Q .1 .1	.01 Q .01 .04	.1 Q .1 .3
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	5.5	.70	6.0	.46	2.3	.17	3.2	.02	.2	.05	.4
SOME, NONE, OTHER PAID BY HOUSEHOLD	.8	.08	.7	.06	.3	.02	.3	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE MOBILE HOMESINGLE FAMILY2 OR MORE UNITS	.3 4.9 1.1	.02 .65 .11	.2 5.6 .9	.01 .43 .08	q 2.1 .4	.01 .16 .02	.1 3.0 .4	Q .02 Q	Q .1 Q	ପ . 05 Q	Q .4 Q
NUMBER OF ROOMS 1 TO 3	.7 2.7 3.0	.05 .30 .43	.4 2.6 3.7	.04 .20 .29	.2 1.0 1.4	.01 .07	.2 1.4 1.9	Q .01 .01	Q .1 .1	Q .01 .03	Q .1 .3
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	1.8 2.5	.17	1.4	.11	.6 1.0	.04 .08	.7 1.6	.01 .01	.1	.01 .02	q .2
2,000 OR MORE	2.0	.31	2.6	.21	1.1	.07	1.2	Q	Q	.03	.2
BEFORE 1950	2.3 3.0 1.0	.32 .36 .10	2.5 3.2 1.0	.23 .24 .06	1.1 1.3 .3	.05 .09 .04	1.1 1.7 .7	.01 .01 Q	.1 .1 Q	.03 .02 Q	.2 .2 Q
ОЫЛ/RENT ОЫЛ RENT	4.8 1.5	0.63	5.4 1.3	0.41	2.1	0.15	2.9	0.02 Q	0.1 Q	0.05 Q	0.4 Q
1981 FAMILY INCOME LESS THAN \$10,000 \$10,000 TO \$19,999 \$20,000 TO \$34,999 \$35,000 OR MORE	1.7 1.8 1.1 1.7	.18 .21 .14 .24	1.5 1.8 1.3 2.1	.12 .14 .09	.6 .7 .5	.03 .05 .04	.7 1.0 .7 1.2	.01 .01 .01 Q	.1 .1 Q Q	.01 .01 .01	.1 .1 .1
TOTAL BELON 100 PERCENT OF POVERTY LINETOTAL BELOW 125 PERCENT	.7	.07	.5	.05	.2	.01	.3	Q	Q	Q	Q
OF POVERTY LINE	1.0	.11	.9	.08	.4	.02	-4	.01	Q	Q	Q
UNDER 35 YEARS	2.0 2.8 1.6	.21 .38 .19	2.0 3.3 1.5	.14 .25 .13	.7 1.3 .6	.06 .09 .03	1.1 1.7 .7	.01 .01	.1 Q .1	.01 .03 .01	.1 .2 .1
HOUSEHOLD MEMBERS ONE PERSON2 TO 4 PEOPLE	1.4 4.2	.13	1.1	.09	.5 1.8	.02	.5 2.5	.01	.1 .1	.01	.1



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

	         NUMBER	ALL MAJOR FUELS		HATURAL     GAS   		 	RICITY	   FUEL   KERO 	OIL OR SENE	PETR	JEFIED POLEUM JAS
HOUSEHOLD CHARACTERISTICS	OF   HOUSE-   HOLDS   (MIL-   LIOHS) 	(QUAD-	   TOTAL  EXPEND-   ITURES  (BILLION  DOLLARS)		   TOTAL  EXPEND-   ITURES  (BILLION  DOLLARS)		   TOTAL  EXFEND-   ITURES  (BILLION  DOLLARS)		   TOTAL  EXPEND-   ITURES  (BILLION  DOLLARS)	PETH ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	
MAIN HEATING FUEL											
NATURAL GAS	4.7	.63	4.9	.51	2.6	.12	2.3	Q	Q	Q	Q
ELECTRICITY	.5	.04	. 5	Q	Q	.03	. 5	Q	Q		Q
FUEL OIL OR KEROSENE	. 3	.03	. 4	Q	Q Q	.01	. 2	.02	.2	_	ď
LPG	.5	.06	.7	Q Q	ų Q	.02	. 3	Q G	Q Q		. 4 Q
CODOTHER OR NONE	. 3 Q	. 0 2 Q	Q Q	Q	Q	Q	Q <sup>°</sup>	Q	Q		Ć.
HOT WATER FUEL											
NATURAL GAS	4.5	0.61	4.7	0.49	2.5	0.11	2.2	0.01	0.1		Q.
FUEL OIL OR KEROSENE	1.3 Q	.13	1.5 Q	.03 Q	.2 Q	.07 Q	1.1 Q	.02 Q	.1 Q		0.1 Q
OTHER	.4	.05	.5	Q	q	.01	.2	Q	Q		. 3
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	2.1	.28	2.5	.19	1.0	.06	1.2	.02	.1	.02	. 1
5,500 TO 7,000 HDD	1.3	.17	1.3	.12	.6	.03	.6	Q	Q	.02	. 1
4,000 TO 5,499 HDD	2.9	. 33	2.9	.21	1.0	.09	1.7	.01	Q	.02	. 1
<2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
>2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-	-	-



Table 1. (Continued) Census Region: South

		<del></del>				1		1		<u> </u>	
		i     ALL MAJ 	OR FUELS	2	URAL AS	I 	RICITY	I   FUEL   KERO	OIL OR SENE	PETR	EFIED OLEUM AS
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MIL-	AMOUNT	I I I TOTAL IEXPEND-	AMOUNT	I I TOTAL IEXPEND-	AMOUNT	I I TOTAL IEXPEND-	AMOUNT	I I TOTAL IEXPEND-	   TOTAL   AMOUNT   CON-	TOTAL
		(QUAD-		(QUAD-		(QUAD-		(QUAD-	ITURES  (BILLION  DOLLARS)	(QUAD-	
	<u> </u>	l BTU)	<u> </u>	BTU)	<u> </u>	BTU)	<u> </u>	BTU)	<u> </u>	i BTU)	<u> </u>
TOTAL HOUSEHOLDS	28.1	2.46	28.6	1.13	6.3	1.05	19.6	0.17	1.4	0.12	1.2
AREA TYPE METROPOLITAN	18.6	1.73	20.0	.86	4,8	.71	13.7	.11	.9	.05	.6
CENTRAL CITY	8.5	.81	8.5	.47	2.4	.30	5.7	.04	.3	.01	.1
OUTSIDE CENTRAL CITY	10.1 9.4	.92 .73	11.5 8.6	.39 .27	2.4 1.6	.41	8.0 5.9	.07	.6 .5	,05 .07	.5 .6
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NOME, OTHER	24.7	2.20	25.5	1.00	5.5	. 95	17.7	. 15	1.2	.11	1.0
PAID BY HOUSEHOLD	3.3	.26	3.0	.13	.8	.10	1.9	.02	.2	.01	.1
TYPE OF HOUSING STRUCTURE MOBILE HOME	1.8	.10	1.5	.01	.1	.06	1.1	.01	.1	.02	.2
SINGLE FAMILY	20.9	2.00	22.5	. 95	5.2	.82	15.2	.14	1.2	.10	1.0
2 OR MORE UNITS	5.4	.37	4.6	.17	1.1	.18	3.4	.02	.2	Q	Q
NUMBER OF ROOMS	3.1	.17	2.3	.07	.4	.09	1.7	.01	.1	.01	.1
4 TO 5	12.6	. 95	11.0	.44	2.4	.39	7.4	.06	.5	.06	.6
6 OR MORE	12.3	1.34	15.3	.63	3.5	.57	10.5	.09	.8	.05	.5
HEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	10.5	40	8.4	.30	1.8	.29	F 7	0.6	4	0.5	-
1,000 TO 1,999	13.2	.69 1.19	13.9	.54	2.9	.53	5.7 9.7	.04	.4 .6	.05 .06	.5 .6
2,000 OR MORE	4.2	.57	6.3	.29	1.6	.23	4.2	.05	.4	.01	.1
YEAR HOUSE BUILT			7.0	7.			4.		-		-
BEFORE 1950	7.7 15.6	.69 1.42	7.2 16.4	.34 .68	1.9 3.8	.21 .61	4.0 11.4	.08 .08	.7 .7	.06 .05	.5 .5
AFTER 1974	4.7	.36	5.0	.11	.6	.23	4.2	.01	ġ´	.01	.1
DWN/RENT	18.5	1.75	20.3	0.79		0.76	14.1	0.12	1.0	0.08	0.8
OWNRENT	9.6	.72	8.3	.34	4.4 2.0	.29	5.5	.05	.4	.04	.4
1981 FAMILY INCOME LESS THAN \$10,000	9.5	.68	7.7	.31	1.9	.25	4.8	.05	.5	.06	.6
\$10,000 TO \$19,999	8.0	.69	7.9	.30	1.7	.29	5.4	.05	.4	.04	.4
\$20,000 TO \$34,999 \$35,000 OR MORE	4.3 6.3	.40 .70	4.5 8.5	.19	1.1 1.8	.17	3.1 6.3	.02	.2	.01 .01	.1 .1
TOTAL BELOW 100 PERCENT OF POVERTY LINE	5.1	70	4.2	10	1.0	17	2 =	0.7	. 3	0/	.4
TOTAL BELOW 125 PERCENT DE POVERTY LINE		.38	4.2 5.7	.18	1.0	.13	2.5	.03		.04	
	6.9	.51	5.7	.24	1.4	.18	3.5	.04	.3	.05	.4
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	8.8	.72	8.5	.32	1.8	.32	6.0	.05	.4	.03	. 3
35 TO 59 YEARS	11.6	1.12	13.0	.52	2.9	.49	9.1	.06	.5	.04	.4
60 YEARS AND OVER	7.7	.63	7.1	.29	1.6	.24	4.5	.06	.5	.05	.4
HOUSEHOLD MEMBERS ONE PERSON	6.1	.41	4.7	.20	1.2	.15	3.0	.04	. 3	.03	.3
2 TO 4 PEOPLE	18.6	1.68	19.7	.75	4.2	.74	13.8	.11	1.0	.08	.7
5 OR MORE PEOPLE	3.3	.37	4.2	.18	1.0	.16	2.9	.02	.2	.01	.1



Table 1. (Continued) Census Region: South

	NUMBER	ALL MAJOR FUELS			URAL AS	i ELECT I	RICITY	FUEL KERO	OIL OR SENE	I PETR	EFIED OLEUM AS
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)			(QUAD-			   TOTAL  EXPEND-   ITURES  (BILLION  DOLLARS)			PETF    CI   TOTAL   AMOUNT   CON-   SUMED   GUAD-   ILLION   BTU)   0.05   Q   0.05   Q   0.07	
MAIN HEATING FUEL											
NATURAL GAS	13.3	1.49	14.0	1.08	6.0	.41	8.0	Q	Q	Q	Q
ELECTRICITY	6.8	.42	7.1	.03	. 2	.38	6.9	Q	Q.		Q
FUEL OIL OR KEROSENE	2.5	.24	3.0	.01	.1	.08	1.5	.15	1.3	.01	. 1.
LPG	2.3	.16	2.2	Q	Q	.06	1.3	Q	Q	.10	. 9
WOOD	2.6	.12	1.9	.01	. 1	.09	1.7	.01	Q	.01	. 1.
OTHER DR NONE	.6	.02	.4	Q	Q	.02	.3	Q	Q	Q	Q
HOT WATER FUEL											
NATURAL GAS	12.4	1.39	13.2	1.00	5.5	0.38	7.5	0.02	0.1	Q	Q
ELECTRICITY	13.2	.89	13.0	.13	.8	.62	10.9	.09	.8		0.5
FUEL OIL OR KEROSENE	.4	. 06	.6	Q	Q	.01	.3	.04	.3		Q
OTHER	2.0	.13	1.8	Q	Q	.04	1.0	.02	.1	.07	.7
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	Q	Q	Q	Q	Q	Q	Q	Q	G	R	Q
<2,000 CDD AND	4	વ	ч	4	ч	ų.	4	· ·	4	4	4
4,000 TO 5,499 HDD	6.4	.60	6.9	.27	1.7	-22	4.1	.10	.8	กร	. 2
<2,000 CDD AND <4,000 HDD	10.4	.92	9.9	.42	2.2	.39	6.7	.06	.5	.05	. 5
721000 COD AND \$4100 NDD	70.4	.94	11.9	.46	2.5	. 37	0.,	.00	.1	.05	.5



# Table 1. (Continued) Census Division: South Atlantic

gradient gewant gew	•										
		ALL MAJ	OR FUELS		URAL AS	     ELECT 	RICITY	FUEL KERO	OIL OR SENE	PETR	EFIED OLEUM AS
HOUSEHOLD CHARACTERISTI <b>CS</b>	HOLDS (MIL- LIONS)	SUMED (QUAD-	EXPEND-   ITURES  (BILLION  DOLLARS)	SUMED (QUAD- RILLION	TOTAL EXPEND- ITURES (BILLION DOLLARS)	CON- SUMED (QUAD-	TOTAL EXPEND- ITURES (BILLION (BOLLARS)	SUMED (QUAD-	EXPEND-   ITURES  (BILLION	SUMED (QUAD- RILLION	EXPEND- ITURES (BILLION
	<u> </u>		<u> </u>		<u> </u>	L	<u> </u>	<u> </u>	<u> </u>	<u> </u>	l
TOTAL HOUSEHOLDS	13.9	1.11	14.0	0.41	2.7	0.48	9.3	0.16	1.3	0.06	0.7
AREA TYPE METROPOLITAN CENTRAL CITY OUTSIDE CENTRAL CITY NON-METROPOLITAN	10.0 3.8 6.2 3.9	.85 .31 .54 .26	10.7 3.8 6.8 3.4	.35 .15 .21 .06	2.3 1.0 1.4	.35 .13 .23	7.0 2.5 4.5 2.3	.11 .03 .07	.9 .3 .6 .4	.04 .01 .03	.4 .1 .3
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NONE, OTHER	12.0	.95	12.2	. 33	2.1	.43	8.4	.14	1.2	.06	.6
PAID BY HOUSEHOLD	2.0	.16	1.8	.08	.6	.05	1.0	.02	.2	.01	.1
TYPE OF HOUSING STRUCTURE  MOBILE HOMESINGLE FAMILY	1.2 9.8 2.9	.06 .86 .19	.9 10.6 2.5	Q .32 .09	Q 2.0 .6	.03 .36 .09	.7 6.9 1.7	.01 .13 .02	.1 1.1 .2	.01 .05 Q	.1 .5 Q
NUMBER OF ROOMS											
1 TO 3	1.6 6.1 6.1	.08 .41 .63	1.2 5.2 7.6	.02 .14 .25	.1 .9 1.6	.04 .18 .26	.9 3.5 5.0	.01 .06 .09	.1 .5 .7	Q .03 .03	Q .3 .3
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	5.4 6.1	.32	4.3 6.2	.10 .17	.7 1.1	.14	2.9	.04	.4	.03	. 4 . 2
2,000 OR MORE	2.4	.30	3.5	.13	. 9	.11	2.2	.05	.4	.01	.1
YEAR HOUSE BUILT BEFORE 1950	3.9 8.0 2.0	.35 .64 .13	3.9 8.1 2.0	.13 .24 .04	.8 1.6 .3	.11 .29 .09	2.1 5.6 1.7	.08 .07 Q	.7 .6 Q	.03 .04 Q	.3 .4 Q
OWN/RENT OWNRENT	9.0 4.9	0.77 .34	9.7 4.3	0.28 .13	1.8	0.34	6.6 2.7	0.11	0.9	0.04	0.4
1981 FAMILY INCOME LESS THAN \$10,000 \$10,000 TO \$19,999 \$20,000 TO \$34,999	4.5 4.2 2.0	.30 .33	3.7 4.1 2.1	.11 .11 .07	.7 .7 .4	.11 .15	2.2 2.8 1.4	.05	.5 .4 .2	.03 .02 .01	.3 .2 .1
\$35,000 OR MORE	3.2	.31	4.1	.12	.8	.15	3.0	.04	.3	Q	Q
OF POVERTY LINE TOTAL BELOW 125 PERCENT OF POVERTY LINE	2.3 3.0	.17	2.1	.06	.5	.06	1.2	.03	.3	.02	.2
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	4.3 5.8 3.9	.31 .51 .29	4.0 6.4 3.6	.12 .19 .10	.8 1.2 .7	.14 .23	2.7 4.4 2.3	.04 .06 .06	.4 .5 .5	.02 .03	.2 .3 .2
HOUSEHOLD MEMBERS ONE PERSON	3.4 9.1	.22 .75	2.7 9.5	.08 .27	.5 1.7	.08	1.6 6.5	.04 .11	.3	.02 .04	.2
5 OR MORE PEOPLE	1.4	.14	1.8	.06	.4	.06	1.2	.02	.1	.01	.1



# Table 1. (Continued) Census Division: South Atlantic

	       NUMBER	ALL MAJOR FUELS		NATURAL GAS		   ELECT 	RICITY	FUEL KERO	OIL OR SENE	PETR	EFIED OLEUM AS
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIOHS)		TOTAL EXPEND- ITURES (BILLION DOLLARS)	( QUAD -				CON- SUMED (QUAD-		PETRIL PE	   TOTAL  EXPEND-   ITURES  (BILLION  DOLLARS)
MAIN HEATING FUEL											
NATURAL GAS	4.6	.52	5.0	.39	2.5	.13	2.4	Q	Q	Q	Q
ELECTRICITY	3.7	.19	3.6	.01	.1	.18	3.5	Q	Q	Q	Q
FUEL OIL OR KEROSENE	2.4	.23	2.8	.01	.1	.07	1.4	.15	1.2		.1
LPG	1.2	.08	1.2	Q	Q	.03	.7	Q	Q		. 5
NOOD	1.5 .5	.07 .02	1.2	.01 Q	Q Q	.05	1.0	.01 Q	Q Q		. 1 Q
HOT WATER FUEL											
NATURAL GAS	4.3	0.47	4.5	0.34	2.2	0.11	2.2	0.01	0.1		Q
ELECTRICITY	8.2	.52	7.9	.06	.4	.33	6.4	.09	.7		0.4
FUEL OIL OR KEROSENE	.4	.06	.6	Q	Q	.01	.3	.04	.3		Q
OTHER	1.1	.07	1.0	Q	Q	.02	. 5	.02	.1		. 3
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	Q	Q	Q	Q	Q	Q	Q	Q	Q	a	Q
<2,000 CDD AND	•	-	7	-	•	4	4	4	ч	4	Q.
4,000 TO 5,499 HDD	5.1	.48	5.7	.20	1.4	.17	3.3	.10	.8	.02	.2
<2,000 CDD AND <4,000 HDD	5.0	.43	4.9	.18	1.1	.16	3.0	.06	.5	.03	. 3
>2,000 CDD AND <4,000 HDD	3.8	.20	3.5	.02	.2	.15	3.1	Q	Q	.02	.2



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

	· · · · · ·	T		· · · · · · · · · · · · · · · · · · ·		1		<del></del>		1	
wij ja t	Langer	     ALL MAJ  	OR FUELS		URAL AS	ELECT	RICITY	FUEL KERO	OIL OR SENE	PETR	EFIED OLEUM AS
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	CON- SUMED QUAD-	DOLLARS)	CON- SUMED QUAD- RILLION		CON- SUMED QUAD- RILLION	TOTAL EXPEND- ITURES (BILLION DOLLARS)	SUMED (QUAD-		SUMED (QUAD- RILLION	
TOTAL HOUSEHOLDS	5.7	0.47	5.2	0.20	1.0	0.25	3.9	0.01	0.1	0.02	0.2
AREA TYPE METROPOLITAN CENTRAL CITY. OUTSIDE CENTRAL CITY. NON-METROPOLITAN	2.8 1.3 1.5 2.9	.24 .11 .13	2.6 I.I 1.5 2.6	.11 .06 .05	.6 .3 .3	.12 .05 .07	1.9 .8 1.1 2.0	Q Q Q .01	Q Q Q .1	Q Q Q .01	Q Q Q .1
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLDSONE, NONE, OTHER	5.1	.44	4.8	.18	. 9	.23	3.6	.01	.1	.02	.2
PAID BY HOUSEHOLD	.5	.04	.4	.02	.1	.02	.3	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE MOBILE HOME	.3 4.3 1.1	.02 .38 .07	.3 4.1 .7	.01 .15 .04	Q .8 .2	.01 .20 .04	.2 3.1 .5	Q .01 Q	Q .1 Q	Q .01 Q	Q .1 Q
NUMBER OF ROOMS 1 TO 3	.6 2.5 2.6	.04 .18 .26	.4 2.0 2.8	.02 .08 .10	.1 .4 .5	.02 .09 .14	.3 1.4 2.2	Q Q	Q Q Q	Q .01 .01	Q .1 .1
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	2.1 2.6 1.0	.14 .22 .12	1.4 2.5 1.2	.06 .08 .05	.4 .4 .3	.06 .13 .06	1.0 2.0 .9	<b>Q</b> Q	<b>Q</b> Q	.01 .01 Q	.1 .1 Q
YEAR HOUSE BUILT BEFORE 1950	1.4 3.1 1.2	.12 .26 .08	1.1 2.9 1.1	.07 .11	.4 .6 .1	.05 .14 .07	.7 2.2 1.8	Q Q Q	Q Q	.01 .01 Q	.1 .1 Q
OWNRENT OWNRENT	3.9 1.8	0.35 .13	3.8 1.3	0.13 .07	0.7	0.19	2.9	0.01 Q	0.1 Q	0.02 Q	0.2 Q
1981 FAMILY INCOME LESS THAN \$10,000 \$10,000 TO \$19,999 \$20,000 TO \$34,999	2.2 1.5 1.2	.15 .13 .11	1.6 1.4 1.2 1.0	.08 .05 .05	.4 .3 .2 .1	.07 .07 .06	1.1 1.1 .9	G G G	G G G	.01 .01 Q Q	.1 .1 Q Q
TOTAL BELOW 100 PERCENT OF POVERTY LINE TOTAL BELOW 125 PERCENT OF POVERTY LINE	1.0	.07	.7 1.1	.03	.2	.03	.5	Q Q	Q Q	.01	.1
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	1.8 2.3 1.6	.14 .20	1.5 2.3 1.3	.06 .07	.3	.08	1.2	Q .01 Q	Q Q	q .01 .01	q .1 .1
HOUSEHOLD MEMBERS ONE PERSON. 2 TO 4 PEOPLE. 5 OR MORE PEOPLE.	1.2 3.8 .7	.08	.8 3.6 .8	.05 .13	.3 .7 .1	.03	.5 2.8 .6	Q .01 Q	Q .1 Q	Q .01 Q	Q .1 Q



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

İ	NUMBER	NUMBER		NATURAL   GAS   		i I ELECT I	RICITY	FUEL KERO	OIL OR SENE	PETR	EFIED OLEUM AS
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)		   TOTAL  EXPEND-   ITURES  (BILLION  DOLLARS)	SUMED (QUAD-		(QUAD-	I TOTAL IEXPEND- I ITURES [(BILLION [DOLLARS)	SUMED	   TOTAL  EXPEND-   ITURES  (BILLION  DOLLARS)	PETRICAL PETRICAL PART PART PART PART PART PART PART PART	
MAIN HEATING FUEL											
NATURAL GAS	2.5	.27	2.4	.19	1.0	.08	1.3	Q	Q	o	Q
ELECTRICITY	1.8	.12	1.8	Q	Q	.12	1.7	Q.	q		q
FUEL OIL OR KEROSENE	Q	Q	Q	à	Q.	Q	Q	Q.	Ġ	Q	Q
LPG	.3	.02	.3	ò	à	.01	. 2	Q.	Q.	.01	.1
WOOD	.8	.04	.6	Q.	Q.	.03	, 5	Q	Q	Q	Q
OTHER OR NONE	Q Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
HOT WATER FUEL											
NATURAL GAS	1.9	0.21	1.8	0.15	0.8	0.06	1.0	Q	Q		ଦ
ELECTRICITY	3.6	.25	3.2	.04	.2	.19	8.8	0.01	0.1		0.1
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q		Q
OTHER	. 2	.01	. 2	Q	Q	.01	.1	Q	Q	.01	. 1
HEATING DEGREES-DAYS (HDD) AHD COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE <2,000 CDD AHD >7,000 HDD	_	_	_	-	_	-	_	_	_	_	<b>-</b>
<2,000 CDD AND											
5,500 TO 7,000 HDD	-	-	-	-	-	-	-	-	-	-	-
4,000 TO 5,499 HDD	1.3	.12	1.2	.06	.3	.05	. 9	Q	Q	Q	Q
<2,000 CDD AND <4,000 HDD	3.4	.26	2.9	.09	. 5	.16	2.3	Q	Q	.01	.l
>2,000 CDD AND <4,000 HDD	1.0	.09	1.0	.04	. 2	.04	. 7	o,	ġ.	.01	.1



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

	l										
		     ALL MAJ	OR FUELS		URAL AS	l     ELECT 	RICITY	   FUEL   KERO 	OIL OR SENE	! PETR	EFIED OLEUM AS
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MIL-	CON-	EXPEND-	SUMED	EXPEND-	CON-	   TOTAL  EXPEND-   ITURES  (BILLION	SUMED	   TOTAL  EXPEND-   ITURES  (BILLION	CON-	TOTAL EXPEND- ITURES
		RILLION		RILLION		RILLION	[DOLLARS]	RILLION		RILLION	
		l BTU)	l i	l BTU) I	1	l BTU)	1	l BTU) I	ļ 	BTU)	<u> </u>
TOTAL HOUSEHOLDS	8.5	0.88	9.4	0.52	2.6	0.32	6.4	Q	Q	0.04	0.3
AREA TYPE									_		
METROPOLITAN	5.9 3.5	.64 .38	6.8 3.6	.39 .26	1.9 1.1	.24 .12	4.8 2.4	Q Q	Q	.01 Q	.1 Q
OUTSIDE CENTRAL CITY	2.4	.26	3.2	.13	.7	.12	2.4	à	Q.	.01	.1
NON-METROPOLITAN	2.6	.24	2.6	.13	.8	.08	1.6	Q	Q	.03	.2
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	7.6	.81	8.5	.50	2.5	.29	5.8	Q	Q	.03	.3
SOME, NONE, OTHER PAID BY HOUSEHOLD	.8	.07	.9	.03	.1	.03	.7	Q	Q	.01	.1
TYPE OF HOUSING STRUCTURE					_		_	_	_	_	_
MOBILE HOME		.02	.3	.01	Q O.A	.01	.2	Q Q	Q Q	Q .03	Q
SINGLE FAMILY	6.8 1.3	.76 .10	7.8 1.3	.47 .05	2.4	. 25 . 05	5.1 1.1	Q	Q	Q Q	. 3 Q
NUMBER OF ROOMS											
1 10 3	.9	.06	.7	.03	.2	.02	.5	Q	Q	Q	Q.
4 TO 5	4.0 3.6	.36 .46	3.8 4.9	.22 .27	1.1 1.4	.13	2.6 3.4	Q Q	Q Q	.02	.1 .2
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)											
LESS THAN 999	3.0	.23	2.6	.13	.7	.09	1.8	Q	G	.01	.1
1,000 TO 1,999 2,000 OR MORE	4.5 .9	.49 .16	5.2 1.6	.29 .10	1.4	.18 .05	3.5 1.1	Q Q	Q Q	.03 Q	.2 Q
YEAR HOUSE BUILT											
BEFORE 1950	2.4	.22	2.2	.14	.8	.06	1.2	Q	Q	.02	.2
1950 TO 1974	4.6	.52	5.3	.33	1.6	.18	3.6	Q	Q	.01	.1
AFTER 1974	1.5	.14	1.9	.06	.3	.08	1.5	Q	Q	.01	.1
DWN/RENT ONN	5.7	0.63	6.7	0.38	1.9	0.23	4.6	Q	Q	0.02	0.2
RENT	2.8	.25	2.7	.14	.7	.09	1.8	Q	Q	.01	.1
L981 FAMILY INCOME LESS THAN \$10,000	2.8	.23	2.4	.13	.7	.07	1.5	Q	Q	.02	.2
\$10,000 TO \$19,999	2.3	.23	2.4	.14	.7	.08	1.6	Q	Q.	.01	.1
\$20,000 TO \$34,999	1.0	.12	1.2	.08	.4	.04	.8	Q	Q	Q	q
\$35,000 OR MORE	2.3	.30	3.4	.17	.8	.13	2.5	Q	Q	Q	Q
TOTAL BELOW 100 PERCENT  OF POVERTY LINE	1.7	.14	1.4	.08	.5	.04	9.	Q	Q	.01	.1
TOTAL BELOW 125 PERCENT									•		
OF POVERTY LINE	2.3	.19	2.0	.11	.6	.06	1.2	Q	Q	.02	.2
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	2.8	.26	3.0	,15	.7	.11	2.2	Q	Q	.01	.1
35 TO 59 YEARS	3.5	.41	4.2	. 26	1.3	.14	2.9	Q	q	.01	.1
60 YEARS AND OVER	2.2	.21	2.2	.12	.6	.07	1.4	Q	q	.02	.2
HOUSEHOLD MEMBERS ONE PERSON	1.6	.12	1.3	.07	.4	.04	.9	Q	Q	.01	Q
2 TO 4 PEOPLE	5.7	.60	6.5	, 35	1.8	.22	4.5	Q	Q	.03	.2
5 OR MORE PEOPLE	1.2	.16	1.6	.10	.5	.05	1.0	Q	q	.01	.1



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

	NUMBER	ALL MAJOR FUELS		NATURAL   GAS		I     ELECT 	RICITY		OIL OR SENE	PETR	EFIED OLEUM AS
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)		TOTAL EXPEND- ITURES (BILLION DOLLARS)	CON- SUMED QUAD-	   TOTAL  EXPEND-   ITURES  (BILLION  DOLLARS)	SUMED	   TOTAL  EXPEND-   ITURES   BILLION  DOLLARS	( GUAD -	TOTAL EXPEND- ITURES (BILLION DOLLARS)	PETR  G  TOTAL  TOTAL  AMOUNT  CON- SURIED  (QUAD- RILLION  BTU)  Q Q Q Q Q Q Q 0.04  Q Q Q 0.03	EXPEND-   ITURES  (BILLICN
MAIN HEATING FUEL											
NATURAL GAS	6.2	.70	6.7	.50	2.5	.20	4.2	Q	Q	o	Q
ELECTRICITY	1.3	.11	1.8	.02	.1	.09	1.7	Q	Q.		Q
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
LPG	.7	. 05	.7	Q	Q	.02	.4	Q	Q	.04	.3
WOOD	. 3	.02	.2	.01	Q	.01	. 2	Q	Q		Q
OTHER OR NONE	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
HOT WATER FUEL											
NATURAL GAS	6.3	0.71	6.9	0.50	2.5	0.21	4.4	Q	Q	Q	Q
ELECTRICITY	1.5	.12	1.9	.02	.1	.09	1.7	Q	Q		q
FUEL OIL OR KEROSENE	Q.	Q	Q_	Q	Q	Q	Q	Q	Q		Gł
OTHER	.7	.05	.7	Q	Q	.02	.4	Q	Q	0.03	0.3
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	-	-	-	-	-	-	-	-	-	-	•••
<2,000 CDD AND 4,000 TO 5,499 HDD	Q		Q	Q	Q	Q	G	Q	Q	o	Q
<pre>4,000 10 5,499 HD0</pre> <2,000 CDD AND <4,000 HDD	2.0	વ .24	2.0	.15	.5	.07	1.4	Q	Q		. L
>2,000 CBD AND <4,000 HDD	6.5	.64	7.4	.37	2.1	.25	5.0	à	Q	.02	. 2



Table 1. (Continued) Census Region: West

		I		1		·		<del></del>		1	
		ALL MAJ	OR FUELS		URAL AS	I ELECT	RICITY	I FUEL KERO	OIL OR SENE	PETR	EFIED OLEUM AS
	NUMBER	İ		! 				l		]	AJ
HOHOPHOLD	OF	TOTAL		TOTAL	1	TOTAL	1	TOTAL	!	70741	[
HOUSEHOLD CHARACTERISTICS	HOUSE-	I TOTAL	TOTAL	TOTAL	TOTAL	I TOTAL	TOTAL	I TOTAL I AMOUNT	TOTAL	TOTAL   AMOUNT	Ι Ι τηται
	(MIL-	I CON-	EXPEND-	CON-	EXPEND-		EXPEND-	:	EXPEND-		EXPEND-
[변화] . Ser 조모	LIONS)		ITURES		ITURES		ITURES		ITURES		ITURES
	.:						(BILLION				
		BTU)	I	BTU	I			BTU)	 	BTU)	
	<u> </u>	İ	<u> </u>	<u> </u>	Ĺ	<u> </u>	<u> </u>	L	1	L	<u> </u>
TOTAL HOUSEHOLDS	16.5	1.38	12.0	0.89	4.3	0.42	7.1	0.03	0.3	0.04	0.4
REA TYPE											
METROPOLITAN	14.4	1.20	10.3	.81	3.9	. 36	6.0	.02	.2	.01	.1
CENTRAL CITY	7.3	.58	4.9	.40	2.0	.17	2.9	.01	.1	Q	ପ୍
OUTSIDE CENTRAL CITY	7.1 2.1	.61 .18	5.3 1.8	.40	2.0	.19	3.2 1.1	.01 .01	.1 .1	.01	.1
		.10			, ,		* • *	.01	••	.03	, ,
TILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NONE, OTHER	14.0	1.20	10.6	.77	3.8	.38	6.3	.03	.2	.03	.3
PAID BY HOUSEHOLD	2.5	.18	1.5	.12	.6	.04	.8	Q	Q	.01	.1
YPE OF HOUSING STRUCTURE											
MOBILE HOME	. 9	.07	.7	.03	. 2	.02	.4	Q	ଷ୍	.01	.1
SINGLE FAMILY	11.2 4.5	1.05	9.1 2.3	.68 .18	3.3	.31	5.3 1.4	.03 Q	.2 Q	.02 Q	.2 Q
E OR HORE DRITE	4.5	0	2.3	.10	. 7	.00	1.4	4	æ	ų	ч
UMBER OF ROOMS											
1 TO 3	2.5	.12	1.1	.08	.4	.04	.7	Q	ଦ୍	Q	Q
4 TO 5	8.2 5.9	.62 .64	5.4 5.5	.40 .41	1.9 2.0	.19 .20	3.2 3.2	.01 .02	.1 .2	.02 .01	.2 .1
	2.,		2.2				312				••
EASURED HEATED SPACE OF RESI-											
ENCE (IN SQUARE FEET) LESS THAN 999	6.9	.42	3.8	.26	1.3	.13	2.3	.01	.1	.02	.2
1,000 TO 1,999	7.1	.64	5.5	.42	2.0	.19	3.3	.01	.1	.01	.1
2,000 OR MORE	2.5	.32	2.7	.21	1.0	.09	1.5	.01	.1	.01	.1
EAR HOUSE BUILT											
BEFORE 1950	4.3	.37	2.9	.25	1.3	.09	1.4	.02	.2	.01	.1
1950 TO 1974	8.4	.74	6.3	.50	2.5	.21	3.6	.01	.1	.02	.2
AFTER 1974	3.8	.27	2.8	.14	-6	.12	2.0	Q	Q	.01	.1
WN/RENT											
OWN	9.9	0.93	8.3	0.59	2.8	0.29	5.0	0.02	0.2	0.02	0.2
RENT.	6.6	.45	3.8	.30	1.5	.13	2.1	.01	.1	.01	.1
981 FAMILY INCOME											
LESS THAN \$10,000	4.7	.34	3.0	.22	1.1	.10	1.7	.01	.1	.01	.1
\$10,000 TO \$19,999	4.7	. 36	3.2	.24	1.1	.11	1.8	.01	.1	.01	.1
\$20,000 TO \$34,999 \$35,000 OR MORE	2.6 4.4	.23	2.0 3.9	.15	.7 1.4	.08 .14	1.2 2.4	Q .01	Q .1	Q .01	Q .1
- No. 10	-7.	• • •	3.7	••,	***	•••					
OTAL BELOW 100 PERCENT	* ^	* /			-	0.5	-		_		_
F POVERTY LINE	1.9	.16	1.3	.11	.5	.05	.7	Q	Q	.01	Q
F POVERTY LINE	3.0	.24	2.1	.16	.8	.07	1.2	Q	Q	.01	.1
GE OF HOUSEHOLD HEAD											
UNDER 35 YEARS	6.0	.45	3.9	.29	1.4	.14	2.3	.01	.1	.01	.1
35 TO 59 YEARS	6.1	.59	5.1	.39	1.9	.17	3.0	.01	.1	.02	. 2
60 YEARS AND OVER	4.3	. 34	3.0	.22	1.1	.10	1.8	.01	.1	.01	.1
OUSEHOLD MEMBERS											
ONE PERSON	4.0	. 25	2.1	.17	.8	.07	1.2	.01	.1	Q	Q
2 TO 4 PEOPLE	10.6	.92 .21	8.1 1.8	.59	2.9	.29 .06	4.8 1.1	.02 Q	.2 Q	.02 .01	.2 .1
5 OR HORE PEUPLE	1.7	. 61	7.0	.13	.6	.00	1.1	ч	ď	.01	- 1



Table 1. (Continued) Census Region: West

	ALL MAJOR FUELS			URAL AS	ELECTRICITY		FUEL ( KERO	OIL OR SENE	PETR	DEFIED OLEUM SAS	
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)		TOTAL EXPEND- ITURES (BILLION DOLLARS)	SUMED (QUAD-		(QUAD-	TOTAL EXPEND- ITURES (BILLION DOLLARS)	SUMED (GUAD-		PETH PETH PETH PETH PETH PETH PETH PETH	
MAIN HEATING FUEL											
NATURAL GAS	11.1	1.05	8.1	.84	4.1	.21	4.0	Q	G	a	Q
ELECTRICITY	3.1	.19	2.2	.04	.2	.15	2.0	õ	õ		q.
FUEL OIL OR KEROSENE	.4	.04	.4	Q	Q	.02	.2	.03	.e		Q.
LPG	.4	.03	.4	Q	Q	.01	.2	Q	Q		.2
W000	.9	.05	.6	.01	.1	.03	.5	Q	Q		.1
OTHER OR NONE	.5	.02	.4	Q	Q	.01	.3	Q	Q		.1
HOT WATER FUEL											
NATURAL GAS	11.3	1.05	8.2	0.85	4.1	0.21	4.1	Q	Q		Q
ELECTRICITY	4.2	.27	3.0	.04	. 3	.19	2.5	0.03	0.2		q
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q		Q
OTHER	.8	.05	.8	Q	Q	.02	.4	Q	Q	0.03	0.3
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	1.4	.17	1.2	.13	.6	.03	.5	Q	Q	.01	. 1.
5,500 TO 7,000 HDD	1.5	.16	1.3	.09	.4	.05	.8	.01	.1	.01	.1
<2,000 CDD AND					_				_	_	
4,000 TO 5,499 HDD	3.0	.23	2.0	.09	.5	.12	1.3	.02	.2	Q	Ģ.
<2,000 CDD AND <4,000 HDD	9.2	. 74	6.4	. 56	2.7	.17	3.6	Q	Q	.01	. 1
>2,000 CDD AND <4,000 HDD	1.3	.07	1.2	.02	. 1	.04	1.0	Q	Q	Q	.1



Table 1. (Continued)
Census Division:
Mountain

	·					,	·····	·		1	
		;		I I NAT	URAL	! <b>!</b>		FUEL	OIL OR	LIQU	EFIED
	!	ALL MAJ	OR FUELS	l G	AS	ELECT	RICITY	l KERO	SENE		OLEUM
	NUMBER	i i		1 1		} [				i e	AS
	OF.		l	i	Τ	i	Ī	<u> </u>	1	<u> </u>	
HOUSEHOLD	HOUSE-	TOTAL	!	TOTAL	!	TOTAL	!	TOTAL	[	TOTAL	!
CHARACTERISTICS	HOLDS		TOTAL		TOTAL EXPEND-		TOTAL		TOTAL  EXPEND-		TOTAL  EXPEND-
	(MIL-   LIONS)	CON-   SUMED	EXPEND-		ITURES		ITURES		ITURES	1	ITURES
	1 210,107								(BILLION		
			DOLLARS)		[DOLLARS]		[DOLLARS]		[DOLLARS]		[DOLLARS]
	l L	l BTU)	<u> </u>	l BTU)		BTU)	<u> </u>	BTU)	i I	l BTU)	
TOTAL HOUSEHOLDS	4.3	0.42	3.8	0.27	1.3	0.12	2.2	0.01	0.1	0.02	0.2
AREA TYPE											
METROPOLITAN	2.8	.27	2.5	.19	.9	.08	1.5	Q	Q	Q	Q
CENTRAL CITY	1.7	.16	1.4	.11	.6	.04	.9	Q	Q	Q	Q
OUTSIDE CENTRAL CITY	1.1	.11	1.0	.07	.4	.03	.7	Q	Q_	Q	Q
NON-METROPOLITAN	1.5	.16	1.3	.08	.4	.04	.7.	.01	.1	.02	.2
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	3.7	.37	3.3	.24	1.1	.11	1.9	.01	.1	.01	.1
SOME, NONE, OTHER	. 3.7	.31	3.3	• 6-7	1.1	.11	4.7	.01		.01	• •
PAID BY HOUSEHOLD	.6	.06	.5	.03	.2	.01	.3	Q	Q	.01	.1
TYPE OF HOUSING STRUCTURE			~				^	^	•		
MOBILE HOME	3.3	.03	.3 3.0	.01 .22	.1 1.0	.01 .10	.2 1.8	Q .01	Q .1	.01 .01	.1 .1
2 OR MORE UNITS	.7	.05	.5	.04	.2	.02	.3	Q	q	Q	Q Q
NUMBER OF ROOMS											
1 TO 3	.6	.04	.4	.03	.1	.01	.2	Q	Q	Q	Q
4 TO 5	2.2	.19	1.8	.12	.6	.06	1.1	Q	Q	.01	.1
6 OR MORE	1.5	.20	1.7	.13	.6	.05	.9	.01	.1	.01	.1
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)											
LESS THAN 999	1.7	.13	1.3	.08	.4	.04	.8	Q	Q	.01	.1
1,000 TO 1,999	1.8	.18	1.6 .9	.12	.5 .3	.05	1.0 .5	Q Q	Q Q	.01 .01	.1 .1
			• •					•	,		
YEAR HOUSE BUILT BEFORE 1950	.9	.09	.7	.06	.3	.02	.3	.01	Q	Q	Q
1950 TO 1974	2.2	.24	2.0	.17	.8	.06	1.1	Q	Q.	.01	.1
AFTER 1974	1.2	.09	1.1	.04	.2	.04	.8	Q	Q	.01	.1
OWN/RENT											
OWN	3.1	0.32	2.9	0.20	1.0	0.10	1.7	0.01	Q	0.02	0.1
RENT	1.2	.10	.9	.07	.3	.03	.5	Q	Q	.01	.1
1981 FAMILY INCOME LESS THAN \$10,000	1.5	.12	1.1	.08	.4	.03	.6	Q	Q	.01	.1
\$10,000 TO \$19,999	1.0	.10	.9	.06	.3	.03	.5	q	q	.01	.1
\$20,000 TO \$34,999	.7	.07	.6	.05	.2	.02	. 3	Q	Q	Q	Q
\$35,000 OR MORE	1.2	.13	1.2	.08	.4	.04	.8	Q	Q	Q	Q
TOTAL BELOW 100 PERCENT	_				_		_	_	_	_	
OF POVERTY LINE	.5	.05	.4	.03	.1	.01	. 2	Q	Q	Q	Q
TOTAL BELOW 125 PERCENT OF POVERTY LINE	.8	.08	.7	.05	.2	.02	.4	Q	Q	.01	.1
AGE OF HOUSEHOLD HEAD											
UNDER 35 YEARS	1.6	.15	1.4	.09	.4	. 85	.9	Q	Q	.01	.1
35 TO 59 YEARS	1.4	.16	1.4	.10	.5	.04	.8	Q	Q	.01	.1
60 YEARS AND OVER	1.3	.12	1.1	.08	.4	.03	.6	Q	Q	Q	Q
HOUSEHOLD MEMBERS ONE PERSON	1.1	.08	.7	.06	. 3	. 02	.4	Q	Q	Q	Q
2 TO 4 PEOPLE	2.7	.08	2.5	.17	.8	.02	1.5	.01	0.1	.01	.1
5 OR MORE PEOPLE	.5	.07	.6	.04	.2	.02	.3	Q	Q	.01	.1



Table 1. (Continued)
Census Division:
Mountain

	NUMBER	ALL MAJ	OR FUELS		URAL AS	i   ELECT 	RICIYY	FUEL KERO	OIL OR SENE	PETR	DEFIED POLEUM SAS
HOUSEHOLD CHARACTERISTICS	OF HOUSE- KOLDS (MIL- LIONS)	(QUAD-	   TOTAL  EXPEND-   ITURES  (BILLION  DOLLARS)	SUMED (QUAD-					   TOTAL  EXPEND-   ITURES  (BILLION  DOLLARS)		   TOTAL  EXPEND-   ITURES  (BILLION  DOLLARS)
MAIN HEATING FUEL											
NATURAL GAS	2.8	.32	2.4	. 26	1.2	.06	1.2	Q	Q	Q	Q
ELECTRICITY	.9	.05	.7	.01	Q	.04	.7	õ	õ	õ	Q
FUEL OIL OR KEROSENE	Q,	Q	Q.	Q .	ġ.	G.	Q.	à	Ĝ.	Q.	ĝ
LPG	.2	.02	.3	à	à	.01	.1	à	Q	.02	.1
WOOD	. 3	.02	.2	Q	Q	.01	.1	Q	Q	.01	.1
OTHER OR NONE	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
HOT WATER FUEL											
NATURAL GAS	2.7	0.32	2.4	0.26	1.2	0.06	1.1	Q	Q	Q	Q
ELECTRICITY	1.2	.08	1.0	.01	.1	.05	. 9	0.01	0.1	Q	q
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	q
OTHER	.4	.03	.4	Q	Q	.01	.2	Q	Q	0.02	0.2
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD	1.2	.16	1.1	.12	.5	.03	.5	Q	Q	.01	. 1
5,500 TO 7,000 HDD	1.3	.14	1.1	.08	.4	.04	.6	.01	.1	.01	. 1
4,000 TO 5,499 HDD	. 3	.03	. 3	.02	.1	.01	.2	Q	Q	Q	Q
<2,000 CDD AND <4,000 HDD	.5	.04	.4	.03	.1	.01	. 3	Q	Ġ	Q	Q
>2,000 CDD AND <4,000 HDD	1.0	.06	. 9	.02	.1	.04	.7	Q	q	Q	Ġ



Table 1. (Continued)
Census Division:
Pacific

in the grander of		1		1	URAL	1		   ===================================	OIL OR	וומדו	EFIED
114.4		I ALL MAJ	OR FUELS		AS	ELECT	RICITY	KERO			OLEUM
i de la companya de la companya de la companya de la companya de la companya de la companya de la companya de				i	···	1		İ			AS
4.	NUMBER	ļ		ļ		!	· · · · · · · · · · · · · · · · · · ·	ļ <u></u>	<del></del>		·
HOUSEHOLD	OF HOUSE-	!   TOTAL	1	I TOTAL	l t	I TOTAL	1	   TOTAL	l l	TOTAL	1
CHARACTERISTICS	HOLDS		TOTAL		TOTAL			AMOUNT	TOTAL	AHOUNT	
	(MIL-		EXPEND-		EXPEND-		EXPEND-		EXPEND-		EXPEND-
in the first of the second	LIONS)		ITURES		ITURES		ITURES		ITURES		! ITURES
									(BILLION		
	l I	RILLION	(DOLLARS)	(RILLION ( BTU)	IDULLARSI		IDULLARSI	(RILLION	DOLLARS)	RIELLUN	[DULLARS]
e jerej – T		1 810,	1	1 010,	1	1		1	i	1	
			<u> </u>					20000			
TOTAL HOUSEHOLDS		0.07		0.40	3.0	0.70	4.0	0.02	0.2	0.01	0.2
TOTAL HOUSEHOLDS	12.2	0.96	8.2	0.62	3.0	0.30	4.9	0.02	0.2	0.01	0.2
AREA TYPE											
METROPOLITAN	11.6	.93	7.8	.62	3.0	.28	4.5	.02	.2	.01	.1
CENTRAL CITY	5.6	.43	3.5	.29	1.4	.12	2.0	.01	.1	Q	Q
OUTSIDE CENTRAL CITY	6.0	.50	4.3	.33	1.6	.15	2.5	.01	.1	.01	.1
NON-METROPOLITAN	.6	.03	.4	Q	Q	.02	.4	Q	Q	Q	.1
UTILITIES PAID BY HOUSEHOLD											
ALL PAID BY HOUSEHOLD	10.3	.84	7.3	.53	2.6	.27	4.3	.02	.2	.01	.2
SOME, NONE, OTHER											
PAID BY HOUSEHOLD	1.8	.12	. 9	.09	.4	.03	.5	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE											
MOBILE HOME	. 5	.04	. 4	.02	.1	.01	.3	Q	Q	Q	Q
SINGLE FAMILY	7.9	.71	6.1	.46	2.3	.22	3.5	.02	. 2	.01	.1
2 OR MORE UNITS	3.8	.21	1.8	.14	.7	.07	1.1	Q	Q	Q	Q
NUMBER OF ROOMS											
1 TO 3	1.8	.08	.7	.05	.2	.03	.5	Q	Q	Q	Q
4 TO 5	6.0	.43	3.7	.29	1.4	.13	2.1	.01	.1	.01	.1
6 OR MORE	4.3	.44	3.8	.29	1.4	.14	2.3	.01	.1	Q	Q
MEASURED HEATED SPACE OF RESI-											
DENCE (IN SQUARE FEET)											
LESS THAN 999	5.2	.29	2.6	.18	.9	.09	1.5	.01	.1	.01	.1
1,000 TO 1,999	5.3	.45	3.8	.30	1.5	.14	2.3	.01	.1	Q	Q
2,000 OR MORE	1.7	.21	1.8	.13	.7	.06	1.0	.01	.1	Q	Q
YEAR HOUSE BUILT											
YEAR HOUSE BUILT BEFORE 1950	3.4	.28	2.2	.19	1.0	.07	1.1	.01	.1	Q	Q
1950 TO 1974	6.2	.50	4.3	. 34	1.7	.15	2.5	.01	.1	Ġ	Q
AFTER 1974	2.6	.18	1.7	.09	.4	.08	1.2	Q	Q	.01	.1
OWN/RENT											
OWN.	6.8	0.61	5.4	0.39	1.9	0.20	3.3	0.02	0.2	0.01	0.1
RENT	5.4	.34	2.8	.24	1.1	.10	1.6	Q	Q	.01	.1
1001 FANTLY TURBUT											
1981 FAMILY INCOME LESS THAN \$10,000	3.2	.22	1.8	.14	.7	.07	1.1	Q	Q	Q	.1
\$10,000 TO \$19,999	3.7	.26	2.3	,17	.8	.08	1.3	.01	.1	.01	.1
\$20,000 TO \$34,999	2.0	.16	1.4	.10	.5	.06	. 9	Q	Q	Q	Q
\$35,000 OR MORE	3.3	.31	2.7	.21	1.0	.09	1.6	.01	.1	Q	Q
TOTAL DELON 100 SERVENT											
TOTAL BELOW 100 PERCENT OF POVERTY LINE	1.5	.12	.9	.08	.4	.03	.5	Q	Q	Q	Q
TOTAL BELOW 125 PERCENT			.,		• •	.03	.,	4	•	٩	٦
OF POVERTY LINE	2.2	.17	1.4	.11	.5	.05	.8	Q	Q	.01	.1
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	6.4	70	2.6	.20	1.0	.10	1.5	Q	Q	.01	.1
35 TO 59 YEARS	4.4	.30	3.8	.20	1.0	.10	2.2	.01	.1	.01	.1
60 YEARS AND OVER	3.0	.22	1.9	.14	.7	.07	1.1	.01	.1	Q	Ġ.
The section of the se					••	,				7	7
HOUSEHOLD MEMBERS					_		_	_	_	_	_
ONE PERSON	2.9 7.9	.17	1.4	.12	.5	.05	.8	Q .01	Q	Q .01	Q .1
5 OR MORE PEOPLE	1.3	.65 .14	5.6 1.2	.42	2.0	.20 .04	3.3 .7	Q Q	.1 Q	G .nr	Q.
		• • • •	1.0	,	. 7		• •	•	7	٦	7



#### Table 1. (Continued) **Census Division: Pacific**

	NUMBER	I     ALL MAJ 	OR FUELS		URAL AS	 	RICITY	I FUEL   KERO   	OIL OR SENE	PETR	EFIED OLEUM AS
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIOHS)		   TOTAL  EXPEND-   ITURES  (BILLION  DOLLARS)		   TOTAL  EXPEND-   ITURES  (BILLION  DOLLARS) 		   TOTAL  EXPEND-   ITURES  (BILLION  DOLLARS)	CON- SUMED QUAD-	   TOTAL  EXPEND-   ITURES  (BILLION  DOLLARS)	CON- SUMED QUAD-	   TOTAL  EXPEND-   ITURES  (BILLION  DOLLARS)
NATE DELTADO POR											
MAIN HEATING FUEL NATURAL GAS	8.4	70	5.6	F0	2.8	.15			•	_	
ELECTRICITY	2.3	.72	1.5	.58 .03	.1	.15	2.8 1.3	Q Q	Q Q	Q Q	Q
FUEL OIL OR KEROSENE	.3	.03	.3	.03 Q	Q .I	.01	.1	.02	.2	Q	Q Q
LPG	.2	.01	.1	Q	Q Q	. 0 1 Q	.1	Q Q	Q Q	.01	.1
WOOD	.6	.03	.4	.01	.1	.02	.3	Q	Q	Q	ď.
OTHER OR NONE	.4	.02	.3	Q	q	.01	.2	Q	Q	Q	.1
HOT WATER FUEL											
NATURAL GAS	8.6	0.74	5.8	0.59	2.8	0.15	3.0	Q	Q	, Q	Q
ELECTRIC_TY	3.1	.19	2.0	.03	. 2	.14	1.6	0.02	0.2	Q	Q
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	-4	.02	.4	Q	Q	.01	.2	Q	Q	0.01	0.1
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	.2	.02	.1	.01	Q	Q	.1	Q	Q	Q	Q
5,500 TO 7,000 HDD	. 3	.02	. 2	Q	Q	.02	. 2	Q	Q	Q	Q
4,000 TO 5,499 HDD	2.7	.20	1.7	.06	.4	.11	1.1	.02	.2	Q	Q
<2,000 CDD AND <4,000 HDD	8.7	.71	5.9	.54	2.6	.16	3.3	Q .	Q	.01	.1
>2,000 CDD AND <4,000 HDD	.3	.01	.3	Ģ.	Q	.01	.2	ä	Q.	Q	. 1

<sup>&</sup>quot;-" = DATA NOT APPLICABLE.

<sup>&</sup>quot;"" = 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 1982 RESIDENTIAL ENERGY CONSUMPTION SURVEY.



Table 2. U.S. Average
Residential Energy
Consumption of Major
Fuels Used in the Household, by MainHeating Fuel
Type—April 1982
Through March
1983, United States
(Million Btu per Household)

	ALL HO	JSEHOLDS				HOUSEHOLE	)5 USING:			
HOUSEHOLD	NUMBER	AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO	OIL OR SENE AS ATING FUEL	GAS A	D PETROLEU AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG.  AMOUNT  CONSUMED  PER  HOUSEHOLD  (MILLION  BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOL (MILLION BTU)
TOTAL HOUSEHOLDS	83.8	103	47.5	118	13.4	62	12.0	125	3.8	86
AREA TYPE										
METROPOLITAN	63.2	106	38.8	118	10.5	62	9.7	129	1.5	76
CENTRAL CITY	29.4	107	19.9	114	4.5	65	4.1	130	.3	46
OUTSIDE CENTRAL CITY	33.8	106	18.9	121	5.9	59	5.6	129	1.3	84
NON-METROPOLITAN	20.6	92	8.7	121	2.9	62	2.3	107	2.2	92
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	68.9	105	38.6	125	11.5	61	8.7	126	3.4	86
SOME, NONE, OTHER PAID BY HOUSEHOLD	14.8	92	8.9	87	1.9	69	3.4	122	.4	85
TYPE OF HOUSING STRUCTURE										
MOBILE HOME	3.7	72	1.1	91	.9	50	.6	80	.9	73
SINGLE FAMILY	57.7	112	33.2	132	7.5	70	7.6	130	2.8	91
2 OR MORE UNITS	22.4	84	13.2	87	4.9	52	3.8	122	Q	Q
JUMBER OF ROOMS									_	
1 TO 3	10.8	67	5.5	68	2.8	46	1.7	109	.3	48
4 TO 5	36.6 36.4	90 127	21.0 21.0	101 149	5.9 4.6	57 77	4.9 5.4	114 140	1.9 1.6	76 105
		227	22.0	• • • •		• •	J.,	2.0	***	103
MEASURED HEATED SPACE OF RESI-										
DENCE (IN SQUARE FEET) LESS THAN 999	30.2	76	16.7	84	5.7	49	4.1	105	1.7	66
1,000 TO 1,999	35.6	104	19.9	121	5.8	65	5.0	124	1.5	90
2,000 OR MORE	17.9	147	10.8	167	1.9	90	3.0	156	.5	139
Lyou or north the transfer	11.7	- 11	10.0		2.,	,•	3.0			,
YEAR HOUSE BUILT			***	122		59	6.8	134	1.4	89
BEFORE 1950	30.6	114 101	18.4 24.5	117	1.1 6.6	62	4.4	114	1.7	83
1950 TO 1974	40.2 12.9	83	4.7	111	5.7	61	.8	110	.7	87
	22.	03	1							
DWN/RENT										
OWN	53.9	113	29.8	132	7.8	69	8.1	130	2.7	91
RENT	29,8	85	17.7	94	5.6	52	4.0	114	1.1	73
981 FAMILY INCOME										
LESS THAN \$10,000	26.3	89	14.5	100	3.9	53	4.1	113	1.7	78
\$10,000 TO \$19,999	24.8	98	13.6	114	3.9	55	3.8	123	1.0	85
\$20,000 TO \$34,999	12.4	108	7.3	123	2.1	65	1.5	137	.5	95
ATE ASA OR MORE	20.2	125	12.2	143	3.6	78	2.6	143	.5	106
\$35,000 OR MORE										
교육 보는 사람이 함께 있다. 전략적 있는 사람들 등 사람들이 되고 있다.										
TOTAL BELOW 100 PERCENT OF POVERTY LINE	12.1	92	6.9	105	1.4	59	1.8	118	.8	73
TOTAL BELOW 100 PERCENT OF POVERTY LINE OF POVERTY LINE	12.1	92 92	6.9 9.7	105 105	1.4	59 56	1.8	118	.8 1.2	73 77



Table 2. (Continued)
United States

	ALL HCL	SEHOLDS				HOUSEHOLE	S USING:			
нопаеного (	NUMBER	AVG.		_ GAS AS ATING FUEL		ICITY AS ATING FUEL	KEROS	OIL OR SENE AS ATING FUEL	GAS	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIOHS)	(CONSUMED   PER   HOUSEHOLD   (HILLION   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 BU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BIU)
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	26.2	90	14.6	104	5.3	58	2.9	111	1.0	1.6
35 TO 59 YEARS	34.0	115	19.8	132	4.7	74	4.7	133	1.5	93
60 YEARS AND OVER	23.6	101	13.0	114	3.4	52	4.4	126	1.3	8).
HOUSEHOLD MEMBERS										
ONE PERSON	19.3	80	11.5	85	3.3	48	2.9	113	0.8	73
2 TO 4 PEOPLE	54.1	106	30.3	124	8.7	63	7.7	126	2.5	84
5 OR MORE PEOPLE	10.4	130	5.7	154	1.4	89	1.5	144	.5	153
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD	8.5	112	4.5	130	.6	74	1.7	127	.5	109
5,500 TO 7,000 HDD	21.0	123	13.5	135	2.4	64	3.4	139	.5	114
4,000 TO 5,499 HDD	22.1	109	10.7	127	3.1	62	5.7	125	.5	1.07
<2,000 CDD AND <4,000 HDD	19.6	85	12.5	96	3.2	65	1.1	90	1.0	81
>2,000 CDD AND <4,000 HDD	12.6	80	6.3	103	4.1	56	. 3	67	1.3	62



Table 2. (Continued)
Census Region:
Northeast

	ALL HOU	SEHOLDS				HOUSEHOLE	s USING:			
HOUSEHOLD	NUMBER	I AVG.	NATURAL MAIN HEA			ICITY AS ATING FUEL	KEROS	OIL OR SENE AS ATING FUEL	GAS .	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL-	CONSUMED PER HOUSEHOLD (MILLION BTU)	HOUSE- HOLDS (MIL-	AVG. AHOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOUSE- HOLDS (MIL-	AVG.  AMOUNT  ICONSUMED  PER  HOUSEHOLD  (MILLION  BTU)	HOLDS (MIL-	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL HOUSEHOLDS	18.0	122	7.5	134	1.3	51	7.6	135	0.2	78
AREA TYPE METROPOLITAN	15.5 6.4 9.1 2.4	125 130 122 99	6.8 3.1 3.7	135 128 140 131	1.2 .2 .9 Q	52 59 51 Q	6.7 3.0 3.7	136 138 134 124	<b>G</b> G G	ପ ପ ପ
UTILITIES PAID BY HOUSEHOLD										
ALL PAID BY HOUSEHOLD	12.7	127	5.4	147	1.1	51	4.8	141	.2	81
PAID BY HOUSEHOLD	5.3	109	2.1	100	.3	51	2.8	123	Q	Q
TYPE OF HOUSING STRUCTURE MOBILE HOME	.4 10.6 7.0	93 134 104	Q 4.5 2.9	q 159 98	Q .7 .6	Q 60 41	.2 4.0 3.3	103 145 124	Q Q Q	ପ ସ ସ
NUMBER OF ROOMS								**/	Q	Q
1 TO 3	2.8 6.3 8.8	89 106 143	1.0 2.5 4.1	73 110 163	.4 .5 .4	44 45 67	1.3 2.8 3.4	116 126 149	9 Q Q	Q Q
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	6.0	93	2.2	89	.6	41	2.7	115	Q	Q
1,000 TO 1,999 2,000 OR MORE	7.1 4.8	124 153	3.2	137 177	.5 .2	56 69	2.9 1.9	135 162	Q Q	Q Q
YEAR HOUSE BUILT BEFORE 1950	9.4 7.1 1.5	126 120 102	3.9 3.2 .4	127 140 162	0.2 .7 .5	51 50 52	4.5 2.5 .5	140 128 120	Q Q Q	<b>Q</b> <b>Q</b>
OWN/RENT										
OWN	11.3 6.7	134 100	4.9 2.7	150 104	.5 .8	62 44	4.7 2.9	144 120	G Q	Q Q
1981 FAMILY INCOME LESS THAN \$10,000	5.3 5.4 2.6 4.6	106 116 128 144	2.0 2.1 1.3 2.2	111 126 139 160	.5 .4 Q	48 50 Q 60	2.5 2.4 1.0 1.7	122 132 140 154	ଫ ଫ ଫ	ପ ପ ଦ ଦ
TOTAL BELOW 100 PERCENT OF POVERTY LINE	2.3	111	.9	123	Q	q	1.0	121	Q	Q
TOTAL BELOW 125 PERCENT OF POVERTY LINE	3.6	111	1.4	121	.2	51	1.6	125	Q	Q
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	4.8	105	1.9	122	.6	51	1.8	119	Q	Q
35 TO 59 YEARS	7.5 5.6	132 122	3.4 2.2	146 127	.3	58 46	3.0 2.8	142 136	Q Q	Q Q



Table 2. (Continued) Census Region: Northeast

	ALL HOL	SEHOLDS				HOUSEHOLE	S USING:			
HOUSEHOLD	HUMBER	AVG.		GAS AS		CITY AS	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)	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 BYU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOUD (MILLION BTU)
HOUSEHOLD MEMBERS ONE PERSON	4.4 11.2 2.3	96 127 143	1.8 4.9 .9	93 143 166	0.5 .7 Q	42 56 Q	1.9 4.6 1.0	118 137 156	<b>Q</b> Q	<i>Q</i> Q
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	1.6 8.0	90 121	Q 3.7	Q 133	Q .8	Q 49	.8 2.8	120 142	Q Q	Q Q
<pre>&lt;2,000 CDD AND 4,000 TO 5,499 HDD &lt;2,000 CDD AND &lt;4,000 HDD &gt;2,000 CDD AND &lt;4,000 HDD</pre>	8.3	128	3.7	135	.4	60	4.0	132	Q - -	Q - -



Table 2. (Continued)
Census Division: New
England

	ALL HOU	SEHOLDS				HOUSEHOLD	s using:			
HOUSEHÖLD	NUMBER	I I I AVG.			   ELECTRI   MAÌN HEA 	CITY AS	KEROS		GAS	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE-	CONSUMED   PER   HOUSEHOLD   (MILLION   BTU) 	OF HOUSE- HOLDS (MIL-			AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS	AMOUNT CONSUMED		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL HOUSEHOLDS	4.2	120	1.2	130	0.3	47	2.1	140	Q	Q
AREA TYPE METROPOLITAN CENTRAL CITY OUTSIDE CENTRAL CITY NON-METROPOLITAN	3.3 1.3 2.0	128 120 133 92	1.1 .6 .5 Q	131 110 154 Q	.3 Q .2 Q	47 Q 44 Q	1.7 .5 1.1	146 144 147 120	<i>ख च च</i>	ଫ ଫ ଫ
	.,	76	4	4	ч	4	.5	120	4	4
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NONE, OTHER	3.2	127	.9	139	Q	Q	1.6	147	Q	Q
PAID BY HOUSEHOLD	1.0	97	.3	. 97	.2	51	. 5	119	Q	Q
TYPE OF HOUSING STRUCTURE MOBILE HOME	Q 2.3 1.8	Q 137 99	Q .5 .7	Q 165 103	Q Q • 3	ଷ ଷ 46	Q 1.3 .8	Q 156 118	Q Q Q	ୟ ଫ ୟ
NUMBER OF ROOMS										
1 TO 3	.5 1.7 2.0	63 103 148	. 2 . 5 . 5	67 109 170	. 2 Q Q	43 Q Q	Q .9 1.1	Q 121 160	Q Q Q	ख ख
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)		80		70		60	-	110		•
LESS THAN 999	1.2 1.9 1.1	120 165	.4 .5 .3	79 132 191	.2 Q Q	42 9 9	.5 1.0 .6	110 133 178	Q Q	ବ ଦ ବ
YEAR HOUSE BUILT BEFORE 1950	2.4	130	0.8	131	Q	Q	1.3	146	Q	Q
1950 TO 1974	1.5	110 96	.4 Q	137 Q	0.2 Q	41 Q	.7 Q	128 Q	Q Q	Q
OWN/RENT OWN	2.7 1.5	134 94	.7 .5	155 93	Q .3	Q 46	1.5	147 125	Q Q	Q Q
1981 FAMILY INCOME LESS THAN \$10,000	1.0	105	.3	97	q	q	.5	123	Q	Q
\$10,000 TO \$19,999 \$20,000 TO \$34,999 \$35,000 OR MORE	1.2 .6 1.4	113 110 142	.3 .2 .5	110 105 173	Q Q Q	Q Q Q	.6 .3 .7	147 145 146	Q Q Q	Q Q
TOTAL BELOW 100 PERCENT OF POVERTY LINE	.3	93	Q	Q	Q	Q	Q	Q	Q	Q
TOTAL BELOW 125 PERCENT OF POVERTY LINE	.6	110	.2	122	Q	Q	.2	131	Q	Q
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	1.2	97	.3	97	Q	Q	.6	120	Q	Q
35 TO 59 YEARS	1.7	131 128	.5	147 134	Q Q	Q Q	.8	153 142	Q Q	Q Q



Table 2. (Continued) Census Division: New England

	ALL HOU	SEHOLDS				HOUSEHOLI	os USING:			
HOUSEHOLD	NUMBER	AVG.		L GAS AS ATING FUEL		CITY 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)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT 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 CONSUMED PER HOUSEHOLD (MILLION BTU)
HOUSEHOLD MEMBERS ONE PERSON	0.8 2.9 .5	95 125 135	0.3 .8 Q	87 141 Q	વ 0.2 વ	Q 46 Q	0.4 1.6 .2	120 141 177	<b>a</b> <b>a</b>	Q Q Q
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE <2,000 CDD AND >7,000 HDD	1.1	100	Q	Q	Q	Q	.6	121	Q	Q
<2,000 CDD AND 5,500 TO 7,000 HDD <2,000 CDD AND	3.1	127	1.1	127	.3	47	1.6	147	Q	Q
4,000 TO 5,499 HDD	-	- -	- - -	-	-	-	-	: <u> </u>	- - -	- -



Table 2. (Continued)
Census Division: Middle
Atlantic

	<u> </u>									
	ALL HOL	SEHOLDS				HOUSEHOLE	S USING:			
HOUSEHOLD	NUMBER	     AVG.   AMOUNT		GAS AS		CITY AS	KEROS	OIL OR SENE AS TING FUEL	GAS	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS.		CONSUMED PER HOUSEHOLD (MILLION BTU)	HOUSE- HOLDS (MIL-	AVG. AMOUNT ICONSUMED I PER IHOUSEHOLD I(MILLION BTU)	OF HOUSE- HOLDS (MIL-	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS			AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL HOUSEHOLDS	13.7	122	6.3	135	1.0	52	5.4	132	0.2	72
AREA TYPE METROPOLITAN CENTRAL CITY. OUTSIDE CENTRAL CITY. NON-METROPOLITAN.	12.2 5.1 7.1 1.5	124 132 119 104	5.7 2.5 3.2 .7	135 132 138 132	.9 Q .8 Q	54 Q 52 Q	5.1 2.5 2.6 .4	133 137 129 129	<b>Q</b> Q Q	<b>લ</b> લ લ લ
UTILITIES PAID BY HOUSEHOLD										
ALL PAID BY HOUSEHOLD	9.4	127	4.5	149	.9	52	3.1	139	Q	Q
PAID BY HOUSEHOLD	4.3	112	1.9	101	Q	Q	2.3	124	Q	Q
TYPE OF HOUSING STRUCTURE MOBILE HOME. SINGLE FAHILY 2 OR MORE UNITS	.3 8.3 5.2	89 134 106	Q 4.0 2.2	Q 158 97	Q .7 .3	Q 60 37	Q 2.8 2.5	Q 140 126	લ વ વ	Q Q Q
NUMBER OF ROOMS										•
1 TO 3	2.3 4.6 6.8	94 108 141	.8 2.0 3.6	74 111 162	.3 .4 .3	45 44 67	1.2 1.9 2.3	118 128 144	Q Q	Q Q Q
MEASURED HEATED SPACE OF RESI- DENCE (IN JOUARE FEET) LESS THAN 999	4.8 5.2	97 126	1.8	91 138	.4	40 54	2.3 1.9	116 137	Q Q	Q O
2,000 OR MORE	3.7	150	1.8	174	.2	70	1.3	154	Q	q q
YEAR HOUSE BUILT BEFORE 1950	7.0 5.6 1.2	125 122 103	3.1 2.9 .3	126 140 180	Q 0.5 .4	Q 53 52	3.2 1.8 .4	138 128 109	ୟ ପ ୟ	Q Q Q
OWN/RENT OWN RENT	8.5 5.2	134 102	4.2 2.2	150 107	.5 .6	63 43	3.2 2.2	142 118	Q Q	Q Q
1981 FAMILY INCOME LESS THAN \$10,000	4.4	106	1.7	113	.4	48	2.0	122	Q	Q
\$10,000 TD \$19,999 \$20,000 TD \$34,999 \$35,000 OR MORE	4.2 2.0 3.2	116 133 145	1.8 1.1 1.8	128 144 156	.3 Q .3	52 q 60	1.7	127 138 161	Q Q	<b>Q</b> Q
TOTAL BELOW 100 PERCENT OF POVERTY LINE TOTAL BELOW 125 PERCENT	2.0	114	.9	124	Q	Q	. 9	122	Q	Q
OF POVERTY LINE	3.0	112	1.3	120	.2	51	1.3	124	Q	Q
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	3.5 5.8	108 132	1.6 2.9	127 146	.5 .2	51 60	1.2	119 138	Q Q	Q Q
60 YEARS AND OVER	4.4	120	1.8	125	.3	48	2.1	134	Q	. Q



Table 2. (Continued)
Census Division:
Middle Atlantic

	ALL HOL	ISEHOLDS				ноиѕенац	S USING:			
HOUSEHOLD I	NUMBER		NATURAL MAIN HEA	GAS AS I		ICITY AS ATING FUEL	KEROS	OIL OR SENE AS TING FUEL	GAS A	PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD IMILLION BTU	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. I AVG. I AMOUNT ICONSUMED I PER IHOUSEHOLD I(MILLION I BTU)	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)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLIGN BTU)
HOUSEHOLD MEMBERS										
ONE PERSON	3.6	97	1.5	95	0.4	40	1.6	118	Q	Q
2 TO 4 PEOPLE	8.3	128	4.1	144	.6	59	3.0	135	Q	ଦ
5 OR MORE PEOPLE	1.8	145	.7	166	Q	Q	.8	151	Q	Q
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD	. 5	71	Q	Q	Q	Q	.2	120	Q	Q
5,500 TO 7,000 HDD	4.9	117	2.7	135	.5	50	1.2	136	Q	G
4,000 TO 5,499 HDD	8.3	128	3.7	135	.4	60	4.0	132	Q	Q
<2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-	-
>2,000 CDD AND <4,000 HDD	_	-	-	-	_	-	-	-	-	_



Table 2. (Continued)
Census Region: North
Central

	ALL HO	JSEHOLD\$				HOUSEHOLD	S USING:			
HOUSEHOLD	     Number	I AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO:		GAS	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU)	OF	AMOUNT	HOUSE- HOLDS (MIL-	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS	AMOUNT		AVG. ANOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL HOUSEHOLDS	21.3	155	15.5	133	2.1	73	1.6	128	1.0	121
AREA TYPE METROPOLITAN CENTRAL CITY OUTSIDE CENTRAL CITY NON-METROPOLITAN	14.7 7.2 7.6 6.6	126 129 124 112	11.7 6.0 5.6 3.8	134 136 132 130	1.4 .8 .7	71 79 61 79	1.1 .3 .8	133 137 132 116	.2 Q .2 .8	142 Q 144 116
UTILITIES PAID BY HOUSEHOLD										
ALL PAID BY HOUSEHOLD SOME, NONE, OTHER		128	12.4	144	1.7	73	1.3	126	.9	121
PAID BY HOUSEHOLD	3.8	94	3.1	92	.4	75	.3	137	Q	Q
TYPE OF HOUSING STRUCTURE MOBILE HOME. SINGLE FAMILY. 2 OR MORE UNITS.	.7 15.0 5.6	88 134 95	.2 10.7 4.6	107 148 100	Q 1.2 .8	Q 86 54	q 1.2 .3	Q 132 118	.2 .8 Q	81 131 Q
NUMBER OF ROOMS										
1 TO 3	2.4 9.6 9.3	74 109 147	1.7 7.0 6.8	79 117 163	.4 .8 .8	56 69 87	.2 .8 .6	97 123 145	Q .4 .5	Q 103 137
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)		89			.9			105	•	0.5
LESS THAN 999	6.8 8.1 6.3	122 157	5.2 5.7 4.6	96 134 173	.7 .5	58 78 95	.3 .8 .5	105 122 156	.2 .4 .3	85 115 158
YEAR HOUSE BUILT BEFORE 1950	9.3 9.2 2.9	134 116 100	7.4 6.8 1.3	140 128 121	Q 1.2 .8	Q 72 75	0.9	143 110 99	0.4 .4 Q	131 109 Q
OWN/RENT	-,-									
OWN	14.3 7.0	132 101	9.9 5.6	147 108	1.2	85 58	1.3	132 112	. 9 Q	Q Q
1981 FAMILY INCOME LESS THAN \$10,000	6.8	109	5.1	116	.5	65	.5	128	.4	110 94
\$10,000 TO \$19,999 \$20,000 TO \$34,999 \$35,000 OR MORE	6.7 2.9 4.9	114 127 147	4.7 2.0 3.7	129 140 159	.7 .4 .4	65 83 88	.6 .2 .3	119 123 155	.2 Q .3	Q 138
TOTAL BELOW 100 PERCENT OF POVERTY LINE	2.8	115	2.3	119	Q	Q	. 2	150	Q	Q
TOTAL BELOW 125 PERCENT OF POVERTY LINE	4.0	114	3.1	121	. 2	63	.3	138	.2	108
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	6.5	104	4.7	117	.8	60	.3	112	.2	112
35 TO 59 YEARS	8.8	135 122	6.5 4.3	146 130	.8	94 65	.6 .7	143 124	.5 .3	126 119



#### Table 2. (Continued) Census Region: North Central

	ALL HOL	SEHOLDS   				HOUSEHOLE	S USING:			
HOUSEHOLD	NUMBER	AVG.		. GAS AS TING FUEL		ICITY AS ATING FUEL	KEROS	OIL OR SENE AS LTING FUEL	GAS A	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED   PER   HOUSEHOLD   HILLION   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 ICONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSELOED (MILLION BTU!
HOUSEHOLD MEMBERS ONE PERSON	4.7	97	3.7	101	0.4	51	0.3	124	0.2	102
2 TO 4 PEOPLE	13.6 3.0	124 149	9.7 2.1	138 170	1.4	72 105	1.1 Q	129 Q	.6	118 157
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	5.5	115	3.3	125	. 3	91	.9	130	.3	11.9
5,500 TO 7,000 HDD	11.5	127	9.0	137	1.3	71	.5	128	.3	130
4,000 TO 5,499 HDD	4.3	118	3.1	131	.4	66	.2	119	.3	11.4
<2,000 CDD AND <4,000 HDD >2,000 CDD AND <4,000 HDD	Q 	<b>Q</b> -	Q -	Q -	Q -	Q ~	Q ~	Q ~	Q -	- 3



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

	· ·	1	i							
e de la companya de l	ALL HOU	SEHOLDS	!   			HOUSEHOLE	s using:			
HOUSEHOLD	NUMBER	AVG.		GAS AS TING FUEL		ICITY AS ATING FUEL	KER0:	OIL OR SENE AS ATING FUEL	GAS	D PETROLEUM AS MAIN NG FUEL
	HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU) I	HOUSE- HOLDS (MIL-	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	(MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL HOUSEHOLDS	15.0	121	10.8	133	1.6	73	1.3	132	0.5	116
AREA TYPE METROPOLITAN CENTRAL CITY OUTSIDE CENTRAL CITY NON-METROPOLITAN	11.4 5.4 6.0 3.6	126 131 122 104	8.9 4.4 4.5 1.9	135 139 131 122	1.2 .7 .5	70 79 56 81	1.0 .3 .7	133 135 132 130	Q Q Q .4	Q Q Q 107
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD		128	8.4	145	1.3	73	1.0	132	.5	116
PAID BY HOUSEHOLD	2.9	91	2.3	89	.3	74	.3	132	Q	Q
TYPE OF HOUSING STRUCTURE MOBILE HOME	.4 10.1 4.5	82 134 95	Q 7.1 3.6	Q 149 101	9 .9 .6	Q 87 54	Q 1.0 .3	Q 138 113	Q .3 Q	Q 129 Q
NUMBER OF ROOMS 1 TO 3	1.8 6.9 6.3	72 109 148	1.2 5.0 4.6	78 116 165	.4 .6 .6	55 72 86	Q .6 .5	Q 122 152	Q .3 .2	Q 104 132
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	5.0	89	3.8	96	.7	58	. 2	109	.2	84
1,000 TO 1,999 2,000 OR MORE	5.6 4.3	122 158	3.9	133 177	.5	79 94	.7	122 159	Q.	126 Q
YEAR HOUSE BUILT BEFORE 1950	6.9 6.2 1.9	133 114 97	5.5 4.4 .9	139 129 112	Q 1.0 .5	q 71 76	8.0 3. 2.	148 112 99	Q 0.2 Q	Q 96 Q
OWN/RENT OWN RENT	9.6 5.4	132 102	6.4 4.4	149 109	.9	85 57	1.0	137 111	.4 Q	116 Q
1981 FAMILY INCOME LESS THAN \$10,000 \$10,000 TO \$19,999 \$20,000 TO \$34,999	5.1 4.8 1.8 3.2	110 113 125 148	3.9 3.3 1.2 2.4	115 128 140 163	.4 .6 .3	66 62 90 85	.4 .4 .2 .2	135 122 120 153	. 2 Q Q Q	114 Q Q Q
TOTAL BELOW 100 PERCENT OF POVERTY LINE	2.1	119	1.8	122	Q	Q	.2	165	Q	Q
TOTAL BELOW 125 PERCENT OF POVERTY LINE	3.0	117	2.3	121	Q	Q	.2	150	Q	Q
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	4.6 6.0 4.4	102 136 121	3.2 4.4 3.2	117 147 129	.6 .6 .4	57 95 65	.2 .5 .6	108 151 125	Q . 2 Q	Q 114 Q



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

	ALL HOU	USEHOLDS				HOUSEHOLE	S USING:			
HOUSEHOLD	NUMBER	     AVG.     AMOUNT		_ GAS AS   ATING FUEL		CITY AS   ATING FUEL	KEROS	OIL OR SENE AS ATING FUEL	GAS A	D 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 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 CONSUMED PER HOUSEHOLD (MILLICH BTU)
HOUSEHOLD MEMBERS										
ONE PERSON	3.3	98	2.6	102	0.3	49	0.2	131	Q	Q
2 TO 4 PEOPLE	9.4	122	6.6	136	1.1	72	.9	133	0.3	103
5 OR MORE PEOPLE	2.2	150	1.6	169	.2	109	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	3.4	105	1.7	117	-3	87	. 7	134	.2	107
5,500 TO 7,000 HDD	10.2	126	7.9	137	1.3	71	. 5	128	.2	122
					_		Q	G G	_	_
<2,000 CDD AND 4,000 TO 5,499 HDD	1.5	123	1.2	127	Q	Q	Q	Q	Q	Q
<2,000 CDD AND	1.5	123	1.2	127	ч 	·	- -		~	ч -



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

	ALL HOL	JSEHOLDS				HOUSEHOLE	s using:			
HOUSEHOLD	NUMBER	AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KEROS		GAS	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL-	CONSUMED PER HOUSEHOLD (MILLION BTU) I		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BIU)	HOLDS (MIL-	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL HOUSEHOLDS	6.3	124	4.7	134	0.5	75	0.3	113	0.5	126
AREA TYPE METROPOLITAN	3.3 1.7 1.6 3.0	127 125 129 121	2.8 1.6 1.2 1.9	131 127 137 138	.3 Q .2 .2	74 Q 75 76	ପ ପ ପ . ୧	Q Q Q 91	q q q .4	Q Q Q 124
UTILITIES PAID BY HOUSEHOLD								, <del>-</del>	• •	
ALL PAID BY HOUSEHOLD SOME, NONE, OTHER	5.5	127	3.9	141	.4	74	.3	107	.5	126
PAID BY HOUSEHOLD	.8	101	.8	99	Q	Q	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE  MOBILE HOMESINGLE FAMILY	.3 4.9 1.1	99 132 93	q 3.6 1.0	Q 145 96	Q .3 Q	Q 83 Q	Q . 2 Q	Q 111 Q	Q .4 Q	Q 132 Q
NUMBER OF ROOMS										
1 TO 3 4 TO 5	.7 2.7 3.0	78 111 146	.5 2.0 2.2	81 120 160	Q .2 .2	Q 64 88	Q Q	Q 127 Q	Q .2 .3	Q 101 140
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	1.8 2.5	92 123	1.4 1.8	98 136	. 2 . 2	59 75	Q Q	Q Q	Q .2	Q 107
2,000 OR MORE	2.0	155	1.5	165	ହ	Q	Q	Q	. 2	164
YEAR HOUSE BUILT					_	_				
BEFORE 1950	2.3 3.0	137 120	1.8 2.4	143 127	Q Q	Q Q	0.2 .2	118 107	0.2 .2	133 125
AFTER 1974	1.0	105	.5	137	0.3	73	Q	Q	Q	Q
ОЫN/RENT ОЫN RENT	4.8 1.5	132 99	3.5 1.2	144 105	.3	84 62	. 2 Q	112 Q	.4 Q	127 Q
1981 FAMILY INCOME LESS THAN \$10,000	1.7	108	1.2	117	Q	Q	Q	Q	.2	105
\$10,000 TO \$19,999	1.8	115	1.3	129	Q Q	Q	Q Q	Q Q	Q Q	Q Q
\$20,000 TO \$34,999 \$35,000 OR MORE	1.1	131 145	1.3	139 151	Q	Q Q	G G	Q	Q	Q
TOTAL BELOW 100 PERCENT OF POVERTY LINE	.7	99	.5	109	Q	Q	Q	Q	Q	Q
TOTAL BELOW 125 PERCENT OF POVERTY LINE	1.0	107	.7	120	Q	Q	Q	Q	Q	Q
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	2.0	109	1.5	118	.2	69	Q	Q	Q	Q
35 TO 59 YEARS	2.8	134	2.1	145	.2	87	Q	à	. 3	135



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

	ALL HOU	JSEHOLDS				HOUSEHOLD	s USING:			
HOUSEHOLD	NUMBER	     AVG.     AMOUNT		. GAS AS TING FUEL		CITY AS	KEROS	OIL OR SENE AS STING FUEL	GAS A	PETROLEUM AS MAIN AG FUEL
CHARACTERISTICS	OF HOUSE- KOLOS (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 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)
HOUSEHOLD MEMBERS										
ONE PERSON	1.4	95	1.1	97	Q	Q	Q	Q	Q	Q
2 TO 4 PEOPLE	4.2	130	3.1	141	0.3	. 75	0.2	111	0.3	132
5 OR MORE PEOPLE	.8	146	. 5	174	Q	Q	Q	Q	Q	3
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	2.1	132	1.7	134	Q	Q	.2	121	.2	1.32
5,500 TO 7,000 HDD	1.3	131	1.1	134	Q	Q	Q	Q	Q	Q
		115	1.9	134	.4	69	Q	Q	.2	1:.0
4,000 TO 5,499 HDD	2.9	113								
4,000 TO 5,499 HDD	2.9 Q	Q 113	Q	Q	Q	Q	Q	Q	Q	ą



Table 2. (Continued) Census Region: South

	ALL HOL	ISEHOLDS				HOUSEHOL	s USING:			
HOUSEHOLD	NUMBER	AVG.		GAS AS		ICITY AS ATING FUEL	KERO	OIL OR SENE AS ATING FUEL	GAS	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS		CONSUMED PER HOUSEHOLD (MILLION BTU)	OF .	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOUSE- HOLDS (MIL-	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	1	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BUU)
TOTAL HOUSEHOLDS	28.1	88	13.3	112	6.8	61	2.5	98	2.3	71
AREA TYPE METROPOLITAN CENTRAL CITY OUTSIDE CENTRAL CITY NON-METROPOLITAN	18.6 8.5 10.1 9.4	93 95 92 78	10.0 5.6 4.4 3.4	114 110 119 107	5.0 1.9 3.1 1.8	62 62 62 59	1.6 .6 1.0	105 95 112 86	1.1 .3 .9 1.1	66 44 73 76
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NONE, OTHER	24.7	89	11.2	118	6.2	61	2.2	98	2.0	70
PAID BY HOUSEHOLD	3.3	79	2.1	81	.7	67	.3	96	.3	. 82
TYPE OF HOUSING STRUCTURE MOBILE HOMESINGLE FAMILY	1.8 20.9 5.4	57 96 68	.3 10.2 2.9	81 122 78	.6 4.0 2.2	43 69 53	.3 1.9 .2	61 104 103	.5 1.8 Q	65 73 Q
NUMBER OF ROOMS										
1 TO 3	3.1 12.6 12.3	55 75 109	1.3 6.0 6.0	70 94 140	1.3 2.9 2.6	43 56 77	1.2 1.1	70 84 117	.2 1.1 .9	42 65 85
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	10.5 13.2	66 90	4.9 6.0	81 117	2.8 3.2	49 66	.9 1.1	76 99	1.1	59 80
2,000 OR MORE	4.2	136	2.3	166	.8	87	.5	138	Q	Q
YEAR HOUSE BUILT										
BEFORE 1950	7.7 15.6	89 91	4.0 8.1	107 115	0.5 3.7	58 62	1.1	109 90	0.9 1.1	75 69
AFTER 1974	4.7	76	1.3	111	2.6	61	Q Q	Q	.3	69
OWN/RENT										
OWN	18.5 9.6	94 75	8.5 4.8	124 91	4.2 2.6	66 54	1.8 .7	99 96	1.6	72 69
1981 FAMILY INCOME										
LESS THAN \$10,000	9.5	72	4.4	88	1.8	51	-9	83	1.1	68
\$10,000 TO \$19,999 \$20,000 TO \$34,999	8.0 4.3	86 94	3.5 2.2	113 119	1.9 1.1	52 60	.8 .3	104 110	.7 .3	78 66
\$35,000 OR MORE::	6.3	111	3.1	141	2.0	80	.5	111	.2	74
TOTAL BELOW 100 PERCENT OF POVERTY LINE TOTAL BELOW 125 PERCENT	5.1	74	2.5	87	.7	61	.5	97	.6	69
OF POVERTY LINE	6.9	74	3.3	90	1.0	56	.6	91	.8	70
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	8.8	81	4.1	100	2.5	61	.8	92	.6	70
35 TO 59 YEARS	11.6 7.7	97 82	5.7 3.5	125	2.7	68 52	.9	105 97	.8	73 70



Table 2. (Continued) Census Region: South

	ALL HOU	ISEHOL <b>DS</b>				HOUSEHOLE	S USING:			
HOUSEHOLD	NUMBER	AVG.		GAS AS		CITY AS TING FUEL	KEROS	OIL OR SENE AS ATING FUEL		PETROLEUM S MAIN G 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 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. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
HOUSEHOLD MEMBERS ONE PERSON	6.1 18.6	67 90	3.2 8.4	79 119	1.6	44 64	0.5	90 99	0.5	64 70
5 OR MORE PEOPLE  HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE <2,000 CDD AND >7,000 HDD	3.3	114	1.7	143	.7	87	.3	111	.2	94 -
<2,000 CDD AND 5,500 TO 7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	G!
<pre>&lt;2,000 CDD AND 4,000 TO 5,499 HDD</pre>	6.4 10.4 11.3	94 89 83	2.7 4.9 5.8	124 113 106	1.2 2.1 3.5	64 65 53	1.2 1.1 .3	112 90 67	Q .9 1.2	© 82 61



Table 2. (Continued)
Census Division: South
Atlantic

	I ALL HOU	SEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD	I I I I NUMBER	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 ICONSUMED PER HOUSEHOLD (MILLION	LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS (MIL-	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
	1	_l		- <del>1</del>						
TOTAL HOUSEHOLDS	13.9	80	4.6	113	3.7	52	2.4	98	1.2	67
AREA TYPE METROPOLITAN. CENTRAL ČITY. OUTSIDE CENTRAL CITY. NON-METROPOLITAN.	10.0 3.8 6.2 3.9	85 82 87 67	3.9 1.7 2.2 .7	115 107 121 101	3.1 1.1 2.0 .6	52 50 54 48	1.6 .6 1.0	105 94 112 85	.8 .3 .6 .4	61 44 68 80
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NONE, OTHER	12.0	80	3.3	122	3.4	52	2.1	99	1.1	66
PAID BY HOUSEHOLD	2.0	82	1.3	88	.2	48	.3	96	Q	Q
TYPE OF HOUSING STRUCTURE  MOBILE HOMESINGLE F'MILY	1.2 9.8 2.9	50 88 67	Q 3.2 1.4	Q 126 83	.4 2.0 1.2	37 60 44	.3 1.8 .2	61 103 103	.3 .9 Q	58 70 Q
NUMBER OF ROOMS	1.6	47	.5	62	.8	39	.2	70	Q	q
4 TO 5	6.1 6.1	67 102	1.9 2.3	94 139	1.6	44 71	1.1	84 118	.7 .5	58 85
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)	<b>.</b> .	/0		~	1 7	40	٥	75	.7	Eo
LESS THAN 999. 1,000 TO 1,999. 2,000 OR MORE		60 79 129	1.6 1.9 1.1	81 114 158	1.7 1.7 .3	42 54 88	.8 1.1 .4	75 98 142	. 4 Q	58 70 Q
YEAR HOUSE BUILT BEFORE 1950	8.0	88 80 65	1.4 2.7 .5	110 116 103	0.3 2.2 1.1	51 51 53	1.0 1.2 Q	109 90 Q	0.4 .8 Q	78 64 Q
OWN/RENT				128	2.3	58	1.7	99	.8	66
OWNRENT		86 7 <b>0</b>	2.7	91	1.4	43	.7	96	.4	70
1981 FAMILY INCOME LESS THAN \$10,000	4.5 4.2	67 78	1.3	93 117	1.0	43 46	.9	83 104	.5 .4	61 79
\$20,000 TO \$34,999 \$35,000 OR MORE	2.0	83 98	.8 1.3	111 130	.5 1.0	50 70	.2 .5	115 111	.2 Q	60 Q
TOTAL BELOW 100 PERCENT OF POVERTY LINE TOTAL BELOW 125 PERCENT	2.3	73	.7	92	.3	56	.5	97	.3	66
OF POVERTY LINE	3.0	70	.9	94	.5	50	.6	91	.3	64
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS		74	1.4	99	1.2	48	.7	92	.4	66
35 TO 59 YEARS		87 76	2.1	. 123 111	1.4 1.1	59 47	.8 .8	105 97	.5 .4	74 59



Table 2. (Continued)
Census Division:
South Atlantic

1	ALL HOL	ISEHOLDS I				HOUSEHOLE	S USING:			
HOUSEHOLD I	NUMBER	AVG.		GAS AS		CITY AS	KEROS	DIL OR SENE AS STING FUEL	GAS A	PETROLEUM S MAIN IG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS	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)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
HOUSEHOLD MEMBERS ONE PERSON	3.4 9.1 1.4	64 82 102	1.3 2.8 .5	80 121 152	1.0 2.3 .3	36 55 78	0.5 1.6 .2	90 99 112	0.3 .9 Q	70 65 Q
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	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
4,000 TO 5,499 HDD	5.1 5.0 3.8	94 86 52	2.1 2.0 .5	122 116 66	.7 .7 2.3	63 51 48	1.1 1.0 .3	115 89 65	Q .5 .6	Q 76 54



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

1. ** 1. **										
	ALL HOL	JSEHOLDS				HOUSEHOLI	S USING:			
HOUSEHOLD	NUMBER	I I AVG.	NATURAL MAIN HEA	GAS AS TING FUEL		ICITY AS ATING FUEL	KEROS	OIL OR SENE AS ATING FUEL	GAS .	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	•	CONSUMED PER HOUSEHOLD (MILLION BTU)	HOUSE- HOLDS (MIL-	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL HOUSEHOLDS	5.7	83	2.5	108	1.8	66	Q	Q	0.3	74
AREA TYPE METROPOLITAN CENTRAL CITY OUTSIDE CENTRAL CITY NON-METROPOLITAN	2.8 1.3 1.5 2.9	87 90 84 80	1.6 1.0 .6	101 95 111 119	.8 .3 .6 1.0	70 70 71 62	0 0 0 0	Q Q Q	Q Q Q .2	Q Q Q 81
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NONE, OTHER	5.1	85	2.2	112	1.6	68	Q	ę.	.3	74
PAID BY HOUSEHOLD	.5	68	.3	80	.2	51	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE  MOBILE HOME  SINGLE FAMILY	.3 4.3 1.1	69 89 66	Q 1.7 .7	q 123 76	Q 1.4 .4	Q 71 47	Q Q Q	Q Q Q	Q .3 Q	ଦ 68 ବ
NUMBER OF ROOMS 1 TO 3	.6 2.5 2.6	59 73 100	.3 1.1 1.1	72 91 135	.2 .7 .9	43 58 78	ପ ଦ ଦ	Q Q Q	Q .2 Q	Q 79 Q
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	2.1	66	1.1	80	.6	49	٠ و	Q	Q	Q 78
1,000 TO 1,999 2,000 OR MORE	2.6	84 120	1.0	116 161	.9 .4	68 86	Q	Q Q	. 2 Q	e´°
YEAR HOUSE BUILT BEFORE 1950	1.4 3.1 1.2	89 86 70	0.7 1.6 .2	121 103 95	0.2 .8 .8	63 69 63	<b>Q</b> Q	ୟ ପ ପ	Q Q	Q Q Q
OWN/RENT OWN	3.9 1.8	90 71	1.5	124 85	1.3	73 51	Q Q	Q Q	0.3 Q	75 Q
1981 FAMILY INCOME LESS THAN \$10,000 \$10,000 TO \$19,999 \$20,000 TO \$34,999	2.2 1.5 1.2	71 82 93 109	1.1 .7 .5	92 107 122 148	.6 .4 .4 .4	52 58 67 90	Q Q Q	ୟ ପ ପ	@ @ @	ପ ପ ପ
TOTAL BELOW 100 PERCENT OF POVERTY LINE	1.0	70	.5	93	.2	52	Q	Q	Q	q
TOTAL BELOW 125 PERCENT OF POVERTY LINE	1.5	70	.7	96	.3	51	Q	Q	Q	Q
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	1.8 2.3 1.6	78 91 80	.8 .9 .8	93 120 109	.7 .8 .4	64 75 51	Q Q	<b>Q</b> Q Q	Q Q .2	Q Q 73



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

	ALL HOU	SEHOLDS				HOUSEHOLD	s using:			
HOUSEHOLD	NUMBER			. GAS AS   TING FUEL		CITY AS S	KEROS	OIL OR SENE AS ATING FUEL	GAS A	PETROLEUM S MAIN IG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BYU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER KOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. I AMOUNT ICONSUMED I PER IHOUSEHOLD I(MILLION I BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLE (MILLION BTU)
OUSEHOLD MEMBERS										
ONE PERSON	1.2	68	0.8	80	0.3	49	Q	Q	Q	Q
2 TO 4 PEOPLE	3.8 .7	84 105	1.5 .2	117 137	1.3	66 84	Q	Q Q	0.2 9	78 Q
EATING DEGREES-DAYS (HDD) IND COOLING DEGREES-DAYS (CDD) ONG-TERM AVERAGE  <2,000 CDD AND >7,000 HDD  <2,000 CDD AND 5,500 TO 7,000 HDD  <2,000 CDD AND 4,000 TO 5,499 HDD  <2,000 CDD AND <4,000 HDD	- 1.3 3.4	  94 76	- - .6 1.4	- - 131 97	- - .5 1.2	- - 66 66	- - - -	- -	- - - 0	- - Q 74:



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

		· · · · · · · · · · · · · · · · · · ·								
	ALL HOL	JSEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER	AVG.				ICITY AS ATING FUEL	KERO		GAS	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	ICONSUMED   PER  HOUSEHOLD  (MILLION   BTU)		AMOUNT CONSUMED		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	OF HOUSE- HOLDS	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
				- 22000						
TOTAL HOUSEHOLDS	8.5	104	6.2	113	1.3	82	Q	Q	0.7	78
AREA TYPE METROPOLITAN CENTRAL CITY OUTSIDE CENTRAL CITY NON-METROPOLITAN	5.9 3.5 2.4 2.6	109 111 107 91	4.5 2.9 1.6 1.7	118 117 119 102	1.1 .6 .6	83 81 85 74	0 G G	ଷ ଷ ଷ	.2 Q .2 .5	94 Q 94 72
UTILITIES PAID BY HOUSEHOLD		106	5.7	118	1.1	77	Q	Q	.6	74
ALL PAID BY HOUSEHOLD SOME, NONE, OTHER PAID BY HOUSEHOLD	7.6	80	.5	110	.2	106	q q	e;	.° Q	Q (T
TYPE OF HOUSING STRUCTURE										
MOBILE HOME	.3 6.8 1.3	70 111 73	Q 5.3 .8	Q 120 71	Q .7 .6	Q 90 76	Q Q	ବ ଷ ବ	વ .6 વ	Q 80 Q
NUMBER OF ROOMS										
1 TO 3	.9 4.0 3.6	67 91 128	.5 3.0 2.6	75 95 142	.3 .6 .5	56 87 90	ଫ ଫ ଷ	ख द	Q .3 .3	Q 73 89
MEASURED HEATED SPACE OF RESI-	3.0							,		
DENCE (IN SQUARE FEET) LESS THAN 999	3.0 4.5	76 109 170	2.2 3.2 .8	81 119 179	.6 .7 q	70 92 Q	@ @ @	Q Q	.2 .4	59 88 Q
	• •				•	•	•	,	•	
YEAR HOUSE BUILT BEFORE 1950	2.4	92	1.8	99	Q	Q	Q	Q	0.4	77
1950 TO 1974	1 15	112 96	3.7	119 121	0.6	90 73	Q Q	Q	.2 q	72 Q
OWN/RENT					_		_			0.7
OWN	5.7 2.8	112 88	4.3 1.8	122 94	.7 .6	83 81	Q Q	Q Q	.4	83 70
1981 FAMILY INCOME LESS THAN \$10,000	2.8	80	2.0	82	.2	88	Q	Q	.4	77
\$10,000 TO \$19,999 \$20,000 TO \$34,999	2.3	102 114	1.7 .8	113 123	. 3 Q	67 Q	Q Q	Q Q	.2 G	71 Q
\$35,000 OR MORE	2.3	129	1.6	148	.6	ື່89	Q	Q	Q	q
TOTAL BELOW 100 PERCENT OF POVERTY LINE	1.7	79	1.3	82	Q	Q	Q	Q	.2	74
TOTAL BELOW 125 PERCENT OF POVERTY LINE	2.3	82	1.7	86	.2	83	Q	Q	.3	78
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	2.8	95	1.8	103	.7	80	Q	Q	.2	81
35 TO 59 YEARS	3.5	117 94	2.7 1.6	128 101	.5	82 88	Q	Q Q	.2 .3	68 83



Table 2. (Continued) West South Central

	ALL HOL	ISEHOLDS I				HOUSEHOL	S USING:				
i I HOUSEHOLD	NUMBER	AVG.	NATURAL MAIN HEA	GAS AS TING FUEL		CITY AS	KEROS	KEROSENE AS		IQUEFIED 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 AVG. I AMOUNT ICONSUMED I PER IHOUSEHOLD I(MILLION I 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)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	
HOUSEHOLD MEMBERS ONE PERSON	1.6 5.7 1.2	73 107 132	1.1 4.1 1.0	78 117 139	0.3	65 83 110	ଦ ଦ ଦ	ହ ପ ପ	ପ 0.5 ସ	Q 78. Q	
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 TD 7,000 HDD <2,000 CDD AND	-	-	-	- -	-	- -	-	-	- -	-	
<pre>&lt;2,000 CDB AND 4,000 TD 5,499 HDD &lt;2,000 CDD AND &lt;4,000 HDD &gt;2,000 CDD AND &lt;4,000 HDD</pre>	Q 2.0 6.5	Q 117 100	Q 1.5 4.6	Q 124 110	Q .2 1.1	Q 103 77	ख ख ख	Q Q Q	Q .2 .5	Q 98 69	



Table 2. (Continued) Census Region: West

i del Paragonia del Organis	ALL HO	USEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOL <b>Ö</b>	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
	OF HOUSE- HOLOS (MIL- LIONS)	CONSUMED   PER   HOUSEHOLD   (MILLION   BTU)	OF	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BIU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLE (MILLION BTU)
TOTAL HOUSEHOLDS		84	11.1	94	3.1	59	0.4	99	0.4	88
AREA TYPE METROPOLITAN CENTRAL CITY OUTSIDE CENTRAL CITY	14.4 7.3 7.1	83 80 87	10.3 5.2 5.1	92 86 97	2.8 1.6 1.2	59 63 54	.3 Q .2	92 Q 98	. 2 Q Q	69 Q Q
NON-METROPOLITAN	2.1	87	.8	126	. 3	59	Q	Q	. 2	103
ALL PAID BY HOUSEHOLD SOME, NO.IE, OTHER	1 37 1	86	9.5	98	2.5	56	.4	96	.3	87
PAID BY HOUSEHOLD	2.5	71	1.6	70	.6	75	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE			_		_	_	_	_	_	
MOBILE HOMESINGLE FAMILY	.9 11.2	81 94	.5 7.8	90 106	Q 1.6	Q 65	Q .4	Q 99	. 2 . 2	86 90
2 OR MORE UNITS	4.5	59	2.9	63	1.4	53	વં	q´´	Q · -	Q <sup>´</sup>
NUMBER OF ROOMS	Fig. 6									
1 TO 3	2.5	49	1.6	53	.6	44	Q	Q	Q	Q
4 TO 5	8.2 5.9	75 110	5.5 4.1	84 123	1.7 .8	58 74	.2 .2	78 113	.2 Q	87 Q
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	6.9 7.1	62 90	4.4 5.0	69 100	1.4 1.4	46 60	Q ,2	Q 98	. 2 Q	70 Q
2,000 OR MORE	2.5	128	1.7	142	.4	105	ฉั๋	Ø 9	Q	q
YEAR HOUSE BUILT									_	_
BEFORE 1950	4.3 8.4	85 89	3.1 6.4	93 96	0.3 1.1	61 61	0.3	95 105	Q Q	Q Q
AFTER 1974	3.8	71	1.6	90	1.7	58	Q <sup>`</sup>	Q	0.2	86
OWN/RENT										
DWN	9.9	94	6.5	108	1.8	66	.3	100	.2	94
RENT	6.6	68	4.6	75	1.3	50	Q	Q	Q	Q
1981 FAMILY INCOME		77.77	7.0	0.7			Q	Q	.2	74
LESS THAN \$10,000 \$10,000 TO \$19,999	4.7 4.7	73 77	3.0 3.3	83 85	1.1	51 54	ď	Q	q.°	Q <sup>'</sup>
\$20,000 TO \$34,999	2.6	89	1.9	98	.4	62	Q	Q	Q	Q
\$35,000 OR MORE	4.4	100	3.0	112	.9	73	Q	Q	Q	Q
TOTAL BELOW 100 PERCENT OF POVERTY LINE TOTAL BELOW 125 PERCENT	1.9	84	1.2	100	.5	55	Q	Q	Q	Q
OF POVERTY LINE	3.0	81	1.9	93	.7	56	Q	Q	Q	Q
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	6.0	75	3.9	84	1.3	54	Q	Q	Q	Q
35 TO 59 YEARS	6.1	97	4.2	106	.9	79	.2	ີ 95	.2	97
60 YEARS AND OVER	4.3	78	3.0	90	.9	46	. 2	102	q	Q



Table 2. (Continued) Census Region: West

ĺ	ALL HOU	ISEHOLDS				HOUSEHOLD	S USING:			,
HOUSEHOLD I	NUMBER			L GAS AS ATING FUEL		CITY AS TING FUEL	KEROS	OIL OR ENE AS TING FUEL	GAS A	PETROLEUM S MAIN IG 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 IHOUSEHOLD (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)
HOUSEHOLD MEMBERS			_				_			
ONE PERSON	4.0	62	2.8	65	0.8	59	Q	Q	Q	Q.
2 TO 4 PEOPLE 5 OR MORE PEOPLE	10.6 1.9	87 113	7.2 1.1	99 134	2.0	57 76	0.3 Q	102 Q	0.3 Q	82 q
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	1.4	127	1.1	141	Q	Q	Q	Q	Q	Q
5,500 TO 7,000 HDD	1.5	103	.7	135	.3	73	Q	Q	Q	Q
4,000 TO 5,499 HDD	3.0	75	1.2	94	1.2	58	.3	90	Q	Q
<2,000 CDD AND <4,000 HDD	9.2	81	7.6	85	1.0	63	Q	Q	Q	Q
>2,000 CDD AND <4,000 HDD	1.3	54	. 5	75	. 5	46	Q	Q	Q	Q



Table 2. (Continued)
Census Division:
Mountain

	<u> </u>									
All Allending (Section 2014)	ALL HOU	SEHOLDS				HOUSEHOLE	S USING:			
HOUSEHOLD	NUMBER	AVG.		GAS AS TING FUEL		CITY AS	KEROS		GAS A	PETROLEUM AS MAIN IG FUEL
CHARACTERISTICS	HOLDS (MIL-	CONSUMED PER HOUSEHOLD (MILLION BTU)	OF	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	NUMBER DF HOUSE- HOLDS (MIL- LIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS (MIL-	AVG. I AMOUNT ICONSUMED I PER IHOUSEHOLD I(MILLION I BTU)	HOLDS	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLYON BTU)
TOTAL HOUSEHOLDS	4.3	98	2.8	117	0.9	53	Q	Q	0.2	101
AREA TYPE										
METROPOLITAN	2.8	96	2.0	113	.8	50	Q	Q	Q	Q
CENTRAL CITY	1.7	94	1.2	110	.4	49	Q	Q	Q	Q
OUTSIDE CENTRAL CITY	1.1	98	.8	119	.3	_51	Q	Q	Q	Q
NON-METROPOLITAN	1.5	103	.8	126	Q	Q	Q	Q	.2	103
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	3.7	99	2.4	120	.8	51	Q	Q	Q	Q
SOME, NONE, OTHER PAID BY HOUSEHOLD	.6	92	.4	98	Q	Q	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE										
MOBILE HOME	.3	90	.2	95	Q	Q	Q	Q	Q	Q
SINGLE FAMILY	3.3	103	2.1	125	.6	51	Q	Q	Q	Q
2 OR MORE UNITS	.7	77	.5	87	.2	55	Q	Q	Q	Q
LERUNER OF FLORID										
NUMBER OF ROOMS	.6	63	.4	63	Q	Q	Q	Q	Q	Q
4 TO 5	2.2	86	1.3	109	٠.6	45	Q Q	o o	Q.	q
6 OR MORE	1.5	130	1.1	147	Q	Q	q	Q.	ĝ	q
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	1.7	75	1.1	85	.4	50	Q	Q	Q	Q
1,000 TO 1,999	1.8	101	1.1	128	.4	50	Q	Q	Q	Q
2,000 OR MORE	.8	142	.6	158	Q	Q	Q	Q	Q	Q
YEAR HOUSE BUILT							,			
BEFORE 1950	0.9	99	0.6	111	Q	Q	Q	Q	Q	Q
1950 TO 1974	2.2	111	1.7	121	0.2	59	Q	Q	Q	Q
AFTER 1974	1.2	76	.5	110	.6	51	Q	Q	Q	Q
OWN/RENT										
DWN	3.1	103	2.0	125	.6	51	Q	Q	0.2	109
RENT	1.2	86	.8	96	.2	56	Q	Q	Q	Q
1981 FAMILY INCOME										
LESS THAN \$10,000	1.5	84	.9	96	.3	52	Q	Q	Q	Q
\$10,000 TO \$19,999	1.0	99	.7	114	.2	55	Q.	q	q	Q q
\$20,000 TO \$34,999	.7	107	.4	126	q ¯	จั๊	Q.	q.	q	q
\$35,000 OR MORE	1.2	111	.7	142	. 3	53	Q	Q	Q	Q
TOTAL DELOG TOO DEPORTE										
TOTAL BELOW 100 PERCENT OF POVERTY LINE	.5	104	.3	129	Q	Q	e	Q	Q	~
TOTAL BELOW 125 PERCENT		104	. 3	124	4	ч	Q	al	ų	Q
OF POVERTY LINE	.8	94	.5	107	. 2	48	Q	Q	Q	Q
							•	-	•	•
AGE OF HOUSEHOLD HEAD			_		_	F.4	_	_		_
UNDER 35 YEARS35 TO 59 YEARS	1.6	90 117	.9 1.0	115 131	.5 Q	54 Q	Q Q	Q Q	Q Q	Q Q
60 YEARS AND OVER	1.3	89	.9	104	.3	48	G G	q Q	Q	Q Q
INCOME COME WINDS \$55555555555		٠,	• /	441			•	7	•	٦



Table 2. (Continued) Census Division: Mountain

	ALL HOU	JSEHOLDS				HOUSEHOLI	S USING:			
HOUSEHOLD	NUMBER	     AVG.     AMOUNT		GAS AS		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 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 CONSUMED PER HOUSEHOLD (MILLION BIU)
HOUSEHOLD MEMBERS ONE PERSON	1.1 2.7 .5	72 102 134	0.7 1.7 .3	84 123 160	0.2 .5 Q	47 53 Q	ଫ ଫ ଫ	<b>a</b> a a	Q 0.2 Q	ପ 87 ସ
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 <2,000 CDD AND	1.2	129 107	1.0	136 135	<b>Q</b>	<b>Q</b> <b>Q</b>	Q Q	<b>Q</b>	Q Q	<b>ଉ</b> ଉ
4,000 TO 5,499 HDD	.3 .5 1.0	109 74 59	.3 .3 .5	110 84 74	q .2 .5	q 57 46	Q Q Q	Q Q	<b>G</b> G	ଷ ଷ ଷ



Table 2. (Continued)
Census Division:
Pacific

	ALL HOL	SEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER	AVG.		. GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO:		GAS .	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	OF HOUSE- HOLDS (MIL- LIONS)	CONSUMED PER HOUSEHOLD (MILLION BTU) I	OF	AVG. LAMOUNT LCONSUMED PER HOUSEHOLD (MILLION BTU)	HOLDS	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	OF HOUSE- HOLDS (MIL-	AVG.   AMOUNT  CONSUMED   PER  HOUSEHOLD  (MILLION   BTU)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)
TOTAL HOUSEHOLDS	12.2	79	8.4	87	2.3	62	0.3	92	0.2	70
AREA TYPE METROPOLITAN CENTRAL CITY OUTSIDE CENTRAL CITY NON-METROPOLITAN	11.6 5.6 6.0	80 76 85 44	8.4 4.0 4.4 Q	87 79 93 Q	2.1 1.1 .9 .2	63 69 55 53	.3 Q .2 Q	92 Q 98 Q	. 2 Q Q	70 9 Q Q
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NONE, OTHER	10.3	81	7.1	91	1.8	58	.3	94	Q	Q
PAID BY HOUSEHOLD	1.8	64	1.2	61	.5	76	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE MOBILE HOME	.5 7.9 3.8	75 90 56	.3 5.7 2.4	86 98 59	Q 1.0 1.2	9 74 52	Q . 3 Q	Q 93 Q	ପ ଫ ଦ	Q Q
NUMBER OF ROOMS 1 TO 3	1.8	45 72	1.1	49 76	.5 1.1	38 64 75	Q Q .2	Q Q 106	ଫ ଫ ଫ	<b>Q</b> Q
6 OR MORE MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)	4.3	103	3.0	115	.7	/5	.2	106	Q	ч
LESS THAN 999. 1,000 TO 1,999. 2,000 OR MORE.	5.2 5.3 1.7	57 86 121	3.3 3.9 1.1	64 92 133	1.0 .9 .3	45 66 104	Q Q	Q Q	ଫ ଫ ଫ	Q Q Q
YEAR HOUSE BUILT     BEFORE 1950	3.4 6.2 2.6	82 81 69	2.5 4.7 1.2	88 87 82	0.3 .9 1.1	63 62 62	0.2 Q Q	89 Q Q	<b>&amp;</b> <b>Q</b> <b>Q</b>	Q Q
OWN/RENT OWN. RENT.	6.8 5.4	90 64	4.5 3.8	101 70	1.2	73 49	ε.	96 Q	Q Q	Q Q
1981 FAMILY INCOME LESS THAN \$10,000 \$10,000 TO \$19,999 \$20,000 TO \$34,999	3.2 3.7 2.0 3.3	67 70 83 96	2.0 2.6 1.4 2.3	78 78 90 103	.7 .6 .4	50 54 65 84	Q Q Q	ୟ ବ ବ ବ	Q Q Q	Q Q Q
TOTAL BELOW 100 PERCENT OF POVERTY LINE	1.5	78	.9	92	.4	57	Q	Q	Q	Q
OF POVERTY LINE	2.2	76	1.4	87	.5	58	Q	Q	Q	Q
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	4.4 4.7 3.0	69 91 74	3.1 3.2 2.1	75 99 85	.9 .8 .6	54 82 45	<b>Q</b> <b>Q</b>	ଷ ସ ଷ	ୟ ୟ ସ	Q Q



#### Table 2. (Continued) Census Division: Pacific

1	ALL HOU	JSEHOLOS				HOUSEHOLE	S USING:			
HOUSEHOLD	NUMBER	AVG.		L GAS AS ATING FUEL A		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 BYU)	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 ICONSUMED PER (HOUSEHOLD (MILLION BTU)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG AVG AMOUNT CONSUMED PER HOUSEHOLD (MILLYON BTU)
HOUSEHOLD MEMBERS										
ONE PERSON	2.9	58	2.1	59	0.6	64	Q	Q	Q	Q
2 TO 4 PEOPLE	7.9 1.3	82 105	5.5 .8	91 124	1.5	58 79	0.2 G	94 Q	Q Q	Q O
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE	-							·		`
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	. 2	114	Q	Q	Q	Q	Q	Q	Q	Q
5,500 TO 7,000 HDD	. 3	82	Q	Q	. 2	78	Q	Q	Q	G
4,000 TO 5,499 HDD	2.7	72	.9	89	1.2	58	٠3	90	Q	Q
<2,000 CDD AND <4,000 HDD	8.7	82	7.3	85	.8	64	Q	Q	Q	Q
>2,000 CDD AND <4,000 HDD	. 3	41	Q	Q	Q	Q	G	Q	Q	D D

<sup>&</sup>quot;-" = DATA NOT APPLICABLE.

<sup>&</sup>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.
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 1982 RESIDENTIAL ENERGY CONSUMPTION SURVEY.



Table 3. U.S. Average
Residential Energy
Expenditures for Major
Fuels Used inthe Household, by Main Heating
Fuel Type—April 1982
Through March 1983,
United States
(Dollars per Household)

	ALL HOU	JSEHOLDS 1				HOUSEHOLD	s USING:			
HOUSEHOLD	NUMBER OF	AVG.		L GAS AS ATING FUEL I		ICITY AS ATING FUEL	KERO	OIL OR SENE AS ATING FUEL	GAS .	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE-	ITURES				1	Lunmen	1	1	1 400
The State Control of the Control of	HOLDS (MIL-	PER	NUMBER OF	AVG.	NUMBER OF	AVG.	NUMBER OF	AVG.   EXPEND-	NUMBER OF	AVG.
	LIONS)	(DOLLARS)		ITURES	HOUSE-	ITURES	HOUSE-	ITURES	HOUSE-	ITURES
		1	HOLDS	PER	HOLDS	PER	HOLDS	PER	HOLDS	PER
		!!!	(MIL-	HOUSEHOLD		HOUSEHOLD		HOUSEHOLD		HOUSEHOLD
		1 1	LIONS)	(DOLLARS)	LIONS	(DOLLARS)	LIONS }	(DOLLARS)	( LIONS)	(DOLLARS)
TOTAL HOUSEHOLDS	83.8	1048	47.5	1011	13.4	976	12.0	1433	3.8	1072
AREA TYPE	0314									
METROPOLITAN	63.2	1079	38.8	1024	10.5	986	9.7	1485	1.5	1035
CENTRAL CITY	29.4	1034	19.9 18.9	982	4.5	930 1029	4.1 5.6	1468 1497	.3 1.3	748
OUTSIDE CENTRAL CITY	33.8 20.6	1119 951	8.7	1068 956	5.9 2.9	942	2.3	1497	2.2	1102 1098
NON-METROPOLITANUTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	68.9	1069		1063		973	8.7	1459	3.4	1078
SOME, NONE, OTHER	14.8	950	38.6 8.9	787	11.5	973				1070
PAID BY HOUSEHOLD	14.0	750	. 0.9	707	1.9	770	3.4	1367	.4	1093
MOBILE HOME	3.7	861	1.1	784	.9	836	.6	998	.9	948
SINGLE FAMILY	57.7	1122	33.2	1111	7.5	1096	7.6	1493	2.8	1120
2 OR MORE UNITS	22.4	889	13.2	780	4.9	820	3.8	1381	Q	Q
1 TO 3	10.8	744	5.5	610	2.8	776	1.7	1215	.3	674
4 TO 5	36.6 36.4	906 1281	21.0	849 1279	5.9 4.6	887 1212	4.9 5.4	1303 1622	1.9	959
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)	30.4	1201	51.0	12/7	4.0	1612	3.4	1022	1.6	1288
LESS THAN 999	30.2	792	16.7	712	5.7	798	4.1	1190	1.7	860
1,000 TO 1,999	35.6	1068	19.9	1037	5.8	1025	5.0	1434	1.5	1137
2.000 OR MORE	17.9	1439	10.8	1427	1.9	1370	3.0	1767	.5	1579
YEAR HOUSE BUILT BEFORE 1950	30.6	1071	18.4	987	1.1	873	6.8	1496	1.4	1081
1950 TO 1974	40.2	1049	24.5	1030	6.6	1014	4.4	1359	1.7	1054
AFTER 1974	12.9	991	4.7	1008	5.7	952	.8	1314	.7	1101
OWN/RENT										
OWN	53.9	1151	29.8	1141	7.8	1083	8.1	1502	2.7	1121
RENT	29.8	862	17.7	792	5.6	830	4.0	1293	1.1	945
LESS THAN \$10,000	26.3	874	14.5	815	3.9	819	4.1	1258	1.7	943
\$10,000 TO \$19,999	24.8	997	13.6	950	3.9	915	3.8	1403	1.0	1071
\$20,000 TO \$34,999	12.4	1097	7.3	1071	2.1	948	1.5	1511	.5	1223
\$35,000 OR MORE	20.2	1306	12.2	1277	3.6	1230	2.6	1709	.5	1364
TOTAL BELOW 100 PERCENT										
OF POVERTY LINE TOTAL BELOW 125 PERCENT	12.1	900	6.9	859	1.4	843	1.8	1326	.8	897
OF POVERTY LINE	17.4	910	9.7	868	2.1	834	2.6	1326	1.2	927
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	26.2	934	14.6	882	5.3	928	2.9	1302	1.0	1024
35 TO 59 YEARS	34.0 23.6	1174	19.8	1154	4.7	1108	4.7	1564	1.5	1173
	23.0	993	13.0	939	3.4	872	4.4	1383	1.3	988
ONE PERSON	19.3	783	11.5	696	3.3	753	2.9	1212	.8	873
2 TO 4 PEOPLE	54.1	1083	30.3	1068	8.7	1014	7.7	1447	2.5	1061
5 OR MORE PEOPLE	10.4	1352	5.7	1338	1.4	1284	1.5	1804	.5	1490



Table 3. (Continued)
United States

	ALL HOU	SEHOLDS				HOUSEHOLD	S USING:	S USING:					
HOUSEHOLD	NUMBER AVG.			L GAS AS   ATING FUEL		ICITY AS ATING FUEL	KERO	OIL OR SENE AS ATING FUEL	GAS /	) PETROLEUM AS MAIN NG FUEL			
CHARACTERISTICS	HARACTERISTICS   HOUSE-   ITUR   HOLDS   PEI   (MIL-   HOUSE	ITURES     PER    HOUSEHOLD    (DOLLARS)   		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   (DOCLLARS.			
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE <2,000 CDD AND >7,000 HDD	8.5	1038	4.5	955	0.6	1119	1.7	1387	0.5	1208			
<pre>&lt;2,000 CDD AND 5,500 TO 7,000 HDD &lt;2,000 CDD AND</pre>	21.0	1138	13.5	1069	2.4	1007	3.4	1576	.5	1303			
4,000 TO 5,499 HDD	22.1 19.6 12.6	1165 829 1038	10.7 12.5 6.3	1180 784 1094	3.1 3.2 4.1	906 940 1020	5.7 1.1 .3	1444 1091 1122	.5 1.0 1.3	1246 1031 889			



Table 3. (Continued)
Census Region:
Northeast

	ALL HOU	SEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER OF	AVG.		. GAS AS ITING FUEL		CITY AS	KEROS	OIL OR ENE AS TING FUEL	GAS .	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	(MIL-	ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	HOLDS	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	HOUSE- HOLDS (MIL-	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD ((DOLLARS)
TOTAL HOUSEHOLDS	18.0	1369	7.5	1331	1.3	1112	7.6	1549	0.2	961
AREA TYPE										
METROPOLITAN	15.5	1420	6.8	1373	1.2	1151	6.7	1566	Q	Q
CENTRAL CITY	6.4	1453	3.1	1381	.2	1049	3.0	1559	Q	Q
OUTSIDE CENTRAL CITY	9.1	1396	3.7	1366	.9	1176	3.7	1572	Q	Q
NON-METROPOLITAN	2.4	1050	.7	935	Q	Q	.8	1412	Q	Q
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	12.7	1422	5.4	1432	1.1	1139	4.8	1629	.2	976
SOME, NONE, OTHER PAID BY HOUSEHOLD	5.3	1243	2.1	1073	.3	1002	2.8	1410	Q	Q
TYPE OF HOUSING STRUCTURE										
MOBILE HOME	.4	1027	Q .	Q	Q	Q	.2	1255	Q	Q
SINGLE FAMILY	10.6 7.0	1482 1216	4.5 2.9	1509 1082	.7 .6	1312 877	4.0 3.3	1663 1428	Q Q	<b>a</b>
NUMBER OF ROOMS										
1 TO 3	2.8	1053	1.0	809	.4	848	1.3	1303	Q	Q
4 TO 5	6.3	1216	2.5	1109	.5	1078	2.8	1436	Q	Q
6 OR MORE	8.8	1578	4.1	1587	.4	1487	3.4	1736	Q	Q
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)		3004		074		00/		1700		
LESS THAN 999	6.0	1084	2.2 3.2	934	.6	886 1254	2.7 2.9	1302	Q Q	Q Q
1,000 TO 1,999 2,000 OR MORE	7.1 4.8	1386 1702	2.1	1324 1752	.5 .2	1460	1.9	1572 1868	۹ و	Q.
YEAR HOUSE BUILT										
BEFORE 1950	9.4	1359	3.9	1219	0.2	1069	4.5	1572	Q	Q
1950 TO 1974	7.1	1388	3.2	1412	.7	1130	2.5	1530	Q	Q
AFTER 1974	1.5	1344	.4	1776	.5	1103	.5	1428	Q	Q
OWN/RENT OWN	11.3	1504	4.9	1495	.5	1413	4.7	1662	Q	Q
RENT	6.7	1142	2.7	1031	.8	931	2.9	1363	q	Q
1981 FAMILY INCOME										
LESS THAN \$10,000	5.3	1155	2.0	1025	.5	998	2.5	1357	ଜ	Q
\$10,000 TO \$19,999	5.4	1292	2.1	1217	.4	1114	2.4	1497	Q	Q
\$20,000 TO \$34,999 \$35,000 OR MORE	2.6 4.6	1418 1682	1.3 2.2	1370 1684	Q .3	Q 1378	1.0 1.7	1640 1858	Q Q	Q Q
TOTAL BELOW 100 PERCENT										
OF POVERTY LINE	2.3	1208	.9	1110	Q	Q	1.0	1399	Q	Q
TOTAL BELOW 125 PERCENT										
OF POVERTY LINE	3.6	1212	1.4	1105	.2	1052	1.6	1425	Q	Q
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	4.8	1240	1.9	1230	.6	1106	1.8	1401	Q	Q
35 TO 59 YEARS	7.5	1508	3.4	1485	.3	1331	3.0	1687	Q.	q
60 YEARS AND OVER	5.6	1294	2.2	1182	.4	958	2.8	1491	Q	Q
HOUSEHOLD MEMBERS										
ONE PERSON	4.4	1030	1.8	866	,5	833	1.9	1264	Q	Q
2 TO 4 PEOPLE	11.2	1429	4.9	1432	.7	1295	4.6	1574	Q	Q
5 OR MORE PEOPLE	2.3	1733	.9	1706	Q	Q	1.0	1988	Q	Q



# Table 3. (Continued) Census Region: Northeast

	I ALL HOU	SEHOLDS				HOUSEHOLD	S USING:		······································	Barristan Bakarat kangta
HOUSEHOLD	NUMBER	AVG.		. GAS AS TING FUEL		CCITY AS ATING FUEL	KEROS	DIL OR SENE AS TING FUEL	GAS A	D FETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES     PER  HOUSEHOLD  (DOLLARS)    		AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD (COLLARS)	HOUSE- HOLDS D) (MIL-	AVG. EXPEND- LITURES PER THOUSEHOLD LOOLLEPS
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	1115	Q	Q	Q	Q	0.8	1367	Q	Ę
5,500 TO 7,000 HDD	8.0	1298	3.7	1179	8.8	1036	2.8	1626	Q	q
4,000 TO 5,499 HDD	8.3 - -	1488 - -	3.7	1481 - -	.4	1392 _	4.0 - -	1530 - -	Q - -	q  -



Table 3. (Continued)
Census Division: New
England

HOUSEHOLD CHARACTERISTICS  FOTAL HOUSEHOLDS	NUMBER   OF HOUSE- HOLDS   (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	MAIN HE	L GAS AS ATING FUEL   AVG.   EXPEND-	MAIN HEA	CITY AS	KERO	OIL OR SENE AS ATING FUEL	GAS .	PETROLEUM AS MAIN AG FUEL
TOTAL HOUSEHOLDS	HOLDS (MIL-	PER HOUSEHOLD	OF			1 1			·	
AGEA TYGE		1	HOLDS	ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	HOLDS	AVG.   EXPEND-   ITURES   PER  HOUSEHOLD  (DOLLARS)		AVG. EXPEND- ITURES PER (HOUSEHOLD (DOLLARS)
AREA TYPE	4.2	1395	1.2	1401	0.3	1035	2.1	1560	Q	Q
METROPOLITAN	3,3	1472	1.1	1416	.3	1025	1.7	1635	Q	Q
CENTRAL CITY	1.3	1350	.6	1208	Q	Q	.5	1540	Q	Q
OUTSIDE CENTRAL CITY		1549	.5	1648	.2	952	1.1	1682	Q	Q
NON-METROPOLITAN	.9	1123	Q	. Q	Q	Q	.5	1298	Q	Q
JTILITIES PAID BY HOUSEHOLD			_	<u>.</u>	_	_			_	_
ALL PAID BY HOUSEHOLD	3.2	1459	.9	1491	Q	Q	1.6	1644	Q	Q
SOME, NONE, OTHER PAID BY HOUSEHOLD	1.0	1182	.3	1064	.2	1113	.5	1280	Q	q
TYPE OF HOUSING STRUCTURE										
MOBILE HOME	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
SINGLE FAMILY		1573	ີ.5	1744	Q Q	q Q	1.3	1749	Q	Ğ.
2 OR MORE UNITS	1.8	1165	.7	1129	`.3	1009	.8	1271	à	q
NUMBER OF ROOMS										
1 TO 3	.5	885	.2	781	.2	928	Q	Q	Q	Q
4 TO 5	1.7	1212	.5	1209	Q	Q	. 9	1342	Q	Q
6 OR MORE	2.0	1670	.5	1776	Q	Q	1.1	1777	Q	Q
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999		1010	.4	910	.2	918	.5	1201	Q	Q
1,000 TO 1,999		1382	.5	1434	Q	Q	1.0	1473	Q	Q
2,000 OR MORE	1.1	1852	.3	1949	Q	Q	.6	1998	Q	Q
YEAR HOUSE BUILT						_			_	_
BEFORE 1950	2.4	1416	0.8	1361	Q	Q	1.3	1547	Q	Q
1950 TO 1974	1.5	1360	4	1523	0.2	870	.7	1513	Q	Q
AFTER 1974	.3	1402	Q	Q	Q	Q .	Q	Q	Q	Q
DWH/RENT			_		_			3/40		
OWN	2.7 1.5	1538 1131	.7 .5	1654 1025	Q .3	Q 1009	1.5	1648 1345	Q Q	Q Q
1981 FAMILY INCOME LESS THAN \$10,000	1.0	1186	.3	1065	Q	Q	.5	1290	Q	Q
\$10,000 TO \$19,999	1.2	1321	.3	1191	Q	q	.6	1612	q	Q.
\$20,000 TO \$34,999		1331	.2	1171	Ğ.	Q Q	.3	1623	Q	à
\$35,000 OR MORE	1.4	1637	.5	1833	à	à	.7	1697	à	q
TOTAL BELOW 100 PERCENT										
OF POVERTY LINE	.3	1121	Q	Q	Q	Q	Q	Q	Q	Q
TOTAL BELOW 125 PERCENT										
OF POVERTY LINE	.6	1266	.2	1244	Q	Q	.2	1369	Q	Q
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS		1172	.3	1061	Q	Q	.6	1331	Q	Q
35 TO 59 YEARS		1556	.5	1603	Q	Q	.8	1766	Q	Q
60 YEARS AND OVER	1.3	1399	.4	1401	Q	Q	.7	1508	Q	Q
HOUSEHOLD MEMBERS	_		_		_	_	_		_	_
ONE PERSON		1092	.3	965	ď	Q 7017	.4	1233	Q	Q Q
2 TO 4 PEOPLE		1431 1681	.8 Q	1509 Q	s. 9	1013 Q	1.6 .2	1568 2093	Q	Q



#### Table 3. (Continued) Census Division: New England

	ALL HOL	SEHOLDS	! [ ]			HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER OF	AVG.		GAS AS I		ICITY AS ATING FUEL	KEROS	OIL OR SENE AS ATING FUEL	GAS.	D PETROLEUM AS HAIR 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 I(DOLLARS)		AVG. EXPEND - EXTURES PER (HOUSERCLD (DOLLARS)
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	1183	Q	Q	Q	Q	0.6	1317	Q	G
5,500 TO 7,000 HDD	3.1	1469	1.1	1394	0.3	1030	1.6	1647	ଭ	G
4,000 TO 5,499 HDD	-	-	-	-	-	_	-	-	-	
>2,000 CDD AND <4,000 HDD	-	_	-	-	-	-	-	_	_	***



Table 3. (Continued)
Census Division:
Middle Atlantic

Maria Maria										
	ALL HOL	SEHOLDS				HOUSEHOLE	S USING:			
HOUSEHOLD	NUMBER OF	AVG.		GAS AS		CITY AS	KEROS	OIL OR SENE AS ATING FUEL	GAS A	PETROLEUM AS MAIN AG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	HOLDS	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	HOLDS (MIL-	AVG.   EXPEND-   ITURES   PER   HOUSEHOLD  (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLE (DOLLARS)
TOTAL HOUSEHOLDS	13.7	1361	6.3	1318	1.0	1134	5.4	1544	0.2	900
AREA TYPE										
METROPOLITAN	12.2	1405	5.7	1364	.9	1191	5.1	1543	Q	Q
CENTRAL CITY	5.1	1479	2.5	1423	Q	Q	2.5	1563	Q	Q
OUTSIDE CENTRAL CITY	7.1	1352	3.2	1318	.8	1231	2.6	1524	Q	Q
NON-METROPOLITAN	1.5	1006	.7	926	Q	Q	.4	1559	Q	Q
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	9.4	1409	4.5	1420	.9	1166	3.1	1622	Q	q
SOME, NONE, OTHER									•	
PAID BY HOUSEHOLD	4.3	1257	1.9	1074	Q	Q	2.3	1438	Q	Q
TYPE OF HOUSING STRUCTURE										
MOBILE HOME	. 3	923	Q	Q	Q	Q	Q	Q	Q	Q
SINGLE FAMILY	8.3	1456	4.0	1478	.7	1319	2.8	1623	Q	Q
2 OR MORE UNITS	5.2	1234	2.2	1068	.3	781	2.5	1475	Q	Q
NUMBER OF ROOMS										
1 70 3	2.3	1087	.8	815	.3	806	1.2	1327	Q	Q
4 TO 5	4.6	1218	2.0	1085	.4	1072	1.9	1479	Q	Q
6 OR MORE	6.8	1551	3.6	1558	.3	1490	2.3	1716	Q	Q
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									_	
LESS THAN 999	4.8	1103	1.8	939	.4	867	2.3	1324	q	Q
1,000 TO 1,999	5.2	1388	2.7	1301	.4	1219	1.9	1628	Q	Q
2,000 OR MORE	3.7	1659	1.8	1721	.2	1462	1.3	1808	Q	Q
YEAR HOUSE BUILT										
BEFORE 1950	7.0	1340	3.1	1185	Q	Q	3.2	1583	Q	Q
1950 TO 1974	5.6	1395	2.9	1399	0.5	1217	1.8	1537	Q	Q
AFTER 1974	1.2	1328	.3	1917	.4	1070	.4	1267	Q	Q
OWN/RENT		***			_				_	_
RENT	8.5 5.2	1493 1145	4.2 2.2	1468 1032	.5 .6	1432 895	3.2 2.2	1668 1368	Q Q	Q Q
1981 FAMILY INCOME LESS THAN \$10,000	4.4	1148	1 7	1018	.4	965	2.0	1775		Q
\$10,000 TO \$19,999	4.4	1284	1.7 1.8	1222	.3	1167	1.7	1375 1456	Q Q	ų Q
\$20,000 TO \$34,999	2.0	1443	1.1	1400	Q.	Q Q	.7	1646	Q	ų Q
\$35,000 OR MORE	3.2	1701	1.8	1647	.3	1384	1.0	1977	q	Q.
TOTAL BELOW 100 PERCENT										
OF POVERTY LINE	2.0	1219	.9	1109	Q	Q	. 9	1432	Q	Q
TOTAL BELOW 125 PERCENT OF POVERTY LINE	3.0	1202	1.3	1086	.2	988	1.3	1435	Q	Q
ACE OF HOUSEHOLD NEWD						3			•	•
UNDER 35 YEARS	3.5	1264	1.6	1260	.5	1114	1.2	1438	Q	Q
35 TO 59 YEARS	5.8	1493	2.9	1466	.2	1390	2.2	1657	à	q
60 YEARS AND OVER	4.4	1264	1.8	1129	.3	972	2.1	1485	Q	à
HOUSEHOLD MEMBERS	3.6	1016	1.5	847	.4	776	1.6	1271	Q	Q
2 TO 4 PEOPLE	8.3	1429	4.1	1418	.6	1379	3.0	1577	Q	Q



Table 3. (Continued)
Census Division:
Middle Atlantic

	ALL HOL	JSEHOLDS				HOUSEHOLE	S USING:			
HOUSEHOLD	NUMBER OF	AVG. 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)  		AVG.     EXPEND-     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		AVG.   AVG.   EXPEND~   ITURES   PER  HOUSEHOLD  (DOLLARS)
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE <2,000 CDD AND >7,000 HDD	0.5	978	Q	q	Q	q	0.2	1515	Q	Q
<2,000 CDD AND <2,000 CDD AND 5,500 TO 7,000 HDD	4.9	1188	2,7	1091	0.5	1040	1.2	1519	Q	G
<2,000 CDD AND										
4,000 TO 5,499 HDD	8.3	1488	3.7	1481	.4	1392	4.0	1530	Q	Q
<2,000 CDD AND <4,000 HDD >2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-	-



Table 3. (Continued)
Census Region: North
Central

	ALL HOU	SEHOLOS				HOUSEHOLD	S USING:			
ноизеного	NUMBER OF	AVG.		L GAS AS   ATING FUEL		CCITY AS ATING FUEL	KEROS	OIL OR SENE AS ATING FUEL	GAS A	PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS)	HOUSE- HOLDS (MIL-	AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	(MIL-	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	21.3	1060	15.5	1024	2.1	1090	1.6	1404	1.0	1350
AREA TYPE METROPOLITAN	14.7 7.2 7.6 6.6	1084 1066 1101 1005	11.7 6.0 5.6 3.8	1047 1044 1049 954	1.4 .8 .7	1055 1088 1016 1165	1.1 .3 .8 .5	1446 1429 1453 1301	.2 Q .2 .8	1669 Q 1700 1272
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	17.5	1115	12.4	1103	1.7	1068	1.3	1426	.9	1348
SOME, NONE, OTHER PAID BY HOUSEHOLD	3.8	803	3.1	710	.4	1195	.3	1304	Q	Q
TYPE OF HOUSING STRUCTURE MOBILE HOMESINGLE FAMILY	.7 15.0	980 1158	.2 10.7	758 1136	Q 1.2	Q 1209	Q 1.2	Q 1473	.2	972 1440
2 OR MORE UNITS	5.6	805	4.6	776	.8	848	.3	1169	Q	Q
NUMBER OF ROOMS	2.4	705	1.7	605	.4	974	.2	1052	Q	Q
4 TO 5	9.6 9.3	950 1264	7.0 6.8	900 1257	.8	989 1256	.8	1355 1576	.4 .5	1144 1531
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)					_		_			
LESS THAN 999	6.8 8.1	765 1087	5.2 5.7	723 1054	.9 .7	903 1125	.3 .8	1081 1381	.2 .4	971 1307
2,000 OR MORE	6.3	1342	4.6	1324	.5	1375	.5	1661	.3	1713
YEAR HOUSE BUILT BEFORE 1950	9.3	1071	7.4	1017	Q	Q	0.9	1541	0.4	1457
1950 TO 1974	9.2	1056	6.8	1041	1.2	1092	.4	1291	.4	1181
AFTER 1974	2.9	1034	1.3	978	.8	1082	.2	1037	Q	Q
OWN/RENT		,,,,,			• •	1 A 7 A		34/3		7761
OWN	14.3 7.0	1159 855	9.9 5.6	1135 827	1.2	1234 891	1.3	1461 1171	.9 Q	1341 Q
1981 FAMILY INCOME										
LESS THAN \$10,000	6.8	905	5.1	844	.5	1020	.5	1364	.4	1165
\$10,000 TO \$19,999 \$20,000 TO \$34,999	6.7 2.9	1005 1173	4.7 2.0	986 1124	.7 .4	1047 1182	.6 .2	1325 1366	.2 Q	1108 Q
\$35,000 OR MORE	4.9	1279	3.7	1263	.4	1154	.3	1696	.3	1629
TOTAL BELOW 100 PERCENT										
OF POVERTY LINE	2.8	929	2.3	884	Q	Q	.2	1534	Q	Q
OF POVERTY LINE	4.0	938	3.1	892	.2	1044	.3	1431	.2	1113
AGE OF HOUSEHOLD HEAD					_		_			
UNDER 35 YEARS	6.5	931	4.7	911	.8	952	.3	1273	.2	1265
35 TO 59 YEARS	8.8 6.0	1187 1010	6.5 4.3	1155 950	.8 .5	1283	.6 .7	1553 1341	.5 .3	1433 1250
HOUSEHOLD MEMBERS		907	~ -	707		703	•	3000	•	7 4 6 7
ONE PERSON2 TO 4 PEOPLE	4.7 13.6	784 1087	3.7 9.7	727 1061	.4 1.4	781 1103	.3 1.1	1288 1421	.2 .6	1083 1319
5 OR MORE PEOPLE	3.0	1369	2.1	1382	.3	1418	Q	Q	.2	1824



# Table 3. (Continued) Census Region: North Central

ATING DEGREES-DAYS (HDD) D COOLING DEGREES-DAYS (CDD) NG-TERM AVERAGE	AVG. EXPEND-   ITURES   PER HOUSEHOLD   (DOLLARS)	MAIN HE	L GAS AS ATING FUEL    AVG.   EXPEND-   ITURES   PER   HOUSEHOLD	NUMBER OF HOUSE- HOLDS (MIL-	ICITY AS ATING FUEL     AVG.     EXPEND-     ITURES     PER     HOUSEHOLD	MAIN HEA MAIN HEA MUMBER OF HOUSE- HOLDS	OIL OR SENE AS ATING FUEL I I AVG. I EXPEND- I TURES I PER I HOUSEHOLD	GAS HEATIN	D PETROLEUM AS MAIN NG FUEL AVG. EXPEND- JITURES PER
HOLDS   (MIL-	PER   HOUSEHOLD	OF HOUSE- HOLDS (MIL-	EXPEND-   ITURES   PER   HOUSEHOLD	OF HOUSE- HOLDS (MIL-	EXPEND-     ITURES     PER	OF HOUSE- HOLDS	EXPEND-     ITURES     PER	OF HOUSE- HOLDS	EXPEND- ITURES PER
EATING DEGREES-DAYS (HDD) ND COOLING DEGREES-DAYS (CDD) ONG-TERM AVERAGE				2101137	[(DOLLARS)]		(DOLLARS)		HOUSEHOLD   (DOLLARS)
<2,000 CDD AND >7,000 HDD 5.5 <2,000 CDD AND	1056	3.3	973	0.3	1354	0.9	1387	0.3	1290
5,500 TO 7,000 HDD	1065	9.0	1037	1.3	1055	.5	1405	.3	1463
4,000 TO 5,499 HDD 4.3	1049	3.1	1040	.4	988	. 2	1485	.3	1296
<2,000 CDD AND <4,000 HDD Q		Q	Q	Q	G	Q	Q	Q	q



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

	ALL HOL	JSEHOLDS	i i			HOUSEHOLI	os using:			
HOUSEHOLD	NUMBER OF	AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERO:	OIL OR SENE AS ATING FUEL	I GAS	PETROLEUM AS MAIN AG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS)				AVG. EXPEND- ITURES PER HOUSEHOLD (OOLLARS)		AVG.   EXPEND-   ITURES   PER  HOUSEHOLD  (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS,	15.0	1056	10.8	1018	1.6	1079	1.3	1440	0.5	1324
AREA TYPE										
METROPOLITAN CENTRAL CITY OUTSIDE CENTRAL CITY NON-METROPOLITAN	11.4 5.4 6.0 3.6	1078 1075 1079 987	8.9 4.4 4.5 1.9	1041 1052 1030 908	1.2 .7 .5	1031 -1094 937 1203	1.0 .3 .7 .3	1436 1418 1443 1451	ୟ ସ ଫ .4	Q Q Q 1188
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	12.1	1120	8.4	1111	1.3	1047	1.0	1484	.5	1324
SOME, NONE, OTHER PAID BY HOUSEHOLD	2.9	794	2.3	682	.3	1208	.3	1274	Q	Q
TYPE OF HOUSING STRUCTURE MOBILE HOMESINGLE FAMILY	.4 10.1	1018 1168	Q 7.1	Q 1147	Q .9	Q 1184	Q 1.0	Q 1522	Q .3	Q 1471
2 OR MORE UNITS	4.5	807	3.6	773	.6	868	.3	1144	Q	Q
NUMBER OF ROOMS	1.8	715	1.2	584	.4	978	Q	Q	Q	Q
4 TO 5	6.9 6.3	943 1274	5.0 4.6	884 1273	.6	1012 1211	.6 .5	1339 1636	.3	1156 1560
MEASURED HEATED SPACE OF RESI-		7/0		74.5	_	01.0	•	1101	•	070
LESS THAN 999	5.0 5.6 4.3	762 1080 1364	3.8 3.9 3.1	715 1041 1359	.7 .5 .4	919 1123 1327	.2 .7 .4	1121 1374 1696	.2 .2 Q	938 1387 Q
YEAR HOUSE BUILT BEFORE 1950	6.9	1077						770-	_	_
1950 TO 1974	6.2	1047 1010	5.5 4.4 .9	1024 1031 912	Q 1.0 .5	q 1099 1041	0.8 .3 .2	1599 1300 1037	Q 0.2 Q	Q 1071 Q
OWN/RENT OWN	9.6 5.4	1169 858	6.4 4.4	1145	.9	1214	1.0	1504	.4	1310
1981 FAMILY INCOME				832	.7	892	.2	1175	Q	Q
LESS THAN \$10,000 \$10,000 TO \$19,999	5.1 4.8	914 1009	3.9 3.3	844	.4	1059	.4	1458	.2	1211
\$20,000 TO \$34,999	1.8	1170	1.2	983 1132	.6 .3	1034 1247	.4 .2	1354 1266	Q Q	Q Q
\$35,000 OR MORE	3.2	1284	2.4	1290	.3	1026	.2	1696	Q	Q
TOTAL BELOW 100 PERCENT OF POVERTY LINE	2.1	969	1.8	915	Q	Q	.2	1667	Q	Q
TOTAL BELOW 125 PERCENT OF POVERTY LINE	3.0	964	2.3	906	Q	Q	.2	1548	Q	Q
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	4.6	900	3.2	889	.6	899	.2	1171	Q	Q
35 TO 59 YEARS	6.0	1197 1024	4.4 3.2	116 <b>0</b> 952	.6 .4	1288 1050	.5 .6	1628 1376	.2 Q	1332 Q
HOUSEHOLD MEMBERS ONE PERSON	3.3	792	2.6	736	.3	777	. 2	1373	Q	Q
2 TO 4 PEOPLE	9.4 2.2	1072 1381	6.6 1.6	1039 1397	1.1	1083 1442	Q . 9	1458 Q	Q.3	1208 Q



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

	ALL HOL	SEHOLDS				HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER OF	AVG.		L GAS AS   ATING FUEL   		ICITY AS ATING FUEL	KEROS	OIL OR SENE AS STING FUEL	GAS	D PETROLEUM AS HAIN 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. LEXPEND- LITURES PER HOUSEHOLD	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- IXTURES PER HOUSEHOLD (COULLARS)
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<pre>&lt;2,000 CDD AND &gt;7,000 HDD &lt;2,000 CDD AND</pre>	3.4	992	1.7	878	0.3	1223	0.7	1390	0.2	13.23
5,500 TO 7,000 HDD	10.2	1071	7.9	1046	1.3	1059	.5	1405	.2	1509
4,000 TO 5,499 HDD	1.5	1098	1.2	1026	Q	Q	Q	Q	Q	q
<2,000 CDD AND <4,000 HDD >2,000 CDD AND <4,000 HDD	-	- +	-	-	-	-	-	-	=	



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

	ALL HOL	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 A	PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS)	HOUSE- HOLDS (MIL-	AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD		I PER IHOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD
		}	LIONS)	(DOLLARS)	LIONS)	(DOLLARS)	LIONS)	(DOLLARS)	LIONS)	(DOLLARS)
TOTAL HOUSEHOLDS	6.3	1068	4.7	1038	0.5	1129	0.3	1258	0.5	1374
AREA TYPE										
METROPOLITAN	3.3	1105	2.8	1065	.3	1166	Q	Q	Q	Q
CENTRAL CITY	1.7	1037	1.6	1022	Q	Q	Q	Q	Q	Q
OUTSIDE CENTRAL CITY	1.6	1181	1.2	1123	.2	1216	Q	Q	Q	Q
NON-METROPOLITAN	3.0	1028	1.9	999	.2	1087	.2	1031	.4	1350
UTILITIES PAID BY HOUSEHOLD	5.5	1104	3.9	1085	.4	1132	.3	1229	.5	1371
SOME, NONE, OTHER						_				
PAID BY HOUSEHOLD	.8	832	.8	795	Q	Q	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE	_		_	_	_	_	_	_	_	_
MOBILE HOME	.3	915	Q	Q	Q _	Q	Q	Q	Q	Q
SINGLE FAMILY	4.9 1.1	1139 795	3.6 1.0	1114 787	.3 Q	1274 Q	.2 Q	1273 Q	.4 Q	1416 Q
NUMBER OF ROOMS										
1 70 3	.7	677	.5	649	Q	Q	ଦ	Q	Q	Q
4 TO 5	2.7	969	2.0	941	.2	926	.2 Q	1416	.2	1123
6 DR MORE	3.0	1243	2.2	1222	.2	1387	ď	Q	.3	1514
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)							_	_		_
LESS THAN 999	1.8	773	1.4	746	٠2	825	ğ	Q	Q	Q
1,000 TO 1,999 2,000 OR MORE	2.5 2.0	1102 1295	1.8 1.5	1082 1252	.2 Q	1129 Q	Q Q	Q Q	.2 .2	124 <b>2</b> 1658
Lyou on Hone	2.0	12/3	1.5	1656	4	•	4	•	• •	1030
YEAR HOUSE BUILT					_	_				
BEFORE 1950	2.3	1056	1.8	996	Q	Q	0.2	1240	0.2	1459
AFTER 1974	3.0 1.0	1074 1081	2.4 .5	1059 1096	Q 0.3	Q 1161	.2 Q	1276 Q	.2 Q	1319 Q
	1.0	1001		1070	0.3	1101	4	ď	ч	4
OWN/RENT	4.8	1140	3.5	1117	.3	1304	.2	1282	.4	1371
RENT	1.5	845	1.2	809	.2	886	Q T	Q	Q T	Q'
1981 FAMILY INCOME										
LESS THAN \$10,000	1.7	878	1.2	842	Q	Q	Q	Q	.2	1101
\$10,000 TO \$19,999	1.8	993	1.3	993	q	વે	Q	ā	Q.	q
\$20,000 TO \$34,999	1.1	1178	.8	1112	Q	Q	Q	Q	ġ	q.
\$35,000 OR MORE	1.7	1270	1.3	1216	Q	Q	Q	Q	Q	Q
TOTAL BELOW 100 PERCENT										
OF POVERTY LINE	. 7	799	.5	773	Q	Q	q	Q	Q	Q
TOTAL BELOW 125 PERCENT			_		_	_		_	_	_
OF POVERTY LINE	1.0	861	.7	845	Q	Q	Q	Q	Q	Q
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	2.0	1004	1.5	958	.2	1104	Q	q	Q	Q
35 TO 59 YEARS	2.8	1167	2.1	1145	.2	1264	Q.	q	٠.3	1516
60 YEARS AND OVER	1.6	971	1.2	946	Q	Q	q	Q	q Î	Q
HOUSEHOLD MEMBERS										
ONE PERSON	1.4	766	1.1	707	Q	Q	Q	Q	Q	Q
2 TO 4 PEOPLE	4.2	1151	3.1	1108	.3	1172	.2	1208	.3	1419
5 OR MORE PEOPLE	.8	1333	.5	1330	Q	Q	Q	Q	Q	Q



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

	ALL HOU	ISEHOLDS				HOUSEHOLD	s USING:			
HOUSEHOLD	I I I NUMBER I OF	I I I AVG. I EXPEND-	NATURAL MAIN HEA	GAS AS TING FUEL		ICITY AS   ATING FUEL	KEROS	OIL OR SENE AS ATING FUEL	GAS .	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE-   ITURES     HOLDS   PER     (MIL-  HOUSEHOLD    LIONS)   (DOLLARS)	HOUSE- HOLDS	AVG.   EXPEND-   ITURES   PER  HOUSEHOLD  (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE <2,000 CDD AND >7,000 HDD	2.1	1158	1.7	1067	Q	Q	0.2	1378	0.2	1485
5,500 TO 7,000 HDD	1.3	1019	1.1	974	Q	Q	Q	G;	Q	Q
<pre>&lt;2,000 CDD AND 4,000 TO 5,499 HDD &lt;2,000 CDD AND &lt;4,000 HDD &gt;2,000 CDD AND &lt;4,000 HDD</pre>	2.9 Q ~	1024 Q	1.9 Q -	1049 Q -	0.4 Q -	1014 Q	Q Q -	Q -	.2 Q -	1245 Q -



Table 3. (Continued) Census Region: South

TOTAL HOUSEHOLDS		. [									
MATURAL 665 & S.   SECTRACTIV AS   FUEL OIL OR   AUGUST		ALL HOL	JSEHOLDS		, the man to the committee of		HOUSEHOLD	S USING:			
No.   Per   N.   N.   Per   N.   N.   N.   N.   N.   N.   N.   N								KERO:	SENE AS	GAS .	AS MAIN
AREA TYPE HEIROPOLITAN	는 경기를 다 되었다.	HOLDS	PER HOUSEHOLD	OF HOUSE- HOLDS (MIL-	EXPEND- I ITURES PER HOUSEHOLD	OF HOUSE- HOLDS (MIL-	EXPEND-   ITURES   PER  HOUSEHOLD	OF HOUSE- HOLDS (MIL-	EXPEND-   ITURES   PER  HOUSEHOLD	OF HOUSE- HOLDS (MIL-	EXPEND-
AREA TYPE HEIROPOLITAN											
HETROPOLITAN.   18.6   1074   10.0   1075   5.0   1083   1.6   1291   1.1   961   1.1   601   1.5	TOTAL HOUSEHOLDS	28.1	1019	13.3	1054	6.8	1039	2.5	1190	2.3	973
CENTRAL CITY. 10.1 1139 4.4 1196 3.1 11033 6.6 1206 3.3 755 0UTSIDE CENTRAL CITY. 10.1 1139 4.4 1196 3.1 1195 7.9 1021 NON-HETROPOLITAN. 9.4 912 3.4 994 1.8 915 9.9 1011 1.1 985 0THILLINGS AND SY HOUSEHOLD ALL PAID BY HOUSEHOL	AREA TYPE										
OUTSIDE CENTRAL CITY. 10.1 1139 4.4 1196 3.1 1115 1.0 1345 .9 1021 1.1 985  UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD. 24.7 1033 11.2 1095 6.2 1036 2.2 1212 2.0 957  SOME, NOME, OTHER DIFFER BY HOUSEHOLD. 3.3 914 2.1 838 7. 1066 3.3 1000 3.3 1095  TYPE OF HOUSENOLD. 24.7 1033 11.2 1095 6.2 1036 2.2 1212 2.0 957  SOME, NOME, OTHER DIFFER BY HOUSEHOLD. 3.3 914 2.1 838 7. 1066 3.3 1000 3.3 1095  TYPE OF HOUSENOLD. 3.3 914 2.1 838 7. 1066 3.3 1000 3.3 1095  TYPE OF HOUSENOLD. 3.5 1095 7.0 10.2 1133 4.0 1141 1.9 1269 1.6 967 2 OR MORE UNITS 5.4 859 2.9 795 2.2 931 2.2 1041 9 9 9  UNIDED OF ROOMS 5.1 724 1.3 713 1.3 774 2.2 753 2.1 1041 9 9  UNIDED OF ROOMS 5.1 724 1.3 713 1.3 774 2.2 753 2.2 60 9 1149  MEASURED HEATE SPACE OF RESIDENCE IN MARKED HEATE SPACE OF RESIDENCE (IN SQUARE FEET)  LESS THAN 999. 10.5 795 4.9 773 2.8 854 7.9 947 1.1 820 1.0 1081 1.000 TO 1.999. 13.2 1046 6.0 1033 3.2 1059 1.1 1200 1.0 1081 2.000 OR MORE. 4.2 1494 2.3 1566 8. 1479 5.5 1015 9 9  WEAR HOUSE 1950. 7.7 937 4.0 946 0.5 914 1.1 1207 1.0 1081 2.000 OR MORE. 4.7 10.5 10.6 4.0 11067 3.7 1066 1.3 1100 1.1 973 AFTER 1974 9.7 11.0 1062 1.3 11067 3.7 1066 1.3 1100 1.1 973 AFTER 1974 9.7 10.2 11.3 11.0 10.7 3.3 1.1 10.7 3.7 10.1 10.1 10.1 10.1 10.1 10.1 10.1 10											
NON-HETROPOLITANN											
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD. 24.7 1033 11.2 1095 6.2 1036 2.2 1212 2.0 957 SOME, NONE, OTHER PAID BY HOUSEHOLD. 3.3 914 2.1 838 7.7 1066 3.3 1000 3.3 1095  TYPE OF HOUSING STRUCTURE HOBILE HOME. 1.6 807 3 828 6 752 3 804 5 925 SINGLE FAMILY. 20.9 1079 10.2 1133 4.0 1141 1.9 1269 1.8 967 2 OR HORE HONTS. 5.4 859 2.9 795 2.2 931 .2 1041 Q Q  NUMBER OF ROOMS 1 10 3 3.1 724 1.3 713 1.3 774 2.2 753 1.2 622 4 10 5 12.6 873 6.0 874 2.9 934 1.2 1033 1.1 889 6 0 MORE. 1 10 3 12.6 873 6.0 874 2.9 934 1.2 1033 1.1 889 6 0 MORE. 1 12.3 1244 6.0 1311 2.6 1285 1.1 1420 9.9 149  MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999. 1 13.2 1046 6.0 1083 3.2 1095 1.1 1200 1.0 1881 2.000 OR MORE. 4.2 1474 2.3 1568 8.8 1470 5.5 1615 Q Q  YEAR HOUSE BUILT BEFORE 1950. 7.7 937 4.0 946 0.5 914 1.1 1207 0.9 973 1950 TO 1974. 1 15.5 1047 8.1 1047 8.3 1181 2.6 1285 Q Q Q 3.3 971  OKN/RENT UKAN. 1 8.5 1066 8.5 1170 4.2 1118 1.8 1216 1.6 973 AFTER 1974. 4.7 1062 1.3 1180 2.6 1025 Q Q Q 3.3 971  OKN/RENT UKAN. 1 8.5 1066 8.5 1170 4.2 1118 1.8 1216 1.6 979 1961 FAMILY INCOME LESS THAN 10.0 00. 9.5 813 4.4 810 1.8 851 9.9 966 1.1 879 1961 FAMILY INCOME LESS THAN 10.0 00. 9.5 813 4.4 810 1.8 851 9.9 966 1.1 879 1961 FAMILY INCOME LESS THAN 10.0 00. 9.5 813 4.4 810 1.8 851 9.9 966 1.1 879 1961 FAMILY INCOME LESS THAN 10.0 00. 9.5 813 4.4 810 1.8 851 9.9 966 1.1 879 1961 FAMILY INCOME LESS THAN 10.0 00. 9.5 813 4.4 810 1.8 891 9.9 86 1034 8.8 810  TOTAL BELOW 10.0 PERCENT OF POVERTY LINE. 6.9 830 3.3 842 1.0 899 6.6 1034 8.8 810  FOR POVERTY LINE. 6.9 830 3.3 842 1.0 899 6.6 1034 8.8 810  HOUSENSOLD HEAD  HOUSENSOLD HERBERS ONE PRESON. 6.1 77 928 3.5 974 1.6 993 8.9 1034 1.1 8.9 935  HOUSENSOLD HERBERS ONE PRESON. 6.1 77 928 3.5 974 1.6 993 8.9 1034 1.0 893  HOUSENSOLD HERBERS ONE PRESON. 6.1 772 3.2 742 1.6 768 5.5 1051 1.5 106 1.6 933											
ALL PAID BY HOUSEHOLD. 24.7 1033 11.2 1095 6.2 1036 2.2 1212 2.0 957 SOHE, NONE, OTHER PAID BY HOUSEHOLD. 3.3 914 2.1 838 7.7 1066 3.3 1000 3.3 1095 TYPE OF HOUSING STRUCTURE HOUSE HOLD. 1.8 897 1.3 828 6.6 752 3. 804 5.5 925 SINGLE FAMILU. 20.9 1079 10.2 1133 4.0 1141 1.9 1269 1.8 987 20 RM HORE HONTS. 5.4 859 2.9 795 2.2 931 1.2 1044 9 q q North House 10 10.5 1.0 10.2 113.3 4.0 1141 1.9 1269 1.8 987 2.9 RM HORE HOUSE FROM STRUCTURE HOUSE FROM STRUCTURE HOUSE FROM STRUCTURE TO STR	NUN-METROPOLITAN	7.4	412	3.4	774	1.0	713	• 7	1011	1.1	703
PAID BY HOUSEHOLD. 3.3 914 2.1 838 7, 1066 .3 1000 .3 1095  TYPE OF HOUSING STRUCTURE  MOBILE HOME. 1.8 807 .3 828 .6 752 .3 804 .5 925  SINGLE FAMILY. 20.9 1079 10.2 1133 4.0 1141 1.9 1269 1.8 987  ZO RO HODE INIT'S. 5.4 859 2.9 795 2.2 931 .2 1041 Q Q  NUMBER OF ROOMS  1 10 3 .3 1 724 1.3 713 1.3 774 2.2 753 2.2 622  4 10 5 . 126 6 873 6.0 674 2.9 934 1.2 1033 1.1 889  6 OR MORE. 12.6 873 6.0 674 2.9 934 1.2 1033 1.1 889  6 OR MORE. 12.3 1244 6.0 1311 2.6 1265 1.1 1420 .9 1149  MEASURED HEATED SPACE OF RESI-  DENCE (IN SQUARE FEET)  LESS THAN 999. 13.2 1046 6.0 1683 3.2 1095 1.1 1200 1.0 1081  2.000 OR MORE. 4.2 1494 2.3 1568 8.8 1470 .5 1615 Q Q  YEAR HOUSE BULTI  BEFORE 1950. 7.7 937 4.0 946 0.5 914 1.1 1227 0.9 973  AFTER 1974. 4.7 1062 1.3 1181 2.6 1025 Q Q 3 3 971  UNN/RENT  ONN/RENT  ONN/RENT  ONN/RENT  ONN/RENT  DNN/RENT  DNN	ALL PAID BY HOUSEHOLD	24.7	1033	11.2	1095	6.2	1036	2.2	1212	2.0	957
MOBILE HONE.		3.3	914	2.1	838	.7	1066	.3	1000	.3	1095
SINGLE FAMILY. 20.9 1079 10.2 1133 4.0 1141 1.9 1267 1.8 987 2 0R NORE UNITS. 5.4 859 2.9 795 2.2 931 2.2 1041 Q Q Q NUMBER OF ROOMS  1 TO 3	TYPE OF HOUSING STRUCTURE										
2 OR HORE UNITS	MOBILE HOME	1.8	807	.3	828	.6	752	.3	804	.5	925
NUMBER OF ROOMS  1 TO 3	SINGLE FAMILY	20.9	1079	10.2	1133	4.0					987
1 TO 3	2 OR MORE UNITS	5.4	859	2.9	795	2.2	931	. 2	1041	Q	Q
1 TO 3	NUMBER OF ROOMS										
## MEASURED HEATED SPACE OF RESIDENCE (IN SQUARE FEET)    LESS THAN 999.		3.1	724	1.3	713	1.3	774	.2	753	.2	622
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)  LESS THAN 999. 10.5 795 4.9 773 2.8 854 .9 947 1.1 820 1.00 TO 1.999. 13.2 1046 6.0 1083 3.2 1095 1.1 1200 1.0 1081 2.000 OR HORE. 4.2 1494 2.3 1568 .8 1470 .5 1615 Q  YEAR HOUSE BUILT BEFORE 1950. 7.7 937 4.0 946 0.5 914 1.1 1287 0.9 973 1950 TO 1974 15.6 1047 8.1 1087 3.7 1066 1.3 1100 1.1 973 AFTER 1974 4.7 1062 1.3 1181 2.6 1025 Q  Q  ONN/RENT  ONN. 18.5 1096 8.5 1170 4.2 1118 1.8 1218 1.6 1.6 997 RENT . 9.6 871 4.6 848 2.6 912 .7 1121 .7 919  1981 FAMILY INCOME  LESS THAN \$10.000. 9.5 813 4.4 810 1.8 851 .9 966 1.1 879 \$10.000 TO \$34.999. 8.0 989 3.5 1032 1.9 908 8.8 1260 .7 1038 \$20.000 TO \$34.999. 4.3 1052 2.2 1107 1.1 954 .3 1278 3 1040 \$35.000 OR HORE. 6.3 1347 3.1 1388 2.0 1377 .5 1431 .2 1173  TOTAL BELON 100 PERCENT OF POVERTY LINE. 5.1 825 2.5 803 .7 960 .5 1089 .6 866 TOTAL BELON 125 PERCENT OF POVERTY LINE. 6.9 830 3.3 842 1.0 899 .6 1034 .8 881  AGE OF HOUSEHOLD HEAD  UNDER 35 YEARS. 8.8 964 4.1 940 2.5 1015 .8 1134 6.9 945 60 YEARS AND OVER. 7.7 928 3.5 974 1.6 993 .8 1140 .8 935  HOUSEHOLD MEMBERS  ONE PERSON. 6.1 772 3.2 742 1.6 768 .5 1051 .5 836 2 TO 4 PEOLET. 16.6 1055 8.4 1122 4.5 1077 1.7 1199 1.6 973	4 TO 5	12.6	873	6.0	874	2.9	934	1.2	1033	1.1	889
DENCE (IN SQUARE FEET)	6 OR MORE	12.3	1244	6.0	1311	2.6	1285	1.1	1420	. 9	1149
1.000 TO 1,999	DENCE (IN SQUARE FEET)		707				051		0/7		222
2,000 OR MORE.       4.2       1494       2.3       1568       .8       1470       .5       1615       Q       Q         YEAR HOUSE BUILT       BEFORE 1950.       7.7       937       4.0       946       0.5       914       1.1       1287       0.9       973         1950 TO 1974.       15.6       1047       8.1       1087       3.7       1066       1.3       1100       1.1       973         AFTER 1974.       4.7       1062       1.3       1181       2.6       1025       Q       Q       .3       971         ONN/RENT         ONN/RENT         0NN.       18.5       1096       8.5       1170       4.2       1118       1.8       1218       1.6       997         RENT       9.6       871       4.8       848       2.6       912       .7       1121       .7       919         1981 FAMILY INCOME       LESS THAN \$10,000.       9.5       813       4.4       810       1.8       851       .9       966       1.1       879         LESS THAN \$10,000.       9.5       813       4.4       810       1.8       851       .9			_								
YEAR HOUSE BUILT  BEFORE 1950											
BEFORE 1950	2,000 OR HORE	4.2	1474	6.3	1200	.0	1470		1013	ч	•
1950 TO 1974											
AFTER 1974											
ONN.   18.5   1096   8.5   1170   4.2   1118   1.8   1218   1.6   997											
OWN	AFTER 17/4	4.7	1065	1.3	1191	2.6	1025	Ų	ч	. 3	9/1
18.5   10%   8.5   1170   4.2   1118   1.8   1218   1.6   997   RENT											
1981 FAMILY INCOME  LESS THAN \$10,000 9.5 813 4.4 810 1.8 851 .9 966 1.1 879 \$10,000 TO \$19,999. 8.0 989 3.5 1032 1.9 908 .8 1260 .7 1038 \$20,000 TO \$34,999. 4.3 1052 2.2 1107 1.1 954 .3 1278 .3 1040 \$35,000 OR MORE. 6.3 1347 3.1 1388 2.0 1377 .5 1431 .2 1173  TOTAL BELOW 100 PERCENT  OF POVERTY LINE. 5.1 825 2.5 803 .7 960 .5 1089 .6 866 TOTAL BELOW 125 PERCENT  OF POVERTY LINE. 6.9 830 3.3 842 1.0 899 .6 1034 .8 881  AGE OF HOUSEHOLD HEAD  UNDER 35 YEARS. 8.8 964 4.1 940 2.5 1015 .8 1134 .6 945 35 TO 59 YEARS. 11.6 1123 5.7 1185 2.7 1146 .9 1283 .8 1034 60 YEARS AND OVER. 7.7 928 3.5 974 1.6 903 .8 1141 .8 935  HOUSEHOLD MEMBERS  ONE PERSON. 6.1 772 3.2 742 1.6 768 .5 1051 .5 836 2 70 PROPERSON. 6.1 779 979	OWN										
1961 FAMILY INCOME   LESS THAN \$10,000   9.5	RENI	9.6	871	4.8	848	2.6	912	.7	1121	.7	919
\$10,000 TO \$19,999 8.0 989 3.5 1032 1.9 908 8. 1260 .7 1038 \$20,000 TO \$34,999 4.3 1052 2.2 1107 1.1 954 .3 1278 .3 1040 \$35,000 OR MORE 6.3 1347 3.1 1388 2.0 1377 .5 1431 .2 1173  TOTAL BELOW 100 PERCENT  OF POVERTY LINE 5.1 825 2.5 803 .7 960 .5 1089 .6 866 TOTAL BELOW 125 PERCENT  OF POVERTY LINE 6.9 830 3.3 842 1.0 899 .6 1034 .8 881  AGE OF HOUSEHOLD HEAD  UNDER 35 YEARS 8.8 964 4.1 940 2.5 1015 .8 1134 .6 945 35 TO 59 YEARS. 11.6 1123 5.7 1185 2.7 1146 .9 1283 .8 1034 60 YEARS AND OVER 7.7 928 3.5 974 1.6 903 .8 1141 .8 935  HOUSEHOLD MEMBERS  ONE PERSON 6.1 772 3.2 742 1.6 768 .5 1051 .5 836 2 TO 4 PEOPLE 18.6 1055 8.4 1122 4.5 1077 1.7 1199 1.6 979	1981 FAMILY INCOME										
\$20,000 TO \$34,999 4.3 1052 2.2 1107 1.1 954 .3 1278 .3 1040 \$35,000 OR MORE. 6.3 1347 3.1 1388 2.0 1377 .5 1431 .2 1173  TOTAL BELOW 100 PERCENT  OF POVERTY LINE. 5.1 825 2.5 803 .7 960 .5 1089 .6 866 TOTAL BELOW 125 PERCENT  OF POVERTY LINE. 6.9 830 3.3 842 1.0 899 .6 1034 .8 881  AGE OF HOUSEHOLD HEAD  UNDER 35 YEARS. 8.8 964 4.1 940 2.5 1015 .8 1134 .6 945 35 TO 59 YEARS. 11.6 1123 5.7 1165 2.7 1146 .9 1283 .8 1034 60 YEARS AND OVER. 7.7 928 3.5 974 1.6 903 .8 1141 .8 935  HOUSEHOLD MEMBERS  ONE PERSON. 6.1 772 3.2 742 1.6 768 .5 1051 .5 836 2 TO 4 PEOPLE. 18.6 1055 8.4 1122 4.5 1077 1.7 1199 1.6 979					810	1.8	851	.9	966	1.1	879
\$35,000 OR MORE											
TOTAL BELOW 100 PERCENT OF POVERTY LINE											
OF POVERTY LINE.     5.1     825     2.5     803     .7     960     .5     1089     .6     866       TOTAL BELOW 125 PERCENT     0F POVERTY LINE.     6.9     830     3.3     842     1.0     899     .6     1034     .8     881       AGE OF HOUSEHOLD HEAD     UNDER 35 YEARS.     8.8     964     4.1     940     2.5     1015     .8     1134     .6     945       35 TO 59 YEARS.     11.6     1123     5.7     1185     2.7     1146     .9     1283     .8     1034       60 YEARS AND OVER.     7.7     928     3.5     974     1.6     903     .8     1141     .8     935       HOUSEHOLD MEMBERS       ONE PERSON.     6.1     772     3.2     742     1.6     768     .5     1051     .5     836       2 TO 4 PEOPLE.     18.6     1055     8.4     1122     4.5     1077     1.7     1199     1.6     979	TOTAL DELOIL TOX GENERAL										
TOTAL BELOW 125 PERCENT OF POVERTY LINE		5.3	825	2.5	803	.7	960	, 5	1089	. 4.	864
OF POVERTY LINE						• •			_00,		
UNDER 35 YEARS. 8.8 964 4.1 940 2.5 1015 8 1134 6 945 35 TO 59 YEARS. 11.6 1123 5.7 1165 2.7 1146 .9 1283 .8 1034 60 YEARS AND OVER. 7.7 928 3.5 974 1.6 903 .8 1141 8 935  HOUSEHOLD MEMBERS ONE PERSON. 6.1 772 3.2 742 1.6 768 .5 1051 .5 836 2 TO 4 PEOPLE. 18.6 1055 8.4 1122 4.5 1077 1.7 1199 1.6 979	OF POVERTY LINE	6.9	830	3.3	842	1.0	899	.6	1034	.8	881
35 TO 59 YEARS		яя	964	4 7	940	2 5	1015	۵	1176	4	945
60 YEARS AND OVER											
ONE PERSON	60 YEARS AND OVER										
2 TO 4 PEOPLE 1		6 1	779	7.9	749	1 4	74.9	ĸ	) 051	<b>5</b>	726
					1310	.7	1400	.3	1408	.2	1233



#### Table 3. (Continued) Census Region: South

	ALL HO	USEHOLOS				HOUSEHOLE	s USING:			
HOUSEHOLD	NUMBER OF	AVG.		GAS AS		CITY AS	KEROS	DIL OR SENE AS STING FUEL	GAS A	PETROLEUM S MAIN IG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS)		AVG.   EXPEND-   ITURES   PER  HOUSEHOLD  (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG.   EXPEND-   ITURES   PER  HOUSEHOLD  (DOLLARS)		AVG.   EXPEND-   ITURES   PER  HOUSEHOLD  (DOLLARS)
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	- Q	- Q	- G	- Q	- Q	- Q	- Q		- Q	- G
<pre>&lt;2,000 CDD AND 4,000 TO 5,499 HDD &lt;2,000 CDD AND &lt;4,000 HDD &gt;2,000 CDD AND &lt;4,000 HDD</pre>	6.4 10.4 11.3	1071 949 1055	2.7 4.9 5.8	1126 948 1112	1.2 2.1 3.5	1081 1008 1044	1.2	1293 1094 1122	Q 0.9 1.2	Q 1049 896



Table 3. (Continued)
Census Division:
South Atlantic

	ALL HOU	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 .	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	HOLDS	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	•	AVG.   EXPEND-   ITURES   PER  HOUSEHOLD  (DOLLARS)
TOTAL HOUSEHOLDS	13.9	1007	4.6	1079	3.7	974	2.4	1195	1.2	958
AREA TYPE										
METROPOLITAN	10,0	1068	3.9	1108	3.1	1005	1.6	1291	.8	920
CENTRAL CITY	3.8	1001	1.7	1035	1.1	930	.6	1210	.3	755
OUTSIDE CENTRAL CITY	6.2	1110	2.2	1165	2.0	1047	1.0	1340	.6	995
NON-METROPOLITAN	3.9	853	.7	927	.6	812	.8	1010	.4	1036
UTILITIES PAID BY HOUSEHOLD		1000		****	7.6	070	9.1	3 2 7 0		959
ALL PAID BY HOUSEHOLD	12.0	1022	3.3	1145	3.4	979	2.1	1219	1.1	727
PAID BY HOUSEHOLD	2.0	916	1.3	905	.2	905	. 3	1000	Q	Q
TYPE OF HOUSING STRUCTURE										
MOBILE HOME	1.2	746	Q	Q	.4	693	.3	805	.3	858
SINGLE FAMILY	9.8	1081 865	3.2 1.4	1172 880	2.0 1.2	1124 828	1.8	1275 1041	.9 Q	992 Q
NUMBER OF ROOMS										
1 TO 3	1.6	722	.5	705	.8	777	.2	753	Q	Q
4 TO 5	6.1	852	1.9	905	1.6	811	1.1	1034	.7	839
6 OR MORE	6.1	1239	2.3	1301	1.2	1309	1.1	1431	.5	1193
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	5.4	801	1.6	806	1.7	799	.8	944	.7	834
1,000 TO 1,999	6.1 2.4	1004 1486	1.9 1.1	1067 1498	1.7	1006 1729	1.1	1199 1657	.4 Q	1037 Q
L, OO OR MORE THE STATE OF THE	6.4	1400	1.1	1470		1,127	• •	1007	4	4
YEAR HOUSE BUILT BEFORE 1950	7.0	000	7.6	077	0.7	062	1.0	3007	0.4	1071
1950 TO 1974	3.9 8.0	988 1023	1.4 2.7	977 1133	0.3 2.2	942 979	1.0 1.2	1287 1105	0.4 .8	1031 945
AFTER 1974	2.0	984	.5	1074	1.1	972	Q.	Q	Q	Q
		,					•	•	•	•
OWN/RENT	9.0	1081		1203	2.3	1071	1.7	1230	.8	969
RENT	4.9	874	2.7 1.9	896	1.4	818	.7	1112	.4	938
1981 FAMILY INCOME										
LESS THAN \$10,000	4.5	827	1.3	874	1.0	782	.9	966	.5	844
\$10,000 TO \$19,999	4.2	981	1.2	1074	1.1	852	.7	1271	.4	1058
\$20,000 TO \$34,999	2.0	1021	.8	1077	.5	903	. 2	1321	.2	983
\$35,000 OR MORE	3.2	1283	1.3	1296	1.0	1352	.5	1450	Q	Q
TOTAL BELOW 100 PERCENT										
OF POVERTY LINE	2.3	883	.7	899	.3	960	.5	1089	.3	860
TOTAL BELOW 125 PERCENT OF POVERTY LINE	3.0	854	.9	902	.5	877	.6	1034	.3	833
AGE OF HOUSEHOLD HEAD	3.0		• •			0,,	••		••	000
UNDER 35 YEARS	4.3	937	1.4	956	1.2	898	.7	1144	.4	892
35 TO 59 YEARS	5.8	1102	2.1	1187	1.4	1103	.8	1295	.5	1080
60 YEARS AND OVER	3.9	943	1.1	1036	1.1	883	.8	1141	.4	875
HOUSEHOLD MEMBERS										
ONE PERSON	3.4	798	1.3	787	1.0	686	.5	1051	.3	930
2 TO 4 PEOPLE	9.1	1041	2.8	1158	2.3	1021	1.6	1208	. 9	955
5 OR MORE PEOPLE	1.4	1290	.5	1398	. 3	1500	.2	1432	Q	Q



### Table 3. (Continued) Census Division: South Atlantic

	ALL HOL	JSEKOLDS				HOUSEHOLD	S USING:			
нопаеного	NUMBER OF	     AVG.     EXPEND-		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.   EXPEND-   ITURES     PER    HOUSEHOLD	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD (00LLARS)	NUMBER OF HOUSE- HOLDS (HIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD		AVG.   AVG.   EXPEND   ITURES   PER   HOUSEHOLD   (DOLLARS)
ATING DEGREES-DAYS (HDD) D COOLING DEGREES-DAYS (CDD) NG-TERM AVERAGE <2,000 CDD AND >7,000 HDD	-	-	-	-	-	-	-	-	-	
5,500 TO 7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
<pre>&lt;2,000 CDD AND 4,000 TO 5,499 HDD &lt;2,000 CDD AND &lt;4,000 HDD &gt;2,000 CDD AND &lt;4,000 HDD</pre>	5.1 5.0 3.8	1104 976 918	2.1 2.0 .5	1180 1044 818	0.7 .7 2.3	1135 909 942	1.1 1.0 .3	1313 1088 1124	Q 0.5 .6	Q 1013 876



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

	ALL HOL	SEHOLDS				HOUSEHOLE	s using:			
HOUSEHOLD	NUMBER OF	AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL I	KERO	OIL OR SENE AS ATING FUEL	GAS A	PETROLEUM AS MAIN AG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES   PER  HOUSEHOLD  (DOLLARS) 		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	5.7	910	2.5	929	1.8	953	Q	Q	0.3	924
AREA TYPE METROPOLITAN CENTRAL CITY OUTSIDE CENTRAL CITY NON-METROPOLITAN	2.8 1.3 1.5 2.9	930 879 974 892	1.6 1.0 .6	920 853 1022 944	.8 .3 .6 1.0	996 957 1016 917	G G G	œ & &	Q Q Q .2	Q Q Q 947
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD	5.1	933	2.2	961	1.6	990	Q	Q	.3	924
SOME, NONE, OTHER PAID BY HOUSEHOLD	.5	694	.3	702	.2	682	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE MOBILE HOMESINGLE FAMILY	.3 4.3 1.1	849 973 685	Q 1.7 .7	Q 1046 672	Q 1.4 .4	Q 1028 708	<b>Q</b> <b>Q</b>	Q Q	. 3 Q	Q 867 Q
NUMBER OF ROOMS										
1 TO 3	.6 2.5 2.6	630 793 1088	.3 1.1 1.1	678 783 1155	.2 .7 .9	579 851 1129	ୟ ୟ ସ	ପ ପ ପ	٠٤ و و	Q 932 Q
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	2.1	695	1.1	707		668	Q	Q	Q	Q
1,000 TO 1,999 2,000 OR MORE	2.6	953 1260	1.0	1003 1327	.6 .9 .4	1007 1254	9 9 9	Q Q	.2 q	968 Q
YEAR HOUSE BUILT BEFORE 1950	1.4	816	0.7	930	0.2	762	Q	Q	Q	Q
1950 TO 1974	3.1 1.2	947 928	1.6	933 691	.8 .8	1013 933	Q Q	Q Q	<b>Q</b> <b>Q</b>	<b>ଦ</b> ପ
OWN/RENT OWNRENT	3.9 1.8	997 727	1.5 1.1	1063 741	1.3	1059 720	Q Q	Q Q	0.3 Q	945 Q
1981 FAMILY INCOME LESS THAN \$10,000	2.2	718	1.1	757	.6	745	q	Q	Q	Q.
\$10,000 TO \$19,999 \$20,000 TO \$34,999 \$35,000 OR MORE	1.5 1.2 .8	920 997 1314	.7 .5 .2	953 1056 1351	.4 .4 .4	862 933 1331	Q Q Q	Q Q Q	Q Q Q	Q Q Q
TOTAL BELOW 100 PERCENT OF POVERTY LINE	1.0	699	.5	745	.2	707	. Q	Q	Q	Q
TOTAL BELOW 125 PERCENT OF POVERTY LINE	1.5	734	.7	826	.3	714	Q	Q	Q	Q
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	1.8	853 1040	.8 .9	809 1089	.7 .8	899 1112	Q Q	Q Q	Q Q	Q; Q;
60 YEARS AND OVER	1.6	795	.8	874	.4	745	Q	Q	ີ.2	934
HOUSEHOLD MEMBERS ONE PERSON. 2 TO 4 PEOPLE. 5 OR MORE PEOPLE.	1.2 3.8 .7	65 <b>3</b> 938 1206	.8 1.5 .2	664 1015 1224	.3 1.3 .2	670 972 1204	Q Q Q	Q Q	Q -2 Q	Q 902 Q



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

	ALL HOU	JSEHOLDS				HOUSEHOLE	S USING:			
HOUSEHOLD				L GAS AS ATING FUEL		ICITY AS ATING FUEL	KERD	OIL OR SENE AS ATING FUEL	GAS	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	I TURES   PER    HOUSEHOLD   (DOLLARS)		AVG.   AVG.   EXPEND-     ITURES     PER    HOUSEHOLD    (DOLLARS)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. LEXPEND- LITURES PER KOUSEHOLD	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLE (DOLLARS)
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	1.3 3.4	- 941 867	0.6 1.4	937 865	0.5 1.2	996 935	- Q Q	- Q Q	- 9 0.2	Q 946
>2,000 CDD AND <4,000 HDD	1.0	1017	.6	1062		964	Q	à	Q	q



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

	ALL HOL	JSEHOLDS				HOUSEHOLI	os using:	-		
HOUSEHOLD	NUMBER OF	AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KEROS	DIL OR SENE AS TING FUEL	GAS A	PETROLEUM AS MAIN AG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (ODLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD ((DOLLARS)		AVG.   EXPEND-   ITURES   PER  HOUSEHOLD  (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	8.5	1112	6.2	1088	1.3	1342	Q	Q	0.7	1021
AREA TYPE										
METROPOLITAN	5.9	1151	4.5	1102	1.1	1355	Q	Q	.2	1192
CENTRAL CITY	3.5	1034	2.9	988	.6	1261	Q	Q	Q	Q
OUTSIDE CENTRAL CITY	2.4	1316	1.6	1308	.6	1452	Q	Q	.2	1192
NON-METROPOLITAN	2.6	1023	1.7	1051	.2	1255	Q	Q	.5	961
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NONE, OTHER	7.6	1118	5.7	1118	1.1	1280	Q	Q	.6	971
PAID BY HOUSEHOLD	.8	1054	.5	751	.2	1693	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE										
MOBILE HOME	.3	994	Q	Q	Q	Q	Q	Q	Q	Q
SINGLE FAMILY	6.8	1142	5.3	1138	.7	1418	Q	Q	.6	1031
2 OR HORE UNITS	1.3	988	.8	760	.6	1305	Q	Q	Q	Q
NUMBER OF ROOMS										
1 TO 3	.9	793	.5	741	.3	944	Q	Q	Q	Q
4 TO 5	4.0	955	3.0	889	.6	1375	Q	Q	. 3	976
6 OR MORE	3.6	1364	2.6	1384	.5	1523	Q	Q	.3	1155
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	3.0	853	2.2	783	.6	1202	Q	Q	.2	761
1,000 TO 1,999 2,000 OR MORE	4.5 .9	1156 1759	3.2 .8	1116 1801	.7 Q	1446 Q	Q Q	Q Q	.4 q	1170 Q
	• •	1,2,		1001	4	•	~	•	4	4
YEAR HOUSE BUILT BEFORE 1950		207			_	•		_		
1950 TO 1974	2.4	923	1.8	929	Q	Q	Q	Q	0.4	994
AFTER 1974	4.6 1.5	1155 1276	3.7 .6	1121 1347	0.6 .7	1440 1231	Q Q	Q	. 2 Q	950 Q
OWN/RENT										
OWN	5.7	1187	4.3	1185	.7	1376	Q	Q	.4	1089
RENT	2.8	959	1.8	862	.6	1304	Q	Q	.3	916
1981 FAMILY INCOME										
LESS THAN \$10,000	2.8	863	2.0	799	.2	1430	Q	Q	.4	974
\$10,000 TO \$19,999	2.3	1049	1.7	1033	.3	1155	Q	Q	.2	940
\$20,000 TO \$34,999	1.0	1174	.8	1170	Q	Q	Q	Q	Q	Q
\$35,000 OR MORE	2.3	1444	1.6	1465	.6	1451	Q	Q	Q	Q
TOTAL BELOW 100 PERCENT										
OF POVERTY LINE	1.7	821	1.3	771	Q	Q	Q	Q	.2	937
TOTAL BELOW 125 PERCENT			- · <del>-</del>		•	•		•		
OF POVERTY LINE	2.3	859	1.7	814	.2	1305	Q	Q	.3	971
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	2.8	1075	1.8	990	.7	1335	Q	Q	.2	1087
35 TO 59 YEARS	3.5	1210	2.7	1216	.5	1326	Q	Q	.2	968
60 YEARS AND OVER	2.2	1000	1.6	981	.2	1417	Q	Q	.3	1015
HOUSEHOLD MEMBERS										
ONE PERSON	1.6	804	1.1	744	.3	1123	Q	Q	Q	Q
2 TO 4 PEOPLE	5.7	1157	4.1	1138	. 9	1398	Q	Q	`.5	1047
5 OR MORE PEOPLE	1.2	1301	1.0	1288	.2	1464	Q	Q	Q	Q



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

	ALL HOU	JSEHOLD <b>S</b>				HOUSEHOLE	s USING:			
HOUSEHOL <b>O</b>	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.   EXPEND-   ITURES   PER   HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD		AVG.   EXPEND-   ITURES   PER  HOUSEHOLD  (DOLLARS)		AVG. EXPEND- ITURES PER [HOUSEHOLD ITDOLLARS]
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	<u>.</u>	-	-	<u>-</u>	-	- -	-	- -	-	
<2,000 CDD AND 4,000 TO 5,499 HDD <2,000 CDD AND <4,000 HDD >2,000 CUD AND <4,000 HDD	Q 2.0 6.5	Q 1018 1141	Q 1.5 4.6	Q 896 1152	Q 0.2 1.1	Q 1655 1273	Q Q Q	Q Q	Q 0.2 .5	Q 1230 930



Table 3. (Continued) Census Region: West

				<u> </u>						
A CONTRACTOR OF THE CONTRACTOR	ALL HOL	JSEHOLDS				HOUSEHOLE	s using:			
HOUSEHOLD	NUMBER OF	AVG.		L GAS AS ATING FUEL		ICITY AS ATING FUEL	KEROS	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 (ODLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	HOLDS (MIL-	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	16.5	731	11.1	725	3.1	707	0.4	926	0.4	1022
AREA TYPE										
METROPOLITAN	14.4	715	10.3	718	2.8	708	. 3	867	.2	822
CENTRAL CITY	7.3	677	5.2	673	1.6	706	Q	Q	Q	Q
OUTSIDE CENTRAL CITY	7.1	754	5.1	764	1.2	709	.2	945	Q,	Q
NON-METROPOLITAN	2.1	844	.8	818	.3	703	Q	Q	.2	1172
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NONE, OTHER	14.0	755	9.5	764	2.5	686	.4	905	.3	986
PAID BY HOUSEHOLD	2.5	598	1.6	490	.6	798	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE										
MOBILE HOME	.9	805	.5	806	Q	Q	Q	Q	.2	982
SINGLE FAMILY	11.2	811	7.8	816	1.6	799	.4	933	.2	1040
2 OR MORE UNITS	4.5	517	2.9	463	1.4	610	Q	Q	Q	Q
NUMBER OF ROOMS										
1 TO 3	2.5	456	1.6	407	.6	588	G	Q	Q	Q
4 TO 5	8.2	664	5.5	636	1.7	699	ີ. 2	733	.2	1020
6 OR MORE	5.9	940	4.1	964	.8	814	. 2	1067	Q	Q
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	6.9	559	4.4	520	1.4	583	Q	Q	.2	848
1,000 TO 1,999	7.1	771	5.0	778	1.4	730	. 2	912	Q	Q
2,000 DR MORE	2.5	1091	1.7	1102	.4	1097	Q	Q	Q	Q
YEAR HOUSE BUILT BEFORE 1950	4.3	683	3.1	680	0.3	604	0.3	876	Q	Q
1950 TO 1974	8.4	756	6.4	752	1.1	686	.2	1008	q q	વે
AFTER 1974	3.8	731	1.6	708	1.7	738	Q	ଦ	0.2	968
OUR CHEAT										
OWN/RENT	9.9	838	6.5	846	1.8	811	. 3	942	.2	1076
RENT	6.6	572	4.6	556	1.3	564	Q	Q	Q _	Q
1981 FAMILY INCOME						F07	•		•	871
LESS THAN \$10,000	4.7	631	3.0	633	1.1	587 701	Q Q	Q Q	.2 Q	6,7
\$10,000 TO \$19,999 \$20,000 TO \$34,999	4.7 2.6	666 766	3.3 1.9	- 639 772	.4	697	Q.	Q	Q	q
\$35,000 OR MORE	4.4	887	3.0	878	.9	869	Q	à	Q	વે
TOTAL PELON 300 DERCENT										
TOTAL BELOW 100 PERCENT OF POVERTY LINE	1.9	688	1.2	731	.5	551	Q	Q	Q	Q
TOTAL BELOW 125 PERCENT	•••	000					7	7	~	7
OF POVERTY LINE	3.0	695	1.9	700	.7	594	Q	Q	Q	Q
AGE OF HOUSEHOLD READ										
UNDER 35 YEARS	6.0	649	3.9	617	1.3	664	Q	Q	Q	Q
35 TO 59 YEARS	6.1	840	4.2	845	.9	791	.2	937	.2	1122
60 YEARS AND OVER	4.3	692	3.0	698	.9	683	. 2	927	Q	Q
HOUSEHOLD MEMBERS										
ONE PERSON	4.0	526	2.8	493	.8	658	Q	Q	Q _	Q
2 TO 4 PEOPLE	10.6	763	7.2	769	2.0	712	.3	978	.3	949
5 OR MORE PEOPLE	1.9	990	1.1	1014	. 3	812	Q	Q	Q	Q



Table 3. (Continued) Census Region: West

	ALL HOU	JSEHOLDS	LDS HOUSEHOLDS USING:										
HOUSEHOLD	     NUMBER   OF	AVG.		L GAS AS ATING FUEL		CITY AS ATING FUEL	KEROS	OIL OR ENE AS TING FUEL	GAS	D PETROLEUM AS MAIN NG FUEL			
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	I ITURES PER HOUSEHOLDI (DOLLARS)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG.   EXPEND-   ITURES   PER   HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD		AVG.   EXPEND-   ITURES   PER  HOUSEHOLD  (DOLLARS)			
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE <2,000 CDD AND >7,000 HDD	1.4	876	1.1	845	Q	Q	Q	Q	Q	ବ			
5,500 TO 7,000 HDD	1.5	847	.7	909	0.3	704	Q	Q	Q	ą			
<pre>&lt;2,000 CDD AND 4,000 TD 5,499 HDD &lt;2,000 CDD AND &lt;4,000 HDD &gt;2,000 CDD AND &lt;4,000 HDD</pre>	3.0 9.2 1.3	648 694 895	1.2 7.6 .5	731 679 888	1.2 1.0 .5	537 802 867	0.3 Q Q	820 Q Q	ୟ ପ ପ	ସ ସ ସ			



Table 3. (Continued)
Census Division:
Mountain

The figure of the first of the	1									
	ALL HOU	JSEHOLD'S				HOUSEHOL	S USING:			
HOUSEHOLD	NUMBER OF	AVG.		. GAS AS TING FUEL		CCITY AS	KEROS	OIL OR SENE AS ATING FUEL	I GAS A	PETROLEUM S MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES   PER  HOUSEHOLD  (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD I(DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD I(DOLLARS)				AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
1 12 2										
TOTAL HOUSEHOLDS	4.3	880	2.8	876	0.9	863	Q	Q	0.2	1149
AREA TYPE										
METROPOLITAN	2.8	889	2.0	899	.8	869	Q	Q	Q	Q
CENTRAL CITY	1.7	862	1.2	876	.4	821	Q	Q	Q	Q
OUTSIDE CENTRAL CITY	1.1	931	.8	936	.3	934	Q	Q	Q	Q 1170
NON-METROPOLITAN	1.5	864	.8	818	Q	Q	Q	Q	.2	1172
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NONE, OTHER	3.7	885	2.4	902	.8	844	Q	Q	Q	Q
PAID BY HOUSEHOLD	.6	850	.4	709	Q	Q	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE					_	_	_	_	_	_
MOBILE HOME	. 3	867	. 2	785	Q	Q	Q	Q	Q	Q
SINGLE FAMILY	3.3	911 740	2.1 .5	927 669	.6 .2	877 830	Q Q	Q Q	Q Q	Q Q
NUMBER OF ROOMS					_	_	_	_	_	_
1 TO 3	.6	612	.4	535	Q,	Q	Q	Q	Q	Q
4 TO 5	2.2 1.5	814 1085	1.3 1.1	818 1079	.6 Q	811 Q	Q Q	Q Q	Q Q	<b>Q</b> Q
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	1.7	733	1.1	698	.4	804	Q	Q	Q	Q
1,000 TO 1,999 2,000 OR MORE	1.8 .8	896 1165	1.1 .6	920 1135	.4 Q	859 Q	Q	Q Q	Q Q	Q Q
	.0	1103	.0	2733	4	•	٦	4	4	•
YEAR HOUSE BUILT		706	• •			•		•	•	
BEFORE 1950	0.9	784	0.6	777	Q	Q	Q	e e	Q	Q
1950 TO 1974	2.2 1.2	933 858	1.7 .5	926 828	0.2	872 873	Q	Q Q	Q Q	Q Q
AND THE										
OWN/RENT OWN	3.1	923	2.0	935		875	Q	Q	0.2	1207
RENT	1.2	772	.8	730	.6 .2	831	Q	Q	9	6
1981 FAMILY INCOME										
LESS THAN \$10,000	1.5	763	.9	749	, 3	735	Q	Q	Q	Q
\$10,000 TO \$19,999	1.0	874	.7	836	.2	978	q	q q	Q	Q.
\$20,000 TD \$34,999	.7	902	.4	928	Q L	é	ä	Q Q	Q Q	Q
\$35,000 OR MORE	1.2	1021	.7	1048	٦.3	963	q	Q	q	Q.
TOTAL BELOW 100 PERCENT										
OF POVERTY LINE	.5	857	.3	889	Q	Q	Q	Q	Q	Q
TOTAL BELOW 125 PERCENT OF POVERTY LINE	.8	830	.5	804	.2	681	Q	Q	Q	Q
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	1.6	839	.9	804	.5	873	Q	Q	Q	Q
35 TO 59 YEARS	1.4	992	1.0	996	Q	Q	Q	Q	Q	Q
60 YEARS AND OVER	1.3	814	.9	814	.3	829	Q	Q	Q	Q
HOUSEHOLD MEMBERS			_		_			_	_	_
ONE PERSON	1.1	639	.7	644	.2	640	q	Q	Q ~	Q
5 OR MORE PEOPLE	2.7 .5	927	1.7	923	.5	945	Q	Q Q	.2 Q	998 Q
W OR HORE PEOPLE	.5	1137	.3	1149	Q	Q	Q	ષ	પ	ч



# Table 3. (Continued) Census Division: Mountain

	ALL HOL	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	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG.   EXPEND-   ITURES   PER   HOUSEHOLD   (DOLLARS)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD
EATING DEGREES-DAYS (HDD) ND COOLING DEGREES-DAYS (CDD) DNG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD	1.2	896	1.0	844	Q	Q	Q	Q	Q	G
5,500 TO 7,000 HDD	1.3	872	.7	907	Q	Q	Q	Q	Q	q
4,000 TO 5,499 HDD	. 3	931	. 3	921	Q	Q	Q	Q	Q	Q
<2,000 CDD AND <4,000 HDD	.5	848	.3	845	0.2	852	Q	Q	Q	Q
>2,000 CDD AND <4,000 HDD	1.0	872	.5	888	.5	859	Q	Q	Q	Q



Table 3. (Continued)
Census Division:
Pacific

	ALL HOU	JSEHOLDS				HOUSEHOLI	OS USING:			
HOUSEHOLD	NUMBER OF	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 (MIL- LIONS)	ITURES   PER  HOUSEHOLD  (DOLLARS)   	OF	AVG. EXPEND- ITURES PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	HOLDS	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD
	<del></del>	J		<del></del>	l.,,,,,,,		<u> </u>			
TOTAL HOUSEHOLDS	12.2	678	8.4	675	2.3	648	0.3	867	0.2	833
AREA TYPE										
METROPOLITAN	11.6	673	8.4	675	2.1	649	.3	867	.2	833
CENTRAL CITY	5.6	622	4.0	610	1.1	663	Q	Q	Q	Q
OUTSIDE CENTRAL CITY	6.0	721	4.4	734	.9	632	.2	945	Q	Q
NON-METROPOLITAN	. 6	789	Q	Q	.2	636	Q	Q	Q	Q
UTILITIES PAID BY HOUSEHOLD ALL PAID BY HOUSEHOLD SOME, NONE, OTHER	10.3	708	7.1	718	1.8	618	.3	882	Q	Q
PAID BY HOUSEHOLD	1.8	510	1.2	422	.5	755	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE MOBILE HOME		7/5	_	27.0	Q				-	
SINGLE FAMILY	.5 7.9	765 769	.3 5.7	819 774	1.0	Q 748	Q .3	Q 876	Q Q	Q G
2 OR MORE UNITS	3.8	476	2.4	424	1.2	573	Q.	Q Q	ď.	Q Q
LEMBER OF BOOKS										
NUMBER OF ROOMS	1.8	403	1.1	361	.5	506	Q	Q	Q	Q
1 TO 3	6.0	611	4.2	580	1.1	638	Q	Q.	q	Q
6 OR HORE	4.3	888	3.0	923	.7	763	.2	1005	Q	Q
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	5.2	502	3.3	460	1.0	500	Q	Q	Q	Q
1,000 TO 1,999	5.3	728	3.9	738	. 9	667	. Q	Q	Q	Q
2,000 OR MORE	1.7	1057	1.1	1086	.3	1051	Q	Q	Q	Q
YEAR HOUSE BUILT	<b>.</b>	/ F.M					• •	204		
BEFORE 1950	3.4	655	2.5	656	0.3	605	0.2	824	Q Q	Q
1950 TO 1974	6.2 2.6	694 670	4.7 1.2	689 659	.9 1.1	644 661	Q Q	Q Q	Q	Q Q
OWN/RENT										
DWN	6.8	800	4.5	807	1.2	777	.3	911	Q	Q
RENT	5.4	527	3.8	520	1.1	505	Q	Q	q	Q
1981 FAMILY INCOME										
LESS THAN \$10,000	3.2	57 <b>0</b>	2.0	580	.7	522	Q	Q	Q	Q
\$10,000 TO \$19,999	3.7	608	2.6	587	.6	631	Q	Q	Q	Q
\$20,000 TO \$34,999	2.0	721	1.4	724	.4	678	Q	Q	Q	Q
\$35,000 OR MORE	3.3	839	2.3	826	.5	817	Q	Q	Q	Q
TOTAL BELOW 100 PERCENT		:	_				_	_		
OF POVERTY LINE	1.5	636	.9	688	.4	528	Q	Q	Q	Q
TOTAL BELOW 125 PERCENT OF POVERTY LINE	2.2	644	1.4	661	.5	564	Q	Q	Q	Q
AGE OF HOUSEHOLD HEAD							•	•	•	•
UNDER 35 YEARS	4.4	579	3.1	563	.9	547	Q	Q	Q	Q
35 TO 59 YEARS	4.7	796	3.2	798	.8	776	Q	Q	Q	Q
60 YEARS AND OVER	3.0	639	2.1	648	.6	613	Q	Q	Q	Q
HOUSEHOLD MEMBERS										
ONE PERSON	2.9	484	2.1	440	.6	666	Q	Q	Q	q
2 TO 4 PEOPLE	7.9	706	5.5	720	1.5	626	.2	917	Q	Q
5 OR MORE PEOPLE	1.3	934	.8	963	.2	748	Q	Q	Q	Q



#### Table 3. (Continued) **Census Division: Pacific**

	ALL HOL	JSEHOLDS	   			HOUSEHOLD	S USING:			
HOUSEHOLD	NUMBER OF	AVG.		GAS AS		ICITY AS   ATING FUEL	KEROS	OIL OR SENE AS ATING FUEL	GAS	D PETROLEUM AS MAIN NG FUEL
CHARACTERISTICS	HOUSE- HOLDS (MIL- LIONS)	ITURES PER HOUSEHOLD (DOLLARS)		AVG. EXPEND- ITURES PER HOUSEHOLD	HUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG.   EXPEND-   ITURES   PER   HOUSEHOLD   (DOLLARS)	NUMBER OF HOUSE- HOLDS (MIL- LIONS)	AVG.   EXPEND-   ITURES   PER   HOUSEHOLD   (DOLLARS)		AVG. LEXPEND- LITURES LETT LETT LETT LETT LETT LETT LETT LE
HEATING DEGREES-DAYS (HDD) NND COOLING DEGREES-DAYS (CDD) ONG-TERM AVERAGE <2,000 CDD AND >7,000 HDD	0.2	724	Q	Q	Q	g	a	<b>Q</b>	o	Q
<2,000 CDD AND		,	•		·	·	•	• •	•	•
5,500 TO 7,000 HDD	. 3	716	Q	Q	0.2	707	Q	Q	Q	Q
4,000 TO 5,499 HDD	2.7	616	0.9	669	1.2	537	0.3	820	Q	Ģ
<2,000 CDD AND <4,000 HDD	8.7	685	7.3	672	.8	791	Q	Q	Q	q
>2,000 CDD AND <4,000 HDD	.3	960	Q	Q	Q	Q	ଦ	Q	Q	Q

<sup>&</sup>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.
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 1982 RESIDENTIAL ENERGY CONSUMPTION SURVEY.



Table 4. U.S.
Residential Natural
Gas Consumption and
Expenditures—April
1982 Through March
1983, United States

	1								
	: 	ANY	NATURAL GAS	USED		I I NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	(MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (THOUSAND CU.FT.)	CONSUMED		AVG. PRICE (DOLLARS PER MILLION BTU)	OF HOUSE-	PER HOUSEHOLD	AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	
TOTAL HOUSEHOLDS	54.2	86	88	500	5.67	47.5	93	95	531
		•	-			,,,,	,-		
AREA TYPE									
METROPOLITAN	45.1	85	87	503 485	5.79 5.75	38.8 19.9	93 91	95 93	540 523
CENTRAL CITY	23.8 21.3	83 88	84 90	522	5.82	18.9	95	93 97	556
NON-METROPOLITAN	9.1	92	94	483	5,13	8.7	95	97	493
HOH-HEIROPOETIANS	7.4	,,,	74	403	2522	0.,	7.3	,,	473
NATURAL GAS PAID BY HOUSEHOLD			•						
YES	43.1	92	94	525	5.58	38.7	99	101	555
Ю	11.0	64	65	401	6.19	8.7	70	71	428
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	1.1	67	68	331	4.86	1.1	67	69	334
SINGLE FAMILY	36.2	98	100	553	5.51	33.2	104	106	577
2 OR MORE UNITS	16.9	62	63	396	6.27	13.2	70	72	432
NUMBER OF ROOMS									
1 TO 3	7.2	48	49	306	6.25	5.5	54	55	327
4 TO 5	23.6	75	77	428	5.56	21.0	80	82	448
6 OR MORE	23.3	109	112	631	5.66	21.0	117	120	669
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	19.8	61	62	361	5.80	16.7	67	68	383
1,000 TO 1,999	22.4	88	90	502	5.60	19.9	94	96	531
2,000 OR MORE	11.9	126	129	727	5.65	10.8	133	136	762
YEAR HOUSE BUILT									
BEFORE 1950	22.1	89	91	532	5.85	18.4	101	103	587
1950 TO 1974	26.7	85	87	484	5.56	24.5	90	91	503
AFTER 1974	5.3	80	82	442	5.39	4.7	83	85	459
OWN/RENT									
ONN	33.2	97	99	557	5.60	29.8	104	106	587
RENT	21.0	69	70	409	5.82	17.7	76	78	438
TOOL CANTLY THOME									
1981 FAMILY INCOME LESS THAN \$10,000	17.0	74	75	428	5.70	14.5	82	63	463
\$10,000 TD \$19,999	15.5	74 84	75 86	428 482	5.64	13.6	91	93	512
\$20,000 TO \$34,999	8.3	87	89	508	5.70	7.3	94	96	538
\$35,000 OR MORE	13.4	105	107	605	5.65	12.2	110	113	631
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE	8.1	7 <b>7</b>	79	448	5.68	6.9	85	87	482
TOTAL BELOW 125 PERCENT		• •	• •						
OF POVERTY LINE	11.5	76	78	445	5.72	9.7	85	87	484
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	16.4	77	79	445	5.64	14.6	82	84	466
35 TO 59 YEARS	22.5	95	97	547	5.65	19.8	102	104	581



Table 4. (Continued)
United States

	 	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 (DOLLARS) PER MILLION (BTU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)	AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (THOUSAND) CU.FT.)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (OOLLARS)
HOUSEHOLD MEMBERS									
ONE PERSON	13.3	64	66	380	5.78	11.5	70	71	401
2 TO 4 PEOPLE	34.3	90	92	521	5.67	30.3	97	99	554
5 OR MORE PEOPLE	6.5	112	114	633	5.55	5.7	120	123	672
MAIN HEATING FUEL									
NATURAL GAS	47.5	93	95	531	5.57	47.5	93	95	531
ELECTRICITY	1.5	73 51	52	293	5.64	47.5	73	79	331
		27	28	256	9.22	-		_	~
FUEL OIL OR KEROSENE	4.3 Q	Q 2/	Q Q	250 Q	9.22 Q	-	-	_	
MOOD	.7	54	55	338	6.10	-	_	_	_
OTHER OR NONE		Q				_	_	-	-
UTHER UR NONE	Q	ч	Q	Q	Q	-	-	-	•
HOT WATER FUEL									
NATURAL GAS	47.1	91	93	517	5.57	43.3	95	97	534
ELECTRICITY	4.4	78	80	487	6.08	4.0	82	84	510
FUEL DIL OR KERDSENE	2.7	20	21	218	10.46	Q	Q	Q.	Ğ
OTHER	Q	Q	Q	Q	Q	Q	Q	Q	q
MAIN HEATING EQUIPMENT USING									
NATURAL GAS	29.0	101	103	559	5.45	29.0	101	103	559
CENTRAL WARM AIR FURNACE	7.4	101	105	663	6.33	7.4	102	105	663
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	7.4	102	105	003	0.33	7.4	100	203	003
FURNACE	6.5	66	67	335	4.97	6.5	66	67	335
ROOM HEATER	4.2	74	75	425	5.64	4.2	74	75	425
NONE/OTHER	7.0	37	38	279	7.37	.3	67	68	399
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	4.7	105	107	567	5.31	4.5	107	110	581
5,500 TO 7,000 HDB	15.2	105	107	594	5.56	13.5	114	116	633
4,000 TO 5,499 HDD	14.0	84	86	558	6.53	10.7	101	103	653
<2,000 CDD AND <4,000 HDD	13.4	72	74	366	4.95	12.5	73	75	369
>2,000 CDD AND <4,000 HDD	6.9	66	67	385	5.76	6.3	68	69	395



Table 4. (Continued)
Census Region:
Northeast

i a filip fatter		ANY	NATURAL GAS	USED		NATURAL GAS USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	OF HOUSE-	PER HOUSEHOLD (THOUSAND		PER HOUSEHOLO	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	OF HOUSE-	PER THOUSEHOLD	AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
TOTAL HOUSEHOLDS	11.6	83	85	619	7.28	7.5	114	116	811	
AREA TYPE										
METROPOLITAN	10.9	82	84	627	7.50	6.8	114	116	841	
CENTRAL CITY	5.8	72	73	584	7.98	3.1	109	111	849	
OUTSIDE CENTRAL CITY	5.1	93	95	674	7.08	3.7	118	121	834	
NON-METROPOLITAN	.8	103	106	507	4.81	.7	108	111	528	
NATURAL GAS PAID BY HOUSEHOLD										
YES	8.2	92	94	668	7.11	5.5	125	128	882	
Ю	3.4	62	63	499	7.87	2.1	82	84	623	
TYPE OF HOUSING STRUCTURE										
MOBILE HOME	· Q	Q	Q	Q	Q	Q	Q	Q	Q	
SINGLE FAMILY	6.0	109	111	767	6.88	4.5	135	137	927	
2 OR MORE UNITS	5.5	56	57	465	8.19	2.9	83	85	653	
NUMBER OF ROOMS										
1 TO 3	2.1	41	41	356	8.60	1.0	61	62	494	
4 TO 5	4.0	67	. 69	507	7.38	2.5	93	95	664	
6 OR MORE	5.5	112	114	802	7.04	4.1	138	141	974	
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	4.3	51	52	416	7.99	2.2	75	77	573	
1,000 TO 1,999	4.6 2.8	89 122	91	651	7.13	3.2	116	119	816	
2,000 OR HORELLILLI.	2.0	122	125	873	7.00	2.1	149	152	1049	
YEAR HOUSE BUILT										
BEFORE 1950	7.0	74	75	561	7.45	3.9	109	112	789	
1950 TO 1974	4.3 .4	94 137	96	672	7.01	3.2	116	118	807	
AFICK 17/4	• • •	137	140	1067	7.63	.4	137	140	1067	
OWN/RENT										
OHN	6.8	99	102	721	7.10	4.9	127	129	897	
RENT	4.9	61	62	475	7.67	2.7	89	91	653	
1981 FAMILY INCOME										
LESS THAN \$10,000	3.6	63	64	470	7.33	2.0	96	98	667	
\$10,000 TO \$19,999	3.5	76	78	567	7.27	2.1	107	109	759	
\$20,000 TO \$34,999	1.8	89	91	650	7.18	1.3	116	119	822 980	
\$35,000 DR MORE	2.8	114	117	851	7.29	2.2	133	136	980	
TOTAL BELOW 100 PERCENT										
OF POVERTY LINE	1.6	73	75	535	7.17	.9	108	110	734	
TOTAL BELOW 125 PERCENT										
OF POVERTY LINE	2.6	68	69	505	7.30	1.4	104	106	727	
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	2.8	80	82	608	7.46	1.9	104	106	765	
35 TO 59 YEARS	4.9	93	95	681	7.16	3.4	121	124	859	
60 YEARS AND OVER	3.9	73	75	547	7.31	2.2	110	112	777	
HOUSEHOLD MEMBERS										
ONE PERSON	3.0	57	58	428	7.39	1.8	81	83	573	
2 TO 4 PEOPLE	7.3	90	92	668	7.25	4.9	121	123	866	
5 OR MORE PEOPLE	1.3	105	108	782	7.27	.9	138	140	985	



Table 4. (Continued)
Census Region:
Northeast

	   	ANY I	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. PRICE (DOLLARS PER MILLION BTU)	(MILLIONS)		AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	
AIN HEATING FUEL									
NATURAL GAS	7.5	114	116	811	7.00	7.5	114	116	81.1
ELECTRICITY	q	Q	Q	Q	Q	-	-	-	-
FUEL OIL OR KEROSENE	3.8	27	27	262	9.58	-	-	-	•
LPG	Q	Q	Q	Q	Q	-	-	-	*
WOOD	q	Q	Q	Q	Q	-	-	-	-
OTHER OR NONE	Q	Q	Q	Q	Q	-	-	-	-
OT WATER FUEL									
NATURAL GAS	8.7	100	102	719	7.07	7.2	111	114	794
ELECTRICITY	.5	119	122	897	7.37	.3	170	174	1268
FUEL OIL OR KEROSENE	2.5	20	21	221	10.57	Q	Q	Q	G.
OTHER	Q	Q	Q	Q	Q	Q	Q	G	Q.
AIN HEATING EQUIPMENT USING ATURAL GAS									
CENTRAL WARM AIR FURNACE	3.6	119	122	809	6.65	3.6	119	122	809
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS		107	110	817	7.45	3.5	107	110	8.17
FURNACE	Q	Q	Q	Q	Q	Q	_Q_	Q	Q
ROOM HEATER	. 3	155	159	1015	6.40	.3	155	159	1015
NONE/OTHER	4.2	28	29	271	9.39	Q	Q	Q	13
EATING DEGREES-DAYS (HDD) ND COOLING DEGREES-DAYS (CDD) ONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	.2	104	106	813	7.69	Q	Q	Q	q
5,500 TO 7,000 HDD	5.0	92	94	633	6.76	3.7	113	115	754
4,000 TO 5,499 HDD	6.5	76	78	603	7.74	3.7	114	116	862
<2,000 CDD AND <4,000 HDD	-	-	_	-	_	-	-	-	
>2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	••



Table 4. (Continued)
Census Division: New
England

1 (1985)		ANY	NATURAL GAS	USED		NATURAL GAS USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	CONSUMED   PER	PER HOUSEHOLD		OF HOUSE-	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION	PER HOUSEHOLD	
4865 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ļ ·	CU.FT.)	l BTU)	1	] !			BTU)	1	
	<u></u>	<u> </u>	<u> </u>		<u> </u>	A			-A	
TOTAL HOUSEHOLDS	2.0	78	79	670	8.46	1.2	110	112	926	
AREA TYPE										
METROPOLITAN	2.0	78	80	675	8.47	1.1	111	113	934	
CENTRAL CITY	. 9	73	75	634	8.46	.6	93	95	789	
OUTSIDE CENTRAL CITY	1.0	82	84	712	8.48	.5	130	133	1097	
NON-METROPOLITAN	Q	Q	Q.	Q	Q	Q	Q	Q	Q	
NATURAL GAS PAID BY HOUSEHOLD										
YES	1.7	78	80	667	8.39	1.0	116	119	968	
NO,	.4	76	78	686	8.83	.2	84	86	756	
TYPE OF HOUSING STRUCTURE										
MOBILE HOME	Q	Q	Q	Q	Q	Q	Q	Q	Q	
SINGLE FAMILY	.9	94	96	798	8.28	.5	138	141	1141	
2 OR MORE UNITS	1.1	63	65	562	8.70	.7	87	89	755	
NUMBER OF ROOMS										
1 TO 3	. 2	51	52	494	9.49	.2	57	59	559	
4 TO 5	8	65	66	573	8.64	.5	92	94	783	
6 OR MORE	1.0	94	96	792	8.24	.5	143	146	1175	
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	.5	53	55	503	9.23	.4	67	68	617	
1,000 TO 1,999	1.0	74	75	635	8.43	.5	110	112	916	
2,000 OR MORE	.5	111	113	916	8.11	.3	163	167	1327	
YEAR HOUSE BUILT										
BEFORE 1950	1.5	72	74	620	8.43	.8	111	113	922	
1950 TO 1974	.4 Q	96 Q	98 Q	820 Q	8.38 Q	.4 Q	115 Q	117 Q	974 Q	
	4	4	•	ч	4	4	ď	ч	ų	
DWN/RENT	1.3	0.7		770				774	300/	
OWN	.8	87 63	89 64	738 563	8.32 8.77	0.7 .5	131 79	134 80	1084 691	
		0.5	•	505	0.,,	••	• •		5/1	
1981 FAMILY INCOME	_					_				
LESS THAN \$10,000	.5	56	57	501	8.78	.3	84	85 87	720	
\$10,000 TO \$19,999 \$20,000 TO \$34,999	.6 .3	64 69	65 70	565 619	8.68 8.82	.3 .2	94 88	96 90	799 787	
\$35,000 OR MORE	.7	110	112	914	8.15	.5	145	148	1189	
TOTAL BELOW 100 PERCENT										
OF POVERTY LINE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
TOTAL BELOW 125 PERCENT	•	•	•	4	4	4	ч	•	ч	
OF POVERTY LINE	.3	78	79	648	8.16	. 2	105	107	841	
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	.5	65	67	572	8.59	.3.	83	84	705	
35 TO 59 YEARS	.8	86	88	735	8.34	.5	120	122	999	
60 YEARS AND OVER	.8	76	77	661	8.55	.4	117	119	991	
HOUSEHOLD MEMBERS										
ONE PERSON	.4	55	56	508	9.11	.3	74	76	676	
2 TO 4 PEOPLE	1.4	79	81	684	8.44	.8	119	122	1000	
5 OR MORE PEOPLE	.2	115	117	927	7.91	Q	Q	Q	Q	



Table 4. (Continued) Census Division: New England

	 	YHA	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   (DOLLARS   PER   MILLION   BTU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)		AVG.   AMOUNT   CONSUMED   PER  HOUSEHOLD   (MILLION   BTU)	AVG. EXPEND- I TURES PER HOUSEHOLD (DOLLARS)
MAIN HEATING FUEL									
NATURAL GAS	1.2	110	112	926	8.25	1.2	110	112	926
ELECTRICITY	Q	Q	Q	Q	Q	-	-	-	-
FUEL OIL OR KEROSENE	.8	32	32	305	9.45	_	-	-	-
LPG	Q	Q	Q	Q	Q	-	-	_	-
WOOD	Q	Q	Q	Q	Q	-	-	-	-
OTHER OR NONE	Q	Q	Q	Q	Q	-	-	-	-
HOT WATER FUEL									
NATURAL GAS	1.6	89	91	764	8.38	1.1	111	114	937
ELECTRICITY	9	Q´	ģ.	9	G. 50	q	Q	Q	·3,
FUEL OIL OR KEROSENE	.3	16	17	180	10.83	õ	Ğ.	ā	ĝ
OTHER	Q	q	Q.	Q	Q	Q	q q	q.	ારે
MAIN HEATING EQUIPMENT USING NATURAL SAS CENTRAL WARM AIR FURNACE	.4	108	110	909	8.23	.4	108	110	909
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	.6	118	120	994	8.25	.6	118	120	994
FURNACE	Q	Q	Q	Q	Q	Q	Q	Q	্ব
ROOM HEATER	Q	Q	Q	Q	Q	Q	Q	Q	Q
NONE/OTHER	. 9	34	35	333	9.46	Q	Q	Q	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	104	106	813	7.69	Q	Q	Q	Q
5,500 TO 7,000 HDD	1.9	75	77	659	8.55	1.1	107	110	914
4,000 TO 5,499 HDD	-	-	-	-	-	-	-	-	
<2,000 CDD AND <4,000 HDD	~	-	-	-	-	-	-	_	••
>2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	••



Table 4. (Continued)
Census Division:
Middle Atlantic

	   	ANY	NATURAL GAS	USEO		I I NATURAL I	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)	PER  HOUSEHOLD		PER HOUSEHOLD	,	HOUSE- HOLDS (MILLIONS)	CONSUMED PER HOUSEHOLD CHOUSAND	CONSUMED PER HOUSEHOLD	AVG. EXPEND- ITURES PER IHOUSEHOLD (DOLLARS)
	I	I		<u> </u>		L.,	1	1	<del></del>
TOTAL HOUSEHOLDS	9.6	85	86	608	7.04	6.3	114	117	789
AREA TYPE									
METROPOLITAN	8.9	83	84	616	7.29	5.7	115	117	822
CENTRAL CITY	4.8	71	73	575	7.88	2.5	113	115	864
OUTSIDE CENTRAL CITY	4.1	96	98	665	6.78	3.2	116	119	789
NON-METROPOLITAN	.7	108	110	503	4.58	.7	110	112	512
NATURAL GAS PAID BY HOUSEHOLD									
YES	6.6	96	98	668	6.84	4.5	127	130	863
NO	3.0	60	62	477	7.72	1.8	82	84	606
TYPE OF HOUSING STRUCTURE			_		_	_		_	_
MOBILE HOME	Q	Q	Q	Q	Q	, Q	Q	Q	Q
SINGLE FAMILY	5.1	112	114	761	6.66	4.0	134	137	898
2 OR MORE UNITS	4.4	54	55	441	8.03	2.2	82	83	623
NUMBER OF ROOMS									
1 TO 3	1.9	39	40	339	8.46	.8	62	63	479
4 TO 5	3.2	68	69	490	7.07	2.0	93	95	635
6 OR MORE	4.5	115	118	804	6.83	3.6	137	140	944
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	3.7	51	52	404	7.80	1.8	77	79	564
1,000 TO 1,999	3.6	94	96	656	6.84	2.7	117	120	796
2,000 OR MORE	2.3	125	127	864	6.78	1.8	147	150	1005
YEAR HOUSE BUILT									
BEFORE 1950	5.4	74	76	544	7.18	3.1	109	111	757
1950 TO 1974	3.8	94	96	654	6.85	2.9	116	118	786
AFTER 1974	. 3	153	156	1149	7.35	. 3	153	156	1149
OWN/RENT									
OWN	5.5	102	104	717	6.87	4.2	126	129	865
RENT	4.1	60	62	458	7.45	2.2	92	94	644
1981 FAMILY INCOME									
LESS THAN \$10,000	3.0	64	65	465	7.10	1.7	98	100	658
\$10,000 TO \$19,999	2.9	79	81	568	7.05	1.8	109	112	752
\$20,000 TO \$34,999	1.6	92	94	654	6.98	1.1	121	123	828
\$35,000 OR MORE	2.1	116	118	831	7.03	1.8	131	133	927
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE	1.5	72	74	523	7.09	.9	108	110	727
TOTAL BELOW 125 PERCENT									
OF POVERTY LINE	2.3	67	68	488	7.17	1.3	104	106	711
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	2.4	83	84	616	7.29	1.6	108	110	776
35 TO 59 YEARS	4.1	95	97	671	6.95	2.9	122	124	837
60 YEARS AND OVER	3.1	73	74	519	6.99	1.8	108	110	724
HOUSEHOLD MEMBERS									
ONE PERSON	2.6	57	58	414	7.11	1.5	83	84	553
2 TO 4 PEOPLE	5.9	93	95	664	7.01	4.1	121	124	841
5 OR MORE PEOPLE	1.1	104	106	755	7.14	.7	139	142	975



Table 4. (Continued)
Census Division: Middle
Atlantic

		ANY	NATURAL GAS	USED		NATURAL 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)	HOUSE-		I AVG. I AMOUNT I CONSUMED I PER IHOUSEHOLD I (MILLION I BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (COCLARS)	
1AIN HEATING FUEL										
NATURAL GAS	6.3	114	117	789	6.77	6.3	114	117	789	
ELECTRICITY	Q	Q	Q	Q	Q		-	-		
FUEL OIL OR KEROSENE	3.0	25	26	250	9.62		-	-	-	
LPG	Q	Q	Q	Q	Q	-	-	-		
WOOD	Q	Q	ଜ	Q	Q	-	-	-	**	
OTHER OR NONE	Q	Q	Q	Q	ଭ	-	-	-		
OT WATER FUEL										
NATURAL GAS	7.1	102	104	709	6.82	6.1	112	114	768	
ELECTRICITY	.3	132	135	959	7.09	.2	207	211	1.481.	
FUEL OIL OR KEROSENE	2.2	21	21	226	10.54	Ġ.	Q,	Q	2, +02. Q	
OTHER	Q	Q.	Q .	Q	Q .	Ğ.	à	ē.	Q	
AIN HEATING EQUIPMENT USING				•				·		
ATURAL GAS										
CENTRAL WARM AIR FURNACE	3.2	121	123	796	6.46	3.2	121	123	796	
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	2.8	105	107	778	7.25	2.8	105	107	778	
FURNACE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
ROOM HEATER	.2	179	182	1093	6.00	.2	179	182	1093	
NONE/OTHER	3.3	26	27	253	9.37	Q	Q	Q	G	
EATING DEGREES-DAYS (HDD)  ND COOLING DEGREES-DAYS (CDD) ONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	Q	G	q	Q	Q	Q	Q	q	Ġ	
5,500 TO 7,000 HDD	3.1	101	104	618	5.97	2.7	115	118	688	
4,000 TO 5,499 HDD	6.5	76	78	603	7.74	3.7	114	116	862	
<2,000 CDD AND <4,000 HDD	-	-	-	-	-	-				
>2,000 CDD AND <4,000 HDD	-	_	-	-	-	_	-	_	_	



Table 4. (Continued)
Census Region: North
Central

		ANY	NATURAL GAS	USED		NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	OF HOUSE-	PER HOUSEHOLD	CONSUMED PER HOUSEHOLD	PER		HOUSE-	AVG. AMOUNT CONSUMED PER HOUSEHOLD (THOUSAND CU.FT.)	PER  HOUSEHOLD	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
				· ·	efu dha u u · · · · · · · · · · · · · · · · ·		<del></del>		
TOTAL HOUSEHOLDS	16.0	108	110	574	5.21	15.5	110	112	584
AREA TYPE									
METROPOLITAN	12.1	109	111	590	5.31	11.7	111	113	600
CENTRAL CITY	6.2	113	115	618	5.35	6.0	114	116	622
OUTSIDE CENTRAL CITY	5.9	105	107	561	5.25	5.6	108	110	576
NON-METROPOLITAN	3.9	105	107	525	4.89	3.8	107	110	535
NATURAL GAS PAID BY HOUSEHOLD									
YES	12,7	117	119	617	5.18	12.4	118	121	625
No	3.3	75	76	411	5.38	3.1	77	79	422
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	.2	87	89	386	4.34	.2	87	89	386
SINGLE FAMILY	11.0	119	122	628	5.16	10.7	121	124	638
2 OR MORE UNITS	4.8	83	85	458	5.42	4.6	85	87	469
NUMBER OF ROOMS									
1 TO 3	1.8	64	66	361	5.48	1.7	67	68	373
4 TO 5	7.2	96	98	514	5.27	7.0	97	99	522
6 OR MORE	6.9	132	135	692	5.12	6.8	134	137	701
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	5.4	80	82	430	5.26	5.2	82	83	438
1,000 TO 1,999	5.9 4.7	107 141	109 144	569 744	5.22 5.16	5.7 4.6	109 143	111 146	579 753
2,000 OR HURE	4.7	141	744	177	3.10	7.0	143	140	155
YEAR HOUSE BUILT						_ 1		***	
BEFORE 1950	7.6 7.0	117	119 103	619 539	5.18 5.25	7.4	119 103	122 105	629 55 <b>0</b>
1950 TO 1974	1.4	101 96	98	505	5.14	6.8 1.3	97	99	508
	***	,0	,0	505	3.14	1.3	· ·	,,	500
OWN/RENT OWN	10.2	118	121	623	5.15	9.9	120	123	633
RENT	5.8	90	91	488	5.33	9.9 5.6	92	93	497
1981 FAMILY INCOME LESS THAN \$10,000	5.2	97	99	515	5.21	5.1	99	101	F24
\$10,000 TO \$19,999	4.8	106	108	570	5.28	4.7	107	101	526 575
\$20,000 TO \$34,999	2.1	109	111	570 590	5.31	2.0	112	114	606
\$35,000 OR MORE	3.9	125	128	649	5.08	3.7	128	131	662
TOTAL BELOW 100 PERCENT OF POVERTY LINE	2.3	100	102	528	5.18	2.3	101	103	533
TOTAL BELOW 125 PERCENT	6.3	100	100	360	5.10	£3	101	103	223
OF POVERTY LINE	3.1	102	104	535	5.15	3.1	103	105	541
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	4.7	95	97	511	5.27	4.7	96	98	516
35 TO 59 YEARS	6.7	117	120	623	5.20	6.5	119	122	632
60 YEARS AND OVER	4.6	108	110	568	5.16	4.3	111	114	585
HOUSEHOLD MEMBERS									
ONE PERSON	3.9	85	87	458	5.30	3.7	87	89	469
2 TO 4 PEOPLE	10.0	111	114	589	5.19	9.7	113	115	598
S OK HUKE PEUPEE	2.1	135	138	713	5.17	2.1	137	140	724



Table 4. (Continued) Census Region: North Central

	 	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 (DOLLARS PER MILLION BTU)	   NUMBER   OF   HOUSE-   KOLDS  (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (THOUSAND CU.FT.)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		
MAIN HEATING FUEL											
NATURAL GAS	15.5	110	112	584	5.20	15.5	110	112	584		
ELECTRICITY	.2	38	39	223	5.74	-	-	-	***		
FUEL OIL OR KEROSENE	.2	40	41	242	5.90	-	_	-	-		
LPG	Q	Q	Q	Q	Q	-	-	_			
WOOD	.2	59	60	335	5.57	-	-	-			
OTHER OR NONE	Q	Q	Q	Q	Q	-	-	-	-		
HOT WATER FUEL											
NATURAL GAS	14.7	110	112	581	5.20	14.2	112	114	592		
ELECTRICITY	1.3	90	92	491	5.33	1.3	91	93	494		
FUEL OIL OR KEROSENE	Q	Q	Q	Q	ପ	Q	Q	Q	G		
OTHER	Q	Q	Q	Q	Q	Q	Q	Q	Q		
MAIN HEATING EQUIPMENT USING NATURAL GAS											
CENTRAL WARM AIR FURNACE	11.3	114	117	611	5.23	11.3	114	117	611.		
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	2.9	101	103	542	5.25	2.9	101	103	542		
FURNACE	.7	89	91	428	4.69	.7	89	91	428		
ROOM HEATER	.6	96	98	476	4.86	.6	96	98	476		
NONE/OTHER	.5	46	47	267	5.72	Q	Q	Q	ą		
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LDNG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD	3.4	101	103	576	5.59	3.3	103	105	585		
5,500 TO 7,000 HDD	9.4	112	114	582	5.10	9.0	114	117	595		
4,000 TO 5,499 HDD	3.2	104	107	547	5.13	3.1	105	108	<b>55</b> 1		
<2,000 CDD AND <4,000 HDD	Q	Ğ	Q	Q	Q	Q	Q	Q	q		
>2,000 CDD AND <4,000 HDD					_		-	_	**		



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

The second secon	,	No. 8.12.11.01.11.11.11.11.11.11.11.11.11.11.11.				1			
		ANY	NATURAL GAS	USED		NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
		PER THOUSEHOLD THOUSAND	CONSUMED PER HOUSEHOLD (MILLION	PER THOUSEHOLD	AVG. PRICE COOLLARS PER MILLION BTU	HOUSE-	PER HOUSEHOLD (THOUSAND	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	
TOTAL HOUSEHOLDS	11.1	109	111	588	5.27	10.8	111	114	599
AREA TYPE									
METROPOLITAN	9.2	111	114	596	5.25	8.9	. 113	116	607
CENTRAL CITY	4.5	118	120	640	5.32	4.4	119	121	646
OUTSIDE CENTRAL CITY	4.7	105	107	553	5.16	4.5	108	110	568
NON-METROPOLITAN	1.9	99	101	549	5.42	1.9	102	104	562
NATURAL GAS PAID BY HOUSEHOLD									
YES	8.6	120	122	643	5.26	8.4	121	124	650
NO	2.6	73	75	402	5.36	2.3	76	78	415
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	Q	Q	Q	Q	Q	Q	Q	Q	Q
SINGLE FAMILY	7.3	122	125	654	5.24	7.1	124	127	663
2 OR MORE UNITS	3.8	85	86	465	5.39	3.6	87	89	477
NUMBER OF ROOMS									
1 TO 3	1.3	64	66	358	5.46	1.2	68	69	375
4 TO 5	5.2	96	98	527	5.38	5.0	97	99	534
6 OR MORE	4.7	136	139	717	5.17	4.6	138	141	727
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	4.0	80	62	442	5.39	3.8	82	84	453
1,000 TO 1,999	4.0	108	111	592	5.35	3.9	110	113	603
2,000 OR MORE	3.1	147	150	768	5.12	3.1	148	151	774
YEAR HOUSE BUILT									
BEFORE 1950	5.7	117	119	631	5.29	5.5	119	121	642
1950 TO 1974	4.6	103	105	554	5.25	4.4	106	108	567
AFTER 1974	. 9	91	92	487	5.26	.9	91	93	491
OWN/RENT	14,								
OWN	6.6	122	124	650	5.23	6.4	124	126	661
RENT	4.6	91	93	497	5.36	4.4	93	95	509
1981 FAMILY INCOME									
LESS THAN \$10,000	4.0	97	99	526	5.31	3.9	99	101	537
\$10,000 TO \$19,999	3.4	107	109	585	5.36	3.3	108	110	592
\$20,000 TO \$34,999 \$35,000 OR MORE	1.3 2.5	111 130	113 133	610 679	5.39 5.09	1.2 2.4	115 134	117 137	629 695
				.,					2,3
TOTAL BELOW 100 PERCENT					<b>.</b>				
OF POVERTY LINE	1.8	103	105	552	5.25	1.8	104	106	555
TOTAL BELOW 125 PERCENT OF POVERTY LINE	2.4	103	105	552	5.25	2.3	104	106	555
AGE OF HOUSEHOLD HEAD					p	• •			
UNDER 35 YEARS	3.2	97	99	530	5.37	3.2	98	100	535
35 TO 59 YEARS	4.6 3.3	119 108	122 110	632 583	5.20 5.30	4.4 3.2	121 111	124 114	645 601
OF ICANO AND OVER	3.3	100	110	203	5.30	3.6	111	114	901
HOUSEHOLD MEMBERS									
ONE PERSON	2.7	86	88	474	5.38	2.6	89	91	489
2 TO 4 PEOPLE	6.8	112	115	603	5.27	6.6	114	116	613
5 OR MORE PEOPLE	1.6	135	138	714	5.19	1.6	137	140	726



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

		ANY	NATURAL GAS	USED		HATURAL	GAS 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) 	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (THOUSAND CU.FT.)		AVG.   AVG.   EXPEND-   ITURES   PER  HOUSEHOLE  (BOLLARS)
AIN HEATING FUEL									
NATURAL GAS	10.8	111	114	599	5.27	10.8	111	114	599
ELECTRICITY	.2	40	41	228	5.60	-	-	-	-
FUEL OIL OR KEROSENE	Q	Q	Q	Q	q		-	-	-
LPG	Q	Q	Q	Q	Q	-	-	-	-
WOOD	Q	Q	Q	Q	Q	-	-	-	-
OTHER OR NONE	Q	Q	Q	Q	Q	-	-	-	-
OT WATER FUEL									
NATURAL GAS	10.1	111	114	597	5.25	9.8	114	116	609
ELECTRICITY	1.0	87	89	493	5.57	1.0	88	89	498
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	q	G	Q	Q	Q	Q	Q	Q	Q
MAIN HEATING EQUIPMENT USING NATURAL GAS									
CENTRAL WARM AIR FURNACE	7.6	118	120	635	5.27	7.6	118	120	635
STEAM OR HOT-WATER SYSTEM	2.3	100	102	536	5.23	2.3	100	102	536
FLOOR, WALL OR PIPELESS									
FURNACE	.4	80	81	441	5.42	.4	80	81	441
ROOM HEATER	.4	86	88	468	5.33	.4	86	88	468
NONE/OTHER	.4	42	43	243	5.65	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	1.7	96	98	573	5.82	1.7	97	99	1578
5,500 TO 7,000 HDD	8.3	112	115	591	5.15	7.9	115	116	605
4,000 TO 5,499 HDD	1.2	105	107	588	5.48	1.2	105	107	588
<2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-
>2,000 CDD AND <4,000 HDD	-	_	-	-	_	_	-	-	-



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

The second secon	<u> </u>			·		,			
	e esta	ANY	NATURAL GAS	USED		I NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD (THOUSAND	CONSUMED	PER  HOUSEHOLD		OF HOUSE-	(THOUSAND	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	
	-								
TOTAL HOUSEHOLDS	4.8	105	107	542	5.04	4.7	107	109	549
AREA TYPE									-
METROPOLITAN	2.9	101	103	569	5.51	2.6	103	105	577
CENTRAL CITY	1.6	100	102	555	5.45	1.6	100	102	556
OUTSIDE CENTRAL CITY	1.2 2.0	103 111	105 113	588 502	5.59 4.42	1.2	106 113	108 115	606 508
NATURAL GAS PAID BY HOUSEHOLD	4.1	110	113	562	4.98	3.9	112	114	569
YES	4.1 .8	79	80	562 439	5.47	.8	80	81	969 444
TYPE OF HOUSING STRUCTURE		_	_		•	_	_	_	_
MOBILE HOME	, Q	Q 114	Q	Q 579	Q 4.98	Q 3.6	Q 116	Q 118	Q 588
SINGLE FAMILY	3.7 1.0	76	116 78	579 434	5.56	1.0	77	79	437
		,,			5,20	7.7	• •	• • •	
NUMBER OF ROOMS						_			
1 70 3	.6	65	66	366	5.52	.5	66	67	370
4 TO 5	2.3	94 125	<del>96</del> 128	482 639	5.01 5.01	2.0 2.2	96 127	98 130	489 648
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	1.4	79	61	398	4.91	1.4	80	82	399
1,000 TO 1,999	1.8	104	106	519	4.90	1.8	105	108	527
2,000 OR MORE	1.6	130	133	696	5.24	1.5	133	136	712
YEAR HOUSE BUILT									
BEFORE 1950	1.9	118	120	582	4.84	1.8	120	123	592
1950 TO 1974	2.4	95	97	512	5.26	2.4	97	99	518
AFTER 1974	.5	106	108	537	4.95	.5	107	109	540
OWN/RENT									
OWN	3.6	112	115	573	5.00	3.5	114	117	582
RENT	1.2	85	87	452	5.21	1.2	86	87	455
1981 FAMILY INCOME									
LESS THAN \$10,000	1.3	96	98	479	4.89	1.2	99	101	490
\$10,000 TO \$19,999	1.4	103	105	533	5.08	1.3	103	105	534
\$20,000 TO \$34,999	.8	106	108	560	5.19	.8	108	110	571
\$35,000 OR MORE	1.4	116	118	597	5.05	1.3	117	120	604
TOTAL BELOW 100 PERCENT OF POVERTY LINE	.5	89	91	443	4.88	.5	92	94	456
TOTAL BELOW 125 PERCENT			100	400		-	7.03	107	
OF POVERTY LINE	.8	98	100	482	4.84	.7	101	103	496
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	1.5	91	93	468	5.04	1.5	92	94	474
35 TO 59 YEARS	2.1	114	116	602	5.18	2.1	115	117	606
60 YEARS AND OVER	1.2	108	110	526	4.79	1.2	112	114	542
HOUSEHOLD MEMBERS									,
ONE PERSON	1.1 3.3	81 109	82	419 EE0	5.08	1.1 3.1	81 111	83	421 540
5 OR MORE PEOPLE	3.3 .5	136	111 139	559 710	5.02 5.10	.5	137	113 140	568 717
	•	224		7.40	2.10		207	270	121



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

	 	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 (MILLION BTU)		AVG. PRICE (DOLLARS PER MILLION BTU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (THOUSAND CU.FT.)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	
MAIN HEATING FUEL									
NATURAL GAS	4.7	107	109	549	5.03	4.7	107	109	549
ELECTRICITY	Q	Q	Q	Q	Q	-	-	-	-
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	-	-	-	-
LPG	Q	Q	Q	Q	Q	~	-	-	-
WOOD	Q	Q	Q	Q	Q	_	-	-	-
OTHER OR NONE	Q	Q	Q	Q	Q	-	-	-	-
HOT WATER FUEL									
NATURAL GAS	4.5	105	108	546	5.07	4.4	107	110	554
ELECTRICITY	.3	101	104	483	4.66	.3	101	104	483
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 '!ARM AIR FURNACE	3.6	107	109	561	5.13	3.6	107	109	561
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	.5	105	107	569	5.32	.5	105	107	569
FURNACE	. 3	103	106	410	3.88	. 3	103	106	410
ROOM HEATER	. 2	118	121	495	4.09	.2	118	121	495
NONE/OTHER	. 2	53	55	318	5.83	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	105	108	579	5.38	1.7	108	110	592
5,500 TO 7,000 HDD	1.1	107	110	517	4.72	1.1	108	110	520
4,000 TO 5,499 HDD	2.0	104	106	523	4.93	1.9	106	108	529
<2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q Q
>2,000 CDD AND <4,000 HDD	-		_	_		-	-	_	-



Table 4. (Continued) Census Region: South

		A YMA	IATURAL GAS	USED		NATURAL	GAS USED AS	MAIN HEAT	NG FUEL
HOUSEHOLD CHARACTERISTICS	MILLIONS)	AVG. AMOUNT CONSUMED PER	AVG. AMOUNT CONSUMED PER	AVG.   EXPEND-   ITURES   PER   HOUSEHOLD	PER	HOUSE-   HOLDS  (MILLIONS)	PER  HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD ((DOLLARS)
	Dillin				- 10	13.3	79	81	451
TOTAL HOUSEHOLDS	14.5	76	78	436	5.62	13.3			
					5.58	10.0	80	82	454
MREA TYPE METROPOLITAN	11.0	77	78	436 403	5.15	5.6	79	80	411 508
CENTRAL CITY	6.0	77	78	476	6.10	4.4	82	84	443
OUTSIDE CENTRAL CITY	5.0	76	78 76	437	5.74	3.4	76	77	4-13
NON-METROPOLITAN	3.5	75	ίο						
					5.53	11.3	83	85	468
NATURAL GAS PAID BY HOUSEHOLD	12,2	80	82	453	5.53 6.33	2.0	55	57	357
YES	2.3	54	55	346	0.33				
							54	55	320
TYPE OF HOUSING STRUCTURE		54	55	320	5.85	.3	54 87	89	488
MODILE HOME	.3	94 84	86	473	5.50	10.2	53	54	333
SINGLE FAMILY	3.3	51	52	324	6.25	2.9	55	•	
			-51		5.97	1.3	46	47	278
NUMBER OF ROOMS	1.5	45	46	273 376	5.58	6.0	68	69	384
1 TO 3	6.5 6.6	66 93	67 95	532	5.61	6.0	98	100	557
MEASURED HEATED SPACE OF RESI-									338
DENCE (IN SQUARE FEET)			56	. 328	5.83	4.9	57	59	455
LECO TUAN GOO.	5.4	55	80	440	5.47	6.0	82	84	674
1,000 TO 1,999	6.7	79	117	661	5.67	2.3	117	119	0,1
2,000 OR MORE	2.5	114							
					r 70	4.0	80	82	472
YEAR HOUSE BUILT	4.3	77	78	454	5.78 5.54	8.1	80	81	448
BEFORE 1950	8.7	77	79	437	5.62	1.3	72	73	406
1950 TO 1974		68	69	388	5.02				
the second of th						8.5	87	88	48
OWN/RENT	9.3	83	85		5.56	4.8	66	67	38
OWN		63	65	373	5.77				
RENT								,	39
1981 FAMILY INCOME			65	382	5.89	4.4			
1555 THAN \$10,000	4.8	64			5.44				
ein non TD \$19.999	, ,,,,	78 78					~ ~ ~		
\$20,000 TO \$34,999 \$35,000 OR MORE	. 2.7	90			5.57	3.1	75	, ,,	
				. 375	5.84	2.5	65	; 66	. 38
TOTAL BELOW 100 PERCENT OF POVERTY LINE	. 2.7	63	64	<sub>+</sub> 3/5				7 68	. 39
TOTAL BELOW 125 PERCENT		65	; 6	388	5.88	3.3	67	, 60	, .
OF POVERTY LINE									> 39
AGE OF HOUSEHOLD HEAD			7 6	9 385	5.6				•
INDER 35 YEARS	4.7				5.5			• _	•
ZE TO SO YFARS	0.1		·			2 3.5	5 7	, ,	•
60 YEARS AND OVER	3.8	, /:							
					5 5.9	3 3.	2 5	.8 5	
HOUSEHOLD MEMBERS	3.4	5	•	8 34		-	4, 8	3 8	
ONE PERSON		3 7	· .	1 45 18 52				10 10	3 5
5 OR MORE PEOPLE	1.	9	6 9	8 52					



Table 4. (Continued) Census Region: South

		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. PRICE (ODLLARS PER MILLION BTU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD		
AIN HEATING FUEL											
NATURAL GAS	13.3	79	81	451	5.58	13.3	79	81	451		
ELECTRICITY	.6	48	49	298	6.13	-	-	_	_		
FUEL OIL OR KEROSENE	.3	26	27	284	7.66	-	-	-	_		
LPG	a	Q	Q	Q	Q	-	-	_	-		
WOOD	.2	53	54	329	6.12	_	-	-	-		
OTHER OR NONE	Q	Q	Q	Q	Q	~	-	-	-		
OT WATER FUEL											
NATURAL GAS	12.4	79	80	445	5.54	11.4	82	83	458		
ELECTRICITY	2.0	64	66	405	6.19	1.9	65	66	413		
FUEL OIL OR KEROSENE	.2	20	20	175	8.66	Ĝ	Q.	Q	q		
OTHER	Q	Q	Q	Q	Q	Q.	q	Q	q		
AIN HEATIMS EQUIPMENT USING ATURAL GAS											
CENTRAL WARM AIR FURNACE	8.2	86	88	488	5.53	8.2	86	88	488		
STEAM OR HOT-WATER SYSTEM	.5	83	85	567	6.68	.5	83	85	567		
FLOOR, WALL OR PIPELESS											
FURNACE	1.8	66	68	357	5.28	1.8	66	68	357		
ROOM HEATER	2.6	65	66	385	5.84	2.6	65	66	385		
NONE/OTHER	1.4	47	48	286	5.99	.2	73	75	343		
EATING DEGREES-DAYS (HDD) ND COOLING DEGREES-DAYS (CDD) DNG-TERM AVERAGE											
<2,000 CDD AND >7,000 HDD	-	-	-	-	-	-	-	-	-		
5,500 TO 7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q		
4,000 TO 5,499 HDD	3.1	86	87	549	6.28	2.7	94	96	596		
<2,000 CDD AND <4,000 HDD	5.1	82	83	423	5.07	4.9	83	85	428		
>2,000 CDD AND <4,000 HDD	6.4	67	68	394	5.75	5.8	69	71	404		



Table 4. (Continued)
Census Division:
South Atlantic

		YHA	NATURAL GAS	USED		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 COOLLARS PER MILLION BTU	HOUSE-	PER  HOUSEHOLD  (THOUSAND	AVS. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)		
TOTAL BOILECHOLDS		74	*9**9	E03	4 60		0.7	06	EAT		
TOTAL HOUSEHOLDS	5.3	76	77	501	6.48	4.6	83	84	543		
AREA TYPE											
METROPOLITAN	4.5	77	78	512	6.53	3.9	84	86	558		
CENTRAL CITY	2.0	73	74	484	6.52	1.7	78	80	515		
OUTSIDE CENTRAL CITY	2.5	80	82	533	6.53	2.2	90	91	592		
NON-METROPOLITAN	8	69	70	438	6.22	.7	73	75	462		
NATURAL GAS PAID BY HOUSEHOLD											
YES	3.9	82	84	535	6.39	3.4	90	92	585		
NO	1.4	58	59	404	6.87	1.2	61	63	428		
TYPE OF HOUSING STRUCTURE											
MOBILE HOME	Q	Q	Ģ	Q	Q	Q	Q	Q	Q		
SINGLE FAMILY	3.6	86	88	560	6.36	3.2	94	96	605		
2 OR MORE UNITS	1.6	52	53	373	6.98	1.4	57	59	405		
NUMBER OF ROOMS											
1 TO 3	.5	33	34	249	7.36	.5	36	37	268		
4 TO 5	2.1	64	66	431	6.55	1.9	69	71	461		
6 OR MORE	2.6	93	95	609	6.38	2.3	103	105	668		
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	1.9	52	54	362	6.77	1.6	58	59	397		
1,000 TO 1,999	2.2	76	77	493	6.38	1.9	84	85	537		
2,000 OR MORE	1.2	113	116	738	6.38	ī.í	117	119	760		
YEAR HOUSE BUILT											
BEFORE 1950	1.7	77	78	500	6.37	1.4	85	87	550		
1950 TO 1974	3.1	77	79	511	6.50	2.7	83	85	547		
AFTER 1974	.6	65	67	448	6.74	.5	73	74	497		
OWN/RENT	Yanan kana										
OWN	3.2	86	88	561	6.39	2.7	94	96	611		
RENT	2.1	60	62	412	6.68	1.9	66	67	443		
1981 FAMILY INCOME											
LESS THAN \$10,000	1.6	66	67	445	6.60	1.3	72	74	483		
\$10,000 TO \$19,999	1.4	79	aí	509	6.31	1.2	87	89	558		
\$20,000 TO \$34,999		73	75	483	6.45	.8	79	80	515		
\$35,000 OR MORE	1.4	85	86	566	6.56	1.3	91	93	608		
TOTAL BELOW 100 PERCENT											
OF POVERTY LINE	. 9	62	63	422	6.66	.7	68	70	458		
TOTAL BELOW 125 PERCENT		4 5	47				71	77	400		
OF POVERTY LINE	1.1	65	67	444	6.68	.9	71	73	480		
AGE OF HOUSEHOLD HEAD	<u>.</u> -		. =								
UNDER 35 YEARS	1.8	64	65	434	6.65	1.4	73	74	487		
35 TO 59 YEARS	2.3	83	85	542	6.39	2.1	89	91	579 540		
60 YEARS AND OVER	1.3	78	80	517	6.48	1.1	83	85	548		
HOUSEHOLD MEMBERS				,		<u>;</u> _					
ONE PERSON	1.4	58	59	394	6.69	1.3	60	61	407		
2 TO 4 PEOPLE	3.4	78	80	515	6.44	2.8	88	89	570		
5 OR MORE PEOPLE	.5	104	106	679	6.39	.5	115	117	745		



Table 4. (Continued)
Census Division:
South Atlantic

		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. PRICE (DOLLARS) PER MILLION BTU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)		AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVIS. LEXPEND- LITURES PER HOUSEHOLI LOULLARS
AIN HEATING FUEL									
NATURAL GAS	4.6	83	84	543	6.43	4.6	83	84	543
ELECTRICITY	.2	31	32	246	7.76	-	-	-	
FUEL OIL OR KEROSENE	.3	25	26	199	7.81	_	_		_
LPG	ä	Q.	Q	Q	Q	-	-	_	_
WOOD	Q.	à	Q.	à	Q.	_	_	_	_
OTHER OR NONE	Ģ.	q	q	q	વે	-	-	-	-
OT WATER FUEL									
NATURAL GAS	4.3	79	81	520	6.43	3.8	85	87	557
ELECTRICITY	. 9	69	70	468	6.68	.8	73	74	492
FUEL OIL OR KEROSENE	.2	20	20	175	8.66	Q	Q	G	Q
OTHER	Q	Q	Q	q	Q	Q	Q	q	Q
AIN HEATING EQUIPMENT USING ATURAL GAS									
CENTRAL WARM AIR FURNACE	3.1	90	92	586	6.39	3.1	90	92	586
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	. 4	89	91	628	6.93	.4	89	91	628
FURNACE	.5	59	60	388	6.50	.5	59	60	388
ROOM HEATER	.6	62	63	389	6.16	.6	62	63	389
NONE/OTHER	.7	30	30	227	7.46	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	-	-	-	-	-	-	_	-	~
5,500 TO 7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q
4,000 TO 5,499 HDD	2.4	82	83	561	6.74	2.1	92	93	624
<2,000 CDD AND <4,000 HDD	2.1	84	86	524	6.13	2.0	87	89	541
>2,000 CCD AND <4,000 HDD	. 7	31	32	225	7.02	.5	34	34	233



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

		ANY	NATURAL GAS	USED		HATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	HOUSE- HOLDS (MILLIONS)		HOUSEHOLD	I PER	AVG. PRICE COLLARS PER MILLION BTU	OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	PER  HOUSEHOLD
TOTAL HOUSEHOLDS	2.6	73	75	397	5.32	2.5	74	75	399
AREA TYPE									
METROPOLITAN	1.7	66	68	374	5.51	1.6	67	68	376
CENTRAL CITY	1.0	61	63	336	5.37	1.0	61	63	336
OUTSIDE CENTRAL CITY	. 7	74	75	427	5.67	.6	75	77	436
NON-METROPOLITAN	.9	85	86	438	5.06	.9	85	87	440
NATURAL GAS PAID BY HOUSEHOLD									
YES	2.3	75	77	407	5.29	2.2	76	78	410
NO	.3	56	57	319	5.59	.3	56	57	319
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	Q	Q	Q	Q	Q	Q	Q	Q	Q
SINGLE FAMILY	1.8	83	85	448	5.28	1.7	84	86	454
2 OR MORE UNITS	.7	50	51	277	5.40	.7	50	51	277
NUMBER OF ROOMS									
1 TO 3	.3	47	48	267	5.53	.3	47	48	267
4 TO 5	1.2	64	66	361	5.50	1.1	65	66	363
6 OR MORE	1.1	90	92	473	5.16	1.1	91	92	477
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	1.1 1.0 .5	56 76 109	57 78 112	317 412 562	5.58 5.30 5.03	1.1 ·1.0 .4	56 77 112	57 76 114	317 415 572
									3,2
YEAR HOUSE BUILT		00				_			
BEFORE 1950	.8 1.7	88 67	90 69	458 373	5.10	.7	89	91	464
1950 TO 1974	.2	62	63	3/3 358	5.42 5.64	1.6 .2	68 62	69	375
Note: The second of the second			,	330	3.04		02	63	358
OWN/RENT			10.00						
OWN	1.5	84	86	450	5.26	1.5	84	86	452
RENT.	1.1	58	59	323	5.44	1.1	59	60	325
1981 FAMILY INCOME									
LESS THAN \$10,000	1.1	67	69	372	5.41	1.1	68	69	375
\$10,000 TO \$19,999	.7	71	72	388	5.39	.7	71	72	388
\$20,000 TO \$34,999	.6	78	80	406	5.10	-5	79	81	410
\$35,000 OR MORE	.3	93	95	508	5.33	.2	94	96	514
TOTAL BELOW 100 PERCENT OF POVERTY LINE	.5	70	71	385	5.41	.5	70	72	388
TOTAL BELOW 125 PERCENT	_				p	_			
OF POVERTY LINE	.7	68	70	385	5.52	.7	69	70	387
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	. 9	63	64	339	5.31	.8	63	64	339
35 TO 59 YEARS	.9	77	79	426	5.39	. 9	78	80	429
60 YEARS AND OVER	.8	80	82	430	5.26	.8	80	82	430
HOUSEHOLD MEMBERS									
ONE PERSON	.8	57	58	313	5.40	.8	56	57	311
2 TO 4 PEOPLE	1.6	79	81	430	5.31	1.5	80	82	433
	. 3	86	88	456	5.21	. 2	88	89	466



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

	!	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 COLLARS PER MILLION BTU	   NUMBER   DF   HOUSE-   HOLD'S  (MILLIONS)		AVG. AMOUNT COMSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLE (DOLLARS)
AIN HEATING FUEL									
NATURAL GAS	2.5	74	75	399	5.32	2.5	74	75	399
ELECTRICITY	Q	Q	Q	Q	Q			-	
FUEL OIL OR KEROSENE	à	Q	Q	à	e i	_	_	-	_
LPG	Ĝ	Q.	o	à	Q	-	_	_	_
WOOD	ä	Q.	Q.	à	Q	-	_	_	_
OTHER OR NONE	q	q	q	q	Q	-	-	-	-
OT WATER FUEL									
NATURAL GAS	1.9	79	80	421	5.23	1.8	79	81	424
ELECTRICITY	.7	58	60	336	5.62	.7	59	60	337
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	Q	Q	Q	Q	Q	Q	Q	Q	Q
AIN HEATING EQUIPMENT USING ATURAL GAS									
CENTRAL WARM AIR FURNACE	1.6	74	75	397	5.26	1.6	74	75	397
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	Q	Q	Q	Q	Q	q	Q	Q	Q
FURNACE	.4	64	66	373	5.66	.4	64	66	373
ROOM HEATER	.5	81	83	440	5.31	.5	81	83	440
NONE/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	-	-	-	-	-	-	=	=	**
5,500 TO 7,000 HDD	-	~	-	=		=	-	-	<del></del> -
4,000 TO 5,499 HDD	.6	102	104	498	4.78	.6	102	104	497
<2,000 CDD AND <4,000 HDD	1.4	63	64	357	5.58	1.4	63	64	359
>2,000 CDD AND <4,000 HDD	.6	68	69	387	5.57	.6	70	7.	395



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

		ANY	NATURAL GAS	USED		NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	OF HOUSE-	CONSUMED PER HOUSEHOLD	CONSUMED	PER  HOUSEHOLD		OF HOUSE-	CONSUMED PER HOUSEHOLD	CONSUMED PER HOUSEHOLD	AVG.   EXPEND-   ITURES   PER  HOUSEHOLD  (DOLLARS)
TOTAL HOUSEHOLDS	6.6	78	79	401	5.06	6.2	79	80	404
AREA TYPE									
METROPOLITAN	4.8	80	81	387	4.75	4.5	82	83	392
CENTRAL CITY	3.0	84	86	372	4.34	2.9	85	87	374
OUTSIDE CENTRAL CITY	1.8	73	74	413	5.57	1.6	75	77	425
NON-METROPOLITAN	1.8	72	73	437	5.96	1.7	72	73	436
NATURAL GAS PAID BY HOUSEHOLD									
YES	6.0	81	83	418	5.05	5.7	82	84	421
NO	.6	43	44	226	5.16	.5	39	40	196
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	Q	Q	Q	Q	Q	Q	Q	Q	Q
SINGLE FAMILY	5.6	83	85	423	5.00	5.3	84	86	428
2 OR MORE UNITS	.9	48	49	272	5.52	.8	46	47	256
NUMBER OF ROOMS									
1 TO 3	.6	54	55	297	5.40	.5	54	55	293
4 TO 5	3.2	68	69	345	4.98	3.0	68	69	342
6 OR MORE	2.9	93	95	484	5.08	2.6	96	98	496
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	2.3 3.5 .8	57 61 119	58 83 121	305 415 609	5.22 4.99 5.03	2.2 3.2 .8	58 83 119	59 85 122	305 419 612
YEAR HOUSE BUILT									
BEFORE 1950	1.8	72	74	617	E E4	3.0	77	75	437
1950 TO 1974	3.9	81		411	5.56	1.8	73	75	413
AFTER 1974	.8	71	83 72	406 353	4.88 4.88	3.7 .6	82 74	84 76	408 354
OWN/RENT	4.6	81	83	419	5.05	4.3	83	84	423
RENT	2.0	69	71	360	5.08	1.8	70	71	359
1981 FAMILY INCOME									
LESS THAN \$10,000	2.1	60	61	342	5.59	2.0	60	61	342
\$10,000 TO \$19,999	1.7	80	82	39 <b>0</b>	4.76	1.7	80	82	388
\$20,000 TO \$34,999	.9	82	83	419	5.04	.8	85	87	431
\$35,000 OR MORE	1.8	94	96	472	4.90	1.6	97	100	484
TOTAL BELOW 100 PERCENT	_				_	_			
OF POVERTY LINE	1.3	61	62	340	5.46	1.3	60	62	337
TOTAL BELOW 125 PERCENT OF POVERTY LINE	1.8	63	64	353	5.49	1.7	63	64	352
				<i></i>	2.7/	***	0.3	V-1	7-7-L
AGE OF HOUSEHOLD HEAD									
	2.0	72	74	363	4.91	1.8	72	73	355
UNDER 35 YEARS		85	87	435	5.01	2.7	88	90	445
35 TO 59 YEARS	2.9								
	2.9 1.7	71	72	385	5.33	1.6	72	73	389
35 TO 59 YEARS			72	385	5.33	1.6	72	73	389
35 TO 59 YEARS		71 57	58	385	5.33 5.39	1.6	57	73 58	389 313
35 TO 59 YEARS	1.7	71							



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

I	i !	ANY I	NATURAL GAS	USED		I NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER CF HCUSE- HOLDS (MILLIONS)		AVG.   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.   EXPEND-   ITURES   PER  HOUSEHOLD  (DOLLARS)
AIN HEATING FUEL									
NATURAL GAS	6.2	79	80	404	5.02	6.2	79	80	404
ELECTRICITY	.3	58	60	333	5.59	-	-	-	-
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	-	-	_	
LPG	Q	Q	Q	Q	Q	-	-	-	-
WOOD	Q	Q	Q	Q	Q	-	-	-	-
OTHER OR NONE	Q	Q	Q	Q	Q	-	-	-	-
OT WATER FUEL									
NATURAL GAS	6.3	78	80	401	5.02	5.9	80	82	405
ELECTRICITY	.3	65	66	391	5.91	. 3	60	61	382
FUEL DIL OR KERDSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	Q	Q	Q	Q	Q	q	Q	Q	Q
MAIN HEATING EQUIPMENT USING									
CENTRAL WARM AIR FURNACE	3.5	89	91	443	4.87	3.5	89	91	443
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	Q	Q	Q	Q	Q	Q	Q	Q	q
FURNACE	.8	72	74	329	4.46	.8	72	74	329
ROOM HEATER	1.6	61	62	367	5.93	1.6	61	62	367
NONE/OTHER	.6	65	66	349	5.28	. 2	73	75	343
EATING DEGREES-DAYS (HDD) ND COOLING DEGREES-DAYS (CDD) ONG-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	Q	Q	Q	Q	Q	Q	Q	Q	Q
<2,000 CDD AND <4,000 HDD	1.6	95	97	342	3.53	1.5	95	97	341.
>2,000 CDD AND <4,000 HDD	5.0	72	74	419	5.69	4.6	73	75	425



Table 4. (Continued) Census Region: West

	, , , , , , , , , , , , , , , , , , ,								
		ANY	NATURAL GAS	USED		   NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER   HOUSEHOLD		ITURES PER		OF HOUSE-		PER [HOUSEHOLD	PER
		CU.FT.)	BTU)	I .	,		CU.FT.)	BTU)	
		<u> </u>	1		L	J	<u> </u>	I	
TOTAL HOUSEHOLDS	12.0	73	74	361	4.85	11.1	74	76	365
AREA TYPE									
METROPOLITAN	11.1	71	73	354	4.88	10.3	72	73	357
CENTRAL CITY	5.9	68	69	333	4.82	5.2	68	70	334
OUTSIDE CENTRAL CITY	5.3	75	76	377	4.93	5.1	76	_ 77	380
NON-METROPOLITAN	.8	97	99	457	4.62	.8	101	103	472
NATURAL GAS PAID BY HOUSEHOLD									
YES	10.0	76	77	377	4.87	9.6	77	78 50	380
NO	2.0	59	60	282	4.71	1.6	57	59	273
TYPE OF HOUSING STRUCTURE	_					_			
MOBILE HOME	.5	65	66	319	4.82	.5	66	67	326
SINGLE FAMILY	8.2	81 53	83 54	405	4.86 4.83	7.8 2.9	83 51	85 52	410
2 OR HORE UNITS	3.3	55	24	260	4.03	2.7	21	54	248
NUMBER OF ROOMS									
1 TO 3	1.8	43	44	219	5.02	1.6	43	44	218
4 TO 5	5.9 4.3	66 95	68 97	326 469	4.81 4.86	5.5 4.1	66 96	68 98	324 474
6 OR MORE	4.3	75	91	409	4.00	4.1	76	70	474
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)			F.	0/0	6.06				
LESS THAN 999	4.8	54 77	56 78	269 378	4.84 4.83	4.4 5.0	55 78	56	271
1,000 TO 1,999	5.4 1.9	109	111	548	4.92	1.7	110	80 112	385 548
2,000 OR FIORE	1.,	10,		3.0		•••	110	210	540
YEAR HOUSE BUILT		7.			r 43		7.5		
BEFORE 1950	3.3 6.7	74 74	75 75	377 366	5.01 4.85	3.1 6.4	75 75	77 76	382 369
AFTER 1974	2.0	68	69	317	4.57	1.6	68	70	315
	2.0	00	0,	511	4.51	2.0	00	, ,	313
OWN/RENT	6.9	83	85	411	4.83	6.5	84	86	412
RENT	5.1	59	60	293	4.89	4.6	60	61	299
1981 FAMILY INCOME									
LESS THAN \$10,000	3.4	63	64	314	4.86	3.0	66	67	326
\$10,000 TO \$19,999	3.4	67	68	330	4.81	3.3	68	70	336
\$20,000 TO \$34,999	1.9	75	76	371	4.85	1.9	75	77	370
\$35,000 OR MORE	3.2	88	90	438	4.88	3.0	87	89	431
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE	1.5	73	75	365	4.88	1.2	81	82	399
TOTAL BELOW 125 PERCENT OF POVERTY LINE	2.2	69	70	344	4.89	1.9	73	75	365
	L . L	0,	, ,	277	4.07	4.7	,,,	13	202
AGE OF HOUSEHOLD HEAD	4 -	/ <b>9</b>	40	700	4 07	7 ^			777
UNDER 35 YEARS	4.2 4.7	67 80	68 82	328 395	4.63 4.83	3.9 4.2	6 <i>7</i> 82	69 83	331 401
60 YEARS AND OVER	3.0	71	72	356	4.93	3.0	71	73	358
		, -		330	,3		, .	, ,	2,70
HOUSEHOLD MEMBERS		r.		071	4 00				0.0
ONE PERSON	3.1 7.6	54 76	55 77	271 374	4.90 4.85	2.8 7.2	52 77	<b>53</b> 79	260 381
5 OR MORE PEOPLE	1.3	102	104	499	4.80	1.1	106	109	520
		***		.,,			*00	10,	250



Table 4. (Continued) Census Region: West

		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   DOLLARS   PER   MILLION   BTU)	   NUMBER   OF   HOUSE-   KOLDS  (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD
AIN HEATING FUEL									
NATURAL GAS	11.1	74	76	365	4.83	11.1	74	76	365
ELECTRICITY	.6	64	65	326	5.03	_	-	_	_
FUEL DIL OR KEROSENE	Q	Q	Q	Q	Q	_	-	-	-
LPG	Q	Q	Q	Q	Q	-	-	-	-
MOOD	.2	53	54	310	5.78	_	-	-	-
OTHER OR NONE	Q	Q	Q	Q	Q	-	-	-	-
OT WATER FUEL									
NATURAL GAS	11.3	73	75	357	4.78	10.5	74	76	360
ELECTRICITY	.6	69	70	435	6.20	.6	72	73	452
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	Q	Q	Q	Q	Q	Q	Q	Q	Q
AIN HEATING EQUIPMENT USING ATURAL GAS									
CENTRAL WARM AIR FURNACE	6.0	83	84	412	4.89	6.0	83	84	412
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	. 5	96	98	397	4.04	.5	96	98	397
FURNACE	3.9	61	63	302	4.82	3.9	61	63	302
ROOM HEATER	.7	55	56	290	5.14	.7	55	56	290
NONE/OTHER	. 9	59	60	314	5.22	Q	Q	Q	Ŕ
EATING DEGREES-DAYS (HDD) ND COOLING DEGREES-DAYS (CDD) DNG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD	1.1	116	119	507	4.26	1.1	119	122	520
5,500 TO 7,000 HDD	.8	104	106	480	4.53	.7	109	111	498
4,000 TO 5,499 HDD	1.3	67	68	390	5.73	1.2	68	69	394
<2,000 CDD AND <4,000 HDD	8.3	67	68	331	4.85	7.6	67	69	331
>2,000 CDD AND <4,000 HDD	.5	45	46	280	6.03	.5	46	47	283



## **Average Natural Gas Consumption** and Expenditures

Table 4. (Continued)
Census Division:
Mountain

		ANY	NATURAL GAS	USED		   NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	OF HOUSE-	PER HOUSEHOLD (THOUSAND	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	PER HOUSEHOLD	(DOLLARS   PER   MILLION	HOUSE-	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	
TOTAL HOUSEHOLDS	2.9	90	92	440	4.79	2.8	93	95	450
AREA TYPE									
METROPOLITAN	2.1	87	89 85	434	4.87	2.0	89	91	440
CENTRAL CITY	1.3 .8	83 95	97	420 458	4.95 4.74	1.2 .8	85 95	87 97	428 461
NON-METROPOLITAN	.8	97	99	457	4.62	.8	101	103	472
NATURAL GAS PAID BY HOUSEHOLD									
YES	2.5	93	95	452	4.77	2.4	95	97	460
NO	.4	74	75	372	4.94	-4	78	80	387
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	.2	71	72	366	5.08	.2	71	72	366
SINGLE FAMILY	2.2	97	99	470	4.73	2.1	100	102	480
2 OR MORE UNITS	.5	67	68	343	5.04	.5	68	70	342
NUMBER OF ROOMS									
1 TO 3	.5	52	53	88\$	5.43	.4	51	52	275
4 TO 5	1.3	85	87	420	4.84	1.3	87	88	426
6 OR MORE	1.1	114	116	536	4.61	1.1	116	119	546
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	1.2	65	67	343	5.14	1.1	66	68	345
1,000 TO 1,999 2,000 OR MORE	1.1	99	101	475	4.68	1.1	102	105	487
Lyou or northern the second	.6	123	126	576	4.57	.6	124	127	581
YEAR HOUSE BUILT									
BEFORE 1950	.7	88	89	433	4.83	.6	91	93	447
1950 TO 1974	1.8 .5	93 84	94 86	452 410	4.78 4.77	1.7 .5	95 85	97 87	462
	.9	04	00	410	4.77	1.5	65	97	40,7
OWN/RENT									
OWN	2.0 .9	97 74	99 76	468 379	4.72 4.99	2.0 .8	99 77	101 79	476 386
RENT	• 7	74	70	379	4.77	•0	//	/7	300
1981 FAMILY INCOME									
LESS THAN \$10,000	1.0	73	74	368	4.97	.9	75	77	375
\$10,000 TO \$19,999	.7	89	91	432	4.75	-7	91	93	439
\$20,000 TO \$34,999 \$35,000 OR MORE	.5 .7	98 111	100 113	478 528	4.79 4.66	.4 .7	100 112	102 115	486 535
TOTAL BELOW 100 PERCENT OF POVERTY LINE	.3	95	97	452	4.67	.3	103	106	476
TOTAL BELOW 125 PERCENT		7.3	7.1	456	7.07		203	100	770
OF POVERTY LINE	.6	81	83	404	4.89	.5	85	86	414
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	1.0	91	93	440	4.73	. 9	94	96	448
35 TO 59 YEARS	1.0	99	101	475	4.70	1.0	102	104	486
60 YEARS AND OVER	.9	79	81	403	4.99	.9	81	83	411
HOUSEHOLD MEMBERS						_			
ONE PERSON	.8	66	68	348	5.15	.7	68	69	348
2 TO 4 PEOPLE	1.8	94 125	96 127	458 570	4.76 4.47	1.7	97 127	99 130	468 580
TO THE PROPERTY OF THE PROPERT		103	TEI	370	7.7/		161	130	20€



## **Average Natural Gas Consumption and Expenditures**

Table 4. (Continued)
Census Division:
Mountain

	 	ANY	NATURAL GAS						
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 STU	NUMBER   OF   HOUSE-   HOLDS   MILLIONS			AVG.   EXPEND-   ITURES   PER   HOUSEHOLD   (DOLLARS)
MAIN HEATING FUEL									
NATURAL GAS	2.8	93	95	450	4.75	2.8	93	95	450
ELECTRICITY	Q	Q	Q	Q	Q	-	-	-	-
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	-	-	-	-
LPG	q	Q	Q	Q	Q	-	-	-	-
WOOD	Q	Q	Q	Q	Q	•	-	-	-
OTHER OR NONE	Q	Q	Q	Q	Q	-	-	-	-
OT WATER FUEL									
NATURAL GAS	2.7	92	94	445	4.74	2.6	94	96	452
ELECTRICITY	. 2	65	67	382	5.71	.2	73	74	418
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Ġ	Q	é .	Q
OTHER	Q	Q	Q	q	q	Q	વે	Q	ą
MAIN HEATING EQUIPMENT USING		00	100					<b></b>	4-7-0
CENTRAL WARM AIR FURNACE	2.0	98	100	470	4.71	2.0	98	100	470
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	.2	113	115	512	4.45	.2	113	115	512
FURNACE	. 3	74	76	380	5.01	.3	74	76	330
ROOM HEATER	.2	52	53	303	5.73	.2	52	53	303
NONE/OTHER	. 2	47	48	289	6.02	Q	Q	Q	13
HEATING DEGREES-DAYS (HDD) NND COOLING DEGREES-DAYS (CDD) .ONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	1.0	114	116	524	4.51	1.0	115	118	5:30
5,500 TO 7,000 HDD	.8	104	106	473	4.44	.7	109	111	486
4,000 TO 5,499 HDD	.3	82	83	412	4,94	.3	82	83	412
<2,000 CDD AND <4,000 HDD	.4	61	62	370	5.95	.3	62	63	375
>2,000 CDD AND <4,000 HDD	.5	45	46	284	6.14	.5	46	47	288



## **Average Natural Gas Consumption** and **Expenditures**

Table 4. (Continued)
Census Division:
Pacific

	· · · · · · · · · · · · · · · · · · ·			***************************************		1		·····	
	! ! !	ANY	NATURAL GAS	USED		NATURAL	GAS USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	OF HOUSE-HOLDS	PER HOUSEHOLD (THOUSAND	CONSUMED	PER  HOUSEHOLD	(DOLLARS   PER   MILLION	OF HOUSE- HOLDS (MILLIONS)	CONSUMED PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	PER  HOUSEHOLD
			<del></del>				<del></del>	- Value - Carlotte - C	
TOTAL HOUSEHOLDS	9.0	67	69	335	4.88	8.4	68	69	337
AREA TYPE									
METROPOLITAN	9.0	67	69	335	4.88	8.4	68	69	337
CENTRAL CITY	4.5	63	64	307	4.77	4.0	63	64	305
OUTSIDE CENTRAL CITY	4.5 Q	72 Q	73 Q	363 Q	4.97 G	4.4 Q	72 Q	74 Q	366 Q
	,	•	•	•	,	,	•	,	,
NATURAL GAS PAID BY HOUSEHOLD	715	70	71	750	4 00	7.0	73	70	757
YES	745 1.5	70 54	71 55	352 256	4.92 4.62	7.2 1.2	71 51	72 52	353 236
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	.3	61	63	290		-	, -		
SINGLE FAMILY	6.0	76	77 .	380	4.64 4.92	.3 5.7	63 77	64 78	300 383
2 OR MORE UNITS	2.8	50	51	244	4.77	2.4	47	48	231
NUMBER OF ROOMS									
1 TO 3	1.3	39	40	192	4.81	1.1	40	40	197
4 TO 5	4.6	61	62	299	4.80	4.2	60	61	293
6 OR MORE	3.2	88	90	446	4.97	3.0	89	91	449
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	3.5	51	52	243	4.71	3.3	51	52	247
1,000 TO 1,999	4.2 1.3	71	72	352	4.88	3.9	72	73	356
2,000 OR HORE	1.5	103	105	536	5.11	1.1	102	104	532
YEAR HOUSE BUILT									
BEFORE 1950	2.7 4.9	70 67	72 69	364 335	5.06 4.89	2.5 4.7	71 67	73 69	365 336
AFTER 1974	1.5	62	64	285	4.48	1.2	62	63	277
OUNTEREST									
OWN/RENT OWN	4.9	78	79	387	4.89	4.5	77	79	384
RENT	4.2	76 55	56	275	4.86	3.8	57	79 58	281
4.48.0.002.0									
1981 FAMILY INCOME	2.3			***				4 70	
LESS THAN \$10,000 \$10,000 TO \$19,999	2.3	59 61	60 63	289 303	4.80 4.84	2.0 2.6	62 62	63 64	303 308
\$20,000 TO \$34,999	1.5	68	69	337	4.88	1.4	68	69	333
\$35,000 OR MORE	2.5	81	83	412	4.96	2.3	79	81	400
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE	1.1	67	69	341	4.95	.9	74	76	378
TOTAL BELOW 125 PERCENT	, ~								
OF POVERTY LINE	1.7	65	66	323	4.89	1.4	69	71	347
AGE OF HOUSEHOLD HEAD	7.0			***					
UNDER 35 YEARS	3.2 3.7	59 75	60 76	294	4.87	3.1	60 74	61	297
35 TO 59 YEARS	2.1	75 67	76 68	372 334	4.88 4.89	3.2 2.1	76 67	77 69	375 336
	<b>-</b>	•			.,0,	~ * *	٠,	• • • • • • • • • • • • • • • • • • • •	550
HOUSEHOLD MEMBERS ONE PERSON	2.3	50	51	243	4.78	2.1	47	48	228
2 TO 4 PEOPLE	5.8	70	71	349	4.89	5.5	71	72	353
5 OR MORE PEOPLE	.9	94	96	475	4.95	.8	98	100	497



#### **Average Natural Gas Consumption** and Expenditures

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)			AVG.   EXPEND-   ITURES   PER  HOUSEHOLD  (DOLLARS)	AVG.   PRICE   (DOLLARS   PER   MILLION   BTU) 	   HUMBER   OF   HOUSE-   HOLDS  (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
AIN HEATING FUEL									
NATURAL GAS	8.4	68	69	337	4.86	8.4	68	69	337
ELECTRICITY	.4	67	68	328	4.83	-	-	-	-
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	-	-	-	-
LPG	Q	Q	Q.	Q	Q	-	-	_	_
WOOD	.2	56	57	330	5.80	-	-	-	-
OTHER OR NONE	Q	Q	Q	Q	Q	-	-	-	-
OT WATER FUEL									
NATURAL GAS	8.6	67	69	329	4.80	7.9	68	69	330
ELECTRICITY	.4	70	72	460	6.41	.4	72	73	467
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	Q	Q	Q	Q	Q	Q	Q	Q	Q
AIN HEATING EQUIPMENT USING ATURAL GAS									
CENTRAL WARM AIR FURNACE	4.0	75	77	383	5.00	4.0	75	77	383
STEAM OR HOT-WATER SYSTEM FLOOR, WALL OR PIPELESS	.3	81	83	295	3.55	.3	81	83	295
FURNACE	3.6	60	61	295	4.80	3.6	60	61	295
ROOM HEATER	.5	57	58	284	4.88	.5	57	58	284
NONE/OTHER	.7	62	63	320	5.07	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	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	1.0	62	64	383	6.03	.9	63	65	388
<2,000 CDD AND <4,800 HDD	7.9	67	69	329	4.80	7.3	67	69	329
>2,000 CDD AND <4,000 HDD	Q	Q	Q	G	Q	Q	Ġ.	Q	Q

<sup>&</sup>quot;-" = DATA NOT APPLICABLE.

<sup>&</sup>quot;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 1982 RESIDENTIAL ENERGY CONSUMPTION SURVEY.



Table 5. U.S.
Residential Electricity
Consumption and
Expenditures—April
1982 Through March
1983, United States

	; p== -	ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	CONSUMED PER HOUSEHOLD THOUSENDLD	CONSUMED   PER	PER HOUSEHOLD	AVG. PRICE COLLARS PER MILLION BTU	OF HOUSE-		AVS. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	PER
TOTAL MOMETIME DO	07.3			F70	30.00	17.6	*/ 0		073
TOTAL HOUSEHOLDS	83.7	8.5	29	578	19.98	13.4	16.0	55	931
AREA TYPE									
METROPOLITAN	63.2	8.2	28	580	20.65	10.5	15.7	54	938
CENTRAL CITY	29.4	7.5	25	526	20.67	4.5	15.5	53	860
OUTSIDE CENTRAL CITY	33.8	8.9	30	628	20.63	5.9	15.9	54	998
NON-METROPOLITAN	20.5	9.2	32	571	18.13	2.9	17.0	58	905
ELECTRICITY PAID BY HOUSEHOLD						***		55	932
YES	76.8	8.6	29	579	19.84	11.9	16.2	49	923
NO	6.9	7.6	26	564	21.69	1.5	14.4	77	763
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	3.7	8.7	30	561	18.93	.9	13.7	47	810
SINGLE FAMILY	57.6	9.4	32	627	19.51	7.5	18.7	64	1055
2 OR MORE UNITS	22.4	6.0	21	455	22.10	4.9	12.2	42	764
NUMBER OF COOMS									
1 TO 3	10.8	5.6	19	412	21.67	2.8	11.3	38	730
4 TO 5	36.6	7.4	25	500	19.90	5.9	14.2	48	834
6 OR MORE	36.3	10.5	36	707	19.77	4.6	21.2	72	1178
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	30.2	6.2	21	435	20.54	5.7	12.6	43	761
1,000 TO 1,999 2,000 OR MORE	35.6 17.9	9.1 11.0	31 38	61 <b>0</b> 758	19.55 20.15	5.8 1.9	16.9 23.4	58 80	977 1309
by our off the first the state of the state	17.7	41.0	30	150	20.13	2.,	65.4	00	1307
YEAR HOUSE BUILT									
BEFORE 1950	30.6	6.3	22	462	21.35	1.1	14.8	50	812
1950 TO 1974	40.2 12.9	9.1 11.6	31 40	618 728	19.92 18.35	6.6 5.7	16.1 16.1	55 55	963 917
	10.7	11.0	40	720	10.33	3.,	20.2	23	,1,
OHN/RENT									
OWN	53.9	9.6	33	647	19.76	7.8	18.1	62	1036
RENT	29.8	6.5	22	454	20.57	5.6	13.1	45	786
1981 FAMILY INCOME									
LESS THAN \$10,000	26.3	6.4	22	439	20.24	3.9	13.0	44	767
\$10,000 TO \$19,999	24.8	8.0	27	545	19.95	3.9	14.8	51	889
\$20,000 TD \$34,999 \$35,000 OR MORE	12.4 20.2	9.5 11.2	33 38	625 771	19.20 20.21	2.1 3.6	16.3 20.3	56 69	881 1184
VJJ)000 GR TRACETTETT	20.2	11.5	30	772		3.0	2013	0,	1101
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE	12.1	6.4	22	447	20.35	1:4	13.7	47	773
TOTAL BELOW 125 PERCENT OF POVERTY LINE	17.4	6.6	22	455	20.35	2.1	13.4	46	772
	•••	0	le le	,,,,			··	14	***
AGE OF HOUSEHOLD HEAD					10		3		
UNDER 35 YEARS	26.2	8.2	28	549	19.52	5.3	15.3	52	895
35 TO 59 YEARS	34.0	9.7	33	663	20.03	4.7	18.4	63 47	1040
60 YEARS AND OVER	23.6	7.0	24	488	20.47	3.4	13.8	47	838
HOUSEHOLD MEMBERS									
ONE PERSON	19.2	5.3	18	377	20.76	3.3	11.1	38	694
2 TO 4 PEOPLE	54.1	9.0	31	610	19.78	8.7	17.0	58 77	983
5 OR MORE PEOPLE	10.4	11.5	39	787	20.10	1.4	21.4	73	1179



Table 5. (Continued)
United States

	! !	YMA	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BIU)	AVG. EXPEND- ITURES PER HOUSEHOLD (ODILARS)	AVG. PRICE CDOLLARS PER HILLION BTU	   NUMBER   OF   HOUSE-   HOLOS  (MILLIONS)		AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD HOUSEHOLD BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
MAIN HEATING FUEL									
NATURAL GAS	47.5	6.6	23	478	21.14	-	_	_	-
ELECTRICITY	13.4	16.0	55	931	17.06	13.4	16.0	55	931
FUEL OIL OR KERDSENE	12.0	7.0	24	568	23.76	-		-	-
LPG	3.8	8.0	27	550	20.25	-	-	-	_
WOOD	5,6	10.0	34	627	18.30	-	-	-	-
DTHER OR NONE	1.5	7.7	26	584	22.27	-	-	-	-
HOT WATER FUEL									
NATURAL GAS	47.1	6.4	22	476	21.76	1,3	11.1	38	792
ELECTRICITY	26.6	13.2	45	785	17.48	11.9	16.5	56	943
FUEL OIL OR KEROSENE	5.7	4.9	17	508	30.24	Q	Q	Q	Q
OTHER	4.4	6.8	23	508	21.76	.2	17.8	61	1202
ALL ELECTRIC HOME									
YES	11.6	16.8	57	954	16.67	11.6	16.8	57	954
NO	72.2	7.2	24	518	21.22	1.8	11.0	37	781
MAIN HEATING EQUIPMENT									
USING ELECTRICITY CENTRAL WARM AIR	3.5	18.2	62	1032	16.64	3.5	18.2	62	1032
HEAT PUMP	3.6	17.1	58	995	17.07	3.6	17.1	58	995
WALL UNITS	5.0	14.8	50	867	17.20	5.0	14.8	50	867
PIPELESS FURNACE	9.0	9	ã	ø,	Q	Q	Q.	ą	Ď,
PORTABLE HEATERS	.8	10.7	36	648	17.77	.8	10.7	36	648
OTHER	.3	12.4	42	756	17.83	.3	12.4	42	756
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD)									
LONG-TERM AVERAGE <2,000 CDD AND >7,000 HDD	8.5	7.5	25	485	19.04	.6	16.5	56	979
<2,000 CDD AND 5,500 TO 7,000 HDD	21.0	7.6	26	542	20.99	2.4	17.3	59	973
<2,000 CDD AND			_						
4,000 TO 5,499 HDD	22.1	8.3	28	584	20.74	3.1	17.0	58	879
<2,000 CDD AND <4,000 HDD	19.6	8.3	28	523	18.38	3.2	15.5	53	881
>2,000 CDD AND <4,000 HDD	12.6	11.3	39	778	20.12	4.1	14.8	50	<b>9</b> 78



Table 5. (Continued)
Census Region:
Northeast

	ANY ELECTRICITY USED						ELECTRICITY USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	HOUSE-	PER HOUSEHOLD	CONSUMED PER HOUSEHOLD	PER	AVG. PRICE (DOLLARS PER MILLION BTU)	HOUSE-		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	PER		
TOTAL HOUSEHOLDS	18.0	6.2	21	582	27.46	1.3	13.9	47	1082		
	10.0	0.2	21	502	27.40	1.3	13.7	77	1002		
AREA TYPE METROPOLITAN	15.5	6.1	21	591	28.63	1.2	14.2	48	1118		
CENTRAL CITY	6.4	4.5	15	515	33.91	.2	13.4	46	943		
OUTSIDE CENTRAL CITY	9.1	7.2	25	645	26.32	.9	14.4	49	1161		
NON-METROPOLITAN	2.4	7.2	25	523	21.25	Q	Q	Q	Q		
ELECTRICITY PAID BY HOUSEHOLD											
YES	15.8	6.4	22	586	26.97	1.1	14.3	49	1116		
Ю	2.2	5.1	17	554	31.79	.2	11.8	40	922		
TYPE OF HOUSING STRUCTURE											
MOBILE HOME	.4	6.7	23	461	20.21	Q	Q	Q	Q		
SINGLE FAMILY	10.6	7.5	25	658	25.85	.7	16.7	57	1290		
2 OR MORF UNITS	7.0	4.3	15	473	32.30	.6	10.6	36	839		
NUMBER OF ROOMS											
1 TO 3	2.8	3.9	13	410	31.02	.4	10.8	37	79 <b>0</b>		
4 TO 5	6.3	5.4	19	517	27.88	.5	12.9	44	1064		
6 OR MORE	8.8	7.5	26	683	26.66	.4	19.2	66	1469		
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	6.0	4.2	14	430	29.98	.6	10.6	36	848		
1,000 TO 1,999	7.1	6.5	22	598	26.79	.5	16.0	55	1243		
2,000 OR MORE	4.8	8.3	28	750	26.63	.2	18.9	64	1418		
YEAR HOUSE BUILT											
BEFORE 1950	9.4	5.1	17	493	28.30	.2	12.0	41	983		
1950 TO 1974	7.1	7.0	24	655	27.57	.7	13.5	46	1099		
AFTER 1974	1.5	9.5	32	787	24.26	.5	15.2	52	1098		
OWN/RENT											
OWN	11.3	7.2	24	654	26.80	0.5	17.5	60	1388		
RENT	6.7	4.6	16	461	29.16	.8	11.8	40	899		
1981 FAMILY INCOME											
LESS THAN \$10,000	5.3	4.6	16	437	27.85	.5	12.6	43	956		
\$10,000 TO \$19,999	5.4	5.9	20	538	26.89	.4	14.0	48	1093		
\$20,000 TO \$34,999	2.6	6.4	22	607	27.74	Q_	Q A	Ø.	Q		
\$35,000 OR MORE	4.6	8.4	29	789	27.56	.3	17.2	59	1360		
TOTAL BELOW 100 PERCENT											
OF POVERTY LINE	2.3	4.8	16	471	28.71	Q	Q	Q	Q		
TOTAL BELOW 125 PERCENT OF POVERTY LINE	3.6	4.7	16	457	28.60	.2	13.1	45	1005		
				.= -							
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	4.8	6.4	22	582	26.76	.6	13.6	46	1068		
35 TO 59 YEARS	7.5	7.2	24	676	27.67	.3	16.6	57	1319		
60 YEARS AND OVER	5.6	4.8	16	456	27.82	.4	12.5	43	929		
				-= -							
HOUSEHOLD MEMBERS			13	368	27.59	.5	10.9	37	797		
OUE DEBEON											
ONE PERSON	4.4 11.2	3.9 6.5	22	612	27.41	.7	15.6	53	1269		



Table 5. (Continued) Census Region: Northeast

	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   (DOLLARS   PER   MILLION   BTU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (THOUSAND KWH)		AVG. EXPEND- I TURES PER HOUSEROLE COOLLARS
IAIN HEATING FUEL									
NATURAL GAS	7.5	5.1	17	513	29.48	-	_	_	-
ELECTRICITY	1.3	13.9	47	1082	22.81	1.3	13.9	47	1082
FUEL OIL OR KEROSENE	7.6	5.7	19	556	28.80	-			1001
LPG	.2	3.9	13	320	24.34	-	_	-	_
WOOD	1.0	8.9	30	690	22.78			_	_
OTHER OR NONE	.3	7.0	24	591	24.90	-	-	_	
OTTER OR HORE	• • •	7.0		371	24.70				
OT WATER FUEL									
NATURAL GAS	8.7	5.0	17	499	29.47	Q	Q	Q	G
ELECTRICITY	3.7	11.3	38	900	23.39	1.3	14.1	48	1097
FUEL OIL OR KEROSENE	5.0	4.7	16	502	31.59	Q	Q	Q	Q
OTHER	.6	6.3	21	498	23.26	Q	Q	Q	Q
LL ELECTRIC HOME									
YES	1.2	14.6	50	1134	22.84	1.2	14.6	50	1134
но	16.8	5.6	19	543	28.29	Q	G	Q	Ġ
AIN HEATING EQUIPMENT									
SING ELECTRICITY	_	_	_	_	_	_	_	_	_
CENTRAL HARM AIR	Q	Q	Q	Q	Q	Q	Q	Q	ଜ
HEAT PUMP	.2	19.0	65	1345	20.70	. 2	19.0	65	1345
WALL UNITS	.9	14.0	48	1122	23.51	<u>.</u> 9	14.0	48	1122
PIPELESS FURNACE	Q	Q	Q	Ģ	Q	Q	Q	Q	G
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 <2,000 CDD AND	1.6	7.2	24	540	22.11	Q	Q	Q	Q
5,500 TO 7,000 HDD	8.0	6.9	24	569	24.21	.8	13.0	44	1001
4,000 TO 5,499 HDD	8.3	5.4	18	603	32.87	.4	16.7	57	1365
T,000 10 3) T77 HDU	0.3	9.7	10	003					1303
<2,000 CDD AND <4,000 HDD		_	_			_	-	_	



Table 5. (Continued)
Census Division: New
England

	i.					1			
		ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	CONSUMED PER HOUSEHOLD (MILLION	PER	AVG. PRICE COLLARS PER MILLION BTU	HOUSE-		I PER IHOUSEHOLD	PER
TOTAL HOUSEHOLDS	4.2	6.6	23	562	24.99	0.3	12.4	42	991
AREA TYPE						-			
METROPOLITAN	3.3	6.6	23	575	25.54	.3	12.3	42 Q	979
CENTRAL CITY OUTSIDE CENTRAL CITY	1.3 2.0	5.5 7.3	19 25	492	26.16 25.25	Q .2	Q 11.5	4 39	Q 909
NON-METROPOLITAN	.9	6.6	22	627 518	23.03	q <sup>°</sup>	Q	Q Q	Q
ELECTRICITY PAID BY HOUSEHOLD									
YES	3.8	6.4	22	550	24.98	Q	Q	Q	Q
NO	.4	7.9	27	673	25.03	.2	13.8	47	1102
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	Q	Q	Q	Q	Q	Q	Q	Q	Q
SINGLE FAMILY	2.3	7.4	25	629	24.89	Q	Q	Q	Q
2 OR MORE UNITS	1.8	5.5	19	474	25.44	.3	12.2	42	972
NUMBER OF ROOMS									
1 TO 3	.5	5.6	19	480	24.95	. 2	11.2	38	891
4 TO 5	1.7	5.9	20	502	25.03	Q	Q	Q	Q
6 OR MORE	2.0	7.4	25	632	24.97	Q	Q	Q	Q
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	1.2	5.4	18	457	24.92	. 2	10.9	37	874
1,000 TO 1,999	1.9	6.3	22	541	25.15	Q	Q	Q	Q
2,000 OR MORE	1.1	8.5	29	719	24.83	Q	Q	Q	Q
YEAR HOUSE BUILT					45 47	_	•	_	_
BEFORE 1950	2.4 1.5	5.6 7.6	19 26	477 639	25.07 24.77	Q . 2	Q 10.1	Q 34	Q 805
AFTER 1974	.3	9.6	33	838	25.45	Q Q	Q	9 Q	ď onz
e e e e e e e e e e e e e e e e e e e						•	7	•	-
OWN/RENT OWN	2.7	7.1	24	605	24.96	Q	Q	0	Q
RENT	1.5	5.6	19	483	25.07	0.3	12.2	42	972
1981 FAMILY INCOME									
LESS THAN \$10,000	1.0	4.8	16	423	25.78	Q	Q	Q	Q
\$10,000 TO \$19,999	1.2	6.3	22	530	24.51	Q	Q	Q	Q
\$20,000 TO \$34,999	.6	7.0	24	587	24.58	Q	Q	Q	Q
\$35,000 OR MORE	1.4	7.9	27	680	25.14	Q	Q	Q	Q
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE	.3	6.4	22	522	23.94	Q	Q	Q	Q
TOTAL BELOW 125 PERCENT									
OF POVERTY LINE	-6	6.0	20	503	24.52	Q	Q	Q	Q
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	1.2	6.3	21	526	24.52	Q	Q	Q	Q
35 TO 59 YEARS	1.7	7.9	27	672	24.79	Q	Q	Q	q
60 YEARS AND OVER	1.3	5.1	17	452	25.97	Q	Q	Q	Q
HOUSEHOLD MEMBERS	v			_		_	_	_	
ONE PERSON	.8	4.5	15	392	25.76	Q	, Q	Q	Q
2 TO 4 PEOPLE	2.9	6.5	22	559	25.10	.2	11.8	40	959
5 OR MORE PEOPLE	.5	10.4	36	857	24.06	Q	Q	Q	Q



Table 5. (Continued) Census Division: New England

	I	ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER HOUSE- HOLDS (MILLIONS)			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- ITURES PER HOUSEHOLD (DOLLARS)
MATH DELTING FUEL									
MAIN HEATING FUEL NATURAL GAS	1.2	5.1	17	470	26.98	_			
ELECTRICITY	.3	12.4	42	991	23.43	.3	12.4	42	991
FUEL OIL OR KEROSENE	2.1	6.2	21	531	25.27		12.4	42	77.1
LPG	9	0.2	9	231	Q Q	-	_		
WOOD	.5	8.6	29	675	22.90	~	-		
OTHER OR NONE	Q.	Q	ā´	Q.	q	_	_	-	
	·	•	,	•					
HOT WATER FUEL NATURAL GAS	1.6	5.3	18	484	26.67	q	Q	0	Q
ELECTRICITY	1.0	10.3	35	823	23.31	0.2	13.1	45	1045
FUEL OIL OR KEROSENE	1.4	5.6	19	485	25.51	Q	- Q	ġ.	G
OTHER	.2	6.2	21	501	23.71	q	Q	à	à
ALL ELECTRIC HOME						_			2010
YES	. 2	13.3	46	1060	23,29	<u>.</u> 2	13.3	46	3060
Ю	4.0	6.2	21	533	25.20	Q	Q	G	Q
MAIN HEATING EQUIPMENT									
USING ELECTRICITY	_		-		_		•	Q	Q
CENTRAL HARM AIR	Q	Q	Q	Q Q	Q Q	Q	Q Q	Ö	ସ ପ
HEAT PUMP	Q -2	Q 11.2	Q 38	896	23.53	Q .2	11.2	38	896
WALL UNITS PIPELESS FURNACE	o. C	11.2 Q	38 Q	Q Q	23.53 Q	Q.	Q Q	Q	G G
PORTABLE HEATERS	ų Q	Q.	9	Q	Q Q	Q	Q	q	Q
OTHER	Q.	o o	g g	Q Q	q q	q q	q.	õ	ฉ
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	6.7	23	527	23.19	Q	Q	Q	Q
5,500 TO 7,000 HDD	3.1	6.6	22	575	25.62	. 3	12.3	42	983
4,000 TO 5,499 HDD	-	-	_	-	-	-	-	-	
<2,000 CDD AND <4,000 HDD	_	-	-	-	-	-	-	-	-
>2,000 CDD AND <4,000 HDD	_	_		_	-	-	_	-	



Table 5. (Continued)
Census Division:
Middle Atlantic

		ANY	ELECTRICITY	ÜSED		ELECTRICITY USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	PER HOUSEHOLD	AVG. PRICE COOLLARS PER MILLION BTU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)	PER HOUSEHOLD	CONSUMED PER HOUSEHOLD	AVG. EXPEND- ITURES PER HOUSEHOLD ((DOLLARS)	
TOTAL HOUSEHOLDS	13.7	6.1	21	588	28.28	1.0	14.3	49	1109	
AREA TYPE	***	F 0	46	<b>F</b> 0/	00 55		14 G	51	1163	
METROPOLITAN	12.2 5.1	5.9 4.2	20 14	596 521	29.55 36.42	.9 Q	14.8 Q	Q 91	Q 1103	
CENTRAL CITY	7.1	7.2	24	650	26.63	.8	15.1	51	1222	
OUTSIDE CENTRAL CITY	1.5	7.6	26	526	20.30	Ģ	Q	Q	Q	
ELECTRICITY PAID BY HOUSEHOLD										
	12.0	6.3	22	597	27.61	.9	14.9	51	1153	
YES	1,8	4.4	15	525	34.71	o ์	Q	ฉี	Q	
TYPE OF HOUSING STRUCTURE	,									
MOBILE HOME	. 3	6.4	22	428	19.50	Q	Q	Q	Q	
SINGLE FAMILY	8.3	7.5	25	666	26.12	7	16.9	58	1301	
2 OR MORE UNITS	5.2	3.9	13	473	35.54	.3	9.4	32	741	
NUMBER OF ROOMS										
1 TO 3	2.3	3.5	12	396	33.01	.3	10.6	36	738	
4 TO 5	4.6	5.3	18	523	29.06	.4	12.8	44	1065	
6 OR MORE	6.8	7.5	26	697	27.15	.3	19.4	66	1479	
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	4.8	3.9	13	423	31.73	-4	10.5	36	832	
1,000 TO 1,999	5.2 3.7	6.6 8.2	23 28	618 759	27.36 27.17	.4 .2	15.7 18.9	54 64	1214 1418	
	2.1	0.2		,,,	27.21		10.7	V1	2120	
YEAR HOUSE BUILT						_	_	Q	Q	
BEFORE 1950	7.0	4.9 6.8	17 23	499 660	29.55 28.40	Q .5	Q 14.7	50	1197	
1950 TO 1974	5.6 1.2	9.5	32	773	23.93	.4	15.0	51	1064	
OWN/RENT OWN	8.5	7.2	24	670	27.39	0.5	17.8	61	1412	
RENT	5.2	4.3	15	454	30.67	.6	11.6	39	865	
- Table 43										
1981 PAMILI INCUME	4.4	4.5	16	440	28.34	.4	12.2	42	912	
LESS THAN \$10,000 \$10,000 TO \$19,999	4.2	5.7	20	540	27.67	.3	14.9	51	1155	
\$20,000 TO \$34,999	2.0	6.2	21	612	28.77	ฉู้	Q´	Q	q	
\$35,000 OR MORE	3.2	8.6	29	837	28.53	.3	17.4	59	1373	
TOTAL BELOW 100 PERCENT OF POVERTY LINE	2.0	4.6	16	464	29.57	Q	Q	Q	Q	
TOTAL BELOW 125 PERCENT OF POVERTY LINE	3.0	4.4	15	449	29.64	.2	12.4	42	921	
	3.0	7.7	4.7	***						
AGE OF HOUSEHOLD HEAD				/ **	07 27	-	17 7	47	1082	
UNDER 35 YEARS	3.5	6.4	22	601	27.53	.5	13.7 17.5	47 60	1386	
35 TO 59 YEARS	5.8 4.4	6.9 4.7	24 16	678 458	28.63 28.41	.2	12.9	44	942	
HOUSEHOLD MEMBERS ONE PERSON	3.6	3.8	13	362	28.07	.4	10.4	36	739	
				630	28.21		16.7	57	1362	
2 TO 4 PEOPLE	8.3	6.5	22	030	20.27	.6	70 + 1	٠,	1000	



Table 5. (Continued)
Census Division: Middle
Atlantic

	i !	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 (THOUSEHOLD KWH)		AVG.   AVG.   EXPEND-   ITURES   PER  HOUSEHOLD  (DOLLARS)	AVG. PRICE COLLARS PER HILLION BTU	HUMBER OF HOUSE- HOLDS (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (THOUSAND KWH)		AVG. EXPEND- ITURES PER HOUSEHOLD
IAIN HEATING FUEL									
NATURAL GAS	6.3	5.1	17	521	29.95	•	_	_	_
ELECTRICITY	1.0	14.3	49	1109	22.66	1.0	14.3	49	1109
FUEL OIL OR KEROSENE	5.4	5.5	19	566	30.35			21	2.07
LPG	.2	3.7	13	309	24.65	_	_	_	_
WOOD	.5	9.1	31	705	22.67	~	_	_	-
OTHER OR NONE	.3	6.8	23	584	25.27	_	_	_	
OTHER OR HORESTELLIST	.,	0.0		304	C3, C1				
NOT WATER FUEL									
NATURAL GAS	7.1	4.9	17	502	30.15	Q	Q	Q	Q
ELECTRICITY	2.7	11.6	40	926	23.41	1.0	14.3	49	1109
FUEL OIL OR KEROSENE	3.6	4.3	15	509	34.75	Q	Q	Q	Q
OTHER	.3	6.3	22	496	22.96	Q	Q	Q	Q
LL ELECTRIC HOME									
YES	.9	14.9	51	1153	22.74	.9	14.9	51	1153
NO	12.8	5.5	19	547	29.39	Q	Q	Q	Q
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	G	Q	Q
WALL UNITS	.7	15.0	51	1201	23.50	.7	15.0	51	1201
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 <2,000 CDD AND	.5	8.2	28	566	20.31	Q	Q	Q	ପ୍
5,500 TO 7,000 HDD	4.9	7.1	24	566	23.37	.5	13.4	46	1010
4,000 TO 5,499 HDD	8.3	5.4	18	603	32.87	.4	16.7	57	1365
<2,000 CDD AND <4,000 HDD		-	-		-			-	
>2,000 CDD AND <4,000 HDD	_			_		_	_	-	_



Table 5. (Continued)
Census Region: North
Central

						<del>,</del>			
		ANY	ELECTRICITY	USED		   ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSENOLD CHARACTERISTICS	OF HOUSE-	PER HOUSEHOLD	CONSUMED	PER HOUSEHOLD	,	HOUSE-		AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	
TOTAL HOUSEHOLDS	21.3	7.9	27	527	19.55	2.1	19.0	65	1026
AREA TYPE									
METROPOLITAN	14.7	7.8	26	527	19.90	1.4	18.9	64	1015
CENTRAL CITY	7.2	7.6	26	499	19.29	.8	21.5	73	1055
OUTSIDE CENTRAL CITY	7.6	7.9	27	554	20.46	.7	15.9	54	969
NON-METROPOLITAN	6.6	8.2	85	527	18.79	.7	19.3	66	1048
ELECTRICITY PAID BY HOUSEHOLD									
YES	20.0	7.9	27	523	19.54	1.8	19.4	66	1007
NO	1.3	8.7	30	586	19.66	.3	17.0	58	1120
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	.7	8.9	30	612	20.12	Q	Q	Q	Q
SINGLE FAMILY	15.0	8.8	30	580	19.21	1.2	22.7	77	1136
2 OR MORE UNITS	5.6	5.3	18	376	20.94	.8	13.1	45	796
IUMBER OF ROOMS									
1 TO 3	2.4	5.3	18	377	20.85	.4	13.4	46	902
4 TO 5	9.6	6.9	23	457	19.54	.8	16.7	57	892
6 OR MORE	9.3	9.7	33	639	19.37	.8	24.5	83	1229
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	6.8	5.4	19	372	20.08	. 9	14.7	50	858
1,000 TO 1,999	8.1	8.4	29	552	19.31	.7	19.3	66	1018
2,000 OR MORE	6.3	10.0	34	663	19.49	.5	26.4	90	1337
EAR HOUSE BUILT									
BEFORE 1950	9.3	6.3	21	439	20.58	Q	Q	Q	Q
1950 TO 1974	9.2	8.4	29	569	19.75	1.2	17.2	59	994
AFTER 1974	2.9	11.5	39	680	17.27	.8	21.6	74	1072
OWN	14.3	8.8	30	585	19.39	1.2	21.7	74	1148
RENT	7.0	6.0	20	409	20.02	.9	15.3	52	856
1981 FAMILY INCOME	6.8	5.8	20	396	20.19	.5	16.7	57	970
LESS THAN \$10,000 \$10,000 TO \$19,999	6.8 6.7	7.6	2u 26	507	19.52	.7	17.7	60	1009
\$20,000 TO \$34,999	2.9	9.8	33	632	18.93	.4	19.2	66	1025
\$35,000 OR MORE	4.9	10.1	35	673	19.44	.4	24.0	82	1125
TOTAL PELON TAN DEPORT									
TOTAL BELOW 100 PERCENT OF POVERTY LINE	2.8	5.4	18	392	21.20	Q	Q	Q	Q
OTAL BELOW 125 PERCENT	۵.0	9.4	10	376		ч.	4	٦	٦.
F POVERTY LINE	4.0	5.8	20	408	20.73	.2	18.4	63	1040
CE OF HOUSEHOLD HEAD									
GE OF HOUSEHOLD HEAD UNDER 35 YEARS	6.5	7.6	26	496	19.03	.8	17.3	59	943
35 TO 59 YEARS	8.8	9.1	31	605	19.54	.8	22.7	78	1155
60 YEARS AND OVER	6.0	6.5	22	446	20.23	.5	16.3	56	971
HOUSEHOLD MEMBERS									
ONE PERSON	4.7	4.5	15	317	20.48	.4	11.3	39	705
2 TO 4 PEOPLE	13.6	8.4	29	551	19.33	1.4	20.2	69	1080
5 OR MORE PEOPLE	3.0	11.1	38	748	19.68	.3	23.4	80	1195
and the second of the second o									



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)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE (BOLLARS PER MILLION BTU)	   MUMBER   OF   HOUSE-   HOLDS  (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (THOUSAND KWH)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
MAIN HEATING FUEL									
NATURAL GAS	15.5	6.1	21	439	21.21		-	-	3001
FUEL OIL OR KEROSENE	2.1	19.0 9.2	65 32	1026	15.81 19.30	2.1	19.0	65	1026
LPG	1.0	9.2 8.7	32 30	608 599	20.19	_	-	-	_
WOOD	1.1	9.9	34	635	18.75	_	-	_	_
OTHER OR NONE	Q	9.9	9	Q .	10.75 Q	_	-	-	_
	ų	4	4	4	ч	_	•	_	_
HOT WATER FUEL					41 57				77.0
NATURAL GAS	14.7	6.0	20	440	21.57	0.2	9.5	33	769
ELECTRICITY	5.5	13.1	45	763	17.11	1.8	20.1	69	1057
FUEL OIL OR KEROSENE	, Q	Q 8.3	Q 28	Q 547	Q 19.34	G G	Q Q	Q Q	Q Q
OTHER	1.0	0.3	20	541	19.34	ч	Q.	ч	ď
ALL ELECTRIC HOME									
YES	1.8	20.1	69	1057	15.40	1.8	20.1	69	1057
NO	19.5	6.7	23	477	20.72	.3	11.1	38	800
MAIN HEATING EQUIPMENT									
USING ELECTRICITY									
CENTRAL WARM AIR	.6	21.0	72	1113	15.57	.6	21.0	72	1113
HEAT PUMP	.4	25.6	87	1092	12.52	. 4	25.6	87	1092
WALL UNITS	1.0	16.2	55	979	17.73	1.0	16.2	55	979
PIPELESS FURNACE	Q	Q	Q	Q	ପ	Q	Q	Q	Q
PORTABLE HEATERS	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	Q	Q	Q	Q	Q	Ø	Q	ଷ୍	Q
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									•
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	5.5	7.7	26	492	18.62	.3	19.2	65	1128
5,500 TO 7,000 HDD	11.5	7.7	26	529	20.22	1.3	19.1	65	1018
<2,000 CDD AND									
4,000 TO 5,499 HDD	4.3	8.8	30	568	19.03	.4	18.7	64	968
<2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	ବ	Q	Q
>2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	<b>b-</b>



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

ALE # - AV. BTY

	·	LLIV	FIERTRYATTY	. UCED	اسباللند مسالسيالسديد ريسيويسرسي	l ELECTRY	CITY USED A	C MATH DEAT	THE FILE
	want linguistic and the contract of the contra	INA	ELECTRICITY	USEU		ELECTRI	CITT OSED A	3 MAIN REAL	ING FOEL
HOUSEHOLD CHARACTERISTICS	OF HOUSE-	PER HOUSEHOLD	PER HOUSEHOLD	PER	PER MILLION	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)	PER HOUSEHOLD	CONSUMED PER HOUSEHOLD	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
And the second s					•••	• .			
TOTAL HOUSEHOLDS	15.0	7.6	26	514	19.91	1.6	18.4	63	1003
AREA TYPE		<b>-</b> ,		F10	00.60	1.0	18.5	63	988
METROPOLITAN	11.4 5.4	7.4 7.6	25 26	518 501	20.48 19.45	1.2 .7	21.8	74	1063
OUTSIDE CENTRAL CITY	6.0	7.3	25	533	21.44	.5	13.5	46	875
NON-METROPOLITAN	3.6	8.0	27	499	18.22	.5	18.4	63	1045
ELECTRICIT. PAID BY HOUSEHOLD									
YES	14.1	7.5	26	507	19.89	1.3	18.8	64	972
NO	.9	8.9	30	610	20.15	.3	16.7	57	1143
TYPE OF HOUSING STRUCTURE					10 / 5	_			_
MOBILE HOME	.4	10.0	34	666 570	19.45 19.46	Q .9	Q 22.3	<b>q</b> 76	Q 1090
SINGLE FAMILY	10.1 4.5	8.6 5.0	29 17	372	21.74	.6	12.8	44	812
NUMBER OF ROOMS									
1 70 3	1.8	5.5	19	398	21.24	-4	13.2	45	910
4 TO 5	6.9 6.3	6.4 9.4	22 32	433 633	19.83 19.75	.6 .6	16.1 24.3	55 83	884 1184
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)		<i>"</i> A	**	7/3	20 77	.7	3 2 2	40	070
LESS THAN 999	5.0 5.6	5.2 7.7	18 26	361 519	20.31 19.64	.5	14.4 18.6	49 63	870 985
1,000 TO 1,999	4.3	10.0	34	683	19.93	.4	26.0	89	1283
YEAR HOUSE BUILT									
BEFORE 1950	6.9	6.1	21	433	20.91	Q	Q	Q	Q
1950 TO 1974	6.2	8.1	28	564	20.36	1.0	16.7	57	992
AFTER 1974	1.9	11.2	38	643	16.87	.5	21.9	75	1029
OWN/RENT					20.47			70	1770
DWN	9.6	8.6	29	577 402	19.67 20.52	0.9 .7	21.0 14.8	72 51	1110 856
RENT	5.4	5.7	20	402	20.32	.,	14.0	31	050
1981 FAMILY INCOME			••	707	00.70		17.1	58	3011
LESS THAN \$10,000 \$10,000 TO \$19,999	5.1 4.8	5.7 7.3	19 .25	393 498	20.32 20.02	.4 .6	16.7	57	995
\$20,000 TO \$34,999	1.8	9.4	32	625	19.44	.3	18.7	64	1020
\$35,000 OR MORE	3.2	9.9	34	664	19.67	.3	23.0	78	994
TOTAL BELOW 100 PERCENT OF POVERTY LINE TOTAL BELOW 125 PERCENT	2.1	5.3	. 18	395	21.75	Q	Q	Q	Q
OF POVERTY LINE	3.0	5.5	. 19	402	21.35	Q	Q	Q	Q
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	4.6	7.0	24	458	19.07	.6	16.4	56	889
35 TO 59 YEARS	6.0	8.8	30	603	20.10	.6	22.2	76	1133
60 YEARS AND OVER	4.4	6.4	22	449	20.49	.4	16.2	55	991
HOUSEHOLD MEMBERS	3.3	4.3	15	309	20.90	. 3	10.4	36	697
HOUSEHOLD MEMBERS ONE PERSON	3.3 9.4	4.3 7.9	15 27	309 531	20.90 19.57	.3 1.1	10.4 19.9	36 68	697 1058



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

	! ! !	ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	   MUMBER   OF   HOUSE-   HOLDS  (MILLIONS)		AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG.   EXPEND-   ITURES   PER   HOUSEHOLD  (DOLLARS)	AVG. PRICE (DOLLARS PER MILLION BYU)	   HUMBER   OF   HOUSE-   HOLDS  (MILLIONS)		AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD ((DOLLARS)
MAIN HEATING FUEL	10.8	5.5	19	418	22.10	_	_	_	-
NATURAL GAS	1.6	18.4	63	1003	15.95	1.6	18.4	63	1003
ELECTRICITY	1.3	9.2	31	606	19.33	-	-	_	
FUEL DIL OR KEROSENE	,5	8.1	27	556	20.22	-		-	-
MOOD	.8	9.7	33	636	19.12	-	~	-	_
OTHER OR NONE	ą̃	Q Q	Q	Q	Q	-	~	~	-
HOT WATER FUEL									
NATURAL GAS	10.1	5.5	19	423	22.63	0.2	9.8	34	812
ELECTRICITY	4.2	12.7	43	737	17.08	1.4	19.6	67	1031
FUEL OIL OR KEROSENE	Q	Q	9	, s,	17.00 Q	Q	Q	, o	Q
OTHER	.6	8.2	28	547	19.59	Q	Q	q.	Q
III FICATORO NOVE									
ALL ELECTRIC HOME	1.4	19.6	67	1031	15.44	1.4	19.6	67	1031
YES	13.6	6.3	22	460	21.34	.2	11.5	39	833
10	13.0	0.0			22131		22.2	•	
MAIN HEATING EQUIPMENT									
USING ELECTRICITY  CENTRAL WARM AIR	.3	20.6	70	1087	15.45	.3	20.6	70	1087
HEAT PUMP	.3	25.7	88	1073	12.24	.3	25.7	88	1073
WALL UNITS	.8	15.6	53	975	18.31	.8	15.6	53	975
PIPELESS FURNACE	Q Q	9	õ	Ġ.	Q Q	e e	Q	Ö	G
PORTABLE HEATERS	Ğ	Q	à	à	ā	Q	à	à	à
OTHER	Q	ā	Q	Q	Q	q	Q	Q	Ŷ
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD	3.4	7.4	25	448	17.80	.3	16.6	57	960
5,500 TD 7,000 HDD	10.2	7.7	26	535	20.34	1.3	19.0	65	1020
4,000 TO 5,499 HDD	1.5	7.0	24	518	21.67	Q	Q	Q	Q
<2,000 CDD AND <4,000 HDD	-	-	= -	-	-			_	_
>2,000 CDD AND <4,000 HDD	-	-	_	_			-	_	_



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

	<del></del>					<u> </u>		<del></del>	
	j	ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	HOUSE-	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	PER  HOUSEHOLD		HOUSE-	PER	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD ((DOLLARS)
TOTAL HOUSEHOLDS	6.3	8.7	30	560	18.80	0.5	21.0	72	1104
AREA TYPE									
METROPOLITAN	3.3	9.0	31	559	18.26	.3	20.9	71	1146
CENTRAL CITY	1.7	7.7	26	491	18.77	Q	Q	Q	Q
OUTSIDE CENTRAL CITY	1.6	10.4	36	634	17.84	.2	21.9	75	1210
NON-METROPOLITAN	3.0	8.5	29	561	19.45	.2	21.2	72	1056
ELECTRICITY PAID BY HOUSEHOLD									
YES	5.9	8.7	30	562	18.83	.4	21.3	73	1118
NO	. 4	8.4	29	528	18.39	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE	3.5								
MOBILE HOME	.3	7.0	24	520	21.78	Q	Q	Q	Q
SINGLE FAMILY	4.9	9.4	32	601	18.76	.3	23.6	81	1252
2 OR MORE UNITS	1.1	6.2	21	390	18.37	Q	Q	Q	Q
NUMBER OF ROOMS									
1 TO 3	.7	4.7	16	318	19.63	Q	Q	Q	ହ
4 TO 5	2.7	8.0 10.2	27 35	518 651	18.93 18.63	.2 .2	18.4 24.9	63 85	913 1363
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	1.8 2.5 2.0	6.0 9.8 9.8	20 34 34	399 628 621	19.52 18.72 18.51	.2 .2 Q	16.0 21.0 Q	55 72 Q	797 1100 Q
	2.0	,		002	20152	•	~	•	•
YEAR HOUSE BUILT	~ ~			,			_	_	_
BEFORE 1950	2.3 3.0	6.8 9.1	23 31	456 578	19.71	Q Q	Q Q	Q	Q
1950 TO 1974	1.0	12.3	42	754	18.63 17.99	.3	21.1	Q 72	Q 1154
	2.70	2213	,_	75.	2,	• • •	2412		****
OWN/RENT	4.0	0.7	70	600	10.07		04.0		1000
OWN	4.8 1.5	9.3 6.9	32 23	435	18.87 18.53	0.3	24.0 16.9	82 58	1282 856
1981 FAMILY INCOME LESS THAN \$10,000	1.7	6.0	21	407	19.83	Q	Q	9	G
\$10,000 TO \$19,999	1.8	8.5	29	531	18.37	. 0	ď.	Ö	Q.
\$20,000 TO \$34,999	1.1	10.4	35	643	18.15	Q.	ō.	Ğ	õ
\$35,000 OR MORE	1.7	10.6	36	690	19.02	Q	Q	Q	Q
TOTAL BELOW 100 PERCENT OF POVERTY LINE	.7	5.7	20	382	19.54	Q	Q	Q	Q
TOTAL BELOW 125 PERCENT							•	•	•
OF POVERTY LINE	1.0	6.5	22	424	19.15	Q	Q	Q	Q
AGE OF HOUSEHOLD HEAD					-				
UNDER 35 YEARS	2.0	9.6	31	585	18.96	.2	20.0	68	1100
35 TO 59 YEARS	2.8	9.7	33	608	18.44	.2	24.6	84	1235
60 YEARS AND OVER	1.6	6.6	23	440	19.52	Q	Q	Q	Q
HOUSEHOLD MEMBERS									
ONE PERSON	1.4	5.0	17	337	19.60	Q	Q	Q	Q
2 TO 4 PEOPLE	4.2 .8	9.3 12.4	32 42	598 756	18.88 17.91	.3 9	21.6 Q	74 Q	1158 Q



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

HOUSEHOLD   NUMBER   ANG.			АНҮ	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
NATURAL GAS.	CHARACTERISTICS	OF HOUSE- HOLDS	AMOUNT CONSUMED PER HOUSEHOLD (THOUSAND	AMOUNT CONSUMED PER HOUSEHOLD (MILLION	EXPEND- ITURES PER HOUSEHOLD	PRICE   (DOLLARS   PER   MILLION	OF HOUSE- HOLDS	AMOUNT CONSUMED PER HOUSEHOLD (THOUSAND	AMOUNT CONSUMED PER HOUSEHOLD (MILLION	EXPEND- ITURES PER HOUSEHOLD
NATURAL GAS.	MAIN HEATING FUEL									
FUEL OIL OR KEROSENE		4.7	7.3	25	488	19.67		-		
LPG. 5 9.3 32 641 20.17	ELECTRICITY	.5	21.0	72	1104	15.38	.5	21.0	72	1104
MOOD	FUEL OIL OR KEROSENE							-		-
OTHER OR NONE. Q Q Q Q Q Q — — — — — — — — — — — — —								-		-
HOT MATER FUEL  NATURAL GAS										-
NATURAL GAS	OTHER OR NONE	Q	Q	Q	Q	ч	-	-	-	_
NATURAL GAS	HOT WATER FIIFI									
ELECTRICITY		4.5	7.1	24	478	19.75	0	0	0	0
FUEL OIL OR KEROSENE Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	ELECTRICITY	1.3	14.4		842					
ALL ELECTRIC HOME YES	FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q
YES	OTHER	.4	8.4	29	547	19.01	Q	Q	Q	Q
YES	ALL ELECTRIC HOME									
NO		.4	21.8	74	1139	15.29	. 4	21.8	74	1139
USING ELECTRICITY  CENTRAL WARM AIR										
USING ELECTRICITY  CENTRAL MARM AIR	MAIN HEATING EQUIPMENT									
CENTRAL WARM AIR										
HEAT PUMP	CENTRAL WARM AIR	.2	21.4	73	1152	15.75	.2	21.4	73	1152
PIFELESS FURNACE	HEAT PUMP	Q	Q	Q	Q	Q				
PORTABLE HEATERS Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	WALL UNITS	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	PIPELESS FURNACE	Q	Q	Q	Q	ଦ	Q	Q	Q	Q
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE  <2,000 CDD AND >7,000 HDD 2.1 8.3 28 561 19.78 Q Q Q Q  5,500 TO 7,000 HDD 1.3 7.4 25 482 19.20 Q Q Q Q  <2,000 CDD AND  4,000 TO 5,499 HDD 2.9 9.7 33 594 18.04 .4 19.5 67 992  <2,000 CDD AND 4,000 HDD Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	PORTABLE HEATERS	Q	Q		Q	Q	Q	Q	Q	Q
AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE  <2,000 CDD AND >7,000 HDD 2.1 8.3 28 561 19.78 Q Q Q  5,500 TO 7,000 HDD 1.3 7.4 25 482 19.20 Q Q Q  <2,000 CDD AND  4,000 TO 5,499 HDD 2.9 9.7 33 594 18.04 .4 19.5 67 992  <2,000 CDD AND <4,000 HDD Q Q Q Q Q Q Q Q Q Q	OTHER	Q	Q	Q	Q	Q	Q	Q	Q	q
<pre>&lt;2,000 CDD AND &gt;7,000 HDD 2.1 8.3 28 561 19.78 Q Q Q &lt;2,000 CDD AND 5,500 TO 7,000 HDD 1.3 7.4 25 482 19.20 Q Q Q </pre> <pre>&lt;2,000 CDD AND 4,000 TO 5,499 HDD 2.9 9.7 33 594 18.04 .4 19.5 67 992 &lt;2,000 CDD AND &lt;4,000 HDD Q Q Q Q Q Q Q Q Q</pre>	AND COOLING DEGREES-DAYS (CDD)									
5,500 TO 7,000 HDD	<2,000 CDD AND >7,000 HDD	2.1	8.3	28	561	19.78	Q	Q	Q	Q
4,000 TO 5,499 HDD 2.9 9.7 33 594 18.04 .4 19.5 67 992 <2,000 CDD AND <4,000 HDD Q Q Q Q Q Q Q Q	5,500 TO 7,000 HDD	1.3	7.4	25	482	19.20	Q	Q	Q	Q
<2,000 CDD AND <4,000 HDD Q Q Q Q Q Q Q Q		2.0	0.7	77	504	30.06		30 5		500
	>2,000 CDD AND <4,000 HDD		· ·	· ·	ų.	· ·	G(	ų.	u .	uę



Table 5. (Continued) Census Region: South

		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	AVG.   PRICE   (DOLLARS   PER   MILLION   BTU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)	PER HOUSEHOLD	CONSUMED PER HOUSEHOLD	AVG.   EXPEND-   ITURES   PER  HOUSEHOLE  (DOLLARS
TOTAL HOUSEHOLDS	28.0	11.0	37	700	18.73	6.8	16.4	56	1004
AREA TYPE									
METROPOLITAN	18.6	11.2	38	736	19.30	5.0	16.4	56	1040
CENTRA' CITY	8.5	10.2	35	667	19.14	1.9	15.8	54	980
OUTSIDE CENTRAL CITY	10.1	12.0	41	794	19.41	3.1	16.7	57	1078
NON-METROPOLITAN	9.4	10.5	36	630	17.53	1.8	16.6	57	902
ELECTRICITY PAID BY HOUSEHOLD									
YES	25.7	11.0	38	704	18.69	6.2	16.5	56	1005
NO	2.3	10.1	35	662	19.18	6	16.2	55	997
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	1.8	9.4	32	597	18.71	-6	11.9	41	731
SINGLE FAMILY	20.9	11.5	39	728	18.63	4.0	18.5	63	1104
2 OR MORE UNITS	5.4	9.6	33	628	19.20	2.2	13.8	47	895
NUMBER OF ROOMS									
1 70 3	3.1	8.1	28	544	19.67	1.3	11.5	39	747
4 TO 5	12.6	9.1	31	590	18.95	2.9	14.6	50	897
6 OR MORE	12.3	13.6	46	853	18.43	2.6	20.8	71	1247
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	10.5	8.2	28	543	19.37	2.8	12.9	44	817
1,000 TO 1,999 2,000 OR MORE	13.2 4.2	11.6 15.8	40 54	734 991	18.51 18.37	3.2 .8	17.4 24.7	60 84	1057 1452
LYOU ON HORCESTEE	7.6	13.0	34	//*	10.57		C4.7	04	1476
YEAR HOUSE BUILT			0.7	F03	30.00	_	15.0		070
BEFORE 1950	7.7 15.6	8.0 11.4	27 39	521 730	19.06 18.75	.5 3.7	15.0 16.5	51	872 1027
AFTER 1974	4.7	14.3	49	896	18.36	2.6	16.6	56 57	997
		2.00	• • • • • • • • • • • • • • • • • • • •	0,0	10.50	2.0	10.0	5,	,,,
DWN/RENT									
OWN	18.5	12.1	41	764	18.50	4.2	18.1	62	1087
RENT	9.5	8.8	30	577	19.33	2.6	13.6	47	869
1981 FAMILY INCOME									
LESS THAN \$10,000	9.5	7.7	26	506	19.17	1.8	13.2	45	806
\$10,000 TO \$19,999	8.0	10.7	36	678	18.61	1.9	14.5	50	889
\$20,000 TO \$34,999	4.3	11.9	41	729	17.97	1.1	15.4	53	908
\$35,000 OR MORE	6.3	15.6	53	1002	18.89	2.0	21.7	74	1341
TOTAL BELOW 100 PERCENT				, ==					
OF POVERTY LINE	5.1	7.6	26	495	19.16	.7	15.0	51	892
TOTAL BELOW 125 PERCENT OF POVERTY LINE	6.9	7.9	27	512	18.97	1.0	14.3	49	848
				<del></del>				••	
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	8,8	10.6	36	682	10 00	2 =	15 7	EA	072
35 TO 59 YEARS	11.5	12.5	36 43	788	18.89 18.47	2.5	15.7 18.6	54 63	972 1116
60 YEARS AND OVER	7.7	9.1	31	590	19.05	1.6	14.0	48	870
IOUSEUOIn MEMBERS									
ONE PERSON	6.1	7.2	25	483	19.60	1.6	11.7	40	742
2 TO 4 PEOPLE	18.6	11.6	40	738	18.60	4.5	17.3	59	1046
5 OR MORE PEOPLE	3.3	14.1	48	890	18.48	.7	21.3	73	1321



Table 5. (Continued) Census Region: South

	! !	ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	I I NUMBER OF I HOUSE- I (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (THOUSAND KWH)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE COOLLARS PER MILLION BYU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)		AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
MAIN HEATING FUEL									
NATURAL GAS	13.3	9.1	31	600	19.36	-	_	_	-
ELECTRICITY	6.8	16.4	56	1004	17.91	6.8	16.4	56	1004
FUEL OIL OR KEROSENE	2.5	9.1	31	610	19.65	-	-	-	-
LPG	2.3	8.2	28	564	20.14	-	-	-	-
WOOD	2.6	10.5	36	639	17.88	-	-	-	-
OTHER OR NONE	.6	10.5	36	613	17.13	-	-	-	-
HOT WATER FUEL									
NATURAL GAS	12.4	8.9	30	605	19.88	0.6	14.3	49	1024
ELECTRICITY	13.2	13.7	47	827	17.73	6.2	16.5	56	995
FUEL OIL OR KEROSENE	.4	8.2	28	625	22.25	Q	Q	Q	Q
OTHER	2.0	6.4	22	477	21.91	Q	Q	Q	q
ALL ELECTRIC HOME									
YES	6.0	16.9	58	1014	17.56	6.0	16.9	58	1014
мо	22.0	9.3	32	615	19.30	.8	12.9	44	931
MAIN HEATING EQUIPMENT									
USING ELECTRICITY  CENTRAL WARM AIR	2.3	18.2	62	1110	17.88	2.3	18.2	62	1110
HEAT PUMP	2.3	16.7	57	1022	17.89	2.3	16.7	57	1022
WALL UNITS	1.6	15.9	54	974	17.95	1.6	15.9	54	974
PIPELESS FURNACE	Q	Q	Q	Q q	Q	Q	Q	Q Q	(g)
PORTABLE HEATERS	.6	10.1	35	632	18.27	.6	10.1	35	632
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 5,500 TO 7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q
<2,000 CED AND	ų	ধ	ч	પ	•	ų	ų	ч.	પ
4,000 TO 5,499 HDD	6.4	10.1	34	647	18.84	1.2	17.2	59	1042
<2,000 CDD AND <4,000 HDD	10.4	10.9	37	643	17.31	2.1	18.4	63	995
>2,000 CDD AND <4,000 HDD	11.3	11.5	39	784	19.90	3.5	15.0	51	997



Table 5. (Continued)
Census Division:
South Atlantic

	<u> </u>					1			
		ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
7 7 m m m m m m m m m m m m m m m m m m	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD HOUSEHOLD BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD IDOLLARS)	AVG. PRICE ODLLARS PER HILLION BTU)	HUMBER OF HOUSE- HOLDS (MILLIONS)	HOUSEHOLD	PER   HOUSEHOLD	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
		( KALL)	1	1	<u> </u>	<u>i                                     </u>	<u> </u>	<u> </u>	<u>i</u>
TOTAL HOUSEHOLDS	13.9	10.1	35	671	19.44	3.7	14.3	49	947
AREA TYPE									
METROPOLITAN	10.0	10.3	35	703	20.01	3.1	14.3	49	973
CENTRAL CITY	3.8	9.6	33	651	19.83	1.1	13.3	45	892
OUTSIDE CENTRAL CITY	6.2	10.7	37	735	20.11	2.0	14.8	51	1018
NON-METROPOLITAN	3.9	9.7	33	590	17.90	.6	14.1	48	810
ELECTRICITY PAID BY HOUSEHOLD									
YES	12.5	10.3	35	679	19.39	3.5	14.3	49	947
No	1.4	8.7	30	594	19.95	.2	13.6	46	941
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	1.2	8.5	29	557	19.12	.4	10.3	35	668
SINGLE FAMILY	9.8	10.7	37	708	19.31	2.0	16.6	57	1094
2 OR MORE UNITS	2.9	8.7	30	594	20.11	1.2	11.9	41	805
NUMBER OF ROOMS									
1 70 3	1.6	7.9	27	561	20.73	.8	10.9	37	75 <del>9</del>
4 TO 5	6.1	8.5	29	563	19.49	1.6	12.1	41	790
6 OR HORE	6.1	12.4	42	808	19.18	1.2	19.2	65	1268
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	5.4	7.9	27	540	20.15	1.7	11.3	39	764
1,000 TO 1,999	6.1	10.6	36	692	19.15	1.7	15.1	52	984
2,000 OR MORE	2.4	14.1	48	920	19.08	.3	25.3	86	1711
YEAR HOUSE BUILT									
BEFORE 1950	3.9	7.8	27	526	19.68	.3	14.5	49	923
1950 TO 1974	8.0	10.6	36	702	19.42	2.2	14.0	48	947
AFTER 1974	2.0	12.7	43	832	19.22	1.1	14.6	50	952
OWN/RENT									
OWN	9.0	11.2	38	735	19.21	2.3	15.9	54	1041
RENT	4.9	8.1	28	554	20.01	1.4	11.7	46	795
1981 FAMILY INCOME									
LESS THAN \$10,000	4.5	7.1	24	495	20.32	1.0	10.7	37	731
\$10,000 TO \$19,999	4.2	10.2	35	659	19.02	1.1	12.9	44	836
\$20,000 TO \$34,999	2.0	10.5	36	677	18.86	. 5	13.5	46	875
\$35,000 OR MORE	3.2	13.9	48	927	19.49	1.0	19.9	68	1337
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE	2.3	7.5	26	510	19.89	. 3	13.2	45	874
TOTAL BELOW 125 PERCENT					**	-	30 -		
OF POVERTY LINE	3.0	7.6	26	509	19.68	.5	12.5	43	819
AGE OF HOUSEHOLD HEAD				,		,	•		
UNDER 35 YEARS	4.3	9.4	32	628	19.64	1.2	13.1	45	868
35 TO 59 YEARS	5.8	11.6	40	758	19.14	1.4	16.5	56	1084
60 YEARS AND OVER	3.9	8.7	30	589	19.80	1.1	12.5	43	848
HOUSEHOLD MEMBERS									
ONE PERSON	3.4	6.9	24	479	20.38	1.0	10.0	34	670
2 TO 4 PEOPLE	9.1	10.8	37	709	19.21	2.3	15.1	52	993
5 OR MORE PEOPLE	1.4	13.3	45	885	19.49	.3	20.9	71	1448



Table 5. (Continued)
Census Division: South
Atlantic

	i !	ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	I NUMBER OF HOUSE- HOLDS		AVG. AMOUNT CONSUMED PER HOUSEHOLD		AVG. PRICE COOLLARS PER MILLION				AVG. EXPEND- ITURES PER HOUSEHOL
	(MILLIONS)   	KMH)	BTU)	(DOLLARS)	l BTU) 	(MILLIONS)	KMH) 	(MILLION   BTU)	(DOLLARS   
1AIN HEATING FUEL									
NATURAL GAS	4.6	8.1	28	529	19.19	-	-	-	-
ELECTRICITY	3.7	14.3	49	947	19.47	3.7	14.3	49	947
FUEL OIL OR KEROSENE	2.4	9.0	31	612	19.85	-	-	-	-
LPG	1.2	7.9	27	559	20.66	-	-	_	•
WOOD	1.5	9.8	33	647	19.35	-	-	-	
OTHER OR NONE	.5	10.1	34	596	17.30	-	-	-	-
HOT WATER FUEL									
NATURAL GAS	4.3	7.7	26	511	19.44	0.2	11.7	40	806
ELECTRICITY	8.2	12.0	41	784	19.11	3.4	14.2	48	940
FUEL OIL OR KEROSENE	. 4	8.2	28	625	22.25	Q	Q	Q	Q
OTHER	1.1	5.9	20	464	23.06	Q	Q	Q	Q
ALL ELECTRIC HOME									
YES	3.2	14.7	50	966	19.29	3.2	14.7	50	966
NO	10.7	8.7	30	582	19.52	.4	11.0	38	799
MAIN HEATING EQUIPMENT									
CENTRAL WARM AIR	.8	15.3	52	981	18.83	.8	15.3	52	981
HEAT PUMP	1.5	14.3	49	968	19.84	1.5	14.3	49	968
WALL UNITS	.9	15.7	54	1025	19.15	.9	15.7	54	1025
PIPELESS FURNACE	ġ´	Q.	Ġ.	Q	Q	Q	Q	Q .	Q
PORTABLE HEATERS	.4	8.4	29	604	21.06	.4	8.4	29	694
OTHER	q	q	Q	Q	Q	q	Q	ą´	IQ.
HEATING DEGREES-DAYS (HDD) NHD COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	-	•	-	-	-	-	-	-	
5,500 TO 7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	6
4,000 TO 5,499 HDD	5.1	9.6	33	642	19.61	.7	16.8	57	1087
<2,000 CDD AND <4,000 HDD	5.0	9.4	32	596	18.55	.7	14.9	51	903
>2,000 CDD AND <4,000 HDD	3.8	11.7	40	809	20.19	2.3	13.3	45	915



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

	<u> </u>								
19 Mg 1 A Sec. (1)		ANY	ELECTRICITY	USED		   ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	OF HOUSE-	PER		PER	AVG. PRICE COLLARS PER MILLION	HOUSE-	AVG. AMOUNT CONSUMED PER HOUSEHOLD	CONSUMED PER	AVG. EXPEND- ITURES PER
the state of the s	(MILLIONS)			(DOLLARS)		(MILLIONS)			(DOLLARS)
		L	-t	.I	I,		J	<del></del>	.l
TOTAL HOUSEHOLDS	5.7	13.0	44	686	15.44	1.8	18.5	63	938
AREA TYPE									
METROPOLITAN	2.8	12.8	44	682	15.66	.8	19.5	66	973
CENTRAL CITY	1.3 1.5	11.9 13.5	40 46	610 744	15.09 16.09	.3 .6	20.3 19.1	69 65	951 985
NON-METROPOLITAN	2.9	13.2	45	689	15.24	1.0	17.8	61	908
ELECTRICITY PAID BY HOUSEHOLD									
YES	5,2	13.1	45	695	15.51	1.6	19.1	65	973
NO.	4	11.5	39	566	14.49	.2	14.9	51	682
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	.3	11.2	38	617	16.19	୍ଦ	Q	Q	Q
SINGLE FAMILY	4.3 1.1	14.0 9.5	48 32	738 503	15.39 15.48	1.4	20.0 13.7	68 47	1009 704
	1.1	7.5	36	202	15.40	• • •	13.7	77	704
NUMBER OF ROOMS	,			6773	15 70	•	33.0		<b></b>
1 TO 3	.6 2.5	9. <b>0</b> 10.6	31 36	471 571	15.32 15.82	.2 .7	11.9 16.4	41 56	566 837
6 OR MORE	2.6	16.3	55	845	15.22	. 9	22.0	75	1112
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	2.1	9.0	31	484	15.77	.6	14.0	48	662
1,000 TO 1,999 2,000 OR MORE	2.6 1.0	14.2 18.5	48 63	744 964	15.36 15.26	.9	18.8 24.8	64 85	985 1241
YEAR HOUSE BUILT BEFORE 1950	1.4	9.7	33	503	15.26	. 2	13.8	47	678
1950 TO 1974	3.1	13.3	45	711	15.64	.8	19.8	67	1005
AFTER 1974	1.2	16.1	55	831	15.15	.8	18.4	63	926
OWN/RENT	3.9	14.4	50	7/4	15 77		00 (	7.0	7045
OWN	1.8	14.6 9.7	33	764 518	15.37 15.66	1.3	20.6 14.0	70 48	1045 701
		***		310	13.00	.10	21.0	40	, , ,
1981 FAMILY INCOME LESS THAN \$10,000	2.2	9.5	32	500	15.42		14.9	51	735
\$10,000 TO \$19,999	1.5	12.7	43	680	15.68	.6 .4	16.8	57	735 858
\$20,000 TO \$34,999	1.2	14.4	49	761	15.46	.4	17.3	59	885
\$35,000 OR MORE	.8	21.6	74	1117	15.15	.4	26.3	90	1329
TOTAL BELOW 100 PERCENT									
OF POVERTY LINETOTAL BELOW 125 PERCENT	1.0	8.9	30	463	15.32	.2	14.4	49	693
OF POVERTY LINE	1.5	9.8	33	515	15.47	.3	14.6	50	705
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	1.8	12.3	42	651	15.50	.7	17.1	58	869
35 TO 59 YEARS	2.2	15.6	53	818	15.37	.8	21.8	74	1104
60 YEARS AND OVER	1.6	10.2	35	541	15.51	.4	14.9	51	741
HOUSEHOLD MEMBERS									
ONE PERSON	1.2	7.7	26	417	15.89	.3	12.1	41	631
2 TO 4 PEOPLE	3.8 .7	13.6 19.1	46 65	718 976	15.47 14.99	1.3 .2	19.1 23.9	65 82	962 1189
S ON HORE PLOPEETITIES	• 1	17.1		7/0	14.77	٠.	63.7	04	1107



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

	i 	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 (THOUSAND KWH)		AVG. EXPEND- ITURES PER HOUSEHOLD ((DOLLARS)	AVG.   PRICE   (DOLLARS   PER   MILLION   BTU)	   HUMBER   OF   HOUSE-   HOLDS  (MILLIONS)	I AVG. I AMOUNT I CONSUMED I PER IHOUSEHOLD I (THOUSAND I KWH)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD
MAIN HEATING FUEL									
NATURAL GAS	2.5	9.6	33	529	16.22	-	-	-	-
ELECTRICITY	1.8	18.5	63	938	14.81	1.8	18.5	63	938
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	-	-	-	-
LPG	.3	10.1	34	572	16.61	-	-	-	-
WOOD	.8	12.7	43	657	15.15	-	-	-	-
OTHER OR NONE	Q	q	Q	Q	Q	-	-	-	-
HOT WATER FUEL									
NATURAL GAS	1.9	8.8	30	505	16.76	Q	Q	Q	Q
ELECTRICITY	3.6	15.5	53	791	14.96	1.8	18.8	64	950
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	.2	7.8	27	492	18.52	Q	Q	Q	Q
ALL ELECTRIC HOME									
YES	1.8	18.9	65	954	14.76	1.8	18.9	65	954
NO	3.9	10.3	35	562	16.01	Q	Q	Q	Q
MAIN HEATING EQUIPMENT USING ELECTRICITY									
CENTRAL WARM AIR	.5	18.0	61	938	15.27	.5	18.0	61	938
HEAT PUMP	.6	22.2	76	1119	14.79	.6	22.2	76	1119
WALL UNITS	.5	16.1	55	801	14.61	.5	16.1	55	801
PIPELESS FURNACE	Ģ.	9	Q .	Q	Q Q	ġ.	Q	Q	Q
PORTABLE HEATERS	.2	14.0	48	668	14.02	.2	14.0	48	668
OTHER	จั	Q	Q	Q	Q	à	Q	Q	Q
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	1.3	12.0	41	668	16.37	.5	18.0	61	970
<2,000 CDD AND <4,000 HDD	3.4	13.6	46	685	14.82	1.2	19.0	65	929
>2,000 CDD AND <4,000 HDD	1.0	12.5	43	709	16.56	.2	17.0	58	912



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

	† [ ]			· · · · · · · · · · · · · · · · · · ·		Ī		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
		ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD Characteristics	OF HOUSE-	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	PER	AVG.   PRICE   (DOLLARS   PER   MILLION   BTU)	OF HOUSE-	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- I TURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	8.5	11.0	37	759	20,26	1.3	19.5	67	1256
AREA TYPE									
METROPOLITAN	5.9	11.9	41	817	20.08	1.1	19.6	67	1267
CENTRAL CITY	3.5	10.3	35	706	20.13	.6	18.3	62	1160
OUTSIDE CENTRAL CITY	2.4	14.3	49	975	20.03	.6	21.0	72	1378
NON-METROPOLITAN	2.6	8.8	30	626	20.79	.2	18.7	64	1183
ELECTRICITY PAID BY HOUSEHOLD									
YES	8.0	10.9	37	748	20.18	1.2	19.2	66	1220
NO	.5	12.7	43	917	21.19	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	.3	10.6	36	731	20.20	Q	Q	Q	Q
SINGLE FAMILY	6.8	10.9	37	751	20.28	.7	21.2	72	1325
2 OR MORE UNITS	1.3	11.7	40	803	20.17	.6	18.3	62	1220
NUMBER OF ROOMS									
1 TO 3	9	7.8	27	562	21.03	.3	13.1	45	877
4 TO 5	4.0	9.2	32	644	20.41	.6	19.6	67	1266
6 OR MORE	3.6	13.7	47	934	20.03	.5	23.0	79	1455
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	3.0	8.3	28	588	20.74	.6	16.7	57	1128
1,000 TO 1,999 2,000 OR MORE	4.5 .9	11.5 17.3	39 59	785 1203	19.98 20.34	.7 Q	21.5 Q	73 Q	1342 Q
	• •	2		. 2200	20137	•	•	7	•
YEAR HOUSE BUILT						_	_	_	_
BEFORE 1950	2.4	7.3	25	522	20.92	Q,	Q	Q.	Q
1950 TO 1974	4.6 1.5	11.5 15.0	39 51	790 1036	20.07 20.18	.6 .7	20.7 18.0	71 61	1335 1160
	1.3	23.0	31	1030	20,10	• *	10.0	01	1100
OWN/RENT									
OMN	5.7	11.8	40	809	20.07	0.7	21.1	72	1313
RENT	2.8	9.3	32	656	20.75	.6	17.7	60	1192
1981 FAMILY INCOME									
LESS THAN \$10,000	2.8	7.3	25	526	21.19	.2	20.1	69	1322
\$10,000 TO \$19,999	2.3	10.2	35	711	20.34	.3	17.2	59	1107
\$20,000 TO \$34,999	1.0	11.7	40	794	19.93	Q	. Q	Q_	_ Q
\$35,000 OR MORE	2.3	15.8	54	1068	19.79	.6	21.3	73	1357
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE	1.7	6.9	24	493	20.93	Q	Q	Q	Q
TOTAL BELOW 125 PERCENT OF POVERTY LINE	2.3	7.2	24	514	21.04	.ż	18.8	64	1197
1.47	L.J	,	L-T	217	~ <del></del>	• •-	23.0	• •	//
AGE OF HOUSEHOLD HEAD					00 ==	_			3 4 5 7
UNDER 35 YEARS	2.8	11.3	39	783	20.32	.7	19.0	65 67	1257
35 TO 59 YEARS	3.5 2.2	12.0 8.9	41 30	820 628	19.96 20.80	.5 .2	19.6 21.1	67 72	1232 1320
	٠.٠	0.7	JU	450	20.00	• 4		,,	1350
HOUSEHOLD MEMBERS		<b></b> .				_	<b>.</b>		3.57
ONE PERSON	1.6 5.7	7.6	26	539	20.87	.3	16.7	57 71	1074 1324
2 TO 4 PEOPLE	1.2	11.6 12.4	40 42	800 851	20.18 20.11	.9 .2	20.7 18.6	63	1239
		46.7	76	631	CA.11		10.0		,



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

	! !	ANY	ELECTRICITY	USED		ELECTRICITY USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BIU)	I AVG. I EXPEND- I TURES I PER IHOUSEHOLD I(DOLLARS) I	AVG. PRICE (DOLLARS PER MILLION BYU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)	AVG. AMOUNT CONSUMED FER HOUSEHOLD (THOUSAND KWH)		AVG. EXPEND- ITURES PER HOUSEHOLD ((DOLLARS))	
MAIN HEATING FUEL										
NATURAL GAS	6.2	9.6	33	683	20.76	-	-	_	-	
ELECTRICITY	1.3	19.5	67	1256	18.87	1.3	19.5	67	1256	
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	-	-	_	-	
LPG	.7	7.8	27	568	21.36	-	-	-		
WOOD	.3	8.0	27	549	20.03	-	-	-	-	
OTHER OR NONE	Q	Q	Q	Q	Q	-	-	-	•	
HOT WATER FUEL										
NATURAL GAS	6.3	9.8	33	699	20.97	0.3	17.1	58	1265	
ELECTRICITY	1.5	18.3	62	1148	18.41	1.0	20.4	70	1265	
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	q	
OTHER	,7	6.7	23	492	21.46	Q	Q	Q	q	
ALL ELECTRIC HOME										
YES	1.0	20.6	70	1280	18.19	1.0	20.6	70	1280	
ко	7.5	9.7	33	690	20.83	. 3	16.2	55	1185	
MAIN HEATING EQUIPMENT										
USING ELECTRICITY										
CENTRAL WARM AIR	. 9	20.9	71	1328	18.61	. 9	20.9	71	1328	
HEAT PUMP	Q	Q	Q	Q	Q	Q	Q	Q	q	
WALL UNITS	Q	Q	Q.	Q	Q	ā	Q	Q	Q	
PIPELESS FURNACE	Q	Q	Q	9	Q	Q	Q	Q	G.	
PORTABLE HEATERS	Q	Q	Q	Q	Q	Q	Q	Q	<b>ं</b> 0	
OTHER	Q	Q	Q	Q	ч	Q	Q	Q	ч	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD	-	-	-	-	-	-	-	-	-	
<pre>&lt;2,000 CDD AND 5,500 TO 7,000 HDD</pre>	-	-	-	-	-	-		-	-	
<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	2.0	10.0	4 34	688	20.10	.2	25.2	ч 86	1583	
>2,000 CDD AND <4,000 HDD	6.5	11.3	38	781	20.30	1.1	18.3	62	1184	



Table 5. (Continued) Census Region: West

	<u> </u>				<del>1</del>				
		ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	) PER	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	PER HOUSEHOLD	AVG. PRICE COLLARS PER MILLION BTU	HOUSE-		AVG. AHOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	16.4	7.5	26	431	16.91	3,1	13.9	47	646
		7.5	LO	437	10.72	3.1	13.7	77	040
AREA TYPE	14.4	~ ~	25	407	1/ 00	• •	37 (		
METROPOLITAN	14.4 7.3	7. <b>3</b> 6.7	25 23	421 396	16.99 17.24	2.8 1.6	13.6 12.5	46 43	642 604
OUTSIDE CENTRAL CITY	7.1	7.8	27	447	16.77	1.2	14.9	51	690
NON-METROPOLITAN	2.1	9.0	31	503	16.44	.3	16.9	58	683
ELECTRICITY PAID BY HOUSEHOLD									
YES	15.3	7.6	26	437	16.90	2.8	14.3	49	653
NO	1.1	6.2	21	361	17.10	.3	10.5	36	589
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	.9	7.9	27	485	17.91	Q	Q	Q	Q
SINGLE FAMILY	11.1	8.3	28	473	16.79	1.6	17.3	59	764
2 OR MORE UNITS	4.5	5.5	19	317	17.07	1.4	10.0	34	516
NUMBER OF ROOMS									
1 70 3	2.4	4.5	15	278	18.00	.6	9.6	33	527
4 TO 5	8.2 5.9	6.7 9.8	23	396 545	17.33 16.30	1.7	12.7 19.7	43 67	628 775
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	6.8 7.1	5.7 8.0	19 27	336 458	17.40 16.70	1.4	11.7	40 50	550 676
2,000 OR MORE	2.5	10.9	37	617	16.64	.4	19.3	66	899
YEAR HOUSE BUILT									
BEFORE 1950	4.3	6.2	21	337	15.89	.3	15.1	51	543
1950 TO 1974	8.4	7.3	25	434	17.35	1.1	15.1	52	631
AFTER 1974	3.8	9.2	32	533	16.91	1.7	12.9	44	673
OHN/RENT									
OWN	9.8	8.8	30	508	16.95	1.8	15.6	53	748
RENT	6.6	5.6	19	319	16.80	1.3	11.5	39	505
1981 FAMILY INCOME									
LESS THAN \$10,000	4.7	6.4	22	366	16.68	1.1	11.2	38	518
\$10,000 TO \$19,999	4.7	6.5	22	383	17.28	.8	13.3	46	663
\$20,000 TO \$34,999 \$35,000 OR MORE	2.6 4.4	8.6 9. <b>0</b>	29 31	466 532	15.94 17.34	. 9	16.9 16.3	58 56	666 780
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE TOTAL BELOW 125 PERCENT	1.9	6.9	23	374	15.91	.5	10.4	35	452
OF POVERTY LINE	3.0	6.8	23	388	16.80	.7	10.6	36	492
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	6.0	7.0	24	388	16.27	1.3	14.0	48	634
35 TO 59 YEARS	6.1	8.4	29	490	17.17	.9	15.0	51	649
60 YEARS AND OVER	4.3	6.9	24	409	17.37	.9	12.7	43	665
HOUSEHOLD MEMBERS									
ONE PERSON	4.0	4.9	17	296	17.65	.8	10.0	34	529
2 TO 4 PEOPLE	10.6 1.8	8.0 10,2	27 35	456 582	16.79 16.67	2.0	14.7 19.3	50 66	677 762
S OR HORE PEOPLE	1.0	10.2	35	204	70.01		17.3		105



Table 5. (Continued) Census Region: West

	 	үна	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)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)		CONSUMED PER HOUSEHOLD	AVG. AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
MAIN HEATING FUEL									
NATURAL GAS	11.1	5.5	19	360	19.31	_	_	_	_
ELECTRICITY	3.1	13.9	47	646	13.62	3.1	13.9	47	646
FUEL OIL OR KERDSENE	.4	10.4	35	382	10.79		-		-
LPG	.4	6.7	23	458	20.07	-	-	-	_
WOOD	.9	10.2	35	509	14.57	-	-	-	-
OTHER OR NONE	.5	5.0	17	563	32.94	-	-	-	-
HOT WATER FUEL									
NATURAL GAS	11.3	5.4	18	365	19.98	0.5	8.4	29	560
ELECTRICITY	4.2	13.4	46	586	12.81	2.6	15.0	51	657
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	.8	6.5	22	540	24.22	Q	Q	Q	G
ALL ELECTRIC HOME		15.0							, , , ,
YES	2.6 13.9	15.0 6.1	51 21	657 390	12.80 18.78	2.6 .6	15.0 8.9	51 30	657 596
	13.7	0.1	£1	370	10.70	.0	0.7	30	570
MAIN HEATING EQUIPMENT USING ELECTRICITY									
CENTRAL WARM AIR	.6	16.9	58	731	12.66	.6	16.9	58	731
HEAT PUMP	.8	13.6	46	806	17.41	.8	13.6	46	806
WALL UNITS	1.5	13.1	45	530	11.83	1.5	13.1	45	530
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	1.4	6.8	23	395	17.14	Q	Q	Q	q
5,500 TO 7,000 HDD	1.5	10.4	35	495	13.97	.3	20.9	71	694
<2,000 CDD AND	7 0	11.6	40	407	10.70	1.2	16.2	55	520
4,000 TO 5,499 HDD	3.0 9.2	5.5	40 19	423 387	20.80	1.2	9.6	33	648
	1.3	9.5	32	38 <i>1</i> 724	20.00	.5	13.4	33 46	856



Table 5. (Continued)
Census Division:
Mountain

The same of the sa									
		ANY	ELECTRICITY	USED	1000	   ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
CHARACTERISTICS	NUMBER   NUMBER   OF   HOUSE-   HOLDS   (MILLIONS)		PER HOUSEHOLD	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU)	OF HOUSE-	PER HOUSEHOLD	CONSUMED PER HOUSEHOLD	AVG.   EXPEND-   ITURES   PER  HOUSEHOLD  (DOLLARS)
TOTAL HOUSEHOLDS	4.3	8.3	28	520	18.33	0.9	13.5	46	824
AREA TYPE									
METROPOLITAN	2.8	8.1	28	558	20.08	.8	12.5	43	826
CENTRAL CITY	1.7	7.7	26	525	20.05	.4	10.9	37	749
OUTSIDE CENTRAL CITY	1.1	8.9	30	608	20.11	.3	14.7	50	931
NON-METROPOLITAN.	1.5	8.6	29	450	15.32	Q	Q	Q	Q
ELECTRICITY PAID BY HOUSEHOLD									
YES	3,9	8.4	29	521	18.29	.8	13.5	46	805
NO	44	7.9	27	507	18.83	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	.3	7.8	27	459	17.29	Q	Q	Q	Q
SINGLE FAMILY	3.3	8.8	30	542	18.06	.6	14.7	50	871
2 OR MORE UNITS	.7	6.3	22	447	20.73	. 2	9.1	31	684
NUMBER OF ROOMS									
1 TO 3	.6	4.8	16	355	21.68	ଷ୍	Q	Q	Q
4 TO 5	2.2	8.1	28	509	18.45	.6	13.1	45	807
6 OR MORE MEASURED HEATED SPACE OF RESI-	1.5	10.0	34	601	17.57	ଦ	Q	Q	Q
DENCE (IN SQUARE FEET)									***
LESS THAN 999	1.7	6.6	23	445 541	19.75 17.83	.4 .4	10.7 14.4	37 49	724 853
1,000 TO 1,999 2,000 OR MORE	1.8 .8	8.9 10.6	30 36	632	17.43	q	14.4 Q	Q	G G
VELB URBER BUSINE									
YEAR HOUSE BUILT BEFORE 1950	.9	6.9	24	389	16.53	Q	o.	a	Q
1950 TO 1974	2.2	7.8	26	505	19.09	.2	13.1	45	776
AFTER 1974	1.2	10.3	35	641	18.21	.6	13.8	47	852
				•					
OWN/RENT OWN	3.1	9.1	31	559	17.96	0.6	14.9	51	870
RENT	1.2	6.3	21	422	19.69	.2	9.9	34	700
1981 FAMILY INCOME									
LESS THAN \$10,000	1.5	6.8	23	438	18.79	.3	10.3	35	634
\$10,000 TO \$19,999	1.0	7.9	27	491	18.23	<u>.</u> 2	15.7	54	969
\$20,000 TO \$34,999 \$35,000 OR MORE	.6 1.2	8.6 10.4	29 35	515 651	17.52 18.40	Q .3	Q 15.6	ହ 53	Q 963
TOTAL BELOW 100 PERCENT OF POVERTY LINE	.5	7.2	25	441	17.93	Q	Q	q	Q
TOTAL BELOW 125 PERCENT OF POVERTY LINE	.8	7.0	24	446	18.74	.2	8.4	29	568
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	1.6	8.3	28	519	18.25	,5	13.8	47	834
35 TO 59 YEARS	1.4	9.2	31	556	17.77	9	Q Q	G,	Q
60 YEARS AND OVER	1.3	7.4	25	482	19.19	.3	11.7	40	781
HOUSEHOLD MEMBERS									
ONE PERSON	1.1	5.1	17	352	20.13	.2	7.5	26	511
2 TO 4 PEOPLE	2.7	9.0	31	560	18.20	.5	15.5	53	942
5 OR MORE PEOPLE	.5	11.3	38	659	17.16	Q	Q	Q	Q



Table 5. (Continued) Census Division: Mountain

	} [	АНУ :	ELECTRICITY	USED		ELECTRICITY USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)			I AVG. I EXPEND- I ITURES I PER IHOUSEHOLD I(DOLLARS)	AVG.   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)	
MAIN HEATING FUEL										
NATURAL GAS	2.8	6.6	22	426	19.03	-	-	~	_	
ELECTRICITY	.9	13.5	46	824	17.83	.9	13.5	46	824	
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	-	-	-	-	
LPG	.2	7.1	24	503	20.85	-	-	~	-	
WOOD	.3	9.4	32	542	16.97	-	-	~	-	
OTHER OR NONE	Q	Q	Q	Q	Q	***	-	~	-	
HOT WATER FUEL										
NATURAL GAS	2.7	6.3	22	420	19.50	Q	G	Q	Q	
ELECTRICITY	1.2	13.3	45	747	16.45	0.7	14.2	49	85!5	
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
OTHER	.4	7.4	25	542	21.36	Q	Q	Q	Q	
ALL ELECTRIC HOME	-					_				
YES	.7	14.2	49	855	17.62	.7	14.2	49	855	
NO	3.6	7.1	24	451	18.63	Q	Q	Q	Q	
MAIN HEATING EQUIPMENT USING ELECTRICITY										
CENTRAL WARM AIR	. 2	15.3	52	920	17.60	.2	15.3	52	920	
HEAT PUMP	.5	13.7	47	873	18.61	.5	13.7	47	873	
WALL UNITS	Q	Q	Q	Q	Q	Q	Q	Q	Q	
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	1.2	6.6	22	380	17.00	Q	Q	Q	Q	
5,500 TO 7,000 HDD	1.3	8.5	29	469	16.18	Q	Q	Q	Q	
4,000 TO 5,499 HDD	.3	7.6	26	511	19.65	Q	Q	Q	G.	
<2,000 CDD AND <4,000 HDD	.5	7.4	25	559	22.18	. 2	9.4	32	700	
>2,000 CDD AND <4,000 HDD	1.0	10.9	37	738	19.81	.5	13.5	46	857	



Table 5. (Continued)
Census Division:
Pacific

								···	
	a.	ANY	ELECTRICITY	USED		ELECTRI	CITY USED A	S MAIN HEAT	ING FUEL
CHARACTERISTICS	HOUSE-	PER HOUSEHOLD	CONSUMED PER HOUSEHOLD	PER	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS) 	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	12.2	7.2	25	400	16.33	2.3	14.0	48	578
AREA TYPE									
METROPOLITAN	11.6	7.0	24	388	16.14	2.1	13.9	48	574
CENTRAL CITY	5.6	6.4	22	358	16.25	1.1	13.1	45	549
OUTSIDE CENTRAL CITY	6.0	7.6	26	417	16.05	.9	15.0	51 53	606
NON-METROPOLITAN	6	9.9	34	645	19.03	.2	15.0	51	613
ELECTRICITY PAID BY HOUSEHOLD	.3								
YES		7.3	25	408	16.35	2.0	14.6	50	593
NO	.8	5.3	18	285	15.76	. 3	9.5	32	463
TYPE OF HOUSING STRUCTURE									
MOBILE HOME		8.0	27	502	18.30	Q	Q	Q	Q
SINGLE FAMILY	7.9	8.0	27	445	16.22	1.0	19.0	65	694
2 OR MORE UNITS	3.8	5.3	18	293	16.26	1.2	10.1	34	487
NUMBER OF ROOMS									
1 TO 3	1.8	4.4	15	252	16.70	.5	9.7	33	490
4 TO 5	6.0	6.2	21	355	16.80	1.1	12.5	43	529
6 OR MORE	4.3	9.7	33	526	15.84	.7	19.6	67	718
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)	5.2	5.3	18	300	16.45	1.0	12.0	41	485
LESS THAN 999	5.2 5.3	7.8	26	430	16.26	.9	14.9	51	591
2,000 OR MORE	1.7	11.0	37	610	16.29	.3	17.9	61	830
YEAR HOUSE BUILT	<b>+</b> .		<b></b>	704	15 70	~	75.4		
BEFORE 1950	3.4	6.0 7.2	21	324 409	15.70	.3	15.4	53	539
1950 TO 1974	6.2 2.6	8.7	24 30	481	16.70 16.16	1.1	15.6 12.5	53 43	598 571
		<b>4</b>			20120		22.5	.5	2.2
OWN/RENT									
GAN	6.8	8.6	29	484	16.47	1.2	16.0	55	683 463
RENT	5.4	5.4	18	295	16.04	1.1	11.9	41	403
1981 FAMILY INCOME									
LESS THAN \$10,000	3.2	6.3	21	334	15.64	.7	11.5	39	467
\$10,000 TO \$19,999	3.7	6.1	21	353 450	16.94 15.43	.6	12.8 17.4	44 59	587 638
\$20,000 TO \$34,999 \$35,000 OR MORE	2.0 3.3	8.5 8.5	29 29	450 489	15.43	.5	16.7	57	678
TOTAL BELOW 100 PERCENT OF POVERTY LINE TOTAL BELOW 125 PERCENT	1.5	6.8	23	353	15.25	-4	11.6	40	448
OF POVERTY LINE	2.2	6.7	23	366	16.03	.5	11.3	39	467
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	4.4	6.5	22	340	15.32	. 9	14.1	48	522
35 TO 59 YEARS	4.7	8.1	28	471	16.97	.8	14.7	50	616
60 YEARS AND OVER	3.0	6.7	23	377	16.52	.6	13.1	45	605
HOUSEHOLD MEMBERS									
ONE PERSON	2.9	4.9	17	276	16.69	.6	11.0	38	536
2 TO 4 PEOPLE	7.9	7.6	26	420	16.21	1.5	14.4	49	578
5 OR MORE PEOPLE	1.3	9.8	34	553	16.45	.2	19.4	66	686



Table 5. (Continued) **Census Division: Pacific** 

	 	ANY	ELECTRICITY	USED	ELECTRICITY USED AS MAIN HEATING FUEL				
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. 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 (THOUSAND KWH)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
WATER 115 TTUE TO 15 1									
MAIN HEATING FUEL									
NATURAL GAS	8.4	5.1	17	338	19.42	-		-	
ELECTRICITY	2.3	14.0	48	578	12.07	2.3	14.0	48	578
FUEL OIL OR KEROSENE	. 3	9.9	34	357	10.53	-	-	-	-
ŁPG	.2	6.1	21 36	391 494	18.72	_	-	_	-
WOOD	-6	10.6	36 16		13.64	-	-	_	-
OTHER OR NONE	.4	4.8	16	563	34.51	-	-	_	-
HOT WATER FUEL									
NATURAL GAS	8.6	5.0	17	347	20.17	0.4	8.6	29	573
ELECTRICITY	3.1	13.4	46	525	11.45	1.8	15.4	52	578
FUEL OIL OR KEROSENE	Q.	q	Q	Q	Q	Q	0	ą į	Q
OTHER	.4	5.7	19	538	27.78	à	q.	ã	q.
	• •	2.,		230	2,	-	•	•	-
ALL ELECTRIC HOME									
YES	1.8	15.4	52	578	11.01	1.8	15.4	52	578
NO	10.3	5.7	20	369	18.84	.4	8.6	29	578
MAIN HEATING EQUIPMENT USING ELECTRICITY									
CENTRAL WARM AIR	.4	17.7	60	644	10.68	.4	17.7	60	644
HEAT PUMP	.3	13.3	45	698	15.39	. 3	13.3	45	698
WALL UNITS	1.4	13.3	46	535	11.75	1.4	13.3	46	535
PIPELESS FURNACE	Q	Q	Q	Q	Q	Q	Q	Q	Q
PORTABLE HEATERS	Q	Q	Q	Q	Q	Q	Q	Q	<b>G</b>
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	8.2	28	502	17.97	Q	Q	Q	Q
<2,000 CDD AND	. –	-				-	•	•	-
5,500 TO 7,000 HDD	.3	19.8	68	623	9.20	.2	22.6	77	699
<2,000 CDD AND									
4,000 TO 5,499 HDD	2.7	12.0	41	413	10.06	1.2	16.2	55	520
<2,000 CDD AND <4,000 HDD	8.7	5.3	18	377	20.68	.8	9.6	33	635
>2,000 CDD AND <4,000 HDD	.3	5.4	18	684	37.16	Q	Q	Q	Q

<sup>&</sup>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 FERMS USED IN THIS REPORT.

SOURCE: ENERGY INFORMATION ADMINISTRATION, OFFICE OF ENERGY MARKETS AND END USE, ENERGY END USE DIVISION, FORM EIA-457, THE 1982 RESIDENTIAL ENERGY CONSUMPTION SURVEY.



Table 6. U.S.
Residential Fuel Oil
or Kerosene
Consumption and
Expenditures—April
1982 Through March
1983, United States

AREA TYPE HETROPOLITAN	2 (22-24) 1 (24-24) 2.1									
CHARACTERISTICS	1941 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944 - 1944		ANY FUEL	OIL OR KERO	SENE USED		   FUEL OIL   			IN HEATING
AREA TYPE HETROPOLITAN	CHARACTERISTICS	OF HOUSE- HOLDS	AMOUNT CONSUMED PER HOUSEHOLD	AMOUNT CONSUMED PER HOUSEHOLD MILLION	EXPEND- I ITURES PER HOUSEHOLD	PRICE COOLLARS PER MILLION	OF HOUSE-	AMOUNT CONSUMED PER HOUSEHOLD	AMOUNT CONSUMED PER HOUSEHOLD (MILLION	EXPEND- I TURES PER IHOUSEHOLD
AREA TYPE HETROPOLITAN										
HETROPOLITAN	TOTAL HOUSEHOLDS	15.5	531	73	619	8.42	12.0	647	90	754
CENTRAL CITY 4.7 597 83 699 8.45 4.1 666 92 779 OUTSIDE CENTRAL CITY 6.9 574 79 666 8.38 5.6 676 94 785 NON-HETROPOLITAN. 3.9 374 52 438 8.48 2.3 546 75 638  FUEL OIL PAID BY MOUSEHOLD  VES. 12.1 504 70 588 8.43 8.9 644 89 750 NO. 3.4 623 86 726 8.41 3.2 657 91 766  TYPE OF HOUSING STRUCTURE  MOBILE HOME. 8 263 36 315 8.73 6 34 47 6 686 93 777 20 RY HORE INITS. 10.5 518 72 603 8.41 7.6 668 93 777 20 RY HORE INITS. 4.1 615 85 718 8.42 3.8 653 90 762  NUMBER OF MOONS  1 10 3 2.1 527 73 615 8.44 1.7 599 83 699 4 TO 5 5.9 503 70 587 8.44 4.9 588 81 686 60 RY HORE. 7.5 553 77 644 8.41 5.4 771 799 835  MEASURED HEATED SPACE OF REST- DENCE (IN SQUARE FEET)  LESS THAN 1999. 4.9 469 65 548 8.45 4.1 540 75 83 84 697 2 FAR HOUSE BULLT  BEFORE 1950. 8.0 619 86 721 8.41 6.8 699 97 814 1950 TO 1974. 6.3 440 61 514 8.44 4.4 577 80 673 AFTER 1974. 1.2 419 58 488 8.42 8.1 671 93 781  ONN.PERT  ONN.PE	AREA TYPE									
OUTSIDE CENTRAL CITY. 6.9 574 79 666 8.38 5.6 676 94 765 NON-HETROPOLITAN. 3.9 374 52 438 8.48 2.3 546 75 638 FUEL CITY PAID BY HOUSEHOLD YES. 12.1 504 70 588 8.48 2.3 546 75 638 FUEL CITY PAID BY HOUSEHOLD YES. 12.1 504 70 588 8.48 2.3 546 67 75 638 FUEL CITY PAID BY HOUSEHOLD YES. 12.1 504 70 588 8.43 8.9 644 89 750 NO. 3.4 623 86 726 8.41 3.2 667 91 766 FUEL CITY PAID BY HOUSENGS STRUCTURE HORLE HOME. 8. 263 36 715 8.73 .6 341 47 410 STRUCE FUEL CITY PAID BY HOUSEHOLD YES. 10.5 518 72 603 8.41 7.6 669 93 777 2 0 R HORE UNITS. 4.1 615 85 718 8.42 3.8 653 90 762 FUEL CITY PAID BY HOUSEHOLD YES. 10.5 518 72 603 8.41 7.6 669 93 777 77 2 0 R HORE UNITS. 4.1 615 85 718 8.42 3.8 653 90 762 FUEL CITY PAID BY HOUSEHOLD YES. 10.0 70 507 8.44 1.7 599 83 699 762 FUEL CITY PAID BY HOUSEHOLD YES. 10.0 70 507 8.44 1.7 599 83 699 762 FUEL CITY PAID BY HOUSEHOLD YES. 10.0 70 507 8.44 1.7 599 835 FUEL CITY PAID BY HOUSEHOLD YES. 10.0 70 507 8.44 1.9 588 81 668 60 R HORE. 7.5 553 77 644 8.41 5.4 717 99 835 FUEL CITY PAID BY HOUSEHOLD YES. 10.0 70 10.199 6.3 530 73 600 8.46 6.0 6.44 8.7 717 99 835 FUEL CITY PAID BY HOUSEHOLD YES. 10.0 70 10.199 6.3 530 73 600 8.46 6.0 6.44 8.7 72 2.0 0.0 R HORE 1550. 8.0 6.3 530 73 600 8.46 6.0 6.44 8.7 742 2.0 0.0 R HORE 1550. 8.0 6.3 540 6.3 640 6										
NON-HETROPOLITAN										
FUEL DIL PAID BY HOUSEHOLD  YES. 12.1 504 70 588 8.43 8.9 644 89 750  NO. 3.4 623 86 726 8.41 3.2 657 91 766  TYPE OF HOUSING STRUCTURE  MOBILE HOME 8 263 36 315 8.73 .6 341 47 410  SINGLE FAMILY 10.5 518 72 603 8.41 7.6 668 93 777  2 OR HOME UNITS 4.1 615 65 718 8.42 3.8 653 90 762  RUMBER OF MORDS  LESS 1 5.9 503 70 587 8.44 4.9 568 81 666 670 815 815 815 815 815 815 815 815 815 815										
YES	NUN-METROPOLITAN	3.9	3/4	52	438	8.48	2.3	546	/5	638
NO	FUEL OIL PAID BY HOUSEHOLD									
NOTE OF HOUSING STRUCTURE   NOBILE HOME.										
MOBILE HOME	NO.	3.4	623	86	726	0.41	3.6	657	41	700
SINGLE FAMILY	TYPE OF HOUSING STRUCTURE									
NUMBER OF HOOMS   STATES   S	MOBILE HOME									
NUMBER OF NOOMS  1 TO 3										
1 TO 3 2.1 527 73 615 8.44 1.7 599 83 699 4 TO 5 5.9 503 70 587 8.44 4.9 588 81 666 6 OR MORE 7.5 553 77 644 8.41 5.4 717 99 835  MEASURED HEATED SPACE OF REST- DENCE (IN SQUARE FEET)  LESS THAN 999 4.9 469 65 548 8.45 4.1 540 75 631 1,000 TO 1,999 6.3 530 73 620 8.46 5.0 634 88 742 2,000 OR MORE 4.3 603 84 698 8.35 3.0 817 113 945  YEAR HOUSE BUILT  BEFORE 1950 8.0 619 86 721 8.41 6.8 699 97 814 1950 TO 1974 6.3 440 61 514 8.44 4.4 577 80 83 698  ONN/RENT  ONN/RENT  ONN 10.9 528 73 615 8.42 8.1 671 93 761  RENT 4.6 537 74 627 8.43 4.0 599 83 700  IPSI FAMILY INCOME  LESS THAN \$10,000 4.7 548 76 639 8.43 4.1 612 85 713 \$20,000 TO \$19,999 4.7 536 74 625 8.43 3.8 632 87 738 \$20,000 TO \$19,999 4.7 536 74 625 8.44 2.9 553 77 646 \$20,000 TO \$20,000 TO \$20,000 TO \$20,000 TO \$20,000 TO \$20,000 TO \$20,000 TO \$20,000 TO \$20,000 TO \$20,000 TO \$20,000 TO \$20,000 TO \$20,000 TO \$20,000 TO \$20,000 TO \$20,000 TO \$20	2 OR MORE UNITS	4.1	615	85	718	8.42	3.8	653	90	762
## TO 5   5.9   503   70   587   8.44   4.9   588   81   666   6 0R MORE.   7.5   553   77   644   6.41   5.4   717   99   835    ## MEASURED HEATED SPACE OF REST-    DENCE (IN SQUARE FEET)	NUMBER OF KOOMS									
6 OR MORE										
MEASURED HEATED SPACE OF RESI-  DENCE (IN SQUARE FEET)  LESS THAN 999										
DENCE (IN SQUARE FEET)  LESS THAN 999	6 OR MORE	7.5	553	77	544	8.41	5.4	/1/	99	835
1,000 TO 1,999 6.3 530 73 620 8.46 5.0 634 88 742 2,000 OR MORE. 4.3 603 84 698 8.35 3.0 817 113 945  YEAR HOUSE BUILT  BEFORE 1950 8.0 619 86 721 8.41 6.8 699 97 814 1950 TO 1974 66.3 440 61 514 8.44 4.4 577 80 673 AFTER 1974 1.2 419 58 488 8.42 .8 598 83 698  ONN/RENT  OHN 10.9 528 73 615 8.42 8.1 671 93 781 RENT 4.6 537 74 627 8.43 4.0 599 83 700  1981 FAMILY INCOME  LESS THAN \$10,000 4.7 548 76 639 8.43 4.1 612 85 713 \$10,000 TO \$19,999 4.7 536 74 625 8.43 3.8 632 87 738 \$20,000 TO \$349,999 2.4 473 66 549 8.38 1.5 675 94 782 \$35,000 OR MORE. 3.7 539 75 629 8.43 2.6 709 98 827  TOTAL BELOW 100 PERCENT  OF POVERTY LINE 2.1 539 74 630 8.46 1.8 616 85 719  TOTAL BELOW 125 PERCENT  OF POVERTY LINE 3.0 559 77 653 8.46 2.6 634 88 740  AGE OF HOUSEHOLD HEAD  UNDER 35 YEARS 4.1 432 60 505 8.44 2.9 553 77 646  35 TO 59 YEARS 6.4 525 73 612 8.44 4.7 673 93 783	MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
2,000 OR MORE. 4.3 603 84 698 8.35 3.0 817 113 945  YEAR HOUSE BUILT BEFORE 1950. 8.0 619 86 721 8.41 6.8 699 97 814 1950 TO 1974. 6.3 440 61 514 8.44 4.4 577 80 673 AFTER 1974. 1.2 419 58 488 8.42 .8 598 83 698  OKN/RENT OHN. 10.9 528 73 615 8.42 8.1 671 93 781 RENT. 4.6 537 74 627 8.43 4.0 599 83 700  1981 FAMILY INCOME LESS THAN \$10,000 4.7 548 76 639 8.43 4.1 612 85 713 \$										
YEAR HOUSE BUILT  BEFORE 1950										
BEFORE 1950. 8.0 619 86 721 8.41 6.8 699 97 814 1950 TO 1974. 6.3 440 61 514 8.44 4.4 577 80 673 AFTER 1974. 1.2 419 58 488 8.42 .8 598 83 698  OWN/RENT OWN. 10.9 528 73 615 8.42 8.1 671 93 781 RENT. 4.6 537 74 627 8.43 4.0 599 83 700  1981 FAMILY INCOME LESS THAN \$10,000. 4.7 548 76 639 8.43 4.1 612 85 713 \$10,000 TO \$19,999. 4.7 536 74 625 8.43 3.8 632 87 738 \$20,000 TO \$34,999. 2.4 473 66 549 8.38 1.5 675 94 782 \$35,000 OR MORE. 3.7 539 75 629 8.43 2.6 709 98 827  TOTAL BELOW 100 PERCENT OF POVERTY LINE. 2.1 539 74 630 8.46 1.8 616 85 719 TOTAL BELOW 125 PERCENT OF POVERTY LINE. 3.0 559 77 653 8.46 2.6 634 88 740  AGE OF HOUSEHOLD HEAD UNDER 35 YEARS. 4.1 432 60 505 8.44 2.9 553 77 646 35 TO 59 YEARS. 4.1 432 60 505 8.44 2.9 553 77 646 35 TO 59 YEARS. 4.1 432 60 505 8.44 2.9 553 77 646 35 TO 59 YEARS. 4.1 432 60 505 8.44 2.9 553 77 646 35 TO 59 YEARS. 4.1 432 60 505 8.44 2.9 553 77 646 35 TO 59 YEARS. 4.1 432 60 505 8.44 2.9 553 77 646 35 TO 59 YEARS. 4.1 432 60 505 8.44 2.9 553 77 646 35 TO 59 YEARS. 4.1 432 60 505 8.44 2.9 553 77 646 35 TO 59 YEARS. 5.4 525 73 612 8.41 4.7 673 93 783	2,000 UR MORE	4.3	603	84	698	8.35	3.0	617	113	745
1950 TO 1974		1								
AFTER 1974										
OWN/RENT  OWN										
OHN	AFIER 1774	1.2	417	30	400	0.42		370	03	0,0
OHN										
RENT		10.0	E29	77	415	9 42	A 1	671	93	781
1981 FAMILY INCOME  LESS THAN \$10,000										
LESS THAN \$10,000			33.	•	02,	5				
LESS THAN \$10,000										
\$20,000 TO \$34,999 2.4 473 66 549 8.38 1.5 675 94 782 \$35,000 OR MORE 3.7 539 75 629 8.43 2.6 709 98 827  TOTAL BELOW 100 PERCENT OF POVERTY LINE 2.1 539 74 630 8.46 1.8 616 85 719  TOTAL BELOW 125 PERCENT OF POVERTY LINE 3.0 559 77 653 8.46 2.6 634 88 740  AGE OF HOUSEHOLD HEAD UNDER 35 YEARS 4.1 432 60 505 8.44 2.9 553 77 646 35 TO 59 YEARS 6.4 525 73 612 8.41 4.7 673 93 783	LESS THAN \$10,000									
\$35,000 OR MORE										
TOTAL BELOW 100 PERCENT  OF POVERTY LINE										
OF POVERTY LINE	VJJ, VVV OR FIORE	3.1	227	19	Q£ 7	0.73	E-9	, , ,	,,,	00,
TOTAL BELOW 125 PERCENT OF POVERTY LINE										
OF POVERTY LINE		2.1	539	74	630	8.46	1.8	616	85	719
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS		3.0	559	77	653	8.46	2.6	634	88	740
UNDER 35 YEARS 4.1 432 60 505 8.44 2.9 553 77 646 35 TO 59 YEARS 6.4 525 73 612 8.41 4.7 673 93 783	Annie and Annie and Annie and Annie and Annie and Annie and Annie and Annie and Annie and Annie and Annie and A			• •					=	• •
35 TO 59 YEARS	AGE OF HOUSEHOLD HEAD				. ===					
00 HAND AND OTHER STREET, 270 021 02 127 03-127 040 747 006 74 772										
	OU TEARD MIND OVERTER TO THE TOTAL A	2.0	01)	03	127	U.73	****	302	/-	. , , ,



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. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVS. PRICE (DOLLARS PER MILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLE (DOLLARS)	
HOUSEHOLD MEMBERS										
ONE PERSON	3.2	594	82	693	8.43	2.9	634	88	739	
2 TO 4 PEOPLE	10.1	521	72	606	8-41	7.7	651	90	757	
5 OR MORE PEOPLE	2.1	482	67	567	8.49	1.5	654	91	769	
MAIN HEATING FUEL										
NATURAL GAS	1.0	90	12	106	8.53	-	-	-	-	
ELECTRICITY	.9	74	10	87	8.61	-	-	-	-	
FUEL OIL OR KEROSENE	12.0	647	90	754	8.42	12.0	647	90	754	
LPG	.2	36	5	45	9.36	-	-	-	-	
WÒOD	1.2	193	27	228	8.55	-	-	-	-	
OTHER OR NONE	.3	141	20	165	8.42	-	-	-	-	
HOT WATER FUEL										
NATURAL GAS	2.5	463	64	539	8.42	1.7	650	90	757	
ELECTRICITY	6.5	39 <b>0</b>	54	455	8.44	4.6	509	70	592	
FUEL OIL OR KEROSENE	5.7	733	102	856	8.42	5.2	766	106	894	
OTHER	.8	455	63	524	8.35	.5	662	91	760	
MAIN HEATING EQUIPMENT USING FUEL OIL										
STEAM OR HOT WATER SYSTEM	6.2	755	105	879	8.40	6.2	755	105	879	
CENTRAL WARM AIR FURNACE	4.5	571	79	662	8.37	4.5	571	79	662	
OTHER/NONE		204	28	242	8.64	1.3	411	56	490	
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	534	74	615	8.32	1.7	683	94	783	
5,500 TO 7,000 HDD	4.1	630	87	734	8.42	3.4	734	102	856	
4,000 TO 5,499 HDD	7.1	553	77	647	8.44	5.7	658	91	769	
<2,000 CDD AND <4,000 HDD	1.6	285	39	335	8.53	1.1	389	54	459	
>2,000 CDD AND <4,000 HDD	.5	116	16	139	8.66	. 3	147	20	177	



Table 6. (Continued)
Census Region:
Northeast

<u> </u>	I										
		ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL OR KEROSENE USED AS MAIN HEATING					
			1		1	<u> </u>		1			
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD			AVG. PRICE (DOLLARS PER MILLION BTU)	,		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG.   EXPEND-   ITURES   PER   HOUSEHOLD   (DOLLARS)		
		<u> </u>	L	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>i                                     </u>		
TOTAL HOUSEHOLDS	8.8	647	90	756	8.43	7.6	726	101	848		
AREA TYPE											
METROPOLITAN	7.6	663	92	773	8.42	6.7	732	102	854		
CENTRAL CITY	3.2	699	97	816	8.43	3.0	738	102	862		
OUTSIDE CENTRAL CITY	4.4	636	88	741	8.41	3.7	728	101	848		
NON-METROPOLITAN	1.2	547	76	643	8.50	.8	676	94	795		
FUEL OIL PAID BY HOUSEHOLD		_									
YES	6.0	649	90	758	8.43	4.8	760	105	888		
NO	2.8	644	89	751	8.41	2.7	666	92	776		
TYPE OF HOUSING STRUCTURE											
MOBILE HOME	. 3	432	59	526	8.87	.2	502	69	613		
SINGLE FAMILY	5.1	662	92	771	8.41	4.0	789	109	919		
2 OR MORT UNITS	3.4	642	89	750	8.42	3.3	664	92	776		
UMBER OF ROOMS											
1 TO 3	1.5	588	81	686	8.42	1.3	634	88	739		
4 TO 5	3.0	647	90	754	8.41	2.8	687	95	801		
6 OR MORE	4.3	668	93	781	8.44	3.4	794	110	928		
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)											
LESS THAN 999	3.0	575	80	671	8.43	2.7	619	86	723		
1,000 TO 1,999	3.3	670	93	784	8.44	2.9	729	101	852		
2,000 OR MORE	2.5	705	98	821	8.40	1.9	876	121	1020		
EAR HOUSE BUILT											
BEFORE 1950	5.0	692	96	806	8.41	4.5	748	104	871		
1950 TO 1974	3.2	578	80	679	8.47	2.5	696	97	817		
AFTER 1974	.5	644	89	749	8.38	.5	661	94	791		
WN/RENT											
OWN	5.7	672	93	785	8.43	4.7	779	108	910		
RENT	3.1	602	83	702	8.41	2.9	639	89	745		
981 FAMILY INCOME											
LESS THAN \$10,000	2.7	651	90	759	8.41	2.5	686	95	800		
\$10,000 TO \$19,999	2.7	636	88	743	8.44	2.4	700	97	819		
\$20,000 TO \$34,999	1.3	596	83	694	8.39	1.0	746	103	868		
\$35,000 OR MORE	2.1	690	96	807	8.44	1.7	612	113	950		
OTAL BELOW 100 PERCENT											
F POVERTY LINE	1.0	630	87	737	8.44	1.0	643	89	752		
OTAL BELOW 125 PERCENT OF POVERTY LINE	1.8	644	89	754	8.45	1.6	690	96	808		
	2.0	V.7-1		<i>•</i> ⊌¬	0.75	2.0	070	70	000		
GE OF HOUSEHOLD HEAD	2.2	544	75	636	8.45	1.8	628	87	775		
UNDER 35 YEARS		544 644	89		8.45				735		
35 TO 59 YEARS	3.7			753		3.0	751	104	878		
60 YEARS AND OVER	2.9	727	101	847	8.40	2.8	762	106	887		
HOUSEHOLD MEMBERS				m							
ONE PERSON	2.0	664	92	773	8.40	1.9	685	95	796		
2 TO 4 PEOPLE	5.5	645	89	753	8.42	4.6	740	103	864		
5 OR MORE PEOPLE	1.2	630	87	741	8.49	1.0	743	103	875		
사고 중심하는 사람											



Table 6. (Continued) Census Region: Northeast

		ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL		USED AS MA	IN HEATING
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)		AVG.   EXPEND-   ITURES   PER  HOUSEHOLD  (DOLLARS) 	AVG.   PRICE   (DOLLARS   PER   MILLION   BTU) 	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)	PER  HOUSEHOLD	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
MAIN HEATING FUEL NATURAL GAS		7.0/							
ELECTRICITY	.4 .2	106 9 <b>0</b>	14 12	123 104	8.57 8.46	-	-	-	-
FUEL DIL OR KEROSENE	7.6	726	101	848	8.42	7.6	726	101	848
LPG	Ġ.	, 20 Q	701	9	0.42	7.6	726	101	848
WOOD	.5	270	37	316	8.47	-	-	_	_
OTHER OR NONE	.2	123	17	143	8.41	-	-	-	-
HOT WATER FUEL									
NATURAL GAS	1.7	548	76	640	8,43	1.3	669	93	781
ELECTRICITY	1.8	491	68	576	8.48	1.3	604	84	709
FUEL OIL OR KEROSENE	5.0	746	103	870	8.41	4.7	775	107	903
OTHER	.3	475	66	559	8.52	.2	790	109	933
MAIN HEATING EQUIPMENT USING FUEL OIL									
STEAM OR HOT WATER SYSTEM	5.5	769	107	897	8.41	5.5	769	107	897
CENTRAL WARM AIR FURNACE	1.9	610	84	713	8.44	1.9	610	84	713
OTHER/NONE	1.4	235	32	276	8.54	.2	674	93	796
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD	1.0	546	76	643	8.50	.8	664	92	782
5,500 TO 7,000 HDD	3,2	688	95	802	8.42	2.8	760	105	887
4,000 TO 5,499 HDD	4.6	642	89	749	8.42	4.0	714	99	833
<2,000 CDD AND <4,000 HDD	-	-	-	_	-	-	•	-	-
>2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-



Table 6. (Continued)
Census Division: New
England

	1					1			
		ANY FUEL	DIL OR KERO	SENE USED		FUEL OIL     	OR KEROSENE FU		IN HEATING
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	PER HOUSEHOLD	AVG.   PRICE   (DOLLARS   PER   MILLION   BTU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)	I PER  HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD (OOLLARS)
TOTAL HOUSEHOLDS	2.5	697	97	818	8.47	2.1	765	106	899
AREA TYPE									
METROPOLITAN	1.9	732	101	859	8.47	1.7	783	108	919
CENTRAL CITY	.6	730	101	855	8.44	.5	760	105	890
OUTSIDE CENTRAL CITY	1.3	733	102	862	8.49	1.1	794	110	934
NON-METROPOLITAN	.6	595	82	698	8.47	.5	705	98	826
FUEL OIL PAID BY HOUSEHOLD									
YES	2.0	726	101	853	8.48	1.7	799	111	940
NO	.5	579	80	674	8.41	.4	634	88	739
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	Q	Q	Q	Q	Q	Q	Q	Q	Q
SINGLE FAMILY	1.6	757	105	887	8.46	1.3	857	119	1005
2 OR MORE UNITS	.8	602	84	705	8.45	.8	635	88	744
NUMBER OF ROOMS									
1 TO 3	Q	Q	Q	Q	Q	ଷ୍	Q	Q	Q
4 TO 5	1.0	624	86	731	8.45	.9	659	91	772
6 OR MORE	1.4	778	108	915	8.48	1.1	872	121	1026
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	.6	547	76	647	8.55	.5	605	84	715
1,000 TO 1,999	1.2	676	94	793	8.46	1.0	722	100	847
2,000 OR MORE	.8	840	116	984	8.45	.6	969	134	1136
YEAR HOUSE BUILT									
BEFORE 1950	1.5	723	100	845	8.43	1.3	788	109	921
1950 TO 1974	. 9 Q	627 Q	87 Q	743 Q	8.54 Q	.7 Q	702 Q	97 Q	833 Q
	4	•	•	4	4	4	ч	ч	4
OWN/RENT	1.8	728	101	856	8.48	1.5	812	113	954
OWN	.7	613	85	717	8.44	.6	652	90	763
1981 FAMILY INCOME	,	673	93	787	8.44	.5	695	96	812
LESS THAN \$10,000 \$10,000 TO \$19,999	.6 .7	736	102	863	8.47	.6	800	111	939
\$20,000 TO \$34,999	.4	633	88	746	8.50	.3	801	111	943
\$35,000 OR MORE	.8	708	98	833	8.49	.7	775	107	912
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE	Q	Q	Q	Q	Q	· Q	Q	ପ	Q
TOTAL BELOW 125 PERCENT	,	•	7	•	,	•	·	•	•
OF POVERTY LINE	.3	666	92	787	8.54	.2	714	99	843
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	.7	597	83	699	8.45	.6	663	92	777
35 TO 59 YEARS	1.0	704	98	830	8.51	.8	795	110	937
60 YEARS AND OVER	.7	787	109	920	8.43	.7	821	114	959
HOUSEHOLD MEMBERS									
	.4	671	93	781	8.40	.4	726	101	842
ONE PERSON		0.1							
2 TO 4 PEOPLE	1.8	703 690	97 96	828 804	8.50 8.41	1.6	771 794	107 110	908 926



Table 6. (Continued) Census Division: New England

	! ! !	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) 	   NUMBER   OF   HOUSE-   KOLDS  (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- I TURES PER HOUSEHOLD (DOLLARS)	
MAIN HEATING FUEL										
NATURAL GAS	Q	Q	Q	G.	Q	-	-	-	-	
ELECTRICITY	Q	Q	Q	Q	q	-	-	_	-	
FUEL OIL OR KEROSENE	2.1	765	106	899	8.47	2.1	765	106	899	
LPG	Q	Q	Q	Q	q	-	-	-	-	
WOOD	. 3	328	45	384	8.48	-	-	-	-	
OTHER OR NONE	Q	Q	Q	Q	Q	=	-	-	-	
HOT WATER FUEL										
NATURAL GAS	0.5	719	100	841	8.43	0.5	743	103	869	
ELECTRICITY	.4	585	81	697	8.61	. 3	674	93	804	
FUEL OIL OR KEROSENE	1.4	754	104	884	8.46	1.3	812	113	952	
OTHER	Q	Q	Q	Q	Q	Q	Q	Q	Q	
MAIN HEATING EQUIPMENT USING FUEL OIL										
STEAM OR HOT WATER SYSTEM	1.6	814	113	956	8.47	1.6	814	113	956	
CENTRAL WARM AIR FURNACE	.5	567	79	664	8.44	.5	567	79	664	
OTHER/NONE	.4	389	54	459	8.56	Q	Q	Q	Q	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD	.7	602	83	705	8.45	.6	697	97	816	
5,500 TO 7,000 HDD	1.8	736	102	865	8.48	1.6	790	110	928	
4,000 TO 5,499 HDD	-	-	-	-	-	-	-	-	-	
<2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	_	-	
>2,000 CDD AND <4,000 HDD	-	-	-	-	-	_	-	-	₩.	



Table 6. (Continued)
Census Division:
Middle Atlantic

	1								
	<b>1</b> <b>1</b> •	ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL		USED AS MA	IN HEATING
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	CONSUMED	PER IHOUSEHOLD		OF HOUSE-	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG.   EXPEND-   ITURES   PER  HOUSEHOLD  (DOLLARS)
	4		<u> </u>		<u> </u>			.L	
TOTAL HOUSEHOLDS	6.3	628	87	731	8.41	5.4	711	99	828
AREA TYPE METROPOLITAN CENTRAL CITY OUTSIDE CENTRAL CITY	5.8 2.7 3.1	640 692 596	89 96 83	745 808 691	8.40 8.43 8.37	5.1 2.5 2.6	716 733 700	99 102 97	833 856 811 754
NON-METROPOLITAN	.5	489	68	577	8.54	.4	637	88	754
YES	4.0 2.4	610 657	85 91	710 767	8.40 8.41	3.1 2.3	739 672	102 93	861 783
	2.4	657	91	767	0.41	2.3	6/2	73	703
TYPE OF HOUSING STRUCTURE MOBILE HOME	.2 3.5 2.6	374 619 655	51 86 91	448 720 764	8.77 8.39 8.42	Q 2.8 2.5	Q 757 672	Q 105 93	Q 680 785
NUMBER OF ROOMS									
1 TO 3	1.3 2.0 3.0	608 658 616	84 91 85	709 766 718	8.41 8.40 8.41	1.2 1.9 2.3	646 700 755	90 97 105	753 814 879
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	2.5 2.1 1.7	581 667 647	81 92 90	677 779 751	8.40 8.43 8.37	2.3 1.9 1.3	622 732 833	86 101 116	725 855 967
YEAR HOUSE BUILT									
BEFORE 1950	3.5 2.3 .4	678 560 581	94 78 81	789 654 671	8.40 8.44 8.33	3.2 1.8 .4	731 694 623	101 96 86	851 811 720
OWN/RENT									
OWN	3.9 2.4	646 598	89 83	752 698	8.40 8.41	3.2 2.2	764 635	106 88	889 740
1981 FAMILY INCOME LESS THAN \$10,000	2.1	645	89	752	8.40	2.0	684	95	796
\$10,000 TO \$19,999 \$20,000 TO \$34,999	2.0	601 581	83 81	701 673	8.43	1.7	665	92	777
\$35,000 OR MORE	1.2	677	94	790	8.35 8.41	.7 1.0	727 838	101 116	841 977
TOTAL BELOW 100 PERCENT OF POVERTY LINE TOTAL BELOW 125 PERCENT	.9	645	89	754	8.43	.9	659	91	770
OF POVERTY LINE	1.5	640	89	748	8.44	1.3	686	95	802
AGE OF HOUSEHOLD HEAD UNDER 35 YEARS	1.4	516	72	604	8.44	1,2	609	84	713
35 TO 59 YEARS	2.7	621 708	86 98	723 823	8.40 8.39	2.2	734 742	102 103	855 863
HOUSEHOLD MEMBERS							<u>.</u>		
ONE PERSON	1.6 3.7 1.0	662 616 615	92 85 85	771 715 726	8.40 8.38 8.51	1.6 3.0	676 724 731	94 100	786 841 863
S ON HUNE PEOPLE	1.0	013	00	140	8.51	.8	731	101	863



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. PRICE COLLARS PER MILLION BTU	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)	PER HOUSEHOLD		AVG.   AVG.   EXPEND-   ITURES   PER  HOUSEHOLD  (DOLLARS)	
MAIN HEATING FUEL										
NATURAL GAS	.4	104	14	121	8.59		-	_	-	
ELECTRICITY	Q	Q	Q	Q	Q	_	_	_	-	
FUEL OIL OR KEROSENE	5.4	711	99	828	8.40	5.4	711	99	828	
LPG	q	Q	Q	Q	Q	-	-	-	-	
WOOD	.2	196	27	229	8.44	-	-	-		
OTHER OR NONE	Q	Q	Q	Q	Q	-	-	-		
HOT WATER FUEL										
NATURAL GAS	1.2	475	66	554	8.43	0.9	627	87	731	
ELECTRICITY	1.3	461	64	538	8.42	1.0	580	80	677	
FUEL OIL OR KEROSENE	3.6	743	103	864	8.39	3.5	761	106	886	
OTHER	. 2	574	79	684	8.62	Q	Q	Q	Q	
MAIN HEATING EQUIPMENT USING										
STEAM OR HOT WATER SYSTEM	3.9	750	104	872	8.39	3.9	750	104	872	
CENTRAL WARM AIR FURNACE	1.4	623	86	730	8.44	1.4	623	86	730	
OTHER/NONE	1.0	172	24	201	8.52	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	.3	416	57	498	8.68	.2	566	78	683	
5,500 TO 7,000 HDD	1.4	627	87	724	8.33	1.2	722	100	833	
4,000 TO 5,499 HDD	4.6	642	89	749	8.42	4.0	714	99	833	
<2,000 CDD AND <4,000 HDD	-	-	-	-		-	-	-	_	
>2,000 CDD AND <4,000 HDD	-	_	-	_		-	-	-	-	



Table 6. (Continued)
Census Region: North
Central

		ANY FUEL	OIL OR KERO	SENE USED		   FUEL OIL   	OR KEROSENE FU	USED AS MA EL	IN HEATING
HOUSEHOLD CHARACTERISTICS	I NUMBER OF HOUSE-I HOLDS (MILLIONS)	PER HOUSEHOLD	CONSUMED PER HOUSEHOLD	AVG. EXPEND- I TURES PER I PER I HOUSEHOLD I (DOLLARS)	AVG. PRICE ODLLARS PER MILLION BTU)	OF HOUSE-		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	2.4	466	64	532	8.28	1.6	650	90	740
AREA TYPE METROPOLITAN	1.4	557 533	77 74	629 611	8.17 8.31	1.1	671 655	93 90	757 750
CENTRAL CITY	1.0	568	79	637	8.11	.8	677	94	760
NON-METROPOLITAN	1.0	334	46	392	8.55	.5	597	82	698
FUEL OIL PAID BY HOUSEHOLD		455	47	519	8.26		(	01	745
YES	2.1	455 553	63 77	644	8.41	1.3	657 609	91 84	745 710
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	.2	185	25	218	8.74	, Q	Q	Q	Q
SINGLE FAMILY 2 OR MORE UNITS	1.9	473 561	65 76	539 646	8.26 8.31	1.2	667 627	92 87	757 723
NUMBER OF ROOMS									
1 TO 3	.3	409	56	481	8.61	.2	566	77	666
4 TO 5	1.1 1.0	459 490	63 68	529 551	8.35 8.12	.8 .6	615 722	85 100	705 809
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)						_			
LESS THAN 999	.5	399	55	457	8.31	.3	569	78	648
1,000 TO 1,999 2,000 OR MORE	1.1	464 508	64 70	539 567	8.42 8.07	.8 .5	611 774	84 107	707 860
YEAR HOUSE BUILT BEFORE 1950	1.2	578		659	8.25	. 9	727	100	828
1950 TO 1974AFTER 1974	.8	325 386	45 53	367 454	8.23 8.51	.4 .2	533 541	73 75	596 637
OWN/RENT									
OWN		460	63	524	8.26	1.3	660	91	750
RENT	.4	498	69	575	8.34	.3	606	84	699
1961 FAMILY INCOME LESS THAN \$10,000	.7	539	74	619	8.33	.5	677	93	774
\$10,000 TO \$19,999	.8	434	60	497	8.31	.6	607	84	695
\$20,000 TO \$34,999 \$35,000 OR MORE	.4	386 489	53 68	443 548	8.31 8.09	.2 .3	574 763	79 106	655 853
TOTAL BELOW 100 PERCENT OF POVERTY LINE	.3	616	85	704	8.31	.2	831	114	946
TOTAL BELOW 125 PERCENT OF POVERTY LINE		620	85	707	8.30	.3	767	106	872
AGE OF HOUSEHOLD HEAD		***		-	0.71	_	***		
UNDER 35 YEARS	.6	345	48	399	8.36	.3	564 405	78	648
35 TO 59 YEARS	.9	457 556	63 77	514 641	8.13 8.37	.6 .7	685 657	95 90	767 757
HOUSEHOLD MEMBERS ONE PERSON	.4	581	80	674	8.41	.3	690	95	800
2 TO 4 PEOPLE	1.6	469	65	531	8.21	1.1	654	90	739
5 OR MORE PEOPLE	.3	295	41	347	8.51	Q	Q	Q	Q



Table 6. (Continued) Census Region: North 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  (DOLLARS)	AVG.   PRICE   (DOLLARS   PER   MILLION   BTU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)		AVG.   AVG.   AMOUNT   CONSUMED   PER   HOUSEHOLD   (MILLION   BTU)	AVG.   AVG.   EXPEND-   ITURES   PER  HOUSEHOLD  (DOLLARS)	
MATN DEATTNE FUEL										
MAIN HEATING FUEL NATURAL GAS	. 3	34	5	40	8.63	-	_	_		
ELECTRICITY	.3	101	14	120	8.72	_	_	_	-	
FUEL OIL OR KEROSENE	1.6	650	90	740	8.25	1.6	650	90	740	
LPG	G	ō	á	Q	Q	~		_	-	
WOOD	. 2	211	29	251	8.60	~	_	-	-	
OTHER OR NONE	Q	Q	Q	Q	Q	-	-	-		
HOT WATER FUEL										
NATURAL GAS	0.4	301	42	341	8.16	0.2	665	92	751	
ELECTRICITY	1.6	498	69	569	8.29	1.1	643	89	733	
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
OTHER	.2	449	62	503	8.09	Q	Q	Q	ବ	
MAIN HEATING EQUIPMENT USING										
FUEL OIL STEAM OR HOT WATER SYSTEM	¿2	589	82	670	8.20	.2	589	82	670	
CENTRAL WARM AIR FURNACE	1.1	650	90	736	8.19	1.1	650	90	736	
OTHER/NONE	1.0	215	29	254	8.64	.2	733	100	864	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD	1.3	527	73	594	8.15	. 9	691	95	773	
5,500 TO 7,000 HDD	.8	424	59	496	8.47	.5	638	88	746	
4,000 TO 5,499 HDD	.3	317	43	370	8.52	.2	489	67	570	
<2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	ଜ	
>2,000 CDD AND <4,000 HDD	-		_	_	_	-	_			



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

and the second	1				**************************************				
e vine Vine Vine Vine Vine Vine Vine Vine V		ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL	OR KEROSENE FU	USED AS MA	IN HEATING
HOUSEHOLD CHARACTERISTICS	HOLDS	AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)	PER HOUSEHOLD (MILLION	PER THOUSEHOLD	AVG. PRICE (DOLLARS) PER MILLION BTU)	HOUSE-	I PER IHOUSEHOLD	PER HOUSEHOLD	AVG. EXPEND- ITURES PER HOUSEHOLD
TOTAL HOUSEHOLDS	1.8	503	69	577	8.31	1.3	681	94	779
AREA TYPE									
METROPOLITAN	1.2	587	81	663	8.17	1.0	678	94	766
CENTRAL CITY	.3	562	78	652	8.40	. 3	648	90	752
OUTSIDE CENTRAL CITY	.8	597	83	668	8.09	.7	689	95	771
NON-METROPOLITAN	.7	360	49	430	8.70	.3	692	95	826
FUEL OIL PAID BY HOUSEHOLD									
YES	1.6	488	67	558	8.30	1.0	697	96	795
NO	.2	609	84	710	8.41	.2	609	84	710
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	Q	Q	Q	Q	Q	Q	Q	Q	Q
SINGLE FAMILY	1.5	518	71	591	8.28	1.0	710	98	808
2 OR MORE UNITS	3	60 <b>0</b>	83	699	8.41	.3	600	83	699
NUMBER OF ROOMS									
1 TO 3	.2	457	62	546	8.75	Q	Q	Q	Q
4 TO 5	. 9	453	62	526	8.42	.6	618	85	715
6 OR MORE	.7	579	80	651	8.12	. 5	774	107	867
MEASURED HEATED SPACE OF RESI-									
DENCE (IN SQUARE FEET)									
LESS THAN 999	. 3	380	52	444	8.47	. 2	596	82	692
1,000 TO 1,999	.9	500	69	582	8.46	.7	632	87	735
2,000 OR MORE	.6	569	79	635	8.08	.4	805	111	895
YEAR HOUSE BUILT									
BEFORE 1950	1.0	606	84	692	8.27	.8	762	105	870
1950 TO 1974	.5	327	45	374	8.33	.3	554	76	627
AFTER 1974	.3	463	64	544	8.50	.2	541	75	637
OWN/RENT	*								
OWN	1.6	489	67	559	8.29	1.0	700	97	798
RENT	. 3	579	80	677	8.43	.2	603	84	705
1981 FAMILY INCOME									
LESS THAN \$10,000	.5	570	79	660	8.41	.4	715	99	826
\$10,000 TO \$19,999	.7	460	63	530	8.37	.4	644	89	743
\$20,000 TO \$34,999	. 3	403	56	463	8.33	. 2	586	81	667
\$35,000 OR MORE	.3	573	79	640	8.06	.2	766	106	854
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE	.2	672	92	778	8.41	.2	924	127	1065
TOTAL BELOW 125 PERCENT									
OF POVERTY LINE	. 3	671	92	771	8.36	.2	844	116	966
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	.4	346	48	402	8.40	.2	538	82	679
35 TO 59 YEARS	. 7	532	74	598	8.13	.5	726	100	813
60 YEARS AND OVER	. 7	569	78	662	8.46	.6	677	93	787
HOUSEHOLD MEMBERS									
ONE PERSON	.3	665	92	784	8.56	.2	757	104	894
2 TO 4 PEOPLE	1.3	518	72	588	8.22	.9	681	94	770
5 OR MORE PEOPLE	.3	260	36	307	8.56	Q	Q	Q	Q
transport fried									



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

		ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL OR KEROSENE USED AS MAIN HEATING   FUEL 				
HOUSEHOLD CHARACTERISTICS		I AVG. I AMOUNT I CONSUMED I PER IHOUSEHOLD I(GALLONS)			AVG.   PRICE   (DOLLARS   PER   MILLION   BTU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD	
MAIN HEATING FUEL										
NATURAL GAS	.2	35	5	41	8.63	_	-	-	-	
ELECTRICITY	.2	109	15	131	8.75	_	_	_	-	
FUEL OIL OR KEROSENE	1.3	681	94	779	8.29	1.3	681	94	779	
LPG	Q	Q	Q	Q	Q	_	_	-	-	
WOOD	.2	219	30	260	8.58		-	-	-	
OTHER OR NONE	Q	Q	Q	Q	Q	-	-	-	-	
HOT WATER FUEL										
NATURAL GAS	0.2	289	40	335	8.36	Q	q	Q	Q	
ELECTRICITY	1.3	529	73	606	8.32	0.9	678	93	776	
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
OTHER	.2	525	73	587	8.08	Q	Q	Q	Q	
MAIN HEATING EQUIPMENT USING FUEL OIL										
STEAM OR HOT WATER SYSTEM	. 2	547	76	628	8.27	.2	547	76	628	
CENTRAL WARM AIR FURNACE	. 9	690	95	785	8.22	.9	690	95	785	
OTHER/NONE	.7	251	34	297	8.66	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	1.0	557	77	628	8.17	.7	737	102	825	
5,500 TO 7,000 HDD	.7	456	63	532	8.47	.5	638	88	746	
4,000 TO 5,499 HDD	Q	Q	Q	Q	Q	Q	q	Q	Q	
<2,000 CDD AND <4,000 HDD	-	-		÷		_	_	_	-	
>2,000 CDD AND <4,000 HDD	_	_		_	_	_	_	_	_	



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

			· —						
		ANY FUEL	OIL OR KERO	SENE USED		   FUEL OIL   		USED AS MA EL	IN HEATING
HOUSEHOLD CHARACTERISTICS	HOUSE-	PER HOUSEHOLD	AMOUNT CONSUMED PER	ITURES PER HOUSEHOLD	AVG.   PRICE   (DOLLARS   PER   MILLION   BTU) 	OF.	PER HOUSEHOLD	CONSUMED PER HOUSEHOLD	AVG. EXPEND- ITURES PER HOUSEHOLD
TOTAL HOUSEHOLDS	0.5	331	46	368	8.08	0.3	519	72	576
METROPOLITAN	.2	404	56	454	8.11	Q	Q	Q	Q
CENTRAL CITY	Q	Q	Q.	Q	Q	Q	Q	q.	Q
OUTSIDE CENTRAL CITY	Q	Q	Q	Q	Q	Q	Q	Q	Q
NON-METROPOLITAN	.3	271	37	299	8.03	.2	426	58	466
FUEL OIL PAID BY HOUSEHOLD									
YES	.5	347	48	386	8.08	.3	519	72	576
NO	Q	Q	Q	Q	Q	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	Q	Q	Q	Q	Q	Q	Q	Q	Q
SINGLE FAMILY	.4	317	44	355	8.11	.2	495	68	552
2 OR MORE UNITS	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	.2	487	67	542	8.05	.2	600	83	666
6 OR MORE	.2	206	28	231	8.14	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
1,000 TO 1,999	.2	317	44	357	8.15	Q	Q	Q	Q
2,000 OR MORE	Q	Q	Q	Q	Q	Q	Q	Q	Q
YEAR HOUSE BUILT									
BEFORE 1950	.2	433	60	487	8.13	.2	541	75	607
1950 TO 1974	2	320	44	352	7.99	.2	496	68	544
AFTER 1974	Q	Q	Q	Q	Q	Q	Q	Q	Q
OWN/RENT									
OWN	0.4	339	47	380	8.12	0.2	497	69	555
RENT	Q	Q	Q	Q	Q	Q	Q	Q	Q
Control of the contro									
1981 FAMILY INCOME		430	59	470	7.97	Q	Q	6	Q
LESS THAN \$10,000 \$10,000 TO \$19,999	.2 .2	319	44	350	7.94	q	q	ą.	õ
\$20,000 TO \$34,999	Ģ.	Q	Q	Q	Q	à	Q	Q	Q
\$35,000 OR MORE	Q	à	à	q	Q	Q	Q	Q	Q
TOTAL 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	.2	205	28	229	8.14	Q	Q	Q	Q
60 YEARS AND OVER	.2	496	69	543	7.93	Q	Q	Q	Q
HONGEROID MEMBERS									
HOUSEHOLD MEMBERS ONE PERSON	Q	Q	G	9	G	Q	Q	Q	Q
2 TO 4 PEOPLE	.3	274	38	306	8.13	.2	505	70	562
5 OR MORE PEOPLE	Q	Q	Q	Q	Q	Q	Q	Q	Q



# Table 6. (Continued) Census Division: West North 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  (DOLLARS)	AVG.   PRICE   (DOLLARS   PER   MILLION   BTU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLL (DOLLARS	
AIN HEATING FUEL										
NATURAL GAS	Q	Q	Q	Q	Q	-	-	_	-	
ELECTRICITY	Q	Q	Q	Q	Q	-	-	-	_	
FUEL OIL OR KEROSENE	. 3	519	72	576	8.04	. 3	519	72	576	
LPG	Q	Q	Q	Q	Q	-	-	-	-	
MOOD	Q	Q	Q	Q	Q	-	-	-	-	
OTHER OR NONE	Ó	্	Q	Q	Q	-	-	-	-	
IOT WATER FUEL										
NATURAL GAS	0.2	319	44	349	7.90	Q	Q	Q	Q	
ELECTRICITY	. 3	365	50	410	8.15	0.2	488	67	547	
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										
STEAM OR HOT WATER SYSTEM	Q	Q	Q	Q	Q	Q	q	Q	Q	
CENTRAL WARM AIR FURNACE	. 2	487	67	539	8.01	.2	487	67	539	
OTHER/NONE	. 2	109	15	126	8.52	Q	Q	Q	Q	
REATING DEGREES-DAYS (HDD)  ND COOLING DEGREES-DAYS (CDB) ONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	.3	430	59	480	8.08	.2	553	76	616	
5,500 TO 7,000 HDD	Q	Q	q	Q	Q	q	Q	Q	Q	
4,000 TO 5,499 HDD	.2	253	35	280	8.06	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 6. (Continued) Census Region: South

		ANY FUEL	OIL OR KERO	SENE USED						
HOUSEHOLD CHARACTERISTICS	HOUSE-	CONSUMED PER HOUSEHOLD	CONSUMED PER HOUSEHOLD (MILLION		AVG. PRICE COLLARS PER MILLION BTU	NUMBER OF HOUSE- HOLDS (MILLIONS)	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		
TOTAL HOUSEHOLDS	3.7	326	45	383	8.51	2.5	442	61	519	
AREA TYPE	• • • • • • • • • • • • • • • • • • • •									
METROPOLITAN	2.1	365	50	431	8.54	1.6	465	64	550	
CENTRAL CITY	.8	306	42	365	8.64	.6	378	52	453	
OUTSIDE CENTRAL CITY	1.3	403	56	473	8.50	1.0	519	72	610	
NON-METROPOLITAN	1.6	271	37	316	8.45	.9	402	55	466	
			٠,			• • •		33	,,,,	
FUEL OIL PAID BY HOUSEHOLD										
YES	3.4	312	43	367	8.52	2.3	429	59	504	
Ю	.3	48 <b>0</b>	67	560	8.41	.2	596	83	695	
TYPE OF HOUSING STRUCTURE						_				
MOBILE HOME	.4	182	25	214	8.53	.3	217	30	255	
SINGLE FAMILY	2.9	333	46	392	8.52	1.9	466	64	548	
2 OR MORE UNITS	.4	418	58	488	8.43	.2	536	74	626	
NUMBER OF ROOMS										
1 TO 3	.3	307	42	359	8.46	.2	364	50	426	
4 TO 5	1.5	299	41	355	8.60	1.2	371	51	440	
6 OR MORE	1.9	350	48	409	8.45	1.1	528	73	617	
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)										
LESS THAN 999	1.2	259	36	306	8.58	.9	308	42	365	
1,000 TO 1,999	1.6	330	45	389	8.56	1.1	447	62	528	
2,000 OR MORE	.8	414	57	481	8.38	.5	678	94	785	
VEAR HOUSE BUTLE										
YEAR HOUSE BUILT BEFORE 1950	1.3	459	63	543	8.56		532	73	629	
1950 TO 1974	2.0	276	38	322	8.46	1.1	380	73 53	444	
AFTER 1974	.4	114	16	133	8.51	q	Q	Q Q	Q	
	• •	•		233	0.31	٦.	•	~	7	
OWN/RENT										
OWN	2.7	308	43	362	8.50	1.8	436	60	511	
RENT	1.0	374	52	441	8.53	- 7	457	63	540	
TOOL EAMTIN THROWS										
1981 FAMILY INCOME		700		7.4		_				
LESS THAN \$10,000	1.2	329	45	391	8.60	9	389	54	461	
\$10,000 TO \$19,999 \$20,000 TO \$34,999	1.0	384 283	53	451	8.51	-8	470	65	552	
\$35,000 OR MORE	1.0	28 <del>6</del>	39 40	326 337	8.32	.3	549	76	630	
TOTAL ON HORE THE STATE OF THE	1.0	200	40	337	8.50	.5	441	61	519	
TOTAL BELOW 100 PERCENT										
OF POVERTY LINE	.7	368	51	438	8.64	.5	464	64	551	
TOTAL BELOW 125 PERCENT										
OF POVERTY LINE	.8	354	49	421	8.62	.6	426	59	505	
AGE OF HOUSEHOLD HEAD										
UNDER 35 YEARS	1.2	288	40	336	8.45	.8	392	54	458	
35 TO 59 YEARS	1.5	306	42	358	8.47	.9	453	63	530	
60 YEARS AND OVER	1.1	395	54	469	8.61	.8	477	66	565	
HOUSEHOLD MEMBERS										
ONE PERSON	.6	414	57	490	0 45	p	646		F-7.0	
2 TO 4 PEOPLE.	2.6	314	43	369	8.60 8.50	.5 1.7	448 441	62	530	
5 OR MORE PEOPLE	.5	271	37	315	8.43	.3	435	61 60	518 507	
	·. ••		٠.	~~~	0.73		733	00	507	



Table 6. (Continued) Census Region: South

		ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL		USED AS MA	DMITABH MI.
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG.   AVG.   PRICE   (DOLLARS   PER   MILLION   BTU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
MAIN HEATING FUEL									
NATURAL GAS	.2	134	18	156	8.44		_	-	-
ELECTRICITY	.4	48	6	56	8.64	~	-	_	-
FUEL OIL OR KEROSENE	2.5	442	61	519	8.51	2.5	442	61	519
LPG	Q	Q	Q	Q	Q	-	-		-
WOOD	.4	99	14	118	8.66	-	-	_	_
OTHER OR NONE	Q	Q	Q	Q	Q	~	-	-	-
HOT WATER FUEL									
NATURAL GAS	0.4	297	41	351	8.56	0.2	507	70	601
ELECTRICITY	2.6	261	36	307	8.53	1.7	362	50	425
FUEL OIL OR KEROSENE	.4	670	93	792	8.53	. 4	711	99	842
OTHER	, 3	438	60	502	8.35	.2	531	73	609
MAIN HEATING EQUIPMENT USING FUEL OIL									
STEAM OR HOT WATER SYSTEM	14	677	94	787	8.39	.4	677	94	787
CENTRAL WARM AIR FURNACE	1.1	455	63	531	8.44	1.1	455	63	531
OTHER/NONE	2.1	180	25	215	8.71	. 9	307	42	368
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	Q	Q	Q	Q	Q	Q	Q	Q	Q
4,000 TO 5,499 HDD	1.8	413	57	485	8.50	1.2	556	77	652
<2,000 CDD AND <4,000 HDD	1.5	285	39	335	8.52	1.1	391	54	460
>2,000 CDD AND <4,000 HDD	.4	108	15	130	8.71	.3	147	20	177



# Table 6. (Continued) Census Division: South Atlantic

	·										
1 Primer Primer Control Contro		ANY FUEL	OIL OR KERO	SENE USED		   FUEL OIL	FUEL OIL OR KEROSENE USED AS MAIN HEAT FUEL				
and the second of the second o		AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)	CONSUMED PER HOUSEHOLD	ITURES PER HOUSEHOLD	PER	HOUSE-	PER HOUSEHOLD				
		<u> </u>	<u> </u>		<u> </u>	<u> </u>	L	-	<u> </u>		
TOTAL HOUSEHOLDS	3.2	354	49	417	8.52	2.4	445	61	523		
AREA TYPE								- William			
METROPOLTTAN	2.0	390	54	461	8.54	1.6	467	65	552		
CENTRAL CITY	.7	353	49	422	8.64	.6	381	53	457		
OUTSIDE CENTRAL CITY	1.3	410	57	482	8.50	1.0	519	72	610		
NON-METROPOLITAN	1.3	299	41	348	8.46	.8	403	55	468		
FUEL OIL PAID BY HOUSEHOLD						5.					
YES	2.9	342	47	402	8.53	2.2	431	60	508		
NO	.3	480	67	560	8.41	.2	596	. 83	695		
TYPE OF HOUSING STRUCTURE											
MOBILE HOME	. 3	206	28	242	8.53	.3	220	30	259		
SINGLE FAMILY	2.6	360	50	424	8.53	1.8	468	65	551		
2 OR MORE UNITS	.3	453	63	529	8.43	.2	536	74	626		
NUMBER OF ROOMS											
1 TO 3	. 3	326	45	381	8.45	.2	364	50	426		
4 TO 5		321	44	381	8.61	1.1	371	51	441		
6 OR MORE	1.6	386	53	452	8.46	1.1	534	74	623		
MEASURED HEATED SPACE OF RESI-											
DENCE (IN SQUARE FEET)				4 Table 1							
LESS THAN 999	1.1	275	38	325	8.58	.8	310	43	367		
1,000 TO 1,999	1.4	356	49	421	8.56	1.1	445	61	527		
2,000 OR MORE	.7	471	65	548	8.39	.4	697	97	808		
YEAR HOUSE BUILT											
BEFORE 1950	1.3	472	65	558	8.56	1.0	534	74	631		
1950 TO 1974	1.8	297	41	347	8.45	1.2	381	53	446		
AFTER 1974	.2	119	16	141	8.61	Q	Q	Q	Q		
OWN/RENT									F7./		
OHN	2.3	339	47	398	8.51	1.7	440	61	516 539		
RENT	.9	393	54	464	8.52	.7	456	63	937		
1981 FAMILY INCOME						_					
LESS THAN \$10,000	1.1	3 <b>35</b>	46	398	8.60	.9	389	54	461		
\$10,000 TO \$19,999	.8	408	56	479	8.51	.7	473	65	556		
\$20,000 TO \$34,999	.4	355	49	408	8.31	.2	582 443	81 61	668 523		
\$35,000 OR MORE	. 8	325	45	383	8.51	.5	443	61	363		
TOTAL BELOW 100 PERCENT											
OF POVERTY LINE	.6	383	53	456	8.64	.5	464	64	551		
TOTAL BELOW 125 PERCENT	.8	366	51	436	8.62	.6	426	59	505		
OF POVERTY LINE	.0	JUU	J-A.	770	U+01						
AGE OF HOUSEHOLD HEAD		707		775	0 /5	7	378	55	465		
UNDER 35 YEARS	1.0	321	44	375	8.45	.7 .8	453	63	532		
35 TO 59 YEARS	1.3	330	46	386	8.47	.8	477	66	565		
60 YEARS AND OVER	1.0	418	58	497	8.61	,0	711	ÇÜ	203		
HOUSEHOLD MEMBERS						-	448	4.0	E7A		
ONE PERSON	.6	414	57	490	8.60	.5	448 444	62 61	530 522		
2 TO 4 PEOPLE	2.2	350	48	411	8.50 8.44	1.6 .2	439	61	513		
5 OR MORE PEOPLE	.4	284	39	332	0.44		737	01	243		



Table 6. (Continued)
Census Division: South
Atlantic

	; ! !	ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL (	OR KEROSENE FU	USED AS MA	IN HEATON
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)	HOUSE-		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	
MAIN HEATING FUEL									
NATURAL GAS	.2	167	23	195	8.42	-	-	-	-
ELECTRICITY	.2	59	8	69	8.63	-	-	-	-
FUEL OIL OR KEROSENE	2.4	445	61	523	8.51	2.4	445	61	523
LPG	Q	Q	Q	Q	Q	-	-	-	-
WOOD	.4	107	15	128	8.66	-	_	-	-
OTHER OR NONE	G	Q	Q	Q	Q	-	-	-	-
HOT WATER FUEL									
NATURAL GAS	0.3	327	45	387	8.57	0.2	518	72	615
ELECTRICITY	2.2	286	39	337	8.53	1.6	359	50	423
FUEL OIL OR KEROSENE	.4	670	93	792	8.53	.4	711	99	842
OTHER	.3	438	60	502	8.35	.2	531	73	609
MAIN HEATING EQUIPMENT USING FUEL OIL									
STEAM OR HOT WATER SYSTEM	,4	677	94	787	8.39	.4	677	94	787
CENTRAL WARM AIR FURNACE	1.1	463	64	541	8.45	1.1	463	64	541
OTHER/NONE	1.7	201	28	241	8.73	.8	297	41	358
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	Q	Q	Q	Q	Q	Ø	Q	Q	Q
4,000 TO 5,499 HDD	1.6	434	60	510	8.50	1.1	571	79	670
<2,000 CDD AND <4,000 HDD	1.3	314	43	369	8.52	1.0	390	54	458
>2,000 CDD AND <4,000 HDD	.3	115	16	139	8.76	.3	129	18	156



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

	   	ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL	IN HEATING		
HOUSEHOLD CHARACTERISTICS	OF HOUSE-	CONSUMED PER HOUSEHOLD	AVG. AMOUNT CONSUMED FER HOUSEHOLD (MILLION BTU)		AVG. PRICE (DOLLARS PER MILLION BTU)	OF HOUSE-	PER  HOUSEHOLD  (GALLONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	
TOTAL HOUSEHOLDS	0.4	156	21	180	8.42	Q	q	Q	Q
AREA TYPE METROPOLITAN CENTRAL CITY OUTSIDE CENTRAL CITY NON-METROPOLITAN	Q Q Q .3	Q Q Q 174	Q Q Q 24	Q Q Q 201	Q Q Q 8.37	<i>द</i> <i>द</i> <i>द</i>	<i>ପ</i> ଫ ଫ ଫ	ख ख ख	æ æ æ æ
FUEL OIL PAID BY HOUSEHOLD									
YES	.4 Q	156 Q	21 Q	180 Q	8.42 Q	Q Q	Q Q	Q Q	Q Q
TYPE OF HOUSING STRUCTURE		7		Ť	,	7	•	•	Ì
MOBILE HOMESINGLE FAMILY2 OR MORE UNITS	ୟ . 3 ହ	Q 170 Q	Q 23 Q	Q 196 Q	Q 8,42 Q	Q Q Q	ୟ ୟ ଷ	ଭ ଜ ଜ	Q Q Q
NUMBER OF ROOMS									
1 TO 3	Q .2 .2	Q 184 134	Q 25 18	Q 215 153	Q 8.51 8.33	ଫ ଫ ଷ	ଫ ଫ ଘ	ପ ପ	ଫ ପ ଘ
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	Q .2 Q	Q 156 Q	Q 21 Q	Q 182 Q	Q 8.53 Q	ୟ ୟ ୟ	ସ ଭ ସ	ଫ ଫ ୟ	Q Q
YEAR HOUSE BUILT									
BEFORE 1950	Q .2 Q	Q 165 Q	Q 23 Q	Q 193 Q	Q 8.49 Q	ଫ ପ ଫ	Q Q Q	ବ ବ ବ	Q Q Q
OWN/RENT									
OWNRENT	0.3 Q	155 Q	21 Q	178 Q	8.38 Q	Q Q	Q Q	Q Q	<b>Q</b> Q
1981 FAMILY INCOME	_		_			_			
LESS THAN \$10,000 \$10,000 TO \$19,999	Q Q	Q Q	Q Q	G Q	Q Q	Q Q	Q Q	ୟ ପ୍	Q Q
\$20,000 TO \$34,999 \$35,000 OR MORE	Q Q	Q Q	Q Q	Q Q	<b>Q</b> Q	Q Q	Q Q	Q Q	Q Q
TOTAL 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	. 2	120	17	138	8.33	Q	q	Q	q
35 TO 59 YEARS	. 2 Q	199 Q	27 Q	231 Q	8.47 Q	Q Q	ଦ ବ	Q	Q Q
HOUSEHOLD MEMBERS ONE PERSON	Q	Q	Q	Q	Q	Q	Q	Q	Q
2 TO 4 PEOPLE 5 OR MORE PEOPLE	.3 Q	143 Q	20 Q	165 Q	8.45 Q	ସ ଜ	Q Q	<b>Q</b>	Q Q



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

	!   	ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL (	OR KEROSENE FU		IN HEATING
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)	I AVG. I AMOUNT I CONSUMED I PER IHOUSEHOLD I (MILLION I BTU)		AVG.   PRICE   (DOLLARS   PER   MILLION   BTU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)			AVG. EXPEND- I TURES PER HOUSEHOLD (DOLLARS)
MAIN HEATING FUEL									
NATURAL GAS	Q	Q	Q	Q	Q	_	-	-	
ELECTRICITY	.2	43	<u>`</u> 6	50	8.63	_	-	-	-
FUEL OIL OR KEROSENE	q	Q	Q	Q	Q	Q	Q	Q	Q
LPG	Q	Q	Q	Q	Q	-	-	-	-
WOOD	Q	Q	Q	Q	Q	•	-	-	-
OTHER OR NONE	Q	Q	Q	Q	Q	-	-	-	-
HOT WATER FUEL									
NATURAL GAS	G <sub>i</sub>	Q	Q	Q	Q;	<b>Q</b>	Q	Q.	G,
ELECTRICITY	0.4	152	21	176	8.43	Q	Q	Q	্ব
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	.3
OTHER	Q	Q	Q	Q	Q	Q	Q	Q	ığ
MAIN HEATING EQUIPMENT USING FUEL OIL									
STEAM OR HOT WATER SYSTEM	q	Q	Q	Q	Q	Q	Q	Q	Q
CENTRAL WARM AIR FURNACE	ĝ	ō	ō	õ	G	Q.	q	Q.	i i
OTHER/NONE	3	111	15	129	8.53	Q	q	à	Q
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	q	Q	Q	Q	Q	Q	Q	Q	Q
<2,000 CDD AND <4,000 HDD	.2	114	16	133	8.55	Q	Q	Q	Q
>2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	<b>C</b> i



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

	ANY FUEL OIL OR KEROSENE USED							E USED AS MAIN HEATING UEL			
HOUSEHOLD CHARACTERISTICS	I I	AVG.	AVG.	AVG.	AVG.	i i Number	AVG.	l AVG. I AMOUNT	AVG.		
CHARACTERISTICS	OF I	CONSUMED	CONSUMED	ITURES PER	(DOLLARS	OF HOUSE-	CONSUMED	CONSUMED	I ITURES PER		
AND THE	HOLDS		(MILLION	(DOLLARS)	MILLION BTU)	HOLDS (MILLIONS)			(DOLLARS)		
			BTU)		1	 	<del>[</del> ]	BTU)	1		

TOTAL HOUSEHOLDS
ADEA WORK
AREA TYPE
METROPOLITAN
CENTRAL CITY
OUTSIDE CENTRAL CITY
NON-METROPOLITAN
FUEL OIL PAID BY HOUSEHOLD
YES
NO
TYPE OF HOUSING STRUCTURE
MOBILE HOME
SINGLE FAMILY
2 OR MORE UNITS
2 DK HOKE ONLIGHT
NUMBER OF ROOMS
1 TO 3
4 TO 5
6 OR MORE
MEASURED HEATED SPACE OF RESI-
DENCE (IN SQUARE FEET)
LESS THAN 999
1,000 TO 1,999
2,000 OR MORE
YEAR HOUSE BUILT
BEFORE 1950
1950 TO 1974
AFTER 1974
OWN/RENT
OWN
RENT
1981 FAMILY INCOME
LESS THAN \$10,000
\$10,000 TO \$19,999
\$20,000 TO \$34,999
\$35,000 OR MORE
TOTAL DELON 100 DEDOCATE
TOTAL BELOW 100 PERCENT
OF POVERTY LINE
OF POVERTY LINE
OF POVERIT LINE
AGE OF HOUSEHOLD HEAD
UNDER 35 YEARS
35 TO 59 YEARS
60 YEARS AND OVER
Com Gamile servere et et
HOUSEHOLD MEMBERS
ONE PERSON
2 TO 4 PEOPLE
5 OR MORE PEOPLE
and the second of the second o

(Data Withheld Because of Large Variance)



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

	! [    -	ANY FUEL	OIL OR KERO	SENE USED		   FUEL OIL 	OR KEROSENE FU	AVG.   AVG. AMOUNT   EXPEND- CONSUMED   ITURES PER   PER				
HOUSEHOLD CHARACTERISTICS	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE COLLARS PER HILLION BTU	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)	AMOUNT CONSUMED PER HOUSEHOLD (MILLION	EXPEND-   ITURES   PER  HOUSEHOLD			
MAIN HEATING FUEL  NATURAL GAS. ELECTRICITY FUEL DIL OR KEROSENE. LPG. WOOD. OTHER OR NONE.  HOT WATER FUEL NATURAL GAS. ELECTRICITY FUEL DIL OR KEROSENE. OTHER.  MAIN HEATING EQUIPHENT USING FUEL DIL STEAM OR HOT WATER SYSTEM. CENTRAL WARM AIR FURNACE. OTHER/NONE.  HEATING DEGREES-DAYS (HDD) AND COQLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE <2,000 CDD AND >7,000 HDD. 22,000 CDD AND 5,500 TO 7,000 HDD. 4,000 TD 5,499 HDD. 22,000 CDD AND <4,000 HDD. >2,000 CDD AND <4,000 HDD.				(Data Wit	thheld Be	ecause c	f Large \	Variance)	)			



Table 6. (Continued) Census Region: West

e de Andrew Abrillon (* 1984) e e									
						EUST OTL C	R KEROSENE	USED AS MAI	N HEATING
		ANY FUEL (	IL OR KERDS	SENE USED		LOEL GIL C	FUE	L	
0.000	·.	M/G.	AVG.	AVC EXPEND-	AVG.	NUMBER	AVG.	AVG.	AVG. EXPEND- I ITURES
CHARACTERISTICS	NUMBER	Ahount	AMOUNT   CONSUMED		(DOLLARS	) OF	CONSUMED	CONSUMED PER	PER
ia in a sign and a sig	OF I	nen	1 PFP	1 PER	PER	HOUSE-	PER	HOUSEHOLD	
Anni San Charles and Anni Anni Anni Anni Anni Anni Anni An	HOUSE-	HOUSEHOLD	HOUSEHOLD	HOUSEHOLD	MILLION	HOLDS  (MILLIONS)	(GALLONS)	(MILLION	(DOLLARS)
in i i i i i i i i i i i i i i i i i i	ILLIONS)	(GALLONS)	(WILLION	(DOLLARS)	BTU)	1	1	[ BTU)	Į.
		1	I BTU)	1	i	<u>i</u>	<u></u>	L	1
		<u> </u>	1	1	1				
1 1 24 - 144 - 174 - 174 - 174 - 174 - 174 - 174 - 174 - 174 - 174 - 174 - 174 - 174 - 174 - 174 - 174 - 174 -						0.4	445	61	526
	0.6	344	46	408	8.58	0.4	, , _		
OTAL HOUSEHOLDS	***								498
REA TYPE			47	410	8.73	. 3	414	57	Q Q
METROPOLITTAN	.4	340	45	393	8.79	Q	Q 675	Q 60	522
CENTRAL CITY	.2	324 357	49	428	8.67	.2	435 Q	q	Q
DUTSTOF CENTRAL CITY	.2 .2	353	49	404	8.29	Q	٠,		
NON-METROPOLITAN									
FUEL OIL PAID BY HOUSEHOLD				391	8.59	.4	430	59	509 Q
YES	.6	329	46 Q	q	Q	Q	Q	Q	4
NO	Q	Q	ч	•					
						Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE	Q	Q	Q	Q	Q 8.60	.4	439	61	520
MOBILE HOME	.6	339	47	403 Q	Q.50	Q	Q	Q	Q
2 OR MORE UNITS	Q	Q	Q	Q	ì				
2 OR HORE						_	Q	Q	Q
NUMBER OF ROOMS	Q	Q	Q	Q	Q	Q	341	47	410
1 TO 3	.3	268	37	323	8.75	. 2 . 2	503	70	593
4 TO 5 6 OR MORE	.3	391	54	460	8.52	•-			
									_
MEASURED HEATED SPACE OF RESI-				384	8.66	Q	Q	Q	Q 470
DENCE (IN SQUARE FEET) LESS THAN 999	.2	321	44 40	342	8.54	.2	400	55	472 Q
1.000 TO 1.999	.3	289 47 <b>0</b>	65	554	8.53	Q	Q	Q	•
2,000 OR MORE	.2	470							
					8.64	.3	441	61	525
YEAR HOUSE BUILT	.4	355	49	424	8.48	.2	452	62	529
BEFORE 1950	.2	345	48	404 Q	Q	Q	Q	Q	Q
AFTER 1974	Q	Q	Q	4	•				
				403	8.62	0.3	444	61	527
OWN	0.5	337	46 9	401 Q	Q	Q	Q	Q	Q
RENT	Q	Q	ч	4					
na kanada na Maria na Maria na Maria na Maria na Maria na Maria na Maria na Maria na Maria na Maria na Maria n					_	•	Q	Q	Q
1981 FAMILY INCOME	Q	Q	Q	Q	Q 8.44	Q	q q	Q	Q
LESS THAN \$10,000 \$10,000 TO \$19,999	.2	340	47	397	Q.44	Q	Q	Q	Q
\$20,000 TO \$34,999	Ø.	Q	Q 42	Q 372	8.77	Q	Q	Q	Q
\$35,000 OR MORE	.2	308	42	370					
TOTAL BELOW 100 PERCENT			¥	Q	Q	Q	Q	Q	G
OF POVERTY LINE	Q	Q	Q	ч	•			_	Q
TOTAL BELOW 125 PERCENT		Q	- Q	. Q	Q	Q	Q	Q	ч
OF POVERTY LINE	Q	વ	-						
AGE OF HOUSEHOLD HEAD				354	8.54	. 9	ગ	Q	
HUNDED 35 YEARS	2					2			
75 TO 59 YEARS							480	67	<b>5</b>
60 YEARS AND OVER	2	377	. 55						
74-5 Li				_	Q	Q	Q	Q	
HOUSEHOLD MEMBERS	Q	Q	Q 49	Q 424		_			53 (
min procoli								Q	Ç.
ONE PERSON	.4	358 Q	. q7	Q	Q	Q	Q	٠,	



Table 6. (Continued) Census Region: West

	; } !	ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL (	R KEROSENE FU	USED AS MA El	IN HEATING
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD HOULLARS)	AVG. PRICE (DOLLARS PER MILLION BTU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)		AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG.   AVG.   EXPEND-   ITURES   PER  HOUSEHOLD  (DOLLARS)
MAIN HEATING FUEL									
NATURAL GAS	Q	Q	Q	Q	Q	_	_	_	_
ELECTRICITY	õ	Ġ	è	è	ò	_	_	-	_
FUEL DIL OR KEROSENE	.4	445	61	526	8.56	. 4	445	61	526
LPG	Q	Q	G,	Q.	Q	-	-	-	-
MGOD	Q	Q	Q	Q	Q	_	-	_	-
OTHER OR NONE	Q	Q	Q	Q	Q	-	-	-	-
HOT WATER FUEL									
NATURAL GAS	Q	Q	Q	Q	Q	Q	Q	Q	Q
ELECTRICITY	0.5	363	50	430	8.58	0.4	425	59	503
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	G.	Q	Q	Q
OTHER	Q	Q	Q	Ġ	Q	Q	Q	Q	G
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	471	65	554	8.49	. 3	471	65	554
OTHER/NONE	. 3	187	26	225	8.78	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	Q	Q	Q	Q	Q	Q	Q	Q	Q
4,000 TD 5,499 HDD	. 4	328	45	393	8.67	. 3	401	56	480
<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	G



# Table 6. (Continued) Census Division: Mountain

		Y FUEL OIL OR KERO	SENE USED		FUEL OIL	OR KEROSENE FU	USED AS MA	IN HEATING
HOUSEHOLD CHARACTERISTICS	NUMBER ! A	AVG. AVG. MOUNT AMOUNT	AVG.	AVG. PRICE	NUMBER	AVG.	AVG.	AVG.
	HOUSE-	NSUMED   CONSUMED   PER   PER   SEHOLD   HOUSEHOLD	ITURES     PER    HOUSEHOLD	(DOLLARS   PER MILLION	OF HOUSE- HOLDS	CONSUMED PER HOUSEHOLD	CONSUMED   PER  HOUSEHOLD	ITURES PER
	(MILLIONS) (GA		(DOLLARS)		(MILLIONS)			(DOLLARS)

	(MILLIONS)   	(GALLONS)	(MILLION   BTU)	(DOLLARS)	BTU)   	(MILLIONS)    	(GALLONS)	(MILLION  (   BTU)   
TOTAL HOUSEHOLDS								
AREA TYPE								
METROPOLITAN								
CENTRAL CITY								
OUTSIDE CENTRAL CITY								
NON-METROPOLITAN								
FUEL OIL PAID BY HOUSEHOLD								
YES								
No								
TYPE OF HOUSING STRUCTURE								
MOBILE HOME				(Data Wit	tnheid E	Because o	T Large	variance)
SINGLE FAMILY				17 (4 )				
2 OR MORE UNITS								
NUMBER OF ROOMS								
1 TO 3								
4 TO 5								
6 UK MUKE								
MEASURED HEATED SPACE OF RESI-								
DENCE (IN SQUARE FEET)								
LESS THAN 999								
2,000 OR MORE								
Light of Horzestelline								
YEAR HOUSE BUILT								
BEFORE 1950								
1950 TO 1974								
AFTER 1974								
OWN/RENT								
OWN								
1981 FAMILY INCOME								
LESS THAN \$10,000								
\$10,000 TO \$19,999 \$20,000 TO \$34,999								
\$35,000 OR MORE								
755,000 OK 110KC::::::								
TOTAL BELOW 100 PERCENT								
OF POVERTY LINE								
TOTAL BELOW 125 PERCENT								
OF POVERTY LINE								
AGE OF HOUSEHOLD HEAD								
UNDER 35 YEARS								
35 TO 59 YEARS								
60 YEARS AND OVER								
HOUSEHOLD MEMBERS								
ONE PERSON								
2 TO 4 PEOPLE								
5 OR MORE PEOPLE								



### Table 6. (Continued) Census Division: Mountain

	! ! ] f	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)			AVG. LEXPEND- LITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE ODLLARS PER HILLION BTU	NUMBER OF HOUSE- HOUDS (MILLIONS)			AVG. EXPEND- ITURE: PER HOUSEHOLD (DOLLARS)
MAIN HEATING FUEL NATURAL GAS. ELECTRICITY. FUEL OIL OR KEROSENE. LPG. WOOD. OTHER OR NONE. HOT WATER FUEL NATURAL TAS. ELECTRICITY. FUEL OIL OR KEROSENE. OTHER.  MAIN HEATING EQUIPMENT USING FUEL OIL STEAM OR HOT WATER SYSTEM. CENTRAL MARM AIR FURNACE. OTHER/NONE.  HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE  <2,000 CDD AND >7,000 HDD.  <2,000 CDD AND 4,000 TO 5,499 HDD.   <2,000 CDD AND <4,000 HDD.  <2,000 CDD AND <4,000 HDD.  <2,000 CDD AND <4,000 HDD.				(Data W	ithheld B	decause ·	of Large	Variance	∌)



Table 6. (Continued)
Census Division:
Pacific

		ANY FUEL	OIL OR KERO	SENE USED		   FUEL OIL 	OR KEROSENE FU	USED AS MA	IN HEATING
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)		I AVG. I AMOUNT I CONSUMED I PER IHOUSEHOLD I (MILLION I 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)
	.h	A				•			
TOTAL HOUSEHOLDS	0.5	337	47	405	8.71	0.3	410	57	493
AREA TYPE						_			
METROPOLITAN	.4	352 340	49 47	424	8.73	.3	414	57	498
CENTRAL CITY	.2			413	8.79	Q	Q 4.75	Q	Q
OUTSIDE CENTRAL CITY	. 2	364 Q	50 q	436 Q	8.67 Q	.2 Q	435 Q	60 Q	522 Q
		,	•		•	•	•	•	•
FUEL OIL PAID BY HOUSEHOLD									
YES	.4	333	46	401	8.72	. 3	408	56	491
NO	Q	q	Q	. Q	Q	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	Q	Q	Q	Q	Q	Q	Q	Q	Q
SINGLE FAMILY	.4	330	46	398	8.73	. 3	406	56	489
2 OR MORE UNITS		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	.2	290	40	354	8.83	Q	q	Q	Q
6 OR MORE	. 2	368	51	440	8.65	. 2	471	65	563
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	.2	307	42	371	8.73	Q	Q	Q	Q
1,000 TO 1,999	. 2 Q	294	41	356	8.76	Q Q	Q	Q	Q
2,000 OR HORE	. 4	Q	Q	Q	Q	Q.	Q	Q	Q
YEAR HOUSE BUILT	-								
BEFORE 1950	.3	330	46	401	8.79	.2	403	56	489
1950 TO 1974	.2	347	48	411	8.58	Q	Q	Q	Q
AFTER 1974	Q	Q	Q	. Q	Q	Q	Q	Q	Q
DWN/RENT									
OWN	0.4	343	47	416	8.78	0.3	424	58	511
RENT	Q	Q	Q	. Q	Q	Q	Q	Q	Q
1981 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
\$20,000 TO \$34,999	Q	Q	Q	Q	Q	Q	Q	Q	Q
\$35,000 OR MORE	.2	331	45	407	8.94	Q	Q	Q	Q
TOTAL 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	Ģ	Ġ	Q	Q	Q	Q
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	- Q	Q	Q	Q.	Q	Q	Q	Q	Q
35 TO 59 YEARS	.2	344	47	412	8.70	Q	Q.	Q	q
60 YEARS AND OVER	Q	Q	Q	Q	Q	Q	Q	Q	q
HOUSEHOLD MEMBERS		_	•	_	_	-	_	~	_
ONE PERSON	Q .3	Q 351	Q 48	Q 423	Q 8.75	Q .2	Q 409	Q 56	Q 492
5 OR MORE PEOPLE	o o	Q	q q	Q	0.75 Q	Q	Q Q	Q	Q Q
	•	٦	٦.	•	٦	•	**	•	•



Table 6. (Continued) **Census Division: Pacific** 

	i 1 1	ANY FUEL	OIL OR KERO	SENE USED		FUEL OIL (   	OR KEROSENE FU		IN HEATING
HOUSEHOLD CHARACTERISTICS	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)	AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)	AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD ((DOLLARS)	AVG. PRICE CDOLLARS PER MILLION BYU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)			AVG. LEXPEND- LITURES PER HOUSEHOLE COOLLARS
MAIN HEATING FUEL									
NATURAL GAS	Q	Q	Q	Q	Q	-	-	-	-
ELECTRICITY	Q	Q	Q	Q	Q	-	-	-	-
FUEL OIL OR KEROSENE	.3	410	57	493	8.70	.3	410	57	4.93
LPG	Q	Q	Q	Q	Q	-	-	-	-
WOOD	Q	Q	Q	Q	Q	_	-	-	-
OTHER OR NONE	Q	Q	Q	Q	Q	-	-	-	-
HOT WATER FUEL									
NATURAL GAS	Q	Q	Q	Q	Q	Q	Q	Q	Q
ELECTRICITY	0.4	333	46	402	8.72	0.3	391	54	471
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	Q	Q	Q	Q	ହ	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	<b>,</b> 2	421	58	505	8.66	.2	421	58	505
OTHER/NONE	2	199	27	242	8.84	q	Q	Q	ď
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<2,000 CDB 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	340	47	408	8.67	.3	401	56	480
<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

<sup>&</sup>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 1982 RESIDENTIAL ENERGY CONSUMPTION SURVEY.



Table 7. U.S.
Residential Liquefied
Petroleum Gas
Consumption and
Expenditures—April
1982 Through March
1983, United States

		ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFI	ED PETROLEU HEATIN	M GAS USED G FUEL	AS MAIN
HOUSEHOLD   CHARACTERISTICS	NUTBER OF HOUSE- HOLDS (MILLIONS)		CONSUMED PER HOUSEHOLD	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	PER MILLION		PER HOUSEHOLD	PER HOUSEHOLD	AVG. EXPEND- I TURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	7.3	432	39	372	9.42	3.8	641	59	521
AREA TYPE									
METROPOLITAN	3.3	331	30	302	9.97	1.5	526	48	448
CENTRAL CITY	.5	222	20	232	11.42	.3	265	24	276
OUTSIDE CENTRAL CITY	2.8	349	32	313	9.82	1.3	587	54	488
NON-METROPOLITAN	4.1	513	47	428	9.14	2.2	720	66	571
LPG PAID BY HOUSEHOLD									
YES	6.8	428	39	369	9.45	3.5	642	59	522
NO	.5	487	44	404	9.09	.3	636	58	510
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	1.5	378	34	327	9.47	.9	519	47	434
SINGLE FAMILY	5.6	454	41	389	9.38	2.8	685	63	551
2 OR MORE UNITS	.2	246	22	248	11.05	Q	Q	Q	Q
NUMBER OF ROOMS									
1 TO 3	.6	262	24	247	10.29	.3	344	31	316
4 TO 5	3.6	409	37	356	9.54	1.9	581	53	486
6 OR MORE	3.2	489	45	412	9.22	1.6	773	71	604
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	3.0	351	32	323	10.09	1.7	494	45	428
1,000 TO 1,999	3.0	459	42	390	9.30	1.5	644	59	522
2,000 OR MORE	1.3	554	51	440	8.69	.5	1111	101	818
YEAR HOUSE BUILT									
BEFORE 1950	3.1	421	38	366	9.52	1.4	689	63	558
1950 TO 1974	3.3	414	38	358	9.46	1.7	605	55	495
AFTER 1974	1.0	527	48	437	9.07	.7	632	58	506
OWN/RENT									
OWN	5.5 1.8	436 419	40 38	369 380	9.26 9.93	2.7 1.1	676 550	62 50	539 473
1981 FAMILY INCOME									
LESS THAN \$10,000	3.0	438	40	378	9.46	1.7	627	57	518
\$10,000 TO \$19,999	2.3	390	36	346	9.71	1.0	599	55	495
\$20,000 TO \$34,999	.8	537	49	437	8.92	.5	671	61	530
\$35,000 OR MORE	1.1	426	39	360	9.23	.5	741	68	570
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE	1.5	409	37	358	9.58	.8	576	53	479
TOTAL BELOW 125 PERCENT OF POVERTY LINE	2.1	424	39	367	9.48	1.2	616	56	509
AGE OF HOUSEHOLD HEAD		600	77	740	9.48	1.0	603	55	492
UNDER 35 YEARS	2.0	402	37	348					
35 TO 59 YEARS	3.0	461	42	391	9.29	1.5	673	62	535



Table 7. (Continued)
United States

		ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEF <b>I</b> I	ED PETROLEU HEATIN		NEAM 2A
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	I AVG. I AMOUNT I CONSUMED I PER IHOUSEHOLD I (GALLONS)		AVG.   AVG.   EXPEND-   ITURES   PER  HOUSEHOLD  COLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)	AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)		AVG. EXPEND- I TURES PER HOUSEHOLD (DOLLARS)
HOUSEHOLD MEMBERS									
ONE PERSON	1.5	403	37	362	9.84	.8	618	56	534
2 TO 4 PEOPLE	4.7	404	37	345	9.36	2.5	595	54	478
5 OR MORE PEOPLE	1.1	594	54	500	9.22	.5	941	86	734
MAIN HEATING FUEL									
NATURAL GAS	Q	Q	Q	Q	ଭ	-	-	-	_
ELECTRICITY	. 3	343	31	305	9.75	-	-	-	-
FUEL OIL OR KEROSENE	1.5	132	12	156	12.90	-	-	-	-
LPG	3.8	641	59	521	8.89	3.8	641	59	521
WOOD	1.5	259	24	237	10.04	-	-	-	-
OTHER OR NONE	. 3	187	17	278	16.26	-	-	-	-
OT WATER FUEL									
NATURAL GAS	Q	Q	Q	Q	Q	Q	Q	Q	Q
ELECTRICITY	3.3	337	31	299	9.71	1.7	520	47	439
FUEL OIL OR KEROSENE	. 4	77	7	102	14.35	Q	Q	Q	Q
OTHER	3.7	550	50	462	9.20	2.1	742	68	589
MAIN HEATING EQUIPMENT USING LPG									
CENTRAL WARM AIR FURNACE	1.7	748	68	591	8.65	1.7	748	68	591
OTHER/NONE	5.6	339	31	307	9.93	2.1	557	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	1.4	512	47	429	9.17	.5	928	85	727
5,500 TO 7,000 HDD	1.3	502	46	408	8.91	.5	939	86	709
4,000 TO 5,499 HDD	1.3	409	37	350	9.35	.5	875	80	691
<2,000 CDD AND <4,000 HDD	1.6	424	39	365	9.43	1.0	557	51	465
>2,000 CDD AND <4,000 HDD	1.7	340	31	321	10.35	1.3	379	35	337



Table 7. (Continued)
Census Region:
Northeast

OF			ANY LIQUEF	IED PETROLE	UM GAS USED		   LIQUEFION	ED PETROLEUM		AS MAIN
AREA TYPE  HETROPOLITAN	CHARACTERISTICS	OF HOUSE- HOLDS	AMOUNT CONSUMED PER HOUSEHOLD	AMOUNT CONSUMED PER HOUSEHOLD (MILLION	EXPEND- ITURES PER HOUSEHOLD	PRICE COOLLARS PER MILLION	OF HOUSE- HOLDS	AMOUNT CONSUMED PER HOUSEHOLD	AMOUNT CONSUMED PER HOUSEHOLD (MILLION	EXPEND- ITURES PER HOUSEHOLD
AREA TYPE  HETROPOLITAN			,							
METROPOLITIAN	TOTAL HOUSEHOLDS	1.1	225	21	237	11.52	0.2	693	63	622
METROPOLITAN	AREA TYPE									
OUTSIDE CENTRAL CITY		.6	187	17					-	•
NON-HETROPOLITAN				•						
LFG PAID BY HOUSEHOLD  YES									-	-
YES. 1.1 223 20 237 11.59 .2 722 66 650 NO. 0 q q q q q q q q q q q q q q q q q q	NON-METROPOLITAN	.5	269	25	283	11.52	ч	¥	Q	ų
YES.   1.1   223   20   237   11.59   .2   722   66   650     NO.	LPG PAID BY HOUSEHOLD									
NO		1.1	223	20	237	11.59	.2	722	66	650
MOBILE HOME										
MOBILE HOME										
SINGLE FAMILY			* 0.7			31 07			_	•
NUMBER OF ROOMS	STAGE FAMILY									
NUMBER OF ROOMS  1 TO 3										
1 TO 3	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		•			~	•	•	•	•
4 TO 5										
6 OR MORE	1 TO 3		Q	Q				Q	Q	Q
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)  LESS THAN 999										
DENCE (IN SQUARE FEET)  LESS THAN 999	6 DR MORE	.6	183	17	204	12.23	Q	Q	Q	Q
1,000 TO 1,999	DENCE (IN SQUARE FEET)									
YEAR HOUSE BUILT  BEFORE 1950	LESS THAN 999	.4								•
YEAR HOUSE BUILT  BEFORE 1950	1,000 TO 1,999									7
BEFORE 1950	2,000 OR MORE	.3	144	13	180	13.64	Q	Q	Q	Q
BEFORE 1950	YEAR HOUSE BUILT									
1950 TO 1974		.6	222	20	252	12.44	Q	Q	Q.	Q
AFTER 1974	1950 TO 1974		233	21	226	10.64	Q	Q	Q	Q
OUN.       0.9       179       16       198       12.13       Q	AFTER 1974	Q	Q	Q.	Q	Q	Q	Q	Q	Q
OUN.       0.9       179       16       198       12.13       Q										
RENT					***			•	_	_
1981 FAMILY INCOME  LESS THAN \$10,0004	OWN									
LESS THAN \$10,000	C		467	27	+00	10.41	પ	ų	¥	પ
LESS THAN \$10,000	1981 FAMILY INCOME									
\$10,000 TO \$19,999	LESS THAN \$10,000									
## STATE OF POVERTY LINE	\$10,000 TO \$19,999									
TOTAL BELOW 100 PERCENT OF POVERTY LINE		-			•	•			-	
OF POVERTY LINE	\$35,000 OR MORE	.2	138	13	166	13.11	Q	ч	ų	Q
OF POVERTY LINE	TOTAL BELOW 100 PERCENT									
TOTAL BELOW 125 PERCENT OF POVERTY LINE		.2	288	26	275	10.47	Q	Q	Q	Q
AGE OF HOUSEHOLD HEAD  UNDER 35 YEARS	TOTAL BELOW 125 PERCENT									
UNDER 35 YEARS	OF POVERTY LINE	.3	267	24	263	10.78	Q	Q	Q	Q
UNDER 35 YEARS	LOT OF HOMOPHOLD MELD									
35 TO 59 YEARS		. ,	403	28	278	10.05	0	a	n	o
60 YEARS AND OVER								•	•	
HOUSEHOLD MEMBERS ONE PERSON										
ONE PERSON							•	•	•	7
2 TO 4 PEOPLE										
2 10 4 PEUPLE										•
S OU HAVE LEGALES SESSION SES SEC CA STA TOOD A A A A A	E OD MODE DEODIE									
	S OR HURE MEUMLES AND STREET	.2	322	5.4	27.4	10.05	ų	ч	પ	ч



Table 7. (Continued)
Census Region: Northeast

		ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFI	ED PETROLEU HEATIN	M GAS USED G FUEL	AS MAIN
HOUSEHOLD CHARACTERISTICS			AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. PRICE COOLLARS PER MILLION BYU	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES FER HOUSEHOLE (DOLLARS)
MAIN HEATING FUEL									
NATURAL GAS	Q	Q	Q	Q	Q	_	_	_	
ELECTRICITY	õ	ġ.	õ	Ĝ	Q.	_	_	-	-
FUEL OIL OR KEROSENE	.6	139	13	174	13.69	-	_	-	
LPG	.2	693	63	622	9.83	0.2	693	63	622
WOOD	.3	130	12	151	12.75		-	_	~
OTHER OR NONE	Q	Q	Q	Q	q	-	-	-	-
HOT WATER FUEL									
NATURAL GAS	Q	Q	Q	Q	q	Q	Q	Q	ę
ELECTRICITY	0.4	207	19	222	11.74	ā	a a	à	ĝ
FUEL OIL OR KEROSENE	.3	59	5	83	15.24	ā	Q	õ	à
OTHER	.4	360	33	361	10.97	q	Q	Q	Q
MAIN HEATING EQUIPMENT USING LPG									
CENTRAL WARM AIR FURNACE	Q	Q	Q	Q	q	Q	Q	Q	Q
OTHER/NONE	1.0	144	13	173	13.14	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	.5	267	24	283	11.63	Q	Q	q	G
5,500 TO 7,000 HDD	.5	182	17	200	12.09	Q	Q	Q	Q
4,000 TO 5,499 HDD	Q	Q	Q	Q	Q	Q	Q	Q	ର
<2,000 CDD AND <4,000 HDD		-	-	-	_		-		_`
>2,000 CDD AND <4,000 HDD	-	_	-	-	_		-	_	_



# Table 7. (Continued) Census Division: New England

		ANY LIQUEF	IED PETROLE	UM GAS USED		   LIQUEFI	ED PETROLEU HEATIN	M GAS USED G FUEL	AS MAIN
		PER HOUSEHOLD	CONSUMED PER		AVG.   PRICE   (DOLLARS   PER   MILLION   BTU)	HOUSE-		AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
		14-57-							
TOTAL HOUSEHOLDS	0.5	203	19	213	11.50	Q	Q	Q	Q
AREA TYPE									
METROPOLITAN	.2	112	10	127	12.47	Q	Q	Q	Q
CENTRAL CITY	Q	Q	Q	<u>. q</u> .	Q	Q	Q	Q	Q
OUTSIDE CENTRAL CITY	.2 .3	118 273	11 25	134 279	12.47 11.19	Q Q	Q Q	Q Q	Q Q
						•	•	•	•
LPG PAID BY HOUSEHOLD		207	19	217	11.50	Q	G	Q	Q
YES	.4 Q	207 Q	ď	6,	11.50 Q	Q Q	ų Q	Q	q
TYPE OF HOUSING STRUCTURE	q	Q	Q	Q	O	Q	Q	Q	Q
MOBILE HOMESINGLE FAMILY	.3	202	18	209	11.33	Ğ.	q q	Q	Q Q
2 OR MORE UNITS	ġ	Q	Q	Q	Q	Q	q	à	q
NUMBER OF ROOMS									
1 TO 3	q	Q	Q	Q	Q	Q	Q	Q	Q
4 TO 5	.2	185	17	186	10.98	Q	Q	Q	Q
6 OR MORE	.2	191	17	511	12.08	Q	Q	Q	Q
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	.2	216	20	233	11.81	Q	Q	Q	Q
1,000 TO 1,999	.2	230	21	231	11.00	Q	Q	Q	Q
2,000 OR MORE	Q	Q	Q	Q	Q	Q	Q	Q	Q
YEAR HOUSE BUILT									
BEFORE 1950	.2	214	20	243	12.42	Q	Q	Q	Q
1950 TO 1974	.2 Q	211 Q	19 Q	203 Q	10.53 Q	ହ ଷ	Q Q	Q Q	Q Q
AFTER 1974	4	ч	4	4	4	4	٦	•	4
OWN/RENT									
OWN	0.4	197	18	206	11.44	Q	Q	Q	ବ
RENT	Q	Q	Q	Q	Q	Q	Q	Q	Q
1981 FAMILY INCOME									
LESS THAN \$10,000	Q	Q	Q	Q	Q	Q	Q	Q	Q
\$10,000 TO \$19,999	.2	232	21	256	12.06	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 Q	Q Q	Q Q
	-	•	,	•	•	•	-	,	•
TOTAL BELOW 100 PERCENT OF POVERTY LINE	Q	Q	Q	Q	Q	Q	Q	Q	Q
TOTAL BELOW 125 PERCENT	٠,	4	ч	. 4	પ	4	4	4	· ·
OF POVERTY LINE	Q	ચ	Q	Q	Q	ď	Q	Q	Q
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	Ģ	Q	Q	Q	Q	Q	Q	Q	Q
35 TO 59 YEARS	.2	164	15	195	13.04	Q	Q	q	Q
60 YEARS AND OVER	Q	Q	Q	, Q	Q	q	Q	Q	Q
HOUSEHOLD MEMBERS									
ONE PERSON		Q	Q	Q	Q	Q	Q	Q	Q
2 TO 4 PEOPLE	.3	134	12	155	12.63	Q	Q	Q	Ŕ
5 OR MORE PEOPLE	Q	Q	Q	Q	Q	Q	Q	Q	Q



Table 7. (Continued) Census Division: New England

	     	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. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE COOLLARS 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 (DOLLARS)
MAIN HEATING FUEL									
NATURAL GAS	Q	Q	Q	Q	Q	_	-	-	•-
ELECTRICITY	G)	Q	Q	Q	Q	-	-	-	••
FUEL OIL OR KEROSENE	. 2	143	13	178	13.59	-	-	-	-
LPG	Q	Q	Q	Q	Q	Q	Q	Q	Q
WOOD	. 2	142	13	155	11.96	-	-	-	-
OTHER OR NONE	Q	Q	Q	Q	Q	-	-	-	
HOT WATER FUEL									
NATURAL GAS	Q	Q	Q	Q	Q	Q	Q	Q	G
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	384	35	374	10.68	Q	Q	Q	Q
MAIN HEATING EQUIPMENT USING LPG									
CENTRAL WARM AIR FURNACE	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER/NONE	.4	157	14	179	12.45	Q	Q	Q	Q
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD	.3	273	25	279	11.19	Q	Q	Q	G
<2,000 CDD AND									
5,500 TO 7,000 HDD	.2	112	10	127	12.47	Q	Q	Q	q
<2,000 CDD AND									
4,000 TO 5,499 HDD	~	-	_	-	-		-	-	-
<2,000 CDB AND <4,000 HDD	~	-	-	-	-	-	-	-	-
>2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	-



Table 7. (Continued)
Census Division:
Middle Atlantic

CHARACTERISTICS    OF   CONSUMED   APOUNT   EXPENDED   PRICE   ODGILARS   OF   CONSUMED		ED AS MAIN
AREA TYPE  METROPOLITAN.  .4 224 20 231 11.30 Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	HARACTERISTICS	T   EXPEND- ED   ITURES   PER ELD  HOUSEHOLD ON  (OOLLARS)
AREA TYPE  METROPOLITAN.  4 224 20 231 11.30 Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q		
HETOPODILITAN		591
CENTRAL CITY		•
OUTSIDE CENTRAL CITY	LIAN	Q G
NON-HETROPOLITAN	L CENTRAL PYTY	Q
LPS PAID BY HOUSEHOLD  YES		Q
YES		~
NO		_
TYPE OF HOUSING STRUCTURE    HOBILE HOME		Q
MOBILE HOME		Q
MOBILE HOHE	SUSING STRUCTURE	
SINGLE FAMILY5 257 24 265 11.27 Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q		Q
2 OR MORE UNITS		Q
1 TO 3		Q
1 TO 3	noove.	
4 TO 5		
6 OR MORE	************	Q
MEASURED HEATED SPACE OF RESI-  DENCE (IN SQUARE FEET)  LESS THAN 999		Q Q
YEAR HOUSE BUILT BEFORE 1950	SQUARE FEET) AN 999	ଷ <b>ସ</b>
BEFORE 1950		•
1950 TO 1974	. 60111	
AFTER 1974	.950	Q
OWN./RENT  OWN	1974	Q
OWN	'7 <b>4</b>	Q
RENT		
1981 FAMILY INCOME  LESS THAN \$10,000		Q
LESS THAN \$10,000		Q
LESS THAN \$10,000	Y THOME	
\$10,000 TO \$19,999		Q
\$20,000 TO \$34,999 Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q		Q
\$35,000 OR MORE Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q		Q
OF POYERTY LINE Q Q Q Q Q Q Q Q		Q
W. Larent Line and Control of the Co	W 100 PERCENT	. Q
TOTAL BELOW 125 PERCENT	W 125 PERCENT	-
OF POVERTY LINE		Q
AGE OF HOUSEHOLD HEAD	SEUNIN HEAN	
UNDER 35 YEARS Q Q Q Q Q Q Q Q		Q
070ER 39 1EARS		Q.
33 10 37 12-10 4 4 4 6 6 7 6 6 7 6 7 6 7 6 7 6 7 6 7 6		q
		7
HOUSEHOLD MEMBERS		
ONE PERSON		Q
2 TO 4 PEOPLE		Q
5 OR MORE PEOPLE	E PEOPLE	Q



Table 7. (Continued)
Census Division: Middle
Atlantic

		ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFIE	ED PETROLEU HEATIN	M GAS USED G FUEL	AS MAIN
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE COOLLARS PER MILLION BYU)	NUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
MAIN HEATING FUEL									
NATURAL GAS	Q	Q	Q	Q	Q	-	-	_	••
ELECTRICITY	Q	Q	Q	Q	Q	-	_	_	
FUEL OIL OR KEROSENE	. 4	137	13	172	13.75	-	-	-	-
LPG	.2	649	59	591	9.96	0.2	649	59	591
WOOD	Q	Q	Q	Q	Q		_	-	-
OTHER OR NONE	Q	Q	Q	Q	Q	-	-	-	~
HOT WATER FUEL									
NATURAL GAS	Q	Q	Q	Q	Q	Q	Q	Q	q
ELECTRICITY	0.3	228	21	243	11.69	Q	Q	Q	Q
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	.3	347	32	353	11.16	Q	Q	Q	Q
MAIN HEATING EQUIPMENT USING LPG									
CENTRAL WARM AIR FURNACE	Q	Q	Q	Q	Q	Q	Q	Q	9
OTHER/NONE	16	134	12	169	13.76	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	.2	259	24	288	12.15	Q	Q	q	q
5,500 TO 7,000 HDB	.3	225	21	246	11.98	Q	Q	Q	Q
4,000 TO 5,499 HDD	Q	Q	Q	Q	Q	q	Q	Q	G
<2,000 CDD AND <4,000 HDD	-	-	-	-	-	-	-	-	**
>2,000 CDD AND <4,000 HDD	_	_	_	_		_	_	_	



Table 7. (Continued)
Census Region: North
Central

NUMBER   AVG.			ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFI		M GAS USED IG FUEL	AS MAIN
AREA TYPE    HENDRIL CITY.	CHARACTERISTICS	OF HOUSE- HOLDS	AMOUNT CONSUMED PER HOUSEHOLD	AMOUNT CONSUMED PER HOUSEHOLD MILLION	EXPEND- ITURES PER HOUSEHOLD	PRICE   (DOLLARS   PER   MILLION	OF HOUSE- HOLDS	AMOUNT CONSUMED PER HOUSEHOLD	AMOUNT CONSUMED PER HOUSEHOLD MILLION	EXPEND- ITURES PER HOUSEHOLD
AREA TYPE    HENDROLITAH.										
METROPOLITAN	TOTAL HOUSEHOLDS	1.8	661	60	510	8.44	1.0	1000	91	750
CENTRAL CITY.	AREA TYPE									
CENTRAL CITY. 0, 0, 475, 455, 455, 392, 0.67, 2, 2, 1116, 102, 626 NON-HERROPOLITAN. 1, 3, 727, 66, 556, 8, 38, 8, 8, 977, 89, 735 LEG PAID BY HOUSEHOLD  YES	METROPOLITAN	.5	498	45	393	8.65	.2	1095	100	810
NON-HETROPOLITAN	CENTRAL CITY				-	-				Q
LPG PAID BY HOUSEHOLD  YES		.5								
YES	NON-METROPOLITAN	1.3	727	66	556	8.38	.8	977	89	735
YES. 1,7 683 62 524 8.40 1.0 1000 91 750 NO. Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	LPG PAID BY HOUSEHOLD									
NO		1.7	683	62	524	8.40	1.0	1000	91	750
MOBILE HONE										
MOBILE HONE	TYPE OF HOUSTN'S STOLETING									
SINGLE FAMILY. 1.5 702 64 536 3.36 .8 1084 99 806 2 0 RY NOW EVENTS. Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q			E70	40	677	0 70	2	450	F0	514
NUMBER OF ROOMS	SINGLE FAMILY									
NUMBER OF ROOMS  1 TO 3										
1 TO 3	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -									•
4 TO 5		_	_			_	_			
6 OR MORE	1 10 3									
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)  LÉSS THAN 999										
DENCE (IN SQUARE FEET)  LESS THAN 999	6 OR HURE	.8	789	72	593	8.22	.5	1115	102	816
11000 TO 1,999	DENCE (IN SQUARE FEET)									
YEAR HOUSE BUILT  BEFORE 1950	LESS THAN 999			41						561
YEAR HOUSE BUILT  BEFORE 1950	1,000 TO 1,999									
BEFORE 1950	21000 OR MORE	.6	829	76	611	8.07	.3	1318	120	934
BEFORE 1950	YEAR HOUSE BUILT									
1950 TO 1974		.8	591	54	453	8.40	.4	1086	99	802
AFTER 1974	1950 TO 1974	.7	701	64	541	8.46	.4	915	84	693
DINN	AFTER 1974	. 3	765	70	592	8.47	Q	Q	Q	Q
DINN										
RENT										71.0
1981 FAMILY INCOME  LESS THAN \$10,000										
LESS THAN \$10,000	REINITERIOR	Q	4	ч	વ	Q	. 4	ч	4	ч
\$10,000 TO \$19,999	1981 FAMILY INCOME									
\$20,000 TO \$34,999		.6	671	61	527	8.60	.4	974	89	746
\$35,000 OR MORE	\$10,000 TO \$19,999		412	38	331	8.79			66	572
TOTAL BELOW 100 PERCENT OF POVERTY LINE									•	
OF POVERTY LINE	\$35,000 OR MORE	.4	726	66	552	8.32	.3	1067	97	795
OF POVERTY LINE	TOTAL BELOW 100 PERCENT									
TOTAL BELOW 125 PERCENT OF POVERTY LINE		.2	563	51	445	8.66	Q	Q	Q	Q
OF POVERTY LINE	TOTAL BELOW 125 PERCENT									
UNDER 35 YEARS	OF POVERTY LINE	3	572	52	461	8.83	. 2	955	87	741
UNDER 35 YEARS	ACE OF HOUSEHOLD HEAD									
35 TO 59 YEARS			404	45	702	8 44	9	832	ra.	670
60 YEARS AND OVER	35 TO 59 YEARS									
HOUSEHOLD MEMBERS  ONE PERSON	60 YEARS AND OVER									
ONE PERSON										
2 TO 4 PEOPLE							_			
	ONE PERSON	.3								
3 OK HORE PROPERTY. 14 007 OT 009 8.51 16 1272 118 905										
	5 OR HURE PEOPLET	• 4	007	9T	663	0.51		7575	110	705



Table 7. (Continued) Census Region: North Central

		ANY LIQUEF	IEO 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)		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
AIN HEATING FUEL									
NATURAL GAS	Q	Q	Q	Q	Q	-	-	-	
ELECTRICITY	Q	Q	Q	Q	Q	-	-	_	
FUEL OIL OR KEROSENE	.4	118	11	121	11.29	_	_	-	-
LPG	1.0	1000	91	750	8.21	1.0	1000	91	750
WOOD	.4	282	26	232	9.01	_	_		-
OTHER OR NONE	Q	Q	Q	Q	Q	-	-	-	-
OT WATER FUEL									
NATURAL GAS	Q	Q	Q	Q	Q	Q	Q	Q	Q
ELECTRICITY	0.9	489	45	389	8.72	0.4	882	81	678
FUEL DIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	.9	834	76	630	8.27	.5	1099	100	811.
MAIN HEATING EQUIPMENT USING LPG									
CENTRAL WARM AIR FURNACE	.7	977	89	734	8.22	.7	977	89	734
OTHER/NONE	1.1	455	42	363	8.74	.2	1064	97	796∙
EATING DEGREES-DAYS (HDD)  ND COOLING DEGREES-DAYS (CDD) ONG-TERM AVERAGE									
<2,000 CDD AND >7,000 HDD <2,000 CDD AND	.8	622	57	493	8.68	.3	1012	92	769
5,500 TO 7,000 HDD	.5	806	74	602	8.18	. 3	1070	98	780
4,000 TO 5,499 HDD	.5	582	53	447	8.40	. 3	911	83	696
<2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	q	Ġ	Q	Q	Q
>2,000 CDD AND <4,000 HDD			2		-	-	_		-



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

HOUSEHOLD	CHARACTERISTICS	ANY LIQUEFIED PETROLEUM GAS USED					LIQUEFIED PETROLEUM GAS USED AS MAIN HEATING FUEL				
AREA TYPE  HETROPOLITAM.  14 425 39 352 9.08 Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q		OF   HOUSE-   HOLDS	AMOUNT CONSUMED PER HOUSEHOLD	AMOUNT CONSUMED PER HOUSEHOLD (MILLION	EXPEND-   ITURES   PER  HOUSEHOLD	PRICE COOLLARS PER MILLION	OF HOUSE- HOLDS	AMOUNT CONSUMED PER HOUSEHOLD	AMOUNT CONSUMED PER HOUSEHOLD (MILLION	EXPEND- ITURES PER HOUSEHOLD	
AREA TYPE    HETROPOLITAN											
HETROPOLITIAN	TOTAL HOUSEHOLDS	1.0	611	56	498	8.93	0.5	967	88	768	
CENTRAL CITY.											
OUTSIDE CENTRAL CITY											
NON-METROPOLITAN											
LPG PAID BY HOUSEHOLD  YES											
YES. 1.0 645 59 523 8.87 .5 967 88 768 NO.	NON-HETROPOLITAN	• •	721	- 55	204	0.00	.4	451	04	142	
NO	LPG PAID BY HOUSEHOLD										
TYPE OF HOUSING STRUCTURE  MOBILE HONE	YES				523	8.87	.5	967	88	768	
MOBILE HONE	NO	Q	Q	Q	Q	Q	Q	Q	Q	Q	
MOBELE HOME	TYPE OF HOUSTNE STOLECTURE										
SINGLE FANTLY		,	587	E3	497	9 08		a	n	a	
2 OR HORE UNITS											
NUMBER OF ROOMS  1 TO 3										_	
1 TO 3		E			•	,	•	•	,	,	
1 TO 3											
6 OR MORE	1 TO 3								-		
MEASURED HEATED SPACE OF RESI  DENCE (IN SQUARE FEET)  LESS THAN 999											
DENCE (IN SQUARE FEET)  LESS THAN 999	6 UR MURE	.5	613	56	497	8.87	.2	1061	97	830	
1,000 TO 1,999	DENCE (IN SQUARE FEET)										
2,000 OR MORE	LESS THAN 999			54	493	9.15			66	595	
YEAR HOUSE BUILT  BEFORE 1950											
BEFORE 1950	2,000 OR MORE	.4	543	50	440	8.89	Q	Q	Q	Q	
BEFORE 1950	YEAR HOUSE BUTLE										
1950 TO 1974		5	402	37	337	9.19	a	O	a	o	
AFTER 1974											
DUN    DUN		. 2	887	81		8.65		Q			
DAN.   1.0   625   57   508   6.90   0.4   987   90   782	the state of the s										
RENT	OWN/RENT										
1981 FAMILY INCOME  LESS THAN \$10,000 3 7.52 69 613 8.94 .2 1026 94 819 \$10,000 TO \$19,9994 399 36 333 9.14 Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q											
LESS THAN \$10,000 3 752 69 613 8.94 .2 1026 94 819 \$10,000 TO \$19,999 4 399 36 333 9.14 Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	RENT	Q	Q	Q	Q	Q	Q	Q	Q	Q	
LESS THAN \$10,000 3 752 69 613 8.94 .2 1026 94 819 \$10,000 TO \$19,999 4 399 36 333 9.14 Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	1001 FANTLY THRONE										
\$10,000 TO \$19,999.					/37	9.06	2	1026	94	819	
\$20.000 TO \$34,999.											
\$35,000 OK NONE									•		
TOTAL BELOW 100 PERCENT OF POVERTY LINE						•			Q	Q	
OF POVERTY LINE		••		• •							
TOTAL BELOW 125 PERCENT OF POVERTY LINE	TOTAL BELOW 100 PERCENT		_	_	_	_	_			_	
OF POVERTY LINE		લ	Q	Q	Q	Q	Q	Q	Q	Q	
AGE OF HOUSEHOLD HEAD  UNDER 35 YEARS		. ,	724	66	505	9 00	n	n	a	n	
UNDER 35 YEARS	OF FOTERES LINE	• •	764	00	272	7.00	ď	ਖ	ধ	4	
UNDER 35 YEARS	AGE OF HOUSEHOLD HEAD										
35 TO 59 YEARS		.3	483	44	400	9.06	Q	Q	Q	Q	
60 YEARS AND OVER		.5	628		512			927	85	736	
ONE PERSON	60 YEARS AND OVER	.2	767	70	617	8.81		Q	Q	Q	
ONE PERSON											
2 TO 4 PEOPLE		_	_	_	_	_	_	~	_	_	
					-			-	-	٦.	
	5 OR MORE PEOPLE.	.2	913	63	729	8.74	.,	Q Q	Q ,	9 P	



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

HOUSEHOLD CHARACTERISTICS	ANY LIQUEFIED PETROLEUM GAS USED					LIQUEFIED PETROLEUM GAS USED AS MAIN HEATING FUEL				
			AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. PRICE (DOLLARS PER MILLION BTU)	NUMBER OF HOUSE- HOLDS (MILLIONS)			AVG.   EXPEND-   ITURES   PER  HOUSEHOLD  (DOLLARS)	
MAIN HEATING FUEL										
NATURAL GAS	Q	Q	Q	Q	Q	-	-	-	-	
ELECTRICITY	Q	Q	Q	Q	Q	-	-	-	-	
FUEL OIL OR KEROSENE	.3	136	12	142	11.41	-	_	-	-	
LPG	.5	967	88	768	8.70	.5	967	88	768	
WOOD	.2	300	27	255	9.31	-	-	-		
OTHER OR NONE	Q	Q	Q	Q	Q	-	-	-	-	
HOT WATER FUEL										
NATURAL GAS	G G	Q	Q	Q	Q	Q	Q	Q	Q.	
ELECTRICITY	0.6	479	44	398	9.09	0.3	890	81	710	
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	q	Q	Q	Q	
OTHER	.5	777	71	625	8.81	.2	1067	97	844	
MAIN HEATING EQUIPMENT USING LPG										
CENTRAL WARM AIR FURNACE	. 4	943	86	742	8.62	.4	943	86	742	
OTHER/NONE	.7	429	39	364	9.30	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	.6	543	50	455	9.18	.2	951	87	772	
5,500 TO 7,000 HDD	.3	638	58	516	8.85	.2	950	87	753	
4,000 TO 5,499 HDD	.2	809	74	624	8.44	Q	Q	Q	Q	
<2,000 CDD AND <4,000 HDD	-	-		-		_	-	-		
>2,000 CDD AND <4,000 HDD	_	_	_	_	_	_	_	_	_	



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

	!				***************************************	!			
	!   · 	ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFI   		M GAS USED G FUEL	AS MAIN
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	CONSUMED PER HOUSEHOLD			,	HOUSE-	CONSUMED PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	
TOTAL HOUSEHOLDS	0.7	732	67	526	7.86	0.5	1032	94	733
AREA TYPE									
METROPOLITAN	Q	Q	Q	Q	Q	Q	Q	Q	Q
CENTRAL CITY	· Q	Q	Q	Q	Q	Q	Q	Q	Q
OUTSIDE CENTRAL CITY	Q	Q	Q	Q	Q	Q	Q	Q	Q
NON-METROPOLITAN	.6	734	67	527	7.86	.4	8201	94	730
LPG PAID BY HOUSEHOLD	_					_			
YES	. 7 Q	732 Q	67 Q	526 Q	7.86 Q	.5 Q	1032 Q	94 Q	733 Q
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	O	Q	G:	a	Q	Q	Q	Q	Q
SINGLE FAMILY	.6	774	71	555	7.85	.4	1084	99	768
2 OR MORE UNITS	ġ Q	Q	Q	q	q	จ์	Q	q q	Q
NUMBER OF ROOMS									
1 TO 3	Q	Q	Q	Q	Q	Q	Q	Q	Q
4 TO 5	.3	501	46	368	8.05	.2	825	75	597
6 OR MORE	.4	1002	91	709	7.74	.3	1148	105	807
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	.2	290	26	212	8.02	Q	Q	Q	Q
1,000 TO 1,999	.3	643	59	489	8.31	. 2	827	76	620
2,000 OR MORE	.2	1307	119	896	7.51	.2	1414	129	963
YEAR HOUSE BUILT									
BEFORE 1950	.3	852	78	614	7.89	. 2	1106	101	791
1950 TO 1974	.3	666	61	477	7.85	. 2	1010	92	714
AFTER 1974	Q	Q	Q	Q	Q	Q	Q	Q	Q
OWN/RENT									
OWN	0.7	743	68	532	7.84	0.4	1042	95	738
RENT	Q	Q	Q	Q	Q	Q	Q	Q	Q
1981 FAMILY INCOME									
LESS THAN \$10,000	. 3	575	52	424	8.07	.2	901	82	646
\$23,000 TO \$19,999		439	40	328	8.19	Q	Q	Q	Q
\$20,000 TO \$34,999	Q	Q	Q	Q	Q	Q	Q	Q	Q
\$35,000 OR MORE	.2	1043	95	749	7.86	Q	Q	Q	Q
TOTAL 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	.2	519	47	378	7.97	Q	Q	Q	Q
35 TO 59 YEARS	.4	865	79	619	7.83	.3	1083	99	769
60 YEARS AND OVER	.2	667	61	480	7.87	Ģ	Q	q´	Q
HOUSEHOLD MEMBERS									
ONE PERSON	Q	Q	Q	Q	Q	Q	Q	Q	Q
2 TO 4 PEOPLE	.5	741	68	525	7.76	.3	1051	96	738
5 OR MORE PEOPLE	Q	Q	Q	Q	Q	Q	Q	Q	Q



# 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 MILLION BTU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)		AVG. ANOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- I TURES PER HOUSEHOLD (DOLLARS)	
MAIN HEATING FUEL										
NATURAL GAS	Q	Q	G.	Q	Q	_	-	-	_	
ELECTRICITY	Q	Q	Q	Q	ହ	-	-	-	-	
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	-	-	-	-	
LPG	.5	1032	94	733	7.77	.5	1032	94	733	
WOOD	. 2	258	24	202	8.56	-	-	-	-	
OTHER OR NONE	Q	Q	Q	Q	Q	-	_	-	-	
HOT WATER FUEL										
NATURAL GAS	Q	Q	Q	Q	Q	Q	Q	Q	Q	
ELECTRICITY	0.3	507	46	374	8.08	0.2	870	79	627	
FUEL OIL OR KEROSENE	Q	Q	Q	Q	ଭ	Q	Q	Q	Q	
OTHER	.4	895	82	636	7.78	.3	1119	102	789	
MAIN HEATING EQUIPMENT USING LPG										
CENTRAL WARM AIR FURNACE	. 3	1015	93	725	7.81	.3	1015	93	725	
OTHER/NONE	:4	49 <b>9</b>	46	362	7.95	Q	Q	Q	Q	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<2,000 CDD AND >7,000 HDD	.2	835	76	595	7.81	. 2	1082	99	765	
5,500 TO 7,000 HDD	.2	1134	104	770	7.44	Q	Q	Q	Q	
4,000 TO 5,499 HDD	.4	489	45	374	8.38	.2	842	77	538	
<2,000 CDD AND <4,000 HDD	Q.	Q	Q	Q.	Q	Q .	Q	á.	ଦ	
>2,000 CDD AND <4,000 HDD							-	-		



Table 7. (Continued) Census Region: South

en de la companya de		ANY LIQUEF	IED PETROLE	UM GAS USED	<u> </u>	   LIQUEFI	ED PETROLEU HEATIN		AS MAIN
The second secon	HOLDS	PER HOUSEHOLD			AVG.   PRICE   (DOLLARS   PER   MILLION   BTU)	OF HOUSE-	CONSUMED PER HOUSEHOLD	CONSUMED PER	
		**************************************		do-m					
TOTAL HOUSEHOLDS	3.5	373	34	334	9.82	2.3	473	43	409
AREA TYPE									
METROPOLITAN	1.8	327	30	310	10.37	1.1	417	38	376
CENTRAL CITY	.4	202	18	221	12.01	.3	231	21	257
OUTSIDE CENTRAL CITY	1.4	362	33	334	10.12	. 9	472	43	411
NON-METROPOLITAN	1.7	422	39	361	9.36	1.1	529	48	441
LPG PAID BY HOUSEHOLD									
YES	3.2	365	33	329	9.89	2.0	464	42	403
NO	.3	468	43	394	9.20	.2	565	52	462
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	8	295	27	270	10.03	.5	394	36	349
SINGLE FAMILY	2.7	398	36	355	9.77	1.8	496	45	425
2 OR MORE UNITS	Q	Q	ğ	Q	Q	Q	Q	q	Q
NUMBER OF ROOMS	e filologica Legan Lagran								
1 TO 3	.3	236	22	223	10.33	. 2	287	26	268
4 TO 5	1.8	355	32	322	9.95	1.1	446	41	392
6 OR MORE	1.4	423	39	372	9.63	. 9	545	50	458
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET) LESS THAN 999	1.7 1.5	326 419 380	30 38 35	301 369 333	10.10 9.64 9.59	1.1 1.0 Q	411 508 Q	38 46 Q	367 428 Q
* ****** * * ***** * * * * * * * * * *									
YEAR HOUSE BUILT		403	70		0.70				
BEFORE 1950	1.4	421 326	38 30	374 300	9.72 10.07	.9 1.1	552 426	50 39	470 375
AFTER 1974	.3	326 407	37	346	9.29	.3	428	39	363
A Service Country of the Country of	· . • • • • • • • • • • • • • • • • • •	407	3.	540	,.L,		410	3,	303
OWN/RENT									
OWN	2.4	362	33	322	9.74	1.6	460	42	394
RENT	1.1	397	36	362	9.99	.7	504	46	442
1981 FAMILY INCOME	1.7	396	36	353	0.76		P0/		
LESS THAN \$10,000 \$10,000 TO \$19,999		408	36 37	363	9.74	1.1	506	46	436
\$20,000 TO \$34,999	.4	280	26	270	9.73 10.57	.7 .3	516 339	47 31	432 327
\$35,000 OR MORE	.3	250	23	225	9.87	.2	348	32	297
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE	1.0	383	35	342	9.77	.6	515	47	440
TOTAL BELOW 125 PERCENT				J 72		••	~4~	77	770
OF POVERTY LINE	1.3	396	36	346	9.59	.8	529	48	445
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	1.0	365	33	322	9.66	.6	475	43	406
35 TO 59 YEARS	1.3	368	34	333	9.91	.8	445	41	383
60 YEARS AND OVER	1.3	383	35	345	9.87	.8	499	46	436
HOUSEHOLD MEMBERS									
ONE PERSON	.8	402	37	381	10.39	.5	526	48	486
2 TO 4 PEOPLE	2.4	354	32	312	9.64	1.6	441	40	373
5 OR MORE PEOPLE	4	430	39	380	9.69	. 2	597	55	501



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. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BYU)	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. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	
MAIN HEATING FUEL										
NATURAL GAS	Q	Q	G	Q	Q	-	-	_	~	
ELECTRICITY	.2	112	10	122	11.93	_	-	-	-	
FUEL DIL OR KEROSENE	.5	130	12	160	13.39		-	_	-	
LPG	2.3	473	43	409	9.45	2.3	473	43	409	
WOOD	.5	282	26	272	1.0.54	_	_	-	_	
OTHER OR NONE	Q	Q	Q	Q	Q	-	-	-	-	
HOT WATER FUEL										
NATURAL GAS	Q	Q	Q	Q	Q	Q	Q	Q	Q	
ELECTRICITY	1.8	293	27	274	10.25	1.2	364	33	328	
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
OTHER	1.7	466	43	405	9.51	1.1	588	54	493	
MAIN HEATING EQUIPMENT USING LPG										
CENTRAL WARM AIR FURNACE	.7	433	40	379	9.57	. 7	433	40	379	
OTHER/NONE	2.9	358	33	324	9.90	1.6	490	45	421	
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE										
<pre>&lt;2,000 CDD AND &gt;7,000 HDD &lt;2,000 CDD AND</pre>	-	-	-	-	-	-	-	-	-	
5,500 TO 7,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	
4,000 TO 5,499 HDD	.6	305	28	302	10.85	Q	Q	Q	ହ	
<2,000 CDD AND <4,000 HDD	1.4	432	39	374	9.50	.9	551	50	462	
>2,000 CDD AND <4,000 HDD	1.5	349	32	313	9.80	1.2	380	35	338	



Table 7. (Continued)
Census Division:
South Atlantic

		ANY LIQUEF	IED PETROLE	UM GAS USED		   LIQUEFI 	ED PETROLEU HEATIN	M GAS USED G FUEL	AS MAIN
HOUSEHOLD CHARACTERISTICS	OF HOUSE-	CONSUMED PER HOUSEHOLD	CONSUMED PER HOUSEHOLD	PER		OF HOUSE-	CONSUMED PER HOUSEHOLD	I AVG. I AMOUNT I CONSUMED I PER IHOUSEHOLD I (MILLION I BTU)	AVG. EXPEND- ITURES PER HOUSEHOLD
	,								
TOTAL HOUSEHOLDS	2.2	317	29	305	10.51	1.2	435	40	398
AREA TYPE									
METROPOLITAN	1.5	294	27	293	10.91	.8	387	35	367
CENTRAL CITY	.4	202	18	221	12.01	.3	231	21	257
OUTSIDE CENTRAL CITY	1.1	328	30	319	10.66	.6	457	42	417
NON-METROPOLITAN	.7	364	33	328	9.87	.4	534	49	460
LPG PAID BY HOUSEHOLD									
YES	2.1	316	29	305	10.56	1.1	432	39	397
NO	Q	Q	Q	Q	Q	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	,5	257	24	247	10.49	, 3	345	32	321
SINGLE FAMILY	1.7	34 <b>0</b>	31	326	10.50	.9	465	42	423
2 OR MORE UNITS	<b>Q</b>	Q	Q	Q	Q	Q	Q	Q	Q
NUMBER OF ROOMS									
1 TO 3	.2	184	17	184	10.98	Q	Q	Q	Q
4 TO 5	1.2	298	27	291	10.69	.7	383	35	360
6 OR MORE	.9	369	34	346	10.27	.5	554	51	488
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	1.2	298	27	289	10.60	.7	388	35	363
1,000 TO 1,999	.7	329	30	323	10.75	.4	434	40	399
2,000 OR MORE	.3	371	34	325	9.58	Q	Q	Q	Q
YEAR HOUSE BUILT									
BEFORE 1950	.8	368	34	353	10.51	.4	593	54	538
1950 TO 1974	1.3	296	27	283	10.46	.8	393	36	357
AFTER 1974	Q	Q	Q	Q	Q	Q	Q	Q	Q
THIRL									
0ł.N	1.4	293	27	280	10.47	0.6	397	36	361
RENT	.8	363	33	350	10.57	•4	510	47	471
1981 FAMILY INCOME									
LESS THAN \$10,000	1.0	322	29	308	10.48	.5	456	42	420
\$10,000 TO \$19,999	.7	383	35	355	10.15	.4	517	47	445
\$20,000 TO \$34,999	.3	264	24	280	11.61	.2	330	30	342
\$35,000 OR MORE	.2	162	15	164	11.10	Q	Q	Q	Q
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE	.6	311	28	297	10.49	. 3	484	44	438
TOTAL BELOW 125 PERCENT	~	293	27	281	10.51	.3	460	42	416
OF POVERTY LINE	.7	273	۷,	201	10.51		-100	76	410
AGE OF HOUSEHOLD HEAD							440		705
UNDER 35 YEARS	.6	329	30	302	10.08	.4	449	41	398 706
35 TO 59 YEARS	.8	343	31	324	10.34	.5 .4	441 413	40 38	394 402
60 YEARS AND OVER	.8	280	26	285	11.14	•4	413	30	402
HOUSEHOLD MEMBERS			*			_			
ONE PERSON	.6	403	37	396	10.75	.3	581	53	555
2 TO 4 PEOPLE	1.4	286	26	269	10.28	.9	379	35	336
5 OR MORE PEOPLE	.2	301	27	308	11.18	Q	Q	Q	Q



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.   EXPEND-   ITURES   PER  HOUSEHOLD  (DOLLARS)	AVG. PRICE (DOLLARS) PER MILLION BTU)	   MUMBER   OF   HOUSE-   HOLDS  (MILLIONS) 		AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		
MAIN HEATING FUEL										
NATURAL GAS	Q	Q	Q	Q	Q	_	-	-	-	
ELECTRICITY	,2	125	11	137	12.07	-	-	-	_	
FUEL DIL OR KERDSENE	.5	131	12	160	13.37	•	-	~	_	
LPG	1,2	435	40	398	10.01	1.2	435	40	398	
WOOD	.3	260	24	263	11.07	_	-	~	-	
OTHER OR NONE	Q	Q	Q	Q	Q	-	-	-	-	
HOT WATER FUEL										
NATURAL GAS	Q	G	Q	Q	G	Q	Q	Q	Q	
ELECTRICITY	1.3	275	25	267	10.63	0.8	354	32	331	
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
OTHER	.8	401	37	378	10.32	. 5	574	52	511	
MAIN HEATING EQUIPMENT USING LPG										
CENTRAL WARM AIR FURNACE	,4	390	36	358	10.04	.4	390	36	358	
OTHER/NONE	1.8	300	27	292	10.66	.8	458	42	419	
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	Q	Q	Q	Q	Q	Q	Q	Q	Q	
4,000 TO 5,499 HDD	,6	308	28	305	10.86	Q	Q	Q	G	
<2,000 CDD AND <4,000 HDD	.8	383	35	349	9.97	.5	538	49	469	
>2,000 CDD AND <4,000 HDD	.8	256	23	258	11.04	.6	284	26	284	



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

		ANY LIQUEF	IED PETROLE	UM GAS USED		   LIQUEFII 	ED PETROLEU HEATIN		AS MAIN
HOUSEHOLD CHARACTERISTICS	NUMBER OF HOUSE- HOLDS (MILLIONS)	CONSUMED PER HOUSEHOLD	AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)		AVG. PRICE (DOLLARS PER MILLION BTU)	OF HOUSE-	PER HOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	0.5	381	35	323	9.29	0.3	428	39	353
	•••	301			,,,,	7.3	720	37	333
AREA TYPE METROPOLITAN	.2	293	27	259	9.66	Q	Q	Q	Q
CENTRAL CITY	٠ <u>.                                    </u>	Q	ď,	Q Q	9.00 Q	Q.	Q Q	Q	q
OUTSIDE CENTRAL CITY	.2	293	27	259	9.66	Q.	Q	q	q
NON-METROPOLITAN	.3	423	39	354	9.17	.2	505	46	414
LPG PAID BY HOUSEHOLD	•								
YES	.5	381	35	323	9.29	.3	428	39	353
NO	Q	Q	Q	Q	Q	Q	q	Q	Q
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	Q	Q	Q	Q	Q	Q	Q	Q	G
SINGLE FAMILY	.4	384	35	325	9.26	. 3	394	36	325
2 OR MORE UNITS	Q	Q	Q	Q	Q	Q	Q	Q	Q
NUMBER OF ROOMS									
1 70 3	Q	Q	Q	Q	Q	Q	Q	Q	Q
4 TO 5	.3	465	42	382	9.01	. 2	557	51	447
6 OR MORE	.2	322	29	283	9.64	Q	۹	Q	Q
MEASURED HEATED SPACE OF RESI-									
DENCE (IN SQUARE FEET)		7/-				_	_	_	_
LESS THAN 999	.2 .3	368 383	34 35	310 325	9.23 9.30	Q .2	Q	Q	Q
2,000 OR MORE	Q Q	Q	35 Q	925 Q	9.30 Q	ę ę	422 Q	39 Q	347 Q
	•		7			•	~	•	•
YEAR HOUSE BUILT						_	_	_	_
BEFORE 1950	.2	400 342	37 31	346 289	9.45 9.25	Q; G;	Q	Q	Q
AFTER 1974	9	342 Q	d 27	6	9.25 Q	Q.	Q Q	Q Q	Q Q
	-		-	7	7	_	•	7	•
OWN. PCST									
OWN	0.5	382	35	324	9.29	0.3	438	40	361
RENT	Q	Q	Q	Q	Q	Q	Q	Q	Q
1981 FAMILY INCOME									
LESS THAN \$10,000	Q	Q	Q	Q	Q	Q	Q	Q	Q
\$10,000 TO \$19,999	.2	410	37	353	9.43	Q	Q	q	Q
\$20,000 TO \$34,999	Q	Q Q	Q O	Q	Q Q	Q	Q	Q Q	Q Q
\$35,000 UR MORE	Q	ų	Q	Q	ч	ď	Q	ч	ч
TOTAL 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	.2	416	38	350	9.21	٩	Q	Q 39	Q 747
60 YEARS AND OVER	.2	396	36	334	9.22	.2	426	39	361
HOUSEHOLD MEMBERS									
ONE PERSON	ଷ୍	Q	Q	Q	Q	Q	Q	Q	Q
	ଦ . 4 ହ	Q 378 Q	Q 35 Q	Q 321 Q	Q 9.29 Q	Q .2 Q	Q 454 Q	Q 41 Q	Q 368 Q



#### Table 7. (Continued) Census Division: East 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. AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVG. PRICE COOLLARS PER MILLION BTU	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD GALLONS	AVG. AVG. AMOUNT CONSUMED FER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- I TURES PER HOUSEHOLD (OOLLARS)	
MAIN HEATING FUEL										
NATURAL GAS	Q	Q	Q	Q	Q	-	-	_	-	
ELECTRICITY	q	Q	Q	Q	Q	-	-	-	-	
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	-	_	-	-	
LPG,	.3	428	39	353	9.02	. 3	428	39	353	
WOOD	Q	Q	Q	Q	Q	_	-	-	-	
OTHER OR NONE	Q	Q	Q	Q	Q	-	-	-	-	
HOT WATER FUEL										
NATURAL GAS	Q.	Q	Q	Q	Q	Q	Q	Q	Q	
ELECTRICITY	0.3	344	31	294	9.37	0.3	398	36	332	
FUEL OIL OR KEROSENE	Q	Q	Q	Q.	Q	Q	Q	Q	G	
OTHER	.2	458	42	384	9.17	q	Q	Q	વે	
MAIN HEATING EQUIPMENT USING LPG										
CENTRAL WARM AIR FURNACE	Q	q	Q	Q	Q	G.	Q	Q	Q	
OTHER/NONE	14	376	34	320	9.33	.3	429	39	354	
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	Q	Q	Q	Q	Q	Q	Q	Q	q	
<2,000 CDD AND <4,000 HDD	.3	390	36	327	9.18	. 2	432	39	354	
>2,000 CDD AND <4,000 HDD	G.	Q	G	Q	Q	Q	Q	Q	G	



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

		ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFI		M GAS USED	AIAM &A
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)	NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)		CONSUMED PER HOUSEHOLD	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
				-	<u> </u>	<u></u>	<u> </u>	······································	<u></u>
TOTAL HOUSEHOLDS	0.8	520	47	423	8.92	0.7	561	51	454
AREA TYPE									
METROPOLITAN	.2	594	54	474	8.74	.2	635	58	502
CENTRAL CITY	ė.	á	q	Ġ.	G	จั	Q	9	Q
OUTSIDE CENTRAL CITY	.2	594	54	474	8.74	.2	635	58	502
NON-METROPOLITAN	.6	494	45	406	8.99	.5	535	49	437
LPG PAID BY HOUSEHOLD									
YES	.7	501	46	409	8.94	.6	549	50	444
NO	q	q	q	Q	Q	ą	Q	q	Q
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	q	Q	Q	Q	Q	Q	Q	Q	Q
SINGLE FAMILY	.7	550	50	445	8.86	.6	590	54	473
2 OR MORE UNITS	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		448	41	375	9.16	.3	523	48	431
6 OR MORE	.3	636	58	501	8.62	.3	636	58	501
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	.3	420	38	348	9.07	.2	465	43	382
1,000 TO 1,999	.5	571	52	462	8.85	.4	611	56	491
2,000 OR MORE	, Q	Q	Q	Q	Q	Q	Q	Q	Q
YEAR HOUSE BUILT									
BEFORE 1950	.4	524	48	423	8.83	.4	566	52	452
1950 TO 1974	.2	515	47	431	9.15	.2	541	49	450
AFTER 1974	.2	512	47	416	8.89	Q	Q	Q	Q
OWN/RENT									
OWN	0.5	538	49	438	8.91	0.4	595	54	481
RENT	.3	488	45	398	8.92	.3	509	47	412
1981 FAMILY INCOME									
LESS THAN \$10,000	.5	535	49	437	8.95	.4	587	54	475
\$10,000 (0 \$19,999	.2	491	45	399	8.90	.2	536	49	435
\$20,000 TO \$34,999	. 0	Q	Q	Q	Q	٩	Q	Q	q
\$35,000 OR MORE	. 9	Q	Q	Q	Q	Q	Q	Q	Q
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE	.3	511	47	421	9.02	.2	587	54	474
TOTAL BELOW 125 PERCENT					_	_	,		
OF POVERTY LINE	.4	550	50	445	8.86	.3	618	56	493
AGE OF HOUSEHOLD HEAD									
	.2	486	44	398	8.96	.2	5.55	51	449
UNDER 35 YEARS		424	39	355	9.15	.2	444	41	367
UNDER 35 YEARS	.2								
UNDER 35 YEARS	.2 .3	613	56	491	8.78	ε.	654	60	522
UNDER 35 YEARS				491	8.78	.3	654	60	522
UNDER 35 YEARS			56 Q	Q	q	Q	Q	Q	Q
UNDER 35 YEARS	.3	613	56						



# 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.   AVG.   EXPEND-   ITURES   PER  HOUSEHOLD  (DOLLARS)	AVG. PRICE (DOLLARS PER MILLION BTU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)			AVG. EXPEND~ ITURES PER HOUSEHOLD (DOLLARS)	
MAIN HEATING FUEL										
NATURAL GAS	Q	Q	Q	Q	Q	_	_	_	_	
ELECTRICITY	q.	Q.	q	Ġ.	Q	-	-	_	_	
FUEL OIL OR KEROSENE	q	à	ġ	Q.	q	-	_	-	_	
LPG	.7	561	51	454	8.85	.7	561	51	454	
WOOD	Q	Q	Q	Q	Q	-	-	_	-	
OTHER OR NONE	Q	Q	Q	Q	Q	-	-	-	-	
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	G	
OTHER	0.7	545	50	442	8.89	0.6	598	55	481	
MAIN HEATING EQUIPMENT USING LPG										
CENTRAL WARM AIR FURNACE	. 2	532	49	435	8.94	.2	532	49	435	
OTHER/NONE	.6	516	47	420	8.91	.5	572	52	461	
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	Q	q	Q	Q	Q	Q	Q	Q	Q	
<2,000 CDD AND <4,000 HDD	. 2	654	60	523	8.75	. 2	697	64	553	
>2,000 CDD AND <4,000 HDD	.6	465	42	382	9.01	. 5	502	46	411	



Table 7. (Continued) Census Region: West

		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)	CONSUMED PER HOUSEHOLD			AVG. PRICE (DOLLARS PER MILLION BYU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)			AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
		440			0.40		71.		F. 17
TOTAL HOUSEHOLDS	0.9	468	43	413	9.68	0.4	714	65	561
AREA TYPE									
METROPOLITAN	.3	365	33	307	9.22	.2	532	49	440
CENTRAL CITY	; Q	Q	Q	Q	Q	Q	٩	Q	Q
OUTSIDE CENTRAL CITY	.3	358	33	300	9.18	Q	Q	Q	Q
NON-METROPOLITAN	.6	524	48	472	9.86	. 2	851	78	651
LPG PAID BY HOUSEHOLD									
YES	8	421	38	384	9.98	. 3	674	62	532
NO	Q	Q	Q	Q	Q	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	.2	598	55	473	8.65	.2	721	66	567
SINGLE FAMILY	.6	408	37	385	10.35	.2	714	65	557
2 OR MORE UNITS	ė Č	Q	ą́	G	Q	Q	Q	Q	Ğ,
NUMBER OF ROOMS						_	_	_	
1 TO 3	.2	313	29	282	9.89	Q	Q (AA	Q	Q
4 TO 5	.4	442 596	40 54	387 529	9.60 9.72	.2 Q	688 Q	63 Q	540 Q
O OR HOREITEE		370	34	327	7.72	4	ч	ч	ч
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)			-	-					
LESS THAN 999	.5	390	36	386	10.81	.2	556	51	455
1,000 TO 1,999	2	497	45	409	9.01	Q.	Q	Q	Q
2,000 OR MORE	.2	644	59	500	8.51	Q	Q	Q	Q
YEAR HOUSE BUILT									
BEFORE 1950	- 3	332	30	305	10.06	q	Q	Q	Q
1950 TO 1974	.3	531	49	465	9.58	Q	Q	Q	Q
AFTER 1974	.3	528	48	461	9.56	.2	708	65	559
Description									
OWN/RENT									
OWN	0.5	479	44	415	9.49	0.2	756	69	586
RENT	.3	448	41	410	10.02	Q	Q	Q	Q
1981 FAMIL: INCOME									
LESS THAN \$10,000	.3	422	39	375	9.73	.2	596	54	477
\$10,000 TO \$19,999	.3	531	49	457	9.42	ฉั	Q	Q.	Ġ.
\$20,000 TO \$34,999	Q	Q	Q	Q	Q	Q	Q	Q	Q
\$35,000 OR MORE	.2	389	36	379	10.67	Q	Q	Q	Q
TOTAL BELOW 100 personal file of the control of the									
TOTAL BELOW 100 PERCENT	G	Q	Q		_	Q	n	Q	Q
OF POVERTY LINETOTAL BELOW 125 PERCENT	. 4	v4	4	, Q	Q	ų	Q	ч	ų
OF POVERTY LINE	. 3	579	53	485	9.18	Q	Q	Q	Q
i i i i i i i i i i i i i i i i i i i							*	•	•
AGE OF HOUSEHOLD HEAD		,				_	_	_	_
UNDER 35 YEARS	3	434	40	402	10.13	ଷ୍	Q.	Q	Q
35 TO 59 YEARS	-4	551	50	472	9.39	.2	760	69	593
60 YEARS AND OVER	.2	368	34	321	9.55	Q	Q	Q	Q
HOUSEHOLD MEMBERS									
ONE PERSON	Q	Q	Q	ે વ	Q	Q	Q	Q	Q
2 TO 4 PEOPLE	.5	462	42	406	9.62	.3	660	60	523



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 (GALLONS)		AVG. EXPEND- ITURES PER HOUSEHOLD (ODOLLARS)	AVG. PRICE (DOLLARS PER MILLION BYU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)		AVG. EXPEND- ITURES PER HOUSEHOLE (DOLLARS)
MAIN HEATING FUEL									
NATURAL GAS	Q	Q	Q	Q	Q	-	_	_	-
ELECTRICITY	Q	Q	Q.	à	Q	_	-	_	-
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	-	_	_	
LPG	.4	714	65	561	8.59	.4	714	65	561
WQOD	. 3	317	29	268	9.25	_	_	<del>-</del>	-
OTHER OR NONE	.2	238	22	356	16.38	-	-	-	-
HOT WATER FUEL									
NATURAL GAS	Q	Q	Q	Q	E)	Q	Q	Q	Q
ELECTRICITY	q.	Q	Q	Q	Q	Q	Q	Q	Q
FUEL DIL OR KEROSENE	Q	Q	Q	Q	Q	Q	Q	Q	Q
OTHER	0.7	50 <b>0</b>	46	444	9.72	0.3	727	66	572
MAIN HEATING EQUIPMENT USING LPG									
CENTRAL WARM AIR FURNACE	.2	979	89	741	8.29	.2	979	89	741
OTHER/NONE	.7	354	32	340	10.53	.2	522	48	429
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	.3	555	51	450	8.88	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	.2	377	34	309	8.99	Q	Q	Q	Q
>2,000 CDD AND <4,000 HDD	,2	271	25	391	15.80	Q	Q	o o	Q



Table 7. (Continued)
Census Division:
Mountain

						1			
	1	ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFI	ED PETROLEU HEATIN	M GAS USED IG FUEL	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 (DOLLARS PER MILLION BTU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)	PER THOUSEHOLD		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)
TOTAL HOUSEHOLDS	0.4	640	58	504	8.63	0.2	836	76	640
AREA TYPE									
METROPOLITAN	Q	Q	Q	Q	Q	Q	Q	Q	Q
CENTRAL CITY	Q	Q	Q	Q	Q	Q	Q	Q	Q
OUTSIDE CENTRAL CITY	. Q	Q	Q	Q	Q	Q	Q	Q	Q
NON-METROPOLITAN	.4	646	59	509	8.62	.2	851	78	651
LPG PAID BY HOUSEHOLD							-		_
YES	.3	573	52	456	8.70	ē	Q	Q	Q
NO	, Q	Q	Q	Q	Q	Q	Q	Q	Q
TVDE OF HOUSTHE ATCHORIGE									
TYPE OF HOUSING STRUCTURE	o Q	Q	Q ·	Q	Q	Q	Q	Q	O
MOBILE HOME				469	8.65	Q		Q.	Ğ
SINGLE FAMILY	.3	594	54		0.05 Q	G	Q	ų Q	Ğ
2 OR MORE UNITS	Q	Q	·Q	Q	ષ	ď	Q	ų	ч
NUMBER OF ROOMS	teg a g								
1 TO 3	Q	Q	Q	Q	Q	Q	Q	Q	Q
4 TO 5	.2	580	53	465	8.78	Q.	q	q	ã
6 OR MORE		835	76	634	8.32	Q.	Q	Q	Ğ
O OR HORELLESS STATES OF THE S	• • •	033	70	0.54	0.52	4	ч.	ų	•
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	.2	515	47	422	8.97	Q	Q	Q	Q
1,000 TO 1,999	. 2	618	56	491	8.69	Q	Q	Q	Q
2,000 OR MORE	Q	Q	Q	Q	Q	Q	Q	Q	Q
YEAR HOUSE BUILT									
BEFORE 1950	. ପ୍	Q	Q	Q	Q	Q	Q	Q	Q
1950 TO 1974	.2	736	67	572	8.51	Q	Q	Q	Q
AFTER 1974	Q	Q	Q	Q	Q	Q	Q	Q	Q
OWN/RENT									
OHN	0.3	649	59	506	8.54	0.2	903	82	684
RENT	Q	Q	Q	Q	Q	Q	Q	Q	Q
TOOL FAMILY TIMOMP									
1981 FAMILY INCOME		•			_	٠,	_	_	_
LESS THAN \$10,000		Q	Q	Q	Q	Q	Q	Q	Q
\$10,000 TO \$19,999 \$20,000 TO \$34,999	. u	Q	Q	Q	Q	Q	Q	Q	q
\$35,000 OR MORE	q	Q	Q	Q Q	q	Q	Q	Q	Q
433,000 OK 10KE	. 4	Q	Q	ч	Q	Q	Q	Q	Q
TOTAL BELOW 100 PERCENT									
OF POVERTY LINE		Q	Q	Q	Q	Q	Q	Q	Q
TOTAL BELOW 125 PERCENT		•	•	•	٦	٦	۳.	۳.	٦
OF POVERTY LINE	Q	Q	Q	Q	Q	Q	Q	Q	Q
					•	•	•	•	-
AGE OF HOUSEHOLD HEAD									
UNDER 35 YEARS	.2	530	48	431	8.90	Q	Q	Q	Q
35 TO 59 YEARS	.2	830	76	633	8.35	Q	Q	Q	Q
60 YEARS AND OVER	Q	Q	Q	, Q	Q	Q	Q	Q	Q
HOUSELIAL B. MEMBERS									
HOUSEHOLD MEMBERS ONE PERSON	Q	Q	G.	•	^	•	•	_	_
2 TO 4 PEOPLE.	ч	u 588	54	Q 667	Q 9 70	Q	Q 727	Q	Q 547
5 OR MORE PEOPLE	Q Q	58 <b>5</b>		467	8.70	.2	727	66	567
- OR HURL FLUFLE	ч	બ	Q	Q	Q	Q	Q	Q	Q



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 (MILLION BTU)	AVG.   AVG.   EXPEND-   ITURES   PER  HOUSEHOLD  (DOLLARS)	AVG.   PRICE   (DOLLARS   PER   MILLION   BTU}	HUMBER OF HOUSE- HOLDS (MILLIONS)		AVG. AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	AVG. EXPEND- I TURES PER HOUSEHOLD (COOLLARS)	
IAIN HEATING FUEL										
NATURAL GAS	Q	Q	Q	Q	Q		_	_		
ELECTRICITY	q.	õ	Q	à	Ģ	_	_	_		
FUEL OIL OR KEROSENE	વે	õ	à	à	Ġ	_	_	_	-	
LPG	.2	836	76	640	8.38	. 2	836	76	640	
WOOD	. 2	396	36	335	9.26	-	-	_		
OTHER OR NONE	ହ	Q	Q	Q	Q	~	-	-		
OT WATER FUEL										
NATURAL GAS	Q	Q	Q	Q	ଦ	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	0.4	634	58	501	8.65	0.2	874	80	668	
IAIN HEATING EQUIPMENT USING LPG										
CENTRAL WARM AIR FURNACE	Q	Q	Q	Q	Q	Q	Q	Q	Q	
OTHER/NONE	.3	475	43	389	8.97	Q	Q	Q	ହ	
EATING DEGREES-DAYS (HDD) ND 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	.3	555	51	450	8.88	Q	Q	Q	Q	
4,000 TO 5,499 HDD	G	Q	Q	Q	Q	Q	Q	Q	Q	
<2,000 CuD AND <4,000 HDD	q q	Q	Q	Q	Q	Q	Q	Q	হ	
>2,000 CDD AND <4,000 HDD	q	Q	Q	Q	Q	Q	Q	Q	Q	



Table 7. (Continued)
Census Division:
Pacific

					,		····		
		ANY LIQUEF	IED PETROLE	UM GAS USED		LIQUEFIED PETROLEUM GAS USED AS MAI HEATING FUEL			
HOUSEHOLD CHARACTERISTICS	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS)	PER HOUSEHOLD	AVG. AMOUNT CONSUMED PER HOUSEHOLD (MILLION BTU)	PER HOUSEHOLD	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)
	<u>i</u>	<u>i</u>	]	<u>i</u>	<u>i</u>	<u> </u>	<u>i</u>	j	i
		***		*****	** (0				
TOTAL HOUSEHOLDS	0.5	319	29	335	11.49	0.2	532	49	442
AREA TYPE									
METROPOLITAN	.3	358	33	303	9.24	.2	532	49	442
CENTRAL CITY	Q	Q	Q	Q	Q	Q	Q	Q	Q
OUTSIDE CENTRAL CITY	.3	358	33	301	9.19	Q	Q	Q	Q
NON-METROPOLITAN	.2	254	23	390	16.83	Q	Q	Q	Q
LPG PAID BY HOUSEHOLD									
YES	.5	319	29	336	11.53	Q	Q	Q	Q
NO	Q	Q	Q	Q	Q	Q	Q	Q	Q
TYPE OF HOUSING STRUCTURE									
MOBILE HOME	Q	Q	Q	Q	Q	Q	Q	Q	Q
SINGLE FAMILY	. 3	265	24	321	13.27	Q	Q	Q	Q
2 OR MORE UNITS	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 10 5	. 3	353	32	337	10.46	Q	Q	Q	ବ
6 OR MORE	Q	Q	Q	Q	Q	Q	Q	Q	Q
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)									
LESS THAN 999	. 3	328	30	367	12.26	Q	Q	Q	Q
1,000 TO 1,999	Q	Q	Q	Q	Q	Q	Q	Q	Q
2,000 OR MORE	Q	Q	Q	Q	Q	,Q	Q	Q	Q
YEAR HOUSE BUILT									
BEFORE 1950	-2	254	23	265	11.39	Q	Q	Q	Q
1950 TO 1974	Q	Q	Q	G	Q	Q	Q	ଭ	Q
AFTER 1974	.2	446	41	426	10.46	Q	Q	Q	Q
DWN/RENT									
OWN	0.3	300	27	319	11.64	Q	Ģ	Q	Q
RENT	.2	344	- 31	356	11.32	Q	Q	Q	Q
1981 FAMILY INCOME									
LESS THAN \$10.000	. 2	301	27	308	11.23	Q	Q	Q	Q
\$10,000 TO \$19,999	. 2	371	34	358	10.57	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
TOTAL 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	.2	337	31	372	12.09	Q	Q	Q	Q
35 TO 59 YEARS	.2	326	30	343	11.51	Q	Q	Q	Q
60 YEARS AND OVER	Q	Q	Q	Q	Q	Q	Q	, Q	Q
HOUSEHOLD MEMBERS									
ONE PERSON	√ Q	Q	Q	Q	Q	Q	Q	Q	Q
2 TO 4 PEOPLE	.3	354	32	354	10.93	Q	Q	Q	Q
5 OR MORE PEOPLE	Q	Q	Q	Q	Q	. Q	Q	Q	Q



#### Table 7. (Continued) **Census Division: Pacific**

HOUSEHOLD CHARACTERISTICS	i I	1	1	ANY LIQUEFIED PETROLEUM GAS USED					AS USED AS MAIN JEL			
HOUSEHOLD CHARACTERISTICS	I NUMBER I OF I HOUSE- I HOLDS I(MILLIONS)	AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)		AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)	AVS.   PRICE   (DOLLARS   PER   MILLION   BTU)	   NUMBER   OF   HOUSE-   HOLDS  (MILLIONS) 	AVG. AMOUNT CONSUMED PER HOUSEHOLD (GALLONS)	•	AVG. EXPEND- ITURES PER HOUSEHOLD (DOLLARS)			
MAIN HEATING FUEL												
NATURAL GAS	Q	Q	Q	Q	Q	_	_	-	-			
ELECTRICITY	Q	Q	Q	Q	Q	-	-	-	-			
FUEL OIL OR KEROSENE	Q	Q	Q	Q	Q	-	-	-	-			
LPG	.2	532	49	442	9.08	0.2	532	49	442			
WOOD		Q	Q	Q	Q	-	-	-	-			
OTHER OR NONE	, 2	234	21	357	16.72	-	-	-	-			
HOT WATER FUEL												
NATURAL GAS	Q		Q		Q	•	•		Q			
ELECTRICITY	Q Q	Q Q	Q Q	Q Q	q q	Q Q	Q Q	Q	G G			
FUEL OIL OR KEROSENE	Q	G	ų G	ų G	G G	q Q	Q	Q Q	Q Q			
		365	33		-	q Q	o o	o o	G G			
OTHER	0.4	205	33	387	11.60	ď	ų	ų	G			
MAIN HEATING EQUIPMENT USING LPG												
CENTRAL WARM AIR FURNACE	Q	Q	Q	Q	G	Q	Q	Q	G			
OTHER/NONE	.4	275	25	309	12.28	Q	à	Q	Ġ			
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 <2,000 CDD AND	<b>Q</b> <b>Q</b>	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q Q	Q Q	ୟ ବ <b>ତ</b>			
4,000 TO 5,499 HDD				-				•	ų Q			
<pre>&lt;2,000 CDD AND &lt;4,000 HDD &gt;2,000 CDD AND &lt;4,000 HDD</pre>	.2 .2	37 <b>7</b> 271	34 25	309 391	8.99 15.80	Q	Q Q	Q G	Q D			

<sup>&</sup>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 1982 RESIDENTIAL ENERGY CONSUMPTION SURVEY.



Table 8. U.S.
Residential Wood
Consumption—April
1982 Through March
1983 United States

HOUSEHOLD ! CHARACTERISTICS !	NUMBER OF I		TOTAL NUMBER O	F CORDS BURNED	AVERAGE NUMBER OF CORDS BURNED
	(MILLIONS)	(PERCENT)	(MILLIONS)	(PERCENT)	PER HOUSEHOLD
TOTAL HOUSEHOLDS	21.1	100.0	43.9	100.0	2.1
AREA TYPE					
METROPOLITAN	14.2	67.2	19.6	44.6	1.4
CENTRAL CITY	4.1	19.3	3.5	8.1	.9
OUTSIDE CENTRAL CITY	10.1	47.9	16.0	36.5	1.6
NON-METROPOLITAN	6.9	32.8	24.3	55.4	3.5
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)					
LESS THAN 999	2.5	11.8	6.9	15.8	2.8
1,000 TO 1,999	10.1	47.6	21.5	48.9	2.1
2,000 OR MORE	8.6	40.6	15.5	35.3	1.8
1981 FAMILY INCOME LESS THAN \$10,000					
	3.2	15.4	11.8	27.0	3.6
\$10,000 TO \$19,999	5.5	25.9	13.4	30.6	2.5
\$20,000 TO \$34,999	3.7	17.6	5.9	13.5	1.6
\$35,000 OR MORE	8.7	41.1	12.7	28.9	1.5
AMOUNT OF WOOD BURNED					
LESS THAN 2 CORDS	13.7	64.7	8.8	20.0	0.6
2 TO 4 CORDS	4.3	20.3	12.3	28.1	2.9
MORE THAN 4 CORDS	3.1	14.9	22.8	51.9	7.2
HORE THAN 4 CORDS	3.1	14.7	22.0	31.7	7.6
WOOD IS MAIN HEATING FUEL					
YES	5.5	26.3	25.6	58.3	4.6
NO	15.6	73.7	18.3	41.7	1.2
YEAR HOUSE BUILT					
BEFORE 1950	6.1	28.8	17.4	39.6	2.9
1950 TO 1974	10.7	50.9	19.2	43.8	1.8
AFTER 1974	4.3	20.3	7.2	16.5	1.7
HEATING DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD) LONG-TERM AVERAGE					
<pre>&lt;2,000 CDD AND &gt;7,000 HDD</pre>	2.7	12.9	12.2	27.8	4.5
5,500 TO 7,000 HDD	5.1	24.3	9.2	20.9	1.8
<pre>&lt;2,000 CDD AND 4,000 TO 5,499 HDD</pre>	4.0	20 E	10.0	27.7	1 7
	6.0	28.5	10.2	23.3	1.7
<2,000 CDD AND <4,000 HDD	5.2	24.7	9.5	21.7	1.8
>2,000 CDD AND <4,000 HDB	2.0	9.6	2.8	6.3	1.4



Table 8. (Continued)
Census Region:
Northeast

HOUSEHOLD   CHARACTERISTICS	NUMBER OF BURNIN		TOTAL NUMBER OF	CORDS BURNED	)  AVERAGE NUMBER _ OF CORDS BURNED	
	(MILLIONS)	PERCENT)	(MILLIONS)	(PERCENT)	PER HOUSEHOLD   	
TOTAL HOUSEHOLDS	3.9	100.0	11.3	100.0	2.9	
CENSUS DIVISION						
NEW ENGLAND	1.4 2.5	35.7 64.3	3.4 7.8	30.5 69.5	2.4 3.1	
AREA TYPE						
METROPOLITAN	2.8	72.2	5.3	47.3	1.9	
CENTRAL CITY	.3	8.0	.3	2.9	1.0	
OUTSIDE CENTRAL CITY	2.5	64.2	5.0	44.5	2.0	
NON-METROPOLITAN	1.1	27.8	5.9	52.7	5.4	
MEASURED HEATED SPACE OF RESI- MENCE (IN SQUARE FEET)						
LESS THAN 999	.3	8.5	2.1	18.7	6.3	
1,000 TO 1,999	1.6	41.3	4.5	39.7	2.7	
2,000 OR MORE	2.0	50.2	4.7	41.6	2.4	
981 FAMILY INCOME						
LESS THAN \$10,000	.5	12.7	2.1	18.6	4.2	
\$10,000 TO \$19,999	1.2	31.1	4.1	36.4	3.3	
\$20,000 TO \$34,999	.5	13.1	1.3	11.7	2.5	
\$35,000 OR MORE	1.7	43.1	3.7	33.3	2.2	
MOUNT OF WOOD BURNED						
LESS THAN 2 CORDS	2.2	56.3	1.4	12.4	0.6	
2 TO 4 CORDS	.9	21.8	2.6	23.1	3.0	
MORE THAN 4 CORDS	. 9	22.0	7.3	64.5	8.4	
DOD IS MAIN HEATING FUEL YES	1.0	25.6	6.8	60.6	6.8	
NO	2.9	74.4	4.4	39.4	1.5	
EAR HOUSE BUILT	7 4	75.0			<b>-</b> ,	
BEFORE 1950	1.4 2.0	35.8 49.9	4.8 4.6	42.5 40.7	3.4 2.3	
AFTER 1974	.6	14.2	1.9	16.9	3.4	
			•••	1017	3.,	
EATING DEGREES-DAYS (HDD) ND COOLING DEGREES-DAYS (CDD)						
ONG-TERM AVERAGE  <2,000 CDD AND >7,000 HDD	.8	19.6	5.2	46.6	6.8	
5,500 TO 7,000 HDD	2.1	54.0	4.7	41.5	2.2	
4,000 TO 5,499 HDD	1.0	26.4	1.3	12.0	1.3	
<2,000 CDD AND <4,000 HDD	-	-	<b>**</b>	-	-	
>2,000 CDD AND <4,000 HDD	-	-	-	-	-	



# Table 8. (Continued) Census Region: North Central

HOUSEHOLD CHARACTERISTICS	NUMBER OF BURNIN		TOTAL NUMBER O	F CORDS BURNED	  AVERAGE NUMBER   OF CORDS BURNE
	(MILLIONS)	(PERCENT)	(MILLIONS)	(PERCENT)	PER HOUSEHOLD
		<del>*************************************</del>			
TOTAL HOUSEHOLDS	4.8	100.0	10.9	100.0	2.3
CENSUS DIVISION					
EAST NORTH CENTRAL	3.2	66.0	7.8	71.9	2.5
WEST NORTH CENTRAL	1.6	34.0	3.1	28.1	1.9
REA TYPE					
METROPOLITAN.	3.0	62.6	4.2	38.6	1.4
CENTRAL CITY	.9	19.3	.8	7.3	.9
OUTSIDE CENTRAL CITY	2.1	43.3	3.4	31.2	1.6
NON-METROPOLITAN	1.8	37.4	6.7	61.4	3.7
MEASURED HEATED SPACE OF RESI-					
DENCE (IN SQUARE FEET) LESS THAN 999	_	10 5	1.3	10.0	0.7
	.5	10.5		12.2	2.6
1,000 TO 1,999	1.8 2.5	37.2 52.3	4.1 5.4	37.9 49.9	2.3 2.2
	2.5	32.3	2.4	47.7	
L981 FAMILY INCOME					
LESS THAN \$10,000	.6	12.7	2.4	22.4	4.0
4403000 TO 447322222222222222222222222222222222222	1.4	28.3	4.1	37.8	3.0
\$20,000 TO \$34,999	-9	18.5	1.4	12.6	1.5
\$35,000 OR MORE	2.0	40.5	3.0	27.2	1.5
The state of the s	and the same of th				
AMOUNT OF WOOD BURNED LESS THAN 2 CORDS	~ .				
	3.1	64.7	2.2	20.5	0.7
2 TO 4 CORDS	.8	16.7	2.4	21.8	2.9
MORE THAN 4 CORDS	.9	18.6	6.3	57.7	7.0
NOOD IS MAIN HEATING FUEL					
YES	1.1	23.1	6.2	56.8	5.5
NO	3.7	76.9	4.7	43.2	1.3
EAR HOUSE BUILT					
BEFORE 1950	1.4	28.0	4.6	42.3	3.4
1950 TO 1974	2.3	47.7	3.9	35.7	1.7
AFTER 1974	1.2	24.3	2.4	22.0	2.1
EATING DEGREES-DAYS (HDD)					
ND COOLING DEGREES-DAYS (CDD) .ONG-TERM AVERAGE					
<2,000 CDD AND >7,000 HDD	1.5	31.5	6.0	55.6	4.0
5,500 TO 7,000 HDD	2.2	45.7	2.8	25.9	1.3
4,000 TO 5,499 HDD	1.1	22.9	2.0	18.6	1.8
<2,000 CDD AND <4,000 HDD	Q	Q Q	Q. 0	Q	1.0 Q
>2,000 CDD AND <4,000 HDD	-	- ·	-	9	<b>4</b>



Table 8. (Continued) Census Region: South

HOUSEHOLD   CHARACTERISTICS	NUMBER OF BURNIN		TOTAL NUMBER OF	F CORDS BURNED	 
	(MILLIONS)	   (PERCENT) 	(MILLIONS)	(PERCENT)	PER HOUSEHOLD
TOTAL HOUSEHOLDS	7.6	100.0	15.1	100.0	2.0
CENSUS DIVISION SOUTH ATLANTIC	4.1	54.5	8.0	52.9	1.9
EAST SOUTH CENTRAL	1.7	22.7	4.9	32.4	2.8
WEST SOUTH CENTRAL	1.7	22.8	2.2	14.7	1.3
AREA TYPE METROPOLITAN	4.4	57.2	6.0	39.5	1.4
CENTRAL CITY	1.1	14.8	1.2	7.8	1.0
OUTSIDE CENTRAL CITY	3.2	42.4	4.8	31.7	1.5
NON-METROPOLITAN	3.3	42.8	9.1	60.5	2.8
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)					
LESS THAN 999	1.0	13.5	2.2	14.5	2.1
1,000 TO 1,999	4.1	53.4	9.6	63.4	2.4
2,000 OR MORE	2.5	33.2	3.3	22.1	1.3
1001 FAMTLY TUCOUP					
1981 FAMILY INCOME LESS THAN \$10,000	1.5	19.9	5.7	37.5	3.7
\$10,000 TO \$19,999	1.8	23.8	3.6	24.0	2.0
\$20,000 TO \$34,999	1.2	16.3	1.9	12.3	1.5
\$35,000 OR MORE	3.1	40.1	4.0	26.2	1.3
AMOUNT OF WOOD BURNED					
LESS THAN 2 CORDS	4.7	62.3	3.3	21.9	0.7
2 TO 4 CORDS	2.0	25.9	5.5	36.6	2.8
MORE THAN 4 CORDS	.9	11.9	6.3	41.5	6.9
WOOD IS MAIN HEATING FUEL					
YES	2.6	33.8	9.4	62.4	3.7
NO	5.0	66.2	5.7	37.6	1.1
YEAR HOUSE BUILT					
BEFORE 1950	2.1	27.0	5.9	39.2	2.9
1950 TO 1974	4.0	52.2	7.1	46.7	1.8
AFTER 1974	1.6	20.7	2.1	14.0	1.3
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	Q	Q	Q	Q	Q
4,000 TO 5,499 HDD	2.6	34.5	4.7	30.8	1.8
<2,000 CDD AND <4,000 HDD	3.0	39.8	7.7	51.2	2.6
>2,000 CDD AND <4,000 HDD	2.0	25.8	2.7	18.0	1.4



Table 8. (Continued) Census Region: West

HOUSEHOLD I CHARACTERISTICS	NUMBER OF BURNIN		TOTAL NUMBER O	F CORDS BURNED	  AVERAGE NUMBER  OF CORDS BURNE
	(MILLIONS)	PERCENT)	(MILLIONS)	( PERCENT )	PER HOUSEHOLD
		I	<del> </del>	L	<del> </del>
TOTAL HOUSEHOLDS	4.7	100.0	6.7	100.0	1.4
CENSUS DIVISION					
MOUNTAIN	1.3	27.1	2.6	38.9	2.0
PACIFIC	3.4	72.9	4.1	61.1	1.2
AREA TYPE					
METROPOLITAN	4.0	83.9	4,1	61.4	1.0
CENTRAL CITY	1.7	36.1	1.2	18.7	.7
OUTSIDE CENTRAL CITY	2.3	47.7	2.8	42.7	1.3
NON-METROPOLITAN	.8	16.1	2.6	38.6	3.4
MEASURED HEATED SPACE OF RESI- DENCE (IN SQUARE FEET)					
LESS THAN 999	.6	13.1	1.3	19.6	2.1
1,000 TO 1,999	2.6	54.4	3.3	50.0	1.3
2,000 OR MORE	1.5	32.5	2.0	30.4	1.3
L981 FAMILY INCOME					
LESS THAN \$10,000	.6	13.2	1.6	24.7	2.6
\$10,000 TO \$19,999	1.1	22.6	1.6	23.9	1.5
\$20,000 TO \$34,999	1.1	22.7	1.4	20.9	1.3
\$35,000 OR MORE	2.0	41.5	2.0	30.5	1.0
935,000 OR MORE	2.0	41.5	2.0	30.5	1.0
MOUNT OF WOOD BURNED					
LESS THAN 2 CORDS	3.6	75.8	1.9	28.0	0.5
2 TO 4 CORDS			1.8		
	.7	14.0		27.5	2.8
MORE THAN 4 CORDS	.5	10.3	3.0	44.5	6.1
OOD IS MAIN HEATING FUEL					
YES	.8	18.0	3.2	47.6	3.7
NO	3.9	82.0	3.5	52.4	.9
EAR HOUSE BUILT					
BEFORE 1950	1.3	26.5	2.1	31.5	1.7
1950 TO 1974	2.5	52.9	3.7	55.9	1.5
AFTER 1974	1.0	20.6	.8	12.6	.9
MATCH DEGREES-DAYS (HDD) AND COOLING DEGREES-DAYS (CDD)					
.ONG-TERM AVERAGE <2,000 CDD AND >7,000 HDD	.4	9.4	.9	13.7	2.1
5,500 TO 7,000 HDD	.8	16.8	1.7	25.5	2.1
<2,000 CDD AND 4,000 TO 5,499 HDD	7.0	04.7	2.2	33.4	1.8
	1.2	26.3			
<2,000 CDD AND <4,000 HDD	2.2	46.3	1.8	26.6	.8
>2,000 CDD AND <4,000 HDD	Q	Q	Q	Q	Q

<sup>&</sup>quot;-" = DATA NOT APPLICABLE.

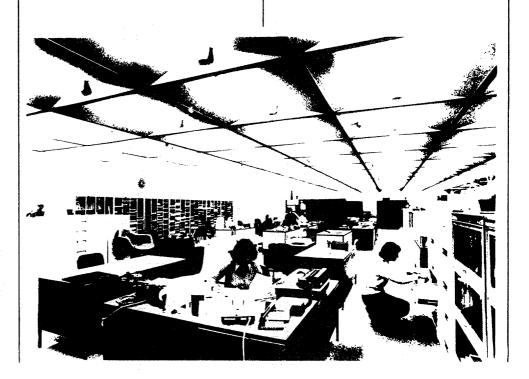
<sup>&</sup>quot;G" = DATA HITHHELD BECAUSE OF A LARGE VARIANCE.

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 1982 RESIDENTIAL ENERGY CONSUMPTION SURVEY.


### Appendix A

How the Survey Was Conducted



 ales discommendes more un more un place mé a processe de processe de processe de Processe	en berendek en keler else men er en else en bilenge brænd værstlikden mårdlikken med bilde k	 	 



#### 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 5,903 units, of which some 95 either were not used for dwelling purposes or were not habitable. Of the 5,808 habitable housing units, 536 were ineligible for this study due to a current vacancy or seasonal occupancy (the units were not the primary residence for the occupants). Personal interviews were conducted at 4,475 of the 5,272 eligible units, for a response rate of 84.9 percent. Subsequently, mail questionnaires were sent to 703 of the 797 households that had not participated in personal interviews. Completed questionnaires were returned by 249 of these households, or 35.4 percent of those mailed. Of the total eligible households, responses were received from 89.6 percent (or 4,724 households).

Interviewer contacts at sample households were begun in late September 1982 and continued through January 1983; more than 90 percent of the personal interviews were completed in October and November. Most of the 249 completed mail questionnaires were received in January and February 1983, 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 1982 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 which included measurements of the housing unit lasted 52 minutes, with 83 percent of the interviews lasting between 30 and 70 minutes. For a subsample of households in which measurements were not made (827 households) the average interview lasted 44 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 improvements and the reasons for making the improvements; household appliances; household vehicles; receipt of government assistance for the cost of heating; and demographic data on household members. The questionnaire is reproduced in Appendix D.

Fuel consumption for household vehicles is collected through the Household Transportation Study, which uses subsamples from the residential surveys. Data 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 were collected for 1983 using households from this survey.



#### The Interviewers

#### Table A1. Experience and Training of 1982 RECS 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 certain housing units, 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 290 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 the 1980 or 1981 RECS. As shown in Table Al, 167 interviewers (58 percent) had completed interviews on a prior RECS. 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.

Experience on Prior RECS	Training for This RECS	Number of Interviewers
Yes	Home study	167
Yes <sup>c</sup>	Regional training meeting	2
No	Regional training meeting	120
No	Other training	<u>1</u> 290

All interviewers completed a practice interview and quiz.

Attended regional training meeting and completed interviews on a prior RECS.

<sup>C</sup>Completed interviews on RECS, but did not attend a regional training meeting in a prior year.

Source: Energy Information Administration, 1982 Residential Energy Consumption Survey.

Two-day regional training meetings were held in 14 locations around the country in September 1982. These meetings were attended by 122 interviewers, including almost all those who had not interviewed on a prior 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 78-page manual, <u>Instructions for Interviewers</u>, <u>Residential Energy</u> Consumption Survey, <u>Fall-Winter</u>, <u>1982-1983</u>.



 $= \{ (a_{i_1}, a_{i_2}, y_{i_1}, a_{i_2}^{(i_1)}, y_{i_1}^{(i_1)}, y_{i_2}^{(i_2)}, a_{i_2}^{(i_2)}, y_{i_2}^{(i_1)}, y_{i_2}^{(i_2)}, y_{i_2}^{(i_2)}, y_{i_2}^{(i_1)}, y_{i_2}^{(i_2)}, y_{i_2$ 

### Sample Design

### Appendix A (Continued)

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 15 interviews. Twenty-one interviewers each completed fewer than 6 interviews; the average for this group of 21 interviewers was 3.5 completed interviews. The most interviews completed by one interviewer was 42. 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. Each 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 four 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.

 $<sup>^2</sup>$ SMSA's are now called MSA's (Metropolitan Statistical Areas), as announced in the press release of March 18, 1983, from the Administrator for Information and Regulatory Affairs, Office of Management and Budget.

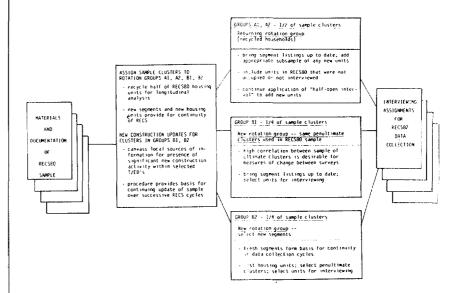


The 131 PSU's were selected in early 1980. The population sizes of PSU's were 1978 population estimates from the U.S. Bureau of the Census. Other data used in stratification, such as the dominant home heating fuel, came from the 1970 Census. Classifications of MSA's used for definition and stratification of PSU's were also based on the 1970 Census. (Metropolitan area classifications used in the tabulation of results for this RECS, are based on June 1983 definitions of the Office of Management and Budget.) 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.

This is the first survey in the RECS series to include a plan for rotation of sample units from an earlier RECS. The primary objective of this rotation scheme was to observe the changes that occurred in the same housing unit over a 2-year period. To accomplish this objective in an efficient way and to set the stage for continuity in the RECS series, systematic random procedures were used to divide the 1,515 clusters in the basic sample into four subsamples, designated as Al, A2, Bl, B2. In the 1982 RECS, Groups Al and A2 constitute a awkward rotation group in which procedures were designed interview a sample of the same housing units that had been in the sample 2 years earlier (in 1980). Groups Bl and B2 constitute, in the 1982 RECS, a new rotation group in which housing units were included in the RECS sample for the first time. (See Figure Al).

#### Longitudinal Sample Design

Figure A1. Sampling Operation for 1982 RECS





Procedures for updating the sample for new construction and for other changes in the housing unit stock were incorporated in sampling operations so that each rotation group, as well as the total RECS sample, is a probability sample of the population covered by the survey.

Rotation Groups Al and A2. The general plan for the sample clusters (757 of the total of 1,515) was to interview the same housing units that had been contacted 2 years earlier, including housing units that had been vacant as well as noninterviews (refusals, not-at-home, etc.) and completed units.

Prior to contacting households for RECS 1982 interviews, interviewers made visits to sample segments to check 1980 housing unit listings for missed units and to update listings for new construction, demolition, and conversion of structures from one use to another. Newly constructed or converted units, and those missed in the 1980 listings, were sampled at the RECS 1982 sampling rate.

Rotation Groups Bl and B2. The first step in these rotation groups (758 of the total of 1,515 clusters) was a new construction update procedure based on a canvass, primarily by telephone, of local sources of information (building permit issuing agencies, zoning boards, tax offices, etc.). The objective was to determine whether significant new construction—defined as groups of 25 or more housing units—had occurred in the 1980-1982 period, within the Census Tracts and Enumeration Districts that were included in the RECS sample.

In the canvass, significant new construction was found in Census Tracts and Enumeration Districts in 123 of the 758 clusters in these rotation groups. New field counts were made and new segments were selected based on the new measures of size.

In Census Tracts and Enumeration Districts in which significant new construction (clusters of 25 or more new housing units) was not found, procedures diverged in rotation groups Bl and B2.

In rotation group B1, 1980 RECS housing unit listings were checked and updated (for missed units, new construction, etc.) prior to the start of field contacts for interviews. This step in rotation group B1 was identical to the listing checks carried out for rotation groups A1 and A2. However, housing units for the 1982 RECS sample were selected from among those not selected in the earlier RECS.

In rotation group B2, a new segment was selected for the 1982 RECS.

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 1982, the universe was estimated to contain 83,788,000 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 10.4 percent of the eligible units.

#### **Survey Estimates**



The adjustment for these noninterviews was designed to spread the effects of noninterviews over the interviewed sample of households in the final cluster. The noninterview weight is equal to the number of households in the ultimate cluster (interviews plus noninterviews) divided by the number of interviews. When the weight computed in this way was greater than 2.0, however, 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. The undercount in RECS surveys is in the range of 7 to 9 percent. 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 1982 RECS. The first-stage adjustment was computed from information for PSU's in NSR strata 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 (1980 Census population) in cell c for all PSU's in RECS NSR strata, and

 $^{\rm M}_{\rm C}$  is an estimate of N generated by applying RECS PSU sampling weights to 1980 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 A2. The second-stage adjustment for category k was given by

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

where  $\mathbf{H}_{k}$  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 (CPS) estimates for March 1982 and March 1983. The second-stage factor reduced both the between-PSU variance and the within-PSU variance.



An intermediate step was introduced in the 1982 RECS to adjust RECS estimates approximately to current CPS estimates for numbers of households of each of the following types:

One-person households, male householder One-person households, female householder All other households

The purpose of this intermediate step was to reduce possible bias in the RECS sample due to undercoverage of one-person households, particularly those with male householders. The use of this adjustment creates a discontinuity in the estimated number of one-person households compared with earlier RECS surveys. For example, the 1981 survey produced an estimate of 18.5 percent one-person households versus 23.0 percent in 1982. This change reflects primarily the effect of the ratio adjustment applied for the first time in the 1982 survey.

The procedures related to the second stage ratio estimate were carried out in three steps: the second-stage ratio estimate was performed, the intermediate adjustment for number of persons in household was carried out, and the second-stage ratio estimate was iterated to produce the final estimates approximately equal to the control totals shown in Table A2.

#### Table A2. Population Estimates Used as Controls in Ratio Estimates

Census Region	MSA Central City	MSAOutside Central City	Non-MSA	Total
Northeast	6,005,000	8,163,000	3,783,000	17,951,000
North Central	5,889,000	8,089,000	7,327,000	21,305,000
South	7,422,000	8,706,000	11,927,000	28,055,000
West	5,447,000	7,509,000	3,521,000	16,477,000
Total	24,763,000	32,467,000	26,558,000	83,788,000

Source: Estimates derived from March 1982 and March 1983 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 1982, 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, 95 addresses were found to be nonresidential and an additional 513 were found to be ineligible. Some 4,037 personal interviews were completed, leaving 1,258 nonrespondents in this wave.



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 22 addresses were found to be ineligible. As a result of the second wave, an additional 394 interviews were completed, leaving 842 nonrespondents.

A third wave was initiated in an effort to reach nonrespondents in a number of locations that had low completion rates. One address was found to be ineligible and an additional 44 personal interviews were completed in the third wave.

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, 249 additional households responded.

After three waves of personal interview attempts and the mailed questionnaire, 548 households or 10.4 percent of all eligible housing units had not responded. These results are displayed in Table A3.

These efforts were successful in accomplishing the following:

- Approximately 85 percent of the households were contacted and agreed to be interviewed personally. An additional 4.7 percent of the sample households completed and returned mailed questionnaires.
- Of the 4,724 responses, 85.5 percent were obtained during the first wave of contacts; 8.3 percent were obtained during the second wave; and 0.9 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, 40.1 percent required only one visit and 68.7 percent were completed with no more than two callbacks.
- A total of 202 personal interviews were completed in the second and third waves with respondents who had previously refused to participate, representing 4.5 percent of all completed personal interviews. In addition, of the 249 mailed questionnaires that were completed and returned, 177 were from households that previously refused to participate.



#### **Table A3. Interviews** Completed by Stage

				Status		77 70 10 10 10
	Personal Interviews			After		
	First	Second	Third	Third		Final
	Wave	Wave	Wave	Wave	Mai1	Status
Total Listed Units	5,903	1,258	842	5,903	797	5,903
Nonhousing Units						
Business, Other	32	0	0	32	-	32
Not Habitable	20	0	0	20	-	20
Nonhousing Unit	43	0	0	_43	-	<u>43</u>
Subtotal	95			95		95
Housing Units	5,808	1,258	842	5,808	797	5,808
Ineligible Units						
Vacant	383	20	1	404		404
Seasonal Vacant	130	2	0	132	-	132
Subtotal	513	22	1	536	=	536
Eligible Units	5,295	1,236	841	5,272	797	5,272
Not CompletedPersonal						
No One Home	365	168	38	101		101
Eligible Respondent			_			10
Not Home	46	17	7	19		19
Refused	724	445	31	605	-	605
Illness	24	12	0	12	-	12
Language Barrier Wrong Respondent	7	1.	0	3		3
	15	0	0	7	_	7
or Unit	52	187	721	29	_	29
Other	25	12	721	21	_	21
Subtotal	$\frac{23}{1,258}$	842	797	$\frac{21}{797}$	***	$\frac{21}{797}$
Dabeotar	1,250	042	, , , ,	, , , ,		7,71
Not CompletedMail					0.0	00
Unusable Address	-			-	22	22
Post Master Return		<del>-</del> .	_		41	41
Returned Blank		-	_	-	109	109
Returned Unusable Not Returned			-		15 289	15
Other Not Mailed	_	-		_		289
Subtotal	-		_	-	$\frac{72}{548}$	<u>72</u> 548
Total Interviews Completed	4,037	394	44	4,475	249	4,724
compreted	4,037	224	44	4,4/3	249	4,724

<sup>&</sup>lt;sup>a</sup>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.

<sup>&</sup>quot;-" = Data not applicable.

Source: Energy Information Administration, 1982 Residential Energy Consumption Survey.



# Response Rates and Household Characteristics

### 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 A4.

Several patterns are clear from Table A4. First, personal interviews enjoyed the most success in the South (86.5 percent), in non-MSA areas (89.7 percent), and among residents of mobile homes (87.4 percent). Conversely, the interviewers had their lowest success rates in the Northeast (81.7 percent), MSA central cities (80.8 percent), and in buildings with five or more residential units (76.7 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 overall 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. Overall response rates are approximately two percentage points higher for new rotation groups (households not contacted for an earlier RECS) than for returning rotation groups.



#### Table A4. Response Rates by Region, Location, Type of Structure, and Rotation Groups (Percentage of Eligible Housing Units)

### Adjustments for Item Nonresponse

### Appendix A (Continued)

		Response Rates			nal view Non- nse Rates
	Personal	Mail	Total		Unable to
Characteristic	Interview	Questionnaire	Response	Refuse	Contact
Total	84.9	4.7	89.6	11.4	3.6
Census Region					
Northeast	81.7	5.2	86.9	13.1	5.2
North Central	84.4	5.4	89.9	12.5	3.0
South	86.5	3.2	89.7	9.7	3.8
West	85.9	5.4	91.3	11.2	2.9
Location Type MSACentral					
City MSAOutside	80.8	6.1	86.8	13.6	5.6
Central City	85.0	4.6	89.6	12.5	2.5
Non-MSA	89.7	3.2	93.0	7.5	2.8
Structure Type Single-Family House		4.4	90.6	11.6	2.3
Mobile Home Buildings with Two to Four	87.4	2.0	89.5	8.9	3.6
Units Buildings with Fiv		4.2	89.2	10.2	4.8
or More Units	76.7	7.9	84.5	13.0	10.3
Rotation Group Returning Rotation		4.8	88.7	12.7	2 /
Group	83.9	4.0	00./	14./	3.4
Group	85.9	4.6	90.5	10.3	3.9

Source: Energy Information Administration, 1982 Residential Energy Consumption Survey.

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. 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 when actual measurements 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 443 items of information. These items were treated as follows with respect to imputations

Imputation Method	Number
Not Imputed	155 288
Hot-deck Random	229 39
Modal Total	20 443

Table A5 shows the most frequently imputed items, the number of cases requiring imputation, and the method used.

The 249 mailed questionnaires had considerable missing data since the mailed questionnaire was a small subset of questions from the household interview. For the mailed questionnaire, a modified hot-deck imputation method was used. A hot-deck matrix was created for both mailed-questionnaire and personal-interview households using Census region, type of housing unit structure, space heating fuel, hot water fuel, and presence and fuel of air conditioning. For each mailed questionnaire household, a donor personal interview household was chosen from the same cell of the hot-deck matrix whenever possible. For 95 percent of the mailed questionnaires, donors matched on all hot-deck variables.

Since each cell of the matrix usually contained several possible donors, a donor was chosen from the cell based on how closely it matched the mailed questionnaire household on a number of additional variables. These variables were: income, number of household members, number of household vehicles, age of householder, tenure, number of rooms, model year of newest vehicle, and household structure (married couple, other). Except for information on household vehicles, which was taken directly from the mailed questionnaire, the entire set of responses from the donor household was imputed to the mailed questionnaire households. This means that all responses for mailed questionnaire households are imputed except weather data, fuel consumption data acquired from the household's fuel suppliers, the geographic location of the mailed questionnaire household, information on household vehicles, and those items in the hot-deck imputation process for which an exact match was obtained.



#### Table A5. 1982 Residential Energy Consumption Survey Items Most Frequently Imputed

#### Appendix A (Continued)

		Percentage of	
Item	Cases Imputed	Total Sample <sup>a</sup> (4,724)	Method of Imputing
Name			
1981 Family Income	604	13	Hot-deck
Year House Was Built	318	7	Hot-deck
Availability of Natural Gas	305	7	Hot-deck
Householder Completed			
Highest Grade	262	6	Hot-deck
Square Footage of Housing	202	•	not ucca
Unit	192	4	(b)
Most-Used Oven Is Microwave	145	3	Hot-deck
	138	3	Hot-deck
Condominium or Cooperative			
Warm Air Forced Through Ducts	116	3	Hot-deck
Basement or Crawl Space			
Heated	100	2	Hot-deck
Central Water-Heating			
System for the Building	95	2	Hot-deck
Central Heating System for			
The Building	77	2	Hot-deck
Number of Window or Ceiling			
Fans	71	2	Hot-deck
Monthly Rent of Dwelling	65	1	Hot-deck
Heating Stove is Air Tight	61	1	Hot-deck
Other Reason No Heat Last		•	not deck
Winter	60	1	Hot-deck
	00	±	not-deck
Heating System Broken Last	50	1	11 a. d 1.
Winter	59	1	Hot-deck
No Fuel Available Last		_	
Winter	59	1	Hot-deck
Age of Householder	57	1	Hot-deck
No Heat from Landlord Last			
Winter	57	1	Hot-deck
Unable to Pay for Fuel Last			
Winter	55	1	Hot-deck
Age of Second Household			
Member	55	1	Hot-deck
Thermostat Present to Adjust			
Temperature	49	1	Hot-deck
Fuel of Most-Used	77	-	not acck
Refrigerator	49	1	Modal
	47	T	riodal
Type of Foundation Under		4	77 1 . 1
Home	48	1	Hot-deck
Government Provided Other	4.7		
Energy Devices	47	1	Hot-deck
Second Oven Is Microwave	47	1	Hot-deck
Month Caulking Added	45	1	Random
Fuel of Most-Used Freezer,	42	1	Modal
·			

<sup>&</sup>lt;sup>a</sup>Mailed questionnaires are not included in the percentage. To account for these, add 5 percentage points to the percentage list.

<sup>&</sup>lt;sup>b</sup>See Appendix B for details on the square footage imputations.
Source: Energy Information Administration, 1982 Residential Energy Consumption Survey.



#### **Rental Agent Survey**

#### **Editing Completed Questionnaires**

#### Appendix A (Continued)

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 September 1983.

Altogether, 168 rental agents were interviewed. These interviews covered 308 households in 206 buildings. The 308 households were 57.0 percent of the total of 540 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 proprietary software package called EDITOR II.

The contractor attempted to resolve inconsistencies or ambiguities in the data internally, by reference to other parts of the questionnaime. 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 10 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 knowledge-able than the household respondent on specific fuels and/or equipment.

Editors followed the guideline that the rental agent was the more knowledgeable 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.



#### Table A6. Changes Made in Household Records Based on Information from Rental Agents

#### **Fuel Supplier Survey**

#### Appendix A (Continued)

The changes in the household records that resulted from these inquiries are given in Table A6.

Type of Changes Made in Household Records	Fuel Paid by Rental Agent	Number with Any Changes Made	Percentage with Changes Made
All Households in Rental			
		0.0	0.6
Agent Survey	308	80	26
Main Heating Fuel	255	31	12
Main Heating Equipment	(a)	40	16
Supplementary Heating Fuel	(a)	5	2
Water-Heating Fuel	272	36	13
Air-Conditioning Fuel	44	2	5

<sup>&</sup>lt;sup>a</sup>Responses of rental agents and household respondents were compared for the 255 households for which the rental agent paid for the main heating fuel.

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, 1982, through March 31, 1983.

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 1,003 companies. The number of companies in the survey supplying each fuel and the total number of households supplied are shown in Table A7.

Source: Energy Information Administration, 1982 Residential Energy Consumption Survey.

<sup>&</sup>lt;sup>3</sup>Households 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 reported by the household, 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.



### Table A7. Companies in Fuel Supplier Survey and Number of Households Supplied

#### Appendix A (Continued)

Fuel Supplier	Number of Companies	Number of Survey House- holds Supplied <sup>b</sup>
Electricity	275	4,055
Natural Gas	147	2,264
Fuel Oil or Kerosene	443	576
LPG	199	355

<sup>a</sup>The total number of companies in the survey was 1,003. These included 43 that supplied both electricity and natural gas; 2 that supplied natural gas and LPG; and 16 that supplied fuel oil and CPG.

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. The fuel oil/kerosene figure excludes 21 households whose suppliers were unknown and 65 households who provided estimates of quantities of kerosene, based primarily on cash-and-carry purchases. The LPG figure excludes 6 households whose suppliers were unknown.

Source: Energy Information Administration, 1982 Residential Energy Consumption Survey.

#### Data Collection Procedures

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

- o 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;
- o the telephone contact referred to in the initial letter;
- o 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;
- o completed forms or copies of records returned by mail; and
- o a letter from the EIA thanking the company for its effort.



#### Energy Consumption Records

#### Appendix A (Continued)

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 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 A8). These households are 17.7 percent of users of natural gas and 18.0 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 5 to 7 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 18 percent of this group returned signed forms in response to the mail request and therefore were included in the fuel supplier survey.

<sup>&</sup>lt;sup>4</sup>The 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).



## Table A8. 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)

#### Appendix A (Continued)

Survey Households	Elec- tric- ity	Natural Gas	Fuel Oi	
Total Households Using the Fuel		100.0 (2,951)		100.0 (413)
Usable Records Received from Fuel Supplier	83.4	74.3	48.3	67.3
Quantity Estimated by Household $^{\rm b}$	*	*	7.5	2/2
Unusable Records Received from Fuel Supplier	1.2	0.9	6.2	8.5
Household Pays Directly to SupplierNo Record Available for the Household	7.8	7.1	20.0	18.2
Household Not Identified in Company Records	1.3 * * 6.5	*	11.5 0.8 2.4 5.3	9.7 0.5 1.5 6.5
Fuel Used Included in Rent or Paid in Other Way	7.6	17.7	18.0	6.0

 $<sup>^{\</sup>rm a}{\rm Data}$  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.

the record covered less than 1 year.

Households in this group are those using kerosene as a supplemental heating fuel and purchasing kerosene primarily on a cash-and-carry basis. Estimated purchases of kerosene were supplied by telephone by these households after the end of the 1982-1983 heating season.

Cincludes 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.

"\*" represents or rounds to zero.

Source: Energy Information Administration, 1982 Residential Energy Consumption Survey.

Table A8 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 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.



#### Data Collection Dates

#### Fuel Consumption Imputations

#### Appendix A (Continued)

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

The first set of advance letters was mailed to utility companies during the first two weeks of April 1983. The cut-off date for receipt of usable information was August 31, 1983.

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 A8. The problem of unusable records is small for the metered fuels. For electricity and natural gas, 1 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 6 percent of fuel oil or kerosene records and 9 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.

A variety of information from household respondents as well as from uppliers 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 by telephone to some households to obtain estimates of cash-and-carry purchases of kerosene directly from household respondents.

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.

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 utility gas, all structure types were modeled simultaneously with an allowance for differentiation of structure types within the model by inclusion of dummy variables (for each type of structure). For each of fuel oil/kerosene and LPG, there were three consumption models: for single-family detached homes, for mobile homes, and for all other structure types combined. 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.

<sup>&</sup>lt;sup>5</sup>The number of households with partial year records, as a proportion of total households using the fuel, is 7.4 percent for electricity and 5.9 percent for natural gas.



#### **Appendix A (Continued)**

For households using kerosene as a supplemental heating fuel, where the main heating fuel was neither fuel oil nor kerosene, and where full year data were not available from the supplier, respondent estimates furnished through a followup telephone survey were used as kerosene consumption quantity. These cases include primarily cash-and-carry kerosene customers. If followup respondent estimates were not available, regression estimates were calculated in the usual way and then adjusted in such a way that overall average imputations matched the average followup respondent estimates. 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  $\ensuremath{\mathbb{LPG}}$ 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, 1982, and March 31, 1983. 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. For a small proportion of households, 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 1 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 A9 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 (90.8 percent of the units) and natural gas (90.2 percent) than for fuel oil or kerosene (70.2 percent) or LPG (71.9 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 19.7 percent of the apartments in large buildings that used natural gas and for only 3.3 percent 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 57.4 percent of the cases.



## Table A9. Energy Consumption Records and Missing Data for Survey Households, by Fuels Used, and by Type of Housing Structure (Percent)

#### **Appendix A (Continued)**

	Total			_	
	House-			Two	Five
	holds Using	Mobile	Single-	to Four	or
Type of Fuel Used	the Fue		Family	Units	More Units
Type of fact osea	CIIC I GC	1 HOME	1 4111111	OMICS	UIIICO
Electricity	100.0	100.0	100.0	100.0	100.0
(Sample Number)	(4,721)	(221)	(3,357)	(552)	(591)
Markle Beard	83.4	79.7	90.8	67.9	57.4
Usable Record	1.2	2.7	0.5	3.1	2.5
Unusable Record					
Records Not Available Fuel Used Is Included in	7.8	10.4	7.1	9.1	9.6
Rent or Paid in Other Ways	7.6	7.2	1.6	19.9	30.5
Natural Gas	100.0	100.0	100.0	100.0	100.0
(Sample Number)	(2,951)	(74)	(2,054)	(427)	(396)
Usable Record	74.3	75.6	90.2	48.2	19.7
Unusable Record <sup>a</sup>	0.9	1.4	0.7	1.9	1.0
Records Not Available	7.1	8.1	7.4	5.4	6.8
Fuel Used Is Included in	7 • 1	0.1	7 • 4	7.4	0.0
Rent or Paid in Other Waysb	17.7	14.9	1.7	44.5	72.5
Fuel Oil or Kerosene	100.0	100.0	100.0	100.0	100.0
(Sample Number)	(863)	(45)	(45)	(112)	(91)
Usable Record	55.8	46.7	70.2	23.2	3.3
Usable Record	6.2	4.4	7.0	7.1	*
Records Not Available	20.0	48.9	22.0	13.4	1.1
Fuel Used Is Included in h					
Rent or Paid in Other Ways	18.0	*	0.8	56.3	95.6
LPG	100.0	100.0	100.0	100.0	100.0
(Sample Number)	(413)	(81)	(316)	(15)	(1)
			•		
Usable Record	67.3	55.6	71.9	(6)	*
Unusable Record <sup>a</sup>	8.5	7.4	8.5	(2)	*
Records Not Available Fuel Used Is Included in	18.2	28.4	16.1	(1)	*
Rent or Paid in Other Ways	6.0	8.6	3.5	(6)	(1)

<sup>&</sup>lt;sup>a</sup>Data were unusable for electricity and natural gas if the records covered fewer than 5 months and for fuel oil, kerosene, and LPG if the record covered less than 1 year.

Source: Energy Information Administration, 1982 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.

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.

<sup>&</sup>quot;\*" represents or rounds to zero.



#### Supplemental Data

Collection

Followup Survey on Fuelwood Consumption

#### Appendix A (Continued)

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 23.2 percent and 55.6 percent of the households.

Portions of the 1982 RECS data set and analyses are based on three supplemental data collections carried out mainly by telephone between and 1983 and early 1984. The primary purposes of two of these followup activities were to obtain estimates of use of wood and kerosene as home heating fuels during the 1982-1983 heating season. The third supplemental activity was designed primarily to collect additional information of interest to the Social Security Administration on government assistance to low-income households during the 1982-1983 heating season and assistance to pay cooling costs for the 12-month period ending in September 1983.

The survey of fuelwood consumption during the 1982-1983 heating season was carried out for a sample of households who had reported using wood as a main or supplemental home heating fuel in the 1982 RECS household interview.

The RECS household survey included a series of questions on use of fuelwood. In the main RECS survey, however, estimates of quantity of wood used by the household referred to the 12 months preceding the interview in the fall of 1982. The primary purpose of the supplemental fuelwood data collection was to obtain estimates for the 1982-1983 heating season, basically matching the time period for consumption information obtained directly from utility companies and fuel dealers for other fuels. An additional feature of the supplemental data collection was an advance mailing to households of rough sketches of various quantities of fuel to assist household members in estimating quantities of wood used during the period of interest.

Followup contacts were attempted in May 1983 with a systematic random sample of households with whom personal interviews were completed in the 1982 RECS. The sample included approximately three-fourths of households (261 of 354) who had reported using wood as their main home heating fuel and approximately three-eighths (382 of 997) households who had reported using wood as a supplemental home heating fuel. Contacts were primarily by telephone. Households without telephones were asked to respond to a brief mailed questionnaire. Contacts were completed and estimates of fuelwood consumption during the 1982-1983 heating season were obtained from 514 of the 643 households in the sample for the followup activity is response rate of 79.9 percent). The remainder of the households had moved prior to the supplemental data collection, could not be contacted, or could not provide estimates of fuelwood consumption for the period of interest.

The overall relationship of fuelwood consumption estimates in the followup survey, to those in the original RECS data collection for the period 12 months earlier, closely paralleled the ratio of heating degree days in 1982-1983 to heating degree days in 1981-1982. This ratio was used to derive estimates for households not included in or not responding to the followup survey.



#### Followup Survey on Kerosene Consumption

#### Followup Data Collection for Social Security Administration

### Bias in Estimates of Fuel Usage in Apartments

#### Appendix A (Continued)

A very large majority of households using kerosene as a supplemental home heating fuel made cash-and-carry purchases of kerosene in small quantities, usually less than 10 gallons at a time. Records of such purchases are generally not maintained by fuel suppliers. Thus, the normal procedure of obtaining delivery or sales records from fuel suppliers can be followed only for a small fraction of these households. In earlier RECS, kerosene consumption estimates were imputed for almost all households using kerosene as a supplemental heating fuel.

Use of kerosene as a supplemental home heating fuel increased dramatically in the period from 1980 to 1982. Followup telephone calls were made to households in the 1982 RECS sample to obtain estimates of kerosene used during the 1982-1983 heating season directly from a knowledgeable person in the household.

Followup contacts were attempted in September 1983 for 96 households. This group included all households in the 1982 RECS who reported that they purchased kerosene as a supplemental home heating fuel and for which records were not obtained from fuel suppliers. Of these 96 households, 65 (67.7 percent) were reached by telephone and were able to provide estimates of the amount of kerosene purchased during the 1982-1983 heating season. The remaining 31 households either could not be reached by telephone or could not provide an estimate of the amount of kerosene used.

If followup respondent estimates were not obtained, regression estimates were calculated and then adjusted in such a way that overall average imputations matched the average estimate of followup respondents.

This supplemental data collection was carried out entirely by telephone in January 1984. Telephone contacts for this purpose were combined when possible with a portion of the data collection for the 1983 Transportation Study.

The population of interest for this supplemental data collection was defined as all households in the 1982 RECS who had reported annual family income of under \$30,000 for 1981. Of the total of 3,548 households included in this group, followup interviews were completed with 2,461, or 69.4 percent. Nonrespondents include those who could not be reached by telephone for this special purpose as well as households who had refused to participate in earlier Transportation Study contacts.

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, and rooms per



#### Appendix A (Continued)

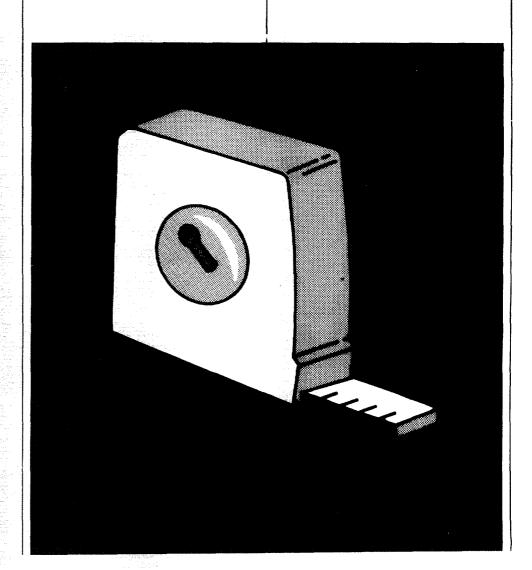
unit, in the building. A comparison of these estimates, derived from actual records, with the imputed values assigned by the regression modeling indicates the following bias in some imputed values:

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

#### **Appendix B**

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



r, <del></del> .		The state of the s	



#### Introduction

#### Appendix B

Interviewers for the 1982 Residential Energy Consumption Survey were given 50-foot tape measures to measure the dimensions of housing units. The 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.

Interviewers were instructed to measure all housing units in new rotation groups B1 and B2. Housing units in the returning rotation groups A1 and A2 which did not have complete measurements taken in the 1980 RECS were also to be measured. Additionally, a subsample of 1/4 of the returning rotation groups which were completely measured in the 1980 RECS was selected to be measured again in the 1982 RECS. This subsample will serve as the basis for methodological analyses of differences between 1980 RECS and 1982 RECS measurements.

Interviewers were instructed to skip the measurement step for the remaining 3/4 of the returning rotation groups with complete measurements in the 1980 RECS, provided that the housing unit was occupied by the same family as in the 1980 RECS, and that no changes had been made in the structure or in heated square feet. For these 827 households, measurements taken during the 1980 RECS are used in the 1982 RECS data file.

Interviewers attempted to measure the size of 3,648 housing units. In 95 percent of the cases, usable measurements were acquired. In 5 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

Table Bl 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.



#### Scaling Up Outside Measurements

#### Appendix B (Continued)

As shown in Table B1, 2,277 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 1,058 homes that were measured on the inside. The inside measurements were standardized to outside dimensions. The scaling value was determined for each housing unit as a quadratic function of HOMEAREA for the housing unit.

SCALE =  $.888 + 1.99E-04 \times HOMEAREA - 3.59E-08 \times (HOMEAREA)^2$  (B1)

This formula indicates that the larger the HOMEAREA, the larger the scaling-up value. These scale values, which increased the inside measurements, ranged from 5.05 to 16.23 percent, depending on the size of HOMEAREA. For any case in which HOMEAREA was less than 1,000, SCALE was set to 1.05; for HOMEAREA greater than 2,765, SCALE was set to 1.16.

The 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 3,000 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 3,000 square feet. The last two steps were repeated until the quadratic fit of "outside" to "inside" converged to a stable solution.



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

#### **Appendix B (Continued)**

mount of Information Collected	Number of Households	Percent
Complete Set of Dimensions	2,277	62
Outside measurement of home	1,219	33
Inside measurement of home	1,058	29
Instac medocrement of nome	1,050	2,
Partial Information		
Information available on heated		
and unheated areas. Unknown		
whether dimensions are for		
inside or outside of home	996	27
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	92	3
Basement dimensions missing	63	2
Complete set of dimensions for all floors except basement. Basement total area known, but information on heated and unheated areas for		
basement is missing	28	1
All dimensions missing or unusable	192	5
Total	3.648	100

Note: The floor area for the 249 households responding by mail was imputed through a hot-deck procedure. The mail questionnaires are not included in this table. Also excluded from the table are 827 households for which measurements were taken from the 1980 RECS data file.

Source: Energy Information Administration, 1982 Residential Energy

Consumption Survey.

259



#### Treatment of Housing Units with Some Missing

#### Regression Model

#### Appendix B (Continued)

The 996 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 as though measurements were outside. This was because average predictions based upon regression models using homes measured outside matched average totals for this group very closely, while predictions based upon regression models using homes measured inside were seriously biased on the low side

The 92 cases lacking information on the ratio of heated to unheated space borrowed that ratio from housing units with complete data, on a PSU by PSU basis. For most of these cases, information was also lacking as to whether the measurements were inside or outside, and measurements were again assumed to be outside.

For the 63 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.

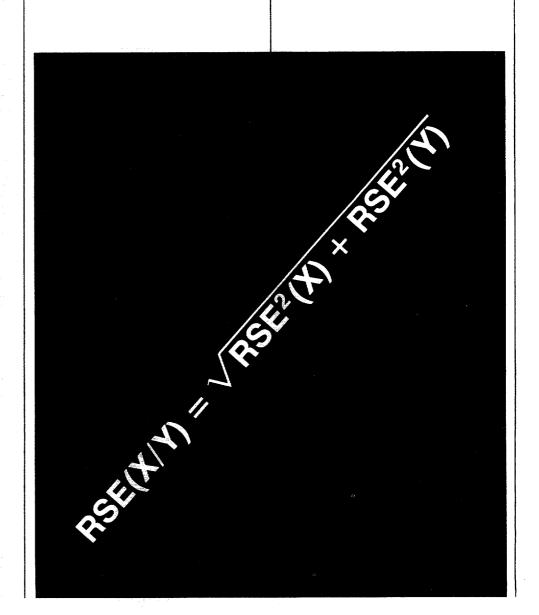
There were 28 cases in which the ratio of heated to unheated space for the basement was unknown. This ratio was imputed by using an appropriate empirical distribution of heated to unheated ratios. Two such distributions were used: one for homes with basements only, and one for homes with a basement plus crawl space and/or slab.

A regression equation was used for the 192 cases with no usable data. After HOMEAREA had been imputed by using the regression model, the ratio of heated to unheated space was imputed using the same procedures described above for housing units for which that ratio was missing.

All estimates were than 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.

#### Appendix C

Limitations of the Data



	 make the second	 	**************************************	 	



#### Introduction

#### **Nonsampling Error**

Completeness of Data

#### Appendix C

Data from the 1982 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.

Data are not collected for the following two types of housing units:

- o 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 5.0 million vacant, year-round housing units in 1981.
- o Second homes for the owner's use. The AHS estimates there were 1.5 million homes "held for occasional use" in 1981.

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. That type of person is not usually available for vacant or second homes.

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 from a subset of respondents and is reported separately.
- o Wood use for heating. Consumption data on woodfuel are presented in Table 18 but are not included in other tables that combine data for the four major fuels.
- 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.



#### Appendix C (Continued)

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 1982, about the same level as for 1980 and 1981. If added to the average household energy use, the average would increase from 103 million to 113 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, 1982, and March 31, 1983, 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

Heating Degree-Days. The heating degree days represent a unique source of information inasmuch as the Residential Energy Consumption Survey contains weather data matched to individual households. This unique matching makes it possible to present weather data for households classified by the kinds of information collected in the RECS survey. For example, households heating with fuel oil or kerosene experienced 5,379 heating degree days (HDD) in 1982 (April 1982 through March 1983) whereas natural gas heated homes experienced 4,596 HDD.

The matching between households and weather is done by using maps to locate the NOAA division for each sample household. Once the NOAA division is identified, a simple average is computed for all weather stations within the NOAA division which report temperatures. (See NOAA Division in Glossary).

This average is assigned to all the RECS households located within the NOAA division. Temperatures can vary from one part of the division to another as, for example, between the city and nearby country side. It is yet to be determined whether assigning temperatures from the nearest weather station would provide more useful information.

This procedure produces the averages in Table C1 attributed to RECS. The NOAA data in Table C1 are derived from NOAA publications entitled



#### State, Regional, and National Monthly and Seasonal Heating Degree-Days Weighted by Population (1980 Census)

# Table C1. Comparison of Annual Heating Degree-Days Population Weighted by the National Oceanic and Atmospheric Administration (NOAA) and by the Residential Energy Consumption Survey (RECS)

#### Appendix C (Continued)

At the national level, the RECS estimates are consistently 1 to 5 percent higher than those for NOAA. The NOAA estimates are within two standard errors of the RECS estimates, but the fact that the RECS estimates are consistently higher raises concerns about what may be causing the difference.

Beyond the sampling error of RECS estimates, the differences must be either in the population weights or in the heating degree—day numbers for the NOAA division. The average HDD for the NOAA division is calculated in the same way—both the RECS and NOAA calculate a simple average of temperatures for reporting stations in the NOAA division. A more detailed inspection may reveal differences in methods and in data used that are not apparent in published descriptions of how this is done. For example, NOAA averages over stations that report both temperature and precipitation, whereas RECS averages are for all stations reporting temperature whether or not they report precipitation.

An initial inspection of weights shows that RECS weights are larger for the South and West and are getting larger as the population shifts from colder to warmer areas. This difference in weights, however, only exacerbates the problem, for the larger weight RECS gives to households in warmer areas would drive the RECS estimates lower, not higher.

NOAA						
United States  NOAA				Year <sup>a</sup>		
NOAA	·	1978	1979		1981	1982
NOAA	United States					
RECS		5.008	4.721	4.745	4.831	4.439
Percent Difference . +0.6				•		
North Central  NOAA				•	•	-
NOAA	referre birrefered ;;	,0.0	. 4.5			, 2 • ¬
RECS	North Central					
Percent Difference4.3 -1.5 +3.0 +2.3 +2.6  Northeast  NOAA	NOAA	7,064	6,673	6,423	6,857	5,956
Northeast  NOAA	RECS	6,762	6,576	6,616	7,014	6,109
NOAA 6,244 5,952 6,307 6,307 5,636 RECS 6,175 6,265 6,404 6,416 5,739 Percent Difference1.1 +5.3 +1.5 +1.7 +1.8  South  NOAA 3,037 2,986 3,112 2,920 2,793 RECS 2,967 2,982 3,292 3,093 3,032 Percent Difference2.3 -0.1 +5.8 +5.9 +8.6  West  NOAA 4,218 3,647 3,485 3,695 3,865 RECS 4,728 4,368 3,448 3,715 3,805	Percent Difference	-4.3	-1.5	+3.0	+2.3	+2.6
NOAA 6,244 5,952 6,307 6,307 5,636 RECS 6,175 6,265 6,404 6,416 5,739 Percent Difference1.1 +5.3 +1.5 +1.7 +1.8  South  NOAA 3,037 2,986 3,112 2,920 2,793 RECS 2,967 2,982 3,292 3,093 3,032 Percent Difference2.3 -0.1 +5.8 +5.9 +8.6  West  NOAA 4,218 3,647 3,485 3,695 3,865 RECS 4,728 4,368 3,448 3,715 3,805						
RECS	Northeast					
Percent Difference1.1 +5.3 +1.5 +1.7 +1.8  South  NOAA	NOAA	6,244	5,952	6,307	6,307	5,636
South  NOAA	RECS	6,175	6,265	6,404	6,416	5,739
NOAA	Percent Difference	-1.1	+5.3	+1.5	+1.7	+1.8
NOAA						
RECS	South					
West       NOAA       4,218       3,647       3,485       3,695       3,865         RECS       4,728       4,368       3,448       3,715       3,805	NOAA	3,037	2,986	3,112	2,920	2,793
West NOAA	RECS	2,967	2,982	3,292	3,093	3,032
NOAA 4,218 3,647 3,485 3,695 3,865 RECS 4,728 4,368 3,448 3,715 3,805	Percent Difference	-2.3	-0.1	+5.8	+5.9	+8.6
NOAA 4,218 3,647 3,485 3,695 3,865 RECS 4,728 4,368 3,448 3,715 3,805						
RECS 4,728 4,368 3,448 3,715 3,805	West					
		4,218	3,647			
Percent Difference +12.1 +19.8 -1.1 +0.5 -1.6	RECS	4,728	4,368	3,448	3,715	3,805
	Percent Difference	+12.1	+19.8	-1.1	+0.5	-1.6
			•	-	-	

<sup>&</sup>lt;sup>a</sup>From April of year indicated through March of succeeding year.



#### Table C2. Comparison of Housing Units Measured in 1980 and 1982 by Housing Types

#### Appendix C (Continued)

Square Feet of Floor Space. The longitudinal design of the 1982 RECS made it possible to measure a subsample of the housing units twice. This subsample contained 355 housing units; the first measurement was made in 1980 and the second one in 1982. The two measurements can be compared as a test of the reliability of the measuring procedure. Not all units in the subsample yielded measurements that are usable in the analysis of the reliability of the measuring procedure. In four of the cases, the interviewer did not go back to the original 1980 RECS housing unit. For nine additional cases, either changes had been made in the size of the housing unit, changes were in progress, or it could not be determined that no changes were made. Housing units where the measurements for the 1982 RECS are either incomplete or missing also cannot be used in the reliability analysis. Table C2 presents the results of the reliability analysis using housing units with good square footage data for both the 1980 and 1982 RECS.

	Tota1	Single- Family Detached	Mobile Home	Multi- unit Building	Building Type Responses Differ in 1980 and 1982
Number of Cases	300	208	14	70	8
Average Square Feet Per Housing Unit					
1980 1982	1,797 1,821	2,116 2,142	803 721	1,082 1,147	1,503 1,282
Median Percent Difference in Square Footage	11.7	11.8	7.2	12.2	11.3
Average Heated Square Footage Per Housing Unit					
1980 1982	1,536 1,521	1,780 1,751	798 711	966 1,039	1,469 1,194
Median Percent Difference in Heated Square Footage	15.6	16.9	7.2	14.4	13.4

Source: Energy Information Administration, 1980 and 1982 Residential Energy Consumption Surveys.



#### Appendix C (Continued)

In Table C2, the housing units are grouped into types. The units are grouped according to both the 1980 and 1982 responses. The types used are single-family detached homes, mobile homes, and units in buildings with more than one unit. Single-family attached units are in the group with multi-unit buildings. If the 1980 and 1982 designations are the same, the units are categorized by that group type. If the two designations are different, then the unit is put into a separate category.

The percent change shown in Table C2 is the absolute value of the difference as a percentage of the average of the two measurements. The median is tabled instead of the mean because a few large values for percent change will have a misleadingly large effect on the mean of the percent change.

The measuring technique was refined slightly between 1980 and 1982. The average measured square footage of all 300 cases increased only marginally, indicating that on the average the refinement had a small effect. On the other hand, the median percent difference in square footage is 11.7 percent. In addition, for 10 units in the subsample, the percent change exceeds 70 percent. This indicates that the measuring technique could be improved.

Estimates are also made for that portion of the total floor space that is heated. The variability of these measurements is greater than for the total area of the unit. This may be because any vagueness about the total area was multiplied by the added task of identifying the heated areas. In addition, some variability may reflect actual changes in heated areas. For example, the time of the interview may determine if an occasionally heated area is reported to the interviewer as being heated. Note that the median percent change has increased from 11.7 percent to 15.6 percent.

One of the persistent problems in clarifying the measuring task has been identifying basements for households in multi-family units. A significant portion of buildings with 2 to 4 units have basements, but the basements are often for the use of all families in the building and cannot, therefore, be included as private living space for any one apartment.

Expenditures as a Percentage of Income. The 1982 RECS is the second RECS 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 have a precise value was resolved in most cases 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. The following values were assigned when the midpoint of the interval was not used:

	Value	Assigned
Income Category	Family Size Is One	Family Size Is More than One
\$20,000 - 24,999	\$22,293	
\$25,000 - 29,999	\$27,294	
\$30,000 - 34,999	\$32,231	
\$35,000 - 49,999	\$41,117	
\$50,000 and over \$75,000 and over	\$68,087	\$98,725



#### Appendix C (Continued)

The second problem is that energy expenditures are based on the period April 1982 through March 1983, while income is based on calendar year 1981. 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. It is not known how much the percentage 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 in 1982 when a small number of households were called back to inquire about nighttime temperatures that exceeded day-time temperatures. Many of these households changed their reports by 5 to 10 degrees or more.

#### Sampling Errors

The form of the sampling error that is presented here is the relative standard error (RSE). The RSE is also known as the coefficient of variation. 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

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



#### Determination of Relative Sampling Errors for Household Counts

#### **Appendix C (Continued)**

This section provides generalized procedures and examples for use in calculating relative standard errors for several types of statistics from the 1982 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 1982 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.

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, other reports of the 1982 RECS, or the public-use data tape for the 1982 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. The numbers of households that live in each of the four Census regions were used as design parameters for the 1982 RECS. These household counts are listed in Table C5. 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 1982 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 C3. (The RSE's listed in Table C3 can be obtained by using the first equation listed in Table C11.) The value should be adjusted by multiplying by the appropriate value or values for  $10^{10}$  from Table C4.

If the characteristic of the statistic being considered is not listed in Table C4, use  $10^{15}$  =1, or use a value for a characteristic that has similar clustering tendencies. If two characteristics define the statistic, multiply by both values of  $10^{15}$  from Table C4. 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.")

<sup>&</sup>lt;sup>1</sup>The source of data for the calculation of relative standard errors is the 1982 Residential Energy Consumption Survey.



#### Table C3. Relative Standard Errors for Survey Estimates of the Number (Count) of Households

#### Table C4. Clustering Factors for Calculation of Relative Standard Errors for Survey Estimates of the Number (Count) of Households

#### **Appendix C (Continued)**

	One Relative		One Relative
Million	Standard Error	Million	Standard Error
Households	(Percent)	Households	(Percent)
0.1	46.5	1.0	17.5
0.2	35.1	1.5	14.6
0.3	29.7	2.0	12.8
0.4	26.3	3.0	10.5
0.5	23.8	4.0	9.2
0.6	22.0	5.0	8.2
0.7	20.6	10.0	5.8
0.8	19.4	20.0	4.1
0.9	18.4	40.0	2.8

Source: Energy Information Administration, 1982 Residential  ${\tt Energy}$  Consumption Survey.

Cell Definition	Value of $10^{\mathrm{B}}$
Heating and Cooling Degree-Days	186
MSA (1980)	124
Housing Structure	1.20
Natural Gas is Water or Space Heating Fuel	116
Electricity is Water or Space Heating Fuel	1.13
Year House Built	1.08
Origin (Race)	1.07
Wood is Main Space Heating Fuel	1.07
How Utilities are Paid	1.06
LPG is Water or Space Heating Fuel	1.05
Hispanic Descent	1.03
Main Heating Equipment	1.02
Wood is Burned	1.02
Fuel Oil is Water or Space Heating Fuel	0.99
Own/Rent	0.98
Poor125 Percent	0.97
Secondary Heating Equipment	0.97
Number of Doors	0.97
Types of Appliances Used	0.97
Have Air Conditioning Equipment	0,96
Add Weatherstripping	0.95
Add Caulking	0.94
Number of Windows	0.94
Have Energy Audit	0.93
Number of Storm Windows	0.93
	*
Number of Heated Square Feet	0.90
Sex of Householder	0.90
Age of Householder	0.87
Family Income	0.87
Number of Household Members	0.86

Source: Energy Information Administration, 1982 Residential  ${\tt Energy}$  Consumption Survey.



#### Appendix C (Continued)

Longer Method. The second method for calculating sampling errors for household counts uses the control totals listed in Table C5.

- Step 1: Find the statistic's appropriate control from Table C5. The control total is the number of households in the Census region 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 C3. Multiply this value by the appropriate  $10^{\rm B}$  value or values from Table C4. 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 C5. Relative Standard Error Control Totals (Million Households)

Type of	Control	Upper Bound for Direct Applica- tion of Formula
Aggregate	Totals	or Table
National	83.8	41.9
Census Region		
Northeast	18.0	9.0
North Central	21.3	10.7
South	28.1	14.1
West	16.5	8.3

Note: The MSA control parameters do not appear in this table. The reason for this is that the control parameters were based on 1970 definitions of MSA's, but this report contains tabulations based on 1983 definitions of MSA's.

Source: Estimates derived from the March 1982 and 1983 Current Population Surveys.



#### Appendix C (Continued)

Consider the computation of sampling error for the estimate, 15.5 million households heat with natural gas in the North Central region

- Step 1: From Table C5, the control total is 21.3 million, the number of households that live in the North Central region.
- Step 2: The number 15.5 million is more than one-half of 21.3. Its control complement then is (21.3 15.5 = 5.8).
- Step 3: Extrapolating from Table C3, the RSE for 5.8 is 7.8 percent. Multiply 7.8 by the values for 10<sup>B</sup> from Table C4 for household counts over categories restricted to households whose main space-heating fuel is natural gas. (7.8 x 1.16 = 9.05 percent.)

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

Determination of Relative Standard 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  $C_1$ . 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  $C_2$  among all households that have characteristic  $C_1$ . The RSE of p can be approximated using

$$RSE(p) = RSE^2(X) - RSE^2(Y)$$
.

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, Expenditures, and Related 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 C6 through C8. The RSE's listed in Tables C6 through C8 can be obtained using the equations listed in Table C9. See Residential Energy Consumption Survey: Housing Characteristics 1982 (DOE/EIA-0314(82) for RSE's for square footage, annual heating degree-days, indoor daytime temperatures, number of doors or windows, and inches of insulation.

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



# Table C6. Relative Standard Errors for Aggregate Statistics of Total Consumption or Expenditures for All Major Fuels, Electricity, Natural Gas, Fuel Oil or Kerosene, LPG, and Consumption of

Wood

#### Appendix C (Continued)

18.0 million. This is the number used when computing the RSE for the total residential energy consumption in the Northeast. For electricity consumption, again use 18.0 million. But for natural gas consumption, the number of households equals 11.6 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 major fuels" category in Table 1 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.

There are 1.0 million households that heat with LPG in the North Central region. Reading from Table C6, column 6 yields an RSE of 25.5 for total LPG consumption for households in the North Central that heat with LPG.

	A11	All Fuel Oil						
Million	Major Natural or							
Households	Fuels	Electricity	Gas	Kerosene	LPG	Wood		
0.2	44.0	44.1	40.4	44.6	43.7	41.7		
0.3	36.3	36.7	34.0	36.6	38.2	36.9		
0.4	31.6	32.3	30.1	31.8	34.7	33.8		
0.5	28.4	29.2	27.4	28.5	32.2	31.6		
0.6	26.0	26.9	25.4	26.1	30.3	29.9		
0.7	24.2	25.1	23.8	24.2	28.8	28.6		
0.8	22.7	23.7	22.4	22.7	27.5	27.4		
0.9	21.4	22.5	21.4	21.4	26.4	26.5		
1.0	20.4	21.4	20.4	20.3	25.5	25.6		
1.5	16.8	17.9	17.2	16.7	22.3	22.7		
2.0	14.6	15.7	15.2	14.5	20.3	20.8		
3.0	12.0	13.1	12.8	11.9	17.7	18.4		
4.0	10.5	11.5	11.3	10.3	16.1	16.9		
5.0	9.4	10.4	10.3	9.3	14.9	15.8		
10.0	6.8	7.6	7.7	6.6	11.8	12.8		
20.0	4.9	5.6	5.7	4.7	(a)	10.4		
40.0	3.5	4.1	4.3	(a)	(a)	8.4		
83.8	2.4	2.9	3.1	(a)	(a)	(a)		

 $<sup>^{\</sup>mathrm{a}}\mathrm{Exceeds}$  maximum number of households for this statistic.

Source: Energy Information Administration, 1982 Residential Energy Consumption Survey.



# Table C7. Relative Standard Errors for Statistics of Average (Mean) Consumption and Expenditures per Household for All Major Fuels, Electricity, Natural Gas, Fuel Oil or Kerosene, LPG, and Consumption of Wood

#### **Appendix C (Continued)**

		One Relative S	tandard E	<del></del>	ent)	
	A11			Fuel Oil		
Million	Major		Natural	or		
Households	Fuels	Electricity	Gas	Kerosene	LPG	Wood
0.2	15.1	17.6	18.7	27.4	24.2	22 1
					24.3	22.1
0.3	12.9	15.2	15.7	21.6	20.1	20.2
0.4	11.5	13.7	13.9	18.2	17.6	18.9
0.5	10.6	12.7	12.6	16.0	15.8	17.9
0.6	9.9	11.9	11.7	14.3	14.5	17.2
0.7	9.3	11.2	10.9	13.1	13.5	16.6
0.8	8.8	10.7	10.3	12.1	12.7	16.1
0.9	8.4	10.3	9.8	11.3	12.0	15.7
1.0	8.1	9.9	9.4	10.6	11.4	15.3
1.5	6.9	8.6	7.9	8.3	9.4	14.0
2.0	6.2	7.7	6.9	7.0	8.3	13.1
3.0	5.3	6.7	5.8	5.5	6.8	11.9
4.0	4.7	6.0	5.1	4.7	6.0	11.1
5.0	4.3	5.6	4.7	4.1	5.4	10.6
10.0	3.3	4.3	3.5	2.7	3.9	9.0
20.0	2.5	3.4	2.6	1.8	(a)	7.7
40.0	1.9	2.6	1.9	(a)	(a)	6.6
83.8	1.5	2.0	1.4	(a)	(a)	(a)

<sup>&</sup>lt;sup>a</sup>Exceeds maximum number of households for this statistic.

Source: Energy Information Administration, 1982 Residential  $\mathtt{Energ} y$  Consumption Survey.



## Table C8. Relative Standard Errors for Statistics of Energy Prices for All Major Fuels, Electricity, Natural Gas, Fuel Oil or Kerosene, and LPG

#### **Appendix C (Continued)**

		One Relative St	andard Erro	r (Percent)	
	A11	Me Relative St	andard biro	Fuel Oil	
Million	Major		Natural	or	
Households	Fuels	Electricity	Gas	Kerosene	LPG
0.2	7.3	7.0	8.2	1.4	37.1
0.3	6.5	6.3	7.1	1.2	32.5
0.4	6.0	5.9	6.4	1.0	29.7
0.5	5.6	5.5	5.9	0.9	27.6
0.6	5.3	5.3	5.5	0.9	26.0
0.7	5.1	5.1	5.2	0.8	24.8
0.8	4.9	4.9	4.9	0.8	23.7
0.9	4.7	4.8	4.7	0.7	22.8
1.0	4.6	4.6	4.6	0.7	22.1
1.5	4.1	4.2	3.9	0.6	19.4
2.0	3.8	3.9	3.5	0.5	17.7
3.0	3.3	3.5	3.0	0.4	15.5
4.0	3.1	3.3	2.7	0.4	14.1
5.0	2.9	3.1	2.5	0.4	13.2
10.0	2.4	2.6	2.0	0.3	10.5
20.0	1.9	2.2	1.5	0.2	(a)
40.0	1.6	1.8	1.2	(a)	(a)
83.8	1.3	1.5	0.9	(a)	(a)

 $<sup>^{\</sup>mathrm{a}}\mathrm{Exceeds}$  maximum number of households for this statistic.

Source: Energy Information Administration, 1982 Residential Energy Consumption Survey.



### Table C9. Relative Standard Error Equations for Statistics from the 1982 Residential Energy Consumption Survey

#### **Appendix C (Continued)**

		<del></del>	
Type of Statistic		Gene	eralized Variance Equation
Household Counts	log(RSE)	=	1.244 - 0.450*log(NHSLD) -0.027 *[(log(NHSLD)) <sup>2</sup> ]
Total Consumption or Expenditures			
All Major Fuels	log(RSE)	=	1.309479*log(NHSLD)
Electricity	log(RSE)	=	1.331448*log(NHSLD)
Natural Gas	log(RSE)	=	1.310424*log(NHSLD)
Fuel Oil or			,
Kerosene	log(RSE)	=	1.308489*log(NHSLD)
Liquefied Petroleum	· ·		_
Gas	log(RSE)	=	1.407334*log(NHSLD)
Wood Consumption	log(RSE)	222	1.409302*log(NHSLD)
average (Mean) Consumption or Expenditures			
411 Water B 1	1 (2011)		000 20641 (27707.7)
All Major Fuels	log(RSE)	=	.908386*log(NHSLD)
Electricity	log(RSE)	=	.995357*log(NHSLD)
Natural Gas Fuel Oil or	log(RSE)	=	.971431*log(NHSLD)
Kerosene	log(RSE)	==	1.025591*log(NHSLD)
Liquefied Petroleum	TOB (KOE)		1.025591"10g(NII35D)
Gas	log(RSE)	==	1.058470*log(NHSLD)
Wood Consumed	log(RSE)	=	1.185229*log(NHSLD)
Average (Median)			
Wood Consumed	log(RSE)	==	1.495245*log(NHSLD)
Percent of Income	0		
Spent on Energy	log(RSE)	==	1.188420*log(NHSLD)
Cnergy Prices			
All Major Fuels	log(RSE)	=	.661288*log(NHSLD)
Electricity	log(RSE)	=	.667253*log(NHSLD)
Natural Gas Fuel Oil or	log(RSE)	=	.659367*log(NHSLD)
Kerosene	log(RSE)	200	152426*log(NHSLD)
Liquefied Petroleum	~		-
Gas	log(RSE)	=	1.344322*log(NHSLD)
roportionate			
Electricity	log(RSE)	==	.904321*log(NHSLD)
Natural Gas	log(RSE)	<b>E</b>	.794478*log(NHSLD)
Fuel Oil or	J ,		
Kerosene	log(RSE)	=	.865594*log(NHSLD)
Liquefied Petroleum	•		-
Gas	log(RSE)	52	1.007396*log(NHSLD)

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

Source: Energy Information Administration, 1982 Residential Energy Consumption Survey.



#### Discussion of the Generalized Variance Equations

AND THE RESERVE OF THE PROPERTY OF THE PROPERT

e de la companione de l

#### Half-Sample Estimation Procedures for Sampling Errors

#### Appendix C (Continued)

The generalized variance equations shown in Table C9 were obtained using a least squares regression. 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 1982 RECS data with a procedure for obtaining RSE's.

The generalized variance equations listed in this report apply only to data for the 1982 RECS. Procedures for calculating estimates of sampling error for other RECS surveys can be found in publications of data from those surveys.

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 C5 lists control totals for the country as a whole and the four Census regions. Control totals can also be sums of the control totals listed in Table C5. For example, if one is considering the number of households in the country whose main heating fuel is fuel oil, then from Table C5, the control total is the estimated number of households in the country (83.8 million). If one wants the number of households that heat with fuel oil in New England, the appropriate control total is the number of households in the Northeast (18.0 million), from Table C5. 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  $10^{10}$  from Table C4, 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 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" for a discussion of replication.) If the characteristic is highly clustered, the value of 10 is greater than one. If the characteristic is widely spread out, the value of  $10^{\rm D}$  is less than one. For example, one possible characteristic is heating and cooling degree-days. People who live close to each other experience the same weather conditions; consequently, the value of 10 for heating and cooling degree-days is greater than one. On the other  $% \left\{ 1\right\} =\left\{ 1$ 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  $10^{\rm B}$  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  $10^{\circ}$  for Census regions is 1.0.

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



#### Appendix C (Continued)

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 x 81 design matrix was constructed using a 32 x 32 orthogonal matrix adapted from an article by Plackett and Burman (Reference 3). The rows of this 32 x 32 matrix were randomly sorted. The sorting preserves orthogonality. For each Census region, K columns were randomly selected from the sorted 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  $\frac{1}{1}$  row and  $\frac{1}{2}$  column of the design matrix, the replication group corresponding to the +1 in the the  $\frac{1}{2}$  pair was used in the  $\frac{1}{2}$  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 MSA 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 MSA 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 and Current Population Surveys.

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

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

where Y' is the  $i^{\frac{th}{h}}$  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." <u>Vital and Health Statistics</u>. U.S. Public Health Service <u>Publication No. 1000--Series 2--No. 14</u>. Washington, D.C.: U.S. Government Printing Office, April 1966.

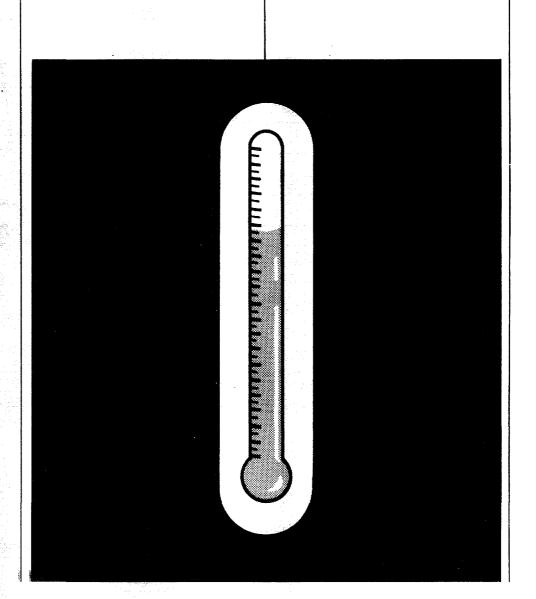
- National Center for Health Statistics. "Pseudoreplication: Further Evaluation and Application of the Balanced Half-Sample Technique." Vital and Health Statistics. U.S. Public Health Service Publication No. 1000-Series 2-No. 31.
   Washington, D.C.: U.S. Government Printing Office, January 1969.
- Plackett, R. L., and Burman, J. P.: "The Design of Optimum Multifactorial Experiments." Biometrika 33 (1946): 305-325.

#### References

	the late to the state of the st	 

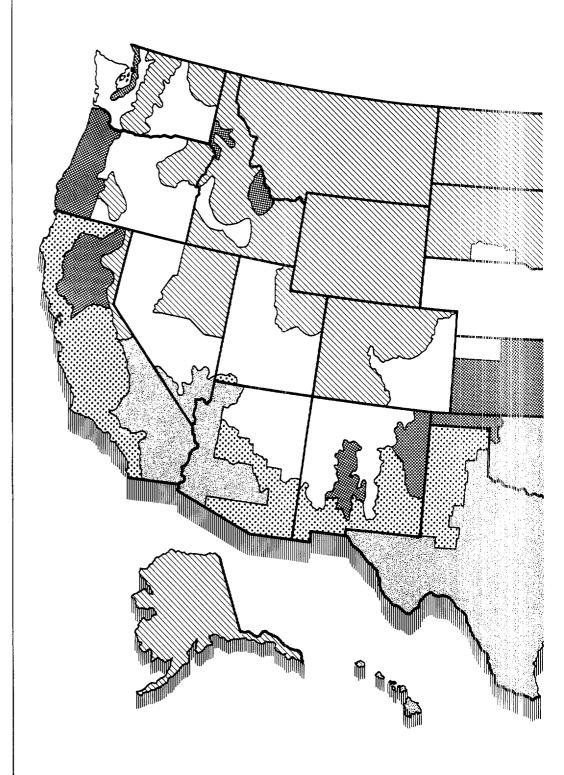
# Appendix D

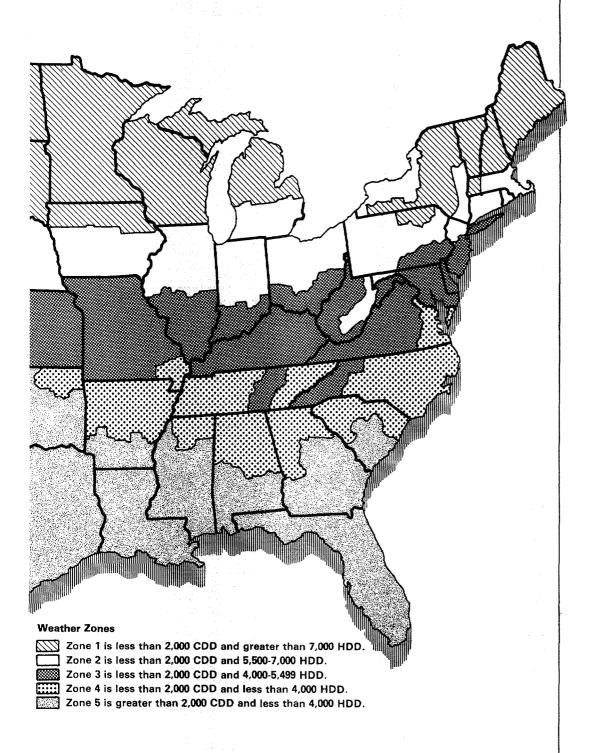
U.S. Weather Zone Map





# Appendix D

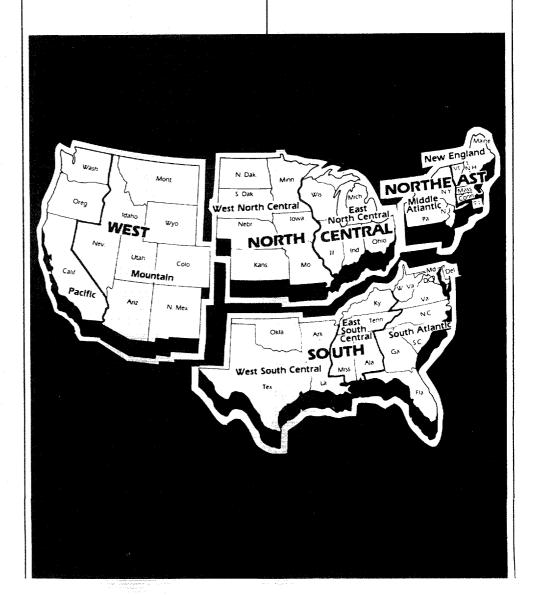




	CONTROL CONTRO	 	
•			

# Appendix E

U.S. Census Regions and Divisions

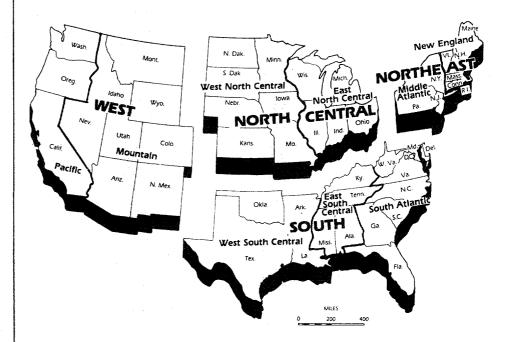


,			



# U.S. Census Regions and Divisions

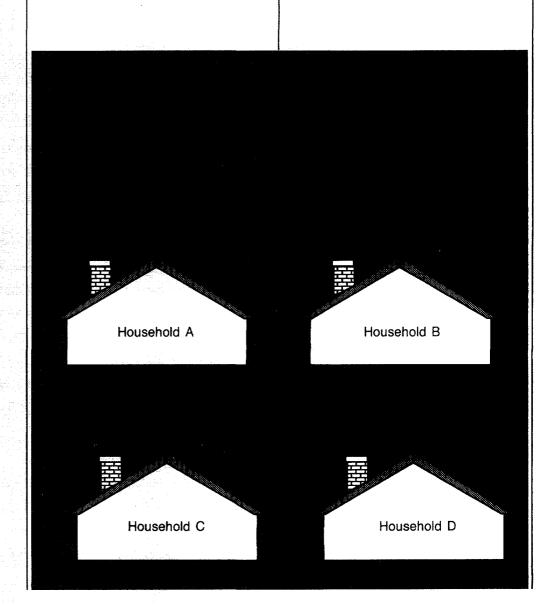
# Appendix E



,	 **************************************		 		
		•			

# Appendix F

Followup Interviews With Four Households Using Unusual Amounts of Energy



 	***************************************		 	
	1			
	'			



#### Introduction

### Appendix F

The Energy Information Administration (EIA) is committed to publishing statistics that are of the highest quality possible within existing resource constraints. To that end, EIA is continually working to ensure the continued credibility of its statistics and data systems. Our ongoing analysis of issues related to the quality of the data is presented in Appendix C, "Limitations of the Data." That appendix contains a discussion of the effect of excluding wood fuel from consumption statistics for the major fuels, and the reliability of floor space measurements and temperature settings. In evaluating the Residential Energy Consumption Survey (RECS) questionnaire prior to implementing the 1984 RECS, a major question was whether the questionnaire could be expanded to include information that might help explain the reasons for unusually high or low energy consumption.

The four followup interviews described below were the result of that concern. The outcome was a judgment that an improved understanding of the unusual consumption patterns in the four households would not come from adding questions to the questionnaire. Improvement may require other changes in the survey procedures, such as follow-up interviews or improved training and internal procedures. These are areas now under review.

The reader is cautioned that the four households which are described below are not typical households but rather are representative of the 20 percent of households that consume more or less than would be expected.

Four households were selected from those which had participated in the 1981 Residential Energy Consumption Survey. Each of the selected households had consumed above or below average amounts of electricity or natural gas during the period from April 1, 1981, to March 31, 1982. The primary goal of this project was to find out why each household might have had a higher or lower consumption rate than other households with the same number of people living in a similar size home.

The interviews were conducted by Harold L. Wilhite and Richard R. Wilk of the University of California at Santa Cruz in March 1984. The authors developed the interview methods during a 1-year study of energy conservation decision making in Santa Cruz, California. The interview methods were based on conventional ethnographic methods used in anthropology, and can be described as guided but open-ended. The household members being interviewed were encouraged to take the lead in linking their energy use to other aspects of their life-style, including home improvement, recreation, and family interactions. The interviewers also explored attitudes toward utility companies, nuclear power, resource conservation, rising costs, and family finances in general. Households Energy Conservation Decision Making in Santa Cruz County, California, (Paper UER-105, Universitywide Energy Research Group, Berkeley 1983) contains a more complete description of the Santa Cruz project research methodology.



#### **Summary of Findings**

# Detailed Analysis of Each Case

#### Appendix F (Continued)

The reasons for overconsumption or underconsumption of fuels by the sample households were quite straightforward, although the extended analysis goes beyond the most obvious answers. The most important reasons for deviant consumption by each household are presented in this section.

 $\underline{\text{Household}}$  A: Consumption of natural gas was 66 percent above that of households with similar characteristics.

Major Cause: On the original survey form, the head of the household claimed that he never used natural gas for space heating, but depended instead on a wood-burning stove. During the interview, he admitted that he had in fact used his natural gas heater during the period in question, a time when his wife was terminally ill at home.

 $\underline{\text{Household B:}}$  Consumption of natural gas was 72 percent below that of households with similar characteristics.

<u>Major Cause</u>: Because of language differences, the original survey form reported that the thermostat on the wall heater was kept at 65 degrees Fahrenheit when the occupants were in the apartment. In actuality, the heater was completely turned off when the apartment was first occupied (in 1980) and had not been used since.

 $\underline{\text{Household}}$   $\underline{\text{C}}$ : Consumption of electricity was 101 percent above that of households with similar characteristics.

Major Cause: At the time of the original survey, this household included a married couple and three young adult sons. Each son had what was essentially his own apartment with appliances (all electric), meaning that this house contained four semi-autonomous units. In addition, a number of electrical appliances in the house were omitted from the original form, perhaps because the household head was self-conscious about high consumption.

<u>Household</u> <u>D</u>: Consumption of natural gas was 62 percent below that of households with similar characteristics.

<u>Major Cause</u>: One month after the original survey, the household installed a wood burning-stove and turned off the pilot light for the natural gas furnace. Therefore, during most of the winter of 1981-1982 this household did not use natural gas for space heating.

<u>Household A:</u> This household consists of a single retired male, Mr. A. At the time of the survey interview in 1981, Mrs. A was also living in the house. Shortly after the survey interview, in November 1981, Mrs. A contracted cancer. From that time on she was hospitalized for short periods, but was otherwise house bound until she died a year later.

Mr. A is a retired mechanic who prides himself on his frugal and conservative life-style. He performs many maintenance tasks around the house ("I never hire nothing out...") and places a high value on self-reliance and independence. These are some of the characteristics that led him to install an air-tight fireplace insert in fall 1980. In addition, Mr. and Mrs. A spent most of their time in and around the



house, did not go on long vacations, and did not have many recreations that took them outside the home. During Mrs. A's illness, this trend was exacerbated, although Mr. A began to spend much less time in the house after his wife died.

One reflection of Mr. A's pride in his frugality is his attitude towards his utility bills. He feels that his bills are very low and compares them favorably with those of his neighbors and his children. It is significant that his explanation for their higher bills is that they are careless and wasteful. According to him, they forget to turn off lights and they leave outside doors open. The interviewers have found a similar linkage between energy use and moral issues among the households they have interviewed.

His attitude towards independence and frugality and the need to rationalize the purchase of a woodstove, which was a large expense considering their limited income, is reflected by Mr. A's response during the original survey that he did not use his natural gas heater. At that time, he claimed that  $\overline{\text{all}}$  of his heat came from his new woodstove. The interviewers have  $\overline{\text{often}}$  found that people exaggerate the benefits of woodstoves, solar panels, and other expensive conservation measures. The assertion that he did not use piped gas for heating is in accordance with a desire for self-reliance and independence.

The conversational format of the interview allowed the interviewers to draw Mr. A out on this topic, and they found that each time he mentioned heating or thermostat settings, he increased his estimate of his use of natural gas. At first he said that the furnace was off all of the time. Then he admitted that it was used sometimes. Eventually, he mentioned that the thermostat was kept between 55 and 60 degrees all winter, so that the furnace was functioning even when he was absent from the house.

When confronted directly with the evidence that his household had used quite a bit of natural gas during the period from March 1981 to April 1982, Mr. A admitted that the gas heater may have been used more often during his wife's illness. The interviewers' found that it is common, especially among older Americans, for good health to be associated with a warm house (this is quite different from the attitudes of most younger households in the Santa Cruz sample), and it is likely that the home was kept warmer than usual during the winter of 1981-1982. Mr. A's gas heater is of a particularly inefficient type; it is a forced-air wall furnace with only two outlets into the house, controlled by a single thermostat in a drafty hallway.

The interviewers have often observed a male bias in the operation of woodstoves; males often take major responsibility for lighting and stoking the heater. When Mrs. A was ill and alone in the house, she probably used the gas heater rather than the woodstove, again increasing gas consumption. Being house-bound may lead to high energy consumption in other ways. More meals may be taken in the home and many other appliances may be used more often.

Household B: At the time of the original survey, this household consisted of two adult males who rented the apartment. One of them has since moved out, and Mr. B, the original respondent, now has a new roommate. The interview was conducted with Mr. B only. Mr. B is Hispanic and has lived and worked in the United States for only a few years. His family remains in Mexico. The interviewers established that much of his disposable income goes to support them, which means that the household income recorded on the original survey form is far greater than the actual disposable income.



Mr. B and his roommate are both single males with incomes and very few possessions. Their recreations often take them out of the house. They use few appliances, cook few meals, and live a frugal lifestyle, conserving cash for major expenses. During 1981 and 1982, Mr. B worked a shift from 4 p.m. to 12:30 p.m., so that he was not home for the dinner meal, nor was he home during the cool evening hours.

The facts that Mr. B is a renter and has a low income both have a strong bearing on his energy use. He has had neither the incentive nor the means to invest in energy conserving devices as a strategy to reduce his energy costs. He had, therefore, developed a lean energy lifestyle that is reflected by his decision not to use space heating in the apartment. He stopped using the space heater a few months after he moved in. The original survey form recorded that he kept the house at 65 degrees Fahrenheit when he was at home. This report may have been the result of miscommunication, as English is not his native language.

Mr. B was brought up in rural Mexico, and had never before lived in a home with any kind of space heating. The interviewers have found that early life comfort conditioning often carries over into later life.

Mr. B is aware that his utility bills are low and is pleased by it. He mentioned that he had compared his bill on several occasions with his neighbor's, and that his bills were much lower. He attributed the difference to the presence of a child in the neighbor's household.

Household C: Household C includes Mr. and Mrs. C and their four children. Three of the children are sons around 20 years of age, each of whom has his own bedroom in the back of the house. They pay rent to Mr. C, but do not pay a share of the utility bills. They eat with the rest of the family, and Mrs. C does their laundry (sometimes four or five loads a day). They spend much of their leisure time in their rooms, where they have their own television sets, stereos, and electric resistance heaters (these heaters were omitted from the original survey form). Mr. C is a general contractor, upwardly mobile, with a high income and high standards of consumption.

This is an increasingly common type of housing arrangement in areas where housing is expensive. The economic arrangements fall between those of regular conjugal-family household and those of a houseful (the term for several independent households which share a single domicile). As such, this is an ambiguous situation, which was dealt with in the original survey by recording the son's energy consumption as fuel "used for purposes other than for your own living quarters." Mr. C estimated that about 25 percent of the energy was used by the sons. The situation is, in fact, more complex; the sons probably use more than a quarter of the total electricity in their own rooms, in addition to their share of the energy spent in cooking, washing, and cooling.

Mr. C's household has a high energy use profile. They have many appliances, spend much of their time at home, and have habits conducive to high energy use. In an extensive exchange, the interviewers compiled a complete list of all the electrical appliances in his house at the time of the original interview. The interviewers found that a truly exhaustive list requires taking the interviewee through a room-by-room visualization. This often results in the mention of appliances which are omitted when answering a query such as "what other electrical appliances



do you have?". The final list included 6 television sets, a Jacuzzi pump (run 2 hours a day), a pool pump, four stereos, two baseboard heaters, two ovens, an electric indoor barbeque, a trash compactor, a dishwasher, two refrigerators, and old freezer, a table saw, two skill saws, a stove, a clothes washing machine, and an electric dryer.

Mr. C is aware that his household has high electricity bills. "I can go out there and look at that (utility company) meter and that thing is spinning faster than heck!" His first explanation was that there was a fault in the wiring or metering, but the utility company found nothing wrong. He admitted that the problem must be "just overusing," but places the blame on his wife for all her cooking and washing (she was not present at the interview). At the same time, he expressed minimal interest in energy conservation measures. In this, he is like many of the upwardly-mobile people interviewed, for whom a high-consumption lifestyle is a sign of wealth. Conservation measures are seen as being mean or stingy and are associated with poverty. However, he does not want to be seen as wasteful or extravagant, just comfortable. High usage is viewed as a consequence of greater comfort.

Household D: This interview was conducted with Mr. and Mrs. D, a middle-aged married couple with three teen-aged children. In 1980, Mr. D moved from a management position in his company to a sales position. He reported that his potential for earnings became higher, but that his income began to fluctuate dramatically because he works strictly on a commission basis. In the meantime, he had become concerned about rapidly rising utility rates, which looked even higher to him from his less stable economic position. He became very disaffected with the utility company, characterizing them as "a ripoff."

Mr. D faces what he perceives to be a serious dilemma; he must continue to meet the energy needs of his family, "even though I don't always have the financial stability." His first recourse was to impose a strict regimen of energy management in the home. The pilot on the gas furnace was turned off for several months during the year, doors were closed, and family members were sweaters and bulky clothing in the house. These efforts helped to reduce the bills, but not enough. If he could eliminate his need for natural gas, he would no longer have to worry about "paying the high price of gas" in those periods when his income was down.

In November 1981, one month after the original interview was conducted, Mr. D bought a wood burning stove (it is possible that the interview sparked the decision). Shortly thereafter, he turned off the pilot light on his gas central heater and has not lit it since. Thus, the principle reason that this household used so much less than the norm in the winter of 1981-1982 was that it began using wood instead of gas as its space heating fuel.

The conversion to the woodstove for space heating was not the only way that this household has reduced energy use. After a couple of years with the thermostat turned down, the members of the household had habituated themselves to the cooler temperature in the house. Mrs. D said that "I liked a house hot, but I have adjusted that down. Now I think we are healthier." The interviewers have found that "better health" is often a rationalization that follows temperature set-backs. The strategy is then not perceived as stinginess, but as an effort to improve family health.



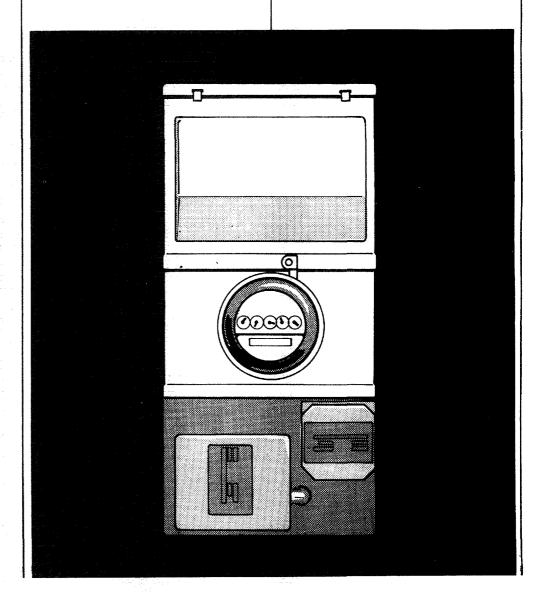
In this case, the family got rid of their electric blankets which reduced their need for night time heating, though they kept their heated water beds. Another reason for their lower household energy consumption is that they own a camper and a boat, and spend many weekends out of the house. They divert as much of their income as possible into these recreations.

Another strategy that Mr. D used was to get the utility to raise his electricity lifeline level by lying to them about his central heating source. When he bought the woodstove, he called the utility company and said that he had bought an electric heater and it would now be his principle heating source. The utility took him at his word, even though he never bought the electric heater. He considers this to be a "white lie," saying that when he called he really had intended to buy a heater.

Mr. D said that when he "saw what happened with the fireplace," he decided to invest in solar panels for his hot water heating. He did this after the survey data were collected, but it is another manifestation of his drive for independence. The interviewers have found that positive feedback from one investment in conservation often leads people to do more. In this case, there is no doubt that Mr. D was happy with his stove. He said "I love the stove," and when it was installed, he took full charge of its operation. In 1983, he decided to buy a more efficient wood stove insert. He expressed special satisfaction with his low gas consumption in comparison to that of his father, who had chided him about his high utility bill. According to Mr. D "that really dorked me off." Now he has the advantage in their competition.

In the case of the D household, an unstable household income, a dislike of the utility company, and a fear of ever higher energy costs led to a multi-faceted drive for independence from the utility company. One of the mainfestations of that drive was the installation of the woodburning stove in November 1981 as the principle source of space heating; it was this more than anything else that was responsible for the tremendous reduction in the use of natural gas by this household.

# Glossary



,	 and the same the second of property and any or the second beautiful and the same an	 	



#### Glossary

Air Conditioning: Cooling of air by a refrigeration unit. This does not include fans, blowers, or evaporative cooling systems or "swamp coolers" that are not connected to a refrigeration unit. Airconditioning 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. The question "How many rooms in your house (apartment) can be cooled by your 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 Number of Rooms.

All-Electric Home: 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 during the year. 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. Ponds, hot tubs, jacuzzis, or childrens wading pools are not swimming pools. "Oven" includes microwave and convection ovens, but does not include toaster ovens. "An evaporative cooler (swamp cooler)" is an aircooling unit that turns air into moist, cool air by saturating the air with water vapor. (See also Refrigerators.)

April 1982 through March 1983: The annual consumption period is a 365-day period beginning as close as possible to April 1, 1982. 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. The expenditures for fuel oil or kerosene and LPG represent expenditures for the amount of fuel delivered to the home, not the amount of fuels 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. The intent of this question is to determine whether a household could hook up to a gas line. This question was asked only of households living in single-family or mobile homes in the 1980 RECS. In subsequent surveys, this question was asked of all households.

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.

<u>Bathroom</u>: 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 Oil No. 1	135,000 Btu/gallon
Kerosene	135,000 Btu/gallon
Fuel 011 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

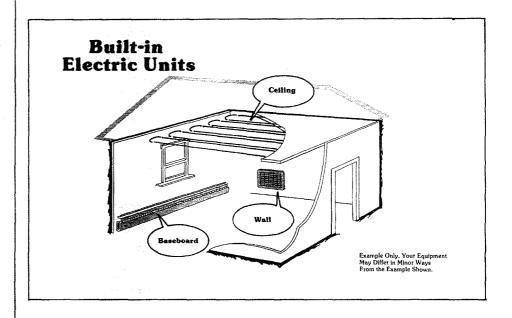
Other conversion factors used include:

```
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.

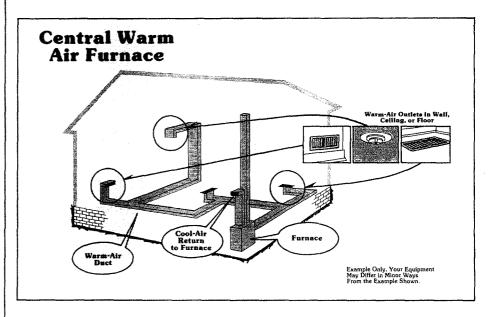
<u>Built-in Electric Units:</u> Individual resistance electric heating units are permanently installed in the floors, walls, ceilings, or baseboards and are part of the electrical installation of the building. Electric heating devices that are plugged into an electric socket or outlet are not considered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





Central System for the Building: 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.

Central Warm-Air Furnace: 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.





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.

"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 and/or cooling ducts" is extra insulation around the heating and/or cooling ducts to reduce the loss of hot or cold air as it travels to different parts of the residence.

"Insulation around the hot water and/or cooling pipes" is wrapping hot water and/or cooling pipes with insulation to reduce the heat or  $\operatorname{col} \hat{c}$  loss through the pipes.

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

"Closeable shutters, insulating drapes, reflective film" 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 as well as insulated roller shades or "window quilts" whose sides ride in a channel attached to the window frame. Decorative shutters that do not close are not counted.

"Plastic sheets" may be used to cover a window or other opening in the housing unit in an attempt to reduce heat loss.

"Caulking around any windows or doors to the outside" usually comes in a tube and is clay-like in that it can be molded into the space being treated. It is used to prevent drafts from coming into the house through cracks around the frames of windows or doors or cracks in other stationary parts of the house. Caulking could have been applied to 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 comes in strips or rolls of metal, vinyl, or foam rubber. It is used to prevent drafts from coming into the house around movable parts of the door or window.

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 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 1981 but the energy expenditure data are for a later year, April 1982 through March 1983. 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 18 percent of the households in 1982, the cost of one or more fuels is included in a tenant's rent or paid by someone outside of the household.

Family Income: Is the total combined income in 1981 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 1981, 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.

<u>Federal Regions</u>: The States are divided into 10 groups as follows (These regions are not to be confused with Census regions shown on the map in Appendix F):

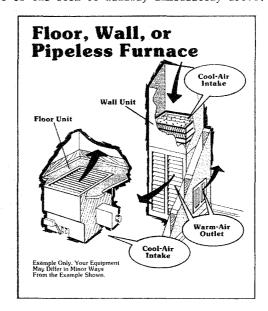
Region	States
1	Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut
2	New York, New Jersey
3	Delaware, Pennsylvania, Maryland, Virginia, West Virginia, District of Columbia
4	Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Alabama, Mississippi, Florida
5	Ohio, Indiana, 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 usually a masonry unit, built into the wall of a house. Fireplaces in mobile homes are included. A fireplace must have a permanent chimney. 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>Fuel</u>: Refers to the primary fuels 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.

"Coal" includes coke.

"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 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 Oil" 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.

Fuel 0il Paid by Household: 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 <u>Fuels</u>.)

<u>Gas Paid by Household</u>: 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.)



Heating Degree-Days: 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. See also Cooling Degree-Days.

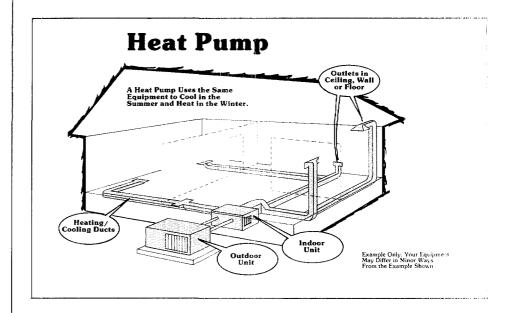
Heating Stove Burning Wood, Coal, and Coke: Any freestanding box or controlled draft stove or stove installed in the fireplace opening and using the chimney of the fireplace. Stoves are made of cast iron, sheet metal, or plate steel. Freestanding fireplaces that can be detached from their chimneys are considered heating stoves. "Airtight" stoves allow one to control the amount of air in the stove in order to regulate the rate of combustion. The doors fit tightly so that air can be controlled. Many air tight stoves have a gasket aroung the door of the stove. "Non-airtight" stoves do not have gaskets around their door openings.





Heat Pump (Reverse Cycle System): A year-round heating/air-condition-ing 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.



Hot-Deck Imputation: An imputation procedure used for item nonresponse in which the household file is sorted by variables related to the missing item. A household is then selected that has the same value on those variables, and this "donor" household supplies the value for the missing item. (See Imputation).

Household: Is a family, an individual, or a group of up to nine unrelated 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 foam" solidifies after being sprayed on a surface or poured into a cavity to be insulated.

"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.)

<u>Main Cooking Fuel:</u> 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.

<u>Main Heating Fuel</u>: The fuel mentioned by the respondent in response to the question: "What is the main fuel used for heating your home?

<u>Major Fuels</u>: Electricity, natural gas, fuel oil or kerosene and LPG. Although the Btu value of wood burned in the home is greater than the Btu value of LPG, wood is not included as a major fuel primarily because the wood data are not as high in quality as data for the other fuels. Also, expenditure data are not available for wood.

Master Metered: 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.

Median: A measure of central tendency, intended to express a "typical" value for an attribute. The median is different from the arithmetic average (mean) in that its value is not much influenced by extremes. For example, the mean number of cords of wood consumed per household would be affected by the inclusion of a few heavy users of wood, and would not express wood consumption for a "typical"



wood-using household. However, the median number of cords of wood consumed per household would not be so affected. Medians are computed by listing all values in ascending order. The value that divides the list in half is the median.

Metropolitan: A group of households located within Metropolitan Statistical Areas (MSA's) as defined in the 1980 Census. Except in New England, an MSA is a county or group of contiguous counties that contain at least one city of 50,000 inhabitants or wore, or "twin cities" with a combined population of at least 50,000. The contiguous counties are included in an MSA if, according to certain criteria, they are essentially metropolitan in character and are socially and economically integrated with the central city. In New England, MSA's consist of towns and cities, rather than counties. "Non-Metropolitan" refers to households not located within MSA's as defined in the 1980 Census.

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.

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. Finished means that the ceiling and walls are covered with finishing materials.

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.

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 conwhich 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. Furthermore, underreporting of income is a problem in surveys of this type (cf. reference in Table G1). Underreporting may be a greater problem in the RECS survey which measures income by one question. In comparson the Current Population Survey (CPS) collects data on individual household members by source of income. The CPS estimate for households below 100 percent of poverty was 11.677 million for March 1982. The RECS estimate was 12.096 million poor households (below 100 percent of poverty). This difference may be due in part to greater underreporting of income in RECS, but on the other hand, could be accounted for entirely by sampling error.



# Table G1. Definition of Poverty

# **Glossary (Continued)**

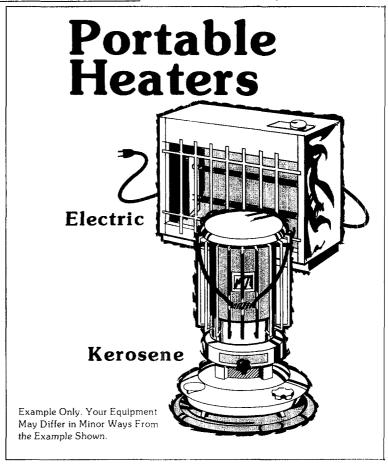
<u>Bel</u>	ow 100 Percent	of Poverty	Below 125 Percent	of Poverty
Number of	1981 RECS		1981 RECS	
Persons per	ncome Range	Census	Income Range	125 Percent
Family	Less Than:	Threshold	Less Than:	Threshold
1				
Respondent				
is under 65	\$5,000	\$4,729	\$6,000	\$5,911
Respondent is over 64	\$4,000	\$4,359	\$5,000	\$5,449
	, , , , , , ,	1 . 7		, - ,
Householder is under 65	\$6,000	\$6,111	\$8,000	\$7,639
Householder				
is over 64	\$5,000	\$5,498	\$7,000	\$6,873
3	\$7,,000	\$7,250	\$9,000	\$9,063
4	\$9,000	\$9,287	\$12,000	\$11,609
5	\$11,000	\$11,007	\$14,000	\$13,759
6	\$12,000	\$12,449	\$15,000	\$15,561
7	\$14,000	\$14,110	\$17,500	\$17,638
8	\$15,000	\$15,655	\$20,000	\$19,569
9	\$17,500	\$18,572	\$22,500	\$23,215

<sup>&</sup>lt;sup>a</sup>Figures from the U.S. Bureau of the Census, <u>Money Income and Poverty Status of Families and Persons in the United States: 1981 (Advance Data from the March 1982 Current Population Survey). (Current Population Reports, Series P-60, No. 134) (July 1982, Table A1, 31).

Source: Energy Information Administration, 1982 Residential Energy Consumption Survey.</u>



Portable Electric Heater(s): Heaters that can be picked up and moved.



 $\underline{ \text{Portable Kerosene Heater(s):}} \quad \text{Heaters that can be picked up and moved.}$ 

Quadrillion: Equals 1,000,000,000,000,000 or 10<sup>15</sup>.

Race: See Origin.

Receive Assistance for Heating in Winter: Indicates the household received assistance from the Low-Income Home Energy Assistance Program (LIHEAP) during the Fiscal Year 1983 that began in October 1982 and ended September 1983. 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. The most recent report on the program is found in U.S. Department of Health and Human Services, Low-Income Home Energy Assistance Program: Report to Congress for Fiscal Year 1982, November 1, 1983. Copies are available from:

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



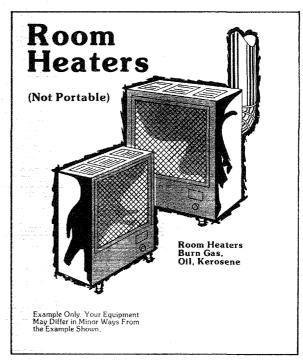
Note: There is a basic incongruity of time periods that the readers should note. Recipients of LIHEAP were identified in this survey for the period October 1982 through September 1983. The fuel bills for these households, however, were for a somewhat earlier period—April 1982 through March 1983 although both time periods covered essentially the same 1982-1983 winter. Family income, on the other hand, covers the calendar year 1981. 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 <a href="Household">Housing Unit</a> 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.



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.

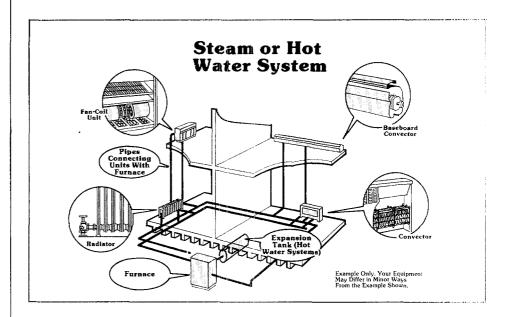


<u>Secondary Heating Equipment</u>: Equipment used in addition to the main equipment. Description of the secondary heating equipment is the same as for the main heating equipment.

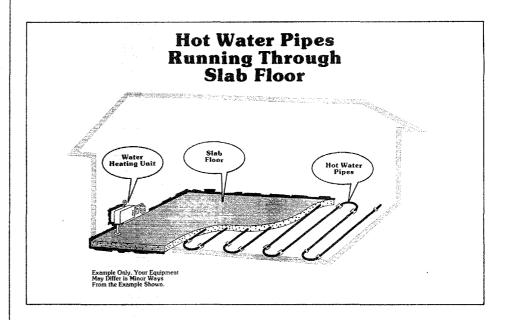
Square Feet: The floor area of the housing unit that is enclosed from the weather. Basements are included whether or not they contain finished space. Garages are included if they have a wall in common with the house. Attics that have finished space and attics that have some heated space are included. 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. For information on the reliability of the measurements, see Appendix C.

"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 only if they can be used year after year.

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.

Utilities Paid by Household: Fuel suppliers or utility companies paid directly for all 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.

<u>Vacant Housing Unit</u>: 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.

<u>Vehicles</u>: Are all motorized vehicles used by U.S. households for personal transportation excluding motorcycles, mopeds, large trucks, and buses. They include automobiles, station wagons, passenger vans, cargo vans, motor homes, pickup trucks, jeeps, or similar vehicles owned (being bought) by one or more members of the household. Vehicles also include company cars, pickup trucks, taxicabs, and other motorized vehicles that are not owned by household members but which are regularly available to household members for their personal use and ordinarily kept at home. Cars rented or leased for one month or more are included.

Not included are motorized vehicles used solely for business purposes, such as police cars or other Government-owned vehicles. Dismantled or dilapidated vehicles in an early stage of being junked or immobile vehicles used only as a source of power for some pieces of machinery are not included. Vehicles used primarily for competition or display purposes such as racing cars, stock cars, or antique cars not used as passenger automobiles are not included. Vehicles kept by students who live away at school or kept by persons who reside on military bases or similar institutional settings are not included.

Water-Heating Fuel: The answer to the question, "Which fuel is used most for heating water?" The phrase "other than just for cooking purposes" was added to the question in the 1982 RECS to clarify that the use for hot water is for bathing and washing. Households that did not have running water in their home were also asked this question.

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.

Wood Consumed: Amount of wood burned in a fireplace, stove, or furnace in the home at any time during the 1982-1983 winter based on reports by the respondent at the time of the interview. The following values were assigned to respondent answers:

A few logs or scraps of wood	0.1 cord
1/4 to 1/3 of a cord	0.3 cord
1/2 cord (about one pick-up truck of wood)	0.5 cord
Over 1/2 cord but less than a full	0.7 cord



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).

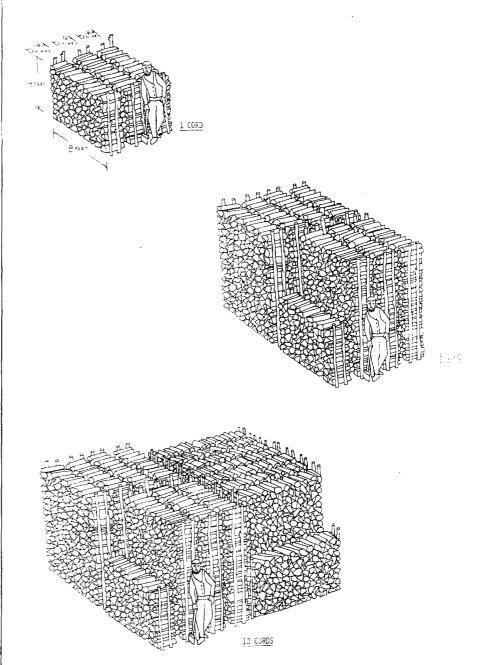
In other cases, wood is bought or cut in unusual units (e.g., pickup truck load or trunk load). Finally, volume estimates are difficult to make when the wood is not stacked up but is left in a pile.

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.

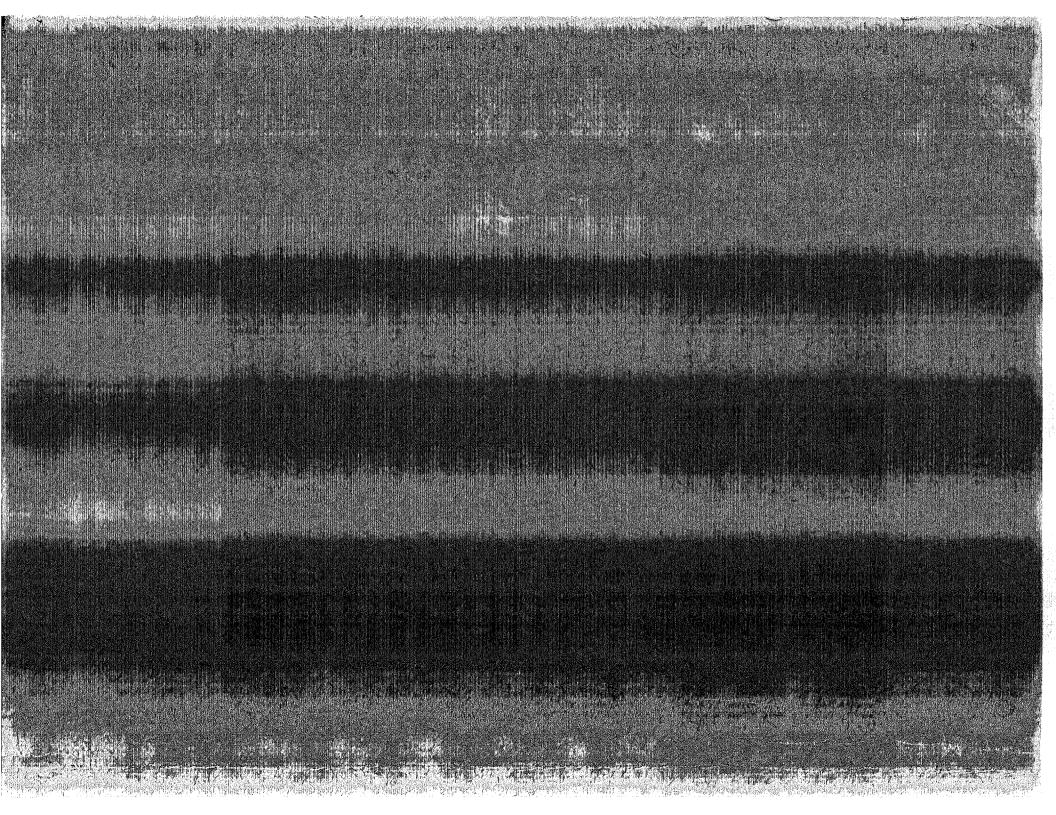


A "cord" measures 4 feet by 4 feet by 8 feet and is approximately 128 cubic feet. A third of a cord measures 16 inches by 4 feet by 8 feet.

More detailed and accurate drawings of wood piles were used for the first time in the 1982 RECS. The drawings were more correct in perspective, contained a person and holding an ax as a point of reference, and showed wood piles containing 5 and 10 cords. The purpose of these improvements was to enable respondents to be more accurate in reporting the amount of wood they burned especially those households burning more than 5 cords of wood. A copy of the drawings for 1, 5, and 10 cords is reproduced below.



1.5. GOVERNEENT PRINTING OFFICE: 1984-461-115:...



Energy Information Administration Forrestal Building Washington, D.C. 20585

FERMIT NO. G 21 FIRST CLASS MAIL

FRST-CLASS MAIL BOSTAGE & FLES PAID U.S. DEPT: OF ENERGY

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300