DOE/EIA-0262/1

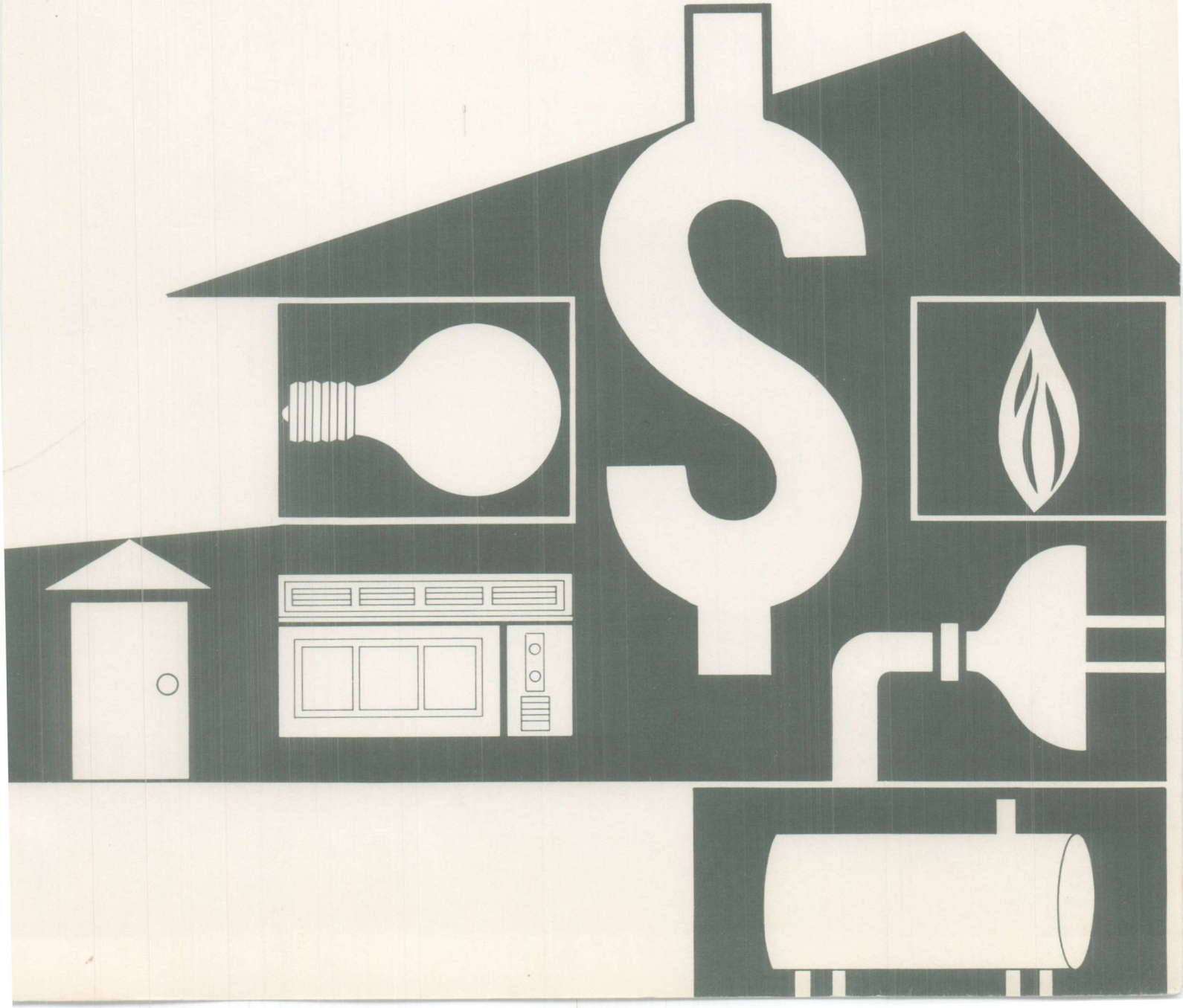
# Residential Energy Consumption Survey:

## 1979-1980 Consumption and Expenditures

### Part I: National Data (including Conservation)

April 1981

**U.S. Department of Energy**
Energy Information Administration
Assistant Administrator for Program Development
Office of the Consumption Data System
Residential and Commercial Data Systems Division



## Other Reports Produced by the Office of the Consumption Data System

Preliminary Conservation Tables from the National Interim Energy Consumption Survey, August 1979, DOE/EIA-0193/P.

Characteristics of the Housing Stocks and Households: Preliminary Findings from the National Interim Energy Consumption Survey, October 1979, DOE/EIA-0199/P.

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Residential Energy Consumption Survey: Conservation, February 1980, DOE/EIA-0207/3, GPO Stock No. 061-003-00087-8, $6.00.

Single-Family Households: Fuel Inventories and Expenditures: National Interim Energy Consumption Survey, December 1979, DOE/EIA-0207/1, GPO Stock No. 061-003-00075-4, $1.75.

Residential Energy Consumption Survey: Characteristics of the Housing Stock and Households, 1978, February 1980, DOE/EIA-0207/2, GPO Stock No. 061-003-00093-2, $4.25.

Residential Energy Consumption Survey: Consumption and Expenditures, April 1979 Through March 1979, July 1980, DOE/EIA-0207/5, GPO Stock No. 061-003-00131-9, $6.50.

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Nonresidential Buildings Energy Consumption Survey: Building Characteristics, March 1981, DOE/EIA-0246, GPO Stock No. 061-003-00171-8, $5.50.

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National Interim Energy Consumption Survey: Household Interview File, DOE/DF-81/001 (Magnetic Tape), available from the National Technical Information Service - Computer Products Division, 5285 Port Royal Road, Springfield, Virginia, Telephone (203) 487-4808, Accession No. PB-81-108714, $125.

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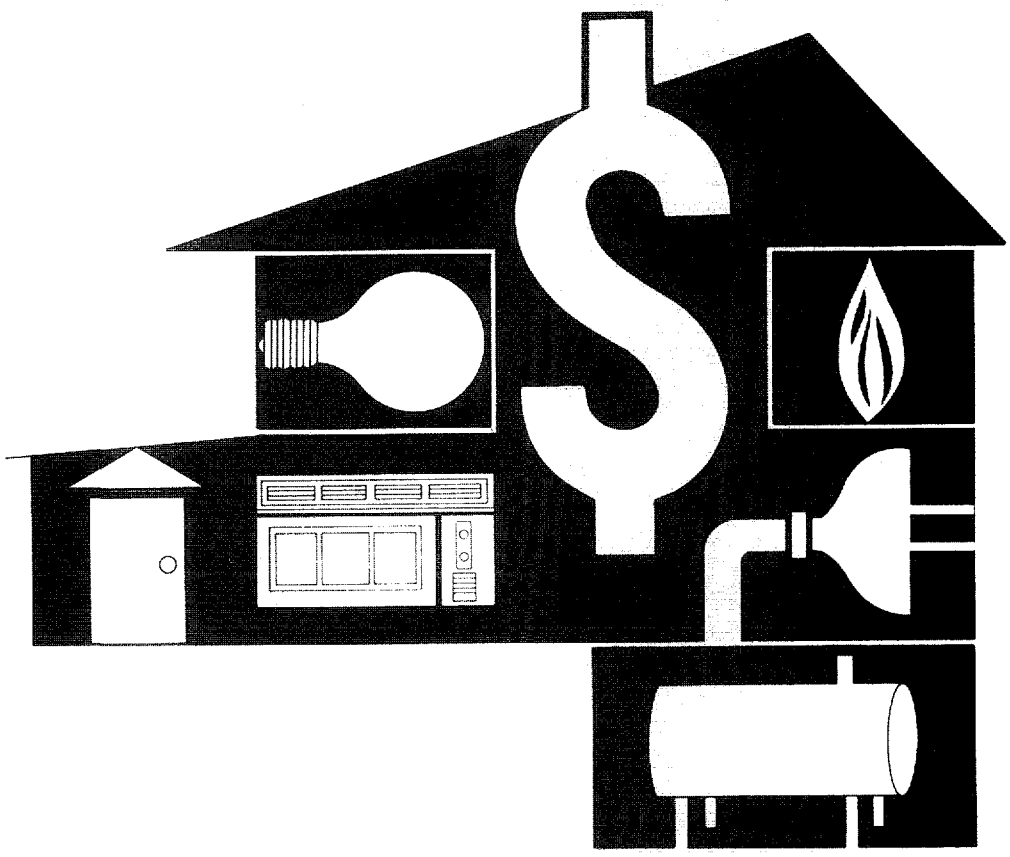

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# PREFACE

This report presents the results of the second residential energy consumption survey. Data on consumption and expenditures are presented for the year April 1979 through March 1980. Tables are also presented which indicate the cost and incidence of major insulation added to U.S. households in 1978 and 1979. The tables are from the final data file that contains imputations for missing data and includes information from the mail questionnaires. In addition to this publication, we are also issuing a report entitled, Residential Energy Consumption Survey: 1978-1980 Consumption and Expenditures, Part II. Regional Data (DOE/EIA-0262/2). This report contains selected tabulations for each of the four Census regions for the period 1978-1980. A public use file containing machine-readable data for individual households will also be made available through the National Technical Information Service (NTIS).

Included in this report are: a summary of findings showing comparisons in residential energy consumption between the 1978 to 1979 and 1979 to 1980 time periods, a description of how the survey was conducted, a statement about the limitations of the data including relative standard errors, a copy of the survey forms, and a glossary.

This report was prepared by the Residential and Commercial Data Systems Division, Office of the Consumption Data System, Assistant Administrator for Program Development, Energy Information Administration. The following staff members contributed to this project: Kenneth Vagts--Director, Office of the Consumption Data System; Lynda T. Carlson--Director, Residential and Commercial Data Systems Division; Wendel Thompson--manager of the residential energy consumption surveys; Dwight French and Phillip Windell--statisticians; Leigh Carleton and Vickie Fadeley--table design and generation; Les Whitaker--data processing.

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## SUMMARY OF FINDINGS

### Introduction

The results of the 1979 Household Screener Survey cover the year April 1979 through March 1980 and can be compared with the National Interim Energy Consumption Survey (NIECS) covering the preceding 12 months. The two surveys, each conducted similarly with a different sample of households, provide the first evidence on a national scale of the changes that are occurring in household energy use. The consumption and expenditures data are based on actual household bills for natural gas, electricity, fuel oil and kerosene, and liquified petroleum gas (LPG). The data do not include energy used in vacation homes or vacant houses and do not include the value of wood and coal burned by households. Gasoline and other motor vehicle fuels are also excluded. Cosumption of wood will be included in the data published for 1980-81. Consumption of gasoline is collected from subsamples of households and is reported separately.

### Significant Trends

For the year ending March 1980, energy consumption per household dropped significantly from the preceding 12-month period. Over the same 12-month period, however, the total number of residential households increased. This increase tended to off-set the energy savings realized by individual households to the extent that there was no statistically significant decline in total residential consumption nor in the consumption of any fuel except fuel oil.

Prices for all forms of energy rose rapidly over the year, significantly outstripping the general rate of inflation for all fuels except electricity. Fuel oil prices rose nearly five times the rate of inflation, forcing expenditures up significantly for those households that continued to use fuel oil as their main source of heat. Many households, however, switched away from fuel oil during the year, primarily into wood or natural gas. The net effect was that total nationwide expenditures for fuel oil showed no statistically significant increase despite the increase for individual households.

Table A. Directional Changes in Residential Energy Consumption, Expenditures, and Prices from 1978-79 to 1979-80

| | Consumption | | Expenditures | | Prices |
|---|---|---|---|---|---|
| | Total | Per Household | Total | Per Household | Average |
| All Fuels | 0 | - | + | + | + |
| Natural Gas | 0 | 0* | + | +* | + |
| Electricity | 0 | 0 | 0 | 0 | + |
| Fuel Oil/ Kerosene | - | -* | 0 | +* | + |
| LPG | 0 | 0* | 0 | 0* | + |

+ Represents an increase for 1979-80.
0 Represents no statistically significant change for 1979-80.
- Represents a decrease for 1979-80.
* Includes only households using the fuel as main source of heat.

## Consumption

For the year ending March 1980, total residential energy consumption was 9.74 quadrillion Btu (± .66)[1] which represents 12.5 percent of total amount of energy consumed in the United States.[2] The average amount of energy used annually per household dropped by nearly 9 percent (± 6) over the year, from 138[3] million Btu (MMBtu) (± 5) to 126 MMBtu (± 6) (Figure 1).[4] However, during the same period, the number of households increased by about 900,000[5] or about 1 percent, with the result that the drop in total residential consumption was not statistically significant.[6]

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[1]The ± values given in parentheses after a statistic quoted in the text represent two standard errors of the statistic. The standard error is a measure of the variability of an estimate based on a sample survey. For further explanation of standard errors, see Appendix B, "Limitations of the Data" which also contains tables of standard errors (Tables B1-B14).

[2]U.S. Department of Energy, Monthly Energy Review, August 1980, p.2. Total energy consumption in all sectors of the U.S. economy is estimated to be 78.075 quadrillion Btu for the year ending March 1980.

[3]This number and others from the NIECS survey were reported in trillion Btu in Residential Energy Consumption Survey: Consumption and Expenditures, April 1978 through March 1979, July 1980, DOE/EIA-0207/5. In this case 10,563 trillion Btu is the same as 10.563 quadrillion Btu. Numbers from the NIECS have been rounded off to the same number of decimal places used in the tables for this report. The reader should note this fact when using figures from the NIECS report.

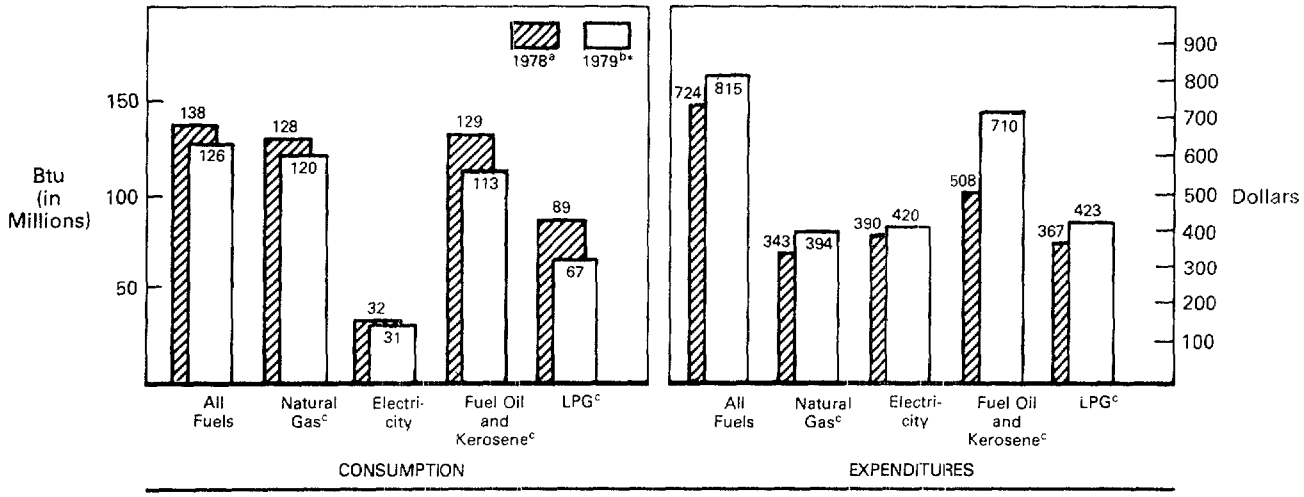
[4]Unless otherwise stated, the text mentions only differences between the two surveys which are statistically significant at the .05 level. This means that there is only a 5 percent probability that the survey estimates incorrectly show a difference when none really exists.

[5]The estimates of total households were prepared for this survey prior to the availability of official estimates from the Bureau of Census, and thus may differ somewhat. Our estimates of the total number of households was 76.6 million as of November 1978 and 77.5 million as of November 1979, an increase of 900,000 households.

[6]While it is true that the energy used by the additional 900,000 households reduced the difference in consumption between the two time periods making it less likely that a statistically significant difference would be found, it is also true that totals are inherently more variable statistics than averages. Therefore, it would not be unusual to find a statistically significant difference in average household consumption but fail to find a statistically significant difference in total consumption over all households.

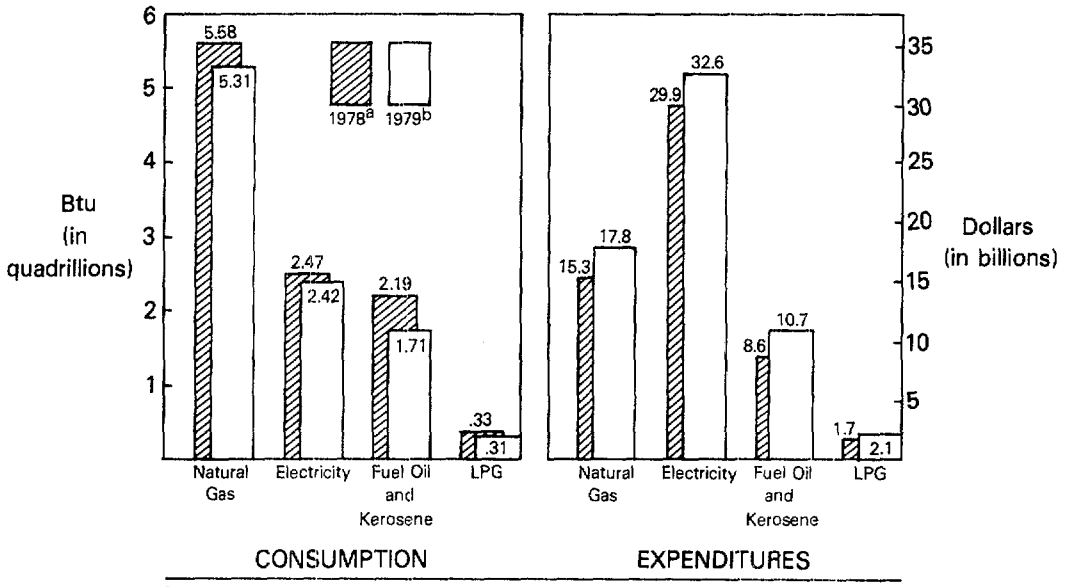
As shown in Figure 2, purchase of fuel oil (including kerosene) dropped to 1.71 quadrillion Btu (± .32) for the year ending March 1980, down by 22 percent (± 21) from the 2.19 quadrillion Btu (± .33) purchased during the previous 12 months. Contributing to the decline was not only a switching by about 8 percent (± 3) of fuel oil households to some other primary energy source, but also a drop of about 12 percent (± 7) in the use of fuel oil, from 129 million Btu (± 6) to 113 million Btu (± 7). Less severe weather,[7] continuing conservation activities and use of other energy sources have also contributed to the decline.

**Figure 1. Residential Energy Consumption and Expenditures Per Household by Type of Fuel**




[a] April 1978 through March 1979.
[b] April 1979 through March 1980.
[c] Average is based on households using this fuel as the main source of heat
Source: The 1979 Household Screener Survey and the 1978 National Interim Energy Consumption Survey. For Screener data, see Tables 1, 2, 3, 6, and 7.

**Figure 2. Total Residential Energy Consumption and Expenditures by Type of Fuel**



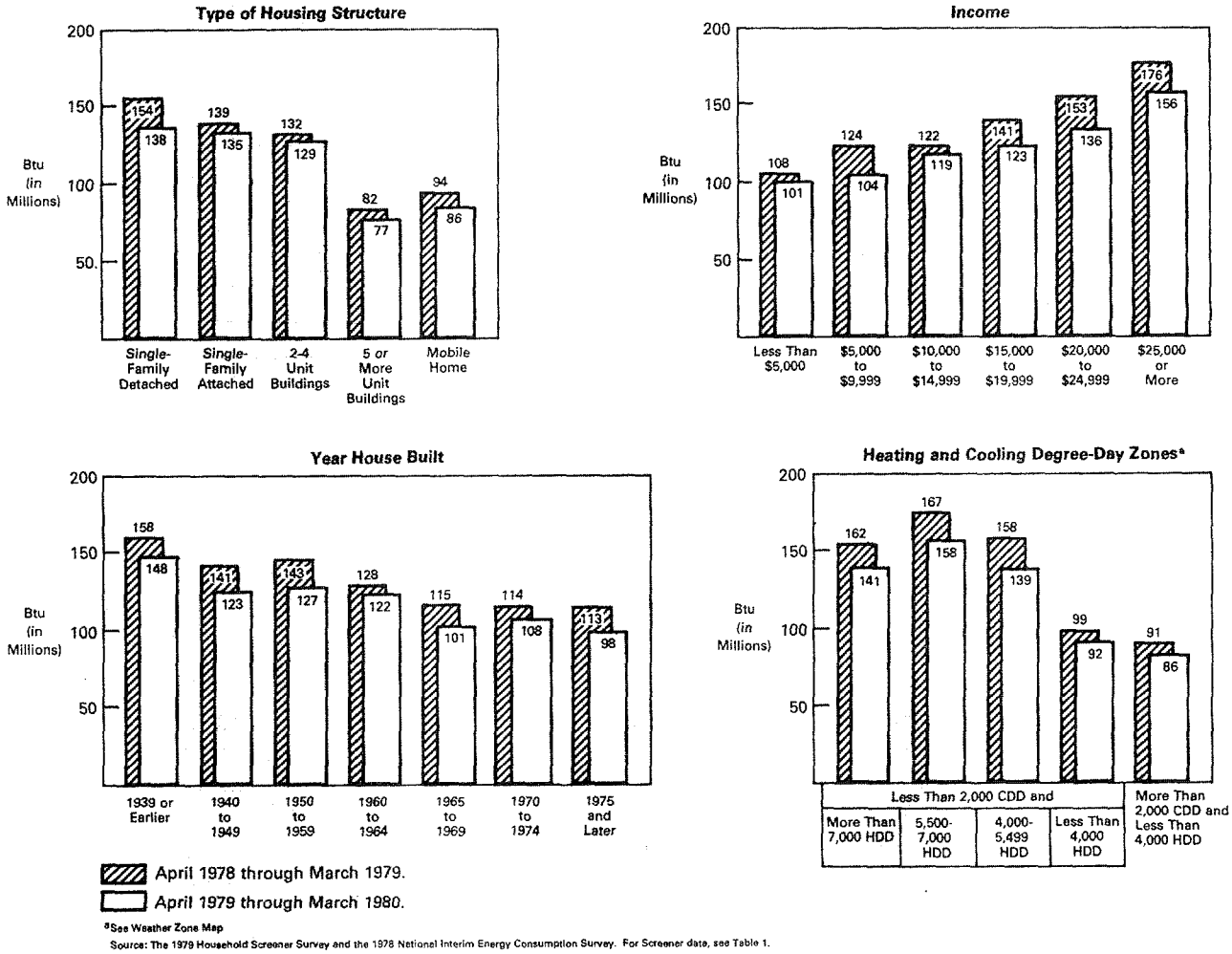

[a] April 1978 through March 1979.
[b] April 1979 through March 1980.

Source: The 1979 Household Screener Survey and the 1978 National Interim Energy Consumption Survey. For Screener data, see Table 1.

[7] See Figure 8.

The overall decline in energy consumption per household tends to be repeated when consumption is disaggregated by household characteristics. As shown in Figure 3, decreases (not always statistically significant) occurred for all housing types and ages, household income classes, and weather zones. Similar declines in consumption occurred across all categories of size of house (number of rooms), owner/renter, and age of household head.

Figure 3. **Annual Consumption Per Household**




[a]See Weather Zone Map

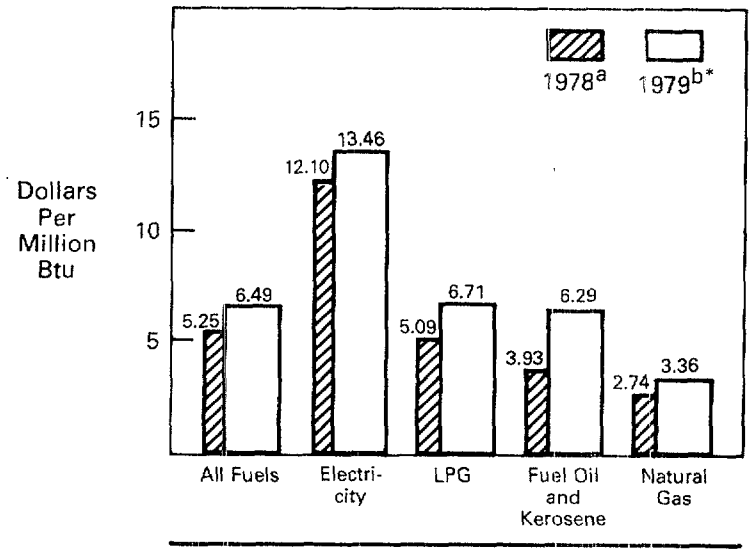
Source: The 1979 Household Screener Survey and the 1978 National Interim Energy Consumption Survey. For Screener data, see Table 1.

More than half (55 percent ± 3) of residential energy consumption (in Btu) for the 12 months ending March 1980 was in the form of natural gas. A distant second was electricity with about 25 percent (± 2) of the total, followed by fuel oil (and kerosene) with about 18 percent (± 3).

## Prices and Expenditures

Residential energy prices rose sharply from $5.25 (± .17) per MMBtu to $6.49 (± .19). This represents an increase of about 24 percent (± 5) over the year, nearly double the rate of inflation (12.3 percent). As shown in Figure 4, fuel oil prices led the increase with a massive 60 percent (± 1) gain, from $3.93 (± .02) to $6.29 (± .04) per MMBtu. Prices for LPG and natural gas also rose significantly, by 32 percent (± 10) and 23 percent (± 4) respectively. Electricity price increases were similar to the rate of inflation.

**Figure 4. Average Residential Energy Prices**




[a]April 1978 through March 1979.

[b]April 1979 through March 1980.

Source: The 1979 Household Screener Survey and the 1978 National Interim Energy Consumption Survey. For Screener data, see Table 8.

Total residential energy expenditures were $63.2 billion (± 4.8) for the year ending March 1980, up by 14 percent (± 11) from the $55.5 billion (± 3.4) for the preceding year. This represents 2.6 percent of the Gross National Product, and about 24 percent of total energy expenditure.[8] As can be seen from Figures 1 and 2, natural gas expenditures increased both for individual households using natural gas as their main fuel, and in total. Fuel oil expenditures per household showed a massive increase of 40 percent (± 11), but because of the switch of households away from fuel oil, total expenditures did not show a statistically significant increase.

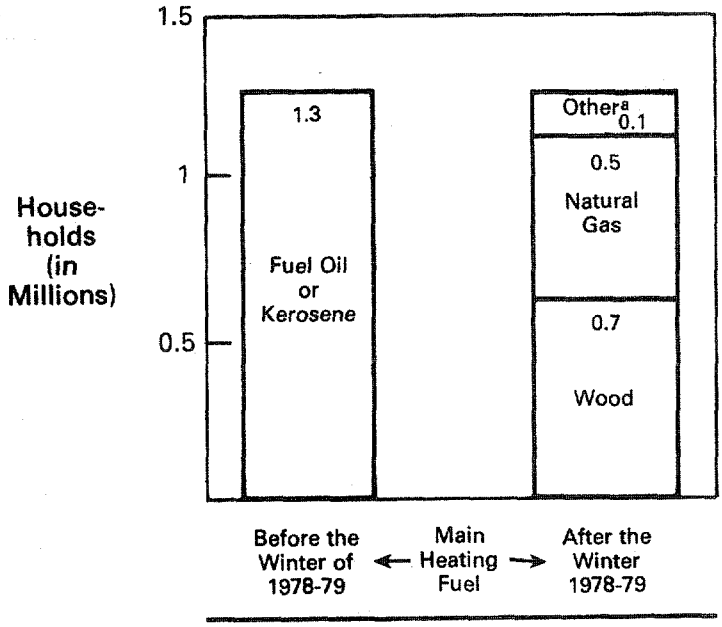
[8]No comprehensive figure for total U.S. energy expenditures by end use sectors is presently available. A rough estimate for the year 1979 is $263 billion, which is probably an underestimate for the 12 months ending March 1980.

Although natural gas accounts for more than half of all energy used in the residential sector, only a bit over a quarter of the expenditures are on natural gas. The situation is reversed for electricity, which comprises 25 percent (± 2) of residential energy consumption but half of all expenditures.

## Conservation Activities

Approximately 2.7 percent (± .7) or 2.13 million (± .58) households changed from one main heating fuel to another. The households previously using fuel oil or kerosene as the main space-heating fuel comprised the largest group of "switchers" (1.3 million ± .5) (Figure 5). These 1.3 million switchers represent 8.2 percent (± 3.0) of the estimated 15.8 million (± 2.8) households heating with fuel oil prior to the winter of 1979-1980.[9] Most of the fuel oil and kerosene households switched their main heating fuel to wood or to natural gas. The survey did not collect data on whether these households still retained their fuel oil heating equipment which could, when necessary, be used again as the main heating equipment.

**Figure 5. Households No Longer Using Fuel Oil/Kerosene as Main Heating Fuel**

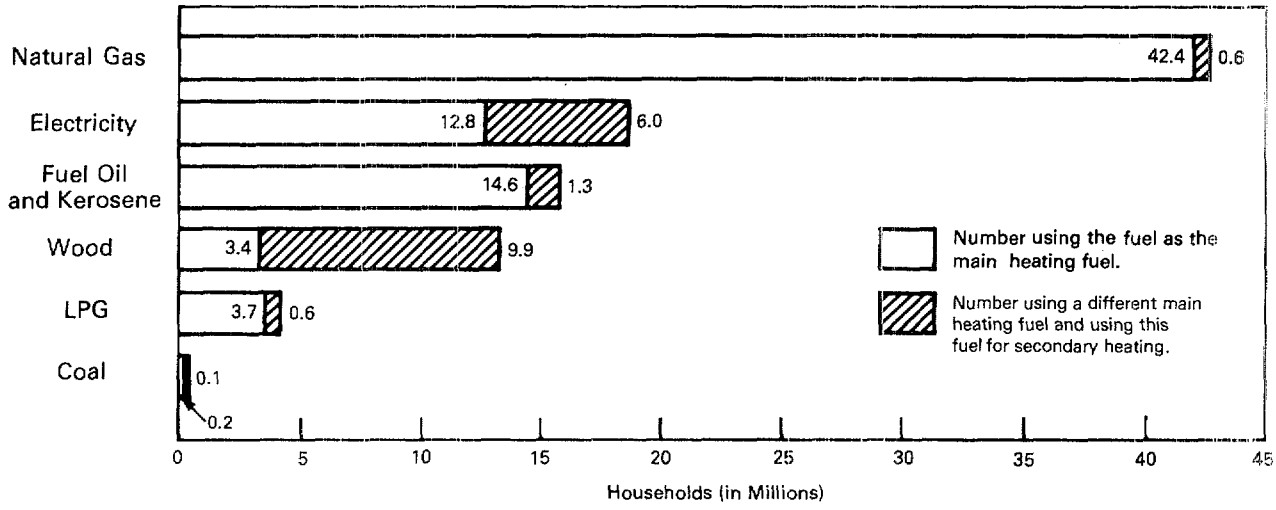



[a] Includes LPG, Coal, and Electricity.
Source: The 1979 Household Screener Survey. For data, see Table 10.

[9]The 15.8 million household figure is derived as 14.6 million now heating with fuel oil plus the 1.3 million "switchers" minus 0.1 million households switching from another type of energy to using fuel oil. See Table 10.

About one-quarter of all households used a secondary heating fuel (Figure 6). The fuels most often used included wood (9.9 million households ± 1.7) and electricity (6 million ± 1.3). Fuel oil or kerosene, rarely used as a secondary heating fuel in 1978 (0.2 million ± .2)[10], was used by 1.3 million (± .6) households in 1979.[11]

**Figure 6. Fuels Used for Heating**




Note: Households using the same fuel for both main and secondary heating are counted only once, under main heating fuel. Therefore, the figures in this chart underestimate the number of households using a fuel for secondary heating. Based on the NIECS, an estimate of the undercount is 3 million secondary users of natural gas, 1 million electricity users, 0.2 million users of fuel oil/kerosene, and 0.2 million users of LPG.

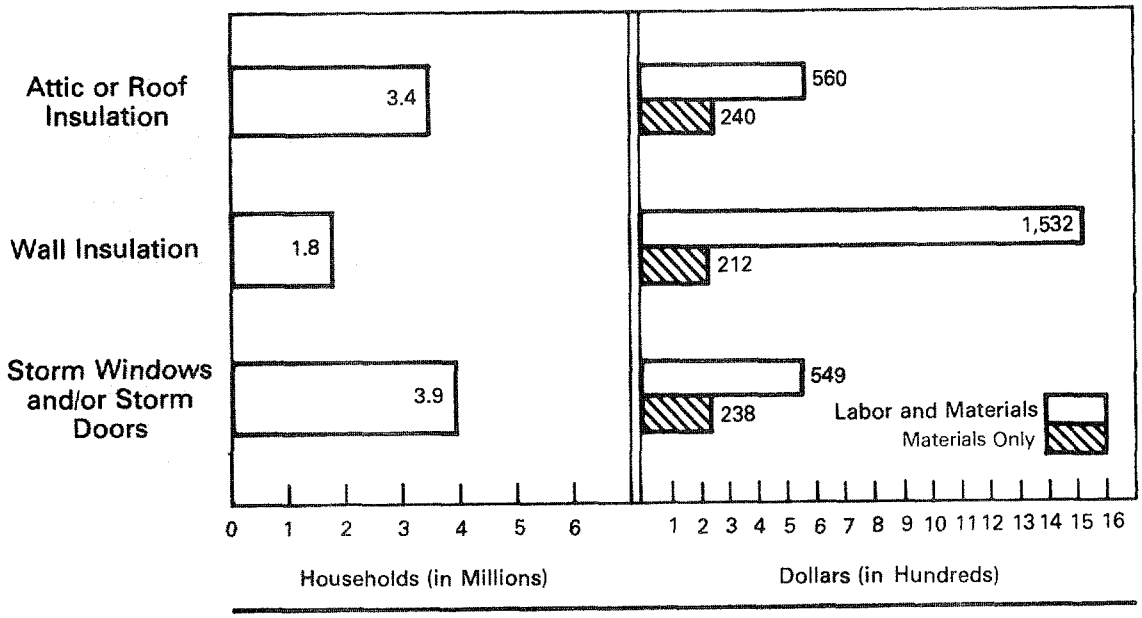
Source: The 1979 Household Screener Survey. For data, see Table 10.

[10] Residential Energy Consumption Survey: Characteristics of the Housing Stock and Households, 1978, February 1980, DOE/EIA-0207/2. This report shows 0.4 million secondary heating users, minus 0.2 million who use fuel oil both for main heating and secondary heating. This equals 0.2 million using fuel oil only for secondary heating. See note on Figure 6.

[11] By a coincidence, the number of households switching from fuel oil, 1.3 million, is the same as the number of secondary heating users in 1979. These figures do not, in all cases, represent the same households. Some households may have removed their fuel oil heating equipment, while others may still use it for secondary heating. In addition, secondary heating with fuel oil or kerosene may utilize portable heating equipment.

About the same number of households added attic insulation in 1979 as added storm windows or doors (Figure 7). Fewer households added wall insulation than added attic insulation or storm windows and doors. When the household paid only for material and installed the insulation themselves, they tended to spend somewhat more than $200 no matter what was to be insulated. However, the expenditures for contractor installations were higher for wall insulation than for either attic insulation or storm windows/doors.

**Figure 7. Expenditures for Insulation Added in 1979 (Excluding Buildings of 5 or More Units)**

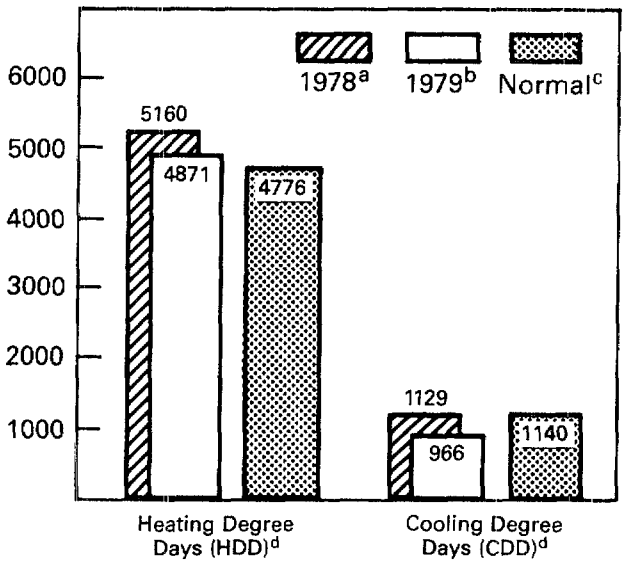



Source: The 1979 Household Screener Survey. For data, see Tables 11, 12, and 13.

## Weather

The winter of 1979-1980 was warmer than the preceding winter, but still colder than the normal winter weather (Figure 8). As for the need for air conditioning, the summer of 1979 was cooler than the summer of 1978. The summer of 1978 was very close to the long-term normal summer temperatures (within 1 percent). These less severe weather conditions contribute to reduced use of energy for heating homes in the winter and cooling them in the summer.

**Figure 8. Heating and Cooling Degree Days**




[a]April 1978 through March 1979.

[b]April 1979 through March 1980.

[c]Average over past 49 years.

[d]Difference between average daily temperature and 65° F. summed over the year. For HDD, the average daily temperature is below 65°. For CDD, it is above 65°.

Source: National Climatic Center, State, Regional and National Monthly and Seasonal Heating Degree Days Weighted by Population (July 1931 through June 1980), September 1980 and companion report for cooling degree days for January 1931 through December 1979.

TABLE 1. TOTAL RESIDENTIAL ENERGY CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980

| HOUSEHOLD CHARACTERISTICS | TOTAL HOUSEHOLDS (MIL*N) | ALL FUELS | | | | NATURAL GAS | | ELECTRICITY | | FUEL OIL AND KEROSENE | | LIQUID PETROLEUM GAS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | TOTAL EXPEND (BIL*N $) | AVG EXPEND PER HOUSEHOLD ($) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) |
| TOTAL HOUSEHOLDS | 77.5 | 9.74 | 126 | 63.2 | 815 | 5.31 | 17.8 | 2.42 | 32.6 | 1.71 | 10.7 | 0.307 | 2.06 |
| CENSUS REGION | | | | | | | | | | | | | |
| NORTHEAST | 17.2 | 2.50 | 145 | 17.8 | 1033 | 1.05 | 4.3 | .39 | 6.8 | 1.03 | 6.5 | .029 | .26 |
| NORTH CENTRAL | 20.7 | 3.48 | 168 | 19.1 | 924 | 2.48 | 7.8 | .59 | 8.8 | .31 | 2.0 | .098 | .60 |
| SOUTH | 24.9 | 2.30 | 92 | 18.5 | 744 | .91 | 3.1 | .97 | 12.6 | .28 | 1.8 | .143 | .98 |
| WEST | 14.7 | 1.47 | 100 | 7.7 | 527 | .88 | 2.6 | .47 | 4.4 | .09 | .6 | .037 | .22 |
| URBAN/RURAL | | | | | | | | | | | | | |
| URBAN | 56.8 | 7.41 | 130 | 45.3 | 797 | 4.66 | 15.7 | 1.52 | 21.8 | 1.17 | 7.4 | .061 | .45 |
| RURAL | 20.7 | 2.34 | 113 | 17.9 | 864 | .65 | 2.1 | .90 | 10.8 | .54 | 3.3 | .246 | 1.61 |
| SMSA/NON-SMSA | | | | | | | | | | | | | |
| SMSA | 53.4 | 6.98 | 131 | 44.1 | 826 | 4.15 | 14.1 | 1.49 | 21.3 | 1.24 | 7.8 | .104 | .76 |
| NON-SMSA | 24.1 | 2.76 | 114 | 19.1 | 792 | 1.16 | 3.7 | .93 | 11.2 | .46 | 2.9 | .203 | 1.31 |
| AIA HEATING AND COOLING DEGREE DAY ZONES | | | | | | | | | | | | | |
| <2000 CDD AND >7000 HDD | 6.7 | .94 | 141 | 5.6 | 841 | .52 | 1.7 | .21 | 2.6 | .19 | 1.2 | .032 | .20 |
| <2000 CDD AND 5500-7000 HDD | 21.2 | 3.35 | 158 | 19.3 | 908 | 2.15 | 7.2 | .59 | 8.3 | .55 | 3.4 | .053 | .37 |
| <2000 CDD AND 4000-5499 HDD | 20.2 | 2.82 | 139 | 18.5 | 915 | 1.37 | 4.8 | .60 | 8.3 | .78 | 4.9 | .075 | .50 |
| <2000 CDD AND <4000 HDD | 17.5 | 1.62 | 92 | 11.4 | 649 | .81 | 2.6 | .58 | 7.3 | .15 | 1.0 | .072 | .49 |
| >2000 CDD AND <4000 HDD | 11.9 | 1.02 | 86 | 8.4 | 709 | .46 | 1.5 | .44 | 6.1 | .05 | .3 | .375 | .50 |

SEE NOTES AT END OF TABLE

TABLE 1. TOTAL RESIDENTIAL ENERGY CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | TOTAL HOUSEHOLDS (MIL*N) | ALL FUELS | | | | NATURAL GAS | | ELECTRICITY | | FUEL OIL AND KEROSENE | | LIQUID PETROLEUM GAS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | TOTAL EXPEND (BIL*N $) | AVG EXPEND PER HOUSEHOLD ($) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) |
| TYPE OF STRUCTURE | | | | | | | | | | | | | |
| SINGLE FAMILY DETACHED | | | | | | | | | | | | | |
| TOTAL | 50.1 | 6.92 | 138 | 44.9 | 896 | 3.74 | 12.2 | 1.80 | 23.9 | 1.17 | 7.3 | 0.216 | 1.46 |
| OWNERS | 43.1 | 6.03 | 140 | 39.5 | 916 | 3.20 | 10.5 | 1.60 | 21.2 | 1.05 | 6.6 | .171 | 1.15 |
| RENTERS | 7.0 | .89 | 127 | 5.4 | 770 | .53 | 1.7 | .20 | 2.7 | .12 | .7 | .044 | .31 |
| SINGLE FAMILY ATTACHED | | | | | | | | | | | | | |
| TOTAL | 3.3 | .45 | 135 | 2.6 | 795 | .30 | 1.0 | .09 | 1.3 | .05 | .3 | .003 | .02 |
| OWNERS | 2.0 | .30 | 148 | 1.8 | 869 | .21 | .7 | .06 | .8 | .03 | .2 | .003 | .02 |
| RENTERS | 1.3 | .15 | 115 | .9 | 680 | .09 | .3 | .04 | .5 | .02 | .1 | - | - |
| 2-4 UNIT BUILDING | | | | | | | | | | | | | |
| TOTAL | 9.3 | 1.20 | 129 | 7.1 | 764 | .80 | 2.9 | .17 | 2.7 | .21 | 1.4 | .016 | .10 |
| OWNERS | 2.3 | .40 | 177 | 2.4 | 1056 | .27 | 1.0 | .06 | .9 | .08 | .5 | .001 | - |
| RENTERS | 7.0 | .79 | 114 | 4.7 | 669 | .53 | 1.9 | .11 | 1.8 | .14 | .9 | .016 | .10 |
| 5+ UNIT BUILDING | | | | | | | | | | | | | |
| TOTAL | 10.6 | .82 | 77 | 5.8 | 548 | .38 | 1.5 | .21 | 2.9 | .22 | 1.4 | .007 | .05 |
| OWNERS | 1.4 | .10 | 66 | .7 | 461 | .05 | .2 | .04 | .5 | - | - | - | - |
| RENTERS | 9.2 | .72 | 79 | 5.2 | 562 | .33 | 1.3 | .17 | 2.5 | .22 | 1.4 | .007 | .05 |
| MOBILE HOME | 4.1 | .35 | 86 | 2.6 | 649 | .09 | .3 | .15 | 1.6 | .05 | .3 | .006 | .43 |
| OTHER | .1 | .02 | 125 | .1 | 894 | .01 | - | - | - | .01 | - | - | - |
| NUMBER OF ROOMS | | | | | | | | | | | | | |
| ONE TO THREE | 9.1 | .66 | 72 | 4.4 | 476 | .36 | 1.3 | .14 | 2.0 | .13 | .8 | .037 | .25 |
| FOUR | 16.1 | 1.58 | 98 | 10.4 | 644 | .84 | 2.9 | .42 | 5.4 | .25 | 1.6 | .072 | .47 |
| FIVE | 18.3 | 2.17 | 119 | 13.9 | 762 | 1.22 | 4.0 | .56 | 7.4 | .31 | 2.0 | .080 | .54 |
| SIX | 15.7 | 2.13 | 136 | 14.0 | 894 | 1.15 | 3.8 | .54 | 7.5 | .39 | 2.4 | .051 | .34 |
| SEVEN | 9.2 | 1.42 | 155 | 9.1 | 990 | .81 | 2.7 | .35 | 4.7 | .23 | 1.4 | .037 | .24 |
| EIGHT OR MORE | 9.1 | 1.77 | 194 | 11.5 | 1255 | .93 | 3.1 | .41 | 5.6 | .41 | 2.5 | .031 | .22 |

SEE NOTES AT END OF TABLE

TABLE 1. TOTAL RESIDENTIAL ENERGY CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | TOTAL HOUSEHOLDS (MIL*N) | ALL FUELS | | | | NATURAL GAS | | ELECTRICITY | | FUEL OIL AND KEROSENE | | LIQUID PETROLEUM GAS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | TOTAL EXPEND (BIL*N $) | AVG EXPEND PER HOUSEHOLD ($) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) |
| NUMBER OF ROOMS AIR CONDITIONED | | | | | | | | | | | | | |
| ALL | 23.2 | 2.80 | 121 | 19.5 | 841 | 1.58 | 5.1 | 0.95 | 12.7 | 0.17 | 1.1 | 0.098 | 0.65 |
| SOME | 19.4 | 2.75 | 142 | 18.1 | 935 | 1.45 | 5.1 | .57 | 8.4 | .66 | 4.2 | .061 | .42 |
| NONE | 35.0 | 4.20 | 120 | 25.6 | 732 | 2.28 | 7.7 | .91 | 11.5 | .87 | 5.5 | .148 | .99 |
| YEAR HOUSE BUILT | | | | | | | | | | | | | |
| 1939 OR EARLIER | 25.5 | 3.76 | 148 | 22.5 | 885 | 2.12 | 7.3 | .59 | 8.7 | .96 | 6.0 | .092 | .61 |
| 1940 TO 1949 | 6.9 | .85 | 123 | 5.4 | 773 | .50 | 1.7 | .18 | 2.6 | .14 | .9 | .029 | .20 |
| 1950 TO 1959 | 14.7 | 1.87 | 127 | 12.0 | 817 | 1.11 | 3.7 | .44 | 6.2 | .28 | 1.8 | .035 | .26 |
| 1960 TO 1964 | 7.5 | .92 | 122 | 6.2 | 827 | .48 | 1.6 | .24 | 3.3 | .17 | 1.1 | .026 | .18 |
| 1965 TO 1969 | 7.8 | .78 | 101 | 5.6 | 712 | .41 | 1.3 | .29 | 3.6 | .06 | .4 | .033 | .23 |
| 1970 TO 1974 | 8.1 | .87 | 108 | 6.3 | 781 | .41 | 1.3 | .34 | 4.3 | .06 | .4 | .058 | .37 |
| 1975 TO 1979 | 7.1 | .69 | 98 | 5.2 | 742 | .28 | .9 | .34 | 3.9 | .04 | .2 | .034 | .21 |
| OWN/RENT | | | | | | | | | | | | | |
| OWN | 52.0 | 7.12 | 137 | 46.5 | 894 | 3.81 | 12.6 | 1.87 | 24.8 | 1.21 | 7.6 | .226 | 1.50 |
| RENT | 24.2 | 2.50 | 103 | 15.8 | 650 | 1.45 | 5.1 | .50 | 7.2 | .47 | 3.0 | .073 | .51 |
| RENT FREE | 1.3 | .13 | 100 | .9 | 740 | .05 | .1 | .05 | .6 | .03 | .2 | .008 | .05 |
| 1978 FAMILY INCOME | | | | | | | | | | | | | |
| LESS THAN $5,000 | 10.6 | 1.07 | 101 | 6.4 | 609 | .64 | 2.2 | .22 | 2.9 | .16 | 1.1 | .045 | .30 |
| $5,000 TO $9,999 | 14.3 | 1.50 | 104 | 9.4 | 657 | .85 | 2.9 | .32 | 4.5 | .27 | 1.7 | .056 | .38 |
| $10,000 TO $14,999 | 13.5 | 1.62 | 119 | 10.3 | 759 | .87 | 2.9 | .38 | 5.0 | .30 | 1.9 | .064 | .44 |
| $15,000 TO $19,999 | 10.1 | 1.24 | 123 | 8.2 | 814 | .66 | 2.2 | .34 | 4.4 | .21 | 1.3 | .036 | .24 |
| $20,000 TO $24,999 | 9.9 | 1.35 | 136 | 9.1 | 922 | .69 | 2.4 | .36 | 4.8 | .27 | 1.7 | .035 | .24 |
| $25,000 TO $34,999 | 11.3 | 1.62 | 143 | 10.5 | 931 | .91 | 3.0 | .45 | 5.9 | .22 | 1.4 | .032 | .21 |
| $35,000 OR MORE | 7.8 | 1.35 | 174 | 9.2 | 1181 | .68 | 2.3 | .36 | 4.9 | .27 | 1.7 | .040 | .25 |

SEE NOTES AT END OF TABLE

TABLE 1. TOTAL RESIDENTIAL ENERGY CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | TOTAL HOUSEHOLDS (MIL*N) | ALL FUELS | | | | NATURAL GAS | | ELECTRICITY | | FUEL OIL AND KEROSENE | | LIQUID PETROLEUM GAS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | TOTAL EXPEND (BIL*N $) | AVG EXPEND PER HOUSEHOLD ($) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) |
| TOTAL POOR..... | 12.9 | 1.39 | 107 | 8.4 | 654 | 0.82 | 2.7 | 0.30 | 3.9 | 0.21 | 1.4 | 0.056 | 0.38 |
| RACE | | | | | | | | | | | | | |
| WHITE..... | 68.8 | 8.57 | 125 | 56.0 | 815 | 4.59 | 15.3 | 2.22 | 29.5 | 1.48 | 9.3 | .284 | 1.88 |
| BLACK..... | 7.9 | 1.08 | 137 | 6.6 | 836 | .68 | 2.3 | .18 | 2.8 | .20 | 1.2 | .024 | .18 |
| OTHER..... | .9 | .09 | 104 | .6 | 675 | .04 | .2 | .02 | .3 | .03 | .2 | - | - |
| AGE OF HEAD | | | | | | | | | | | | | |
| 29 OR LESS..... | 15.5 | 1.68 | 108 | 10.5 | 682 | .96 | 3.2 | .40 | 5.4 | .25 | 1.6 | .054 | .34 |
| 30 TO 44..... | 21.8 | 2.97 | 136 | 19.6 | 897 | 1.63 | 5.5 | .78 | 10.5 | .47 | 2.9 | .097 | .66 |
| 45 TO 59..... | 18.8 | 2.56 | 136 | 17.2 | 911 | 1.33 | 4.5 | .69 | 9.3 | .46 | 2.9 | .077 | .53 |
| 60 AND OVER..... | 21.4 | 2.54 | 119 | 15.9 | 744 | 1.39 | 4.7 | .54 | 7.4 | .53 | 3.3 | .079 | .53 |
| MARITAL STATUS | | | | | | | | | | | | | |
| MARRIED..... | 50.3 | 6.88 | 137 | 45.6 | 907 | 3.61 | 12.1 | 1.83 | 24.4 | 1.22 | 7.7 | .215 | 1.44 |
| NOT MARRIED..... | 27.2 | 2.87 | 105 | 17.6 | 645 | 1.71 | 5.8 | .59 | 8.1 | .48 | 3.1 | .092 | .62 |
| FEMALE HEAD..... | 18.1 | 1.98 | 110 | 12.1 | 667 | 1.18 | 4.0 | .40 | 5.5 | .35 | 2.2 | .054 | .36 |
| MALE HEAD..... | 9.1 | .88 | 97 | 5.5 | 602 | .52 | 1.8 | .19 | 2.6 | .14 | .9 | .039 | .26 |
| HOUSEHOLDS WITH CHILDREN | | | | | | | | | | | | | |
| YES..... | 34.9 | 5.13 | 147 | 33.6 | 962. | 2.78 | 9.3 | 1.30 | 17.7 | .88 | 5.5 | .161 | 1.10 |
| FEMALE HEAD..... | 5.9 | .79 | 133 | 4.9 | 828 | .45 | 1.5 | .17 | 2.3 | .14 | .9 | .022 | .16 |
| MALE HEAD..... | 29.0 | 4.34 | 150 | 28.7 | 989 | 2.33 | 7.7 | 1.13 | 15.4 | .74 | 4.6 | .139 | .94 |
| NO..... | 42.6 | 4.62 | 108 | 29.6 | 695 | 2.53 | 8.6 | 1.12 | 14.8 | .82 | 5.2 | .146 | .96 |
| FEMALE HEAD..... | 12.4 | 1.22 | 98 | 7.3 | 591 | .74 | 2.5 | .23 | 3.3 | .21 | 1.3 | .032 | .20 |
| MALE HEAD..... | 30.2 | 3.40 | 113 | 22.3 | 738 | 1.79 | 6.1 | .88 | 11.6 | .61 | 3.9 | .114 | .76 |

SEE NOTES AT END OF TABLE

TABLE 1. TOTAL RESIDENTIAL ENERGY CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | TOTAL HOUSEHOLDS (MIL'N) | ALL FUELS | | | | NATURAL GAS | | ELECTRICITY | | FUEL OIL AND KEROSENE | | LIQUID PETROLEUM GAS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOTAL AMOUNT CONSUMED (QUAD'N BTU) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL'N BTU) | TOTAL EXPEND (BIL'N $) | AVG EXPEND PER HOUSEHOLD ($) | TOTAL AMOUNT CONSUMED (QUAD'N BTU) | TOTAL EXPEND (BIL'N $) | TOTAL AMOUNT CONSUMED (QUAD'N BTU) | TOTAL EXPEND (BIL'N $) | TOTAL AMOUNT CONSUMED (QUAD'N BTU) | TOTAL EXPEND (BIL'N $) | TOTAL AMOUNT CONSUMED (QUAD'N BTU) | TOTAL EXPEND (BIL'N $) |
| HOUSEHOLD MEMBERS | | | | | | | | | | | | | |
| ONE | 15.4 | 1.37 | 89 | 8.3 | 538 | 0.82 | 2.8 | 0.27 | 3.8 | 0.22 | 1.4 | 0.050 | 0.32 |
| TWO | 26.8 | 3.11 | 116 | 20.5 | 764 | 1.61 | 5.5 | .82 | 10.6 | .59 | 3.7 | .097 | .64 |
| THREE | 13.2 | 1.78 | 135 | 11.5 | 873 | .98 | 3.2 | .44 | 6.0 | .30 | 1.9 | .060 | .41 |
| FOUR | 11.9 | 1.82 | 153 | 12.0 | 1003 | 1.00 | 3.4 | .47 | 6.4 | .31 | 1.9 | .048 | .33 |
| FIVE OR MORE | 10.2 | 1.66 | 163 | 10.9 | 1073 | .90 | 3.0 | .42 | 5.8 | .29 | 1.8 | .052 | .36 |
| NUMBER OF FULL-TIME WAGE EARNERS | | | | | | | | | | | | | |
| NONE | 21.5 | 2.31 | 107 | 14.4 | 667 | 1.30 | 4.4 | .50 | 6.7 | .43 | 2.7 | .085 | .58 |
| ONE | 34.2 | 4.40 | 129 | 28.7 | 838 | 2.40 | 8.1 | 1.12 | 15.1 | .74 | 4.6 | .133 | .89 |
| TWO | 18.9 | 2.50 | 132 | 16.6 | 878 | 1.35 | 4.5 | .68 | 9.1 | .39 | 2.5 | .075 | .49 |
| THREE | 2.3 | .43 | 186 | 2.9 | 1245 | .20 | .7 | .09 | 1.4 | .12 | .8 | .014 | .09 |
| FOUR OR MORE | .6 | .10 | 178 | .7 | 1192 | .06 | .2 | .02 | .3 | .02 | .1 | - | - |
| FULL-TIME (FT) EMPLOYMENT | | | | | | | | | | | | | |
| HEAD MARRIED | 50.3 | 6.88 | 137 | 45.6 | 907 | 3.61 | 12.1 | 1.83 | 24.4 | 1.22 | 7.7 | .215 | 1.44 |
| HEAD OR SPOUSE EMPLOYED FT | 25.4 | 3.64 | 144 | 24.3 | 959 | 1.90 | 6.4 | .97 | 13.1 | .67 | 4.2 | .103 | .69 |
| BOTH EMPLOYED FT | 14.9 | 2.02 | 135 | 13.5 | 900 | 1.08 | 3.6 | .56 | 7.5 | .31 | 2.0 | .068 | .45 |
| NEITHER EMPLOYED FT | 10.0 | 1.22 | 122 | 7.9 | 787 | .63 | 2.1 | .30 | 3.9 | .24 | 1.5 | .043 | .30 |
| HEAD NOT MARRIED | 27.2 | 2.87 | 105 | 17.6 | 645 | 1.71 | 5.8 | .59 | 8.1 | .48 | 3.1 | .092 | .62 |
| HEAD EMPLOYED FT | 12.6 | 1.36 | 108 | 8.5 | 673 | .81 | 2.7 | .30 | 4.1 | .22 | 1.4 | .038 | .26 |
| HEAD NOT EMPLOYED FT | 14.6 | 1.50 | 103 | 9.1 | 620 | .90 | 3.0 | .29 | 4.0 | .26 | 1.7 | .055 | .36 |

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

TABLE 2. RESIDENTIAL NATURAL GAS CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980

| HOUSEHOLD CHARACTERISTICS | NATURAL GAS | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NATURAL GAS USED: AS MAIN HEATING FUEL | | | | NATURAL GAS USED: NOT AS MAIN HEATING FUEL | | | |
| | TOTAL AMOUNT CONSUMED (TRIL*N CU.FT.) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | AVG PRICE ($ PER THOU CU.-FT.) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU CU.FT.) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU CU.FT.) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) |
| TOTAL HOUSEHOLDS.. | 5.20 | 5.31 | 17.8 | 3.43 | 42.4 | 117 | 120 | 394 | 7.17 | 31.8 | 32.5 | 156 |
| WATER HEATING FUEL | | | | | | | | | | | | |
| NATURAL GAS..... | 4.82 | 4.92 | 16.2 | 3.37 | 38.9 | 119 | 122 | 398 | 3.64 | 48.5 | 49.5 | 206 |
| OTHER AND NONE.. | .38 | .39 | 1.6 | 4.18 | 3.5 | 94 | 96 | 350 | 3.54 | 14.7 | 15.0 | 104 |
| CENSUS REGION | | | | | | | | | | | | |
| NORTHEAST..... | 1.02 | 1.05 | 4.3 | 4.24 | 7.1 | 130 | 133 | 525 | 4.36 | 22.7 | 23.2 | 141 |
| NORTH CENTRAL... | 2.43 | 2.48 | 7.8 | 3.21 | 16.0 | 149 | 152 | 477 | .80 | 54.7 | 55.8 | 201 |
| SOUTH..... | .89 | .91 | 3.1 | 3.51 | 9.4 | 88 | 90 | 305 | 1.55 | 43.5 | 44.4 | 179 |
| WEST..... | .86 | .88 | 2.6 | 2.99 | 10.0 | 84 | 86 | 251 | .46 | 39.1 | 40.0 | 141 |
| URBAN/RURAL | | | | | | | | | | | | |
| URBAN..... | 4.56 | 4.66 | 15.7 | 3.44 | 37.3 | 117 | 119 | 393 | 6.58 | 31.8 | 32.5 | 157 |
| RURAL..... | .64 | .65 | 2.1 | 3.34 | 5.1 | 121 | 123 | 400 | .59 | 32.2 | 32.9 | 143 |
| SMSA/NON-SMSA | | | | | | | | | | | | |
| SMSA..... | 4.06 | 4.15 | 14.1 | 3.48 | 32.5 | 119 | 122 | 405 | 6.35 | 30.5 | 31.1 | 155 |
| NON-SMSA..... | 1.14 | 1.16 | 3.7 | 3.25 | 10.0 | 111 | 113 | 359 | .82 | 42.6 | 43.5 | 164 |
| AIA HEATING AND COOLING DEGREE DAY ZONES | | | | | | | | | | | | |
| <2000 CDD AND >7000 HDD..... | .50 | .52 | 1.7 | 3.34 | 3.2 | 154 | 157 | 513 | .32 | 50.8 | 51.9 | 194 |
| <2000 CDD AND 5500-7000 HDD.. | 2.11 | 2.15 | 7.2 | 3.43 | 14.3 | 143 | 146 | 483 | 1.73 | 39.7 | 40.6 | 191 |
| <2000 CDD AND 4000-5499 HDD.. | 1.34 | 1.37 | 4.8 | 3.59 | 10.1 | 125 | 128 | 432 | 3.34 | 20.6 | 21.1 | 128 |
| <2000 CDD AND <4000 HDD..... | .80 | .81 | 2.6 | 3.27 | 9.7 | 80 | 82 | 262 | .55 | 34.3 | 35.1 | 135 |
| >2000 CDD AND <4000 HDD..... | .45 | .46 | 1.5 | 3.35 | 5.2 | 76 | 78 | 248 | 1.23 | 45.0 | 46.0 | 182 |

SEE NOTES AT END OF TABLE

TABLE 2. RESIDENTIAL NATURAL GAS CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | NATURAL GAS | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NATURAL GAS USED: AS MAIN HEATING FUEL | | | | NATURAL GAS USED: NOT AS MAIN HEATING FUEL | | | |
| | TOTAL AMOUNT CONSUMED (TRIL*N CU.FT.) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | AVG PRICE ($ PER THOU CU.-FT.) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU CU.FT.) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU CU.FT.) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) |
| TYPE OF STRUCTURE | | | | | | | | | | | | |
| SINGLE FAMILY DETACHED | | | | | | | | | | | | |
| TOTAL | 3.66 | 3.74 | 12.2 | 3.34 | 27.5 | 129 | 132 | 426 | 2.34 | 47.4 | 48.4 | 213 |
| OWNERS | 3.14 | 3.20 | 10.5 | 3.36 | 23.2 | 131 | 134 | 435 | 2.14 | 48.7 | 49.7 | 218 |
| RENTERS | .52 | .53 | 1.7 | 3.19 | 4.3 | 120 | 122 | 380 | .20 | 33.9 | 34.6 | 159 |
| SINGLE FAMILY ATTACHED | | | | | | | | | | | | |
| TOTAL | .29 | .30 | 1.0 | 3.33 | 2.4 | 117 | 119 | 382 | .37 | 29.0 | 29.6 | 134 |
| OWNERS | .20 | .21 | .7 | 3.46 | 1.6 | 124 | 127 | 424 | .20 | 31.1 | 31.7 | 140 |
| RENTERS | .09 | .09 | .3 | 3.04 | .9 | 103 | 105 | 395 | .17 | 26.6 | 27.2 | 126 |
| 2-4 UNIT BLDG | | | | | | | | | | | | |
| TOTAL | .78 | .80 | 2.9 | 3.70 | 6.5 | 114 | 117 | 413 | 1.34 | 25.7 | 26.2 | 146 |
| OWNERS | .26 | .27 | 1.0 | 3.69 | 1.6 | 159 | 162 | 576 | .38 | 32.7 | 33.4 | 167 |
| RENTERS | .52 | .53 | 1.9 | 3.70 | 5.0 | 100 | 102 | 360 | .97 | 23.0 | 23.5 | 139 |
| 5+ UNIT BLDG | | | | | | | | | | | | |
| TOTAL | .37 | .38 | 1.5 | 3.95 | 4.8 | 62 | 63 | 227 | 3.06 | 23.3 | 23.8 | 121 |
| OWNERS | .05 | .05 | .2 | 3.47 | .6 | 77 | 78 | 264 | .09 | 41.8 | 42.7 | 159 |
| RENTERS | .32 | .33 | 1.3 | 4.03 | 4.2 | 60 | 61 | 222 | 2.97 | 22.8 | 23.2 | 120 |
| MOBILE HOME | .09 | .09 | .3 | 3.05 | 1.1 | 78 | 79 | 236 | .04 | 13.4 | 13.6 | 72 |
| OTHER | .01 | .01 | - | 4.12 | .1 | 102 | 104 | 409 | .01 | 8.7 | 8.9 | 86 |
| NUMBER OF ROOMS | | | | | | | | | | | | |
| ONE TO THREE | .35 | .36 | 1.3 | 3.60 | 4.9 | 63 | 65 | 217 | 1.73 | 22.5 | 22.9 | 112 |
| FOUR | .83 | .84 | 2.9 | 3.55 | 8.1 | 96 | 98 | 332 | 1.82 | 26.3 | 26.8 | 136 |
| FIVE | 1.20 | 1.22 | 4.0 | 3.38 | 10.1 | 114 | 116 | 378 | 1.37 | 33.1 | 33.8 | 156 |
| SIX | 1.13 | 1.15 | 3.8 | 3.36 | 8.8 | 123 | 126 | 408 | 1.06 | 36.7 | 37.5 | 173 |
| SEVEN | .79 | .81 | 2.7 | 3.40 | 5.6 | 138 | 141 | 465 | .46 | 50.9 | 52.0 | 211 |
| EIGHT OR MORE | .91 | .93 | 3.1 | 3.45 | 4.9 | 178 | 182 | 599 | .74 | 46.2 | 47.2 | 250 |

SEE NOTES AT END OF TABLE

TABLE 2. RESIDENTIAL NATURAL GAS CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | NATURAL GAS | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NATURAL GAS USED: AS MAIN HEATING FUEL | | | | NATURAL GAS USED: NOT AS MAIN HEATING FUEL | | | |
| | TOTAL AMOUNT CONSUMED (TRIL'N CU.FT.) | TOTAL AMOUNT CONSUMED (QUAD'N BTU) | TOTAL EXPEND (BIL'N $) | AVG PRICE ($ PER THOU CU.-FT.) | NUMBER OF HOUSEHOLDS (MIL'N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU CU.FT.) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL'N BTU) | AVG EXPEND PER HOUSEHOLD ($) | NUMBER OF HOUSEHOLDS (MIL'N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU CU.FT.) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL'N BTU) | AVG EXPEND PER HOUSEHOLD ($) |
| **NUMBER OF ROOMS AIR CONDITIONED** | | | | | | | | | | | | |
| ALL | 1.54 | 1.58 | 5.1 | 3.29 | 13.0 | 114 | 117 | 372 | 1.40 | 45.9 | 46.9 | 184 |
| SOME | 1.42 | 1.45 | 5.1 | 3.59 | 10.7 | 126 | 128 | 439 | 2.59 | 29.4 | 30.0 | 155 |
| NONE | 2.24 | 2.28 | 7.7 | 3.43 | 18.8 | 114 | 117 | 383 | 3.19 | 27.7 | 28.2 | 145 |
| **YEAR HOUSE BUILT** | | | | | | | | | | | | |
| 1939 OR EARLIER | 2.07 | 2.12 | 7.3 | 3.50 | 15.2 | 130 | 133 | 440 | 4.04 | 24.9 | 25.4 | 140 |
| 1940 TO 1949 | .49 | .50 | 1.7 | 3.46 | 4.4 | 107 | 110 | 366 | .56 | 28.8 | 29.4 | 149 |
| 1950 TO 1959 | 1.09 | 1.11 | 3.7 | 3.43 | 9.1 | 116 | 118 | 393 | .75 | 43.3 | 44.2 | 192 |
| 1960 TO 1964 | .47 | .48 | 1.6 | 3.49 | 4.0 | 107 | 110 | 367 | 1.00 | 39.5 | 40.3 | 167 |
| 1965 TO 1969 | .40 | .41 | 1.3 | 3.31 | 3.7 | 102 | 104 | 333 | .40 | 50.1 | 51.1 | 214 |
| 1970 TO 1974 | .40 | .41 | 1.3 | 3.24 | 3.6 | 107 | 110 | 345 | .36 | 43.2 | 44.1 | 163 |
| 1975 TO 1979 | .28 | .28 | .9 | 3.20 | 2.4 | 115 | 117 | 366 | .07 | 63.5 | 64.8 | 217 |
| **OWN/RENT** | | | | | | | | | | | | |
| OWN | 3.73 | 3.81 | 12.6 | 3.38 | 27.9 | 129 | 132 | 432 | 2.84 | 44.8 | 45.7 | 203 |
| RENT | 1.42 | 1.45 | 5.1 | 3.56 | 14.1 | 94 | 96 | 321 | 4.30 | 23.4 | 23.9 | 125 |
| RENT FREE | .05 | .05 | .1 | 3.19 | .4 | 101 | 103 | 313 | .04 | 26.4 | 27.0 | 177 |
| **1978 FAMILY INCOME** | | | | | | | | | | | | |
| LESS THAN $5,000 | .63 | .64 | 2.2 | 3.42 | 6.1 | 98 | 100 | 327 | .85 | 36.8 | 37.6 | 176 |
| $5,000 TO $9,999 | .83 | .85 | 2.9 | 3.44 | 8.1 | 98 | 100 | 328 | 1.51 | 30.3 | 31.0 | 141 |
| $10,000 TO $14,999 | .85 | .87 | 2.9 | 3.43 | 7.4 | 111 | 113 | 372 | 1.49 | 22.4 | 22.9 | 119 |
| $15,000 TO $19,999 | .65 | .66 | 2.2 | 3.45 | 5.0 | 123 | 125 | 415 | .92 | 31.0 | 31.7 | 156 |
| $20,000 TO $24,999 | .68 | .69 | 2.4 | 3.46 | 5.0 | 131 | 134 | 446 | .97 | 29.1 | 29.7 | 139 |
| $25,000 TO $34,999 | .89 | .91 | 3.0 | 3.38 | 6.7 | 130 | 132 | 431 | .75 | 42.5 | 43.4 | 199 |
| $35,000 OR MORE | .67 | .68 | 2.3 | 3.45 | 4.2 | 152 | 155 | 512 | .68 | 43.1 | 44.0 | 222 |

SEE NOTES AT END OF TABLE

TABLE 2. RESIDENTIAL NATURAL GAS CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | NATURAL GAS | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NATURAL GAS USED: AS MAIN HEATING FUEL | | | | NATURAL GAS USED: NOT AS MAIN HEATING FUEL | | | |
| | TOTAL AMOUNT CONSUMED (TRIL°N CU.FT.) | TOTAL AMOUNT CONSUMED (QUAD°N BTU) | TOTAL EXPEND (BIL°N $) | AVG PRICE ($ PER THOU CU.-FT.) | NUMBER OF HOUSEHOLDS (MIL°N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU CU.FT.) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL°N BTU) | AVG EXPEND PER HOUSEHOLD ($) | NUMBER OF HOUSEHOLDS (MIL°N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU CU.FT.) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL°N BTU) | AVG EXPEND PER HOUSEHOLD ($) |
| TOTAL POOR..... | 0.80 | 0.82 | 2.7 | 3.42 | 7.4 | 102 | 105 | 342 | 1.17 | 37.0 | 37.8 | 179 |
| RACE | | | | | | | | | | | | |
| WHITE..... | 4.49 | 4.59 | 15.3 | 3.42 | 36.8 | 117 | 119 | 392 | 5.92 | 32.2 | 32.9 | 155 |
| BLACK..... | .66 | .68 | 2.3 | 3.50 | 5.2 | 122 | 125 | 418 | 1.03 | 32.4 | 33.1 | 168 |
| OTHER..... | .04 | .04 | .2 | 3.76 | .5 | 75 | 77 | 260 | .22 | 18.7 | 19.1 | 122 |
| AGE OF HEAD | | | | | | | | | | | | |
| 29 OR LESS..... | .94 | .96 | 3.2 | 3.41 | 8.4 | 106 | 108 | 352 | 1.86 | 29.6 | 30.2 | 139 |
| 30 TO 44..... | 1.60 | 1.63 | 5.5 | 3.43 | 12.0 | 127 | 130 | 429 | 2.08 | 31.6 | 32.2 | 154 |
| 45 TO 59..... | 1.30 | 1.33 | 4.5 | 3.45 | 10.3 | 122 | 125 | 415 | 1.34 | 33.1 | 33.8 | 162 |
| 60 AND OVER..... | 1.36 | 1.39 | 4.7 | 3.43 | 11.7 | 110 | 113 | 370 | 1.89 | 33.5 | 34.2 | 171 |
| MARITAL STATUS | | | | | | | | | | | | |
| MARRIED..... | 3.53 | 3.61 | 12.1 | 3.42 | 26.4 | 129 | 131 | 432 | 4.13 | 32.4 | 33.1 | 164 |
| NOT MARRIED..... | 1.67 | 1.71 | 5.8 | 3.44 | 16.0 | 98 | 101 | 332 | 3.04 | 31.1 | 31.7 | 145 |
| FEMALE HEAD... | 1.16 | 1.18 | 4.0 | 3.43 | 11.1 | 99 | 101 | 334 | 1.83 | 33.8 | 34.5 | 156 |
| MALE HEAD..... | .51 | .52 | 1.8 | 3.47 | 4.9 | 97 | 99 | 328 | 1.21 | 26.9 | 27.5 | 128 |
| HOUSEHOLDS WITH CHILDREN | | | | | | | | | | | | |
| YES..... | 2.72 | 2.78 | 9.3 | 3.40 | 19.4 | 135 | 138 | 451 | 3.13 | 33.3 | 34.0 | 164 |
| FEMALE HEAD... | .44 | .45 | 1.5 | 3.43 | 3.4 | 119 | 122 | 399 | .83 | 40.7 | 41.6 | 180 |
| MALE HEAD..... | 2.28 | 2.33 | 7.7 | 3.39 | 15.9 | 139 | 142 | 463 | 2.30 | 30.6 | 31.3 | 158 |
| NO..... | 2.48 | 2.53 | 8.6 | 3.46 | 23.1 | 102 | 104 | 346 | 4.05 | 30.7 | 31.4 | 150 |
| FEMALE HEAD... | .73 | .74 | 2.5 | 3.42 | 7.8 | 90 | 92 | 303 | 1.04 | 27.9 | 28.5 | 135 |
| MALE HEAD..... | 1.75 | 1.79 | 6.1 | 3.48 | 15.3 | 108 | 110 | 367 | 3.01 | 31.7 | 32.4 | 155 |

SEE NOTES AT END OF TABLE

TABLE 2. RESIDENTIAL NATURAL GAS CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | NATURAL GAS | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NATURAL GAS USED: AS MAIN HEATING FUEL | | | | NATURAL GAS USED: NOT AS MAIN HEATING FUEL | | | |
| | TOTAL AMOUNT CONSUMED (TRIL'N CU.FT.) | TOTAL AMOUNT CONSUMED (QUAD'N BTU) | TOTAL EXPEND (BIL'N $) | AVG PRICE ($ PER THOU CU.-FT.) | NUMBER OF HOUSEHOLDS (MIL'N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU CU.FT.) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL'N BTU) | AVG EXPEND PER HOUSEHOLD ($) | NUMBER OF HOUSEHOLDS (MIL'N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU CU.FT.) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL'N BTU) | AVG EXPEND PER HOUSEHOLD ($) |
| **HOUSEHOLD MEMBERS** | | | | | | | | | | | | |
| ONE | 0.81 | 0.82 | 2.8 | 3.43 | 9.3 | 84 | 85 | 282 | 1.40 | 23.2 | 23.7 | 112 |
| TWO | 1.57 | 1.61 | 5.5 | 3.48 | 13.4 | 111 | 113 | 376 | 2.58 | 33.4 | 34.1 | 165 |
| THREE | .96 | .98 | 3.2 | 3.37 | 7.4 | 123 | 126 | 410 | 1.27 | 34.6 | 35.3 | 153 |
| FOUR | .98 | 1.00 | 3.4 | 3.45 | 6.7 | 141 | 144 | 478 | 1.01 | 33.1 | 33.8 | 176 |
| FIVE OR MORE | .88 | .90 | 3.0 | 3.39 | 5.7 | 151 | 154 | 501 | .91 | 35.6 | 36.3 | 182 |
| **NUMBER OF FULL-TIME WAGE EARNERS** | | | | | | | | | | | | |
| NONE | 1.27 | 1.30 | 4.4 | 3.43 | 12.2 | 100 | 102 | 334 | 1.86 | 30.7 | 31.3 | 159 |
| ONE | 2.36 | 2.40 | 8.1 | 3.42 | 18.5 | 121 | 124 | 407 | 3.27 | 33.4 | 34.1 | 158 |
| TWO | 1.32 | 1.35 | 4.5 | 3.43 | 10.1 | 125 | 128 | 423 | 1.66 | 29.6 | 30.2 | 146 |
| THREE | .19 | .20 | .7 | 3.44 | 1.2 | 148 | 151 | 493 | .34 | 33.2 | 33.9 | 166 |
| FOUR OR MORE | .06 | .06 | .2 | 3.62 | .4 | 168 | 172 | 604 | .05 | 39.2 | 40.0 | 168 |
| **FULL-TIME (FT) EMPLOYMENT** | | | | | | | | | | | | |
| HEAD MARRIED | 3.53 | 3.61 | 12.1 | 3.42 | 26.4 | 129 | 131 | 432 | 4.13 | 32.4 | 33.1 | 164 |
| HEAD OR SPOUSE EMPLOYED FT. | 1.87 | 1.91 | 6.4 | 3.44 | 13.4 | 134 | 137 | 452 | 2.21 | 32.1 | 32.7 | 165 |
| BOTH EMPLOYED FT. | 1.05 | 1.08 | 3.6 | 3.40 | 8.2 | 124 | 127 | 417 | 1.06 | 29.2 | 29.8 | 142 |
| NEITHER EMPLOYED FT. | .61 | .62 | 2.1 | 3.42 | 4.8 | 120 | 123 | 400 | .86 | 37.4 | 38.2 | 190 |
| HEAD NOT MARRIED | 1.67 | 1.71 | 5.8 | 3.44 | 16.0 | 98 | 101 | 332 | 3.04 | 31.1 | 31.7 | 145 |
| HEAD EMPLOYED FT. | .79 | .81 | 2.7 | 3.44 | 7.1 | 105 | 107 | 355 | 1.49 | 29.1 | 29.7 | 133 |
| HEAD NOT EMPLOYED FT. | .88 | .90 | 3.0 | 3.44 | 8.9 | 93 | 95 | 313 | 1.56 | 32.9 | 33.6 | 156 |

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY; THE 1979 HOUSEHOLD SCREENER SURVEY.

TABLE 3. TOTAL RESIDENTIAL ELECTRICITY CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980

| HOUSEHOLD CHARACTERISTICS | ELECTRICITY | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | TOTAL AMOUNT CONSUMED (BIL*N KWH) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | AVG PRICE ($ PER KWH) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) |
| TOTAL HOUSEHOLDS | 709 | 2.42 | 32.6 | 0.0459 | 77.5 | 9.1 | 31.2 | 420 |
| WATER HEATING FUEL | | | | | | | | |
| ELECTRICITY | 386 | 1.32 | 14.9 | .0385 | 25.9 | 14.9 | 50.9 | 574 |
| OTHER AND NONE | 323 | 1.10 | 17.7 | .0548 | 51.6 | 6.3 | 21.4 | 343 |
| CENSUS REGION | | | | | | | | |
| NORTHEAST | 115 | .39 | 6.8 | .0588 | 17.2 | 6.7 | 22.7 | 391 |
| NORTH CENTRAL | 174 | .59 | 8.8 | .0506 | 20.7 | 8.4 | 28.7 | 425 |
| SOUTH | 284 | .97 | 12.6 | .0445 | 24.9 | 11.4 | 38.9 | 508 |
| WEST | 136 | .47 | 4.4 | .0321 | 14.7 | 9.3 | 31.7 | 298 |
| URBAN/RURAL | | | | | | | | |
| URBAN | 445 | 1.52 | 21.8 | .0489 | 56.8 | 7.8 | 26.7 | 383 |
| RURAL | 264 | .90 | 10.8 | .0409 | 20.7 | 12.8 | 43.6 | 522 |
| SMSA/NON-SMSA | | | | | | | | |
| SMSA | 436 | 1.49 | 21.3 | .0489 | 53.4 | 8.2 | 27.9 | 400 |
| NON-SMSA | 273 | .93 | 11.2 | .0411 | 24.1 | 11.3 | 38.6 | 465 |
| AIA HEATING AND COOLING DEGREE DAY ZONES | | | | | | | | |
| <2000 CDD AND >7000 HDD | 61 | .21 | 2.6 | .0419 | 6.7 | 9.2 | 31.3 | 385 |
| <2000 CDD AND 5500-7000 HDD | 174 | .59 | 8.3 | .0475 | 21.2 | 8.2 | 28.0 | 390 |
| <2000 CDD AND 4000-5499 HDD | 176 | .60 | 8.3 | .0472 | 20.2 | 8.7 | 29.8 | 412 |
| <2000 CDD AND <4000 HDD | 169 | .58 | 7.3 | .0432 | 17.5 | 9.7 | 33.0 | 418 |
| >2000 CDD AND <4000 HDD | 128 | .44 | 6.1 | .0474 | 11.9 | 10.8 | 36.8 | 511 |

SEE NOTES AT END OF TABLE

TABLE 3. TOTAL RESIDENTIAL ELECTRICITY CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | ELECTRICITY | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | TOTAL AMOUNT CONSUMED (BIL*N KWH) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | AVG PRICE ($ PER KWH) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) |
| TYPE OF STRUCTURE | | | | | | | | |
| SINGLE FAMILY DETACHED | | | | | | | | |
| TOTAL | 527 | 1.80 | 23.9 | 0.0455 | 50.1 | 10.5 | 35.8 | 478 |
| OWNERS | 469 | 1.60 | 21.2 | .0453 | 43.1 | 10.9 | 37.1 | 493 |
| RENTERS | 58 | .20 | 2.7 | .0467 | 7.0 | 8.2 | 28.1 | 384 |
| SINGLE FAMILY ATTACHED | | | | | | | | |
| TOTAL | 27 | .09 | 1.3 | .0482 | 3.3 | 8.2 | 27.8 | 393 |
| OWNERS | 17 | .06 | .8 | .0494 | 2.0 | 8.3 | 28.4 | 411 |
| RENTERS | 10 | .04 | .5 | .0461 | 1.3 | 7.9 | 27.0 | 365 |
| 2-4 UNIT BUILDING | | | | | | | | |
| TOTAL | 49 | .17 | 2.7 | .0549 | 9.3 | 5.3 | 18.2 | 293 |
| OWNERS | 16 | .06 | .9 | .0568 | 2.3 | 7.2 | 24.7 | 411 |
| RENTERS | 33 | .11 | 1.8 | .0540 | 7.0 | 4.7 | 16.1 | 254 |
| 5 OR MORE UNIT BUILDING | | | | | | | | |
| TOTAL | 62 | .21 | 2.9 | .0471 | 10.6 | 5.9 | 20.0 | 276 |
| OWNERS | 12 | .04 | .5 | .0385 | 1.4 | 8.6 | 29.4 | 332 |
| RENTERS | 50 | .17 | 2.5 | .0492 | 9.2 | 5.4 | 18.5 | 267 |
| MOBILE HOME | 43 | .15 | 1.6 | .0378 | 4.1 | 10.6 | 36.3 | 402 |
| OTHER | 1 | - | - | .0711 | .1 | 4.9 | 16.9 | 351 |
| NUMBER OF ROOMS | | | | | | | | |
| ONE TO THREE | 40 | .14 | 2.0 | .0496 | 9.1 | 4.4 | 15.1 | 220 |
| FOUR | 122 | .42 | 5.4 | .0444 | 16.1 | 7.5 | 25.8 | 335 |
| FIVE | 165 | .56 | 7.4 | .0446 | 18.3 | 9.0 | 30.8 | 403 |
| SIX | 159 | .54 | 7.5 | .0469 | 15.7 | 10.2 | 34.7 | 477 |
| SEVEN | 103 | .35 | 4.7 | .0457 | 9.2 | 11.3 | 38.5 | 516 |
| EIGHT OR MORE | 119 | .41 | 5.6 | .0468 | 9.1 | 13.0 | 44.5 | 611 |

SEE NOTES AT END OF TABLE

TABLE 3. TOTAL RESIDENTIAL ELECTRICITY CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | ELECTRICITY | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | TOTAL AMOUNT CONSUMED (BIL*N KWH) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | AVG PRICE ($ PER KWH) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) |
| **NUMBER OF ROOMS AIR CONDITIONED** | | | | | | | | |
| ALL | 277 | 0.95 | 12.7 | 0.0456 | 23.2 | 12.0 | 40.9 | 547 |
| SOME | 166 | .57 | 8.4 | .0506 | 19.4 | 8.6 | 29.3 | 435 |
| NONE | 265 | .91 | 11.5 | .0433 | 35.0 | 7.6 | 25.9 | 328 |
| **YEAR HOUSE BUILT** | | | | | | | | |
| 1939 OR EARLIER | 174 | .59 | 8.7 | .0498 | 25.5 | 6.8 | 23.3 | 340 |
| 1940 TO 1949 | 53 | .18 | 2.6 | .0489 | 6.9 | 7.7 | 26.1 | 374 |
| 1950 TO 1959 | 129 | .44 | 6.2 | .0482 | 14.7 | 8.8 | 30.1 | 424 |
| 1960 TO 1964 | 70 | .24 | 3.3 | .0472 | 7.5 | 9.3 | 31.7 | 439 |
| 1965 TO 1969 | 84 | .29 | 3.6 | .0432 | 7.8 | 10.8 | 36.7 | 465 |
| 1970 TO 1974 | 101 | .34 | 4.3 | .0424 | 8.1 | 12.5 | 42.5 | 528 |
| 1975 TO 1979 | 99 | .34 | 3.9 | .0395 | 7.1 | 14.0 | 47.7 | 552 |
| **OWN/RENT** | | | | | | | | |
| OWN | 549 | 1.87 | 24.8 | .0452 | 52.0 | 10.6 | 36.0 | 477 |
| RENT | 147 | .50 | 7.2 | .0489 | 24.2 | 6.1 | 20.7 | 297 |
| RENT FREE | 13 | .05 | .6 | .0437 | 1.3 | 10.3 | 35.3 | 452 |
| **1978 FAMILY INCOME** | | | | | | | | |
| LESS THAN $5,000 | 64 | .22 | 2.9 | .0458 | 10.6 | 6.0 | 20.6 | 277 |
| $5,000 TO $9,999 | 93 | .32 | 4.5 | .0481 | 14.3 | 6.5 | 22.1 | 312 |
| $10,000 TO $14,999 | 113 | .38 | 5.0 | .0447 | 13.5 | 8.3 | 28.4 | 372 |
| $15,000 TO $19,999 | 99 | .34 | 4.4 | .0449 | 10.1 | 9.8 | 33.5 | 440 |
| $20,000 TO $24,999 | 104 | .36 | 4.8 | .0465 | 9.9 | 10.5 | 35.9 | 489 |
| $25,000 TO $34,999 | 132 | .45 | 5.9 | .0449 | 11.3 | 11.6 | 39.7 | 522 |
| $35,000 OR MORE | 105 | .36 | 4.9 | .0471 | 7.8 | 13.5 | 46.0 | 635 |

SEE NOTES AT END OF TABLE

TABLE 3. TOTAL RESIDENTIAL ELECTRICITY CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | ELECTRICITY | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | TOTAL AMOUNT CONSUMED (BIL*N KWH) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | AVG PRICE ($ PER KWH) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) |
| TOTAL POOR | 87 | 0.30 | 3.9 | 0.0455 | 12.9 | 6.7 | 22.9 | 306 |
| RACE | | | | | | | | |
| WHITE | 650 | 2.22 | 29.5 | .0453 | 68.8 | 9.5 | 32.2 | 429 |
| BLACK | 54 | .18 | 2.8 | .0529 | 7.9 | 6.8 | 23.2 | 359 |
| OTHER | 6 | .02 | .3 | .0455 | .9 | 6.5 | 22.1 | 295 |
| AGE OF HEAD | | | | | | | | |
| 29 OR LESS | 118 | .40 | 5.4 | .0455 | 15.5 | 7.7 | 26.1 | 348 |
| 30 TO 44 | 229 | .78 | 10.5 | .0459 | 21.8 | 10.5 | 35.8 | 482 |
| 45 TO 59 | 202 | .69 | 9.3 | .0458 | 18.8 | 10.7 | 36.6 | 492 |
| 60 AND OVER | 160 | .54 | 7.4 | .0464 | 21.4 | 7.4 | 25.4 | 346 |
| MARITAL STATUS | | | | | | | | |
| MARRIED | 537 | 1.83 | 24.4 | .0455 | 50.3 | 10.7 | 36.4 | 486 |
| NOT MARRIED | 172 | .59 | 8.1 | .0472 | 27.2 | 6.3 | 21.6 | 298 |
| FEMALE HEAD | 117 | .40 | 5.5 | .0472 | 18.1 | 6.5 | 22.0 | 305 |
| MALE HEAD | 55 | .19 | 2.6 | .0472 | 9.1 | 6.1 | 20.7 | 285 |
| HOUSEHOLDS WITH CHILDREN | | | | | | | | |
| YES | 381 | 1.30 | 17.7 | .0465 | 34.9 | 10.9 | 37.2 | 507 |
| FEMALE HEAD | 51 | .17 | 2.3 | .0462 | 5.9 | 8.5 | 29.1 | 394 |
| MALE HEAD | 331 | 1.13 | 15.4 | .0465 | 29.0 | 11.4 | 38.9 | 530 |
| NO | 328 | 1.12 | 14.8 | .0453 | 42.6 | 7.7 | 26.3 | 349 |
| FEMALE HEAD | 68 | .23 | 3.3 | .0479 | 12.4 | 5.5 | 18.8 | 264 |
| MALE HEAD | 259 | .88 | 11.6 | .0446 | 30.2 | 8.6 | 29.3 | 383 |
| HOUSEHOLD MEMBERS | | | | | | | | |
| ONE | 80 | .27 | 3.8 | .0474 | 15.4 | 5.2 | 17.8 | 247 |
| TWO | 240 | .82 | 10.6 | .0444 | 26.8 | 8.9 | 30.5 | 397 |
| THREE | 129 | .44 | 6.0 | .0463 | 13.2 | 9.8 | 33.3 | 453 |
| FOUR | 138 | .47 | 6.4 | .0463 | 11.9 | 11.5 | 39.3 | 533 |
| FIVE OR MORE | 123 | .42 | 5.8 | .0470 | 10.2 | 12.1 | 41.1 | 567 |

SEE NOTES AT END OF TABLE

TABLE 3. TOTAL RESIDENTIAL ELECTRICITY CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | ELECTRICITY | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | TOTAL AMOUNT CONSUMED (BIL'N KWH) | TOTAL AMOUNT CONSUMED (QUAD'N BTU) | TOTAL EXPEND (BIL'N $) | AVG PRICE ($ PER KWH) | NUMBER OF HOUSEHOLDS (MIL'N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL'N BTU) | AVG EXPEND PER HOUSEHOLD ($) |
| NUMBER OF FULL-TIME WAGE EARNERS | | | | | | | | |
| NONE | 146 | 0.50 | 6.7 | 0.0457 | 21.5 | 6.8 | 23.2 | 311 |
| ONE | 328 | 1.12 | 15.1 | .0460 | 34.2 | 9.6 | 32.7 | 441 |
| TWO | 201 | .68 | 9.1 | .0453 | 18.9 | 10.6 | 36.3 | 481 |
| THREE | 28 | .09 | 1.4 | .0489 | 2.3 | 12.0 | 40.9 | 586 |
| FOUR OR MORE | 6 | .02 | .3 | .0562 | .6 | 10.6 | 36.2 | 597 |
| FULL-TIME (FT) EMPLOYMENT | | | | | | | | |
| HEAD MARRIED | 537 | 1.83 | 24.4 | .0455 | 50.3 | 10.7 | 36.4 | 486 |
| HEAD OR SPOUSE EMPLOYED FT | 286 | .98 | 13.1 | .0459 | 25.5 | 11.2 | 38.2 | 514 |
| BOTH EMPLOYED FT | 165 | .56 | 7.5 | .0453 | 14.9 | 11.0 | 37.6 | 500 |
| NEITHER EMPLOYED FT | 86 | .29 | 3.8 | .0447 | 9.8 | 8.8 | 30.0 | 392 |
| HEAD NOT MARRIED | 172 | .59 | 8.1 | .0472 | 27.2 | 6.3 | 21.6 | 298 |
| HEAD EMPLOYED FT | 88 | .30 | 4.1 | .0471 | 12.6 | 6.9 | 23.7 | 327 |
| HEAD NOT EMPLOYED FT | 84 | .29 | 4.0 | .0473 | 14.6 | 5.8 | 19.7 | 273 |

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

TABLE 4. RESIDENTIAL ELECTRICITY CONSUMPTION AND EXPENDITURES FOR HOUSEHOLDS THAT USE ELECTRICITY AS MAIN HEATING FUEL - APRIL 1979 THROUGH MARCH 1980

| HOUSEHOLD CHARACTERISTICS | ELECTRICITY USED: AS MAIN HEATING FUEL | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ELECTRICITY USED: FOR AIR CONDITIONING | | | | | ELECTRICITY USED: NOT FOR AIR CONDITIONING | | | | |
| | NUMBER OF HOUSEHOLDS (MIL'N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL'N BTU) | AVG EXPEND PER HOUSEHOLD ($) | AVG PRICE ($ PER KWH) | NUMBER OF HOUSEHOLDS (MIL'N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL'N BTU) | AVG EXPEND PER HOUSEHOLD ($) | AVG PRICE ($ PER KWH) |
| TOTAL HOUSEHOLDS | 8.42 | 17.4 | 59.4 | 689 | 0.0396 | 4.40 | 18.5 | 63.0 | 530 | 0.0287 |
| WATER HEATING FUEL | | | | | | | | | | |
| ELECTRICITY | 6.94 | 19.2 | 65.6 | 738 | .0384 | 4.13 | 19.4 | 66.1 | 547 | .0282 |
| OTHER AND NONE | 1.48 | 8.9 | 30.2 | 460 | .0520 | .27 | 4.7 | 15.9 | 264 | .0568 |
| CENSUS REGION | | | | | | | | | | |
| NORTHEAST | .40 | 16.0 | 54.7 | 686 | .0428 | 1.29 | 13.7 | 46.8 | 526 | .0384 |
| NORTH CENTRAL | .50 | 21.9 | 74.7 | 868 | .0397 | .44 | 20.1 | 68.6 | 796 | .0396 |
| SOUTH | 6.80 | 17.0 | 57.9 | 706 | .0416 | .72 | 16.3 | 55.5 | 603 | .0371 |
| WEST | .73 | 19.0 | 64.7 | 412 | .0218 | 1.96 | 22.0 | 75.2 | 445 | .0202 |
| URBAN/RURAL | | | | | | | | | | |
| URBAN | 5.76 | 15.3 | 52.1 | 618 | .0404 | 2.19 | 14.7 | 50.3 | 462 | .0314 |
| RURAL | 2.67 | 22.0 | 75.0 | 843 | .0384 | 2.21 | 22.2 | 75.6 | 596 | .0269 |
| SMSA/NON-SMSA | | | | | | | | | | |
| SMSA | 5.94 | 16.0 | 54.7 | 656 | .0409 | 1.79 | 16.9 | 57.8 | 486 | .0287 |
| NON-SMSA | 2.48 | 20.7 | 70.5 | 768 | .0372 | 2.62 | 19.5 | 66.6 | 559 | .0287 |
| AIA HEATING AND COOLING DEGREE DAY ZONES | | | | | | | | | | |
| <2000 CDD AND >7000 HDD | .12 | 19.1 | 65.3 | 640 | .0334 | 1.22 | 15.3 | 52.1 | 470 | .0308 |
| <2000 CDD AND 5500-7000 HDD | .67 | 23.4 | 79.9 | 771 | .0329 | 1.06 | 21.3 | 72.7 | 622 | .0292 |
| <2000 CDD AND 4000-5499 HDD | .87 | 19.3 | 65.8 | 624 | .0324 | 1.45 | 22.2 | 75.7 | 544 | .0245 |
| <2000 CDD AND <4000 HDD | 3.17 | 17.9 | 61.2 | 665 | .0370 | .50 | 12.1 | 41.3 | 496 | .0410 |
| >2000 CDD AND <4000 HDD | 3.60 | 15.3 | 52.2 | 713 | .0466 | .17 | 10.9 | 37.4 | 366 | .0334 |

SEE NOTES AT END OF TABLE

TABLE 4. RESIDENTIAL ELECTRICITY CONSUMPTION AND EXPENDITURES FOR HOUSEHOLDS THAT USE ELECTRICITY AS MAIN HEATING FUEL - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | ELECTRICITY USED: AS MAIN HEATING FUEL | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ELECTRICITY USED: FOR AIR CONDITIONING | | | | | ELECTRICITY USED: NOT FOR AIR CONDITIONING | | | | |
| | NUMBER OF HOUSEHOLDS (MIL'N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL'N BTU) | AVG EXPEND PER HOUSEHOLD ($) | AVG PRICE ($ PER KWH) | NUMBER OF HOUSEHOLDS (MIL'N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL'N BTU) | AVG EXPEND PER HOUSEHOLD ($) | AVG PRICE ($ PER KWH) |
| TYPE OF STRUCTURE | | | | | | | | | | |
| SINGLE FAMILY DETACHED | | | | | | | | | | |
| TOTAL | 4.72 | 21.3 | 72.7 | 852 | 0.0400 | 2.34 | 23.0 | 78.4 | 652 | 0.0284 |
| OWNERS | 4.36 | 21.4 | 73.2 | 861 | .0402 | 2.10 | 23.6 | 80.4 | 664 | .0281 |
| RENTERS | .37 | 19.7 | 67.2 | 742 | .0377 | .24 | 17.6 | 60.1 | 552 | .0313 |
| SINGLE FAMILY ATTACHED | | | | | | | | | | |
| TOTAL | .21 | 21.0 | 71.7 | 697 | .0331 | .11 | 10.4 | 35.3 | 455 | .0439 |
| OWNERS | .04 | 32.1 | 109.4 | 911 | .0284 | - | - | - | - | - |
| RENTERS | .17 | 18.2 | 62.0 | 641 | .0353 | .11 | 10.4 | 35.3 | 455 | .0439 |
| 2-4 UNIT BUILDING | | | | | | | | | | |
| TOTAL | .72 | 12.8 | 43.6 | 599 | .0469 | .38 | 10.1 | 34.6 | 277 | .0273 |
| OWNERS | .23 | 13.6 | 46.3 | 567 | .0417 | .05 | 7.6 | 25.9 | 292 | .0384 |
| RENTERS | .49 | 12.4 | 42.4 | 614 | .0495 | .33 | 10.5 | 35.9 | 275 | .0261 |
| 5 OR MORE UNIT BUILDING | | | | | | | | | | |
| TOTAL | 2.28 | 10.5 | 35.8 | 406 | .0387 | 1.07 | 11.5 | 39.4 | 393 | .0340 |
| OWNERS | .16 | 10.2 | 34.8 | 201 | .0197 | .44 | 12.8 | 43.6 | 461 | .0361 |
| RENTERS | 2.12 | 10.5 | 35.9 | 422 | .0402 | .63 | 10.7 | 36.4 | 345 | .0323 |
| MOBILE HOME | .46 | 17.7 | 60.3 | 572 | .0324 | .49 | 20.5 | 70.0 | 458 | .0223 |
| OTHER | .03 | 8.5 | 29.0 | 396 | .0465 | - | - | - | - | - |
| NUMBER OF ROOMS | | | | | | | | | | |
| ONE TO THREE | 1.33 | 8.3 | 28.5 | 371 | .0444 | .62 | 11.8 | 40.2 | 351 | .0298 |
| FOUR | 2.30 | 13.4 | 45.9 | 541 | .0402 | 1.43 | 15.6 | 53.3 | 451 | .0289 |
| FIVE | 1.81 | 18.4 | 62.6 | 719 | .0392 | 1.27 | 17.0 | 57.9 | 503 | .0296 |
| SIX | 1.57 | 20.5 | 70.0 | 830 | .0405 | .44 | 24.3 | 83.1 | 738 | .0303 |
| SEVEN | .68 | 23.6 | 80.4 | 930 | .0395 | .35 | 33.7 | 115.0 | 817 | .0242 |
| EIGHT OR MORE | .74 | 31.4 | 107.0 | 1131 | .0361 | .30 | 25.8 | 88.0 | 742 | .0288 |

SEE NOTES AT END OF TABLE

TABLE 4. RESIDENTIAL ELECTRICITY CONSUMPTION AND EXPENDITURES FOR HOUSEHOLDS THAT USE ELECTRICITY AS MAIN HEATING FUEL - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | ELECTRICITY USED: AS MAIN HEATING FUEL | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ELECTRICITY USED: FOR AIR CONDITIONING | | | | | ELECTRICITY USED: NOT FOR AIR CONDITIONING | | | | |
| | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) | AVG PRICE ($ PER KWH) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) | AVG PRICE ($ PER KWH) |
| NUMBER OF ROOMS AIR CONDITIONED | | | | | | | | | | |
| ALL | 6.43 | 17.5 | 59.8 | 709 | 0.0405 | - | - | - | - | - |
| SOME | 2.00 | 17.0 | 58.1 | 624 | .0367 | - | - | - | - | - |
| NONE | - | - | - | - | - | 4.40 | 18.5 | 63.0 | 530 | 0.0287 |
| YEAR HOUSE BUILT | | | | | | | | | | |
| 1939 OR EARLIER | .31 | 18.5 | 63.1 | 570 | .0308 | .55 | 22.5 | 76.6 | 510 | .0227 |
| 1940 TO 1949 | .28 | 22.8 | 77.8 | 800 | .0351 | .18 | 12.8 | 43.6 | 411 | .0322 |
| 1950 TO 1959 | 1.11 | 13.8 | 47.0 | 599 | .0434 | .48 | 19.4 | 66.1 | 456 | .0235 |
| 1960 TO 1964 | 1.16 | 14.4 | 49.2 | 592 | .0411 | .36 | 17.8 | 60.8 | 631 | .0354 |
| 1965 TO 1969 | 2.18 | 15.8 | 54.0 | 638 | .0403 | .44 | 18.0 | 61.5 | 491 | .0273 |
| 1970 TO 1974 | 1.76 | 19.6 | 66.8 | 764 | .0390 | .85 | 17.9 | 61.1 | 567 | .0317 |
| 1975 TO 1979 | 1.63 | 20.6 | 70.1 | 811 | .0394 | 1.54 | 18.0 | 61.6 | 540 | .0299 |
| OWN/RENT | | | | | | | | | | |
| OWN | 5.14 | 20.7 | 70.6 | 812 | .0392 | 2.96 | 21.3 | 72.6 | 602 | .0283 |
| RENT | 3.08 | 11.9 | 40.6 | 489 | .0411 | 1.37 | 12.3 | 41.8 | 371 | .0303 |
| RENT FREE | .21 | 17.3 | 59.0 | 608 | .0351 | .07 | 21.2 | 72.4 | 546 | .0257 |
| 1978 FAMILY INCOME | | | | | | | | | | |
| LESS THAN $5,000 | .62 | 11.9 | 40.5 | 490 | .0413 | .66 | 17.7 | 60.4 | 420 | .0237 |
| $5,000 TO $9,999 | 1.49 | 12.2 | 41.8 | 511 | .0417 | .66 | 15.2 | 51.8 | 445 | .0293 |
| $10,000 TO $14,999 | 1.45 | 16.4 | 56.0 | 647 | .0394 | .77 | 18.1 | 61.7 | 502 | .0278 |
| $15,000 TO $19,999 | 1.31 | 17.3 | 59.0 | 698 | .0404 | .84 | 17.3 | 59.2 | 530 | .0306 |
| $20,000 TO $24,999 | 1.34 | 18.0 | 61.3 | 702 | .0391 | .44 | 20.2 | 69.0 | 607 | .0300 |
| $25,000 TO $34,999 | 1.25 | 21.5 | 73.3 | 850 | .0395 | .80 | 21.9 | 74.6 | 630 | .0288 |
| $35,000 OR MORE | 1.05 | 23.5 | 80.2 | 887 | .0377 | .23 | 20.4 | 69.5 | 676 | .0332 |

SEE NOTES AT END OF TABLE

TABLE 4. RESIDENTIAL ELECTRICITY CONSUMPTION AND EXPENDITURES FOR HOUSEHOLDS THAT USE ELECTRICITY AS MAIN HEATING FUEL - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | ELECTRICITY USED: AS MAIN HEATING FUEL | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ELECTRICITY USED: FOR AIR CONDITIONING | | | | | ELECTRICITY USED: NOT FOR AIR CONDITIONING | | | | |
| | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) | AVG PRICE ($ PER KWH) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) | AVG PRICE ($ PER KWH) |
| TOTAL POOR | 0.87 | 13.4 | 45.9 | 541 | 0.0403 | 0.72 | 18.8 | 64.0 | 436 | 0.0232 |
| RACE | | | | | | | | | | |
| WHITE | 8.05 | 17.4 | 59.2 | 689 | .0397 | 4.15 | 19.0 | 64.8 | 538 | .0284 |
| BLACK | .35 | 18.2 | 62.0 | 724 | .0398 | .15 | 9.3 | 31.9 | 455 | .0488 |
| OTHER | .03 | 19.0 | 64.8 | 294 | .0154 | .10 | 10.8 | 36.8 | 272 | .0252 |
| AGE OF HEAD | | | | | | | | | | |
| 29 OR LESS | 2.02 | 14.7 | 50.1 | 563 | .0383 | 1.29 | 14.1 | 48.2 | 428 | .0303 |
| 30 TO 44 | 2.34 | 19.9 | 67.8 | 788 | .0397 | 1.33 | 19.5 | 66.7 | 594 | .0304 |
| 45 TO 59 | 1.97 | 19.7 | 67.1 | 796 | .0405 | .82 | 23.4 | 80.0 | 656 | .0280 |
| 60 AND OVER | 2.09 | 15.1 | 51.6 | 599 | .0396 | .96 | 18.5 | 63.2 | 467 | .0252 |
| MARITAL STATUS | | | | | | | | | | |
| MARRIED | 5.55 | 20.0 | 68.3 | 788 | .0394 | 2.46 | 21.5 | 73.2 | 598 | .0279 |
| NOT MARRIED | 2.87 | 12.3 | 42.1 | 498 | .0404 | 1.94 | 14.7 | 50.2 | 444 | .0302 |
| FEMALE HEAD | 1.68 | 13.4 | 45.8 | 532 | .0396 | 1.04 | 16.1 | 54.8 | 473 | .0295 |
| MALE HEAD | 1.19 | 10.8 | 36.8 | 450 | .0418 | .90 | 13.1 | 44.8 | 410 | .0312 |
| HOUSEHOLDS WITH CHILDREN | | | | | | | | | | |
| YES | 3.19 | 22.2 | 75.8 | 879 | .0396 | 1.44 | 21.5 | 73.3 | 627 | .0292 |
| FEMALE HEAD | .50 | 19.4 | 66.2 | 746 | .0385 | .36 | 18.1 | 61.7 | 606 | .0335 |
| MALE HEAD | 2.69 | 22.7 | 77.6 | 904 | .0397 | 1.08 | 22.6 | 77.2 | 634 | .0280 |
| NO | 5.23 | 14.5 | 49.3 | 573 | .0397 | 2.96 | 17.0 | 58.0 | 482 | .0284 |
| FEMALE HEAD | 1.20 | 11.3 | 38.4 | 450 | .0400 | .68 | 15.0 | 51.1 | 403 | .0269 |
| MALE HEAD | 4.03 | 15.4 | 52.6 | 610 | .0396 | 2.28 | 17.6 | 60.1 | 506 | .0287 |

SEE NOTES AT END OF TABLE

TABLE 4. RESIDENTIAL ELECTRICITY CONSUMPTION AND EXPENDITURES FOR HOUSEHOLDS THAT USE ELECTRICITY AS MAIN HEATING FUEL - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | ELECTRICITY USED: AS MAIN HEATING FUEL | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ELECTRICITY USED: FOR AIR CONDITIONING | | | | | ELECTRICITY USED: NOT FOR AIR CONDITIONING | | | | |
| | NUMBER OF HOUSEHOLDS (MIL'N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL'N BTU) | AVG EXPEND PER HOUSEHOLD ($) | AVG PRICE ($ PER KWH) | NUMBER OF HOUSEHOLDS (MIL'N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL'N BTU) | AVG EXPEND PER HOUSEHOLD ($) | AVG PRICE ($ PER KWH) |
| **HOUSEHOLD MEMBERS** | | | | | | | | | | |
| ONE | 1.75 | 9.6 | 32.6 | 403 | 0.0422 | 1.03 | 15.0 | 51.1 | 394 | 0.0263 |
| TWO | 3.51 | 16.4 | 56.1 | 641 | .0391 | 1.99 | 18.1 | 61.7 | 537 | .0297 |
| THREE | 1.25 | 22.1 | 75.3 | 856 | .0388 | .55 | 17.0 | 58.1 | 527 | .0309 |
| FOUR | 1.02 | 22.7 | 77.4 | 876 | .0386 | .53 | 24.2 | 82.5 | 685 | .0283 |
| FIVE OR MORE | .89 | 23.9 | 81.6 | 991 | .0414 | .30 | 25.6 | 87.2 | 676 | .0265 |
| **NUMBER OF FULL-TIME WAGE EARNERS** | | | | | | | | | | |
| NONE | 1.87 | 14.1 | 48.0 | 558 | .0397 | 1.25 | 18.4 | 62.7 | 467 | .0254 |
| ONE | 4.10 | 17.4 | 59.3 | 696 | .0400 | 2.01 | 18.4 | 62.7 | 568 | .0309 |
| TWO | 2.36 | 19.6 | 66.8 | 759 | .0388 | 1.12 | 18.5 | 63.2 | 529 | .0286 |
| THREE | .08 | 32.5 | 110.8 | 1352 | .0416 | .02 | 32.2 | 109.9 | 553 | .0172 |
| FOUR OR MORE | .01 | 17.5 | 59.9 | 675 | .0385 | - | - | - | - | - |
| **FULL-TIME (FT) EMPLOYMENT** | | | | | | | | | | |
| HEAD MARRIED | 5.55 | 20.0 | 68.3 | 788 | .0394 | 2.46 | 21.5 | 73.2 | 598 | .0279 |
| HEAD OR SPOUSE EMPLOYED FT | 2.77 | 20.6 | 70.2 | 806 | .0391 | 1.21 | 22.3 | 76.1 | 667 | .0299 |
| BOTH EMPLOYED FT | 1.73 | 20.6 | 70.1 | 795 | .0387 | .67 | 21.6 | 73.8 | 561 | .0259 |
| NEITHER EMPLOYED FT | 1.05 | 17.6 | 60.1 | 728 | .0413 | .58 | 19.5 | 66.5 | 495 | .0254 |
| HEAD NOT MARRIED | 2.87 | 12.3 | 42.1 | 498 | .0404 | 1.94 | 14.7 | 50.2 | 444 | .0302 |
| HEAD EMPLOYED FT | 1.70 | 12.4 | 42.4 | 517 | .0415 | 1.14 | 13.3 | 45.5 | 436 | .0327 |
| HEAD NOT EMPLOYED FT | 1.17 | 12.2 | 41.6 | 471 | .0387 | .81 | 16.6 | 56.7 | 455 | .0274 |

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

TABLE 5. RESIDENTIAL ELECTRICITY CONSUMPTION AND EXPENDITURES FOR HOUSEHOLDS THAT DO NOT USE ELECTRICITY AS MAIN HEATING FUEL - APRIL 1979 THROUGH MARCH 1980

| HOUSEHOLD CHARACTERISTICS | ELECTRICITY USED: NOT AS MAIN HEATING FUEL | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ELECTRICITY USED: FOR AIR CONDITIONING | | | | | ELECTRICITY USED: NOT FOR AIR CONDITIONING | | | | |
| | NUMBER OF HOUSEHOLDS (MIL'N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL'N BTU) | AVG EXPEND PER HOUSEHOLD ($) | AVG PRICE ($ PER KWH) | NUMBER OF HOUSEHOLDS (MIL'N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL'N BTU) | AVG EXPEND PER HOUSEHOLD ($) | AVG PRICE ($ PER KWH) |
| TOTAL HOUSEHOLDS | 33.0 | 8.71 | 29.7 | 447 | 0.0513 | 31.7 | 6.12 | 20.9 | 305 | 0.0499 |
| WATER HEATING FUEL | | | | | | | | | | |
| ELECTRICITY | 7.0 | 12.83 | 43.8 | 580 | .0452 | 7.8 | 10.56 | 36.0 | 436 | .0412 |
| OTHER AND NONE | 25.9 | 7.59 | 25.9 | 411 | .0542 | 23.9 | 4.68 | 16.0 | 263 | .0562 |
| CENSUS REGION | | | | | | | | | | |
| NORTHEAST | 7.1 | 6.78 | 23.1 | 449 | .0663 | 8.5 | 5.05 | 17.2 | 309 | .0611 |
| NORTH CENTRAL | 11.4 | 8.75 | 29.9 | 451 | .0515 | 8.4 | 6.49 | 22.1 | 343 | .0528 |
| SOUTH | 10.8 | 10.42 | 35.5 | 487 | .0467 | 6.5 | 6.73 | 23.0 | 327 | .0486 |
| WEST | 3.6 | 7.21 | 24.6 | 312 | .0434 | 8.4 | 6.37 | 21.7 | 247 | .0388 |
| URBAN/RURAL | | | | | | | | | | |
| URBAN | 25.7 | 7.97 | 27.2 | 421 | .0528 | 23.2 | 5.17 | 17.6 | 274 | .0531 |
| RURAL | 7.3 | 11.30 | 38.5 | 538 | .0476 | 8.5 | 8.71 | 29.7 | 389 | .0447 |
| SMSA/NON-SMSA | | | | | | | | | | |
| SMSA | 23.4 | 8.06 | 27.5 | 432 | .0535 | 22.3 | 5.49 | 18.7 | 291 | .0530 |
| NON-SMSA | 9.6 | 10.28 | 35.1 | 485 | .0472 | 9.4 | 7.61 | 26.0 | 339 | .0445 |
| AIA HEATING AND COOLING DEGREE DAY ZONES | | | | | | | | | | |
| <2000 CDD AND >7000 HDD | 2.1 | 8.61 | 29.4 | 431 | .0501 | 3.2 | 6.89 | 23.5 | 312 | .0454 |
| <2000 CDD AND 5500-7000 HDD | 8.7 | 8.00 | 27.3 | 417 | .0522 | 10.8 | 6.13 | 20.9 | 321 | .0523 |
| <2000 CDD AND 4000-5499 HDD | 10.4 | 7.95 | 27.1 | 459 | .0578 | 7.5 | 5.97 | 20.4 | 297 | .0497 |
| <2000 CDD AND <4000 HDD | 6.2 | 9.52 | 32.5 | 433 | .0455 | 7.6 | 6.16 | 21.0 | 296 | .0480 |
| >2000 CDD AND <4000 HDD | 5.5 | 10.39 | 35.4 | 493 | .0474 | 2.6 | 5.44 | 18.6 | 283 | .0519 |

SEE NOTES AT END OF TABLE

TABLE 5. RESIDENTIAL ELECTRICITY CONSUMPTION AND EXPENDITURES FOR HOUSEHOLDS THAT DO NOT USE ELECTRICITY AS MAIN HEATING FUEL - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | ELECTRICITY USED: NOT AS MAIN HEATING FUEL | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ELECTRICITY USED: FOR AIR CONDITIONING | | | | | ELECTRICITY USED: NOT FOR AIR CONDITIONING | | | | |
| | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) | AVG PRICE ($ PER KWH) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) | AVG PRICE ($ PER KWH) |
| **TYPE OF STRUCTURE** | | | | | | | | | | |
| SINGLE FAMILY DETACHED | | | | | | | | | | |
| TOTAL | 23.1 | 9.77 | 33.3 | 491 | 0.0502 | 20.0 | 7.34 | 25.0 | 353 | 0.0481 |
| OWNERS | 20.8 | 9.90 | 33.8 | 499 | .0504 | 15.9 | 7.57 | 25.8 | 361 | .0477 |
| RENTERS | 2.3 | 8.62 | 29.4 | 423 | .0491 | 4.1 | 6.46 | 22.0 | 321 | .0497 |
| SINGLE FAMILY ATTACHED | | | | | | | | | | |
| TOTAL | 1.6 | 7.84 | 26.8 | 438 | .0559 | 1.4 | 6.38 | 21.8 | 289 | .0453 |
| OWNERS | 1.1 | 8.11 | 27.7 | 464 | .0573 | .9 | 7.44 | 25.4 | 326 | .0438 |
| RENTERS | .6 | 7.34 | 25.0 | 388 | .0529 | .5 | 4.28 | 14.6 | 215 | .0502 |
| 2-4 UNIT BUILDING | | | | | | | | | | |
| TOTAL | 3.3 | 5.91 | 20.2 | 345 | .0584 | 5.1 | 3.58 | 12.2 | 219 | .0613 |
| OWNERS | 1.0 | 7.58 | 25.9 | 476 | .0628 | 1.0 | 5.35 | 18.3 | 309 | .0577 |
| RENTERS | 2.0 | 5.03 | 17.2 | 276 | .0549 | 4.2 | 3.17 | 10.8 | 199 | .0628 |
| 5 OR MORE UNIT BUILDING | | | | | | | | | | |
| TOTAL | 3.4 | 4.12 | 14.1 | 254 | .0617 | 3.9 | 3.10 | 10.6 | 186 | .0600 |
| OWNERS | .3 | 7.22 | 24.6 | 349 | .0483 | .6 | 5.62 | 19.2 | 262 | .0466 |
| RENTERS | 3.2 | 3.87 | 13.2 | 247 | .0637 | 3.3 | 2.66 | 9.1 | 172 | .0649 |
| MOBILE HOME | 1.8 | 9.42 | 32.1 | 430 | .0456 | 1.4 | 6.17 | 21.0 | 287 | .0465 |
| OTHER | .1 | 4.40 | 15.0 | 390 | .0888 | - | 1.16 | 3.9 | 112 | .0970 |
| **NUMBER OF ROOMS** | | | | | | | | | | |
| ONE TO THREE | 3.0 | 3.57 | 12.2 | 209 | .0586 | 4.2 | 2.70 | 9.2 | 159 | .0590 |
| FOUR | 5.1 | 6.80 | 23.2 | 345 | .0507 | 7.3 | 4.64 | 15.8 | 241 | .0519 |
| FIVE | 7.4 | 8.18 | 27.9 | 408 | .0499 | 7.8 | 6.37 | 21.7 | 308 | .0484 |
| SIX | 7.8 | 9.63 | 32.9 | 483 | .0501 | 5.9 | 7.06 | 24.1 | 355 | .0502 |
| SEVEN | 4.6 | 9.83 | 33.5 | 513 | .0522 | 3.5 | 8.61 | 29.4 | 411 | .0477 |
| EIGHT OR MORE | 5.0 | 12.08 | 41.2 | 636 | .0527 | 3.1 | 8.98 | 30.7 | 432 | .0481 |

SEE NOTES AT END OF TABLE

TABLE 5. RESIDENTIAL ELECTRICITY CONSUMPTION AND EXPENDITURES FOR HOUSEHOLDS THAT DO NOT USE ELECTRICITY AS MAIN HEATING FUEL - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | ELECTRICITY USED: NOT AS MAIN HEATING FUEL | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ELECTRICITY USED: FOR AIR CONDITIONING | | | | | ELECTRICITY USED: NOT FOR AIR CONDITIONING | | | | |
| | NUMBER OF HOUSEHOLDS (MIL.N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL.N BTU) | AVG EXPEND PER HOUSEHOLD ($) | AVG PRICE ($ PER KWH) | NUMBER OF HOUSEHOLDS (MIL.N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL.N BTU) | AVG EXPEND PER HOUSEHOLD ($) | AVG PRICE ($ PER KWH) |
| NUMBER OF ROOMS AIR CONDITIONED | | | | | | | | | | |
| ALL | 15.7 | 9.93 | 33.9 | 486 | 0.0490 | 1.0 | 8.60 | 29.3 | 454 | 0.0529 |
| SOME | 17.2 | 7.59 | 25.9 | 412 | .0542 | .1 | 11.81 | 40.3 | 578 | .0490 |
| NONE | - | - | - | - | - | 30.6 | 6.02 | 20.5 | 299 | .0497 |
| YEAR HOUSE BUILT | | | | | | | | | | |
| 1939 OR EARLIER | 9.9 | 7.13 | 24.3 | 392 | .0550 | 14.7 | 5.79 | 19.8 | 294 | .0507 |
| 1940 TO 1949 | 3.2 | 8.57 | 29.2 | 440 | .0513 | 3.3 | 5.15 | 17.6 | 269 | .0523 |
| 1950 TO 1959 | 7.3 | 9.52 | 32.5 | 488 | .0513 | 5.8 | 6.06 | 20.7 | 307 | .0506 |
| 1960 TO 1964 | 3.4 | 9.09 | 31.0 | 473 | .0520 | 2.6 | 6.11 | 20.8 | 300 | .0491 |
| 1965 TO 1969 | 3.0 | 8.68 | 29.6 | 437 | .0503 | 2.2 | 7.05 | 24.1 | 323 | .0458 |
| 1970 TO 1974 | 3.7 | 9.71 | 33.1 | 461 | .0475 | 1.8 | 8.48 | 28.9 | 412 | .0486 |
| 1975 TO 1979 | 2.4 | 10.88 | 37.1 | 513 | .0471 | 1.5 | 7.61 | 26.0 | 346 | .0455 |
| OWN/RENT | | | | | | | | | | |
| OWN | 24.5 | 9.70 | 33.1 | 492 | .0507 | 19.4 | 7.32 | 25.0 | 350 | .0478 |
| RENT | 8.0 | 5.62 | 19.2 | 307 | .0547 | 11.8 | 4.11 | 14.0 | 230 | .0560 |
| RENT FREE | .5 | 9.47 | 32.3 | 485 | .0512 | .5 | 6.82 | 23.3 | 344 | .0504 |
| 1978 FAMILY INCOME | | | | | | | | | | |
| LESS THAN $5,000 | 2.8 | 5.97 | 20.4 | 289 | .0483 | 6.5 | 4.34 | 14.8 | 237 | .0546 |
| $5,000 TO $9,999 | 5.3 | 6.33 | 21.6 | 331 | .0522 | 6.9 | 4.59 | 15.7 | 244 | .0532 |
| $10,000 TO $14,999 | 5.4 | 7.30 | 24.9 | 372 | .0509 | 5.9 | 6.01 | 20.5 | 289 | .0481 |
| $15,000 TO $19,999 | 4.4 | 8.37 | 28.6 | 430 | .0514 | 3.5 | 7.02 | 23.9 | 334 | .0476 |
| $20,000 TO $24,999 | 4.6 | 9.22 | 31.5 | 483 | .0524 | 3.5 | 8.21 | 28.0 | 401 | .0488 |
| $25,000 TO $34,999 | 6.1 | 10.35 | 35.3 | 518 | .0501 | 3.1 | 7.60 | 25.9 | 371 | .0488 |
| $35,000 OR MORE | 4.3 | 12.63 | 43.1 | 665 | .0527 | 2.2 | 9.64 | 32.9 | 452 | .0468 |

SEE NOTES AT END OF TABLE

TABLE 5. RESIDENTIAL ELECTRICITY CONSUMPTION AND EXPENDITURES FOR HOUSEHOLDS THAT DO NOT USE ELECTRICITY AS MAIN HEATING FUEL - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | ELECTRICITY USED: NOT AS MAIN HEATING FUEL | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ELECTRICITY USED: FOR AIR CONDITIONING | | | | | ELECTRICITY USED: NOT FOR AIR CONDITIONING | | | | |
| | NUMBER OF HOUSEHOLDS (MIL'N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL'N BTU) | AVG EXPEND PER HOUSEHOLD ($) | AVG PRICE ($ PER KWH) | NUMBER OF HOUSEHOLDS (MIL'N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL'N BTU) | AVG EXPEND PER HOUSEHOLD ($) | AVG PRICE ($ PER KWH) |
| TOTAL POOR | 3.5 | 6.75 | 23.0 | 324 | 0.0481 | 7.8 | 4.85 | 16.6 | 259 | 0.0535 |
| RACE | | | | | | | | | | |
| WHITE | 30.1 | 8.78 | 29.9 | 448 | .0511 | 26.5 | 6.32 | 21.6 | 310 | .0490 |
| BLACK | 2.4 | 8.34 | 28.5 | 449 | .0539 | 5.0 | 5.16 | 17.6 | 287 | .0555 |
| OTHER | .4 | 5.91 | 20.2 | 345 | .0584 | .3 | 4.93 | 16.8 | 233 | .0472 |
| AGE OF HEAD | | | | | | | | | | |
| 29 OR LESS | 5.7 | 6.92 | 23.6 | 359 | .0519 | 6.4 | 4.82 | 16.4 | 255 | .0529 |
| 30 TO 44 | 9.5 | 10.04 | 34.2 | 502 | .0500 | 8.6 | 7.05 | 24.1 | 359 | .0509 |
| 45 TO 59 | 9.2 | 9.91 | 33.8 | 512 | .0516 | 6.8 | 7.75 | 26.4 | 357 | .0460 |
| 60 AND OVER | 8.5 | 7.12 | 24.3 | 374 | .0526 | 9.9 | 5.04 | 17.2 | 256 | .0508 |
| MARITAL STATUS | | | | | | | | | | |
| MARRIED | 24.0 | 9.81 | 33.5 | 498 | .0508 | 18.3 | 7.54 | 25.7 | 363 | .0482 |
| NOT MARRIED | 9.0 | 5.77 | 19.7 | 310 | .0538 | 13.4 | 4.19 | 14.3 | 227 | .0541 |
| FEMALE HEAD | 6.2 | 6.09 | 20.8 | 317 | .0521 | 9.2 | 4.33 | 14.8 | 236 | .0544 |
| MALE HEAD | 2.8 | 5.05 | 17.2 | 295 | .0585 | 4.2 | 3.88 | 13.3 | 207 | .0532 |
| HOUSEHOLDS WITH CHILDREN | | | | | | | | | | |
| YES | 16.2 | 10.53 | 35.9 | 532 | .0505 | 14.1 | 7.72 | 26.4 | 382 | .0495 |
| FEMALE HEAD | 2.0 | 8.64 | 29.5 | 431 | .0499 | 3.1 | 5.62 | 19.2 | 290 | .0516 |
| MALE HEAD | 14.3 | 10.78 | 36.8 | 545 | .0506 | 11.0 | 8.32 | 28.4 | 409 | .0491 |
| NO | 16.7 | 6.94 | 23.7 | 365 | .0526 | 17.6 | 4.84 | 16.5 | 244 | .0503 |
| FEMALE HEAD | 4.3 | 4.99 | 17.0 | 269 | .0538 | 6.2 | 3.71 | 12.7 | 209 | .0563 |
| MALE HEAD | 12.4 | 7.63 | 26.0 | 399 | .0523 | 11.5 | 5.45 | 18.6 | 262 | .0481 |

SEE NOTES AT END OF TABLE

TABLE 5. RESIDENTIAL ELECTRICITY CONSUMPTION AND EXPENDITURES FOR HOUSEHOLDS THAT DO NOT USE ELECTRICITY AS MAIN HEATING FUEL - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | ELECTRICITY USED: NOT AS MAIN HEATING FUEL | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ELECTRICITY USED: FOR AIR CONDITIONING | | | | | ELECTRICITY USED: NOT FOR AIR CONDITIONING | | | | |
| | NUMBER OF HOUSEHOLDS (MIL.N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL.N BTU) | AVG EXPEND PER HOUSEHOLD ($) | AVG PRICE ($ PER KWH) | NUMBER OF HOUSEHOLDS (MIL.N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL.N BTU) | AVG EXPEND PER HOUSEHOLD ($) | AVG PRICE ($ PER KWH) |
| **HOUSEHOLD MEMBERS** | | | | | | | | | | |
| ONE | 5.5 | 4.41 | 15.1 | 247 | 0.0560 | 7.1 | 3.36 | 11.5 | 187 | 0.0558 |
| TWO | 11.1 | 8.00 | 27.3 | 411 | .0514 | 10.2 | 5.58 | 19.1 | 270 | .0484 |
| THREE | 6.1 | 9.36 | 31.9 | 468 | .0500 | 5.3 | 6.59 | 22.5 | 332 | .0504 |
| FOUR | 5.9 | 10.99 | 37.5 | 560 | .0510 | 4.5 | 8.17 | 27.9 | 400 | .0490 |
| FIVE OR MORE | 4.3 | 11.91 | 40.7 | 608 | .0510 | 4.6 | 9.04 | 30.8 | 441 | .0488 |
| **NUMBER OF FULL-TIME WAGE EARNERS** | | | | | | | | | | |
| NONE | 7.1 | 6.09 | 20.8 | 316 | .0519 | 11.3 | 4.76 | 16.2 | 249 | .0522 |
| ONE | 15.2 | 9.03 | 30.8 | 465 | .0515 | 12.9 | 6.42 | 21.9 | 312 | .0487 |
| TWO | 9.1 | 9.62 | 32.8 | 485 | .0504 | 6.3 | 7.31 | 24.9 | 362 | .0495 |
| THREE | 1.3 | 12.63 | 43.1 | 642 | .0508 | .9 | 9.10 | 31.1 | 447 | .0491 |
| FOUR OR MORE | .3 | 10.23 | 34.9 | 686 | .0670 | .3 | 10.65 | 36.3 | 517 | .0486 |
| **FULL-TIME (FT) EMPLOYMENT** | | | | | | | | | | |
| HEAD MARRIED | 24.0 | 9.81 | 33.5 | 498 | .0508 | 18.3 | 7.54 | 25.7 | 363 | .0482 |
| HEAD OR SPOUSE EMPLOYED FT | 12.7 | 10.29 | 35.1 | 527 | .0513 | 8.9 | 8.08 | 27.6 | 383 | .0474 |
| BOTH EMPLOYED FT | 7.9 | 9.88 | 33.7 | 497 | .0503 | 4.6 | 7.88 | 26.9 | 385 | .0488 |
| NEITHER EMPLOYED FT | 3.4 | 7.87 | 26.8 | 393 | .0499 | 4.8 | 6.20 | 21.1 | 305 | .0493 |
| HEAD NOT MARRIED | 9.0 | 5.77 | 19.7 | 310 | .0538 | 13.4 | 4.19 | 14.3 | 227 | .0541 |
| HEAD EMPLOYED FT | 4.4 | 6.42 | 21.9 | 345 | .0536 | 5.4 | 4.30 | 14.7 | 231 | .0537 |
| HEAD NOT EMPLOYED FT | 4.6 | 5.14 | 17.5 | 278 | .0541 | 8.0 | 4.12 | 14.0 | 224 | .0543 |

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

TABLE 6. RESIDENTIAL FUEL OIL AND KEROSENE CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980

| HOUSEHOLD CHARACTERISTICS | FUEL OIL AND KEROSENE | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | FUEL OIL OR KEROSENE USED: AS MAIN HEATING FUEL | | | |
| | TOTAL AMOUNT CONSUMED (BIL'N GAL) | TOTAL AMOUNT CONSUMED (QUAD'N BTU) | TOTAL EXPEND (BIL'N $) | AVG PRICE ($ PER GAL) | NUMBER OF HOUSEHOLDS (MIL'N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (GAL) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL'N BTU) | AVG EXPEND PER HOUSEHOLD ($) |
| TOTAL HOUSEHOLDS | 12.3 | 1.71 | 10.7 | 0.872 | 14.6 | 812 | 113 | 710 |
| WATER HEATING FUEL | | | | | | | | |
| FUEL OIL AND KEROSENE | 5.7 | .79 | 4.9 | .865 | 5.2 | 1055 | 146 | 913 |
| OTHER AND NONE | 6.6 | .92 | 5.8 | .878 | 9.4 | 676 | 94 | [illegible] |
| CENSUS REGION | | | | | | | | |
| NORTHEAST | 7.4 | 1.03 | 6.5 | .869 | 7.4 | 981 | 136 | 854 |
| NORTH CENTRAL | 2.2 | .31 | 2.0 | .874 | 2.6 | 839 | 116 | 736 |
| SOUTH | 2.0 | .28 | 1.8 | .881 | 3.8 | 499 | 69 | 443 |
| WEST | .6 | .09 | .6 | .867 | .8 | 660 | 91 | 581 |
| URBAN/RURAL | | | | | | | | |
| URBAN | 8.4 | 1.17 | 7.4 | .877 | 9.9 | 841 | 117 | 738 |
| RURAL | 3.9 | .54 | 3.3 | .861 | 4.7 | 752 | 104 | 652 |
| SMSA/NON-SMSA | | | | | | | | |
| SMSA | 9.0 | 1.24 | 7.8 | .875 | 10.4 | 841 | 117 | 737 |
| NON-SMSA | 3.3 | .46 | 2.9 | .864 | 4.2 | 740 | 103 | 644 |
| AIA HEATING AND COOLING DEGREE DAY ZONES | | | | | | | | |
| <2000 CDD AND >7000 HDD | 1.3 | .19 | 1.2 | .870 | 1.3 | 966 | 134 | 844 |
| <2000 CDD AND 5500-7000 HDD | 3.9 | .55 | 3.4 | .868 | 4.0 | 947 | 131 | 825 |
| <2000 CDD AND 4000-5499 HDD | 5.6 | .78 | 4.9 | .870 | 6.3 | 864 | 120 | 753 |
| <2000 CDD AND <4000 HDD | 1.1 | .15 | 1.0 | .869 | 1.9 | 545 | 76 | 477 |
| >2000 CDD AND <4000 HDD | .3 | .05 | .3 | .959 | 1.1 | 307 | 43 | 296 |

SEE NOTES AT END OF TABLE

TABLE 6. RESIDENTIAL FUEL OIL AND KEROSENE CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | FUEL OIL AND KEROSENE | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | FUEL OIL OR KEROSENE USED: AS MAIN HEATING FUEL | | | |
| | TOTAL AMOUNT CONSUMED (BIL'N GAL) | TOTAL AMOUNT CONSUMED (QUAD'N BTU) | TOTAL EXPEND (BIL'N $) | AVG PRICE ($ PER GAL) | NUMBER OF HOUSEHOLDS (MIL'N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (GAL) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL'N BTU) | AVG EXPEND PER HOUSEHOLD ($) |
| **TYPE OF STRUCTURE** | | | | | | | | |
| SINGLE FAMILY DETACHED | | | | | | | | |
| TOTAL | 8.4 | 1.17 | 7.3 | 0.867 | 9.9 | 810 | 112 | 705 |
| OWNERS | 7.6 | 1.05 | 6.6 | .866 | 8.7 | 829 | 115 | 720 |
| RENTERS | .8 | .12 | .7 | .879 | 1.2 | 669 | 93 | 593 |
| SINGLE FAMILY ATTACHED | | | | | | | | |
| TOTAL | .4 | .05 | .3 | .881 | .5 | 831 | 115 | 731 |
| OWNERS | .2 | .03 | .2 | .882 | .3 | 816 | 113 | 719 |
| RENTERS | .1 | .02 | .1 | .879 | .2 | 857 | 119 | 753 |
| 2-4 UNIT BUILDING | | | | | | | | |
| TOTAL | 1.5 | .21 | 1.4 | .893 | 1.3 | 1149 | 159 | 1028 |
| OWNERS | .6 | .08 | .5 | .886 | .4 | 1393 | 193 | 1234 |
| RENTERS | 1.0 | .14 | .9 | .897 | .9 | 1043 | 145 | 938 |
| 5 OR MORE UNIT BUILDING | | | | | | | | |
| TOTAL | 1.6 | .22 | 1.4 | .864 | 2.1 | 765 | 106 | 662 |
| OWNERS | - | - | - | .829 | - | 1009 | 140 | 863 |
| RENTERS | 1.6 | .22 | 1.4 | .864 | 2.0 | 763 | 106 | 660 |
| MOBILE HOME | .3 | .05 | .3 | .913 | .8 | 387 | 54 | 355 |
| OTHER | - | .01 | - | .907 | - | 2490 | 345 | 2259 |
| **NUMBER OF ROOMS** | | | | | | | | |
| ONE TO THREE | 1.0 | .13 | .8 | .886 | 1.5 | 639 | 89 | 567 |
| FOUR | 1.8 | .25 | 1.6 | .884 | 2.6 | 683 | 95 | 606 |
| FIVE | 2.2 | .31 | 2.0 | .883 | 2.9 | 716 | 99 | 636 |
| SIX | 2.8 | .39 | 2.4 | .868 | 3.4 | 778 | 108 | 676 |
| SEVEN | 1.6 | .23 | 1.4 | .861 | 1.8 | 883 | 122 | 764 |
| EIGHT OR MORE | 2.9 | .41 | 2.5 | .862 | 2.5 | 1158 | 161 | 1000 |

SEE NOTES AT END OF TABLE

TABLE 6. RESIDENTIAL FUEL OIL AND KEROSENE CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | FUEL OIL AND KEROSENE | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | FUEL OIL OR KEROSENE USED: AS MAIN HEATING FUEL | | | |
| | TOTAL AMOUNT CONSUMED (BIL*N GAL) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | AVG PRICE ($ PER GAL) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (GAL) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) |
| **NUMBER OF ROOMS AIR CONDITIONED** | | | | | | | | |
| ALL | 1.3 | 0.17 | 1.1 | 0.877 | 2.0 | 605 | 84 | 531 |
| SOME | 4.8 | .66 | 4.2 | .868 | 5.1 | 913 | 127 | 795 |
| NONE | 6.3 | .87 | 5.5 | .874 | 7.5 | 800 | 111 | 702 |
| **YEAR HOUSE BUILT** | | | | | | | | |
| 1939 OR EARLIER | 6.9 | .96 | 6.0 | .872 | 7.1 | 946 | 131 | 827 |
| 1940 TO 1949 | 1.0 | .14 | .9 | .868 | 1.3 | 717 | 99 | 625 |
| 1950 TO 1959 | 2.0 | .28 | 1.8 | .870 | 2.7 | 708 | 98 | 618 |
| 1960 TO 1964 | 1.2 | .17 | 1.1 | .875 | 1.5 | 809 | 112 | 709 |
| 1965 TO 1969 | .4 | .06 | .4 | .890 | .8 | 494 | 68 | 442 |
| 1970 TO 1974 | .4 | .06 | .4 | .878 | .8 | 543 | 75 | 481 |
| 1975 TO 1979 | .3 | .04 | .2 | .854 | .4 | 622 | 86 | 540 |
| **OWN/RENT** | | | | | | | | |
| OWN | 8.7 | 1.21 | 7.6 | .869 | 10.1 | 828 | 115 | 722 |
| RENT | 3.4 | .47 | 3.0 | .879 | 4.2 | 795 | 110 | 700 |
| RENT FREE | .2 | .03 | .2 | .865 | .3 | 553 | 77 | 484 |
| **1978 FAMILY INCOME** | | | | | | | | |
| LESS THAN $5,000 | 1.2 | .16 | 1.1 | .893 | 1.8 | 644 | 89 | 577 |
| $5,000 TO $9,999 | 2.0 | .27 | 1.7 | .870 | 2.6 | 731 | 101 | 638 |
| $10,000 TO $14,999 | 2.2 | .30 | 1.9 | .874 | 2.6 | 789 | 109 | 692 |
| $15,000 TO $19,999 | 1.5 | .21 | 1.3 | .873 | 1.9 | 764 | 106 | 669 |
| $20,000 TO $24,999 | 1.9 | .27 | 1.7 | .876 | 2.3 | 794 | 110 | 699 |
| $25,000 TO $34,999 | 1.6 | .22 | 1.4 | .869 | 1.8 | 856 | 119 | 747 |
| $35,000 OR MORE | 2.0 | .27 | 1.7 | .857 | 1.6 | 1194 | 166 | 1024 |

SEE NOTES AT END OF TABLE

TABLE 6. RESIDENTIAL FUEL OIL AND KEROSENE CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | FUEL OIL AND KEROSENE | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | FUEL OIL OR KEROSENE USED: AS MAIN HEATING FUEL | | | |
| | TOTAL AMOUNT CONSUMED (BIL*N GAL) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | AVG PRICE ($ PER GAL) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (GAL) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) |
| TOTAL POOR | 1.5 | 0.21 | 1.4 | 0.886 | 2.2 | 675 | 94 | 662 |
| RACE | | | | | | | | |
| WHITE | 10.7 | 1.48 | 9.3 | .871 | 12.7 | 805 | 112 | 704 |
| BLACK | 1.4 | .20 | 1.2 | .879 | 1.7 | 847 | 117 | 744 |
| OTHER | .2 | .03 | .2 | .856 | .2 | 932 | 129 | 798 |
| AGE OF HEAD | | | | | | | | |
| 29 OR LESS | 1.8 | .25 | 1.6 | .879 | 2.4 | 703 | 97 | 621 |
| 30 TO 44 | 3.4 | .47 | 2.9 | .865 | 3.7 | 869 | 120 | 755 |
| 45 TO 59 | 3.3 | .46 | 2.9 | .869 | 3.9 | 811 | 113 | 707 |
| 60 AND OVER | 3.8 | .53 | 3.3 | .877 | 4.5 | 825 | 114 | 725 |
| MARITAL STATUS | | | | | | | | |
| MARRIED | 8.8 | 1.22 | 7.7 | .870 | 10.2 | 827 | 115 | 722 |
| NOT MARRIED | 3.5 | .48 | 3.1 | .878 | 4.4 | 777 | 108 | 684 |
| FEMALE HEAD | 2.5 | .35 | 2.2 | .882 | 3.1 | 796 | 110 | 703 |
| MALE HEAD | 1.0 | .14 | .9 | .869 | 1.3 | 730 | 101 | 638 |
| HOUSEHOLDS WITH CHILDREN | | | | | | | | |
| YES | 6.4 | .88 | 5.5 | .867 | 7.0 | 861 | 119 | 750 |
| FEMALE HEAD | 1.0 | .14 | .9 | .874 | 1.2 | 839 | 116 | 736 |
| MALE HEAD | 5.4 | .74 | 4.6 | .866 | 5.9 | 866 | 120 | 753 |
| NO | 5.9 | .82 | 5.2 | .877 | 7.6 | 766 | 106 | 674 |
| FEMALE HEAD | 1.5 | .21 | 1.3 | .887 | 1.9 | 769 | 107 | 682 |
| MALE HEAD | 4.4 | .61 | 3.9 | .874 | 5.6 | 765 | 106 | 671 |

SEE NOTES AT END OF TABLE

TABLE 6. RESIDENTIAL FUEL OIL AND KEROSENE CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | FUEL OIL AND KEROSENE | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | FUEL OIL OR KEROSENE USED: AS MAIN HEATING FUEL | | | |
| | TOTAL AMOUNT CONSUMED (BIL*N GAL) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | AVG PRICE ($ PER GAL) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (GAL) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) |
| **HOUSEHOLD MEMBERS** | | | | | | | | |
| ONE | 1.6 | 0.22 | 1.4 | 0.882 | 2.2 | 688 | 95 | 609 |
| TWO | 4.2 | .59 | 3.7 | .876 | 5.3 | 782 | 108 | 687 |
| THREE | 2.2 | .30 | 1.9 | .870 | 2.5 | 812 | 113 | 710 |
| FOUR | 2.2 | .31 | 1.9 | .863 | 2.4 | 872 | 121 | 754 |
| FIVE OR MORE | 2.1 | .29 | 1.8 | .867 | 2.1 | 951 | 132 | 828 |
| **NUMBER OF FULL-TIME WAGE EARNERS** | | | | | | | | |
| NONE | 3.1 | .43 | 2.7 | .884 | 3.9 | 755 | 105 | 671 |
| ONE | 5.4 | .74 | 4.6 | .867 | 6.2 | 828 | 115 | 719 |
| TWO | 2.8 | .39 | 2.5 | .874 | 3.5 | 778 | 108 | 682 |
| THREE | .9 | .12 | .8 | .854 | .8 | 1144 | 159 | 980 |
| FOUR OR MORE | .1 | .02 | .1 | .873 | .2 | 756 | 105 | 660 |
| **FULL-TIME (FT) EMPLOYMENT** | | | | | | | | |
| HEAD MARRIED | 8.8 | 1.22 | 7.7 | .870 | 10.2 | 827 | 115 | 722 |
| HEAD OR SPOUSE EMPLOYED FT | 4.8 | .67 | 4.2 | .866 | 5.3 | 868 | 120 | 755 |
| BOTH EMPLOYED FT | 2.2 | .31 | 2.0 | .874 | 2.9 | 764 | 106 | 670 |
| NEITHER EMPLOYED FT | 1.7 | .24 | 1.5 | .873 | 2.1 | 809 | 112 | 709 |
| HEAD NOT MARRIED | 3.5 | .48 | 3.1 | .878 | 4.4 | 777 | 108 | 684 |
| HEAD EMPLOYED FT | 1.6 | .22 | 1.4 | .868 | 1.9 | 824 | 114 | 716 |
| HEAD NOT EMPLOYED FT | 1.9 | .26 | 1.7 | .887 | 2.5 | 740 | 103 | 659 |

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

TABLE 7. RESIDENTIAL LIQUID PETROLEUM GAS CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980

| HOUSEHOLD CHARACTERISTICS | LIQUID PETROLEUM GAS (LPG) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | LIQUID PETROLEUM GAS USED: AS MAIN HEATING FUEL | | | | LIQUID PETROLEUM GAS USED: NOT AS MAIN HEATING FUEL | | | |
| | TOTAL AMOUNT CONSUMED (BIL*N GAL) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | AVG PRICE ($ PER GAL) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (GAL) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (GAL) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) |
| TOTAL HOUSEHOLDS.. | 3.37 | 0.307 | 2.06 | 0.613 | 3.71 | 729 | 67 | 423 | 3.30 | 199 | 18 | 148 |
| WATER HEATING FUEL | | | | | | | | | | | | |
| LPG..... | 2.05 | .187 | 1.25 | .611 | 2.05 | 821 | 75 | 494 | .91 | 408 | 37 | 265 |
| OTHER AND NONE.. | 1.31 | .120 | .81 | .615 | 1.67 | 617 | 56 | 337 | 2.39 | 119 | 11 | 103 |
| CENSUS REGION | | | | | | | | | | | | |
| NORTHEAST..... | .32 | .029 | .26 | .821 | .22 | 855 | 78 | 608 | 1.10 | 121 | 11 | 118 |
| NORTH CENTRAL... | 1.07 | .098 | .60 | .555 | .79 | 1207 | 110 | 650 | .53 | 220 | 20 | 152 |
| SOUTH..... | 1.57 | .143 | .98 | .622 | 2.32 | 513 | 47 | 308 | 1.57 | 241 | 22 | 166 |
| WEST..... | .40 | .037 | .22 | .561 | .38 | 985 | 90 | 553 | .10 | 280 | 26 | 169 |
| URBAN/RURAL | | | | | | | | | | | | |
| URBAN..... | .67 | .061 | .45 | .668 | .83 | 576 | 53 | 343 | 1.30 | 145 | 13 | 124 |
| RURAL..... | 2.70 | .246 | 1.61 | .599 | 2.88 | 774 | 71 | 447 | 2.00 | 234 | 21 | 163 |
| SMSA/NON-SMSA | | | | | | | | | | | | |
| SMSA..... | 1.14 | .104 | .76 | .661 | 1.46 | 584 | 53 | 357 | 1.78 | 164 | 15 | 132 |
| NON-SMSA..... | 2.22 | .203 | 1.31 | .587 | 2.25 | 823 | 75 | 466 | 1.53 | 239 | 22 | 166 |
| AIA HEATING AND COOLING DEGREE DAY ZONES | | | | | | | | | | | | |
| <2000 CDD AND >7000 HDD..... | .35 | .032 | .20 | .583 | .17 | 1544 | 141 | 834 | .30 | 265 | 24 | 193 |
| <2000 CDD AND 5500-7000 HDD.. | .58 | .053 | .37 | .634 | .40 | 1145 | 105 | 659 | .82 | 148 | 13 | 127 |
| <2000 CDD AND 4000-5499 HDD.. | .82 | .075 | .50 | .608 | .72 | 998 | 91 | 573 | .74 | 131 | 12 | 112 |
| <2000 CDD AND <4000 HDD..... | .79 | .072 | .49 | .615 | .89 | 635 | 58 | 378 | .92 | 248 | 23 | 164 |
| >2000 CDD AND <4000 HDD..... | .82 | .075 | .50 | .612 | 1.53 | 455 | 42 | 270 | .51 | 251 | 23 | 178 |

SEE NOTES AT END OF TABLE

TABLE 7. RESIDENTIAL LIQUID PETROLEUM GAS CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | LIQUID PETROLEUM GAS (LPG) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | LIQUID PETROLEUM GAS USED: AS MAIN HEATING FUEL | | | | LIQUID PETROLEUM GAS USED: NOT AS MAIN HEATING FUEL | | | |
| | TOTAL AMOUNT CONSUMED (BIL*N GAL) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | AVG PRICE ($ PER GAL) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (GAL) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (GAL) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) |
| **TYPE OF STRUCTURE** | | | | | | | | | | | | |
| SINGLE FAMILY DETACHED | | | | | | | | | | | | |
| TOTAL | 2.36 | 0.216 | 1.46 | 0.620 | 2.37 | 775 | 71 | 455 | 2.45 | 212 | 19 | 156 |
| OWNERS | 1.87 | .171 | 1.15 | .613 | 1.82 | 791 | 72 | 454 | 2.06 | 213 | 19 | 157 |
| RENTERS | .49 | .044 | .31 | .646 | .56 | 723 | 66 | 455 | .39 | 211 | 19 | 155 |
| SINGLE FAMILY ATTACHED | | | | | | | | | | | | |
| TOTAL | .04 | .003 | .02 | .616 | .08 | 427 | 39 | 249 | .02 | 174 | 16 | 162 |
| OWNERS | .03 | .003 | .02 | .583 | .08 | 427 | 39 | 249 | - | - | - | - |
| RENTERS | - | - | - | .931 | - | - | - | - | .02 | 174 | 16 | 162 |
| 2-4 UNIT BLDG | | | | | | | | | | | | |
| TOTAL | .18 | .016 | .10 | .562 | .19 | 818 | 75 | 446 | .09 | 285 | 26 | 187 |
| OWNERS | .01 | .001 | - | .620 | - | - | - | - | .02 | 271 | 25 | 168 |
| RENTERS | .17 | .016 | .10 | .560 | .19 | 818 | 75 | 446 | .07 | 289 | 26 | 192 |
| 5+ UNIT BLDG | | | | | | | | | | | | |
| TOTAL | .07 | .007 | .05 | .711 | .07 | 455 | 42 | 303 | .21 | 187 | 17 | 140 |
| OWNERS | - | - | - | - | - | - | - | - | - | - | - | - |
| RENTERS | .07 | .007 | .05 | .711 | .07 | 455 | 42 | 303 | .21 | 187 | 17 | 140 |
| MOBILE HOME | .72 | .066 | .43 | .592 | 1.00 | 647 | 59 | 368 | .53 | 128 | 12 | 105 |
| OTHER | - | - | - | - | - | - | - | - | - | - | - | - |
| **NUMBER OF ROOMS** | | | | | | | | | | | | |
| ONE TO THREE | .41 | .037 | .25 | .625 | .57 | 601 | 55 | 363 | .35 | 175 | 16 | 131 |
| FOUR | .79 | .072 | .47 | .599 | 1.06 | 625 | 57 | 354 | .81 | 159 | 14 | 121 |
| FIVE | .88 | .080 | .54 | .617 | 1.04 | 725 | 66 | 428 | .62 | 202 | 18 | 156 |
| SIX | .55 | .051 | .34 | .615 | .43 | 772 | 70 | 424 | .95 | 230 | 21 | 165 |
| SEVEN | .40 | .037 | .24 | .597 | .38 | 915 | 84 | 530 | .24 | 221 | 20 | 156 |
| EIGHT OR MORE | .34 | .031 | .22 | .633 | .24 | 1147 | 105 | 685 | .32 | 211 | 19 | 164 |

SEE NOTES AT END OF TABLE

TABLE 7. RESIDENTIAL LIQUID PETROLEUM GAS CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | LIQUID PETROLEUM GAS (LPG) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | LIQUID PETROLEUM GAS USED: AS MAIN HEATING FUEL | | | | LIQUID PETROLEUM GAS USED: NOT AS MAIN HEATING FUEL | | | |
| | TOTAL AMOUNT CONSUMED (BIL*N GAL) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | AVG PRICE ($ PER GAL) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (GAL) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (GAL) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) |
| NUMBER OF ROOMS AIR CONDITIONED | | | | | | | | | | | | |
| ALL | 1.07 | 0.098 | 0.65 | 0.606 | 1.33 | 721 | 66 | 426 | 0.53 | 218 | 20 | 159 |
| SOME | .67 | .061 | .42 | .631 | .67 | 677 | 62 | 392 | 1.08 | 199 | 18 | 147 |
| NONE | 1.63 | .148 | .99 | .609 | 1.72 | 756 | 69 | 433 | 1.69 | 193 | 18 | 145 |
| YEAR HOUSE BUILT | | | | | | | | | | | | |
| 1939 OR EARLIER | 1.01 | .092 | .61 | .606 | .90 | 868 | 79 | 492 | 1.04 | 213 | 19 | 159 |
| 1940 TO 1949 | .32 | .029 | .20 | .636 | .32 | 636 | 58 | 393 | .39 | 302 | 28 | 201 |
| 1950 TO 1959 | .39 | .035 | .26 | .668 | .55 | 528 | 48 | 321 | .69 | 138 | 13 | 117 |
| 1960 TO 1964 | .28 | .026 | .18 | .627 | .25 | 709 | 65 | 398 | .47 | 222 | 20 | 164 |
| 1965 TO 1969 | .36 | .033 | .23 | .625 | .46 | 703 | 64 | 429 | .28 | 139 | 13 | 104 |
| 1970 TO 1974 | .63 | .058 | .37 | .589 | .80 | 749 | 68 | 432 | .25 | 129 | 12 | 105 |
| 1975 TO 1979 | .37 | .034 | .21 | .571 | .42 | 770 | 70 | 430 | .18 | 262 | 24 | 175 |
| OWN/RENT | | | | | | | | | | | | |
| OWN | 2.48 | .226 | 1.50 | .608 | 2.64 | 747 | 68 | 428 | 2.50 | 201 | 18 | 150 |
| RENT | .80 | .073 | .51 | .629 | .94 | 714 | 65 | 429 | .74 | 181 | 17 | 139 |
| RENT FREE | .09 | .008 | .05 | .597 | .14 | 490 | 45 | 295 | .06 | 325 | 30 | 187 |
| 1978 FAMILY INCOME | | | | | | | | | | | | |
| LESS THAN $5,000 | .49 | .045 | .30 | .605 | .73 | 552 | 50 | 311 | .52 | 170 | 16 | 136 |
| $5,000 TO $9,999 | .62 | .056 | .38 | .616 | .80 | 568 | 52 | 332 | .71 | 226 | 21 | 159 |
| $10,000 TO $14,999 | .70 | .064 | .44 | .620 | .74 | 773 | 71 | 451 | .64 | 202 | 18 | 157 |
| $15,000 TO $19,999 | .39 | .036 | .24 | .624 | .37 | 795 | 73 | 467 | .53 | 185 | 17 | 136 |
| $20,000 TO $24,999 | .38 | .035 | .24 | .633 | .36 | 845 | 77 | 506 | .37 | 206 | 19 | 159 |
| $25,000 TO $34,999 | .35 | .032 | .21 | .610 | .33 | 838 | 77 | 499 | .32 | 229 | 21 | 152 |
| $35,000 OR MORE | .43 | .040 | .25 | .579 | .38 | 1055 | 96 | 593 | .21 | 147 | 13 | 117 |

SEE NOTES AT END OF TABLE

TABLE 7. RESIDENTIAL LIQUID PETROLEUM GAS CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | LIQUID PETROLEUM GAS (LPG) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | LIQUID PETROLEUM GAS USED: AS MAIN HEATING FUEL | | | | LIQUID PETROLEUM GAS USED: NOT AS MAIN HEATING FUEL | | | |
| | TOTAL AMOUNT CONSUMED (BIL*N GAL) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | AVG PRICE ($ PER GAL) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (GAL) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (GAL) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) |
| TOTAL POOR..... | 0.62 | 0.056 | 0.38 | 0.615 | 0.88 | 571 | 52 | 330 | 0.62 | 181 | 16 | 142 |
| RACE | | | | | | | | | | | | |
| WHITE..... | 3.10 | .284 | 1.88 | .606 | 3.36 | 751 | 69 | 433 | 2.83 | 206 | 19 | 151 |
| BLACK..... | .26 | .024 | .18 | .690 | .36 | 526 | 48 | 331 | .46 | 157 | 14 | 133 |
| OTHER..... | - | - | - | 1.034 | - | - | - | - | .02 | 88 | 8 | 91 |
| AGE OF HEAD | | | | | | | | | | | | |
| 29 OR LESS..... | .59 | .054 | .34 | .578 | .64 | 789 | 72 | 426 | .55 | 155 | 14 | 124 |
| 30 TO 44..... | 1.06 | .097 | .66 | .626 | 1.17 | 762 | 70 | 464 | .72 | 231 | 21 | 166 |
| 45 TO 59..... | .85 | .077 | .53 | .626 | .78 | 823 | 75 | 483 | .99 | 209 | 19 | 155 |
| 60 AND OVER..... | .87 | .079 | .53 | .607 | 1.12 | 596 | 54 | 339 | 1.04 | 191 | 17 | 141 |
| MARITAL STATUS | | | | | | | | | | | | |
| MARRIED..... | 2.35 | .215 | 1.44 | .612 | 2.54 | 722 | 66 | 419 | 2.50 | 208 | 19 | 151 |
| NOT MARRIED..... | 1.01 | .092 | .62 | .613 | 1.18 | 744 | 68 | 434 | .80 | 172 | 16 | 138 |
| FEMALE HEAD... | .59 | .054 | .36 | .618 | .74 | 672 | 61 | 397 | .48 | 184 | 17 | 142 |
| MALE HEAD..... | .42 | .039 | .26 | .606 | .43 | 866 | 79 | 497 | .32 | 152 | 14 | 131 |
| HOUSEHOLDS WITH CHILDREN | | | | | | | | | | | | |
| YES..... | 1.77 | .161 | 1.10 | .623 | 1.73 | 817 | 75 | 481 | 1.71 | 205 | 19 | 157 |
| FEMALE HEAD... | .24 | .022 | .16 | .678 | .21 | 914 | 83 | 582 | .24 | 201 | 18 | 169 |
| MALE HEAD..... | 1.53 | .139 | .94 | .614 | 1.52 | 804 | 73 | 467 | 1.47 | 206 | 19 | 155 |
| NO..... | 1.60 | .146 | .96 | .601 | 1.98 | 652 | 60 | 373 | 1.59 | 192 | 18 | 139 |
| FEMALE HEAD... | .35 | .032 | .20 | .576 | .53 | 576 | 53 | 324 | .24 | 168 | 15 | 116 |
| MALE HEAD..... | 1.25 | .114 | .76 | .608 | 1.45 | 680 | 62 | 391 | 1.35 | 196 | 18 | 143 |

SEE NOTES AT END OF TABLE

TABLE 7. RESIDENTIAL LIQUID PETROLEUM GAS CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 CONTINUED

| HOUSEHOLD CHARACTERISTICS | LIQUID PETROLEUM GAS (LPG) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | LIQUID PETROLEUM GAS USED: AS MAIN HEATING FUEL | | | | LIQUID PETROLEUM GAS USED: NOT AS MAIN HEATING FUEL | | | |
| | TOTAL AMOUNT CONSUMED (BIL*N GAL) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | AVG PRICE ($ PER GAL) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (GAL) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (GAL) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) |
| HOUSEHOLD MEMBERS | | | | | | | | | | | | |
| ONE | 0.55 | 0.050 | 0.32 | 0.590 | 0.67 | 727 | 66 | 414 | 0.37 | 148 | 13 | 116 |
| TWO | 1.06 | .097 | .64 | .603 | 1.29 | 628 | 57 | 356 | 1.22 | 209 | 19 | 149 |
| THREE | .65 | .060 | .41 | .635 | .73 | 711 | 65 | 434 | .63 | 212 | 19 | 155 |
| FOUR | .53 | .048 | .33 | .616 | .53 | 824 | 75 | 480 | .51 | 185 | 17 | 143 |
| FIVE OR MORE | .57 | .052 | .36 | .624 | .49 | 923 | 84 | 537 | .57 | 209 | 19 | 164 |
| NUMBER OF FULL-TIME WAGE EARNERS | | | | | | | | | | | | |
| NONE | .93 | .085 | .58 | .622 | 1.16 | 611 | 56 | 357 | 1.11 | 202 | 18 | 151 |
| ONE | 1.46 | .133 | .89 | .613 | 1.56 | 765 | 70 | 448 | 1.29 | 206 | 19 | 151 |
| TWO | .82 | .075 | .49 | .599 | .88 | 776 | 71 | 440 | .73 | 181 | 17 | 139 |
| THREE | .15 | .014 | .09 | .611 | .12 | 1078 | 98 | 634 | .12 | 239 | 22 | 169 |
| FOUR OR MORE | - | - | - | .925 | - | - | - | - | .05 | 82 | 8 | 76 |
| FULL-TIME (FT) EMPLOYMENT | | | | | | | | | | | | |
| HEAD MARRIED | 2.35 | .215 | 1.44 | .612 | 2.54 | 722 | 66 | 419 | 2.50 | 208 | 19 | 151 |
| HEAD OR SPOUSE EMPLOYED FT | 1.13 | .103 | .69 | .607 | 1.19 | 749 | 68 | 431 | 1.15 | 207 | 19 | 150 |
| BOTH EMPLOYED FT | .75 | .068 | .45 | .600 | .78 | 799 | 73 | 458 | .67 | 192 | 18 | 140 |
| NEITHER EMPLOYED FT | .47 | .043 | .30 | .644 | .57 | 563 | 51 | 338 | .69 | 224 | 20 | 164 |
| HEAD NOT MARRIED | 1.01 | .092 | .62 | .613 | 1.18 | 744 | 68 | 434 | .80 | 172 | 16 | 138 |
| HEAD EMPLOYED FT | .41 | .038 | .26 | .630 | .39 | 937 | 86 | 564 | .26 | 191 | 17 | 160 |
| HEAD NOT EMPLOYED FT | .60 | .055 | .36 | .601 | .79 | 649 | 59 | 370 | .54 | 162 | 15 | 127 |

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

TABLE 8. AVERAGE RESIDENTIAL ENERGY PRICES - APRIL 1979 THROUGH MARCH 1980 (DOLLARS PER MILLION BTU)

| HOUSEHOLD CHARACTERISTICS | AVERAGE ENERGY PRICES | | | | |
|---|---|---|---|---|---|
| | ALL FUELS | ELECTRICITY | LIQUID PETROLEUM GAS | FUEL OIL AND KEROSENE | NATURAL GAS |
| TOTAL HOUSEHOLDS | 6.49 | 13.46 | 6.71 | 6.29 | 3.36 |
| CENSUS REGION | | | | | |
| NORTHEAST | 7.13 | 17.22 | 6.99 | 6.27 | 4.15 |
| NORTH CENTRAL | 5.50 | 14.82 | 6.08 | 6.30 | 3.15 |
| SOUTH | 8.05 | 13.05 | 6.81 | 6.35 | 3.44 |
| WEST | 5.26 | 9.40 | 6.15 | 6.25 | 2.93 |
| URBAN/RURAL | | | | | |
| URBAN | 6.12 | 14.33 | 7.32 | 6.32 | 3.37 |
| RURAL | 7.65 | 11.99 | 6.56 | 6.21 | 3.27 |
| SMSA/NON-SMSA | | | | | |
| SMSA | 6.31 | 14.34 | 7.24 | 6.31 | 3.41 |
| NON-SMSA | 6.92 | 12.05 | 6.43 | 6.23 | 3.19 |
| AIA HEATING AND COOLING DEGREE DAY ZONES | | | | | |
| <2000 CDD AND >7000 HDD | 5.97 | 12.28 | 6.39 | 6.27 | 3.27 |
| <2000 CDD AND 5500-7000 HDD | 5.77 | 13.93 | 6.94 | 6.27 | 3.36 |
| <2000 CDD AND 4000-5499 HDD | 6.56 | 13.84 | 6.65 | 6.27 | 3.51 |
| <2000 CDD AND <4000 HDD | 7.03 | 12.66 | 6.73 | 6.27 | 3.21 |
| >2000 CDD AND <4000 HDD | 8.24 | 13.89 | 6.70 | 6.91 | 3.28 |

SEE NOTES AT END OF TABLE

TABLE 8. AVERAGE RESIDENTIAL ENERGY PRICES - APRIL 1979 THROUGH MARCH 1980 (DOLLARS PER MILLION BTU) CONTINUED

| HOUSEHOLD CHARACTERISTICS | AVERAGE ENERGY PRICES | | | | |
|---|---|---|---|---|---|
| | ALL FUELS | ELECTRICITY | LIQUID PETROLEUM GAS | FUEL OIL AND KEROSENE | NATURAL GAS |
| **TYPE OF STRUCTURE** | | | | | |
| SINGLE FAMILY DETACHED | | | | | |
| TOTAL | 6.49 | 13.32 | 6.78 | 6.25 | 3.27 |
| OWNERS | 6.55 | 13.28 | 6.71 | 6.25 | 3.29 |
| RENTERS | 6.09 | 13.68 | 7.08 | 6.34 | 3.13 |
| SINGLE FAMILY ATTACHED | | | | | |
| TOTAL | 5.89 | 14.12 | 6.74 | 6.35 | 3.26 |
| OWNERS | 5.88 | 14.48 | 6.38 | 6.36 | 3.38 |
| RENTERS | 5.92 | 13.52 | 10.19 | 6.34 | 2.98 |
| 2-4 UNIT BUILDING | | | | | |
| TOTAL | 5.91 | 16.09 | 6.15 | 6.44 | 3.62 |
| OWNERS | 5.97 | 16.63 | 6.79 | 6.39 | 3.62 |
| RENTERS | 5.88 | 15.82 | 6.13 | 6.47 | 3.62 |
| 5 OR MORE UNIT BUILDING | | | | | |
| TOTAL | 7.12 | 13.80 | 7.79 | 6.23 | 3.87 |
| OWNERS | 6.96 | 11.27 | - | 5.98 | 3.40 |
| RENTERS | 7.14 | 14.42 | 7.79 | 6.23 | 3.95 |
| MOBILE HOME | 7.52 | 11.09 | 6.49 | 6.58 | 2.99 |
| OTHER | 7.14 | 20.82 | - | 6.54 | 4.04 |
| **NUMBER OF ROOMS** | | | | | |
| ONE TO THREE | 6.58 | 14.54 | 6.84 | 6.39 | 3.52 |
| FOUR | 6.58 | 13.01 | 6.56 | 6.37 | 3.48 |
| FIVE | 6.40 | 13.08 | 6.75 | 6.36 | 3.31 |
| SIX | 6.57 | 13.74 | 6.73 | 6.26 | 3.29 |
| SEVEN | 6.37 | 13.41 | 6.54 | 6.20 | 3.33 |
| EIGHT OR MORE | 6.46 | 13.72 | 6.93 | 6.22 | 3.37 |
| **NUMBER OF ROOMS AIR CONDITIONED** | | | | | |
| ALL | 6.97 | 13.38 | 6.63 | 6.32 | 3.22 |
| SOME | 6.59 | 14.82 | 6.91 | 6.26 | 3.51 |
| NONE | 6.09 | 12.69 | 6.67 | 6.30 | 3.36 |

SEE NOTES AT END OF TABLE

TABLE 8. AVERAGE RESIDENTIAL ENERGY PRICES - APRIL 1979 THROUGH MARCH 1980 (DOLLARS PER MILLION BTU) CONTINUED

| HOUSEHOLD CHARACTERISTICS | AVERAGE ENERGY PRICES | | | | |
|---|---|---|---|---|---|
| | ALL FUELS | ELECTRICITY | LIQUID PETROLEUM GAS | FUEL OIL AND KEROSENE | NATURAL GAS |
| **YEAR HOUSE BUILT** | | | | | |
| 1939 OR EARLIER | 6.00 | 14.60 | 6.63 | 6.29 | 3.43 |
| 1940 TO 1949 | 6.30 | 14.32 | 6.96 | 6.26 | 3.39 |
| 1950 TO 1959 | 6.41 | 14.12 | 7.31 | 6.28 | 3.36 |
| 1960 TO 1964 | 6.77 | 13.84 | 6.87 | 6.31 | 3.42 |
| 1965 TO 1969 | 7.05 | 12.66 | 6.84 | 6.42 | 3.24 |
| 1970 TO 1974 | 7.26 | 12.42 | 6.44 | 6.33 | 3.17 |
| 1975 TO 1979 | 7.56 | 11.57 | 6.25 | 6.16 | 3.14 |
| **OWN/RENT** | | | | | |
| OWN | 6.53 | 13.24 | 6.65 | 6.27 | 3.32 |
| RENT | 6.30 | 14.35 | 6.89 | 6.34 | 3.48 |
| RENT FREE | 7.43 | 12.81 | 6.54 | 6.24 | 3.13 |
| **1978 FAMILY INCOME** | | | | | |
| LESS THAN $5,000 | 6.01 | 13.42 | 6.63 | 6.44 | 3.35 |
| $5,000 TO $9,999 | 6.29 | 14.10 | 6.74 | 6.27 | 3.37 |
| $10,000 TO $14,999 | 6.36 | 13.11 | 6.78 | 6.30 | 3.36 |
| $15,000 TO $19,999 | 6.62 | 13.15 | 6.84 | 6.29 | 3.38 |
| $20,000 TO $24,999 | 6.75 | 13.61 | 6.93 | 6.32 | 3.39 |
| $25,000 TO $34,999 | 6.52 | 13.15 | 6.68 | 6.27 | 3.31 |
| $35,000 OR MORE | 6.79 | 13.81 | 6.33 | 6.18 | 3.38 |
| **TOTAL POOR** | 6.09 | 13.34 | 6.73 | 6.39 | 3.35 |
| **RACE** | | | | | |
| WHITE | 6.53 | 13.29 | 6.63 | 6.28 | 3.35 |
| BLACK | 6.09 | 15.58 | 7.56 | 6.34 | 3.43 |
| OTHER | 6.51 | 13.33 | 11.32 | 6.17 | 3.68 |
| **AGE OF HEAD** | | | | | |
| 29 OR LESS | 6.29 | 13.32 | 6.33 | 6.34 | 3.34 |
| 30 TO 44 | 6.58 | 13.46 | 6.85 | 6.24 | 3.36 |
| 45 TO 59 | 6.71 | 13.42 | 6.85 | 6.26 | 3.37 |
| 60 AND OVER | 6.27 | 13.60 | 6.65 | 6.33 | 3.36 |

SEE NOTES AT END OF TABLE

TABLE 8. AVERAGE RESIDENTIAL ENERGY PRICES - APRIL 1979 THROUGH MARCH 1980 (DOLLARS PER MILLION BTU) CONTINUED

| HOUSEHOLD CHARACTERISTICS | AVERAGE ENERGY PRICES | | | | |
|---|---|---|---|---|---|
| | ALL FUELS | ELECTRICITY | LIQUID PETROLEUM GAS | FUEL OIL AND KEROSENE | NATURAL GAS |
| **MARITAL STATUS** | | | | | |
| MARRIED | 6.64 | 13.34 | 6.70 | 6.27 | 3.35 |
| NOT MARRIED | 6.12 | 13.84 | 6.71 | 6.33 | 3.37 |
| FEMALE HEAD | 6.09 | 13.84 | 6.77 | 6.36 | 3.36 |
| MALE HEAD | 6.20 | 13.82 | 6.64 | 6.27 | 3.40 |
| **HOUSEHOLDS WITH CHILDREN** | | | | | |
| YES | 6.55 | 13.61 | 6.82 | 6.25 | 3.33 |
| FEMALE HEAD | 6.23 | 13.55 | 7.42 | 6.30 | 3.36 |
| MALE HEAD | 6.61 | 13.62 | 6.73 | 6.24 | 3.32 |
| NO | 6.41 | 13.27 | 6.58 | 6.32 | 3.39 |
| FEMALE HEAD | 6.00 | 14.04 | 6.31 | 6.39 | 3.35 |
| MALE HEAD | 6.56 | 13.07 | 6.66 | 6.30 | 3.41 |
| **HOUSEHOLD MEMBERS** | | | | | |
| ONE | 6.07 | 13.88 | 6.46 | 6.36 | 3.36 |
| TWO | 6.58 | 13.02 | 6.60 | 6.32 | 3.41 |
| THREE | 6.47 | 13.58 | 6.95 | 6.27 | 3.31 |
| FOUR | 6.57 | 13.56 | 6.75 | 6.22 | 3.37 |
| FIVE OR MORE | 6.57 | 13.79 | 6.83 | 6.25 | 3.32 |
| **NUMBER OF FULL-TIME WAGE EARNERS** | | | | | |
| NONE | 6.21 | 13.38 | 6.81 | 6.37 | 3.36 |
| ONE | 6.52 | 13.48 | 6.71 | 6.25 | 3.35 |
| TWO | 6.63 | 13.27 | 6.56 | 6.30 | 3.36 |
| THREE | 6.70 | 14.33 | 6.68 | 6.16 | 3.37 |
| FOUR OR MORE | 6.68 | 16.46 | 10.13 | 6.29 | 3.54 |
| **FULL-TIME (FT) EMPLOYMENT** | | | | | |
| HEAD MARRIED | 6.64 | 13.34 | 6.70 | 6.27 | 3.35 |
| HEAD OR SPOUSE EMPLOYED FT | 6.68 | 13.44 | 6.65 | 6.25 | 3.37 |
| BOTH EMPLOYED FT | 6.68 | 13.29 | 6.57 | 6.30 | 3.33 |
| NEITHER EMPLOYED FT | 6.45 | 13.09 | 7.05 | 6.29 | 3.34 |
| HEAD NOT MARRIED | 6.12 | 13.84 | 6.71 | 6.33 | 3.37 |
| HEAD EMPLOYED FT | 6.23 | 13.81 | 6.90 | 6.26 | 3.37 |
| HEAD NOT EMPLOYED FT | 6.02 | 13.87 | 6.58 | 6.39 | 3.37 |

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

TABLE 9. TYPE OF RESIDENTIAL MAIN HEATING FUEL - AS OF NOVEMBER 1979 (MILLION HOUSEHOLDS)

| HOUSEHOLD CHARACTERISTICS | TOTAL HOUSEHOLDS | TYPE OF MAIN HEATING FUEL | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | NATURAL GAS | FUEL OIL AND KEROSENE | ELECTRICITY | LIQUID PETROLEUM GAS | WOOD | COAL | OTHER AND NONE |
| TOTAL HOUSEHOLDS | 77.5 | 42.4 | 14.6 | 12.8 | 3.71 | 3.41 | 0.23 | 0.31 |
| **WATER HEATING FUEL** | | | | | | | | |
| NATURAL GAS | 42.6 | 38.9 | 1.8 | 1.5 | .05 | .17 | .02 | .11 |
| ELECTRICITY | 25.9 | 3.3 | 7.3 | 11.1 | 1.57 | 2.51 | .07 | .10 |
| FUEL OIL AND KEROSENE | 5.6 | .1 | 5.2 | - | - | .25 | .05 | - |
| LIQUID PETROLEUM GAS | 3.0 | - | .3 | .2 | 2.05 | .33 | .02 | .06 |
| OTHER | .2 | - | - | - | .02 | .11 | .04 | .01 |
| NONE | .3 | .1 | - | - | .03 | .04 | .03 | .02 |
| **CENSUS REGION** | | | | | | | | |
| NORTHEAST | 17.2 | 7.1 | 7.4 | 1.7 | .22 | .76 | .05 | .08 |
| NORTH CENTRAL | 20.7 | 16.0 | 2.6 | .9 | .79 | .39 | - | .03 |
| SOUTH | 24.9 | 9.4 | 3.8 | 7.5 | 2.32 | 1.53 | .16 | .16 |
| WEST | 14.7 | 10.0 | .8 | 2.7 | .38 | .73 | .02 | .04 |
| **URBAN/RURAL** | | | | | | | | |
| URBAN | 56.8 | 37.3 | 9.9 | 7.9 | .83 | .60 | .02 | .24 |
| RURAL | 20.7 | 5.1 | 4.7 | 4.9 | 2.88 | 2.82 | .21 | .06 |
| **SMSA/NON-SMSA** | | | | | | | | |
| SMSA | 53.4 | 32.5 | 10.4 | 7.7 | 1.46 | 1.01 | .07 | .29 |
| NON-SMSA | 24.1 | 10.0 | 4.2 | 5.1 | 2.25 | 2.41 | .16 | .02 |
| **AIA HEATING AND COOLING DEGREE DAY ZONES** | | | | | | | | |
| <2000 CDD AND >7000 HDD | 6.7 | 3.2 | 1.3 | 1.3 | .17 | .74 | - | - |
| <2000 CDD AND 5500-7000 HDD | 21.2 | 14.3 | 4.0 | 1.7 | .40 | .56 | .20 | .09 |
| <2000 CDD AND 4000-5499 HDD | 20.2 | 10.1 | 6.3 | 2.3 | .72 | .71 | - | .02 |
| <2000 CDD AND <4000 HDD | 17.5 | 9.7 | 1.9 | 3.7 | .89 | 1.25 | .03 | .07 |
| >2000 CDD AND <4000 HDD | 11.9 | 5.2 | 1.1 | 3.8 | 1.53 | .16 | - | .13 |

SEE NOTES AT END OF TABLE

TABLE 9. TYPE OF RESIDENTIAL MAIN HEATING FUEL - AS OF NOVEMBER 1979 (MILLION HOUSEHOLDS) CONTINUED

| HOUSEHOLD CHARACTERISTICS | TOTAL HOUSEHOLDS | TYPE OF MAIN HEATING FUEL | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | NATURAL GAS | FUEL OIL AND KEROSENE | ELECTRICITY | LIQUID PETROLEUM GAS | WOOD | COAL | OTHER AND NONE |
| **TYPE OF STRUCTURE** | | | | | | | | |
| SINGLE FAMILY DETACHED | | | | | | | | |
| TOTAL | 50.1 | 27.5 | 9.9 | 7.1 | 2.37 | 3.03 | 0.19 | 0.12 |
| OWNERS | 43.1 | 23.2 | 8.7 | 6.5 | 1.82 | 2.65 | .18 | .10 |
| RENTERS | 7.0 | 4.3 | 1.2 | .6 | .56 | .38 | .02 | .02 |
| SINGLE FAMILY ATTACHED | | | | | | | | |
| TOTAL | 3.3 | 2.4 | .5 | .3 | .08 | .02 | .02 | - |
| OWNERS | 2.0 | 1.6 | .3 | - | .08 | .02 | .02 | - |
| RENTERS | 1.3 | .9 | .2 | .3 | - | - | - | - |
| 2-4 UNIT BUILDING | | | | | | | | |
| TOTAL | 9.3 | 6.5 | 1.3 | 1.1 | .19 | .04 | - | .07 |
| OWNERS | 2.3 | 1.6 | .4 | .3 | - | - | - | .02 |
| RENTERS | 7.0 | 5.0 | .9 | .8 | .19 | .04 | - | .05 |
| 5 OR MORE UNIT BUILDING | | | | | | | | |
| TOTAL | 10.6 | 4.8 | 2.1 | 3.3 | .07 | .22 | - | .12 |
| OWNERS | 1.4 | .6 | - | .6 | - | .22 | - | - |
| RENTERS | 9.2 | 4.2 | 2.0 | 2.7 | .07 | - | - | .12 |
| MOBILE HOME | 4.1 | 1.1 | .8 | 1.0 | 1.00 | .11 | .02 | - |
| OTHER | .1 | .1 | - | - | - | - | - | - |
| **NUMBER OF ROOMS** | | | | | | | | |
| ONE TO THREE | 9.1 | 4.9 | 1.5 | 1.9 | .57 | .22 | - | .06 |
| FOUR | 16.1 | 8.1 | 2.6 | 3.7 | 1.06 | .65 | - | .07 |
| FIVE | 18.3 | 10.1 | 2.9 | 3.1 | 1.04 | .94 | .07 | .07 |
| SIX | 15.7 | 8.8 | 3.4 | 2.0 | .43 | .84 | .09 | .06 |
| SEVEN | 9.2 | 5.6 | 1.8 | 1.0 | .38 | .40 | .02 | - |
| EIGHT OR MORE | 9.1 | 4.9 | 2.5 | 1.0 | .24 | .36 | .05 | .05 |
| **NUMBER OF ROOMS AIR CONDITIONED** | | | | | | | | |
| ALL | 23.2 | 13.0 | 2.0 | 6.4 | 1.33 | .40 | - | .01 |
| SOME | 19.4 | 10.7 | 5.1 | 2.0 | .67 | .77 | .07 | .07 |
| NONE | 35.0 | 18.8 | 7.5 | 4.4 | 1.72 | 2.24 | .16 | .22 |

SEE NOTES AT END OF TABLE

TABLE 9. TYPE OF RESIDENTIAL MAIN HEATING FUEL - AS OF NOVEMBER 1979 (MILLION HOUSEHOLDS) CONTINUED

| HOUSEHOLD CHARACTERISTICS | TOTAL HOUSEHOLDS | TYPE OF MAIN HEATING FUEL | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | NATURAL GAS | FUEL OIL AND KEROSENE | ELECTRICITY | LIQUID PETROLEUM GAS | WOOD | COAL | OTHER AND NONE |
| **YEAR HOUSE BUILT** | | | | | | | | |
| 1939 OR EARLIER | 25.5 | 15.2 | 7.1 | 0.9 | 0.90 | 1.21 | 0.12 | 0.13 |
| 1940 TO 1949 | 6.9 | 4.4 | 1.3 | .5 | .32 | .29 | .02 | .09 |
| 1950 TO 1959 | 14.7 | 9.1 | 2.7 | 1.6 | .55 | .66 | .02 | .02 |
| 1960 TO 1964 | 7.5 | 4.0 | 1.5 | 1.5 | .25 | .16 | .03 | - |
| 1965 TO 1969 | 7.8 | 3.7 | .8 | 2.6 | .46 | .18 | - | - |
| 1970 TO 1974 | 8.1 | 3.6 | .8 | 2.6 | .80 | .29 | - | .03 |
| 1975 TO 1979 | 7.1 | 2.4 | .4 | 3.2 | .42 | .63 | .03 | .04 |
| **OWN/RENT** | | | | | | | | |
| OWN | 52.0 | 27.9 | 10.1 | 8.1 | 2.64 | 2.99 | .20 | .13 |
| RENT | 24.2 | 14.1 | 4.2 | 4.4 | .94 | .34 | .03 | .18 |
| RENT FREE | 1.3 | .4 | .3 | .3 | .14 | .09 | - | - |
| **1978 FAMILY INCOME** | | | | | | | | |
| LESS THAN $5,000 | 10.6 | 6.1 | 1.8 | 1.3 | .73 | .45 | .04 | .15 |
| $5,000 TO $9,999 | 14.3 | 8.1 | 2.6 | 2.1 | .80 | .67 | .06 | .08 |
| $10,000 TO $14,999 | 13.5 | 7.4 | 2.6 | 2.2 | .74 | .56 | .02 | - |
| $15,000 TO $19,999 | 10.1 | 5.0 | 1.9 | 2.2 | .37 | .65 | .02 | - |
| $20,000 TO $24,999 | 9.9 | 5.0 | 2.3 | 1.8 | .36 | .43 | .02 | .04 |
| $25,000 TO $34,999 | 11.3 | 6.7 | 1.8 | 2.1 | .33 | .40 | .07 | .02 |
| $35,000 OR MORE | 7.8 | 4.2 | 1.6 | 1.3 | .38 | .25 | .02 | .01 |
| **TOTAL POOR** | 12.9 | 7.4 | 2.2 | 1.6 | .88 | .59 | .06 | .19 |
| **RACE** | | | | | | | | |
| WHITE | 68.8 | 36.8 | 12.7 | 12.2 | 3.36 | 3.28 | .23 | .22 |
| BLACK | 7.9 | 5.2 | 1.7 | .5 | .36 | .12 | - | .09 |
| OTHER | .9 | .5 | .2 | .1 | - | .02 | - | - |
| **AGE OF HEAD** | | | | | | | | |
| 29 OR LESS | 15.5 | 8.4 | 2.4 | 3.3 | .64 | .54 | .02 | .10 |
| 30 TO 44 | 21.8 | 12.0 | 3.7 | 3.7 | 1.17 | 1.06 | .10 | .06 |
| 45 TO 59 | 18.8 | 10.3 | 3.9 | 2.8 | .78 | .92 | .05 | .09 |
| 60 AND OVER | 21.4 | 11.7 | 4.5 | 3.0 | 1.12 | .99 | .05 | .06 |

SEE NOTES AT END OF TABLE

TABLE 9. TYPE OF RESIDENTIAL MAIN HEATING FUEL - AS OF NOVEMBER 1979 (MILLION HOUSEHOLDS) CONTINUED

| HOUSEHOLD CHARACTERISTICS | TOTAL HOUSEHOLDS | TYPE OF MAIN HEATING FUEL | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | NATURAL GAS | FUEL OIL AND KEROSENE | ELECTRICITY | LIQUID PETROLEUM GAS | WOOD | COAL | OTHER AND NONE |
| **MARITAL STATUS** | | | | | | | | |
| MARRIED | 50.3 | 26.4 | 10.2 | 8.0 | 2.54 | 2.80 | 0.17 | 0.12 |
| NOT MARRIED | 27.2 | 16.0 | 4.4 | 4.8 | 1.18 | .61 | .06 | .19 |
| FEMALE HEAD | 18.1 | 11.1 | 3.1 | 2.7 | .74 | .36 | .04 | .09 |
| MALE HEAD | 9.1 | 4.9 | 1.3 | 2.1 | .43 | .25 | .02 | .10 |
| **HOUSEHOLDS WITH CHILDREN** | | | | | | | | |
| YES | 34.9 | 19.4 | 7.0 | 4.6 | 1.73 | 1.86 | .17 | .15 |
| FEMALE HEAD | 5.9 | 3.4 | 1.2 | .9 | .21 | .19 | - | .06 |
| MALE HEAD | 29.0 | 15.9 | 5.9 | 3.8 | 1.52 | 1.67 | .17 | .10 |
| NO | 42.6 | 23.1 | 7.6 | 8.2 | 1.98 | 1.55 | .05 | .15 |
| FEMALE HEAD | 12.4 | 7.8 | 1.9 | 1.9 | .53 | .19 | .04 | .03 |
| MALE HEAD | 30.2 | 15.3 | 5.6 | 6.3 | 1.45 | 1.36 | .02 | .12 |
| **HOUSEHOLD MEMBERS** | | | | | | | | |
| ONE | 15.4 | 9.3 | 2.2 | 2.8 | .67 | .35 | .02 | .08 |
| TWO | 26.8 | 13.4 | 5.3 | 5.5 | 1.29 | 1.16 | .06 | .06 |
| THREE | 13.2 | 7.4 | 2.5 | 1.8 | .73 | .64 | .07 | - |
| FOUR | 11.9 | 6.7 | 2.4 | 1.5 | .53 | .65 | .04 | .08 |
| FIVE OR MORE | 10.2 | 5.7 | 2.1 | 1.2 | .49 | .62 | .05 | .09 |
| **NUMBER OF FULL-TIME WAGE EARNERS** | | | | | | | | |
| NONE | 21.5 | 12.2 | 3.9 | 3.1 | 1.16 | .89 | .11 | .12 |
| ONE | 34.2 | 18.5 | 6.2 | 6.1 | 1.56 | 1.59 | .10 | .11 |
| TWO | 18.9 | 10.1 | 3.5 | 3.5 | .88 | .82 | .02 | .04 |
| THREE | 2.3 | 1.2 | .8 | .1 | .12 | .10 | - | .02 |
| FOUR OR MORE | .6 | .4 | .2 | - | - | .02 | - | .02 |
| **FULL-TIME (FT) EMPLOYMENT** | | | | | | | | |
| HEAD MARRIED | 50.3 | 26.4 | 10.2 | 8.0 | 2.54 | 2.80 | .17 | .12 |
| HEAD OR SPOUSE EMPLOYED FT | 25.4 | 13.3 | 5.3 | 4.0 | 1.19 | 1.45 | .10 | .08 |
| BOTH EMPLOYED FT | 14.9 | 8.2 | 2.9 | 2.4 | .78 | .64 | .02 | .01 |
| NEITHER EMPLOYED FT | 10.0 | 4.9 | 2.1 | 1.6 | .57 | .72 | .05 | .02 |
| HEAD NOT MARRIED | 27.2 | 16.0 | 4.4 | 4.8 | 1.18 | .61 | .06 | .19 |
| HEAD EMPLOYED FT | 12.6 | 7.1 | 1.9 | 2.8 | .39 | .32 | - | .07 |
| HEAD NOT EMPLOYED FT | 14.6 | 8.9 | 2.5 | 2.0 | .79 | .29 | .06 | .12 |

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

TABLE 10. TYPE OF RESIDENTIAL MAIN HEATING FUEL USED LAST YEAR - (MILLION HOUSEHOLDS)

| HOUSEHOLD CHARACTERISTICS | TOTAL HOUSEHOLDS | TYPE OF MAIN HEATING FUEL - AS OF NOVEMBER 1979 | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | NATURAL GAS | FUEL OIL AND KEROSENE | ELECTRICITY | LIQUID PETROLEUM GAS | WOOD | COAL | OTHER AND NONE |
| TOTAL HOUSEHOLDS | 77.5 | 42.4 | 14.6 | 12.8 | 3.71 | 3.41 | 0.23 | 0.31 |
| HOUSEHOLDS USING SAME MAIN HEATING FUEL IN WINTER 1978-1979 | | | | | | | | |
| TOTAL | 75.4 | 41.8 | 14.5 | 12.7 | 3.56 | 2.44 | .16 | .28 |
| NON-POOR | 62.8 | 34.4 | 12.3 | 11.1 | 2.75 | 1.97 | .11 | .11 |
| POOR | 12.6 | 7.3 | 2.2 | 1.6 | .81 | .46 | .06 | .17 |
| HOUSEHOLDS USING DIFFERENT MAIN HEATING FUEL IN WINTER 1978-1979 | | | | | | | | |
| TOTAL | 2.1 | .7 | .1 | .1 | .16 | .98 | .07 | .03 |
| NON-POOR | 1.8 | .6 | .1 | .1 | .09 | .86 | .07 | .01 |
| POOR | .3 | .1 | - | - | .07 | .12 | - | .02 |
| MAIN HEATING FUEL IN WINTER 1978-1979 | | | | | | | | |
| TOTAL | 2.1 | .7 | .1 | .1 | .16 | .98 | .07 | .03 |
| FUEL OIL AND KEROSENE | 1.3 | .5 | - | - | .07 | .67 | .07 | - |
| ELECTRICITY | .4 | .2 | - | - | .09 | .16 | - | .01 |
| NATURAL GAS | .1 | - | - | - | - | .05 | - | - |
| LPG | .1 | - | - | - | - | .08 | - | - |
| OTHER | .2 | - | .1 | .1 | - | .02 | - | .02 |
| SECONDARY HEATING FUEL AS OF NOV. 1979 | | | | | | | | |
| WOOD | 9.9 | 3.9 | 2.3 | 2.7 | .95 | - | .05 | .01 |
| ELECTRICITY | 6.0 | 2.9 | 1.5 | - | .55 | 1.03 | - | .03 |
| FUEL OIL AND KEROSENE | 1.3 | .1 | .1 | .1 | .02 | .98 | - | .02 |
| NATURAL GAS | .6 | - | .1 | .4 | - | .14 | .02 | - |
| LPG | .6 | - | .1 | .2 | - | .28 | .02 | - |
| COAL | .1 | .1 | - | - | - | .05 | - | - |
| OTHER | .3 | .2 | .1 | - | - | - | - | - |
| NONE | 58.6 | 35.2 | 10.5 | 9.4 | 2.20 | .94 | .14 | .24 |

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

**TABLE 11. ATTIC INSULATION ADDED DURING 1978 OR 1979 (EXCLUDING BUILDINGS OF 5 OR MORE UNITS)**

| HOUSEHOLD CHARACTERISTICS | HOUSEHOLDS NOT ADDING ATTIC INSULATION IN 1979 (MILLIONS) | HOUSEHOLDS ADDING ATTIC INSULATION IN 1979 (MILLIONS) | COST OF ITEMS ADDED IN 1979 | | | HOUSEHOLDS NOT ADDING ATTIC INSULATION IN 1978 (MILLIONS) | HOUSEHOLDS ADDING ATTIC INSULATION IN 1978 (MILLIONS) | COST OF ITEMS ADDED IN 1978 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) |
| **TOTAL HOUSEHOLDS** | 63.5 | 3.4 | 560 | 240 | 394 | 62.4 | 4.4 | 543 | 269 | 399 |
| **MAIN HEATING FUEL** | | | | | | | | | | |
| NATURAL GAS | 36.0 | 1.7 | 741 | 257 | 465 | 35.1 | 2.5 | 487 | 312 | 396 |
| FUEL OIL AND KEROSENE | 11.6 | .9 | 459 | 202 | 341 | 11.5 | 1.0 | 678 | 194 | 432 |
| ELECTRICITY | 9.0 | .5 | 331 | 297 | 299 | 9.2 | .3 | 569 | 160 | 450 |
| LPG | 3.5 | .2 | 639 | 78 | 352 | 3.6 | - | - | - | - |
| WOOD | 3.0 | .2 | 430 | 230 | 313 | 2.7 | .5 | 517 | 212 | 326 |
| COAL | .2 | - | 200 | - | 200 | .2 | - | - | - | 250 |
| OTHER AND NONE | .2 | - | 300 | - | 300 | .2 | - | - | 720 | 332 |
| **CENSUS REGION** | | | | | | | | | | |
| NORTHEAST | 12.3 | .6 | 685 | 147 | 492 | 11.8 | 1.0 | 559 | 230 | 347 |
| NORTH CENTRAL | 18.5 | 1.3 | 638 | 305 | 412 | 18.2 | 1.6 | 635 | 179 | 418 |
| SOUTH | 21.7 | 1.0 | 408 | 192 | 295 | 21.3 | 1.4 | 486 | 178 | 350 |
| WEST | 11.1 | .6 | 584 | 279 | 425 | 11.2 | .5 | 395 | 936 | 588 |
| **URBAN/RURAL** | | | | | | | | | | |
| URBAN | 43.9 | 2.4 | 667 | 270 | 453 | 43.2 | 3.1 | 612 | 286 | 446 |
| RURAL | 19.6 | 1.0 | 332 | 175 | 252 | 19.3 | 1.3 | 360 | 228 | 284 |
| **SMSA/NON-SMSA** | | | | | | | | | | |
| SMSA | 41.7 | 2.3 | 529 | 180 | 336 | 40.9 | 3.1 | 514 | 292 | 390 |
| NON-SMSA | 21.8 | 1.1 | 631 | 400 | 522 | 21.5 | 1.3 | 600 | 200 | 419 |
| **AIA HEATING AND COOLING DEGREE DAY ZONES** | | | | | | | | | | |
| <2000 CDD AND >7000 HDD | 4.8 | .4 | 261 | 109 | 156 | 4.8 | .4 | 269 | 180 | 244 |
| <2000 CDD AND 5500-7000 HDD | 18.0 | 1.0 | 763 | 397 | 536 | 17.3 | 1.6 | 567 | 211 | 375 |
| <2000 CDD AND 4000-5499 HDD | 15.9 | 1.0 | 453 | 171 | 352 | 15.9 | 1.0 | 625 | 177 | 401 |
| <2000 CDD AND <4000 HDD | 14.7 | .7 | 596 | 185 | 411 | 14.5 | .9 | 460 | 589 | 494 |
| >2000 CDD AND <4000 HDD | 10.1 | .4 | 396 | 272 | 336 | 10.0 | .5 | 593 | 157 | 427 |

SEE NOTES AT END OF TABLE

TABLE 11. ATTIC INSULATION ADDED DURING 1978 OR 1979 (EXCLUDING BUILDINGS OF 5 OR MORE UNITS) CONTINUED

| HOUSEHOLD CHARACTERISTICS | HOUSEHOLDS NOT ADDING ATTIC INSULATION IN 1979 (MILLIONS) | HOUSEHOLDS ADDING ATTIC INSULATION IN 1979 (MILLIONS) | COST OF ITEMS ADDED IN 1979 | | | HOUSEHOLDS NOT ADDING ATTIC INSULATION IN 1978 (MILLIONS) | HOUSEHOLDS ADDING ATTIC INSULATION IN 1978 (MILLIONS) | COST OF ITEMS ADDED IN 1978 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) |
| **TYPE OF STRUCTURE** | | | | | | | | | | |
| SINGLE FAMILY DETACHED | | | | | | | | | | |
| TOTAL | 47.1 | 3.0 | 582 | 241 | 418 | 46.1 | 4.0 | 481 | 276 | 367 |
| OWNERS | 40.2 | 2.9 | 582 | 248 | 415 | 39.3 | 3.8 | 489 | 277 | 373 |
| RENTERS | 6.8 | .2 | - | 78 | 467 | 6.8 | .2 | 336 | 200 | 259 |
| SINGLE FAMILY ATTACHED | | | | | | | | | | |
| TOTAL | 3.3 | .1 | 100 | 67 | 80 | 3.2 | .1 | 389 | - | 358 |
| OWNERS | 2.0 | .1 | 100 | 67 | 80 | 1.9 | .1 | 389 | - | 358 |
| RENTERS | 1.3 | - | - | - | - | 1.3 | - | - | - | - |
| 2-4 UNIT BLDG | | | | | | | | | | |
| TOTAL | 9.1 | .1 | 484 | - | 222 | 9.1 | .2 | 640 | 170 | 309 |
| OWNERS | 2.3 | - | 800 | - | 800 | 2.2 | .1 | 640 | 220 | 411 |
| RENTERS | 6.9 | .1 | 277 | - | 102 | 6.9 | .1 | - | 121 | 121 |
| MOBILE HOME | 3.9 | .2 | 133 | 271 | 210 | 3.9 | .1 | 1655 | - | 1655 |
| OTHER | .1 | - | - | - | - | .1 | - | - | - | - |
| **NUMBER OF ROOMS** | | | | | | | | | | |
| ONE TO THREE | 4.6 | .2 | 97 | 74 | 78 | 4.7 | .1 | 513 | - | 513 |
| FOUR | 11.6 | .3 | 438 | 257 | 334 | 11.4 | .5 | 1079 | 185 | 596 |
| FIVE | 15.9 | .8 | 642 | 184 | 398 | 15.7 | .9 | 440 | 233 | 336 |
| SIX | 14.5 | .9 | 390 | 424 | 381 | 14.2 | 1.2 | 575 | 163 | 381 |
| SEVEN | 8.5 | .6 | 684 | 155 | 458 | 8.1 | 1.0 | 332 | 473 | 397 |
| EIGHT OR MORE | 8.3 | .6 | 686 | 123 | 459 | 8.2 | .7 | 512 | 240 | 363 |

SEE NOTES AT END OF TABLE

TABLE 11. ATTIC INSULATION ADDED DURING 1978 OR 1979 (EXCLUDING BUILDINGS OF 5 OR MORE UNITS) CONTINUED

| HOUSEHOLD CHARACTERISTICS | HOUSEHOLDS NOT ADDING ATTIC INSULATION IN 1979 (MILLIONS) | HOUSEHOLDS ADDING ATTIC INSULATION IN 1979 (MILLIONS) | COST OF ITEMS ADDED IN 1979 | | | HOUSEHOLDS NOT ADDING ATTIC INSULATION IN 1978 (MILLIONS) | HOUSEHOLDS ADDING ATTIC INSULATION IN 1978 (MILLIONS) | COST OF ITEMS ADDED IN 1978 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) |
| **NUMBER OF ROOMS AIR CONDITIONED** | | | | | | | | | | |
| ALL | 18.5 | 1.1 | 374 | 158 | 280 | 18.2 | 1.4 | 532 | 195 | 394 |
| SOME | 16.3 | .8 | 911 | 355 | 577 | 15.6 | 1.5 | 516 | 170 | 345 |
| NONE | 28.7 | 1.5 | 546 | 226 | 379 | 28.7 | 1.5 | 594 | 403 | 458 |
| **YEAR HOUSE BUILT** | | | | | | | | | | |
| 1939 OR EARLIER | 21.3 | 1.1 | 772 | 325 | 502 | 20.9 | 1.5 | 395 | 216 | 280 |
| 1940 TO 1949 | 6.2 | .3 | 250 | 177 | 439 | 6.1 | .4 | 320 | 133 | 230 |
| 1950 TO 1959 | 12.9 | .6 | 627 | 208 | 417 | 12.3 | 1.2 | 606 | 163 | 435 |
| 1960 TO 1964 | 5.4 | .5 | 445 | 228 | 343 | 5.3 | .5 | 451 | 1429 | 678 |
| 1965 TO 1969 | 5.9 | .3 | 381 | 144 | 217 | 5.8 | .4 | 1432 | 187 | 596 |
| 1970 TO 1974 | 6.1 | .4 | 484 | 168 | 252 | 6.3 | .2 | 839 | 159 | 317 |
| 1975 TO 1979 | 5.7 | .2 | 416 | 346 | 380 | 5.7 | .2 | 216 | 306 | 308 |
| **OWN/RENT** | | | | | | | | | | |
| OWN | 47.5 | 3.1 | 571 | 250 | 406 | 46.4 | 4.1 | 549 | 275 | 408 |
| RENT | 14.8 | .3 | 277 | 71 | 302 | 14.9 | .3 | 442 | 134 | 249 |
| RENT FREE | 1.2 | - | 60 | 50 | 55 | 1.2 | - | 402 | - | 402 |
| **1978 FAMILY INCOME** | | | | | | | | | | |
| LESS THAN $5,000 | 8.6 | .3 | 362 | 44 | 172 | 8.6 | .3 | 540 | 247 | 327 |
| $5,000 TO $9,999 | 11.2 | .4 | 1084 | 120 | 775 | 10.9 | .7 | 379 | 220 | 302 |
| $10,000 TO $14,999 | 11.3 | .4 | 806 | 347 | 532 | 11.2 | .5 | 478 | 166 | 315 |
| $15,000 TO $19,999 | 8.1 | .5 | 321 | 118 | 210 | 8.1 | .5 | 317 | 175 | 261 |
| $20,000 TO $24,999 | 8.0 | .6 | 439 | 172 | 283 | 7.8 | .8 | 531 | 178 | 341 |
| $25,000 TO $34,999 | 9.5 | .6 | 495 | 493 | 494 | 9.2 | 1.0 | 720 | 193 | 476 |
| $35,000 OR MORE | 6.8 | .5 | 447 | 209 | 328 | 6.6 | .7 | 734 | 679 | 642 |

SEE NOTES AT END OF TABLE

**TABLE 11. ATTIC INSULATION ADDED DURING 1978 OR 1979 (EXCLUDING BUILDINGS OF 5 OR MORE UNITS) CONTINUED**

| HOUSEHOLD CHARACTERISTICS | HOUSEHOLDS NOT ADDING ATTIC INSULATION IN 1979 (MILLIONS) | HOUSEHOLDS ADDING ATTIC INSULATION IN 1979 (MILLIONS) | COST OF ITEMS ADDED IN 1979 | | | HOUSEHOLDS NOT ADDING ATTIC INSULATION IN 1978 (MILLIONS) | HOUSEHOLDS ADDING ATTIC INSULATION IN 1978 (MILLIONS) | COST OF ITEMS ADDED IN 1978 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) |
| **TOTAL POOR** | 10.7 | 0.4 | 516 | 63 | 360 | 10.7 | 0.4 | 515 | 324 | 335 |
| **RACE** | | | | | | | | | | |
| WHITE | 56.3 | 3.1 | 543 | 246 | 374 | 55.2 | 4.2 | 535 | 271 | 399 |
| BLACK | 6.6 | .2 | 998 | 66 | 722 | 6.7 | .2 | 722 | 225 | 461 |
| OTHER | .5 | - | 156 | - | 156 | .5 | - | - | - | 10 |
| **AGE OF HEAD** | | | | | | | | | | |
| 29 OR LESS | 10.9 | .5 | 537 | 612 | 591 | 10.9 | .5 | 361 | 164 | 250 |
| 30 TO 44 | 17.7 | 1.0 | 507 | 177 | 296 | 17.4 | 1.2 | 318 | 423 | 381 |
| 45 TO 59 | 16.1 | 1.1 | 421 | 158 | 295 | 15.6 | 1.6 | 733 | 191 | 482 |
| 60 AND OVER | 18.8 | .9 | 740 | 167 | 525 | 18.5 | 1.2 | 494 | 145 | 361 |
| **MARITAL STATUS** | | | | | | | | | | |
| MARRIED | 43.9 | 2.6 | 511 | 254 | 399 | 42.8 | 3.6 | 556 | 271 | 403 |
| NOT MARRIED | 19.6 | .8 | 741 | 169 | 379 | 19.6 | .8 | 494 | 251 | 381 |
| FEMALE HEAD | 13.7 | .5 | 795 | 172 | 512 | 13.6 | .6 | 461 | 340 | 370 |
| MALE HEAD | 5.9 | .3 | 169 | 168 | 145 | 6.0 | .2 | 568 | 76 | 412 |
| **HOUSEHOLDS WITH CHILDREN** | | | | | | | | | | |
| YES | 30.6 | 1.9 | 608 | 284 | 446 | 30.3 | 2.2 | 408 | 315 | 345 |
| FEMALE HEAD | 4.7 | .3 | 666 | 195 | 404 | 4.8 | .2 | 470 | 159 | 322 |
| MALE HEAD | 25.9 | 1.6 | 595 | 290 | 453 | 25.5 | 2.1 | 402 | 319 | 347 |
| NO | 32.9 | 1.5 | 507 | 155 | 326 | 32.2 | 2.2 | 654 | 206 | 454 |
| FEMALE HEAD | 9.1 | .2 | 935 | 60 | 659 | 8.9 | .4 | 457 | 383 | 387 |
| MALE HEAD | 23.8 | 1.2 | 400 | 158 | 266 | 23.3 | 1.7 | 704 | 178 | 471 |

SEE NOTES AT END OF TABLE

TABLE 11. ATTIC INSULATION ADDED DURING 1978 OR 1979 (EXCLUDING BUILDINGS OF 5 OR MORE UNITS) CONTINUED

| HOUSEHOLD CHARACTERISTICS | HOUSEHOLDS NOT ADDING ATTIC INSULATION IN 1979 (MILLIONS) | HOUSEHOLDS ADDING ATTIC INSULATION IN 1979 (MILLIONS) | COST OF ITEMS ADDED IN 1979 | | | HOUSEHOLDS NOT ADDING ATTIC INSULATION IN 1978 (MILLIONS) | HOUSEHOLDS ADDING ATTIC INSULATION IN 1978 (MILLIONS) | COST OF ITEMS ADDED IN 1978 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) |
| **HOUSEHOLD MEMBERS** | | | | | | | | | | |
| ONE | 10.8 | 0.4 | 990 | 197 | 444 | 10.7 | 0.5 | 563 | 197 | 404 |
| TWO | 21.6 | 1.1 | 390 | 144 | 293 | 21.0 | 1.7 | 693 | 185 | 459 |
| THREE | 11.1 | .8 | 541 | 418 | 467 | 11.4 | .5 | 355 | 156 | 287 |
| FOUR | 10.7 | .6 | 701 | 176 | 405 | 10.4 | .9 | 421 | 488 | 435 |
| FIVE OR MORE | 9.2 | .5 | 794 | 199 | 448 | 8.9 | .9 | 455 | 224 | 310 |
| **NUMBER OF FULL-TIME WAGE EARNERS** | | | | | | | | | | |
| NONE | 17.7 | .8 | 710 | 222 | 455 | 17.6 | .9 | 454 | 199 | 323 |
| ONE | 27.8 | 1.5 | 456 | 324 | 408 | 27.3 | 2.0 | 571 | 362 | 474 |
| TWO | 15.4 | .9 | 484 | 129 | 288 | 14.9 | 1.3 | 578 | 202 | 348 |
| THREE | 2.1 | .2 | 459 | 112 | 243 | 2.1 | .1 | 491 | 154 | 265 |
| FOUR OR MORE | .5 | .1 | 1364 | - | 1364 | .5 | .1 | 505 | 254 | 437 |
| **FULL-TIME (FT) EMPLOYMENT** | | | | | | | | | | |
| HEAD MARRIED | 43.9 | 2.6 | 511 | 254 | 399 | 42.8 | 3.6 | 556 | 271 | 403 |
| HEAD OR SPOUSE EMPLOYED FT | 22.3 | 1.3 | 442 | 327 | 423 | 21.9 | 1.7 | 585 | 372 | 484 |
| BOTH EMPLOYED FT | 12.7 | .7 | 535 | 129 | 323 | 12.1 | 1.3 | 584 | 189 | 351 |
| NEITHER EMPLOYED FT | 8.9 | .5 | 615 | 219 | 446 | 8.8 | .6 | 415 | 172 | 288 |
| HEAD NOT MARRIED | 19.6 | .8 | 741 | 169 | 379 | 19.6 | .8 | 494 | 251 | 381 |
| HEAD EMPLOYED FT | 8.2 | .5 | 700 | 183 | 392 | 8.3 | .4 | 449 | 214 | 365 |
| HEAD NOT EMPLOYED FT | 11.3 | .4 | 802 | 44 | 360 | 11.3 | .4 | 537 | 316 | 395 |

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

**TABLE 12. STORM WINDOWS AND DOORS ADDED DURING 1978 OR 1979 (EXCLUDING BUILDINGS OF 5 OR MORE UNITS)**

| HOUSEHOLD CHARACTERISTICS | HOUSEHOLDS NOT ADDING STORM WINDOWS AND/OR DOORS IN 1979 (MILLIONS) | HOUSEHOLDS ADDING STORM WINDOWS AND/OR DOORS IN 1979 (MILLIONS) | COST OF ITEMS ADDED IN 1979 | | | HOUSEHOLDS NOT ADDING STORM WINDOWS AND/OR DOORS IN 1978 (MILLIONS) | HOUSEHOLDS ADDING STORM WINDOWS AND/OR DOORS IN 1978 (MILLIONS) | COST OF ITEMS ADDED IN 1978 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) |
| **TOTAL HOUSEHOLDS** | 63.0 | 3.9 | 549 | 238 | 382 | 63.2 | 3.7 | 496 | 285 | 398 |
| **MAIN HEATING FUEL** | | | | | | | | | | |
| NATURAL GAS | 35.4 | 2.2 | 408 | 237 | 318 | 35.7 | 2.0 | 431 | 260 | 351 |
| FUEL OIL AND KEROSENE | 11.8 | .7 | 681 | 218 | 440 | 11.7 | .9 | 521 | 326 | 446 |
| ELECTRICITY | 8.9 | .5 | 1060 | 219 | 685 | 9.0 | .5 | 761 | 230 | 588 |
| LPG | 3.4 | .2 | 263 | 422 | 294 | 3.4 | .2 | 430 | 478 | 461 |
| WOOD | 3.0 | .2 | 170 | 166 | 160 | 3.0 | .2 | 237 | 193 | 195 |
| COAL | .2 | .1 | - | 500 | 500 | .2 | - | - | - | - |
| OTHER AND NONE | .2 | - | - | - | - | .2 | - | - | - | - |
| **CENSUS REGION** | | | | | | | | | | |
| NORTHEAST | 11.9 | .9 | 660 | 440 | 524 | 12.1 | .8 | 514 | 380 | 445 |
| NORTH CENTRAL | 18.6 | 1.1 | 500 | 181 | 332 | 18.4 | 1.3 | 594 | 249 | 414 |
| SOUTH | 21.3 | 1.4 | 590 | 173 | 379 | 21.3 | 1.4 | 391 | 224 | 334 |
| WEST | 11.2 | .4 | 199 | 222 | 225 | 11.3 | .3 | 741 | 395 | 508 |
| **URBAN/RURAL** | | | | | | | | | | |
| URBAN | 43.6 | 2.7 | 476 | 210 | 339 | 44.0 | 2.4 | 533 | 294 | 429 |
| RURAL | 19.4 | 1.2 | 744 | 287 | 482 | 19.2 | 1.3 | 422 | 270 | 343 |
| **SMSA/NON-SMSA** | | | | | | | | | | |
| SMSA | 41.5 | 2.5 | 661 | 249 | 448 | 41.6 | 2.4 | 583 | 325 | 465 |
| NON-SMSA | 21.5 | 1.4 | 294 | 217 | 260 | 21.6 | 1.3 | 317 | 219 | 266 |
| **AIA HEATING AND COOLING DEGREE DAY ZONES** | | | | | | | | | | |
| <2000 CDD AND >7000 HDD | 4.8 | .3 | 287 | 220 | 258 | 4.8 | .3 | 187 | 239 | 220 |
| <2000 CDD AND 5500-7000 HDD | 17.8 | 1.1 | 570 | 254 | 406 | 17.7 | 1.3 | 462 | 398 | 422 |
| <2000 CDD AND 4000-5499 HDD | 15.8 | 1.0 | 519 | 327 | 394 | 16.0 | .9 | 726 | 228 | 492 |
| <2000 CDD AND <4000 HDD | 14.6 | .7 | 331 | 111 | 199 | 14.6 | .8 | 379 | 220 | 311 |
| >2000 CDD AND <4000 HDD | 9.9 | .6 | 745 | 256 | 590 | 10.1 | .4 | 510 | 81 | 442 |

SEE NOTES AT END OF TABLE

TABLE 12. STORM WINDOWS AND DOORS ADDED DURING 1978 OR 1979 (EXCLUDING BUILDINGS OF 5 OR MORE UNITS) CONTINUED

| HOUSEHOLD CHARACTERISTICS | HOUSEHOLDS NOT ADDING STORM WINDOWS AND/OR DOORS IN 1979 (MILLIONS) | HOUSEHOLDS ADDING STORM WINDOWS AND/OR DOORS IN 1979 (MILLIONS) | COST OF ITEMS ADDED IN 1979 | | | HOUSEHOLDS NOT ADDING STORM WINDOWS AND/OR DOORS IN 1978 (MILLIONS) | HOUSEHOLDS ADDING STORM WINDOWS AND/OR DOORS IN 1978 (MILLIONS) | COST OF ITEMS ADDED IN 1978 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) |
| **TYPE OF STRUCTURE** | | | | | | | | | | |
| SINGLE FAMILY DETACHED | | | | | | | | | | |
| TOTAL | 47.0 | 3.2 | 610 | 237 | 402 | 47.0 | 3.1 | 487 | 291 | 400 |
| OWNERS | 40.2 | 2.9 | 636 | 245 | 421 | 40.3 | 2.8 | 488 | 258 | 392 |
| RENTERS | 6.8 | .2 | 148 | 85 | 154 | 6.7 | .3 | 471 | 531 | 482 |
| SINGLE FAMILY ATTACHED | | | | | | | | | | |
| TOTAL | 3.1 | .2 | 301 | - | 338 | 3.2 | .1 | 532 | 50 | 475 |
| OWNERS | 1.9 | .2 | 301 | - | 301 | 1.9 | .1 | 696 | 50 | 599 |
| RENTERS | 1.3 | - | - | - | 469 | 1.3 | - | - | - | - |
| 2-4 UNIT BLDG | | | | | | | | | | |
| TOTAL | 8.9 | .4 | 378 | 333 | 322 | 9.1 | .2 | 524 | 241 | 344 |
| OWNERS | 2.1 | .1 | 368 | 477 | 399 | 2.2 | .1 | 408 | 400 | 405 |
| RENTERS | 6.7 | .2 | 392 | 70 | 278 | 6.9 | .1 | 1000 | 45 | 266 |
| MOBILE HOME | 3.9 | .1 | 182 | 158 | 169 | 3.8 | .3 | 674 | 286 | 387 |
| OTHER | .1 | - | - | 250 | 250 | .1 | - | - | - | - |
| **NUMBER OF ROOMS** | | | | | | | | | | |
| ONE TO THREE | 4.5 | .2 | 220 | 74 | 227 | 4.6 | .2 | 354 | 120 | 259 |
| FOUR | 11.6 | .4 | 508 | 276 | 334 | 11.6 | .4 | 276 | 166 | 227 |
| FIVE | 15.8 | .9 | 274 | 184 | 225 | 15.7 | 1.0 | 490 | 308 | 393 |
| SIX | 14.5 | .9 | 643 | 216 | 402 | 14.6 | .8 | 494 | 208 | 390 |
| SEVEN | 8.5 | .6 | 485 | 362 | 405 | 8.6 | .5 | 593 | 368 | 487 |
| EIGHT OR MORE | 8.1 | .8 | 772 | 216 | 573 | 8.2 | .8 | 601 | 352 | 471 |

SEE NOTES AT END OF TABLE

**TABLE 12. STORM WINDOWS AND DOORS ADDED DURING 1978 OR 1979 (EXCLUDING BUILDINGS OF 5 OR MORE UNITS) CONTINUED**

| HOUSEHOLD CHARACTERISTICS | HOUSEHOLDS NOT ADDING STORM WINDOWS AND/OR DOORS IN 1979 (MILLIONS) | HOUSEHOLDS ADDING STORM WINDOWS AND/OR DOORS IN 1979 (MILLIONS) | COST OF ITEMS ADDED IN 1979 | | | HOUSEHOLDS NOT ADDING STORM WINDOWS AND/OR DOORS IN 1978 (MILLIONS) | HOUSEHOLDS ADDING STORM WINDOWS AND/OR DOORS IN 1978 (MILLIONS) | COST OF ITEMS ADDED IN 1978 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) |
| **NUMBER OF ROOMS AIR CONDITIONED** | | | | | | | | | | |
| ALL | 18.2 | 1.4 | 707 | 186 | 453 | 18.4 | 1.2 | 487 | 306 | 407 |
| SOME | 15.8 | 1.3 | 459 | 290 | 355 | 16.0 | 1.1 | 539 | 234 | 436 |
| NONE | 28.9 | 1.2 | 451 | 248 | 330 | 28.7 | 1.4 | 463 | 296 | 363 |
| **YEAR HOUSE BUILT** | | | | | | | | | | |
| 1939 OR EARLIER | 20.9 | 1.5 | 491 | 290 | 360 | 21.2 | 1.2 | 543 | 353 | 441 |
| 1940 TO 1949 | 6.1 | .4 | 491 | 206 | 339 | 6.0 | .4 | 518 | 229 | 392 |
| 1950 TO 1959 | 12.8 | .7 | 373 | 232 | 287 | 12.8 | .7 | 340 | 159 | 283 |
| 1960 TO 1964 | 5.5 | .3 | 703 | 166 | 510 | 5.6 | .2 | 435 | 203 | 341 |
| 1965 TO 1969 | 5.8 | .4 | 842 | 209 | 578 | 5.8 | .4 | 589 | 374 | 439 |
| 1970 TO 1974 | 6.2 | .3 | 404 | 177 | 277 | 6.1 | .4 | 709 | 248 | 583 |
| 1975 TO 1979 | 5.6 | .3 | 541 | 279 | 459 | 5.6 | .3 | 218 | 303 | 278 |
| **OWN/RENT** | | | | | | | | | | |
| OWN | 47.3 | 3.3 | 573 | 250 | 408 | 47.3 | 3.3 | 495 | 265 | 394 |
| RENT | 14.6 | .5 | 245 | 81 | 224 | 14.8 | .3 | 649 | 391 | 437 |
| RENT FREE | 1.2 | .1 | 400 | 250 | 295 | 1.1 | .1 | 344 | 582 | 420 |
| **1978 FAMILY INCOME** | | | | | | | | | | |
| LESS THAN $5,000 | 8.6 | .3 | 746 | 232 | 366 | 8.8 | .2 | 156 | 35 | 120 |
| $5,000 TO $9,999 | 11.2 | .4 | 244 | 194 | 242 | 11.1 | .5 | 280 | 124 | 213 |
| $10,000 TO $14,999 | 11.0 | .7 | 400 | 141 | 252 | 11.2 | .5 | 480 | 388 | 436 |
| $15,000 TO $19,999 | 8.2 | .4 | 383 | 423 | 406 | 8.2 | .4 | 319 | 359 | 320 |
| $20,000 TO $24,999 | 7.8 | .7 | 585 | 224 | 379 | 7.8 | .8 | 482 | 297 | 410 |
| $25,000 TO $34,999 | 9.3 | .8 | 673 | 239 | 494 | 9.4 | .7 | 581 | 293 | 434 |
| $35,000 OR MORE | 6.8 | .5 | 647 | 244 | 485 | 6.8 | .6 | 885 | 288 | 623 |

SEE NOTES AT END OF TABLE

TABLE 12. STORM WINDOWS AND DOORS ADDED DURING 1978 OR 1979 (EXCLUDING BUILDINGS OF 5 OR MORE UNITS) CONTINUED

| HOUSEHOLD CHARACTERISTICS | HOUSEHOLDS NOT ADDING STORM WINDOWS AND/OR DOORS IN 1979 (MILLIONS) | HOUSEHOLDS ADDING STORM WINDOWS AND/OR DOORS IN 1979 (MILLIONS) | COST OF ITEMS ADDED IN 1979 | | | HOUSEHOLDS NOT ADDING STORM WINDOWS AND/OR DOORS IN 1978 (MILLIONS) | HOUSEHOLDS ADDING STORM WINDOWS AND/OR DOORS IN 1978 (MILLIONS) | COST OF ITEMS ADDED IN 1978 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) |
| TOTAL POOR | 10.6 | 0.4 | 488 | 212 | 328 | 10.8 | 0.3 | 163 | 41 | 119 |
| RACE | | | | | | | | | | |
| WHITE | 55.8 | 3.6 | 582 | 247 | 401 | 56.1 | 3.4 | 420 | 275 | 351 |
| BLACK | 6.6 | .3 | 142 | 67 | 125 | 6.5 | .3 | 1192 | 437 | 883 |
| OTHER | .5 | - | 100 | - | 100 | .6 | - | - | - | - |
| AGE OF HEAD | | | | | | | | | | |
| 29 OR LESS | 10.5 | .8 | 294 | 127 | 161 | 10.8 | .5 | 464 | 192 | 338 |
| 30 TO 44 | 17.6 | 1.1 | 468 | 292 | 379 | 17.3 | 1.4 | 479 | 365 | 413 |
| 45 TO 59 | 16.1 | 1.2 | 724 | 291 | 549 | 16.2 | 1.0 | 332 | 312 | 319 |
| 60 AND OVER | 18.9 | .8 | 500 | 207 | 368 | 18.8 | .9 | 655 | 134 | 498 |
| MARITAL STATUS | | | | | | | | | | |
| MARRIED | 43.6 | 2.9 | 568 | 249 | 398 | 43.5 | 3.0 | 545 | 271 | 431 |
| NOT MARRIED | 19.4 | 1.0 | 490 | 184 | 334 | 19.7 | .7 | 232 | 338 | 263 |
| FEMALE HEAD | 13.5 | .7 | 600 | 160 | 428 | 13.7 | .5 | 225 | 366 | 262 |
| MALE HEAD | 5.9 | .3 | 131 | 213 | 136 | 6.0 | .2 | 254 | 276 | 266 |
| HOUSEHOLDS WITH CHILDREN | | | | | | | | | | |
| YES | 30.5 | 2.1 | 545 | 275 | 388 | 30.3 | 2.2 | 508 | 352 | 421 |
| FEMALE HEAD | 4.7 | .3 | 818 | 81 | 496 | 4.8 | .2 | 177 | 665 | 343 |
| MALE HEAD | 25.8 | 1.8 | 499 | 291 | 372 | 25.6 | 2.0 | 533 | 323 | 430 |
| NO | 32.5 | 1.8 | 552 | 180 | 375 | 32.8 | 1.5 | 483 | 158 | 364 |
| FEMALE HEAD | 8.9 | .4 | 460 | 235 | 386 | 9.0 | .3 | 248 | 171 | 204 |
| MALE HEAD | 23.6 | 1.4 | 581 | 172 | 371 | 23.8 | 1.2 | 534 | 154 | 408 |

SEE NOTES AT END OF TABLE

**TABLE 12. STORM WINDOWS AND DOORS ADDED DURING 1978 OR 1979 (EXCLUDING BUILDINGS OF 5 OR MORE UNITS) CONTINUED**

| HOUSEHOLD CHARACTERISTICS | HOUSEHOLDS NOT ADDING STORM WINDOWS AND/OR DOORS IN 1979 (MILLIONS) | HOUSEHOLDS ADDING STORM WINDOWS AND/OR DOORS IN 1979 (MILLIONS) | COST OF ITEMS ADDED IN 1979 | | | HOUSEHOLDS NOT ADDING STORM WINDOWS AND/OR DOORS IN 1978 (MILLIONS) | HOUSEHOLDS ADDING STORM WINDOWS AND/OR DOORS IN 1978 (MILLIONS) | COST OF ITEMS ADDED IN 1978 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) |
| **HOUSEHOLD MEMBERS** | | | | | | | | | | |
| ONE | 10.6 | 0.5 | 381 | 113 | 290 | 10.9 | 0.3 | 140 | 87 | 106 |
| TWO | 21.4 | 1.3 | 687 | 163 | 415 | 21.5 | 1.2 | 513 | 158 | 407 |
| THREE | 11.1 | .9 | 369 | 271 | 303 | 11.1 | .8 | 511 | 479 | 484 |
| FOUR | 10.5 | .8 | 678 | 218 | 417 | 10.6 | .7 | 478 | 284 | 372 |
| FIVE OR MORE | 9.3 | .4 | 501 | 546 | 489 | 9.1 | .7 | 593 | 335 | 434 |
| **NUMBER OF FULL-TIME WAGE EARNERS** | | | | | | | | | | |
| NONE | 17.7 | .8 | 370 | 219 | 315 | 17.8 | .7 | 457 | 106 | 322 |
| ONE | 27.4 | 1.9 | 635 | 280 | 450 | 27.7 | 1.6 | 385 | 326 | 344 |
| TWO | 15.1 | 1.1 | 500 | 204 | 338 | 15.1 | 1.2 | 654 | 299 | 530 |
| THREE | 2.2 | .1 | 170 | 166 | 120 | 2.1 | .2 | 337 | 104 | 294 |
| FOUR OR MORE | .5 | - | - | 80 | 80 | .5 | - | - | 475 | 475 |
| **FULL-TIME (FT) EMPLOYMENT** | | | | | | | | | | |
| HEAD MARRIED | 43.6 | 2.9 | 568 | 249 | 398 | 43.5 | 3.0 | 545 | 271 | 431 |
| HEAD OR SPOUSE EMPLOYED FT | 22.0 | 1.6 | 675 | 313 | 495 | 22.0 | 1.5 | 623 | 289 | 448 |
| BOTH EMPLOYED FT | 12.5 | .9 | 452 | 161 | 288 | 12.5 | 1.0 | 455 | 272 | 399 |
| NEITHER EMPLOYED FT | 9.0 | .4 | 265 | 244 | 277 | 9.0 | .5 | 555 | 149 | 440 |
| HEAD NOT MARRIED | 19.4 | 1.0 | 490 | 184 | 334 | 19.7 | .7 | 232 | 338 | 263 |
| HEAD EMPLOYED FT | 8.2 | .5 | 229 | 232 | 196 | 8.3 | .4 | 316 | 536 | 393 |
| HEAD NOT EMPLOYED FT | 11.2 | .5 | 764 | 113 | 479 | 11.4 | .3 | 140 | 56 | 103 |

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

TABLE 13. WALL INSULATION ADDED DURING 1978 OR 1979 (EXCLUDING BUILDINGS OF 5 OR MORE UNITS)

| HOUSEHOLD CHARACTERISTICS | HOUSEHOLDS NOT ADDING WALL INSULATION IN 1979 (MILLIONS) | HOUSEHOLDS ADDING WALL INSULATION IN 1979 (MILLIONS) | COST OF ITEMS ADDED IN 1979 | | | HOUSEHOLDS NOT ADDING WALL INSULATION IN 1978 (MILLIONS) | HOUSEHOLDS ADDING WALL INSULATION IN 1978 (MILLIONS) | COST OF ITEMS ADDED IN 1978 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) |
| TOTAL HOUSEHOLDS | 65.1 | 1.8 | 1532 | 212 | 886 | 64.9 | 2.0 | 760 | 335 | 654 |
| MAIN HEATING FUEL | | | | | | | | | | |
| NATURAL GAS | 36.7 | .9 | 1138 | 199 | 631 | 36.5 | 1.2 | 860 | 241 | 707 |
| FUEL OIL AND KEROSENE | 12.2 | .4 | 2371 | 129 | 1599 | 12.2 | .3 | 667 | 439 | 636 |
| ELECTRICITY | 9.3 | .2 | 1179 | 430 | 705 | 9.2 | .3 | 564 | 135 | 416 |
| LPG | 3.6 | .1 | 177 | 450 | 234 | 3.6 | .1 | 403 | 60 | 259 |
| WOOD | 3.1 | .1 | 1575 | 156 | 503 | 3.0 | .1 | 673 | 995 | 851 |
| COAL | .2 | .1 | 3000 | - | 3000 | .2 | - | - | - | - |
| OTHER AND NONE | .2 | - | - | - | - | .2 | - | - | - | - |
| CENSUS REGION | | | | | | | | | | |
| NORTHEAST | 12.3 | .5 | 1368 | 264 | 807 | 12.6 | .3 | 828 | 171 | 534 |
| NORTH CENTRAL | 19.1 | .6 | 1942 | 164 | 1097 | 18.9 | .8 | 952 | 336 | 887 |
| SOUTH | 22.3 | .4 | 1573 | 188 | 891 | 22.1 | .6 | 529 | 567 | 537 |
| WEST | 11.4 | .2 | 689 | 248 | 468 | 11.3 | .3 | 546 | 283 | 382 |
| URBAN/RURAL | | | | | | | | | | |
| URBAN | 45.2 | 1.2 | 1524 | 207 | 931 | 45.1 | 1.3 | 797 | 273 | 655 |
| RURAL | 19.9 | .6 | 1552 | 219 | 803 | 19.8 | .7 | 703 | 493 | 653 |
| SMSA/NON-SMSA | | | | | | | | | | |
| SMSA | 42.9 | 1.2 | 1812 | 262 | 1204 | 42.9 | 1.2 | 870 | 227 | 697 |
| NON-SMSA | 22.2 | .6 | 510 | 146 | 259 | 22.0 | .8 | 619 | 523 | 593 |
| AIA HEATING AND COOLING DEGREE DAY ZONES | | | | | | | | | | |
| <2000 CDD AND >7000 HDD | 4.9 | .3 | 712 | 100 | 181 | 4.9 | .2 | 614 | 91 | 375 |
| <2000 CDD AND 5500-7000 HDD | 18.3 | .7 | 1692 | 174 | 1220 | 18.2 | .8 | 1136 | 311 | 950 |
| <2000 CDD AND 4000-5499 HDD | 16.5 | .3 | 1288 | 420 | 769 | 16.4 | .5 | 551 | 347 | 496 |
| <2000 CDD AND <4000 HDD | 15.1 | .3 | 1307 | 176 | 776 | 15.1 | .3 | 524 | 643 | 569 |
| >2000 CDD AND <4000 HDD | 10.3 | .2 | 1735 | 205 | 958 | 10.3 | .2 | 407 | 133 | 363 |

SEE NOTES AT END OF TABLE

**TABLE 13. WALL INSULATION ADDED DURING 1978 OR 1979 (EXCLUDING BUILDINGS OF 5 OR MORE UNITS) CONTINUED**

| HOUSEHOLD CHARACTERISTICS | HOUSEHOLDS NOT ADDING WALL INSULATION IN 1979 (MILLIONS) | HOUSEHOLDS ADDING WALL INSULATION IN 1979 (MILLIONS) | COST OF ITEMS ADDED IN 1979 | | | HOUSEHOLDS NOT ADDING WALL INSULATION IN 1978 (MILLIONS) | HOUSEHOLDS ADDING WALL INSULATION IN 1978 (MILLIONS) | COST OF ITEMS ADDED IN 1978 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) |
| **TYPE OF STRUCTURE** | | | | | | | | | | |
| SINGLE FAMILY DETACHED | | | | | | | | | | |
| TOTAL | 48.6 | 1.5 | 1531 | 223 | 974 | 48.4 | 1.8 | 816 | 373 | 711 |
| OWNERS | 41.7 | 1.4 | 1531 | 237 | 1039 | 41.4 | 1.7 | 824 | 373 | 687 |
| RENTERS | 6.9 | .1 | - | 76 | 89 | 7.0 | .1 | 488 | - | 1502 |
| SINGLE FAMILY ATTACHED | | | | | | | | | | |
| TOTAL | 3.3 | - | 500 | 500 | 500 | 3.3 | - | 492 | - | 492 |
| OWNERS | 2.0 | - | 500 | 500 | 500 | 2.0 | - | 492 | - | 492 |
| RENTERS | 1.3 | - | - | - | - | 1.3 | - | - | - | - |
| 2-4 UNIT BLDG | | | | | | | | | | |
| TOTAL | 9.1 | .2 | 2236 | 136 | 517 | 9.2 | .1 | 50 | 120 | 75 |
| OWNERS | 2.2 | - | - | 137 | 137 | 2.3 | - | 50 | - | 50 |
| RENTERS | 6.8 | .1 | 2236 | 135 | 641 | 6.9 | - | 50 | 120 | 93 |
| MOBILE HOME | 4.0 | .1 | - | 188 | 163 | 4.0 | .1 | 132 | 88 | 106 |
| OTHER | .1 | - | - | - | - | .1 | - | - | - | - |
| **NUMBER OF ROOMS** | | | | | | | | | | |
| ONE TO THREE | 4.6 | .2 | 1090 | 55 | 539 | 4.7 | .1 | 152 | 99 | 127 |
| FOUR | 11.8 | .1 | 1189 | 200 | 701 | 11.8 | .2 | 774 | 104 | 683 |
| FIVE | 16.4 | .3 | 874 | 106 | 549 | 16.1 | .6 | 676 | 576 | 726 |
| SIX | 15.0 | .4 | 1392 | 205 | 555 | 14.9 | .5 | 923 | 235 | 715 |
| SEVEN | 8.7 | .4 | 2260 | 375 | 1585 | 8.8 | .3 | 974 | 150 | 712 |
| EIGHT OR MORE | 8.6 | .4 | 1481 | 196 | 937 | 8.7 | .3 | 515 | 356 | 463 |

SEE NOTES AT END OF TABLE

TABLE 13. WALL INSULATION ADDED DURING 1978 OR 1979 (EXCLUDING BUILDINGS OF 5 OR MORE UNITS) CONTINUED

| HOUSEHOLD CHARACTERISTICS | HOUSEHOLDS NOT ADDING WALL INSULATION IN 1979 (MILLIONS) | HOUSEHOLDS ADDING WALL INSULATION IN 1979 (MILLIONS) | COST OF ITEMS ADDED IN 1979 | | | HOUSEHOLDS NOT ADDING WALL INSULATION IN 1978 (MILLIONS) | HOUSEHOLDS ADDING WALL INSULATION IN 1978 (MILLIONS) | COST OF ITEMS ADDED IN 1978 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) |
| **NUMBER OF ROOMS AIR CONDITIONED** | | | | | | | | | | |
| ALL | 19.2 | 0.4 | 925 | 145 | 552 | 19.0 | 0.6 | 473 | 366 | 436 |
| SOME | 16.5 | .6 | 1509 | 344 | 1041 | 16.5 | .6 | 834 | 543 | 772 |
| NONE | 29.4 | .8 | 1945 | 163 | 947 | 29.4 | .8 | 918 | 206 | 728 |
| **YEAR HOUSE BUILT** | | | | | | | | | | |
| 1939 OR EARLIER | 21.7 | .7 | 1937 | 259 | 1065 | 21.7 | .6 | 560 | 209 | 445 |
| 1940 TO 1949 | 6.3 | .2 | 1765 | 151 | 1292 | 6.3 | .2 | 675 | 888 | 738 |
| 1950 TO 1959 | 13.3 | .2 | 1802 | 209 | 1295 | 13.0 | .6 | 1019 | 155 | 840 |
| 1960 TO 1964 | 5.7 | .2 | 749 | 49 | 653 | 5.7 | .2 | 708 | 220 | 665 |
| 1965 TO 1969 | 6.1 | .1 | 2507 | 208 | 899 | 6.1 | .1 | 982 | 634 | 1080 |
| 1970 TO 1974 | 6.3 | .1 | 118 | 320 | 229 | 6.4 | .1 | 1008 | 167 | 610 |
| 1975 TO 1979 | 5.7 | .2 | 725 | 145 | 253 | 5.7 | .2 | 514 | 370 | 447 |
| **OWN/RENT** | | | | | | | | | | |
| OWN | 49.1 | 1.5 | 1509 | 234 | 976 | 48.7 | 1.9 | 773 | 343 | 641 |
| RENT | 14.8 | .3 | 2236 | 107 | 365 | 15.0 | .1 | 352 | 120 | 924 |
| RENT FREE | 1.2 | - | - | - | - | 1.2 | - | - | - | - |
| **1978 FAMILY INCOME** | | | | | | | | | | |
| LESS THAN $5,000 | 8.8 | .1 | 200 | 70 | 112 | 8.9 | - | 1763 | - | 1763 |
| $5,000 TO $9,999 | 11.4 | .2 | 1358 | 134 | 859 | 11.3 | .3 | 602 | 123 | 636 |
| $10,000 TO $14,999 | 11.4 | .3 | 1087 | 150 | 577 | 11.5 | .2 | 558 | 111 | 430 |
| $15,000 TO $19,999 | 8.3 | .3 | 1171 | 428 | 783 | 8.3 | .3 | 528 | 685 | 563 |
| $20,000 TO $24,999 | 8.3 | .3 | 2843 | 150 | 1406 | 8.1 | .5 | 930 | 237 | 625 |
| $25,000 TO $34,999 | 9.8 | .3 | 1638 | 258 | 1180 | 9.7 | .4 | 727 | 735 | 729 |
| $35,000 OR MORE | 7.1 | .2 | 1211 | 193 | 739 | 7.1 | .2 | 1074 | 194 | 803 |

SEE NOTES AT END OF TABLE

TABLE 13. WALL INSULATION ADDED DURING 1978 OR 1979 (EXCLUDING BUILDINGS OF 5 OR MORE UNITS) CONTINUED

| HOUSEHOLD CHARACTERISTICS | HOUSEHOLDS NOT ADDING WALL INSULATION IN 1979 (MILLIONS) | HOUSEHOLDS ADDING WALL INSULATION IN 1979 (MILLIONS) | COST OF ITEMS ADDED IN 1979 | | | HOUSEHOLDS NOT ADDING WALL INSULATION IN 1978 (MILLIONS) | HOUSEHOLDS ADDING WALL INSULATION IN 1978 (MILLIONS) | COST OF ITEMS ADDED IN 1978 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) |
| TOTAL POOR | 11.0 | 0.1 | 200 | 63 | 103 | 11.0 | 0.1 | 1270 | 400 | 1045 |
| RACE | | | | | | | | | | |
| WHITE | 57.8 | 1.7 | 1605 | 212 | 922 | 57.6 | 1.9 | 784 | 337 | 671 |
| BLACK | 6.8 | .1 | 430 | 105 | 270 | 6.8 | .1 | 186 | 250 | 198 |
| OTHER | .5 | - | 10 | 500 | 220 | .6 | - | - | - | - |
| AGE OF HEAD | | | | | | | | | | |
| 29 OR LESS | 10.9 | .4 | 2334 | 180 | 678 | 10.9 | .5 | 817 | 105 | 469 |
| 30 TO 44 | 18.1 | .5 | 1058 | 134 | 629 | 18.1 | .6 | 779 | 491 | 758 |
| 45 TO 59 | 16.8 | .4 | 1214 | 510 | 999 | 16.7 | .5 | 725 | 528 | 672 |
| 60 AND OVER | 19.3 | .4 | 2149 | 140 | 1277 | 19.3 | .4 | 740 | 82 | 682 |
| MARITAL STATUS | | | | | | | | | | |
| MARRIED | 45.0 | 1.4 | 1510 | 214 | 920 | 44.8 | 1.7 | 759 | 356 | 628 |
| NOT MARRIED | 20.1 | .3 | 1672 | 200 | 739 | 20.1 | .3 | 764 | 88 | 819 |
| FEMALE HEAD | 14.0 | .2 | 1332 | 165 | 740 | 14.0 | .2 | 870 | 120 | 1007 |
| MALE HEAD | 6.1 | .1 | 4000 | 450 | 737 | 6.1 | .1 | 400 | 60 | 282 |
| HOUSEHOLDS WITH CHILDREN | | | | | | | | | | |
| YES | 31.6 | 1.0 | 1213 | 262 | 746 | 31.4 | 1.2 | 876 | 310 | 717 |
| FEMALE HEAD | 4.9 | .1 | 866 | 256 | 666 | 4.9 | .1 | 696 | - | 1316 |
| MALE HEAD | 26.7 | .9 | 1263 | 263 | 754 | 26.5 | 1.1 | 891 | 310 | 676 |
| NO | 33.5 | .8 | 1917 | 127 | 1057 | 33.5 | .8 | 612 | 391 | 558 |
| FEMALE HEAD | 9.2 | .1 | 1966 | 126 | 722 | 9.2 | .1 | 965 | 120 | 816 |
| MALE HEAD | 24.3 | .7 | 1911 | 127 | 1130 | 24.3 | .7 | 538 | 426 | 510 |

SEE NOTES AT END OF TABLE

TABLE 13. WALL INSULATION ADDED DURING 1978 OR 1979 (EXCLUDING BUILDINGS OF 5 OR MORE UNITS) CONTINUED

| HOUSEHOLD CHARACTERISTICS | HOUSEHOLDS NOT ADDING WALL INSULATION IN 1979 (MILLIONS) | HOUSEHOLDS ADDING WALL INSULATION IN 1979 (MILLIONS) | COST OF ITEMS ADDED IN 1979 | | | HOUSEHOLDS NOT ADDING WALL INSULATION IN 1978 (MILLIONS) | HOUSEHOLDS ADDING WALL INSULATION IN 1978 (MILLIONS) | COST OF ITEMS ADDED IN 1978 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) |
| HOUSEHOLD MEMBERS | | | | | | | | | | |
| ONE | 11.0 | 0.2 | 2281 | 124 | 755 | 11.0 | 0.2 | 555 | 88 | 424 |
| TWO | 22.1 | .6 | 1554 | 128 | 1035 | 22.1 | .6 | 620 | 485 | 594 |
| THREE | 11.6 | .3 | 2007 | 156 | 1189 | 11.4 | .5 | 946 | 137 | 745 |
| FOUR | 10.9 | .4 | 1023 | 229 | 673 | 11.0 | .3 | 708 | 495 | 653 |
| FIVE OR MORE | 9.5 | .3 | 1507 | 347 | 672 | 9.4 | .4 | 969 | 435 | 723 |
| NUMBER OF FULL-TIME WAGE EARNERS | | | | | | | | | | |
| NONE | 18.0 | .5 | 1956 | 114 | 1286 | 18.3 | .2 | 541 | 82 | 684 |
| ONE | 28.5 | .8 | 1170 | 262 | 647 | 28.3 | 1.0 | 747 | 323 | 625 |
| TWO | 15.8 | .4 | 1752 | 162 | 965 | 15.6 | .7 | 815 | 401 | 653 |
| THREE | 2.2 | .1 | 1090 | - | 730 | 2.2 | .1 | 1080 | 190 | 723 |
| FOUR OR MORE | .6 | - | 700 | - | 700 | .5 | - | 1208 | - | 1208 |
| FULL-TIME (FT) EMPLOYMENT | | | | | | | | | | |
| HEAD MARRIED | 45.0 | 1.4 | 1510 | 214 | 920 | 44.8 | 1.7 | 759 | 356 | 628 |
| HEAD OR SPOUSE EMPLOYED FT | 22.8 | .8 | 1095 | 262 | 653 | 22.7 | .9 | 834 | 331 | 684 |
| BOTH EMPLOYED FT | 13.1 | .3 | 1526 | 94 | 977 | 12.8 | .6 | 711 | 408 | 590 |
| NEITHER EMPLOYED FT | 9.1 | .3 | 2233 | 149 | 1533 | 9.3 | .2 | 525 | 130 | 449 |
| HEAD NOT MARRIED | 20.1 | .3 | 1672 | 200 | 739 | 20.1 | .3 | 764 | 88 | 819 |
| HEAD EMPLOYED FT | 8.6 | .1 | 2099 | 277 | 656 | 8.6 | .1 | 504 | 60 | 417 |
| HEAD NOT EMPLOYED FT | 11.5 | .2 | 1523 | 53 | 799 | 11.5 | .1 | 1012 | 120 | 1158 |

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

**TABLE 14. ADDED ROOF OR ATTIC INSULATION, STORM WINDOWS AND/OR DOORS, OR WALL INSULATION DURING 1978 OR 1979 EXCLUDING BUILDINGS OF 5 OR MORE UNITS (MILLION HOUSEHOLDS)**

| HOUSEHOLD CHARACTERISTICS | NUMBER OF CONSERVATION ITEMS ADDED DURING 1979 | | | | NUMBER OF CONSERVATION ITEMS ADDED DURING 1978 | | | |
|---|---|---|---|---|---|---|---|---|
| | THREE | TWO | ONE | NONE | THREE | TWO | ONE | NONE |
| **TOTAL HOUSEHOLDS** | 0.2 | 1.4 | 5.8 | 59.6 | 0.3 | 1.4 | 6.4 | 58.7 |
| **MAIN HEATING FUEL** | | | | | | | | |
| NATURAL GAS | .1 | .7 | 3.1 | 33.7 | .2 | .8 | 3.5 | 33.1 |
| FUEL OIL AND KEROSENE | - | .3 | 1.2 | 11.0 | .1 | .3 | 1.4 | 10.8 |
| ELECTRICITY | .1 | .1 | .8 | 8.5 | - | .1 | .7 | 8.6 |
| LPG | - | - | .3 | 3.3 | - | - | .2 | 3.4 |
| WOOD | - | .1 | .4 | 2.7 | - | .1 | .6 | 2.5 |
| COAL | - | .1 | - | .2 | - | - | - | .2 |
| OTHER AND NONE | - | - | - | .2 | - | - | - | .2 |
| **CENSUS REGION** | | | | | | | | |
| NORTHEAST | - | .3 | 1.3 | 11.2 | - | .2 | 1.5 | 11.1 |
| NORTH CENTRAL | - | .6 | 1.7 | 17.4 | .1 | .6 | 2.1 | 16.9 |
| SOUTH | - | .3 | 2.1 | 20.2 | .1 | .4 | 2.3 | 19.9 |
| WEST | .1 | .2 | .7 | 10.7 | - | .2 | .6 | 10.8 |
| **URBAN/RURAL** | | | | | | | | |
| URBAN | .1 | 1.0 | 4.0 | 41.3 | .2 | .9 | 4.5 | 40.8 |
| RURAL | .1 | .4 | 1.8 | 18.3 | .1 | .5 | 2.0 | 18.0 |
| **SMSA/NON-SMSA** | | | | | | | | |
| SMSA | .1 | .9 | 4.0 | 39.1 | .2 | .9 | 4.4 | 38.6 |
| NON-SMSA | .1 | .5 | 1.8 | 20.5 | .1 | .5 | 2.1 | 20.1 |
| **AIA HEATING AND COOLING DEGREE DAY ZONES** | | | | | | | | |
| <2000 CDD AND >7000 HDD | - | .2 | .5 | 4.5 | - | .2 | .6 | 4.4 |
| <2000 CDD AND 5500-7000 HDD | .1 | .5 | 1.6 | 16.8 | .1 | .5 | 2.3 | 16.1 |
| <2000 CDD AND 4000-5499 HDD | - | .4 | 1.5 | 15.0 | .1 | .4 | 1.4 | 15.0 |
| <2000 CDD AND <4000 HDD | - | .2 | 1.2 | 13.9 | .1 | .3 | 1.2 | 13.8 |
| >2000 CDD AND <4000 HDD | - | .1 | .9 | 9.4 | - | .1 | .9 | 9.5 |

SEE NOTES AT END OF TABLE

**TABLE 14. ADDED ROOF OR ATTIC INSULATION, STORM WINDOWS AND/OR DOORS, OR WALL INSULATION DURING 1978 OR 1979 EXCLUDING BUILDINGS OF 5 OR MORE UNITS (MILLION HOUSEHOLDS) CONTINUED**

| HOUSEHOLD CHARACTERISTICS | NUMBER OF CONSERVATION ITEMS ADDED DURING 1979 | | | | NUMBER OF CONSERVATION ITEMS ADDED DURING 1978 | | | |
|---|---|---|---|---|---|---|---|---|
| | THREE | TWO | ONE | NONE | THREE | TWO | ONE | NONE |
| **TYPE OF STRUCTURE** | | | | | | | | |
| SINGLE FAMILY DETACHED | | | | | | | | |
| TOTAL | 0.2 | 1.2 | 4.7 | 44.1 | 0.2 | 1.3 | 5.7 | 43.0 |
| OWNERS | .2 | 1.1 | 4.5 | 37.4 | .2 | 1.2 | 5.2 | 36.4 |
| RENTERS | - | .1 | .2 | 6.7 | - | .1 | .4 | 6.5 |
| SINGLE FAMILY ATTACHED | | | | | | | | |
| TOTAL | - | - | .3 | 3.1 | - | - | .1 | 3.1 |
| OWNERS | - | - | .2 | 1.8 | - | - | .1 | 1.9 |
| RENTERS | - | - | - | 1.3 | - | - | - | 1.3 |
| 2-4 UNIT BLDG | | | | | | | | |
| TOTAL | - | - | .6 | 8.6 | - | - | .3 | 8.9 |
| OWNERS | - | - | .2 | 2.1 | - | - | .2 | 2.1 |
| RENTERS | - | - | .4 | 6.5 | - | - | .1 | 6.8 |
| MOBILE HOME | - | .1 | .3 | 3.7 | - | .1 | .3 | 3.7 |
| OTHER | - | - | - | .1 | - | - | - | .1 |
| **NUMBER OF ROOMS** | | | | | | | | |
| ONE TO THREE | - | .1 | .4 | 4.3 | - | - | .1 | 4.5 |
| FOUR | - | .1 | .6 | 11.3 | - | .1 | .8 | 11.0 |
| FIVE | - | .3 | 1.2 | 15.2 | - | .4 | 1.7 | 14.6 |
| SIX | .1 | .2 | 1.7 | 13.5 | .1 | .3 | 1.6 | 13.4 |
| SEVEN | - | .3 | 1.0 | 7.8 | .1 | .2 | 1.3 | 7.6 |
| EIGHT OR MORE | .1 | .3 | 1.1 | 7.5 | - | .4 | 1.0 | 7.6 |

SEE NOTES AT END OF TABLE

TABLE 14. ADDED ROOF OR ATTIC INSULATION, STORM WINDOWS AND/OR DOORS, OR WALL INSULATION DURING 1978 OR 1979 EXCLUDING BUILDINGS OF 5 OR MORE UNITS (MILLION HOUSEHOLDS) CONTINUED

| HOUSEHOLD CHARACTERISTICS | NUMBER OF CONSERVATION ITEMS ADDED DURING 1979 | | | | NUMBER OF CONSERVATION ITEMS ADDED DURING 1978 | | | |
|---|---|---|---|---|---|---|---|---|
| | THREE | TWO | ONE | NONE | THREE | TWO | ONE | NONE |
| **NUMBER OF ROOMS AIR CONDITIONED** | | | | | | | | |
| ALL | - | 0.4 | 2.0 | 17.2 | 0.1 | 0.4 | 2.2 | 16.9 |
| SOME | - | .4 | 1.7 | 14.9 | - | .5 | 2.0 | 14.5 |
| NONE | 0.1 | .5 | 2.1 | 27.5 | .1 | .6 | 2.2 | 27.3 |
| **YEAR HOUSE BUILT** | | | | | | | | |
| 1939 OR EARLIER | .1 | .7 | 1.6 | 20.0 | .1 | .5 | 2.1 | 19.7 |
| 1940 TO 1949 | - | .1 | .5 | 5.8 | - | .1 | .6 | 5.7 |
| 1950 TO 1959 | - | .2 | 1.1 | 12.2 | .1 | .3 | 1.7 | 11.5 |
| 1960 TO 1964 | - | .1 | .7 | 5.0 | - | .1 | .6 | 5.1 |
| 1965 TO 1969 | - | .1 | .7 | 5.4 | - | .2 | .6 | 5.4 |
| 1970 TO 1974 | - | .1 | .7 | 5.7 | - | - | .5 | 5.9 |
| 1975 TO 1979 | - | .1 | .5 | 5.3 | - | .1 | .4 | 5.4 |
| **OWN/RENT** | | | | | | | | |
| OWN | .2 | 1.2 | 5.0 | 44.2 | .3 | 1.4 | 5.8 | 43.1 |
| RENT | - | .1 | .7 | 14.2 | - | .1 | .5 | 14.5 |
| RENT FREE | - | - | .1 | 1.1 | - | - | .1 | 1.1 |
| **1978 FAMILY INCOME** | | | | | | | | |
| LESS THAN $5,000 | - | .2 | .4 | 8.4 | - | - | .5 | 8.4 |
| $5,000 TO $9,999 | - | .1 | .7 | 10.8 | - | .2 | 1.1 | 10.3 |
| $10,000 TO $14,999 | .1 | .2 | .9 | 10.6 | .1 | .1 | .9 | 10.7 |
| $15,000 TO $19,999 | - | .2 | .8 | 7.6 | .1 | .2 | .6 | 7.7 |
| $20,000 TO $24,999 | - | .3 | 1.1 | 7.2 | - | .3 | 1.3 | 6.9 |
| $25,000 TO $34,999 | - | .3 | 1.1 | 8.8 | .1 | .4 | 1.2 | 8.5 |
| $35,000 OR MORE | - | .2 | .9 | 6.3 | - | .2 | 1.0 | 6.1 |
| **TOTAL POOR** | - | .2 | .6 | 10.3 | - | .1 | .6 | 10.4 |

SEE NOTES AT END OF TABLE

**TABLE 14. ADDED ROOF OR ATTIC INSULATION, STORM WINDOWS AND/OR DOORS, OR WALL INSULATION DURING 1978 OR 1979 EXCLUDING BUILDINGS OF 5 OR MORE UNITS (MILLION HOUSEHOLDS) CONTINUED**

| HOUSEHOLD CHARACTERISTICS | NUMBER OF CONSERVATION ITEMS ADDED DURING 1979 | | | | NUMBER OF CONSERVATION ITEMS ADDED DURING 1978 | | | |
|---|---|---|---|---|---|---|---|---|
| | THREE | TWO | ONE | NONE | THREE | TWO | ONE | NONE |
| **RACE** | | | | | | | | |
| WHITE | 0.2 | 1.3 | 5.3 | 52.6 | 0.2 | 1.4 | 6.0 | 51.8 |
| BLACK | - | - | .4 | 6.4 | - | - | .5 | 6.4 |
| OTHER | - | - | - | .5 | - | - | - | .5 |
| **AGE OF HEAD** | | | | | | | | |
| 29 OR LESS | - | .3 | .9 | 10.0 | .1 | .2 | .7 | 10.3 |
| 30 TO 44 | .1 | .3 | 1.8 | 16.5 | .1 | .5 | 1.9 | 16.1 |
| 45 TO 59 | - | .4 | 1.7 | 15.0 | .1 | .4 | 2.1 | 14.7 |
| 60 AND OVER | .1 | .3 | 1.3 | 18.0 | .1 | .3 | 1.7 | 17.7 |
| **MARITAL STATUS** | | | | | | | | |
| MARRIED | .2 | 1.1 | 4.4 | 40.9 | .2 | 1.2 | 5.2 | 39.8 |
| NOT MARRIED | - | .3 | 1.4 | 18.6 | - | .2 | 1.2 | 18.9 |
| FEMALE HEAD | - | .2 | .9 | 13.0 | - | .1 | 1.0 | 13.0 |
| MALE HEAD | - | .1 | .5 | 5.6 | - | .1 | .2 | 5.9 |
| **HOUSEHOLDS WITH CHILDREN** | | | | | | | | |
| YES | .1 | .8 | 3.3 | 28.5 | .2 | .8 | 3.4 | 28.1 |
| FEMALE HEAD | - | .1 | .5 | 4.4 | - | - | .4 | 4.6 |
| MALE HEAD | .1 | .7 | 2.8 | 24.0 | .2 | .8 | 3.0 | 23.6 |
| NO | .1 | .6 | 2.5 | 31.1 | .1 | .6 | 3.1 | 30.6 |
| FEMALE HEAD | - | .1 | .5 | 8.7 | - | .1 | .6 | 8.6 |
| MALE HEAD | .1 | .5 | 2.0 | 22.4 | - | .5 | 2.4 | 22.0 |

SEE NOTES AT END OF TABLE

TABLE 14. ADDED ROOF OR ATTIC INSULATION, STORM WINDOWS AND/OR DOORS, OR WALL INSULATION DURING 1978 OR 1979 EXCLUDING BUILDINGS OF 5 OR MORE UNITS (MILLION HOUSEHOLDS) CONTINUED

| HOUSEHOLD CHARACTERISTICS | NUMBER OF CONSERVATION ITEMS ADDED DURING 1979 | | | | NUMBER OF CONSERVATION ITEMS ADDED DURING 1978 | | | |
|---|---|---|---|---|---|---|---|---|
| | THREE | TWO | ONE | NONE | THREE | TWO | ONE | NONE |
| **HOUSEHOLD MEMBERS** | | | | | | | | |
| ONE | - | 0.2 | 0.7 | 10.3 | - | 0.1 | 0.6 | 10.4 |
| TWO | 0.1 | .5 | 1.8 | 20.4 | 0.1 | .5 | 2.3 | 19.9 |
| THREE | - | .3 | 1.2 | 10.4 | - | .3 | 1.2 | 10.4 |
| FOUR | - | .2 | 1.3 | 9.8 | .1 | .3 | 1.1 | 9.8 |
| FIVE OR MORE | - | .2 | .7 | 8.8 | .1 | .3 | 1.3 | 8.2 |
| **NUMBER OF FULL-TIME WAGE EARNERS** | | | | | | | | |
| NONE | .1 | .3 | 1.2 | 16.9 | - | .2 | 1.4 | 16.9 |
| ONE | - | .6 | 2.9 | 25.8 | .2 | .7 | 2.7 | 25.7 |
| TWO | - | .4 | 1.5 | 14.3 | .1 | .5 | 2.0 | 13.7 |
| THREE | - | - | .1 | 2.1 | - | - | .2 | 2.0 |
| FOUR OR MORE | - | - | - | .5 | - | - | .1 | .4 |
| **FULL-TIME (FT) EMPLOYMENT** | | | | | | | | |
| HEAD MARRIED | .2 | 1.1 | 4.4 | 40.9 | .2 | 1.2 | 5.2 | 39.8 |
| HEAD OR SPOUSE EMPLOYED FT | .1 | .5 | 2.4 | 20.6 | .1 | .7 | 2.5 | 20.3 |
| BOTH EMPLOYED FT | - | .4 | 1.2 | 11.9 | .1 | .5 | 1.8 | 11.1 |
| NEITHER EMPLOYED FT | .1 | .2 | .8 | 8.5 | - | .1 | 1.0 | 8.4 |
| HEAD NOT MARRIED | - | .3 | 1.4 | 18.6 | - | .2 | 1.2 | 18.9 |
| HEAD EMPLOYED FT | - | .1 | .8 | 7.8 | - | .1 | .6 | 8.0 |
| HEAD NOT EMPLOYED FT | - | .2 | .6 | 10.9 | - | .1 | .6 | 10.9 |

NOTE: DATA MAY NOT SUM TO TOTALS DUE TO ROUNDING. A DASH "-" REPRESENTS OR ROUNDS TO ZERO. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

Appendix A

HOW THE SURVEY WAS CONDUCTED

## Introduction

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. The EIA is conducting parallel studies of energy consumption within other sectors of the economy.

The RECS is designed to serve a variety of purposes. Information concerning the housing unit is collected through personal interviews with adult residents of a representative national sample of households. Data concerning actual energy consumption is 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 study to be reported here was designed as a follow-up to the National Interim Energy Consumption Survey (NIECS) and as a means of screening households for participation in the Household Transportation Panel.[1] The sample for this 1979 Household Screener Survey was selected from the same sample frame that was used for the NIECS, but excluding those households that had been selected for the NIECS.

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[1]The fieldwork for the NIECS was conducted from October 1978 through April 1979 as a pretest for the RECS. The results, together with descriptions of the methodology were reported in three publications: Residential Energy Consumption Survey: Characteristics of the Housing Stock and Households, DOE/EIA-0207/2, February 1980; Residential Energy Consumption Survey: Conservation, DOE/EIA-0207/3, February, 1980; and Residential Energy Consumption Survey: Consumption and Expenditures, April 1978 through March 1979, DOE/ EIA-0207/5, July 1980. The Household Transporation Survey is an ongoing survey of household automobile usage and gasoline consumption using rotating subsamples from the residential survey. The methodology and the first results have been reported in Residential Energy Consumption Survey: Consumption Patterns of Household Vehicles, June to August 1979, DOE/EIA-0207/4, June 1980.

## Data Collection

The fieldwork for this study was conducted by a contractor, Response Analysis Corporation of Princeton, New Jersey. The original sample consisted of 4,935 units, of which some 138 were either not used for dwelling purposes or were not habitable. Of the 4,797 habitable housing units, 344 were ineligible for this study due to a current vacancy or seasonal occupancy (occupants did not live in the units for more than half the year). Personal interviews were conducted at 3,806 of the 4,453 eligible units, for a response rate of 85.5 percent. Subsequently, mail questionnaires were sent to 551 households that had not participated in personal interviews. Completed questionnaires were returned by 227 of these households, or 41.2 percent of those mailed. Of the total eligible households, responses were received from 90.6 percent.

The fieldwork for this study was begun in October, 1979; the final mail questionnaire was received in April, 1980. Ninety-one percent of the interviews were completed by December 31, 1979. Personal interviews averaged approximately 27 minutes and included a subset of the questions from the NIECS. Due to the focus of this study, all of the questions regarding the description of each of the household's automobiles were included. In addition, interviewers were asked to inspect and record the current reading from the odometer for each automobile. The remainder of the questionnaire covered the fuel types and end-uses, those structural features used in the computation of energy consumption imputations and some of the energy conservation features of the housing unit. At the end of the interview, respondents were asked to sign waivers authorizing the contractor to obtain records of fuel consumption from the housing unit's fuel supplier.

Most of the 368 interviewers employed by the contractor had previous survey experience; many had worked on the preceding NIECS study. Training for the interviewers was done by mail using a detailed instruction booklet. After studying the booklet, interviewers were asked to complete a practice interview and a quiz, both of which were reviewed by the contractor's central staff. Each interviewer conducted an average of 10 interviews; several conducted only one interview; one interviewer completed 39 interviews. Twenty percent of all personal interviews were verified to ensure that interviews were conducted in person.

## Sample Design

The sample frame for the Screener Survey was the same as that used for the NIECS. The only difference between the two samples was in the final selection of households to be visited. Thus, the households selected for the NIECS were excluded from the Screener sample.

As in the NIECS, the Screener sample is a representative area probability sample consisting of 103 primary sampling units (PSU's). These PSU's were selected from approximately 1,140 PSU's that collectively form a mutually

exclusive and exhaustive division of the contiguous United States. Each PSU is a well-defined geographic unit, usually consisting of one or more counties. Based on the 1970 Census, PSU sizes range from a population of 50,000 to approximately 3,300,000. Region, metropolitan status and size classification were the primary considerations in the selection of the sampled PSU's.

Within each PSU, secondary sampling units (SSU's) were defined. Based on 1970 Census counts, 400 SSU's were selected from the 103 PSU's. Each of these SSU's contained approximately 2,500 persons and consisted of one or more blocks in urban areas and one or more enumeration districts in the nonurban areas. In an effort to control the variation in cluster size, an additional 56 SSU's were selected independently. These 56 SSU's comprised probability selection of areas believed to include substantial new construction since 1970. Independent sources (Reuben H. Donnelley address lists and local area data) were used to update the population for these SSU's prior to the NIECS. This procedure was not replicated between the completion of the NIECS and the start of the Screener Survey.

Within each SSU, subdivisions were made. Census block statistics and rough field counts were used to break each SSU into segments. Interviewers listed all housing units in the selected segment in the summer of 1978, prior to the NIECS. Penultimate clusters were formed so that they ultimately contained an average of about 25 households. The households selected for the NIECS were then eliminated. From the remaining households, a final cluster averaging about 10 households was selected for the Screener Survey. As a result, within each SSU, an average of 10 households were sampled; within each PSU, an average of 40 to 45 households were sampled; and nationally, about 4,500 units were sampled.

## Screener Coverage Checks

Undercounts and underlistings of the target population are a common problem in most sample surveys and censuses. Coverage checks for the Screener Survey were carried out by assigning a second interviewer to independently list the cluster of housing units originally assigned in a sample of approximately one-fourth of the Screener Survey locations. In general, the original listings and relistings are in agreement for 90 to 95 percent of the housing units listed.

## Survey Estimates

Weights were calculated for each sample household to: (1) compensate for differences in probabilities of selection, (2) adjust for differences in interview completion rate in individual sampling locations, and (3) expand data for sample households to estimates for the total universe (all households in the contiguous 48 States plus the District of Columbia).

In order to increase the precision of our estimates, a technique called ratio estimation was employed. Ratio estimation uses known distributions of the population. These adjustments took place in two stages for the Screener Survey. The first stage factor was a ratio of the total number of households in each region by fuel type to an estimate of the number of households in each category. Only the PSU's in our sample and their appropriate weights were used. The figures used in both the numerator and denominator were based on the 1970 Census. The implementation of this factor reduced the amount of variance due to the sampling of PSU's. The second stage factor adjusted data from the survey to independently derived current estimates of the number of households for specified groups. The ratio adjustment was calculated for each region by type of community. The second stage factor reduced both the between PSU variance, as in the first stage, and the within PSU variance.

## Minimizing Nonresponse

In an effort to maximize the validity of the survey data, a multi-wave, multi-contact approach was employed. Prior to the initial contacts, two letters were sent to each household. An EIA letter briefly described the purposes and stressed the importance of the survey. A subsequent letter from the contractor announced the impending arrival of the interviewer.

Beginning in October, 1979, interviewers made up to eight call-backs at different times of the day and 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.

A second wave was initiated in December, 1979, 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 eight attempts were made to contact the prospective respondents.

In January, 1980, a third wave was initiated in an effort to reach nonrespondents in four sample locations that had low completion rates. No letters preceded this effort and only up to four attempts were made to contact these nonrespondents.

In a final attempt to reduce nonresponse, an abbreviated version of the questionnaire (adapted for self-administration) was mailed to the remaining nonrespondents in January, 1980.

These efforts were successful in accomplishing the following:

- Fully 85.5 percent of the households were contacted and agreed to be interviewed personally. An additional 5.1 percent of the sample households completed and returned mailed questionnaires.

- Of the 4,033 responses, 83.6 percent were obtained during the first wave of contacts; 10.7 percent were obtained during the second wave; and less than 0.1 percent resulted from third wave contacts. Some 5.6 percent were responses to the mailed questionnaire.

- Of all responding households, 37.6 percent required only one visit and 73.9 percent were completed with no more than two call-backs.

- A total of 195 interviews were completed with respondents who had previously refused to participate, representing 5.1 percent of all completed interviews. Of the 227 mailed questionnaires which were completed and returned, 165 were from households which had previously refused to participate.

- In the entire sample of eligible housing units, only 102 failed to participate either through a personal interview or a mailed questionnaire. This represents only 2.3 percent of the total eligible units.

## Incentives Experiment

Each of the households in the NIECS was offered a small incentive ($2.00) to participate. In the Screener Survey, an effort was made to measure the relative effectiveness of the incentive. Matched pairs of PSU's were selected with the largest SMSA's excluded so as not to jeopardize the already lower-than-average response rates in those areas. The distribution of households by SMSA location is presented in Table A1. For each pair of PSU's, then, the incentive was withheld from households in one PSU but not from those in the second PSU.

The results of the experiment are displayed in Table A2. Of the 3,515 households in the experiment, interviews were completed with 3,064, or 87.2 percent. There was a slightly greater likelihood of completing an interview among those households which received the incentive and a slightly greater likelihood of a refusal when the incentive was not offered. However, the differences are not statistically significant.

TABLE A1. Households By SMSA Location and Incentive Use

| | Total | Incentive Used | Incentive Not Used | Not Included |
|---|---|---|---|---|
| Total | 100 | 57.8 | 21.1 | 21.1 |
| (total number) | (4,453) | (2,575) | (940) | (938) |
| SMSA Over 1 Million | 100 | 38.9 | 12.2 | 48.9 |
| (total number) | (1,832) | ( 713) | (224) | (895) |
| SMSA Under 1 Million | 100 | 68.6 | 27.8 | 3.6 |
| (total number) | (1,205) | ( 827) | (335) | ( 43) |
| Non-SMSA | 100 | 73.1 | 26.9 | 0.0 |
| (total number) | (1,416) | (1,035) | (381) | ( - ) |

TABLE A2. Percent of Households By Incentive Use and Final Interview Results

| | Total | Incentive Used | Incentive Not Used |
|---|---|---|---|
| Total | 100 | 100 | 100 |
| (total number) | (3,515) | (2,575) | (940) |
| Completed | 87.2 | 87.3 | 86.7 |
| (total number) | (3,064) | (2,249) | (815) |
| Refused | 10.0 | 9.7 | 10.7 |
| (total number) | ( 352) | ( 251) | (101) |
| Unable to Contact | 2.8 | 2.9 | 2.6 |
| (total number) | ( 99) | ( 75) | ( 24) |

## Evaluation of Nonresponse

Through the sampling unit listing procedure, basic information is available for each of the 4,453 eligible housing units in the sample. It is thereby possible to compare response rates and nonresponse rates across census regions, urban-rural locations, size locations, and housing unit structure types.

In Table A3, the interview and final response rates for each of these characteristics are reported. The interview responses include just those housing units which completed a personal interview. The final responses include both the interview responses and the completed mail questionnaires which were returned to the contractor. The interview response rates were highest among housing units classified as "other", among units located in nonSMSA's and in rural areas and among units located in the South. The results of the mail questionnaire effort reduced the disparity between categories for each characteristic and, in one case, altered the rank-ordering slightly. Thus, final response rates were highest among housing units located in the West as opposed to the South, although the difference is quite small: 91.7 percent and 91.4 percent, respectively. Both interview and final response rates are lowest among units in buildings with 5 or more units, among units located in the central city, in SMSA's containing more than a million people, and among units located in the Northeastern region of the country.

TABLE A3. Percent of Eligible Households Which Responded to Survey

| Characteristic | Interview | Final [1] |
|---|---|---|
| Total | 85.5 | 90.6 |
| Census Region | | |
| Northeast | 82.0 | 88.0 |
| North Central | 86.7 | 91.1 |
| South | 87.6 | 91.4 |
| West | 84.2 | 91.7 |
| Location Size | | |
| SMSA: over 1 Million | 81.8 | 88.3 |
| SMSA: under 1 Million | 85.1 | 91.1 |
| Non SMSA | 90.6 | 93.1 |
| Urban-Rural Location | | |
| Central City | 80.8 | 88.0 |
| Other Urban | 85.9 | 91.2 |
| Rural | 89.4 | 92.1 |
| Structure Type | | |
| Single-Family Detached | 87.6 | 91.9 |
| Buildings with 2 to 4 units | 80.1 | 87.2 |
| Buildings with 5 or more units | 76.3 | 85.8 |
| Other | 88.1 | 90.9 |

[1]Includes personal interviews and completed mail questionnaries.

TABLE A4. Percent of Eligible Households Not Responding to Personal Interview

| Characteristic | Refusal | Unable to Contact |
|---|---|---|
| Total | 10.8 | 3.7 |
| Census Region | | |
| North East | 12.4 | 5.6 |
| North Central | 11.1 | 2.2 |
| South | 9.0 | 3.4 |
| West | 11.8 | 4.0 |
| Location Size | | |
| SMSA: over 1 Million | 13.2 | 5.0 |
| SMSA: under 1 Million | 11.8 | 3.2 |
| Non SMSA | 7.0 | 2.4 |
| Urban-Rural Location | | |
| Central City | 14.3 | 4.9 |
| Other Urban | 10.4 | 3.6 |
| Rural | 8.1 | 2.5 |
| Structure Type | | |
| Single-Family Detached | 9.7 | 2.6 |
| Buildings with 2 to 4 units | 12.8 | 6.3 |
| Buildings with 5 or more units | 16.9 | 6.8 |
| Other | 7.5 | 4.4 |

In general, nonrespondents may be divided into two groups: those which the interviewers have been unable to contact and those who, although contacted, declined to participate in the survey. Overall, interviewers were unable to contact someone in only 3.7 percent of the 4,453 eligible housing units. The rates were highest for housing units in large apartment buildings, units located in the central city and in SMSA's of over 1 million people and for units in the Northeast. Households in single-family detached units, those located in the nonSMSA's and in rural areas, and those located in the North Central census region were most likely to have been contacted.

Approximately two-thirds of the nonrespondents refused to be personally interviewed -- 10.8 percent of the eligible households. For each of the characteristics, the categories with the highest refusal rates were the same as those with the highest rates of "unable to contact": units in large apartment buildings, those located in the central city, in large SMSA's, and in the Northeast. The lowest refusal rates occured among units categorized as "other", in rural areas, and in areas outside the SMSA's and among units located in the South.

## Adjustment for Nonresponse

In most cases, the weights for responding households in the final clusters were proportionally increased in order to account for the absence of data from nonresponding households.

Item nonresponse required a customized procedure for imputing data for each of the data elements. The data elements were divided into two categories depending upon the amount of nonresponse and the importance of the data element. The basic procedure attributed the most common response (modal value) to cases for which the data were missing. This first category was comprised of only two variables: whether the house or apartment is part of a condominium or cooperative (modal value of "no") and the number of fuel oil or kerosene tanks (modal value of "one"). With certain exceptions, the missing values for the remaining elements were imputed using a "hot-deck" procedure. In the exceptional cases, imputation procedures were not employed and a "don't know" response was accepted. These elements included the questions concerning the vehicles currently owned and those owned but disposed of in the past year by members of the household; questions concerning fuel oil or kerosene use by the household; and the questions concerning the dimensions of the largest room.

## Additional Survey Components

A major purpose of the Screener Sample was to replenish the sample pool from which the transportation panel is drawn. Begun with a subset of the NIECS sample in June, 1979, participating households are asked to keep a log of their fuel purchases and odometer readings. The panel consists of 500 to 1,000 households reporting each month. A separate tabulation of the June and August 1979 consumption patterns was published in June, 1980 in the report Residential Energy Consumption Survey : Consumption Patterns of Household Vehicles, June to August 1979, DOE/EIA - 0207/4, June 1980); further publications are planned.

In those cases where the respondent did not pay directly for the household fuel, an interviewer attempted to make personal contact with the apartment manager to inquire about space and water heating fuels and selected building characteristics. The contractor interviewed 109 of the 141 identified apartment managers, each of whom is responsible for about 2 sampled apartment units, on the average. Some of the information from these interviews has been incorporated into the Screener data set, resulting in more complete and accurate information about rental housing units.

The Energy Information Administration has initiated separate follow-up studies of fuel oil use by single-family households. The purpose of the studies is to determine whether households have converted to another type of fuel, and to collect information concerning the households' consumption and expenditures for fuel oil and their conservation activities. An initial report has been issued.[1] Further publications are planned.

## Data From Non-Household Sources (Fuel Suppliers)

Respondents in 93.6 percent of the households which paid directly for their fuels signed waivers to permit fuel suppliers to provide the EIA with monthly records of their past year's fuel purchases. The data include both the amount of fuel supplied and the total cost of the fuel for the previous twelve-month period. Attempts to contact the suppliers began in April, 1980 and data collection continued through October, 1980.

In an effort to maximize the response rate, the following procedures were used:

- Letters were sent to each company after the person who would be personally responsible for responding to the request for fuel bills had been located. Follow-up telephone calls were made to insure receipt of the letter and to help with any problems that may have arisen. In addition, the contractor personally visited several fuel supply companies to offer assistance in responding to the requests.

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[1] Single-Family Households: Fuel Oil Inventories and Expenditures: National Interim Energy Consumption Survey, DOE/EIA-0207/1, December 1979.

- A member of the Energy Information Administration staff contacted the responsible official at some of the fuel supply companies to address any questions which they might have, inquire about the problems which the company might have in responding to the request for information, and to offer DOE's assistance in responding to the request.

- Some fuel oil and liquid petroleum gas (LPG) suppliers provided the fuel purchase information over the telephone. (The telephone was used for these types of suppliers because each company supplied data for only a few customers and the fuel records were not as detailed as records for electricity and natural gas sales.) Nearly 500 of the approximately 700 fuel suppliers contacted in this survey were fuel oil or LPG distributors.

## Fuel Consumption Imputations

Records of households' electricity consumption were categorized into three groups depending on the length of the period for which data were available. Household records with 330 or more days of data for electricity were considered complete. The only adjustment to these data was to standardize the reporting period from April 1979 to March 1980. After this adjustment, each of the households in this category had 366 days of data. The procedure followed for utility gas records was the same as that used for electricity. Fuel oil (includes kerosene) and LPG records were considered complete only if delivery records were available for the full 12-month calendar period from April 1979 through March 1980. Therefore, it was possible for a household to have complete records for one fuel and incomplete records for another.

Household records with 146 to 329 days of data for electricity or utility gas were considered partial respondents. These households were classified into broad categories based on end-uses and climate zones. Households with complete records that also fit into these categories were used in order to develop a fuel consumption proportion. This fraction equals the consumption for the whole year divided by the consumption for the period reported by the partial respondent. The partial respondent's consumption was then expanded by this proportion. None of the fuel oil or LPG user records were considered partial.

Households were categorized as nonrespondents if: they refused to sign a waiver; their fuel company refused to cooperate; there were less than 146 days of data available for electricity or utility gas; or there were less than 12 months of data for fuel oil or LPG. Fuel consumption for those households was imputed using regression techniques. Variables such as the number of heating and cooling degree-days, the number of people in the household, the household income and the size of the largest room (in square feet) were used to develop separate equations for each of the four major fuels by major end use (heating and air conditioning). Fuel consumption costs were imputed independently using similar regression methods.

The extent to which imputation was required is indicated in Table A5, which presents the percent of households in each of the response categories. A separate effort has been made to collect fuel consumption data for those households that do not pay directly for the fuel they use. However, these data are not included in this report. Since the collected data most frequently included the amount of fuel consumed by an entire multi-household building, it is necessary to disaggregate the data using some mathematical technique. Several techniques for disaggregating the data will be pilot-tested using the Screener Survey data.

TABLE A5. Percent of Households by Fuel Type And Completeness of Data

| | Electricity | Utility Gas | Fuel Oil | LPG |
|---|---|---|---|---|
| All Households (total number) | 100 (4,033) | 100 (2,573) | 100 (849) | 100 (352) |
| Complete | 78.6 | 71.9 | 48.5 | 49.2 |
| Partial | 6.7 | 6.7 | - | - |
| Missing | 14.7 | 21.4 | 51.5 | 50.8 |
| Household that Pay for Home Heating (total number) | 100 (901) | 100 (1,987) | 100 (682) | 100 (215) |
| Complete | 84.8 | 82.9 | 60.4 | 53.0 |
| Partial | 8.5 | 7.8 | - | - |
| Missing | 6.7 | 9.3 | 39.6 | 47.0 |

Table A5 also indicates the availability of fuel consumption data for those households which pay for each of the fuels which they use for heating purposes. This portion of the table is more representative of the success of the data collection effort since it includes only those households where a data collection effort was made. Clearly, the effort was substantially more likely to succeed with electricity and utility gas records than for fuel oil and LPG records. The availability of data for other end uses is quite similar to that for heating.

Households that reside in multi-unit structures are less likely to pay directly for the fuels which they consume than are households in single-unit structures. This is apparent in Table A6. Fuel consumption data were less likely to be available for households in multi-unit structures than for households in single-unit structures.

TABLE A6. Percent of Households by Type of Structure and Completeness of Fuel Data

| | Mobile Homes | Single Family Detached | Single Family Attached | 2-4 Unit Building | 5-or-More Unit Building |
|---|---|---|---|---|---|
| Electricity | 100 | 100 | 100 | 100 | 100 |
| (total number) | (224) | (2,721) | (160) | (441) | (482) |
| Complete | 67.4 | 87.3 | 80.6 | 56.7 | 54.4 |
| Partial | 12.9 | 4.0 | 8.8 | 12.5 | 12.9 |
| Missing | 19.6 | 8.7 | 10.6 | 30.8 | 32.8 |
| Utility Gas | 100 | 100 | 100 | 100 | 100 |
| (total number) | ( 65) | (1,650) | (130) | (378) | (346) |
| Complete | 53.8 | 85.4 | 80.8 | 50.5 | 30.9 |
| Partial | 12.3 | 5.1 | 8.5 | 11.9 | 6.6 |
| Missing | 33.8 | 9.5 | 10.8 | 37.6 | 62.4 |
| Fuel Oil | 100 | 100 | 100 | 100 | 100 |
| (total number) | (44) | (585) | (26) | (71) | (122) |
| Complete | 40.9 | 62.7 | 30.8 | 22.5 | 1.6 |
| Missing | 59.1 | 37.3 | 69.2 | 77.5 | 98.4 |
| LPG | 100 | 100 | 100 | 100 | 100 |
| (total number) | (77) | (77) | (243) | ( 5) | (13) |
| Complete | 41.6 | 56.0 | 60.0 | 0.0 | 15.4 |
| Missing | 58.4 | 44.0 | 40.0 | 100.0 | 84.6 |

## Weather Data

Three forms of weather data are being collected as part of the survey. For each form, the weather data for the household is that for the National Oceanic and Atmospheric Administration (NOAA) weather division in which the housing unit is located. On the average, a NOAA division is a group of nine contiguous counties, although the weather division does not always follow county boundaries (see "NOAA" section in Glossary).

### AIA Weather Zone

The following weather zones, developed by the American Institute of Architects (AIA) for the U.S. Departments of Energy and Housing and Urban Development, are used to classify housing units based on long term weather conditions.

| Zone | Cooling Degree Days | Heating Degree Days | Comments |
|---|---|---|---|
| 1 | Less than 2,000 | More than 7,000 | |
| 2 | Less than 2,000 | 5,500 to 7,000 | |
| 3 | Less than 2,000 | 4,000 to 5,499 | |
| 4 | Less than 2,000 | 2,000 to 3,999 | Zones 4 and 5 are combined to prevent geographic identity of households in zone 5--lower coastal areas of California. |
| 5 | Less than 2,000 | Less than 2,000 | |
| 6 | More than 2,000 | Less than 2,000 | Zones 6 and 7 are combined for this report. |
| 7 | More than 2,000 | 2,000 to 3,999 | |

Weather for April 1979 through March 1980

The number of heating and cooling degree-days is cumulated for the 366-day period from April 1, 1979 through March 31, 1980. This period generally corresponds to the annual period for which household consumption and expenditures are reported.

Billing Period Weather Data

Heating and cooling degree-days will be calculated for each billing period. For example, one household may be billed on the 1st of every month, while another may be billed on the 5th. Obviously, there will be different 30-day averages of HDD and CDD for each billing period. These data will allow more accurate analysis of fuel consumption.

## Editing Completed Questionnaires

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 to insure completeness and the logical consistency of selected patterns of responses and to prepare the questionnaires for translation into machine-readable form. All keypunching was fully verified. Finally, the data were machine-edited to further insure completeness, logical consistency, and the legitimacy of coded values.

The contractor attempted to resolve inconsistencies or ambiguities in the data internally, by reference to other parts of the questionnaire. In the event that these efforts failed to resolve the problem, the contractor made telephone contact with a member of the household in question.

Additional editing resolved discrepancies among the household interview, the rental agent survey and the information from fuel suppliers. For example, information on the fuel used in apartment buildings was taken from the rental agent survey to correct the data from the household. In other cases, a fuel supplier reported supplying kerosene to a household, not fuel oil as was reported by the household. The data, therefore, do not always represent the respondents' reports, exclusively.

## Appendix B

## LIMITATIONS OF THE DATA

Data from the 1979 Household Screener Survey 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. 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 response variance, interviewer error, coding and/or punching 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, data receipt, and data 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 estimation were incorporated into the survey estimator to help reduce both sampling and nonsampling error. These procedures are also discussed in Appendix A.

### Variance Estimation Using Balanced Half-Sample Replication

The complex multistage sample design and estimation procedures associated with this survey make it virtually impossible to construct an exact algebraic variance estimator. The method used to produce variances for this survey is balanced half-sample replication (References 1 and 2). In order to apply to half-sample technique, the 79 sample PSU's were grouped into 71 strata. Thirty-nine of the strata were self-representing; that is, they consisted of large metropolitan area PSU's that came into the sample with certainty. In these strata, segments were divided into two replication groups. Each of the remaining 32 strata consisted of two sample PSU's in the same Census region. Each of the two PSU's formed a replication group.

Variance estimates for selected survey statistics were created by computing 72 half-sample estimates for each statistic. A half-sample was formed by selecting one of the two replication groups for each stratum using an orthogonal matrix technique adapted from an article by Plackett and Burman (reference 3). Then the sampling weights were adjusted so that the half-sample estimates would be essentially unbiased estimates of the corresponding population parameter, in the same way as the estimate based on the entire national sample.

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

$$S^2_{X'} = {}^1/_{72} \sum_{i=1}^{72} (X'_i - X')^2$$

where $X_i'$ is the $i^{th}$ half-sample estimate of X. The half-sample procedure measures variability due to sampling error and random response variance.

## Summary and Display of Errors

Instead of displaying a computed error estimate for every statistic in this report, this report includes variances for selected stub variables from each detailed table. Every error table includes the variables "type of structure" and "own/rent" (except for table 10, which does not have these stub variables). All other stub variables in the report are represented in one or more error tables. Stub variables were sampled for the error tables in order to conserve space in the report.

Error estimates are given in the form of relative standard errors (RSE's) and are shown in percent. The RSE of an estimate is defined as the standard error of the estimate divided by its expected value. Since the expected value of the estimate is not known, the estimate itself is used. Thus,

$$\text{RSE } (X') = \frac{S_{X'}}{X'}$$

and conversely, the standard error of X', which is used throughout the text, is obtained by multiplying X' by its RSE. For example, the number of single-family detached households in the United States is given in Table 1 as 50.1 million. From error Table B1, the RSE of that estimate is 4.2 percent, so the standard error would be (.042) (50.1 million) = 2.1 million.

## Estimating Errors Not Found in Tables

RSE's for statistics whose errors are not shown in the error tables should be approximated by using the RSE of the same type of statistic in the population subcategory in the stub of the corresponding error table whose weighted number of households is closest to that of the statistic of interest. For example, in Table 5, the average expenditures per household for electricity in households built from 1950 to 1959 with electricity used neither as the main heating fuel nor as a fuel for air conditioning was $307. Table 5 also shows that there were an estimated 5.8 million such households. Of the variables for which RSE's are shown in Table B5, the category whose weighted number of households is closest to 5.8 million is total households in 2-4 unit buildings within the "type of structure" variable. This category contains 5.1 million households for which electricity is used neither as the main heating fuel nor as a fuel for air conditioning. The RSE of the average expenditure per household for this category from error Table B5, is 5.8 percent. Applying this value to the 1950-1959 year-built category, the standard error of the $307 average expenditure is (.058) (307) = $17.8.

## Using Standard Errors to Test Statistical Hypotheses

The analytical statements in this report can be divided into two main types. The first type is the expository statement, which presents a statistic for its own sake, without reference or comparison to any other statistic. An example of such a statement is found in the first sentence under "Consumption". "For the year ending March 1980, total residential energy consumption was 9.74 quadrillion Btu (± .66)..." No statistical tests of hypothesis are needed or were performed for such statements; twice the standard error is given in parentheses after the estimate. This value serves as a measure of the level of variability in the statistic, and allows the reader to compute an approximate 95 percent confidence interval for the estimate by adding and subtracting the value in parentheses.

The second type of statement is the stated or implied comparison between two or more table entries. Such comparisons are meant to point out specific similarities and differences among population subgroups. Since these statements of comparison state relationships among population subgroups based upon sample data, they are inferential, and subject to statistical testing. Examples of such comparisons are:

(1) Sentence 1 in the section "Prices and Expenditures": "Residential energy prices rose sharply from $5.25 (± .17) per MMBtu to $6.49 (± .19)."

(2) The last 2 sentences in the section "Consumption": "More than half (55 percent ± 3) of residential energy consumption in Btu for the 12 months ending March 1980 was in the form of natural gas. A distant second was electricity, with about 25 percent (± 2) of the total, followed by fuel oil and kerosene with about 18 percent (± 3)."

The statistical test used to verify this type of statement is the standard normal deviate test. In order to test the significance of the difference between estimates X' and Y', X' and Y' are assumed to be normally distributed by appeal to the Central Limit Theorem. Then the test statistic:

$$Z_{X',Y'} = \frac{X' - Y'}{\sqrt{S^2_{X'} + S^2_{Y'}}}$$

is computed, where $S_X^2$, and $S_Y^2$, are the variances of X' and Y', respectively, and Z is distributed approximately standard normal. The null hypothesis, that there is no difference between X' and Y', is rejected if $Z_{X'Y'}$ is greater than some critical value G. For the statements in this report, G was set so that the level of significance of the test (the probability of incorrectly detecting a significant difference) is .05. Ordinarily, this level of significance corresponds to a critical value of 1.96, and when a comparison is the only possible one of its type, as is the case in example (1), 1.96 is the correct value. However, some of the statements in this report involve comparisons that were selected from a larger set of C possible comparisons, each of which had an opportunity to be tested and falsely yield a significant difference. Example (2) above is such a statement. In order to attain a true level of significance no greater than .05 for a particular test from such a set, the critical value G was adjusted so that the probability of falsely detecting any significant difference was .05/C. The rationale for this adjustment is based on the Bonferroni inequality, and is discussed elsewhere (References 4 and 5).

The test procedures can be applied to the two examples as follows:

(1) This statement requires a single comparison of total energy expenditures for the periods April 1978 through March 1979 and April 1979 through March 1980. From the data given in the statement, the test statistic is:

$$Z = \frac{6.49 - 5.25}{\sqrt{(.09)^2 + (.10)^2}} = \frac{1.24}{.13} = 9.54$$

Since this comparison is the only one of its type, the critical value for the test is 1.96, which Z exceeds. Therefore, the statement is justified.

(2) The data for this statement are derived from Tables 1 and B1 and can be summarized as follows:

| Type of Fuel | Percent of Total Consumption | Standard Error (%) |
|---|---|---|
| All Fuels | 100 | - |
| Natural Gas | 55 | 1.5 |
| Electricity | 25 | 1.0 |
| Fuel Oil | 18 | 1.5 |
| LPG | 3 | 0.5 |

Since there are 4C2 or six possible comparisons between the fuel types shown in Table 1, the critical value for all tests is the normal two-tailed .05/6 = .0083 critical value, which, from the standard normal tables, is 2.64. The test statistics for the relationships discussed in the statement are:

$$Z_{GE} = \frac{55 - .25}{\sqrt{(1.5)^2 + (1.0)^2}} = \frac{30}{1.8} = 16.7$$

$$Z_{EF} = \frac{25 - 18}{\sqrt{(1.0)^2 + (1.5)^2}} = \frac{7}{1.8} = 3.89$$

$$Z_{FL} = \frac{18 - 3}{\sqrt{(1.5)^2 + (0.5)^2}} = \frac{15}{1.6} = 9.37$$

The three differences that are claimed to be significant each have Z values greater than 2.64. Technically, all fuel types should be tested against all others, but since the adjacent-ranking fuel types are significantly different, all other comparisons will turn out significant. Therefore, the statement is justified.

## References


1. National Center for Health Statistics: "Replication: An Approach to the Analysis of Data From Complex Surveys." Vital and Health Statistics. Public Health Service Publication No. 1000 - Series 2 - No. 14., Washington: U.S. Government Printing Office, April 1966.

2. National Center for Health Statistics: Pseudoreplication: Further Evaluation and Application of the Balanced Half-Sample Technique," Vital and Health Statistics. Public Health Service Publication No. 1000 - Series 2 - No. 31. Washington: U.S. Government Printing Office, January 1969.

3. Plackett, R.L., and Burman, J.P.: "The Design of Optimum Multifactorial Experiments." Biometrika 33: pp. 305-325, 1946.

4. Miller, R. G.: Simultaneous Statistical Inference. New York: McGraw-Hill Book Co., 1966.

5. National Center for Health Statistics: Manual on Standards and Procedures for Reviewing Statistical Reports. 1974. (Internal Document.)

6. Residential Energy Consumption Survey: Consumption and Expenditures, April 1978 through March 1979, July 1980, DOE/EIA-0207/5.

TABLE B1. TOTAL RESIDENTIAL ENERGY CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 : RELATIVE STANDARD ERRORS (PERCENT)

| HOUSEHOLD CHARACTERISTICS | TOTAL HOUSEHOLDS (MIL'N) | ALL FUELS | | | | NATURAL GAS | | ELECTRICITY | | FUEL OIL AND KEROSENE | | LIQUID PETROLEUM GAS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | TOTAL AMOUNT CONSUMED (QUAD'N BTU) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL'N BTU) | TOTAL EXPEND (BIL'N $) | AVG EXPEND PER HOUSEHOLD ($) | TOTAL AMOUNT CONSUMED (QUAD'N BTU) | TOTAL EXPEND (BIL'N $) | TOTAL AMOUNT CONSUMED (QUAD'N BTU) | TOTAL EXPEND (BIL'N $) | TOTAL AMOUNT CONSUMED (QUAD'N BTU) | TOTAL EXPEND (BIL'N $) | TOTAL AMOUNT CONSUMED (QUAD'N BTU) | TOTAL EXPEND (BIL'N $) |
| TOTAL HOUSEHOLDS | 3.5 | 3.4 | 2.2 | 3.8 | 2.2 | 4.4 | 4.5 | 4.9 | 4.0 | 9.4 | 9.4 | 17.7 | 16.6 |
| CENSUS REGION | | | | | | | | | | | | | |
| NORTHEAST | 9.8 | 7.5 | 5.9 | 8.2 | 5.5 | 9.0 | 9.1 | 13.9 | 10.1 | 11.1 | 11.3 | 26.6 | 26.0 |
| NORTH CENTRAL | 5.2 | 5.7 | 3.4 | 7.4 | 4.3 | 6.3 | 6.7 | 10.7 | 8.6 | 29.9 | 29.6 | 32.5 | 30.9 |
| SOUTH | 6.2 | 6.4 | 3.6 | 5.8 | 2.8 | 13.1 | 12.5 | 6.2 | 5.7 | 22.8 | 22.3 | 24.8 | 24.1 |
| WEST | 7.1 | 8.3 | 4.0 | 7.7 | 4.3 | 9.8 | 9.7 | 12.2 | 8.1 | 17.3 | 16.4 | 68.5 | 66.8 |
| URBAN/RURAL | | | | | | | | | | | | | |
| URBAN | 4.1 | 4.2 | 2.5 | 4.5 | 2.4 | 4.5 | 4.5 | 5.4 | 4.6 | 10.7 | 10.8 | 22.4 | 19.8 |
| RURAL | 10.6 | 10.6 | 4.5 | 11.1 | 5.5 | 20.5 | 18.9 | 12.2 | 11.3 | 21.1 | 21.1 | 20.7 | 19.9 |
| TYPE OF STRUCTURE | | | | | | | | | | | | | |
| SINGLE FAMILY DETACHED | 4.2 | 4.1 | 2.2 | 4.5 | 2.5 | 5.6 | 5.8 | 5.9 | 4.8 | 10.9 | 10.8 | 19.0 | 17.9 |
| SINGLE FAMILY ATTACHED | 18.7 | 20.1 | 7.5 | 19.1 | 5.9 | 23.1 | 23.7 | 22.4 | 20.1 | 33.7 | 33.3 | 61.4 | 58.4 |
| 2-4 UNIT BUILDING | 12.1 | 14.3 | 7.3 | 14.6 | 6.7 | 15.2 | 14.3 | 16.0 | 15.3 | 32.2 | 32.2 | 48.4 | 45.6 |
| 5+ UNIT BUILDING | 14.6 | 14.5 | 5.8 | 15.1 | 4.9 | 18.6 | 16.2 | 21.7 | 19.1 | 23.7 | 24.0 | 53.5 | 52.5 |
| MOBILE HOME | 14.4 | 15.8 | 6.8 | 14.2 | 5.4 | 42.7 | 43.5 | 11.2 | 13.2 | 26.2 | 26.2 | 29.0 | 27.8 |
| OTHER | 57.7 | 55.5 | 69.1 | 56.8 | 67.0 | 69.9 | 70.6 | 58.2 | 57.9 | 100.0 | 100.0 | - | - |
| OWN/RENT | | | | | | | | | | | | | |
| OWN | 4.1 | 4.0 | 2.6 | 4.1 | 2.6 | 5.5 | 5.5 | 5.6 | 4.6 | 9.7 | 9.6 | 20.3 | 19.1 |
| RENT | 6.4 | 6.5 | 3.1 | 7.1 | 3.1 | 7.1 | 7.1 | 8.0 | 7.7 | 16.4 | 16.6 | 17.6 | 16.5 |
| RENT FREE | 12.1 | 12.5 | 7.4 | 13.8 | 7.8 | 18.5 | 19.1 | 14.6 | 14.6 | 30.5 | 30.5 | 42.5 | 41.9 |

NOTE: A DASH "-" INDICATES THAT THE ESTIMATE OF THE RELATIVE STANDARD ERROR IS NOT AVAILABLE. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

TABLE B2. RESIDENTIAL NATURAL GAS CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 : RELATIVE STANDARD ERRORS (PERCENT)

| HOUSEHOLD CHARACTERISTICS | NATURAL GAS | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NATURAL GAS USED: AS MAIN HEATING FUEL | | | | NATURAL GAS USED: NOT AS MAIN HEATING FUEL | | | |
| | TOTAL AMOUNT CONSUMED (TRIL*N CU.FT.) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | AVG PRICE ($ PER THOU CU.-FT.) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU CU.FT.) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU CU.FT.) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) |
| TOTAL HOUSEHOLDS | 4.4 | 4.4 | 4.5 | 1.2 | 4.3 | 2.4 | 2.4 | 2.4 | 12.5 | 8.3 | 8.3 | 5.0 |
| WATER HEATING FUEL | | | | | | | | | | | | |
| NATURAL GAS | 4.5 | 4.5 | 4.6 | 1.1 | 4.3 | 2.5 | 2.5 | 2.5 | 14.3 | 7.5 | 7.5 | 6.7 |
| OTHER AND NONE | 12.7 | 12.7 | 11.9 | 3.4 | 14.6 | 6.0 | 6.0 | 4.8 | 16.7 | 14.4 | 14.4 | 6.6 |
| AIA HEATING AND COOLING DEGREE DAY ZONES | | | | | | | | | | | | |
| <2000 CDD AND >7000 HDD | 21.2 | 21.2 | 22.7 | 3.8 | 17.8 | 13.3 | 13.3 | 12.7 | 56.4 | - | - | - |
| <2000 CDD AND 5500-7000 HDD | 9.8 | 9.8 | 10.1 | 1.8 | 9.3 | 3.4 | 3.4 | 3.0 | 23.0 | 17.7 | 17.7 | 12.8 |
| <2000 CDD AND 4000-5499 HDD | 10.6 | 10.6 | 11.3 | 2.4 | 10.4 | 3.6 | 3.6 | 3.9 | 20.0 | 12.0 | 12.0 | 6.5 |
| <2000 CDD AND <4000 HDD | 14.5 | 14.5 | 14.8 | 2.8 | 12.6 | 4.7 | 4.7 | 6.5 | 34.7 | 22.4 | 22.4 | 14.7 |
| >2000 CDD AND <4000 HDD | 16.7 | 16.7 | 16.5 | 5.8 | 18.4 | 4.9 | 4.9 | 3.8 | 33.6 | 10.2 | 10.2 | 6.2 |
| TYPE OF STRUCTURE | | | | | | | | | | | | |
| SINGLE FAMILY DETACHED | 5.6 | 5.6 | 5.8 | 1.5 | 5.9 | 2.4 | 2.4 | 2.6 | 13.8 | 11.2 | 11.2 | 9.2 |
| SINGLE FAMILY ATTACHED | 23.1 | 23.1 | 23.7 | 4.6 | 22.6 | 9.1 | 9.1 | 10.3 | 36.1 | 20.3 | 20.3 | 13.3 |
| 2-4 UNIT BLDG | 15.2 | 15.2 | 14.3 | 3.0 | 12.4 | 7.5 | 7.5 | 6.6 | 28.6 | 15.0 | 15.0 | 8.7 |
| 5+ UNIT BLDG | 18.6 | 18.6 | 16.2 | 4.5 | 17.6 | 9.6 | 9.6 | 8.8 | 20.0 | 17.8 | 17.8 | 9.2 |
| MOBILE HOME | 42.7 | 42.7 | 43.5 | 6.5 | 37.1 | 19.0 | 19.0 | 22.1 | 72.8 | - | - | - |
| OTHER | 69.9 | 69.9 | 70.6 | - | 80.3 | 70.5 | 70.5 | 58.1 | 100.0 | - | - | - |
| OWN/RENT | | | | | | | | | | | | |
| OWN | 5.5 | 5.5 | 5.5 | 1.3 | 5.6 | 2.8 | 2.8 | 2.8 | 12.5 | 10.2 | 10.2 | 7.9 |
| RENT | 7.1 | 7.1 | 7.1 | 1.7 | 7.2 | 3.6 | 3.6 | 3.7 | 16.7 | 11.6 | 11.6 | 6.2 |
| RENT FREE | 18.5 | 18.5 | 19.1 | 5.8 | 19.2 | 15.1 | 15.1 | 14.1 | 70.7 | - | - | 97.2 |

NOTE: A DASH "-" INDICATES THAT THE ESTIMATE OF THE RELATIVE STANDARD ERROR IS NOT AVAILABLE. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRANT FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

TABLE B3. TOTAL RESIDENTIAL ELECTRICITY CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 : RELATIVE STANDARD ERRORS (PERCENT)

| HOUSEHOLD CHARACTERISTICS | ELECTRICITY | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | TOTAL AMOUNT CONSUMED (BIL*N KWH) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | AVG PRICE ($ PER KWH) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) |
| TOTAL HOUSEHOLDS | 4.9 | 4.9 | 4.0 | 2.2 | 3.5 | 3.0 | 3.0 | 2.2 |
| SMSA/NON-SMSA | | | | | | | | |
| SMSA | 4.8 | 4.8 | 4.3 | 2.5 | 3.7 | 3.2 | 3.2 | 2.2 |
| NON-SMSA | 10.7 | 10.7 | 8.8 | 4.1 | 8.7 | 5.3 | 5.3 | 5.0 |
| TYPE OF STRUCTURE | | | | | | | | |
| SINGLE FAMILY DETACHED | 5.9 | 5.9 | 4.8 | 2.6 | 4.2 | 3.4 | 3.4 | 2.7 |
| SINGLE FAMILY ATTACHED | 22.4 | 22.4 | 20.1 | 6.4 | 18.7 | 9.9 | 9.9 | 6.4 |
| 2-4 UNIT BUILDING | 16.0 | 16.0 | 15.3 | 3.7 | 12.1 | 6.3 | 6.3 | 5.7 |
| 5 OR MORE UNIT BUILDING | 21.7 | 21.7 | 19.1 | 5.8 | 14.6 | 10.3 | 10.3 | 7.2 |
| MOBILE HOME | 11.2 | 11.2 | 13.2 | 5.5 | 14.4 | 8.0 | 8.0 | 5.6 |
| OTHER | 58.2 | 58.2 | 57.9 | 36.2 | 57.7 | 47.6 | 47.6 | 39.0 |
| YEAR HOUSE BUILT | | | | | | | | |
| 1939 OR EARLIER | 7.2 | 7.2 | 6.9 | 2.7 | 6.8 | 4.9 | 4.9 | 3.7 |
| 1940 TO 1949 | 11.2 | 11.2 | 10.9 | 2.2 | 9.3 | 6.2 | 6.2 | 5.1 |
| 1950 TO 1959 | 6.3 | 6.3 | 6.3 | 2.4 | 6.1 | 5.1 | 5.1 | 4.5 |
| 1960 TO 1964 | 8.5 | 8.5 | 8.0 | 3.1 | 9.2 | 6.5 | 6.5 | 5.1 |
| 1965 TO 1969 | 8.7 | 8.7 | 8.9 | 2.4 | 8.7 | 4.9 | 4.9 | 4.8 |
| 1970 TO 1974 | 10.7 | 10.7 | 11.1 | 3.7 | 9.7 | 5.5 | 5.5 | 5.6 |
| 1975 TO 1979 | 17.0 | 17.0 | 16.0 | 4.9 | 20.2 | 7.4 | 7.4 | 7.5 |
| OWN/RENT | | | | | | | | |
| OWN | 5.6 | 5.6 | 4.6 | 2.5 | 4.1 | 3.3 | 3.3 | 2.6 |
| RENT | 8.0 | 8.0 | 7.7 | 2.3 | 6.4 | 4.0 | 4.0 | 3.3 |
| RENT FREE | 14.6 | 14.6 | 14.6 | 5.0 | 12.1 | 10.4 | 10.4 | 10.2 |

NOTE: A DASH "-" INDICATES THAT THE ESTIMATE OF THE RELATIVE STANDARD ERROR IS NOT AVAILABLE. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

TABLE B4. RESIDENTIAL ELECTRICITY CONSUMPTION AND EXPENDITURES FOR HOUSEHOLDS THAT USE ELECTRICITY AS MAIN HEATING FUEL - APRIL 1979 THROUGH MARCH 1980 : RELATIVE STANDARD ERRORS (PERCENT)

| HOUSEHOLD CHARACTERISTICS | ELECTRICITY USED: AS MAIN HEATING FUEL | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ELECTRICITY USED: FOR AIR CONDITIONING | | | | | ELECTRICITY USED: NOT FOR AIR CONDITIONING | | | | |
| | NUMBER OF HOUSEHOLDS (MIL'N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL'N BTU) | AVG EXPEND PER HOUSEHOLD ($) | AVG PRICE ($ PER KWH) | NUMBER OF HOUSEHOLDS (MIL'N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL'N BTU) | AVG EXPEND PER HOUSEHOLD ($) | AVG PRICE ($ PER KWH) |
| TOTAL HOUSEHOLDS | 13.9 | 5.1 | 5.1 | 4.1 | 3.5 | 22.4 | 9.7 | 9.7 | 6.1 | 11.1 |
| URBAN/RURAL | | | | | | | | | | |
| URBAN | 14.3 | 6.6 | 6.6 | 5.5 | 3.1 | 37.3 | 10.5 | 10.5 | 9.7 | 13.4 |
| RURAL | 24.7 | 6.1 | 6.1 | 4.4 | 5.9 | 27.9 | 9.0 | 9.0 | 7.9 | 14.6 |
| TYPE OF STRUCTURE | | | | | | | | | | |
| SINGLE FAMILY DETACHED | 15.3 | 3.8 | 3.8 | 3.2 | 3.0 | 23.6 | 5.7 | 5.7 | 8.1 | 12.8 |
| SINGLE FAMILY ATTACHED | 66.9 | 48.6 | 48.6 | 48.2 | 31.1 | 75.6 | 61.2 | 61.2 | 60.4 | 50.1 |
| 2-4 UNIT BUILDING | 51.7 | 10.9 | 10.9 | 11.4 | 12.7 | 35.3 | 13.6 | 13.6 | 11.2 | 16.4 |
| 5 OR MORE UNIT BUILDING | 26.7 | 5.7 | 5.7 | 7.2 | 7.1 | 64.6 | 18.6 | 18.6 | 24.2 | 17.8 |
| MOBILE HOME | 31.0 | 15.4 | 15.4 | 13.5 | 13.9 | 29.6 | 11.1 | 11.1 | 9.7 | 20.3 |
| OTHER | 100.0 | 70.7 | 70.7 | 70.7 | 70.7 | - | - | - | - | - |
| NUMBER OF ROOMS | | | | | | | | | | |
| ONE TO THREE | 19.1 | 10.0 | 10.0 | 8.4 | 6.9 | 25.9 | 15.8 | 15.8 | 10.9 | 13.0 |
| FOUR | 23.2 | 8.1 | 8.1 | 7.4 | 5.1 | 37.4 | 11.9 | 11.9 | 7.9 | 12.4 |
| FIVE | 15.0 | 5.8 | 5.8 | 5.3 | 4.2 | 30.0 | 9.9 | 9.9 | 8.8 | 15.4 |
| SIX | 22.6 | 6.6 | 6.6 | 8.1 | 5.7 | 30.4 | 9.9 | 9.9 | 11.7 | 14.7 |
| SEVEN | 19.8 | 4.0 | 4.0 | 6.2 | 5.1 | 26.9 | 14.9 | 14.9 | 11.3 | 16.4 |
| EIGHT OR MORE | 27.4 | 7.8 | 7.8 | 7.4 | 6.7 | 24.9 | 11.5 | 11.5 | 11.9 | 15.6 |
| OWN/RENT | | | | | | | | | | |
| OWN | 14.7 | 4.4 | 4.4 | 3.6 | 3.9 | 25.3 | 9.1 | 9.1 | 8.2 | 12.5 |
| RENT | 22.4 | 5.5 | 5.5 | 5.8 | 4.1 | 25.5 | 10.9 | 10.9 | 10.7 | 11.4 |
| RENT FREE | 32.9 | 16.1 | 16.1 | 12.6 | 8.9 | 58.8 | 47.0 | 47.0 | 57.0 | 53.7 |

NOTE: A DASH "-" INDICATES THAT THE ESTIMATE OF THE RELATIVE STANDARD ERROR IS NOT AVAILABLE. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.
OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

TABLE B5. RESIDENTIAL ELECTRICITY CONSUMPTION AND EXPENDITURES FOR HOUSEHOLDS THAT DO NOT USE ELECTRICITY AS MAIN HEATING FUEL - APRIL 1979 THROUGH MARCH 1980 : RELATIVE STANDARD ERRORS (PERCENT)

| HOUSEHOLD CHARACTERISTICS | ELECTRICITY USED: NOT AS MAIN HEATING FUEL | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ELECTRICITY USED: FOR AIR CONDITIONING | | | | | ELECTRICITY USED: NOT FOR AIR CONDITIONING | | | | |
| | NUMBER OF HOUSEHOLDS (MIL'N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL'N BTU) | AVG EXPEND PER HOUSEHOLD ($) | AVG PRICE ($ PER KWH) | NUMBER OF HOUSEHOLDS (MIL'N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (THOU KWH) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL'N BTU) | AVG EXPEND PER HOUSEHOLD ($) | AVG PRICE ($ PER KWH) |
| TOTAL HOUSEHOLDS | 4.9 | 3.7 | 3.7 | 3.2 | 1.6 | 6.1 | 3.8 | 3.8 | 3.3 | 2.2 |
| **TYPE OF STRUCTURE** | | | | | | | | | | |
| SINGLE FAMILY DETACHED | 5.5 | 3.9 | 3.9 | 3.4 | 1.6 | 6.3 | 3.8 | 3.8 | 3.5 | 2.8 |
| SINGLE FAMILY ATTACHED | 23.7 | 7.3 | 7.3 | 5.5 | 6.3 | 21.6 | 13.7 | 13.7 | 7.8 | 8.7 |
| 2-4 UNIT BUILDING | 21.3 | 6.4 | 6.4 | 7.2 | 6.2 | 12.0 | 7.1 | 7.1 | 5.8 | 3.1 |
| 5 OR MORE UNIT BUILDING | 19.2 | 17.0 | 17.0 | 13.8 | 5.2 | 24.1 | 12.5 | 12.5 | 7.8 | 9.7 |
| MOBILE HOME | 18.3 | 7.9 | 7.9 | 5.7 | 3.6 | 22.7 | 16.3 | 16.3 | 13.3 | 5.5 |
| OTHER | 82.5 | 66.5 | 66.5 | 59.4 | 50.5 | 100.0 | 70.7 | 70.7 | 70.7 | 70.7 |
| **NUMBER OF ROOMS AIR CONDITIONED** | | | | | | | | | | |
| ALL | 7.6 | 4.9 | 4.9 | 4.5 | 1.8 | 17.2 | 8.0 | 8.0 | 9.0 | 4.4 |
| SOME | 5.8 | 3.8 | 3.8 | 3.3 | 2.1 | 39.1 | 24.0 | 24.0 | 25.4 | 14.2 |
| NONE | - | - | - | - | - | 6.2 | 4.0 | 4.0 | 3.5 | 2.3 |
| **OWN/RENT** | | | | | | | | | | |
| OWN | 4.9 | 3.7 | 3.7 | 3.2 | 1.6 | 6.4 | 3.9 | 3.9 | 3.5 | 2.8 |
| RENT | 12.8 | 6.4 | 6.4 | 6.3 | 3.1 | 10.3 | 5.3 | 5.3 | 4.5 | 2.7 |
| RENT FREE | 22.5 | 14.5 | 14.5 | 11.7 | 6.8 | 24.4 | 24.7 | 24.7 | 25.1 | 7.7 |
| **RACE** | | | | | | | | | | |
| WHITE | 5.1 | 3.8 | 3.8 | 3.3 | 1.6 | 6.6 | 4.3 | 4.3 | 3.7 | 2.4 |
| BLACK | 14.6 | 6.0 | 6.0 | 5.1 | 2.7 | 15.4 | 7.2 | 7.2 | 7.2 | 2.6 |
| OTHER | 30.4 | 23.1 | 23.1 | 17.4 | 8.6 | 30.0 | 13.4 | 13.4 | 10.5 | 11.2 |

NOTE: A DASH "-" INDICATES THAT THE ESTIMATE OF THE RELATIVE STANDARD ERROR IS NOT AVAILABLE. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

TABLE B6. RESIDENTIAL FUEL OIL AND KEROSENE CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 : RELATIVE STANDARD ERRORS (PERCENT)

| HOUSEHOLD CHARACTERISTICS | FUEL OIL AND KEROSENE | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | FUEL OIL OR KEROSENE USED: AS MAIN HEATING FUEL | | | |
| | TOTAL AMOUNT CONSUMED (BIL*N GAL) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | AVG PRICE ($ PER GAL) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (GAL) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) |
| TOTAL HOUSEHOLDS | 9.4 | 9.4 | 9.4 | 0.3 | 8.9 | 3.3 | 3.3 | 3.3 |
| TYPE OF STRUCTURE | | | | | | | | |
| SINGLE FAMILY DETACHED | 10.9 | 10.9 | 10.8 | .4 | 10.6 | 4.0 | 4.0 | 3.8 |
| SINGLE FAMILY ATTACHED | 33.7 | 33.7 | 33.3 | 1.2 | 30.6 | 7.6 | 7.6 | 7.3 |
| 2-4 UNIT BUILDING | 32.2 | 32.2 | 32.2 | .9 | 28.6 | 9.7 | 9.7 | 9.1 |
| 5 OR MORE UNIT BUILDING | 23.7 | 23.7 | 24.0 | .7 | 22.1 | 5.8 | 5.8 | 5.8 |
| MOBILE HOME | 26.2 | 26.2 | 26.2 | 1.2 | 26.5 | 5.7 | 5.7 | 5.4 |
| OTHER | 100.0 | 100.0 | 100.0 | - | 100.0 | 70.7 | 70.7 | 70.7 |
| OWN/RENT | | | | | | | | |
| OWN | 9.7 | 9.7 | 9.6 | .4 | 9.4 | 4.0 | 4.0 | 3.9 |
| RENT | 16.4 | 16.4 | 16.6 | .6 | 14.0 | 5.7 | 5.7 | 5.8 |
| RENT FREE | 30.5 | 30.5 | 30.5 | 2.0 | 32.6 | 20.3 | 20.3 | 19.3 |
| 1978 FAMILY INCOME | | | | | | | | |
| LESS THAN $5,000 | 16.0 | 16.0 | 16.1 | .9 | 13.9 | 7.3 | 7.3 | 7.1 |
| $5,000 TO $9,999 | 15.2 | 15.2 | 15.2 | .7 | 13.7 | 5.8 | 5.8 | 5.8 |
| $10,000 TO $14,999 | 13.1 | 13.1 | 13.3 | .8 | 11.7 | 5.7 | 5.7 | 5.9 |
| $15,000 TO $19,999 | 16.6 | 16.6 | 16.5 | .7 | 17.0 | 7.0 | 7.0 | 6.6 |
| $20,000 TO $24,999 | 14.0 | 14.0 | 14.1 | 1.1 | 14.1 | 6.4 | 6.4 | 6.3 |
| $25,000 TO $34,999 | 13.7 | 13.7 | 14.0 | .9 | 15.0 | 6.5 | 6.5 | 6.5 |
| $35,000 OR MORE | 18.2 | 18.2 | 18.2 | .8 | 15.3 | 9.9 | 9.9 | 9.8 |
| MARITAL STATUS | | | | | | | | |
| MARRIED | 9.9 | 9.9 | 9.9 | .4 | 9.6 | 3.7 | 3.7 | 3.7 |
| NOT MARRIED | 13.6 | 13.6 | 13.6 | .5 | 11.4 | 5.6 | 5.6 | 5.4 |
| FEMALE HEAD | 14.1 | 14.1 | 14.1 | .6 | 11.8 | 5.6 | 5.6 | 5.5 |
| MALE HEAD | 18.9 | 18.9 | 19.0 | 1.0 | 16.9 | 10.1 | 10.1 | 10.1 |

NOTE: A DASH "-" INDICATES THAT THE ESTIMATE OF THE RELATIVE STANDARD ERROR IS NOT AVAILABLE. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

TABLE B7. RESIDENTIAL LIQUID PETROLEUM GAS CONSUMPTION AND EXPENDITURES - APRIL 1979 THROUGH MARCH 1980 : RELATIVE STANDARD ERRORS (PERCENT)

| HOUSEHOLD CHARACTERISTICS | LIQUID PETROLEUM GAS (LPG) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | LIQUID PETROLEUM GAS USED: AS MAIN HEATING FUEL | | | | LIQUID PETROLEUM GAS USED: NOT AS MAIN HEATING FUEL | | | |
| | TOTAL AMOUNT CONSUMED (BIL*N GAL) | TOTAL AMOUNT CONSUMED (QUAD*N BTU) | TOTAL EXPEND (BIL*N $) | AVG PRICE ($ PER GAL) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (GAL) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) | NUMBER OF HOUSEHOLDS (MIL*N) | AVG AMOUNT CONSUMED PER HOUSEHOLD (GAL) | AVG AMOUNT CONSUMED PER HOUSEHOLD (MIL*N BTU) | AVG EXPEND PER HOUSEHOLD ($) |
| TOTAL HOUSEHOLDS.. | 17.7 | 17.7 | 16.6 | 2.5 | 19.5 | 10.0 | 10.0 | 9.1 | 15.3 | 12.0 | 12.0 | 7.7 |
| TYPE OF STRUCTURE | | | | | | | | | | | | |
| SINGLE FAMILY DETACHED..... | 19.0 | 19.0 | 17.9 | 2.9 | 20.8 | 11.0 | 11.0 | 9.8 | 18.3 | 13.7 | 13.7 | 8.8 |
| SINGLE FAMILY ATTACHED..... | 61.4 | 61.4 | 58.4 | - | 59.2 | 54.8 | 54.9 | 54.4 | 100.0 | - | - | - |
| 2-4 UNIT BLDG... | 48.4 | 48.4 | 45.6 | 30.2 | 55.4 | 35.6 | 35.6 | 37.8 | 47.5 | - | - | - |
| 5+ UNIT BLDG.... | 53.5 | 53.5 | 52.5 | 13.3 | 71.8 | 74.8 | 74.8 | 68.4 | 53.0 | - | - | - |
| MOBILE HOME..... | 29.0 | 29.0 | 27.8 | 3.8 | 27.4 | 17.5 | 17.5 | 16.5 | 27.1 | 27.9 | 27.9 | 20.2 |
| OTHER..... | - | - | - | - | - | - | - | - | - | - | - | - |
| OWN/RENT | | | | | | | | | | | | |
| OWN..... | 20.3 | 20.3 | 19.1 | 2.7 | 23.0 | 12.2 | 12.2 | 11.0 | 17.0 | 14.7 | 14.7 | 9.5 |
| RENT..... | 17.6 | 17.6 | 16.5 | 3.4 | 20.4 | 9.8 | 9.8 | 9.3 | 23.5 | 18.7 | 18.7 | 13.9 |
| RENT FREE..... | 42.5 | 42.5 | 41.9 | 5.0 | 50.3 | 17.6 | 17.6 | 19.9 | 60.1 | - | - | - |
| AGE OF HEAD | | | | | | | | | | | | |
| 29 OR LESS..... | 26.7 | 26.7 | 24.8 | 3.7 | 27.0 | 11.0 | 11.0 | 10.6 | 27.6 | 30.0 | 30.0 | 20.7 |
| 30 TO 44..... | 20.7 | 20.7 | 20.5 | 3.1 | 22.1 | 7.8 | 7.8 | 7.1 | 26.8 | 21.9 | 21.9 | 15.6 |
| 45 TO 59..... | 29.1 | 29.1 | 25.9 | 5.2 | 25.4 | 18.5 | 18.5 | 16.1 | 20.5 | 20.5 | 20.5 | 14.3 |
| 60 AND OVER..... | 20.5 | 20.5 | 19.2 | 3.4 | 24.1 | 14.3 | 14.3 | 12.2 | 14.9 | 12.8 | 12.8 | 8.9 |
| HOUSEHOLD MEMBERS | | | | | | | | | | | | |
| ONE..... | 25.4 | 25.4 | 23.9 | 4.4 | 26.6 | 19.5 | 19.5 | 17.3 | 26.0 | 28.9 | 28.9 | 17.8 |
| TWO..... | 18.0 | 18.0 | 17.6 | 2.3 | 21.2 | 8.8 | 8.8 | 7.2 | 17.9 | 12.3 | 12.3 | 9.1 |
| THREE..... | 21.1 | 21.1 | 20.7 | 4.4 | 22.3 | 10.3 | 10.3 | 10.5 | 24.2 | 20.4 | 20.4 | 14.7 |
| FOUR..... | 23.7 | 23.7 | 22.0 | 3.7 | 23.8 | 8.3 | 8.3 | 7.6 | 22.2 | 21.7 | 21.7 | 14.0 |
| FIVE OR MORE.... | 25.9 | 25.9 | 24.7 | 2.9 | 23.6 | 18.6 | 18.6 | 19.3 | 22.5 | 19.9 | 19.9 | 13.9 |

NOTE: A DASH "-" INDICATES THAT THE ESTIMATE OF THE RELATIVE STANDARD ERROR IS NOT AVAILABLE. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

TABLE B8. AVERAGE RESIDENTIAL ENERGY PRICES - APRIL 1979 THROUGH MARCH 1980 (DOLLARS PER MILLION BTU) : RELATIVE STANDARD ERRORS, (PERCENT)

| HOUSEHOLD CHARACTERISTICS | AVERAGE ENERGY PRICES | | | | |
|---|---|---|---|---|---|
| | ALL FUELS | ELECTRICITY | LIQUID PETROLEUM GAS | FUEL OIL AND KEROSENE | NATURAL GAS |
| TOTAL HOUSEHOLDS | 1.5 | 2.2 | 2.5 | 0.3 | 1.2 |
| URBAN/RURAL | | | | | |
| URBAN | 1.4 | 2.0 | 5.3 | .4 | 1.3 |
| RURAL | 3.8 | 4.6 | 2.6 | .5 | 5.2 |
| TYPE OF STRUCTURE | | | | | |
| SINGLE FAMILY DETACHED | 1.8 | 2.6 | 2.9 | .4 | 1.5 |
| SINGLE FAMILY ATTACHED | 4.0 | 6.4 | - | 1.2 | 4.6 |
| 2-4 UNIT BUILDING | 4.5 | 3.7 | 30.2 | .9 | 3.0 |
| 5 OR MORE UNIT BUILDING | 4.1 | 5.8 | 13.3 | .7 | 4.5 |
| MOBILE HOME | 5.4 | 5.5 | 3.8 | 1.2 | 6.5 |
| OTHER | 40.9 | 36.2 | - | - | - |
| NUMBER OF ROOMS | | | | | |
| ONE TO THREE | 2.2 | 4.0 | 3.7 | 1.0 | 3.0 |
| FOUR | 2.8 | 2.9 | 2.6 | .8 | 2.1 |
| FIVE | 2.1 | 3.3 | 4.1 | .7 | 1.5 |
| SIX | 2.2 | 2.4 | 5.0 | .6 | 1.4 |
| SEVEN | 2.3 | 3.3 | 4.6 | 1.0 | 1.8 |
| EIGHT OR MORE | 2.6 | 3.1 | 8.3 | .4 | 2.6 |
| OWN/RENT | | | | | |
| OWN | 1.7 | 2.5 | 2.7 | .4 | 1.3 |
| RENT | 2.0 | 2.3 | 3.4 | .6 | 1.7 |
| RENT FREE | 4.7 | 5.0 | 5.0 | 2.0 | 5.8 |

NOTE: A DASH "-" INDICATES THAT THE ESTIMATE OF THE RELATIVE STANDARD ERROR IS NOT AVAILABLE. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

TABLE 89. TYPE OF RESIDENTIAL MAIN HEATING FUEL - AS OF NOVEMBER 1979 (MILLION HOUSEHOLDS) : RELATIVE STANDARD ERRORS (PERCENT)

| HOUSEHOLD CHARACTERISTICS | TOTAL HOUSEHOLDS | TYPE OF MAIN HEATING FUEL | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | NATURAL GAS | FUEL OIL AND KEROSENE | ELECTRICITY | LIQUID PETROLEUM GAS | WOOD | COAL | OTHER AND NONE |
| TOTAL HOUSEHOLDS | 3.5 | 4.3 | 8.9 | 11.8 | 19.5 | 20.2 | 61.7 | 34.6 |
| TYPE OF STRUCTURE | | | | | | | | |
| SINGLE FAMILY DETACHED | 4.2 | 5.9 | 10.6 | 12.9 | 20.8 | 19.8 | 57.0 | 38.1 |
| SINGLE FAMILY ATTACHED | 18.7 | 22.6 | 30.6 | 58.1 | 59.2 | 100.0 | 100.0 | - |
| 2-4 UNIT BUILDING | 12.1 | 12.4 | 28.6 | 36.7 | 55.4 | 71.9 | - | 58.7 |
| 5 OR MORE UNIT BUILDING | 14.6 | 17.6 | 22.1 | 27.7 | 71.8 | 100.0 | - | 70.7 |
| MOBILE HOME | 14.4 | 37.1 | 26.5 | 16.7 | 27.4 | 41.4 | 100.0 | - |
| OTHER | 57.7 | 80.3 | 100.0 | 100.0 | - | - | - | - |
| YEAR HOUSE BUILT | | | | | | | | |
| 1939 OR EARLIER | 6.8 | 8.9 | 13.7 | 16.7 | 20.4 | 27.5 | 63.2 | 53.7 |
| 1940 TO 1949 | 9.3 | 11.6 | 12.4 | 24.4 | 54.7 | 36.9 | 100.0 | 100.0 |
| 1950 TO 1959 | 6.1 | 8.5 | 15.3 | 19.4 | 34.9 | 23.8 | 100.0 | 100.0 |
| 1960 TO 1964 | 9.2 | 14.6 | 17.2 | 16.0 | 35.7 | 36.1 | 70.8 | - |
| 1965 TO 1969 | 8.7 | 14.1 | 23.7 | 18.7 | 31.8 | 34.1 | - | - |
| 1970 TO 1974 | 9.7 | 15.2 | 21.3 | 16.9 | 24.2 | 31.0 | - | 70.7 |
| 1975 TO 1979 | 20.2 | 21.0 | 26.6 | 24.4 | 36.2 | 51.1 | 100.0 | 72.5 |
| OWN/RENT | | | | | | | | |
| OWN | 4.1 | 5.6 | 9.4 | 13.0 | 23.0 | 20.9 | 57.4 | 38.4 |
| RENT | 6.4 | 7.2 | 14.0 | 17.6 | 20.4 | 30.8 | 100.0 | 60.0 |
| RENT FREE | 12.1 | 19.2 | 32.6 | 23.4 | 50.3 | 54.2 | - | - |
| NUMBER OF FULL-TIME WAGE EARNERS | | | | | | | | |
| NONE | 6.1 | 7.7 | 10.7 | 21.0 | 25.5 | 26.5 | 85.9 | 57.3 |
| ONE | 4.2 | 4.7 | 9.4 | 12.9 | 21.1 | 23.1 | 62.7 | 35.9 |
| TWO | 5.5 | 6.7 | 14.1 | 13.3 | 23.0 | 22.4 | 100.0 | 74.6 |
| THREE | 10.6 | 13.9 | 19.6 | 40.9 | 43.3 | 41.0 | - | 100.0 |
| FOUR OR MORE | 19.3 | 26.0 | 32.6 | 100.0 | - | 100.0 | - | 100.0 |

NOTE: A DASH "-" INDICATES THAT THE ESTIMATE OF THE RELATIVE STANDARD ERROR IS NOT AVAILABLE. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

TABLE B10. TYPE OF RESIDENTIAL MAIN HEATING FUEL USED LAST YEAR - (MILLION HOUSEHOLDS) : RELATIVE STANDARD ERRORS (PERCENTS)

| HOUSEHOLD CHARACTERISTICS | TOTAL HOUSEHOLDS | TYPE OF MAIN HEATING FUEL - AS OF NOVEMBER 1979 | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | NATURAL GAS | FUEL OIL AND KEROSENE | ELECTRICITY | LIQUID PETROLEUM GAS | WOOD | COAL | OTHER AND NONE |
| TOTAL HOUSEHOLDS | 3.5 | 4.3 | 8.9 | 11.8 | 19.5 | 20.2 | 61.7 | 34.6 |
| HOUSEHOLDS USING SAME MAIN HEATING FUEL IN WINTER 1978-1979 | | | | | | | | |
| TOTAL | 3.5 | 4.4 | 9.0 | 12.0 | 20.2 | 22.9 | 72.0 | 37.6 |
| NON-POOR | 3.8 | 4.9 | 9.8 | 12.6 | 22.1 | 24.3 | 73.2 | 46.0 |
| POOR | 8.0 | 10.8 | 14.2 | 19.4 | 23.2 | 30.9 | 75.9 | 48.1 |
| HOUSEHOLDS USING DIFFERENT MAIN HEATING FUEL IN WINTER 1978-1979 | | | | | | | | |
| TOTAL | 13.7 | 20.8 | 32.5 | 43.6 | 52.9 | 21.6 | 80.5 | 70.8 |
| NON-POOR | 15.0 | 21.9 | 32.5 | 43.6 | 60.2 | 21.6 | 80.5 | 100.0 |
| POOR | 29.8 | 45.0 | - | - | 60.5 | 48.3 | - | 100.0 |
| MAIN HEATING FUEL IN WINTER 1978-1979 | | | | | | | | |
| TOTAL | 13.7 | 20.8 | 32.5 | 43.6 | 52.9 | 21.6 | 80.5 | 70.8 |
| FUEL OIL AND KEROSENE | 20.3 | 26.5 | - | 58.1 | 62.1 | 28.1 | 80.5 | - |
| ELECTRICITY | 21.6 | 33.9 | 100.0 | - | 80.5 | 44.7 | - | 100.0 |
| NATURAL GAS | 50.8 | - | - | 100.0 | - | 58.4 | - | - |
| LPG | 41.6 | - | - | 100.0 | - | 44.7 | - | - |
| OTHER | 24.2 | 70.9 | 33.8 | 60.1 | - | 100.0 | - | 100.0 |
| SECONDARY HEATING FUEL AS OF NOV. 1979 | | | | | | | | |
| WOOD | 8.7 | 12.6 | 14.8 | 19.3 | 27.6 | - | 57.9 | 100.0 |
| ELECTRICITY | 10.8 | 15.3 | 18.8 | - | 28.1 | 26.0 | - | 70.7 |
| FUEL OIL AND KEROSENE | 23.7 | 54.8 | 45.8 | 49.7 | 100.0 | 26.9 | - | 100.0 |
| NATURAL GAS | 26.8 | - | 46.1 | 38.8 | - | 44.8 | 100.0 | - |
| LPG | 27.9 | - | 46.0 | 32.4 | - | 43.2 | 100.0 | - |
| COAL | 42.4 | 59.8 | - | 100.0 | - | 73.5 | - | - |
| OTHER | 24.8 | 32.1 | 59.6 | 100.0 | - | - | - | - |
| NONE | 3.5 | 4.0 | 9.8 | 12.5 | 20.7 | 26.2 | 73.3 | 41.6 |

NOTE: A DASH "-" INDICATES THAT THE ESTIMATE OF THE RELATIVE STANDARD ERROR IS NOT AVAILABLE. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

TABLE B11. ATTIC INSULATION ADDED DURING 1978 OR 1979 (EXCLUDING BUILDINGS OF 5 OR MORE UNITS): RELATIVE STANDARD ERRORS (PERCENT)

| HOUSEHOLD CHARACTERISTICS | HOUSEHOLDS NOT ADDING ATTIC INSULATION IN 1979 (MILLIONS) | HOUSEHOLDS ADDING ATTIC INSULATION IN 1979 (MILLIONS) | COST OF ITEMS ADDED IN 1979 | | | HOUSEHOLDS NOT ADDING ATTIC INSULATION IN 1978 (MILLIONS) | HOUSEHOLDS ADDING ATTIC INSULATION IN 1978 (MILLIONS) | COST OF ITEMS ADDED IN 1978 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) |
| TOTAL HOUSEHOLDS | 3.7 | 9.1 | 15.9 | 21.9 | 16.0 | 3.6 | 7.9 | 12.1 | 28.7 | 12.0 |
| **TYPE OF STRUCTURE** | | | | | | | | | | |
| SINGLE FAMILY DETACHED | 4.4 | 9.3 | 16.6 | 27.7 | 17.3 | 4.3 | 8.0 | 10.5 | 29.8 | 12.5 |
| SINGLE FAMILY ATTACHED | 18.7 | 72.7 | 70.7 | 70.7 | 52.2 | 18.4 | 44.0 | 38.3 | - | 37.6 |
| 2-4 UNIT BLDG | 12.3 | 49.5 | 57.7 | - | 76.2 | 12.4 | 39.4 | 46.5 | 45.0 | 46.2 |
| MOBILE HOME | 14.8 | 37.5 | 59.2 | 61.6 | 45.1 | 14.5 | 55.4 | 58.7 | - | 58.7 |
| OTHER | 57.7 | - | - | - | - | 57.7 | - | - | - | - |
| **OWN/RENT** | | | | | | | | | | |
| OWN | 4.2 | 9.2 | 16.3 | 22.3 | 16.0 | 4.1 | 8.3 | 12.4 | 29.2 | 12.4 |
| RENT | 6.7 | 25.5 | 79.2 | 41.4 | 76.3 | 6.6 | 28.6 | 41.6 | 42.7 | 22.1 |
| RENT FREE | 12.2 | 70.8 | 70.7 | 70.7 | 50.4 | 12.6 | 73.0 | 99.8 | - | 99.8 |
| **HOUSEHOLDS WITH CHILDREN** | | | | | | | | | | |
| YES | 3.8 | 12.5 | 21.9 | 29.4 | 18.4 | 3.8 | 9.5 | 13.1 | 41.2 | 20.3 |
| FEMALE HEAD | 8.1 | 32.5 | 39.8 | 54.9 | 47.5 | 8.1 | 34.1 | 50.8 | 61.5 | 42.6 |
| MALE HEAD | 4.0 | 12.4 | 26.4 | 30.8 | 21.4 | 4.0 | 10.1 | 13.5 | 41.6 | 21.6 |
| NO | 4.7 | 12.3 | 26.3 | 20.3 | 19.9 | 4.7 | 10.6 | 18.4 | 16.5 | 16.9 |
| FEMALE HEAD | 8.0 | 25.7 | 90.8 | 70.7 | 61.9 | 8.2 | 18.1 | 14.5 | 47.6 | 14.4 |
| MALE HEAD | 4.6 | 12.7 | 16.3 | 21.1 | 12.8 | 4.6 | 11.8 | 22.3 | 15.3 | 20.6 |
| **HOUSEHOLD MEMBERS** | | | | | | | | | | |
| ONE | 7.1 | 23.0 | 73.8 | 42.6 | 55.3 | 7.2 | 16.7 | 19.3 | 47.7 | 18.1 |
| TWO | 4.3 | 12.6 | 15.6 | 25.3 | 13.6 | 4.3 | 12.6 | 24.2 | 15.7 | 21.9 |
| THREE | 5.3 | 19.8 | 32.8 | 55.9 | 28.5 | 5.4 | 15.5 | 20.3 | 23.6 | 16.8 |
| FOUR | 5.4 | 20.8 | 50.2 | 31.8 | 41.5 | 5.6 | 16.7 | 28.2 | 59.2 | 37.6 |
| FIVE OR MORE | 5.5 | 18.1 | 43.4 | 23.8 | 33.3 | 5.8 | 16.6 | 16.0 | 13.4 | 12.0 |

NOTE: A DASH "-" INDICATES THAT THE ESTIMATE OF THE RELATIVE STANDARD ERROR IS NOT AVAILABLE. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

**TABLE B12. STORM WINDOWS AND DOORS ADDED DURING 1978 OR 1979 (EXCLUDING BUILDINGS OF 5 OR MORE UNITS): RELATIVE STANDARD ERRORS (PERCENT)**

| HOUSEHOLD CHARACTERISTICS | HOUSEHOLDS NOT ADDING STORM WINDOWS AND/OR DOORS IN 1979 (MILLIONS) | HOUSEHOLDS ADDING STORM WINDOWS AND/OR DOORS IN 1979 (MILLIONS) | COST OF ITEMS ADDED IN 1979 | | | HOUSEHOLDS NOT ADDING STORM WINDOWS AND/OR DOORS IN 1978 (MILLIONS) | HOUSEHOLDS ADDING STORM WINDOWS AND/OR DOORS IN 1978 (MILLIONS) | COST OF ITEMS ADDED IN 1978 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) |
| TOTAL HOUSEHOLDS | 3.6 | 9.3 | 18.5 | 18.2 | 13.9 | 3.7 | 7.5 | 14.8 | 14.4 | 11.6 |
| TYPE OF STRUCTURE | | | | | | | | | | |
| SINGLE FAMILY DETACHED | 4.3 | 10.9 | 20.6 | 19.8 | 16.4 | 4.4 | 7.7 | 17.1 | 17.3 | 13.6 |
| SINGLE FAMILY ATTACHED | 18.2 | 32.5 | 33.4 | - | 33.6 | 19.3 | 42.0 | 42.2 | 70.7 | 42.0 |
| 2-4 UNIT BLDG | 12.4 | 30.0 | 21.6 | 78.0 | 22.2 | 12.4 | 36.3 | 39.3 | 67.3 | 31.2 |
| MOBILE HOME | 14.9 | 23.6 | 44.1 | 35.5 | 16.4 | 14.5 | 34.1 | 67.6 | 29.6 | 45.3 |
| OTHER | 64.2 | 100.0 | - | 70.7 | 70.7 | 57.7 | - | - | - | - |
| OWN/RENT | | | | | | | | | | |
| OWN | 4.2 | 9.8 | 19.2 | 18.7 | 15.0 | 4.3 | 7.8 | 16.0 | 12.2 | 12.8 |
| RENT | 6.7 | 20.1 | 49.2 | 49.1 | 25.5 | 6.7 | 32.2 | 73.6 | 72.8 | 36.3 |
| RENT FREE | 12.9 | 39.6 | 70.7 | 70.7 | 19.2 | 13.5 | 45.4 | 60.6 | 77.2 | 56.6 |
| 1978 FAMILY INCOME | | | | | | | | | | |
| LESS THAN $5,000 | 9.3 | 22.6 | 98.3 | 70.1 | 35.6 | 9.5 | 32.1 | 43.4 | 93.2 | 41.3 |
| $5,000 TO $9,999 | 7.0 | 23.7 | 43.0 | 66.9 | 26.3 | 7.1 | 19.8 | 30.7 | 32.5 | 26.0 |
| $10,000 TO $14,999 | 5.2 | 15.8 | 27.4 | 25.0 | 22.9 | 5.3 | 21.6 | 38.6 | 47.7 | 27.1 |
| $15,000 TO $19,999 | 7.4 | 22.1 | 14.1 | 64.7 | 38.1 | 7.2 | 24.7 | 25.6 | 33.9 | 20.0 |
| $20,000 TO $24,999 | 7.4 | 19.3 | 31.9 | 33.7 | 24.8 | 7.4 | 21.5 | 42.4 | 29.2 | 24.9 |
| $25,000 TO $34,999 | 7.3 | 16.9 | 44.0 | 31.5 | 36.3 | 6.7 | 18.7 | 41.8 | 32.5 | 30.2 |
| $35,000 OR MORE | 9.0 | 19.4 | 39.2 | 46.2 | 36.7 | 9.2 | 20.9 | 35.6 | 18.1 | 29.8 |
| AGE OF HEAD | | | | | | | | | | |
| 29 OR LESS | 6.3 | 17.2 | 28.6 | 18.2 | 17.9 | 6.0 | 19.0 | 27.2 | 23.7 | 18.9 |
| 30 TO 44 | 5.0 | 19.1 | 34.8 | 21.5 | 22.6 | 4.9 | 13.5 | 18.9 | 28.0 | 15.6 |
| 45 TO 59 | 4.9 | 13.4 | 29.2 | 52.2 | 26.0 | 5.0 | 13.5 | 27.4 | 19.3 | 15.9 |
| 60 AND OVER | 6.0 | 15.9 | 34.4 | 28.1 | 22.8 | 6.1 | 14.0 | 30.9 | 31.6 | 29.8 |

NOTE: A DASH "-" INDICATES THAT THE ESTIMATE OF THE RELATIVE STANDARD ERROR IS NOT AVAILABLE. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

**TABLE B13. WALL INSULATION ADDED DURING 1978 OR 1979 (EXCLUDING BUILDINGS OF 5 OR MORE UNITS): RELATIVE STANDARD ERRORS (PERCENT)**

| HOUSEHOLD CHARACTERISTICS | HOUSEHOLDS NOT ADDING WALL INSULATION IN 1979 (MILLIONS) | HOUSEHOLDS ADDING WALL INSULATION IN 1979 (MILLIONS) | COST OF ITEMS ADDED IN 1979 | | | HOUSEHOLDS NOT ADDING WALL INSULATION IN 1978 (MILLIONS) | HOUSEHOLDS ADDING WALL INSULATION IN 1978 (MILLIONS) | COST OF ITEMS ADDED IN 1978 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) | | | COST OF LABOR AND MATERIALS ($) | COST OF MATERIALS ONLY ($) | AVERAGE COST ($) |
| TOTAL HOUSEHOLDS | 3.5 | 11.4 | 17.2 | 26.9 | 19.2 | 3.6 | 10.3 | 10.1 | 33.9 | 11.1 |
| AIA HEATING AND COOLING DEGREE DAY ZONES | | | | | | | | | | |
| <2000 CDD AND >7000 HDD | 26.1 | 33.0 | 56.1 | 42.2 | 46.7 | 25.6 | 47.3 | 73.0 | 46.3 | 65.8 |
| <2000 CDD AND 5500-7000 HDD | 11.6 | 20.0 | 25.3 | 32.8 | 28.7 | 11.5 | 19.1 | 14.1 | 38.7 | 16.1 |
| <2000 CDD AND 4000-5499 HDD | 12.2 | 23.7 | 44.6 | 56.0 | 20.0 | 12.1 | 30.4 | 26.4 | 164.3 | 32.8 |
| <2000 CDD AND <4000 HDD | 10.7 | 30.8 | 38.1 | 21.0 | 39.0 | 10.6 | 33.1 | 36.4 | 59.7 | 35.0 |
| >2000 CDD AND <4000 HDD | 15.8 | 44.9 | 71.9 | 52.1 | 79.3 | 15.9 | 29.1 | 19.4 | 67.5 | 22.2 |
| TYPE OF STRUCTURE | | | | | | | | | | |
| SINGLE FAMILY DETACHED | 4.3 | 11.4 | 17.2 | 33.3 | 18.0 | 4.3 | 10.6 | 10.1 | 35.5 | 11.3 |
| SINGLE FAMILY ATTACHED | 18.7 | 72.7 | 70.7 | 70.7 | 50.0 | 18.8 | 71.6 | 50.0 | - | 50.0 |
| 2-4 UNIT BLDG | 12.2 | 41.9 | 78.3 | 44.1 | 118.7 | 12.2 | 41.8 | - | 70.7 | 27.0 |
| MOBILE HOME | 14.4 | 45.0 | - | 52.5 | 50.1 | 14.6 | 57.3 | 75.3 | 62.0 | 51.7 |
| OTHER | 57.7 | - | - | - | - | 57.7 | - | - | - | - |
| OWN/RENT | | | | | | | | | | |
| OWN | 4.1 | 11.5 | 16.7 | 28.7 | 17.4 | 4.2 | 10.8 | 10.3 | 34.1 | 9.6 |
| RENT | 6.5 | 27.0 | 78.3 | 36.1 | 71.9 | 6.6 | 45.6 | 76.9 | 70.7 | 77.4 |
| RENT FREE | 12.4 | - | - | - | - | 12.4 | - | - | - | - |
| FULL-TIME (FT) EMPLOYMENT | | | | | | | | | | |
| HEAD MARRIED | 3.5 | 12.1 | 18.6 | 30.8 | 19.6 | 3.6 | 11.2 | 10.3 | 34.0 | 10.2 |
| HEAD OR SPOUSE EMPLOYED FT | 4.3 | 16.4 | 33.5 | 38.5 | 30.8 | 4.4 | 16.2 | 14.2 | 35.8 | 13.2 |
| BOTH EMPLOYED FT | 5.6 | 20.7 | 33.6 | 46.1 | 32.1 | 5.9 | 15.3 | 13.3 | 57.6 | 15.4 |
| NEITHER EMPLOYED FT | 6.5 | 28.2 | 37.8 | 45.8 | 39.0 | 6.6 | 33.3 | 48.4 | 74.1 | 43.8 |
| HEAD NOT MARRIED | 5.5 | 27.3 | 38.1 | 33.3 | 42.3 | 5.6 | 27.9 | 37.5 | 55.5 | 37.9 |
| HEAD EMPLOYED FT | 6.4 | 36.6 | 52.2 | 31.8 | 57.6 | 6.5 | 42.9 | 34.0 | 70.7 | 38.7 |
| HEAD NOT EMPLOYED FT | 7.6 | 39.0 | 60.3 | 50.5 | 64.9 | 7.6 | 36.6 | 57.0 | 70.7 | 50.1 |

NOTE: A DASH "-" INDICATES THAT THE ESTIMATE OF THE RELATIVE STANDARD ERROR IS NOT AVAILABLE. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

TABLE B14. ADDED ROOF OR ATTIC INSULATION, STORM WINDOWS AND/OR DOORS, OR WALL INSULATION DURING 1978 OR 1979 EXCLUDING BUILDINGS OF 5 OR MORE UNITS (MILLION HOUSEHOLDS): RELATIVE STANDARD ERRORS (PERCENT)

| HOUSEHOLD CHARACTERISTICS | NUMBER OF CONSERVATION ITEMS ADDED DURING 1979 | | | | NUMBER OF CONSERVATION ITEMS ADDED DURING 1978 | | | |
|---|---|---|---|---|---|---|---|---|
| | THREE | TWO | ONE | NONE | THREE | TWO | ONE | NONE |
| TOTAL HOUSEHOLDS | 25.8 | 14.4 | 6.9 | 3.6 | 26.6 | 11.7 | 7.2 | 3.8 |
| TYPE OF STRUCTURE | | | | | | | | |
| SINGLE FAMILY DETACHED | 25.7 | 15.0 | 7.9 | 4.4 | 29.6 | 11.5 | 7.4 | 4.5 |
| SINGLE FAMILY ATTACHED | - | 100.0 | 32.5 | 10.3 | 71.6 | 100.0 | 38.8 | 19.0 |
| 2-4 UNIT BLDG | - | 71.7 | 22.7 | 12.6 | 100.0 | 72.2 | 33.4 | 12.6 |
| MOBILE HOME | 100.0 | 38.6 | 31.9 | 15.1 | - | 73.0 | 31.0 | 14.7 |
| OTHER | - | - | 100.0 | 64.2 | - | - | - | 57.7 |
| NUMBER OF ROOMS | | | | | | | | |
| ONE TO THREE | 100.0 | 60.4 | 24.2 | 13.6 | 75.2 | 73.5 | 38.5 | 13.3 |
| FOUR | 100.0 | 41.4 | 19.0 | 8.1 | 71.8 | 42.2 | 21.3 | 7.9 |
| FIVE | 72.0 | 26.8 | 14.5 | 5.5 | - | 21.5 | 12.2 | 5.6 |
| SIX | 61.6 | 31.3 | 10.5 | 4.9 | 46.3 | 23.3 | 9.8 | 5.2 |
| SEVEN | - | 25.2 | 15.8 | 7.2 | 50.2 | 32.5 | 15.3 | 7.1 |
| EIGHT OR MORE | 57.9 | 28.4 | 14.5 | 8.3 | 71.3 | 25.8 | 17.3 | 7.0 |
| OWN/RENT | | | | | | | | |
| OWN | 37.0 | 15.4 | 7.1 | 4.2 | 26.6 | 12.1 | 7.6 | 4.3 |
| RENT | 75.1 | 37.2 | 18.5 | 6.7 | - | 58.8 | 19.2 | 6.8 |
| RENT FREE | - | 100.0 | 58.0 | 12.9 | - | 100.0 | 45.6 | 13.5 |
| AGE OF HEAD | | | | | | | | |
| 29 OR LESS | 100.0 | 26.9 | 15.6 | 6.3 | 51.1 | 25.8 | 17.2 | 5.9 |
| 30 TO 44 | 51.1 | 26.6 | 13.8 | 4.9 | 51.5 | 21.9 | 12.9 | 5.1 |
| 45 TO 59 | 70.9 | 21.5 | 11.2 | 5.2 | 50.5 | 21.3 | 12.4 | 5.2 |
| 60 AND OVER | 58.6 | 25.9 | 13.2 | 6.1 | 59.3 | 25.9 | 11.8 | 6.4 |

NOTE: A DASH "-" INDICATES THAT THE ESTIMATE OF THE RELATIVE STANDARD ERROR IS NOT AVAILABLE. SEE GLOSSARY FOR DEFINITIONS OF TERMS USED IN THIS TABLE.

SOURCE: RESIDENTIAL AND COMMERCIAL DATA SYSTEMS DIVISION, OFFICE OF THE CONSUMPTION DATA SYSTEM, ASSISTANT ADMINISTRATOR FOR PROGRAM DEVELOPMENT, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY, THE 1979 HOUSEHOLD SCREENER SURVEY.

## Appendix C

## SURVEY FORMS

1. Housing Unit Record Sheet
2. Household Interview Schedule
3. Electric Utility Form
4. Natural Gas Utility Form
5. Fuel Oil or Kerosene Company Form
6. LPG Company Form

Response Analysis Corporation
Princeton, New Jersey

RAC 3993
101278 C

HOUSING UNIT RECORD SHEET

Location #_____ Housing Unit #_____

Address (or description)_____

Post Office (city or town)_____

State_____ Zip code_____

INTRODUCTION

Hello, I'm _____ from Response Analysis, a survey organization in Princeton, New Jersey. We are working on a national survey for the U.S. Department of Energy. May I speak to the head of the household?

CONTINUE WITH HEAD OF HOUSEHOLD, OR ONE OF HOUSEHOLD HEADS, OR SPOUSE

We would like to ask some questions about your home, about heating and air-conditioning, appliances, and related topics.

HAND PRIVACY ACT NOTICE TO RESPONDENT: This notice explains that information about your household is protected by the Privacy Act of 1974 and will remain confidential.

HAND PACKET OF TWO DOLLAR COINS TO RESPONDENT: As Response Analysis mentioned in the letter to your household, these coins are a token of appreciation for your participation in the survey.

CONTINUE WITH INTERVIEW

(1) INTERVIEWER OBSERVATION OF TYPE OF LIVING QUARTERS

01 [] MOBILE HOME OR TRAILER

02 [] ONE-FAMILY HOUSE →
- [] DETACHED
- [] ATTACHED ON ONE SIDE (SEMI-DETACHED)
- [] ATTACHED ON TWO SIDES

03 [] HOUSE OR BUILDING WITH 2 - 4 HOUSING UNITS →
- [] DETACHED
- [] ATTACHED ON ONE SIDE (SEMI-DETACHED)
- [] ATTACHED ON TWO SIDES

04 [] BUILDING WITH 5 OR MORE UNITS →
- NUMBER OF UNITS: _____
- NUMBER OF FLOORS (STORIES): _____

21 [] OTHER -- DESCRIBE IN DETAIL ANY STRUCTURE THAT DOES NOT FIT ONE OF THE ABOVE.

COMPLETE RECORD OF CONTACTS AND ADDITIONAL INFORMATION ON BACK OF THIS RECORD SHEET.

(2) TYPE OF OCCUPANCY OF HOUSING UNIT

1 [] YEAR-ROUND UNIT
2 [] SEASONAL UNIT
3 [] MIGRATORY UNIT

MARK ANSWER WHETHER HOUSING UNIT IS OCCUPIED OR VACANT -- SEE P. 10 OF INSTRUCTION BOOKLET FOR INTERVIEWERS.

(3) RECORD OF VISITS TO HOUSING UNIT

| Visit number | Time of day (include AM or PM) | Date | Day of week | Result or comments |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

(4) USE THIS SPACE FOR ADDITIONAL NOTES OR COMMENTS ABOUT VISITS TO THIS HOUSEHOLD. DESCRIBE FULLY IF REFUSAL OR OTHER NONINTERVIEW.

(5) GIFT TO HOUSEHOLD

MARK TO SHOW WHETHER TWO DOLLAR COIN PACKET WAS ACCEPTED

1 [] TWO DOLLAR COIN PACKET ACCEPTED BY HOUSEHOLD
0 [] NOT ACCEPTED

(6) NAME AND PHONE NUMBER OF HEAD OF HOUSEHOLD (OR ONE OF HOUSEHOLD HEADS)

Name

Phone number
Area code ( )

(7) INTERVIEWER'S NAME AND I.D. NUMBER

Interviewer

I.D. number

Response Analysis Corporation
Princeton, New Jersey

RAC 4151 [D] 100479

OMB No. 38S-78028
EIA-84 Screener

# 1979 - 80
# RESIDENTIAL ENERGY CONSUMPTION SURVEY

*106-107:01*

| LOCATION # _____ | HOUSING UNIT # _____ | TIME INTERVIEW STARTED: _____ |
|---|---|---|
| *111-115* | *116-117* | |

1. In what year did your family move into this house (apartment)?

*01* [] BEFORE 1940
*02* [] 1940-1949
*03* [] 1950-1959
*04* [] 1960-1964
*05* [] 1965-1969
*06* [] 1970-1974
*07* [] 1975
*08* [] 1976
*09* [] 1977
*10* [] 1978
*11* [] 1979
*12* [] 1980

*121-122*

IF "1978," "1979," OR "1980," ASK:

2. In which month did you move in? (SPECIFY MONTH AND ENTER LAST TWO DIGITS OF YEAR.)

MONTH: _____

YEAR: 19 ____

*123-124*

3. In what year was this house (building) built? Just your estimate.

*01* [] BEFORE 1940
*02* [] 1940-1949
*03* [] 1950-1959
*04* [] 1960-1964
*05* [] 1965-1969
*06* [] 1970-1974
*07* [] 1975
*08* [] 1976
*09* [] 1977
*10* [] 1978
*11* [] 1979
*12* [] 1980

*125-126*

4. Altogether (counting all areas that are used as year-round living space), how many rooms do you have in your living quarters? Do not count bathrooms, unheated porches, foyers, or hallways.

NUMBER OF ROOMS: _____

*127-128*

5. *Think about the largest room in your house that is part of your year-round living space -- what is your estimate of the length and width of that room in feet?*

INTERVIEWER: PUT RESPONDENT'S ESTIMATE IN BOXES IN RECTANGULAR OR L-SHAPED SKETCH AT RIGHT, AS APPROPRIATE. IF RESPONDENT IS UNABLE TO MAKE ESTIMATE, PUT IN YOUR OWN BEST ESTIMATE.

NOTE BELOW WHETHER LARGEST ROOM IS RECTANGULAR OR L-SHAPED, AND HOW ESTIMATE WAS MADE.

*1* [] LARGEST ROOM IS RECTANGULAR: ENTER DIMENSIONS IN SKETCH #1

*129*

*2* [] LARGEST ROOM IS L-SHAPED: ENTER DIMENSIONS IN SKETCH #2

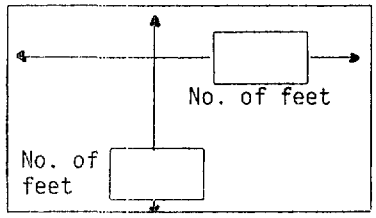
SOURCE OF ESTIMATE

*1* [] ESTIMATE MADE BY RESPONDENT

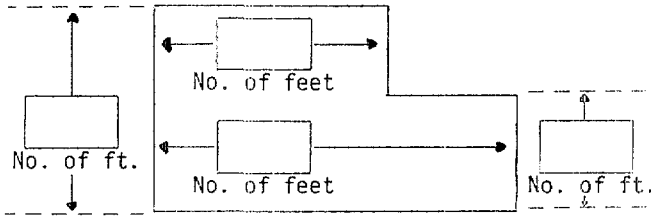
*130* *2* [] ESTIMATE MADE BY INTERVIEWER

*3* [] RESPONDENT/INTERVIEWER MEASURED

SKETCH #1




SKETCH #2




*131-142*

HAND RESPONDENT EXHIBIT 6

6. What is the main fuel used for heating your home?

*01* [] GAS FROM UNDERGROUND PIPES SERVING THE NEIGHBORHOOD
*02* [] GAS, LPG (BOTTLED OR TANK GAS)
*03* [] FUEL OIL
*04* [] KEROSENE OR COAL OIL
*05* [] ELECTRICITY
*06* [] COAL OR COKE
*07* [] WOOD
*08* [] SOLAR COLLECTORS
*21* [] OTHER (SPECIFY): _____

*143-144*

*00* [] NO FUEL USED -- SKIP TO Q. 11

7. In addition to your main fuel, do you use any other fuel to heat your home?

*1* [] YES
*0* [] NO

*145*

IF "YES," ASK:

8. What is the additional fuel?

*01* [] GAS FROM UNDERGROUND PIPES SERVING THE NEIGHBORHOOD
*02* [] GAS, LPG (BOTTLED OR TANK GAS)
*03* [] FUEL OIL
*04* [] KEROSENE OR COAL OIL
*05* [] ELECTRICITY
*06* [] COAL OR COKE
*07* [] WOOD
*08* [] SOLAR COLLECTORS
*21* [] OTHER (SPECIFY): _____

*146-147*

9. Last winter, was the main fuel used to heat this house (apartment) the same as it is now?

*1* [] YES
*0* [] NO *148*
*9* [] DID NOT LIVE IN THIS HOUSE (APARTMENT) LAST WINTER

IF "NO," ASK:

10. What was the main fuel used to heat this house (apartment) last winter?

*01* [] GAS FROM UNDERGROUND PIPES SERVING THE NEIGHBORHOOD
*02* [] GAS, LPG (BOTTLED OR TANK)
*03* [] FUEL OIL
*04* [] KEROSENE OR COAL OIL *149-150*
*05* [] ELECTRICITY
*06* [] COAL OR COKE
*07* [] WOOD
*08* [] SOLAR COLLECTORS
*21* [] OTHER (SPECIFY): _____
_____
*00* [] NO FUEL USED

11. Which fuel is used most for heating water?

*01* [] GAS FROM UNDERGROUND PIPES SERVING THE NEIGHBORHOOD
*02* [] GAS, LPG (BOTTLED OR TANK)
*03* [] FUEL OIL
*04* [] KEROSENE OR COAL OIL *151-152*
*05* [] ELECTRICITY
*06* [] COAL OR COKE
*07* [] WOOD
*08* [] SOLAR COLLECTORS
*21* [] OTHER (SPECIFY): _____
_____
*00* [] NO FUEL USED

TAKE BACK EXHIBIT 6

12. Do you have air-conditioning, either a central system or individual window or wall units? (MARK ALL THAT APPLY.)

[] YES, CENTRAL SYSTEM *153*
[] YES, INDIVIDUAL (WINDOW/WALL) UNITS *154*
[] NO -- SKIP TO Q. 15

IF "YES," ASK:

13. How many rooms in your house (apartment) are air-conditioned?

NUMBER OF ROOMS: [ ] *155-156*
*95* [] ENTIRE HOUSE OR APARTMENT

IF "CENTRAL SYSTEM" ON Q. 12, ASK:

14. Does the central air-conditioning system use gas or electricity?

*1* [] GAS
*2* [] ELECTRICITY *157*
*6* [] DON'T KNOW

IF LIVING QUARTERS ARE IN A BUILDING WITH 5 OR MORE HOUSING UNITS, SKIP TO Q. 19.

HAND RESPONDENT EXHIBIT 15

15. Please look at this list and tell me which items, if any, have been added or installed in your home since January 1, 1978.

MARK "YES," "NO," OR "IN PROCESS" FOR EACH ITEM. COUNT AS "IN PROCESS" ANY WORK STARTED BUT NOT YET COMPLETED. DO NOT COUNT ANY CHANGES MADE BEFORE THIS HOUSEHOLD MOVED IN.

| | | | |
|---|---|---|---|
| a. Storm Windows and/or Doors with Insulating Glass (Double Glazed)<br>1 [] YES<br>0 [] NO<br>2 [] IN PROCESS<br>158 | MONTH: _____<br>YEAR: 19____<br>[] IN PROCESS<br>159-162 | 1 [] LABOR AND MATERIALS<br>2 [] MATERIALS ONLY<br>5 [] OTHER (SPECIFY):<br>_____<br>163 | APPROXIMATE COST:<br>$ _____.00<br>[] DON'T KNOW<br>164-166 |
| b. Roof or Attic Insulation<br>1 [] YES<br>0 [] NO<br>2 [] IN PROCESS<br>167 | MONTH: _____<br>YEAR: 19____<br>[] IN PROCESS<br>168-171 | 1 [] LABOR AND MATERIALS<br>2 [] MATERIALS ONLY<br>5 [] OTHER (SPECIFY):<br>_____<br>172 | APPROXIMATE COST:<br>$ _____.00<br>[] DON'T KNOW<br>173-175 |
| c. Insulation in Outside Walls<br>1 [] YES<br>0 [] NO<br>2 [] IN PROCESS<br>211 | MONTH: _____<br>YEAR: 19____<br>[] IN PROCESS<br>212-215 | 1 [] LABOR AND MATERIALS<br>2 [] MATERIALS ONLY<br>5 [] OTHER (SPECIFY):<br>_____<br>216 | APPROXIMATE COST:<br>$ _____.00<br>[] DON'T KNOW<br>217-219 |

FOR EACH "YES" OR "IN PROCESS" ANSWER, ASK:

16. In what month and year was the work completed?

17. (Did you pay/Are you paying) for labor and materials, or only for materials?

18. Just approximately, what (did/will) the job cost?

TAKE BACK EXHIBIT 15

Now let's talk about transportation ...

HAND RESPONDENT EXHIBIT 19/21

19. Do you or other members of your household own or have the regular use of any cars, trucks, vans, motorcycles, mopeds, or similar vehicles?

1 [] YES *220*

0 [] NO -- SKIP TO Q. 28 -- TAKE BACK EXHIBIT 19/21

20. How many do you have?

NUMBER OF VEHICLES: [ ] *221-222*

*306-307: 03*

21. Which type(s) do you have? (IF HOUSEHOLD HAS MORE THAN FOUR VEHICLES, MARK ANSWERS FOR THE FOUR VEHICLES USED MOST.)

22. Please tell me the make and model year (of each one). (ENTER LAST TWO DIGITS OF MODEL YEAR.)

23. What is the model name (of each one)?

| | VEHICLE NUMBER 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| | *223-224* | *246-247* | *311-312* | *334-335* |
| STATION WAGON | *01* [] | *01* [] | *01* [] | *01* [] |
| AUTOMOBILE | *02* [] | *02* [] | *02* [] | *02* [] |
| JEEP OR SIMILAR VEHICLE | *03* [] | *03* [] | *03* [] | *03* [] |
| PASSENGER VAN OR MINIBUS | *04* [] | *04* [] | *04* [] | *04* [] |
| CARGO VAN | *05* [] | *05* [] | *05* [] | *05* [] |
| PICKUP TRUCK | *06* [] | *06* [] | *06* [] | *06* [] |
| OTHER TRUCK | *07* [] | *07* [] | *07* [] | *07* [] |
| MOTOR HOME | *08* [] | *08* [] | *08* [] | *08* [] |
| MOTORCYCLE | *09* [] | *09* [] | *09* [] | *09* [] |
| MOPED/MOTORIZED BICYCLE | *10* [] | *10* [] | *10* [] | *10* [] |
| OTHER (SPECIFY): | *21* [] | *21* [] | *21* [] | *21* [] |
| | *225-226* | *248-249* | *313-314* | *336-337* |
| MAKE | | | | |
| | *227-228* | *250-251* | *315-316* | *338-339* |
| MODEL YEAR | 19___ | 19___ | 19___ | 19___ |
| | *229-230* | *252-253* | *317-318* | *340-341* |
| MODEL NAME | | | | |

TAKE BACK EXHIBIT 19/21

ALL HOUSEHOLDS WITH ONE OR MORE VEHICLES ON Q. 20

ASK Q's. 24-27 FIRST ABOUT FIRST VEHICLE, THEN SECOND, THIRD, AND FOURTH

These next questions are about your (first/second/third/fourth) vehicle.

| | | VEHICLE NUMBER | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| | | *231* | *254* | *319* | *342* |
| 24. Did you get this vehicle within the past 12 months or did you have it before that? | WITHIN PAST 12 MONTHS | *1* [] | *1* [] | *1* [] | *1* [] |
| | HAD IT MORE THAN 12 MONTHS -- SKIP TO Q. 27 | *2* [] | *2* [] | *2* [] | *2* [] |
| | | *232-235* | *255-258* | *320-323* | *343-346* |
| IF "WITHIN PAST 12 MONTHS," ASK: | | | | | |
| 25. In what month and year did you get it? | MONTH | | | | |
| | YEAR | 19 ___ | 19 ___ | 19 ___ | 19 ___ |
| | | *236-240* | *259-263* | *324-328* | *347-351* |
| 26. How many miles has it been driven since you have had it? | MILES | | | | |
| | DON'T KNOW | [] | [] | [] | [] |
| IF "HAD IT MORE THAN 12 MONTHS" ON Q. 24, ASK: | | *241-245* | *264-268* | *329-333* | *352-356* |
| 27. How many miles was it driven during the past 12 months, just approximately? | MILES | | | | |
| | DON'T KNOW | [] | [] | [] | [] |

ASK EVERYONE

HAND RESPONDENT EXHIBIT 28/30

28. Did you or other members of your household own or have the regular use of any vehicles a year ago -- or anytime in the past 12 months -- that you don't have now (that you traded or sold or disposed of in some other way) -- such as cars, trucks, vans, motorcycles, mopeds, or similar vehicles?

1 [] YES
0 [] NO -- SKIP TO Q. 35 -- TAKE BACK EXHIBIT 28/30

357

IF "YES," ASK:

29. How many vehicles did you or other members of your household have in the past 12 months that you don't have now?

1 [] ONE
2 [] TWO
3 [] THREE OR MORE

358

406-407:04

| | VEHICLE NUMBER 1 | VEHICLE NUMBER 2 |
|---|---|---|
| | 359-360 | 411-412 |
| 30. Which type(s) did you have? (IF HOUSEHOLD HAD MORE THAN TWO VEHICLES, MARK ANSWERS FOR THE TWO USED MOST.) | | |
| STATION WAGON | 01 [] | 01 [] |
| AUTOMOBILE | 02 [] | 02 [] |
| JEEP OR SIMILAR VEHICLE | 03 [] | 03 [] |
| PASSENGER VAN OR MINIBUS | 04 [] | 04 [] |
| CARGO VAN | 05 [] | 05 [] |
| PICKUP TRUCK | 06 [] | 06 [] |
| OTHER TRUCK | 07 [] | 07 [] |
| MOTOR HOME | 08 [] | 08 [] |
| MOTORCYCLE | 09 [] | 09 [] |
| MOPED/MOTORIZED BICYCLE | 10 [] | 10 [] |
| OTHER (SPECIFY): | 21 [] | 21 [] |
| | 361-362 | 413-414 |
| 31. Please tell me the make and model year (of each one). (ENTER LAST TWO DIGITS OF MODEL YEAR.) MAKE | | |
| | 363-364 | 415-416 |
| MODEL YEAR | 19__ | 19__ |
| | 365-366 | 417-418 |
| 32. What was the model name? MODEL NAME | | |

TAKE BACK EXHIBIT 28/30

IF "YES" ON Q. 28 (CONTINUED):

ASK Q's. 33-34 FIRST ABOUT FIRST VEHICLE, THEN SECOND.

33. In what month and year did you dispose of it?

34. Just approximately, how many miles was it driven between this time a year ago and the time you disposed of it?

| | VEHICLE NUMBER 1 | VEHICLE NUMBER 2 |
|---|---|---|
| | *367-370* | *419-422* |
| MONTH | _____ | _____ |
| YEAR | 19___ | 19___ |
| | *371-375* | *423-427* |
| MILES | _____ | _____ |
| DON'T KNOW | [] | [] |

ASK EVERYONE

35. Now I have some questions about the people who live here. Please tell me who they are, just in relation to you (if they are related to you), and their ages on their last birthday. Please begin with yourself.

INTERVIEWER:

LIST EVERYONE, INCLUDING CHILDREN AND INFANTS, WHO IS NOW LIVING HERE.

INCLUDE PERSONS WHO ARE UNRELATED IF THEY SHARE THIS HOUSING UNIT.

PERSONS WHO ARE NORMALLY MEMBERS OF THE HOUSEHOLD, BUT WHO ARE NOW LIVING AWAY FROM HOME (E.G., COLLEGE STUDENTS OR MEMBERS OF THE ARMED FORCES) SHOULD NOT BE LISTED.

| RELATIONSHIP TO RESPONDENT | SEX | | AGE | Q. 36-EMPLOYMENT (AGE 14+) | | | |
|---|---|---|---|---|---|---|---|
| | FEMALE | MALE | | FULL TIME | PART TIME | NOT EMPLOYED | |
| RESPONDENT | 1 [] | 2 [] | | 1 [] | 2 [] | 0 [] | 431-436 |
| | 1 [] | 2 [] | | 1 [] | 2 [] | 0 [] | 441-446 |
| | 1 [] | 2 [] | | 1 [] | 2 [] | 0 [] | 451-456 |
| | 1 [] | 2 [] | | 1 [] | 2 [] | 0 [] | 461-466 |
| | 1 [] | 2 [] | | 1 [] | 2 [] | 0 [] | 471-476 |
| | 1 [] | 2 [] | | 1 [] | 2 [] | 0 [] | 506-507:05<br>511-516 |
| | 1 [] | 2 [] | | 1 [] | 2 [] | 0 [] | 521-526 |
| | 1 [] | 2 [] | | 1 [] | 2 [] | 0 [] | 531-536 |
| | 1 [] | 2 [] | | 1 [] | 2 [] | 0 [] | 541-546 |
| | 1 [] | 2 [] | | 1 [] | 2 [] | 0 [] | 551-556 |
| | 1 [] | 2 [] | | 1 [] | 2 [] | 0 [] | 561-566 |
| | 1 [] | 2 [] | | 1 [] | 2 [] | 0 [] | 571-576 |

FOR EACH PERSON 14 YEARS OLD OR OLDER, ASK:

36. Is he/she employed full time (30 hours or more per week), part time, or not employed?

577-578 [ ]

INTERVIEWER: MARK ANSWERS; ASK IF NECESSARY.

RESPONDENT'S MARITAL STATUS

37. Are you now married, widowed, divorced, separated, or have you never been married?

1 [] NOW MARRIED
2 [] WIDOWED
3 [] DIVORCED OR SEPARATED
4 [] NEVER MARRIED

579

RESPONDENT'S RACE

38. What is your race?

1 [] WHITE
2 [] BLACK OR NEGRO
5 [] OTHER (SPECIFY): _____

580

606-607

39. How many members of your household can drive a car?

NUMBER OF DRIVERS: [ ] 608-609

00 [] NONE

I have just a few questions for background statistical purposes.

40. What is the highest grade (or year) you attended in school?

00 [] NEVER ATTENDED SCHOOL

| | |
|---|---|
| 01 [] FIRST | 07 [] SEVENTH |
| 02 [] SECOND | 08 [] EIGHTH |
| 03 [] THIRD | 09 [] NINTH |
| 04 [] FOURTH | 10 [] TENTH |
| 05 [] FIFTH | 11 [] ELEVENTH |
| 06 [] SIXTH | 12 [] TWELFTH |

610-611

COLLEGE (ACADEMIC YEARS)

| | |
|---|---|
| 13 [] C1 | 16 [] C4 |
| 14 [] C2 | 17 [] C5 |
| 15 [] C3 | 18 [] C6 OR MORE |

41. Did you finish that grade (or year)?

1 [] YES

0 [] NO 612

IF RESPONDENT IS MARRIED, ASK:

42. What is the highest grade (or year) that your (husband/wife) attended in school?

00 [] NEVER ATTENDED SCHOOL

| | |
|---|---|
| 01 [] FIRST | 07 [] SEVENTH |
| 02 [] SECOND | 08 [] EIGHTH |
| 03 [] THIRD | 09 [] NINTH |
| 04 [] FOURTH | 10 [] TENTH |
| 05 [] FIFTH | 11 [] ELEVENTH |
| 06 [] SIXTH | 12 [] TWELFTH |

COLLEGE (ACADEMIC YEARS)

| | |
|---|---|
| 13 [] C1 | 16 [] C4 |
| 14 [] C2 | 17 [] C5 |
| 15 [] C3 | 18 [] C6 OR MORE |

616-617

43. Did (he/she) finish that grade (or year)?

1 [] YES
0 [] NO

618

HAND RESPONDENT EXHIBIT 44

44. Now let's look at this list of income groups. Please tell me which group letter best describes the total combined income in 1978 of all members of your family living here, from all sources -- wages, dividends, social security, and so forth -- before taxes and deductions.

CIRCLE LETTER FOR INCOME GROUP

| | |
|---|---|
| 01 - A UNDER $3,000 | 09 - I $25,000 - $29,999 |
| 02 - B $3,000 - $4,999 | 10 - J $30,000 - $34,999 |
| 03 - C $5,000 - $7,999 | 11 - K $35,000 - $39,999 |
| 04 - D $8,000 - $9,999 | 12 - L $40,000 - $44,999 |
| 05 - E $10,000 - $11,999 | 13 - M $45,000 - $49,999 |
| 06 - F $12,000 - $14,999 | 14 - N $50,000 OR OVER |
| 07 - G $15,000 - $19,999 | 96 [] DON'T KNOW |
| 08 - H $20,000 - $24,999 | 97 [] REFUSED |

619-620

TAKE BACK EXHIBIT 44

45. Do you or members of your household own your home here or do you rent?

1 [] OWN (BUYING)
2 [] RENT
3 [] OCCUPIED WITHOUT PAYMENT OF RENT

621

IF "OWN (BUYING)," ASK:

46. Is this house (apartment) part of a condominium or cooperative?

1 [] YES, CONDOMINIUM
2 [] YES, COOPERATIVE
0 [] NO

622

HAND RESPONDENT EXHIBIT 47

47. We may have covered some of these points before, but just to be sure, please look at this exhibit and tell me whether these fuels are used here in your household. (BE SURE TO MARK EITHER "USED" OR "NOT USED" FOR EACH ITEM.)

| | | USED | NOT USED | PAID BY HOUSEHOLD | INCLUDED IN RENT | OTHER (SPECIFY) | |
|---|---|---|---|---|---|---|---|
| | ELECTRICITY | | | | | | |
| a. | FOR LIGHTING AND OTHER APPLIANCES | 1 [] | 0 [] | 1 [] | 2 [] | 5 [] | 623-624 |
| b. | FOR COOKING | 1 [] | 0 [] | 1 [] | 2 [] | 5 [] | 625-626 |
| c. | FOR HOT WATER | 1 [] | 0 [] | 1 [] | 2 [] | 5 [] | 627-628 |
| d. | FOR HEATING YOUR HOME | 1 [] | 0 [] | 1 [] | 2 [] | 5 [] | 629-630 |
| e. | FOR AIR-CONDITIONING (CENTRAL OR WINDOW/WALL UNITS) | 1 [] | 0 [] | 1 [] | 2 [] | 5 [] | 631-632 |
| | GAS FROM UNDERGROUND PIPES SERVING YOUR NEIGHBORHOOD | | | | | | |
| f. | FOR COOKING | 1 [] | 0 [] | 1 [] | 2 [] | 5 [] | 633-634 |
| g. | FOR OTHER APPLIANCES (INCLUDE OUTSIDE GAS LIGHT HERE) | 1 [] | 0 [] | 1 [] | 2 [] | 5 [] | 635-636 |
| h. | FOR HOT WATER | 1 [] | 0 [] | 1 [] | 2 [] | 5 [] | 637-638 |
| i. | FOR HEATING YOUR HOME | 1 [] | 0 [] | 1 [] | 2 [] | 5 [] | 639-640 |
| j. | FOR CENTRAL AIR-CONDITIONING | 1 [] | 0 [] | 1 [] | 2 [] | 5 [] | 641-642 |
| | GAS, LPG (BOTTLED OR TANK GAS) | | | | | | |
| k. | FOR COOKING | 1 [] | 0 [] | 1 [] | 2 [] | 5 [] | 643-644 |
| l. | FOR OTHER APPLIANCES | 1 [] | 0 [] | 1 [] | 2 [] | 5 [] | 645-646 |
| m. | FOR HOT WATER | 1 [] | 0 [] | 1 [] | 2 [] | 5 [] | 647-648 |
| n. | FOR HEATING YOUR HOME | 1 [] | 0 [] | 1 [] | 2 [] | 5 [] | 649-650 |
| o. | FOR CENTRAL AIR-CONDITIONING | 1 [] | 0 [] | 1 [] | 2 [] | 5 [] | 651-652 |
| | FUEL OIL OR KEROSENE | | | | | | |
| p. | FOR HOT WATER | 1 [] | 0 [] | 1 [] | 2 [] | 5 [] | 653-654 |
| q. | FOR HEATING YOUR HOME | 1 [] | 0 [] | 1 [] | 2 [] | 5 [] | 655-656 |

FOR EACH USE OF EACH FUEL, ASK:

48. Is that paid for by your household, included in your rent, or do you get it some other way?

TAKE BACK EXHIBIT 47

ASK QUESTIONS ON THIS PAGE IF HOUSEHOLD USES AND PAYS FOR FUEL OIL OR KEROSENE (SEE Q's. 47/48, PARTS p AND q).

IF HOUSEHOLD DOES NOT USE AND PAY FOR FUEL OIL OR KEROSENE, SKIP TO Q. 58.

49. How many tanks do you have for fuel oil or kerosene?

1 [] ONE
2 [] TWO
3 [] THREE OR MORE

657

ASK QUESTIONS 50 - 52 FOR EACH FUEL TANK (IF MORE THAN TWO TANKS ASK ABOUT TWO LARGEST TANKS.)

| | TANK #1 | TANK #2 |
|---|---|---|
| 50. What is the capacity of the tank (each tank) in total gallons? | [] 275 GALLONS<br>[] 550 GALLONS<br>[] 1000 GALLONS<br>[] OTHER - SPECIFY: _____ 658-661 | [] 275 GALLONS<br>[] 550 GALLONS<br>[] 1000 GALLONS<br>[] OTHER - SPECIFY: _____ 667-670 |
| 51. Did you have this same tank in January 1979, or is it a replacement (or has it been added since January 1979)? | 1[] SAME TANK<br>2[] REPLACEMENT<br>3[] ADDITIONAL TANK 662 | 1[] SAME TANK<br>2[] REPLACEMENT<br>3[] ADDITIONAL TANK 671 |
| IF REPLACEMENT TANK, ASK:<br>52. What was the capacity of the tank that was replaced? | [] 275 GALLONS<br>[] 550 GALLONS<br>[] 1000 GALLONS<br>[] OTHER - SPECIFY: _____ 663-666 | [] 275 GALLONS<br>[] 550 GALLONS<br>[] 1000 GALLONS<br>[] OTHER - SPECIFY: _____ 672-675 |

HAND RESPONDENT EXHIBIT 53

706-707:07

53. About how much fuel oil/kerosene does your household use in a year -- which of these groups would it be?

1 [] LESS THAN 100 GALLONS PER YEAR
2 [] 100-499 GALLONS PER YEAR
3 [] 500 OR MORE GALLONS PER YEAR

711

TAKE BACK EXHIBIT 53

54. About how many times a year does your household purchase fuel oil/kerosene?

NUMBER OF DELIVERIES: [ ] 712-713

[] LIVED HERE LESS THAN 1 YEAR

55. Did you buy fuel oil for this house (apartment) in the past 12 months from one company, or from more than one company?

1 [] ONE COMPANY
2 [] MORE THAN ONE COMPANY

714

IF "MORE THAN ONE," ASK:

56. How many different companies?

2 [] TWO
3 [] THREE
4 [] FOUR OR MORE

715

57. About what did your household pay per gallon on your last delivery/purchase of fuel oil/kerosene?

PRICE PER GALLON: [ ] 716-718

[] DON'T KNOW

IF HOUSEHOLD PAYS FOR ELECTRICITY AND/OR GAS AND/OR FUEL OIL OR KEROSENE IN Q. 48, ASK:

58. In addition to the types of fuel you use, we are interested in the quantities used, and in the amount that people pay for electricity, gas, fuel oil, and kerosene in different parts of the United States.

I have a form that would authorize the companies that supply your household to provide that information to Response Analysis Corporation.

Since this study is being done nationwide, it will give a good picture of the differences in fuel cost and use all over the country. The information is needed to help establish important national energy policies.

INTERVIEWER: REMOVE PERFORATED FORM AND HAND TO RESPONDENT. EITHER YOU OR RESPONDENT SHOULD FILL IN THE NAMES OF COMPANIES. IF MORE THAN ONE LPG OR FUEL OIL OR KEROSENE COMPANY HAS BEEN USED SINCE JANUARY 1, 1979, FILL IN ADDITIONAL COMPANY NAMES ON OTHER SIDE OF FORM. PLEASE PRINT.

1 [] AUTHORIZATION FORM COMPLETED

0 [] AUTHORIZATION FORM NOT COMPLETED -- INTERVIEWER, EXPLAIN BELOW:

719

CONTINUE ON PAGE 17 TO COMPLETE INTERVIEW.

Remove Form Carefully At Perforation

# U.S. DEPARTMENT OF ENERGY SURVEY

**Authorization Form for**
**Residential Energy Consumption Survey**

I hereby give permission to the company (companies) below to provide information to Response Analysis Corporation for confidential use in connection with their survey for the U.S. Department of Energy.

This authorization covers use of fuels (electricity, natural gas or LPG, fuel oil or kerosene) by my household from January 1, 1979 through December 31, 1980, including:

1) the total amount of fuels used by my household.
2) the total price charged for fuels used by my household.

Companies are authorized to provide this information by monthly periods or by delivery date, whichever applies.

A photocopy of this authorization may be accepted with the same authority as the original.

Signature: _____

Date: _____

PLEASE PRINT

*YOUR NAME*

*ADDRESS* *APT. NO.*

*CITY OR POST OFFICE* *STATE* *ZIP CODE*

*TELEPHONE*
*AREA CODE:*_____ *NUMBER:*_____

**PLEASE COMPLETE ONE BLOCK BELOW FOR EACH FUEL USED BY YOUR HOUSEHOLD**
**(IF MORE THAN ONE SUPPLIER OF A PARTICULAR FUEL USE THE OTHER SIDE OF THIS SHEET)**

**ELECTRICITY** →

*PRINT FULL NAME OF ELECTRIC COMPANY*

*LOCATION OF COMPANY (IF KNOWN) – CITY AND STATE*

*TELEPHONE*
*AREA CODE:*_____ *NUMBER:*_____

**GAS** →
from underground pipes or LPG (bottled or tank gas)

*PRINT FULL NAME OF GAS COMPANY*

*LOCATION OF COMPANY (IF KNOWN) – CITY AND STATE*

*TELEPHONE*
*AREA CODE:*_____ *NUMBER:*_____

**FUEL OIL** →
or KEROSENE

*PRINT FULL NAME OF OIL COMPANY*

*LOCATION OF COMPANY (IF KNOWN) – CITY AND STATE*

*TELEPHONE*
*AREA CODE:*_____ *NUMBER:*_____

16

GAS → LPG (bottled or tank gas)

SECOND GAS COMPANY

*PRINT FULL NAME OF GAS COMPANY*

*LOCATION OF COMPANY (IF KNOWN) – CITY AND STATE*

*TELEPHONE*
*AREA CODE:*_____ *NUMBER:*_____

THIRD GAS COMPANY

*PRINT FULL NAME OF GAS COMPANY*

*LOCATION OF COMPANY (IF KNOWN) – CITY AND STATE*

*TELEPHONE*
*AREA CODE:*_____ *NUMBER:*_____

FUEL OIL → or KEROSENE

SECOND FUEL OIL/KEROSENE COMPANY

*PRINT FULL NAME OF OIL COMPANY*

*LOCATION OF COMPANY (IF KNOWN) – CITY AND STATE*

*TELEPHONE*
*AREA CODE:*_____ *NUMBER:*_____

THIRD FUEL OIL/KEROSENE COMPANY

*PRINT FULL NAME OF OIL COMPANY*

*LOCATION OF COMPANY (IF KNOWN) – CITY AND STATE*

*TELEPHONE*
*AREA CODE:*_____ *NUMBER:*_____

INTERVIEWER: MARK APPROPRIATE ANSWER AT RIGHT

1 [] HOUSEHOLD PAYS FOR ALL FUELS USED IN Q. 48 -- SKIP TO Q. 60

2 [] HOUSEHOLD HAS ONE OR MORE FUELS "INCLUDED IN RENT" OR PAID IN "OTHER" WAYS IN Q. 48 -- ASK Q. 59 *720*

59. We may be getting some additional information about fuels used in this building (house). May I have the name of the person or company to whom you pay rent?

NAME: _____

TELEPHONE NUMBER: (AREA CODE:_____) _____

STREET ADDRESS: _____

CITY OR TOWN/STATE/ZIP CODE: _____

ASK EVERYONE

60. The research staff at Response Analysis may wish to contact you over the next year to obtain additional information about fuels used by your household. As far as you know now, do you expect to be living in this house (apartment) for the next 12 months?

1 [] YES

0 [] NO *721*

6 [] DON'T KNOW

IF "NO" OR "DON'T KNOW," ASK:

61. Would you please give me the name, address, and telephone number of two friends or relatives who will know where you can be reached if you happen to move?

INTERVIEWER: ASSURE RESPONDENT THAT NAMES AND ADDRESSES OF FRIENDS OR RELATIVES WILL NOT BE USED UNLESS WE WANT TO CONTACT HOUSEHOLD AFTER IT HAS MOVED TO ANOTHER ADDRESS.

NAME: _____

STREET: _____

CITY OR STATE: _____ *722*

PHONE: (AREA CODE: _____) _____

RELATIONSHIP TO RESPONDENT: _____

NAME: _____

STREET: _____

CITY OR STATE: _____

PHONE: (AREA CODE: _____) _____

RELATIONSHIP TO RESPONDENT: _____

CONTINUE ON BACK OF THIS PAGE TO COMPLETE INTERVIEW.

INTERVIEWER: MARK APPROPRIATE ANSWER AT RIGHT

1 [] RESPONDENT'S NAME, TELEPHONE NUMBER, AND MAILING ADDRESS ARE RECORDED ON AUTHORIZATION FORM -- SKIP TO INSTRUCTION BELOW FOR Q. 63.

2 [] RESPONDENT'S NAME (OR TELEPHONE NUMBER OR MAILING ADDRESS) ARE DIFFERENT FROM BILLING INFORMATION ON AUTHORIZATION FORM (PAGE 15) -- ASK Q. 62.

3 [] AUTHORIZATION FORM (PAGE 15) NOT COMPLETED -- ASK Q. 62.

783

62. For interview verification purposes, may I have your name, phone number, and mailing address please?

RESPONDENT'S NAME: _____

TELEPHONE NUMBER: (AREA CODE: _____) _____

MAILING ADDRESS: _____

POST OFFICE: _____ ZIP CODE: _____

INTERVIEWER: MARK APPROPRIATE ANSWER AT RIGHT

1 [] ONE OR MORE VEHICLES LISTED IN Q. 20 -- ASK Q. 63

0 [] NO VEHICLES LISTED IN Q. 20 -- PUT ENTRIES IN AT BOTTOM OF PAGE TO COMPLETE INTERVIEW

784

63. Earlier you mentioned that your household has _____ vehicle(s). Could we look at the odometer on (this/these) vehicle(s) now to see how many miles the vehicle has been driven?

| | VEHICLE NUMBER | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | 4 |
| VEHICLE MAKE (FROM Q. 22) | | | | |
| ODOMETER READING | 725-730 _____ | 731-736 _____ | 737-742 _____ | 743-748 _____ |
| VEHICLE NOT AT HOME (MARK BOX) | [] | [] | [] | [] |

Thank you very much for your help.

TIME INTERVIEW COMPLETED: _____ LENGTH OF INTERVIEW: _____ MINUTES

749-750

INTERVIEWER'S SIGNATURE: _____ DATE: _____

751-754

OMB No. 38-R0447
EIA-410C F1153

# U.S. DEPARTMENT OF ENERGY SURVEY

Conducted by
RESPONSE ANALYSIS CORPORATION
P.O. Box 158, Princeton, New Jersey 08540

Mandatory under Public Law 93-159, 93-275, and 94-385

HOUSEHOLD:

Please show customer account number for this household. It will be helpful if we later need to request additional information about this household.

If you have any questions please call collect to Ms. Luci Raaum at (609) 921-3333.

Customer Account
Number for Household: _____

| ELECTRICITY USAGE FROM JANUARY 1, 1979 TO THE PRESENT | | | | | |
|---|---|---|---|---|---|
| Time Period | Consumption Period | | Number of Kwhr Used | (Circle One) Kwhr are: A - Actual E - Estimated R - Read by Customer | Total Dollar* Amount |
| | Beginning Date | Ending Date | | | |
| 1 | | | | A E R | |
| 2 | | | | A E R | |
| 3 | | | | A E R | |
| 4 | | | | A E R | |
| 5 | | | | A E R | |
| 6 | | | | A E R | |
| 7 | | | | A E R | |
| 8 | | | | A E R | |
| 9 | | | | A E R | |
| 10 | | | | A E R | |
| 11 | | | | A E R | |
| 12 | | | | A E R | |
| 13 | | | | A E R | |
| 14 | | | | A E R | |
| 15 | | | | A E R | |
| 16 | | | | A E R | |
| 17 | | | | A E R | |
| 18 | | | | A E R | |

*Please include state and local taxes. Exclude merchandise, repair, and service charges. If the household is on the budget plan, do not provide the budgeted bill; provide instead the dollar amount that is the cost of the acutal consumption in the period.

Form completed by _____ _____ _____
(Name) (Telephone Number) (Date)

OMB No. 38-R0447
EIA-410C F1154

# U.S. DEPARTMENT OF ENERGY SURVEY

Conducted by
RESPONSE ANALYSIS CORPORATION
P.O. Box 158, Princeton, New Jersey 08540

Mandatory under Public Law 93-159, 93-275, and 94-385

HOUSEHOLD:

Please show customer account number for this household. It will be helpful if we later need to request additional information about this household.

If you have any questions please call collect to Ms. Luci Raaum at (609) 921-3333.

Customer Account
Number for Household: _____

| UTILITY GAS USAGE FROM JANUARY 1, 1979 TO THE PRESENT | | | | | |
|---|---|---|---|---|---|
| Time Period | Consumption Period: Beginning Date | Consumption Period: Ending Date | Quantity Used* | (Circle One) Kwhr are: A - Actual, E - Estimated, R - Read by Customer | Total Dollar Amount** |
| 1 | | | | A E R | |
| 2 | | | | A E R | |
| 3 | | | | A E R | |
| 4 | | | | A E R | |
| 5 | | | | A E R | |
| 6 | | | | A E R | |
| 7 | | | | A E R | |
| 8 | | | | A E R | |
| 9 | | | | A E R | |
| 10 | | | | A E R | |
| 11 | | | | A E R | |
| 12 | | | | A E R | |
| 13 | | | | A E R | |
| 14 | | | | A E R | |
| 15 | | | | A E R | |
| 16 | | | | A E R | |
| 17 | | | | A E R | |
| 18 | | | | A E R | |

*The quantity used is expressed in terms of: (Mark one)

[] Therms
[] Cubic Feet
[] Hundreds of Cubic Feet (CCF)
[] Thousands of Cubic Feet (MCF)
[] Other (Please specify):

_____

**Please include state and local taxes. Exclude merchandise, repairs, and service charges. If the household is on the budget plan, do not provide the budgeted bill; provide instead the dollar amount that is the cost of the actual consumption in the period.

Form completed by _____ _____ _____
(Name) (Telephone Number) (Date)

OMB 38-R0447
EIA-410C F1151

# U.S. DEPARTMENT OF ENERGY

# 1979-80 RESIDENTIAL ENERGY CONSUMPTION SURVEY

Conducted by
RESPONSE ANALYSIS CORPORATION
Research Park, Route 206
P. O. Box 158
Princeton, New Jersey 08540

FUEL OIL OR KEROSENE

HOUSEHOLD

This research is being conducted by Response Analysis Corporation under U.S. Department of Energy Contract Number DE-AC01-EI10085. This survey is mandatory as authorized by the Federal Energy Administration Act of 1974 (Public Law 93-275), the Emergency Petroleum Allocation Act of 1973 (Public Law 93-159), and the Energy Conservation and Production Act (Public Law 94-385).

HOUSEHOLD:

If you have any questions, please call collect to Luci Raaum at (609) 921-3333.

FUEL OIL AND KEROSENE USAGE

Please provide information on all deliveries to this household from January 1, 1979 to present. If information is available only for a shorter period, just report deliveries for that shorter period.

| Del. # | Column 1<br>Date of Delivery | Column 2<br>Fuel Sold Was:<br>Fuel oil #1 (1)<br>Fuel oil #2 (2)<br>Kerosene (K)<br>Other (O)<br>(Circle one) | Column 3<br>Gallons Delivered | Column 4<br>Price per Gallon | Column 5<br>Total Dollar Amount* | Column 6<br>Was tank completely filled?<br>Yes<br>No<br>Don't Know (DK)<br>(Circle one) |
|---|---|---|---|---|---|---|
| 1 | | 1 2 K O | | | | YES NO DK |
| 2 | | 1 2 K O | | | | YES NO DK |
| 3 | | 1 2 K O | | | | YES NO DK |
| 4 | | 1 2 K O | | | | YES NO DK |
| 5 | | 1 2 K O | | | | YES NO DK |
| 6 | | 1 2 K O | | | | YES NO DK |
| 7 | | 1 2 K O | | | | YES NO DK |
| 8 | | 1 2 K O | | | | YES NO DK |
| 9 | | 1 2 K O | | | | YES NO DK |
| 10 | | 1 2 K O | | | | YES NO DK |
| 11 | | 1 2 K O | | | | YES NO DK |
| 12 | | 1 2 K O | | | | YES NO DK |
| 13 | | 1 2 K O | | | | YES NO DK |
| 14 | | 1 2 K O | | | | YES NO DK |
| 15 | | 1 2 K O | | | | YES NO DK |
| 16 | | 1 2 K O | | | | YES NO DK |
| 17 | | 1 2 K O | | | | YES NO DK |
| 18 | | 1 2 K O | | | | YES NO DK |

PLEASE CONTINUE ON PAGE 4 IF NECESSARY.

*Please include state and local sales taxes, where applicable. Exclude merchandise, repairs, or service charges.

FUEL OIL AND KEROSENE

1. If "Other" has been circled for type of fuel in Column 2 (page 2 or page 4), please specify what fuel was sold: _____

[] NOT APPLICABLE

2. What is the capacity of this household's storage tank?

CAPACITY: _____ GALLONS

3. Was this household your customer as of January 1, 1979?

[] YES [] NO

IF "NO," approximately when did this household become a customer of your company?

APPROXIMATE DATE: _____

[] DON'T KNOW
[] NEVER A CUSTOMER

4. Is this household presently your customer?

[] YES [] NO

IF "NO," approximately when did this household stop being a customer of your company?

APPROXIMATE DATE: _____

[] DON'T KNOW
[] NEVER A CUSTOMER

5. The information presented here is from:

[] COMPANY RECORDS
[] AN ESTIMATE MADE BY A COMPANY REPRESENTATIVE
[] INFORMATION SECURED FROM THE CUSTOMER

6. This information has been supplied by:

| (Name) | (Company) | (Telephone) | (Date) |
|---|---|---|---|

4

FUEL OIL AND KEROSENE

| Del. # | Column 1<br>Date of Delivery | Column 2<br>Fuel Sold Was:<br>Fuel oil #1 (1)<br>Fuel oil #2 (2)<br>Kerosene (K)<br>Other (O)<br>(Circle one) | Column 3<br>Gallons Delivered | Column 4<br>Price per Gallon | Column 5<br>Total Dollar Amount* | Column 6<br>Was tank completely filled?<br>Yes<br>No<br>Don't Know (DK)<br>(Circle one) |
|---|---|---|---|---|---|---|
| 19 | | 1 2 K O | | | | YES NO DK |
| 20 | | 1 2 K O | | | | YES NO DK |
| 21 | | 1 2 K O | | | | YES NO DK |
| 22 | | 1 2 K O | | | | YES NO DK |
| 23 | | 1 2 K O | | | | YES NO DK |
| 24 | | 1 2 K O | | | | YES NO DK |
| 25 | | 1 2 K O | | | | YES NO DK |
| 26 | | 1 2 K O | | | | YES NO DK |
| 27 | | 1 2 K O | | | | YES NO DK |
| 28 | | 1 2 K O | | | | YES NO DK |
| 29 | | 1 2 K O | | | | YES NO DK |
| 30 | | 1 2 K O | | | | YES NO DK |

*Please include state and local sales taxes, where applicable. Exclude merchandise, repairs, or service charges.

PLEASE USE THIS SPACE FOR ANY ADDITIONAL NOTES THAT YOU WISH TO MAKE TO EXPLAIN ENTRIES ON THIS FORM.

PLEASE CHECK THAT THE QUESTIONS ON PAGE THREE HAVE BEEN ANSWERED.

OMB 38-R0447
EIA-410C F1152

# U.S. DEPARTMENT OF ENERGY

# 1979-80 RESIDENTIAL ENERGY CONSUMPTION SURVEY

Conducted by
RESPONSE ANALYSIS CORPORATION
Research Park, Route 206
P. O. Box 158
Princeton, New Jersey 08540

## LIQUEFIED PETROLEUM GAS (LPG)

## HOUSEHOLD

This research is being conducted by Response Analysis Corporation under U.S. Department of Energy Contract Number DE-AC01-EI10085. This survey is mandatory as authorized by the Federal Energy Administration Act of 1974 (Public Law 93-275), the Emergency Petroleum Allocation Act of 1973 (Public Law 93-159), and the Energy Conservation and Protection Act (Public Law 94-385).

HOUSEHOLD:

If you have any questions, please call collect to Luci Raaum at (609) 921-3333.

LIQUEFIED PETROLEUM GAS USAGE

Please provide information on all deliveries to this household from January 1, 1979 to the present. If information is available only for a shorter period, just report deliveries for that shorter period.

| Del. # | Column 1<br>Date of Delivery | Column 2<br>Fuel Sold Was:<br>Propane P<br>Butane B<br>Other O<br>(Circle one) | Column 3<br>Quantity Delivered | Column 4<br>Price per Unit | Column 5<br>Total Dollar Amount* | Column 6<br>Was tank/cylinder completely filled?<br>Yes<br>No<br>Don't Know (DK)<br>(Circle one) |
|---|---|---|---|---|---|---|
| 1 | | P B O | | | | YES NO DK |
| 2 | | P B O | | | | YES NO DK |
| 3 | | P B O | | | | YES NO DK |
| 4 | | P B O | | | | YES NO DK |
| 5 | | P B O | | | | YES NO DK |
| 6 | | P B O | | | | YES NO DK |
| 7 | | P B O | | | | YES NO DK |
| 8 | | P B O | | | | YES NO DK |
| 9 | | P B O | | | | YES NO DK |
| 10 | | P B O | | | | YES NO DK |
| 11 | | P B O | | | | YES NO DK |
| 12 | | P B O | | | | YES NO DK |
| 13 | | P B O | | | | YES NO DK |
| 14 | | P B O | | | | YES NO DK |
| 15 | | P B O | | | | YES NO DK |
| 16 | | P B O | | | | YES NO DK |
| 17 | | P B O | | | | YES NO DK |
| 18 | | P B O | | | | YES NO DK |

PLEASE CONTINUE ON PAGE 4 IF NECESSARY.

*Please include state and local taxes, where applicable. Exclude merchandise, repairs, or service charges.

LIQUEFIED PETROLEUM GAS (LPG)

1. If "Other" has been circled for type of fuel in Column 2 (page 2 or page 4), please specify what fuel was sold?

   _____

   [] NOT APPLICABLE

2. Please mark unit of measure for deliveries reported on page 2.

   [] POUNDS
   [] GALLONS
   [] CUBIC FEET
   [] CUBIC METERS
   [] DECITHERMS
   [] OTHER (Please specify):

   _____

3. What is the capacity of this household's storage tank(s)?

   Capacity is _____ and is measured in number of:

   [] POUNDS
   [] GALLONS
   [] OTHER UNIT (Please specify): _____

4. Was this household your customer as of January 1, 1979?

   [] YES
   [] NO

   IF "NO," approximately when did this household become a customer of your company?

   APPROXIMATE DATE: _____

   [] DON'T KNOW
   [] NEVER A CUSTOMER

5. Is this household presently your customer?

   [] YES
   [] NO

   IF "NO," approximately when did this household stop being a customer of your company?

   APPROXIMATE DATE: _____

   [] DON'T KNOW
   [] NEVER A CUSTOMER

6. The information reported here is from:

   [] COMPANY RECORDS
   [] AN ESTIMATE MADE BY A COMPANY REPRESENTATIVE
   [] INFORMATION SECURED FROM THE CUSTOMER

7. This information has been supplied by:

| (Name) | (Company) | (Telephone) | (Date) |
|---|---|---|---|

LIQUEFIED PETROLEUM GAS (LPG)

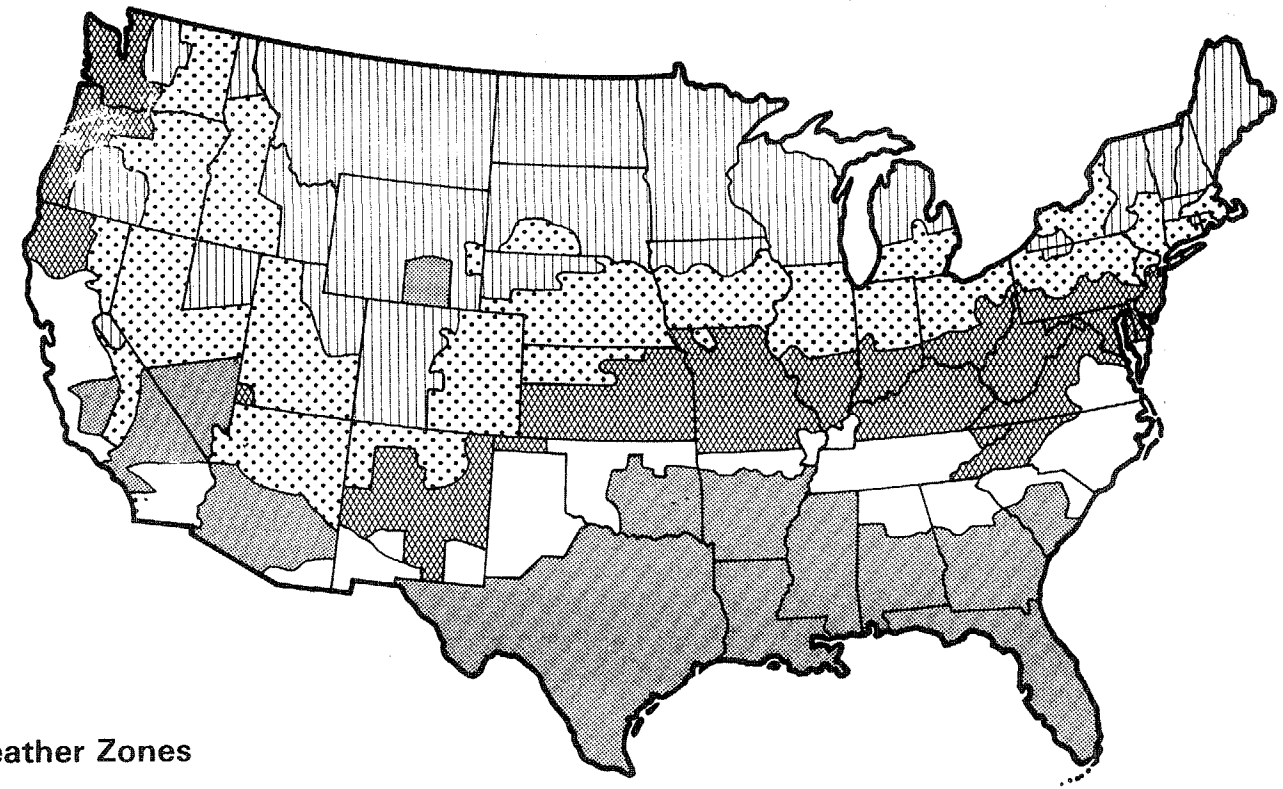
| Del. # | Column 1<br>Date of Delivery | Column 2<br>Fuel Sold Was:<br>Propane P<br>Butane B<br>Other O<br>(Circle one) | Column 3<br>Quantity Delivered | Column 4<br>Price per Unit | Column 5<br>Total Dollar Amount* | Column 6<br>Was tank/cylinder completely filled?<br>Yes<br>No<br>Don't Know (DK)<br>(Circle one) |
|---|---|---|---|---|---|---|
| 19 | | P B O | | | | YES NO DK |
| 20 | | P B O | | | | YES NO DK |
| 21 | | P B O | | | | YES NO DK |
| 22 | | P B O | | | | YES NO DK |
| 23 | | P B O | | | | YES NO DK |
| 24 | | P B O | | | | YES NO DK |
| 25 | | P B O | | | | YES NO DK |
| 26 | | P B O | | | | YES NO DK |
| 27 | | P B O | | | | YES NO DK |
| 28 | | P B O | | | | YES NO DK |
| 29 | | P B O | | | | YES NO DK |
| 30 | | P B O | | | | YES NO DK |

*Please include state and local sales taxes, where applicable. Exclude merchandise, repairs, or service charges.

PLEASE USE THIS SPACE FOR ANY ADDITIONAL NOTES THAT YOU WISH TO MAKE TO EXPLAIN ENTRIES ON THIS FORM.

PLEASE CHECK THAT THE QUESTIONS ON PAGE THREE HAVE BEEN ANSWERED.

# United States Weather Zone Map
# of
# Heating Degree Days (HDD) and Cooling Degree Days (CDD)

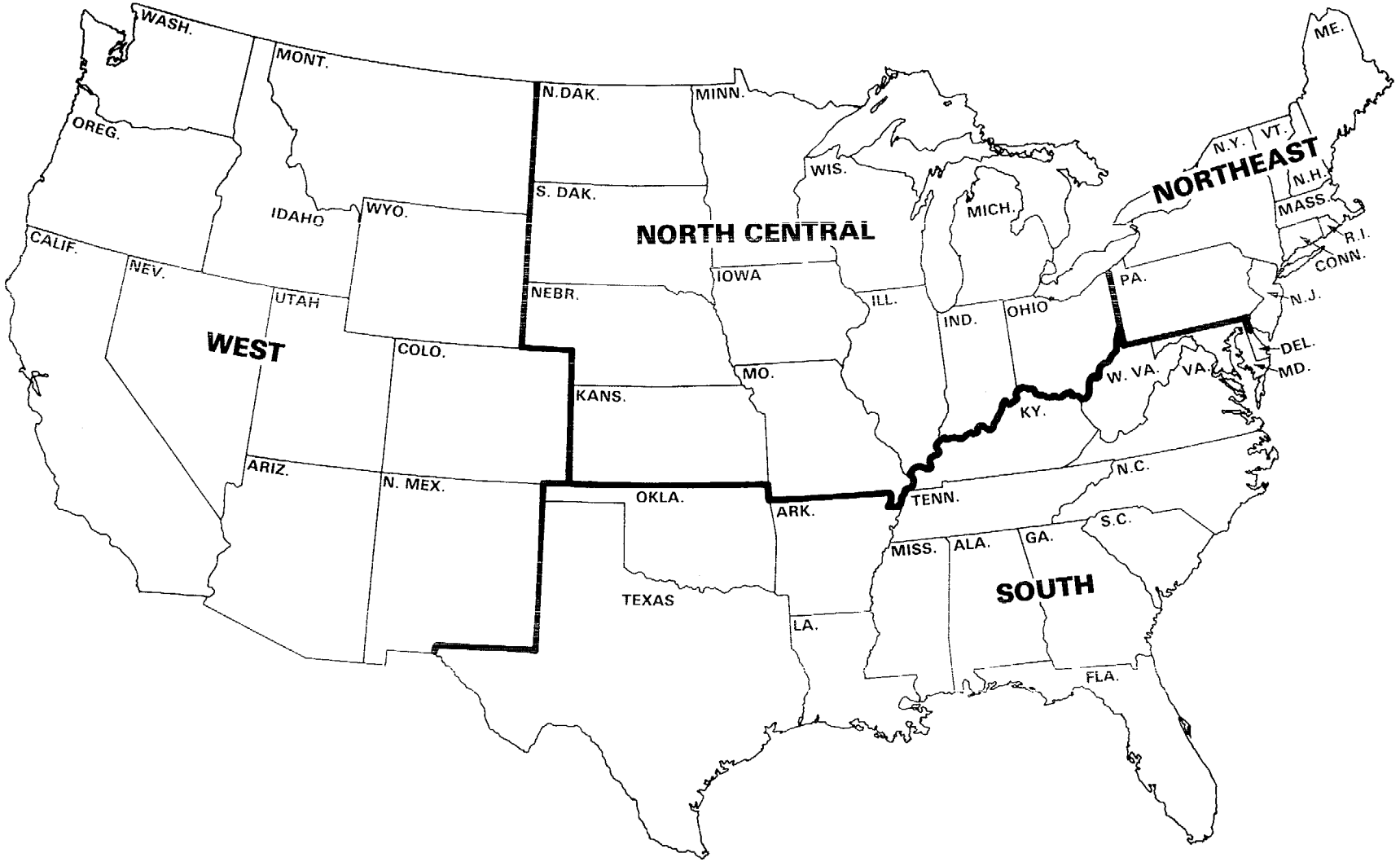


Weather Zones

Zone 1 Is Less Than 2,000 CDD and Greater Than 7,000 HDD.
Zone 2 Is Less Than 2,000 CDD and 5,500-7,000 HDD.
Zone 3 Is Less Than 2,000 CDD and 4,000-5,499 HDD.
Zone 4 Is Less Than 2,000 CDD and Less Than 4,000 HDD.
Zone 5 Is Greater Than 2,000 CDD and Less Than 4,000 HDD.

Appendix E

# CENSUS REGIONS



Appendix F

GLOSSARY

AIA Weather Zones define areas of the country based on long term weather conditions. AIA is American Institute of Architects. See section on "Weather Data" in "How the Survey Was Conducted" for further detail.

Air Conditioning refers to air cooled by a refrigeration unit. It does not include fans, blowers, or evaporative cooling systems which are not connected to a refrigeration unit. Air conditioning units that are not currently in working condition or are not used, but are in place in the housing unit, are included in this survey.

"Number of Rooms Air Conditioned" refers to the number of rooms the air conditioning equipment is capable of cooling when the equipment is used. Question 13, "How many rooms in your house (apartment) are air conditioned?" refers to rooms which 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 which air conditioned zero rooms.

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

April 1979 Through March 1980. The annual consumption period is a 366-day period beginning as close as possible to April 1, 1979. The actual beginning date for a household may vary from April 1 by several weeks depending on that household's billing cycle. For fuel oil and LPG companies, the annual amounts are for deliveries between April 1, 1979, and March 31, 1980.

Average Cost for insulation is the mean expenditure for all households adding the item, regardless of whether they paid for labor and materials, for materials only, for labor only, or whether someone else paid for the addition such as a landlord. These expenditures cover whatever the cost was to the household or landlord for adding the item.

Billing Period refers to 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 which 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 one pound of water, one degree Fahrenheit at or near 39.2 degrees Fahrenheit and one atmosphere of pressure.

Btu conversion factors for this survey are:

| | |
|---|---|
| Electricity | 3,412 Btu/Kilowatt-hour |
| Natural Gas | 1,021 Btu/cubic foot |
| Fuel Oil | 5,825,000 Btu/barrel |
| LPG | 91,500 Btu/gallon |

For conversion purposes, kerosene was converted at the same rate as fuel oil and all types of LPG were converted at the same rate. Other conversion factors used include:

| | |
|---|---|
| 100,000 Btu | = 1 therm |
| 1 barrel | = 42 gallons |
| LPG | [= 21,560 Btu/pound<br>[= 2,520 Btu/cubic foot<br>[= 89,060 Btu/cubic meter |

Building with Five or More Housing Units. This type of building contains living quarters for five or more separate households or families.

Census Region. Refers to a grouping of States into a region depending on their population and geographic location. In this survey, the States were grouped into four regions:

Northeast

| | |
|---|---|
| Maine | Rhode Island |
| Vermont | New York |
| New Hampshire | Pennsylvania |
| Massachusetts | New Jersey |
| Connecticut | |

North Central

| | |
|---|---|
| Ohio | Iowa |
| Michigan | Missouri |
| Indiana | Kansas |
| Illinois | Nebraska |
| Wisconsin | South Dakota |
| Minnesota | North Dakota |

South

| | |
|---|---|
| Maryland | Kentucky |
| Delaware | Tennessee |
| District of Columbia | Alabama |
| West Virginia | Mississippi |
| Virginia | Louisiana |
| North Carolina | Arkansas |
| South Carolina | Oklahoma |
| Georgia | Texas |
| Florida | |

West

| | |
|---|---|
| Montana | Idaho |
| Wyoming | Washington |
| Colorado | Oregon |
| New Mexico | Nevada |
| Arizona | California |
| Utah | |

Note: Alaska and Hawaii are normally considered parts of the western region, but were not included in the sample for this survey.

Children. A household includes children if at least one member of the respondent's family is a child, stepchild, grandchild, or great grandchild, of the respondent or of the respondent's spouse.

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

Conservation Efforts are undertaken in the housing unit the family occupies. In this survey, unlike the NIECS, efforts undertaken by a landlord are included. Changes made before the respondent moved in are not included in this survey. Changes in the process of being completed at the time of the survey were included in the no-change category.

Consumed is the amount of electricity or natural gas used by the household during the 366-day period. For fuel oil 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 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 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.

Education--Highest Grade Attended includes attendance at graded public, private, or parochial schools, colleges, universities, or professional schools, whether day or night school. Only schooling which advances a person toward an elementary or high school diploma, or a college, university, or professional school degree is included. Other schooling is included only if the credits obtained are acceptable in the regular school system.

Persons who have attended "post graduate" high school courses after completing high school, but have not attended college, are considered to be "twelfth grade" graduates. Persons who have attended more than four years of college, or who have attended professional schools (for example, law, medicine, or dentistry) are considered to have a college education plus graduate or professional schooling after completion of four years of college. The equivalent grade of the regular American school system is assumed for a person who obtained his formal education through other systems. For persons who skip or repeat grades, the highest grade attended is accepted.

Electricity refers to electric power supplied by a central utility to a residence via underground or above-ground 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.

Estimated Bill. This is 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 of the household, usage of similiar households, weather data.

Expenditures refers to the cost for electricity or natural gas consumed during the 366-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 cost of actual consumption. Fuel oil and LPG expenditures are for the amount of fuel purchased which may differ from the amount of fuel consumed (see "Consumed").

Family Income is the total combined income in 1978 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 umemployment insurance. Family income includes the total income for all family members who lived in the household in 1978, 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 relationship: mother, father, sister, brother, son, daughter, father-in-law, uncle, aunt, niece, grandchild, foster child and similar relationships.

Fuels refers to primary fuel delivered to the residential site. It may be converted at the site to some other energy form. Electricity is included in this report as a fuel.

Fuel Oil is No. 1, No. 2, or No. 4 grade fuel oil or residual fuel oil which might be burned for space-heating or water-heating purposes. In tables showing consumption and expenditures, fuel oil also includes kerosene.

Full-Time Employment. In cases when the head of the household was married but the spouse was absent, the household was classified "Head Married." In these cases, employment information was not collected for the absent spouse. Household Heads employed full-time were classified "Head or spouse employed full-time." Household heads not employed full-time were classified "Neither employed full-time."

Head of Household. If the respondent was married and living with his or her spouse, the male was considered to be the head of household. Otherwise, the respondent was the head of household.

Heating Degree-Days refers to the number of degrees 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.

Home-Owner/Renter. "Own" means the owner or co-owner is a household member of the unit, even if the unit is mortgaged or not fully paid for. Own/rent refers to the structure itself, not the land on which it is located. The household is classified "renter" even if the rent is paid by someone not living in the unit.

"Rent free" means the unit is not owned or being bought and no money rent is paid or contracted for. 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, but do not pay any money for rent and do not own the unit or exchange services in order to live there. Unless shown separately, "rent free" households are grouped together with "renters".

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, but 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.

Household includes up to 12 persons who occupy a 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 interview. By definition, the count of households is the same as the count of occupied housing units.

Households Paying Directly for Energy includes households that paid directly to a fuel supplier or utility company for all electricity, natural gas, fuel oil, kerosene, or LPG used by the household. Households that paid directly for a portion of the energy used (electricity for air conditioning, for example) are not included in this category.

Housing Unit refers to a structure or part of a structure where a household (family or individual) lives or could live. It has a separate entrance from the outside or from a common hall or lobby, or it has cooking facilities for the exclusive use of the occupants. Housing units do not include group quarters such as prisons, hospitals, dormitories, nursing homes, fraternity houses, or convents. Hotel rooms, motel rooms, mobile homes, or trailers are considered housing units if occupied.

Insulation refers to any material which, when placed between the interior of the dwelling and the outdoor environment, reduces the rate of heat (cold) loss to the environment. Included in this category are:

Blankets or Batts-rolls or pieces are nailed or stapled between the roof rafters.

Foam-initially a liquid that solidifies after being sprayed on a surface or poured into a cavity to be insulated.

Loose Fill or Blown Material-loose insulation which is poured between the attic floor joists (beams) or blown into open spaces.

Plastic Foam Boards-rigid boards (such as styrofoam), that can be cut to size and either edged, nailed, or glued in place.

Imputation is a statistical method used to estimate the response to specific unanswered questions which should have been answered or were unknown at the time of the interview.

Kerosene refers to a distilled product of oil or coal with the generic name "kerosene" and used for space-heating and water-heating. Kerosene is included with fuel oil in tables showing consumption and expenditures for fuel oil.

LPG or Liquified Petroleum Gas refers to any fuel gas supplied to a residence in liquid form. It is usually delivered by tank truck and stored near the residence in a tank or cylinder until used. Propane and butane are liquified petroleum gases. Household use of LPG solely for outdoor gas grills is not considered sufficient use to mark the household as an LPG user.

Main Heating Fuel refers to the fuel mentioned by the respondent in response to Question 6, "What is the main fuel used for heating your home?" or to Question 10, "What was the main fuel used to heat this house (apartment) last winter?"

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.

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

Migratory Housing Unit refers to occupancy by migratory workers employed in farm work during the crop season.

Mobile Home or Trailer refers to a structure which 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. Even if additional rooms are added to the structure, it is still considered a mobile home.

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

NIECS is 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. The National Oceanic and Atmospheric Administration (NOAA) has divided the 48 contiguous States into 344 weather divisions. 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.

Occupied Housing Unit. This refers to a unit someone was living in as his/her usual or permanent place of residence at the time of the first field contact.

Poor. The following definition of poor was based on family income for 1978 and the number of family members in the household. The definition approximates the 125 percent level of poverty. (The reader should be cautioned about comparing the poor in the NIECS and this survey. The NIECS survey defined poor as 100 percent of the poverty level and estimated the poor to number 9.7 million.)

| Family Size | 1978 Income Range | Census Level of Poverty * | 125 Percent Poverty Level |
|---|---|---|---|
| 1 | Less than $ 5,000 | $ 3,302 | $ 4,128 |
| 2 | Less than $ 5,000 | 4,225 | 5,281 |
| 3 | Less than $ 5,000 | 5,178 | 6,473 |
| 4 | Less than $ 8,000 | 6,628 | 8,285 |
| 5 | Less than $10,000 | 7,833 | 9,791 |
| 6 | Less than $12,000 | 8,825 | 11,031 |
| 7 or More | Less than $15,000 | 10,926 | 13,658 |

*Figures from the Bureau of the Census, Characteristics of the Population Below the Poverty Level: 1978, (Series P-60, No. 124), July 1980. See Table A-3, page 208.

The use of categories (for example, $3,000 to $4,999) to collect data on income precludes the separation of poor families from nonpoor families within an income category that contains the Census threshold. In determining whether to include the category, the following rule was applied; in cases when the Census threshold was in the top half of the category, it was used, and when the threshold fell into the bottom half of the category it was not used. For example, the category $3,000 to $4,999 was used to define poor families consisting of one unrelated individual, since the $4,128 threshold was in the top half of the category (above $4,000). The category $5,000 to $7,999 was not used to identify poor families of two persons, since $5,281 was in the bottom half of the category (below $6,000). Applying these rules produced an estimate of 12,900,000 poor households (125 percent level of poverty) as of November 1979 based on 1978 income. The Bureau of the Census estimate is 13,079,000 as of March 1979 based on 1978 income (op. cit., pp. 200-201).

Quadrillion or "quad" equals 1,000,000,000,000,000.

Race. The interviewer determined the race of the respondent by observation or, if necessary, by asking the respondent.

Rooms. The count of rooms used as year-round living space in a housing unit includes whole rooms such as living rooms, dining rooms, bedrooms, kitchens, lodger's rooms, finished basements, attic rooms, recreation rooms, and permanently enclosed sun porches which are used year-round. Rooms used for offices by a person living in the unit are included.

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 in the count of rooms.

A partially divided room, such as a dinette next to a kitchen or 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. Year-round living space defines areas that are completely enclosed with permanently installed walls, windows, and roof and can be heated.

Rural refers to nonurban areas.

Seasonal Housing Unit refers to occupancy only at certain seasons of the year. Seasonal units include those intended for recreational use (for example, beach cottages and hunting cabins that have not been converted to year-round use).

Secondary Heating Fuel. The secondary heating fuel is any fuel the household uses to heat the home other than the main or primary heating fuel. Respondents in the Screener Survey were not asked if they also used the main heating fuel as a secondary heating fuel. Data on the use of the same fuel for main and secondary heating is available in the NIECS.

Single-Family Housing Unit. This refers to a structure that provides living space for one household or family. The structure may be detached, attached on one side (semi-detached), 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.

Solar Collector refers to active, thermal, concentrating collectors using either air or liquid as the working fluid. They do not refer to passive collection of solar thermal energy.

Storm Doors and Windows. Storms doors are 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 a storm door.

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

Trillion equals 1,000,000,000,000.

Urban includes housing in places of 2,500 inhabitants or more as defined in the 1970 Census.

Vacant Housing Unit. A unit is vacant if it was 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.

Year-Round Housing Unit. This refers to a unit occupied or intended for occupancy at any time during the year. Mobile homes or trailers are considered year-round units if they also satisfy this condition.

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