CURRENT HOUSING REPORTS
SERIES H-150-83

Annual Housing Survey: 1983

United States and Regions

Part F

Energy-Related Housing Characteristics

Issued September 1985

U.S. Department of Commerce

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Preface and Acknowledgments

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This report presents data from the Annual Housing Survey, which was sponsored by the U.S. Department of Housing and Urban Development and conducted by the U.S. Bureau of the Census. It was prepared primarily under the direction of Duane T. McGough, Director, Housing and Demographic Analysis Division, Department of Housing and Urban Development, and Arthur F. Young, Chief, Housing Division, Bureau of the Census.

Duane T. McGough, assisted by Paul Burke, Connie Casey, and Kathryn Nelson, was responsible for overseeing the Annual Housing Survey and the resultant report on behalf of the Department of Housing and Urban Development.

Within the Bureau of the Census, this report was developed in the Housing Division. It was prepared under the supervision of Leonard J. Norry, Assistant Division Chief, by Edward D. Montfort, Chief, Current Surveys Branch, assisted by Paul P. Harple, Jr., and Jane S. Maynard. Specific activities related to data collection procedures, statistical presentation, organization of the report, and preparation of text materials were performed by Edward Cary Bean, Jr., Walter L. Busse, Mary C. Carroll, Wallace Fraser, Stuart M. Kaufman, Richard G. Kreinsen, Ruby E. Lewis, Sheryl H. Stein, Georgina Torres, and Barbara T. Williams.

The operational aspects of the Annual Housing Survey were coordinated by the Demographic Surveys Division, under the direction of Thomas C. Walsh, Chief, by B. Gregory Russell, Assistant Division Chief, and John C. Cannon, assisted by Maria A. Mochulski, Helen S. Montagliani, Anastacio Aguilar, and Edward A. Hayes. Systems and processing procedures were performed under the direction of Robert G. Munsey, Assistant Division Chief. The computer programming and processing were performed under the supervision of D. Richard Bartlett, assisted by Robert L. Goodson, Peggy Goldsmith, Katherine M. Galdi, Duane Cavanaugh, and Velma Banks. Kenneth McKinnis was responsible for the clerical and keying procedures, assisted by Larry Beasley, Mary Campbell, Pauline Toth, and Carl D. Jablin.

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C	Financial Characteristics of the Housing Inventory for the United States and Regions: 1983
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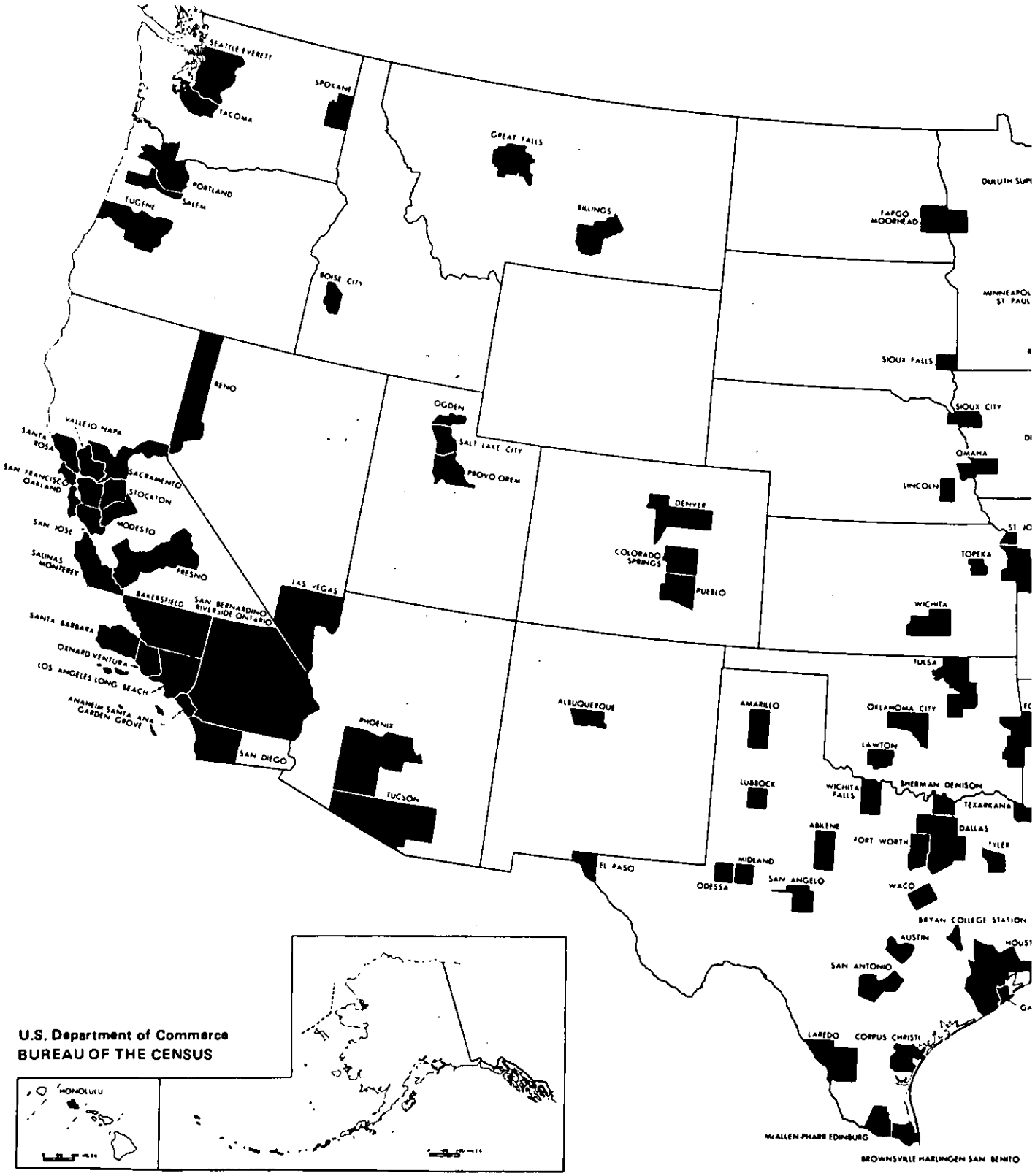
(Areas defined by the Office of Management and Budget as of February 1971)



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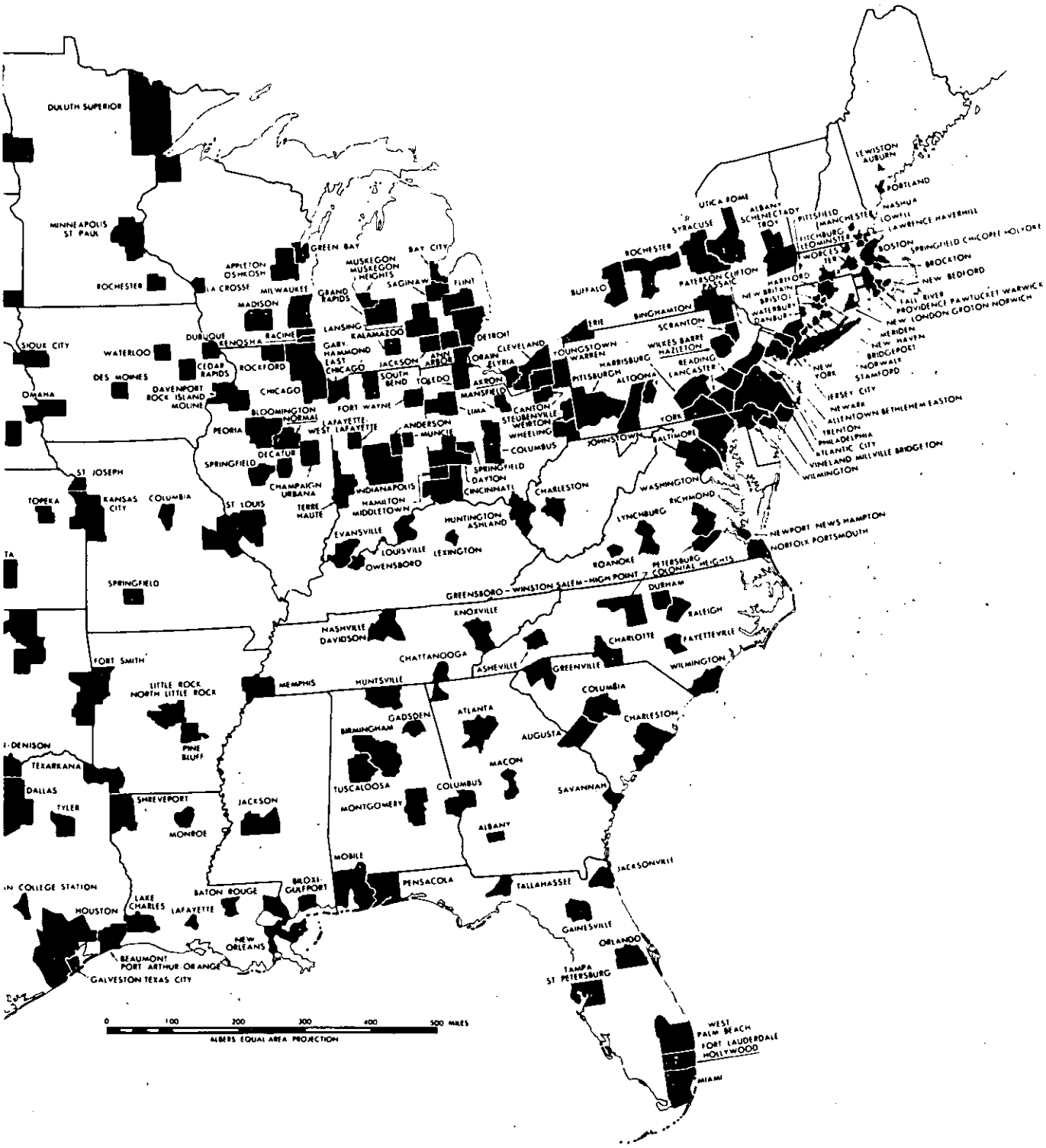
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SIOUX CITY
WATERLOO
DES MOINES
OMAHA
ST JOSEPH
TOPEKA
KANSAS CITY
COLUMBIA
ST LOUIS
SPRINGFIELD
FORT SMITH
LITTLE ROCK NORTH LITTLE ROCK
PINE BLUFF
TEXARKANA
DALLAS
TYLER
SHREVEPORT
MONROE
JACKSON
COLLEGE STATION
HOUSTON
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GALVESTON TEXAS CITY
APPLETON OSHKOSH
LA CROSSE
MILWAUKEE
GREEN BAY
MUSKEGON MUSKEGON HEIGHTS
BAY CITY
SAGINAW
FLINT
GRAND RAPIDS
MADISON
DUBUQUE
RACINE
KENOSHA
LANSING
KALAMAZOO
GARY HAMMOND EAST CHICAGO
DETROIT
CEDAR RAPIDS
ROCKFORD
JACKSON
ANN ARBOR
SOUTH BEND
TOLEDO
DAVENPORT ROCK ISLAND MOLINE
CHICAGO
LORAIN ELYRIA
CLEVELAND
AKRON
MANSFIELD
BLOOMINGTON NORMAL
FORT WAYNE
LIMA
PEORIA
LAFAYETTE WEST LAFAYETTE
ANDERSON
MUNCIE
CANTON STEUBENVILLE WEIRTON
WHEELING
DECATUR
COLUMBUS
SPRINGFIELD
SPRINGFIELD DAYTON
CHAMPAIGN URBANA
INDIANAPOLIS
CINCINNATI
TERRE HAUTE
HAMILTON MIDDLETOWN
HUNTINGTON ASHLAND
EVANSVILLE
LOUISVILLE
LEXINGTON
OWENSBORO
NASHVILLE DAVIDSON
KNOXVILLE
CHATTANOOGA
MEMPHIS
HUNTSVILLE
ASHEVILLE
GADSDEN
BIRMINGHAM
ATLANTA
TUSCALOOSA
COLUMBUS
MONTGOMERY
ALBANY
MOBILE
PENSACOLA
TALLAHASSEE
JACKSONVILLE
GAINESVILLE
ORLANDO
TAMPA ST PETERSBURG
WEST PALM BEACH
FORT LAUDERDALE HOLLYWOOD
MIAMI
BUFFALO
ROCHESTER
UTICA ROME
SYRACUSE
ALBANY SCHENECTADY TROY
PITTSFIELD
MANCHESTER
LOWELL
LAWRENCE HAVERHILL
FITCHBURG LEOMINSTER
WORCESTER
BOSTON
SPRINGFIELD CHICOPEE HOLYOKE
BROCKTON
NEW BEDFORD
HARTFORD
NEW BRITAIN BRISTOL
WATERBURY DANBURY
FALL RIVER PROVIDENCE PAWTUCKET WARWICK
NEW LONDON GROTON NORWICH
MERIDEN
NEW HAVEN
BRIDGEPORT
NORWALK
STAMFORD
NEW YORK
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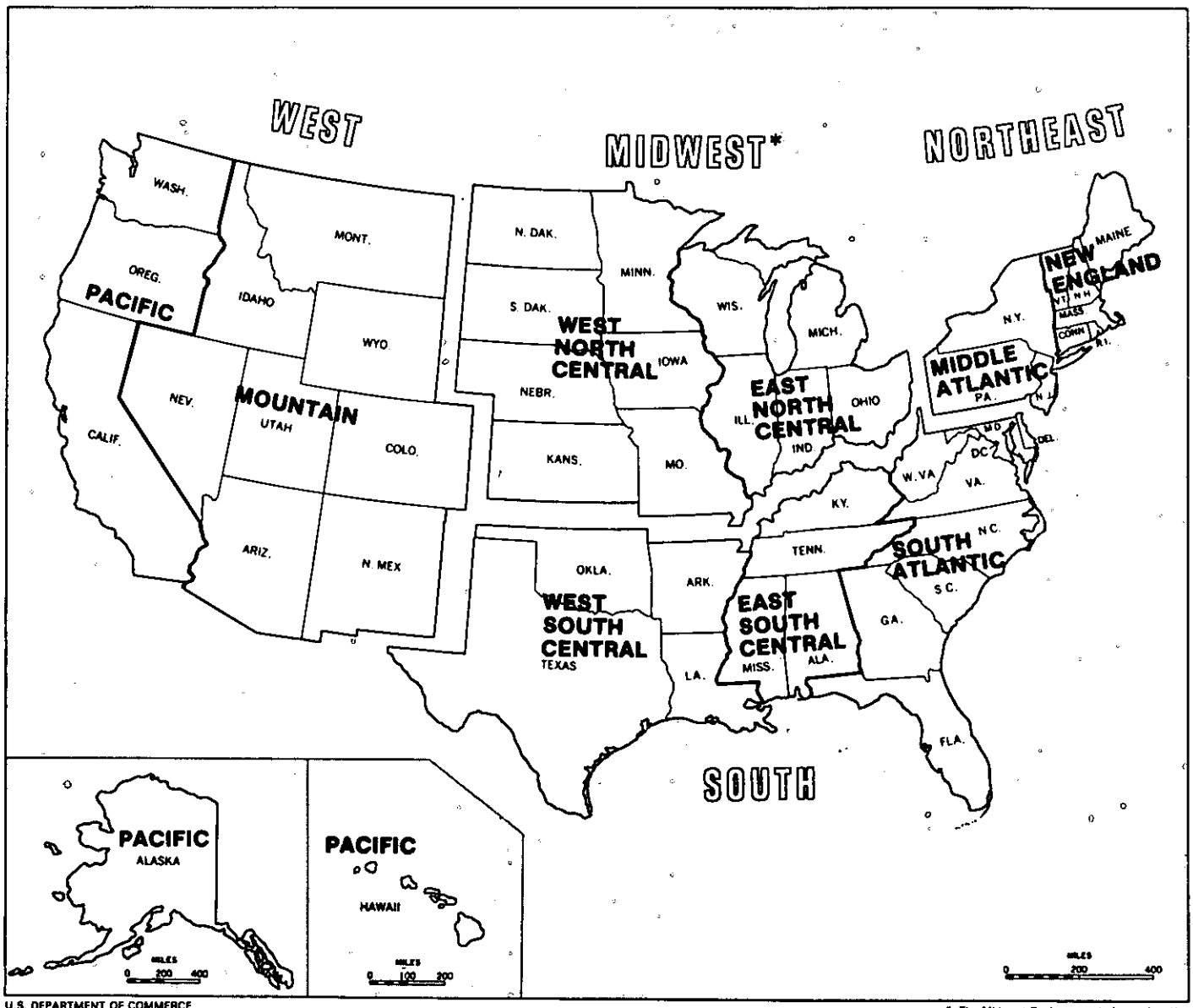
TRENTON
PHILADELPHIA
ATLANTIC CITY
VINELAND MILLVILLE BRIDGETON
WILMINGTON
ERIE
BINGHAMTON
SCRANTON
YOUNGSTOWN WARREN
PATERSON CLIFTON PASSAIC
WILKES BARRE HAZLETON
HARRISBURG
READING
LANCASTER
PITTSBURGH
ALTOONA
YORK
JOHNSTOWN
BALTIMORE
CHARLESTON
WASHINGTON
RICHMOND
LYNCHBURG
NEWPORT NEWS HAMPTON
NORFOLK PORTSMOUTH
ROANOKE
PETERSBURG COLONIAL HEIGHTS
GREENSBORO - WINSTON SALEM - HIGH POINT
DURHAM
RALEIGH
CHARLOTTE
FAYETTEVILLE
WILMINGTON
GREENVILLE
COLUMBIA
CHARLESTON
AUGUSTA
MACON
SAVANNAH
0 100 200 300 400 500 MILES
ALBERS EQUAL AREA PROJECTION

Regions and Geographic Divisions of the United States



U.S. DEPARTMENT OF COMMERCE
Bureau of the Census

* The Midwest Region was designated as the North Central Region until June 1984.

Introduction

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GENERAL

This report presents statistics on energy-related housing characteristics from the 1983 Annual Housing Survey for the United States, by inside and outside standard metropolitan statistical areas (SMSA's) and each of the four geographic regions. The Annual Housing Survey (AHS) was designed to provide a current series of information on the size and composition of the housing inventory, the characteristics of its occupants, the changes in the inventory resulting from new construction and from losses, the indicators of housing and neighborhood quality, the characteristics of recent movers, and the characteristics of urban and rural housing units. The survey, performed for the Department of Housing and Urban Development, is authorized under sections 501 and 502(d), 502(e), and 502(f) of the Housing and Urban Development Act of 1970, Title 12, United States Code 1701z-1 and 1701z-2. The Bureau of the Census is authorized under Title 31, United States Code, section 686, to perform special work or services for Federal agencies.

The statistics presented in this report are based on information from a sample of housing units. The information for the survey was collected by interviewers from August 1983 through December 1983.

This report series consists of six basic parts (see list on page III) issued jointly by the Department of Housing and Urban Development and the Bureau of the Census. Part A provides data on general housing characteristics, part B on indicators of housing and neighborhood quality cross-classified by financial characteristics, part C on financial characteristics, part D on recent mover households, part E on urban and rural housing characteristics, and part F on energy-related housing characteristics.

The content and procedures of the Annual Housing Survey were determined after consultation with a variety of users of housing data and through field pretesting. A large portion of the subjects covered in this report are the same as those collected in the 1970 Census of Housing; in general, these data are comparable to those shown in the 1970 census reports. In addition, a number of new items were introduced in this survey on subjects such as alterations and repairs, breakdowns or failures in equipment, and the physical condition of the structure.

More detailed information on the technical and procedural matters covered in the text of this report can be obtained by writing to the Director, Bureau of the Census, Washington, DC 20233.

Organization of the text—The text consists of this introduction and appendixes A and B, which appear after the data tables. Appendix A describes the geographic area classifications, provides definitions and explanations of the subjects covered in this report, and contains a facsimile of the questionnaire. Appendix B presents information on sample design, estimation, and accuracy of the data.

Content of the tables—A series of standard tables presents simple distributions and cross-tabulations of the data for occupied housing units for each area shown in this report. The finding guide (following appendix B) lists the characteristics covered in this report and shows the tables in which the various types of statistics appear. The numbers presented in these tables are rounded to the nearest thousand. Table 1 presents characteristics for the United States by inside SMSA's, in/not in central city, and outside SMSA'S; table 2, characteristics for owner- and renter-occupied housing units by income of the family or primary individual; table 3, characteristics for owner-occupied, one-unit structures by value of property; table 4, characteristics for renter-occupied housing units by gross rent; table 5, characteristics by housing units in structure; table 6, characteristics by number of rooms per housing unit; table 7, characteristics by the year the structure was built; table 8, characteristics by the monthly cost paid for electricity; table 9,

characteristics by the monthly cost paid for gas; and table 10, characteristics by the yearly cost paid for fuel oil, kerosene, coal, wood, etc.

The prefix letter "A" has been assigned to the tables for the United States as a whole, "B" to the Northeast Region, "C" to the Midwest Region (formerly North Central), "D" to the South Region, and "E" to the West Region.

Sample size—The statistics presented in this report are based on a sample of housing units and are, therefore, subject to sampling variability. The designated sample consisted of approximately 71,800 housing units located throughout the United States. The sample was selected from units enumerated in the 1970 census and updated to include units constructed since 1970. Detailed information on the sample design, size of sample, estimation procedure, and sampling variability associated with these data is given in appendix B.

Derived figures (medians, etc.)—Shown in this report are medians, means, and ratios. The median, which is a type of average, is the middle value in a distribution; i.e., the median divides the distribution into two equal parts—one-half of the cases fall below the median and one-half of the cases exceed the median. Derived figures are not presented (but indicated by three dots ...) if there are less than 25 sample cases in the distribution or the base.

Medians for rooms and persons are rounded to the nearest tenth, for value and income to the nearest hundred dollars, and for rent and fuel costs to the nearest dollar. Travel time is rounded to the nearest minute, and distance from home to work is rounded to the nearest tenth of a mile. In computing medians for rooms and persons per housing unit, the whole number is used as the midpoint of the interval; for example, the category "4 rooms" is treated as an interval ranging from 3.5 up to 4.5 rooms. In computing median rent, units reported as "no cash rent" are excluded. The medians are generally computed on the basis of the distribution as shown in this report.

When the median falls in the lower terminal category of an open-ended distribution, the method of presentation is to show the initial value of the next category followed by a minus sign; for example, if the median falls in the category "Less than $3,000," it is shown as "$3,000—." When the median falls in the upper terminal category of an open-ended distribution, the method of presentation is to show the initial value of the terminal category followed by a plus sign; for example, if the median falls in the category "$75,000 or more," it is shown as "$75,000+."

The medians and percents for 1983 are generally computed on the basis of the distributions as shown in the tables. As a result a median or percent for the same characteristic and universe may vary somewhat between tables. The medians and percents shown for 1970 are computed on the basis of distributions as tabulated in 1970, which are sometimes more detailed than the distributions shown in this report.

Symbols—A dash (—) signifies zero. Three dots (. . .) in a data column mean not applicable or that the base for a derived figure is too small for it to be shown.

Boundaries—The data shown in this report relate to the areas as defined for the 1970 census. See appendix A for a discussion of these areas. Additional information and definitions of the 1970 boundaries are given in the 1970 Population Census PC(1)-A reports.

Other reports from the Annual Housing Survey—In addition to the six basic reports in the Annual Housing Survey Series H-150, one or more supplementary reports (Series H-151) may be published for the United States.

A series of reports (H-170) similar to H-150 has been published for 60 selected SMSA's. Data for the SMSA's are based on an independent sample of the 60 SMSA's originally divided into groups of approximately 20 each, with a group interviewed every year on a rotating basis. These SMSA's are no longer surveyed according to the original groups. A listing of the SMSA's by the original groups is included in this introduction. The years for which reports are currently available for individual SMSA's are provided in this listing.

ADDITIONAL DATA

Unpublished tabulations—A large number of tabulations, not included in the Annual Housing Survey published reports, have been prepared to meet special needs of both national (Series H-150 and H-151) and SMSA (Series H-170 and H-171) data users. These unpublished data are available in two forms. Paper photocopies are available for specific tables at the cost of reproduction. Microfiche copies of these unpublished data are also available. An index of the data available can be obtained free of charge. The unpublished index of data may be obtained by contacting the Housing Division, Bureau of the Census, Washington, DC 20233.

Public-use computer tapes—For the data users whose needs are not met by available tabulations, the Census Bureau also has available computerized microdata computer tapes (with individual respondent records) from both the SMSA and national samples. Except for names and addresses, the Annual Housing Survey microdata provide essentially all the information obtained from each occupied or vacant housing unit. The Census Bureau's confidentiality guidelines prescribe that individuals and specific addresses remain anonymous.

Confidentiality guidelines further prescribe that individual records cannot be associated with areas having fewer than 250,000 people based on 1970 census results. The national tapes identify the four census regions, each SMSA of 250,000 or more population (central cities are also identified where possible), metropolitan/nonmetropolitan location, and urban/rural location. The SMSA tapes contain data from all SMSA samples except Saginaw, MI, which contained less than the 250,000 required 1970 population. Central cities are identified for 42 of the 59 SMSA's.

Microdata computer tapes from the Annual Housing Survey are available on a cost-per-reel basis from the Data User Services Division, Customer Services (Tapes), Bureau of the Census, Washington, DC 20233.

Microfiche of published reports—Microfiche copies of national and SMSA published reports are available from Data User Services Division, Customer Services (Microfiche), Bureau of the Census, Washington, DC 20233.

DATA COLLECTION PROCEDURES

The 1983 Annual Housing Survey was conducted by interviewers who obtained the information from the occupants or, if the unit was vacant, from informed persons (landlords, rental agents, or knowledgeable neighbors). The information reported by the interviewer reflected the situation at the time of the survey, which began in August 1983 and extended through December 1983.

Data were collected for sample housing units located in the counties and independent cities that make up the 461 sample areas used in current surveys of the Census Bureau. A sample of housing units was selected in these areas from the 1970 census and updated by a sample of addresses from building permits to include housing units added since 1970. Estimates of the counts and characteristics of the 1983 inventory were obtained for these sample units.

A more detailed description of the survey design and sampling procedures can be found in appendix B.

PROCESSING PROCEDURES

The questionnaires used for the 1983 Annual Housing Survey were of the conventional type on which the interviewer recorded the information by marking a precoded check box or by writing in the entries. Census clerks edited and coded the questionnaires. The information from the questionnaires was data keyed directly to magnetic tape which was processed on the Census Bureau's computers through a number of editing and tabulating steps. A facsimile of the questionnaire appears at the end of appendix A.

QUALIFICATIONS OF THE DATA

Since the estimates in this report are based on a sample, they may differ somewhat from the figures that would have been obtained from a complete census, using the same questionnaires, instructions, and interviewers. Particular care should be exercised, therefore, in the interpretation of figures based on relatively small numbers of sample cases as well as small

List of SMSA Reports From the Annual Housing Survey by Original Publication Groups

Group A	Years for which reports are published 19—	Group B	Years for which reports are published 19—	Group C	Years for which reports are published 19—
Albany-Schenectady-Troy, NY	74, 77, 80	Atlanta, GA	75, 78, 82	Allentown-Bethlehem-Easton, PA-NJ	76, 80
Anaheim-Santa Ana-Garden Grove, CA	74, 77, 81	Chicago, IL	75, 79, 83	Baltimore, MD	76, 79, 83
Boston, MA	74, 77, 81	Cincinnati, OH-KY-IN	75, 78, 82	Birmingham, AL	76, 80
Dallas, TX	74, 77, 81	Colorado Springs, CO	75, 78	Buffalo, NY	76, 79
Detroit, MI	74, 77, 81	Columbus, OH	75, 78, 82	Cleveland, OH	76, 79
Fort Worth, TX	74, 77, 81	Hartford, CT	75, 79, 83	Denver, CO	76, 79, 83
Los Angeles-Long Beach, CA	74, 77, 80	Kansas City, MO-KS	75, 78, 82	Grand Rapids, MI	76, 80
Madison, WI*	75, 77, 81	Miami, FL	75, 79, 83	Honolulu, HI	76, 79, 83
Memphis, TN-AR	74, 77, 80	Milwaukee, WI	75, 79	Houston, TX	76, 79, 83
Minneapolis-St. Paul, MN	74, 77, 81	New Orleans, LA	75, 78, 82	Indianapolis, IN	76, 80
Newark, NJ	74, 77, 81	Newport News-Hampton, VA	75, 78	Las Vegas, NV	76, 79
Orlando, FL	74, 77, 81	Paterson-Clifton-Passaic, NJ	75, 78, 82	Louisville, KY-IN	76, 80, 83
Phoenix, AZ	74, 77, 81	Philadelphia, PA-NJ	75, 78, 82	New York, NY	76, 80, 83
Pittsburgh, PA	74, 77, 81	Portland, OR-WA	75, 79, 83	Oklahoma City, OK	76, 80
Saginaw, MI	74, 77, 80	Rochester, NY	75, 78, 82	Omaha, NE-IA	76, 79
Salt Lake City, UT	74, 77, 80	San Antonio, TX	75, 78, 82	Providence-Pawtucket-Warwick, RI-MA	76, 80
Spokane, WA	74, 77, 81	San Bernardino-Riverside-Ontario, CA	75, 78, 82	Raleigh, NC	76, 79
Tacoma, WA	74, 77, 81	San Diego, CA	75, 78, 82	Sacramento, CA	76, 80, 83
Washington, DC-MD-VA	74, 77, 81	San Francisco-Oakland, CA	75, 78, 82	St. Louis, MO-IL	76, 80, 83
Wichita, KS	74, 77, 81	Springfield-Chicopee-Holyoke, MA-CT	75, 78	Seattle-Everett, WA	76, 79, 83

*Included with Group B for the first interview.

differences between figures. As in any survey work, the results are subject to errors of response and nonreporting and to sampling variability. For a further discussion of accuracy of the data, see appendix B.

The concepts and definitions of most of the items in this report are essentially the same as those used for the 1970 and 1980 censuses. The SMSA boundaries are the same as those in the 1970 census. For historical comparisons and boundary changes, refer to the census reports of 1960 and earlier.

In making comparisons between the 1983 Annual Housing Survey, and 1970 and 1980 Censuses of Housing results, differences in the data may reflect such factors as the use of direct interview for the 1983 Annual Housing Survey contrasted with the extensive use of self-enumeration in the censuses, the sample design, the estimation procedure used, the sampling variability of the estimates, and the processing procedures. See the sections on "Comparability with 1970 Census of Housing data" and "Comparability with 1980 Census of Housing data," in appendix A for further discussion.

Research shows that the national Annual Housing Survey and the 1980 Census of Housing produced significant differences for several key characteristics. For example, the April 1980 census had a homeownership rate for the United States of 64.4 percent; the October 1979 AHS national, 65.4 percent; and the October 1980 AHS national, 65.6 percent. The 1980 census showed that 18 percent of the housing units were in multiunit structures (5-or-more housing units); both the 1979 and 1980 surveys, 15 percent. In the 1980 census, 26 percent of the housing inventory was built since January 1970; the October 1979 AHS, 21 percent since March 1970; and the 1980 AHS, 23 percent since March 1970.

In addition, according to the 1970 Census Evaluation and Research Program, the 1970 count of 68.7 million housing units is understated by approximately 1.5 million units which were missed in the 1970 census. See the section on "Estimates of Change in the Inventory" in the Summary of Findings, Series H-150-73A, *General Housing Characteristics* and Series PHC(E)-5, *The Coverage of Housing in the 1970 Census*, for further discussion.

In making comparisons between the 1981 and 1983 Annual Housing Surveys, and the 1973 through 1980 Annual Housing Surveys, differences in the data may reflect a weighting change from the 1970-based independent estimates to the 1980-based estimates. See the section "Comparability with 1973 through 1981 Annual Housing Surveys," in appendix A for further discussion.

Statistics on value, rent, and income for both 1970 and 1983 are measured in current dollars (the value at the time the data were collected). Therefore, a significant part of the increase between 1970 and 1983 reflects the 160.5 percent rise in the cost of living during the 13½ year period, as measured by the Consumer Price Index, as well as changes in the housing inventory.

In this report, statistics on income relate to the income of the family or primary individual. Therfore, no data are provided on household income; i.e., income of persons unrelated to the householder is excluded.

Statistics for many of the characteristics shown in this report are based on restricted universes; therefore, care should be exercised in relating the statistics for one characteristic to another. For example, value is restricted to owner-occupied, one-unit structures on less than 10 acres having no business on the property, and gross rent is restricted to renter-occupied units excluding one-unit structures on 10 acres or more. Therefore, the totals for owner-occupied units in the "value" universe and for renter-occupied units in the "gross rent" universe do not agree with the totals for some of the income universes.

Care should be exercised in the interpretation of differences in the estimated counts of Spanish-origin households between 1970 and 1983. Research indicates that 1970 estimates of Spanish-origin households may be significantly overstated in the South and Midwest (formerly North Central) Regions. Apparently some respondents in the 1970 census misinterpreted the Spanish-origin category "Central or South American" to mean the central or southern part of the United States. The method of data collection used in the Annual Housing Survey; i.e., interviews conducted by trained interviewers, would tend to prevent the reoccurrence of this 1970 census classification error. In addition, differences between the two sets of data may reflect factors such as the sampling variability of both the 1970 estimates from the 5-percent census sample and the 1983 estimates from the Annual Housing Survey sample, as well as the estimation and processing procedures used.

Beginning in 1980, data on household composition and characteristics of the householder should be compared with caution to the data on household composition and characteristics of the head published in 1979 and previous years (see definition of householder in appendix A), because of the change in concept from head of household to householder. In addition, improvements have been made to both the clerical and computer edit procedures. Although these improvements result in more accurate estimates, direct comparisons of types of households beginning in 1980 with similar categories in 1979 and previous years should be made with caution. These changes do not affect the data for one-person households.

See appendix A for a more detailed discussion of the definitions and qualifications of all items in this report.

Table A-1. Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Inside SMSA's			Outside SMSA's
		Total	In central city	Not in central city	
ALL OCCUPIED HOUSING UNITS					
Total	**84 638**	**57 798**	**25 161**	**32 637**	**26 840**
House Heating Fuel					
Owner occupied	**54 724**	**35 166**	**12 372**	**22 794**	**19 558**
Utility gas	30 776	22 899	9 205	13 694	7 876
Bottled, tank, or LP gas	2 955	754	72	682	2 201
Fuel oil	7 877	5 232	1 490	3 742	2 644
Kerosene, etc.	284	113	30	83	171
Electricity	8 916	4 969	1 360	3 610	3 947
Coal or coke	330	144	23	122	186
Wood	3 287	794	94	700	2 493
Solar heat	19	16	-	16	2
Other fuel	24	13	4	9	11
None	256	230	94	137	26
Renter occupied	**29 914**	**22 632**	**12 788**	**9 844**	**7 282**
Utility gas	15 925	12 692	7 292	5 400	3 233
Bottled, tank, or LP gas	914	263	57	206	651
Fuel oil	4 708	3 837	2 456	1 381	871
Kerosene, etc.	162	60	19	42	101
Electricity	6 767	5 089	2 637	2 452	1 678
Coal or coke	102	39	9	30	63
Wood	800	181	30	151	619
Solar heat	6	6	2	4	-
Other fuel	109	104	101	3	5
None	421	361	185	175	60
Monthly Cost Paid for Electricity					
Specified owner occupied[1]	**43 535**	**29 408**	**10 238**	**19 170**	**14 127**
Electricity paid for	43 507	29 395	10 232	19 163	14 112
Less than $10	140	111	49	62	29
$10 to $19	1 657	1 170	552	618	487
$20 to $29	4 186	2 861	1 150	1 711	1 325
$30 to $39	6 232	4 280	1 651	2 628	1 952
$40 to $49	5 729	3 879	1 290	2 589	1 850
$50 to $59	5 897	3 978	1 360	2 619	1 919
$60 to $79	8 429	5 572	1 819	3 752	2 857
$80 to $99	3 978	2 629	864	1 765	1 349
$100 to $149	5 085	3 381	1 034	2 347	1 703
$150 or more	2 174	1 534	462	1 071	641
Median	56	55	53	57	57
No electricity used	28	13	6	7	15
Specified renter occupied[2]	**29 214**	**22 457**	**12 769**	**9 688**	**6 757**
Electricity paid for	24 211	18 452	10 121	8 330	5 759
Less than $10	902	783	460	323	119
$10 to $19	3 600	2 997	1 664	1 332	603
$20 to $29	4 828	3 790	2 148	1 642	1 037
$30 to $39	4 316	3 359	1 885	1 473	957
$40 to $49	2 967	2 239	1 287	952	728
$50 to $59	2 359	1 706	896	810	653
$60 to $79	2 628	1 773	881	892	856
$80 to $99	1 096	778	391	387	318
$100 to $149	1 124	758	368	390	366
$150 or more	391	270	141	129	121
Median	36	34	34	35	42
Included in rent	4 914	3 942	2 602	1 340	972
No electricity used	90	63	46	17	26
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas					
Specified owner occupied[1]	**43 535**	**29 408**	**10 238**	**19 170**	**14 127**
Gas paid for	31 849	22 912	8 803	14 109	8 938
Less than $10	876	512	179	333	364
$10 to $14	1 292	886	330	556	406
$15 to $19	1 419	1 054	423	630	365
$20 to $24	2 088	1 523	574	949	565
$25 to $29	1 905	1 346	552	794	558
$30 to $39	4 308	2 998	1 264	1 734	1 310
$40 to $49	4 035	2 891	1 174	1 717	1 144
$50 to $69	7 884	5 563	2 060	3 502	2 321
$70 to $99	5 126	3 891	1 328	2 563	1 234
$100 or more	2 918	2 247	917	1 330	670
Median	50	51	48	52	47
No gas used	11 686	6 496	1 436	5 061	5 189
Specified renter occupied[2]	**29 214**	**22 457**	**12 769**	**9 688**	**6 757**
Gas paid for	14 558	11 198	6 692	4 506	3 361
Less than $10	1 868	1 624	978	645	244
$10 to $14	1 844	1 531	954	578	313
$15 to $19	1 429	1 143	709	434	287
$20 to $24	1 409	1 111	690	421	298
$25 to $29	1 102	813	460	354	288
$30 to $39	1 921	1 404	795	609	516
$40 to $49	1 325	912	519	393	413
$50 to $69	1 945	1 411	808	603	534
$70 to $99	1 016	738	413	325	278
$100 or more	699	509	365	144	190
Median	28	26	25	27	34
Included in rent	7 484	6 137	3 624	2 513	1 327
No gas used	7 191	5 122	2 453	2 669	2 069

See footnotes at end of table.

Table A-1. Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Inside SMSA's			Outside SMSA's
		Total	In central city	Not in central city	
ALL OCCUPIED HOUSING UNITS—Con.					
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.					
Specified owner occupied[1]					
Fuel oil, kerosene, coal, wood, etc., paid for	43 535	29 408	10 238	19 170	14 127
Less than $100	11 239	7 059	1 886	5 174	4 179
$100 to $199	1 776	1 136	442	694	640
$200 to $299	1 552	892	251	641	660
$300 to $399	965	515	138	377	451
$400 to $499	842	400	115	284	443
$500 to $599	685	343	86	257	342
$600 to $699	683	421	99	322	261
$700 to $799	759	477	116	361	281
$800 or more	546	361	98	264	185
Median	3 431	2 514	541	1 973	917
Fuels not used or free	470	557	396	603	376
	32 296	22 349	8 353	13 996	9 947
Specified renter occupied[2]					
Fuel oil, kerosene, coal, wood, etc., paid for	29 214	22 457	12 769	9 688	6 757
Less than $100	2 464	1 357	527	831	1 107
$100 to $199	444	263	138	125	181
$200 to $299	344	190	87	103	154
$300 to $399	270	134	48	85	136
$400 to $499	231	91	30	61	141
$500 to $599	155	68	19	49	87
$600 to $699	176	97	29	69	78
$700 to $799	141	77	19	58	65
$800 or more	128	70	23	47	58
Median	574	368	133	235	206
Included in rent	375	402	278	485	358
Fuels not used or free	4 863	4 173	2 883	1 290	689
	21 887	16 926	9 359	7 567	4 960
ALL OCCUPIED HOUSING UNITS					
Total	84 638	57 798	25 161	32 637	26 840
Heating Equipment					
Owner occupied					
Warm-air furnace	54 724	35 166	12 372	22 794	19 558
Heat pump	32 391	22 299	7 705	14 594	10 092
Steam or hot water	1 750	1 139	253	886	610
Built-in electric units	7 007	5 519	2 070	3 449	1 488
Floor, wall, or pipeless furnace	2 944	1 439	436	1 002	1 506
Room heaters with flue	3 028	2 062	971	1 091	966
Room heaters without flue	1 797	721	308	412	1 077
Fireplaces, stoves, or portable heaters	1 622	650	336	314	972
None	3 929	1 107	198	909	2 822
	256	230	94	137	26
Renter occupied					
Warm-air furnace	29 914	22 632	12 788	9 844	7 282
Heat pump	11 929	9 139	4 834	4 305	2 790
Steam or hot water	421	340	135	205	80
Built-in electric units	6 765	6 015	4 007	2 008	750
Floor, wall, or pipeless furnace	3 263	2 362	1 193	1 169	900
Room heaters with flue	2 949	2 330	1 225	1 105	619
Room heaters without flue	1 641	973	591	381	668
Fireplaces, stoves, or portable heaters	1 304	668	459	209	636
None	1 223	444	158	286	779
	421	361	185	175	60
ALL OCCUPIED HOUSING UNITS					
Total	84 638	57 798	25 161	32 637	26 840
UNITS OCCUPIED LAST WINTER					
Total	73 908	50 187	21 467	28 720	23 720
Insufficient Heat					
Closure of rooms:					
Owner occupied					
With heating equipment	52 031	33 388	11 795	21 593	18 643
No rooms closed	51 796	33 172	11 707	21 466	18 623
Closed certain rooms	49 239	31 809	11 177	20 633	17 430
Living room only	2 021	1 014	396	617	1 007
Dining room only	87	51	25	26	36
1 or more bedrooms only	27	16	11	5	11
Other rooms or combination of rooms	1 352	618	234	384	733
Not reported	491	290	112	178	201
Not reported	64	37	13	24	26
No heating equipment	536	350	134	216	186
	235	216	88	128	19
Renter occupied					
With heating equipment	21 877	16 799	9 672	7 126	5 078
No rooms closed	21 606	16 560	9 547	7 013	5 047
Closed certain rooms	19 758	15 280	8 734	6 545	4 478
Living room only	1 527	1 036	670	366	492
Dining room only	98	78	65	13	20
1 or more bedrooms only	19	14	9	6	4
Other rooms or combination of rooms	999	677	420	256	322
Not reported	389	259	176	83	130
Not reported	23	8	-	8	15
No heating equipment	321	244	143	102	77
	270	239	126	113	31
Additional heat source:					
Owner occupied					
With specified heating equipment[3]	52 031	33 388	11 795	21 593	18 643
No additional heat source used	46 421	31 466	11 184	20 282	14 955
Used kitchen stove, fireplace, or portable heater	42 341	28 903	10 140	18 754	13 438
Not reported	2 961	1 893	779	1 114	1 068
Lacking specified heating equipment or none	1 119	670	256	414	449
	5 610	1 922	611	1 311	3 688

See footnotes at end of table.

Table A-1. Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Inside SMSA's			Outside SMSA's
		Total	In central city	Not in central city	
UNITS OCCUPIED LAST WINTER—Con.					
Insufficient Heat—Con.					
Additional heat source—Con.					
Renter occupied	21 877	16 799	9 672	7 126	5 078
With specified heating equipment[3]	19 616	15 688	9 063	6 625	3 928
No additional heat source used	16 551	13 233	7 432	5 800	3 319
Used kitchen stove, fireplace, or portable heater	2 480	2 044	1 368	676	436
Not reported	585	411	263	149	173
Lacking specified heating equipment or none	2 261	1 111	610	501	1 150
Rooms lacking specified heat source:					
Owner occupied	52 031	33 388	11 795	21 593	18 643
With specified heating equipment[3]	46 421	31 466	11 184	20 282	14 955
No rooms lacking air ducts, registers, radiators, or heaters	38 219	26 725	9 162	17 564	11 494
Rooms lacking air ducts, registers, radiators, or heaters	7 358	4 279	1 824	2 455	3 079
1 room	2 448	1 546	595	951	902
2 rooms	1 720	974	432	542	746
3 rooms or more	3 190	1 759	797	961	1 431
Not reported	844	462	198	264	382
Lacking specified heating equipment or none	5 610	1 922	611	1 311	3 688
Renter occupied	21 877	16 799	9 672	7 126	5 078
With specified heating equipment[3]	19 616	15 688	9 063	6 625	3 928
No rooms lacking air ducts, registers, radiators, or heaters	15 325	12 600	7 248	5 351	2 726
Rooms lacking air ducts, registers, radiators, or heaters	3 849	2 789	1 608	1 182	1 060
1 room	1 370	1 055	656	399	315
2 rooms	1 174	856	444	412	318
3 rooms or more	1 305	879	507	371	426
Not reported	442	299	206	93	143
Lacking specified heating equipment or none	2 261	1 111	610	501	1 150
Housing unit uncomfortably cold:					
Owner occupied	52 031	33 388	11 795	21 593	18 643
With specified heating equipment[3]	46 421	31 466	11 184	20 282	14 955
Lacking specified heating equipment or none	5 610	1 922	611	1 311	3 688
Housing unit not uncomfortably cold for 24 hours or more	4 767	1 606	502	1 104	3 162
Housing unit uncomfortably cold for 24 hours or more	540	185	71	114	355
Not reported	303	132	38	94	171
Renter occupied	21 877	16 799	9 672	7 126	5 078
With specified heating equipment[3]	19 616	15 688	9 063	6 625	3 928
Lacking specified heating equipment or none	2 261	1 111	610	501	1 150
Housing unit not uncomfortably cold for 24 hours or more	1 705	838	458	380	867
Housing unit uncomfortably cold for 24 hours or more	459	215	112	103	243
Not reported	97	58	40	18	39
ALL OCCUPIED HOUSING UNITS					
Total	84 638	57 798	25 161	32 637	26 840
Air Conditioning					
Owner occupied	54 724	35 166	12 372	22 794	19 558
With air conditioning	34 692	22 924	8 202	14 722	11 768
Room units	16 563	10 420	4 244	6 176	6 143
1	10 164	5 874	2 338	3 536	4 290
2	4 580	3 119	1 300	1 819	1 461
3	1 301	1 021	435	585	280
4	347	263	114	149	84
5 or more	172	143	56	87	29
Central system	18 130	12 504	3 958	8 546	5 625
With no air conditioning	20 032	12 242	4 170	8 072	7 790
Renter occupied	29 914	22 632	12 788	9 844	7 282
With air conditioning	15 315	11 852	6 150	5 702	3 463
Room units	8 765	6 535	3 499	3 036	2 231
1	6 723	4 889	2 586	2 303	1 833
2	1 678	1 332	725	607	346
3	294	256	150	106	38
4	49	43	29	14	6
5 or more	21	14	9	5	7
Central system	6 550	5 318	2 651	2 666	1 232
With no air conditioning	14 599	10 780	6 639	4 141	3 819

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table A-2. Income of Families and Primary Individuals by Fuel, Fuel Costs, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $3,000	$3,000 to $6,999	$7,000 to $9,999	$10,000 to $14,999	$15,000 to $19,999	$20,000 to $24,999	$25,000 to $34,999	$35,000 to $49,999	$50,000 to $74,999	$75,000 or more	Median (dollars)
ALL OCCUPIED HOUSING UNITS												
Total	84 638	3 759	10 606	7 217	11 900	9 943	8 424	13 797	10 706	5 637	2 449	19 300
House Heating Fuel												
Owner occupied	54 724	1 451	4 634	3 841	6 447	5 937	5 676	10 408	9 007	5 056	2 262	24 400
Utility gas	30 776	710	2 409	2 010	3 415	3 150	3 093	6 001	5 423	3 192	1 372	26 000
Bottled, tank, or LP gas	2 955	173	521	324	479	386	294	407	233	98	40	14 800
Fuel oil	7 877	180	674	618	974	846	901	1 440	1 208	696	340	23 600
Kerosene, etc.	284	13	61	43	45	45	33	23	10	11	-	12 800
Electricity	8 916	205	537	526	979	957	918	1 818	1 664	864	449	26 900
Coal or coke	330	17	51	34	40	51	22	57	37	16	6	17 300
Wood	3 287	143	347	275	485	466	388	610	386	149	38	19 200
Solar heat	19	-	-	-	-	1	1	2	7	4	4	...
Other fuel	24	2	2	-	5	4	3	4	1	1	3	...
None	256	8	32	12	25	32	24	48	39	25	10	23 800
Renter occupied	29 914	2 308	6 172	3 375	5 452	4 006	2 748	3 388	1 699	581	187	12 800
Utility gas	15 925	1 281	3 394	1 860	2 951	2 100	1 409	1 684	860	299	87	12 400
Bottled, tank, or LP gas	914	89	212	136	180	121	51	80	32	9	3	10 500
Fuel oil	4 708	289	966	500	843	616	438	602	286	120	49	13 600
Kerosene, etc.	162	27	38	23	32	20	9	9	2	2	-	9 100
Electricity	6 767	409	1 220	691	1 168	986	748	902	471	131	43	14 600
Coal or coke	102	13	37	13	16	12	3	4	2	-	-	7 100
Wood	800	105	189	100	145	112	53	62	23	6	3	10 200
Solar heat	6	2	-	-	-	-	4	-	-	-	-	...
Other fuel	109	35	31	7	15	3	4	7	3	4	-	5 600
None	421	58	85	45	102	35	28	38	19	10	2	11 100
Monthly Cost Paid for Electricity												
Specified owner occupied[1]	43 535	1 005	3 295	2 825	4 694	4 506	4 448	8 709	7 710	4 397	1 946	26 100
Electricity paid for	43 507	1 002	3 287	2 818	4 693	4 503	4 444	8 707	7 710	4 397	1 946	26 200
Less than $10	140	18	41	20	19	8	6	15	7	2	4	8 600
$10 to $19	1 657	50	371	203	276	184	166	188	155	71	13	13 700
$20 to $29	4 186	135	595	412	579	505	442	719	487	245	67	18 700
$30 to $39	6 232	159	647	512	868	728	668	1 203	894	421	131	21 500
$40 to $49	5 729	106	418	424	706	683	640	1 139	963	485	166	24 100
$50 to $59	5 897	139	357	371	648	590	628	1 289	1 060	600	216	26 700
$60 to $79	8 429	171	424	432	792	902	874	1 822	1 717	927	368	28 400
$80 to $99	3 978	67	171	169	349	365	413	852	858	510	223	30 300
$100 to $149	5 085	98	186	202	332	411	469	1 086	1 113	755	433	32 800
$150 or more	2 174	59	76	72	123	148	137	395	457	382	325	37 500
Median	56	52	39	46	48	53	54	58	63	68	81	...
No electricity used	28	3	8	7	1	2	4	2	-	-	-	...
Specified renter occupied[2]	29 214	2 239	6 042	3 297	5 307	3 915	2 690	3 321	1 655	564	182	12 900
Electricity paid for	24 211	1 670	4 554	2 611	4 459	3 385	2 366	3 002	1 491	511	161	13 700
Less than $10	902	64	232	112	214	114	48	72	29	14	4	11 000
$10 to $19	3 600	282	860	405	660	484	345	334	171	42	16	11 900
$20 to $29	4 828	322	1 064	556	872	694	454	546	220	78	22	12 700
$30 to $39	4 316	301	850	499	840	555	378	541	261	76	16	13 000
$40 to $49	2 967	186	519	343	541	440	298	368	170	85	17	14 000
$50 to $59	2 359	168	358	218	447	354	261	299	179	49	26	14 900
$60 to $79	2 628	179	371	254	475	379	293	392	200	63	23	15 500
$80 to $99	1 096	70	145	92	180	141	127	191	99	34	16	17 100
$100 to $149	1 124	72	119	100	172	181	126	182	115	49	9	17 800
$150 or more	391	25	38	31	57	42	39	77	47	21	13	20 200
Median	36	35	31	34	35	37	38	40	43	45	52	...
Included in rent	4 914	547	1 464	676	835	518	324	313	162	53	21	9 000
No electricity used	90	22	23	11	13	13	-	6	2	-	-	7 000
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas												
Specified owner occupied[1]	43 535	1 005	3 295	2 825	4 694	4 506	4 448	8 709	7 710	4 397	1 946	26 100
Gas paid for	31 849	759	2 563	2 084	3 457	3 295	3 174	6 256	5 555	3 273	1 434	25 900
Less than $10	876	37	107	73	126	109	61	150	117	57	18	19 400
$10 to $14	1 292	23	141	134	172	180	134	226	155	91	37	19 900
$15 to $19	1 419	38	152	130	177	155	154	241	217	108	45	21 800
$20 to $24	2 088	49	186	133	249	241	251	399	356	175	48	23 700
$25 to $29	1 905	36	182	128	221	206	185	351	325	175	96	24 900
$30 to $39	4 308	117	434	293	503	391	422	807	767	402	173	24 900
$40 to $49	4 035	96	307	253	500	468	393	822	679	383	134	25 000
$50 to $69	7 884	172	529	469	830	885	762	1 658	1 459	860	280	26 900
$70 to $99	5 126	93	311	304	449	442	546	1 085	958	633	306	28 900
$100 or more	2 918	97	214	168	230	238	246	517	522	390	296	30 100
Median	50	47	42	45	45	47	48	52	52	55	61	...
No gas used	11 686	246	732	741	1 237	1 211	1 274	2 454	2 155	1 124	513	26 600
Specified renter occupied[2]	29 214	2 239	6 042	3 297	5 307	3 915	2 690	3 321	1 655	564	182	12 900
Gas paid for	14 558	1 070	2 933	1 647	2 758	1 914	1 316	1 703	817	317	86	13 000
Less than $10	1 868	110	368	213	377	262	183	215	91	42	8	13 200
$10 to $14	1 844	132	342	217	364	240	179	237	93	30	9	13 200
$15 to $19	1 429	96	267	162	305	188	120	157	99	26	9	13 100
$20 to $24	1 409	97	244	191	277	165	147	168	81	31	6	13 100
$25 to $29	1 102	67	249	138	185	157	95	123	51	29	8	12 600
$30 to $39	1 921	147	417	208	323	247	174	246	106	41	11	12 900
$40 to $49	1 325	115	275	148	249	176	94	152	80	25	10	12 500
$50 to $69	1 945	166	400	214	347	245	160	232	119	51	12	12 800
$70 to $99	1 016	63	221	86	197	136	93	116	71	27	7	13 500
$100 or more	699	77	149	69	134	99	71	56	25	14	6	12 100
Median	28	32	29	26	26	28	26	27	28	30	32	...
Included in rent	7 464	676	1 800	945	1 251	979	609	667	372	112	52	11 200
No gas used	7 191	493	1 309	706	1 299	1 022	766	951	466	135	44	14 200

See footnotes at end of table.

Table A-2. Income of Families and Primary Individuals by Fuel, Fuel Costs, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $3,000	$3,000 to $6,999	$7,000 to $9,999	$10,000 to $14,999	$15,000 to $19,999	$20,000 to $24,999	$25,000 to $34,999	$35,000 to $49,999	$50,000 to $74,999	$75,000 or more	Median (dollars)
ALL OCCUPIED HOUSING UNITS—Con.												
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.												
Specified owner occupied[1]	43 535	1 005	3 295	2 825	4 694	4 506	4 448	6 709	7 710	4 397	1 946	26 100
Fuel oil, kerosene, coal, wood, etc., paid for	11 239	237	816	758	1 139	1 131	1 211	2 245	1 982	1 185	535	26 500
Less than $100	1 776	37	72	77	148	172	179	364	368	267	92	30 600
$100 to $199	1 552	28	107	79	133	135	125	385	298	175	105	29 600
$200 to $299	965	25	87	65	115	98	93	182	174	95	31	25 000
$300 to $399	842	33	76	79	95	106	97	146	138	48	24	21 600
$400 to $499	685	21	75	50	76	95	91	117	100	48	11	21 400
$500 to $599	683	8	72	58	76	78	75	138	100	54	26	23 300
$600 to $699	759	20	70	60	79	78	112	145	121	56	17	23 200
$700 to $799	546	13	57	50	71	52	49	98	93	40	23	23 000
$800 or more	3 431	51	200	241	344	317	390	691	588	403	206	27 500
Median	470	382	487	551	501	456	527	455	412	417	517	...
Fuels not used or free	32 296	769	2 479	2 067	3 556	3 375	3 236	6 464	5 728	3 212	1 411	26 000
Specified renter occupied[2]	29 214	2 239	6 042	3 297	5 307	3 915	2 690	3 321	1 655	564	182	12 900
Fuel oil, kerosene, coal, wood, etc., paid for	2 464	192	433	248	435	337	257	343	144	64	12	14 100
Less than $100	444	35	69	41	64	66	55	69	26	19	2	16 100
$100 to $199	344	29	64	30	66	47	28	50	22	8	-	13 700
$200 to $299	270	22	49	37	44	38	23	36	16	4	-	13 000
$300 to $399	231	34	54	24	39	35	19	18	4	4	1	10 500
$400 to $499	155	12	34	17	31	16	21	14	5	2	3	12 400
$500 to $599	176	17	30	12	36	23	20	15	15	6	1	13 900
$600 to $699	141	8	29	8	37	16	17	23	3	-	-	13 500
$700 to $799	128	7	26	14	20	21	13	13	11	3	-	14 400
$800 or more	574	28	78	66	98	77	60	104	40	17	6	16 100
Median	375	328	363	369	416	352	415	385	468	333	...	...
Included in rent	4 863	374	1 035	587	847	603	416	554	287	112	47	12 600
Fuels not used or free	21 887	1 673	4 573	2 482	4 025	2 975	2 018	2 424	1 224	389	123	12 800
ALL OCCUPIED HOUSING UNITS												
Total	84 638	3 759	10 806	7 217	11 900	9 943	8 424	13 797	10 706	5 637	2 449	19 300
Heating Equipment												
Owner occupied	54 724	1 451	4 634	3 841	6 447	5 937	5 678	10 408	9 007	5 056	2 262	24 400
Warm-air furnace	32 391	747	2 119	1 942	3 672	3 349	3 251	6 559	5 933	3 370	1 448	26 700
Heat pump	1 750	28	45	61	120	131	156	359	429	272	149	34 300
Steam or hot water	7 007	115	468	430	687	706	789	1 367	1 213	831	422	27 400
Built-in electric units	2 944	83	215	199	361	355	365	590	458	223	94	23 500
Floor, wall, or pipeless furnace	3 028	86	420	314	471	404	343	469	337	123	61	17 800
Room heaters with flue	1 797	95	436	271	308	219	163	173	87	29	16	11 600
Room heaters without flue	1 622	117	426	250	239	201	139	148	73	13	16	10 400
Fireplaces, stoves, or portable heaters	3 929	171	474	364	583	541	447	696	437	170	46	18 400
None	256	8	32	12	25	32	24	48	39	25	10	23 800
Renter occupied	29 914	2 308	6 172	3 375	5 452	4 006	2 746	3 388	1 699	581	187	12 800
Warm-air furnace	11 929	776	2 032	1 207	2 184	1 665	1 231	1 611	834	288	100	14 500
Heat pump	421	13	55	42	81	56	40	68	47	16	2	16 700
Steam or hot water	6 765	498	1 434	741	1 176	898	605	767	416	172	56	13 000
Built-in electric units	3 263	223	769	381	549	446	314	364	169	37	12	12 400
Floor, wall, or pipeless furnace	2 949	226	619	384	605	384	289	264	135	34	9	12 000
Room heaters with flue	1 641	189	478	221	307	215	84	109	28	8	2	9 100
Room heaters without flue	1 304	175	379	193	238	145	67	76	21	9	1	8 500
Fireplaces, stoves, or portable heaters	1 223	148	322	162	210	161	88	93	29	7	3	9 600
None	421	58	85	45	102	35	28	38	19	10	2	11 100
ALL OCCUPIED HOUSING UNITS												
Total	84 638	3 759	10 806	7 217	11 900	9 943	8 424	13 797	10 706	5 637	2 449	19 300
UNITS OCCUPIED LAST WINTER												
Total	73 908	2 829	9 139	6 215	10 110	8 578	7 396	12 430	9 759	5 199	2 253	20 100
Insufficient Heat												
Closure of rooms:												
Owner occupied	52 031	1 385	4 484	3 728	6 164	5 642	5 344	9 869	8 520	4 774	2 120	24 300
With heating equipment	51 796	1 378	4 457	3 716	6 139	5 613	5 323	9 824	8 482	4 751	2 112	24 300
No rooms closed	49 239	1 249	3 970	3 398	5 756	5 322	5 100	9 508	8 245	4 618	2 075	24 800
Closed certain rooms	2 021	103	443	272	317	224	178	249	145	74	15	13 000
Living room only	87	4	18	14	15	13	7	3	9	3	1	12 400
Dining room only	27	-	3	4	2	6	2	4	3	2	2	...
1 or more bedrooms only	1 352	75	316	178	225	154	118	153	89	36	7	12 400
Other rooms or combination of rooms	491	23	92	67	69	42	45	76	40	31	4	14 500
Not reported	64	1	14	8	5	8	7	13	5	3	-	17 300
Not reported	536	27	44	47	67	67	44	67	91	59	22	21 800
No heating equipment	235	7	27	12	25	29	21	45	38	23	8	24 300
Renter occupied	21 877	1 444	4 655	2 487	3 946	2 936	2 051	2 561	1 239	425	133	13 000
With heating equipment	21 606	1 413	4 600	2 456	3 879	2 910	2 028	2 542	1 223	423	131	13 000
No rooms closed	19 758	1 240	4 063	2 238	3 531	2 664	1 911	2 409	1 167	407	128	13 300
Closed certain rooms	1 527	144	447	182	292	217	93	100	38	11	3	9 800
Living room only	98	11	35	5	23	13	6	4	3	-	-	9 300
Dining room only	19	3	10	1	2	2	2	-	-	-	-	...
1 or more bedrooms only	999	89	283	126	186	159	64	60	22	7	3	10 000
Other rooms or combination of rooms	389	38	109	50	77	42	20	37	13	4	-	9 800
Not reported	23	3	10	2	5	1	2	-	1	-	-	...
Not reported	321	29	90	35	56	28	25	33	17	6	-	10 500
No heating equipment	270	30	55	31	67	26	23	19	16	2	2	11 400

See footnotes at end of table.

Table A-2. Income of Families and Primary Individuals by Fuel, Fuel Costs, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $3,000	$3,000 to $6,999	$7,000 to $9,999	$10,000 to $14,999	$15,000 to $19,999	$20,000 to $24,999	$25,000 to $34,999	$35,000 to $49,999	$50,000 to $74,999	$75,000 or more	Median (dollars)
UNITS OCCUPIED LAST WINTER—Con.												
Insufficient Heat—Con.												
Additional heat source:												
Owner occupied	52 031	1 385	4 484	3 728	6 164	5 642	5 344	9 869	8 520	4 774	2 120	24 300
With specified heating equipment[3]	46 421	1 098	3 577	3 124	5 340	4 900	4 755	9 001	8 001	4 571	2 053	25 500
No additional heat source used	42 341	951	3 105	2 785	4 835	4 429	4 376	8 311	7 399	4 233	1 917	25 800
Used kitchen stove, fireplace, or portable heater	2 961	101	318	220	357	343	278	540	455	244	104	22 500
Not reported	1 119	45	154	119	149	128	102	150	147	93	32	18 600
Lacking specified heating equipment or none	5 610	287	907	604	824	742	589	868	519	204	66	16 200
Renter occupied	21 877	1 444	4 655	2 487	3 946	2 936	2 051	2 561	1 239	425	133	13 000
With specified heating equipment[3]	19 616	1 174	4 046	2 186	3 510	2 659	1 906	2 414	1 181	410	129	13 400
No additional heat source used	16 551	939	3 269	1 813	2 980	2 253	1 649	2 118	1 058	355	118	13 800
Used kitchen stove, fireplace, or portable heater	2 480	180	621	287	425	342	213	246	108	50	8	11 800
Not reported	585	56	156	85	105	63	44	51	16	5	3	9 800
Lacking specified heating equipment or none	2 261	269	609	301	436	276	145	146	58	15	4	9 500
Rooms lacking specified heat source:												
Owner occupied	52 031	1 385	4 484	3 728	6 164	5 642	5 344	9 869	8 520	4 774	2 120	24 300
With specified heating equipment[3]	46 421	1 098	3 577	3 124	5 340	4 900	4 755	9 001	8 001	4 571	2 053	25 500
No rooms lacking air ducts, registers, radiators, or heaters	38 219	845	2 537	2 318	4 162	3 880	3 874	7 669	7 006	4 075	1 854	26 900
Rooms lacking air ducts, registers, radiators, or heaters	7 358	215	924	706	1 068	923	803	1 217	888	441	175	19 100
1 room	2 448	56	198	139	297	272	293	485	394	223	90	24 500
2 rooms	1 720	57	241	197	284	231	166	245	192	84	24	16 800
3 rooms or more	3 190	103	485	370	487	420	344	487	299	134	60	16 800
Not reported	844	38	116	100	111	97	78	115	110	54	25	18 000
Lacking specified heating equipment or none	5 610	287	907	604	824	742	589	868	519	204	66	16 200
Renter occupied	21 877	1 444	4 655	2 487	3 946	2 936	2 051	2 561	1 239	425	133	13 000
With specified heating equipment[3]	19 616	1 174	4 046	2 186	3 510	2 659	1 906	2 414	1 181	410	129	13 400
No rooms lacking air ducts, registers, radiators, or heaters	15 325	880	3 057	1 652	2 634	2 088	1 532	1 994	1 009	361	119	13 900
Rooms lacking air ducts, registers, radiators, or heaters	3 849	250	874	471	796	524	342	376	163	45	8	12 100
1 room	1 370	91	337	175	249	192	116	125	65	14	5	11 600
2 rooms	1 174	70	258	132	265	162	119	114	43	12	2	12 400
3 rooms or more	1 305	90	279	163	282	170	107	138	55	20	2	12 100
Not reported	442	44	115	63	81	47	32	44	10	4	2	9 900
Lacking specified heating equipment or none	2 261	269	609	301	436	276	145	146	58	15	4	9 500
Housing unit uncomfortably cold:												
Owner occupied	52 031	1 385	4 484	3 728	6 164	5 642	5 344	9 869	8 520	4 774	2 120	24 300
With specified heating equipment[3]	46 421	1 098	3 577	3 124	5 340	4 900	4 755	9 001	8 001	4 571	2 053	25 500
Lacking specified heating equipment or none	5 610	287	907	604	824	742	589	868	519	204	66	16 200
Housing unit not uncomfortably cold for 24 hours or more	4 767	225	718	520	690	640	516	759	464	175	61	16 800
Housing unit uncomfortably cold for 24 hours or more	540	51	139	69	91	57	42	58	20	11	2	10 700
Not reported	303	12	50	16	43	45	31	52	35	17	3	18 400
Renter occupied	21 877	1 444	4 655	2 487	3 946	2 936	2 051	2 561	1 239	425	133	13 000
With specified heating equipment[3]	19 616	1 174	4 046	2 186	3 510	2 659	1 906	2 414	1 181	410	129	13 400
Lacking specified heating equipment or none	2 261	269	609	301	436	276	145	146	58	15	4	9 500
Housing unit not uncomfortably cold for 24 hours or more	1 705	183	429	224	342	221	116	126	47	13	4	10 200
Housing unit uncomfortably cold for 24 hours or more	459	79	154	59	76	43	24	15	7	1	-	6 900
Not reported	97	7	26	18	18	12	6	5	3	1	-	9 500
ALL OCCUPIED HOUSING UNITS												
Total	84 638	3 759	10 806	7 217	11 900	9 943	8 424	13 797	10 706	5 637	2 449	19 300
Air Conditioning												
Owner occupied	54 724	1 451	4 634	3 841	6 447	5 937	5 678	10 408	9 007	5 056	2 262	24 400
With air conditioning	34 692	783	2 280	2 134	3 838	3 666	3 464	6 977	6 260	3 596	1 692	26 700
Room units	18 563	420	1 546	1 373	2 202	2 100	1 856	3 127	2 329	1 170	440	21 700
1	10 164	317	1 153	966	1 533	1 356	1 146	1 746	1 250	519	177	19 100
2	4 580	84	333	305	532	559	511	1 034	731	371	120	24 700
3	1 301	16	45	76	102	147	154	248	254	183	76	29 400
4	347	3	12	20	28	25	35	83	65	51	24	31 000
5 or more	172	-	2	5	8	13	9	17	29	45	44	51 900
Central system	16 130	363	734	761	1 636	1 566	1 608	3 850	3 931	2 428	1 252	31 200
With no air conditioning	20 032	668	2 355	1 707	2 609	2 272	2 214	3 431	2 747	1 459	570	20 900
Renter occupied	29 914	2 308	6 172	3 375	5 452	4 006	2 746	3 388	1 699	581	187	12 800
With air conditioning	15 315	842	2 305	1 549	2 810	2 276	1 687	2 185	1 154	371	136	15 300
Room units	8 765	517	1 520	1 013	1 627	1 327	898	1 076	559	162	65	14 100
1	6 723	428	1 316	820	1 274	1 006	662	769	330	93	26	13 100
2	1 678	76	189	165	304	266	205	237	171	42	23	17 000
3	294	7	9	18	38	49	26	61	45	25	15	25 000
4	49	3	5	7	8	5	5	7	7	2	1	17 300
5 or more	21	3	2	3	4	2	-	2	5	-	-	...
Central system	6 550	325	785	536	1 182	949	789	1 109	595	208	72	17 400
With no air conditioning	14 599	1 466	3 867	1 826	2 643	1 730	1 059	1 203	545	210	50	10 300

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table A-3. Value of Owner-Occupied Housing Units by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $10,000	$10,000 to $19,999	$20,000 to $29,999	$30,000 to $39,999	$40,000 to $49,999	$50,000 to $59,999	$60,000 to $74,999	$75,000 to $99,999	$100,000 to $199,999	$200,000 or more	Median (dollars)
SPECIFIED OWNER OCCUPIED[1]												
Total	43 535	633	1 775	3 410	5 000	5 985	5 136	7 081	7 247	6 008	1 261	59 700
House Heating Fuel												
Utility gas	26 546	300	996	2 151	3 065	3 579	3 072	4 129	4 497	3 924	833	60 400
Bottled, tank, or LP gas	1 450	94	192	245	238	195	125	158	112	80	11	38 200
Fuel oil	6 072	72	217	443	693	868	750	1 079	1 090	713	147	59 900
Kerosene, etc.	177	14	34	39	31	21	16	11	7	2	1	30 200
Electricity	6 659	31	122	230	593	941	855	1 356	1 261	1 053	218	66 200
Coal or coke	233	21	27	44	38	25	27	19	19	10	4	36 700
Wood	2 179	99	181	248	325	337	274	311	243	143	18	47 000
Solar heat	16	-	-	-	-	-	-	-	1	11	5	...
Other fuel	12	-	-	2	3	1	2	1	-	2	3	...
None	190	2	6	9	13	19	15	16	16	71	21	96 500
Monthly Cost Paid for Electricity												
Electricity paid for	43 507	627	1 771	3 408	4 999	5 978	5 132	7 080	7 245	6 008	1 261	59 700
Less than $10	140	10	15	20	14	9	11	23	20	14	4	52 000
$10 to $19	1 657	101	131	213	234	195	148	170	219	213	32	47 700
$20 to $29	4 186	129	293	480	583	610	462	537	573	457	63	50 000
$30 to $39	6 232	115	357	662	914	948	702	1 000	803	606	124	51 700
$40 to $49	5 729	95	265	482	740	882	760	914	867	628	95	55 300
$50 to $59	5 897	78	256	491	718	864	747	987	951	685	121	57 300
$60 to $79	8 429	55	267	597	908	1 223	1 014	1 488	1 547	1 144	186	61 500
$80 to $99	3 978	17	78	208	416	531	494	734	738	823	140	65 000
$100 to $149	5 085	17	90	213	348	544	589	912	1 112	1 008	252	72 200
$150 or more	2 174	10	18	43	125	172	205	314	414	630	243	87 100
Median	56	36	43	46	50	54	56	58	62	67	81	...
No electricity used	28	6	4	2	1	7	5	1	2	-	-	...
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas												
Gas paid for	31 849	507	1 409	2 746	3 810	4 315	3 602	4 941	5 167	4 395	957	58 700
Less than $10	876	34	54	75	125	133	103	136	105	95	16	51 600
$10 to $14	1 292	40	63	129	182	141	125	185	214	185	29	57 300
$15 to $19	1 419	26	76	113	158	150	145	209	252	248	43	63 000
$20 to $24	2 088	29	83	184	224	257	185	307	397	383	59	64 000
$25 to $29	1 905	56	89	152	209	239	160	247	326	334	92	62 800
$30 to $39	4 308	81	210	422	554	594	443	572	638	656	138	56 600
$40 to $49	4 035	61	168	336	541	590	533	610	607	474	115	56 000
$50 to $69	7 884	95	346	670	946	1 220	1 031	1 396	1 200	823	157	56 400
$70 to $99	5 126	52	196	403	583	697	593	875	915	878	133	60 700
$100 or more	2 918	33	124	260	289	295	284	403	514	540	175	66 500
Median	50	38	47	48	48	51	52	53	51	48	48	...
No gas used	11 686	126	366	685	1 189	1 670	1 534	2 140	2 079	1 613	304	62 100
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.												
Fuel oil, kerosene, coal, wood, etc., paid for	11 239	193	478	861	1 226	1 435	1 339	1 929	1 997	1 482	298	60 700
Less than $100	1 776	18	60	144	143	172	220	330	364	275	50	66 000
$100 to $199	1 552	27	72	80	151	177	181	268	282	264	50	64 900
$200 to $299	965	32	54	99	105	113	94	162	148	140	19	58 600
$300 to $399	842	30	58	94	117	125	102	122	107	68	19	49 800
$400 to $499	685	20	40	70	95	108	98	92	101	54	6	50 900
$500 to $599	683	14	35	65	106	96	90	125	95	50	6	52 800
$600 to $699	759	8	31	80	117	122	84	141	120	44	11	52 500
$700 to $799	546	13	35	56	73	77	64	80	75	58	14	52 900
$800 or more	3 431	31	93	173	319	445	406	609	704	530	122	66 100
Median	470	364	390	420	502	523	473	489	495	390	569	...
Fuels not used or free	32 296	440	1 297	2 549	3 774	4 549	3 797	5 152	5 250	4 526	962	59 300
Heating Equipment												
Warm-air furnace	26 398	133	681	1 715	2 842	3 749	3 316	4 642	4 525	3 928	867	62 500
Heat pump	1 406	4	7	12	47	119	154	275	356	361	72	81 000
Steam or hot water	5 411	20	99	271	470	638	639	1 040	1 174	872	188	68 200
Built-in electric units	2 214	13	57	119	316	426	318	398	326	200	41	55 600
Floor, wall, or pipeless furnace	2 637	45	138	318	461	360	198	244	472	358	42	49 900
Room heaters with flue	1 347	130	273	338	230	139	73	65	62	34	4	28 000
Room heaters without flue	1 277	140	265	311	224	145	89	39	41	22	2	27 500
Fireplaces, stoves, or portable heaters	2 658	147	248	318	398	392	333	361	275	161	24	45 500
None	190	2	6	9	13	19	15	16	16	71	21	96 500

See footnotes at end of table.

Table A-3. Value of Owner-Occupied Housing Units by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $10,000	$10,000 to $19,999	$20,000 to $29,999	$30,000 to $39,999	$40,000 to $49,999	$50,000 to $59,999	$60,000 to $74,999	$75,000 to $99,999	$100,000 to $199,999	$200,000 or more	Median (dollars)
SPECIFIED OWNER OCCUPIED[1]												
Total	43 535	633	1 775	3 410	5 000	5 985	5 136	7 081	7 247	6 008	1 261	59 700
UNITS OCCUPIED LAST WINTER												
Total	41 621	602	1 700	3 297	4 616	5 767	4 927	6 769	6 925	5 632	1 186	59 400
Insufficient Heat												
Closure of rooms:												
With heating equipment	41 447	601	1 693	3 289	4 804	5 751	4 914	6 754	6 910	5 564	1 165	59 300
No rooms closed	39 485	503	1 490	3 018	4 508	5 497	4 737	6 544	6 671	5 388	1 131	60 000
Closed certain rooms	1 564	94	193	244	251	209	134	152	156	109	22	40 000
Living room only	62	-	6	6	12	8	8	11	7	2	1	47 900
Dining room only	20	1	2	1	5	1	-	3	4	-	4	...
1 or more bedrooms only	1 041	67	157	172	172	134	98	86	81	67	7	37 200
Other rooms or combination of rooms	387	21	27	58	54	63	21	47	52	35	10	45 400
Not reported	54	5	2	7	8	4	6	5	12	6	-	53 200
Not reported	397	4	10	28	47	45	43	58	83	68	12	65 700
No heating equipment	175	1	6	7	12	15	14	15	15	67	21	102 400
Additional heat source:												
With specified heating equipment[2]	37 638	325	1 199	2 682	4 191	5 233	4 508	6 373	6 601	5 388	1 140	61 600
No additional heat source used	34 424	254	988	2 361	3 769	4 788	4 159	5 938	6 111	4 994	1 063	62 300
Used kitchen stove, fireplace, or portable heater	2 374	43	163	232	331	309	257	322	366	286	64	54 200
Not reported	840	28	47	89	91	137	92	113	123	107	13	53 000
Lacking specified heating equipment or none	3 983	277	501	615	625	533	420	396	325	244	47	39 600
Rooms lacking specified heat source:												
With specified heating equipment[2]	37 638	325	1 199	2 682	4 191	5 233	4 508	6 373	6 601	5 388	1 140	61 600
No rooms lacking air ducts, registers, radiators, or heaters	30 830	130	679	1 760	3 110	4 276	3 884	5 589	5 679	4 702	1 021	64 200
Rooms lacking air ducts, registers, radiators, or heaters	6 189	168	472	854	1 009	855	556	706	842	619	107	46 900
1 room	2 072	44	108	211	275	303	224	315	321	215	56	54 200
2 rooms	1 424	43	128	216	245	194	102	168	170	135	22	44 100
3 rooms or more	2 693	81	236	427	488	358	229	223	351	269	29	43 200
Not reported	618	27	47	68	72	102	68	77	79	67	11	49 300
Lacking specified heating equipment or none	3 983	277	501	615	625	533	420	396	325	244	47	39 600
Housing unit uncomfortably cold:												
With specified heating equipment[2]	37 638	325	1 199	2 682	4 191	5 233	4 508	6 373	6 601	5 388	1 140	61 600
Lacking specified heating equipment or none	3 983	277	501	615	625	533	420	396	325	244	47	39 600
Housing unit not uncomfortably cold for 24 hours or more	3 367	210	407	511	535	461	370	330	293	212	38	40 400
Housing unit uncomfortably cold for 24 hours or more	397	61	69	80	57	43	23	28	13	20	3	28 600
Not reported	219	7	25	24	33	30	26	39	18	12	6	46 900
SPECIFIED OWNER OCCUPIED[1]												
Total	43 535	633	1 775	3 410	5 000	5 985	5 136	7 081	7 247	6 008	1 261	59 700
Air Conditioning												
With air conditioning	27 820	219	852	1 896	3 124	3 952	3 445	4 791	4 934	3 832	775	61 300
Room units	13 032	200	743	1 518	2 259	2 207	1 562	1 798	1 635	988	123	48 100
1	7 802	170	570	1 061	1 467	1 331	916	982	814	435	56	44 800
2	3 724	24	151	392	618	647	486	561	542	268	33	50 600
3	1 060	4	18	56	142	187	103	198	183	154	14	61 500
4	295	2	4	5	28	33	41	41	70	67	5	73 100
5 or more	153	-	-	4	4	9	16	16	26	63	15	102 700
Central system	14 788	19	109	378	865	1 745	1 883	2 992	3 298	2 844	652	72 000
With no air conditioning	15 715	414	923	1 514	1 876	2 032	1 691	2 290	2 313	2 176	486	56 500

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table A-4. Gross Rent of Renter-Occupied Housing Units by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $100	$100 to $149	$150 to $199	$200 to $249	$250 to $299	$300 to $349	$350 to $399	$400 to $499	$500 or more	No cash rent	Median (dollars)
SPECIFIED RENTER OCCUPIED[1]												
Total	29 214	1 196	1 708	2 364	3 485	3 892	3 909	3 441	4 212	3 606	1 401	316
House Heating Fuel												
Utility gas	15 787	571	917	1 423	2 055	2 196	2 062	1 828	2 136	1 934	665	309
Bottled, tank, or LP gas	764	29	75	106	110	110	74	35	52	26	146	244
Fuel oil	4 609	149	278	325	518	670	665	590	627	581	205	319
Kerosene, etc.	154	7	16	28	41	21	12	4	5	4	16	222
Electricity	6 703	326	268	339	570	785	995	902	1 302	973	223	346
Coal or coke	81	11	11	11	12	8	7	5	-	-	16	196
Wood	585	74	89	74	78	47	44	34	21	18	107	201
Solar heat	6	-	-	-	-	-	2	-	2	1	2	...
Other fuel	107	6	9	12	41	7	7	6	10	7	-	230
None	418	22	25	45	59	48	41	37	57	62	21	298
Monthly Cost Paid for Electricity												
Electricity paid for	24 211	561	1 088	1 747	2 761	3 368	3 457	3 106	3 822	3 328	972	330
Less than $10	902	65	89	80	114	140	110	104	111	68	21	282
$10 to $19	3 600	182	230	390	505	574	531	388	430	293	78	289
$20 to $29	4 828	165	288	427	663	720	712	598	622	451	162	303
$30 to $39	4 316	83	213	301	562	674	673	558	599	494	159	318
$40 to $49	2 967	24	132	218	353	458	488	393	447	347	128	325
$50 to $59	2 359	21	44	156	225	305	366	369	430	327	115	351
$60 to $79	2 628	20	61	117	214	329	351	390	532	469	145	369
$80 to $99	1 096	2	23	36	64	91	127	163	303	231	58	405
$100 to $149	1 124	-	9	22	33	73	108	122	264	407	88	457
$150 or more	391	-	-	-	9	4	12	21	85	242	17	500+
Median	36	22	27	28	31	33	35	37	43	50	45	...
Included in rent	4 914	610	610	610	715	516	444	326	388	276	418	229
No electricity used	90	25	10	7	9	8	8	9	2	2	11	183
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas												
Gas paid for	14 558	252	667	1 147	1 834	2 133	2 026	1 787	2 022	2 015	677	322
Less than $10	1 868	73	118	123	257	271	278	226	278	187	57	311
$10 to $14	1 844	42	88	149	221	286	276	242	262	226	52	320
$15 to $19	1 429	27	83	116	173	234	199	179	193	185	41	315
$20 to $24	1 409	38	76	120	156	171	202	162	217	211	55	328
$25 to $29	1 102	26	81	101	141	170	116	97	138	180	53	303
$30 to $39	1 921	29	111	160	272	266	217	244	233	274	114	315
$40 to $49	1 325	11	48	122	202	191	199	158	143	171	83	312
$50 to $69	1 945	5	54	196	264	289	261	237	228	288	123	319
$70 to $99	1 016	-	8	48	105	184	157	133	174	145	62	341
$100 or more	699	-	2	14	43	71	120	109	155	149	37	387
Median	26	17	22	28	28	27	27	28	27	31	36	...
Included in rent	7 484	592	707	781	917	887	843	762	946	644	384	280
No gas used	7 191	353	334	435	734	873	1 040	892	1 244	946	340	333
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.												
Fuel oil, kerosene, coal, wood, etc., paid for	2 464	72	119	176	271	300	285	268	342	399	233	331
Less than $100	444	24	27	26	44	46	50	42	79	71	36	338
$100 to $199	344	15	25	26	35	36	34	29	45	65	32	325
$200 to $299	270	15	22	37	30	36	27	23	21	29	31	272
$300 to $399	231	11	13	35	42	39	16	18	15	21	21	256
$400 to $499	155	4	11	17	25	16	23	16	13	16	15	291
$500 to $599	176	3	8	15	34	17	25	18	31	14	10	312
$600 to $699	141	-	7	11	15	28	15	16	16	15	16	303
$700 to $799	128	1	3	4	11	18	16	24	13	19	19	353
$800 or more	574	-	3	6	35	63	78	81	107	149	52	395
Median	375	180	234	297	364	382	465	530	483	483	380	...
Included in rent	4 863	231	355	383	564	688	691	615	639	521	177	309
Fuels not used or free	21 887	893	1 234	1 805	2 650	2 904	2 934	2 558	3 230	2 687	991	316
Heating Equipment												
Warm-air furnace	11 721	269	411	644	1 151	1 499	1 671	1 572	1 998	1 911	595	347
Heat pump	417	7	12	7	10	40	48	65	101	106	23	409
Steam or hot water	6 727	285	425	510	861	975	1 002	871	919	716	163	311
Built-in electric units	3 224	253	216	226	385	438	449	339	476	346	93	305
Floor, wall, or pipeless furnace	2 907	108	140	295	332	396	395	337	446	356	103	316
Room heaters with flue	1 579	72	176	277	318	223	133	92	115	64	109	232
Room heaters without flue	1 227	84	174	229	213	169	100	82	38	21	137	213
Fireplaces, stoves, or portable heaters	993	96	129	131	154	104	71	67	59	24	157	220
None	418	22	25	45	59	48	41	37	57	62	21	298

See footnotes at end of table.

Table A-4. Gross Rent of Renter-Occupied Housing Units by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $100	$100 to $149	$150 to $199	$200 to $249	$250 to $299	$300 to $349	$350 to $399	$400 to $499	$500 or more	No cash rent	Median (dollars)
SPECIFIED RENTER OCCUPIED[1]												
Total	29 214	1 196	1 708	2 364	3 485	3 892	3 909	3 441	4 212	3 606	1 401	316
UNITS OCCUPIED LAST WINTER												
Total	21 279	996	1 429	1 811	2 547	2 859	2 611	2 395	2 939	2 315	1 175	307
Insufficient Heat												
Closure of rooms:												
With heating equipment	21 008	986	1 410	1 789	2 511	2 823	2 777	2 371	2 896	2 284	1 162	307
No rooms closed	19 246	899	1 285	1 602	2 272	2 606	2 543	2 181	2 651	2 152	1 055	308
Closed certain rooms	1 448	70	106	163	206	181	196	159	188	89	90	286
Living room only	95	3	12	13	10	15	14	8	10	6	5	273
Dining room only	19	-	1	2	6	-	3	1	2	2	2	...
1 or more bedrooms only	951	41	67	109	129	125	133	108	127	55	58	289
Other rooms or combination of rooms	363	23	26	36	61	34	44	42	48	26	23	285
Not reported	20	3	-	3	-	7	2	1	2	-	3	...
Not reported	315	17	19	24	33	37	37	31	57	43	17	325
No heating equipment	270	12	19	22	36	36	34	24	43	31	13	306
Additional heat source:												
With specified heating equipment[2]	19 288	825	1 171	1 500	2 255	2 626	2 643	2 280	2 825	2 257	906	315
No additional heat source used	16 281	699	1 000	1 234	1 860	2 190	2 238	1 914	2 396	1 979	771	317
Used kitchen stove, fireplace, or portable heater	2 442	109	126	194	314	345	353	315	374	226	85	313
Not reported	566	17	45	72	81	91	52	51	56	52	50	273
Lacking specified heating equipment or none	1 991	173	258	311	292	233	168	115	113	59	269	220
Rooms lacking specified heat source:												
With specified heating equipment[2]	19 288	825	1 171	1 500	2 255	2 626	2 643	2 280	2 825	2 257	906	315
No rooms lacking air ducts, registers, radiators, or heaters	15 137	674	872	1 052	1 637	2 053	2 129	1 889	2 300	1 871	659	322
Rooms lacking air ducts, registers, radiators, or heaters	3 730	139	251	388	562	503	483	344	489	363	208	291
1 room	1 342	54	100	138	185	205	170	147	160	121	63	289
2 rooms	1 138	41	74	105	164	152	157	97	190	107	53	302
3 rooms or more	1 249	44	78	145	213	147	156	100	139	136	91	283
Not reported	421	11	48	61	55	70	31	47	36	23	39	261
Lacking specified heating equipment or none	1 991	173	258	311	292	233	168	115	113	59	269	220
Housing unit uncomfortably cold:												
With specified heating equipment[2]	19 288	825	1 171	1 500	2 255	2 626	2 643	2 280	2 825	2 257	906	315
Lacking specified heating equipment or none	1 991	173	258	311	292	233	168	115	113	59	269	220
Housing unit not uncomfortably cold for 24 hours or more	1 492	123	193	212	232	153	133	100	93	45	207	224
Housing unit uncomfortably cold for 24 hours or more	411	46	58	81	50	64	29	10	16	7	49	196
Not reported	88	3	7	17	10	16	5	5	4	7	13	248
SPECIFIED RENTER OCCUPIED[1]												
Total	29 214	1 196	1 708	2 364	3 485	3 892	3 909	3 441	4 212	3 606	1 401	316
Air Conditioning												
With air conditioning	15 040	347	570	849	1 408	1 866	2 211	2 078	2 696	2 287	729	347
Room units	8 560	233	427	701	1 125	1 231	1 220	1 053	1 203	900	466	313
1	6 574	216	378	611	954	1 013	956	785	816	521	324	297
2	1 633	16	46	79	154	196	238	226	309	258	111	357
3	284	2	2	6	14	18	19	38	66	102	17	452
4	48	-	2	5	4	4	5	4	9	12	5	383
5 or more	21	-	-	-	-	-	2	-	3	7	9	...
Central system	6 480	113	142	148	283	634	991	1 025	1 493	1 387	263	388
With no air conditioning	14 174	850	1 138	1 514	2 077	2 026	1 698	1 364	1 516	1 319	672	278

[1]Excludes one-unit structures on 10 acres or more.
[2]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table A-5. Housing Units in Structure by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Housing units in structure					
		1	2 to 4	5 to 9	10 to 19	20 or more	Mobile home or trailer
ALL OCCUPIED HOUSING UNITS							
Total	84 638	57 653	10 061	3 953	3 358	5 614	3 999
House Heating Fuel							
Owner occupied	54 724	48 085	2 263	317	193	630	3 236
Utility gas	30 776	27 762	1 413	175	84	172	1 171
Bottled, tank, or LP gas	2 955	2 209	15	-	4	2	724
Fuel oil	7 877	6 843	486	26	11	184	327
Kerosene, etc.	284	201	4	-	-	-	79
Electricity	8 916	7 431	316	112	91	246	720
Coal or coke	330	321	2	2	-	-	5
Wood	3 287	3 079	17	1	-	-	191
Solar heat	19	19	-	-	-	-	-
Other fuel	24	21	1	-	-	2	-
None	256	198	10	2	2	25	19
Renter occupied	29 914	9 568	7 797	3 636	3 165	4 984	763
Utility gas	15 925	5 528	4 957	1 866	1 540	1 773	261
Bottled, tank, or LP gas	914	606	76	17	7	7	202
Fuel oil	4 708	1 028	1 114	430	436	1 611	89
Kerosene, etc.	162	93	29	7	2	-	32
Electricity	6 767	1 311	1 486	1 262	1 138	1 421	149
Coal or coke	102	78	7	7	6	3	-
Wood	800	747	30	-	-	-	22
Solar heat	6	2	2	2	-	-	-
Other fuel	109	4	4	5	9	87	-
None	421	170	92	41	28	82	9
Monthly Cost Paid for Electricity							
Specified owner occupied[1]	43 535	43 535	-	-	-	-	-
Electricity paid for	43 507	43 507	...	...	...	...	...
Less than $10	140	140	...	...	...	...	...
$10 to $19	1 657	1 657	...	...	...	...	...
$20 to $29	4 186	4 186	...	...	...	...	...
$30 to $39	6 232	6 232	...	...	...	...	...
$40 to $49	5 729	5 729	...	...	...	...	...
$50 to $59	5 897	5 897	...	...	...	...	...
$60 to $79	8 429	8 429	...	...	...	...	...
$80 to $99	3 978	3 978	...	...	...	...	...
$100 to $149	5 085	5 085	...	...	...	...	...
$150 or more	2 174	2 174	...	...	...	...	...
Median	56	56	...	...	...	...	...
No electricity used	28	28	...	...	...	...	...
Specified renter occupied[2]	29 214	8 868	7 797	3 636	3 165	4 984	763
Electricity paid for	24 211	8 199	6 610	2 872	2 612	3 246	672
Less than $10	902	99	254	158	171	207	12
$10 to $19	3 600	671	1 125	604	504	647	49
$20 to $29	4 628	1 340	1 560	539	510	781	98
$30 to $39	4 316	1 435	1 263	458	448	594	118
$40 to $49	2 967	1 098	798	318	321	345	87
$50 to $59	2 359	963	533	278	223	276	86
$60 to $79	2 628	1 198	605	270	231	219	105
$80 to $99	1 096	528	205	135	91	97	39
$100 to $149	1 124	630	204	87	90	56	57
$150 or more	391	236	61	24	25	25	20
Median	36	45	33	33	32	29	46
Included in rent	4 914	645	1 160	754	549	1 715	91
No electricity used	90	24	27	10	5	22	1
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas							
Specified owner occupied[1]	43 535	43 535	-	-	-	-	-
Gas paid for	31 849	31 849	...	...	...	...	...
Less than $10	876	876	...	...	...	...	...
$10 to $14	1 292	1 292	...	...	...	...	...
$15 to $19	1 419	1 419	...	...	...	...	...
$20 to $24	2 088	2 088	...	...	...	...	...
$25 to $29	1 905	1 905	...	...	...	...	...
$30 to $39	4 308	4 308	...	...	...	...	...
$40 to $49	4 035	4 035	...	...	...	...	...
$50 to $69	7 884	7 884	...	...	...	...	...
$70 to $99	5 126	5 126	...	...	...	...	...
$100 or more	2 918	2 918	...	...	...	...	...
Median	50	50	...	...	...	...	...
No gas used	11 686	11 686	...	...	...	...	...
Specified renter occupied[2]	29 214	8 868	7 797	3 636	3 165	4 984	763
Gas paid for	14 558	6 088	4 562	1 328	866	1 223	492
Less than $10	1 868	284	544	316	280	395	49
$10 to $14	1 844	458	561	253	177	335	58
$15 to $19	1 429	488	463	162	110	169	37
$20 to $24	1 409	556	453	137	72	121	69
$25 to $29	1 102	529	337	69	55	58	55
$30 to $39	1 921	966	582	147	61	84	80
$40 to $49	1 325	721	401	80	54	29	40
$50 to $69	1 945	1 141	593	104	38	11	58
$70 to $99	1 016	581	361	27	9	16	23
$100 or more	699	363	266	34	9	5	22
Median	28	37	28	17	13	13	27
Included in rent	7 464	916	1 620	1 193	1 215	2 416	105
No gas used	7 191	1 864	1 615	1 115	1 085	1 345	166

See footnotes at end of table.

Table A-5. Housing Units in Structure by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Housing units in structure					
		1	2 to 4	5 to 9	10 to 19	20 or more	Mobile home or trailer
ALL OCCUPIED HOUSING UNITS—Con.							
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.							
Specified owner occupied[1]	43 535	43 535	-	-	-	-	-
Fuel oil, kerosene, coal, wood, etc., paid for	11 239	11 239	...	...	...	...	...
Less than $100	1 776	1 776	...	...	...	...	...
$100 to $199	1 552	1 552	...	...	...	...	...
$200 to $299	965	965	...	...	...	...	...
$300 to $399	842	842	...	...	...	...	...
$400 to $499	685	685	...	...	...	...	...
$500 to $599	683	683	...	...	...	...	...
$600 to $699	759	759	...	...	...	...	...
$700 to $799	546	546	...	...	...	...	...
$800 or more	3 431	3 431	...	...	...	...	...
Median	470	470	...	...	...	...	...
Fuels not used or free	32 296	32 296	...	...	...	...	...
Specified renter occupied[2]	29 214	8 868	7 797	3 636	3 165	4 984	763
Fuel oil, kerosene, coal, wood, etc., paid for	2 464	1 672	543	48	28	39	134
Less than $100	444	271	89	19	26	23	16
$100 to $199	344	252	57	12	1	11	12
$200 to $299	270	187	57	5	2	4	16
$300 to $399	231	162	43	1	-	-	25
$400 to $499	155	113	28	2	-	-	12
$500 to $599	176	109	41	4	-	-	22
$600 to $699	141	95	34	2	-	-	10
$700 to $799	128	90	28	-	-	-	10
$800 or more	574	393	166	4	-	1	10
Median	375	377	493	142	...	100-	389
Included in rent	4 863	557	1 341	606	551	1 765	43
Fuels not used or free	21 887	6 638	5 913	2 982	2 586	3 181	586
ALL OCCUPIED HOUSING UNITS							
Total	84 638	57 653	10 061	3 953	3 358	5 614	3 999
Heating Equipment							
Owner occupied	54 724	49 085	2 263	317	193	630	3 236
Warm-air furnace	32 391	28 389	873	174	88	243	2 626
Heat pump	1 750	1 579	65	27	12	45	22
Steam or hot water	7 007	5 795	906	49	35	212	11
Built-in electric units	2 944	2 520	144	41	57	92	91
Floor, wall, or pipeless furnace	3 028	2 813	89	6	2	6	112
Room heaters with flue	1 797	1 637	90	15	-	2	54
Room heaters without flue	1 622	1 507	51	-	-	2	62
Fireplaces, stoves, or portable heaters	3 929	3 647	35	3	-	4	240
None	256	198	10	2	2	25	19
Renter occupied	29 914	9 568	7 797	3 636	3 165	4 984	763
Warm-air furnace	11 929	4 086	3 016	1 477	1 338	1 418	593
Heat pump	421	127	96	60	46	90	3
Steam or hot water	6 765	666	2 005	935	900	2 257	2
Built-in electric units	3 263	552	787	558	490	850	25
Floor, wall, or pipeless furnace	2 949	1 263	828	327	256	233	41
Room heaters with flue	1 641	813	541	157	77	38	18
Room heaters without flue	1 304	905	296	50	22	-	31
Fireplaces, stoves, or portable heaters	1 223	987	137	31	9	18	42
None	421	170	92	41	28	82	9
ALL OCCUPIED HOUSING UNITS							
Total	84 638	57 653	10 061	3 953	3 358	5 614	3 999
UNITS OCCUPIED LAST WINTER							
Total	73 908	53 122	7 901	2 814	2 353	4 422	3 296
Insufficient Heat							
Closure of rooms:							
Owner occupied	52 031	46 049	2 123	268	167	566	2 858
With heating equipment	51 796	45 868	2 115	266	165	541	2 842
No rooms closed	49 239	43 552	2 016	255	158	532	2 727
Closed certain rooms	2 021	1 853	78	4	5	3	80
Living room only	87	75	10	1	-	-	2
Dining room only	27	24	2	-	-	-	2
1 or more bedrooms only	1 352	1 240	36	3	5	1	66
Other rooms or combination of rooms	491	454	27	-	-	2	9
Not reported	64	60	2	-	-	-	2
Not reported	536	461	24	8	2	6	35
No heating equipment	235	183	8	2	2	25	16
Renter occupied	21 877	7 073	5 778	2 546	2 186	3 856	438
With heating equipment	21 606	6 964	5 719	2 519	2 165	3 807	433
No rooms closed	19 758	6 154	5 244	2 336	2 052	3 573	399
Closed certain rooms	1 527	716	390	147	76	177	21
Living room only	98	30	25	11	13	19	-
Dining room only	19	12	2	2	-	3	-
1 or more bedrooms only	999	479	257	92	49	105	18
Other rooms or combination of rooms	389	183	101	40	15	47	3
Not reported	23	13	5	3	-	2	-
Not reported	321	94	85	36	36	57	13
No heating equipment	270	109	59	27	21	49	4

See footnotes at end of table.

Table A-5. Housing Units in Structure by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Housing units in structure: 1	2 to 4	5 to 9	10 to 19	20 or more	Mobile home or trailer
UNITS OCCUPIED LAST WINTER—Con.							
Insufficient Heat—Con.							
Additional heat source:							
Owner occupied	52 031	46 049	2 123	268	167	566	2 858
With specified heating equipment[3]	46 421	40 857	2 030	263	165	537	2 568
No additional heat source used	42 341	37 260	1 876	245	151	487	2 322
Used kitchen stove, fireplace, or portable heater	2 961	2 639	108	8	5	33	169
Not reported	1 119	958	46	11	9	18	77
Lacking specified heating equipment or none	5 610	5 191	94	5	2	28	290
Renter occupied	21 877	7 073	5 778	2 546	2 186	3 856	438
With specified heating equipment[3]	19 616	5 431	5 387	2 476	2 140	3 795	386
No additional heat source used	16 551	4 482	4 570	2 118	1 874	3 173	334
Used kitchen stove, fireplace, or portable heater	2 480	753	659	285	213	535	36
Not reported	585	197	158	73	54	87	16
Lacking specified heating equipment or none	2 261	1 642	391	70	45	62	51
Rooms lacking specified heat source:							
Owner occupied	52 031	46 049	2 123	268	167	566	2 858
With specified heating equipment[3]	46 421	40 857	2 030	263	165	537	2 568
No rooms lacking air ducts, registers, radiators, or heaters	38 219	33 160	1 717	232	153	504	2 453
Rooms lacking air ducts, registers, radiators, or heaters	7 358	6 974	276	23	6	21	57
1 room	2 448	2 271	111	9	6	16	34
2 rooms	1 720	1 619	79	8	-	4	10
3 rooms or more	3 190	3 084	86	5	1	1	13
Not reported	844	723	36	8	5	13	58
Lacking specified heating equipment or none	5 610	5 191	94	5	2	28	290
Renter occupied	21 877	7 073	5 778	2 546	2 186	3 856	438
With specified heating equipment[3]	19 616	5 431	5 387	2 476	2 140	3 795	386
No rooms lacking air ducts, registers, radiators, or heaters	15 325	3 519	4 099	2 004	1 863	3 479	361
Rooms lacking air ducts, registers, radiators, or heaters	3 849	1 742	1 174	407	245	260	20
1 room	1 370	458	434	195	136	142	5
2 rooms	1 174	491	396	137	70	78	3
3 rooms or more	1 305	792	345	76	40	40	12
Not reported	442	170	113	65	32	55	6
Lacking specified heating equipment or none	2 261	1 642	391	70	45	62	51
Housing unit uncomfortably cold:							
Owner occupied	52 031	46 049	2 123	268	167	566	2 858
With specified heating equipment[3]	46 421	40 857	2 030	263	165	537	2 568
Lacking specified heating equipment or none	5 610	5 191	94	5	2	28	290
Housing unit not uncomfortably cold for 24 hours or more	4 767	4 405	74	3	2	28	255
Housing unit uncomfortably cold for 24 hours or more	540	509	6	2	-	-	24
Not reported	303	277	13	-	-	-	12
Renter occupied	21 877	7 073	5 778	2 546	2 186	3 856	438
With specified heating equipment[3]	19 616	5 431	5 387	2 476	2 140	3 795	386
Lacking specified heating equipment or none	2 261	1 642	391	70	45	62	51
Housing unit not uncomfortably cold for 24 hours or more	1 705	1 249	284	51	25	57	39
Housing unit uncomfortably cold for 24 hours or more	459	341	84	12	15	-	7
Not reported	97	53	22	7	6	5	5
ALL OCCUPIED HOUSING UNITS							
Total	84 638	57 653	10 061	3 953	3 358	5 614	3 999
Air Conditioning							
Owner occupied	54 724	48 085	2 263	317	193	630	3 236
With air conditioning	34 692	30 335	1 311	222	141	556	2 127
Room units	16 563	14 324	926	51	60	201	1 000
1	10 164	8 671	539	28	40	76	809
2	4 580	4 017	284	13	12	79	175
3	1 301	1 150	83	9	6	40	12
4	347	323	18	-	-	2	3
5 or more	172	163	2	-	3	4	1
Central system	18 130	16 011	385	172	80	354	1 127
With no air conditioning	20 032	17 750	952	94	52	74	1 109
Renter occupied	29 914	9 568	7 797	3 636	3 165	4 984	763
With air conditioning	15 315	4 476	3 375	1 976	2 096	2 965	428
Room units	8 765	2 834	2 224	860	937	1 614	297
1	6 723	2 065	1 719	716	788	1 179	256
2	1 678	607	429	125	131	344	41
3	294	126	64	14	16	74	-
4	49	21	9	3	2	14	-
5 or more	21	14	2	2	-	3	-
Central system	6 550	1 642	1 151	1 116	1 158	1 351	131
With no air conditioning	14 599	5 092	4 422	1 661	1 070	2 019	336

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table A-6. Number of Rooms Per Housing Unit by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms or more	Median rooms
ALL OCCUPIED HOUSING UNITS									
Total	84 638	1 064	2 151	8 173	16 017	20 420	17 468	19 344	5.2
House Heating Fuel									
Owner occupied									
Utility gas	54 724	95	230	1 320	6 626	14 494	14 395	17 566	5.8
Bottled, tank, or LP gas	30 776	28	64	583	3 293	8 250	8 302	10 258	5.9
Fuel oil	2 955	26	55	137	652	900	665	521	5.2
Kerosene, etc.	7 877	2	33	169	854	1 812	2 156	2 851	6.0
Electricity	284	-	-	10	90	100	49	35	4.9
Coal or coke	8 916	13	34	282	1 213	2 366	2 211	2 796	5.7
Wood	330	-	3	7	42	80	72	127	6.0
Solar heat	3 287	18	29	112	440	912	679	897	5.6
Other fuel	19	-	-	-	-	1	5	13	...
None	24	2	-	-	2	3	5	12	[illegible]
	256	6	13	21	40	69	50	56	5.2
Renter occupied									
Utility gas	29 914	969	1 921	6 853	9 392	5 927	3 074	1 778	4.0
Bottled, tank, or LP gas	15 925	392	910	3 441	4 994	3 443	1 812	933	4.1
Fuel oil	914	16	26	111	300	243	134	84	4.5
Kerosene, etc.	4 708	231	295	1 255	1 313	856	439	318	3.9
Electricity	162	3	8	26	48	46	14	16	4.4
Coal or coke	6 767	223	562	1 811	2 417	1 048	443	263	3.8
Wood	102	5	4	8	17	23	18	25	5.2
Solar heat	800	9	27	67	195	195	179	128	5.0
Other fuel	6	-	-	2	4	-	-	1	...
None	109	42	19	27	12	6	1	4	2.2
	421	48	71	106	93	65	32	7	3.4
Monthly Cost Paid for Electricity									
Specified owner occupied[1]									
Electricity paid for	43 535	32	63	493	3 689	11 368	12 451	15 439	6.0
Less than $10	43 507	30	60	490	3 680	11 364	12 447	15 436	6.0
$10 to $19	140	-	3	11	27	51	25	23	5.1
$20 to $29	1 657	5	12	93	305	530	414	298	5.3
$30 to $39	4 186	3	7	76	648	1 385	1 146	921	5.5
$40 to $49	6 232	6	12	98	699	1 880	1 867	1 669	5.7
$50 to $59	5 729	3	13	65	560	1 662	1 667	1 759	5.8
$60 to $79	5 897	5	2	48	477	1 605	1 763	1 998	6.0
$80 to $99	8 429	4	6	85	540	2 065	2 493	3 255	6.1
$100 to $149	3 978	-	2	14	178	895	1 181	1 708	6.3
$150 or more	5 085	3	2	18	188	961	1 406	2 506	6.5
Median	2 174	2	1	2	57	328	485	1 299	6.5+
No electricity used	56	...	36	36	43	51	56	66	...
	28	3	2	3	9	4	3	3	...
Specified renter occupied[2]									
Electricity paid for	29 214	966	1 907	6 826	9 256	5 752	2 929	1 578	4.0
Less than $10	24 211	291	1 150	5 367	8 095	5 198	2 684	1 426	4.1
$10 to $19	902	23	147	395	216	87	19	14	3.2
$20 to $29	3 600	75	295	1 259	1 213	522	178	58	3.6
$30 to $39	4 828	83	243	1 308	1 699	942	407	146	3.9
$40 to $49	4 316	45	192	897	1 495	1 002	463	222	4.2
$50 to $59	2 967	29	93	556	1 041	690	367	191	4.3
$60 to $79	2 359	19	73	360	829	598	303	176	4.4
$80 to $99	2 628	10	67	343	880	646	421	261	4.5
$100 to $149	1 096	5	20	120	371	291	161	128	4.6
$150 or more	1 124	2	15	95	274	329	251	159	5.0
Median	391	-	6	35	77	91	113	69	5.3
Included in rent	38	25	25	27	36	41	47	54	...
No electricity used	4 914	651	750	1 434	1 140	547	240	151	3.2
	90	23	8	24	22	7	4	1	3.1
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas									
Specified owner occupied[1]									
Gas paid for	43 535	32	63	493	3 689	11 368	12 451	15 439	6.0
Less than $10	31 849	24	40	360	2 732	8 341	9 146	11 207	6.0
$10 to $14	876	2	3	31	108	230	260	242	5.7
$15 to $19	1 292	4	4	39	180	395	382	306	5.6
$20 to $24	1 419	-	1	43	180	449	423	323	5.6
$25 to $29	2 088	-	5	25	251	649	625	532	5.7
$30 to $39	1 905	4	7	40	198	567	575	514	5.7
$40 to $49	4 308	2	6	59	495	1 319	1 243	1 184	5.7
$50 to $69	4 035	6	7	38	365	1 219	1 151	1 250	5.8
$70 to $99	7 884	4	3	50	608	2 063	2 337	2 818	6.0
$100 or more	5 126	2	2	22	241	1 058	1 476	2 325	6.3
Median	2 918	2	1	14	107	390	694	1 710	6.5+
No gas used	50	...	29	30	38	44	48	58	...
	11 686	8	22	132	958	3 027	3 305	4 233	6.0
Specified renter occupied[2]									
Gas paid for	29 214	966	1 907	6 826	9 256	5 752	2 929	1 578	4.0
Less than $10	14 558	139	589	2 711	4 686	3 502	1 957	994	4.3
$10 to $14	1 868	56	187	648	599	265	58	55	3.6
$15 to $19	1 844	25	126	508	668	354	124	39	3.9
$20 to $24	1 429	17	69	344	531	274	137	57	4.0
$25 to $29	1 409	5	61	291	467	332	199	54	4.2
$30 to $39	1 102	8	33	189	409	279	131	52	4.3
$40 to $49	1 921	7	44	261	681	553	253	122	4.4
$50 to $69	1 325	6	25	181	394	385	228	126	4.7
$70 to $99	1 945	10	15	183	570	526	396	245	4.9
$100 or more	1 016	3	9	65	224	325	255	137	5.1
Median	699	2	1	59	143	210	178	107	5.2
Included in rent	28	12	13	17	26	34	43	48	...
No gas used	7 464	539	786	2 347	2 141	1 063	398	189	3.5
	7 191	288	552	1 768	2 429	1 186	573	394	3.9

See footnotes at end of table.

Table A-6. Number of Rooms Per Housing Unit by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms or more	Median rooms
ALL OCCUPIED HOUSING UNITS—Con.									
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.									
Specified owner occupied[1]	43 535	32	63	493	3 689	11 368	12 451	15 439	6.0
Fuel oil, kerosene, coal, wood, etc., paid for	11 239	4	17	105	886	2 454	3 257	4 515	6.2
Less than $100	1 776	3	2	17	102	354	506	793	6.3
$100 to $199	1 552	-	4	17	113	353	442	624	6.1
$200 to $299	965	1	5	16	74	230	261	378	6.1
$300 to $399	842	1	2	16	123	202	215	285	5.9
$400 to $499	685	-	1	13	101	198	184	189	5.7
$500 to $599	683	-	-	4	63	174	199	243	6.0
$600 to $699	759	-	1	5	88	198	226	241	5.9
$700 to $799	546	-	2	6	49	132	161	196	6.0
$800 or more	3 431	-	1	12	173	614	1 063	1 566	6.4
Median	470	...	...	319	431	444	510	493	...
Fuels not used or free	32 296	28	46	387	2 804	8 914	9 194	10 924	5.9
Specified renter occupied[2]	29 214	966	1 907	6 826	9 256	5 752	2 929	1 578	4.0
Fuel oil, kerosene, coal, wood, etc., paid for	2 464	7	34	222	616	665	523	398	5.0
Less than $100	444	3	11	54	117	110	99	49	4.8
$100 to $199	344	2	5	38	101	83	65	51	4.8
$200 to $299	270	2	10	31	80	69	50	26	4.7
$300 to $399	231	-	5	19	73	61	41	32	4.8
$400 to $499	155	-	1	15	35	48	29	27	5.0
$500 to $599	176	-	-	15	53	51	37	19	4.9
$600 to $699	141	-	-	12	31	44	34	21	5.1
$700 to $799	128	-	2	11	27	28	32	29	5.4
$800 or more	574	-	1	26	99	170	136	142	5.4
Median	375	...	...	263	313	417	422	562	...
Included in rent	4 883	309	419	1 519	1 426	764	320	106	3.6
Fuels not used or free	21 887	650	1 454	5 085	7 214	4 323	2 086	1 074	4.0
ALL OCCUPIED HOUSING UNITS									
Total	84 638	1 064	2 151	8 173	16 017	20 420	17 468	19 344	5.2
Heating Equipment									
Owner occupied	54 724	95	230	1 320	6 626	14 494	14 395	17 566	5.8
Warm-air furnace	32 391	23	73	575	3 562	8 512	8 654	10 991	5.9
Heat pump	1 750	2	2	41	135	350	424	796	6.3
Steam or hot water	7 007	9	17	142	546	1 344	1 949	3 000	6.2
Built-in electric units	2 944	2	21	120	441	875	722	762	5.5
Floor, wall, or pipeless furnace	3 028	10	25	94	598	1 063	802	436	5.2
Room heaters with flue	1 797	8	28	78	403	621	379	280	5.1
Room heaters without flue	1 622	7	10	93	331	545	410	225	5.2
Fireplaces, stoves, or portable heaters	3 929	28	40	155	569	1 114	1 004	1 019	5.5
None	256	6	13	21	40	69	50	56	5.2
Renter occupied	29 914	969	1 921	6 853	9 392	5 927	3 074	1 778	4.0
Warm-air furnace	11 929	150	461	2 266	3 766	2 759	1 551	976	4.3
Heat pump	421	5	14	100	164	85	38	35	4.0
Steam or hot water	6 785	437	520	1 899	1 974	1 139	497	299	3.8
Built-in electric units	3 263	166	365	982	1 074	404	162	91	3.6
Floor, wall, or pipeless furnace	2 949	55	245	757	1 068	513	225	86	3.9
Room heaters with flue	1 641	47	99	312	527	374	202	81	4.2
Room heaters without flue	1 304	17	81	281	398	319	150	57	4.2
Fireplaces, stoves, or portable heaters	1 223	24	66	152	328	268	218	147	4.6
None	421	48	71	106	93	65	32	7	3.4
ALL OCCUPIED HOUSING UNITS									
Total	84 638	1 064	2 151	8 173	16 017	20 420	17 468	19 344	5.2
UNITS OCCUPIED LAST WINTER									
Total	73 908	742	1 531	6 203	12 938	18 264	16 193	18 038	5.3
Insufficient Heat									
Closure of rooms:									
Owner occupied	52 031	75	202	1 192	6 169	13 801	13 839	16 753	5.8
With heating equipment	51 796	72	189	1 176	6 131	13 735	13 792	16 701	5.8
No rooms closed	49 239	69	178	1 112	5 801	13 040	13 147	15 893	5.8
Closed certain rooms	2 021	2	9	43	260	564	505	639	5.8
Living room only	87	-	-	2	15	25	20	25	5.5
Dining room only	27	-	-	-	2	12	5	9	...
1 or more bedrooms only	1 352	1	6	32	197	395	347	375	5.6
Other rooms or combination of rooms	491	1	1	8	44	111	125	201	6.1
Not reported	64	-	2	2	2	21	9	29	6.1
Not reported	536	2	3	21	70	131	139	170	5.8
No heating equipment	235	3	13	16	38	67	47	51	5.2
Renter occupied	21 877	667	1 329	5 011	6 768	4 463	2 354	1 285	4.1
With heating equipment	21 606	641	1 291	4 945	6 701	4 419	2 328	1 261	4.1
No rooms closed	19 758	614	1 233	4 650	6 137	3 946	2 059	1 118	4.0
Closed certain rooms	1 527	10	31	210	486	401	241	147	4.6
Living room only	98	2	-	29	33	22	7	5	4.0
Dining room only	19	-	2	3	3	7	2	2	...
1 or more bedrooms only	999	5	22	117	343	257	163	91	4.5
Other rooms or combination of rooms	389	4	6	57	101	107	66	47	4.7
Not reported	23	-	1	3	5	9	3	2	...
Not reported	321	16	27	85	78	72	28	16	3.9
No heating equipment	270	26	38	66	67	44	25	4	3.6
Additional heat source:									
Owner occupied	52 031	75	202	1 192	6 169	13 801	13 839	16 753	5.8
With specified heating equipment[3]	46 421	45	141	934	5 266	12 122	12 419	15 493	5.9
No additional heat source used	42 341	44	120	834	4 741	11 126	11 419	14 057	5.9
Used kitchen stove, fireplace, or portable heater	2 961	1	12	72	347	686	704	1 138	6.0
Not reported	1 119	-	9	28	178	310	296	299	5.6
Lacking specified heating equipment or none	5 610	30	61	257	903	1 679	1 420	1 259	5.4

See footnotes at end of table.

Table A-6. Number of Rooms Per Housing Unit by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms or more	Median rooms
UNITS OCCUPIED LAST WINTER—Con.									
Insufficient Heat—Con.									
Additional heat source—Con.									
Renter occupied	21 877	667	1 329	5 011	6 768	4 463	2 354	1 285	4.1
With specified heating equipment[3]	19 616	607	1 189	4 633	6 126	3 917	2 018	1 126	4.0
No additional heat source used	16 551	532	1 027	3 980	5 202	3 248	1 629	932	4.0
Used kitchen stove, fireplace, or portable heater	2 480	54	119	511	740	560	329	167	4.2
Not reported	585	21	43	142	183	109	60	27	4.0
Lacking specified heating equipment or none	2 261	60	140	378	643	546	336	159	4.4
Rooms lacking specified heat source:									
Owner occupied	52 031	75	202	1 192	6 169	13 801	13 839	16 753	5.8
With specified heating equipment[3]	46 421	45	141	934	5 266	12 122	12 419	15 493	5.9
No rooms lacking air ducts, registers, radiators, or heaters	38 219	38	107	771	4 211	9 920	10 208	12 964	5.9
Rooms lacking air ducts, registers, radiators, or heaters	7 358	5	23	141	908	1 962	1 977	2 341	5.8
1 room	2 448	5	17	82	182	499	673	989	6.1
2 rooms	1 720	-	6	41	363	422	396	492	5.6
3 rooms or more	3 190	-	-	18	363	1 040	908	860	5.7
Not reported	844	2	11	22	147	240	234	188	5.5
Lacking specified heating equipment or none	5 610	30	61	257	903	1 679	1 420	1 259	5.4
Renter occupied	21 877	667	1 329	5 011	6 768	4 463	2 354	1 285	4.1
With specified heating equipment[3]	19 616	607	1 189	4 633	6 126	3 917	2 018	1 126	4.0
No rooms lacking air ducts, registers, radiators, or heaters	15 325	582	1 018	3 759	4 683	2 992	1 487	804	4.0
Rooms lacking air ducts, registers, radiators, or heaters	3 849	15	152	756	1 300	842	480	303	4.3
1 room	1 370	15	117	496	282	224	136	100	3.7
2 rooms	1 174	-	35	207	615	164	100	54	4.1
3 rooms or more	1 305	-	-	53	404	455	244	150	4.9
Not reported	442	10	18	118	143	82	51	19	4.0
Lacking specified heating equipment or none	2 261	60	140	378	643	546	336	159	4.4
Housing unit uncomfortably cold:									
Owner occupied	52 031	75	202	1 192	6 169	13 801	13 839	16 753	5.8
With specified heating equipment[3]	46 421	45	141	934	5 266	12 122	12 419	15 493	5.9
Lacking specified heating equipment or none	5 610	30	61	257	903	1 679	1 420	1 259	5.4
Housing unit not uncomfortably cold for 24 hours or more	4 767	26	39	210	770	1 438	1 207	1 077	5.4
Housing unit uncomfortably cold for 24 hours or more	540	3	15	33	98	160	120	111	5.2
Not reported	303	2	7	14	35	80	93	71	5.6
Renter occupied	21 877	667	1 329	5 011	6 768	4 463	2 354	1 285	4.1
With specified heating equipment[3]	19 616	607	1 189	4 633	6 126	3 917	2 018	1 126	4.0
Lacking specified heating equipment or none	2 261	60	140	378	643	546	336	159	4.4
Housing unit not uncomfortably cold for 24 hours or more	1 705	44	106	253	500	416	261	126	4.4
Housing unit uncomfortably cold for 24 hours or more	459	14	27	105	113	111	62	27	4.2
Not reported	97	2	6	20	30	20	13	6	4.2
ALL OCCUPIED HOUSING UNITS									
Total	84 638	1 064	2 151	8 173	16 017	20 420	17 468	19 344	5.2
Air Conditioning									
Owner occupied	54 724	95	230	1 320	6 626	14 494	14 395	17 566	5.8
With air conditioning	34 692	53	119	730	3 975	9 071	9 244	11 501	5.9
Room units	16 563	32	86	437	2 330	4 725	4 574	4 379	5.6
1	10 164	29	69	340	1 685	3 175	2 619	2 247	5.4
2	4 580	2	17	92	519	1 222	1 417	1 312	5.8
3	1 301	2	-	4	111	266	391	526	6.2
4	347	-	-	-	15	52	107	173	6.5
5 or more	172	-	-	-	-	11	39	122	6.5+
Central system	18 130	20	33	293	1 645	4 346	4 670	7 122	6.1
With no air conditioning	20 032	42	111	590	2 650	5 422	5 151	6 065	5.7
Renter occupied	29 914	969	1 921	6 853	9 392	5 927	3 074	1 778	4.0
With air conditioning	15 315	325	830	3 615	5 135	2 967	1 565	858	4.1
Room units	8 765	245	528	2 129	2 824	1 696	928	416	4.0
1	6 723	238	473	1 760	2 130	1 232	622	268	3.9
2	1 678	7	55	343	571	371	233	98	4.3
3	294	-	-	23	106	81	54	30	4.7
4	49	-	-	3	15	10	12	9	5.1
5 or more	21	-	-	-	2	2	7	10	...
Central system	6 550	80	302	1 486	2 311	1 271	657	442	4.1
With no air conditioning	14 599	644	1 091	3 238	4 257	2 960	1 489	920	4.0

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table A-7. Year Structure Built by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Year structure built					
		April 1970 or later	March 1970 or earlier				
			Total	1960 to March 1970	1950 to 1959	1940 to 1949	1939 or earlier
ALL OCCUPIED HOUSING UNITS							
Total	84 638	21 766	62 872	17 110	13 597	7 524	24 641
House Heating Fuel							
Owner occupied	54 724	14 534	40 190	11 423	10 243	4 918	13 607
Utility gas	30 776	5 951	24 824	6 830	6 721	3 077	8 197
Bottled, tank, or LP gas	2 955	964	1 992	651	376	258	704
Fuel oil	7 877	900	6 976	1 328	1 696	900	3 052
Kerosene, etc.	284	66	218	88	46	34	51
Electricity	8 916	5 481	3 435	1 757	869	285	524
Coal or coke	330	35	295	37	40	50	169
Wood	3 287	1 048	2 240	651	433	289	866
Solar heat	19	13	6	4	-	-	2
Other fuel	24	4	20	5	3	3	10
None	256	71	185	71	58	23	33
Renter occupied	29 914	7 232	22 682	5 688	3 354	2 606	11 034
Utility gas	15 925	2 630	13 295	3 133	2 136	1 623	6 404
Bottled, tank, or LP gas	914	155	759	187	112	102	358
Fuel oil	4 708	360	4 348	634	532	451	2 732
Kerosene, etc.	162	9	152	41	20	11	80
Electricity	6 767	3 940	2 827	1 531	364	224	708
Coal or coke	102	-	102	4	9	6	83
Wood	800	53	746	91	107	103	445
Solar heat	6	6	-	-	-	-	-
Other fuel	109	3	106	5	4	6	91
None	421	75	346	61	71	82	133
Monthly Cost Paid for Electricity							
Specified owner occupied[1]	43 535	10 167	33 368	9 372	9 375	4 330	10 292
Electricity paid for	43 507	10 161	33 347	9 367	9 370	4 328	10 282
Less than $10	140	12	128	11	28	17	73
$10 to $19	1 657	130	1 527	184	333	252	758
$20 to $29	4 186	482	3 705	644	989	583	1 489
$30 to $39	6 232	892	5 339	1 078	1 450	818	1 992
$40 to $49	5 729	929	4 800	1 187	1 420	682	1 511
$50 to $59	5 897	1 162	4 735	1 357	1 376	629	1 374
$60 to $79	8 429	2 129	6 300	2 090	1 872	705	1 633
$80 to $99	3 978	1 318	2 661	996	801	255	608
$100 to $149	5 085	2 120	2 965	1 284	788	275	618
$150 or more	2 174	988	1 186	536	313	111	226
Median	58	73	52	62	53	47	45
No electricity used	28	6	22	6	5	2	10
Specified renter occupied[2]	29 214	7 185	22 028	5 617	3 274	2 539	10 598
Electricity paid for	24 211	6 198	18 013	4 627	2 698	2 080	8 607
Less than $10	902	152	750	224	107	74	344
$10 to $19	3 600	637	2 963	757	408	346	1 452
$20 to $29	4 828	892	3 936	924	572	447	1 993
$30 to $39	4 316	993	3 323	777	464	385	1 697
$40 to $49	2 967	767	2 199	529	309	261	1 101
$50 to $59	2 359	745	1 614	449	258	194	712
$60 to $79	2 628	927	1 701	479	285	207	731
$80 to $99	1 096	451	645	188	130	83	244
$100 to $149	1 124	477	647	221	121	60	245
$150 or more	391	156	236	80	44	22	88
Median	36	45	34	35	35	34	33
Included in rent	4 914	984	3 930	981	570	443	1 937
No electricity used	90	4	85	9	7	16	53
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas							
Specified owner occupied[1]	43 535	10 167	33 368	9 372	9 375	4 330	10 292
Gas paid for	31 849	5 391	26 458	7 001	7 350	3 477	8 630
Less than $10	876	150	725	149	174	104	298
$10 to $14	1 292	191	1 101	203	259	203	436
$15 to $19	1 419	301	1 119	230	324	190	374
$20 to $24	2 088	390	1 698	414	513	273	498
$25 to $29	1 905	355	1 550	378	514	198	460
$30 to $39	4 308	771	3 537	954	1 040	537	1 005
$40 to $49	4 035	727	3 309	955	1 019	420	915
$50 to $69	7 884	1 335	6 549	1 914	1 917	802	1 916
$70 to $99	5 126	784	4 342	1 179	1 089	497	1 575
$100 or more	2 918	388	2 530	626	499	252	1 152
Median	50	47	51	52	48	45	53
No gas used	11 686	4 775	6 910	2 371	2 025	853	1 661
Specified renter occupied[2]	29 214	7 185	22 028	5 617	3 274	2 539	10 598
Gas paid for	14 558	1 942	12 617	2 265	1 954	1 632	6 766
Less than $10	1 868	203	1 665	318	239	210	898
$10 to $14	1 844	233	1 610	330	227	221	833
$15 to $19	1 429	216	1 213	213	208	134	659
$20 to $24	1 409	234	1 175	226	210	191	548
$25 to $29	1 102	186	916	183	164	127	442
$30 to $39	1 921	309	1 612	317	286	235	773
$40 to $49	1 325	181	1 144	223	186	144	591
$50 to $69	1 945	257	1 688	283	280	223	902
$70 to $99	1 016	79	937	103	93	104	636
$100 or more	699	43	657	68	62	41	485
Median	28	27	28	26	27	27	30
Included in rent	7 484	1 739	5 725	1 865	823	582	2 475
No gas used	7 191	3 505	3 687	1 488	497	345	1 357

See footnotes at end of table.

Table A-7. Year Structure Built by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Year structure built					
		April 1970 or later	March 1970 or earlier				
			Total	1960 to March 1970	1950 to 1959	1940 to 1949	1939 or earlier
ALL OCCUPIED HOUSING UNITS—Con.							
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.							
Specified owner occupied[1]	43 535	10 167	33 368	9 372	9 376	4 330	10 292
Fuel oil, kerosene, coal, wood, etc., paid for	11 239	2 260	6 978	2 218	2 299	1 198	3 263
Less than $100	1 776	628	1 149	438	251	134	325
$100 to $199	1 552	551	1 001	378	272	125	227
$200 to $299	965	262	703	207	178	88	230
$300 to $399	842	170	672	170	174	107	221
$400 to $499	685	120	565	133	169	71	191
$500 to $599	683	92	591	110	173	81	226
$600 to $699	759	86	672	133	184	93	262
$700 to $799	546	52	494	83	147	72	191
$800 or more	3 431	299	3 132	563	752	427	1 389
Median	470	190	567	349	561	590	680
Fuels not used or free	32 296	7 906	24 390	7 155	7 075	3 132	7 029
Specified renter occupied[2]	29 214	7 185	22 028	5 617	3 274	2 539	10 598
Fuel oil, kerosene, coal, wood, etc., paid for	2 464	309	2 155	300	302	255	1 299
Less than $100	444	112	332	52	57	46	176
$100 to $199	344	70	273	50	45	40	139
$200 to $299	270	37	233	35	28	50	120
$300 to $399	231	31	201	33	31	27	110
$400 to $499	155	9	146	27	17	20	82
$500 to $599	176	18	158	24	21	14	99
$600 to $699	141	9	132	21	14	11	86
$700 to $799	128	6	122	13	13	11	85
$800 or more	574	17	558	44	75	36	402
Median	375	160	426	336	365	284	523
Included in rent	4 863	606	4 257	794	514	441	2 507
Fuels not used or free	21 887	6 270	15 617	4 523	2 458	1 844	6 792
ALL OCCUPIED HOUSING UNITS							
Total	84 638	21 766	62 872	17 110	13 597	7 524	24 641
Heating Equipment							
Owner occupied	54 724	14 534	40 190	11 423	10 243	4 918	13 607
Warm-air furnace	32 391	9 753	22 638	7 466	6 340	2 427	6 405
Heat pump	1 750	1 237	513	230	176	29	78
Steam or hot water	7 007	654	6 353	1 196	1 108	663	3 387
Built-in electric units	2 944	1 325	1 619	822	361	146	290
Floor, wall, or pipeless furnace	3 028	139	2 889	424	950	614	902
Room heaters with flue	1 797	80	1 718	202	320	278	917
Room heaters without flue	1 622	111	1 511	248	354	357	552
Fireplaces, stoves, or portable heaters	3 929	1 165	2 765	763	576	381	1 045
None	256	71	185	71	58	23	33
Renter occupied	29 914	7 232	22 682	5 688	3 354	2 606	11 034
Warm-air furnace	11 929	4 336	7 593	2 618	1 157	684	3 134
Heat pump	421	287	134	77	10	9	38
Steam or hot water	6 765	634	6 131	993	594	539	4 005
Built-in electric units	3 263	1 562	1 701	836	196	132	537
Floor, wall, or pipeless furnace	2 949	208	2 741	667	749	497	828
Room heaters with flue	1 641	33	1 609	148	201	226	1 034
Room heaters without flue	1 304	30	1 273	137	207	272	657
Fireplaces, stoves, or portable heaters	1 223	67	1 155	152	169	166	668
None	421	75	346	61	71	82	133
ALL OCCUPIED HOUSING UNITS							
Total	84 638	21 766	62 872	17 110	13 597	7 524	24 641
UNITS OCCUPIED LAST WINTER							
Total	73 908	17 870	56 037	15 143	12 515	6 799	21 581
Insufficient Heat							
Closure of rooms:							
Owner occupied	52 031	13 228	38 803	10 974	9 918	4 783	13 127
With heating equipment	51 796	13 162	38 634	10 910	9 862	4 763	13 099
No rooms closed	49 239	12 782	36 458	10 521	9 483	4 457	11 996
Closed certain rooms	2 021	253	1 768	271	282	259	956
Living room only	87	7	81	12	14	7	48
Dining room only	27	5	22	-	13	1	8
1 or more bedrooms only	1 352	180	1 172	162	174	184	652
Other rooms or combination of rooms	491	56	435	86	72	59	218
Not reported	64	5	59	12	10	8	30
Not reported	536	128	408	117	97	47	147
No heating equipment	235	66	170	65	56	20	29
Renter occupied	21 877	4 643	17 234	4 169	2 596	2 016	8 453
With heating equipment	21 606	4 597	17 009	4 123	2 553	1 965	8 369
No rooms closed	19 758	4 407	15 350	3 902	2 339	1 757	7 352
Closed certain rooms	1 527	132	1 395	161	162	180	892
Living room only	98	2	96	6	6	11	73
Dining room only	19	-	19	-	2	6	11
1 or more bedrooms only	999	108	891	115	116	114	546
Other rooms or combination of rooms	389	19	370	38	36	47	249
Not reported	23	3	20	3	2	3	13
Not reported	321	58	263	60	52	27	125
No heating equipment	270	45	225	46	43	51	84

See footnotes at end of table.

Table A-7. Year Structure Built by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Year structure built					
		April 1970 or later	March 1970 or earlier				
			Total	1960 to March 1970	1950 to 1959	1940 to 1949	1939 or earlier
UNITS OCCUPIED LAST WINTER—Con.							
Insufficient Heat—Con.							
Additional heat source:							
Owner occupied	52 031	13 228	38 803	10 974	9 918	4 783	13 127
With specified heating equipment[3]	46 421	11 951	34 470	9 932	8 955	4 038	11 546
No additional heat source used	42 341	11 082	31 259	9 203	8 234	3 595	10 227
Used kitchen stove, fireplace, or portable heater	2 961	632	2 329	533	517	289	990
Not reported	1 119	237	882	196	203	154	329
Lacking specified heating equipment or none	5 610	1 277	4 333	1 042	964	746	1 581
Renter occupied	21 877	4 643	17 234	4 169	2 596	2 016	8 453
With specified heating equipment[3]	19 616	4 530	15 086	3 905	2 255	1 607	7 319
No additional heat source used	16 551	4 194	12 357	3 393	1 914	1 296	5 753
Used kitchen stove, fireplace, or portable heater	2 480	246	2 233	405	279	247	1 302
Not reported	585	89	495	106	62	64	263
Lacking specified heating equipment or none	2 261	113	2 148	264	341	409	1 134
Rooms lacking specified heat source:							
Owner occupied	52 031	13 228	38 803	10 974	9 918	4 783	13 127
With specified heating equipment[3]	46 421	11 951	34 470	9 932	8 955	4 038	11 546
No rooms lacking air ducts, registers, radiators, or heaters	38 219	11 235	26 984	8 778	7 258	2 907	8 041
Rooms lacking air ducts, registers, radiators, or heaters	7 358	543	6 815	1 010	1 532	1 021	3 252
1 room	2 448	351	2 097	430	442	225	1 000
2 rooms	1 720	72	1 649	173	308	231	937
3 rooms or more	3 190	121	3 069	408	782	565	1 315
Not reported	844	172	672	144	164	110	254
Lacking specified heating equipment or none	5 610	1 277	4 333	1 042	964	746	1 581
Renter occupied	21 877	4 643	17 234	4 169	2 596	2 016	8 453
With specified heating equipment[3]	19 616	4 530	15 086	3 905	2 255	1 607	7 319
No rooms lacking air ducts, registers, radiators, or heaters	15 325	4 233	11 092	3 231	1 571	1 037	5 253
Rooms lacking air ducts, registers, radiators, or heaters	3 849	246	3 603	596	633	518	1 855
1 room	1 370	117	1 253	196	174	169	714
2 rooms	1 174	81	1 094	229	209	140	516
3 rooms or more	1 305	49	1 256	171	251	210	624
Not reported	442	51	390	77	52	51	211
Lacking specified heating equipment or none	2 261	113	2 148	264	341	409	1 134
Housing unit uncomfortably cold:							
Owner occupied	52 031	13 228	38 803	10 974	9 918	4 783	13 127
With specified heating equipment[3]	46 421	11 951	34 470	9 932	8 955	4 038	11 546
Lacking specified heating equipment or none	5 610	1 277	4 333	1 042	964	746	1 581
Housing unit not uncomfortably cold for 24 hours or more	4 767	1 127	3 640	899	828	633	1 281
Housing unit uncomfortably cold for 24 hours or more	540	82	458	79	88	91	200
Not reported	303	68	235	65	47	22	100
Renter occupied	21 877	4 643	17 234	4 169	2 596	2 016	8 453
With specified heating equipment[3]	19 616	4 530	15 086	3 905	2 255	1 607	7 319
Lacking specified heating equipment or none	2 261	113	2 148	264	341	409	1 134
Housing unit not uncomfortably cold for 24 hours or more	1 705	97	1 608	214	277	304	813
Housing unit uncomfortably cold for 24 hours or more	459	12	447	39	49	88	271
Not reported	97	4	94	11	15	17	50
ALL OCCUPIED HOUSING UNITS							
Total	84 638	21 766	62 872	17 110	13 597	7 524	24 641
Air Conditioning							
Owner occupied	54 724	14 534	40 190	11 423	10 243	4 918	13 607
With air conditioning	34 692	10 547	24 145	7 774	6 803	2 829	6 739
Room units	16 563	2 205	14 358	3 098	3 848	1 953	5 459
1	10 164	1 522	8 642	1 978	2 202	1 153	3 309
2	4 580	565	4 015	811	1 137	559	1 507
3	1 301	99	1 202	232	374	160	435
4	347	17	330	56	89	55	129
5 or more	172	3	169	20	46	26	78
Central system	18 130	8 342	9 787	4 676	2 954	877	1 280
With no air conditioning	20 032	3 986	16 045	3 648	3 440	2 089	6 868
Renter occupied	29 914	7 232	22 682	5 688	3 354	2 606	11 034
With air conditioning	15 315	5 480	9 835	3 646	1 708	1 070	3 412
Room units	8 765	1 491	7 275	2 053	1 296	909	3 016
1	6 723	1 206	5 517	1 632	930	682	2 273
2	1 678	232	1 446	358	301	188	598
3	294	44	250	50	53	38	111
4	49	5	45	13	12	1	19
5 or more	21	4	17	-	-	2	16
Central system	6 550	3 989	2 561	1 593	412	161	395
With no air conditioning	14 599	1 753	12 846	2 042	1 646	1 537	7 622

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table A-8. Monthly Cost Paid for Electricity by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Monthly cost paid for electricity										
		Less than $10	$10 to $19	$20 to $29	$30 to $39	$40 to $49	$50 to $59	$60 to $79	$80 to $99	$100 to $149	$150 or more	No electricity used or not reported[1]	Median (dollars)
SPECIFIED OWNER OCCUPIED[2]													
Total	**43 535**	**140**	**1 657**	**4 186**	**6 232**	**5 729**	**5 697**	**6 429**	**3 978**	**5 085**	**2 174**	**28**	**56**
House Heating Fuel													
Electricity	6 659	5	38	138	228	279	482	1 320	1 048	2 010	1 112	-	95
Other than electricity	36 686	135	1 614	4 037	5 982	5 423	5 386	7 075	2 902	3 046	1 056	28	52
Utility gas	26 546	94	1 268	3 084	4 443	3 945	3 814	4 953	1 986	2 167	783	8	51
Bottled, tank, or LP gas	1 450	7	64	150	224	191	234	297	117	123	39	5	53
Fuel oil	6 072	23	168	566	940	904	913	1 266	553	536	182	2	54
Kerosene, etc.	177	-	8	19	25	36	27	27	18	14	3	-	50
Coal or coke	233	2	22	24	34	32	27	47	24	19	2	1	51
Wood	2 179	10	64	190	317	308	385	479	205	183	46	12	55
Solar heat	16	-	-	1	-	6	2	3	-	5	-	-	...
Other fuel	12	-	-	3	-	-	4	3	-	1	2	-	...
None	190	-	4	11	22	27	29	34	30	27	6	-	61
Heating Equipment													
Warm-air furnace	26 398	67	836	2 455	3 767	3 570	3 670	5 237	2 374	3 063	1 352	8	56
Heat pump	1 406	-	2	11	30	47	65	267	254	491	238	-	103
Steam or hot water	5 411	13	204	528	952	840	824	1 043	386	439	179	2	52
Built-in electric units	2 214	3	19	70	102	136	234	491	350	559	250	-	83
Floor, wall, or pipeless furnace	2 637	29	301	491	496	379	293	345	147	127	28	-	40
Room heaters with flue	1 347	14	112	223	270	202	173	190	77	67	20	-	42
Room heaters without flue	1 277	3	73	157	208	173	181	243	111	82	41	4	51
Fireplaces, stoves, or portable heaters	2 658	12	105	240	385	355	429	579	250	229	61	13	55
None	190	-	4	11	22	27	29	34	30	27	6	-	61
Persons													
1 person	6 097	85	793	1 253	1 150	780	663	721	260	299	77	15	37
2 persons	13 902	38	586	1 646	2 389	2 032	1 981	2 491	1 052	1 240	446	6	51
3 persons	8 415	4	131	585	1 122	1 185	1 168	1 761	869	1 138	452	1	60
4 persons	8 772	10	100	448	1 005	1 050	1 198	1 954	1 035	1 355	617	1	66
5 persons	4 008	4	36	159	355	431	572	966	456	669	359	1	69
6 persons	1 494	2	8	61	142	179	211	349	180	222	136	3	68
7 persons or more	847	-	4	35	68	72	104	187	127	163	87	1	74
Median	2.7	1.5-	1.5	2.0	2.3	2.5	2.8	3.1	3.3	3.4	3.7	...	...
Air Conditioning													
With air conditioning	27 820	26	484	1 573	3 059	3 348	3 867	6 219	3 114	4 230	1 916	3	65
Room units	13 032	20	369	1 080	1 998	2 030	2 087	2 802	1 168	1 093	386	-	54
1	7 802	17	305	821	1 322	1 302	1 209	1 556	627	498	145	-	51
2	3 724	1	54	219	529	568	625	823	363	396	146	-	57
3	1 060	2	6	32	116	120	188	287	114	141	54	-	64
4	295	-	4	7	27	20	50	109	39	23	15	-	67
5 or more	153	-	-	2	4	20	14	26	25	35	27	-	88
Central system	14 788	6	95	493	1 061	1 319	1 779	3 418	1 947	3 137	1 530	3	75
With no air conditioning	15 715	114	1 192	2 613	3 173	2 381	2 031	2 210	864	854	258	25	43
SPECIFIED RENTER OCCUPIED[3]													
Total	**29 214**	**902**	**3 600**	**4 828**	**4 316**	**2 967**	**2 359**	**2 628**	**1 096**	**1 124**	**391**	**5 003**	**36**
House Heating Fuel													
Electricity	6 703	130	388	672	743	734	738	1 024	540	516	194	1 023	52
Other than electricity	22 094	762	3 184	4 101	3 507	2 194	1 595	1 579	529	595	195	3 854	33
Utility gas	15 787	659	2 523	3 031	2 491	1 470	1 093	1 028	339	424	137	2 593	31
Bottled, tank, or LP gas	764	13	66	118	107	111	69	113	29	44	15	78	43
Fuel oil	4 609	69	507	806	778	505	332	319	118	98	35	1 042	35
Kerosene, etc.	154	3	16	21	23	20	21	27	7	5	1	10	44
Coal or coke	61	3	12	13	11	3	7	10	2	1	2	18	33
Wood	585	7	48	100	93	82	74	83	35	21	4	37	43
Solar heat	6	-	4	2	-	-	-	-	-	1	-	-	...
Other fuel	107	9	9	11	2	2	-	-	-	-	-	75	...
None	418	9	28	55	66	39	26	26	27	13	3	126	37
Heating Equipment													
Warm-air furnace	11 721	192	1 076	1 686	1 811	1 269	1 152	1 330	578	659	229	1 738	42
Heat pump	417	-	2	27	42	66	56	75	39	42	18	49	57
Steam or hot water	6 727	237	1 066	1 273	1 052	585	335	279	68	85	35	1 712	29
Built-in electric units	3 224	104	290	445	389	342	288	384	173	134	50	626	42
Floor, wall, or pipeless furnace	2 907	249	683	601	356	217	158	143	59	66	18	356	25
Room heaters with flue	1 579	71	256	322	233	154	111	126	49	36	11	211	31
Room heaters without flue	1 227	20	116	237	213	176	114	128	51	51	18	102	38
Fireplaces, stoves, or portable heaters	993	20	84	182	154	119	118	137	51	38	10	82	41
None	418	9	28	55	66	39	26	26	27	13	3	126	37
Persons													
1 person	10 047	552	1 831	1 826	1 272	747	529	510	154	126	42	2 460	27
2 persons	8 469	221	1 032	1 510	1 346	913	746	773	306	293	82	1 246	36
3 persons	4 710	63	398	720	769	572	452	569	240	274	77	576	42
4 persons	3 398	33	188	473	519	419	341	443	218	245	100	417	46
5 persons	1 487	15	87	175	223	186	170	192	117	101	51	169	48
6 persons	608	7	35	61	104	75	76	81	30	42	21	75	47
7 persons or more	496	11	30	62	83	55	45	60	30	43	18	59	45
Median	2.0	1.5-	1.5-	1.9	2.1	2.3	2.4	2.5	2.9	3.0	3.4	1.5	...

See footnotes at end of table.

Table A-8. Monthly Cost Paid for Electricity by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Monthly cost paid for electricity											
		Less than $10	$10 to $19	$20 to $29	$30 to $39	$40 to $49	$50 to $59	$60 to $79	$80 to $99	$100 to $149	$150 or more	No electricity used or not reported[1]	Median (dollars)
SPECIFIED RENTER OCCUPIED[3]—Con.													
Air Conditioning													
With air conditioning	15 040	248	1 317	2 076	2 193	1 758	1 569	1 852	829	873	290	2 034	43
Room units	8 560	191	990	1 478	1 389	1 068	837	879	313	318	76	1 021	37
1	6 574	175	865	1 230	1 054	790	583	579	217	197	57	827	35
2	1 633	14	109	223	283	234	203	242	71	93	8	153	44
3	284	-	10	21	43	38	42	50	20	18	10	31	53
4	48	1	4	2	9	6	7	5	5	4	1	4	51
5 or more	21	-	2	2	-	-	2	3	-	5	-	7	...
Central system	6 480	57	328	598	805	690	731	973	516	556	214	1 013	53
With no air conditioning	14 174	654	2 283	2 752	2 123	1 209	790	776	268	251	102	2 969	29

[1]Renter households with electricity costs included in their rent are included in this category.
[2]Limited to one-unit structures on less than 10 acres and no business on property.
[3]Excludes one-unit structures on 10 acres or more.

Table A-9. Monthly Cost Paid for Gas by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Monthly cost paid for utility, bottled, tank, or LP gas										
		Less than $10	$10 to $14	$15 to $19	$20 to $24	$25 to $29	$30 to $39	$40 to $49	$50 to $69	$70 to $99	$100 or more	No gas used or not reported[1]	Median (dollars)
SPECIFIED OWNER OCCUPIED[2]													
Total	**43 535**	**876**	**1 292**	**1 419**	**2 088**	**1 905**	**4 308**	**4 035**	**7 684**	**5 126**	**2 918**	**11 686**	**50**
House Heating Fuel													
Gas	27 996	339	702	979	1 590	1 517	3 758	3 799	7 567	4 988	2 757	-	53
Utility gas	26 546	299	649	928	1 500	1 408	3 578	3 644	7 180	4 772	2 588	-	53
Bottled, tank, or LP gas	1 450	40	52	51	90	110	180	156	387	216	169	-	52
Other than gas	15 349	520	583	430	487	382	543	232	315	134	159	11 563	23
Fuel oil	6 072	288	333	252	228	172	272	85	118	40	98	4 185	21
Kerosene, etc.	177	11	10	7	5	8	11	3	7	2	1	112	23
Electricity	6 659	106	95	73	127	92	121	69	114	75	37	5 751	27
Coal or coke	233	16	14	7	10	11	8	7	3	2	4	152	21
Wood	2 179	96	131	90	111	97	130	68	72	16	18	1 350	23
Solar heat	16	2	-	-	5	3	2	-	-	-	-	5	...
Other fuel	12	-	-	-	2	-	-	-	2	-	2	7	...
None	190	17	7	10	11	5	7	4	2	3	2	122	20
Heating Equipment													
Warm-air furnace	26 398	361	552	722	1 192	1 140	2 801	2 942	6 165	4 021	1 917	4 585	54
Heat pump	1 406	18	15	11	21	14	21	10	17	19	4	1 257	28
Steam or hot water	5 411	183	217	159	155	128	305	282	674	722	793	1 793	61
Built-in electric units	2 214	36	27	15	26	23	17	14	45	20	11	1 979	27
Floor, wall, or pipeless furnace	2 637	54	176	244	352	259	539	348	369	107	47	140	33
Room heaters with flue	1 347	48	50	68	80	93	188	147	272	120	75	206	43
Room heaters without flue	1 277	32	78	78	113	116	271	192	236	87	43	31	37
Fireplaces, stoves, or portable heaters	2 658	127	170	113	138	126	160	96	104	27	24	1 572	24
None	190	17	7	10	11	5	7	4	2	3	2	122	20
Persons													
1 person	6 097	213	287	313	377	305	707	624	1 023	521	278	1 448	42
2 persons	13 902	308	439	527	664	678	1 530	1 349	2 485	1 469	710	3 744	46
3 persons	8 415	133	209	226	383	383	791	747	1 581	1 045	559	2 380	52
4 persons	8 772	118	211	205	351	305	767	811	1 606	1 170	697	2 530	54
5 persons	4 008	66	79	104	198	139	318	307	778	585	370	1 063	56
6 persons	1 494	21	46	30	84	51	124	130	277	199	195	337	56
7 persons or more	847	17	22	14	31	43	71	67	133	136	109	203	58
Median	2.7	2.2	2.3	2.2	2.5	2.4	2.4	2.5	2.8	3.0	3.3	2.8	...
Air Conditioning													
With air conditioning	27 820	462	706	768	1 226	1 103	2 734	2 709	5 242	3 401	1 886	7 583	51
Room units	13 032	282	433	444	599	545	1 343	1 258	2 362	1 566	996	3 204	50
1	7 802	175	259	266	372	330	852	756	1 392	895	525	1 981	48
2	3 724	66	134	127	162	153	349	357	727	476	272	902	52
3	1 060	29	18	26	49	53	101	110	181	144	120	230	53
4	295	10	15	21	11	4	26	28	50	33	38	58	51
5 or more	153	2	8	4	6	5	15	8	11	19	41	34	71
Central system	14 788	180	273	324	626	558	1 391	1 451	2 880	1 834	890	4 379	53
With no air conditioning	15 715	413	586	651	862	801	1 574	1 326	2 642	1 725	1 032	4 103	46
SPECIFIED RENTER OCCUPIED[3]													
Total	**29 214**	**1 868**	**1 844**	**1 429**	**1 409**	**1 102**	**1 921**	**1 325**	**1 945**	**1 016**	**699**	**14 655**	**28**
House Heating Fuel													
Gas	16 551	1 135	1 211	1 015	1 055	915	1 614	1 171	1 824	961	640	5 011	32
Utility gas	15 787	1 100	1 160	961	1 000	855	1 535	1 096	1 710	902	580	4 889	32
Bottled, tank, or LP gas	764	35	51	53	55	60	79	75	115	59	61	123	38
Other than gas	12 245	710	605	400	338	173	290	147	119	54	55	9 353	18
Fuel oil	4 609	508	455	293	236	101	177	71	55	37	19	2 657	15
Kerosene, etc.	154	15	11	10	3	4	3	3	5	-	-	101	15
Electricity	6 703	145	97	71	78	40	86	46	48	7	25	6 060	20
Coal or coke	81	5	4	2	3	3	2	1	1	-	2	59	...
Wood	585	28	34	23	17	26	21	25	10	10	10	381	25
Solar heat	6	-	2	-	-	-	-	-	-	-	-	4	...
Other fuel	107	9	2	2	2	-	-	2	-	-	-	91	...
None	418	24	28	15	16	14	17	7	2	2	3	291	18
Heating Equipment													
Warm-air furnace	11 721	407	487	466	561	499	914	660	1 147	610	388	5 584	38
Heat pump	417	6	9	5	-	-	2	6	-	2	1	386	...
Steam or hot water	6 727	735	616	381	273	115	253	145	228	149	128	3 703	17
Built-in electric units	3 224	68	43	19	19	24	37	18	20	3	11	2 962	20
Floor, wall, or pipeless furnace	2 907	383	432	301	284	215	284	162	159	71	29	588	21
Room heaters with flue	1 579	111	98	101	87	105	166	141	189	108	84	388	35
Room heaters without flue	1 227	61	69	99	130	94	196	145	167	42	26	198	33
Fireplaces, stoves, or portable heaters	993	73	60	42	40	36	52	40	33	31	31	556	25
None	418	24	28	15	16	14	17	7	2	2	3	291	18
Persons													
1 person	10 047	923	628	431	370	286	445	315	413	176	92	5 967	21
2 persons	8 469	517	587	456	398	326	568	348	494	254	165	4 355	26
3 persons	4 710	231	316	244	246	232	369	269	375	237	148	2 044	32
4 persons	3 398	119	190	170	230	141	277	201	358	194	150	1 367	35
5 persons	1 487	46	67	66	90	67	137	100	189	87	75	560	38
6 persons	608	23	42	32	41	18	63	44	63	31	39	212	36
7 persons or more	496	9	13	30	34	31	61	47	53	36	31	150	38
Median	2.0	1.5	2.0	2.1	2.3	2.3	2.4	2.5	2.7	2.8	3.1	1.8	...

See footnotes at end of table.

Table A-9. Monthly Cost Paid for Gas by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Monthly cost paid for utility, bottled, tank, or LP gas											
		Less than $10	$10 to $14	$15 to $19	$20 to $24	$25 to $29	$30 to $39	$40 to $49	$50 to $69	$70 to $99	$100 or more	No gas used or not reported[1]	Median (dollars)
SPECIFIED RENTER OCCUPIED[3]—Con.													
Air Conditioning													
With air conditioning	15 040	754	753	605	680	482	922	670	969	440	288	8 475	30
Room units	8 560	609	563	412	431	305	584	445	655	314	210	4 031	28
1	6 574	474	441	326	322	241	426	366	459	226	152	3 142	28
2	1 633	115	109	74	91	49	127	68	162	79	41	717	31
3	284	19	13	11	13	13	23	8	28	7	13	134	32
4	48	-	-	-	5	2	6	2	3	2	2	27	...
5 or more	21	2	-	-	-	-	2	2	4	-	2	11	...
Central system	6 480	145	190	194	249	177	338	225	314	126	78	4 444	32
With no air conditioning	14 174	1 114	1 091	824	729	620	998	655	976	576	411	6 180	27

[1]Renter households with gas costs included in their rent are included in this category.
[2]Limited to one-unit structures on less than 10 acres and no business on property.
[3]Excludes one-unit structures on 10 acres or more.

Table A-10. Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, etc., by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Yearly cost paid for fuel oil, kerosene, coal, wood, etc.										
		Less than $100	$100 to $199	$200 to $299	$300 to $399	$400 to $499	$500 to $599	$600 to $699	$700 to $799	$800 or more	Fuels not used, free, or not reported[1]	Median (dollars)
SPECIFIED OWNER OCCUPIED[2]												
Total	**43 535**	**1 776**	**1 552**	**965**	**842**	**685**	**683**	**759**	**546**	**3 431**	**32 296**	**470**
House Heating Fuel												
Oil, coal, kerosene, wood, etc.	8 681	291	508	520	606	568	604	690	507	3 225	1 143	695
Fuel oil	6 072	117	201	213	339	396	488	608	476	3 096	139	800+
Coal or coke	233	10	24	36	40	35	22	17	3	32	14	398
Kerosene, etc.	177	16	18	20	16	26	14	17	11	29	9	453
Wood	2 179	148	265	250	211	112	80	47	17	68	981	274
Other than oil, coal, kerosene, wood, etc.	34 684	1 483	1 044	445	236	117	79	69	39	205	30 967	136
Utility gas	26 546	1 077	700	302	132	72	53	51	29	150	23 980	129
Bottled, tank, or LP gas	1 450	56	46	26	15	17	4	3	1	17	1 265	179
Electricity	6 659	350	297	117	90	28	21	15	9	33	5 700	143
Solar heat	16	-	1	-	-	-	-	-	-	1	15	...
Other fuel	12	-	-	1	-	-	1	-	-	3	8	...
None	190	1	-	1	-	-	-	-	-	1	187	...
Heating Equipment												
Warm-air furnace	26 398	1 176	833	434	377	367	380	437	302	1 223	20 890	382
Heat pump	1 406	94	72	24	12	4	3	2	3	11	1 181	125
Steam or hot water	5 411	101	98	73	79	92	153	199	176	1 999	2 441	800+
Built-in electric units	2 214	98	105	46	50	12	14	9	4	21	1 855	177
Floor, wall, or pipeless furnace	2 637	60	46	34	34	34	18	18	13	29	2 350	309
Room heaters with flue	1 347	38	69	55	34	37	38	36	28	66	946	411
Room heaters without flue	1 277	41	33	19	9	6	4	3	3	2	1 159	155
Fireplaces, stoves, or portable heaters	2 658	168	297	279	247	133	92	54	18	80	1 289	278
None	190	1	-	1	-	-	-	-	-	1	187	...
Persons												
1 person	6 097	157	150	116	110	121	111	121	106	476	4 628	571
2 persons	13 902	547	454	322	261	247	223	256	210	1 085	10 298	488
3 persons	8 415	367	356	190	145	130	120	156	88	720	6 141	459
4 persons	8 772	420	367	209	196	90	120	125	71	657	6 517	366
5 persons	4 008	183	155	96	76	71	70	67	54	306	2 932	442
6 persons	1 494	65	38	20	28	15	28	27	9	112	1 152	517
7 persons or more	847	37	29	12	29	11	10	8	7	75	629	417
Median	2.7	3.0	3.0	2.7	2.8	2.4	2.5	2.5	2.3	2.7	2.7	...
Air Conditioning												
With air conditioning	27 820	1 198	920	531	403	331	335	354	280	1 796	21 672	407
Room units	13 032	407	394	292	251	200	238	275	204	1 481	9 290	632
1	7 802	265	253	197	162	140	165	178	114	751	5 577	557
2	3 724	115	98	78	67	41	52	73	63	465	2 671	703
3	1 060	18	32	12	21	18	14	20	17	165	745	800+
4	295	5	7	2	-	2	2	4	9	64	201	800+
5 or more	153	4	5	4	-	2	5	-	2	35	97	800+
Central system	14 788	791	525	239	153	131	97	79	75	315	12 382	178
With no air conditioning	15 715	578	632	435	439	353	347	405	266	1 635	10 624	531
SPECIFIED RENTER OCCUPIED[3]												
Total	**29 214**	**444**	**344**	**270**	**231**	**155**	**176**	**141**	**128**	**574**	**26 749**	**375**
House Heating Fuel												
Oil, coal, kerosene, wood, etc.	5 429	149	170	186	195	134	151	128	114	524	3 680	527
Fuel oil	4 609	74	73	93	114	91	113	101	99	490	3 361	665
Coal or coke	81	3	9	11	10	9	4	5	1	6	24	367
Kerosene, etc.	154	18	25	19	18	10	21	9	7	13	13	341
Wood	585	54	63	63	53	25	12	13	7	14	282	254
Other than oil, coal, kerosene, wood, etc.	23 387	293	173	82	37	21	25	13	14	51	22 657	135
Utility gas	15 787	181	111	37	18	10	14	10	9	38	15 358	130
Bottled, tank, or LP gas	764	22	19	14	7	4	6	3	3	7	680	208
Electricity	6 703	90	43	30	12	7	5	-	2	7	6 507	118
Solar heat	6	-	-	1	-	-	-	-	-	-	5	...
Other fuel	107	-	-	-	-	-	-	-	-	-	107	-
None	418	2	1	3	-	-	-	-	-	-	412	...
Heating Equipment												
Warm-air furnace	11 721	203	130	83	90	75	84	58	64	239	10 696	409
Heat pump	417	7	1	2	2	1	-	-	-	-	405	...
Steam or hot water	6 727	45	26	35	15	20	34	47	32	258	6 214	800+
Built-in electric units	3 224	41	27	19	8	5	3	-	2	6	3 112	151
Floor, wall, or pipeless furnace	2 907	24	14	10	16	7	6	2	8	15	2 805	316
Room heaters with flue	1 579	24	39	33	26	13	23	15	10	39	1 358	356
Room heaters without flue	1 227	25	22	7	12	3	10	4	3	3	1 139	189
Fireplaces, stoves, or portable heaters	993	72	65	77	63	30	16	16	9	16	609	245
None	418	2	1	3	-	-	-	-	-	-	412	...
Persons												
1 person	10 047	130	80	54	55	28	28	32	28	112	9 500	316
2 persons	8 469	122	105	77	62	42	60	38	28	141	7 794	354
3 persons	4 710	70	64	59	46	32	27	27	26	107	4 253	376
4 persons	3 398	72	56	44	41	32	41	27	19	103	2 964	413
5 persons	1 487	36	22	20	16	11	10	13	17	76	1 266	549
6 persons	608	5	12	11	8	6	6	3	4	19	534	426
7 persons or more	496	8	6	5	4	4	5	2	6	16	439	525
Median	2.0	2.2	2.4	2.6	2.5	2.7	2.5	2.5	2.8	2.8	2.0	...

See footnotes at end of table.

Table A-10. Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, etc., by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Yearly cost paid for fuel oil, kerosene, coal, wood, etc.										
		Less than $100	$100 to $199	$200 to $299	$300 to $399	$400 to $499	$500 to $599	$600 to $699	$700 to $799	$800 or more	Fuels not used, free, or not reported[1]	Median (dollars)
SPECIFIED RENTER OCCUPIED[3]—Con.												
Air Conditioning												
With air conditioning	15 040	214	133	74	70	63	65	48	38	188	14 147	338
Room units	8 560	125	80	50	61	51	57	39	32	174	7 892	437
1	6 574	100	52	40	50	43	41	31	26	117	6 074	419
2	1 633	19	25	8	6	8	16	8	6	43	1 497	528
3	284	6	3	4	3	-	-	-	-	11	257	...
4	48	-	-	-	2	-	-	-	-	2	45	...
5 or more	21	-	-	-	-	-	-	-	-	2	20	...
Central system	6 480	89	53	25	9	12	8	9	6	14	6 254	144
With no air conditioning	14 174	230	211	196	162	92	111	93	90	387	12 603	391

[1]Renter households with fuel costs included in their rent are included in this category.
[2]Limited to one-unit structures on less than 10 acres and no business on property.
[3]Excludes one-unit structures on 10 acres or more.

Table B-1. Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Inside SMSA's			Outside SMSA's
		Total	In central city	Not in central city	
ALL OCCUPIED HOUSING UNITS					
Total	18 221	14 328	6 253	8 075	3 893
House Heating Fuel					
Owner occupied	11 009	8 155	2 391	5 764	2 854
Utility gas	4 894	3 993	1 414	2 579	901
Bottled, tank, or LP gas	85	46	7	39	40
Fuel oil	4 600	3 408	868	2 540	1 192
Kerosene, etc.	92	46	4	42	46
Electricity	655	399	77	322	256
Coal or coke	174	109	14	95	65
Wood	496	145	4	141	351
Solar heat	1	1	-	1	-
Other fuel	10	7	4	3	3
None	1	1	-	1	-
Renter occupied	7 212	6 173	3 861	2 312	1 039
Utility gas	2 847	2 483	1 504	980	364
Bottled, tank, or LP gas	60	35	18	17	24
Fuel oil	3 489	3 064	2 081	983	425
Kerosene, etc.	45	17	-	17	27
Electricity	664	522	238	284	142
Coal or coke	38	23	4	19	15
Wood	48	11	2	10	37
Solar heat	-	-	-	-	-
Other fuel	16	12	12	-	4
None	5	5	4	2	-
Monthly Cost Paid for Electricity					
Specified owner occupied[1]	8 674	6 490	1 576	4 913	2 185
Electricity paid for	8 673	6 489	1 576	4 913	2 184
Less than $10	20	13	4	10	7
$10 to $19	254	180	65	115	74
$20 to $29	851	616	174	442	235
$30 to $39	1 436	1 042	305	737	395
$40 to $49	1 298	947	239	708	351
$50 to $59	1 316	1 004	245	759	313
$60 to $79	1 625	1 244	280	965	381
$80 to $99	669	519	113	406	149
$100 to $149	847	652	117	535	195
$150 or more	356	272	36	236	84
Median	53	54	50	55	51
No electricity used	2	1	-	1	1
Specified renter occupied[2]	7 149	6 146	3 859	2 287	1 003
Electricity paid for	5 541	4 745	2 853	1 892	796
Less than $10	105	94	56	38	11
$10 to $19	833	711	428	283	122
$20 to $29	1 423	1 220	729	491	203
$30 to $39	1 179	1 035	649	386	144
$40 to $49	740	648	442	207	92
$50 to $59	473	414	247	167	59
$60 to $79	440	362	178	184	78
$80 to $99	143	106	56	49	37
$100 to $149	151	125	51	74	26
$150 or more	53	29	16	13	24
Median	33	33	33	33	34
Included in rent	1 591	1 386	993	393	204
No electricity used	18	15	13	3	3
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas					
Specified owner occupied[1]	8 674	6 490	1 576	4 913	2 185
Gas paid for	5 669	4 524	1 333	3 191	1 146
Less than $10	276	157	21	135	120
$10 to $14	322	227	43	184	95
$15 to $19	253	187	66	121	67
$20 to $24	256	202	43	158	54
$25 to $29	197	161	52	109	36
$30 to $39	486	386	134	252	89
$40 to $49	432	362	98	264	69
$50 to $69	1 099	878	248	630	221
$70 to $99	1 160	951	269	682	208
$100 or more	1 189	1 013	356	657	176
Median	61	63	66	61	53
No gas used	3 005	1 966	243	1 723	1 039
Specified renter occupied[2]	7 149	6 146	3 859	2 287	1 003
Gas paid for	3 611	3 198	2 166	1 032	413
Less than $10	619	572	392	179	47
$10 to $14	613	562	410	153	50
$15 to $19	388	370	291	79	18
$20 to $24	304	275	194	82	29
$25 to $29	178	165	104	61	14
$30 to $39	342	285	199	85	57
$40 to $49	213	179	107	72	35
$50 to $69	425	357	215	141	69
$70 to $99	289	238	122	115	51
$100 or more	241	197	131	66	44
Median	22	21	19	27	38
Included in rent	2 357	2 100	1 370	730	257
No gas used	1 181	849	323	525	332

See footnotes at end of table.

Table B-1. Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Inside SMSA's			Outside SMSA's
		Total	In central city	Not in central city	
ALL OCCUPIED HOUSING UNITS—Con.					
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.					
Specified owner occupied[1]	6 674	6 490	1 576	4 913	2 185
Fuel oil, kerosene, coal, wood, etc., paid for	4 617	3 241	575	2 665	1 377
Less than $100	230	158	26	132	72
$100 to $199	205	146	19	127	59
$200 to $299	170	102	18	84	68
$300 to $399	243	125	13	112	117
$400 to $499	246	131	24	107	115
$500 to $599	324	216	27	189	108
$600 to $699	341	220	28	192	121
$700 to $799	281	194	30	164	87
$800 or more	2 577	1 948	389	1 559	629
Median	800+	800+	800+	800+	731
Fuels not used or free	4 057	3 249	1 001	2 248	808
Specified renter occupied[2]	7 149	6 146	3 859	2 287	1 003
Fuel oil, kerosene, coal, wood, etc., paid for	843	568	201	368	275
Less than $100	79	65	40	25	14
$100 to $199	47	32	15	17	15
$200 to $299	51	35	16	18	16
$300 to $399	40	20	2	18	20
$400 to $499	55	31	7	24	24
$500 to $599	79	52	9	44	27
$600 to $699	77	55	17	38	22
$700 to $799	57	35	7	28	22
$800 or more	358	243	88	156	115
Median	690	688	667	698	695
Included in rent	3 330	3 063	2 234	829	267
Fuels not used or free	2 976	2 515	1 424	1 090	461
ALL OCCUPIED HOUSING UNITS					
Total	18 221	14 328	6 253	8 075	3 893
Heating Equipment					
Owner occupied	11 009	8 155	2 391	5 764	2 854
Warm-air furnace	4 665	3 398	891	2 507	1 267
Heat pump	100	79	10	69	21
Steam or hot water	4 905	4 044	1 357	2 687	861
Built-in electric units	510	281	61	220	229
Floor, wall, or pipeless furnace	109	57	14	44	52
Room heaters with flue	137	92	41	51	45
Room heaters without flue	22	15	4	11	7
Fireplaces, stoves, or portable heaters	561	188	14	173	373
None	1	1	-	1	-
Renter occupied	7 212	6 173	3 861	2 312	1 039
Warm-air furnace	1 836	1 491	826	665	344
Heat pump	17	17	10	7	-
Steam or hot water	4 266	3 879	2 618	1 261	407
Built-in electric units	599	463	213	249	137
Floor, wall, or pipeless furnace	50	24	4	21	26
Room heaters with flue	273	214	143	71	59
Room heaters without flue	33	19	11	8	14
Fireplaces, stoves, or portable heaters	113	61	32	28	52
None	5	5	4	2	-
ALL OCCUPIED HOUSING UNITS					
Total	18 221	14 328	6 253	8 075	3 893
UNITS OCCUPIED LAST WINTER					
Total	16 585	13 067	5 629	7 438	3 517
Insufficient Heat					
Closure of rooms:					
Owner occupied	10 564	7 822	2 294	5 528	2 742
With heating equipment	10 563	7 821	2 294	5 526	2 742
No rooms closed	10 115	7 520	2 196	5 324	2 595
Closed certain rooms	352	235	79	156	117
Living room only	10	9	2	7	2
Dining room only	3	-	-	-	3
1 or more bedrooms only	229	139	41	97	91
Other rooms or combination of rooms	97	79	36	43	18
Not reported	13	9	-	9	3
Not reported	95	66	19	46	29
No heating equipment	1	1	-	1	-
Renter occupied	6 021	5 245	3 335	1 911	776
With heating equipment	6 015	5 240	3 331	1 909	775
No rooms closed	5 466	4 753	2 977	1 776	713
Closed certain rooms	466	419	308	111	47
Living room only	45	42	36	7	3
Dining room only	3	3	2	2	-
1 or more bedrooms only	293	268	185	82	27
Other rooms or combination of rooms	119	104	88	17	15
Not reported	6	3	-	3	3
Not reported	83	68	46	22	15
No heating equipment	5	5	4	2	-
Additional heat source:					
Owner occupied	10 564	7 822	2 294	5 528	2 742
With specified heating equipment[3]	10 004	7 628	2 278	5 350	2 376
No additional heat source used	9 221	7 048	2 061	4 988	2 173
Used kitchen stove, fireplace, or portable heater	606	435	163	273	171
Not reported	176	144	55	89	32
Lacking specified heating equipment or none	560	194	16	178	366

See footnotes at end of table.

Table B-1. Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Inside SMSA's			Outside SMSA's
		Total	In central city	Not in central city	
UNITS OCCUPIED LAST WINTER—Con.					
Insufficient Heat—Con.					
Additional heat source—Con.					
Renter occupied	6 021	5 245	3 335	1 911	775
With specified heating equipment[3]	5 900	5 176	3 297	1 879	724
No additional heat source used	4 778	4 162	2 538	1 624	616
Used kitchen stove, fireplace, or portable heater	1 015	922	682	240	92
Not reported	108	92	78	14	16
Lacking specified heating equipment or none	121	70	38	32	51
Rooms lacking specified heat source:					
Owner occupied	10 564	7 822	2 294	5 528	2 742
With specified heating equipment[3]	10 004	7 628	2 278	5 350	2 376
No rooms lacking air ducts, registers, radiators, or heaters	8 788	6 909	2 031	4 878	1 880
Rooms lacking air ducts, registers, radiators, or heaters	1 095	626	211	415	469
1 room	471	317	99	218	154
2 rooms	284	170	60	110	114
3 rooms or more	340	139	51	87	201
Not reported	121	93	37	57	27
Lacking specified heating equipment or none	560	194	16	178	366
Renter occupied	6 021	5 245	3 335	1 911	775
With specified heating equipment[3]	5 900	5 176	3 297	1 879	724
No rooms lacking air ducts, registers, radiators, or heaters	5 203	4 657	2 932	1 726	545
Rooms lacking air ducts, registers, radiators, or heaters	613	441	300	142	172
1 room	264	198	134	64	67
2 rooms	172	116	77	39	56
3 rooms or more	177	128	89	39	49
Not reported	84	77	66	12	6
Lacking specified heating equipment or none	121	70	38	32	51
Housing unit uncomfortably cold:					
Owner occupied	10 564	7 822	2 294	5 528	2 742
With specified heating equipment[3]	10 004	7 628	2 278	5 350	2 376
Lacking specified heating equipment or none	560	194	16	178	366
Housing unit not uncomfortably cold for 24 hours or more	470	161	12	149	310
Housing unit uncomfortably cold for 24 hours or more	50	19	4	15	31
Not reported	40	15	-	15	25
Renter occupied	6 021	5 245	3 335	1 911	775
With specified heating equipment[3]	5 900	5 176	3 297	1 879	724
Lacking specified heating equipment or none	121	70	38	32	51
Housing unit not uncomfortably cold for 24 hours or more	73	36	13	24	37
Housing unit uncomfortably cold for 24 hours or more	28	19	12	6	10
Not reported	19	15	13	2	5
ALL OCCUPIED HOUSING UNITS					
Total	18 221	14 328	6 253	8 075	3 893
Air Conditioning					
Owner occupied	11 009	8 155	2 391	5 764	2 854
With air conditioning	5 642	4 707	1 489	3 219	934
Room units	4 394	3 714	1 291	2 423	680
1	2 326	1 883	651	1 231	443
2	1 329	1 170	402	768	159
3	506	453	176	277	52
4	153	141	46	95	13
5 or more	81	68	18	51	13
Central system	1 248	993	197	796	254
With no air conditioning	5 367	3 448	903	2 545	1 920
Renter occupied	7 212	6 173	3 861	2 312	1 039
With air conditioning	2 886	2 630	1 452	1 177	256
Room units	2 391	2 159	1 193	967	232
1	1 631	1 445	775	670	186
2	619	582	325	257	37
3	118	113	79	35	5
4	17	15	12	4	2
5 or more	5	4	2	2	2
Central system	495	470	260	211	25
With no air conditioning	4 326	3 543	2 409	1 134	783

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table B-2. Income of Families and Primary Individuals by Fuel, Fuel Costs, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $3,000	$3,000 to $6,999	$7,000 to $9,999	$10,000 to $14,999	$15,000 to $19,999	$20,000 to $24,999	$25,000 to $34,999	$35,000 to $49,999	$50,000 to $74,999	$75,000 or more	Median (dollars)
ALL OCCUPIED HOUSING UNITS												
Total	18 221	688	2 278	1 581	2 434	2 085	1 857	2 985	2 391	1 318	605	20 100
House Heating Fuel												
Owner occupied	11 009	214	696	729	1 190	1 161	1 217	2 179	1 938	1 148	538	26 400
Utility gas	4 894	86	300	317	508	498	516	994	889	539	247	27 200
Bottled, tank, or LP gas	85	2	16	7	16	9	10	10	9	6	1	16 400
Fuel oil	4 600	91	301	311	496	489	537	895	768	460	250	25 800
Kerosene, etc.	92	4	13	9	17	17	7	13	6	6	-	15 900
Electricity	655	11	17	40	64	55	70	129	140	98	32	30 500
Coal or coke	174	3	14	14	20	32	15	34	26	13	3	21 300
Wood	496	16	35	31	64	61	58	102	99	25	5	23 600
Solar heat	1	-	-	-	-	-	1	-	-	-	-	...
Other fuel	10	-	-	-	5	1	2	1	-	1	-	...
None	1	-	-	-	-	-	1	-	-	-	-	...
Renter occupied	7 212	474	1 581	853	1 244	924	640	806	454	170	67	12 800
Utility gas	2 847	193	648	350	500	374	253	286	176	51	17	12 300
Bottled, tank, or LP gas	60	7	21	6	10	3	6	6	1	-	-	7 900
Fuel oil	3 489	209	718	386	614	441	306	431	235	101	48	13 500
Kerosene, etc.	45	5	13	6	15	3	2	-	-	2	-	9 300
Electricity	664	48	157	98	89	83	66	73	36	11	2	11 700
Coal or coke	38	4	11	3	6	7	3	2	2	-	-	10 400
Wood	48	7	8	3	7	10	4	6	3	1	-	14 400
Solar heat	-	-	-	-	-	-	-	-	-	-	-	-
Other fuel	16	-	4	2	1	-	2	2	2	4	-	...
None	5	2	-	-	2	2	-	-	-	-	-	...
Monthly Cost Paid for Electricity												
Specified owner occupied[1]	8 674	142	469	551	857	866	954	1 777	1 625	967	465	27 800
Electricity paid for	8 673	142	469	550	856	866	954	1 777	1 625	967	465	27 800
Less than $10	20	6	7	3	2	-	-	1	1	-	-	...
$10 to $19	254	9	67	42	54	20	25	20	15	3	-	10 900
$20 to $29	851	18	102	111	120	124	115	138	76	40	7	18 000
$30 to $39	1 436	22	96	119	206	179	202	298	196	95	23	22 400
$40 to $49	1 298	20	59	81	156	149	149	293	227	125	37	26 200
$50 to $59	1 316	16	44	67	119	137	148	275	295	152	63	29 600
$60 to $79	1 625	30	52	64	111	132	159	384	361	240	113	32 300
$80 to $99	669	7	20	29	35	55	57	140	155	114	57	34 400
$100 to $149	847	5	13	20	36	54	84	195	216	131	92	36 100
$150 or more	356	9	10	13	17	15	16	52	84	67	73	43 300
Median	53	47	35	40	43	47	48	55	60	65	77	...
No electricity used	2	-	-	1	1	-	-	-	-	-	-	...
Specified renter occupied[2]	7 149	471	1 569	846	1 230	916	633	798	449	170	67	12 800
Electricity paid for	5 541	334	1 087	600	963	731	528	703	388	149	57	13 900
Less than $10	105	1	41	11	22	12	3	4	2	5	3	9 700
$10 to $19	833	67	205	109	153	106	70	74	33	12	4	11 200
$20 to $29	1 423	89	302	141	222	233	150	159	85	30	11	14 000
$30 to $39	1 179	65	221	149	221	149	111	162	74	24	3	13 500
$40 to $49	740	35	135	77	127	77	66	113	67	34	11	14 900
$50 to $59	473	33	70	38	104	53	44	56	48	14	10	14 600
$60 to $79	440	22	59	39	62	68	41	81	47	14	8	17 800
$80 to $99	143	4	28	19	29	6	16	22	10	4	5	13 700
$100 to $149	151	14	16	14	18	20	17	23	20	6	2	18 100
$150 or more	53	5	10	3	6	6	8	7	2	5	1	17 300
Median	33	31	29	32	33	31	33	36	39	41	48	...
Included in rent	1 591	136	477	242	264	182	105	94	60	20	11	9 300
No electricity used	18	-	5	4	4	3	-	1	2	-	-	...
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas												
Specified owner occupied[1]	8 674	142	469	551	857	866	954	1 777	1 625	967	465	27 800
Gas paid for	5 669	105	361	369	581	576	618	1 123	1 019	607	311	27 000
Less than $10	276	8	36	19	39	41	26	45	37	17	7	19 400
$10 to $14	322	3	28	38	37	41	33	58	38	33	13	22 100
$15 to $19	253	7	27	23	25	27	26	55	33	18	13	23 400
$20 to $24	256	9	17	27	21	25	38	36	56	20	6	23 800
$25 to $29	197	1	12	15	23	21	21	34	38	23	9	26 700
$30 to $39	486	13	44	22	51	59	54	105	80	34	22	24 800
$40 to $49	432	9	19	27	47	53	53	95	76	43	12	26 000
$50 to $69	1 099	15	48	64	121	143	126	232	211	109	30	26 400
$70 to $99	1 160	13	66	60	123	94	140	241	214	132	78	28 500
$100 or more	1 189	27	64	74	95	71	101	223	236	178	121	32 300
Median	61	53	48	54	57	53	59	61	64	71	86	...
No gas used	3 005	38	108	182	276	290	336	654	607	360	154	29 200
Specified renter occupied[2]	7 149	471	1 569	846	1 230	916	633	798	449	170	67	12 800
Gas paid for	3 611	226	761	397	662	457	321	432	228	96	31	13 200
Less than $10	619	44	119	69	113	82	57	72	31	26	5	13 500
$10 to $14	613	45	109	77	112	73	56	89	35	13	4	13 400
$15 to $19	388	22	71	48	82	53	26	38	37	5	5	13 200
$20 to $24	304	13	55	39	50	37	38	41	25	5	2	14 500
$25 to $29	178	13	50	24	25	19	13	13	12	4	5	10 300
$30 to $39	342	14	66	33	84	46	19	49	17	9	4	13 500
$40 to $49	213	9	64	22	20	30	17	29	18	6	-	13 000
$50 to $69	425	32	104	43	66	52	35	52	24	16	1	12 500
$70 to $99	289	15	76	21	65	31	31	25	19	4	2	12 500
$100 or more	241	20	48	20	46	34	30	24	11	7	3	13 500
Median	22	21	27	20	22	22	22	22	22	22	...	...
Included in rent	2 357	151	569	320	364	324	195	222	132	52	30	11 900
No gas used	1 181	94	240	130	204	135	116	144	90	22	6	13 100

See footnotes at end of table.

Table B-2. Income of Families and Primary Individuals by Fuel, Fuel Costs, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $3,000	$3,000 to $6,999	$7,000 to $9,999	$10,000 to $14,999	$15,000 to $19,999	$20,000 to $24,999	$25,000 to $34,999	$35,000 to $49,999	$50,000 to $74,999	$75,000 or more	Median (dollars)
ALL OCCUPIED HOUSING UNITS—Con.												
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.												
Specified owner occupied[1]	**8 674**	**142**	**469**	**551**	**857**	**866**	**954**	**1 777**	**1 625**	**967**	**465**	**27 800**
Fuel oil, kerosene, coal, wood, etc., paid for	4 617	74	253	298	441	465	530	962	856	500	237	27 600
Less than $100	230	4	4	6	25	15	31	47	60	24	15	31 400
$100 to $199	205	3	12	10	17	20	9	46	41	31	14	31 700
$200 to $299	170	4	9	8	13	14	19	33	50	21	1	30 900
$300 to $399	243	8	10	16	23	30	34	59	41	19	2	25 100
$400 to $499	246	8	12	15	26	33	39	54	39	16	3	23 700
$500 to $599	324	3	27	23	35	40	36	72	53	24	12	24 800
$600 to $699	341	4	27	26	25	42	52	67	66	29	4	24 500
$700 to $799	281	6	25	24	37	29	27	46	53	17	18	23 800
$800 or more	2 577	35	128	171	241	241	284	537	453	319	169	28 500
Median	800+	760	800+	800+	800+	800+	800+	800+	800+	800+	800+	...
Fuels not used or free	4 057	68	216	253	416	401	424	815	769	467	228	28 100
Specified renter occupied[2]	**7 149**	**471**	**1 569**	**846**	**1 230**	**916**	**633**	**798**	**449**	**170**	**67**	**12 800**
Fuel oil, kerosene, coal, wood, etc., paid for	843	58	144	82	162	99	99	119	50	23	8	14 300
Less than $100	79	5	18	4	12	7	20	10	3	1	-	15 400
$100 to $199	47	8	6	3	15	4	5	4	2	-	-	11 900
$200 to $299	51	5	11	6	5	8	4	9	-	2	-	13 100
$300 to $399	40	9	10	3	7	5	3	3	-	-	-	8 400
$400 to $499	55	4	6	6	17	7	10	2	1	-	2	13 200
$500 to $599	79	4	13	7	15	11	7	4	11	5	1	15 000
$600 to $699	77	4	21	3	21	9	11	7	1	-	-	12 200
$700 to $799	57	4	8	4	12	9	6	7	5	2	-	15 300
$800 or more	358	15	50	43	58	39	33	73	28	13	5	16 600
Median	690	455	634	800+	650	676	606	800+	800+	...	...	...
Included in rent	3 330	207	710	419	552	429	265	393	220	93	42	13 000
Fuels not used or free	2 976	205	716	345	516	389	269	285	179	54	17	12 100
ALL OCCUPIED HOUSING UNITS												
Total	**18 221**	**688**	**2 278**	**1 581**	**2 434**	**2 085**	**1 857**	**2 985**	**2 391**	**1 318**	**605**	**20 100**
Heating Equipment												
Owner occupied	**11 009**	**214**	**696**	**729**	**1 190**	**1 161**	**1 217**	**2 179**	**1 938**	**1 148**	**538**	**26 400**
Warm-air furnace	4 665	109	307	309	547	528	516	963	787	416	184	25 200
Heat pump	100	1	-	2	4	5	12	12	24	28	12	43 900
Steam or hot water	4 905	73	291	312	471	485	548	945	874	599	306	27 900
Built-in electric units	510	8	13	35	55	48	54	105	112	62	18	28 900
Floor, wall, or pipeless furnace	109	1	10	11	18	14	9	17	24	2	4	20 600
Room heaters with flue	137	5	27	19	25	13	12	19	5	6	7	13 500
Room heaters without flue	22	1	5	-	-	4	3	4	3	-	2	...
Fireplaces, stoves, or portable heaters	561	16	43	40	70	66	62	114	110	35	6	23 800
None	1	-	-	-	-	-	1	-	-	-	-	...
Renter occupied	**7 212**	**474**	**1 581**	**853**	**1 244**	**924**	**640**	**806**	**454**	**170**	**67**	**12 800**
Warm-air furnace	1 836	117	402	236	338	229	183	190	99	25	17	12 400
Heat pump	17	-	8	-	2	-	2	1	1	3	-	...
Steam or hot water	4 288	274	878	477	726	561	367	513	306	135	48	13 500
Built-in electric units	599	46	143	94	77	71	59	68	33	7	2	11 000
Floor, wall, or pipeless furnace	50	3	8	2	15	10	4	4	5	-	-	14 300
Room heaters with flue	273	18	92	35	59	29	14	22	4	-	-	9 300
Room heaters without flue	33	1	19	2	9	3	-	-	-	-	-	...
Fireplaces, stoves, or portable heaters	113	13	31	7	16	19	12	8	5	1	-	11 300
None	5	2	-	-	2	2	-	-	-	-	-	...
ALL OCCUPIED HOUSING UNITS												
Total	**18 221**	**688**	**2 278**	**1 581**	**2 434**	**2 085**	**1 857**	**2 985**	**2 391**	**1 318**	**605**	**20 100**
UNITS OCCUPIED LAST WINTER												
Total	**16 585**	**549**	**2 019**	**1 436**	**2 186**	**1 904**	**1 687**	**2 767**	**2 243**	**1 227**	**568**	**20 600**
Insufficient Heat												
Closure of rooms:												
Owner occupied	**10 564**	**204**	**673**	**719**	**1 162**	**1 120**	**1 163**	**2 078**	**1 855**	**1 080**	**509**	**26 200**
With heating equipment	10 563	204	673	719	1 162	1 120	1 162	2 078	1 855	1 080	509	26 200
No rooms closed	10 115	195	613	666	1 090	1 070	1 117	2 017	1 792	1 052	503	26 500
Closed certain rooms	352	5	55	44	63	40	32	53	39	19	2	18 100
Living room only	10	-	2	1	4	2	1	1	1	-	-	...
Dining room only	3	-	-	-	1	2	-	-	-	-	-	...
1 or more bedrooms only	229	4	40	30	38	30	20	34	25	8	2	15 400
Other rooms or combination of rooms	97	2	14	13	17	5	8	16	11	11	-	18 000
Not reported	13	-	-	-	2	2	3	3	3	-	-	...
Not reported	95	3	4	9	9	10	13	9	24	9	5	24 300
No heating equipment	1	-	-	-	-	-	1	-	-	-	-	...
Renter occupied	**6 021**	**345**	**1 346**	**717**	**1 023**	**783**	**524**	**689**	**387**	**147**	**58**	**12 900**
With heating equipment	6 015	343	1 346	717	1 022	781	524	689	387	147	58	12 900
No rooms closed	5 468	312	1 191	651	913	693	487	655	373	134	57	13 200
Closed certain rooms	466	25	132	54	97	82	29	29	8	9	2	11 100
Living room only	45	-	17	2	13	8	2	2	2	-	-	11 500
Dining room only	3	-	2	-	-	2	-	-	-	-	-	...
1 or more bedrooms only	293	19	70	40	61	56	23	12	4	5	2	11 400
Other rooms or combination of rooms	119	5	40	12	22	16	4	15	2	4	-	10 700
Not reported	6	2	4	-	-	-	-	-	-	-	-	...
Not reported	83	5	23	12	12	6	8	5	7	4	-	10 400
No heating equipment	5	2	-	-	2	2	-	-	-	-	-	...

See footnotes at end of table.

Table B-2. Income of Families and Primary Individuals by Fuel, Fuel Costs, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $3,000	$3,000 to $6,999	$7,000 to $9,999	$10,000 to $14,999	$15,000 to $19,999	$20,000 to $24,999	$25,000 to $34,999	$35,000 to $49,999	$50,000 to $74,999	$75,000 or more	Median (dollars)
UNITS OCCUPIED LAST WINTER—Con.												
Insufficient Heat—Con.												
Additional heat source:												
Owner occupied	10 564	204	673	719	1 162	1 120	1 163	2 078	1 855	1 080	509	26 200
With specified heating equipment[3]	10 004	190	624	679	1 093	1 053	1 102	1 965	1 747	1 045	505	26 300
No additional heat source used	9 221	174	552	619	1 009	973	1 022	1 819	1 616	975	461	26 400
Used kitchen stove, fireplace, or portable heater	606	13	60	43	72	58	54	118	100	50	38	25 300
Not reported	176	2	12	17	12	22	26	28	31	21	6	24 300
Lacking specified heating equipment or none	560	14	48	40	69	67	61	113	108	35	5	23 400
Renter occupied	6 021	345	1 346	717	1 023	783	524	689	387	147	58	12 900
With specified heating equipment[3]	5 900	334	1 305	713	1 001	767	513	681	382	146	58	13 000
No additional heat source used	4 778	272	991	586	803	619	441	555	331	126	53	13 400
Used kitchen stove, fireplace, or portable heater	1 015	55	266	117	183	141	68	116	46	18	4	11 900
Not reported	108	7	48	10	15	7	3	10	4	2	2	6 900
Lacking specified heating equipment or none	121	11	41	4	22	16	12	8	5	1	-	10 900
Rooms lacking specified heat source:												
Owner occupied	10 564	204	673	719	1 162	1 120	1 163	2 078	1 855	1 080	509	26 200
With specified heating equipment[3]	10 004	190	624	679	1 093	1 053	1 102	1 965	1 747	1 045	505	26 300
No rooms lacking air ducts, registers, radiators, or heaters	8 788	157	518	567	923	898	965	1 758	1 584	953	465	27 100
Rooms lacking air ducts, registers, radiators, or heaters	1 095	30	96	98	161	141	116	193	144	80	37	21 000
1 room	471	8	30	27	62	50	55	99	67	46	27	25 400
2 rooms	284	12	28	38	49	43	19	36	39	18	2	16 700
3 rooms or more	340	10	38	33	50	48	42	58	38	15	8	19 100
Not reported	121	2	10	14	10	15	21	14	19	12	3	22 200
Lacking specified heating equipment or none	560	14	48	40	69	67	61	113	108	35	5	23 400
Renter occupied	6 021	345	1 346	717	1 023	783	524	689	387	147	58	12 900
With specified heating equipment[3]	5 900	334	1 305	713	1 001	767	513	681	382	146	58	13 000
No rooms lacking air ducts, registers, radiators, or heaters	5 203	304	1 118	635	846	662	477	611	352	140	58	13 200
Rooms lacking air ducts, registers, radiators, or heaters	613	25	155	72	135	93	34	63	28	6	1	12 000
1 room	264	7	67	39	45	45	11	29	18	2	1	12 100
2 rooms	172	10	39	19	40	27	11	16	6	4	-	12 300
3 rooms or more	177	9	49	13	50	21	11	18	4	1	-	11 800
Not reported	84	5	32	6	19	11	2	6	2	-	-	9 300
Lacking specified heating equipment or none	121	11	41	4	22	16	12	8	5	1	-	10 900
Housing unit uncomfortably cold:												
Owner occupied	10 564	204	673	719	1 162	1 120	1 163	2 078	1 855	1 080	509	26 200
With specified heating equipment[3]	10 004	190	624	679	1 093	1 053	1 102	1 965	1 747	1 045	505	26 300
Lacking specified heating equipment or none	560	14	48	40	69	67	61	113	108	35	5	23 400
Housing unit not uncomfortably cold for 24 hours or more	470	13	39	32	56	58	50	93	94	31	4	23 600
Housing unit uncomfortably cold for 24 hours or more	50	-	6	5	10	7	4	12	4	2	-	17 700
Not reported	40	1	3	3	3	2	8	8	10	2	1	26 500
Renter occupied	6 021	345	1 346	717	1 023	783	524	689	387	147	58	12 900
With specified heating equipment[3]	5 900	334	1 305	713	1 001	767	513	681	382	146	58	13 000
Lacking specified heating equipment or none	121	11	41	4	22	16	12	8	5	1	-	10 900
Housing unit not uncomfortably cold for 24 hours or more	73	7	18	4	13	12	11	5	3	1	-	12 800
Housing unit uncomfortably cold for 24 hours or more	28	4	13	-	6	-	-	3	3	-	-	...
Not reported	19	-	10	-	4	5	1	-	-	-	-	...
ALL OCCUPIED HOUSING UNITS												
Total	18 221	688	2 278	1 581	2 434	2 085	1 857	2 985	2 391	1 318	605	20 100
Air Conditioning												
Owner occupied	11 009	214	696	729	1 190	1 161	1 217	2 179	1 938	1 148	538	26 400
With air conditioning	5 642	76	224	269	505	522	586	1 158	1 147	762	394	30 500
Room units	4 394	56	202	226	422	446	479	929	858	541	235	28 900
1	2 326	35	138	142	285	271	276	485	404	220	69	25 300
2	1 329	13	52	64	110	130	144	304	277	174	62	30 000
3	506	6	10	17	21	42	43	95	124	92	55	37 200
4	153	2	-	4	3	4	13	40	36	36	16	39 800
5 or more	81	-	2	-	4	-	2	6	16	18	33	65 500
Central system	1 248	21	22	42	83	76	107	229	288	221	159	37 300
With no air conditioning	5 367	137	473	460	685	639	631	1 021	791	386	144	22 300
Renter occupied	7 212	474	1 581	853	1 244	924	640	806	454	170	67	12 800
With air conditioning	2 886	117	360	311	460	389	339	466	269	99	56	17 500
Room units	2 391	105	300	261	388	333	265	377	238	81	43	17 100
1	1 631	75	251	196	276	244	168	239	134	35	13	15 400
2	619	23	45	58	100	68	85	112	80	30	18	20 900
3	118	4	4	4	9	19	7	24	23	14	12	30 600
4	17	2	-	1	4	-	5	2	2	2	-	...
5 or more	5	2	-	2	-	2	-	-	-	-	-	...
Central system	495	11	60	50	72	56	75	89	51	19	13	19 800
With no air conditioning	4 326	358	1 221	542	784	535	301	340	164	71	11	10 300

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table B-3. Value of Owner-Occupied Housing Units by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $10,000	$10,000 to $19,999	$20,000 to $29,999	$30,000 to $39,999	$40,000 to $49,999	$50,000 to $59,999	$60,000 to $74,999	$75,000 to $99,999	$100,000 to $199,999	$200,000 or more	Median (dollars)
SPECIFIED OWNER OCCUPIED[1]												
Total	8 674	64	299	569	895	1 230	1 088	1 567	1 619	1 125	220	61 900
House Heating Fuel												
Utility gas	3 989	26	163	303	446	591	486	671	700	505	98	59 600
Bottled, tank, or LP gas	53	1	8	4	8	8	8	8	3	4	-	46 000
Fuel oil	3 593	21	87	174	331	479	449	707	757	487	102	65 400
Kerosene, etc.	49	3	10	6	6	11	5	5	3	-	-	39 200
Electricity	488	1	7	10	20	63	73	98	98	104	14	70 800
Coal or coke	137	6	7	26	25	16	14	12	19	8	4	42 600
Wood	361	7	18	44	58	63	48	67	38	16	2	48 600
Solar heat	1	-	-	-	-	-	-	-	-	1	-	...
Other fuel	3	-	-	1	-	-	2	-	-	-	-	...
None	1	-	-	-	-	-	-	-	1	-	-	...
Monthly Cost Paid for Electricity												
Electricity paid for	8 673	63	299	569	895	1 230	1 088	1 567	1 619	1 125	220	61 900
Less than $10	20	3	3	5	2	2	-	4	2	-	-	...
$10 to $19	254	9	25	37	52	46	31	26	19	3	5	40 900
$20 to $29	851	19	60	111	139	163	121	125	80	31	2	45 900
$30 to $39	1 436	10	63	151	226	250	216	261	173	80	7	50 900
$40 to $49	1 298	5	55	81	145	232	187	244	235	100	14	57 000
$50 to $59	1 316	10	40	79	112	176	157	276	285	165	17	64 500
$60 to $79	1 625	2	30	72	126	192	192	306	390	272	43	69 700
$80 to $99	669	1	9	16	43	73	70	121	159	142	35	75 300
$100 to $149	847	3	11	15	36	70	75	163	203	212	59	81 200
$150 or more	356	2	1	3	15	27	37	38	74	120	40	93 800
Median	53	31	39	38	42	46	48	54	61	73	93	...
No electricity used	2	1	-	-	-	1	-	-	-	-	-	...
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas												
Gas paid for	5 669	44	240	429	659	837	671	989	991	677	134	59 300
Less than $10	276	6	15	32	36	45	36	46	37	22	2	51 100
$10 to $14	322	3	20	28	46	38	28	55	64	32	9	60 000
$15 to $19	253	3	8	25	39	32	25	40	47	28	6	58 000
$20 to $24	256	6	18	15	24	40	30	49	49	21	5	58 900
$25 to $29	197	-	6	11	42	31	16	38	22	25	5	54 800
$30 to $39	486	5	26	49	61	93	41	90	73	35	11	52 100
$40 to $49	432	4	15	46	53	76	61	62	75	32	9	53 700
$50 to $69	1 099	5	50	72	153	185	160	213	156	91	13	55 200
$70 to $99	1 160	4	48	71	114	176	151	225	206	135	28	61 000
$100 or more	1 189	8	32	82	90	123	123	170	261	254	46	72 000
Median	61	38	54	53	53	57	62	60	66	81	77	...
No gas used	3 005	20	59	140	236	393	415	578	628	448	86	66 200
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.												
Fuel oil, kerosene, coal, wood, etc., paid for	4 617	35	145	274	462	626	578	887	903	589	118	63 200
Less than $100	230	-	11	18	28	26	31	45	33	33	4	60 000
$100 to $199	205	3	9	10	17	27	23	38	41	29	7	64 800
$200 to $299	170	3	5	18	15	24	21	35	34	15	1	59 900
$300 to $399	243	2	11	27	23	35	36	50	37	19	2	56 400
$400 to $499	246	2	10	17	30	48	46	43	32	18	-	53 400
$500 to $599	324	4	9	31	49	39	48	76	47	17	4	56 300
$600 to $699	341	4	10	25	49	58	34	68	70	20	3	57 100
$700 to $799	281	5	18	21	39	33	33	46	37	39	9	57 200
$800 or more	2 577	11	61	106	211	336	306	485	571	400	89	67 900
Median	800+	673	736	663	748	800+	800+	800+	800+	800+	800+	...
Fuels not used or free	4 057	29	154	295	433	605	508	680	716	536	102	60 100
Heating Equipment												
Warm-air furnace	3 798	35	181	301	466	637	474	648	597	378	82	55 900
Heat pump	72	-	-	1	-	3	7	10	13	33	6	107 400
Steam or hot water	3 823	10	61	181	306	450	470	738	866	616	124	68 800
Built-in electric units	383	1	7	6	18	54	63	83	78	66	6	67 600
Floor, wall, or pipeless furnace	88	1	10	11	30	13	5	6	6	6	-	37 400
Room heaters with flue	82	6	17	15	13	3	9	8	5	7	-	33 000
Room heaters without flue	14	-	4	-	1	4	4	1	1	-	-	...
Fireplaces, stoves, or portable heaters	413	12	19	54	61	67	55	73	51	19	3	49 000
None	1	-	-	-	-	-	-	-	1	-	-	...

See footnotes at end of table.

Table B-3. Value of Owner-Occupied Housing Units by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $10,000	$10,000 to $19,999	$20,000 to $29,999	$30,000 to $39,999	$40,000 to $49,999	$50,000 to $59,999	$60,000 to $74,999	$75,000 to $99,999	$100,000 to $199,999	$200,000 or more	Median (dollars)
SPECIFIED OWNER OCCUPIED[1]												
Total	8 674	64	299	569	895	1 230	1 086	1 567	1 619	1 125	220	61 900
UNITS OCCUPIED LAST WINTER												
Total	8 378	62	285	557	873	1 191	1 046	1 522	1 574	1 059	210	61 700
Insufficient Heat												
Closure of rooms:												
With heating equipment	8 377	62	285	557	873	1 191	1 046	1 522	1 572	1 059	210	61 700
No rooms closed	8 016	50	262	514	834	1 138	1 004	1 471	1 526	1 012	206	62 100
Closed certain rooms	290	12	22	38	33	46	35	39	30	33	2	48 800
Living room only	7	-	1	-	1	2	2	-	-	2	-	...
Dining room only	2	-	-	-	-	-	-	2	-	-	-	...
1 or more bedrooms only	194	10	17	26	22	31	27	25	16	19	-	46 800
Other rooms or combination of rooms	75	2	4	10	8	13	6	10	13	8	2	52 500
Not reported	13	-	-	2	2	1	1	2	2	4	-	...
Not reported	70	-	1	4	7	7	7	12	16	14	3	72 000
No heating equipment	1	-	-	-	-	-	-	-	1	-	-	...
Additional heat source:												
With specified heating equipment[2]	7 967	50	264	504	812	1 122	993	1 451	1 523	1 040	208	62 500
No additional heat source used	7 368	43	222	449	744	1 057	917	1 383	1 422	961	189	62 800
Used kitchen stove, fireplace, or portable heater	470	6	36	43	57	47	65	63	76	58	17	56 900
Not reported	131	1	5	12	11	18	11	25	26	20	2	64 200
Lacking specified heating equipment or none	411	12	21	52	62	69	53	71	50	19	3	48 500
Rooms lacking specified heat source:												
With specified heating equipment[2]	7 967	50	264	504	812	1 122	993	1 451	1 523	1 040	208	62 500
No rooms lacking air ducts, registers, radiators, or heaters	7 035	31	187	393	657	972	905	1 313	1 406	976	194	64 300
Rooms lacking air ducts, registers, radiators, or heaters	645	18	71	105	148	137	79	120	103	50	13	45 900
1 room	381	8	26	44	52	63	24	62	64	29	9	49 700
2 rooms	217	3	27	26	44	39	19	29	23	7	1	42 300
3 rooms or more	246	7	18	35	53	36	36	29	16	14	3	43 100
Not reported	67	1	5	7	6	13	9	18	15	13	-	62 000
Lacking specified heating equipment or none	411	12	21	52	62	69	53	71	50	19	3	48 500
Housing unit uncomfortably cold:												
With specified heating equipment[2]	7 967	50	264	504	812	1 122	993	1 451	1 523	1 040	208	62 500
Lacking specified heating equipment or none	411	12	21	52	62	69	53	71	50	19	3	48 500
Housing unit not uncomfortably cold for 24 hours or more	341	9	17	38	50	57	49	58	47	15	2	49 800
Housing unit uncomfortably cold for 24 hours or more	35	2	4	8	5	9	2	5	-	1	-	37 700
Not reported	35	1	1	5	6	3	3	8	4	4	1	53 000
SPECIFIED OWNER OCCUPIED[1]												
Total	8 674	64	299	569	895	1 230	1 086	1 567	1 619	1 125	220	61 900
Air Conditioning												
With air conditioning	4 449	6	107	192	344	573	489	801	1 027	767	143	69 600
Room units	3 472	6	101	179	316	494	431	627	773	494	51	65 000
1	1 834	5	71	114	207	331	249	338	321	180	17	57 600
2	1 038	2	26	54	81	120	129	185	295	128	15	68 500
3	393	-	-	11	24	35	28	83	98	106	8	79 000
4	137	-	2	-	3	6	19	13	48	38	5	86 700
5 or more	71	-	-	-	-	-	6	7	10	43	6	129 700
Central system	977	-	6	13	29	79	58	174	254	273	92	87 800
With no air conditioning	4 225	58	192	377	550	658	597	766	593	358	78	54 700

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table B-4. Gross Rent of Renter-Occupied Housing Units by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $100	$100 to $149	$150 to $199	$200 to $249	$250 to $299	$300 to $349	$350 to $399	$400 to $499	$500 or more	No cash rent	Median (dollars)
SPECIFIED RENTER OCCUPIED[1]												
Total	**7 149**	**230**	**448**	**546**	**823**	**1 031**	**1 065**	**894**	**1 019**	**866**	**226**	**318**
House Heating Fuel												
Utility gas	2 835	77	161	246	389	423	431	377	376	258	97	308
Bottled, tank, or LP gas	58	2	9	4	7	12	7	3	12	2	2	279
Fuel oil	3 460	112	218	226	343	505	527	448	501	488	94	326
Kerosene, etc.	43	2	1	9	12	5	4	-	3	2	4	231
Electricity	662	32	50	47	59	73	84	61	124	115	17	338
Coal or coke	34	5	4	2	9	4	4	2	-	-	5	...
Wood	38	-	5	7	4	5	6	3	-	1	7	...
Solar heat	-	-	-	-	-	-	-	-	-	-	-	-
Other fuel	14	-	-	3	-	4	2	2	2	2	-	...
None	5	-	2	2	-	-	-	-	2	-	-	...
Monthly Cost Paid for Electricity												
Electricity paid for	5 541	76	204	323	623	844	847	796	922	774	132	337
Less than $10	105	-	16	9	21	19	19	7	9	3	3	263
$10 to $19	833	31	53	86	131	169	119	91	91	43	19	280
$20 to $29	1 423	27	47	122	203	229	251	191	208	120	23	314
$30 to $39	1 179	11	38	59	117	195	215	183	183	156	21	336
$40 to $49	740	1	35	18	94	120	100	104	134	115	19	346
$50 to $59	473	4	4	12	27	59	74	92	107	83	11	377
$60 to $79	440	2	5	12	24	31	51	75	97	128	16	413
$80 to $99	143	-	3	4	4	16	7	29	35	35	9	410
$100 to $149	151	-	2	1	-	5	10	21	44	60	9	473
$150 or more	53	-	-	-	2	2	-	3	14	31	2	500+
Median	33	22	26	25	27	30	31	35	38	45	39	...
Included in rent	1 591	152	245	221	198	181	217	96	96	92	94	232
No electricity used	18	2	-	2	3	6	2	2	2	-	-	...
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas												
Gas paid for	3 611	32	117	212	475	608	594	551	513	410	99	326
Less than $10	619	17	37	38	110	90	102	59	80	76	11	306
$10 to $14	613	7	32	34	76	101	119	91	76	69	9	322
$15 to $19	388	4	9	22	50	81	69	61	58	31	3	319
$20 to $24	304	1	6	16	32	36	66	48	56	38	6	343
$25 to $29	176	-	5	17	22	33	28	18	29	21	4	316
$30 to $39	342	2	7	21	45	62	43	70	44	33	15	330
$40 to $49	213	2	5	17	28	43	28	43	22	13	11	310
$50 to $69	425	-	10	33	62	79	59	60	53	49	21	315
$70 to $99	289	-	3	15	41	53	46	54	35	34	9	330
$100 or more	241	-	2	-	9	30	36	47	61	45	11	390
Median	22	...	13	23	20	24	20	29	23	23	42	...
Included in rent	2 357	146	267	255	248	272	295	221	290	281	84	290
No gas used	1 181	51	64	78	102	152	177	122	217	175	43	334
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.												
Fuel oil, kerosene, coal, wood, etc., paid for	843	15	16	35	67	119	105	106	150	168	63	365
Less than $100	79	3	5	5	7	14	11	6	10	10	9	304
$100 to $199	47	3	3	3	5	3	11	4	11	3	3	326
$200 to $299	51	3	2	7	3	12	7	3	5	3	5	283
$300 to $399	40	3	1	4	5	16	2	1	4	3	2	270
$400 to $499	55	2	1	5	11	6	9	5	5	6	4	302
$500 to $599	79	2	1	4	11	8	10	11	18	10	4	359
$600 to $699	77	-	3	5	5	20	6	14	12	8	5	327
$700 to $799	57	-	1	1	3	4	6	16	10	12	6	385
$800 or more	358	-	-	1	18	36	43	46	76	115	24	431
Median	690	...	...	375	524	598	644	754	800+	800+	672	...
Included in rent	3 330	118	233	249	388	484	516	432	447	402	61	315
Fuels not used or free	2 976	97	199	261	369	428	444	356	423	296	103	309
Heating Equipment												
Warm-air furnace	1 808	33	87	123	225	280	255	231	271	214	89	321
Heat pump	17	-	-	2	-	6	1	6	1	2	-	...
Steam or hot water	4 270	157	276	301	446	598	673	567	610	540	102	322
Built-in electric units	597	32	48	44	59	62	61	52	107	98	14	329
Floor, wall, or pipeless furnace	50	1	2	7	5	11	5	4	5	7	3	287
Room heaters with flue	270	5	23	43	67	50	34	21	17	2	7	244
Room heaters without flue	32	-	5	3	6	6	4	5	1	-	2	...
Fireplaces, stoves, or portable heaters	100	2	6	21	14	18	12	9	5	3	9	254
None	5	-	2	2	-	-	-	-	2	-	-	...

See footnotes at end of table.

Table B-4. Gross Rent of Renter-Occupied Housing Units by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $100	$100 to $149	$150 to $199	$200 to $249	$250 to $299	$300 to $349	$350 to $399	$400 to $499	$500 or more	No cash rent	Median (dollars)
SPECIFIED RENTER OCCUPIED[1]												
Total	**7 149**	**230**	**448**	**546**	**823**	**1 031**	**1 065**	**894**	**1 019**	**666**	**226**	**318**
UNITS OCCUPIED LAST WINTER												
Total	**5 968**	**188**	**404**	**471**	**710**	**884**	**872**	**746**	**823**	**669**	**202**	**313**
Insufficient Heat												
Closure of rooms:												
With heating equipment	5 962	188	402	469	710	884	872	746	821	669	202	313
No rooms closed	5 419	172	374	431	627	799	786	673	737	632	188	313
Closed certain rooms	460	14	22	34	69	75	79	64	68	26	10	307
Living room only	45	2	2	2	5	13	13	3	2	5	-	297
Dining room only	3	-	-	-	2	-	-	-	2	-	-	...
1 or more bedrooms only	269	5	12	29	40	43	50	44	45	16	4	312
Other rooms or combination of rooms	118	7	8	3	21	16	16	17	18	5	5	300
Not reported	5	-	-	-	-	3	-	-	2	-	-	...
Not reported	83	2	5	3	14	11	7	9	17	10	5	328
No heating equipment	5	-	2	2	-	-	-	-	2	-	-	...
Additional heat source:												
With specified heating equipment[2]	5 858	186	395	446	691	867	859	735	818	668	193	314
No additional heat source used	4 740	150	327	352	553	680	696	572	661	575	174	316
Used kitchen stove, fireplace, or portable heater	1 012	35	61	84	117	160	158	154	146	84	13	313
Not reported	106	2	7	10	21	27	5	9	11	10	5	270
Lacking specified heating equipment or none	110	2	9	24	19	18	13	11	5	1	9	241
Rooms lacking specified heat source:												
With specified heating equipment[2]	5 858	186	395	446	691	867	859	735	818	668	193	314
No rooms lacking air ducts, registers, radiators, or heaters	5 177	177	352	365	578	739	764	662	756	623	161	319
Rooms lacking air ducts, registers, radiators, or heaters	597	7	32	73	100	110	92	59	57	38	30	282
1 room	262	4	18	30	24	53	44	24	26	28	11	296
2 rooms	167	-	6	15	31	32	36	17	16	6	9	291
3 rooms or more	169	4	7	28	45	26	13	18	15	3	11	244
Not reported	84	2	10	9	13	18	4	14	5	7	2	268
Lacking specified heating equipment or none	110	2	9	24	19	18	13	11	5	1	9	241
Housing unit uncomfortably cold:												
With specified heating equipment[2]	5 858	186	395	446	691	867	859	735	818	668	193	314
Lacking specified heating equipment or none	110	2	9	24	19	18	13	11	5	1	9	241
Housing unit not uncomfortably cold for 24 hours or more	64	2	5	10	12	6	12	9	-	1	7	248
Housing unit uncomfortably cold for 24 hours or more	27	-	4	6	4	10	-	-	3	-	-	...
Not reported	19	-	-	8	3	2	1	2	2	-	2	...
SPECIFIED RENTER OCCUPIED[1]												
Total	**7 149**	**230**	**448**	**546**	**823**	**1 031**	**1 065**	**894**	**1 019**	**666**	**226**	**318**
Air Conditioning												
With air conditioning	2 870	35	87	116	195	326	482	408	557	581	85	368
Room units	2 376	35	72	104	189	283	398	359	427	437	71	360
1	1 617	30	60	91	149	210	312	244	272	207	43	339
2	618	5	12	10	33	68	75	101	127	167	21	397
3	118	-	-	3	4	4	9	11	27	58	4	500+
4	17	-	-	1	4	2	2	3	2	4	-	...
5 or more	5	-	-	-	-	-	-	-	-	2	4	...
Central system	494	-	15	11	6	43	84	49	129	144	14	425
With no air conditioning	4 279	195	361	430	628	705	584	486	463	285	141	282

[1]Excludes one-unit structures on 10 acres or more.
[2]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table B-5. Housing Units in Structure by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Housing units in structure					
		1	2 to 4	5 to 9	10 to 19	20 or more	Mobile home or trailer
ALL OCCUPIED HOUSING UNITS							
Total	18 221	10 410	3 499	891	724	2 349	348
House Heating Fuel							
Owner occupied	11 009	9 376	1 031	61	26	226	290
Utility gas	4 894	4 203	555	30	6	33	66
Bottled, tank, or LP gas	85	60	2	-	-	2	21
Fuel oil	4 600	3 652	412	21	8	170	137
Kerosene, etc.	92	52	2	-	-	-	38
Electricity	655	554	51	8	12	19	11
Coal or coke	174	170	2	2	-	-	1
Wood	496	475	7	-	-	-	15
Solar heat	1	1	-	-	-	-	-
Other fuel	10	7	-	-	-	2	-
None	1	1	-	-	-	-	-
Renter occupied	7 212	1 034	2 469	831	698	2 123	58
Utility gas	2 847	460	1 372	331	253	423	8
Bottled, tank, or LP gas	60	13	27	9	2	5	3
Fuel oil	3 489	405	884	358	347	1 470	26
Kerosene, etc.	45	17	6	5	2	-	15
Electricity	664	71	163	124	87	216	3
Coal or coke	38	26	7	2	3	-	-
Wood	48	41	5	-	-	-	3
Solar heat	-	-	-	-	-	-	-
Other fuel	16	2	2	2	2	9	-
None	5	-	3	-	2	-	-
Monthly Cost Paid for Electricity							
Specified owner occupied[1]	8 674	8 674	...	...	...	...	...
Electricity paid for	8 673	8 673	...	...	...	...	...
Less than $10	20	20	...	...	...	...	...
$10 to $19	254	254	...	...	...	...	...
$20 to $29	851	851	...	...	...	...	...
$30 to $39	1 436	1 436	...	...	...	...	...
$40 to $49	1 298	1 298	...	...	...	...	...
$50 to $59	1 316	1 316	...	...	...	...	...
$60 to $79	1 625	1 625	...	...	...	...	...
$80 to $99	669	669	...	...	...	...	...
$100 to $149	847	847	...	...	...	...	...
$150 or more	356	356	...	...	...	...	...
Median	53	53	...	...	...	...	...
No electricity used	2	2	...	...	...	...	...
Specified renter occupied[2]	7 149	971	2 469	831	698	2 123	58
Electricity paid for	5 541	846	2 109	615	539	1 378	54
Less than $10	105	3	38	15	19	29	2
$10 to $19	833	63	313	140	106	208	3
$20 to $29	1 423	165	581	150	137	377	14
$30 to $39	1 179	167	451	130	110	307	14
$40 to $49	740	124	286	73	75	176	7
$50 to $59	473	97	163	42	38	127	7
$60 to $79	440	103	180	30	31	93	3
$80 to $99	143	53	32	15	5	38	1
$100 to $149	151	57	49	15	12	17	2
$150 or more	53	16	16	6	7	7	2
Median	33	42	32	30	31	32	35
Included in rent	1 591	123	354	210	158	742	4
No electricity used	18	3	6	5	-	3	-
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas							
Specified owner occupied[1]	8 674	8 674	...	...	...	...	...
Gas paid for	5 669	5 669	...	...	...	...	...
Less than $10	276	276	...	...	...	...	...
$10 to $14	322	322	...	...	...	...	...
$15 to $19	253	253	...	...	...	...	...
$20 to $24	256	256	...	...	...	...	...
$25 to $29	197	197	...	...	...	...	...
$30 to $39	486	486	...	...	...	...	...
$40 to $49	432	432	...	...	...	...	...
$50 to $69	1 099	1 099	...	...	...	...	...
$70 to $99	1 160	1 160	...	...	...	...	...
$100 or more	1 189	1 189	...	...	...	...	...
Median	61	61	...	...	...	...	...
No gas used	3 005	3 005	...	...	...	...	...
Specified renter occupied[2]	7 149	971	2 469	831	698	2 123	58
Gas paid for	3 611	606	1 628	360	243	732	42
Less than $10	619	38	181	91	72	225	13
$10 to $14	613	49	205	77	68	204	10
$15 to $19	388	28	137	55	34	132	2
$20 to $24	304	43	131	26	23	77	4
$25 to $29	178	25	103	16	5	27	1
$30 to $39	342	63	184	39	9	42	4
$40 to $49	213	52	124	12	15	11	-
$50 to $69	425	150	233	21	12	2	7
$70 to $99	289	92	174	13	-	9	1
$100 or more	241	66	156	10	5	3	-
Median	22	51	33	16	13	13	13
Included in rent	2 357	125	511	297	307	1 111	6
No gas used	1 181	240	330	174	148	280	10

See footnotes at end of table.

Table B-5. Housing Units in Structure by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Housing units in structure: 1	2 to 4	5 to 9	10 to 19	20 or more	Mobile home or trailer
ALL OCCUPIED HOUSING UNITS—Con.							
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.							
Specified owner occupied[1]	8 674	8 674	...	...	...	...	...
Fuel oil, kerosene, coal, wood, etc., paid for	4 617	4 617	...	...	...	...	...
Less than $100	230	230	...	...	...	...	...
$100 to $199	205	205	...	...	...	...	...
$200 to $299	170	170	...	...	...	...	...
$300 to $399	243	243	...	...	...	...	...
$400 to $499	246	246	...	...	...	...	...
$500 to $599	324	324	...	...	...	...	...
$600 to $699	341	341	...	...	...	...	...
$700 to $799	261	261	...	...	...	...	...
$800 or more	2 577	2 577	...	...	...	...	...
Median	800+	800+	...	...	...	...	...
Fuels not used or free	4 057	4 057	...	...	...	...	...
Specified renter occupied[2]	7 149	971	2 469	831	698	2 123	58
Fuel oil, kerosene, coal, wood, etc., paid for	843	412	338	21	11	22	41
Less than $100	79	26	25	5	9	15	-
$100 to $199	47	18	20	1	-	4	4
$200 to $299	51	13	26	5	2	2	3
$300 to $399	40	19	11	1	-	-	9
$400 to $499	55	26	22	2	-	-	5
$500 to $599	79	44	29	2	-	-	4
$600 to $699	77	45	26	2	-	-	4
$700 to $799	57	28	25	-	-	-	3
$800 or more	358	193	152	4	-	1	8
Median	690	753	734	...	...	...	469
Included in rent	3 330	126	928	409	379	1 485	3
Fuels not used or free	2 976	433	1 203	401	308	617	15
ALL OCCUPIED HOUSING UNITS							
Total	18 221	10 410	3 499	891	724	2 349	348
Heating Equipment							
Owner occupied	11 009	9 376	1 031	61	26	226	290
Warm-air furnace	4 665	4 089	247	18	6	58	247
Heat pump	100	94	3	3	-	-	1
Steam or hot water	4 905	4 030	677	31	10	148	11
Built-in electric units	510	423	49	5	11	17	5
Floor, wall, or pipeless furnace	109	98	7	-	-	-	3
Room heaters with flue	137	91	33	4	-	2	7
Room heaters without flue	22	15	4	-	-	2	1
Fireplaces, stoves, or portable heaters	561	535	11	-	-	-	15
None	1	1	-	-	-	-	-
Renter occupied	7 212	1 034	2 469	831	698	2 123	58
Warm-air furnace	1 836	455	667	153	132	377	52
Heat pump	17	3	2	4	-	8	-
Steam or hot water	4 286	387	1 383	520	467	1 528	1
Built-in electric units	599	59	145	114	81	200	1
Floor, wall, or pipeless furnace	50	27	21	-	-	-	2
Room heaters with flue	273	43	182	30	9	9	-
Room heaters without flue	33	6	19	4	4	-	-
Fireplaces, stoves, or portable heaters	113	54	47	6	4	-	3
None	5	-	3	-	2	-	-
ALL OCCUPIED HOUSING UNITS							
Total	18 221	10 410	3 499	891	724	2 349	348
UNITS OCCUPIED LAST WINTER							
Total	16 585	9 888	3 030	726	565	2 086	290
Insufficient Heat							
Closure of rooms:							
Owner occupied	10 564	9 052	982	54	22	198	255
With heating equipment	10 563	9 051	982	54	22	198	255
No rooms closed	10 115	8 663	932	54	22	196	248
Closed certain rooms	352	312	34	-	-	-	5
Living room only	10	8	2	-	-	-	1
Dining room only	3	2	-	-	-	-	1
1 or more bedrooms only	229	210	16	-	-	-	4
Other rooms or combination of rooms	97	81	16	-	-	-	-
Not reported	13	13	-	-	-	-	-
Not reported	95	76	15	-	-	2	3
No heating equipment	1	1	-	-	-	-	-
Renter occupied	6 021	836	2 048	672	543	1 888	34
With heating equipment	6 015	836	2 045	672	541	1 888	34
No rooms closed	5 466	754	1 654	602	506	1 716	32
Closed certain rooms	466	70	163	59	29	143	2
Living room only	45	2	15	7	5	16	-
Dining room only	3	-	-	-	-	3	-
1 or more bedrooms only	293	49	106	33	17	86	2
Other rooms or combination of rooms	119	19	41	16	7	36	-
Not reported	6	1	2	2	-	2	-
Not reported	83	12	28	11	4	29	-
No heating equipment	5	-	3	-	2	-	-

See footnotes at end of table.

Table B-5. Housing Units In Structure by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Housing units in structure					
		1	2 to 4	5 to 9	10 to 19	20 or more	Mobile home or trailer
UNITS OCCUPIED LAST WINTER—Con.							
Insufficient Heat—Con.							
Additional heat source:							
Owner occupied	10 564	9 052	982	54	22	198	255
With specified heating equipment[3]	10 004	8 520	966	54	22	198	243
No additional heat source used	9 221	7 869	887	51	20	173	222
Used kitchen stove, fireplace, or portable heater	606	512	52	2	-	23	17
Not reported	176	139	27	2	2	2	3
Lacking specified heating equipment or none	560	532	15	-	-	-	13
Renter occupied	6 021	836	2 048	672	543	1 888	34
With specified heating equipment[3]	5 900	788	1 989	666	537	1 888	32
No additional heat source used	4 778	657	1 639	527	429	1 493	32
Used kitchen stove, fireplace, or portable heater	1 015	122	305	126	99	364	-
Not reported	108	9	45	12	10	32	-
Lacking specified heating equipment or none	121	48	60	6	6	-	2
Rooms lacking specified heat source:							
Owner occupied	10 564	9 052	982	54	22	198	255
With specified heating equipment[3]	10 004	8 520	966	54	22	198	243
No rooms lacking air ducts, registers, radiators, or heaters	8 788	7 457	837	48	22	192	233
Rooms lacking air ducts, registers, radiators, or heaters	1 095	972	110	5	-	4	5
1 room	471	411	50	2	-	4	4
2 rooms	284	251	29	3	-	-	1
3 rooms or more	340	309	31	-	-	-	-
Not reported	121	92	20	2	-	2	5
Lacking specified heating equipment or none	560	532	15	-	-	-	13
Renter occupied	6 021	836	2 048	672	543	1 888	34
With specified heating equipment[3]	5 900	788	1 989	666	537	1 888	32
No rooms lacking air ducts, registers, radiators, or heaters	5 203	642	1 651	593	502	1 786	30
Rooms lacking air ducts, registers, radiators, or heaters	613	142	308	62	29	70	3
1 room	264	48	130	32	15	39	1
2 rooms	172	48	75	20	11	18	-
3 rooms or more	177	46	103	10	3	13	2
Not reported	84	4	29	11	6	33	-
Lacking specified heating equipment or none	121	48	60	6	6	-	2
Housing unit uncomfortably cold:							
Owner occupied	10 564	9 052	982	54	22	198	255
With specified heating equipment[3]	10 004	8 520	966	54	22	198	243
Lacking specified heating equipment or none	560	532	15	-	-	-	13
Housing unit not uncomfortably cold for 24 hours or more	470	448	13	-	-	-	9
Housing unit uncomfortably cold for 24 hours or more	50	45	2	-	-	-	3
Not reported	40	39	-	-	-	-	1
Renter occupied	6 021	836	2 048	672	543	1 888	34
With specified heating equipment[3]	5 900	788	1 989	666	537	1 888	32
Lacking specified heating equipment or none	121	48	60	6	6	-	2
Housing unit not uncomfortably cold for 24 hours or more	73	40	28	2	2	-	2
Housing unit uncomfortably cold for 24 hours or more	28	3	19	4	2	-	-
Not reported	19	5	12	-	2	-	-
ALL OCCUPIED HOUSING UNITS							
Total	18 221	10 410	3 499	891	724	2 349	348
Air Conditioning							
Owner occupied	11 009	9 376	1 031	61	26	226	290
With air conditioning	5 642	4 722	561	35	22	183	119
Room units	4 394	3 638	508	19	16	121	93
1	2 326	1 925	265	3	10	47	75
2	1 329	1 078	172	10	1	50	19
3	506	422	56	6	4	18	-
4	153	137	14	-	-	2	-
5 or more	81	75	2	-	-	4	-
Central system	1 248	1 084	53	16	7	63	26
With no air conditioning	5 367	4 654	470	26	4	42	171
Renter occupied	7 212	1 034	2 469	831	698	2 123	58
With air conditioning	2 886	334	853	279	343	1 069	8
Room units	2 391	280	793	241	274	795	8
1	1 631	190	551	199	202	481	8
2	619	73	201	41	61	244	-
3	118	10	38	-	10	60	-
4	17	4	4	-	2	8	-
5 or more	5	4	-	-	-	2	-
Central system	495	54	60	38	69	274	1
With no air conditioning	4 326	701	1 616	552	355	1 054	50

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table B-6. Number of Rooms Per Housing Unit by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms or more	Median rooms
ALL OCCUPIED HOUSING UNITS									
Total	**16 221**	**358**	**486**	**2 269**	**3 156**	**3 615**	**3 720**	**4 597**	**5.3**
House Heating Fuel									
Owner occupied	**11 009**	**14**	**31**	**259**	**1 061**	**2 281**	**3 068**	**4 295**	**6.1**
Utility gas	4 894	6	3	84	376	982	1 442	2 001	6.2
Bottled, tank, or LP gas	85	2	1	6	27	19	9	19	4.7
Fuel oil	4 600	2	21	128	449	962	1 275	1 763	6.1
Kerosene, etc.	92	-	-	3	35	27	10	18	4.8
Electricity	655	1	1	24	91	138	164	236	5.9
Coal or coke	174	-	-	2	16	32	43	81	6.4
Wood	496	1	5	10	64	120	122	174	5.9
Solar heat	1	-	-	-	-	-	1	-	...
Other fuel	10	2	-	-	2	1	2	3	...
None	1	-	-	1	-	-	-	-	...
Renter occupied	**7 212**	**344**	**455**	**2 030**	**2 095**	**1 334**	**652**	**302**	**3.9**
Utility gas	2 847	113	145	679	870	594	333	113	4.0
Bottled, tank, or LP gas	60	3	2	16	19	13	5	2	4.0
Fuel oil	3 489	202	228	1 074	977	591	272	144	3.7
Kerosene, etc.	45	3	4	4	13	11	5	4	4.3
Electricity	664	22	75	239	193	99	21	15	3.5
Coal or coke	38	2	-	1	6	9	8	12	5.7
Wood	48	-	1	5	11	16	6	10	5.0
Solar heat	-	-	-	-	-	-	-	-	-
Other fuel	16	-	-	9	4	-	1	3	...
None	5	-	-	4	2	-	-	-	...
Monthly Cost Paid for Electricity									
Specified owner occupied[1]	**8 674**	**5**	**5**	**56**	**525**	**1 647**	**2 651**	**3 785**	**6.3**
Electricity paid for	8 673	5	5	56	525	1 647	2 650	3 785	6.3
Less than $10	20	-	-	1	1	6	9	4	...
$10 to $19	254	1	1	7	47	61	77	61	5.6
$20 to $29	851	-	3	13	93	214	297	231	5.8
$30 to $39	1 436	-	1	11	110	339	491	485	6.0
$40 to $49	1 298	-	-	12	78	319	418	470	6.1
$50 to $59	1 316	2	-	2	76	218	419	600	6.4
$60 to $79	1 625	2	-	8	66	255	479	816	6.5+
$80 to $99	669	-	-	3	24	87	175	380	6.5+
$100 to $149	847	1	-	-	23	103	207	513	6.5+
$150 or more	356	-	-	-	7	44	78	227	6.5+
Median	53	...	...	36	41	46	51	61	...
No electricity used	2	-	1	-	-	-	1	-	...
Specified renter occupied[2]	**7 149**	**344**	**455**	**2 029**	**2 089**	**1 323**	**636**	**273**	**3.8**
Electricity paid for	5 541	126	270	1 494	1 703	1 138	572	238	4.0
Less than $10	105	3	16	38	38	7	3	-	3.4
$10 to $19	833	34	75	344	217	115	40	9	3.4
$20 to $29	1 423	44	76	418	427	294	128	36	3.9
$30 to $39	1 179	20	50	318	373	255	120	44	4.0
$40 to $49	740	9	23	163	238	166	97	45	4.2
$50 to $59	473	11	11	90	154	116	59	32	4.3
$60 to $79	440	2	11	73	155	89	70	41	4.4
$80 to $99	143	4	9	19	38	38	23	13	4.5
$100 to $149	151	-	1	14	52	44	25	15	4.7
$150 or more	53	-	-	16	12	15	7	3	4.4
Median	33	25	25	28	34	35	39	46	...
Included in rent	1 591	213	183	532	383	184	62	34	3.2
No electricity used	18	4	2	3	4	2	2	1	...
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas									
Specified owner occupied[1]	**8 674**	**5**	**5**	**56**	**525**	**1 647**	**2 651**	**3 785**	**6.3**
Gas paid for	5 669	4	5	25	328	1 026	1 761	2 520	6.3
Less than $10	276	-	1	6	25	54	87	104	6.1
$10 to $14	322	-	1	2	28	65	87	139	6.2
$15 to $19	253	-	-	-	27	36	91	99	6.2
$20 to $24	256	-	-	3	24	56	75	97	6.1
$25 to $29	197	-	2	-	16	29	72	78	6.2
$30 to $39	486	-	-	2	36	106	156	186	6.1
$40 to $49	432	2	1	-	23	110	131	165	6.1
$50 to $69	1 099	-	-	3	70	223	396	407	6.1
$70 to $99	1 160	2	-	7	46	204	376	525	6.3
$100 or more	1 189	-	-	2	33	144	290	719	6.5+
Median	61	...	...	...	43	55	59	68	...
No gas used	3 005	2	1	31	196	620	890	1 265	6.2
Specified renter occupied[2]	**7 149**	**344**	**455**	**2 029**	**2 089**	**1 323**	**636**	**273**	**3.8**
Gas paid for	3 611	84	155	856	1 086	811	455	163	4.1
Less than $10	619	34	67	232	190	68	12	15	3.4
$10 to $14	613	20	29	206	180	117	46	15	3.8
$15 to $19	388	14	22	112	130	71	28	10	3.8
$20 to $24	304	2	14	87	82	50	55	14	4.1
$25 to $29	178	3	9	30	55	60	18	4	4.4
$30 to $39	342	2	12	66	109	100	40	12	4.3
$40 to $49	213	4	-	32	76	58	34	10	4.4
$50 to $69	425	4	1	39	131	111	97	42	4.8
$70 to $99	289	-	-	31	78	88	67	25	4.9
$100 or more	241	2	1	22	56	87	58	14	4.9
Median	22	12	11	14	22	34	47	50	...
Included in rent	2 357	214	194	845	674	305	92	33	3.4
No gas used	1 181	46	106	327	329	207	89	77	3.8

See footnotes at end of table.

Table B-6. **Number of Rooms Per Housing Unit by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983**—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms or more	Median rooms
ALL OCCUPIED HOUSING UNITS—Con.									
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.									
Specified owner occupied[1]	**8 674**	**5**	**5**	**56**	**525**	**1 647**	**2 651**	**3 785**	**6.3**
Fuel oil, kerosene, coal, wood, etc., paid for	4 617	1	3	35	300	884	1 381	2 014	6.3
Less than $100	230	-	-	2	6	47	55	120	6.5+
$100 to $199	205	-	-	4	13	32	54	102	6.5+
$200 to $299	170	1	1	5	16	27	53	67	6.2
$300 to $399	243	-	-	4	26	56	61	96	6.1
$400 to $499	246	-	-	3	28	71	73	71	5.8
$500 to $599	324	-	-	2	31	64	100	129	6.2
$600 to $699	341	-	-	1	39	82	106	114	6.0
$700 to $799	281	-	2	6	27	63	76	108	6.1
$800 or more	2 577	-	-	9	116	443	803	1 206	6.4
Median	800+	...	...	...	680	800+	800+	800+	...
Fuels not used or free	4 057	4	2	22	224	763	1 270	1 771	6.3
Specified renter occupied[2]	**7 149**	**344**	**455**	**2 029**	**2 089**	**1 323**	**636**	**273**	**3.8**
Fuel oil, kerosene, coal, wood, etc., paid for	843	1	7	84	193	253	190	115	5.0
Less than $100	79	-	2	20	19	18	19	2	4.4
$100 to $199	47	1	2	8	15	17	3	2	4.3
$200 to $299	51	-	2	4	19	15	11	-	4.5
$300 to $399	40	-	-	2	19	13	3	3	4.4
$400 to $499	55	-	-	11	7	19	11	7	5.0
$500 to $599	79	-	-	4	19	31	18	7	5.0
$600 to $699	77	-	-	8	19	26	16	8	4.9
$700 to $799	57	-	2	7	14	12	16	6	5.0
$800 or more	358	-	-	20	61	103	92	81	5.4
Median	690	...	...	477	589	654	782	800+	...
Included in rent	3 330	227	265	1 142	996	476	180	43	3.5
Fuels not used or free	2 976	115	184	802	901	594	266	114	3.9
ALL OCCUPIED HOUSING UNITS									
Total	**16 221**	**358**	**486**	**2 289**	**3 156**	**3 615**	**3 720**	**4 597**	**5.3**
Heating Equipment									
Owner occupied	**11 009**	**14**	**31**	**259**	**1 061**	**2 281**	**3 068**	**4 295**	**6.1**
Warm-air furnace	4 665	5	10	100	477	972	1 353	1 749	6.1
Heat pump	100	-	-	-	6	14	29	51	6.5+
Steam or hot water	4 905	6	10	114	379	986	1 361	2 048	6.2
Built-in electric units	510	1	1	24	78	117	118	171	5.8
Floor, wall, or pipeless furnace	109	-	-	-	11	26	31	42	6.1
Room heaters with flue	137	2	4	5	33	33	32	26	5.2
Room heaters without flue	22	-	-	-	7	4	5	6	...
Fireplaces, stoves, or portable heaters	561	1	6	13	70	129	139	203	5.9
None	1	-	-	1	-	-	-	-	...
Renter occupied	**7 212**	**344**	**455**	**2 030**	**2 095**	**1 334**	**652**	**302**	**3.9**
Warm-air furnace	1 836	51	98	464	505	389	221	109	4.1
Heat pump	17	-	-	5	7	4	-	1	...
Steam or hot water	4 286	262	262	1 270	1 269	728	342	153	3.8
Built-in electric units	599	20	75	217	173	84	18	12	3.4
Floor, wall, or pipeless furnace	50	-	3	8	9	7	17	6	5.2
Room heaters with flue	273	11	12	36	89	77	40	9	4.4
Room heaters without flue	33	-	2	12	6	11	3	-	...
Fireplaces, stoves, or portable heaters	113	-	3	15	36	35	11	12	4.6
None	5	-	-	4	2	-	-	-	...
ALL OCCUPIED HOUSING UNITS									
Total	**16 221**	**358**	**486**	**2 289**	**3 156**	**3 615**	**3 720**	**4 597**	**5.3**
UNITS OCCUPIED LAST WINTER									
Total	**16 585**	**279**	**409**	**1 920**	**2 739**	**3 322**	**3 539**	**4 377**	**5.4**
Insufficient Heat									
Closure of rooms:									
Owner occupied	**10 564**	**10**	**28**	**227**	**998**	**2 187**	**2 976**	**4 138**	**6.1**
With heating equipment	10 563	10	28	225	998	2 187	2 976	4 138	6.1
No rooms closed	10 115	10	26	219	958	2 118	2 849	3 934	6.1
Closed certain rooms	352	-	2	4	27	55	102	163	6.4
Living room only	10	-	-	1	3	1	1	5	...
Dining room only	3	-	-	-	-	1	2	-	...
1 or more bedrooms only	229	-	1	2	20	34	78	95	6.2
Other rooms or combination of rooms	97	-	1	2	4	17	21	53	6.5+
Not reported	13	-	-	-	-	3	-	10	...
Not reported	95	-	-	2	13	15	25	41	6.2
No heating equipment	1	-	-	1	-	-	-	-	...
Renter occupied	**6 021**	**269**	**381**	**1 693**	**1 741**	**1 134**	**563**	**239**	**3.9**
With heating equipment	6 015	269	381	1 689	1 740	1 134	563	239	3.9
No rooms closed	5 466	255	360	1 591	1 563	989	502	207	3.8
Closed certain rooms	466	5	14	79	161	124	54	29	4.3
Living room only	45	-	-	11	24	4	4	3	4.0
Dining room only	3	-	2	2	-	-	-	-	...
1 or more bedrooms only	293	3	12	49	106	72	33	17	4.3
Other rooms or combination of rooms	119	2	-	15	31	46	18	8	4.7
Not reported	6	-	-	3	-	2	-	1	...
Not reported	63	9	7	19	16	21	7	3	3.9
No heating equipment	5	-	-	4	2	-	-	-	...
Additional heat source:									
Owner occupied	**10 564**	**10**	**28**	**227**	**998**	**2 187**	**2 976**	**4 138**	**6.1**
With specified heating equipment[3]	10 004	9	23	212	926	2 057	2 839	3 938	6.1
No additional heat source used	9 221	9	21	192	849	1 921	2 623	3 606	6.1
Used kitchen stove, fireplace, or portable heater	606	-	-	15	58	108	155	271	6.3
Not reported	176	-	2	5	19	28	62	61	6.1
Lacking specified heating equipment or none	560	1	5	15	72	130	136	201	5.9

See footnotes at end of table.

Table B-6. Number of Rooms Per Housing Unit by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms or more	Median rooms
UNITS OCCUPIED LAST WINTER—Con.									
Insufficient Heat—Con.									
Additional heat source—Con.									
Renter occupied	6 021	269	381	1 693	1 741	1 134	563	239	3.9
With specified heating equipment[3]	5 900	269	378	1 670	1 707	1 096	551	229	3.9
No additional heat source used	4 778	234	306	1 373	1 377	858	439	192	3.8
Used kitchen stove, fireplace, or portable heater	1 015	27	62	264	306	221	103	33	4.0
Not reported	108	9	11	33	24	17	10	4	3.6
Lacking specified heating equipment or none	121	-	3	23	35	39	11	10	4.5
Rooms lacking specified heat source:									
Owner occupied	10 564	10	28	227	998	2 187	2 976	4 138	6.1
With specified heating equipment[3]	10 004	9	23	212	926	2 057	2 839	3 938	6.1
No rooms lacking air ducts, registers, radiators, or heaters	8 788	8	18	198	847	1 847	2 499	3 372	6.1
Rooms lacking air ducts, registers, radiators, or heaters	1 095	-	1	12	63	193	289	536	6.5
1 room	471	-	1	11	24	107	119	210	6.3
2 rooms	284	-	-	1	24	40	89	130	6.4
3 rooms or more	340	-	-	1	15	47	81	196	6.5+
Not reported	121	2	4	2	15	17	52	30	5.9
Lacking specified heating equipment or none	560	1	5	15	72	130	136	201	5.9
Renter occupied	6 021	269	381	1 693	1 741	1 134	563	239	3.9
With specified heating equipment[3]	5 900	269	378	1 670	1 707	1 096	551	229	3.9
No rooms lacking air ducts, registers, radiators, or heaters	5 203	257	359	1 544	1 518	915	434	176	3.8
Rooms lacking air ducts, registers, radiators, or heaters	613	7	13	90	172	172	110	50	4.6
1 room	264	7	9	45	73	73	42	16	4.5
2 rooms	172	-	4	32	60	32	32	12	4.3
3 rooms or more	177	-	-	13	39	67	36	21	5.0
Not reported	84	5	7	35	16	9	7	4	3.3
Lacking specified heating equipment or none	121	-	3	23	35	39	11	10	4.5
Housing unit uncomfortably cold:									
Owner occupied	10 564	10	28	227	998	2 187	2 976	4 138	6.1
With specified heating equipment[3]	10 004	9	23	212	926	2 057	2 839	3 938	6.1
Lacking specified heating equipment or none	560	1	5	15	72	130	136	201	5.9
Housing unit not uncomfortably cold for 24 hours or more	470	1	5	11	60	110	112	171	5.9
Housing unit uncomfortably cold for 24 hours or more	50	-	-	2	7	12	15	15	5.8
Not reported	40	-	-	2	5	8	10	15	6.0
Renter occupied	6 021	269	381	1 693	1 741	1 134	563	239	3.9
With specified heating equipment[3]	5 900	269	378	1 670	1 707	1 096	551	229	3.9
Lacking specified heating equipment or none	121	-	3	23	35	39	11	10	4.5
Housing unit not uncomfortably cold for 24 hours or more	73	-	2	4	22	25	11	9	4.8
Housing unit uncomfortably cold for 24 hours or more	28	-	1	10	7	9	1	1	...
Not reported	19	-	-	9	5	4	-	-	...
ALL OCCUPIED HOUSING UNITS									
Total	18 221	358	486	2 289	3 156	3 615	3 720	4 597	5.3
Air Conditioning									
Owner occupied	11 009	14	31	259	1 061	2 281	3 068	4 295	6.1
With air conditioning	5 642	9	18	139	501	1 081	1 530	2 363	6.2
Room units	4 394	7	11	113	392	891	1 283	1 697	6.1
1	2 326	5	11	78	229	562	678	763	5.9
2	1 329	2	-	35	121	252	390	530	6.1
3	506	-	-	-	34	66	152	254	6.5+
4	153	-	-	-	8	8	47	91	6.5+
5 or more	81	-	-	-	-	4	16	60	6.5+
Central system	1 248	2	8	26	110	190	246	666	6.5+
With no air conditioning	5 367	5	12	120	560	1 200	1 538	1 932	6.0
Renter occupied	7 212	344	455	2 030	2 095	1 334	652	302	3.9
With air conditioning	2 886	125	179	911	867	460	246	98	3.8
Room units	2 391	110	146	722	729	387	218	80	3.8
1	1 631	106	113	504	453	270	143	42	3.7
2	619	4	33	202	209	86	58	27	3.8
3	118	-	-	16	57	27	15	4	4.2
4	17	-	-	-	8	4	2	4	...
5 or more	5	-	-	-	2	-	-	4	...
Central system	495	15	33	189	138	73	28	19	3.6
With no air conditioning	4 326	219	277	1 118	1 228	874	407	204	3.9

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table B-7. Year Structure Built by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Year structure built					
		April 1970 or later	March 1970 or earlier				
			Total	1960 to March 1970	1950 to 1959	1940 to 1949	1939 or earlier
ALL OCCUPIED HOUSING UNITS							
Total	**18 221**	**2 496**	**15 726**	**2 955**	**2 544**	**1 491**	**8 738**
House Heating Fuel							
Owner occupied	**11 009**	**1 637**	**9 372**	**1 972**	**1 964**	**1 003**	**4 433**
Utility gas	4 894	554	4 340	964	889	444	2 043
Bottled, tank, or LP gas	85	21	65	20	15	9	21
Fuel oil	4 600	490	4 110	714	932	492	1 971
Kerosene, etc.	92	27	66	35	9	1	21
Electricity	655	406	249	121	36	10	83
Coal or coke	174	15	160	28	17	17	97
Wood	496	124	372	84	65	28	194
Solar heat	1	-	1	1	-	-	-
Other fuel	10	1	9	3	-	2	4
None	1	1	-	-	-	-	-
Renter occupied	**7 212**	**858**	**6 354**	**984**	**580**	**488**	**4 302**
Utility gas	2 847	289	2 558	378	192	190	1 799
Bottled, tank, or LP gas	60	9	51	8	5	3	35
Fuel oil	3 489	221	3 267	421	355	291	2 201
Kerosene, etc.	45	5	40	10	4	-	25
Electricity	664	331	332	155	15	3	159
Coal or coke	38	-	38	1	2	-	35
Wood	48	3	46	11	3	1	31
Solar heat	-	-	-	-	-	-	-
Other fuel	16	-	16	-	4	2	11
None	5	-	5	-	-	-	5
Monthly Cost Paid for Electricity							
Specified owner occupied[1]	**8 674**	**1 167**	**7 508**	**1 642**	**1 761**	**871**	**3 234**
Electricity paid for	8 673	1 166	7 507	1 642	1 761	871	3 233
Less than $10	20	3	18	2	1	1	14
$10 to $19	254	6	248	19	30	28	171
$20 to $29	851	44	807	103	167	76	461
$30 to $39	1 436	120	1 316	198	293	148	677
$40 to $49	1 298	132	1 165	218	292	137	518
$50 to $59	1 316	179	1 138	270	269	154	445
$60 to $79	1 625	259	1 366	354	346	163	503
$80 to $99	669	96	573	175	149	71	178
$100 to $149	847	204	643	222	149	70	203
$150 or more	356	123	232	80	66	23	64
Median	53	67	52	61	53	53	45
No electricity used	2	1	1	-	-	-	1
Specified renter occupied[2]	**7 149**	**858**	**6 291**	**978**	**578**	**486**	**4 250**
Electricity paid for	5 541	605	4 935	719	373	331	3 512
Less than $10	105	4	101	13	1	6	81
$10 to $19	833	56	777	103	57	42	576
$20 to $29	1 423	126	1 296	168	95	94	940
$30 to $39	1 179	121	1 059	147	71	75	766
$40 to $49	740	74	667	98	47	46	476
$50 to $59	473	63	409	74	32	35	269
$60 to $79	440	84	356	66	43	23	225
$80 to $99	143	29	114	27	10	4	73
$100 to $149	151	37	115	20	8	4	83
$150 or more	53	12	41	5	10	2	24
Median	33	39	32	35	34	33	32
Included in rent	1 581	251	1 340	255	203	153	729
No electricity used	18	2	16	4	2	2	9
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas							
Specified owner occupied[1]	**8 674**	**1 167**	**7 508**	**1 642**	**1 761**	**871**	**3 234**
Gas paid for	5 689	480	5 190	1 014	1 086	600	2 489
Less than $10	276	24	252	47	46	22	138
$10 to $14	322	16	306	26	36	47	197
$15 to $19	253	25	228	24	42	31	131
$20 to $24	256	9	247	18	57	24	148
$25 to $29	197	9	188	18	39	19	113
$30 to $39	486	21	465	50	61	57	277
$40 to $49	432	35	396	83	91	58	164
$50 to $69	1 099	123	977	201	265	128	383
$70 to $99	1 160	123	1 037	281	241	95	419
$100 or more	1 189	96	1 093	266	188	118	521
Median	61	66	60	74	61	56	54
No gas used	3 005	687	2 318	628	674	271	745
Specified renter occupied[2]	**7 149**	**858**	**6 291**	**978**	**578**	**486**	**4 250**
Gas paid for	3 611	130	3 481	238	195	263	2 785
Less than $10	619	11	608	34	39	70	465
$10 to $14	613	9	604	61	37	50	456
$15 to $19	388	14	374	13	16	24	320
$20 to $24	304	9	296	18	25	22	230
$25 to $29	178	2	176	8	4	12	152
$30 to $39	342	21	321	25	26	20	250
$40 to $49	213	14	199	21	10	14	155
$50 to $69	425	31	394	38	24	31	301
$70 to $99	289	10	279	9	8	11	250
$100 or more	241	10	230	9	7	8	206
Median	22	40	22	22	21	17	23
Included in rent	2 357	387	1 970	505	305	185	975
No gas used	1 181	340	841	235	78	38	490

See footnotes at end of table.

Table B-7. Year Structure Built by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Year structure built					
		April 1970 or later	March 1970 or earlier				
			Total	1960 to March 1970	1950 to 1959	1940 to 1949	1939 or earlier
ALL OCCUPIED HOUSING UNITS—Con.							
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.							
Specified owner occupied[1]	8 674	1 167	7 508	1 842	1 761	671	3 234
Fuel oil, kerosene, coal, wood, etc., paid for	4 617	570	4 047	775	973	497	1 803
Less than $100	230	47	184	52	28	22	81
$100 to $199	205	46	159	52	30	22	56
$200 to $299	170	43	126	28	28	7	64
$300 to $399	243	53	190	44	43	22	80
$400 to $499	246	43	203	45	61	13	85
$500 to $599	324	51	273	51	75	32	115
$600 to $699	341	47	295	48	80	35	132
$700 to $799	281	27	255	49	75	31	100
$800 or more	2 577	214	2 363	405	554	314	1 090
Median	800+	604	800+	800+	800+	800+	800+
Fuels not used or free	4 057	596	3 461	667	788	375	1 431
Specified renter occupied[2]	7 149	858	6 291	978	578	486	4 250
Fuel oil, kerosene, coal, wood, etc., paid for	843	42	801	66	67	51	617
Less than $100	79	2	77	3	4	12	58
$100 to $199	47	3	44	4	2	-	38
$200 to $299	51	2	49	4	2	3	40
$300 to $399	40	9	31	8	-	1	22
$400 to $499	55	2	53	8	4	4	37
$500 to $599	79	8	71	5	10	4	52
$600 to $699	77	4	73	7	4	5	57
$700 to $799	57	2	55	4	1	5	46
$800 or more	358	10	348	23	41	17	267
Median	690	534	704	607	800+	627	709
Included in rent	3 330	287	3 043	483	335	266	1 960
Fuels not used or free	2 976	529	2 447	428	176	169	1 674
ALL OCCUPIED HOUSING UNITS							
Total	18 221	2 496	15 726	2 955	2 544	1 491	8 736
Heating Equipment							
Owner occupied	11 009	1 637	9 372	1 972	1 964	1 003	4 433
Warm-air furnace	4 665	668	3 997	935	994	441	1 628
Heat pump	100	77	22	6	6	-	10
Steam or hot water	4 905	441	4 464	798	832	501	2 333
Built-in electric units	510	300	209	111	25	10	64
Floor, wall, or pipeless furnace	109	2	107	13	23	9	62
Room heaters with flue	137	10	127	10	10	8	99
Room heaters without flue	22	2	20	3	4	3	11
Fireplaces, stoves, or portable heaters	561	136	425	96	72	31	226
None	1	1	-	-	-	-	-
Renter occupied	7 212	858	6 354	984	580	488	4 302
Warm-air furnace	1 836	262	1 573	278	141	94	1 060
Heat pump	17	8	9	-	-	-	9
Steam or hot water	4 286	286	4 000	534	406	370	2 690
Built-in electric units	599	298	301	146	13	3	139
Floor, wall, or pipeless furnace	50	1	49	3	7	6	33
Room heaters with flue	273	1	272	7	4	11	250
Room heaters without flue	33	-	33	2	1	3	28
Fireplaces, stoves, or portable heaters	113	3	110	13	8	2	88
None	5	-	5	-	-	-	5
ALL OCCUPIED HOUSING UNITS							
Total	18 221	2 496	15 726	2 955	2 544	1 491	8 736
UNITS OCCUPIED LAST WINTER							
Total	16 585	2 174	14 411	2 717	2 426	1 415	7 854
Insufficient Heat							
Closure of rooms:							
Owner occupied	10 564	1 496	9 068	1 901	1 903	976	4 288
With heating equipment	10 563	1 495	9 068	1 901	1 903	976	4 288
No rooms closed	10 115	1 459	8 657	1 856	1 858	944	3 999
Closed certain rooms	352	22	330	29	30	22	249
Living room only	10	1	10	1	-	1	8
Dining room only	3	1	2	-	-	-	2
1 or more bedrooms only	229	16	213	16	18	16	163
Other rooms or combination of rooms	97	4	93	10	7	8	70
Not reported	13	-	13	2	4	-	6
Not reported	95	14	81	17	15	9	40
No heating equipment	1	1	-	-	-	-	-
Renter occupied	6 021	678	5 343	816	523	439	3 566
With heating equipment	6 015	678	5 338	816	523	439	3 561
No rooms closed	5 466	648	4 818	776	483	418	3 141
Closed certain rooms	466	20	446	33	27	13	372
Living room only	45	-	45	4	-	-	41
Dining room only	3	-	3	-	-	-	3
1 or more bedrooms only	293	20	273	21	18	8	225
Other rooms or combination of rooms	119	-	119	9	9	5	96
Not reported	6	-	6	-	-	-	6
Not reported	83	9	73	6	12	7	48
No heating equipment	5	-	5	-	-	-	5

See footnotes at end of table.

Table B-7. Year Structure Built by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Year structure built					
		April 1970 or later	March 1970 or earlier				
			Total	1960 to March 1970	1950 to 1959	1940 to 1949	1939 or earlier
UNITS OCCUPIED LAST WINTER—Con.							
Insufficient Heat—Con.							
Additional heat source:							
Owner occupied	10 564	1 496	9 068	1 901	1 903	976	4 288
With specified heating equipment[3]	10 004	1 367	8 637	1 807	1 829	944	4 057
No additional heat source used	9 221	1 272	7 949	1 699	1 729	869	3 652
Used kitchen stove, fireplace, or portable heater	606	80	526	82	77	53	313
Not reported	176	15	161	25	22	22	91
Lacking specified heating equipment or none	560	129	431	95	74	31	231
Renter occupied	6 021	678	5 343	816	523	439	3 566
With specified heating equipment[3]	5 900	675	5 225	803	516	435	3 470
No additional heat source used	4 778	609	4 169	679	442	356	2 693
Used kitchen stove, fireplace, or portable heater	1 015	55	960	111	71	76	701
Not reported	108	12	96	13	4	4	76
Lacking specified heating equipment or none	121	3	118	13	6	4	96
Rooms lacking specified heat source:							
Owner occupied	10 564	1 496	9 068	1 901	1 903	976	4 288
With specified heating equipment[3]	10 004	1 367	8 637	1 807	1 829	944	4 057
No rooms lacking air ducts, registers, radiators, or heaters	8 788	1 301	7 487	1 728	1 729	846	3 184
Rooms lacking air ducts, registers, radiators, or heaters	1 095	59	1 036	61	78	80	817
1 room	471	39	432	45	48	43	296
2 rooms	284	7	277	7	20	17	234
3 rooms or more	340	13	327	9	10	20	288
Not reported	121	7	113	18	22	19	55
Lacking specified heating equipment or none	560	129	431	95	74	31	231
Renter occupied	6 021	678	5 343	816	523	439	3 566
With specified heating equipment[3]	5 900	675	5 225	803	516	435	3 470
No rooms lacking air ducts, registers, radiators, or heaters	5 203	658	4 545	778	500	405	2 861
Rooms lacking air ducts, registers, radiators, or heaters	613	6	608	18	13	25	552
1 room	284	2	282	10	7	16	230
2 rooms	172	2	170	5	3	7	155
3 rooms or more	177	2	175	3	3	2	168
Not reported	84	11	73	7	3	5	57
Lacking specified heating equipment or none	121	3	118	13	6	4	96
Housing unit uncomfortably cold:							
Owner occupied	10 564	1 496	9 068	1 901	1 903	976	4 288
With specified heating equipment[3]	10 004	1 367	8 637	1 807	1 829	944	4 057
Lacking specified heating equipment or none	560	129	431	95	74	31	231
Housing unit not uncomfortably cold for 24 hours or more	470	109	362	79	64	30	188
Housing unit uncomfortably cold for 24 hours or more	50	11	38	5	5	-	28
Not reported	40	9	31	10	6	1	15
Renter occupied	6 021	678	5 343	816	523	439	3 566
With specified heating equipment[3]	5 900	675	5 225	803	516	435	3 470
Lacking specified heating equipment or none	121	3	118	13	6	4	96
Housing unit not uncomfortably cold for 24 hours or more	73	3	71	10	4	3	55
Housing unit uncomfortably cold for 24 hours or more	28	-	28	2	1	-	26
Not reported	19	-	19	1	2	1	15
ALL OCCUPIED HOUSING UNITS							
Total	18 221	2 496	15 726	2 955	2 544	1 491	8 736
Air Conditioning							
Owner occupied	11 009	1 637	9 372	1 972	1 964	1 003	4 433
With air conditioning	5 642	882	4 759	1 127	1 200	521	1 910
Room units	4 394	418	3 976	736	961	462	1 818
1	2 326	239	2 087	394	469	212	1 011
2	1 329	140	1 189	210	286	152	541
3	506	33	473	92	140	53	188
4	153	6	147	32	42	24	50
5 or more	81	-	81	8	23	21	28
Central system	1 248	465	783	391	240	59	93
With no air conditioning	5 367	755	4 612	844	764	482	2 523
Renter occupied	7 212	858	6 354	984	580	488	4 302
With air conditioning	2 886	539	2 347	587	287	196	1 277
Room units	2 391	310	2 081	484	271	193	1 132
1	1 631	200	1 431	315	161	126	829
2	619	84	535	148	97	53	236
3	118	22	96	18	11	14	53
4	17	3	14	4	2	-	9
5 or more	5	-	5	-	-	-	5
Central system	495	229	266	103	16	3	145
With no air conditioning	4 326	319	4 007	396	293	292	3 025

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table B-8. Monthly Cost Paid for Electricity by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Monthly cost paid for electricity											
		Less than $10	$10 to $19	$20 to $29	$30 to $39	$40 to $49	$50 to $59	$60 to $79	$80 to $99	$100 to $149	$150 or more	No electricity used or not reported[1]	Median (dollars)
SPECIFIED OWNER OCCUPIED[2]													
Total	6 674	20	254	651	1 436	1 298	1 316	1 625	669	847	356	2	53
House Heating Fuel													
Electricity	488	-	3	9	11	19	36	57	55	179	118	-	115
Other than electricity	6 185	20	251	642	1 425	1 279	1 279	1 568	614	668	237	2	52
Utility gas	3 989	6	142	449	743	638	624	711	256	306	114	-	50
Bottled, tank, or LP gas	53	-	2	13	15	5	8	7	1	2	-	-	37
Fuel oil	3 593	11	82	331	575	563	559	740	301	313	118	-	54
Kerosene, etc.	49	-	3	8	4	9	6	8	5	6	-	-	51
Coal or coke	137	1	10	13	19	13	16	26	17	17	2	1	55
Wood	361	2	12	28	68	50	62	75	34	25	4	1	53
Solar heat	1	-	-	-	-	-	-	1	-	-	-	-	...
Other fuel	3	-	-	1	-	-	2	-	-	-	-	-	...
None	1	-	-	-	-	-	1	-	-	-	-	-	...
Heating Equipment													
Warm-air furnace	3 798	9	103	395	668	601	613	713	284	314	99	-	52
Heat pump	72	-	-	2	2	-	2	6	6	29	26	-	132
Steam or hot water	3 823	8	119	365	650	596	582	758	289	323	134	-	53
Built-in electric units	383	-	3	7	7	18	28	49	47	135	89	-	112
Floor, wall, or pipeless furnace	88	1	6	20	17	17	5	9	1	10	2	-	40
Room heaters with flue	82	-	5	24	22	9	11	3	2	4	2	-	35
Room heaters without flue	14	-	-	4	2	3	4	1	-	-	-	-	...
Fireplaces, stoves, or portable heaters	413	3	17	34	69	54	71	86	40	32	4	2	54
None	1	-	-	-	-	-	1	-	-	-	-	-	...
Persons													
1 person	1 069	17	129	282	237	155	87	88	38	37	21	1	34
2 persons	2 561	-	93	369	546	395	394	378	164	175	48	-	46
3 persons	1 810	1	20	112	293	320	302	369	140	170	84	-	55
4 persons	1 789	1	8	59	229	261	310	417	181	235	88	-	61
5 persons	910	2	4	25	85	110	144	234	95	146	66	1	67
6 persons	351	-	-	5	33	48	63	93	32	53	24	-	66
7 persons or more	165	-	-	-	14	10	16	48	19	32	26	-	76
Median	2.9	...	1.5-	1.9	2.4	2.8	3.1	3.4	3.4	3.7	3.8	...	...
Air Conditioning													
With air conditioning	4 449	3	63	262	602	636	731	970	405	529	248	-	58
Room units	3 472	3	61	243	520	535	587	766	296	310	153	-	56
1	1 834	2	45	162	359	313	291	354	132	126	49	-	51
2	1 038	1	13	58	115	175	193	242	85	99	56	-	57
3	393	-	-	16	37	35	71	104	47	56	26	-	67
4	137	-	2	4	9	6	26	55	18	9	7	-	67
5 or more	71	-	-	2	-	6	6	11	12	20	14	-	97
Central system	977	-	3	20	82	101	145	204	109	220	94	-	73
With no air conditioning	4 225	17	191	589	834	662	585	655	264	318	108	2	47
SPECIFIED RENTER OCCUPIED[3]													
Total	7 149	105	833	1 423	1 179	740	473	440	143	151	53	1 609	33
House Heating Fuel													
Electricity	662	3	39	76	65	54	46	99	45	44	22	169	52
Other than electricity	6 482	102	794	1 345	1 115	686	426	340	98	108	31	1 438	32
Utility gas	2 835	53	364	660	466	281	182	130	35	49	13	601	31
Bottled, tank, or LP gas	58	4	14	17	5	4	3	1	-	-	1	9	24
Fuel oil	3 460	42	398	646	626	385	229	197	56	59	17	805	33
Kerosene, etc.	43	1	6	3	5	8	5	8	2	-	-	4	44
Coal or coke	34	-	7	4	4	2	4	4	1	-	-	9	...
Wood	38	-	3	10	7	4	3	1	4	-	-	5	...
Solar heat	-	-	-	-	-	-	-	-	-	-	-	-	-
Other fuel	14	2	2	4	2	2	-	-	-	-	-	4	...
None	5	-	-	2	-	-	-	2	-	-	-	2	...
Heating Equipment													
Warm-air furnace	1 808	33	176	350	308	197	150	112	40	49	18	374	35
Heat pump	17	-	-	1	6	4	-	1	1	1	-	3	...
Steam or hot water	4 270	58	537	862	748	452	249	216	48	61	16	1 021	32
Built-in electric units	597	3	39	75	53	45	42	91	41	30	17	161	51
Floor, wall, or pipeless furnace	50	-	8	15	4	9	2	2	4	3	-	4	29
Room heaters with flue	270	2	50	80	36	24	22	11	4	5	-	36	27
Room heaters without flue	32	5	6	8	5	2	2	3	1	-	-	-	...
Fireplaces, stoves, or portable heaters	100	3	16	29	19	8	6	3	4	2	2	8	28
None	5	-	-	2	-	-	-	2	-	-	-	2	...
Persons													
1 person	2 630	75	490	563	310	174	79	95	24	22	10	788	26
2 persons	2 067	24	214	484	380	209	144	110	31	36	15	420	32
3 persons	1 139	4	81	200	240	158	111	100	30	41	7	166	38
4 persons	800	2	29	127	143	123	80	76	34	25	17	145	42
5 persons	305	-	11	33	57	53	33	35	13	12	4	54	44
6 persons	118	-	7	9	27	13	16	15	6	7	-	18	45
7 persons or more	89	-	2	6	22	10	10	10	6	7	-	17	46
Median	1.9	1.5-	1.5-	1.8	2.2	2.4	2.6	2.6	3.0	2.9	2.7	1.5	...

See footnotes at end of table.

Table B-8. Monthly Cost Paid for Electricity by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Monthly cost paid for electricity											
		Less than $10	$10 to $19	$20 to $29	$30 to $39	$40 to $49	$50 to $59	$60 to $79	$80 to $99	$100 to $149	$150 or more	No electricity used or not reported[1]	Median (dollars)
SPECIFIED RENTER OCCUPIED[3]—Con.													
Air Conditioning													
With air conditioning	2 870	35	260	519	527	359	249	265	81	73	21	481	37
Room units	2 376	30	231	462	461	312	204	208	64	44	15	344	36
1	1 617	23	182	347	309	203	115	121	35	23	12	248	34
2	618	6	45	101	133	89	66	64	25	13	1	75	38
3	118	-	4	13	18	15	22	18	2	6	3	18	50
4	17	1	2	-	1	5	-	4	2	-	-	2	...
5 or more	5	-	-	-	-	-	-	2	-	2	-	2	...
Central system	494	5	28	57	67	47	45	56	18	29	5	137	44
With no air conditioning	4 279	69	573	904	652	381	223	176	62	79	32	1 127	30

[1]Renter households with electricity costs included in their rent are included in this category.
[2]Limited to one-unit structures on less than 10 acres and no business on property.
[3]Excludes one-unit structures on 10 acres or more.

Table B-9. Monthly Cost Paid for Gas by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Monthly cost paid for utility, bottled, tank, or LP gas											
		Less than $10	$10 to $14	$15 to $19	$20 to $24	$25 to $29	$30 to $39	$40 to $49	$50 to $69	$70 to $99	$100 or more	No gas used or not reported[1]	Median (dollars)
SPECIFIED OWNER OCCUPIED[2]													
Total	8 674	276	322	253	256	197	488	432	1 099	1 160	1 189	3 005	61
House Heating Fuel													
Gas	4 042	39	50	59	64	57	228	345	978	1 115	1 108	-	75
Utility gas	3 989	38	50	58	61	54	223	344	967	1 103	1 092	-	75
Bottled, tank, or LP gas	53	1	-	1	3	3	5	2	11	12	16	-	73
Other than gas	4 631	238	272	195	192	140	258	86	121	45	81	3 004	22
Fuel oil	3 593	191	226	167	166	113	212	63	95	29	69	2 259	22
Kerosene, etc.	49	6	4	4	3	4	5	2	3	-	-	18	...
Electricity	488	8	5	2	1	3	6	4	11	14	4	429	48
Coal or coke	137	8	14	5	6	8	6	5	2	1	4	79	22
Wood	361	24	20	16	14	12	29	13	10	1	5	218	23
Solar heat	1	-	-	-	-	-	-	-	-	-	-	1	-
Other fuel	3	-	-	-	2	-	-	-	-	-	-	1	...
None	1	-	-	-	-	-	-	-	-	-	-	1	-
Heating Equipment													
Warm-air furnace	3 798	85	103	97	105	78	225	234	730	731	613	800	65
Heat pump	72	2	-	2	-	-	2	1	2	6	-	57	...
Steam or hot water	3 823	147	183	135	121	93	219	168	319	381	535	1 521	55
Built-in electric units	383	8	4	-	1	3	2	3	5	7	3	348	...
Floor, wall, or pipeless furnace	88	2	4	1	8	5	3	6	16	7	17	21	57
Room heaters with flue	82	6	3	2	4	3	4	6	12	22	12	9	65
Room heaters without flue	14	1	-	-	2	2	2	-	2	2	2	2	...
Fireplaces, stoves, or portable heaters	413	28	26	17	16	13	29	14	15	4	7	245	23
None	1	-	-	-	-	-	-	-	-	-	-	1	-
Persons													
1 person	1 089	69	63	45	42	28	66	76	141	111	97	350	47
2 persons	2 561	80	80	87	83	67	163	126	342	351	286	896	58
3 persons	1 810	61	67	45	48	41	98	71	259	229	229	662	61
4 persons	1 789	33	64	41	41	27	75	89	195	237	288	647	70
5 persons	910	23	29	30	29	20	40	49	110	118	165	296	65
6 persons	351	8	10	4	11	9	26	15	40	41	83	104	71
7 persons or more	165	3	8	1	1	5	17	6	13	21	41	50	76
Median	2.9	2.4	2.8	2.4	2.6	2.6	2.6	2.7	2.7	3.0	3.4	2.9	...
Air Conditioning													
With air conditioning	4 449	114	139	129	117	106	242	260	591	654	693	1 403	63
Room units	3 472	107	121	120	101	90	203	192	433	462	508	1 134	60
1	1 834	70	68	51	58	41	112	104	225	235	226	643	58
2	1 038	24	38	38	22	32	63	48	129	146	154	344	62
3	393	7	5	14	16	14	20	26	52	60	78	101	66
4	137	6	7	13	3	2	4	12	24	13	29	24	58
5 or more	71	-	4	4	2	2	4	2	2	8	21	23	87
Central system	977	7	18	9	16	16	39	68	158	193	185	268	74
With no air conditioning	4 225	162	183	124	139	91	244	172	508	505	496	1 602	57
SPECIFIED RENTER OCCUPIED[3]													
Total	7 149	619	613	388	304	178	342	213	425	289	241	3 538	22
House Heating Fuel													
Gas	2 893	142	174	111	87	89	190	141	375	264	220	1 100	47
Utility gas	2 835	138	172	109	85	87	182	139	368	258	217	1 080	47
Bottled, tank, or LP gas	58	3	2	3	2	2	8	2	7	7	3	19	39
Other than gas	4 251	477	439	276	217	89	152	70	50	25	19	2 437	14
Fuel oil	3 460	444	417	267	211	81	138	54	40	24	11	1 775	14
Kerosene, etc.	43	8	5	1	1	1	1	1	1	-	-	25	...
Electricity	662	12	12	7	4	5	9	11	8	1	6	587	27
Coal or coke	34	4	2	-	1	1	2	1	-	-	1	23	...
Wood	38	5	2	-	1	1	2	4	2	-	1	21	...
Solar heat	-	-	-	-	-	-	-	-	-	-	-	-	-
Other fuel	14	3	2	2	-	-	-	-	-	-	-	7	...
None	5	-	-	-	-	-	-	2	-	-	2	2	...
Heating Equipment													
Warm-air furnace	1 808	82	83	52	58	59	109	74	205	123	110	852	44
Heat pump	17	-	-	2	-	-	-	-	-	1	-	14	...
Steam or hot water	4 270	503	504	317	231	90	174	94	146	92	79	2 040	16
Built-in electric units	597	11	10	5	2	5	9	7	7	-	6	534	27
Floor, wall, or pipeless furnace	50	1	3	2	1	4	8	-	7	9	2	15	51
Room heaters with flue	270	9	9	5	9	17	31	24	44	51	26	46	54
Room heaters without flue	32	4	3	1	-	-	2	4	7	5	-	7	...
Fireplaces, stoves, or portable heaters	100	9	2	4	3	3	9	9	8	9	16	29	46
None	5	-	-	-	-	-	-	2	-	-	2	2	...
Persons													
1 person	2 630	343	199	118	66	47	87	48	100	62	26	1 532	15
2 persons	2 067	161	199	122	96	59	99	57	116	65	59	1 034	21
3 persons	1 139	68	98	65	58	40	65	47	85	78	63	472	31
4 persons	800	33	80	52	54	20	46	30	68	52	52	312	31
5 persons	305	7	24	18	18	9	19	18	37	18	19	120	38
6 persons	118	7	10	7	9	1	12	7	7	11	9	40	35
7 persons or more	89	-	2	5	4	2	13	5	13	5	13	27	48
Median	1.9	1.5-	2.0	2.1	2.4	2.2	2.3	2.5	2.5	2.7	3.0	1.7	...

See footnotes at end of table.

Table B-9. Monthly Cost Paid for Gas by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Monthly cost paid for utility, bottled, tank, or LP gas											
		Less than $10	$10 to $14	$15 to $19	$20 to $24	$25 to $29	$30 to $39	$40 to $49	$50 to $69	$70 to $99	$100 or more	No gas used or not reported[1]	Median (dollars)
SPECIFIED RENTER OCCUPIED[3]—Con.													
Air Conditioning													
With air conditioning	2 870	233	241	125	118	52	113	72	150	99	85	1 585	22
Room units	2 376	223	236	117	108	47	96	65	122	89	78	1 196	21
1	1 617	169	187	85	63	28	83	50	75	61	53	803	18
2	618	43	63	30	38	16	28	11	31	25	16	318	22
3	118	11	5	2	4	4	5	3	12	2	5	65	32
4	17	-	-	-	4	-	-	-	2	2	-	10	...
5 or more	5	-	-	-	-	-	-	-	2	-	2	2	...
Central system	494	10	5	8	7	4	17	7	28	10	9	389	42
With no air conditioning	4 279	386	372	263	189	127	228	141	275	190	156	1 953	23

[1]Renter households with gas costs included in their rent are included in this category.
[2]Limited to one-unit structures on less than 10 acres and no business on property.
[3]Excludes one-unit structures on 10 acres or more.

Table B-10. Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, etc., by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Yearly cost paid for fuel oil, kerosene, coal, wood, etc.										
		Less than $100	$100 to $199	$200 to $299	$300 to $399	$400 to $499	$500 to $599	$600 to $699	$700 to $799	$800 or more	Fuels not used, free, or not reported[1]	Median (dollars)
SPECIFIED OWNER OCCUPIED[2]												
Total	**8 674**	**230**	**205**	**170**	**243**	**246**	**324**	**341**	**281**	**2 577**	**4 057**	**800+**
House Heating Fuel												
Oil, coal, kerosene, wood, etc.	4 140	53	87	109	186	219	291	320	261	2 451	163	800+
Fuel oil	3 593	35	55	57	102	156	233	274	248	2 360	73	800+
Coal or coke	137	4	8	16	19	21	17	14	2	31	5	491
Kerosene, etc.	49	1	4	4	2	7	4	2	4	19	3	675
Wood	361	13	20	33	63	35	36	30	7	41	82	431
Other than oil, coal, kerosene, wood, etc.	4 533	177	118	60	57	27	33	21	21	125	3 894	241
Utility gas	3 989	152	89	42	34	17	26	16	18	105	3 489	221
Bottled, tank, or LP gas	53	2	1	1	1	3	-	-	-	2	44	...
Electricity	488	23	28	17	22	7	7	5	3	17	360	278
Solar heat	1	-	-	-	-	-	-	-	-	-	1	-
Other fuel	3	-	-	-	-	-	-	-	-	2	1	...
None	1	1	-	-	-	-	-	-	-	-	-	...
Heating Equipment												
Warm-air furnace	3 798	142	89	65	89	119	147	145	126	672	2 204	701
Heat pump	72	7	5	5	1	1	1	1	-	3	48	...
Steam or hot water	3 823	48	58	45	55	70	118	156	139	1 805	1 330	800+
Built-in electric units	383	13	21	12	21	6	4	4	3	12	286	310
Floor, wall, or pipeless furnace	88	2	4	1	2	6	4	1	2	22	45	800+
Room heaters with flue	82	1	5	2	2	3	6	1	3	15	45	645
Room heaters without flue	14	4	1	2	1	1	-	-	2	-	4	...
Fireplaces, stoves, or portable heaters	413	13	22	38	73	40	44	34	7	47	95	432
None	1	1	-	-	-	-	-	-	-	-	-	...
Persons												
1 person	1 089	14	18	12	28	33	46	53	54	316	516	800+
2 persons	2 561	62	52	48	63	94	102	104	94	765	1 178	800+
3 persons	1 810	44	53	40	50	43	54	76	56	572	822	800+
4 persons	1 789	61	47	38	59	33	70	53	33	534	862	800+
5 persons	910	32	25	29	27	37	34	33	35	236	423	776
6 persons	351	8	9	3	12	4	12	22	5	92	185	800+
7 persons or more	165	10	1	-	4	3	7	1	4	63	73	800+
Median	2.9	3.4	3.1	3.1	3.1	2.5	2.8	2.7	2.4	2.9	2.9	...
Air Conditioning												
With air conditioning	4 449	106	99	74	83	110	147	150	129	1 319	2 232	800+
Room units	3 472	64	79	62	71	84	120	131	110	1 183	1 569	800+
1	1 834	44	46	36	46	53	78	81	61	583	805	800+
2	1 038	14	23	22	18	23	29	33	35	374	468	800+
3	393	6	8	4	7	6	9	15	9	138	191	800+
4	137	-	2	-	-	-	-	2	5	56	72	800+
5 or more	71	-	-	-	-	2	4	-	-	33	32	800+
Central system	977	42	21	12	12	26	28	19	20	136	662	691
With no air conditioning	4 225	125	105	95	159	137	177	192	152	1 257	1 826	800+
SPECIFIED RENTER OCCUPIED[3]												
Total	**7 149**	**79**	**47**	**51**	**40**	**55**	**79**	**77**	**57**	**358**	**6 306**	**690**
House Heating Fuel												
Oil, coal, kerosene, wood, etc.	3 575	41	29	43	34	52	69	72	52	330	2 852	739
Fuel oil	3 460	37	20	33	25	35	55	61	45	316	2 833	800+
Coal or coke	34	-	2	2	4	7	3	3	-	4	9	...
Kerosene, etc.	43	3	3	5	2	5	9	4	3	6	4	523
Wood	38	2	5	3	3	6	2	4	4	4	7	...
Other than oil, coal, kerosene, wood, etc.	3 568	38	18	8	6	3	10	5	5	28	3 448	260
Utility gas	2 835	34	12	5	5	3	6	5	3	24	2 738	245
Bottled, tank, or LP gas	58	-	2	2	-	-	2	-	3	1	49	...
Electricity	662	4	3	1	1	-	3	-	-	3	647	...
Solar heat	-	-	-	-	-	-	-	-	-	-	-	-
Other fuel	14	-	-	-	-	-	-	-	-	-	14	-
None	5	-	-	-	-	-	-	-	-	-	5	-
Heating Equipment												
Warm-air furnace	1 808	32	14	14	23	27	34	28	26	113	1 497	639
Heat pump	17	-	-	-	-	-	-	-	-	-	17	-
Steam or hot water	4 270	37	18	22	6	20	31	43	21	222	3 849	800+
Built-in electric units	597	4	3	1	-	-	3	-	-	3	583	...
Floor, wall, or pipeless furnace	50	1	1	-	1	1	2	-	5	8	32	...
Room heaters with flue	270	3	4	8	3	-	3	3	-	8	241	...
Room heaters without flue	32	-	-	1	2	-	3	-	2	-	25	...
Fireplaces, stoves, or portable heaters	100	3	7	5	5	7	5	4	4	4	56	427
None	5	-	-	-	-	-	-	-	-	-	5	-
Persons												
1 person	2 630	29	11	10	8	13	15	20	12	66	2 445	631
2 persons	2 067	22	14	19	7	15	24	21	9	95	1 842	658
3 persons	1 139	13	10	6	11	11	12	13	14	58	991	688
4 persons	800	9	8	11	8	8	26	16	10	72	634	691
5 persons	305	4	2	5	2	2	1	6	9	46	228	800+
6 persons	118	-	3	-	2	5	2	1	3	10	93	...
7 persons or more	89	3	-	-	2	1	1	-	1	10	72	...
Median	1.9	2.0	2.4	2.3	2.9	2.4	2.6	2.4	3.0	2.8	1.9	...

See footnotes at end of table.

Table B-10. Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, etc., by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Yearly cost paid for fuel oil, kerosene, coal, wood, etc.										
		Less than $100	$100 to $199	$200 to $299	$300 to $399	$400 to $499	$500 to $599	$600 to $699	$700 to $799	$800 or more	Fuels not used, free, or not reported[1]	Median (dollars)
SPECIFIED RENTER OCCUPIED[3]—Con.												
Air Conditioning												
With air conditioning	2 870	33	7	8	5	16	20	21	18	113	2 628	756
Room units	2 376	33	6	8	4	16	20	18	18	111	2 142	763
1	1 617	25	4	3	3	14	13	16	15	72	1 452	729
2	618	4	2	6	1	2	7	3	4	33	557	800+
3	118	3	-	-	-	-	-	-	-	4	112	...
4	17	-	-	-	-	-	-	-	-	2	15	...
5 or more	5	-	-	-	-	-	-	-	-	-	5	-
Central system	494	-	1	-	2	-	-	3	-	3	487	...
With no air conditioning	4 279	47	40	42	35	39	59	56	39	245	3 678	669

[1]Renter households with fuel costs included in their rent are included in this category.
[2]Limited to one-unit structures on less than 10 acres and no business on property.
[3]Excludes one-unit structures on 10 acres or more.

Table C-1. Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Inside SMSA's			Outside SMSA's
		Total	In central city	Not in central city	
ALL OCCUPIED HOUSING UNITS					
Total	21 618	14 191	5 986	8 205	7 427
House Heating Fuel					
Owner occupied	14 935	9 399	3 295	6 104	5 536
Utility gas	10 776	7 758	2 925	4 833	3 018
Bottled, tank, or LP gas	945	179	3	176	766
Fuel oil	1 295	655	150	504	640
Kerosene, etc.	11	7	4	3	4
Electricity	1 231	664	189	475	567
Coal or coke	45	19	6	13	26
Wood	615	111	17	94	505
Solar heat	4	2	-	2	2
Other fuel	10	4	-	4	6
None	2	2	2	-	1
Renter occupied	6 683	4 792	2 691	2 102	1 891
Utility gas	4 881	3 602	2 229	1 573	1 079
Bottled, tank, or LP gas	221	34	-	34	187
Fuel oil	466	282	121	161	184
Kerosene, etc.	2	-	-	-	2
Electricity	941	613	321	292	328
Coal or coke	23	9	4	6	13
Wood	130	34	2	32	96
Solar heat	-	-	-	-	-
Other fuel	16	16	14	3	-
None	3	2	-	2	2
Monthly Cost Paid for Electricity					
Specified owner occupied[1]	11 906	7 999	2 677	5 323	3 907
Electricity paid for	11 902	7 997	2 677	5 320	3 905
Less than $10	31	23	12	12	8
$10 to $19	434	264	128	135	171
$20 to $29	1 110	698	310	389	411
$30 to $39	1 924	1 284	479	804	640
$40 to $49	1 858	1 227	399	828	631
$50 to $59	1 789	1 224	396	828	565
$60 to $79	2 453	1 679	557	1 122	774
$80 to $99	978	683	191	491	296
$100 to $149	986	658	155	503	328
$150 or more	339	257	49	208	81
Median	53	54	50	55	51
No electricity used	5	2	-	2	2
Specified renter occupied[2]	6 469	4 739	2 688	2 050	1 730
Electricity paid for	5 458	4 016	2 172	1 845	1 442
Less than $10	156	124	80	44	32
$10 to $19	929	766	437	329	162
$20 to $29	1 138	854	475	379	285
$30 to $39	1 062	810	466	344	253
$40 to $49	707	507	260	247	200
$50 to $59	507	347	177	170	160
$60 to $79	530	332	142	190	198
$80 to $99	183	121	58	62	63
$100 to $149	167	106	49	57	62
$150 or more	78	51	28	24	27
Median	34	33	32	34	39
Included in rent	992	706	502	204	286
No electricity used	19	16	14	2	3
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas					
Specified owner occupied[1]	11 906	7 999	2 677	5 323	3 907
Gas paid for	10 385	7 184	2 514	4 670	3 202
Less than $10	140	62	27	36	78
$10 to $14	139	54	23	31	85
$15 to $19	172	81	35	47	91
$20 to $24	235	138	53	86	96
$25 to $29	259	144	51	93	115
$30 to $39	832	472	170	302	360
$40 to $49	1 272	894	317	577	378
$50 to $69	3 575	2 528	813	1 715	1 046
$70 to $99	2 645	2 012	681	1 331	633
$100 or more	1 117	798	345	453	319
Median	61	63	64	63	57
No gas used	1 521	816	163	653	705
Specified renter occupied[2]	6 469	4 739	2 688	2 050	1 730
Gas paid for	3 422	2 469	1 505	964	954
Less than $10	289	238	160	78	50
$10 to $14	196	149	117	33	46
$15 to $19	195	127	84	42	69
$20 to $24	193	155	93	62	37
$25 to $29	225	147	100	47	78
$30 to $39	460	332	184	148	129
$40 to $49	436	278	162	115	158
$50 to $69	711	518	263	255	193
$70 to $99	444	320	183	137	124
$100 or more	275	206	159	47	69
Median	43	43	41	46	44
Included in rent	2 102	1 661	929	732	441
No gas used	944	609	254	355	335

See footnotes at end of table.

Table C-1. Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Inside SMSA's			Outside SMSA's
		Total	In central city	Not in central city	
ALL OCCUPIED HOUSING UNITS—Con.					
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.					
Specified owner occupied[1]	11 906	7 999	2 677	5 323	3 907
Fuel oil, kerosene, coal, wood, etc., paid for	2 047	1 195	311	884	852
Less than $100	483	316	113	204	166
$100 to $199	343	209	55	154	133
$200 to $299	198	100	14	87	98
$300 to $399	155	62	19	43	93
$400 to $499	108	50	9	41	58
$500 to $599	108	51	10	40	57
$600 to $699	155	99	28	72	56
$700 to $799	107	57	12	45	51
$800 or more	391	250	52	198	141
Median	300	271	177	296	331
Fuels not used or free	9 859	6 804	2 365	4 439	3 055
Specified renter occupied[2]	6 489	4 739	2 688	2 050	1 730
Fuel oil, kerosene, coal, wood, etc., paid for	416	190	70	121	225
Less than $100	83	45	21	24	38
$100 to $199	67	29	10	19	38
$200 to $299	43	25	10	15	18
$300 to $399	30	12	5	7	18
$400 to $499	21	5	3	2	16
$500 to $599	18	4	2	2	13
$600 to $699	15	7	2	5	8
$700 to $799	28	10	-	10	18
$800 or more	110	53	16	37	57
Median	348	283	233	337	401
Included in rent	508	353	213	140	155
Fuels not used or free	5 545	4 195	2 405	1 790	1 350
ALL OCCUPIED HOUSING UNITS					
Total	21 618	14 191	5 986	8 205	7 427
Heating Equipment					
Owner occupied	14 935	9 399	3 295	6 104	5 536
Warm-air furnace	11 328	7 677	2 590	5 086	3 651
Heat pump	241	150	36	114	91
Steam or hot water	1 324	904	432	472	420
Built-in electric units	632	310	103	207	322
Floor, wall, or pipeless furnace	278	80	42	39	197
Room heaters with flue	422	116	44	72	306
Room heaters without flue	43	26	22	3	17
Fireplaces, stoves, or portable heaters	664	134	24	110	530
None	2	2	2	-	1
Renter occupied	6 683	4 792	2 691	2 102	1 891
Warm-air furnace	3 570	2 537	1 327	1 210	1 033
Heat pump	34	25	13	13	8
Steam or hot water	1 681	1 461	920	541	220
Built-in electric units	640	408	209	199	233
Floor, wall, or pipeless furnace	179	81	56	25	98
Room heaters with flue	360	193	130	63	167
Room heaters without flue	48	37	24	12	11
Fireplaces, stoves, or portable heaters	168	49	12	37	119
None	3	2	-	2	2
ALL OCCUPIED HOUSING UNITS					
Total	21 618	14 191	5 986	8 205	7 427
UNITS OCCUPIED LAST WINTER					
Total	19 174	12 525	5 155	7 369	6 649
Insufficient Heat					
Closure of rooms:					
Owner occupied	14 292	8 981	3 155	5 826	5 312
With heating equipment	14 291	8 979	3 153	5 826	5 312
No rooms closed	13 687	8 657	3 028	5 629	5 030
Closed certain rooms	449	219	87	133	230
Living room only	19	14	6	9	4
Dining room only	2	2	2	-	-
1 or more bedrooms only	320	131	50	81	189
Other rooms or combination of rooms	95	61	25	36	34
Not reported	13	11	4	7	2
Not reported	155	103	39	64	52
No heating equipment	2	2	2	-	-
Renter occupied	4 882	3 544	2 001	1 543	1 338
With heating equipment	4 881	3 544	2 001	1 543	1 337
No rooms closed	4 535	3 312	1 855	1 457	1 223
Closed certain rooms	292	188	112	76	104
Living room only	14	14	10	4	-
Dining room only	-	-	-	-	-
1 or more bedrooms only	208	125	69	56	83
Other rooms or combination of rooms	65	46	32	14	18
Not reported	5	2	-	2	3
Not reported	54	44	34	9	10
No heating equipment	1	-	-	-	1
Additional heat source:					
Owner occupied	14 292	8 981	3 155	5 826	5 312
With specified heating equipment[3]	13 597	8 821	3 107	5 715	4 776
No additional heat source used	12 605	8 232	2 879	5 353	4 373
Used kitchen stove, fireplace, or portable heater	735	453	180	273	282
Not reported	258	136	48	88	122
Lacking specified heating equipment or none	695	159	48	112	536

See footnotes at end of table.

Table C-1. Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Inside SMSA's			Outside SMSA's
		Total	In central city	Not in central city	
UNITS OCCUPIED LAST WINTER—Con.					
Insufficient Heat—Con.					
Additional heat source—Con.					
Renter occupied	**4 882**	**3 544**	**2 001**	**1 543**	**1 338**
With specified heating equipment[3]	4 699	3 470	1 967	1 502	1 229
No additional heat source used	4 066	2 982	1 630	1 352	1 084
Used kitchen stove, fireplace, or portable heater	513	411	286	125	101
Not reported	120	76	51	25	44
Lacking specified heating equipment or none	183	74	33	41	109
Rooms lacking specified heat source:					
Owner occupied	**14 292**	**8 981**	**3 155**	**5 826**	**5 312**
With specified heating equipment[3]	13 597	8 821	3 107	5 715	4 776
No rooms lacking air ducts, registers, radiators, or heaters	11 720	7 984	2 763	5 221	3 737
Rooms lacking air ducts, registers, radiators, or heaters	1 706	763	323	440	943
1 room	733	429	182	247	304
2 rooms	435	181	85	96	254
3 rooms or more	538	153	57	97	385
Not reported	170	74	21	53	96
Lacking specified heating equipment or none	695	159	48	112	536
Renter occupied	**4 882**	**3 544**	**2 001**	**1 543**	**1 338**
With specified heating equipment[3]	4 699	3 470	1 967	1 502	1 229
No rooms lacking air ducts, registers, radiators, or heaters	3 961	3 040	1 664	1 376	920
Rooms lacking air ducts, registers, radiators, or heaters	656	381	265	116	275
1 room	300	197	152	45	103
2 rooms	173	98	61	37	75
3 rooms or more	184	86	52	34	98
Not reported	82	48	39	10	33
Lacking specified heating equipment or none	183	74	33	41	109
Housing unit uncomfortably cold:					
Owner occupied	**14 292**	**8 981**	**3 155**	**5 826**	**5 312**
With specified heating equipment[3]	13 597	8 821	3 107	5 715	4 776
Lacking specified heating equipment or none	695	159	48	112	536
Housing unit not uncomfortably cold for 24 hours or more	573	121	30	91	452
Housing unit uncomfortably cold for 24 hours or more	47	16	5	11	31
Not reported	75	23	13	10	52
Renter occupied	**4 882**	**3 544**	**2 001**	**1 543**	**1 338**
With specified heating equipment[3]	4 699	3 470	1 967	1 502	1 229
Lacking specified heating equipment or none	183	74	33	41	109
Housing unit not uncomfortably cold for 24 hours or more	146	58	24	33	88
Housing unit uncomfortably cold for 24 hours or more	24	10	4	7	13
Not reported	14	6	5	1	7
ALL OCCUPIED HOUSING UNITS					
Total	**21 618**	**14 191**	**5 988**	**8 205**	**7 427**
Air Conditioning					
Owner occupied	**14 935**	**9 399**	**3 295**	**6 104**	**5 536**
With air conditioning	9 684	6 397	2 248	4 149	3 287
Room units	4 568	2 733	1 174	1 559	1 835
1	3 205	1 788	772	1 016	1 417
2	1 105	740	305	436	365
3	208	165	71	94	43
4	27	18	17	2	9
5 or more	22	21	9	12	1
Central system	5 116	3 664	1 074	2 590	1 452
With no air conditioning	5 250	3 002	1 047	1 955	2 249
Renter occupied	**6 683**	**4 792**	**2 691**	**2 102**	**1 891**
With air conditioning	3 657	2 693	1 276	1 417	964
Room units	2 400	1 717	836	882	683
1	1 976	1 368	656	712	608
2	365	299	152	147	66
3	49	43	23	21	6
4	9	7	5	2	2
5 or more	2	-	-	-	2
Central system	1 256	976	440	536	280
With no air conditioning	3 026	2 099	1 415	684	927

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table C-2. Income of Families and Primary Individuals by Fuel, Fuel Costs, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $3,000	$3,000 to $6,999	$7,000 to $9,999	$10,000 to $14,999	$15,000 to $19,999	$20,000 to $24,999	$25,000 to $34,999	$35,000 to $49,999	$50,000 to $74,999	$75,000 or more	Median (dollars)
ALL OCCUPIED HOUSING UNITS												
Total	21 618	993	2 732	1 753	3 027	2 552	2 168	3 798	2 764	1 355	478	19 500
House Heating Fuel												
Owner occupied	14 935	426	1 222	994	1 804	1 662	1 591	3 096	2 424	1 262	452	24 300
Utility gas	10 776	260	803	707	1 242	1 156	1 117	2 331	1 830	1 006	323	25 400
Bottled, tank, or LP gas	945	42	134	80	137	131	109	154	97	43	19	18 000
Fuel oil	1 295	49	148	107	185	129	151	243	171	74	30	20 700
Kerosene, etc.	11	-	-	-	6	2	1	2	-	1	-	...
Electricity	1 231	32	77	52	121	135	125	249	253	114	73	27 900
Coal or coke	45	4	7	3	7	10	2	5	4	-	3	15 700
Wood	615	37	52	45	97	96	86	110	69	22	2	19 000
Solar heat	4	-	-	-	-	-	-	1	-	3	-	...
Other fuel	10	2	1	-	-	3	-	2	1	-	3	...
None	2	-	2	-	-	-	-	-	-	-	-	...
Renter occupied	6 683	567	1 510	759	1 222	890	575	702	340	93	25	12 100
Utility gas	4 881	424	1 083	571	923	635	403	500	246	73	21	12 000
Bottled, tank, or LP gas	221	24	43	23	50	32	14	25	7	2	1	12 100
Fuel oil	486	30	115	41	77	59	59	62	21	2	1	13 100
Kerosene, etc.	2	1	2	-	-	-	-	-	-	-	-	...
Electricity	941	63	229	101	134	147	89	102	60	16	1	12 900
Coal or coke	23	4	7	2	7	1	-	2	1	-	-	...
Wood	130	18	24	16	28	17	10	10	5	1	1	11 200
Solar heat	-	-	-	-	-	-	-	-	-	-	-	-
Other fuel	16	2	7	3	3	-	-	2	-	-	-	...
None	3	2	1	1	-	-	-	-	-	-	-	...
Monthly Cost Paid for Electricity												
Specified owner occupied[1]	11 906	308	897	729	1 295	1 264	1 238	2 630	2 069	1 113	365	25 800
Electricity paid for	11 902	308	895	728	1 295	1 262	1 238	2 630	2 069	1 113	365	25 900
Less than $10	31	4	13	6	4	1	-	1	1	-	2	...
$10 to $19	434	6	108	57	82	43	51	51	25	11	2	12 800
$20 to $29	1 110	46	153	125	192	141	105	204	98	33	13	16 400
$30 to $39	1 924	58	182	146	271	228	193	414	285	112	34	22 000
$40 to $49	1 858	48	120	126	195	243	235	399	321	150	22	24 200
$50 to $59	1 789	44	95	101	180	178	198	471	310	172	39	27 100
$60 to $79	2 453	50	108	92	192	267	237	613	528	291	75	29 600
$80 to $99	978	16	57	39	99	78	114	198	213	118	47	29 400
$100 to $149	986	26	40	27	61	64	84	224	216	167	77	33 500
$150 or more	339	11	19	8	19	20	21	55	73	58	55	38 500
Median	53	48	39	42	45	48	52	55	59	65	78	...
No electricity used	5	-	2	2	-	2	-	-	-	-	-	...
Specified renter occupied[2]	6 469	545	1 483	739	1 174	860	555	674	326	90	23	12 000
Electricity paid for	5 458	393	1 136	595	1 022	784	497	617	308	84	21	13 000
Less than $10	156	19	43	20	32	21	5	10	5	-	-	9 400
$10 to $19	929	64	255	106	175	115	74	93	34	9	5	11 100
$20 to $29	1 138	90	267	125	212	165	101	120	45	10	5	12 100
$30 to $39	1 062	79	219	106	201	159	83	133	69	11	2	13 200
$40 to $49	707	46	128	91	142	99	69	80	41	10	1	13 100
$50 to $59	507	31	78	53	85	86	63	62	34	10	3	15 400
$60 to $79	530	32	84	49	95	75	68	68	41	16	3	15 300
$80 to $99	183	16	24	19	35	24	19	22	19	6	1	14 900
$100 to $149	167	9	28	14	33	31	9	18	15	10	-	15 100
$150 or more	78	8	9	13	15	8	7	11	5	2	1	12 900
Median	34	33	30	34	34	35	37	36	40	52	...	...
Included in rent	992	147	340	141	152	73	58	56	18	6	2	7 200
No electricity used	19	4	7	4	-	3	-	-	-	-	-	...
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas												
Specified owner occupied[1]	11 906	308	897	729	1 295	1 264	1 238	2 630	2 069	1 113	365	25 800
Gas paid for	10 385	260	780	643	1 121	1 123	1 052	2 308	1 794	986	320	25 900
Less than $10	140	15	15	8	26	14	13	22	16	7	2	17 400
$10 to $14	139	2	15	13	24	25	19	23	14	1	2	17 900
$15 to $19	172	6	25	15	29	15	15	37	18	11	2	18 800
$20 to $24	235	7	23	18	31	31	41	43	31	10	1	21 000
$25 to $29	259	9	31	18	32	29	23	68	29	11	11	22 400
$30 to $39	832	23	103	70	99	96	79	161	134	49	18	21 600
$40 to $49	1 272	34	80	82	171	188	142	290	198	73	13	22 800
$50 to $69	3 575	71	231	209	409	387	344	858	638	341	86	26 600
$70 to $99	2 645	52	161	150	215	233	285	600	510	330	108	28 800
$100 or more	1 117	41	97	60	85	103	91	204	204	154	77	28 900
Median	61	59	58	59	57	58	61	61	64	68	77	...
No gas used	1 521	48	116	86	174	141	186	322	275	127	46	25 300
Specified renter occupied[2]	6 469	545	1 483	739	1 174	860	555	674	326	90	23	12 000
Gas paid for	3 422	268	708	394	691	456	289	385	164	57	10	12 500
Less than $10	289	16	63	40	63	41	21	34	4	4	2	12 000
$10 to $14	196	18	37	25	47	28	13	22	3	2	-	11 900
$15 to $19	195	17	43	23	35	28	14	21	11	2	2	12 100
$20 to $24	193	18	42	23	34	27	18	16	11	4	-	12 000
$25 to $29	225	19	55	27	38	34	17	25	7	2	-	11 400
$30 to $39	460	38	102	38	79	65	47	60	25	6	1	13 300
$40 to $49	436	35	86	57	91	62	31	50	22	3	-	12 200
$50 to $69	711	56	144	84	140	80	56	86	41	19	4	12 500
$70 to $99	444	26	87	51	93	49	42	51	34	11	-	13 200
$100 or more	275	26	49	25	70	42	29	20	6	5	2	12 600
Median	43	42	41	43	45	41	44	43	49	57	...	...
Included in rent	2 102	231	532	259	346	257	176	167	105	19	11	10 400
No gas used	944	46	243	87	137	147	91	121	57	14	1	13 500

See footnotes at end of table.

Table C-2. Income of Families and Primary Individuals by Fuel, Fuel Costs, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $3,000	$3,000 to $6,999	$7,000 to $9,999	$10,000 to $14,999	$15,000 to $19,999	$20,000 to $24,999	$25,000 to $34,999	$35,000 to $49,999	$50,000 to $74,999	$75,000 or more	Median (dollars)
ALL OCCUPIED HOUSING UNITS—Con.												
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.												
Specified owner occupied[1]	**11 906**	**308**	**897**	**729**	**1 295**	**1 264**	**1 238**	**2 630**	**2 069**	**1 113**	**365**	**25 800**
Fuel oil, kerosene, coal, wood, etc., paid for	2 047	60	148	128	216	206	230	455	352	193	60	25 800
Less than $100	483	11	20	16	29	58	46	124	83	78	19	30 100
$100 to $199	343	4	9	19	28	29	31	94	62	49	15	30 300
$200 to $299	198	10	15	12	20	19	17	38	47	13	6	26 400
$300 to $399	155	8	11	12	21	23	24	17	32	5	3	20 600
$400 to $499	108	3	12	7	15	17	14	18	17	4	2	20 400
$500 to $599	108	2	14	6	15	10	14	25	15	5	1	22 400
$600 to $699	155	8	12	15	24	11	22	34	23	6	-	21 900
$700 to $799	107	2	18	4	17	9	5	22	20	9	-	22 200
$800 or more	391	12	39	37	46	29	56	82	53	23	14	22 900
Median	300	358	557	475	464	281	385	224	265	137	170	...
Fuels not used or free	9 859	248	749	601	1 079	1 058	1 008	2 174	1 717	920	305	25 900
Specified renter occupied[2]	**6 469**	**545**	**1 483**	**739**	**1 174**	**860**	**555**	**674**	**326**	**90**	**23**	**12 000**
Fuel oil, kerosene, coal, wood, etc., paid for	416	25	76	39	77	57	44	60	29	8	1	14 400
Less than $100	83	4	10	9	16	12	7	13	9	2	-	16 000
$100 to $199	67	4	17	5	15	4	3	9	4	4	-	12 300
$200 to $299	43	-	8	2	8	10	7	5	4	-	-	17 200
$300 to $399	30	3	2	5	7	5	4	2	-	-	1	...
$400 to $499	21	2	8	2	4	1	2	3	-	-	-	...
$500 to $599	18	3	1	1	6	2	3	1	2	1	-	...
$600 to $699	15	-	2	-	3	5	-	5	-	-	-	...
$700 to $799	28	2	7	6	1	6	1	1	4	1	-	...
$800 or more	110	7	21	10	17	12	17	20	6	-	-	14 900
Median	348	...	394	371	301	341	409	380	...	...	...	...
Included in rent	508	59	126	65	92	52	47	42	18	4	3	10 300
Fuels not used or free	5 545	460	1 281	635	1 005	751	465	572	279	78	19	12 000
ALL OCCUPIED HOUSING UNITS												
Total	**21 618**	**993**	**2 732**	**1 753**	**3 027**	**2 552**	**2 166**	**3 798**	**2 764**	**1 355**	**478**	**19 500**
Heating Equipment												
Owner occupied	**14 935**	**426**	**1 222**	**994**	**1 804**	**1 662**	**1 591**	**3 096**	**2 424**	**1 262**	**452**	**24 300**
Warm-air furnace	11 328	287	836	726	1 348	1 231	1 175	2 449	1 931	1 004	342	25 200
Heat pump	241	2	5	6	13	16	19	58	60	40	23	35 600
Steam or hot water	1 324	26	105	75	133	148	153	284	212	135	54	25 800
Built-in electric units	632	24	47	25	76	73	75	123	115	47	28	24 800
Floor, wall, or pipeless furnace	278	15	56	42	56	32	30	22	20	4	2	12 300
Room heaters with flue	422	30	99	59	75	52	44	40	15	8	-	11 500
Room heaters without flue	43	4	9	7	3	6	4	6	2	2	-	11 700
Fireplaces, stoves, or portable heaters	664	40	63	53	101	105	90	115	70	22	4	18 600
None	2	-	2	-	-	-	-	-	-	-	-	...
Renter occupied	**6 683**	**567**	**1 510**	**759**	**1 222**	**890**	**575**	**702**	**340**	**93**	**25**	**12 100**
Warm-air furnace	3 570	274	702	394	692	493	308	427	199	64	16	13 000
Heat pump	34	-	3	9	2	3	4	4	7	-	1	...
Steam or hot water	1 681	151	410	182	297	213	161	164	81	16	6	11 700
Built-in electric units	640	36	173	69	90	107	54	66	35	9	-	12 300
Floor, wall, or pipeless furnace	179	20	54	30	30	19	14	6	5	1	-	8 600
Room heaters with flue	360	54	118	46	71	31	15	20	5	-	-	7 500
Room heaters without flue	48	5	11	7	8	6	4	5	2	1	-	10 700
Fireplaces, stoves, or portable heaters	168	26	38	23	32	18	14	10	5	2	1	9 700
None	3	2	1	1	-	-	-	-	-	-	-	...
ALL OCCUPIED HOUSING UNITS												
Total	**21 618**	**993**	**2 732**	**1 753**	**3 027**	**2 552**	**2 166**	**3 798**	**2 764**	**1 355**	**478**	**19 500**
UNITS OCCUPIED LAST WINTER												
Total	**19 174**	**763**	**2 297**	**1 515**	**2 632**	**2 251**	**1 906**	**3 520**	**2 571**	**1 273**	**447**	**20 300**
Insufficient Heat												
Closure of rooms:												
Owner occupied	**14 292**	**414**	**1 186**	**963**	**1 719**	**1 598**	**1 485**	**2 974**	**2 327**	**1 201**	**425**	**24 300**
With heating equipment	14 291	414	1 185	963	1 719	1 598	1 485	2 974	2 327	1 201	425	24 300
No rooms closed	13 687	389	1 083	898	1 626	1 524	1 426	2 883	2 268	1 172	418	24 600
Closed certain rooms	449	22	84	54	72	48	47	69	36	15	3	14 500
Living room only	19	-	5	4	2	2	2	2	1	2	-	...
Dining room only	2	-	-	2	-	-	-	-	-	-	-	...
1 or more bedrooms only	320	18	61	36	62	34	30	47	22	9	2	13 700
Other rooms or combination of rooms	95	4	15	12	9	10	14	16	11	3	1	18 400
Not reported	13	-	3	-	-	1	2	5	2	-	-	...
Not reported	155	3	18	11	21	26	11	22	23	14	5	19 600
No heating equipment	2	-	2	-	-	-	-	-	-	-	-	...
Renter occupied	**4 882**	**349**	**1 110**	**552**	**913**	**654**	**421**	**546**	**244**	**71**	**22**	**12 400**
With heating equipment	4 881	349	1 110	552	913	654	421	546	244	71	22	12 400
No rooms closed	4 535	312	1 006	509	832	618	406	519	239	71	22	12 600
Closed certain rooms	292	31	83	38	68	34	15	17	5	-	-	9 500
Living room only	14	2	6	1	4	-	2	-	-	-	-	...
Dining room only	-	-	-	-	-	-	-	-	-	-	-	-
1 or more bedrooms only	208	20	61	27	47	25	9	16	4	-	-	9 700
Other rooms or combination of rooms	65	9	16	10	15	10	3	1	1	-	-	9 200
Not reported	5	1	1	-	2	-	1	-	-	-	-	...
Not reported	54	7	20	5	12	1	-	10	-	-	-	7 100
No heating equipment	1	-	1	-	-	-	-	-	-	-	-	...

See footnotes at end of table.

Table C-2. **Income of Families and Primary Individuals by Fuel, Fuel Costs, Heating, and Air Conditioning Characteristics: 1983**—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $3,000	$3,000 to $6,999	$7,000 to $9,999	$10,000 to $14,999	$15,000 to $19,999	$20,000 to $24,999	$25,000 to $34,999	$35,000 to $49,999	$50,000 to $74,999	$75,000 or more	Median (dollars)
UNITS OCCUPIED LAST WINTER—Con.												
Insufficient Heat—Con.												
Additional heat source:												
Owner occupied	14 292	414	1 186	963	1 719	1 598	1 485	2 974	2 327	1 201	425	24 300
With specified heating equipment[3]	13 597	371	1 114	905	1 617	1 488	1 392	2 854	2 256	1 178	421	24 700
No additional heat source used	12 605	326	1 010	832	1 496	1 357	1 305	2 665	2 116	1 102	395	24 900
Used kitchen stove, fireplace, or portable heater	735	34	72	45	80	97	69	149	109	63	19	23 000
Not reported	258	12	32	28	41	35	18	40	32	13	6	17 200
Lacking specified heating equipment or none	695	42	72	58	102	109	93	119	70	23	4	18 300
Renter occupied	4 882	349	1 110	552	913	654	421	546	244	71	22	12 400
With specified heating equipment[3]	4 699	326	1 071	530	874	632	406	532	238	69	21	12 400
No additional heat source used	4 066	256	909	446	758	550	349	492	224	62	20	12 800
Used kitchen stove, fireplace, or portable heater	513	56	128	64	98	69	45	32	13	7	1	10 500
Not reported	120	14	33	20	19	13	12	8	1	-	-	8 900
Lacking specified heating equipment or none	183	24	40	22	38	22	15	14	6	3	1	10 800
Rooms lacking specified heat source:												
Owner occupied	14 292	414	1 186	963	1 719	1 598	1 485	2 974	2 327	1 201	425	24 300
With specified heating equipment[3]	13 597	371	1 114	905	1 617	1 488	1 392	2 854	2 256	1 178	421	24 700
No rooms lacking air ducts, registers, radiators, or heaters	11 720	311	880	704	1 365	1 223	1 191	2 522	2 048	1 081	395	25 700
Rooms lacking air ducts, registers, radiators, or heaters	1 706	50	212	179	227	240	191	316	182	89	21	18 900
1 room	733	15	51	45	85	109	89	172	102	51	13	23 500
2 rooms	435	9	65	57	69	63	39	71	42	16	4	16 400
3 rooms or more	538	26	96	77	73	68	63	73	38	21	4	14 900
Not reported	170	10	21	22	25	25	10	17	26	8	4	16 200
Lacking specified heating equipment or none	695	42	72	58	102	109	93	119	70	23	4	18 300
Renter occupied	4 882	349	1 110	552	913	654	421	546	244	71	22	12 400
With specified heating equipment[3]	4 699	326	1 071	530	874	632	406	532	238	69	21	12 400
No rooms lacking air ducts, registers, radiators, or heaters	3 961	265	878	434	725	530	346	476	221	65	20	12 800
Rooms lacking air ducts, registers, radiators, or heaters	656	51	175	82	133	93	53	51	14	4	1	10 800
1 room	300	22	80	31	54	49	23	28	8	3	1	11 600
2 rooms	173	17	53	24	30	24	15	7	2	1	-	9 000
3 rooms or more	184	12	42	27	49	20	15	15	3	-	-	11 200
Not reported	82	10	17	14	16	8	7	5	3	-	-	9 800
Lacking specified heating equipment or none	183	24	40	22	38	22	15	14	6	3	1	10 800
Housing unit uncomfortably cold:												
Owner occupied	14 292	414	1 186	963	1 719	1 598	1 485	2 974	2 327	1 201	425	24 300
With specified heating equipment[3]	13 597	371	1 114	905	1 617	1 488	1 392	2 854	2 256	1 178	421	24 700
Lacking specified heating equipment or none	695	42	72	58	102	109	93	119	70	23	4	18 300
Housing unit not uncomfortably cold for 24 hours or more	573	33	47	52	80	94	80	104	58	21	4	19 000
Housing unit uncomfortably cold for 24 hours or more	47	6	11	3	11	4	4	5	3	-	-	11 600
Not reported	75	4	14	3	11	11	9	11	10	2	-	17 400
Renter occupied	4 882	349	1 110	552	913	654	421	546	244	71	22	12 400
With specified heating equipment[3]	4 699	326	1 071	530	874	632	406	532	238	69	21	12 400
Lacking specified heating equipment or none	183	24	40	22	38	22	15	14	6	3	1	10 800
Housing unit not uncomfortably cold for 24 hours or more	146	19	26	15	32	20	14	10	6	2	1	11 900
Housing unit uncomfortably cold for 24 hours or more	24	4	7	5	5	-	1	2	-	-	-	...
Not reported	14	-	7	2	1	2	-	2	-	1	-	...
ALL OCCUPIED HOUSING UNITS												
Total	21 618	993	2 732	1 753	3 027	2 552	2 166	3 798	2 764	1 355	478	19 500
Air Conditioning												
Owner occupied	14 935	426	1 222	994	1 804	1 662	1 591	3 096	2 424	1 262	452	24 300
With air conditioning	9 684	226	588	543	1 079	1 027	976	2 119	1 770	964	372	26 900
Room units	4 568	132	377	356	629	593	515	934	687	294	71	21 900
1	3 205	112	309	272	481	430	387	617	432	145	40	20 000
2	1 105	16	58	65	120	150	121	275	185	92	22	25 800
3	208	4	8	13	21	12	25	35	44	40	6	31 300
4	27	-	2	6	6	2	2	2	2	4	2	...
5 or more	22	-	1	-	-	-	-	5	4	12	-	...
Central system	5 116	94	210	187	450	434	461	1 184	1 103	690	302	31 100
With no air conditioning	5 250	200	635	451	726	635	615	977	653	278	80	19 800
Renter occupied	6 683	567	1 510	759	1 222	890	575	702	340	93	25	12 100
With air conditioning	3 657	207	621	380	679	559	371	485	261	76	19	14 600
Room units	2 400	129	459	268	445	379	253	284	146	30	9	13 900
1	1 976	108	425	232	351	307	198	230	98	24	3	13 200
2	365	17	34	32	83	63	52	42	33	3	5	16 300
3	49	3	-	3	10	8	3	11	9	3	-	20 800
4	9	-	-	-	1	2	-	2	4	-	1	...
5 or more	2	-	-	-	-	-	-	-	2	-	-	...
Central system	1 256	78	163	112	234	180	118	201	115	46	10	16 200
With no air conditioning	3 026	360	889	380	543	332	204	217	79	17	6	9 100

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table C-3. Value of Owner-Occupied Housing Units by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $10,000	$10,000 to $19,999	$20,000 to $29,999	$30,000 to $39,999	$40,000 to $49,999	$50,000 to $59,999	$60,000 to $74,999	$75,000 to $99,999	$100,000 to $199,999	$200,000 or more	Median (dollars)
SPECIFIED OWNER OCCUPIED[1]												
Total	11 906	175	556	1 209	1 644	1 964	1 635	2 070	1 680	846	129	52 500
House Heating Fuel												
Utility gas	9 341	107	386	963	1 300	1 561	1 310	1 637	1 294	685	97	52 700
Bottled, tank, or LP gas	429	22	49	62	71	60	44	70	36	13	2	41 900
Fuel oil	864	20	61	95	142	146	113	126	109	42	10	47 800
Kerosene, etc.	5	-	-	3	-	2	-	-	-	-	-	...
Electricity	862	3	16	31	58	135	125	186	197	94	18	65 100
Coal or coke	25	1	5	3	4	4	4	4	-	1	-	...
Wood	371	21	41	51	67	55	40	46	43	8	1	41 200
Solar heat	2	-	-	-	-	-	-	-	1	1	-	...
Other fuel	7	-	-	1	3	-	-	1	-	2	1	...
None	2	1	-	-	-	2	-	-	-	-	-	...
Monthly Cost Paid for Electricity												
Electricity paid for	11 902	174	556	1 209	1 644	1 964	1 633	2 070	1 678	846	129	52 500
Less than $10	31	5	3	7	5	4	2	3	-	2	-	...
$10 to $19	434	29	58	107	97	48	47	35	12	-	2	32 400
$20 to $29	1 110	29	101	177	230	209	149	130	73	12	1	40 800
$30 to $39	1 924	40	118	248	335	366	254	337	177	39	11	46 000
$40 to $49	1 858	28	80	197	271	306	293	333	243	97	11	51 600
$50 to $59	1 789	17	76	156	243	314	290	338	257	90	8	53 000
$60 to $79	2 453	17	64	198	283	437	325	446	421	249	13	57 000
$80 to $99	978	2	27	66	94	159	119	198	181	115	18	61 700
$100 to $149	986	4	20	45	63	97	129	199	243	158	27	70 100
$150 or more	339	3	7	9	21	24	26	51	71	84	42	84 700
Median	53	35	39	43	45	51	52	55	63	74	107	...
No electricity used	5	1	-	-	1	-	2	-	2	-	-	...
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas												
Gas paid for	10 385	153	496	1 097	1 480	1 714	1 422	1 793	1 402	724	105	51 800
Less than $10	140	10	17	13	28	15	21	19	12	5	-	41 600
$10 to $14	139	8	14	24	25	17	19	20	3	8	1	39 700
$15 to $19	172	13	18	24	19	29	20	24	15	8	2	44 400
$20 to $24	235	5	9	36	41	46	24	41	24	9	1	45 900
$25 to $29	259	14	16	36	45	46	28	39	26	2	7	43 900
$30 to $39	832	22	48	121	158	160	117	122	61	15	7	44 200
$40 to $49	1 272	12	54	125	197	236	218	247	138	39	8	50 500
$50 to $69	3 575	38	163	334	494	634	535	658	515	194	11	52 300
$70 to $99	2 645	22	96	251	333	401	330	464	432	288	27	56 600
$100 or more	1 117	10	60	133	140	130	110	158	176	156	44	57 700
Median	61	44	58	60	59	59	59	61	66	78	89	...
No gas used	1 521	22	61	111	165	250	212	277	278	121	24	57 200
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.												
Fuel oil, kerosene, coal, wood, etc., paid for	2 047	40	120	214	280	306	256	333	316	151	31	52 400
Less than $100	483	3	19	58	46	44	76	97	89	44	7	59 500
$100 to $199	343	3	12	25	33	64	33	60	57	44	9	59 700
$200 to $299	198	7	16	22	27	31	14	29	31	16	5	48 900
$300 to $399	155	4	17	21	35	14	20	24	18	3	-	40 500
$400 to $499	108	3	9	12	22	21	11	13	14	2	-	43 700
$500 to $599	108	4	8	14	18	19	12	15	13	5	-	44 700
$600 to $699	155	1	10	17	23	27	25	26	20	5	1	49 500
$700 to $799	107	2	8	18	12	27	11	13	11	5	-	45 000
$800 or more	391	12	21	27	64	59	54	56	64	26	8	52 300
Median	300	479	371	310	398	403	324	232	239	169	...	...
Fuels not used or free	9 859	135	436	994	1 364	1 657	1 379	1 737	1 383	695	99	52 500
Heating Equipment												
Warm-air furnace	9 438	64	335	931	1 360	1 643	1 382	1 678	1 278	668	99	52 800
Heat pump	183	-	1	1	-	13	15	42	60	46	6	83 400
Steam or hot water	929	8	24	61	101	110	107	201	198	103	17	64 000
Built-in electric units	438	3	8	24	40	97	68	90	85	19	6	57 200
Floor, wall, or pipeless furnace	198	19	37	63	37	19	12	5	5	1	-	26 700
Room heaters with flue	295	50	99	70	34	23	5	5	8	1	-	19 900
Room heaters without flue	14	4	3	2	2	2	1	-	-	-	-	...
Fireplaces, stoves, or portable heaters	408	26	47	58	72	56	46	48	45	9	1	40 000
None	2	1	-	-	-	2	-	-	-	-	-	...

See footnotes at end of table.

Table C-3. Value of Owner-Occupied Housing Units by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $10,000	$10,000 to $19,999	$20,000 to $29,999	$30,000 to $39,999	$40,000 to $49,999	$50,000 to $59,999	$60,000 to $74,999	$75,000 to $99,999	$100,000 to $199,999	$200,000 or more	Median (dollars)
SPECIFIED OWNER OCCUPIED[1]												
Total	11 906	175	556	1 209	1 644	1 964	1 635	2 070	1 680	846	129	52 500
UNITS OCCUPIED LAST WINTER												
Total	11 422	157	527	1 161	1 576	1 897	1 579	1 992	1 610	802	120	52 500
Insufficient Heat												
Closure of rooms:												
With heating equipment	11 421	157	527	1 161	1 576	1 896	1 579	1 992	1 610	802	120	52 500
No rooms closed	10 994	139	487	1 089	1 501	1 835	1 537	1 934	1 573	781	119	52 900
Closed certain rooms	310	18	35	61	57	43	29	30	22	13	1	37 100
Living room only	10	-	-	1	1	3	3	4	-	-	-	...
Dining room only	2	-	-	-	2	-	-	-	-	-	-	...
1 or more bedrooms only	217	14	31	46	47	27	18	13	11	11	-	33 700
Other rooms or combination of rooms	71	3	4	14	8	12	5	14	8	3	1	45 400
Not reported	9	1	-	-	-	2	4	-	3	-	-	...
Not reported	117	-	5	11	18	18	13	29	16	8	-	55 300
No heating equipment	2	-	-	-	-	2	-	-	-	-	-	...
Additional heat source:												
With specified heating equipment[2]	11 009	129	479	1 102	1 504	1 838	1 532	1 947	1 565	793	119	52 900
No additional heat source used	10 255	108	415	1 019	1 393	1 710	1 448	1 834	1 472	747	107	53 300
Used kitchen stove, fireplace, or portable heater	557	10	47	53	85	90	62	87	74	38	12	49 300
Not reported	197	12	17	30	26	38	22	26	19	8	-	43 800
Lacking specified heating equipment or none	413	28	48	59	72	59	46	45	45	9	1	39 900
Rooms lacking specified heat source:												
With specified heating equipment[2]	11 009	129	479	1 102	1 504	1 838	1 532	1 947	1 565	793	119	52 900
No rooms lacking air ducts, registers, radiators, or heaters	9 580	58	297	826	1 240	1 608	1 392	1 810	1 481	754	115	55 500
Rooms lacking air ducts, registers, radiators, or heaters	1 300	60	166	255	245	207	134	126	75	31	2	36 900
1 room	603	12	39	87	101	105	92	96	46	22	2	45 900
2 rooms	338	17	47	73	80	54	22	21	18	6	-	33 900
3 rooms or more	360	31	80	95	63	48	20	10	11	3	-	27 300
Not reported	128	12	16	21	20	23	6	11	9	8	2	37 700
Lacking specified heating equipment or none	413	28	48	59	72	59	46	45	45	9	1	39 900
Housing unit uncomfortably cold:												
With specified heating equipment[2]	11 009	129	479	1 102	1 504	1 838	1 532	1 947	1 565	793	119	52 900
Lacking specified heating equipment or none	413	28	48	59	72	59	46	45	45	9	1	39 900
Housing unit not uncomfortably cold for 24 hours or more	340	21	41	48	61	46	40	35	41	7	1	39 900
Housing unit uncomfortably cold for 24 hours or more	28	5	3	8	2	4	3	3	-	-	-	...
Not reported	46	3	5	4	9	9	3	8	4	2	-	43 300
SPECIFIED OWNER OCCUPIED[1]												
Total	11 906	175	556	1 209	1 644	1 964	1 635	2 070	1 680	846	129	52 500
Air Conditioning												
With air conditioning	7 922	73	267	668	984	1 298	1 099	1 447	1 262	702	121	56 100
Room units	3 588	68	230	521	681	659	468	527	319	102	14	44 500
1	2 470	63	193	398	478	435	311	344	193	49	6	42 400
2	906	4	31	110	169	184	139	145	84	34	6	47 500
3	170	1	6	11	27	34	16	31	33	9	2	54 000
4	22	-	-	-	7	2	2	4	4	4	-	...
5 or more	21	-	-	2	-	4	-	4	6	6	-	...
Central system	4 334	5	37	148	303	640	631	920	943	600	107	66 600
With no air conditioning	3 984	102	289	540	660	665	535	622	417	144	9	46 000

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table C-4. Gross Rent of Renter-Occupied Housing Units by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $100	$100 to $149	$150 to $199	$200 to $249	$250 to $299	$300 to $349	$350 to $399	$400 to $499	$500 or more	No cash rent	Median (dollars)
SPECIFIED RENTER OCCUPIED[1]												
Total	**6 469**	**259**	**395**	**637**	**1 015**	**1 073**	**932**	**748**	**719**	**403**	**286**	**286**
House Heating Fuel												
Utility gas	4 837	155	290	469	787	824	675	572	564	324	175	287
Bottled, tank, or LP gas	169	1	8	22	34	28	16	9	15	3	33	256
Fuel oil	420	14	20	41	51	67	68	49	43	20	48	294
Kerosene, etc.	2	-	-	-	-	2	-	-	-	-	1	...
Electricity	926	81	63	74	127	141	167	109	95	56	12	289
Coal or coke	16	-	1	7	2	3	-	3	-	-	1	...
Wood	78	6	12	18	12	6	3	5	3	-	14	191
Solar heat	-	-	-	-	-	-	-	-	-	-	-	-
Other fuel	16	2	2	5	3	2	2	-	-	-	-	...
None	3	-	-	1	-	-	-	-	-	-	2	...
Monthly Cost Paid for Electricity												
Electricity paid for	5 458	132	240	439	805	951	888	718	691	392	203	303
Less than $10	156	14	28	11	29	33	24	7	6	-	3	238
$10 to $19	929	24	78	130	181	167	154	81	86	12	16	263
$20 to $29	1 138	41	47	109	227	208	178	147	109	29	42	279
$30 to $39	1 062	26	49	55	165	215	173	146	138	50	46	299
$40 to $49	707	14	14	60	82	136	125	112	97	44	24	314
$50 to $59	507	7	8	35	55	81	97	78	77	53	17	330
$60 to $79	530	5	11	24	45	80	96	85	82	78	24	345
$80 to $99	183	-	3	10	13	15	20	31	45	34	12	388
$100 to $149	167	-	2	5	6	15	19	22	28	56	15	427
$150 or more	78	-	-	-	2	-	3	10	24	36	2	491
Median	34	26	23	26	28	33	35	38	41	62	38	...
Included in rent	992	124	153	195	211	120	40	28	28	12	82	195
No electricity used	19	3	3	3	-	2	4	2	-	-	2	...
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas												
Gas paid for	3 422	38	136	284	542	615	534	429	418	271	156	302
Less than $10	289	8	20	29	59	52	50	32	20	6	13	271
$10 to $14	196	5	7	20	31	40	37	26	15	5	9	287
$15 to $19	195	2	14	19	44	42	25	21	15	11	3	270
$20 to $24	193	5	8	19	28	41	29	29	19	13	2	293
$25 to $29	225	3	25	32	53	34	27	19	13	11	6	245
$30 to $39	460	10	34	31	86	82	62	69	47	15	24	284
$40 to $49	436	3	14	32	90	77	74	43	61	22	19	294
$50 to $69	711	2	15	70	100	133	102	87	83	77	43	307
$70 to $99	444	-	-	23	38	89	78	66	84	48	18	339
$100 or more	275	-	-	8	12	25	50	38	61	62	19	393
Median	43	24	28	37	36	42	44	44	54	63	51	...
Included in rent	2 102	150	203	264	336	305	235	223	218	78	90	258
No gas used	944	71	55	90	137	152	163	96	84	55	40	282
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.												
Fuel oil, kerosene, coal, wood, etc., paid for	416	5	11	33	46	53	63	58	47	44	55	325
Less than $100	83	1	2	5	15	9	10	10	17	7	8	331
$100 to $199	67	3	4	7	6	12	6	14	2	8	5	293
$200 to $299	43	1	1	6	2	7	8	7	4	5	4	322
$300 to $399	30	-	2	3	3	3	3	8	2	2	5	...
$400 to $499	21	-	-	3	5	1	3	4	1	2	2	...
$500 to $599	18	-	-	3	5	3	2	2	2	1	1	...
$600 to $699	15	-	1	2	1	4	3	-	-	3	2	...
$700 to $799	26	-	-	2	4	4	5	1	3	2	7	...
$800 or more	110	-	2	3	6	12	24	14	17	13	21	348
Median	348	...	...	...	330	290	569	284	365	387	710	...
Included in rent	508	30	54	62	61	84	74	57	39	23	26	270
Fuels not used or free	5 545	224	331	543	908	935	796	633	633	337	204	285
Heating Equipment												
Warm-air furnace	3 459	71	156	293	482	601	541	440	426	277	172	304
Heat pump	34	-	2	2	6	4	5	-	2	12	2	...
Steam or hot water	1 666	88	105	157	276	271	237	201	206	84	41	284
Built-in electric units	629	74	50	49	90	97	99	73	65	23	7	274
Floor, wall, or pipeless furnace	177	10	12	31	39	33	23	9	7	5	9	239
Room heaters with flue	340	8	52	73	91	42	18	15	10	3	28	212
Room heaters without flue	46	-	2	4	10	16	5	3	-	-	5	263
Fireplaces, stoves, or portable heaters	115	7	16	27	21	8	4	8	4	-	20	195
None	3	-	-	1	-	-	-	-	-	-	2	...

See footnotes at end of table.

Table C-4. Gross Rent of Renter-Occupied Housing Units by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $100	$100 to $149	$150 to $199	$200 to $249	$250 to $299	$300 to $349	$350 to $399	$400 to $499	$500 or more	No cash rent	Median (dollars)
SPECIFIED RENTER OCCUPIED[1]												
Total	**6 469**	**259**	**395**	**637**	**1 015**	**1 073**	**932**	**748**	**719**	**403**	**286**	**286**
UNITS OCCUPIED LAST WINTER												
Total	**4 697**	**215**	**331**	**475**	**718**	**773**	**666**	**501**	**511**	**260**	**245**	**281**
Insufficient Heat												
Closure of rooms:												
With heating equipment	4 696	215	331	475	718	773	666	501	511	260	245	281
No rooms closed	4 373	204	312	439	657	732	626	458	473	243	229	281
Closed certain rooms	272	7	15	33	53	34	31	39	31	15	14	279
Living room only	13	2	-	2	2	1	2	3	3	-	-	...
Dining room only	-	-	-	-	-	-	-	-	-	-	-	-
1 or more bedrooms only	193	3	13	24	33	25	25	22	21	13	13	282
Other rooms or combination of rooms	60	3	2	5	18	7	3	13	7	2	2	269
Not reported	5	-	-	3	-	2	1	-	-	-	-	...
Not reported	51	3	5	3	8	8	9	5	7	3	1	287
No heating equipment	1	-	-	-	-	-	-	-	-	-	1	-
Additional heat source:												
With specified heating equipment[2]	4 563	209	319	447	697	751	659	490	508	260	223	283
No additional heat source used	3 954	178	282	381	610	657	567	417	439	230	192	282
Used kitchen stove, fireplace, or portable heater	498	22	22	49	75	77	79	66	61	26	21	294
Not reported	111	8	14	18	12	16	14	6	8	4	9	243
Lacking specified heating equipment or none	133	6	13	28	21	22	7	11	3	-	23	221
Rooms lacking specified heat source:												
With specified heating equipment[2]	4 563	209	319	447	697	751	659	490	508	260	223	283
No rooms lacking air ducts, registers, radiators, or heaters	3 874	184	254	348	540	652	576	440	468	245	168	290
Rooms lacking air ducts, registers, radiators, or heaters	617	20	54	87	150	85	78	44	35	14	49	240
1 room	289	12	26	43	63	38	32	25	22	10	18	243
2 rooms	164	6	14	21	39	25	29	7	9	4	10	245
3 rooms or more	164	3	14	24	48	23	17	12	3	-	20	232
Not reported	73	5	10	12	8	14	6	5	5	2	6	239
Lacking specified heating equipment or none	133	6	13	28	21	22	7	11	3	-	23	221
Housing unit uncomfortably cold:												
With specified heating equipment[2]	4 563	209	319	447	697	751	659	490	508	260	223	283
Lacking specified heating equipment or none	133	6	13	28	21	22	7	11	3	-	23	221
Housing unit not uncomfortably cold for 24 hours or more	105	6	9	21	18	15	4	10	2	-	19	218
Housing unit uncomfortably cold for 24 hours or more	17	-	3	5	3	3	1	-	-	-	3	...
Not reported	11	-	-	2	-	4	2	2	1	-	1	...
SPECIFIED RENTER OCCUPIED[1]												
Total	**6 469**	**259**	**395**	**637**	**1 015**	**1 073**	**932**	**748**	**719**	**403**	**286**	**286**
Air Conditioning												
With air conditioning	3 566	95	163	252	479	570	559	496	503	308	139	313
Room units	2 328	71	126	200	380	416	344	295	283	121	92	290
1	1 925	66	121	185	332	358	287	239	196	74	67	281
2	350	3	5	16	44	57	52	46	73	32	22	336
3	43	2	-	-	4	-	5	10	10	11	1	405
4	8	-	-	-	-	-	-	-	2	3	3	...
5 or more	2	-	-	-	-	-	-	-	2	-	-	...
Central system	1 238	25	38	52	99	154	215	201	221	187	47	353
With no air conditioning	2 903	164	232	385	536	503	373	252	216	95	147	256

[1]Excludes one-unit structures on 10 acres or more.
[2]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table C-5. Housing Units in Structure by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Housing units in structure					
		1	2 to 4	5 to 9	10 to 19	20 or more	Mobile home or trailer
ALL OCCUPIED HOUSING UNITS							
Total	**21 618**	**15 621**	**2 541**	**641**	**809**	**1 050**	**756**
House Heating Fuel							
Owner occupied	**14 935**	**13 451**	**637**	**69**	**43**	**107**	**628**
Utility gas	10 776	9 785	547	66	30	59	289
Bottled, tank, or LP gas	945	769	4	-	3	-	169
Fuel oil	1 295	1 188	40	-	-	4	62
Kerosene, etc.	11	7	-	-	-	-	4
Electricity	1 231	1 064	43	4	9	44	68
Coal or coke	45	44	-	-	-	-	1
Wood	615	578	2	-	-	-	35
Solar heat	4	4	-	-	-	-	-
Other fuel	10	9	1	-	-	-	-
None	2	2	-	-	-	-	-
Renter occupied	**6 683**	**2 170**	**1 904**	**771**	**767**	**943**	**128**
Utility gas	4 881	1 481	1 564	586	511	655	63
Bottled, tank, or LP gas	221	173	13	4	-	-	31
Fuel oil	466	222	83	25	58	65	14
Kerosene, etc.	2	2	-	-	-	-	-
Electricity	941	152	218	151	194	209	17
Coal or coke	23	13	-	4	3	3	-
Wood	130	123	3	-	-	-	4
Solar heat	-	-	-	-	-	-	-
Other fuel	16	1	2	2	2	10	-
None	3	2	2	-	-	-	-
Monthly Cost Paid for Electricity							
Specified owner occupied[1]	**11 906**	**11 906**	---	---	---	---	---
Electricity paid for	11 902	11 902	...	...	...	...	...
Less than $10	31	31	...	...	...	...	...
$10 to $19	434	434	...	...	...	...	...
$20 to $29	1 110	1 110	...	...	...	...	...
$30 to $39	1 924	1 924	...	...	...	...	...
$40 to $49	1 858	1 858	...	...	...	...	...
$50 to $59	1 789	1 789	...	...	...	...	...
$60 to $79	2 453	2 453	...	...	...	...	...
$80 to $99	978	978	...	...	...	...	...
$100 to $149	986	986	...	...	...	...	...
$150 or more	339	339	...	...	...	...	...
Median	53	53	...	...	...	...	...
No electricity used	5	5	...	...	...	...	...
Specified renter occupied[2]	**6 469**	**1 955**	**1 904**	**771**	**767**	**943**	**128**
Electricity paid for	5 458	1 814	1 546	617	672	692	117
Less than $10	156	12	41	25	32	45	1
$10 to $19	929	128	283	142	167	201	7
$20 to $29	1 138	294	368	129	154	168	25
$30 to $39	1 062	335	343	121	115	127	22
$40 to $49	707	248	217	70	93	62	17
$50 to $59	507	243	117	49	46	37	16
$60 to $79	530	292	104	44	46	32	13
$80 to $99	183	103	32	24	6	12	6
$100 to $149	167	110	30	11	5	3	9
$150 or more	78	50	11	3	8	5	-
Median	34	45	32	31	28	25	42
Included in rent	992	139	351	151	95	246	11
No electricity used	19	3	7	3	-	5	-
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas							
Specified owner occupied[1]	**11 906**	**11 906**	---	---	---	---	---
Gas paid for	10 385	10 385	...	...	...	...	...
Less than $10	140	140	...	...	...	...	...
$10 to $14	139	139	...	...	...	...	...
$15 to $19	172	172	...	...	...	...	...
$20 to $24	235	235	...	...	...	...	...
$25 to $29	259	259	...	...	...	...	...
$30 to $39	832	832	...	...	...	...	...
$40 to $49	1 272	1 272	...	...	...	...	...
$50 to $69	3 575	3 575	...	...	...	...	...
$70 to $99	2 645	2 645	...	...	...	...	...
$100 or more	1 117	1 117	...	...	...	...	...
Median	61	61	...	...	...	...	...
No gas used	1 521	1 521	...	...	...	...	...
Specified renter occupied[2]	**6 469**	**1 955**	**1 904**	**771**	**767**	**943**	**128**
Gas paid for	3 422	1 508	1 178	322	168	148	98
Less than $10	289	43	96	60	45	36	10
$10 to $14	196	49	64	26	20	34	2
$15 to $19	195	59	77	36	12	7	5
$20 to $24	193	59	67	34	6	19	7
$25 to $29	225	79	88	19	22	10	9
$30 to $39	460	186	177	45	24	18	10
$40 to $49	436	212	144	32	20	11	17
$50 to $69	711	401	228	47	8	7	19
$70 to $99	444	258	152	10	8	3	13
$100 or more	275	163	86	13	4	2	7
Median	43	53	41	26	25	17	44
Included in rent	2 102	220	531	333	390	617	11
No gas used	944	227	195	116	208	178	19

See footnotes at end of table.

Table C-5. **Housing Units in Structure by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983**—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Housing units in structure					
		1	2 to 4	5 to 9	10 to 19	20 or more	Mobile home or trailer
ALL OCCUPIED HOUSING UNITS—Con.							
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.							
Specified owner occupied[1]	11 906	11 906	...	...	...	...	...
Fuel oil, kerosene, coal, wood, etc., paid for	2 047	2 047	...	...	...	...	...
Less than $100	483	483	...	...	...	...	...
$100 to $199	343	343	...	...	...	...	...
$200 to $299	198	198	...	...	...	...	...
$300 to $399	155	155	...	...	...	...	...
$400 to $499	108	108	...	...	...	...	...
$500 to $599	108	108	...	...	...	...	...
$600 to $699	155	155	...	...	...	...	...
$700 to $799	107	107	...	...	...	...	...
$800 or more	391	391	...	...	...	...	...
Median	300	300	...	...	...	...	...
Fuels not used or free	9 859	9 859	...	...	...	...	...
Specified renter occupied[2]	6 469	1 955	1 904	771	767	943	128
Fuel oil, kerosene, coal, wood, etc., paid for	416	335	50	3	6	2	19
Less than $100	83	54	15	3	5	-	5
$100 to $199	67	60	3	-	1	-	3
$200 to $299	43	30	7	-	-	2	4
$300 to $399	30	22	8	-	-	-	-
$400 to $499	21	15	3	-	-	-	2
$500 to $599	18	15	1	-	-	-	2
$600 to $699	15	13	3	-	-	-	-
$700 to $799	28	24	2	-	-	-	2
$800 or more	110	102	8	-	-	-	-
Median	348	407	292	...	...	...	...
Included in rent	508	95	180	67	59	100	8
Fuels not used or free	5 545	1 525	1 674	701	702	841	101
ALL OCCUPIED HOUSING UNITS							
Total	21 618	15 621	2 541	841	809	1 050	756
Heating Equipment							
Owner occupied	14 935	13 451	637	69	43	107	628
Warm-air furnace	11 328	10 325	366	51	20	27	540
Heat pump	241	230	8	-	-	1	2
Steam or hot water	1 324	1 067	190	15	12	41	-
Built-in electric units	632	547	19	2	9	38	17
Floor, wall, or pipeless furnace	278	240	11	-	2	-	25
Room heaters with flue	422	392	22	2	-	-	7
Room heaters without flue	43	24	18	-	-	-	1
Fireplaces, stoves, or portable heaters	684	624	3	-	-	-	37
None	2	2	-	-	-	-	-
Renter occupied	6 683	2 170	1 904	771	767	943	128
Warm-air furnace	3 570	1 473	1 080	336	305	266	111
Heat pump	34	13	6	9	2	4	-
Steam or hot water	1 681	142	466	278	326	468	1
Built-in electric units	640	89	148	96	121	184	2
Floor, wall, or pipeless furnace	179	107	43	5	2	19	4
Room heaters with flue	360	173	126	46	9	2	3
Room heaters without flue	48	19	23	2	2	-	2
Fireplaces, stoves, or portable heaters	168	152	10	-	-	-	6
None	3	2	2	-	-	-	-
ALL OCCUPIED HOUSING UNITS							
Total	21 618	15 621	2 541	841	809	1 050	756
UNITS OCCUPIED LAST WINTER							
Total	19 174	14 568	1 973	626	592	784	631
Insufficient Heat							
Closure of rooms:							
Owner occupied	14 292	12 945	592	60	36	98	561
With heating equipment	14 291	12 943	592	60	36	98	561
No rooms closed	13 687	12 392	565	53	36	98	543
Closed certain rooms	449	413	23	2	-	-	12
Living room only	19	13	6	-	-	-	-
Dining room only	2	2	-	-	-	-	-
1 or more bedrooms only	320	297	11	2	-	-	11
Other rooms or combination of rooms	95	91	4	-	-	-	-
Not reported	13	10	2	-	-	-	1
Not reported	155	138	4	5	-	-	7
No heating equipment	2	2	-	-	-	-	-
Renter occupied	4 882	1 623	1 382	566	555	687	70
With heating equipment	4 881	1 623	1 382	566	555	687	70
No rooms closed	4 535	1 452	1 285	529	535	668	66
Closed certain rooms	292	154	85	28	12	10	4
Living room only	14	2	5	3	3	2	-
Dining room only	-	-	-	-	-	-	-
1 or more bedrooms only	208	118	61	16	6	3	4
Other rooms or combination of rooms	65	33	17	7	3	4	-
Not reported	5	2	2	1	-	1	-
Not reported	54	17	12	9	8	9	-
No heating equipment	1	1	-	-	-	-	-

See footnotes at end of table.

Table C-5. Housing Units in Structure by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Housing units in structure					
		1	2 to 4	5 to 9	10 to 19	20 or more	Mobile home or trailer
UNITS OCCUPIED LAST WINTER—Con.							
Insufficient Heat—Con.							
Additional heat source:							
Owner occupied	14 292	12 945	592	60	36	98	561
With specified heating equipment[3]	13 597	12 306	571	60	36	98	526
No additional heat source used	12 605	11 402	538	58	36	90	480
Used kitchen stove, fireplace, or portable heater	735	670	26	-	-	3	35
Not reported	258	234	6	2	-	4	11
Lacking specified heating equipment or none	695	638	21	-	-	-	38
Renter occupied	4 882	1 623	1 382	566	555	687	70
With specified heating equipment[3]	4 699	1 478	1 353	564	553	687	63
No additional heat source used	4 066	1 270	1 180	483	498	573	61
Used kitchen stove, fireplace, or portable heater	513	168	145	67	43	88	2
Not reported	120	41	29	13	12	25	1
Lacking specified heating equipment or none	183	145	28	2	2	-	6
Rooms lacking specified heat source:							
Owner occupied	14 292	12 945	592	60	36	98	561
With specified heating equipment[3]	13 597	12 306	571	60	36	98	526
No rooms lacking air ducts, registers, radiators, or heaters	11 720	10 519	499	55	36	94	517
Rooms lacking air ducts, registers, radiators, or heaters	1 706	1 626	67	4	-	4	6
1 room	733	695	31	2	-	2	3
2 rooms	435	418	15	-	-	2	-
3 rooms or more	538	513	21	2	-	-	3
Not reported	170	161	4	2	-	-	3
Lacking specified heating equipment or none	695	638	21	-	-	-	36
Renter occupied	4 882	1 623	1 382	566	555	687	70
With specified heating equipment[3]	4 699	1 478	1 353	564	553	687	63
No rooms lacking air ducts, registers, radiators, or heaters	3 961	1 091	1 125	500	530	651	63
Rooms lacking air ducts, registers, radiators, or heaters	656	358	202	52	19	25	-
1 room	300	125	101	38	16	20	-
2 rooms	173	98	61	6	4	4	-
3 rooms or more	184	135	39	8	-	2	-
Not reported	82	30	26	12	3	10	-
Lacking specified heating equipment or none	183	145	28	2	2	-	6
Housing unit uncomfortably cold:							
Owner occupied	14 292	12 945	592	60	36	98	561
With specified heating equipment[3]	13 597	12 306	571	60	36	98	526
Lacking specified heating equipment or none	695	638	21	-	-	-	36
Housing unit not uncomfortably cold for 24 hours or more	573	533	9	-	-	-	31
Housing unit uncomfortably cold for 24 hours or more	47	44	2	-	-	-	2
Not reported	75	62	10	-	-	-	3
Renter occupied	4 882	1 623	1 382	566	555	687	70
With specified heating equipment[3]	4 699	1 478	1 353	564	553	687	63
Lacking specified heating equipment or none	183	145	28	2	2	-	6
Housing unit not uncomfortably cold for 24 hours or more	146	115	26	-	-	-	5
Housing unit uncomfortably cold for 24 hours or more	24	20	1	-	2	-	1
Not reported	14	10	2	2	-	-	-
ALL OCCUPIED HOUSING UNITS							
Total	21 618	15 621	2 541	841	809	1 050	756
Air Conditioning							
Owner occupied	14 935	13 451	637	69	43	107	628
With air conditioning	9 684	8 723	377	49	37	106	393
Room units	4 568	4 020	269	10	24	39	206
1	3 205	2 795	193	7	20	14	175
2	1 105	990	71	2	2	16	26
3	208	187	5	2	2	9	4
4	27	27	-	-	-	-	-
5 or more	22	21	-	-	-	-	1
Central system	5 116	4 703	108	39	13	67	187
With no air conditioning	5 250	4 728	260	20	5	1	235
Renter occupied	6 683	2 170	1 904	771	767	943	128
With air conditioning	3 657	1 073	834	472	556	647	74
Room units	2 400	712	589	291	322	431	55
1	1 976	555	469	252	284	366	50
2	365	131	109	29	38	54	5
3	49	23	11	7	-	9	-
4	9	3	-	2	-	4	-
5 or more	2	-	-	2	-	-	-
Central system	1 256	360	246	181	233	216	20
With no air conditioning	3 026	1 097	1 070	299	211	296	54

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table C-6. Number of Rooms Per Housing Unit by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms or more	Median rooms
ALL OCCUPIED HOUSING UNITS									
Total	**21 618**	**177**	**400**	**1 662**	**3 697**	**5 506**	**4 682**	**5 493**	**5.4**
House Heating Fuel									
Owner occupied	**14 935**	**13**	**32**	**239**	**1 705**	**4 109**	**3 903**	**4 934**	**5.8**
Utility gas	10 776	9	12	152	1 146	3 050	2 828	3 578	5.9
Bottled, tank, or LP gas	945	-	8	32	170	276	224	235	5.4
Fuel oil	1 295	-	5	15	168	307	376	423	5.9
Kerosene, etc.	11	-	-	-	-	7	3	2	...
Electricity	1 231	-	2	19	130	285	307	488	6.1
Coal or coke	45	-	-	-	5	15	8	17	5.8
Wood	615	3	3	20	85	168	153	183	5.7
Solar heat	4	-	-	-	-	1	2	2	...
Other fuel	10	-	-	-	-	-	4	7	...
None	2	-	2	1	-	-	-	-	...
Renter occupied	**6 683**	**165**	**368**	**1 423**	**1 993**	**1 397**	**779**	**559**	**4.2**
Utility gas	4 881	116	261	1 033	1 452	1 092	589	337	4.2
Bottled, tank, or LP gas	221	-	3	17	51	55	41	54	5.2
Fuel oil	466	9	15	76	140	87	60	80	4.4
Kerosene, etc.	2	-	-	-	1	-	1	1	...
Electricity	941	30	80	267	327	127	47	42	3.7
Coal or coke	23	3	4	-	2	5	3	4	...
Wood	130	3	2	3	15	30	38	39	5.8
Solar heat	-	-	-	-	-	-	-	-	-
Other fuel	16	3	2	7	3	-	-	1	...
None	3	1	2	-	-	-	-	1	...
Monthly Cost Paid for Electricity									
Specified owner occupied[1]	**11 906**	**10**	**13**	**111**	**1 081**	**3 265**	**3 287**	**4 140**	**5.9**
Electricity paid for	11 902	9	13	111	1 081	3 264	3 285	4 139	5.9
Less than $10	31	-	-	4	6	6	7	7	...
$10 to $19	434	2	3	25	86	143	97	79	5.2
$20 to $29	1 110	-	2	16	179	387	287	239	5.4
$30 to $39	1 924	4	4	21	226	655	559	454	5.6
$40 to $49	1 858	1	3	17	196	565	527	549	5.8
$50 to $59	1 789	1	-	9	134	516	523	606	5.9
$60 to $79	2 453	-	-	12	155	576	703	1 007	6.2
$80 to $99	978	-	2	-	58	208	265	446	6.3
$100 to $149	986	-	-	6	33	154	263	530	6.5+
$150 or more	339	2	-	-	7	54	55	221	6.5+
Median	53	...	...	34	42	47	53	63	...
No electricity used	5	1	-	-	-	2	2	1	...
Specified renter occupied[2]	**6 469**	**165**	**367**	**1 419**	**1 972**	**1 353**	**732**	**461**	**4.1**
Electricity paid for	5 458	47	190	1 103	1 774	1 258	681	405	4.3
Less than $10	156	7	15	70	33	28	1	2	3.3
$10 to $19	929	14	62	310	311	149	60	22	3.7
$20 to $29	1 138	11	48	277	438	219	102	44	4.0
$30 to $39	1 062	5	34	178	352	295	137	62	4.4
$40 to $49	707	3	13	132	241	179	89	50	4.3
$50 to $59	507	2	7	62	153	142	89	52	4.7
$60 to $79	530	3	5	45	158	122	112	85	4.9
$80 to $99	183	1	3	12	47	54	32	33	5.0
$100 to $149	167	-	-	13	27	52	39	36	5.3
$150 or more	78	-	2	4	13	18	22	20	5.6
Median	34	23	23	26	33	37	44	54	...
Included in rent	992	115	175	307	194	95	51	55	3.2
No electricity used	19	3	2	9	4	-	-	-	...
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas									
Specified owner occupied[1]	**11 906**	**10**	**13**	**111**	**1 081**	**3 265**	**3 287**	**4 140**	**5.9**
Gas paid for	10 385	8	11	98	929	2 907	2 851	3 581	5.9
Less than $10	140	-	-	8	20	40	34	38	5.5
$10 to $14	139	-	1	6	22	33	43	33	5.6
$15 to $19	172	-	-	6	23	52	47	44	5.6
$20 to $24	235	-	-	2	31	79	69	54	5.6
$25 to $29	259	2	2	5	36	92	63	60	5.4
$30 to $39	832	-	2	16	148	294	208	164	5.3
$40 to $49	1 272	2	1	24	165	459	319	303	5.5
$50 to $69	3 575	3	3	16	304	1 080	1 059	1 110	5.9
$70 to $99	2 645	-	2	11	134	613	747	1 136	6.2
$100 or more	1 117	2	1	4	45	164	263	637	6.5+
Median	61	...	...	42	51	57	62	69	...
No gas used	1 521	2	2	13	151	358	435	559	6.0
Specified renter occupied[2]	**6 469**	**165**	**367**	**1 419**	**1 972**	**1 353**	**732**	**461**	**4.1**
Gas paid for	3 422	11	97	450	1 044	954	545	322	4.6
Less than $10	289	3	18	67	105	64	13	18	4.0
$10 to $14	196	-	15	32	78	49	16	4	4.1
$15 to $19	195	-	13	48	70	33	20	12	4.0
$20 to $24	193	2	11	33	58	55	23	12	4.4
$25 to $29	225	-	6	41	95	50	22	9	4.2
$30 to $39	460	1	10	75	169	131	50	25	4.3
$40 to $49	438	3	9	49	144	124	67	39	4.6
$50 to $69	711	3	6	72	209	215	128	78	4.8
$70 to $99	444	-	8	17	77	157	118	66	5.3
$100 or more	275	-	-	15	38	76	88	59	5.6
Median	43	...	21	30	36	47	59	60	...
Included in rent	2 102	120	205	697	614	279	115	72	3.5
No gas used	944	33	65	272	315	121	72	66	3.8

See footnotes at end of table.

Table C-6. Number of Rooms Per Housing Unit by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms or more	Median rooms
ALL OCCUPIED HOUSING UNITS—Con.									
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.									
Specified owner occupied[1]	11 906	10	13	111	1 081	3 265	3 287	4 140	5.9
Fuel oil, kerosene, coal, wood, etc., paid for	2 047	1	2	23	198	469	601	753	6.0
Less than $100	483	-	-	3	26	82	150	220	6.3
$100 to $199	343	-	-	5	24	77	83	154	6.3
$200 to $299	198	-	1	2	15	56	47	78	6.0
$300 to $399	155	1	-	4	27	28	45	50	5.9
$400 to $499	108	-	-	3	15	28	36	26	5.7
$500 to $599	108	-	-	-	10	34	36	28	5.8
$600 to $699	155	-	-	4	25	38	38	50	5.8
$700 to $799	107	-	-	1	13	35	38	20	5.6
$800 or more	391	-	1	2	41	90	128	129	6.0
Median	300	...	...	...	438	367	346	204	...
Fuels not used or free	9 859	9	11	88	882	2 797	2 686	3 386	5.9
Specified renter occupied[2]	6 469	165	367	1 419	1 972	1 353	732	461	4.1
Fuel oil, kerosene, coal, wood, etc., paid for	416	1	6	18	93	105	89	103	5.3
Less than $100	83	-	2	4	21	25	16	14	5.1
$100 to $199	67	1	-	3	21	10	16	16	5.3
$200 to $299	43	-	4	2	11	11	7	10	5.0
$300 to $399	30	-	-	-	3	11	8	7	...
$400 to $499	21	-	-	-	6	7	4	4	...
$500 to $599	18	-	-	3	4	2	6	2	...
$600 to $699	15	-	-	-	2	4	4	4	...
$700 to $799	28	-	-	3	6	6	6	7	...
$800 or more	110	-	1	3	19	30	21	37	5.6
Median	348	...	...	...	242	357	371	484	...
Included in rent	508	31	45	126	133	95	50	28	3.9
Fuels not used or free	5 545	133	316	1 274	1 747	1 153	593	330	4.1
ALL OCCUPIED HOUSING UNITS									
Total	21 618	177	400	1 662	3 697	5 506	4 682	5 493	5.4
Heating Equipment									
Owner occupied	14 935	13	32	239	1 705	4 109	3 903	4 934	5.8
Warm-air furnace	11 328	5	12	137	1 236	3 244	3 014	3 681	5.8
Heat pump	241	-	-	1	7	35	46	152	6.5+
Steam or hot water	1 324	4	5	16	110	245	364	581	6.3
Built-in electric units	632	-	2	14	74	179	164	198	5.8
Floor, wall, or pipeless furnace	278	-	3	15	76	83	58	43	5.0
Room heaters with flue	422	-	6	27	98	133	81	77	5.1
Room heaters without flue	43	-	-	3	9	13	10	8	5.2
Fireplaces, stoves, or portable heaters	664	3	3	26	94	177	165	195	5.7
None	2	-	2	1	-	-	-	-	...
Renter occupied	6 683	165	368	1 423	1 993	1 397	779	559	4.2
Warm-air furnace	3 570	32	110	625	1 031	888	527	358	4.5
Heat pump	34	-	-	11	8	7	1	7	...
Steam or hot water	1 681	90	153	432	526	279	104	96	3.8
Built-in electric units	640	27	69	204	231	70	26	13	3.6
Floor, wall, or pipeless furnace	179	2	8	53	57	34	14	11	4.0
Room heaters with flue	360	9	20	83	101	65	55	26	4.2
Room heaters without flue	48	-	2	6	15	14	8	3	4.6
Fireplaces, stoves, or portable heaters	168	3	4	8	25	40	45	44	5.6
None	3	1	2	-	-	-	-	1	...
ALL OCCUPIED HOUSING UNITS									
Total	21 618	177	400	1 662	3 697	5 506	4 682	5 493	5.4
UNITS OCCUPIED LAST WINTER									
Total	19 174	135	277	1 260	3 030	4 959	4 376	5 138	5.5
Insufficient Heat									
Closure of rooms:									
Owner occupied	14 292	13	31	216	1 604	3 926	3 776	4 726	5.8
With heating equipment	14 291	13	30	216	1 604	3 926	3 776	4 726	5.8
No rooms closed	13 687	11	29	210	1 532	3 791	3 623	4 492	5.8
Closed certain rooms	449	2	-	4	49	97	110	187	6.1
Living room only	19	-	-	-	3	8	2	6	...
Dining room only	2	-	-	-	-	2	-	-	...
1 or more bedrooms only	320	1	-	3	41	69	84	123	6.0
Other rooms or combination of rooms	95	1	-	1	3	17	22	52	6.5+
Not reported	13	-	-	-	2	2	3	6	...
Not reported	155	-	1	2	23	38	43	48	5.8
No heating equipment	2	-	2	-	-	-	-	-	...
Renter occupied	4 882	123	245	1 043	1 426	1 033	599	412	4.2
With heating equipment	4 881	122	245	1 043	1 426	1 033	599	412	4.2
No rooms closed	4 535	117	237	1 006	1 347	936	529	363	4.2
Closed certain rooms	292	2	8	23	68	81	65	45	5.0
Living room only	14	-	-	2	4	7	2	-	...
Dining room only	-	-	-	-	-	-	-	-	-
1 or more bedrooms only	208	2	3	13	53	52	50	35	5.1
Other rooms or combination of rooms	65	-	4	8	10	19	14	10	5.0
Not reported	5	-	1	-	1	3	-	-	...
Not reported	54	3	-	15	11	16	5	4	4.3
No heating equipment	1	1	-	-	-	-	-	-	...
Additional heat source:									
Owner occupied	14 292	13	31	216	1 604	3 926	3 776	4 726	5.8
With specified heating equipment[3]	13 597	9	27	188	1 503	3 739	3 605	4 527	5.9
No additional heat source used	12 605	8	22	171	1 378	3 520	3 379	4 126	5.8
Used kitchen stove, fireplace, or portable heater	735	1	3	14	80	155	158	323	6.2
Not reported	258	-	2	3	45	84	67	78	5.7
Lacking specified heating equipment or none	695	3	4	28	101	188	172	199	5.6

See footnotes at end of table.

Table C-6. Number of Rooms Per Housing Unit by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms or more	Median rooms
UNITS OCCUPIED LAST WINTER—Con.									
Insufficient Heat—Con.									
Additional heat source—Con.									
Renter occupied	4 682	123	245	1 043	1 426	1 033	599	412	4.2
With specified heating equipment[3]	4 699	119	239	1 033	1 394	990	555	369	4.2
No additional heat source used	4 066	105	203	903	1 229	839	470	317	4.2
Used kitchen stove, fireplace, or portable heater	513	9	27	105	134	130	68	40	4.4
Not reported	120	5	9	25	31	21	17	12	4.2
Lacking specified heating equipment or none	183	4	6	10	32	43	44	43	5.4
Rooms lacking specified heat source:									
Owner occupied	14 292	13	31	216	1 604	3 926	3 776	4 726	5.8
With specified heating equipment[3]	13 597	9	27	188	1 503	3 739	3 605	4 527	5.9
No rooms lacking air ducts, registers, radiators, or heaters	11 720	9	20	158	1 316	3 352	3 076	3 769	5.8
Rooms lacking air ducts, registers, radiators, or heaters	1 706	-	6	29	156	340	483	692	6.2
1 room	733	-	4	10	39	135	228	316	6.3
2 rooms	435	-	2	14	61	80	123	156	6.0
3 rooms or more	538	-	-	5	55	126	132	220	6.1
Not reported	170	-	1	1	31	46	46	46	5.6
Lacking specified heating equipment or none	695	3	4	28	101	188	172	199	5.6
Renter occupied	4 682	123	245	1 043	1 426	1 033	599	412	4.2
With specified heating equipment[3]	4 699	119	239	1 033	1 394	990	555	369	4.2
No rooms lacking air ducts, registers, radiators, or heaters	3 961	116	212	901	1 199	852	429	251	4.1
Rooms lacking air ducts, registers, radiators, or heaters	656	2	24	117	172	123	111	108	4.6
1 room	300	2	18	85	60	50	44	40	4.2
2 rooms	173	-	6	21	65	30	34	17	4.4
3 rooms or more	184	-	-	11	46	43	33	51	5.3
Not reported	82	-	4	15	23	15	15	10	4.5
Lacking specified heating equipment or none	183	4	6	10	32	43	44	43	5.4
Housing unit uncomfortably cold:									
Owner occupied	14 292	13	31	216	1 604	3 926	3 776	4 726	5.8
With specified heating equipment[3]	13 597	9	27	188	1 503	3 739	3 605	4 527	5.9
Lacking specified heating equipment or none	695	3	4	28	101	188	172	199	5.6
Housing unit not uncomfortably cold for 24 hours or more	573	3	3	22	85	154	142	165	5.6
Housing unit uncomfortably cold for 24 hours or more	47	1	-	3	7	15	8	14	5.4
Not reported	75	-	2	3	9	19	21	21	5.7
Renter occupied	4 682	123	245	1 043	1 426	1 033	599	412	4.2
With specified heating equipment[3]	4 699	119	239	1 033	1 394	990	555	369	4.2
Lacking specified heating equipment or none	183	4	6	10	32	43	44	43	5.4
Housing unit not uncomfortably cold for 24 hours or more	146	4	5	8	27	32	32	38	5.4
Housing unit uncomfortably cold for 24 hours or more	24	-	1	2	2	8	6	5	...
Not reported	14	-	-	-	3	3	6	2	...
ALL OCCUPIED HOUSING UNITS									
Total	21 618	177	400	1 662	3 697	5 506	4 682	5 493	5.4
Air Conditioning									
Owner occupied	14 935	13	32	239	1 705	4 109	3 903	4 934	5.8
With air conditioning	9 684	9	18	137	1 058	2 646	2 491	3 325	5.9
Room units	4 568	4	12	92	668	1 357	1 219	1 216	5.6
1	3 205	2	11	83	520	987	834	768	5.5
2	1 105	-	1	9	129	317	329	320	5.8
3	208	2	-	-	17	49	50	90	6.2
4	27	-	-	-	2	2	5	19	...
5 or more	22	-	-	-	-	3	2	18	...
Central system	5 116	5	6	45	390	1 289	1 272	2 109	6.1
With no air conditioning	5 250	3	14	102	647	1 463	1 412	1 609	5.8
Renter occupied	6 683	165	368	1 423	1 993	1 397	779	559	4.2
With air conditioning	3 657	62	163	859	1 239	671	395	268	4.1
Room units	2 400	39	129	595	795	429	261	153	4.0
1	1 976	37	123	549	651	311	187	119	3.9
2	365	2	5	44	133	103	52	26	4.5
3	49	-	-	2	12	14	16	5	5.3
4	9	-	-	-	-	2	5	2	...
5 or more	2	-	-	-	-	-	-	2	...
Central system	1 256	23	34	264	444	242	134	115	4.2
With no air conditioning	3 026	103	205	563	754	726	384	291	4.3

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table C-7. Year Structure Built by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Year structure built					
		April 1970 or later	March 1970 or earlier				
			Total	1960 to March 1970	1950 to 1959	1940 to 1949	1939 or earlier
ALL OCCUPIED HOUSING UNITS							
Total	21 618	4 604	17 014	4 043	3 391	1 659	7 921
House Heating Fuel							
Owner occupied	14 935	3 111	11 824	2 802	2 854	1 253	4 915
Utility gas	10 776	1 718	9 058	2 087	2 363	1 013	3 595
Bottled, tank, or LP gas	945	250	695	205	83	51	356
Fuel oil	1 295	174	1 120	195	263	105	557
Kerosene, etc.	11	4	7	1	-	3	4
Electricity	1 231	771	461	213	75	34	139
Coal or coke	45	6	39	1	6	8	24
Wood	615	182	433	98	64	37	234
Solar heat	4	3	1	1	-	-	-
Other fuel	10	3	7	-	-	1	6
None	2	-	2	2	-	1	-
Renter occupied	6 683	1 493	5 190	1 241	537	406	3 005
Utility gas	4 881	798	4 082	929	436	319	2 398
Bottled, tank, or LP gas	221	26	194	31	18	10	135
Fuel oil	466	68	398	80	40	43	235
Kerosene, etc.	2	-	2	1	-	1	1
Electricity	941	590	351	191	35	19	107
Coal or coke	23	-	23	-	2	4	17
Wood	130	9	121	9	8	7	98
Solar heat	-	-	-	-	-	-	-
Other fuel	16	2	15	-	-	2	13
None	3	-	3	-	-	1	2
Monthly Cost Paid for Electricity							
Specified owner occupied[1]	11 906	2 171	9 736	2 297	2 639	1 125	3 674
Electricity paid for	11 902	2 169	9 732	2 297	2 639	1 125	3 671
Less than $10	31	1	30	3	2	2	23
$10 to $19	434	21	414	50	88	60	217
$20 to $29	1 110	97	1 012	133	263	151	465
$30 to $39	1 924	218	1 706	296	424	252	733
$40 to $49	1 858	254	1 604	352	490	178	584
$50 to $59	1 789	267	1 522	394	434	174	520
$60 to $79	2 453	501	1 952	561	558	198	635
$80 to $99	978	273	705	218	201	52	234
$100 to $149	986	402	584	209	129	44	202
$150 or more	339	135	203	82	50	14	57
Median	53	69	51	57	51	45	46
No electricity used	5	1	3	-	-	-	3
Specified renter occupied[2]	6 469	1 483	4 985	1 229	527	388	2 842
Electricity paid for	5 458	1 305	4 153	1 100	456	326	2 272
Less than $10	156	26	129	27	14	5	84
$10 to $19	929	177	751	206	60	48	437
$20 to $29	1 138	227	912	268	99	75	470
$30 to $39	1 062	249	814	219	92	70	432
$40 to $49	707	198	509	135	50	53	270
$50 to $59	507	129	378	91	52	31	204
$60 to $79	530	163	367	89	36	28	213
$80 to $99	183	51	132	22	21	9	80
$100 to $149	167	57	111	27	26	6	51
$150 or more	78	27	51	14	5	2	30
Median	34	38	33	32	35	35	33
Included in rent	992	177	815	129	71	60	555
No electricity used	19	2	17	-	-	2	15
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas							
Specified owner occupied[1]	11 906	2 171	9 736	2 297	2 639	1 125	3 674
Gas paid for	10 385	1 519	8 866	2 036	2 414	1 026	3 390
Less than $10	140	22	118	15	23	21	59
$10 to $14	139	17	122	15	20	15	71
$15 to $19	172	39	132	31	25	7	69
$20 to $24	235	46	189	24	48	12	105
$25 to $29	259	39	221	37	64	26	94
$30 to $39	832	128	704	127	205	109	263
$40 to $49	1 272	177	1 095	267	385	115	328
$50 to $69	3 575	515	3 059	788	899	359	1 013
$70 to $99	2 645	382	2 263	528	555	280	899
$100 or more	1 117	153	964	203	190	81	490
Median	61	61	62	62	59	61	63
No gas used	1 521	652	869	261	224	99	284
Specified renter occupied[2]	6 469	1 483	4 985	1 229	527	388	2 842
Gas paid for	3 422	460	2 962	484	362	278	1 838
Less than $10	289	21	268	32	21	21	195
$10 to $14	196	18	178	22	11	22	123
$15 to $19	195	42	153	24	15	7	108
$20 to $24	193	44	149	30	19	13	86
$25 to $29	225	55	170	36	28	19	87
$30 to $39	460	79	381	86	49	50	195
$40 to $49	436	63	372	83	54	32	203
$50 to $69	711	88	622	95	93	70	365
$70 to $99	444	39	405	43	42	35	285
$100 or more	275	11	264	33	30	9	191
Median	43	36	44	41	46	42	46
Included in rent	2 102	508	1 594	561	129	81	823
No gas used	944	515	429	183	36	29	181

See footnotes at end of table.

Table C-7. Year Structure Built by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Year structure built					
		April 1970 or later	March 1970 or earlier				
			Total	1960 to March 1970	1950 to 1959	1940 to 1949	1939 or earlier
ALL OCCUPIED HOUSING UNITS—Con.							
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.							
Specified owner occupied[1]	**11 906**	**2 171**	**9 736**	**2 297**	**2 639**	**1 125**	**3 674**
Fuel oil, kerosene, coal, wood, etc., paid for	2 047	427	1 620	382	403	183	653
Less than $100	483	123	359	111	77	35	137
$100 to $199	343	116	227	66	58	29	74
$200 to $299	198	46	152	43	34	14	61
$300 to $399	155	40	116	19	26	17	54
$400 to $499	108	18	90	13	26	11	40
$500 to $599	108	14	94	17	26	5	46
$600 to $699	155	16	139	28	35	23	54
$700 to $799	107	10	97	11	35	16	34
$800 or more	391	45	347	75	86	33	153
Median	300	177	361	233	425	382	400
Fuels not used or free	9 859	1 743	8 116	1 916	2 236	943	3 021
Specified renter occupied[2]	**6 469**	**1 483**	**4 985**	**1 229**	**527**	**388**	**2 842**
Fuel oil, kerosene, coal, wood, etc., paid for	416	58	358	40	44	32	241
Less than $100	83	22	61	3	8	7	43
$100 to $199	67	14	53	5	7	4	37
$200 to $299	43	14	29	6	3	4	16
$300 to $399	30	3	27	3	5	4	15
$400 to $499	21	-	21	2	3	3	12
$500 to $599	18	1	17	5	1	-	11
$600 to $699	15	2	13	3	2	-	9
$700 to $799	28	1	27	4	5	1	18
$800 or more	110	2	109	9	11	8	80
Median	348	149	440	516	386	...	478
Included in rent	508	102	407	77	37	28	265
Fuels not used or free	5 545	1 324	4 221	1 112	448	328	2 336
ALL OCCUPIED HOUSING UNITS							
Total	**21 618**	**4 604**	**17 014**	**4 043**	**3 391**	**1 659**	**7 921**
Heating Equipment							
Owner occupied	**14 935**	**3 111**	**11 824**	**2 802**	**2 654**	**1 253**	**4 915**
Warm-air furnace	11 328	2 268	9 060	2 233	2 462	1 039	3 326
Heat pump	241	202	39	8	9	3	19
Steam or hot water	1 324	119	1 205	232	175	66	732
Built-in electric units	632	311	321	173	44	19	85
Floor, wall, or pipeless furnace	278	10	268	34	54	33	147
Room heaters with flue	422	9	413	19	38	46	310
Room heaters without flue	43	2	41	3	1	3	35
Fireplaces, stoves, or portable heaters	664	189	475	99	71	42	262
None	2	-	2	2	-	1	-
Renter occupied	**6 683**	**1 493**	**5 190**	**1 241**	**537**	**406**	**3 005**
Warm-air furnace	3 570	788	2 783	726	340	259	1 457
Heat pump	34	21	12	2	1	2	8
Steam or hot water	1 681	257	1 424	320	102	76	925
Built-in electric units	640	401	240	134	22	11	72
Floor, wall, or pipeless furnace	179	13	166	34	31	21	80
Room heaters with flue	360	1	358	13	27	28	291
Room heaters without flue	48	3	45	1	1	1	42
Fireplaces, stoves, or portable heaters	168	9	159	12	13	8	127
None	3	-	3	-	-	1	2
ALL OCCUPIED HOUSING UNITS							
Total	**21 618**	**4 604**	**17 014**	**4 043**	**3 391**	**1 659**	**7 921**
UNITS OCCUPIED LAST WINTER							
Total	**19 174**	**3 950**	**15 224**	**3 602**	**3 173**	**1 517**	**6 932**
Insufficient Heat							
Closure of rooms:							
Owner occupied	**14 292**	**2 896**	**11 396**	**2 688**	**2 767**	**1 222**	**4 720**
With heating equipment	14 291	2 896	11 394	2 686	2 767	1 222	4 720
No rooms closed	13 687	2 830	10 858	2 622	2 696	1 167	4 373
Closed certain rooms	449	36	413	35	37	42	299
Living room only	19	-	19	1	2	1	15
Dining room only	2	-	2	-	2	-	-
1 or more bedrooms only	320	23	297	23	24	29	221
Other rooms or combination of rooms	95	11	85	9	10	12	54
Not reported	13	2	11	2	-	-	9
Not reported	155	31	123	29	33	13	48
No heating equipment	2	-	2	2	-	-	-
Renter occupied	**4 882**	**1 053**	**3 828**	**914**	**406**	**296**	**2 212**
With heating equipment	4 881	1 053	3 828	914	406	295	2 212
No rooms closed	4 535	1 021	3 515	891	376	278	1 969
Closed certain rooms	292	23	269	19	20	15	215
Living room only	14	1	13	2	2	-	9
Dining room only	-	-	-	-	-	-	-
1 or more bedrooms only	208	18	190	13	12	14	152
Other rooms or combination of rooms	65	4	61	4	6	2	49
Not reported	5	1	4	-	-	-	4
Not reported	54	10	44	4	10	2	28
No heating equipment	1	-	1	-	-	1	-

See footnotes at end of table.

Table C-7. Year Structure Built by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Year structure built					
		April 1970 or later	March 1970 or earlier				
			Total	1960 to March 1970	1950 to 1959	1940 to 1949	1939 or earlier
UNITS OCCUPIED LAST WINTER—Con.							
Insufficient Heat—Con.							
Additional heat source:							
Owner occupied	14 292	2 896	11 396	2 688	2 767	1 222	4 720
With specified heating equipment[3]	13 597	2 710	10 888	2 586	2 695	1 178	4 429
No additional heat source used	12 605	2 526	10 079	2 438	2 540	1 079	4 022
Used kitchen stove, fireplace, or portable heater	735	134	601	115	115	67	304
Not reported	258	50	207	33	40	32	103
Lacking specified heating equipment or none	695	187	508	102	72	44	290
Renter occupied	4 882	1 053	3 828	914	406	296	2 212
With specified heating equipment[3]	4 699	1 043	3 656	902	395	288	2 070
No additional heat source used	4 066	980	3 086	803	336	252	1 695
Used kitchen stove, fireplace, or portable heater	513	44	468	85	47	29	308
Not reported	120	19	101	15	13	7	66
Lacking specified heating equipment or none	183	10	173	12	11	8	143
Rooms lacking specified heat source:							
Owner occupied	14 292	2 896	11 396	2 688	2 767	1 222	4 720
With specified heating equipment[3]	13 597	2 710	10 888	2 586	2 695	1 178	4 429
No rooms lacking air ducts, registers, radiators, or heaters	11 720	2 808	9 112	2 446	2 470	1 010	3 186
Rooms lacking air ducts, registers, radiators, or heaters	1 706	74	1 632	122	202	147	1 162
1 room	733	52	680	78	113	58	431
2 rooms	435	8	428	23	39	40	326
3 rooms or more	538	14	524	21	50	48	405
Not reported	170	27	143	18	23	20	82
Lacking specified heating equipment or none	695	187	508	102	72	44	290
Renter occupied	4 882	1 053	3 828	914	406	296	2 212
With specified heating equipment[3]	4 699	1 043	3 656	902	395	288	2 070
No rooms lacking air ducts, registers, radiators, or heaters	3 961	1 016	2 945	885	340	232	1 507
Rooms lacking air ducts, registers, radiators, or heaters	656	23	633	29	47	52	505
1 room	300	16	284	12	13	17	242
2 rooms	173	6	167	10	23	14	121
3 rooms or more	184	2	182	7	11	21	143
Not reported	82	4	77	8	8	4	57
Lacking specified heating equipment or none	183	10	173	12	11	8	143
Housing unit uncomfortably cold:							
Owner occupied	14 292	2 896	11 396	2 688	2 767	1 222	4 720
With specified heating equipment[3]	13 597	2 710	10 888	2 586	2 695	1 178	4 429
Lacking specified heating equipment or none	695	187	508	102	72	44	290
Housing unit not uncomfortably cold for 24 hours or more	573	163	410	82	60	40	228
Housing unit uncomfortably cold for 24 hours or more	47	9	38	7	2	3	26
Not reported	75	14	61	12	10	2	36
Renter occupied	4 882	1 053	3 828	914	406	296	2 212
With specified heating equipment[3]	4 699	1 043	3 656	902	395	288	2 070
Lacking specified heating equipment or none	183	10	173	12	11	8	143
Housing unit not uncomfortably cold for 24 hours or more	146	9	136	10	9	6	112
Housing unit uncomfortably cold for 24 hours or more	24	-	24	1	3	1	20
Not reported	14	1	13	1	-	1	11
ALL OCCUPIED HOUSING UNITS							
Total	21 618	4 604	17 014	4 043	3 391	1 659	7 921
Air Conditioning							
Owner occupied	14 935	3 111	11 824	2 802	2 854	1 253	4 915
With air conditioning	9 684	2 272	7 412	1 984	1 967	781	2 680
Room units	4 568	464	4 104	704	928	447	2 026
1	3 205	342	2 863	515	629	319	1 401
2	1 105	103	1 003	158	241	112	491
3	208	20	188	24	51	14	99
4	27	-	27	4	4	2	18
5 or more	22	-	22	3	4	-	16
Central system	5 116	1 808	3 308	1 281	1 039	334	655
With no air conditioning	5 250	839	4 412	817	887	472	2 235
Renter occupied	6 683	1 493	5 190	1 241	537	406	3 005
With air conditioning	3 657	1 208	2 448	955	302	189	1 003
Room units	2 400	507	1 894	634	223	140	696
1	1 976	427	1 549	552	180	108	709
2	365	75	290	64	32	30	164
3	49	5	44	13	10	2	19
4	9	-	9	5	2	-	2
5 or more	2	-	2	-	-	-	2
Central system	1 256	702	555	320	79	48	107
With no air conditioning	3 026	284	2 742	287	234	218	2 003

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table C-8. Monthly Cost Paid for Electricity by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Monthly cost paid for electricity											
		Less than $10	$10 to $19	$20 to $29	$30 to $39	$40 to $49	$50 to $59	$60 to $79	$80 to $99	$100 to $149	$150 or more	No electricity used or not reported[1]	Median (dollars)
SPECIFIED OWNER OCCUPIED[2]													
Total	**11 906**	**31**	**434**	**1 110**	**1 924**	**1 658**	**1 769**	**2 453**	**978**	**986**	**339**	**5**	**53**
House Heating Fuel													
Electricity	862	-	1	8	17	25	60	162	143	316	130	-	102
Other than electricity	11 042	31	434	1 101	1 906	1 832	1 729	2 291	834	669	208	5	51
Utility gas	9 341	22	371	954	1 660	1 578	1 461	1 907	660	549	176	2	51
Bottled, tank, or LP gas	429	3	25	37	75	71	71	84	33	26	4	1	50
Fuel oil	864	3	28	79	125	117	136	198	101	56	20	2	55
Kerosene, etc.	5	-	-	-	2	2	-	1	-	-	-	-	...
Coal or coke	25	1	1	-	-	8	2	9	4	1	-	-	...
Wood	371	1	9	31	45	56	58	89	38	37	5	1	57
Solar heat	2	-	-	-	-	1	-	1	-	-	-	-	...
Other fuel	7	-	-	-	-	-	2	3	-	1	2	-	...
None	2	-	-	-	-	-	-	-	2	1	-	-	...
Heating Equipment													
Warm-air furnace	9 438	19	314	903	1 575	1 546	1 492	2 009	730	642	207	2	52
Heat pump	183	-	-	-	2	1	6	29	24	84	38	-	118
Steam or hot water	929	4	38	64	182	140	135	178	73	63	30	2	51
Built-in electric units	438	-	1	4	10	20	35	92	84	139	54	-	93
Floor, wall, or pipeless furnace	198	1	24	30	32	35	33	21	11	7	3	-	43
Room heaters with flue	295	7	39	56	69	49	27	24	14	9	-	-	36
Room heaters without flue	14	-	1	-	3	3	2	3	-	-	2	-	...
Fireplaces, stoves, or portable heaters	408	1	17	32	50	63	60	97	40	40	5	1	56
None	2	-	-	-	-	-	-	-	2	1	-	-	...
Persons													
1 person	1 692	24	234	361	359	236	192	158	55	54	16	3	36
2 persons	3 831	6	141	428	728	710	610	687	236	215	72	-	48
3 persons	2 190	-	33	163	349	342	334	509	192	195	73	-	56
4 persons	2 441	1	20	100	342	347	381	616	285	269	80	1	61
5 persons	1 152	1	8	46	97	154	189	314	128	163	52	-	65
6 persons	405	-	-	9	36	46	62	120	54	52	26	1	68
7 persons or more	196	-	-	2	12	24	22	50	29	38	19	1	74
Median	2.7	...	1.5-	1.9	2.3	2.5	2.6	3.2	3.5	3.6	3.6	...	...
Air Conditioning													
With air conditioning	7 922	3	152	529	1 061	1 222	1 265	1 881	735	796	277	-	57
Room units	3 588	2	129	367	640	647	594	694	275	189	51	-	50
1	2 470	2	106	286	457	456	380	472	184	107	20	-	48
2	906	-	19	73	153	160	169	171	77	62	21	-	53
3	170	-	5	4	26	21	39	40	11	16	8	-	57
4	22	-	-	4	2	4	2	7	4	-	-	-	...
5 or more	21	-	-	-	2	6	4	4	-	4	2	-	...
Central system	4 334	1	23	162	421	575	671	1 188	460	607	226	-	65
With no air conditioning	3 984	28	282	581	862	636	524	572	243	189	62	5	43
SPECIFIED RENTER OCCUPIED[3]													
Total	**6 469**	**156**	**929**	**1 138**	**1 062**	**707**	**507**	**530**	**183**	**167**	**78**	**1 011**	**34**
House Heating Fuel													
Electricity	926	10	33	90	113	157	105	131	55	56	27	150	48
Other than electricity	5 540	145	895	1 049	949	550	402	399	129	112	51	858	32
Utility gas	4 837	137	822	930	875	479	330	306	97	85	40	736	32
Bottled, tank, or LP gas	169	-	14	31	19	21	21	29	6	12	3	14	46
Fuel oil	420	6	54	76	41	37	40	47	20	12	7	81	37
Kerosene, etc.	2	-	-	-	-	-	-	1	-	1	-	1	...
Coal or coke	16	1	2	1	2	-	-	2	-	-	2	7	...
Wood	78	2	3	8	12	13	12	13	7	2	-	7	48
Solar heat	-	-	-	-	-	-	-	-	-	-	-	-	-
Other fuel	16	-	-	4	-	-	-	-	-	-	-	12	...
None	3	-	1	-	-	-	-	-	-	-	-	2	...
Heating Equipment													
Warm-air furnace	3 459	35	398	605	662	424	302	336	123	110	49	415	37
Heat pump	34	-	1	-	3	2	2	6	3	3	2	10	...
Steam or hot water	1 666	98	407	313	223	105	70	45	11	12	10	372	24
Built-in electric units	629	10	26	73	67	108	79	83	28	29	12	114	47
Floor, wall, or pipeless furnace	177	4	17	42	22	29	14	15	3	8	1	24	36
Room heaters with flue	340	7	72	72	53	21	17	26	7	4	3	58	28
Room heaters without flue	46	-	5	14	15	-	4	2	-	1	-	6	31
Fireplaces, stoves, or portable heaters	115	2	3	21	17	17	19	16	9	2	2	9	46
None	3	-	1	-	-	-	-	-	-	-	-	2	...
Persons													
1 person	2 488	107	527	483	371	178	123	101	24	20	7	547	26
2 persons	1 812	32	253	351	301	233	150	163	47	37	18	227	35
3 persons	960	8	79	154	183	145	94	102	27	27	23	116	39
4 persons	701	5	49	106	117	93	74	87	45	49	12	65	44
5 persons	306	2	15	28	54	32	43	49	28	20	4	31	51
6 persons	109	-	1	9	22	17	17	15	7	3	6	14	49
7 persons or more	91	2	3	7	15	9	7	14	5	10	8	11	55
Median	1.9	1.5-	1.5-	1.7	2.0	2.2	2.4	2.5	3.3	3.5	3.1	1.5-	...

See footnotes at end of table.

Table C-8. Monthly Cost Paid for Electricity by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Monthly cost paid for electricity											
		Less than $10	$10 to $19	$20 to $29	$30 to $39	$40 to $49	$50 to $59	$60 to $79	$80 to $99	$100 to $149	$150 or more	No electricity used or not reported[1]	Median (dollars)
SPECIFIED RENTER OCCUPIED[3]—Con.													
Air Conditioning													
With air conditioning	3 566	64	475	630	602	451	334	344	122	118	56	369	36
Room units	2 328	51	376	467	387	282	193	185	52	53	21	258	33
1	1 925	48	340	399	305	219	141	133	46	43	18	233	32
2	350	3	31	67	65	56	41	49	6	10	-	23	39
3	43	-	5	2	13	7	9	3	-	-	3	-	42
4	8	-	-	-	4	-	4	-	-	-	-	1	...
5 or more	2	-	-	-	-	-	-	-	-	-	-	2	-
Central system	1 238	13	99	163	214	169	141	159	70	64	35	111	44
With no air conditioning	2 903	92	453	508	460	256	173	186	61	50	22	641	32

[1]Renter households with electricity costs included in their rent are included in this category.
[2]Limited to one-unit structures on less than 10 acres and no business on property.
[3]Excludes one-unit structures on 10 acres or more.

Table C-9. Monthly Cost Paid for Gas by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Monthly cost paid for utility, bottled, tank, or LP gas											
		Less than $10	$10 to $14	$15 to $19	$20 to $24	$25 to $29	$30 to $39	$40 to $49	$50 to $69	$70 to $99	$100 or more	No gas used or not reported[1]	Median (dollars)
SPECIFIED OWNER OCCUPIED[2]													
Total	11 906	140	139	172	235	259	832	1 272	3 575	2 645	1 117	1 521	61
House Heating Fuel													A
Gas	9 769	61	71	95	161	198	773	1 215	3 503	2 610	1 082	-	63
Utility gas	9 341	55	69	84	153	178	741	1 183	3 358	2 525	995	-	62
Bottled, tank, or LP gas	429	5	3	10	9	20	32	32	145	85	87	-	84
Other than gas	2 135	80	68	77	74	61	59	57	72	33	35	1 520	26
Fuel oil	864	52	35	48	27	22	18	14	13	6	17	613	18
Kerosene, etc.	5	-	-	-	-	1	-	-	2	2	-	-	...
Electricity	862	6	11	9	19	9	3	16	31	15	11	732	44
Coal or coke	25	1	-	2	4	2	2	2	-	-	1	12	...
Wood	371	20	22	18	25	27	36	25	24	11	6	158	28
Solar heat	2	1	-	-	-	-	-	-	-	-	-	1	...
Other fuel	7	-	-	-	-	-	-	-	2	-	-	5	...
None	2	-	-	-	-	-	-	-	-	2	-	1	...
Heating Equipment													
Warm-air furnace	9 438	91	98	112	161	195	678	1 106	3 128	2 302	883	683	62
Heat pump	183	-	-	1	3	1	-	2	2	2	-	174	...
Steam or hot water	929	10	5	9	18	9	38	68	234	259	188	91	73
Built-in electric units	438	5	4	6	11	3	1	6	21	4	4	374	44
Floor, wall, or pipeless furnace	198	1	2	7	8	10	34	27	67	27	6	8	52
Room heaters with flue	295	12	6	14	7	12	37	32	82	34	26	23	53
Room heaters without flue	14	-	2	1	-	1	2	-	2	4	2	1	...
Fireplaces, stoves, or portable heaters	408	22	22	21	28	28	42	32	28	11	7	168	29
None	2	-	-	-	-	-	-	-	-	2	-	1	...
Persons													
1 person	1 692	31	22	37	41	53	172	235	510	267	112	193	56
2 persons	3 831	45	51	60	79	96	329	491	1 180	741	260	498	58
3 persons	2 190	16	27	26	44	41	132	222	668	536	219	258	63
4 persons	2 441	30	20	28	29	40	136	227	743	595	257	336	64
5 persons	1 152	17	8	14	24	14	49	64	334	324	147	155	67
6 persons	405	-	8	3	13	11	12	19	103	106	79	51	72
7 persons or more	196	1	3	2	5	4	1	15	37	54	44	30	78
Median	2.7	2.3	2.4	2.3	2.5	2.3	2.2	2.3	2.6	3.0	3.3	2.8	...
Air Conditioning													
With air conditioning	7 922	74	77	109	151	160	609	877	2 412	1 791	742	922	61
Room units	3 588	44	44	74	77	83	302	408	1 037	783	344	391	60
1	2 470	29	35	62	54	61	227	289	696	498	227	293	59
2	906	12	9	13	19	20	64	96	283	225	78	88	62
3	170	4	-	-	3	2	10	19	53	50	22	8	66
4	22	-	-	-	2	-	-	4	4	7	6	-	...
5 or more	21	-	-	-	-	-	2	-	2	4	11	2	...
Central system	4 334	30	33	35	73	78	307	469	1 375	1 007	398	531	62
With no air conditioning	3 984	66	62	63	84	100	223	396	1 163	854	375	599	61
SPECIFIED RENTER OCCUPIED[3]													
Total	6 469	289	196	195	193	225	460	436	711	444	275	3 046	43
House Heating Fuel													
Gas	5 007	241	172	166	164	204	424	416	689	433	264	1 833	45
Utility gas	4 837	238	168	162	161	196	418	391	644	413	241	1 805	44
Bottled, tank, or LP gas	169	3	4	4	3	8	7	24	45	20	23	28	57
Other than gas	1 459	47	24	29	29	21	36	20	22	10	11	1 210	23
Fuel oil	420	28	12	8	9	8	10	4	7	6	2	328	18
Kerosene, etc.	2	-	-	-	-	-	-	-	-	-	-	2	-
Electricity	926	13	3	15	14	9	22	7	11	3	7	822	28
Coal or coke	16	-	3	1	2	-	-	-	-	-	-	11	...
Wood	78	7	6	6	4	4	4	9	4	2	2	31	26
Solar heat	-	-	-	-	-	-	-	-	-	-	-	-	-
Other fuel	16	-	-	-	-	-	-	-	-	-	-	16	-
None	3	-	-	-	-	-	-	-	-	-	-	3	-
Heating Equipment													
Warm-air furnace	3 459	94	84	106	139	170	321	297	534	348	194	1 172	47
Heat pump	34	2	-	2	-	-	-	1	-	-	-	29	...
Steam or hot water	1 666	162	85	50	25	14	47	41	65	38	40	1 099	18
Built-in electric units	629	9	3	7	6	6	11	3	8	1	4	572	27
Floor, wall, or pipeless furnace	177	3	5	4	7	9	24	29	26	19	8	42	45
Room heaters with flue	340	9	8	20	9	20	39	47	60	27	23	77	45
Room heaters without flue	46	-	-	-	3	2	9	7	10	5	2	10	47
Fireplaces, stoves, or portable heaters	115	9	9	6	4	5	10	11	10	5	3	42	32
None	3	-	-	-	-	-	-	-	-	-	-	3	-
Persons													
1 person	2 488	126	82	62	86	81	149	134	193	73	43	1 461	35
2 persons	1 812	84	54	71	51	76	152	122	176	120	54	852	39
3 persons	960	42	28	26	24	34	71	103	132	93	50	359	47
4 persons	701	22	24	18	21	25	43	50	133	87	64	215	56
5 persons	306	9	7	12	6	8	27	20	48	45	34	91	58
6 persons	109	5	1	4	5	-	11	2	12	9	18	43	58
7 persons or more	91	1	1	3	1	1	7	6	17	17	13	24	65
Median	1.9	1.7	1.8	2.0	1.7	1.9	2.0	2.2	2.4	2.8	3.3	1.6	...

See footnotes at end of table.

Table C-9. Monthly Cost Paid for Gas by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Monthly cost paid for utility, bottled, tank, or LP gas											
		Less than $10	$10 to $14	$15 to $19	$20 to $24	$25 to $29	$30 to $39	$40 to $49	$50 to $69	$70 to $99	$100 or more	No gas used or not reported[1]	Median (dollars)
SPECIFIED RENTER OCCUPIED[3]—Con.													
Air Conditioning													
With air conditioning	3 566	96	81	96	110	133	238	252	382	197	113	1 868	43
Room units	2 328	75	59	53	51	82	137	163	254	128	86	1 239	45
1	1 925	58	44	51	46	69	117	143	190	87	66	1 054	43
2	350	15	11	2	3	11	18	20	56	39	17	158	55
3	43	3	4	-	2	2	2	-	8	2	4	18	...
4	8	-	-	-	-	-	-	-	-	-	-	8	-
5 or more	2	-	-	-	-	-	-	-	-	-	-	2	-
Central system	1 238	21	22	43	59	51	101	90	127	69	27	628	41
With no air conditioning	2 903	193	115	99	83	92	222	183	329	247	162	1 179	43

[1]Renter households with gas costs included in their rent are included in this category.
[2]Limited to one-unit structures on less than 10 acres and no business on property.
[3]Excludes one-unit structures on 10 acres or more.

Table C-10. **Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, etc., by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983**

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Yearly cost paid for fuel oil, kerosene, coal, wood, etc.										
		Less than $100	$100 to $199	$200 to $299	$300 to $399	$400 to $499	$500 to $599	$600 to $699	$700 to $799	$800 or more	Fuels not used, free, or not reported[1]	Median (dollars)
SPECIFIED OWNER OCCUPIED[2]												
Total	11 906	483	343	198	155	108	108	155	107	391	9 859	300
House Heating Fuel												
Oil, coal, kerosene, wood, etc.	1 264	60	78	75	99	72	89	133	100	349	209	641
Fuel oil	864	24	30	33	59	50	70	127	97	336	38	720
Coal or coke	25	2	2	3	5	7	3	1	-	-	1	...
Kerosene, etc.	5	2	2	-	-	-	-	-	-	-	1	...
Wood	371	32	44	39	35	15	16	5	4	13	169	263
Other than oil, coal, kerosene, wood, etc.	10 640	423	264	123	56	35	19	22	7	43	9 648	127
Utility gas	9 341	357	203	94	40	28	11	18	5	28	8 557	117
Bottled, tank, or LP gas	429	19	14	10	3	4	3	2	-	11	362	200
Electricity	862	47	47	19	12	4	3	3	2	3	723	147
Solar heat	2	-	-	-	-	-	-	-	-	-	2	-
Other fuel	7	-	-	1	-	-	1	-	-	1	4	...
None	2	-	-	-	-	-	-	-	-	-	2	-
Heating Equipment												
Warm-air furnace	9 438	367	240	119	101	72	69	128	82	295	7 966	310
Heat pump	183	9	10	6	2	2	1	1	-	1	152	...
Steam or hot water	929	31	19	16	4	5	11	13	9	56	763	559
Built-in electric units	438	25	16	8	4	1	3	-	-	2	380	127
Floor, wall, or pipeless furnace	198	6	-	1	-	2	1	2	3	3	180	...
Room heaters with flue	295	8	8	6	4	6	4	4	9	17	229	520
Room heaters without flue	14	2	3	-	-	-	2	-	-	-	8	...
Fireplaces, stoves, or portable heaters	408	35	46	42	40	20	17	7	4	17	180	278
None	2	-	-	-	-	-	-	-	-	-	2	-
Persons												
1 person	1 692	43	20	19	15	21	6	25	26	77	1 440	609
2 persons	3 831	152	95	62	53	35	41	57	34	133	3 170	341
3 persons	2 190	91	68	39	20	27	17	24	21	63	1 819	267
4 persons	2 441	137	101	44	42	11	18	29	13	64	1 982	190
5 persons	1 152	40	44	22	10	9	13	16	11	41	944	290
6 persons	405	17	7	9	5	4	11	2	1	9	340	291
7 persons or more	196	3	7	4	9	2	2	2	1	5	164	...
Median	2.7	3.0	3.3	3.0	2.9	2.4	2.9	2.4	2.3	2.4	2.7	...
Air Conditioning												
With air conditioning	7 922	335	239	112	66	49	48	69	54	160	6 770	201
Room units	3 588	141	98	67	43	31	33	46	32	112	2 986	291
1	2 470	97	66	51	32	26	26	34	21	80	2 036	308
2	906	39	23	16	9	3	6	12	9	31	758	274
3	170	4	8	-	2	-	1	-	1	1	153	...
4	22	-	-	-	-	2	-	-	-	-	20	...
5 or more	21	2	-	-	-	-	-	-	-	-	19	...
Central system	4 334	194	141	46	22	18	16	23	22	67	3 784	157
With no air conditioning	3 984	147	103	86	90	59	59	86	53	212	3 089	437
SPECIFIED RENTER OCCUPIED[3]												
Total	6 469	83	67	43	30	21	18	15	28	110	6 053	348
House Heating Fuel												
Oil, coal, kerosene, wood, etc.	517	13	31	26	21	15	12	10	22	92	274	624
Fuel oil	420	11	17	13	18	13	11	8	20	90	220	747
Coal or coke	16	1	2	2	-	-	-	-	-	1	11	...
Kerosene, etc.	2	-	1	-	1	-	-	-	1	-	-	...
Wood	78	2	12	11	3	2	2	2	1	2	43	233
Other than oil, coal, kerosene, wood, etc.	5 948	69	36	17	9	6	5	5	7	18	5 775	147
Utility gas	4 837	45	24	9	7	4	3	3	5	12	4 726	143
Bottled, tank, or LP gas	169	9	5	2	2	1	1	2	1	5	142	...
Electricity	926	15	6	6	1	1	2	-	1	2	892	...
Solar heat	-	-	-	-	-	-	-	-	-	-	-	-
Other fuel	16	-	-	-	-	-	-	-	-	-	16	-
None	3	-	-	-	-	-	-	-	-	-	3	-
Heating Equipment												
Warm-air furnace	3 459	57	36	25	18	15	12	8	19	84	3 184	406
Heat pump	34	2	-	-	-	-	-	-	-	-	32	...
Steam or hot water	1 666	4	2	3	3	-	1	2	3	6	1 641	...
Built-in electric units	629	6	5	2	1	1	-	-	1	2	611	...
Floor, wall, or pipeless furnace	177	2	1	-	2	-	1	-	-	3	169	...
Room heaters with flue	340	5	8	1	2	2	3	3	3	12	302	579
Room heaters without flue	46	2	-	-	1	1	-	-	1	-	41	...
Fireplaces, stoves, or portable heaters	115	5	15	12	3	2	2	2	3	3	69	227
None	3	-	-	-	-	-	-	-	-	-	3	-
Persons												
1 person	2 488	22	12	7	7	3	4	3	10	20	2 401	343
2 persons	1 812	18	23	12	10	7	6	4	8	23	1 702	325
3 persons	960	19	8	12	6	3	2	2	5	24	881	310
4 persons	701	15	13	7	5	5	2	2	2	17	633	283
5 persons	306	8	4	3	1	3	2	4	3	22	257	686
6 persons	109	1	3	1	1	1	1	-	1	3	98	...
7 persons or more	91	-	3	2	1	-	1	-	-	2	83	...
Median	1.9	2.6	2.4	2.8	...	...	...	...	...	3.0	1.9	...

See footnotes at end of table.

Table C-10. Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, etc., by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Yearly cost paid for fuel oil, kerosene, coal, wood, etc.										
		Less than $100	$100 to $199	$200 to $299	$300 to $399	$400 to $499	$500 to $599	$600 to $699	$700 to $799	$800 or more	Fuels not used, free, or not reported[1]	Median (dollars)
SPECIFIED RENTER OCCUPIED[3]—Con.												
Air Conditioning												
With air conditioning	3 566	44	22	20	9	5	8	2	5	33	3 417	239
Room units	2 328	29	10	7	8	4	7	2	4	31	2 226	360
1	1 925	26	9	7	3	4	5	2	4	23	1 841	292
2	350	3	-	-	3	-	2	-	-	3	339	...
3	43	-	1	-	1	-	-	-	-	4	37	...
4	8	-	-	-	-	-	-	-	-	-	8	-
5 or more	2	-	-	-	-	-	-	-	-	-	2	-
Central system	1 238	16	12	12	2	1	1	1	1	2	1 190	165
With no air conditioning	2 903	39	45	24	21	18	10	13	23	77	2 637	435

[1]Renter households with fuel costs included in their rent are included in this category.
[2]Limited to one-unit structures on less than 10 acres and no business on property.
[3]Excludes one-unit structures on 10 acres or more.

Table D-1. Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Inside SMSA's			Outside SMSA's
		Total	In central city	Not in central city	
ALL OCCUPIED HOUSING UNITS					
Total	**27 931**	**15 953**	**7 410**	**8 544**	**11 978**
House Heating Fuel					
Owner occupied	**18 825**	**10 028**	**3 909**	**6 120**	**8 796**
Utility gas	8 391	5 435	2 683	2 752	2 956
Bottled, tank, or LP gas	1 654	413	49	364	1 241
Fuel oil	1 623	924	348	576	699
Kerosene, etc.	178	58	22	36	119
Electricity	5 347	2 857	738	2 119	2,490
Coal or coke	100	16	3	13	85
Wood	1 446	251	28	224	1 194
Solar heat	1	1	-	1	-
Other fuel	3	-	-	-	3
None	83	73	38	35	10
Renter occupied	**9 106**	**5 925**	**3 501**	**2 424**	**3 182**
Utility gas	3 956	2 721	1 788	932	1 235
Bottled, tank, or LP gas	514	139	35	104	376
Fuel oil	649	418	210	208	231
Kerosene, etc.	109	38	19	19	71
Electricity	3 211	2 399	1 336	1 062	812
Coal or coke	36	6	2	4	29
Wood	436	57	15	42	379
Solar heat	-	-	-	-	-
Other fuel	14	12	12	-	2
None	181	136	83	52	46
Monthly Cost Paid for Electricity					
Specified owner occupied[1]	**14 911**	**8 576**	**3 547**	**5 029**	**6 335**
Electricity paid for	14 898	8 570	3 543	5 027	6 328
Less than $10	22	13	3	10	9
$10 to $19	279	139	87	52	140
$20 to $29	746	375	209	166	371
$30 to $39	1 346	733	391	343	613
$40 to $49	1 497	874	396	478	624
$50 to $59	1 853	1 012	429	582	841
$60 to $79	3 235	1 787	690	1 097	1 448
$80 to $99	1 918	1 105	435	670	813
$100 to $149	2 678	1 652	576	1 075	1 026
$150 or more	1 323	880	327	553	442
Median	70	72	67	75	67
No electricity used	13	7	4	3	7
Specified renter occupied[2]	**8 791**	**5 871**	**3 489**	**2 383**	**2 920**
Electricity paid for	7 532	4 893	2 842	2 051	2 639
Less than $10	103	82	69	13	21
$10 to $19	489	283	196	87	206
$20 to $29	941	590	396	194	352
$30 to $39	1 182	775	451	324	407
$40 to $49	1 017	675	420	255	342
$50 to $59	986	635	345	290	350
$60 to $79	1 316	820	441	379	496
$80 to $99	618	442	219	223	176
$100 to $149	673	439	225	214	234
$150 or more	207	152	80	72	55
Median	50	51	47	55	49
Included in rent	1 233	970	640	329	263
No electricity used	27	9	7	2	18
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas					
Specified owner occupied[1]	**14 911**	**8 576**	**3 547**	**5 029**	**6 335**
Gas paid for	9 442	5 843	2 846	2 997	3 600
Less than $10	291	172	80	92	119
$10 to $14	467	292	148	144	175
$15 to $19	452	302	146	156	151
$20 to $24	742	460	235	225	282
$25 to $29	737	411	210	201	326
$30 to $39	1 667	993	536	457	673
$40 to $49	1 477	908	460	447	569
$50 to $69	2 190	1 349	627	722	841
$70 to $99	962	647	258	389	316
$100 or more	457	310	146	164	148
Median	42	43	41	45	41
No gas used	5 469	2 734	701	2 032	2 735
Specified renter occupied[2]	**8 791**	**5 871**	**3 489**	**2 383**	**2 920**
Gas paid for	3 764	2 241	1 425	816	1 523
Less than $10	330	243	146	97	87
$10 to $14	321	180	114	66	141
$15 to $19	341	200	139	60	141
$20 to $24	442	258	169	89	184
$25 to $29	329	178	115	63	151
$30 to $39	640	379	224	155	262
$40 to $49	427	250	153	97	177
$50 to $69	573	340	226	115	233
$70 to $99	208	124	73	51	85
$100 or more	153	89	66	24	63
Median	32	31	31	32	32
Included in rent	1 785	1 390	860	530	395
No gas used	3 242	2 240	1 204	1 037	1 002

See footnotes at end of table.

Table D-1. Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Inside SMSA's			Outside SMSA's
		Total	In central city	Not in central city	
ALL OCCUPIED HOUSING UNITS—Con.					
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.					
Specified owner occupied[1]	14 911	8 676	3 547	5 029	6 335
Fuel oil, kerosene, coal, wood, etc., paid for	3 130	1 664	627	1 037	1 466
Less than $100	707	403	171	232	304
$100 to $199	613	288	100	188	325
$200 to $299	372	176	68	108	196
$300 to $399	329	155	65	90	175
$400 to $499	232	101	35	67	131
$500 to $599	185	105	37	68	80
$600 to $699	195	108	38	70	88
$700 to $799	131	89	42	47	42
$800 or more	365	239	72	167	127
Median	265	279	262	290	252
Fuels not used or free	11 781	6 912	2 919	3 992	4 869
Specified renter occupied[2]	8 791	5 871	3 489	2 383	2 920
Fuel oil, kerosene, coal, wood, etc., paid for	886	392	171	222	494
Less than $100	190	87	44	43	103
$100 to $199	151	75	44	31	75
$200 to $299	120	41	14	26	79
$300 to $399	123	45	16	28	79
$400 to $499	61	19	2	17	42
$500 to $599	64	29	15	14	34
$600 to $699	46	13	-	13	32
$700 to $799	42	25	16	8	18
$800 or more	90	59	19	40	31
Median	285	284	193	338	286
Included in rent	864	472	312	161	192
Fuels not used or free	7 241	5 007	3 006	2 000	2 235
ALL OCCUPIED HOUSING UNITS					
Total	27 931	15 953	7 410	8 544	11 978
Heating Equipment					
Owner occupied	18 825	10 028	3 909	6 120	8 796
Warm-air furnace	10 199	6 210	2 361	3 849	3 989
Heat pump	1 130	693	126	567	437
Steam or hot water	558	455	224	232	102
Built-in electric units	1 137	476	145	331	661
Floor, wall, or pipeless furnace	1 273	682	425	257	590
Room heaters with flue	1 050	411	189	221	640
Room heaters without flue	1 517	587	304	283	930
Fireplaces, stoves, or portable heaters	1 879	441	96	344	1 438
None	83	73	38	35	10
Renter occupied	9 106	5 925	3 501	2 424	3 182
Warm-air furnace	4 275	3 230	1 819	1 411	1 045
Heat pump	276	212	76	136	63
Steam or hot water	430	384	246	138	46
Built-in electric units	754	495	303	193	259
Floor, wall, or pipeless furnace	730	420	309	111	309
Room heaters with flue	653	301	198	103	351
Room heaters without flue	1 139	550	393	156	589
Fireplaces, stoves, or portable heaters	669	196	72	123	473
None	181	136	83	52	46
ALL OCCUPIED HOUSING UNITS					
Total	27 931	15 953	7 410	8 544	11 978
UNITS OCCUPIED LAST WINTER					
Total	24 002	13 415	6 107	7 308	10 588
Insufficient Heat					
Closure of rooms:					
Owner occupied	17 752	9 387	3 706	5 681	8 365
With heating equipment	17 681	9 324	3 673	5 651	8 357
No rooms closed	16 536	8 841	3 457	5 384	7 695
Closed certain rooms	968	382	175	207	585
Living room only	46	18	11	7	28
Dining room only	17	9	7	2	8
1 or more bedrooms only	636	236	114	122	400
Other rooms or combination of rooms	239	109	39	70	130
Not reported	29	10	4	6	19
Not reported	178	100	41	59	77
No heating equipment	71	63	33	30	8
Renter occupied	6 250	4 028	2 401	1 626	2 223
With heating equipment	6 147	3 945	2 356	1 589	2 202
No rooms closed	5 482	3 611	2 145	1 467	1 871
Closed certain rooms	574	275	176	98	299
Living room only	33	17	16	2	15
Dining room only	13	11	7	4	2
1 or more bedrooms only	372	188	122	65	184
Other rooms or combination of rooms	144	57	31	26	87
Not reported	12	2	-	2	10
Not reported	91	59	35	23	32
No heating equipment	104	83	45	38	21
Additional heat source:					
Owner occupied	17 752	9 387	3 706	5 681	8 365
With specified heating equipment[3]	14 382	8 316	3 278	5 038	6 066
No additional heat source used	12 757	7 408	2 877	4 531	5 349
Used kitchen stove, fireplace, or portable heater	1 162	655	287	368	507
Not reported	463	253	113	140	210
Lacking specified heating equipment or none	3 370	1 071	428	643	2 299

See footnotes at end of table.

Table D-1. Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Inside SMSA's			Outside SMSA's
		Total	In central city	Not in central city	
UNITS OCCUPIED LAST WINTER—Con.					
Insufficient Heat—Con.					
Additional heat source—Con.					
Renter occupied	6 250	4 028	2 401	1 626	2 223
With specified heating equipment[3]	4 723	3 362	1 996	1 366	1 361
No additional heat source used	3 951	2 847	1 664	1 183	1 104
Used kitchen stove, fireplace, or portable heater	575	393	250	143	182
Not reported	197	122	82	40	75
Lacking specified heating equipment or none	1 527	666	406	260	861
Rooms lacking specified heat source:					
Owner occupied	17 752	9 387	3 706	5 681	8 365
With specified heating equipment[3]	14 382	8 316	3 278	5 038	6 066
No rooms lacking air ducts, registers, radiators, or heaters	11 329	6 764	2 479	4 285	4 565
Rooms lacking air ducts, registers, radiators, or heaters	2 675	1 359	697	662	1 316
1 room	701	380	167	214	321
2 rooms	536	247	127	120	289
3 rooms or more	1 438	732	403	329	706
Not reported	378	194	102	92	184
Lacking specified heating equipment or none	3 370	1 071	428	643	2 299
Renter occupied	6 250	4 028	2 401	1 626	2 223
With specified heating equipment[3]	4 723	3 362	1 996	1 366	1 361
No rooms lacking air ducts, registers, radiators, or heaters	3 526	2 662	1 523	1 139	864
Rooms lacking air ducts, registers, radiators, or heaters	1 045	610	406	203	436
1 room	283	195	131	64	87
2 rooms	253	126	86	41	126
3 rooms or more	510	288	190	98	222
Not reported	152	91	67	24	61
Lacking specified heating equipment or none	1 527	666	406	260	861
Housing unit uncomfortably cold:					
Owner occupied	17 752	9 387	3 706	5 681	8 365
With specified heating equipment[3]	14 382	8 316	3 278	5 038	6 066
Lacking specified heating equipment or none	3 370	1 071	428	643	2 299
Housing unit not uncomfortably cold for 24 hours or more	2 866	893	356	537	1 973
Housing unit uncomfortably cold for 24 hours or more	375	118	54	64	258
Not reported	129	60	18	42	69
Renter occupied	6 250	4 028	2 401	1 626	2 223
With specified heating equipment[3]	4 723	3 362	1 996	1 366	1 361
Lacking specified heating equipment or none	1 527	666	406	260	861
Housing unit not uncomfortably cold for 24 hours or more	1 154	510	321	189	644
Housing unit uncomfortably cold for 24 hours or more	327	135	71	63	192
Not reported	46	22	13	9	25
ALL OCCUPIED HOUSING UNITS					
Total	27 931	15 953	7 410	8 544	11 978
Air Conditioning					
Owner occupied	18 825	10 028	3 909	6 120	8 796
With air conditioning	15 384	8 716	3 301	5 415	6 668
Room units	6 318	3 084	1 475	1 608	3 234
1	3 634	1 527	682	845	2 107
2	1 918	1 043	535	508	873
3	552	373	182	191	180
4	152	91	46	45	61
5 or more	64	50	31	19	14
Central system	9 066	5 632	1 825	3 806	3 434
With no air conditioning	3 441	1 313	608	705	2 128
Renter occupied	9 106	5 925	3 501	2 424	3 182
With air conditioning	6 472	4 580	2 533	2 047	1 892
Room units	2 849	1 711	1 051	660	1 137
1	2 095	1 214	772	442	881
2	607	383	218	164	224
3	113	85	43	42	28
4	23	21	12	9	3
5 or more	10	9	5	3	2
Central system	3 623	2 869	1 482	1 387	754
With no air conditioning	2 634	1 345	968	377	1 290

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table D-2. Income of Families and Primary Individuals by Fuel, Fuel Costs, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $3,000	$3,000 to $6,999	$7,000 to $9,999	$10,000 to $14,999	$15,000 to $19,999	$20,000 to $24,999	$25,000 to $34,999	$35,000 to $49,999	$50,000 to $74,999	$75,000 or more	Median (dollars)
ALL OCCUPIED HOUSING UNITS												
Total	27 931	1 443	3 831	2 529	4 105	3 454	2 693	4 299	3 233	1 612	733	18 000
House Heating Fuel												
Owner occupied	18 825	588	2 035	1 534	2 410	2 216	1 867	3 290	2 742	1 458	666	21 700
Utility gas	8 391	241	884	634	1 001	963	808	1 436	1 326	754	342	22 900
Bottled, tank, or LP gas	1 654	110	335	208	276	216	148	215	100	31	15	13 100
Fuel oil	1 623	35	196	162	243	177	181	238	218	127	45	19 900
Kerosene, etc.	178	9	47	34	23	26	25	8	4	2	-	9 900
Electricity	5 347	111	319	328	622	590	521	1 136	970	483	267	26 600
Coal or coke	100	8	28	17	11	9	4	14	6	2	-	9 400
Wood	1 446	67	207	146	222	214	166	239	115	54	15	16 900
Solar heat	1	-	-	-	-	-	-	-	-	1	-	...
Other fuel	3	-	1	-	-	1	-	1	-	-	-	...
None	83	6	17	5	11	20	13	3	2	4	2	15 600
Renter occupied	9 106	856	1 795	995	1 695	1 238	826	1 009	491	154	47	12 700
Utility gas	3 956	440	918	449	711	501	317	360	183	58	19	11 200
Bottled, tank, or LP gas	514	51	125	92	101	60	22	38	18	6	2	9 600
Fuel oil	649	44	116	64	129	91	66	100	25	14	1	13 900
Kerosene, etc.	109	21	23	16	17	16	6	9	2	-	-	8 900
Electricity	3 211	186	424	288	611	511	383	465	245	73	25	15 900
Coal or coke	36	5	17	7	3	2	-	1	-	-	-	5 900
Wood	436	71	120	57	77	49	24	28	9	2	-	8 400
Solar heat	-	-	-	-	-	-	-	-	-	-	-	-
Other fuel	14	-	9	2	3	-	1	-	-	-	-	...
None	181	38	43	21	45	10	7	8	10	-	-	8 400
Monthly Cost Paid for Electricity												
Specified owner occupied[1]	14 911	400	1 471	1 109	1 766	1 681	1 472	2 747	2 358	1 289	618	23 500
Electricity paid for	14 898	398	1 465	1 106	1 766	1 681	1 472	2 745	2 358	1 289	618	23 500
Less than $10	22	3	11	1	1	2	-	2	-	2	2	...
$10 to $19	279	20	126	26	37	29	16	10	10	4	2	6 800
$20 to $29	748	47	230	91	120	87	47	62	37	22	3	10 200
$30 to $39	1 346	58	281	168	234	177	129	159	99	27	15	13 600
$40 to $49	1 497	29	191	168	253	195	150	229	184	63	37	17 800
$50 to $59	1 853	61	181	165	257	208	200	364	248	125	43	21 400
$60 to $79	3 235	61	213	227	403	422	376	646	555	243	90	23 900
$80 to $99	1 918	33	80	89	176	205	213	446	396	206	75	28 700
$100 to $149	2 678	53	108	129	204	253	255	565	559	366	187	31 000
$150 or more	1 323	35	43	45	83	103	86	262	270	231	166	35 300
Median	70	56	44	56	58	66	70	76	82	95	111	...
No electricity used	13	3	6	3	-	-	-	2	-	-	-	...
Specified renter occupied[2]	8 791	821	1 723	958	1 633	1 204	808	986	473	140	45	12 700
Electricity paid for	7 532	667	1 442	805	1 383	1 052	704	891	420	128	40	13 100
Less than $10	103	19	47	8	16	6	4	4	-	-	-	5 800
$10 to $19	489	70	168	64	78	50	23	22	13	-	-	7 300
$20 to $29	941	89	285	118	189	101	65	67	18	9	-	9 500
$30 to $39	1 182	127	260	152	233	145	88	112	54	8	4	11 100
$40 to $49	1 017	83	195	124	197	172	91	99	29	22	4	12 700
$50 to $59	986	82	157	89	191	160	107	114	63	16	6	14 300
$60 to $79	1 316	104	186	132	258	192	147	186	84	18	9	14 600
$80 to $99	618	39	68	44	99	91	78	120	56	19	3	18 200
$100 to $149	673	43	61	60	101	111	85	118	67	22	5	18 200
$150 or more	207	11	15	14	22	23	16	49	35	14	9	25 600
Median	50	43	38	44	48	53	57	63	67	69	74	...
Included in rent	1 233	141	277	150	247	152	104	92	53	12	5	11 000
No electricity used	27	14	3	3	3	-	-	3	-	-	-	...
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas												
Specified owner occupied[1]	14 911	400	1 471	1 109	1 766	1 681	1 472	2 747	2 358	1 289	618	23 500
Gas paid for	9 442	277	1 068	749	1 141	1 076	908	1 623	1 408	818	374	22 300
Less than $10	291	9	41	32	39	34	28	51	31	19	7	18 500
$10 to $14	467	11	75	52	57	77	46	70	44	23	11	17 500
$15 to $19	452	14	62	50	61	56	53	62	60	25	8	18 400
$20 to $24	742	17	91	53	110	94	77	143	92	54	11	20 400
$25 to $29	737	13	106	59	81	105	71	131	92	51	28	20 200
$30 to $39	1 667	60	215	148	241	153	167	252	249	124	57	20 500
$40 to $49	1 477	40	167	92	192	166	129	275	223	156	37	23 200
$50 to $69	2 190	66	198	162	225	260	203	393	389	208	86	24 500
$70 to $99	962	23	64	76	95	86	91	181	165	114	68	27 600
$100 or more	457	24	50	23	39	45	43	68	62	43	62	25 700
Median	42	43	37	38	38	41	41	43	45	46	56	...
No gas used	5 469	123	403	360	625	605	564	1 124	949	471	244	25 500
Specified renter occupied[2]	8 791	821	1 723	958	1 633	1 204	808	986	473	140	45	12 700
Gas paid for	3 764	410	872	456	672	470	282	363	170	53	16	11 100
Less than $10	330	31	96	33	56	47	26	26	9	4	1	10 400
$10 to $14	321	37	75	45	59	39	19	31	15	2	-	10 400
$15 to $19	341	33	82	47	75	31	30	32	8	4	-	10 600
$20 to $24	442	44	83	74	99	37	33	42	19	10	1	11 000
$25 to $29	329	23	87	50	53	42	30	30	10	3	1	10 400
$30 to $39	640	69	154	77	93	83	50	74	34	5	2	11 100
$40 to $49	427	58	100	39	87	43	25	38	29	5	2	10 900
$50 to $69	573	70	106	60	102	83	43	59	32	11	7	12 500
$70 to $99	208	14	47	10	33	46	18	23	9	6	2	14 900
$100 or more	153	30	42	21	15	19	9	8	6	2	2	7 700
Median	32	35	31	27	29	34	31	32	37	35	...	...
Included in rent	1 785	193	400	191	335	238	151	154	91	22	9	11 600
No gas used	3 242	219	451	311	626	496	374	468	211	65	20	15 100

See footnotes at end of table.

Table D-2. Income of Families and Primary Individuals by Fuel, Fuel Costs, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $3,000	$3,000 to $6,999	$7,000 to $9,999	$10,000 to $14,999	$15,000 to $19,999	$20,000 to $24,999	$25,000 to $34,999	$35,000 to $49,999	$50,000 to $74,999	$75,000 or more	Median (dollars)
ALL OCCUPIED HOUSING UNITS—Con.												
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.												
Specified owner occupied[1]	**14 911**	**400**	**1 471**	**1 109**	**1 766**	**1 681**	**1 472**	**2 747**	**2 358**	**1 289**	**618**	**23 500**
Fuel oil, kerosene, coal, wood, etc., paid for	3 130	76	335	241	342	317	340	531	473	331	144	23 700
Less than $100	707	19	38	34	55	70	78	111	142	121	39	30 500
$100 to $199	613	11	70	34	60	54	57	138	104	46	39	26 500
$200 to $299	372	9	51	27	55	41	40	71	36	28	12	20 200
$300 to $399	329	15	44	48	42	38	31	46	34	19	13	17 200
$400 to $499	232	7	42	21	19	36	27	27	30	20	3	18 700
$500 to $599	185	3	23	20	21	21	23	28	19	20	7	21 100
$600 to $699	195	6	29	15	27	18	24	32	22	13	7	20 400
$700 to $799	131	2	15	16	14	8	17	24	19	10	5	22 700
$800 or more	365	3	26	24	48	30	44	55	65	51	19	26 300
Median	265	282	323	352	299	282	288	224	189	194	183	...
Fuels not used or free	11 781	324	1 136	868	1 424	1 364	1 132	2 216	1 885	958	475	23 400
Specified renter occupied[2]	**8 791**	**821**	**1 723**	**958**	**1 633**	**1 204**	**808**	**986**	**473**	**140**	**45**	**12 700**
Fuel oil, kerosene, coal, wood, etc., paid for	886	92	179	96	151	123	79	106	42	17	2	12 500
Less than $100	190	21	30	16	26	32	14	29	12	9	1	15 300
$100 to $199	151	13	35	15	26	25	13	16	9	-	-	12 500
$200 to $299	120	17	25	25	21	12	5	9	5	1	-	9 100
$300 to $399	123	18	35	9	19	17	11	9	3	-	-	9 500
$400 to $499	61	4	16	7	7	4	7	10	4	2	1	12 600
$500 to $599	64	8	13	4	12	7	8	9	2	-	-	12 500
$600 to $699	46	3	6	5	11	3	6	10	1	-	-	13 700
$700 to $799	42	1	12	3	8	6	6	4	2	1	-	13 600
$800 or more	90	6	8	11	21	17	9	10	4	4	-	14 900
Median	285	269	301	267	312	234	369	296	206	...	...	...
Included in rent	664	70	130	64	134	83	67	71	33	8	3	12 500
Fuels not used or free	7 241	659	1 414	797	1 348	998	662	809	398	115	41	12 800
ALL OCCUPIED HOUSING UNITS												
Total	**27 931**	**1 443**	**3 831**	**2 529**	**4 105**	**3 454**	**2 693**	**4 299**	**3 233**	**1 612**	**733**	**18 000**
Heating Equipment												
Owner occupied	**18 825**	**588**	**2 035**	**1 534**	**2 410**	**2 216**	**1 867**	**3 290**	**2 742**	**1 458**	**686**	**21 700**
Warm-air furnace	10 199	240	651	605	1 177	1 074	976	2 038	1 879	1 069	488	26 800
Heat pump	1 130	22	35	49	90	87	84	235	274	159	95	33 400
Steam or hot water	558	13	59	29	48	52	68	100	98	63	27	25 900
Built-in electric units	1 137	29	105	93	156	171	154	226	120	58	24	20 500
Floor, wall, or pipeless furnace	1 273	32	211	132	222	224	139	177	102	21	12	15 900
Room heaters with flue	1 050	49	262	174	183	132	90	90	51	13	5	11 100
Room heaters without flue	1 517	111	399	239	225	188	131	132	68	11	14	10 200
Fireplaces, stoves, or portable heaters	1 879	86	296	208	298	266	212	288	147	60	17	16 000
None	83	6	17	5	11	20	13	3	2	4	2	15 600
Renter occupied	**9 106**	**856**	**1 795**	**995**	**1 695**	**1 238**	**826**	**1 009**	**491**	**154**	**47**	**12 700**
Warm-air furnace	4 275	283	591	377	791	635	472	620	352	113	39	15 700
Heat pump	276	8	28	33	54	41	28	44	27	12	1	16 800
Steam or hot water	430	32	88	47	73	69	41	56	15	9	-	13 300
Built-in electric units	754	59	147	84	164	100	83	81	32	3	1	12 600
Floor, wall, or pipeless furnace	730	86	185	80	126	95	75	56	19	6	3	10 600
Room heaters with flue	653	97	199	90	115	80	31	30	7	2	2	8 000
Room heaters without flue	1 139	160	329	169	205	126	53	68	20	8	1	8 400
Fireplaces, stoves, or portable heaters	669	92	186	92	121	82	38	48	9	2	-	8 800
None	181	38	43	21	45	10	7	8	10	-	-	8 400
ALL OCCUPIED HOUSING UNITS												
Total	**27 931**	**1 443**	**3 831**	**2 529**	**4 105**	**3 454**	**2 693**	**4 299**	**3 233**	**1 612**	**733**	**18 000**
UNITS OCCUPIED LAST WINTER												
Total	**24 002**	**1 101**	**3 281**	**2 179**	**3 410**	**2 952**	**2 331**	**3 773**	**2 856**	**1 467**	**651**	**18 400**
Insufficient Heat												
Closure of rooms:												
Owner occupied	**17 752**	**556**	**1 965**	**1 480**	**2 286**	**2 092**	**1 745**	**3 081**	**2 547**	**1 368**	**631**	**21 400**
With heating equipment	17 681	554	1 950	1 474	2 275	2 075	1 735	3 078	2 545	1 364	631	21 500
No rooms closed	16 536	475	1 680	1 320	2 099	1 927	1 650	2 975	2 479	1 315	618	22 300
Closed certain rooms	968	69	256	138	158	124	74	80	39	27	6	10 700
Living room only	46	4	10	7	9	8	4	-	5	1	-	11 800
Dining room only	17	-	3	2	1	5	2	2	1	-	2	...
1 or more bedrooms only	636	49	180	84	109	81	49	45	22	13	4	10 200
Other rooms or combination of rooms	239	15	55	35	37	25	17	32	11	11	-	11 900
Not reported	29	1	9	8	3	5	2	-	-	2	-	...
Not reported	178	10	14	18	18	24	12	23	27	22	9	21 900
No heating equipment	71	4	14	5	11	17	10	3	2	4	-	15 100
Renter occupied	**6 250**	**543**	**1 317**	**699**	**1 124**	**860**	**586**	**692**	**310**	**99**	**21**	**12 500**
With heating equipment	6 147	526	1 291	685	1 098	855	581	690	301	99	21	12 600
No rooms closed	5 482	432	1 086	599	988	773	541	655	292	98	19	13 200
Closed certain rooms	574	79	179	75	100	69	35	27	8	-	2	8 100
Living room only	33	9	10	2	5	2	3	2	-	-	-	...
Dining room only	13	3	6	1	2	-	2	-	-	-	-	...
1 or more bedrooms only	372	48	114	50	65	57	20	14	3	-	2	8 400
Other rooms or combination of rooms	144	19	44	20	26	10	10	11	3	-	-	8 300
Not reported	12	1	4	2	2	1	1	-	1	-	-	...
Not reported	91	15	26	11	10	13	4	9	2	1	-	8 200
No heating equipment	104	16	25	14	26	5	5	3	8	-	-	9 100

See footnotes at end of table.

Table D-2. Income of Families and Primary Individuals by Fuel, Fuel Costs, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $3,000	$3,000 to $6,999	$7,000 to $9,999	$10,000 to $14,999	$15,000 to $19,999	$20,000 to $24,999	$25,000 to $34,999	$35,000 to $49,999	$50,000 to $74,999	$75,000 or more	Median (dollars)
UNITS OCCUPIED LAST WINTER—Con.												
Insufficient Heat—Con.												
Additional heat source:												
Owner occupied	17 752	558	1 965	1 480	2 286	2 092	1 745	3 081	2 547	1 368	631	21 400
With specified heating equipment[3]	14 382	361	1 271	1 041	1 768	1 636	1 400	2 669	2 341	1 295	600	24 000
No additional heat source used	12 757	297	1 039	890	1 535	1 431	1 242	2 434	2 146	1 186	557	24 800
Used kitchen stove, fireplace, or portable heater	1 162	44	151	108	158	144	109	195	138	83	34	19 200
Not reported	463	20	82	42	74	61	49	40	59	26	9	16 000
Lacking specified heating equipment or none	3 370	197	694	439	518	456	345	412	205	74	30	13 400
Renter occupied	6 250	543	1 317	699	1 124	860	586	692	310	99	21	12 500
With specified heating equipment[3]	4 723	338	879	482	834	683	514	604	277	92	20	14 000
No additional heat source used	3 951	256	706	380	707	582	431	540	249	84	16	14 500
Used kitchen stove, fireplace, or portable heater	575	56	130	74	90	79	68	48	23	6	1	11 600
Not reported	197	26	43	29	36	22	15	16	5	2	2	10 000
Lacking specified heating equipment or none	1 527	204	438	217	291	177	73	88	32	7	1	8 700
Rooms lacking specified heat source:												
Owner occupied	17 752	558	1 965	1 480	2 286	2 092	1 745	3 081	2 547	1 368	631	21 400
With specified heating equipment[3]	14 382	361	1 271	1 041	1 768	1 636	1 400	2 669	2 341	1 295	600	24 000
No rooms lacking air ducts, registers, radiators, or heaters	11 329	257	786	713	1 267	1 210	1 090	2 241	2 045	1 178	541	26 500
Rooms lacking air ducts, registers, radiators, or heaters	2 675	89	417	290	442	375	273	380	257	104	49	16 300
1 room	701	24	70	45	86	69	90	128	109	55	25	23 100
2 rooms	536	15	92	63	100	65	43	67	49	18	3	14 900
3 rooms or more	1 438	50	255	182	256	221	140	185	99	31	21	14 500
Not reported	378	16	68	38	59	51	36	49	39	12	10	15 700
Lacking specified heating equipment or none	3 370	197	694	439	518	456	345	412	205	74	30	13 400
Renter occupied	6 250	543	1 317	699	1 124	860	586	692	310	99	21	12 500
With specified heating equipment[3]	4 723	338	879	482	834	683	514	604	277	92	20	14 000
No rooms lacking air ducts, registers, radiators, or heaters	3 526	212	570	337	628	525	407	501	246	85	17	15 200
Rooms lacking air ducts, registers, radiators, or heaters	1 045	106	269	124	179	147	96	90	29	5	1	10 700
1 room	283	21	87	33	41	33	27	24	12	4	1	10 100
2 rooms	253	29	65	32	43	28	36	17	3	-	-	10 100
3 rooms or more	510	56	117	59	95	86	33	48	14	2	-	11 200
Not reported	152	21	40	21	27	12	11	13	3	2	2	9 100
Lacking specified heating equipment or none	1 527	204	438	217	291	177	73	88	32	7	1	8 700
Housing unit uncomfortably cold:												
Owner occupied	17 752	558	1 965	1 480	2 286	2 092	1 745	3 081	2 547	1 368	631	21 400
With specified heating equipment[3]	14 382	361	1 271	1 041	1 768	1 636	1 400	2 669	2 341	1 295	600	24 000
Lacking specified heating equipment or none	3 370	197	694	439	518	456	345	412	205	74	30	13 400
Housing unit not uncomfortably cold for 24 hours or more	2 866	151	559	377	439	398	304	361	188	62	27	13 900
Housing unit uncomfortably cold for 24 hours or more	375	40	110	55	61	36	29	27	8	6	2	9 000
Not reported	128	6	24	7	18	22	12	23	9	5	2	17 200
Renter occupied	6 250	543	1 317	699	1 124	860	586	692	310	99	21	12 500
With specified heating equipment[3]	4 723	338	879	482	834	683	514	604	277	92	20	14 000
Lacking specified heating equipment or none	1 527	204	438	217	291	177	73	88	32	7	1	8 700
Housing unit not uncomfortably cold for 24 hours or more	1 154	137	316	160	229	145	59	76	25	7	1	9 300
Housing unit uncomfortably cold for 24 hours or more	327	61	114	43	51	32	12	10	4	-	-	6 600
Not reported	46	6	8	13	12	-	2	3	3	-	-	9 000
ALL OCCUPIED HOUSING UNITS												
Total	27 931	1 443	3 831	2 529	4 105	3 454	2 693	4 299	3 233	1 612	733	18 000
Air Conditioning												
Owner occupied	18 825	588	2 035	1 534	2 410	2 216	1 867	3 290	2 742	1 458	686	21 700
With air conditioning	15 384	398	1 206	1 103	1 611	1 776	1 555	2 943	2 556	1 381	654	24 500
Room units	6 318	207	833	677	970	932	739	1 034	607	228	89	17 500
1	3 634	148	594	453	616	557	402	488	266	78	32	15 100
2	1 916	51	203	168	280	257	232	392	228	77	28	20 000
3	552	6	26	45	56	87	82	109	80	49	13	23 400
4	152	2	11	7	15	18	20	39	25	9	5	25 600
5 or more	64	-	-	4	4	13	4	6	9	15	11	38 900
Central system	9 066	191	373	425	841	844	816	1 909	1 950	1 153	565	30 500
With no air conditioning	3 441	190	829	431	598	440	311	347	186	77	32	12 300
Renter occupied	9 106	856	1 795	995	1 695	1 238	826	1 009	491	154	47	12 700
With air conditioning	6 472	405	955	628	1 250	1 010	709	877	451	143	43	15 000
Room units	2 849	222	563	352	581	442	257	281	114	31	6	12 500
1	2 095	187	456	273	452	299	181	183	45	17	3	11 500
2	607	33	96	65	106	117	61	70	50	7	-	15 100
3	113	-	4	8	17	22	14	24	14	7	3	22 000
4	23	1	5	5	3	3	-	4	2	-	-	...
5 or more	10	2	2	2	2	-	-	-	3	-	-	...
Central system	3 623	183	392	278	670	569	453	596	337	112	38	17 600
With no air conditioning	2 634	450	841	367	445	228	117	133	40	11	4	7 200

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table D-3. Value of Owner-Occupied Housing Units by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $10,000	$10,000 to $19,999	$20,000 to $29,999	$30,000 to $39,999	$40,000 to $49,999	$50,000 to $59,999	$60,000 to $74,999	$75,000 to $99,999	$100,000 to $199,999	$200,000 or more	Median (dollars)
SPECIFIED OWNER OCCUPIED[1]												
Total	**14 911**	**369**	**849**	**1 458**	**2 162**	**2 233**	**1 813**	**2 250**	**2 005**	**1 523**	**249**	**52 100**
House Heating Fuel												
Utility gas	7 448	159	410	798	1 145	1 109	933	1 053	997	734	112	51 100
Bottled, tank, or LP gas	861	67	132	167	149	119	68	69	63	26	2	34 300
Fuel oil	1 305	30	68	154	205	204	141	190	163	127	24	49 600
Kerosene, etc.	121	12	24	30	25	8	10	6	4	-	1	28 000
Electricity	4 138	25	95	168	453	625	529	827	704	606	107	63 200
Coal or coke	66	14	12	14	8	5	9	3	1	1	-	25 500
Wood	903	62	105	119	167	149	111	92	70	27	1	40 000
Solar heat	1	-	-	-	-	-	-	-	-	-	1	...
Other fuel	1	-	-	-	-	1	-	-	-	-	-	...
None	66	1	4	8	11	13	13	10	3	2	2	47 300
Monthly Cost Paid for Electricity												
Electricity paid for	14 898	364	845	1 457	2 162	2 232	1 811	2 250	2 005	1 523	249	52 100
Less than $10	22	2	4	6	3	-	1	1	3	1	-	...
$10 to $19	279	57	45	47	45	25	26	10	14	9	-	28 000
$20 to $29	746	76	111	151	136	114	58	63	27	10	-	32 500
$30 to $39	1 346	57	164	226	290	232	117	148	79	29	5	37 800
$40 to $49	1 497	58	117	181	290	282	201	177	125	61	6	43 700
$50 to $59	1 853	51	132	231	337	318	223	239	195	115	13	45 600
$60 to $79	3 235	34	185	309	472	522	407	571	484	253	18	52 800
$80 to $99	1 918	15	40	125	264	274	283	360	314	215	28	58 500
$100 to $149	2 678	9	56	149	239	351	359	471	530	453	62	65 600
$150 or more	1 323	5	10	30	88	117	137	210	233	377	117	81 900
Median	70	38	48	55	58	65	73	76	85	107	143	...
No electricity used	13	5	4	1	-	1	3	-	-	-	-	...
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas												
Gas paid for	9 442	293	622	1 110	1 464	1 405	1 115	1 284	1 173	837	140	48 800
Less than $10	291	16	20	26	45	53	32	37	29	27	7	47 300
$10 to $14	467	29	25	66	90	63	59	60	40	28	6	43 600
$15 to $19	452	10	46	61	90	58	50	67	45	24	3	43 500
$20 to $24	742	17	48	118	143	125	79	83	76	47	5	43 500
$25 to $29	737	40	62	93	102	127	82	92	80	48	10	45 500
$30 to $39	1 667	50	126	230	283	283	214	189	177	105	9	45 100
$40 to $49	1 477	45	89	152	262	236	184	189	188	121	13	48 100
$50 to $69	2 190	48	129	241	278	328	275	366	287	216	21	52 500
$70 to $99	962	23	49	78	112	96	98	139	191	148	27	62 600
$100 or more	457	14	27	45	58	36	41	61	62	74	39	61 800
Median	42	36	38	37	38	39	42	45	47	52	65	...
No gas used	5 469	76	228	348	699	827	698	966	832	686	109	58 000
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.												
Fuel oil, kerosene, coal, wood, etc., paid for	3 130	105	197	324	430	387	355	451	447	374	61	53 400
Less than $100	707	15	29	58	64	73	60	111	148	109	20	64 700
$100 to $199	613	17	46	39	85	65	94	97	79	81	10	55 900
$200 to $299	372	20	32	50	48	43	31	66	38	44	-	48 200
$300 to $399	329	23	26	41	55	61	30	33	38	17	7	43 400
$400 to $499	232	14	17	36	41	26	26	21	35	15	1	43 000
$500 to $599	185	4	18	18	35	32	23	25	18	11	-	45 300
$600 to $699	195	2	10	33	40	34	15	25	22	11	3	43 500
$700 to $799	131	2	8	17	21	15	17	16	20	10	5	51 800
$800 or more	365	8	11	32	42	37	39	56	49	76	15	63 900
Median	265	303	273	336	333	318	212	225	195	195	303	...
Fuels not used or free	11 781	264	652	1 134	1 732	1 846	1 459	1 799	1 558	1 149	188	51 800
Heating Equipment												
Warm-air furnace	8 112	30	152	423	892	1 203	1 128	1 567	1 431	1 108	178	62 200
Heat pump	916	4	5	10	46	97	111	178	223	205	37	75 800
Steam or hot water	481	2	11	26	60	68	51	82	85	78	17	63 900
Built-in electric units	940	9	40	75	209	200	130	138	78	55	6	46 800
Floor, wall, or pipeless furnace	1 119	20	78	215	341	235	102	76	40	9	4	37 200
Room heaters with flue	826	68	143	234	159	91	49	41	24	14	2	28 600
Room heaters without flue	1 225	136	256	301	218	136	82	38	37	21	1	27 400
Fireplaces, stoves, or portable heaters	1 226	99	161	164	227	191	147	122	83	32	1	38 300
None	66	1	4	8	11	13	13	10	3	2	2	47 300

See footnotes at end of table.

Table D-3. Value of Owner-Occupied Housing Units by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $10,000	$10,000 to $19,999	$20,000 to $29,999	$30,000 to $39,999	$40,000 to $49,999	$50,000 to $59,999	$60,000 to $74,999	$75,000 to $99,999	$100,000 to $199,999	$200,000 or more	Median (dollars)
SPECIFIED OWNER OCCUPIED[1]												
Total	**14 911**	**369**	**849**	**1 458**	**2 162**	**2 233**	**1 813**	**2 250**	**2 005**	**1 523**	**249**	**52 100**
UNITS OCCUPIED LAST WINTER												
Total	**14 175**	**360**	**820**	**1 413**	**2 083**	**2 149**	**1 726**	**2 118**	**1 883**	**1 399**	**226**	**51 500**
Insufficient Heat												
Closure of rooms:												
With heating equipment	14 118	359	816	1 406	2 074	2 139	1 713	2 109	1 881	1 397	224	51 500
No rooms closed	13 231	293	682	1 259	1 908	2 026	1 647	2 045	1 796	1 357	218	52 700
Closed certain rooms	759	61	130	136	146	98	53	53	59	18	5	33 600
Living room only	36	-	4	5	10	4	2	4	7	-	-	38 000
Dining room only	11	1	2	1	4	1	-	1	2	-	-	...
1 or more bedrooms only	498	41	104	94	92	62	41	26	26	9	4	31 100
Other rooms or combination of rooms	190	16	18	30	34	31	9	23	22	7	1	39 300
Not reported	23	4	2	5	6	1	2	-	2	2	-	...
Not reported	128	4	4	11	20	15	12	11	26	22	1	57 000
No heating equipment	57	1	4	7	9	9	13	9	2	2	2	49 000
Additional heat source:												
With specified heating equipment[2]	11 736	132	413	954	1 635	1 827	1 492	1 954	1 761	1 346	222	56 100
No additional heat source used	10 437	92	317	785	1 423	1 625	1 356	1 793	1 608	1 231	208	57 200
Used kitchen stove, fireplace, or portable heater	961	25	72	126	171	140	102	119	113	82	10	46 200
Not reported	338	15	25	43	41	61	34	42	40	33	3	47 300
Lacking specified heating equipment or none	2 439	228	406	459	448	322	233	164	122	53	4	32 800
Rooms lacking specified heat source:												
With specified heating equipment[2]	11 736	132	413	954	1 635	1 827	1 492	1 954	1 761	1 346	222	56 100
No rooms lacking air ducts, registers, radiators, or heaters	9 124	39	182	484	1 077	1 401	1 225	1 669	1 574	1 263	210	61 400
Rooms lacking air ducts, registers, radiators, or heaters	2 337	80	207	434	518	373	232	251	162	70	9	38 600
1 room	613	21	35	65	97	95	70	99	92	37	2	49 200
2 rooms	459	17	46	104	96	66	39	53	24	10	4	36 500
3 rooms or more	1 265	42	126	264	325	212	123	99	46	24	4	38 200
Not reported	275	12	25	37	40	53	35	33	25	13	2	44 400
Lacking specified heating equipment or none	2 439	228	406	459	448	322	233	164	122	53	4	32 800
Housing unit uncomfortably cold:												
With specified heating equipment[2]	11 736	132	413	954	1 635	1 827	1 492	1 954	1 761	1 346	222	56 100
Lacking specified heating equipment or none	2 439	228	406	459	448	322	233	164	122	53	4	32 800
Housing unit not uncomfortably cold for 24 hours or more	2 060	172	330	386	385	283	210	137	109	44	4	33 700
Housing unit uncomfortably cold for 24 hours or more	281	53	59	58	45	26	12	13	8	7	1	24 900
Not reported	98	3	17	14	18	13	11	15	5	2	-	38 200
SPECIFIED OWNER OCCUPIED[1]												
Total	**14 911**	**369**	**849**	**1 458**	**2 162**	**2 233**	**1 813**	**2 250**	**2 005**	**1 523**	**249**	**52 100**
Air Conditioning												
With air conditioning	12 375	135	459	997	1 685	1 857	1 601	2 073	1 859	1 466	242	56 600
Room units	5 000	122	395	787	1 176	941	577	532	294	153	22	40 200
1	2 747	99	290	523	708	467	283	219	104	50	4	36 500
2	1 587	19	92	223	356	328	209	200	114	39	7	43 200
3	482	3	11	35	90	118	59	84	48	32	2	48 700
4	126	2	2	5	18	22	18	24	18	20	-	58 800
5 or more	59	-	-	2	4	5	10	5	10	13	9	82 300
Central system	7 376	13	65	210	509	917	1 024	1 541	1 565	1 313	219	69 300
With no air conditioning	2 536	234	390	461	477	375	212	177	145	57	7	33 800

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table D-4. Gross Rent of Renter-Occupied Housing Units by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $100	$100 to $149	$150 to $199	$200 to $249	$250 to $299	$300 to $349	$350 to $399	$400 to $499	$500 or more	No cash rent	Median (dollars)
SPECIFIED RENTER OCCUPIED[1]												
Total	8 791	503	580	805	1 014	1 084	1 039	982	1 238	685	662	304
House Heating Fuel												
Utility gas	3 897	290	325	448	504	493	449	366	421	334	266	275
Bottled, tank, or LP gas	433	21	47	70	61	60	37	19	15	15	88	227
Fuel oil	831	22	30	55	109	91	57	82	71	53	58	287
Kerosene, etc.	104	5	15	19	28	14	6	4	2	-	11	212
Electricity	3 179	80	80	140	235	386	456	484	699	474	145	364
Coal or coke	27	6	6	3	2	1	1	-	-	-	9	...
Wood	328	64	64	36	42	17	15	7	9	2	74	149
Solar heat	-	-	-	-	-	-	-	-	-	-	-	-
Other fuel	14	5	2	3	2	-	-	3	-	-	-	...
None	179	10	11	30	30	22	18	17	21	7	11	255
Monthly Cost Paid for Electricity												
Electricity paid for	7 532	306	482	713	889	957	956	841	1 076	807	506	309
Less than $10	103	45	11	15	5	9	2	6	2	-	7	113
$10 to $19	489	107	56	85	66	57	51	16	14	5	33	188
$20 to $29	941	83	149	134	143	134	105	64	47	24	60	226
$30 to $39	1 182	43	109	152	204	178	157	125	104	38	73	263
$40 to $49	1 017	6	72	123	153	165	154	121	82	63	78	284
$50 to $59	986	10	27	98	119	125	158	147	156	79	66	325
$60 to $79	1 316	11	43	76	132	186	164	187	280	147	90	350
$80 to $99	618	2	9	18	36	52	89	95	181	104	32	395
$100 to $149	673	-	5	13	26	48	67	74	166	218	55	445
$150 or more	207	-	-	-	5	3	9	7	43	129	12	500+
Median	50	20	32	37	42	45	51	55	69	89	50	...
Included in rent	1 233	182	96	92	124	127	83	138	162	78	149	268
No electricity used	27	15	2	-	-	-	-	3	-	-	7	...
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas												
Gas paid for	3 764	158	321	469	530	522	428	311	363	341	321	273
Less than $10	330	43	33	35	42	38	35	32	38	12	22	251
$10 to $14	321	24	27	51	52	58	32	18	27	9	24	244
$15 to $19	341	17	50	53	35	53	35	29	25	21	22	254
$20 to $24	442	31	46	54	58	55	49	34	50	33	31	264
$25 to $29	329	21	47	36	50	57	24	19	17	27	32	244
$30 to $39	640	11	62	89	93	94	58	47	62	68	57	269
$40 to $49	427	6	27	58	61	53	62	38	29	43	49	284
$50 to $69	573	3	26	80	95	64	73	63	55	64	49	294
$70 to $99	208	-	4	8	23	37	28	10	40	30	29	331
$100 or more	153	-	-	5	19	14	33	21	20	34	5	354
Median	32	18	25	31	33	30	36	34	34	40	35	...
Included in rent	1 785	230	133	151	170	173	176	228	268	122	135	290
No gas used	3 242	115	126	185	314	388	435	443	608	422	206	344
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.												
Fuel oil, kerosene, coal, wood, etc., paid for	886	50	84	96	146	104	76	66	77	84	102	257
Less than $100	190	20	17	14	20	17	12	14	29	28	18	291
$100 to $199	151	8	18	16	23	16	10	6	15	18	21	251
$200 to $299	120	11	18	18	21	12	7	10	3	3	17	210
$300 to $399	123	9	9	27	31	16	7	4	2	6	13	218
$400 to $499	61	1	9	6	9	10	8	3	4	5	7	261
$500 to $599	64	1	7	7	17	4	12	5	6	-	5	243
$600 to $699	46	-	3	4	9	4	5	2	6	2	9	266
$700 to $799	42	1	2	2	4	10	5	8	1	4	6	296
$800 or more	90	-	2	3	12	14	9	15	12	17	7	357
Median	285	163	238	299	330	343	416	383	167	175	267	...
Included in rent	664	61	40	56	65	70	71	83	99	53	65	304
Fuels not used or free	7 241	392	456	652	802	909	892	833	1 062	748	495	309
Heating Equipment												
Warm-air furnace	4 226	127	116	162	322	458	616	654	879	656	236	365
Heat pump	272	1	8	3	4	27	26	35	72	76	19	429
Steam or hot water	426	33	19	41	54	64	41	73	55	35	12	296
Built-in electric units	741	42	38	78	114	144	89	60	81	48	48	276
Floor, wall, or pipeless furnace	706	74	55	107	109	96	66	46	54	23	55	240
Room heaters with flue	623	57	83	120	116	88	51	21	15	19	53	211
Room heaters without flue	1 067	82	158	205	182	138	80	53	32	17	120	208
Fireplaces, stoves, or portable heaters	551	77	92	59	83	46	31	23	30	4	107	194
None	179	10	11	30	30	22	18	17	21	7	11	255

See footnotes at end of table.

Table D-4. Gross Rent of Renter-Occupied Housing Units by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $100	$100 to $149	$150 to $199	$200 to $249	$250 to $299	$300 to $349	$350 to $399	$400 to $499	$500 or more	No cash rent	Median (dollars)
SPECIFIED RENTER OCCUPIED[1]												
Total	**8 791**	**503**	**580**	**805**	**1 014**	**1 084**	**1 039**	**982**	**1 238**	**885**	**662**	**304**
UNITS OCCUPIED LAST WINTER												
Total	**5 979**	**431**	**473**	**587**	**702**	**711**	**672**	**610**	**763**	**478**	**553**	**286**
Insufficient Heat												
Closure of rooms:												
With heating equipment	5 875	424	465	577	689	697	659	599	747	472	546	288
No rooms closed	5 260	366	401	477	613	626	591	554	695	455	482	292
Closed certain rooms	528	48	63	88	70	61	57	32	39	12	57	225
Living room only	31	-	9	7	3	2	-	2	3	-	5	...
Dining room only	13	-	1	2	2	-	3	1	-	2	2	...
1 or more bedrooms only	351	33	38	54	48	52	35	25	27	5	35	234
Other rooms or combination of rooms	124	13	15	24	17	6	17	4	9	5	14	210
Not reported	9	3	-	1	-	2	1	1	-	-	3	...
Not reported	87	10	2	12	5	10	11	13	13	5	7	306
No heating equipment	104	6	7	10	14	14	14	10	16	5	7	289
Additional heat source:												
With specified heating equipment[2]	4 625	283	264	373	504	571	571	551	704	458	346	312
No additional heat source used	3 874	233	218	300	391	455	490	482	603	412	291	319
Used kitchen stove, fireplace, or portable heater	561	43	31	50	84	79	65	52	90	33	34	284
Not reported	191	7	15	23	30	37	16	16	12	14	21	263
Lacking specified heating equipment or none	1 354	148	209	214	198	140	101	59	58	19	207	201
Rooms lacking specified heat source:												
With specified heating equipment[2]	4 625	283	264	373	504	571	571	551	704	458	346	312
No rooms lacking air ducts, registers, radiators, or heaters	3 470	183	153	211	322	411	451	475	613	415	237	337
Rooms lacking air ducts, registers, radiators, or heaters	1 011	96	92	143	163	133	109	69	81	37	89	239
1 room	278	29	23	30	48	27	23	28	31	18	23	248
2 rooms	241	30	28	40	25	42	25	15	9	2	23	219
3 rooms or more	492	36	42	72	90	65	61	25	40	17	43	240
Not reported	144	4	19	19	20	27	12	7	10	7	20	250
Lacking specified heating equipment or none	1 354	148	209	214	198	140	101	59	58	19	207	201
Housing unit uncomfortably cold:												
With specified heating equipment[2]	4 625	283	264	373	504	571	571	551	704	458	346	312
Lacking specified heating equipment or none	1 354	148	209	214	198	140	101	59	58	19	207	201
Housing unit not uncomfortably cold for 24 hours or more	1 020	103	158	146	160	97	82	52	51	13	159	207
Housing unit uncomfortably cold for 24 hours or more	293	42	44	60	32	35	19	8	8	3	42	182
Not reported	41	3	7	7	6	8	-	-	-	3	6	...
SPECIFIED RENTER OCCUPIED[1]												
Total	**8 791**	**503**	**580**	**805**	**1 014**	**1 084**	**1 039**	**982**	**1 238**	**885**	**662**	**304**
Air Conditioning												
With air conditioning	6 331	171	249	402	586	783	857	862	1 139	846	435	343
Room units	2 746	113	188	344	438	426	335	245	251	143	263	268
1	2 024	105	157	283	367	343	237	158	132	63	181	251
2	580	8	28	54	67	69	90	71	87	43	64	318
3	109	-	2	4	4	13	5	16	26	28	11	421
4	23	-	2	4	-	2	3	1	5	5	2	...
5 or more	10	-	-	-	-	-	-	-	2	3	5	...
Central system	3 585	58	61	58	148	357	522	617	888	704	172	390
With no air conditioning	2 460	332	330	403	427	301	182	120	99	38	227	206

[1]Excludes one-unit structures on 10 acres or more.
[2]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table D-5. Housing Units in Structure by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Housing units in structure					
		1	2 to 4	5 to 9	10 to 19	20 or more	Mobile home or trailer
ALL OCCUPIED HOUSING UNITS							
Total	**27 931**	**20 622**	**2 172**	**1 223**	**1 073**	**983**	**1 858**
House Heating Fuel							
Owner occupied	**18 825**	**16 699**	**323**	**86**	**61**	**198**	**1 457**
Utility gas	8 391	7 818	140	22	20	39	351
Bottled, tank, or LP gas	1 654	1 229	8	-	2	-	416
Fuel oil	1 623	1 463	27	4	4	6	119
Kerosene, etc.	178	139	2	-	-	-	37
Electricity	5 347	4 513	143	58	36	153	445
Coal or coke	100	97	-	-	-	-	3
Wood	1 446	1 367	1	1	-	-	77
Solar heat	1	1	-	-	-	-	-
Other fuel	3	3	-	-	-	-	-
None	83	70	2	2	-	-	10
Renter occupied	**9 106**	**3 923**	**1 849**	**1 137**	**1 012**	**785**	**401**
Utility gas	3 956	1 933	907	412	359	224	121
Bottled, tank, or LP gas	514	352	34	3	3	-	122
Fuel oil	849	351	131	41	25	55	47
Kerosene, etc.	109	70	20	2	-	-	17
Electricity	3 211	676	690	666	605	494	80
Coal or coke	36	36	-	-	-	-	-
Wood	436	413	15	-	-	-	8
Solar heat	-	-	-	-	-	-	-
Other fuel	14	1	1	2	5	5	-
None	181	92	51	11	16	7	5
Monthly Cost Paid for Electricity							
Specified owner occupied[1]	**14 911**	**14 911**	...	—	...	...	—
Electricity paid for	14 898	14 898	...	...	...	...	...
Less than $10	22	22	...	...	...	...	...
$10 to $19	279	279	...	...	...	...	...
$20 to $29	746	746	...	...	...	...	...
$30 to $39	1 346	1 346	...	...	...	...	...
$40 to $49	1 497	1 497	...	...	...	...	...
$50 to $59	1 853	1 853	...	...	...	...	...
$60 to $79	3 235	3 235	...	...	...	...	...
$80 to $99	1 918	1 918	...	...	...	...	...
$100 to $149	2 678	2 678	...	...	...	...	...
$150 or more	1 323	1 323	...	...	...	...	...
Median	70	70	...	...	...	...	...
No electricity used	13	13	...	...	...	...	...
Specified renter occupied[2]	**8 791**	**3 608**	**1 849**	**1 137**	**1 012**	**785**	**401**
Electricity paid for	7 532	3 390	1 558	923	817	485	359
Less than $10	103	13	47	23	9	7	3
$10 to $19	489	186	126	75	51	33	18
$20 to $29	941	408	238	91	97	74	34
$30 to $39	1 182	489	273	122	157	80	61
$40 to $49	1 017	489	182	133	110	59	45
$50 to $59	986	423	182	151	115	72	43
$60 to $79	1 316	602	258	173	135	72	75
$80 to $99	618	288	112	83	72	39	24
$100 to $149	673	366	109	57	65	36	39
$150 or more	207	129	31	12	7	13	16
Median	50	52	45	51	48	47	54
Included in rent	1 233	201	285	213	195	298	41
No electricity used	27	16	6	2	-	2	1
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas							
Specified owner occupied[1]	**14 911**	**14 911**	...	...	—	...	—
Gas paid for	9 442	9 442	...	...	...	...	...
Less than $10	291	291	...	...	...	...	...
$10 to $14	467	467	...	...	...	...	...
$15 to $19	452	452	...	...	...	...	...
$20 to $24	742	742	...	...	...	...	...
$25 to $29	737	737	...	...	...	...	...
$30 to $39	1 667	1 667	...	...	...	...	...
$40 to $49	1 477	1 477	...	...	...	...	...
$50 to $69	2 190	2 190	...	...	...	...	...
$70 to $99	962	962	...	...	...	...	...
$100 or more	457	457	...	...	...	...	...
Median	42	42	...	...	...	...	...
No gas used	5 469	5 469	...	...	...	...	...
Specified renter occupied[2]	**8 791**	**3 608**	**1 849**	**1 137**	**1 012**	**785**	**401**
Gas paid for	3 764	2 269	749	243	160	60	263
Less than $10	330	110	91	57	42	7	23
$10 to $14	321	160	64	33	21	10	32
$15 to $19	341	180	93	17	18	9	25
$20 to $24	442	227	109	27	19	8	52
$25 to $29	329	213	55	17	15	5	23
$30 to $39	640	401	125	31	18	11	53
$40 to $49	427	297	74	23	14	6	13
$50 to $69	573	424	93	25	10	-	22
$70 to $99	208	169	25	3	2	3	7
$100 or more	153	108	21	10	-	-	13
Median	32	36	26	22	19	22	24
Included in rent	1 785	380	375	329	340	338	48
No gas used	3 242	959	725	565	513	389	92

See footnotes at end of table.

Table D-5. Housing Units in Structure by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Housing units in structure					
		1	2 to 4	5 to 9	10 to 19	20 or more	Mobile home or trailer
ALL OCCUPIED HOUSING UNITS—Con.							
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.							
Specified owner occupied[1]	14 911	14 911	...	...	...	...	...
Fuel oil, kerosene, coal, wood, etc., paid for	3 130	3 130	...	...	...	...	...
Less than $100	707	707	...	...	...	...	...
$100 to $199	613	613	...	...	...	...	...
$200 to $299	372	372	...	...	...	...	...
$300 to $399	329	329	...	...	...	...	...
$400 to $499	232	232	...	...	...	...	...
$500 to $599	185	185	...	...	...	...	...
$600 to $699	195	195	...	...	...	...	...
$700 to $799	131	131	...	...	...	...	...
$800 or more	365	365	...	...	...	...	...
Median	265	265	...	...	...	...	...
Fuels not used or free	11 781	11 781	...	...	...	...	...
Specified renter occupied[2]	6 791	3 608	1 849	1 137	1 012	785	401
Fuel oil, kerosene, coal, wood, etc., paid for	886	691	104	15	9	-	67
Less than $100	190	141	24	7	9	-	8
$100 to $199	151	121	19	6	-	-	4
$200 to $299	120	95	16	-	-	-	9
$300 to $399	123	84	23	-	-	-	16
$400 to $499	61	54	3	-	-	-	5
$500 to $599	64	42	8	2	-	-	12
$600 to $699	46	33	5	-	-	-	7
$700 to $799	42	37	1	-	-	-	4
$800 or more	90	83	5	-	-	-	2
Median	285	287	256	...	...	-	373
Included in rent	664	227	149	80	88	102	17
Fuels not used or free	7 241	2 689	1 596	1 041	915	682	317
ALL OCCUPIED HOUSING UNITS							
Total	27 931	20 622	2 172	1 223	1 073	983	1 858
Heating Equipment							
Owner occupied	18 825	16 699	323	86	61	198	1 457
Warm-air furnace	10 199	8 690	136	52	41	122	1 159
Heat pump	1 130	995	43	22	12	42	16
Steam or hot water	558	511	26	3	5	13	-
Built-in electric units	1 137	1 035	26	3	3	18	51
Floor, wall, or pipeless furnace	1 273	1 203	28	-	-	-	42
Room heaters with flue	1 050	996	26	4	-	-	25
Room heaters without flue	1 517	1 440	28	-	-	-	49
Fireplaces, stoves, or portable heaters	1 879	1 759	10	1	-	4	105
None	83	70	2	2	-	-	10
Renter occupied	9 106	3 923	1 849	1 137	1 012	785	401
Warm-air furnace	4 275	1 211	745	746	734	542	298
Heat pump	276	83	68	35	33	56	1
Steam or hot water	430	115	115	82	57	61	-
Built-in electric units	754	201	213	126	115	87	13
Floor, wall, or pipeless furnace	730	422	222	34	13	15	23
Room heaters with flue	653	403	159	46	28	2	13
Room heaters without flue	1 139	833	230	39	10	-	26
Fireplaces, stoves, or portable heaters	669	563	47	17	5	14	22
None	181	92	51	11	16	7	5
ALL OCCUPIED HOUSING UNITS							
Total	27 931	20 622	2 172	1 223	1 073	983	1 858
UNITS OCCUPIED LAST WINTER							
Total	24 002	18 793	1 564	774	673	724	1 475
Insufficient Heat							
Closure of rooms:							
Owner occupied	17 752	15 912	301	62	51	183	1 243
With heating equipment	17 681	15 851	301	60	51	183	1 236
No rooms closed	16 536	14 790	282	58	48	179	1 179
Closed certain rooms	968	902	14	-	3	1	48
Living room only	46	43	2	-	-	-	1
Dining room only	17	14	2	-	-	-	1
1 or more bedrooms only	636	590	7	-	3	1	36
Other rooms or combination of rooms	239	227	3	-	-	-	9
Not reported	29	28	-	-	-	-	1
Not reported	178	158	5	3	-	3	9
No heating equipment	71	61	-	2	-	-	8
Renter occupied	6 250	2 881	1 263	711	622	541	232
With heating equipment	6 147	2 833	1 232	705	611	536	229
No rooms closed	5 482	2 413	1 115	660	570	517	207
Closed certain rooms	574	387	94	37	28	11	15
Living room only	33	24	5	-	3	-	-
Dining room only	13	9	2	2	-	-	-
1 or more bedrooms only	372	239	61	32	21	7	12
Other rooms or combination of rooms	144	104	24	4	4	5	3
Not reported	12	10	2	-	-	-	-
Not reported	91	34	22	8	13	7	7
No heating equipment	104	48	31	6	11	5	3

See footnotes at end of table.

Table D-5. **Housing Units in Structure by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983**—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Housing units in structure					
		1	2 to 4	5 to 9	10 to 19	20 or more	Mobile home or trailer
UNITS OCCUPIED LAST WINTER—Con.							
Insufficient Heat—Con.							
Additional heat source:							
Owner occupied	17 752	15 912	301	62	51	183	1 243
With specified heating equipment[3]	14 382	12 733	263	60	51	179	1 096
No additional heat source used	12 757	11 283	238	51	45	168	973
Used kitchen stove, fireplace, or portable heater	1 162	1 048	17	4	2	5	86
Not reported	463	402	8	5	4	7	37
Lacking specified heating equipment or none	3 370	3 179	38	3	-	4	147
Renter occupied	6 250	2 881	1 263	711	622	541	232
With specified heating equipment[3]	4 723	1 695	1 028	677	598	525	200
No additional heat source used	3 951	1 324	851	599	541	475	161
Used kitchen stove, fireplace, or portable heater	575	280	132	55	44	38	29
Not reported	197	91	45	23	13	14	10
Lacking specified heating equipment or none	1 527	1 187	235	34	24	16	31
Rooms lacking specified heat source:							
Owner occupied	17 752	15 912	301	62	51	183	1 243
With specified heating equipment[3]	14 382	12 733	263	60	51	179	1 096
No rooms lacking air ducts, registers, radiators, or heaters	11 329	9 811	201	53	43	169	1 051
Rooms lacking air ducts, registers, radiators, or heaters	2 675	2 592	52	4	4	4	19
1 room	701	668	15	4	4	3	7
2 rooms	536	518	14	-	-	-	3
3 rooms or more	1 438	1 405	22	-	1	1	9
Not reported	378	330	11	3	3	6	26
Lacking specified heating equipment or none	3 370	3 179	38	3	-	4	147
Renter occupied	6 250	2 881	1 263	711	622	541	232
With specified heating equipment[3]	4 723	1 695	1 028	677	598	525	200
No rooms lacking air ducts, registers, radiators, or heaters	3 526	1 019	725	569	535	493	185
Rooms lacking air ducts, registers, radiators, or heaters	1 045	587	273	91	55	29	11
1 room	283	116	60	44	20	21	3
2 rooms	253	131	85	17	15	3	2
3 rooms or more	510	340	108	30	20	5	7
Not reported	152	89	30	17	8	3	4
Lacking specified heating equipment or none	1 527	1 187	235	34	24	16	31
Housing unit uncomfortably cold:							
Owner occupied	17 752	15 912	301	62	51	183	1 243
With specified heating equipment[3]	14 382	12 733	263	60	51	179	1 096
Lacking specified heating equipment or none	3 370	3 179	38	3	-	4	147
Housing unit not uncomfortably cold for 24 hours or more	2 866	2 695	34	1	-	4	132
Housing unit uncomfortably cold for 24 hours or more	375	360	2	2	-	-	12
Not reported	128	124	2	-	-	-	3
Renter occupied	6 250	2 881	1 263	711	622	541	232
With specified heating equipment[3]	4 723	1 695	1 028	677	598	525	200
Lacking specified heating equipment or none	1 527	1 187	235	34	24	16	31
Housing unit not uncomfortably cold for 24 hours or more	1 154	899	184	21	13	14	23
Housing unit uncomfortably cold for 24 hours or more	327	258	47	8	9	-	6
Not reported	46	30	4	5	2	2	3
ALL OCCUPIED HOUSING UNITS							
Total	27 931	20 622	2 172	1 223	1 073	983	1 858
Air Conditioning							
Owner occupied	18 625	16 699	323	66	61	198	1 457
With air conditioning	15 384	13 608	270	64	59	198	1 164
Room units	6 318	5 635	116	5	13	18	531
1	3 634	3 154	53	3	6	3	415
2	1 916	1 748	40	1	7	9	111
3	552	521	19	2	-	5	5
4	152	148	4	-	-	-	-
5 or more	64	64	-	-	-	-	-
Central system	9 066	7 973	154	79	47	181	633
With no air conditioning	3 441	3 091	53	2	2	-	293
Renter occupied	9 106	3 923	1 849	1 137	1 012	785	401
With air conditioning	6 472	2 357	1 232	943	920	734	288
Room units	2 849	1 539	616	194	190	108	202
1	2 095	1 055	486	135	163	85	171
2	607	372	112	51	21	20	31
3	113	88	12	5	7	1	-
4	23	14	5	2	-	2	-
5 or more	10	10	-	-	-	-	-
Central system	3 623	817	616	749	729	625	86
With no air conditioning	2 634	1 566	617	194	92	51	113

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table D-6. Number of Rooms Per Housing Unit by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms or more	Median rooms
ALL OCCUPIED HOUSING UNITS									
Total	27 931	166	556	2 329	5 538	7 508	6 021	5 814	5.2
House Heating Fuel									
Owner occupied	18 825	28	74	485	2 510	5 473	4 992	5 272	5.7
Utility gas	8 391	3	15	165	955	2 391	2 329	2 533	5.8
Bottled, tank, or LP gas	1 654	14	27	73	397	536	383	225	5.1
Fuel oil	1 623	-	3	17	202	441	433	527	5.8
Kerosene, etc.	178	-	-	7	54	67	35	15	4.9
Electricity	5 347	2	12	160	673	1 541	1 356	1 602	5.7
Coal or coke	100	-	2	5	19	30	19	25	5.3
Wood	1 446	7	14	48	192	441	412	330	5.5
Solar heat	1	-	-	-	-	-	-	1	...
Other fuel	3	-	-	-	-	2	-	1	...
None	83	3	1	9	17	23	17	14	5.0
Renter occupied	9 106	139	482	1 844	3 028	2 035	1 038	542	4.2
Utility gas	3 956	53	180	770	1 236	987	500	228	4.3
Bottled, tank, or LP gas	514	8	12	64	194	140	73	24	4.4
Fuel oil	649	12	38	98	171	154	101	75	4.5
Kerosene, etc.	109	1	3	22	33	34	8	9	4.4
Electricity	3 211	46	204	783	1 215	580	240	143	4.0
Coal or coke	36	-	-	6	9	8	6	7	4.9
Wood	436	3	14	40	130	104	92	53	4.8
Solar heat	-	-	-	-	-	-	-	-	-
Other fuel	14	-	3	7	1	3	-	-	...
None	181	15	28	54	40	25	18	2	3.4
Monthly Cost Paid for Electricity									
Specified owner occupied[1]	14 911	9	26	185	1 356	4 352	4 314	4 670	5.8
Electricity paid for	14 898	8	26	183	1 350	4 349	4 314	4 668	5.8
Less than $10	22	-	1	4	2	4	3	9	...
$10 to $19	279	1	7	22	64	75	66	44	5.1
$20 to $29	746	2	3	28	171	275	185	82	5.1
$30 to $39	1 346	-	3	38	232	458	390	226	5.4
$40 to $49	1 497	-	5	18	219	529	419	308	5.4
$50 to $59	1 853	1	2	26	193	651	531	450	5.6
$60 to $79	3 235	2	3	32	249	1 004	1 006	940	5.8
$80 to $99	1 918	-	1	3	81	522	623	688	6.1
$100 to $149	2 678	2	2	10	102	620	780	1 162	6.3
$150 or more	1 323	-	1	2	39	211	310	760	6.5+
Median	70	...	...	39	48	63	71	88	...
No electricity used	13	1	-	2	5	3	-	3	...
Specified renter occupied[2]	8 791	137	478	1 828	2 937	1 948	978	485	4.2
Electricity paid for	7 532	54	322	1 481	2 559	1 771	894	451	4.2
Less than $10	103	2	14	33	26	16	9	3	3.6
$10 to $19	489	8	40	162	167	77	26	9	3.7
$20 to $29	941	10	59	311	272	195	65	28	3.8
$30 to $39	1 182	15	78	279	426	239	101	43	4.0
$40 to $49	1 017	12	39	201	366	240	109	51	4.2
$50 to $59	986	4	33	171	380	235	106	57	4.2
$60 to $79	1 316	3	37	180	480	352	180	83	4.4
$80 to $99	618	-	4	71	230	167	84	61	4.5
$100 to $149	673	-	13	62	171	196	152	79	5.0
$150 or more	207	-	5	10	41	54	62	37	5.4
Median	50	34	36	38	51	55	63	68	...
Included in rent	1 233	82	152	341	368	173	82	34	3.6
No electricity used	27	1	3	6	11	3	3	-	...
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas									
Specified owner occupied[1]	14 911	9	26	185	1 356	4 352	4 314	4 670	5.8
Gas paid for	9 442	5	15	134	938	2 712	2 786	2 852	5.8
Less than $10	291	1	3	10	46	83	81	68	5.5
$10 to $14	467	2	-	12	70	160	135	87	5.4
$15 to $19	452	-	-	21	66	145	135	86	5.5
$20 to $24	742	-	5	14	104	222	233	164	5.6
$25 to $29	737	-	3	21	81	246	226	160	5.6
$30 to $39	1 667	2	3	22	207	570	477	385	5.6
$40 to $49	1 477	-	1	8	126	453	459	429	5.8
$50 to $69	2 190	1	-	22	172	566	654	776	6.0
$70 to $99	962	-	1	2	45	195	267	454	6.4
$100 or more	457	-	-	3	20	72	119	243	6.5+
Median	42	...	...	27	34	38	42	51	...
No gas used	5 469	3	11	51	417	1 640	1 528	1 818	5.9
Specified renter occupied[2]	8 791	137	478	1 828	2 937	1 948	978	485	4.2
Gas paid for	3 764	24	113	620	1 200	978	580	269	4.4
Less than $10	330	4	21	109	94	69	19	13	3.8
$10 to $14	321	5	26	60	126	73	21	8	4.0
$15 to $19	341	-	11	84	118	75	41	12	4.1
$20 to $24	442	1	19	85	148	114	63	12	4.3
$25 to $29	329	3	8	52	124	87	38	17	4.3
$30 to $39	640	4	10	77	224	191	98	35	4.5
$40 to $49	427	-	8	58	106	128	90	38	4.8
$50 to $69	573	3	8	59	164	146	114	80	4.9
$70 to $99	208	3	1	14	57	57	51	26	5.0
$100 or more	153	-	-	21	39	37	26	30	4.9
Median	32	...	18	23	29	33	40	50	...
Included in rent	1 785	67	168	471	542	347	137	53	3.8
No gas used	3 242	46	196	737	1 195	624	281	163	4.0

See footnotes at end of table.

Table D-6. **Number of Rooms Per Housing Unit by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983**—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms or more	Median rooms
ALL OCCUPIED HOUSING UNITS—Con.									
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.									
Specified owner occupied[1]	14 911	9	26	185	1 356	4 352	4 314	4 670	5.8
Fuel oil, kerosene, coal, wood, etc., paid for	3 130	2	7	26	274	786	903	1 131	6.0
Less than $100	707	2	2	4	50	155	211	284	6.2
$100 to $199	613	-	2	4	51	164	192	200	5.9
$200 to $299	372	-	3	6	33	98	108	126	5.9
$300 to $399	329	-	-	6	49	89	86	99	5.7
$400 to $499	232	-	-	4	37	71	53	67	5.6
$500 to $599	185	-	-	1	16	56	49	64	5.9
$600 to $699	195	-	1	-	21	59	65	49	5.7
$700 to $799	131	-	-	-	6	30	40	55	6.2
$800 or more	365	-	-	1	12	64	100	187	6.5+
Median	265	...	...	...	308	275	245	264	...
Fuels not used or free	11 781	7	19	159	1 081	3 565	3 411	3 540	5.8
Specified renter occupied[2]	8 791	137	478	1 828	2 937	1 948	978	485	4.2
Fuel oil, kerosene, coal, wood, etc., paid for	886	3	17	89	255	236	165	121	4.8
Less than $100	190	1	8	18	51	53	37	22	4.8
$100 to $199	151	-	2	18	47	41	25	18	4.7
$200 to $299	120	2	3	18	37	28	22	9	4.5
$300 to $399	123	-	5	14	46	28	20	11	4.4
$400 to $499	61	-	-	4	17	19	10	12	5.0
$500 to $599	64	-	-	8	25	15	10	7	4.5
$600 to $699	46	-	-	4	9	14	12	6	5.2
$700 to $799	42	-	-	1	7	10	10	15	5.9
$800 or more	90	-	-	3	17	30	18	22	5.3
Median	285	...	...	244	279	287	289	402	...
Included in rent	664	23	66	151	200	136	63	27	4.0
Fuels not used or free	7 241	112	394	1 588	2 483	1 576	750	338	4.1
ALL OCCUPIED HOUSING UNITS									
Total	27 931	166	556	2 329	5 538	7 508	6 021	5 814	5.2
Heating Equipment									
Owner occupied	18 825	28	74	485	2 510	5 473	4 982	5 272	5.7
Warm-air furnace	10 199	7	27	197	1 174	2 737	2 734	3 325	5.8
Heat pump	1 130	2	-	35	95	248	273	477	6.2
Steam or hot water	558	-	-	5	29	82	184	258	6.4
Built-in electric units	1 137	-	4	32	136	430	285	249	5.4
Floor, wall, or pipeless furnace	1 273	4	8	23	244	450	362	183	5.3
Room heaters with flue	1 050	2	7	27	221	392	244	157	5.2
Room heaters without flue	1 517	4	7	88	305	516	388	210	5.2
Fireplaces, stoves, or portable heaters	1 879	7	21	70	289	595	496	400	5.4
None	83	3	1	9	17	23	17	14	5.0
Renter occupied	9 106	139	482	1 844	3 028	2 035	1 038	542	4.2
Warm-air furnace	4 275	42	166	867	1 494	959	481	267	4.2
Heat pump	276	2	13	63	105	46	24	23	4.1
Steam or hot water	430	12	37	112	107	87	41	35	4.0
Built-in electric units	754	23	76	211	251	108	54	31	3.8
Floor, wall, or pipeless furnace	730	7	29	115	258	194	86	40	4.3
Room heaters with flue	653	10	34	96	209	180	88	34	4.4
Room heaters without flue	1 139	13	66	244	355	279	134	47	4.2
Fireplaces, stoves, or portable heaters	669	16	32	82	210	154	111	64	4.5
None	181	15	28	54	40	25	18	2	3.4
ALL OCCUPIED HOUSING UNITS									
Total	27 931	166	556	2 329	5 538	7 508	6 021	5 814	5.2
UNITS OCCUPIED LAST WINTER									
Total	24 002	105	364	1 644	4 339	6 657	5 531	5 363	5.3
Insufficient Heat									
Closure of rooms:									
Owner occupied	17 752	21	64	437	2 307	5 188	4 752	4 984	5.7
With heating equipment	17 681	20	63	432	2 292	5 164	4 738	4 973	5.7
No rooms closed	16 536	18	58	397	2 129	4 793	4 451	4 691	5.7
Closed certain rooms	968	-	5	28	146	325	242	222	5.4
Living room only	46	-	-	1	7	14	14	10	5.6
Dining room only	17	-	-	-	2	7	1	7	...
1 or more bedrooms only	636	-	3	21	105	224	154	128	5.3
Other rooms or combination of rooms	239	-	-	4	32	68	67	68	5.7
Not reported	29	-	2	2	-	12	5	9	...
Not reported	178	2	-	8	17	46	44	60	5.8
No heating equipment	71	1	1	4	15	23	15	11	5.1
Renter occupied	6 250	84	300	1 207	2 032	1 469	779	379	4.2
With heating equipment	6 147	75	287	1 176	2 010	1 456	766	377	4.3
No rooms closed	5 482	72	276	1 059	1 806	1 276	664	328	4.2
Closed certain rooms	574	2	5	89	177	158	96	47	4.6
Living room only	33	-	-	15	5	9	2	2	...
Dining room only	13	-	-	2	1	7	2	2	...
1 or more bedrooms only	372	-	5	43	133	108	63	21	4.5
Other rooms or combination of rooms	144	2	-	28	34	32	26	22	4.7
Not reported	12	-	-	-	4	3	3	1	...
Not reported	91	1	6	28	26	21	7	2	3.9
No heating equipment	104	9	13	32	22	13	13	2	3.4
Additional heat source:									
Owner occupied	17 752	21	64	437	2 307	5 188	4 752	4 984	5.7
With specified heating equipment[3]	14 382	10	37	281	1 717	4 084	3 875	4 378	5.8
No additional heat source used	12 757	10	32	238	1 506	3 621	3 475	3 875	5.8
Used kitchen stove, fireplace, or portable heater	1 162	-	4	34	136	313	290	386	5.8
Not reported	463	-	1	9	75	150	111	117	5.5
Lacking specified heating equipment or none	3 370	11	27	156	590	1 104	876	606	5.3

See footnotes at end of table.

Table D-6. Number of Rooms Per Housing Unit by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms or more	Median rooms
UNITS OCCUPIED LAST WINTER—Con.									
Insufficient Heat—Con.									
Additional heat source—Con.									
Renter occupied	6 250	84	300	1 207	2 032	1 469	779	379	4.2
With specified heating equipment[3]	4 723	53	218	937	1 562	1 096	558	299	4.2
No additional heat source used	3 951	43	200	814	1 316	914	431	233	4.2
Used kitchen stove, fireplace, or portable heater	575	6	9	80	177	141	102	60	4.6
Not reported	197	4	9	43	69	41	25	6	4.1
Lacking specified heating equipment or none	1 527	31	82	270	470	373	221	80	4.3
Rooms lacking specified heat source:									
Owner occupied	17 752	21	64	437	2 307	5 188	4 752	4 984	5.7
With specified heating equipment[3]	14 382	10	37	281	1 717	4 084	3 875	4 378	5.8
No rooms lacking air ducts, registers, radiators, or heaters	11 329	8	27	227	1 266	3 130	3 039	3 631	5.8
Rooms lacking air ducts, registers, radiators, or heaters	2 675	2	6	46	382	834	734	670	5.6
1 room	701	2	3	25	51	157	201	263	6.1
2 rooms	536	-	4	13	133	149	112	125	5.3
3 rooms or more	1 438	-	-	8	198	527	422	283	5.5
Not reported	378	-	2	8	69	120	102	77	5.4
Lacking specified heating equipment or none	3 370	11	27	156	590	1 104	876	606	5.3
Renter occupied	6 250	84	300	1 207	2 032	1 469	779	379	4.2
With specified heating equipment[3]	4 723	53	218	937	1 562	1 096	558	299	4.2
No rooms lacking air ducts, registers, radiators, or heaters	3 526	47	182	770	1 145	769	393	219	4.2
Rooms lacking air ducts, registers, radiators, or heaters	1 045	2	31	145	357	290	145	76	4.5
1 room	283	2	31	85	62	45	35	23	3.9
2 rooms	253	-	-	54	131	42	16	10	4.0
3 rooms or more	510	-	-	6	164	203	93	44	4.9
Not reported	152	4	5	22	60	38	20	3	4.2
Lacking specified heating equipment or none	1 527	31	82	270	470	373	221	80	4.3
Housing unit uncomfortably cold:									
Owner occupied	17 752	21	64	437	2 307	5 188	4 752	4 984	5.7
With specified heating equipment[3]	14 382	10	37	281	1 717	4 084	3 875	4 378	5.8
Lacking specified heating equipment or none	3 370	11	27	156	590	1 104	876	606	5.3
Housing unit not uncomfortably cold for 24 hours or more	2 866	8	14	128	504	953	741	518	5.3
Housing unit uncomfortably cold for 24 hours or more	375	1	13	26	66	110	91	68	5.2
Not reported	128	2	-	2	20	40	44	20	5.5
Renter occupied	6 250	84	300	1 207	2 032	1 469	779	379	4.2
With specified heating equipment[3]	4 723	53	218	937	1 562	1 096	558	299	4.2
Lacking specified heating equipment or none	1 527	31	82	270	470	373	221	80	4.3
Housing unit not uncomfortably cold for 24 hours or more	1 154	20	62	190	361	290	169	63	4.3
Housing unit uncomfortably cold for 24 hours or more	327	9	15	74	97	73	45	13	4.2
Not reported	46	2	5	5	12	11	7	4	4.4
ALL OCCUPIED HOUSING UNITS									
Total	27 931	166	556	2 329	5 538	7 608	6 021	5 814	5.2
Air Conditioning									
Owner occupied	18 825	28	74	485	2 510	5 473	4 982	5 272	5.7
With air conditioning	15 384	19	51	343	1 866	4 295	4 180	4 630	5.8
Room units	6 318	13	39	186	1 030	2 125	1 739	1 188	5.4
1	3 634	13	32	142	729	1 343	871	505	5.2
2	1 916	-	8	40	250	596	616	405	5.6
3	552	-	-	4	47	145	182	174	5.9
4	152	-	-	-	4	39	51	59	6.2
5 or more	64	-	-	-	-	2	19	43	6.5+
Central system	9 066	7	12	157	835	2 170	2 441	3 444	6.0
With no air conditioning	3 441	8	23	142	644	1 179	803	643	5.3
Renter occupied	9 106	139	482	1 844	3 028	2 035	1 038	542	4.2
With air conditioning	6 472	68	333	1 325	2 182	1 442	725	378	4.2
Room units	2 849	57	163	514	895	703	373	144	4.3
1	2 095	55	150	434	660	495	227	74	4.1
2	607	2	14	72	202	165	113	40	4.6
3	113	-	-	4	26	37	24	21	5.2
4	23	-	-	3	7	5	4	3	...
5 or more	10	-	-	-	-	-	5	5	...
Central system	3 623	30	170	811	1 288	739	352	234	4.1
With no air conditioning	2 634	51	148	519	846	593	313	164	4.2

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table D-7. Year Structure Built by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Year structure built					
		April 1970 or later	March 1970 or earlier				
			Total	1960 to March 1970	1950 to 1959	1940 to 1949	1939 or earlier
ALL OCCUPIED HOUSING UNITS							
Total	**27 931**	**9 298**	**18 633**	**6 290**	**4 671**	**2 774**	**4 898**
House Heating Fuel							
Owner occupied	**18 825**	**6 456**	**12 369**	**4 384**	**3 419**	**1 766**	**2 800**
Utility gas	8 391	1 764	6 627	2 145	1 964	977	1 540
Bottled, tank, or LP gas	1 654	564	1 090	361	252	181	296
Fuel oil	1 623	213	1 410	371	396	238	405
Kerosene, etc.	178	33	145	52	36	30	27
Electricity	5 347	3 371	1 975	1 082	550	159	184
Coal or coke	100	15	86	7	16	24	38
Wood	1 446	488	958	343	173	150	291
Solar heat	1	-	1	1	-	-	-
Other fuel	3	-	3	2	1	-	-
None	83	9	75	20	30	7	18
Renter occupied	**9 106**	**2 842**	**6 264**	**1 906**	**1 252**	**1 008**	**2 098**
Utility gas	3 956	645	3 311	856	726	601	1 128
Bottled, tank, or LP gas	514	93	422	117	75	72	158
Fuel oil	649	57	592	122	117	111	242
Kerosene, etc.	109	2	107	30	15	10	52
Electricity	3 211	2 007	1 204	712	210	94	188
Coal or coke	36	-	36	3	3	2	27
Wood	436	24	412	43	67	65	237
Solar heat	-	-	-	-	-	-	-
Other fuel	14	-	14	-	-	3	12
None	181	14	167	21	39	52	55
Monthly Cost Paid for Electricity							
Specified owner occupied[1]	**14 911**	**4 557**	**10 354**	**3 617**	**3 109**	**1 494**	**2 135**
Electricity paid for	14 898	4 555	10 343	3 614	3 106	1 493	2 129
Less than $10	22	2	20	1	7	3	9
$10 to $19	279	16	263	30	37	58	137
$20 to $29	746	54	692	121	166	157	248
$30 to $39	1 346	170	1 176	244	337	231	364
$40 to $49	1 497	244	1 253	367	363	254	270
$50 to $59	1 853	415	1 438	480	459	207	292
$60 to $79	3 235	957	2 278	842	764	282	391
$80 to $99	1 918	774	1 144	497	383	103	162
$100 to $149	2 678	1 271	1 407	696	413	134	163
$150 or more	1 323	651	671	337	177	65	93
Median	70	90	63	73	65	52	51
No electricity used	13	2	12	3	3	1	5
Specified renter occupied[2]	**8 791**	**2 816**	**5 975**	**1 865**	**1 202**	**978**	**1 929**
Electricity paid for	7 532	2 532	5 000	1 454	1 024	839	1 683
Less than $10	103	30	74	19	15	9	30
$10 to $19	489	69	419	94	86	78	160
$20 to $29	941	166	775	172	156	140	307
$30 to $39	1 182	316	866	217	173	147	329
$40 to $49	1 017	307	710	200	139	119	253
$50 to $59	986	384	602	195	119	102	187
$60 to $79	1 316	551	765	254	164	125	223
$80 to $99	618	303	315	103	77	62	73
$100 to $149	673	314	359	150	69	45	94
$150 or more	207	92	115	50	26	13	27
Median	50	59	45	51	45	44	41
Included in rent	1 233	284	949	409	177	132	231
No electricity used	27	1	26	3	2	7	15
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas							
Specified owner occupied[1]	**14 911**	**4 557**	**10 354**	**3 617**	**3 109**	**1 494**	**2 135**
Gas paid for	9 442	1 823	7 620	2 414	2 299	1 172	1 735
Less than $10	291	62	230	54	74	39	62
$10 to $14	467	95	372	88	124	70	90
$15 to $19	452	105	347	94	101	71	81
$20 to $24	742	141	601	190	184	111	116
$25 to $29	737	161	576	161	193	85	137
$30 to $39	1 667	289	1 377	433	410	235	299
$40 to $49	1 477	277	1 200	383	350	182	285
$50 to $69	2 190	412	1 778	645	529	232	372
$70 to $99	962	176	786	260	241	106	180
$100 or more	457	103	354	107	93	42	112
Median	42	42	42	44	42	38	43
No gas used	5 469	2 734	2 735	1 203	810	322	400
Specified renter occupied[2]	**8 791**	**2 816**	**5 975**	**1 865**	**1 202**	**978**	**1 929**
Gas paid for	3 764	525	3 239	679	696	614	1 249
Less than $10	330	36	294	68	65	56	105
$10 to $14	321	57	264	62	56	39	106
$15 to $19	341	56	285	60	65	44	115
$20 to $24	442	77	364	86	67	85	126
$25 to $29	329	46	283	54	69	45	115
$30 to $39	640	103	538	118	117	107	196
$40 to $49	427	41	386	71	87	74	155
$50 to $69	573	73	500	104	118	98	180
$70 to $99	208	19	189	34	32	46	77
$100 or more	153	18	135	22	21	18	74
Median	32	28	32	31	32	33	33
Included in rent	1 785	487	1 298	553	245	190	311
No gas used	3 242	1 804	1 439	634	261	175	389

See footnotes at end of table.

Table D-7. Year Structure Built by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Year structure built					
		April 1970 or later	March 1970 or earlier				
			Total	1960 to March 1970	1950 to 1959	1940 to 1949	1939 or earlier
ALL OCCUPIED HOUSING UNITS—Con.							
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.							
Specified owner occupied[1]	14 911	4 557	10 354	3 617	3 109	1 494	2 135
Fuel oil, kerosene, coal, wood, etc., paid for	3 130	833	2 297	741	607	386	562
Less than $100	707	316	391	184	88	55	64
$100 to $199	613	236	377	162	103	52	61
$200 to $299	372	106	266	83	65	55	64
$300 to $399	329	52	277	77	87	50	63
$400 to $499	232	40	192	65	50	33	45
$500 to $599	185	22	163	31	53	33	46
$600 to $699	195	16	178	51	47	29	51
$700 to $799	131	14	118	21	31	19	46
$800 or more	365	32	334	65	84	61	123
Median	265	142	341	229	355	364	485
Fuels not used or free	11 781	3 724	8 057	2 876	2 502	1 107	1 572
Specified renter occupied[2]	8 791	2 816	5 975	1 865	1 202	978	1 929
Fuel oil, kerosene, coal, wood, etc., paid for	886	112	774	142	148	141	343
Less than $100	190	49	141	29	32	22	58
$100 to $199	151	18	133	26	29	29	49
$200 to $299	120	9	111	14	18	33	46
$300 to $399	123	13	110	19	21	17	53
$400 to $499	61	7	54	15	9	8	22
$500 to $599	64	5	58	12	6	9	31
$600 to $699	46	4	42	11	6	6	18
$700 to $799	42	4	38	5	7	5	21
$800 or more	90	3	87	12	19	12	44
Median	285	140	302	317	268	259	334
Included in rent	664	130	534	155	97	101	181
Fuels not used or free	7 241	2 574	4 667	1 568	958	737	1 405
ALL OCCUPIED HOUSING UNITS							
Total	27 931	9 298	18 633	6 290	4 671	2 774	4 898
Heating Equipment							
Owner occupied	18 825	6 456	12 369	4 384	3 419	1 766	2 800
Warm-air furnace	10 199	4 409	5 790	2 683	1 743	575	789
Heat pump	1 130	769	361	179	120	25	37
Steam or hot water	558	21	537	107	70	86	274
Built-in electric units	1 137	447	690	369	180	68	72
Floor, wall, or pipeless furnace	1 273	83	1 189	216	422	245	306
Room heaters with flue	1 050	52	998	149	235	199	416
Room heaters without flue	1 517	106	1 411	233	337	343	498
Fireplaces, stoves, or portable heaters	1 879	560	1 318	429	282	219	389
None	83	9	75	20	30	7	18
Renter occupied	9 106	2 842	6 264	1 906	1 252	1 008	2 098
Warm-air furnace	4 275	2 198	2 078	1 099	412	212	355
Heat pump	276	191	85	51	8	6	20
Steam or hot water	430	17	413	59	58	84	212
Built-in electric units	754	306	448	217	91	37	104
Floor, wall, or pipeless furnace	730	43	687	168	216	141	162
Room heaters with flue	653	12	641	71	124	124	321
Room heaters without flue	1 139	28	1 111	131	190	249	540
Fireplaces, stoves, or portable heaters	669	34	635	89	113	103	330
None	181	14	167	21	39	52	55
ALL OCCUPIED HOUSING UNITS							
Total	27 931	9 298	18 633	6 290	4 671	2 774	4 898
UNITS OCCUPIED LAST WINTER							
Total	24 002	7 455	16 547	5 545	4 245	2 476	4 281
Insufficient Heat							
Closure of rooms:							
Owner occupied	17 752	5 783	11 968	4 219	3 311	1 719	2 719
With heating equipment	17 681	5 778	11 903	4 204	3 281	1 713	2 706
No rooms closed	16 536	5 583	10 953	3 995	3 080	1 537	2 342
Closed certain rooms	968	148	820	183	172	157	327
Living room only	46	5	41	9	9	4	20
Dining room only	17	3	15	-	7	1	6
1 or more bedrooms only	636	105	531	94	107	112	218
Other rooms or combination of rooms	239	33	206	53	45	35	72
Not reported	29	2	27	6	4	6	11
Not reported	178	48	130	46	29	18	36
No heating equipment	71	5	65	15	30	7	13
Renter occupied	6 250	1 672	4 578	1 327	934	756	1 562
With heating equipment	6 147	1 662	4 485	1 310	910	733	1 533
No rooms closed	5 482	1 586	3 896	1 215	802	611	1 268
Closed certain rooms	574	56	517	69	91	110	247
Living room only	33	1	32	-	3	9	21
Dining room only	13	-	13	-	2	6	5
1 or more bedrooms only	372	48	324	52	71	63	139
Other rooms or combination of rooms	144	5	139	15	14	30	80
Not reported	12	2	9	3	2	3	3
Not reported	91	19	72	25	17	12	17
No heating equipment	104	10	93	17	23	24	29

See footnotes at end of table.

Table D-7. Year Structure Built by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Year structure built					
		April 1970 or later	March 1970 or earlier				
			Total	1960 to March 1970	1950 to 1959	1940 to 1949	1939 or earlier
UNITS OCCUPIED LAST WINTER—Con.							
Insufficient Heat—Con.							
Additional heat source:							
Owner occupied	17 752	5 783	11 968	4 219	3 311	1 719	2 719
With specified heating equipment[3]	14 382	5 147	9 235	3 560	2 675	1 159	1 841
No additional heat source used	12 757	4 736	8 021	3 227	2 361	964	1 469
Used kitchen stove, fireplace, or portable heater	1 162	304	859	256	212	119	272
Not reported	463	107	355	77	102	76	101
Lacking specified heating equipment or none	3 370	636	2 733	659	636	560	878
Renter occupied	6 250	1 672	4 578	1 327	934	756	1 562
With specified heating equipment[3]	4 723	1 620	3 103	1 147	666	439	852
No additional heat source used	3 951	1 483	2 468	985	538	316	629
Used kitchen stove, fireplace, or portable heater	575	100	475	120	104	84	166
Not reported	197	37	160	42	24	38	57
Lacking specified heating equipment or none	1 527	52	1 475	180	268	318	710
Rooms lacking specified heat source:							
Owner occupied	17 752	5 783	11 968	4 219	3 311	1 719	2 719
With specified heating equipment[3]	14 382	5 147	9 235	3 560	2 675	1 159	1 841
No rooms lacking air ducts, registers, radiators, or heaters	11 329	4 781	6 547	2 944	1 896	677	1 031
Rooms lacking air ducts, registers, radiators, or heaters	2 675	283	2 392	546	695	431	720
1 room	701	172	530	182	145	55	147
2 rooms	536	37	499	83	129	101	185
3 rooms or more	1 438	75	1 364	281	421	274	388
Not reported	378	83	296	70	64	51	90
Lacking specified heating equipment or none	3 370	636	2 733	659	636	560	878
Renter occupied	6 250	1 672	4 578	1 327	934	756	1 562
With specified heating equipment[3]	4 723	1 620	3 103	1 147	666	439	852
No rooms lacking air ducts, registers, radiators, or heaters	3 526	1 518	2 008	914	405	227	461
Rooms lacking air ducts, registers, radiators, or heaters	1 045	88	960	199	237	182	341
1 room	283	40	242	68	47	39	90
2 rooms	253	28	225	45	58	34	88
3 rooms or more	510	17	493	87	132	109	164
Not reported	152	16	135	34	23	30	49
Lacking specified heating equipment or none	1 527	52	1 475	180	268	318	710
Housing unit uncomfortably cold:							
Owner occupied	17 752	5 783	11 968	4 219	3 311	1 719	2 719
With specified heating equipment[3]	14 382	5 147	9 235	3 560	2 675	1 159	1 841
Lacking specified heating equipment or none	3 370	636	2 733	659	636	560	878
Housing unit not uncomfortably cold for 24 hours or more	2 866	561	2 305	578	538	469	720
Housing unit uncomfortably cold for 24 hours or more	375	51	324	50	75	76	122
Not reported	128	24	104	31	23	15	35
Renter occupied	6 250	1 672	4 578	1 327	934	756	1 562
With specified heating equipment[3]	4 723	1 620	3 103	1 147	666	439	852
Lacking specified heating equipment or none	1 527	52	1 475	180	268	318	710
Housing unit not uncomfortably cold for 24 hours or more	1 154	40	1 114	142	216	238	518
Housing unit uncomfortably cold for 24 hours or more	327	12	315	30	42	68	175
Not reported	46	-	46	7	10	12	17
ALL OCCUPIED HOUSING UNITS							
Total	27 931	9 298	18 633	6 290	4 671	2 774	4 898
Air Conditioning							
Owner occupied	18 825	6 456	12 369	4 384	3 419	1 766	2 800
With air conditioning	15 384	5 739	9 644	3 743	2 856	1 244	1 801
Room units	6 318	1 094	5 223	1 379	1 584	877	1 384
1	3 634	755	2 879	845	810	511	713
2	1 916	294	1 622	400	537	248	437
3	552	34	518	110	178	88	142
4	152	11	141	17	40	26	58
5 or more	64	-	64	7	19	4	34
Central system	9 066	4 645	4 421	2 365	1 271	367	417
With no air conditioning	3 441	716	2 725	640	563	523	999
Renter occupied	9 106	2 842	6 264	1 906	1 252	1 008	2 098
With air conditioning	6 472	2 605	3 868	1 531	846	545	945
Room units	2 849	342	2 507	595	616	461	836
1	2 095	283	1 812	457	416	343	595
2	607	47	560	115	163	96	187
3	113	10	103	19	28	19	37
4	23	2	22	4	9	1	8
5 or more	10	-	10	-	-	2	9
Central system	3 623	2 263	1 360	936	230	84	110
With no air conditioning	2 634	238	2 397	375	406	462	1 153

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table D-8. Monthly Cost Paid for Electricity by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Monthly cost paid for electricity											
		Less than $10	$10 to $19	$20 to $29	$30 to $39	$40 to $49	$50 to $59	$60 to $79	$80 to $99	$100 to $149	$150 or more	No electricity used or not reported[1]	Median (dollars)
SPECIFIED OWNER OCCUPIED[2]													
Total	**14 911**	**22**	**279**	**746**	**1 346**	**1 497**	**1 853**	**3 235**	**1 918**	**2 678**	**1 323**	**13**	**70**
House Heating Fuel													
Electricity	4 138	1	13	32	89	130	248	835	722	1 282	788	-	100
Other than electricity	10 706	21	262	711	1 249	1 352	1 597	2 389	1 193	1 385	533	13	61
Utility gas	7 448	11	167	492	837	915	1 076	1 643	843	1 032	429	4	63
Bottled, tank, or LP gas	861	2	30	84	111	109	140	191	74	84	33	3	56
Fuel oil	1 305	4	33	76	173	176	195	302	146	159	41	-	59
Kerosene, etc.	121	-	5	11	18	25	21	17	12	9	3	-	50
Coal or coke	66	-	11	9	13	10	8	11	4	1	-	-	39
Wood	903	5	15	39	96	118	158	225	115	100	27	6	62
Solar heat	1	-	-	-	-	-	-	-	-	1	-	-	...
Other fuel	1	-	-	-	-	-	-	1	-	-	-	-	...
None	66	-	4	3	7	15	9	11	4	11	2	-	54
Heating Equipment													
Warm-air furnace	8 112	9	50	250	517	715	958	1 812	1 112	1 740	947	3	76
Heat pump	916	-	2	2	9	31	39	185	182	314	152	-	101
Steam or hot water	481	2	39	48	79	75	81	83	17	43	14	-	49
Built-in electric units	940	-	1	12	33	45	103	240	189	223	94	-	84
Floor, wall, or pipeless furnace	1 119	1	34	119	208	178	161	218	100	85	15	-	51
Room heaters with flue	826	2	42	101	151	124	126	153	57	52	18	-	48
Room heaters without flue	1 225	3	71	144	199	163	174	237	111	81	39	4	52
Fireplaces, stoves, or portable heaters	1 226	6	35	67	142	150	204	297	147	129	42	6	60
None	66	-	4	3	7	15	9	11	4	11	2	-	54
Persons													
1 person	2 226	12	169	332	396	277	301	391	138	167	34	9	46
2 persons	4 772	2	61	245	505	587	666	1 134	567	715	286	3	65
3 persons	2 940	1	20	75	205	280	349	653	440	654	262	1	76
4 persons	2 948	6	16	62	134	221	307	627	464	703	408	-	84
5 persons	1 265	1	11	11	57	76	140	290	181	278	220	-	85
6 persons	469	-	2	14	30	41	55	92	64	95	76	1	80
7 persons or more	290	-	-	6	18	15	36	48	63	65	38	-	86
Median	2.6	...	1.5-	1.7	2.0	2.3	2.4	2.6	3.1	3.2	3.7	...	...
Air Conditioning													
With air conditioning	12 375	7	106	377	875	1 125	1 476	2 817	1 756	2 555	1 278	2	75
Room units	5 000	6	90	287	626	717	779	1 189	561	566	179	-	59
1	2 747	4	76	215	353	430	436	617	292	250	73	-	56
2	1 587	-	12	61	210	207	240	379	189	221	68	-	63
3	482	2	-	11	49	63	77	140	53	68	19	-	65
4	126	-	2	-	12	10	21	43	15	14	8	-	68
5 or more	59	-	-	-	2	7	5	10	12	12	10	-	88
Central system	7 376	2	17	91	249	408	697	1 628	1 194	1 990	1 099	2	89
With no air conditioning	2 536	15	173	368	471	373	377	418	163	123	45	11	46
SPECIFIED RENTER OCCUPIED[3]													
Total	**8 791**	**103**	**489**	**941**	**1 182**	**1 017**	**986**	**1 316**	**618**	**673**	**207**	**1 260**	**50**
House Heating Fuel													
Electricity	3 179	14	56	184	321	339	433	631	358	360	121	365	62
Other than electricity	5 434	89	426	731	817	658	532	673	253	304	84	867	43
Utility gas	3 897	67	311	533	579	450	375	453	170	227	59	673	42
Bottled, tank, or LP gas	433	2	27	55	69	75	31	79	23	32	11	30	46
Fuel oil	631	13	39	71	96	74	59	70	39	26	12	131	44
Kerosene, etc.	104	1	9	16	18	10	16	18	5	4	1	5	44
Coal or coke	27	2	4	7	6	2	2	3	1	1	-	-	...
Wood	326	4	33	50	49	47	51	49	15	14	1	17	44
Solar heat	-	-	-	-	-	-	-	-	-	-	-	-	-
Other fuel	14	-	4	-	-	-	-	-	-	-	-	11	...
None	179	-	7	26	44	21	21	12	7	9	3	28	39
Heating Equipment													
Warm-air furnace	4 226	29	156	306	489	434	506	733	350	420	133	671	56
Heat pump	272	-	-	18	21	41	46	53	30	31	13	19	60
Steam or hot water	426	24	57	62	58	18	12	15	7	11	7	155	28
Built-in electric units	741	6	20	54	97	86	89	130	70	59	13	117	55
Floor, wall, or pipeless furnace	706	18	51	99	96	101	76	89	45	42	10	79	44
Room heaters with flue	623	9	60	96	108	83	54	79	34	24	8	87	40
Room heaters without flue	1 067	11	95	195	179	166	102	116	49	50	18	87	41
Fireplaces, stoves, or portable heaters	551	6	42	84	90	68	79	90	26	25	3	37	45
None	179	-	7	26	44	21	21	12	7	9	3	28	39
Persons													
1 person	2 694	58	252	416	422	309	268	270	91	71	20	516	38
2 persons	2 579	17	137	234	379	317	327	398	177	192	36	365	51
3 persons	1 524	5	43	129	166	171	156	302	154	167	39	192	59
4 persons	1 093	4	28	77	110	114	127	206	111	149	57	110	63
5 persons	517	7	18	50	55	53	64	81	60	54	34	41	58
6 persons	216	5	7	17	26	28	29	35	12	25	12	20	55
7 persons or more	170	7	4	19	24	25	14	23	14	16	9	15	48
Median	2.1	1.5-	1.5-	1.7	1.9	2.1	2.2	2.5	2.8	2.9	3.6	1.8	...

See footnotes at end of table.

Table D-8. Monthly Cost Paid for Electricity by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Monthly cost paid for electricity											
		Less than $10	$10 to $19	$20 to $29	$30 to $39	$40 to $49	$50 to $59	$60 to $79	$80 to $99	$100 to $149	$150 or more	No electricity used or not reported[1]	Median (dollars)
SPECIFIED RENTER OCCUPIED[3]—Con.													
Air Conditioning													
With air conditioning	6 331	39	195	488	739	735	795	1 103	544	602	184	907	56
Room units	2 746	30	126	293	396	382	359	433	176	204	39	307	49
1	2 024	29	106	242	306	293	255	290	120	117	26	241	46
2	580	2	17	46	78	75	87	114	39	67	7	48	55
3	109	-	2	3	9	14	11	27	14	12	4	13	66
4	23	-	2	2	3	1	4	2	3	4	1	2	...
5 or more	10	-	-	-	-	-	2	2	-	3	-	3	...
Central system	3 585	9	69	195	343	352	436	670	367	398	145	601	62
With no air conditioning	2 460	64	293	453	443	283	190	214	74	70	24	352	35

[1]Renter households with electricity costs included in their rent are included in this category.
[2]Limited to one-unit structures on less than 10 acres and no business on property.
[3]Excludes one-unit structures on 10 acres or more.

Table D-9. Monthly Cost Paid for Gas by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Monthly cost paid for utility, bottled, tank, or LP gas											
		Less than $10	$10 to $14	$15 to $19	$20 to $24	$25 to $29	$30 to $39	$40 to $49	$50 to $69	$70 to $99	$100 or more	No gas used or not reported[1]	Median (dollars)
SPECIFIED OWNER OCCUPIED[2]													
Total	**14 911**	**291**	**467**	**452**	**742**	**737**	**1 667**	**1 477**	**2 190**	**962**	**457**	**5 469**	**42**
House Heating Fuel													
Gas	8 310	131	260	333	603	607	1 508	1 404	2 105	912	427	-	44
Utility gas	7 448	97	236	297	533	528	1 376	1 294	1 907	810	369	-	45
Bottled, tank, or LP gas	861	34	44	35	70	78	132	110	198	103	58	-	43
Other than gas	6 535	151	182	112	135	129	156	71	85	48	30	5 435	23
Fuel oil	1 305	42	70	38	34	37	40	8	7	5	11	1 014	19
Kerosene, etc.	121	5	6	3	2	3	6	1	2	-	1	92	...
Electricity	4 138	61	57	32	62	53	72	36	49	40	12	3 664	27
Coal or coke	66	7	-	1	-	1	-	-	1	1	-	56	...
Wood	903	35	50	39	38	36	38	26	26	2	6	607	23
Solar heat	1	-	-	-	-	-	-	-	-	-	-	1	-
Other fuel	1	-	-	-	-	-	-	-	-	-	-	1	-
None	66	10	5	8	3	1	3	2	-	2	-	33	...
Heating Equipment													
Warm-air furnace	8 112	99	189	196	395	382	936	945	1 467	685	307	2 512	46
Heat pump	916	6	9	-	4	9	10	6	10	7	1	854	33
Steam or hot water	481	27	27	12	13	18	24	25	70	57	49	158	54
Built-in electric units	940	16	11	6	9	9	5	4	15	6	4	856	25
Floor, wall, or pipeless furnace	1 119	26	46	56	99	87	250	179	206	56	13	101	37
Room heaters with flue	826	23	30	44	54	63	118	90	148	59	36	160	40
Room heaters without flue	1 225	29	75	77	109	112	262	187	229	80	39	27	37
Fireplaces, stoves, or portable heaters	1 226	57	77	53	56	56	57	38	46	10	8	767	23
None	66	10	5	8	3	1	3	2	-	2	-	33	...
Persons													
1 person	2 226	76	107	100	140	140	326	230	281	95	49	682	36
2 persons	4 772	101	165	160	240	255	568	456	681	291	117	1 738	41
3 persons	2 940	47	65	71	135	139	315	290	446	202	98	1 133	44
4 persons	2 948	35	76	71	117	116	278	290	416	217	111	1 222	45
5 persons	1 265	18	31	33	73	51	109	127	236	81	42	465	46
6 persons	469	8	18	12	26	15	46	58	81	40	22	143	46
7 persons or more	290	7	5	5	12	21	25	27	49	36	18	86	50
Median	2.6	2.2	2.3	2.3	2.5	2.4	2.4	2.7	2.8	3.0	3.1	2.8	...
Air Conditioning													
With air conditioning	12 375	201	329	326	607	591	1 350	1 249	1 856	823	386	4 659	43
Room units	5 000	109	196	176	302	301	672	560	773	282	137	1 492	39
1	2 747	58	100	101	168	175	388	285	383	133	64	893	38
2	1 587	30	74	59	96	85	186	197	286	95	40	439	42
3	482	15	11	12	28	35	66	63	76	35	20	120	42
4	126	4	9	5	5	3	22	11	21	12	4	32	39
5 or more	59	2	2	-	5	3	9	6	7	8	9	8	47
Central system	7 376	92	133	151	305	290	678	688	1 083	541	249	3 167	46
With no air conditioning	2 536	91	138	126	135	146	317	228	334	140	71	810	36
SPECIFIED RENTER OCCUPIED[3]													
Total	**8 791**	**330**	**321**	**341**	**442**	**329**	**640**	**427**	**573**	**208**	**153**	**5 027**	**32**
House Heating Fuel													
Gas	4 329	209	226	268	373	281	557	381	531	191	128	1 184	33
Utility gas	3 897	183	194	225	331	251	497	342	475	167	101	1 131	34
Bottled, tank, or LP gas	433	25	32	43	42	31	60	39	56	24	28	53	33
Other than gas	4 283	105	84	63	60	42	72	45	41	17	23	3 732	22
Fuel oil	631	36	27	19	15	10	28	11	9	6	7	462	21
Kerosene, etc.	104	7	6	9	2	3	1	2	3	-	-	72	...
Electricity	3 179	50	36	19	34	9	33	19	23	2	9	2 945	22
Coal or coke	27	1	-	1	-	2	-	-	1	-	1	22	...
Wood	328	11	16	16	9	18	9	11	4	9	6	219	26
Solar heat	-	-	-	-	-	-	-	-	-	-	-	-	-
Other fuel	14	-	-	-	-	-	-	2	-	-	-	12	...
None	179	17	11	9	10	5	12	1	2	-	2	111	18
Heating Equipment													
Warm-air furnace	4 226	87	94	112	180	107	259	155	251	87	65	2 829	34
Heat pump	272	3	9	2	-	-	2	3	-	1	1	253	...
Steam or hot water	426	42	14	12	11	5	21	10	12	14	9	276	22
Built-in electric units	741	17	8	-	5	5	6	5	6	2	-	687	21
Floor, wall, or pipeless furnace	706	41	55	54	62	52	88	58	69	33	13	181	29
Room heaters with flue	623	33	41	37	32	43	59	52	76	28	28	194	34
Room heaters without flue	1 067	50	59	90	120	90	174	126	145	29	24	161	32
Fireplaces, stoves, or portable heaters	551	41	30	25	23	22	20	17	13	16	11	335	22
None	179	17	11	9	10	5	12	1	2	-	2	111	18
Persons													
1 person	2 694	146	126	114	120	95	141	98	89	30	20	1 714	23
2 persons	2 579	95	86	107	122	91	170	115	140	48	46	1 558	30
3 persons	1 524	40	54	53	85	64	137	68	103	50	28	840	33
4 persons	1 093	29	24	36	64	48	96	67	119	42	25	544	37
5 persons	517	11	22	17	25	18	49	41	73	16	17	229	41
6 persons	216	5	9	9	7	7	20	18	34	10	11	87	44
7 persons or more	170	3	-	6	19	6	27	19	14	12	6	57	37
Median	2.1	1.7	1.9	2.0	2.3	2.3	2.6	2.5	3.0	3.0	2.8	2.0	...

See footnotes at end of table.

Table D-9. Monthly Cost Paid for Gas by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Monthly cost paid for utility, bottled, tank, or LP gas											
		Less than $10	$10 to $14	$15 to $19	$20 to $24	$25 to $29	$30 to $39	$40 to $49	$50 to $69	$70 to $99	$100 or more	No gas used or not reported[1]	Median (dollars)
SPECIFIED RENTER OCCUPIED[3]—Con.													
Air Conditioning													
With air conditioning	6 331	201	194	209	303	198	414	265	363	123	82	3 979	32
Room units	2 746	171	144	150	195	131	286	181	241	80	46	1 120	31
1	2 024	112	120	102	143	106	194	136	160	61	32	858	30
2	580	53	20	38	45	18	72	36	70	16	8	203	32
3	109	5	4	10	6	6	12	5	8	3	4	45	30
4	23	-	-	-	2	2	6	2	1	-	2	9	...
5 or more	10	-	-	-	-	-	2	2	2	-	-	5	...
Central system	3 585	31	50	59	108	67	128	84	122	43	36	2 859	33
With no air conditioning	2 460	128	127	132	139	131	226	162	210	85	71	1 049	32

[1]Renter households with gas costs included in their rent are included in this category.
[2]Limited to one-unit structures on less than 10 acres and no business on property.
[3]Excludes one-unit structures on 10 acres or more.

Table D-10. Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, etc., by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text].

Characteristics	Total	Yearly cost paid for fuel oil, kerosene, coal, wood, etc.										
		Less than $100	$100 to $199	$200 to $299	$300 to $399	$400 to $499	$500 to $599	$600 to $699	$700 to $799	$800 or more	Fuels not used, free, or not reported[1]	Median (dollars)
SPECIFIED OWNER OCCUPIED[2]												
Total	**14 911**	**707**	**613**	**372**	**329**	**232**	**165**	**195**	**131**	**365**	**11 781**	**265**
House Heating Fuel												
Oil, coal, kerosene, wood, etc.	2 395	120	252	233	252	201	165	180	123	336	534	436
Fuel oil	1 305	48	106	100	158	148	138	156	111	320	21	559
Coal or coke	66	4	11	16	14	7	2	2	1	1	8	280
Kerosene, etc.	121	13	12	16	14	16	9	16	8	10	4	416
Wood	903	55	122	100	66	28	16	6	3	5	502	223
Other than oil, coal, kerosene, wood, etc.	12 450	587	361	139	78	31	20	15	9	29	11 181	113
Utility gas	7 448	344	177	74	39	14	11	9	4	14	6 763	100-
Bottled, tank, or LP gas	861	31	28	9	7	6	1	2	1	3	775	144
Electricity	4 138	212	156	56	32	12	9	4	4	11	3 642	123
Solar heat	1	-	-	-	-	-	-	-	-	1	-	...
Other fuel	1	-	-	-	-	-	-	-	-	-	1	-
None	66	-	-	-	-	-	-	-	-	1	65	...
Heating Equipment												
Warm-air furnace	8 112	430	261	141	150	128	106	109	72	184	6 531	270
Heat pump	916	70	50	8	7	1	2	-	3	5	770	105
Steam or hot water	481	7	9	9	19	16	18	30	28	129	216	786
Built-in electric units	940	34	39	14	11	3	5	3	-	6	825	160
Floor, wall, or pipeless furnace	1 119	35	30	22	29	19	9	13	7	3	954	261
Room heaters with flue	826	30	52	45	28	22	25	29	17	28	550	338
Room heaters without flue	1 225	34	29	15	8	5	3	3	1	2	1 127	153
Fireplaces, stoves, or portable heaters	1 226	67	143	117	78	38	18	8	4	8	743	227
None	66	-	-	-	-	-	-	-	-	1	65	...
Persons												
1 person	2 226	66	68	56	59	43	37	36	25	60	1 778	359
2 persons	4 772	197	184	132	98	76	58	66	64	143	3 754	296
3 persons	2 940	171	154	70	50	48	39	39	11	72	2 265	203
4 persons	2 948	157	137	79	74	32	26	32	20	53	2 337	214
5 persons	1 265	78	50	27	28	20	19	13	7	19	1 002	211
6 persons	469	29	9	4	9	7	4	4	3	9	392	226
7 persons or more	290	8	13	5	10	6	2	5	2	8	232	329
Median	2.6	3.0	2.9	2.5	2.6	2.5	2.5	2.4	2.1	2.3	2.6	...
Air Conditioning												
With air conditioning	12 375	615	455	261	225	149	127	124	91	277	10 052	235
Room units	5 000	151	187	132	127	75	75	91	59	174	3 927	351
1	2 747	86	120	86	75	51	51	57	28	81	2 113	333
2	1 587	52	43	34	40	15	18	27	18	57	1 283	356
3	482	8	16	8	12	10	4	5	8	26	385	444
4	126	3	3	2	-	-	2	2	4	9	102	...
5 or more	59	2	5	3	-	-	2	-	2	2	44	...
Central system	7 376	464	269	129	98	73	52	33	31	102	6 125	159
With no air conditioning	2 536	92	158	111	105	84	58	71	40	68	1 729	341
SPECIFIED RENTER OCCUPIED[3]												
Total	**8 791**	**190**	**151**	**120**	**123**	**61**	**64**	**46**	**42**	**90**	**7 905**	**285**
House Heating Fuel												
Oil, coal, kerosene, wood, etc.	1 090	81	90	95	111	55	60	43	40	87	428	358
Fuel oil	631	24	32	44	56	36	41	29	33	78	257	483
Coal or coke	27	2	5	7	4	2	-	3	1	1	3	...
Kerosene, etc.	104	16	19	14	16	4	12	4	3	7	8	295
Wood	328	39	33	30	35	13	7	7	3	1	160	238
Other than oil, coal, kerosene, wood, etc.	7 523	107	60	22	12	6	3	3	3	3	7 304	104
Utility gas	3 897	52	32	8	3	-	2	2	2	2	3 794	100-
Bottled, tank, or LP gas	433	9	10	8	5	2	2	1	-	1	396	196
Electricity	3 179	46	18	6	4	4	-	-	1	1	3 099	100-
Solar heat	-	-	-	-	-	-	-	-	-	-	-	-
Other fuel	14	-	-	-	-	-	-	-	-	-	14	-
None	179	2	1	3	-	-	-	-	-	-	174	...
Heating Equipment												
Warm-air furnace	4 226	68	39	28	35	24	27	20	19	35	3 930	334
Heat pump	272	6	1	2	1	1	-	-	-	-	262	...
Steam or hot water	426	3	3	8	6	-	3	2	9	30	363	785
Built-in electric units	741	10	9	3	2	3	-	-	1	1	713	...
Floor, wall, or pipeless furnace	706	11	4	6	14	6	3	2	3	3	654	335
Room heaters with flue	623	16	27	24	17	9	17	9	8	17	480	328
Room heaters without flue	1 067	23	19	6	9	2	5	4	1	3	995	170
Fireplaces, stoves, or portable heaters	551	50	48	41	40	16	8	10	3	1	334	225
None	179	2	1	3	-	-	-	-	-	-	174	...
Persons												
1 person	2 694	46	43	25	33	8	8	8	5	24	2 494	243
2 persons	2 579	57	42	28	35	14	21	13	11	23	2 334	279
3 persons	1 524	26	24	32	24	16	12	10	7	13	1 360	299
4 persons	1 093	34	25	17	17	15	13	9	8	13	943	296
5 persons	517	21	9	9	9	5	3	3	6	6	446	259
6 persons	216	3	5	6	3	-	3	3	1	6	186	...
7 persons or more	170	2	3	3	2	3	4	1	6	4	143	...
Median	2.1	2.3	2.3	2.7	2.3	3.1	2.7	2.7	3.3	2.4	2.1	...

See footnotes at end of table.

Table D-10. Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, etc., by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Yearly cost paid for fuel oil, kerosene, coal, wood, etc.										
		Less than $100	$100 to $199	$200 to $299	$300 to $399	$400 to $499	$500 to $599	$600 to $699	$700 to $799	$800 or more	Fuels not used, free, or not reported[1]	Median (dollars)
SPECIFIED RENTER OCCUPIED[3]—Con.												
Air Conditioning												
With air conditioning	6 331	109	79	36	49	39	32	25	15	38	5 909	263
Room units	2 746	57	55	30	44	29	28	19	9	31	2 444	321
1	2 024	42	34	26	39	24	23	14	7	20	1 796	331
2	580	11	19	-	2	5	5	5	3	6	523	187
3	109	3	2	4	2	-	-	-	-	3	94	...
4	23	-	-	-	2	-	-	-	-	-	21	...
5 or more	10	-	-	-	-	-	-	-	-	2	9	...
Central system	3 585	52	24	6	5	11	4	6	6	7	3 466	131
With no air conditioning	2 460	80	72	84	74	22	32	21	27	52	1 996	294

[1]Renter households with fuel costs included in their rent are included in this category.
[2]Limited to one-unit structures on less than 10 acres and no business on property.
[3]Excludes one-unit structures on 10 acres or more.

Table E-1. Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Inside SMSA's			Outside SMSA's
		Total	In central city	Not in central city	
ALL OCCUPIED HOUSING UNITS					
Total	**16 868**	**13 326**	**5 513**	**7 813**	**3 542**
House Heating Fuel					
Owner occupied	**9 955**	**7 584**	**2 777**	**4 807**	**2 372**
Utility gas	6 715	5 714	2 184	3 530	1 001
Bottled, tank, or LP gas	270	116	14	103	154
Fuel oil	359	245	124	122	113
Kerosene, etc.	3	2	-	2	1
Electricity	1 683	1 049	356	693	634
Coal or coke	11	1	-	1	10
Wood	731	287	46	241	444
Solar heat	13	13	-	13	-
Other fuel	2	2	-	2	-
None	169	154	54	100	15
Renter occupied	**6 912**	**5 742**	**2 736**	**3 006**	**1 170**
Utility gas	4 241	3 686	1 771	1 915	555
Bottled, tank, or LP gas	119	55	4	51	64
Fuel oil	104	73	44	29	32
Kerosene, etc.	5	5	-	5	-
Electricity	1 952	1 556	742	814	396
Coal or coke	5	1	-	1	4
Wood	185	79	12	67	106
Solar heat	6	6	2	4	-
Other fuel	63	63	63	-	-
None	231	218	98	120	13
Monthly Cost Paid for Electricity					
Specified owner occupied[1]	**8 043**	**6 343**	**2 438**	**3 905**	**1 700**
Electricity paid for	8 035	6 340	2 436	3 904	1 695
Less than $10	67	61	31	31	5
$10 to $19	689	587	271	316	102
$20 to $29	1 480	1 172	457	715	308
$30 to $39	1 525	1 221	476	745	304
$40 to $49	1 076	832	257	575	245
$50 to $59	938	739	290	449	200
$60 to $79	1 116	861	293	568	255
$80 to $99	413	322	124	198	91
$100 to $149	574	420	186	234	154
$150 or more	157	125	51	74	33
Median	42	41	39	42	45
No electricity used	8	3	2	1	5
Specified renter occupied[2]	**6 804**	**5 701**	**2 733**	**2 968**	**1 104**
Electricity paid for	5 680	4 798	2 255	2 543	883
Less than $10	538	483	255	228	55
$10 to $19	1 349	1 237	603	633	113
$20 to $29	1 325	1 127	548	579	198
$30 to $39	893	739	319	420	154
$40 to $49	502	409	165	243	94
$50 to $59	394	310	127	183	84
$60 to $79	342	258	120	138	83
$80 to $99	152	109	57	52	42
$100 to $149	133	88	43	45	44
$150 or more	53	38	17	21	15
Median	26	25	24	26	34
Included in rent	1 098	879	466	414	218
No electricity used	26	24	12	11	3
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas					
Specified owner occupied[1]	**8 043**	**6 343**	**2 438**	**3 905**	**1 700**
Gas paid for	6 352	5 362	2 111	3 251	990
Less than $10	168	121	52	70	47
$10 to $14	364	313	116	197	51
$15 to $19	542	484	177	307	57
$20 to $24	855	723	243	480	132
$25 to $29	711	631	239	392	80
$30 to $39	1 324	1 147	424	723	177
$40 to $49	854	727	298	429	127
$50 to $69	1 020	807	372	435	213
$70 to $99	359	282	120	162	78
$100 or more	155	127	70	56	28
Median	34	33	35	32	36
No gas used	1 691	981	328	653	710
Specified renter occupied[2]	**6 804**	**5 701**	**2 733**	**2 968**	**1 104**
Gas paid for	3 761	3 290	1 595	1 695	471
Less than $10	631	571	280	291	60
$10 to $14	715	640	313	327	75
$15 to $19	505	447	194	252	59
$20 to $24	470	423	233	189	48
$25 to $29	370	324	141	183	46
$30 to $39	478	409	189	221	69
$40 to $49	249	206	97	109	43
$50 to $69	236	197	104	92	39
$70 to $99	75	57	35	22	18
$100 or more	31	17	9	8	13
Median	20	19	20	19	23
Included in rent	1 219	986	465	521	233
No gas used	1 824	1 424	672	752	400

See footnotes at end of table.

Table E-1. Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Inside SMSA's			Outside SMSA's
		Total	In central city	Not in central city	
ALL OCCUPIED HOUSING UNITS—Con.					
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.					
Specified owner occupied[1]	8 043	6 343	2 438	3 905	1 700
Fuel oil, kerosene, coal, wood, etc., paid for	1 444	960	372	588	485
Less than $100	356	258	132	126	98
$100 to $199	392	249	77	172	142
$200 to $299	225	137	38	99	89
$300 to $399	115	57	18	39	58
$400 to $499	99	61	18	43	38
$500 to $599	66	49	25	24	16
$600 to $699	68	50	22	28	18
$700 to $799	26	21	14	7	5
$800 or more	98	78	29	49	20
Median	192	188	170	196	202
Fuels not used or free	6 599	5 383	2 066	3 317	1 216
Specified renter occupied[2]	6 804	5 701	2 733	2 968	1 104
Fuel oil, kerosene, coal, wood, etc., paid for	320	207	86	121	113
Less than $100	92	66	33	33	26
$100 to $199	79	53	18	35	26
$200 to $299	57	33	8	25	23
$300 to $399	38	15	7	8	23
$400 to $499	18	13	7	6	5
$500 to $599	15	11	3	8	4
$600 to $699	4	2	-	2	2
$700 to $799	1	1	-	1	-
$800 or more	16	13	10	2	4
Median	185	169	154	177	219
Included in rent	360	284	123	161	76
Fuels not used or free	6 125	5 210	2 524	2 686	915
ALL OCCUPIED HOUSING UNITS					
Total	16 868	13 326	5 513	7 813	3 542
Heating Equipment					
Owner occupied	9 955	7 584	2 777	4 807	2 372
Warm-air furnace	6 198	5 014	1 863	3 151	1 185
Heat pump	279	217	81	136	61
Steam or hot water	220	115	58	58	105
Built-in electric units	666	372	128	244	294
Floor, wall, or pipeless furnace	1 369	1 242	491	751	127
Room heaters with flue	188	102	35	68	86
Room heaters without flue	40	22	5	17	18
Fireplaces, stoves, or portable heaters	826	345	64	281	481
None	169	154	54	100	15
Renter occupied	6 912	5 742	2 736	3 006	1 170
Warm-air furnace	2 247	1 880	862	1 018	367
Heat pump	94	86	38	50	9
Steam or hot water	368	291	224	67	77
Built-in electric units	1 269	997	469	528	272
Floor, wall, or pipeless furnace	1 990	1 804	855	949	185
Room heaters with flue	356	265	120	144	91
Room heaters without flue	84	63	30	32	21
Fireplaces, stoves, or portable heaters	273	138	41	97	135
None	231	218	98	120	13
ALL OCCUPIED HOUSING UNITS					
Total	16 868	13 326	5 513	7 813	3 542
UNITS OCCUPIED LAST WINTER					
Total	14 147	11 181	4 576	6 605	2 966
Insufficient Heat					
Closure of rooms:					
Owner occupied	9 423	7 199	2 640	4 559	2 224
With heating equipment	9 261	7 049	2 587	4 462	2 213
No rooms closed	6 901	6 791	2 496	4 295	2 110
Closed certain rooms	252	177	56	121	76
Living room only	12	10	6	4	2
Dining room only	6	6	2	4	-
1 or more bedrooms only	166	113	29	84	53
Other rooms or combination of rooms	60	41	13	28	19
Not reported	9	8	6	2	2
Not reported	108	81	35	46	27
No heating equipment	162	150	54	97	12
Renter occupied	4 724	3 982	1 936	2 046	742
With heating equipment	4 563	3 831	1 859	1 972	732
No rooms closed	4 274	3 603	1 758	1 845	671
Closed certain rooms	195	154	74	80	41
Living room only	6	4	3	1	2
Dining room only	2	-	-	-	2
1 or more bedrooms only	126	98	44	54	28
Other rooms or combination of rooms	61	52	27	26	9
Not reported	-	-	-	-	-
Not reported	94	74	27	48	20
No heating equipment	160	151	77	74	10
Additional heat source:					
Owner occupied	9 423	7 199	2 640	4 559	2 224
With specified heating equipment[3]	8 438	6 701	2 522	4 180	1 737
No additional heat source used	7 756	6 215	2 333	3 882	1 543
Used kitchen stove, fireplace, or portable heater	457	349	149	200	108
Not reported	222	137	40	97	85
Lacking specified heating equipment or none	985	498	119	379	488

See footnotes at end of table.

Table E-1. Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Inside SMSA's			Outside SMSA's
		Total	In central city	Not in central city	
UNITS OCCUPIED LAST WINTER—Con.					
Insufficient Heat—Con.					
Additional heat source—Con.					
Renter occupied	4 724	3 982	1 936	2 046	742
With specified heating equipment[3]	4 294	3 680	1 802	1 878	614
No additional heat source used	3 757	3 242	1 601	1 641	515
Used kitchen stove, fireplace, or portable heater	377	317	150	167	60
Not reported	160	121	51	70	39
Lacking specified heating equipment or none	430	301	133	168	128
Rooms lacking specified heat source:					
Owner occupied	9 423	7 199	2 640	4 559	2 224
With specified heating equipment[3]	8 438	6 701	2 522	4 180	1 737
No rooms lacking air ducts, registers, radiators, or heaters	6 382	5 069	1 889	3 180	1 312
Rooms lacking air ducts, registers, radiators, or heaters	1 881	1 531	594	937	350
1 room	542	419	147	272	123
2 rooms	465	377	160	217	89
3 rooms or more	873	735	287	448	139
Not reported	175	101	39	62	74
Lacking specified heating equipment or none	985	498	119	379	488
Renter occupied	4 724	3 982	1 936	2 046	742
With specified heating equipment[3]	4 294	3 680	1 802	1 878	614
No rooms lacking air ducts, registers, radiators, or heaters	2 636	2 240	1 130	1 110	396
Rooms lacking air ducts, registers, radiators, or heaters	1 534	1 358	637	721	176
1 room	523	465	239	226	58
2 rooms	576	516	221	295	61
3 rooms or more	435	377	177	200	57
Not reported	124	82	35	47	42
Lacking specified heating equipment or none	430	301	133	168	128
Housing unit uncomfortably cold:					
Owner occupied	9 423	7 199	2 640	4 559	2 224
With specified heating equipment[3]	8 438	6 701	2 522	4 180	1 737
Lacking specified heating equipment or none	985	498	119	379	488
Housing unit not uncomfortably cold for 24 hours or more	858	431	103	328	427
Housing unit uncomfortably cold for 24 hours or more	68	32	8	25	35
Not reported	60	34	8	27	25
Renter occupied	4 724	3 982	1 936	2 046	742
With specified heating equipment[3]	4 294	3 680	1 802	1 878	614
Lacking specified heating equipment or none	430	301	133	168	128
Housing unit not uncomfortably cold for 24 hours or more	331	234	100	134	98
Housing unit uncomfortably cold for 24 hours or more	80	52	25	27	28
Not reported	19	16	9	7	3
ALL OCCUPIED HOUSING UNITS					
Total	16 868	13 326	5 513	7 813	3 542
Air Conditioning					
Owner occupied	9 955	7 584	2 777	4 807	2 372
With air conditioning	3 982	3 104	1 165	1 939	879
Room units	1 283	889	303	585	395
1	999	676	233	443	323
2	230	166	59	107	64
3	35	30	6	23	5
4	14	13	6	7	2
5 or more	5	4	-	4	1
Central system	2 699	2 215	861	1 354	484
With no air conditioning	5 973	4 480	1 612	2 868	1 493
Renter occupied	6 912	5 742	2 736	3 006	1 170
With air conditioning	2 300	1 949	889	1 061	351
Room units	1 125	947	419	527	179
1	1 021	862	383	479	159
2	87	69	29	40	18
3	14	14	5	9	-
4	-	-	-	-	-
5 or more	4	2	2	-	2
Central system	1 175	1 003	469	533	172
With no air conditioning	4 612	3 793	1 847	1 945	819

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table E-2. **Income of Families and Primary Individuals by Fuel, Fuel Costs, Heating, and Air Conditioning Characteristics: 1983**

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $3,000	$3,000 to $6,999	$7,000 to $9,999	$10,000 to $14,999	$15,000 to $19,999	$20,000 to $24,999	$25,000 to $34,999	$35,000 to $49,999	$50,000 to $74,999	$75,000 or more	Median (dollars)
ALL OCCUPIED HOUSING UNITS												
Total	**16 868**	**635**	**1 966**	**1 353**	**2 334**	**1 852**	**1 709**	**2 715**	**2 318**	**1 353**	**634**	**20 900**
House Heating Fuel												
Owner occupied	**9 955**	**223**	**680**	**585**	**1 043**	**898**	**1 004**	**1 843**	**1 904**	**1 188**	**586**	**28 000**
Utility gas	6 715	122	422	351	664	533	652	1 240	1 378	893	459	29 900
Bottled, tank, or LP gas	270	19	36	29	50	30	28	28	27	18	5	15 200
Fuel oil	359	5	31	38	38	51	33	63	50	35	15	22 500
Kerosene, etc.	3	-	-	1	-	-	-	-	-	2	-	...
Electricity	1 683	52	124	106	172	177	201	304	301	170	78	25 300
Coal or coke	11	1	2	-	2	-	1	4	1	1	-	...
Wood	731	23	53	53	102	94	78	159	103	49	17	22 600
Solar heat	13	-	-	-	-	1	-	1	7	-	4	...
Other fuel	2	-	-	-	-	-	2	-	-	-	-	...
None	169	2	12	7	14	12	10	45	37	21	8	31 000
Renter occupied	**6 912**	**411**	**1 286**	**769**	**1 292**	**954**	**704**	**871**	**414**	**165**	**48**	**13 800**
Utility gas	4 241	224	745	490	816	590	436	539	255	117	29	14 100
Bottled, tank, or LP gas	119	7	24	16	20	26	9	11	6	1	-	13 400
Fuel oil	104	6	17	9	23	25	7	9	6	3	-	14 400
Kerosene, etc.	5	-	-	1	1	2	2	-	-	-	-	...
Electricity	1 952	112	410	205	335	245	209	262	129	30	14	13 700
Coal or coke	5	-	2	1	-	3	-	-	-	-	-	...
Wood	185	10	37	25	33	36	15	17	7	3	3	13 300
Solar heat	6	2	-	-	-	-	4	-	-	-	-	...
Other fuel	63	33	10	-	9	3	2	3	2	-	-	3000-
None	231	17	41	23	55	23	21	30	9	10	2	13 100
Monthly Cost Paid for Electricity												
Specified owner occupied[1]	**8 043**	**154**	**458**	**436**	**776**	**695**	**784**	**1 555**	**1 658**	**1 029**	**498**	**29 600**
Electricity paid for	8 035	154	458	433	776	694	780	1 555	1 658	1 029	498	29 600
Less than $10	67	5	11	10	13	5	6	11	5	-	-	12 800
$10 to $19	689	15	70	78	104	72	74	106	106	54	9	20 300
$20 to $29	1 480	25	109	86	147	154	175	315	276	150	44	26 400
$30 to $39	1 525	21	87	80	157	143	144	332	314	187	59	28 900
$40 to $49	1 076	9	48	49	102	96	107	217	231	148	71	30 900
$50 to $59	938	18	37	39	92	66	81	179	207	150	70	32 700
$60 to $79	1 116	30	51	49	87	80	103	199	274	152	90	32 900
$80 to $99	413	11	14	12	39	27	29	69	94	72	45	35 800
$100 to $149	574	14	25	25	31	40	47	102	122	90	79	35 400
$150 or more	157	5	5	6	5	11	14	26	30	26	31	38 700
Median	42	51	34	35	37	37	38	41	45	48	58	...
No electricity used	8	1	-	3	-	1	4	-	-	-	-	...
Specified renter occupied[2]	**6 804**	**402**	**1 267**	**754**	**1 270**	**935**	**695**	**864**	**407**	**164**	**48**	**13 900**
Electricity paid for	5 680	276	889	611	1 091	817	637	791	376	149	44	14 900
Less than $10	538	25	101	73	145	74	34	53	22	9	2	12 400
$10 to $19	1 349	82	231	126	255	213	178	146	91	21	7	14 600
$20 to $29	1 325	54	209	172	250	195	138	200	72	29	6	14 600
$30 to $39	893	30	150	93	186	102	96	134	63	32	8	14 700
$40 to $49	502	22	61	52	76	91	72	75	34	18	2	17 200
$50 to $59	394	21	53	38	68	54	47	65	33	9	6	16 600
$60 to $79	342	21	41	34	60	45	36	57	28	15	3	16 500
$80 to $99	152	12	25	11	18	19	14	27	14	6	6	17 500
$100 to $149	133	6	13	12	20	19	14	23	13	10	2	19 000
$150 or more	53	2	4	2	13	5	8	12	6	-	2	20 400
Median	26	25	25	26	25	26	27	29	30	34	38	...
Included in rent	1 098	123	370	143	173	111	57	71	31	15	4	8 200
No electricity used	26	4	8	-	6	7	-	2	-	-	-	...
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas												
Specified owner occupied[1]	**8 043**	**154**	**458**	**436**	**776**	**695**	**784**	**1 555**	**1 658**	**1 029**	**498**	**29 600**
Gas paid for	6 352	117	353	324	614	520	596	1 201	1 335	863	429	30 400
Less than $10	168	5	14	14	22	20	14	31	31	14	3	23 100
$10 to $14	364	7	23	30	54	37	36	74	59	34	11	24 400
$15 to $19	542	11	38	42	62	56	61	88	107	54	23	25 100
$20 to $24	855	16	55	35	87	91	95	177	177	91	30	27 700
$25 to $29	711	13	34	36	83	51	71	118	167	90	49	30 700
$30 to $39	1 324	21	72	52	112	83	121	289	304	194	76	31 900
$40 to $49	854	13	42	52	90	61	70	162	182	111	72	31 100
$50 to $69	1 020	21	52	33	76	75	88	175	220	202	79	34 500
$70 to $99	359	5	21	17	15	29	30	63	69	57	53	34 900
$100 or more	155	5	3	11	12	18	11	25	20	15	35	32 300
Median	34	32	32	31	29	31	32	33	34	37	43	...
No gas used	1 691	37	105	112	162	174	187	354	324	166	69	26 900
Specified renter occupied[2]	**6 804**	**402**	**1 267**	**754**	**1 270**	**935**	**695**	**864**	**407**	**164**	**48**	**13 900**
Gas paid for	3 761	167	592	400	732	530	423	522	254	111	29	14 900
Less than $10	631	19	90	70	145	91	78	82	46	8	-	14 700
$10 to $14	715	33	121	70	145	100	91	95	41	13	6	14 600
$15 to $19	505	24	72	44	113	76	50	67	43	14	2	15 000
$20 to $24	470	22	65	56	94	65	59	69	26	12	4	14 900
$25 to $29	370	13	56	36	69	62	34	54	23	20	2	15 800
$30 to $39	478	26	95	60	67	52	58	63	30	22	5	14 300
$40 to $49	249	14	25	30	52	41	22	36	11	12	8	15 600
$50 to $69	236	8	46	27	38	30	25	35	22	5	-	14 900
$70 to $99	75	8	12	3	6	9	2	17	10	4	3	19 200
$100 or more	31	-	10	4	3	4	4	4	2	-	-	...
Median	20	21	21	21	18	19	18	21	19	27	...	...
Included in rent	1 219	101	300	175	206	160	88	124	44	19	2	10 800
No gas used	1 824	134	375	178	332	245	183	218	108	34	17	13 400

See footnotes at end of table.

Table E-2. **Income of Families and Primary Individuals by Fuel, Fuel Costs, Heating, and Air Conditioning Characteristics: 1983**—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $3,000	$3,000 to $6,999	$7,000 to $9,999	$10,000 to $14,999	$15,000 to $19,999	$20,000 to $24,999	$25,000 to $34,999	$35,000 to $49,999	$50,000 to $74,999	$75,000 or more	Median (dollars)
ALL OCCUPIED HOUSING UNITS—Con.												
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.												
Specified owner occupied[1]	8 043	154	458	436	776	695	784	1 555	1 658	1 029	498	29 600
Fuel oil, kerosene, coal, wood, etc., paid for	1 444	26	80	91	140	144	111	296	300	161	94	29 400
Less than $100	356	4	11	21	39	29	25	82	83	44	18	31 000
$100 to $199	392	10	16	16	28	32	28	87	90	48	37	32 600
$200 to $299	225	3	12	17	27	24	17	40	41	32	12	28 100
$300 to $399	115	2	12	4	9	16	8	24	31	4	6	28 400
$400 to $499	99	3	10	7	16	9	11	18	14	7	4	21 900
$500 to $599	66	-	8	9	5	6	3	10	13	5	6	26 000
$600 to $699	68	2	3	5	2	6	14	12	9	8	7	26 400
$700 to $799	26	2	-	4	4	5	1	6	2	3	-	...
$800 or more	98	1	7	9	9	17	5	18	18	10	4	25 600
Median	192	...	302	248	208	247	217	176	174	175	177	...
Fuels not used or free	6 599	128	378	345	636	551	672	1 259	1 358	868	404	29 700
Specified renter occupied[2]	6 804	402	1 267	754	1 270	935	695	864	407	164	48	13 900
Fuel oil, kerosene, coal, wood, etc., paid for	320	17	35	31	46	58	36	58	22	16	2	17 800
Less than $100	92	4	11	11	10	14	14	18	2	7	1	18 300
$100 to $199	79	4	6	6	10	14	7	20	8	4	-	19 800
$200 to $299	57	1	5	4	11	7	7	13	8	1	-	20 300
$300 to $399	38	4	6	6	6	7	1	3	1	4	-	12 300
$400 to $499	18	2	4	2	3	4	3	-	-	1	-	...
$500 to $599	15	2	3	-	4	2	3	1	1	-	-	...
$600 to $699	4	-	-	-	1	-	-	1	2	-	-	...
$700 to $799	1	-	-	-	-	-	-	1	-	-	-	...
$800 or more	16	-	-	2	1	9	2	-	2	-	1	...
Median	185	...	...	...	226	218	158	152	...	...	...	...
Included in rent	360	38	70	39	68	39	37	47	16	7	-	12 500
Fuels not used or free	6 125	348	1 162	685	1 156	838	622	758	369	141	46	13 800
ALL OCCUPIED HOUSING UNITS												
Total	16 868	635	1 966	1 353	2 334	1 852	1 709	2 715	2 318	1 353	634	20 900
Heating Equipment												
Owner occupied	9 955	223	680	585	1 043	898	1 004	1 843	1 904	1 188	586	28 000
Warm-air furnace	6 198	111	324	301	601	516	585	1 109	1 336	881	434	31 000
Heat pump	279	4	6	4	14	23	41	53	71	44	20	34 100
Steam or hot water	220	2	13	13	15	21	21	37	30	33	35	31 700
Built-in electric units	666	23	50	46	73	64	82	136	112	57	24	24 700
Floor, wall, or pipeless furnace	1 369	39	143	129	175	134	165	254	191	95	44	22 000
Room heaters with flue	188	11	48	18	28	22	18	23	16	3	4	13 400
Room heaters without flue	40	2	12	4	11	4	1	7	-	1	-	11 300
Fireplaces, stoves, or portable heaters	826	30	72	63	114	103	83	178	110	53	19	21 800
None	169	2	12	7	14	12	10	45	37	21	8	31 000
Renter occupied	6 912	411	1 286	769	1 292	954	704	871	414	165	48	13 600
Warm-air furnace	2 247	102	338	200	363	307	268	375	184	86	27	17 000
Heat pump	94	5	15	-	23	12	6	20	12	2	-	16 800
Steam or hot water	368	41	59	35	81	55	35	34	13	13	2	13 000
Built-in electric units	1 269	82	305	133	217	168	118	149	69	18	9	12 600
Floor, wall, or pipeless furnace	1 990	118	373	272	434	261	196	197	105	28	5	12 700
Room heaters with flue	356	20	69	51	62	75	24	38	12	6	-	13 100
Room heaters without flue	84	10	20	15	15	10	11	3	-	-	-	9 400
Fireplaces, stoves, or portable heaters	273	17	67	40	41	42	26	27	9	3	3	11 700
None	231	17	41	23	55	23	21	30	9	10	2	13 100
ALL OCCUPIED HOUSING UNITS												
Total	16 868	635	1 966	1 353	2 334	1 852	1 709	2 715	2 318	1 353	634	20 900
UNITS OCCUPIED LAST WINTER												
Total	14 147	415	1 542	1 085	1 882	1 471	1 471	2 371	2 089	1 233	587	22 300
Insufficient Heat												
Closure of rooms:												
Owner occupied	9 423	209	660	566	997	833	952	1 736	1 792	1 124	555	27 900
With heating equipment	9 261	207	650	559	983	821	942	1 694	1 755	1 105	547	27 800
No rooms closed	8 901	190	593	513	941	801	908	1 633	1 708	1 078	538	28 100
Closed certain rooms	252	7	48	39	24	12	26	47	32	13	5	18 700
Living room only	12	-	3	3	1	1	1	-	2	-	1	...
Dining room only	6	-	-	-	-	-	-	2	2	2	-	...
1 or more bedrooms only	166	5	35	28	17	10	19	27	20	5	-	14 400
Other rooms or combination of rooms	60	2	8	7	6	2	6	12	7	5	4	23 900
Not reported	9	-	2	-	-	-	-	5	1	1	-	...
Not reported	108	10	9	8	18	7	8	14	17	13	4	21 500
No heating equipment	162	2	11	7	14	12	10	43	36	19	8	30 900
Renter occupied	4 724	206	882	519	886	638	519	634	298	108	32	14 300
With heating equipment	4 563	194	854	502	847	620	502	618	290	106	31	14 300
No rooms closed	4 274	185	779	479	798	580	476	580	264	103	31	14 300
Closed certain rooms	195	8	53	15	27	32	13	28	18	2	-	14 000
Living room only	6	-	2	-	-	4	-	-	1	-	-	...
Dining room only	2	-	2	-	-	-	-	-	-	-	-	...
1 or more bedrooms only	126	3	39	8	13	21	11	18	10	2	-	15 000
Other rooms or combination of rooms	61	5	10	7	14	7	2	10	7	-	-	13 000
Not reported	-	-	-	-	-	-	-	-	-	-	-	-
Not reported	94	2	22	8	21	8	13	10	9	2	-	13 700
No heating equipment	160	12	28	17	39	19	18	17	8	2	2	12 900

See footnotes at end of table.

Table E-2. Income of Families and Primary Individuals by Fuel, Fuel Costs, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $3,000	$3,000 to $6,999	$7,000 to $9,999	$10,000 to $14,999	$15,000 to $19,999	$20,000 to $24,999	$25,000 to $34,999	$35,000 to $49,999	$50,000 to $74,999	$75,000 or more	Median (dollars)
UNITS OCCUPIED LAST WINTER—Con.												
Insufficient Heat—Con.												
Additional heat source:												
Owner occupied	9 423	209	660	566	997	833	952	1 736	1 792	1 124	555	27 900
With specified heating equipment[3]	8 438	175	568	499	862	723	862	1 513	1 656	1 053	528	28 500
No additional heat source used	7 758	154	504	443	794	668	807	1 392	1 522	970	504	28 700
Used kitchen stove, fireplace, or portable heater	457	10	36	24	47	45	46	78	110	49	13	27 700
Not reported	222	10	28	32	21	10	9	42	25	34	11	25 100
Lacking specified heating equipment or none	985	34	92	68	135	110	90	224	135	71	27	23 000
Renter occupied	4 724	206	882	519	886	638	519	634	298	108	32	14 300
With specified heating equipment[3]	4 294	176	791	461	801	577	473	598	284	104	30	14 500
No additional heat source used	3 757	154	663	402	712	503	427	531	253	83	28	14 600
Used kitchen stove, fireplace, or portable heater	377	13	97	33	54	54	31	50	25	19	2	14 200
Not reported	160	8	32	26	35	21	15	17	5	2	-	12 100
Lacking specified heating equipment or none	430	31	91	58	85	61	46	37	14	4	3	12 100
Rooms lacking specified heat source:												
Owner occupied	9 423	209	660	566	997	833	952	1 736	1 792	1 124	555	27 900
With specified heating equipment[3]	8 438	175	568	499	862	723	862	1 513	1 656	1 053	528	28 500
No rooms lacking air ducts, registers, radiators, or heaters	6 382	120	352	334	606	548	628	1 149	1 328	863	453	30 200
Rooms lacking air ducts, registers, radiators, or heaters	1 881	46	199	139	239	168	223	328	303	168	67	23 300
1 room	542	9	47	22	64	43	59	86	117	70	25	28 100
2 rooms	465	20	56	39	65	41	65	71	62	31	14	20 800
3 rooms or more	873	16	96	78	109	84	99	172	124	67	28	22 700
Not reported	175	9	17	25	17	7	11	38	25	22	8	25 700
Lacking specified heating equipment or none	985	34	92	68	135	110	90	224	135	71	27	23 000
Renter occupied	4 724	206	882	519	886	638	519	634	298	108	32	14 300
With specified heating equipment[3]	4 294	176	791	461	801	577	473	598	284	104	30	14 500
No rooms lacking air ducts, registers, radiators, or heaters	2 636	99	491	247	434	371	302	405	190	73	24	15 600
Rooms lacking air ducts, registers, radiators, or heaters	1 534	69	275	193	349	191	158	173	92	30	5	13 300
1 room	523	42	102	72	109	66	54	43	27	5	2	12 100
2 rooms	576	15	101	56	151	82	57	74	32	7	2	13 800
3 rooms or more	435	13	71	64	88	43	47	56	33	17	2	13 900
Not reported	124	8	25	22	18	15	13	20	1	2	-	11 900
Lacking specified heating equipment or none	430	31	91	58	85	61	46	37	14	4	3	12 100
Housing unit uncomfortably cold:												
Owner occupied	9 423	209	660	566	997	833	952	1 736	1 792	1 124	555	27 900
With specified heating equipment[3]	8 438	175	568	499	862	723	862	1 513	1 656	1 053	528	28 500
Lacking specified heating equipment or none	985	34	92	68	135	110	90	224	135	71	27	23 000
Housing unit not uncomfortably cold for 24 hours or more	858	28	72	59	115	90	82	201	124	61	26	24 000
Housing unit uncomfortably cold for 24 hours or more	68	4	11	5	9	10	6	14	5	3	-	17 100
Not reported	60	2	9	3	12	10	2	9	6	7	1	17 600
Renter occupied	4 724	206	882	519	886	638	519	634	298	108	32	14 300
With specified heating equipment[3]	4 294	176	791	461	801	577	473	598	284	104	30	14 500
Lacking specified heating equipment or none	430	31	91	58	85	61	46	37	14	4	3	12 100
Housing unit not uncomfortably cold for 24 hours or more	331	19	69	44	68	45	32	34	14	3	3	12 400
Housing unit uncomfortably cold for 24 hours or more	80	10	20	11	15	10	11	2	-	1	-	9 600
Not reported	19	1	2	3	2	6	3	1	1	-	-	...
ALL OCCUPIED HOUSING UNITS												
Total	16 868	635	1 966	1 353	2 334	1 852	1 709	2 715	2 318	1 353	634	20 900
Air Conditioning												
Owner occupied	9 955	223	680	585	1 043	898	1 004	1 843	1 904	1 188	586	28 000
With air conditioning	3 982	83	262	219	443	341	347	757	787	470	273	28 900
Room units	1 283	25	134	113	180	128	123	229	197	108	46	22 500
1	999	22	113	99	151	98	101	156	147	75	36	20 800
2	230	3	20	8	21	23	14	64	42	28	8	29 000
3	35	-	1	2	3	6	5	8	6	2	2	...
4	14	-	-	3	3	1	-	2	2	3	-	...
5 or more	5	-	-	2	1	-	3	-	-	-	-	...
Central system	2 699	57	128	106	263	212	225	528	590	363	227	31 800
With no air conditioning	5 973	141	418	365	600	558	657	1 086	1 117	718	313	27 300
Renter occupied	6 912	411	1 286	769	1 292	954	704	871	414	165	48	13 800
With air conditioning	2 300	113	369	231	420	316	267	358	152	53	18	15 300
Room units	1 125	61	199	132	214	174	123	134	60	21	7	14 000
1	1 021	57	184	119	195	156	116	117	53	18	7	13 900
2	87	4	13	10	15	18	6	13	7	1	-	15 500
3	14	-	2	4	2	-	2	3	-	2	-	...
4	-	-	-	-	-	-	-	-	-	-	-	-
5 or more	4	-	-	-	2	-	-	2	-	-	-	...
Central system	1 175	52	171	98	206	144	144	224	92	32	11	17 100
With no air conditioning	4 612	298	916	538	871	636	437	514	261	112	29	13 200

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table E-3. Value of Owner-Occupied Housing Units by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $10,000	$10,000 to $19,999	$20,000 to $29,999	$30,000 to $39,999	$40,000 to $49,999	$50,000 to $59,999	$60,000 to $74,999	$75,000 to $99,999	$100,000 to $199,999	$200,000 or more	Median (dollars)
SPECIFIED OWNER OCCUPIED[1]												
Total	**8 043**	**25**	**71**	**175**	**298**	**558**	**602**	**1 194**	**1 943**	**2 514**	**662**	**89 100**
House Heating Fuel												
Utility gas	5 768	9	38	86	174	317	344	768	1 506	1 999	526	94 000
Bottled, tank, or LP gas	107	4	3	12	11	7	5	12	10	37	7	77 100
Fuel oil	311	1	2	20	15	39	47	56	62	57	11	68 400
Kerosene, etc.	2	-	-	-	-	-	-	-	-	2	1	...
Electricity	1 171	2	4	20	62	120	129	246	261	249	79	75 300
Coal or coke	5	1	3	1	-	-	-	-	-	1	-	...
Wood	544	9	18	35	33	71	74	107	92	91	14	64 400
Solar heat	13	-	-	-	-	-	-	-	-	9	4	...
Other fuel	2	-	-	-	-	-	-	-	-	-	2	...
None	120	-	3	1	3	4	3	6	12	69	19	141 600
Monthly Cost Paid for Electricity												
Electricity paid for	8 035	25	71	174	298	552	602	1 194	1 943	2 514	662	89 200
Less than $10	67	-	4	2	4	4	8	15	15	11	4	71 800
$10 to $19	689	6	4	21	40	76	45	96	174	201	26	83 100
$20 to $29	1 480	4	20	40	77	124	135	219	394	404	61	82 500
$30 to $39	1 525	9	12	37	64	101	115	255	374	458	101	86 400
$40 to $49	1 076	4	13	24	34	62	80	161	264	370	65	90 200
$50 to $59	938	-	6	24	25	58	77	134	214	315	85	91 900
$60 to $79	1 116	2	7	19	27	73	89	165	252	371	112	92 500
$80 to $99	413	-	2	1	15	25	22	54	84	151	59	102 300
$100 to $149	574	-	3	4	11	25	25	80	136	184	105	101 200
$150 or more	157	-	-	1	1	5	5	15	36	49	45	131 900
Median	42	...	36	38	34	36	39	41	40	44	58	...
No electricity used	8	-	-	2	-	6	-	1	-	-	-	...
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas												
Gas paid for	6 352	17	52	110	208	358	394	875	1 602	2 158	577	93 100
Less than $10	168	2	2	5	16	19	14	34	28	41	7	71 500
$10 to $14	364	-	4	11	21	25	18	49	107	116	13	87 600
$15 to $19	542	1	4	3	10	31	50	77	145	187	32	91 100
$20 to $24	855	1	8	15	17	46	52	134	249	286	47	90 500
$25 to $29	711	2	4	11	19	35	34	78	198	259	70	96 700
$30 to $39	1 324	5	9	22	52	57	70	171	327	501	111	96 100
$40 to $49	854	1	11	14	29	43	70	113	207	282	87	92 900
$50 to $69	1 020	3	3	25	21	72	61	159	241	323	111	92 200
$70 to $99	359	2	3	4	23	23	15	46	86	107	51	93 700
$100 or more	155	2	4	1	-	7	9	14	15	56	47	146 200
Median	34	...	33	34	34	34	34	33	32	33	41	...
No gas used	1 691	8	18	65	90	199	208	319	341	357	85	72 100
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.												
Fuel oil, kerosene, coal, wood, etc., paid for	1 444	13	16	50	54	116	150	258	331	368	89	80 000
Less than $100	356	1	1	10	5	29	33	76	94	89	20	81 400
$100 to $199	392	3	4	6	15	20	31	73	105	110	24	85 300
$200 to $299	225	3	1	9	15	15	28	32	45	66	13	81 000
$300 to $399	115	1	4	5	4	15	17	14	16	28	10	71 500
$400 to $499	99	-	3	5	3	13	15	16	20	19	6	70 200
$500 to $599	66	1	-	2	3	6	8	9	17	18	2	80 100
$600 to $699	68	1	1	5	4	4	10	23	8	8	5	66 400
$700 to $799	26	3	1	-	2	2	2	5	7	5	-	...
$800 or more	98	-	-	8	2	12	7	11	20	27	9	84 200
Median	192	...	...	308	243	262	239	173	167	186	203	...
Fuels not used or free	6 599	12	55	126	244	442	452	936	1 612	2 146	574	91 000
Heating Equipment												
Warm-air furnace	5 050	4	13	60	124	266	332	750	1 218	1 775	508	95 000
Heat pump	234	-	-	-	1	6	22	46	59	78	23	93 000
Steam or hot water	178	-	2	3	3	10	11	19	25	76	29	121 300
Built-in electric units	453	-	2	14	49	76	58	88	84	60	23	64 800
Floor, wall, or pipeless furnace	1 231	4	13	30	53	93	79	157	422	342	38	86 100
Room heaters with flue	143	6	14	19	24	22	10	11	24	12	2	44 100
Room heaters without flue	24	-	3	8	3	3	3	-	3	1	1	...
Fireplaces, stoves, or portable heaters	610	10	21	42	38	78	86	118	97	101	19	63 900
None	120	-	3	1	3	4	3	6	12	69	19	141 600

See footnotes at end of table.

Table E-3. Value of Owner-Occupied Housing Units by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $10,000	$10,000 to $19,999	$20,000 to $29,999	$30,000 to $39,999	$40,000 to $49,999	$50,000 to $59,999	$60,000 to $74,999	$75,000 to $99,999	$100,000 to $199,999	$200,000 or more	Median (dollars)
SPECIFIED OWNER OCCUPIED[1]												
Total	**8 043**	**25**	**71**	**175**	**298**	**558**	**602**	**1 194**	**1 943**	**2 514**	**662**	**89 100**
UNITS OCCUPIED LAST WINTER												
Total	**7 646**	**23**	**68**	**166**	**284**	**529**	**577**	**1 137**	**1 859**	**2 372**	**630**	**89 000**
Insufficient Heat												
Closure of rooms:												
With heating equipment	7 531	23	65	165	281	525	576	1 131	1 847	2 306	611	88 500
No rooms closed	7 244	21	59	155	264	498	549	1 094	1 777	2 238	589	88 800
Closed certain rooms	205	3	6	9	15	22	16	30	45	45	14	75 600
Living room only	8	-	1	-	-	-	2	4	-	-	1	...
Dining room only	6	-	-	-	-	-	-	-	2	-	4	...
1 or more bedrooms only	131	3	4	6	11	14	12	22	28	28	4	70 900
Other rooms or combination of rooms	50	-	1	4	4	6	2	1	9	16	5	90 300
Not reported	9	-	-	-	-	-	-	3	5	1	-	...
Not reported	83	-	-	1	3	5	11	7	25	23	8	90 400
No heating equipment	114	-	3	1	3	4	1	6	12	66	19	142 500
Additional heat source:												
With specified heating equipment[2]	6 926	14	42	121	240	446	490	1 021	1 751	2 209	591	90 500
No additional heat source used	6 366	11	34	108	208	396	438	947	1 609	2 055	559	91 200
Used kitchen stove, fireplace, or portable heater	387	2	9	10	18	31	27	54	103	108	25	85 200
Not reported	173	1	-	3	13	19	24	19	39	46	8	79 000
Lacking specified heating equipment or none	720	9	26	45	44	83	87	117	107	163	39	68 500
Rooms lacking specified heat source:												
With specified heating equipment[2]	6 926	14	42	121	240	446	490	1 021	1 751	2 209	591	90 500
No rooms lacking air ducts, registers, radiators, or heaters	5 091	2	13	58	136	295	362	797	1 218	1 709	501	93 100
Rooms lacking air ducts, registers, radiators, or heaters	1 707	10	28	60	98	136	110	209	502	468	83	84 900
1 room	475	3	9	14	25	39	39	57	120	127	43	85 900
2 rooms	410	6	7	13	25	36	22	66	105	112	17	82 200
3 rooms or more	822	2	12	33	48	63	50	86	277	228	23	85 600
Not reported	128	2	1	3	6	13	17	15	31	32	8	80 500
Lacking specified heating equipment or none	720	9	26	45	44	83	87	117	107	163	39	68 500
Housing unit uncomfortably cold:												
With specified heating equipment[2]	6 926	14	42	121	240	446	490	1 021	1 751	2 209	591	90 500
Lacking specified heating equipment or none	720	9	26	45	44	83	87	117	107	163	39	68 500
Housing unit not uncomfortably cold for 24 hours or more	627	8	20	38	39	75	71	100	97	146	32	69 200
Housing unit uncomfortably cold for 24 hours or more	53	2	4	5	4	4	6	8	6	12	2	81 300
Not reported	40	-	2	2	-	4	9	9	5	5	5	66 200
SPECIFIED OWNER OCCUPIED[1]												
Total	**8 043**	**25**	**71**	**175**	**298**	**558**	**602**	**1 194**	**1 943**	**2 514**	**662**	**89 100**
Air Conditioning												
With air conditioning	3 073	4	18	39	110	224	255	470	786	896	270	88 200
Room units	973	4	17	32	86	114	85	112	249	238	36	78 700
1	751	4	16	26	74	98	73	81	195	156	30	75 600
2	193	-	-	6	12	14	9	31	49	67	5	87 400
3	16	-	1	-	1	1	-	-	4	7	2	...
4	10	-	-	-	-	1	3	-	-	6	-	...
5 or more	3	-	-	-	-	-	-	-	1	2	-	...
Central system	2 100	1	2	7	24	110	170	358	537	658	234	92 700
With no air conditioning	4 970	21	52	136	188	334	346	725	1 158	1 618	392	89 700

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table E-4. Gross Rent of Renter-Occupied Housing Units by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $100	$100 to $149	$150 to $199	$200 to $249	$250 to $299	$300 to $349	$350 to $399	$400 to $499	$500 or more	No cash rent	Median (dollars)
SPECIFIED RENTER OCCUPIED[1]												
Total	**6 804**	**204**	**285**	**376**	**633**	**704**	**872**	**817**	**1 234**	**1 452**	**228**	**363**
House Heating Fuel												
Utility gas	4 218	48	141	259	375	455	507	513	776	1 018	127	375
Bottled, tank, or LP gas	104	5	12	10	9	10	14	4	10	8	23	275
Fuel oil	98	2	10	3	15	7	13	10	13	20	6	337
Kerosene, etc.	5	-	-	-	-	-	2	1	-	2	-	...
Electricity	1 936	133	95	78	150	185	286	248	383	328	49	353
Coal or coke	3	-	-	-	-	1	2	-	-	-	1	...
Wood	141	4	9	13	19	19	20	19	9	15	12	297
Solar heat	6	-	-	-	-	-	2	-	2	1	2	...
Other fuel	63	-	6	-	36	2	3	2	8	5	-	235
None	230	12	12	12	29	26	23	20	34	55	7	344
Monthly Cost Paid for Electricity												
Electricity paid for	5 680	47	163	272	444	616	766	751	1 132	1 357	131	380
Less than $10	538	6	33	46	59	78	66	84	93	65	8	332
$10 to $19	1 349	20	42	88	127	182	207	200	238	234	10	351
$20 to $29	1 325	15	45	62	110	149	177	195	258	277	37	372
$30 to $39	893	3	17	36	76	86	128	104	173	250	19	393
$40 to $49	502	4	11	18	24	37	88	55	133	126	6	409
$50 to $59	394	-	6	12	24	41	36	52	90	112	21	418
$60 to $79	342	1	2	5	13	33	39	44	73	116	15	435
$80 to $99	152	-	7	3	10	8	12	8	42	58	5	462
$100 to $149	133	-	-	3	1	4	12	6	27	73	9	500+
$150 or more	53	-	-	-	-	-	-	2	4	46	1	500+
Median	26	18	21	20	23	23	26	24	28	34	35	...
Included in rent	1 098	152	116	102	182	88	104	64	102	93	94	236
No electricity used	26	5	5	2	6	-	2	2	-	2	3	...
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas												
Gas paid for	3 761	24	92	182	287	388	470	496	729	993	101	388
Less than $10	631	5	27	21	46	92	91	103	141	92	12	363
$10 to $14	715	6	22	44	62	88	88	108	144	143	10	369
$15 to $19	505	5	10	22	44	58	70	67	95	122	13	378
$20 to $24	470	-	17	31	39	39	58	52	92	127	16	392
$25 to $29	370	2	4	15	15	46	37	41	78	121	11	425
$30 to $39	478	6	8	19	48	28	56	58	80	157	18	409
$40 to $49	249	-	-	15	22	18	34	33	31	92	4	402
$50 to $69	236	-	3	13	6	14	28	28	37	98	10	459
$70 to $99	75	-	1	2	3	5	5	4	16	34	6	494
$100 or more	31	-	-	1	3	1	2	3	14	6	2	...
Median	20	...	13	20	18	16	18	17	18	25	25	...
Included in rent	1 219	65	104	111	165	136	138	90	170	164	76	296
No gas used	1 824	115	89	83	180	181	265	230	335	295	51	344
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.												
Fuel oil, kerosene, coal, wood, etc., paid for	320	2	9	12	12	23	40	37	68	103	13	426
Less than $100	92	-	3	2	2	6	17	13	25	25	-	416
$100 to $199	79	1	1	-	1	6	7	6	18	36	4	488
$200 to $299	57	-	2	5	5	4	5	3	9	19	4	421
$300 to $399	38	-	2	2	3	4	4	5	7	10	2	393
$400 to $499	18	1	2	2	-	-	3	3	3	3	2	...
$500 to $599	15	-	-	1	2	3	2	-	5	3	-	...
$600 to $699	4	-	-	-	-	-	1	-	-	2	1	...
$700 to $799	1	-	-	-	-	-	-	-	-	1	-	...
$800 or more	16	-	-	-	-	1	3	7	2	4	1	...
Median	185	...	...	...	...	...	147	193	150	173	...	...
Included in rent	360	23	27	15	50	50	30	43	54	44	25	305
Fuels not used or free	6 125	180	248	349	571	631	802	737	1 112	1 305	189	362
Heating Equipment												
Warm-air furnace	2 229	38	52	66	122	160	259	248	422	763	98	428
Heat pump	94	6	2	-	-	3	16	24	26	16	2	391
Steam or hot water	366	7	25	11	85	42	51	31	48	57	9	308
Built-in electric units	1 256	104	80	57	123	135	179	153	225	177	23	332
Floor, wall, or pipeless furnace	1 974	23	71	149	178	255	281	279	381	321	36	352
Room heaters with flue	346	2	19	41	44	42	30	35	73	40	21	325
Room heaters without flue	82	3	9	17	16	9	10	1	5	4	10	224
Fireplaces, stoves, or portable heaters	227	11	15	23	38	32	24	27	20	18	21	277
None	230	12	12	12	29	26	23	20	34	55	7	344

See footnotes at end of table.

Table E-4. **Gross Rent of Renter-Occupied Housing Units by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983**—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Less than $100	$100 to $149	$150 to $199	$200 to $249	$250 to $299	$300 to $349	$350 to $399	$400 to $499	$500 or more	No cash rent	Median (dollars)
SPECIFIED RENTER OCCUPIED[1]												
Total	**6 604**	**204**	**285**	**376**	**633**	**704**	**872**	**817**	**1 234**	**1 452**	**228**	**363**
UNITS OCCUPIED LAST WINTER												
Total	**4 635**	**164**	**221**	**278**	**417**	**490**	**601**	**538**	**842**	**909**	**175**	**355**
Insufficient Heat												
Closure of rooms:												
With heating equipment	4 474	159	211	268	395	469	580	525	817	882	169	357
No rooms closed	4 193	156	198	255	375	449	541	496	747	821	156	354
Closed certain rooms	187	-	5	8	14	11	30	24	50	36	9	393
Living room only	6	-	2	2	-	-	-	-	2	1	-	...
Dining room only	2	-	-	-	2	-	-	-	-	-	-	...
1 or more bedrooms only	118	-	3	2	7	6	23	16	34	21	7	397
Other rooms or combination of rooms	60	-	1	4	4	5	7	8	14	14	2	395
Not reported	-	-	-	-	-	-	-	-	-	-	-	-
Not reported	94	3	7	5	6	9	10	5	20	25	4	402
No heating equipment	160	5	11	10	22	22	21	14	25	26	6	318
Additional heat source:												
With specified heating equipment[2]	4 242	147	194	233	362	437	554	505	795	870	144	362
No additional heat source used	3 713	137	173	201	306	397	486	443	693	762	114	361
Used kitchen stove, fireplace, or portable heater	371	9	12	12	38	28	51	43	77	84	16	381
Not reported	158	-	9	21	19	12	16	19	25	24	14	336
Lacking specified heating equipment or none	393	18	28	45	55	53	47	33	47	38	30	284
Rooms lacking specified heat source:												
With specified heating equipment[2]	4 242	147	194	233	362	437	554	505	795	870	144	362
No rooms lacking air ducts, registers, radiators, or heaters	2 616	130	112	128	198	252	340	312	462	588	93	366
Rooms lacking air ducts, registers, radiators, or heaters	1 505	16	73	85	149	175	204	173	316	275	40	359
1 room	514	9	33	36	51	87	72	69	80	65	11	324
2 rooms	567	5	25	28	68	54	67	59	155	94	11	376
3 rooms or more	425	2	15	21	30	34	65	45	81	116	17	391
Not reported	121	-	9	21	15	10	10	21	16	8	12	301
Lacking specified heating equipment or none	393	18	28	45	55	53	47	33	47	38	30	284
Housing unit uncomfortably cold:												
With specified heating equipment[2]	4 242	147	194	233	362	437	554	505	795	870	144	362
Lacking specified heating equipment or none	393	18	28	45	55	53	47	33	47	38	30	284
Housing unit not uncomfortably cold for 24 hours or more	303	13	20	35	43	35	35	29	40	30	22	291
Housing unit uncomfortably cold for 24 hours or more	73	3	7	10	11	17	10	2	5	4	5	259
Not reported	17	1	-	-	1	2	3	2	2	4	4	...
SPECIFIED RENTER OCCUPIED[1]												
Total	**6 604**	**204**	**285**	**376**	**633**	**704**	**872**	**817**	**1 234**	**1 452**	**228**	**363**
Air Conditioning												
With air conditioning	2 272	46	70	80	147	187	313	312	497	551	70	391
Room units	1 110	15	41	53	117	106	144	154	242	189	39	389
1	1 007	15	40	53	106	103	120	144	216	177	33	387
2	85	-	1	-	9	2	21	8	23	17	4	393
3	14	-	-	-	2	2	-	2	3	4	2	...
4	-	-	-	-	-	-	-	-	-	-	-	-
5 or more	4	-	-	-	-	-	2	-	-	2	-	...
Central system	1 162	31	28	27	30	80	169	157	256	352	31	416
With no air conditioning	4 532	158	215	296	485	518	560	505	737	900	158	345

[1]Excludes one-unit structures on 10 acres or more.
[2]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table E-5. Housing Units in Structure by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Housing units in structure					
		1	2 to 4	5 to 9	10 to 19	20 or more	Mobile home or trailer
ALL OCCUPIED HOUSING UNITS							
Total	**16 668**	**11 000**	**1 648**	**999**	**752**	**1 232**	**1 037**
House Heating Fuel							
Owner occupied	**9 955**	**8 559**	**273**	**101**	**63**	**99**	**861**
Utility gas	6 715	5 956	169	57	27	41	464
Bottled, tank, or LP gas	270	151	1	-	-	-	118
Fuel oil	359	339	7	1	-	4	8
Kerosene, etc.	3	3	-	-	-	-	-
Electricity	1 683	1 300	79	43	34	29	197
Coal or coke	11	11	-	-	-	-	-
Wood	731	659	7	-	-	-	64
Solar heat	13	13	-	-	-	-	-
Other fuel	2	2	-	-	-	-	-
None	169	125	8	-	2	25	10
Renter occupied	**6 912**	**2 441**	**1 575**	**898**	**689**	**1 133**	**176**
Utility gas	4 241	1 654	1 094	536	418	470	69
Bottled, tank, or LP gas	119	68	2	-	2	2	46
Fuel oil	104	50	17	7	7	22	2
Kerosene, etc.	5	3	2	-	-	-	-
Electricity	1 952	412	415	321	252	502	49
Coal or coke	5	4	-	2	-	-	-
Wood	185	170	8	-	-	-	7
Solar heat	6	2	2	2	-	-	-
Other fuel	63	-	-	-	-	63	-
None	231	76	36	29	10	75	4
Monthly Cost Paid for Electricity							
Specified owner occupied[1]	**8 043**	**8 043**	**...**	**...**	**...**	**...**	**...**
Electricity paid for	8 035	8 035	...	...	...	...	...
Less than $10	67	67	...	...	...	...	...
$10 to $19	689	689	...	...	...	...	...
$20 to $29	1 480	1 480	...	...	...	...	...
$30 to $39	1 525	1 525	...	...	...	...	...
$40 to $49	1 076	1 076	...	...	...	...	...
$50 to $59	938	938	...	...	...	...	...
$60 to $79	1 116	1 116	...	...	...	...	...
$80 to $99	413	413	...	...	...	...	...
$100 to $149	574	574	...	...	...	...	...
$150 or more	157	157	...	...	...	...	...
Median	42	42	...	...	...	...	...
No electricity used	8	8	...	...	...	...	...
Specified renter occupied[2]	**6 804**	**2 333**	**1 575**	**898**	**689**	**1 133**	**176**
Electricity paid for	5 680	2 149	1 396	718	584	692	142
Less than $10	538	72	127	95	112	126	6
$10 to $19	1 349	295	403	246	180	205	20
$20 to $29	1 325	473	374	169	122	162	25
$30 to $39	893	445	196	86	66	79	20
$40 to $49	502	238	113	42	43	48	18
$50 to $59	394	200	72	37	24	41	21
$60 to $79	342	202	62	23	19	22	14
$80 to $99	152	85	28	14	8	8	8
$100 to $149	133	98	16	5	7	-	7
$150 or more	53	42	3	2	3	-	2
Median	26	35	24	21	20	21	39
Included in rent	1 098	183	172	180	100	429	34
No electricity used	26	2	7	-	5	12	-
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas							
Specified owner occupied[1]	**8 043**	**8 043**	**...**	**...**	**...**	**...**	**...**
Gas paid for	6 352	6 352	...	...	...	...	...
Less than $10	168	168	...	...	...	...	...
$10 to $14	364	364	...	...	...	...	...
$15 to $19	542	542	...	...	...	...	...
$20 to $24	855	855	...	...	...	...	...
$25 to $29	711	711	...	...	...	...	...
$30 to $39	1 324	1 324	...	...	...	...	...
$40 to $49	854	854	...	...	...	...	...
$50 to $69	1 020	1 020	...	...	...	...	...
$70 to $99	359	359	...	...	...	...	...
$100 or more	155	155	...	...	...	...	...
Median	34	34	...	...	...	...	...
No gas used	1 691	1 691	...	...	...	...	...
Specified renter occupied[2]	**6 804**	**2 333**	**1 575**	**898**	**689**	**1 133**	**176**
Gas paid for	3 761	1 684	1 006	403	296	282	90
Less than $10	631	94	177	108	122	127	4
$10 to $14	715	200	228	117	68	87	15
$15 to $19	505	222	156	55	46	21	6
$20 to $24	470	227	146	50	25	15	6
$25 to $29	370	211	92	17	12	15	21
$30 to $39	478	315	96	31	10	13	13
$40 to $49	249	161	59	12	5	2	11
$50 to $69	236	166	39	11	7	2	10
$70 to $99	75	62	10	1	-	-	2
$100 or more	31	26	3	-	-	-	2
Median	20	27	18	13	12	11	28
Included in rent	1 219	211	203	234	178	351	42
No gas used	1 824	438	366	260	216	499	45

See footnotes at end of table.

Table E-5. **Housing Units in Structure by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983**—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Housing units in structure					
		1	2 to 4	5 to 9	10 to 19	20 or more	Mobile home or trailer
ALL OCCUPIED HOUSING UNITS—Con.							
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.							
Specified owner occupied[1]	8 043	8 043	–	–	–	–	–
Fuel oil, kerosene, coal, wood, etc., paid for	1 444	1 444	...	...	...	...	...
Less than $100	356	356	...	...	...	...	...
$100 to $199	392	392	...	...	...	...	...
$200 to $299	225	225	...	...	...	...	...
$300 to $399	115	115	...	...	...	...	...
$400 to $499	99	99	...	...	...	...	...
$500 to $599	66	66	...	...	...	...	...
$600 to $699	68	68	...	...	...	...	...
$700 to $799	26	26	...	...	...	...	...
$800 or more	98	98	...	...	...	...	...
Median	192	192	...	...	...	...	...
Fuels not used or free	6 599	6 599	...	...	...	...	...
Specified renter occupied[2]	6 804	2 333	1 575	898	689	1 133	176
Fuel oil, kerosene, coal, wood, etc., paid for	320	234	51	9	3	15	8
Less than $100	92	50	25	3	3	8	3
$100 to $199	79	53	14	5	–	7	–
$200 to $299	57	48	8	–	–	–	–
$300 to $399	38	37	1	–	–	–	–
$400 to $499	18	18	–	–	–	–	–
$500 to $599	15	8	3	–	–	–	4
$600 to $699	4	4	–	–	–	–	–
$700 to $799	1	1	–	–	–	–	–
$800 or more	16	15	–	–	–	–	1
Median	185	229	103	...	...	...	...
Included in rent	360	108	84	50	25	78	15
Fuels not used or free	6 125	1 991	1 441	839	661	1 040	153
ALL OCCUPIED HOUSING UNITS							
Total	16 868	11 000	1 848	999	752	1 232	1 037
Heating Equipment							
Owner occupied	9 955	8 559	273	101	63	99	861
Warm-air furnace	6 198	5 285	125	54	19	36	680
Heat pump	279	260	11	2	–	2	3
Steam or hot water	220	186	13	1	9	11	–
Built-in electric units	666	515	50	31	33	19	18
Floor, wall, or pipeless furnace	1 369	1 273	43	6	–	6	41
Room heaters with flue	188	158	10	6	–	–	14
Room heaters without flue	40	28	2	–	–	–	11
Fireplaces, stoves, or portable heaters	826	729	11	2	–	–	84
None	169	125	8	–	2	25	10
Renter occupied	6 912	2 441	1 575	898	689	1 133	176
Warm-air furnace	2 247	947	525	241	168	233	133
Heat pump	94	28	20	13	11	21	2
Steam or hot water	368	22	41	56	50	200	–
Built-in electric units	1 269	203	282	223	173	379	9
Floor, wall, or pipeless furnace	1 990	707	542	288	241	199	13
Room heaters with flue	356	193	73	35	30	22	2
Room heaters without flue	84	46	24	5	5	–	3
Fireplaces, stoves, or portable heaters	273	219	32	8	–	4	11
None	231	76	36	29	10	75	4
ALL OCCUPIED HOUSING UNITS							
Total	16 868	11 000	1 848	999	752	1 232	1 037
UNITS OCCUPIED LAST WINTER							
Total	14 147	9 873	1 334	689	524	827	901
Insufficient Heat							
Closure of rooms:							
Owner occupied	9 423	8 140	250	91	57	87	798
With heating equipment	9 261	8 021	242	91	55	62	790
No rooms closed	8 901	7 706	236	89	52	59	758
Closed certain rooms	252	225	5	2	2	2	16
Living room only	12	11	–	1	–	–	–
Dining room only	6	6	–	–	–	–	–
1 or more bedrooms only	166	144	3	1	2	–	16
Other rooms or combination of rooms	60	56	3	–	–	2	–
Not reported	9	9	–	–	–	–	–
Not reported	108	89	–	–	2	1	16
No heating equipment	162	119	8	–	2	25	8
Renter occupied	4 724	1 733	1 084	597	466	740	102
With heating equipment	4 563	1 672	1 060	576	458	696	100
No rooms closed	4 274	1 535	990	544	439	671	94
Closed certain rooms	195	105	47	23	7	13	–
Living room only	6	3	–	–	2	2	–
Dining room only	2	2	–	–	–	–	–
1 or more bedrooms only	126	72	29	10	5	9	–
Other rooms or combination of rooms	61	28	19	13	–	2	–
Not reported	–	–	–	–	–	–	–
Not reported	94	32	23	9	11	13	6
No heating equipment	160	61	24	21	9	44	2

See footnotes at end of table.

Table E-5. Housing Units in Structure by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Housing units in structure					
		1	2 to 4	5 to 9	10 to 19	20 or more	Mobile home or trailer
UNITS OCCUPIED LAST WINTER—Con.							
Insufficient Heat—Con.							
Additional heat source:							
Owner occupied	9 423	8 140	250	91	57	87	798
With specified heating equipment[3]	8 438	7 298	230	89	55	62	703
No additional heat source used	7 758	6 706	213	86	50	55	648
Used kitchen stove, fireplace, or portable heater	457	409	12	2	3	2	29
Not reported	222	183	4	1	3	5	26
Lacking specified heating equipment or none	985	842	20	2	2	25	95
Renter occupied	4 724	1 733	1 084	597	466	740	102
With specified heating equipment[3]	4 294	1 470	1 017	569	452	695	90
No additional heat source used	3 757	1 231	899	508	406	632	80
Used kitchen stove, fireplace, or portable heater	377	183	78	36	28	48	5
Not reported	160	56	40	25	19	16	5
Lacking specified heating equipment or none	430	263	67	28	14	46	12
Rooms lacking specified heat source:							
Owner occupied	9 423	8 140	250	91	57	87	798
With specified heating equipment[3]	8 438	7 298	230	89	55	62	703
No rooms lacking air ducts, registers, radiators, or heaters	6 382	5 373	181	76	51	48	652
Rooms lacking air ducts, registers, radiators, or heaters	1 881	1 785	47	12	2	9	27
1 room	542	497	15	2	2	7	20
2 rooms	465	432	21	6	-	2	5
3 rooms or more	873	856	12	4	-	-	2
Not reported	175	141	2	1	2	5	24
Lacking specified heating equipment or none	985	842	20	2	2	25	95
Renter occupied	4 724	1 733	1 084	597	466	740	102
With specified heating equipment[3]	4 294	1 470	1 017	569	452	695	90
No rooms lacking air ducts, registers, radiators, or heaters	2 636	768	598	342	295	550	82
Rooms lacking air ducts, registers, radiators, or heaters	1 534	656	391	202	142	136	6
1 room	523	170	122	81	88	63	2
2 rooms	576	215	174	93	40	53	1
3 rooms or more	435	271	95	29	16	20	4
Not reported	124	47	27	25	15	9	2
Lacking specified heating equipment or none	430	263	67	28	14	46	12
Housing unit uncomfortably cold:							
Owner occupied	9 423	8 140	250	91	57	87	798
With specified heating equipment[3]	8 438	7 298	230	89	55	62	703
Lacking specified heating equipment or none	985	842	20	2	2	25	95
Housing unit not uncomfortably cold for 24 hours or more	858	729	18	2	2	25	82
Housing unit uncomfortably cold for 24 hours or more	68	61	-	-	-	-	7
Not reported	60	52	2	-	-	-	6
Renter occupied	4 724	1 733	1 084	597	466	740	102
With specified heating equipment[3]	4 294	1 470	1 017	569	452	695	90
Lacking specified heating equipment or none	430	263	67	28	14	46	12
Housing unit not uncomfortably cold for 24 hours or more	331	195	47	28	10	43	9
Housing unit uncomfortably cold for 24 hours or more	80	60	17	-	2	-	1
Not reported	19	8	3	-	2	3	2
ALL OCCUPIED HOUSING UNITS							
Total	16 868	11 000	1 848	999	752	1 232	1 037
Air Conditioning							
Owner occupied	9 955	8 559	273	101	63	99	861
With air conditioning	3 982	3 282	103	54	22	68	452
Room units	1 283	1 031	33	16	8	24	171
1	999	796	28	16	3	11	145
2	230	201	2	1	2	5	20
3	35	20	4	-	-	8	3
4	14	11	-	-	-	-	3
5 or more	5	3	-	-	3	-	-
Central system	2 699	2 252	70	38	14	45	281
With no air conditioning	5 973	5 276	169	46	41	31	409
Renter occupied	6 912	2 441	1 575	898	689	1 133	176
With air conditioning	2 300	713	455	282	277	516	57
Room units	1 125	302	226	135	150	280	32
1	1 021	266	213	129	138	247	27
2	87	30	8	4	12	27	5
3	14	5	3	2	-	4	-
4	-	-	-	-	-	-	-
5 or more	4	-	2	-	-	2	-
Central system	1 175	411	230	147	127	236	25
With no air conditioning	4 612	1 729	1 120	616	412	617	119

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table E-6. Number of Rooms Per Housing Unit by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms or more	Median rooms
ALL OCCUPIED HOUSING UNITS									
Total	16 868	382	708	1 894	3 626	3 792	3 045	3 440	5.0
House Heating Fuel									
Owner occupied	9 955	41	92	337	1 350	2 630	2 441	3 064	5.7
Utility gas	6 715	10	33	181	815	1 827	1 703	2 146	5.8
Bottled, tank, or LP gas	270	10	19	23	58	69	49	42	4.9
Fuel oil	359	-	3	9	35	101	73	137	5.9
Kerosene, etc.	3	-	-	-	1	-	2	1	...
Electricity	1 683	11	19	78	319	402	384	471	5.5
Coal or coke	11	-	1	-	1	3	2	4	...
Wood	731	6	7	34	98	183	192	210	5.7
Solar heat	13	-	-	-	-	-	3	10	...
Other fuel	2	-	-	-	-	-	-	2	...
None	169	4	11	11	23	46	33	42	5.3
Renter occupied	6 912	322	616	1 557	2 276	1 162	604	376	3.9
Utility gas	4 241	109	324	959	1 435	769	390	255	4.0
Bottled, tank, or LP gas	119	5	10	14	36	35	15	4	4.3
Fuel oil	104	9	14	8	25	24	6	19	4.3
Kerosene, etc.	5	-	1	-	2	1	-	2	...
Electricity	1 952	125	203	503	681	242	135	63	3.7
Coal or coke	5	-	-	1	-	2	1	2	...
Wood	185	4	10	19	38	45	43	26	5.0
Solar heat	6	-	-	2	4	-	-	1	...
Other fuel	63	39	13	3	4	4	-	-	1.5-
None	231	32	42	48	51	40	14	4	3.4
Monthly Cost Paid for Electricity									
Specified owner occupied[1]	8 043	8	19	140	728	2 104	2 199	2 844	6.0
Electricity paid for	8 035	7	17	139	725	2 104	2 198	2 844	6.0
Less than $10	67	-	2	3	18	35	6	3	4.8
$10 to $19	689	2	2	38	109	251	174	114	5.3
$20 to $29	1 480	1	-	20	205	509	376	389	5.5
$30 to $39	1 525	2	4	28	131	428	427	505	5.9
$40 to $49	1 076	2	6	17	67	249	303	433	6.1
$50 to $59	938	1	-	11	74	221	289	343	6.1
$60 to $79	1 116	-	3	14	70	230	306	492	6.3
$80 to $99	413	-	-	7	16	78	118	193	6.4
$100 to $149	574	-	-	2	31	84	156	301	6.5+
$150 or more	157	-	-	-	5	19	43	91	6.5+
Median	42	...	...	33	32	35	43	49	...
No electricity used	8	1	2	1	4	-	1	-	...
Specified renter occupied[2]	6 604	321	607	1 550	2 257	1 128	583	359	3.9
Electricity paid for	5 680	65	367	1 290	2 059	1 030	537	331	4.0
Less than $10	538	11	102	254	119	36	7	9	3.1
$10 to $19	1 349	19	118	442	518	181	52	19	3.7
$20 to $29	1 325	18	60	301	562	234	113	37	4.0
$30 to $39	893	4	30	122	345	213	106	73	4.3
$40 to $49	502	5	18	61	196	105	72	46	4.3
$50 to $59	394	3	22	37	143	105	49	35	4.4
$60 to $79	342	2	14	45	88	82	59	52	4.8
$80 to $99	152	-	4	18	55	33	21	21	4.5
$100 to $149	133	2	1	5	23	38	35	29	5.4
$150 or more	53	-	-	6	11	3	23	10	5.8
Median	26	21	16	18	26	33	38	45	...
Included in rent	1 098	241	240	254	194	96	45	27	2.8
No electricity used	26	15	-	6	4	2	-	-	...
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas									
Specified owner occupied[1]	8 043	8	19	140	728	2 104	2 199	2 844	6.0
Gas paid for	6 352	7	10	103	536	1 696	1 747	2 254	6.0
Less than $10	168	1	-	7	16	53	59	32	5.6
$10 to $14	364	2	2	18	59	137	97	50	5.2
$15 to $19	542	-	1	16	64	217	150	93	5.4
$20 to $24	855	-	-	6	91	292	249	216	5.6
$25 to $29	711	2	1	14	65	199	213	217	5.8
$30 to $39	1 324	-	2	18	104	349	402	448	6.0
$40 to $49	854	2	4	6	50	197	243	353	6.2
$50 to $69	1 020	-	-	10	62	195	228	525	6.5+
$70 to $99	359	-	-	2	16	46	86	209	6.5+
$100 or more	155	-	-	5	9	10	21	111	6.5+
Median	34	...	...	26	27	28	32	42	...
No gas used	1 691	2	9	37	193	408	452	590	5.9
Specified renter occupied[2]	6 604	321	607	1 550	2 257	1 128	583	359	3.9
Gas paid for	3 761	20	204	785	1 355	760	397	240	4.1
Less than $10	631	14	81	240	210	64	14	9	3.4
$10 to $14	715	-	55	210	284	115	40	11	3.8
$15 to $19	505	4	23	101	213	94	47	24	4.1
$20 to $24	470	-	16	86	180	113	58	17	4.2
$25 to $29	370	2	8	66	136	82	53	21	4.3
$30 to $39	478	-	12	42	179	131	84	50	4.5
$40 to $49	249	-	8	22	68	75	38	39	4.8
$50 to $69	236	-	-	14	66	54	58	45	5.2
$70 to $99	75	-	-	3	12	22	18	20	5.5
$100 or more	31	-	-	1	10	10	6	4	...
Median	20	...	11	13	18	24	28	37	...
Included in rent	1 219	138	219	333	311	133	55	31	3.2
No gas used	1 824	163	184	432	590	235	131	89	3.7

See footnotes at end of table.

Table E-6. Number of Rooms Per Housing Unit by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms or more	Median rooms
ALL OCCUPIED HOUSING UNITS—Con.									
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.									
Specified owner occupied[1]	8 043	8	19	140	728	2 104	2 199	2 844	6.0
Fuel oil, kerosene, coal, wood, etc., paid for	1 444	1	5	21	112	315	372	617	6.2
Less than $100	356	1	-	8	19	69	90	170	6.4
$100 to $199	392	-	2	4	25	80	113	167	6.2
$200 to $299	225	-	1	4	10	49	53	107	6.4
$300 to $399	115	-	2	2	22	28	22	40	5.7
$400 to $499	99	-	1	3	21	28	21	25	5.4
$500 to $599	66	-	-	1	6	21	15	23	5.8
$600 to $699	68	-	-	-	4	19	18	27	6.1
$700 to $799	26	-	-	-	3	4	7	13	...
$800 or more	98	-	-	-	4	17	32	45	6.4
Median	192	...	...	...	311	216	184	182	...
Fuels not used or free	6 599	7	14	119	616	1 789	1 827	2 227	5.9
Specified renter occupied[2]	6 804	321	607	1 550	2 257	1 128	583	359	3.9
Fuel oil, kerosene, coal, wood, etc., paid for	320	3	4	31	75	70	79	59	5.2
Less than $100	92	3	-	12	25	15	27	11	4.9
$100 to $199	79	-	2	8	19	15	21	15	5.2
$200 to $299	57	-	1	8	14	15	10	9	4.9
$300 to $399	38	-	-	4	4	10	10	11	5.6
$400 to $499	18	-	1	-	5	3	4	4	...
$500 to $599	15	-	-	-	6	4	2	3	...
$600 to $699	4	-	-	-	-	-	1	3	...
$700 to $799	1	-	-	-	-	-	-	1	...
$800 or more	16	-	-	-	2	8	5	2	...
Median	185	...	...	...	165	232	163	233	...
Included in rent	360	28	42	99	98	58	27	8	3.6
Fuels not used or free	6 125	290	561	1 421	2 084	1 000	477	291	3.9
ALL OCCUPIED HOUSING UNITS									
Total	16 668	362	708	1 894	3 626	3 792	3 045	3 440	5.0
Heating Equipment									
Owner occupied	9 955	41	92	337	1 350	2 630	2 441	3 064	5.7
Warm-air furnace	6 198	6	25	142	676	1 560	1 553	2 237	5.9
Heat pump	279	-	2	5	27	54	76	115	6.2
Steam or hot water	220	-	2	7	28	31	39	113	6.5+
Built-in electric units	666	2	13	50	152	149	155	145	5.3
Floor, wall, or pipeless furnace	1 369	6	15	56	267	504	351	169	5.2
Room heaters with flue	188	3	10	19	52	62	22	20	4.7
Room heaters without flue	40	4	4	3	9	12	7	2	4.6
Fireplaces, stoves, or portable heaters	826	16	10	46	116	212	204	222	5.6
None	169	4	11	11	23	46	33	42	5.3
Renter occupied	6 912	322	616	1 557	2 276	1 162	604	376	3.9
Warm-air furnace	2 247	25	87	311	737	523	322	242	4.4
Heat pump	94	4	2	21	43	8	12	4	4.0
Steam or hot water	368	73	67	85	73	45	9	15	3.0
Built-in electric units	1 269	115	144	350	420	142	64	35	3.6
Floor, wall, or pipeless furnace	1 990	47	204	580	745	277	108	29	3.7
Room heaters with flue	356	16	33	97	129	51	18	12	3.7
Room heaters without flue	84	4	11	18	22	16	5	7	3.9
Fireplaces, stoves, or portable heaters	273	5	27	47	57	59	50	28	4.5
None	231	32	42	48	51	40	14	4	3.4
ALL OCCUPIED HOUSING UNITS									
Total	16 668	362	708	1 894	3 626	3 792	3 045	3 440	5.0
UNITS OCCUPIED LAST WINTER									
Total	14 147	222	482	1 379	2 830	3 326	2 747	3 160	5.1
Insufficient Heat									
Closure of rooms:									
Owner occupied	9 423	32	79	312	1 261	2 500	2 335	2 905	5.7
With heating equipment	9 261	30	68	301	1 238	2 457	2 303	2 884	5.7
No rooms closed	8 901	30	65	286	1 182	2 339	2 224	2 776	5.7
Closed certain rooms	252	-	2	7	38	86	52	67	5.4
Living room only	12	-	-	-	3	2	3	4	...
Dining room only	6	-	-	-	-	2	2	2	...
1 or more bedrooms only	166	-	2	5	31	68	31	29	5.2
Other rooms or combination of rooms	60	-	-	2	4	10	15	29	6.4
Not reported	9	-	-	-	-	5	1	4	...
Not reported	108	-	2	9	18	32	27	21	5.3
No heating equipment	162	2	11	11	23	43	32	40	5.3
Renter occupied	4 724	191	403	1 067	1 569	827	412	255	3.9
With heating equipment	4 563	175	377	1 036	1 526	796	400	253	3.9
No rooms closed	4 274	170	360	993	1 421	745	364	220	3.9
Closed certain rooms	195	2	4	20	80	38	27	26	4.4
Living room only	6	2	-	2	-	2	-	1	...
Dining room only	2	-	-	-	2	-	-	-	...
1 or more bedrooms only	126	-	2	12	52	25	17	18	4.4
Other rooms or combination of rooms	61	-	2	6	25	11	9	8	4.4
Not reported	-	-	-	-	-	-	-	-	-
Not reported	94	3	13	23	25	13	9	7	3.8
No heating equipment	160	16	25	31	43	30	12	2	3.7
Additional heat source:									
Owner occupied	9 423	32	79	312	1 261	2 500	2 335	2 905	5.7
With specified heating equipment[3]	8 438	16	54	253	1 121	2 243	2 099	2 651	5.7
No additional heat source used	7 758	16	48	233	1 009	2 064	1 942	2 449	5.8
Used kitchen stove, fireplace, or portable heater	457	-	4	9	73	111	102	158	5.8
Not reported	222	-	4	12	39	68	55	43	5.3
Lacking specified heating equipment or none	985	15	25	59	140	257	236	253	5.5

See footnotes at end of table.

Table E-6. **Number of Rooms Per Housing Unit by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983**—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms or more	Median rooms
UNITS OCCUPIED LAST WINTER—Con.									
Insufficient Heat—Con.									
Additional heat source—Con.									
Renter occupied	4 724	191	403	1 067	1 569	827	412	255	3.9
With specified heating equipment[3]	4 294	167	353	993	1 464	735	353	229	3.9
No additional heat source used	3 757	151	318	890	1 281	638	289	191	3.9
Used kitchen stove, fireplace, or portable heater	377	12	20	62	124	68	56	34	4.2
Not reported	160	4	15	41	59	29	8	4	3.8
Lacking specified heating equipment or none	430	24	49	75	106	91	59	26	4.1
Rooms lacking specified heat source:									
Owner occupied	9 423	32	79	312	1 261	2 500	2 335	2 905	5.7
With specified heating equipment[3]	8 438	16	54	253	1 121	2 243	2 099	2 651	5.7
No rooms lacking air ducts, registers, radiators, or heaters	6 382	12	42	188	782	1 592	1 594	2 172	5.9
Rooms lacking air ducts, registers, radiators, or heaters	1 881	4	8	54	307	594	470	443	5.4
1 room	542	4	8	38	69	100	125	201	5.9
2 rooms	465	-	-	15	145	153	72	81	5.0
3 rooms or more	873	-	-	4	94	341	273	161	5.5
Not reported	175	-	4	11	32	57	35	36	5.2
Lacking specified heating equipment or none	985	15	25	59	140	257	236	253	5.5
Renter occupied	4 724	191	403	1 067	1 569	827	412	255	3.9
With specified heating equipment[3]	4 294	167	353	993	1 464	735	353	229	3.9
No rooms lacking air ducts, registers, radiators, or heaters	2 636	161	265	543	820	457	232	157	3.9
Rooms lacking air ducts, registers, radiators, or heaters	1 534	3	85	404	599	258	114	70	3.9
1 room	523	3	59	282	87	55	15	21	3.2
2 rooms	576	-	26	100	358	60	17	15	3.9
3 rooms or more	435	-	-	23	155	142	82	34	4.8
Not reported	124	2	3	45	44	21	8	2	3.8
Lacking specified heating equipment or none	430	24	49	75	106	91	59	26	4.1
Housing unit uncomfortably cold:									
Owner occupied	9 423	32	79	312	1 261	2 500	2 335	2 905	5.7
With specified heating equipment[3]	8 438	16	54	253	1 121	2 243	2 099	2 651	5.7
Lacking specified heating equipment or none	985	15	25	59	140	257	236	253	5.5
Housing unit not uncomfortably cold for 24 hours or more	858	14	17	49	121	220	212	224	5.5
Housing unit uncomfortably cold for 24 hours or more	68	1	3	3	18	23	7	14	4.9
Not reported	60	-	5	7	1	13	18	16	5.7
Renter occupied	4 724	191	403	1 067	1 569	827	412	255	3.9
With specified heating equipment[3]	4 294	167	353	993	1 464	735	353	229	3.9
Lacking specified heating equipment or none	430	24	49	75	106	91	59	26	4.1
Housing unit not uncomfortably cold for 24 hours or more	331	20	38	50	89	68	49	18	4.1
Housing unit uncomfortably cold for 24 hours or more	80	4	11	19	7	20	10	8	4.3
Not reported	19	-	1	6	10	2	-	-	...
ALL OCCUPIED HOUSING UNITS									
Total	16 868	362	708	1 894	3 626	3 792	3 045	3 440	5.0
Air Conditioning									
Owner occupied	9 955	41	92	337	1 350	2 630	2 441	3 064	5.7
With air conditioning	3 982	15	31	110	550	1 050	1 043	1 183	5.7
Room units	1 283	9	23	45	241	352	332	280	5.4
1	999	9	15	38	207	283	236	212	5.3
2	230	-	8	8	18	57	82	56	5.8
3	35	-	-	-	14	6	8	8	...
4	14	-	-	-	2	4	5	4	...
5 or more	5	-	-	-	-	3	2	1	...
Central system	2 699	6	8	65	310	698	710	902	5.9
With no air conditioning	5 973	25	61	227	799	1 580	1 398	1 882	5.7
Renter occupied	6 912	322	616	1 557	2 276	1 162	604	376	3.9
With air conditioning	2 300	51	156	520	847	395	219	114	4.0
Room units	1 125	39	90	296	405	177	76	40	3.8
1	1 021	39	88	273	366	155	65	34	3.8
2	87	-	3	24	27	17	9	6	4.1
3	14	-	-	-	11	3	-	-	...
4	-	-	-	-	-	-	-	-	-
5 or more	4	-	-	-	-	2	2	-	...
Central system	1 175	11	66	222	442	218	143	74	4.1
With no air conditioning	4 612	271	461	1 038	1 429	767	385	262	3.9

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table E-7. Year Structure Built by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Year structure built					
		April 1970 or later	March 1970 or earlier				
			Total	1960 to March 1970	1950 to 1959	1940 to 1949	1939 or earlier
ALL OCCUPIED HOUSING UNITS							
Total	16 868	5 368	11 499	3 822	2 992	1 599	3 086
House Heating Fuel							
Owner occupied	9 955	3 330	6 626	2 265	2 007	895	1 458
Utility gas	6 715	1 916	4 800	1 634	1 505	643	1 018
Bottled, tank, or LP gas	270	129	141	66	27	17	32
Fuel oil	359	23	335	47	105	64	119
Kerosene, etc.	3	2	1	-	1	-	-
Electricity	1 683	933	750	342	209	81	118
Coal or coke	11	-	11	1	-	1	9
Wood	731	255	476	126	130	73	146
Solar heat	13	10	3	1	-	-	2
Other fuel	2	-	2	-	2	-	-
None	169	61	108	50	28	15	15
Renter occupied	6 912	2 039	4 874	1 557	985	704	1 628
Utility gas	4 241	898	3 344	969	782	513	1 080
Bottled, tank, or LP gas	119	27	92	31	14	17	30
Fuel oil	104	14	91	11	20	6	54
Kerosene, etc.	5	2	3	-	-	1	3
Electricity	1 952	1 012	940	473	105	108	254
Coal or coke	5	-	5	-	2	-	4
Wood	185	18	167	27	30	30	79
Solar heat	6	6	-	-	-	-	-
Other fuel	63	1	61	5	-	-	56
None	231	61	170	39	32	29	69
Monthly Cost Paid for Electricity							
Specified owner occupied[1]	8 043	2 273	5 771	1 816	1 866	839	1 249
Electricity paid for	8 035	2 270	5 765	1 814	1 864	838	1 249
Less than $10	67	7	60	5	17	11	27
$10 to $19	689	87	602	85	179	106	233
$20 to $29	1 480	286	1 194	287	393	199	314
$30 to $39	1 525	384	1 141	340	396	187	217
$40 to $49	1 076	298	778	250	275	114	140
$50 to $59	938	301	638	213	214	94	117
$60 to $79	1 116	412	704	333	205	62	105
$80 to $99	413	175	238	107	68	29	34
$100 to $149	574	243	331	156	97	28	50
$150 or more	157	78	79	38	20	9	12
Median	42	52	38	47	38	35	32
No electricity used	8	3	6	3	2	1	-
Specified renter occupied[2]	6 804	2 028	4 776	1 545	967	687	1 576
Electricity paid for	5 680	1 756	3 925	1 355	845	585	1 140
Less than $10	538	92	446	165	78	55	148
$10 to $19	1 349	335	1 015	353	205	178	279
$20 to $29	1 325	373	953	316	223	139	275
$30 to $39	893	307	586	194	128	93	170
$40 to $49	502	188	314	96	73	44	102
$50 to $59	394	169	225	90	55	27	52
$60 to $79	342	129	212	69	42	31	70
$80 to $99	152	68	83	36	21	8	18
$100 to $149	133	70	63	23	18	4	17
$150 or more	53	24	29	12	3	6	8
Median	26	32	25	25	26	24	25
Included in rent	1 098	272	825	188	119	97	422
No electricity used	26	-	26	3	3	6	14
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas							
Specified owner occupied[1]	8 043	2 273	5 771	1 816	1 866	839	1 249
Gas paid for	6 352	1 570	4 782	1 537	1 550	679	1 017
Less than $10	168	43	125	33	30	22	40
$10 to $14	364	63	301	73	79	71	78
$15 to $19	542	131	411	80	156	81	94
$20 to $24	855	194	661	182	224	126	130
$25 to $29	711	146	565	162	218	69	116
$30 to $39	1 324	333	991	345	345	136	166
$40 to $49	854	237	617	221	192	65	139
$50 to $69	1 020	285	735	280	224	83	148
$70 to $99	359	103	256	110	53	16	77
$100 or more	155	36	119	50	29	11	29
Median	34	36	33	36	32	27	33
No gas used	1 691	702	989	280	317	160	232
Specified renter occupied[2]	6 804	2 028	4 776	1 545	967	687	1 576
Gas paid for	3 761	826	2 935	863	700	478	894
Less than $10	631	136	495	184	114	64	134
$10 to $14	715	150	565	185	122	109	148
$15 to $19	505	104	402	116	112	59	115
$20 to $24	470	104	366	91	99	71	105
$25 to $29	370	84	286	84	63	50	88
$30 to $39	478	106	372	88	95	58	131
$40 to $49	249	63	186	49	35	23	79
$50 to $69	236	65	171	46	45	25	55
$70 to $99	75	10	65	17	11	12	24
$100 or more	31	3	28	4	4	5	15
Median	20	21	20	17	20	20	22
Included in rent	1 219	356	864	246	144	106	368
No gas used	1 824	846	978	436	123	103	316

See footnotes at end of table.

Table E-7. Year Structure Built by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Year structure built					
		April 1970 or later	March 1970 or earlier				
			Total	1960 to March 1970	1950 to 1959	1940 to 1949	1939 or earlier
ALL OCCUPIED HOUSING UNITS—Con.							
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.							
Specified owner occupied[1]	**8 043**	**2 273**	**5 771**	**1 816**	**1 866**	**839**	**1 249**
Fuel oil, kerosene, coal, wood, etc., paid for	1 444	430	1 015	321	316	132	245
Less than $100	356	142	215	91	58	23	43
$100 to $199	392	153	239	99	81	23	36
$200 to $299	225	67	158	53	52	13	41
$300 to $399	115	25	90	30	18	18	23
$400 to $499	99	19	79	11	32	14	22
$500 to $599	66	6	60	10	19	10	20
$600 to $699	68	7	61	6	22	6	25
$700 to $799	26	2	25	2	6	6	11
$800 or more	98	9	89	18	28	19	23
Median	192	147	234	170	237	340	311
Fuels not used or free	6 599	1 843	4 756	1 495	1 550	706	1 004
Specified renter occupied[2]	**6 804**	**2 028**	**4 776**	**1 545**	**967**	**687**	**1 576**
Fuel oil, kerosene, coal, wood, etc., paid for	320	98	222	51	42	31	98
Less than $100	92	39	53	18	13	6	17
$100 to $199	79	35	44	15	8	6	15
$200 to $299	57	13	43	12	4	10	17
$300 to $399	38	5	33	4	5	4	20
$400 to $499	18	-	18	2	2	4	10
$500 to $599	15	4	11	2	4	-	5
$600 to $699	4	-	4	-	2	-	2
$700 to $799	1	-	1	-	-	-	1
$800 or more	16	2	15	-	4	-	10
Median	185	128	231	153	209	...	296
Included in rent	360	87	273	79	46	46	102
Fuels not used or free	6 125	1 843	4 281	1 415	879	610	1 377
ALL OCCUPIED HOUSING UNITS							
Total	**16 868**	**5 368**	**11 499**	**3 822**	**2 992**	**1 599**	**3 086**
Heating Equipment							
Owner occupied	**9 955**	**3 330**	**6 626**	**2 265**	**2 007**	**895**	**1 458**
Warm-air furnace	6 198	2 408	3 791	1 616	1 141	372	662
Heat pump	279	188	90	38	41	2	12
Steam or hot water	220	74	147	59	31	9	47
Built-in electric units	666	267	399	169	112	48	69
Floor, wall, or pipeless furnace	1 369	43	1 325	161	451	326	387
Room heaters with flue	188	8	180	24	38	26	92
Room heaters without flue	40	2	38	10	13	8	8
Fireplaces, stoves, or portable heaters	826	279	547	140	151	89	167
None	169	61	108	50	28	15	15
Renter occupied	**6 912**	**2 039**	**4 874**	**1 557**	**985**	**704**	**1 628**
Warm-air furnace	2 247	1 088	1 159	514	263	119	262
Heat pump	94	67	27	24	2	1	-
Steam or hot water	368	74	294	80	28	8	178
Built-in electric units	1 269	557	712	338	70	81	222
Floor, wall, or pipeless furnace	1 990	151	1 838	461	495	330	553
Room heaters with flue	356	18	338	57	45	63	172
Room heaters without flue	84	-	84	3	15	20	47
Fireplaces, stoves, or portable heaters	273	22	251	39	35	54	124
None	231	61	170	39	32	29	69
ALL OCCUPIED HOUSING UNITS							
Total	**16 868**	**5 368**	**11 499**	**3 822**	**2 992**	**1 599**	**3 086**
UNITS OCCUPIED LAST WINTER							
Total	**14 147**	**4 292**	**9 855**	**3 279**	**2 670**	**1 392**	**2 514**
Insufficient Heat							
Closure of rooms:							
Owner occupied	**9 423**	**3 052**	**6 371**	**2 167**	**1 937**	**867**	**1 401**
With heating equipment	9 261	2 993	6 269	2 119	1 911	853	1 386
No rooms closed	8 901	2 911	5 990	2 050	1 849	809	1 283
Closed certain rooms	252	47	205	44	42	38	81
Living room only	12	1	11	1	3	2	5
Dining room only	6	2	4	-	4	-	-
1 or more bedrooms only	166	35	131	28	25	27	50
Other rooms or combination of rooms	60	8	51	13	10	7	22
Not reported	9	1	8	2	1	2	4
Not reported	108	35	73	25	19	6	22
No heating equipment	162	59	103	48	26	14	15
Renter occupied	**4 724**	**1 240**	**3 484**	**1 112**	**734**	**525**	**1 113**
With heating equipment	4 563	1 205	3 358	1 083	714	498	1 063
No rooms closed	4 274	1 153	3 121	1 019	677	451	974
Closed certain rooms	195	32	163	39	25	42	57
Living room only	6	1	5	-	2	2	2
Dining room only	2	-	2	-	-	-	2
1 or more bedrooms only	126	22	104	29	16	30	29
Other rooms or combination of rooms	61	10	51	10	7	10	24
Not reported	-	-	-	-	-	-	-
Not reported	94	20	74	24	12	6	31
No heating equipment	160	35	125	29	20	27	50

See footnotes at end of table.

Table E-7. Year Structure Built by Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Year structure built					
		April 1970 or later	March 1970 or earlier				
			Total	1960 to March 1970	1950 to 1959	1940 to 1949	1939 or earlier
UNITS OCCUPIED LAST WINTER—Con.							
Insufficient Heat—Con.							
Additional heat source:							
Owner occupied	9 423	3 052	6 371	2 167	1 937	867	1 401
With specified heating equipment[3]	8 438	2 727	5 711	1 979	1 756	757	1 219
No additional heat source used	7 758	2 549	5 210	1 839	1 604	683	1 084
Used kitchen stove, fireplace, or portable heater	457	115	342	79	112	50	101
Not reported	222	64	159	61	39	25	34
Lacking specified heating equipment or none	985	325	660	187	181	110	182
Renter occupied	4 724	1 240	3 484	1 112	734	525	1 113
With specified heating equipment[3]	4 294	1 192	3 102	1 052	678	445	927
No additional heat source used	3 757	1 123	2 634	927	599	372	736
Used kitchen stove, fireplace, or portable heater	377	47	330	89	57	57	127
Not reported	160	22	138	37	22	15	64
Lacking specified heating equipment or none	430	48	382	60	56	80	186
Rooms lacking specified heat source:							
Owner occupied	9 423	3 052	6 371	2 167	1 937	867	1 401
With specified heating equipment[3]	8 438	2 727	5 711	1 979	1 756	757	1 219
No rooms lacking air ducts, registers, radiators, or heaters	6 382	2 545	3 837	1 660	1 163	375	639
Rooms lacking air ducts, registers, radiators, or heaters	1 881	127	1 754	281	556	364	553
1 room	542	87	455	124	135	69	127
2 rooms	465	20	445	60	120	73	192
3 rooms or more	873	19	854	97	301	222	234
Not reported	175	55	120	38	36	19	27
Lacking specified heating equipment or none	985	325	660	187	181	110	182
Renter occupied	4 724	1 240	3 484	1 112	734	525	1 113
With specified heating equipment[3]	4 294	1 192	3 102	1 052	678	445	927
No rooms lacking air ducts, registers, radiators, or heaters	2 636	1 041	1 595	673	325	173	423
Rooms lacking air ducts, registers, radiators, or heaters	1 534	131	1 403	352	335	260	456
1 room	523	58	465	109	106	97	153
2 rooms	576	45	531	168	124	85	153
3 rooms or more	435	28	407	75	105	78	149
Not reported	124	19	105	28	17	12	48
Lacking specified heating equipment or none	430	48	382	60	56	80	186
Housing unit uncomfortably cold:							
Owner occupied	9 423	3 052	6 371	2 167	1 937	867	1 401
With specified heating equipment[3]	8 438	2 727	5 711	1 979	1 756	757	1 219
Lacking specified heating equipment or none	985	325	660	187	181	110	182
Housing unit not uncomfortably cold for 24 hours or more	858	294	564	160	167	94	144
Housing unit uncomfortably cold for 24 hours or more	68	10	57	16	6	12	23
Not reported	60	21	39	12	8	4	14
Renter occupied	4 724	1 240	3 484	1 112	734	525	1 113
With specified heating equipment[3]	4 294	1 192	3 102	1 052	678	445	927
Lacking specified heating equipment or none	430	48	382	60	56	80	186
Housing unit not uncomfortably cold for 24 hours or more	331	45	286	52	49	57	128
Housing unit uncomfortably cold for 24 hours or more	80	-	80	6	4	20	51
Not reported	19	3	16	2	3	3	7
ALL OCCUPIED HOUSING UNITS							
Total	16 868	5 368	11 499	3 822	2 992	1 599	3 086
Air Conditioning							
Owner occupied	9 955	3 330	6 626	2 265	2 007	895	1 458
With air conditioning	3 982	1 653	2 329	919	780	283	347
Room units	1 283	229	1 054	279	376	167	232
1	999	186	813	224	293	112	185
2	230	28	202	43	74	47	38
3	35	13	22	6	4	6	6
4	14	-	14	4	4	3	3
5 or more	5	3	3	3	-	-	-
Central system	2 699	1 424	1 275	640	405	116	115
With no air conditioning	5 973	1 676	4 296	1 346	1 227	612	1 111
Renter occupied	6 912	2 039	4 874	1 557	985	704	1 628
With air conditioning	2 300	1 128	1 173	573	273	140	187
Room units	1 125	332	793	339	187	114	153
1	1 021	295	726	308	173	105	140
2	87	27	60	31	9	9	11
3	14	7	7	-	5	-	2
4	-	-	-	-	-	-	-
5 or more	4	4	-	-	-	-	-
Central system	1 175	795	380	234	87	25	34
With no air conditioning	4 612	911	3 701	984	712	564	1 441

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table E-8. Monthly Cost Paid for Electricity by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Monthly cost paid for electricity											
		Less than $10	$10 to $19	$20 to $29	$30 to $39	$40 to $49	$50 to $59	$60 to $79	$80 to $99	$100 to $149	$150 or more	No electricity used or not reported[1]	Median (dollars)
SPECIFIED OWNER OCCUPIED[2]													
Total	8 043	67	689	1 480	1 525	1 076	938	1 116	413	574	157	8	42
House Heating Fuel													
Electricity	1 171	4	21	89	110	105	139	266	127	234	76	-	68
Other than electricity	6 752	62	668	1 382	1 401	960	780	827	261	325	78	8	38
Utility gas	5 768	55	588	1 189	1 203	815	653	692	227	279	64	3	38
Bottled, tank, or LP gas	107	2	7	17	23	6	15	15	9	12	2	1	47
Fuel oil	311	4	45	81	66	48	23	27	5	9	3	-	33
Kerosene, etc.	2	-	-	-	-	-	-	2	1	-	-	-	...
Coal or coke	5	-	-	2	1	1	-	2	-	-	-	-	...
Wood	544	2	28	92	108	85	87	89	19	21	9	5	44
Solar heat	13	-	-	1	-	5	2	1	-	4	-	-	...
Other fuel	2	-	-	2	-	-	-	-	-	-	-	-	...
None	120	-	-	9	14	11	19	23	25	15	4	-	66
Heating Equipment													
Warm-air furnace	5 050	30	369	907	1 007	708	608	704	247	367	99	4	43
Heat pump	234	-	-	7	17	16	18	48	42	63	23	-	85
Steam or hot water	178	-	8	31	41	29	27	24	7	10	1	-	43
Built-in electric units	453	3	13	46	52	53	68	110	30	63	14	-	58
Floor, wall, or pipeless furnace	1 231	26	236	322	239	149	95	97	35	24	8	-	31
Room heaters with flue	143	6	25	42	27	19	9	10	3	2	-	-	29
Room heaters without flue	24	-	2	8	4	4	2	2	1	2	-	-	...
Fireplaces, stoves, or portable heaters	610	2	35	107	124	87	94	98	22	28	9	5	44
None	120	-	-	9	14	11	19	23	25	15	4	-	66
Persons													
1 person	1 090	32	261	277	159	112	84	85	30	40	6	3	28
2 persons	2 738	28	290	604	610	340	312	292	84	135	40	3	37
3 persons	1 476	2	59	235	274	244	183	231	97	119	33	-	46
4 persons	1 594	2	56	227	300	222	200	294	105	148	41	-	49
5 persons	681	1	13	78	116	92	99	127	52	82	21	-	54
6 persons	268	2	6	33	43	45	31	45	29	22	10	2	51
7 persons or more	195	-	4	26	24	22	30	41	16	28	6	-	57
Median	2.6	1.5	1.8	2.3	2.5	2.8	2.9	3.3	3.4	3.4	3.5	...	...
Air Conditioning													
With air conditioning	3 073	13	143	404	520	366	394	551	218	349	114	1	52
Room units	973	9	90	183	211	132	128	153	35	28	3	-	39
1	751	9	78	157	153	104	102	113	18	14	3	-	38
2	193	-	10	26	50	26	23	32	12	13	-	-	44
3	16	-	2	-	4	1	2	4	3	1	-	-	...
4	10	-	-	-	4	-	1	3	2	-	-	-	...
5 or more	3	-	-	-	-	2	-	1	-	-	-	-	...
Central system	2 100	4	53	221	309	234	266	398	183	321	111	1	58
With no air conditioning	4 970	54	546	1 075	1 005	710	544	565	195	224	44	7	37
SPECIFIED RENTER OCCUPIED[3]													
Total	6 804	538	1 349	1 325	893	502	394	342	152	133	53	1 124	26
House Heating Fuel													
Electricity	1 936	103	261	322	245	185	154	163	82	58	24	340	34
Other than electricity	4 638	426	1 069	976	626	300	234	167	50	72	29	691	24
Utility gas	4 218	401	1 026	908	571	260	207	139	37	63	25	582	24
Bottled, tank, or LP gas	104	8	10	16	14	11	14	4	1	1	1	26	33
Fuel oil	98	8	15	13	17	9	4	5	3	1	-	24	30
Kerosene, etc.	5	1	-	2	-	2	-	-	-	-	-	-	...
Coal or coke	3	-	-	1	-	-	1	-	-	-	-	2	...
Wood	141	2	10	32	25	16	9	19	9	6	3	8	38
Solar heat	6	-	4	2	-	-	-	-	-	1	-	-	...
Other fuel	63	7	3	3	-	-	-	-	-	-	-	49	...
None	230	9	20	27	23	18	5	12	20	4	-	94	35
Heating Equipment													
Warm-air furnace	2 229	95	346	425	351	214	194	150	66	61	29	278	33
Heat pump	94	-	2	8	12	19	9	13	6	7	3	17	48
Steam or hot water	366	57	64	36	23	10	3	3	2	2	2	165	16
Built-in electric units	1 256	85	205	243	171	102	78	80	34	16	8	234	28
Floor, wall, or pipeless furnace	1 974	226	608	445	234	79	67	38	7	13	8	249	21
Room heaters with flue	346	54	73	74	36	26	17	10	4	2	-	50	23
Room heaters without flue	82	3	9	20	14	9	7	8	2	-	-	10	32
Fireplaces, stoves, or portable heaters	227	9	23	48	29	26	13	28	12	9	3	28	36
None	230	9	20	27	23	18	5	12	20	4	-	94	35
Persons													
1 person	2 235	311	562	364	169	86	59	43	15	12	6	608	18
2 persons	2 011	149	428	441	286	154	126	102	51	28	13	233	26
3 persons	1 086	45	196	236	179	98	91	65	29	39	7	101	31
4 persons	803	23	82	163	151	89	60	75	28	22	14	97	35
5 persons	359	6	43	65	57	48	30	27	17	14	8	44	37
6 persons	165	2	20	27	29	17	14	16	5	7	3	24	37
7 persons or more	146	3	20	30	22	11	14	13	6	10	1	16	35
Median	2.1	1.5-	1.8	2.2	2.5	2.6	2.6	2.9	2.8	3.1	3.5	1.5-	...

See footnotes at end of table.

Table E-8. Monthly Cost Paid for Electricity by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Monthly cost paid for electricity											
		Less than $10	$10 to $19	$20 to $29	$30 to $39	$40 to $49	$50 to $59	$60 to $79	$80 to $99	$100 to $149	$150 or more	No electricity used or not reported[1]	Median (dollars)
SPECIFIED RENTER OCCUPIED[3]—Con.													
Air Conditioning													
With air conditioning	2 272	109	387	439	325	213	190	141	82	81	30	276	32
Room units	1 110	79	256	256	144	91	81	53	21	16	1	112	26
1	1 007	76	238	243	134	74	72	36	15	14	1	105	25
2	85	3	17	9	7	14	9	15	2	3	-	7	42
3	14	-	-	3	3	2	-	2	4	-	-	-	...
4	-	-	-	-	-	-	-	-	-	-	-	-	-
5 or more	4	-	2	2	-	-	-	-	-	-	-	-	...
Central system	1 162	30	131	183	181	122	109	88	61	64	29	164	38
With no air conditioning	4 532	429	962	886	568	289	204	201	69	52	23	848	25

[1]Renter households with electricity costs included in their rent are included in this category.
[2]Limited to one-unit structures on less than 10 acres and no business on property.
[3]Excludes one-unit structures on 10 acres or more.

Table E-9. Monthly Cost Paid for Gas by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Monthly cost paid for utility, bottled, tank, or LP gas											
		Less than $10	$10 to $14	$15 to $19	$20 to $24	$25 to $29	$30 to $39	$40 to $49	$50 to $69	$70 to $99	$100 or more	No gas used or not reported[1]	Median (dollars)
SPECIFIED OWNER OCCUPIED[2]													
Total	**8 043**	**168**	**364**	**542**	**855**	**711**	**1 324**	**854**	**1 020**	**359**	**155**	**1 691**	**34**
House Heating Fuel													
Gas	5 875	109	301	493	762	655	1 250	834	981	351	140	-	34
Utility gas	5 768	109	295	489	753	647	1 238	823	948	335	132	-	34
Bottled, tank, or LP gas	107	-	6	4	9	8	12	12	33	16	8	-	52
Other than gas	2 048	52	61	47	86	52	70	18	37	9	13	1 604	23
Fuel oil	311	3	1	-	2	-	2	1	3	-	-	300	...
Kerosene, etc.	2	-	-	-	-	-	-	-	-	-	-	2	-
Electricity	1 171	31	21	30	45	26	39	13	23	7	9	927	24
Coal or coke	5	-	-	-	-	-	-	-	-	-	-	5	-
Wood	544	17	39	17	35	23	27	4	12	2	2	367	22
Solar heat	13	1	-	-	5	3	2	-	-	-	-	2	...
Other fuel	2	-	-	-	-	-	-	-	-	-	2	-	...
None	120	7	3	2	8	4	4	2	2	-	2	87	...
Heating Equipment													
Warm-air furnace	5 050	86	162	318	532	485	962	657	840	303	114	590	38
Heat pump	234	10	6	8	14	5	8	1	3	3	4	173	22
Steam or hot water	178	-	3	2	3	7	22	21	51	25	21	23	57
Built-in electric units	453	9	8	4	6	8	8	2	5	3	-	400	24
Floor, wall, or pipeless furnace	1 231	26	125	180	237	157	252	135	79	17	12	11	26
Room heaters with flue	143	6	11	8	15	15	29	19	20	4	-	15	33
Room heaters without flue	24	2	2	-	3	2	5	5	3	1	1	1	...
Fireplaces, stoves, or portable heaters	610	21	45	21	38	29	32	12	16	3	2	392	22
None	120	7	3	2	8	4	4	2	2	-	2	87	...
Persons													
1 person	1 090	36	95	131	155	85	142	83	92	28	20	224	26
2 persons	2 738	82	142	219	261	260	470	276	282	86	47	812	32
3 persons	1 476	10	49	83	156	162	246	164	209	78	13	306	35
4 persons	1 594	20	50	65	165	122	278	205	253	70	41	325	37
5 persons	681	8	12	26	72	54	120	67	98	62	16	147	37
6 persons	268	5	10	11	35	16	40	39	53	11	10	39	39
7 persons or more	195	7	6	6	12	13	28	21	34	25	7	37	43
Median	2.6	2.1	2.1	2.1	2.6	2.6	2.7	2.9	3.1	3.3	3.2	2.5	...
Air Conditioning													
With air conditioning	3 073	73	162	203	351	247	533	324	383	133	66	600	33
Room units	973	22	72	74	118	71	166	98	119	39	8	186	32
1	751	18	56	52	91	53	126	78	88	30	8	151	32
2	193	-	12	18	25	16	36	17	29	10	-	31	33
3	16	3	2	-	2	2	4	2	-	-	-	1	...
4	10	-	-	4	1	-	-	2	2	-	-	2	...
5 or more	3	-	2	-	-	-	-	-	-	-	-	1	...
Central system	2 100	51	90	130	232	176	367	226	264	94	58	413	34
With no air conditioning	4 970	95	203	338	504	464	791	531	637	226	89	1 092	34
SPECIFIED RENTER OCCUPIED[3]													
Total	**6 604**	**631**	**715**	**505**	**470**	**370**	**478**	**249**	**238**	**75**	**31**	**3 043**	**20**
House Heating Fuel													
Gas	4 323	543	639	469	432	341	443	233	229	72	27	895	21
Utility gas	4 218	540	626	465	423	321	438	224	222	64	21	873	20
Bottled, tank, or LP gas	104	3	13	3	9	19	4	10	7	8	6	22	28
Other than gas	2 252	82	58	31	32	20	30	12	7	2	3	1 974	14
Fuel oil	98	-	-	-	1	2	1	2	-	1	-	92	...
Kerosene, etc.	5	-	-	-	-	-	2	-	1	-	-	2	...
Electricity	1 936	70	46	30	26	16	22	10	6	1	3	1 706	14
Coal or coke	3	-	-	-	-	-	-	-	-	-	-	3	-
Wood	141	6	10	1	4	3	6	-	-	-	1	111	...
Solar heat	6	-	2	-	-	-	-	-	-	-	-	4	...
Other fuel	63	5	-	-	2	-	-	-	-	-	-	56	...
None	230	7	17	5	6	9	5	4	-	2	-	174	18
Heating Equipment													
Warm-air furnace	2 229	144	226	196	183	164	226	134	157	52	17	731	25
Heat pump	94	2	1	-	-	-	-	2	-	-	-	90	...
Steam or hot water	366	28	13	2	6	6	11	1	5	5	-	288	13
Built-in electric units	1 256	31	22	7	5	8	10	3	1	-	1	1 169	12
Floor, wall, or pipeless furnace	1 974	338	369	242	214	150	165	75	57	10	5	349	17
Room heaters with flue	346	60	40	38	37	26	36	19	9	3	7	71	19
Room heaters without flue	82	7	7	8	7	3	12	9	5	3	-	20	27
Fireplaces, stoves, or portable heaters	227	14	19	7	11	5	13	4	2	2	1	150	18
None	230	7	17	5	6	9	5	4	-	2	-	174	18
Persons													
1 person	2 235	308	221	137	98	63	67	34	31	12	2	1 260	13
2 persons	2 011	178	248	157	128	100	147	55	62	20	5	910	18
3 persons	1 086	81	136	100	80	93	95	51	55	16	7	372	22
4 persons	803	35	61	64	92	48	92	54	37	14	9	296	25
5 persons	359	18	16	20	42	33	42	21	32	10	5	121	28
6 persons	165	5	23	13	20	10	21	16	11	2	2	42	24
7 persons or more	146	5	10	15	10	22	14	17	9	2	-	42	27
Median	2.1	1.5	2.0	2.2	2.6	2.7	2.8	3.2	2.9	2.8	...	1.8	...

See footnotes at end of table.

Table E-9. Monthly Cost Paid for Gas by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Monthly cost paid for utility, bottled, tank, or LP gas											
		Less than $10	$10 to $14	$15 to $19	$20 to $24	$25 to $29	$30 to $39	$40 to $49	$50 to $69	$70 to $99	$100 or more	No gas used or not reported[1]	Median (dollars)
SPECIFIED RENTER OCCUPIED[3]—Con.													
Air Conditioning													
With air conditioning	2 272	224	238	175	151	100	157	80	75	21	8	1 044	18
Room units	1 110	140	124	92	77	45	65	36	38	17	1	476	17
1	1 007	135	110	87	70	38	53	36	34	17	1	427	17
2	85	4	14	4	5	5	9	-	4	-	-	40	20
3	14	-	-	-	2	2	3	-	-	-	-	7	...
4	-	-	-	-	-	-	-	-	-	-	-	-	-
5 or more	4	2	-	-	-	-	-	-	-	-	-	2	...
Central system	1 162	84	113	83	75	55	92	44	37	4	7	568	21
With no air conditioning	4 532	407	477	330	319	270	322	169	161	54	23	1 999	21

[1]Renter households with gas costs included in their rent are included in this category.
[2]Limited to one-unit structures on less than 10 acres and no business on property.
[3]Excludes one-unit structures on 10 acres or more.

Table E-10. **Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, etc., by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983**

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Yearly cost paid for fuel oil, kerosene, coal, wood, etc.										
		Less than $100	$100 to $199	$200 to $299	$300 to $399	$400 to $499	$500 to $599	$600 to $699	$700 to $799	$800 or more	Fuels not used, free, or not reported[1]	Median (dollars)
SPECIFIED OWNER OCCUPIED[2]												
Total	8 043	356	392	225	115	99	66	68	26	98	6 599	192
House Heating Fuel												
Oil, coal, kerosene, wood, etc.	863	59	91	102	69	76	59	56	23	89	237	386
Fuel oil	311	10	10	23	20	42	47	51	20	81	7	601
Coal or coke	5	-	3	1	2	-	-	-	-	-	-	...
Kerosene, etc.	2	1	-	-	-	-	-	-	-	-	2	...
Wood	544	49	78	78	48	34	12	5	3	8	228	239
Other than oil, coal, kerosene, wood, etc.	7 061	297	301	122	46	23	7	11	3	8	6 243	137
Utility gas	5 768	224	231	90	19	14	5	9	2	4	5 171	132
Bottled, tank, or LP gas	107	5	3	6	4	5	-	-	-	2	84	...
Electricity	1 171	68	66	25	23	5	2	3	1	3	975	145
Solar heat	13	-	1	-	-	-	-	-	-	-	12	...
Other fuel	2	-	-	-	-	-	-	-	-	-	2	-
None	120	-	-	1	-	-	-	-	-	-	119	...
Heating Equipment												
Warm-air furnace	5 050	237	243	108	38	48	39	55	21	72	4 189	179
Heat pump	234	8	7	5	2	-	-	1	-	2	211	...
Steam or hot water	178	14	12	4	1	1	6	-	-	8	132	175
Built-in electric units	453	27	28	12	14	2	2	2	1	1	364	161
Floor, wall, or pipeless furnace	1 231	17	12	11	4	8	5	3	1	-	1 171	206
Room heaters with flue	143	-	3	2	1	6	2	3	-	6	121	...
Room heaters without flue	24	2	-	2	-	-	-	-	-	-	21	...
Fireplaces, stoves, or portable heaters	610	53	86	82	56	34	12	5	3	8	271	238
None	120	-	-	1	-	-	-	-	-	-	119	...
Persons												
1 person	1 090	34	45	30	8	25	22	7	2	23	894	262
2 persons	2 738	136	123	81	46	42	22	29	19	44	2 196	214
3 persons	1 476	61	83	41	25	12	10	17	-	13	1 215	183
4 persons	1 594	64	82	48	20	15	6	12	5	6	1 337	177
5 persons	681	33	35	18	9	4	5	4	-	10	563	174
6 persons	268	12	14	4	1	1	1	-	-	1	235	...
7 persons or more	195	16	9	4	6	-	-	-	1	-	160	115
Median	2.6	2.6	2.8	2.5	2.6	2.1	2.0	2.4	...	2.1	2.7	...
Air Conditioning												
With air conditioning	3 073	141	126	83	30	24	12	12	6	20	2 619	168
Room units	973	50	31	31	10	11	10	8	4	12	808	206
1	751	38	21	24	10	10	10	6	4	8	622	226
2	193	11	8	6	-	1	-	2	-	4	162	...
3	16	-	-	-	-	-	-	-	-	-	16	-
4	10	2	2	-	-	-	-	-	-	-	7	...
5 or more	3	-	-	1	-	-	-	-	-	-	2	...
Central system	2 100	91	95	52	20	14	2	5	2	9	1 811	156
With no air conditioning	4 970	215	266	142	85	74	53	56	20	77	3 981	210
SPECIFIED RENTER OCCUPIED[3]												
Total	6 804	92	79	57	38	18	15	4	1	16	6 485	185
House Heating Fuel												
Oil, coal, kerosene, wood, etc.	247	13	19	22	28	11	9	4	1	15	125	323
Fuel oil	98	2	4	4	15	7	6	3	1	7	50	394
Coal or coke	3	-	-	-	1	-	1	-	-	-	2	...
Kerosene, etc.	5	-	3	-	-	-	-	-	-	-	2	...
Wood	141	12	12	16	12	4	2	1	-	8	72	259
Other than oil, coal, kerosene, wood, etc.	6 327	79	60	35	10	7	6	-	-	2	6 129	133
Utility gas	4 218	51	42	15	3	3	4	-	-	1	4 100	120
Bottled, tank, or LP gas	104	4	2	2	-	2	2	-	-	-	93	...
Electricity	1 936	24	15	17	7	2	1	-	-	1	1 889	161
Solar heat	6	-	-	1	-	-	-	-	-	-	5	...
Other fuel	63	-	-	-	-	-	-	-	-	-	63	-
None	230	-	-	-	-	-	-	-	-	-	230	-
Heating Equipment												
Warm-air furnace	2 229	46	40	16	13	9	11	2	1	7	2 084	165
Heat pump	94	-	-	-	1	-	-	-	-	-	93	...
Steam or hot water	366	-	3	2	-	-	-	1	-	-	361	...
Built-in electric units	1 256	21	9	14	5	2	-	-	-	-	1 205	152
Floor, wall, or pipeless furnace	1 974	11	8	4	-	1	-	-	-	-	1 950	...
Room heaters with flue	346	-	1	1	4	2	1	-	-	2	338	...
Room heaters without flue	82	-	3	-	-	-	2	-	-	-	77	...
Fireplaces, stoves, or portable heaters	227	14	16	19	14	4	2	1	-	8	149	247
None	230	-	-	-	-	-	-	-	-	-	230	-
Persons												
1 person	2 235	33	14	12	7	4	1	-	1	2	2 160	128
2 persons	2 011	24	26	17	10	7	9	-	-	1	1 917	186
3 persons	1 086	12	21	10	5	3	2	2	-	11	1 021	196
4 persons	803	14	10	9	11	3	-	1	-	1	754	204
5 persons	359	4	6	3	5	1	3	-	-	2	335	...
6 persons	165	2	1	4	1	-	-	-	-	-	157	...
7 persons or more	146	3	-	1	-	-	-	1	-	-	141	...
Median	2.1	2.0	2.5	2.4	2.9	...	...	...	...	...	2.1	...

See footnotes at end of table.

Table E-10. Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, etc., by Fuel Use, Heating, Persons, and Air Conditioning Characteristics: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Yearly cost paid for fuel oil, kerosene, coal, wood, etc.										
		Less than $100	$100 to $199	$200 to $299	$300 to $399	$400 to $499	$500 to $599	$600 to $699	$700 to $799	$800 or more	Fuels not used, free, or not reported[1]	Median (dollars)
SPECIFIED RENTER OCCUPIED[3]—Con.												
Air Conditioning												
With air conditioning	2 272	28	24	11	6	3	5	-	-	4	2 192	149
Room units	1 110	7	9	4	5	2	2	-	-	2	1 081	...
1	1 007	6	5	4	5	1	-	-	-	2	985	...
2	85	1	3	-	-	1	2	-	-	-	78	...
3	14	-	-	-	-	-	-	-	-	-	14	-
4	-	-	-	-	-	-	-	-	-	-	-	-
5 or more	4	-	-	-	-	-	-	-	-	-	4	-
Central system	1 162	21	15	7	1	1	3	-	-	2	1 112	123
With no air conditioning	4 532	64	55	46	32	16	10	4	1	13	4 292	201

[1]Renter households with fuel costs included in their rent are included in this category.
[2]Limited to one-unit structures on less than 10 acres and no business on property.
[3]Excludes one-unit structures on 10 acres or more.

Table F-1. Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics for Housing Units With Black Householder: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Inside SMSA's			Outside SMSA's
		Total	In central city	Not in central city	
ALL OCCUPIED HOUSING UNITS					
Total	9 163	7 128	5 222	1 907	2 034
House Heating Fuel					
Owner occupied	4 123	2 916	1 926	989	1 207
Utility gas	2 515	2 058	1 492	565	457
Bottled, tank, or LP gas	333	64	10	53	269
Fuel oil	522	406	264	142	116
Kerosene, etc.	44	18	8	9	27
Electricity	493	311	127	184	182
Coal or coke	24	13	9	4	11
Wood	177	36	11	25	142
Solar heat	-	-	-	-	-
Other fuel	1	-	-	-	1
None	12	10	5	6	2
Renter occupied	5 040	4 213	3 295	917	827
Utility gas	2 668	2 509	2 015	494	358
Bottled, tank, or LP gas	140	40	12	28	100
Fuel oil	855	798	666	132	58
Kerosene, etc.	36	16	14	2	20
Electricity	912	753	529	225	158
Coal or coke	16	9	6	3	7
Wood	125	15	6	9	110
Solar heat	-	-	-	-	-
Other fuel	3	2	2	-	1
None	85	70	47	23	15
Monthly Cost Paid for Electricity					
Specified owner occupied[1]	3 472	2 512	1 617	895	960
Electricity paid for	3 470	2 512	1 617	895	958
Less than $10	17	11	5	6	6
$10 to $19	131	89	57	32	42
$20 to $29	311	205	137	68	106
$30 to $39	520	388	285	103	132
$40 to $49	474	352	235	118	122
$50 to $59	484	343	236	107	141
$60 to $79	632	463	261	202	169
$80 to $99	330	243	157	86	87
$100 to $149	393	279	162	116	114
$150 or more	177	139	82	57	38
Median	55	56	53	61	54
No electricity used	2	-	-	-	2
Specified renter occupied[2]	4 987	4 204	3 293	911	782
Electricity paid for	4 069	3 357	2 582	775	712
Less than $10	121	115	95	19	6
$10 to $19	468	376	299	77	92
$20 to $29	827	667	520	147	160
$30 to $39	858	737	568	169	122
$40 to $49	529	448	352	96	81
$50 to $59	417	342	266	76	75
$60 to $79	410	313	213	100	97
$80 to $99	190	158	112	46	32
$100 to $149	170	138	105	33	33
$150 or more	79	63	51	12	15
Median	36	36	36	38	37
Included in rent	891	835	705	130	56
No electricity used	27	13	7	6	14
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas					
Specified owner occupied[1]	3 472	2 512	1 617	895	960
Gas paid for	2 865	2 159	1 464	695	706
Less than $10	58	37	24	13	20
$10 to $14	91	58	35	22	34
$15 to $19	117	81	49	32	36
$20 to $24	184	147	89	58	36
$25 to $29	167	103	62	41	63
$30 to $39	425	292	189	103	133
$40 to $49	311	224	148	76	87
$50 to $69	628	463	296	167	165
$70 to $99	494	415	298	117	79
$100 or more	392	340	274	65	52
Median	52	56	59	50	43
No gas used	606	353	153	200	253
Specified renter occupied[2]	4 987	4 204	3 293	911	782
Gas paid for	2 753	2 272	1 840	433	481
Less than $10	258	234	193	41	24
$10 to $14	287	239	183	56	48
$15 to $19	245	215	180	35	30
$20 to $24	273	221	175	45	52
$25 to $29	180	139	112	27	41
$30 to $39	399	304	243	61	95
$40 to $49	277	221	168	52	56
$50 to $69	435	352	290	62	83
$70 to $99	198	169	137	32	29
$100 or more	202	179	157	22	23
Median	33	33	33	32	34
Included in rent	1 360	1 255	1 000	255	105
No gas used	873	677	454	223	196

See footnotes at end of table.

Table F-1. Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics for Housing Units With Black Householder: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Inside SMSA's			Outside SMSA's
		Total	In central city	Not in central city	
ALL OCCUPIED HOUSING UNITS—Con.					
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.					
Specified owner occupied[1]	3 472	2 512	1 617	895	960
Fuel oil, kerosene, coal, wood, etc., paid for	758	512	292	220	246
Less than $100	115	75	43	32	39
$100 to $199	120	67	36	31	53
$200 to $299	65	33	19	14	33
$300 to $399	67	40	20	20	26
$400 to $499	58	32	23	9	26
$500 to $599	45	37	18	19	8
$600 to $699	66	46	28	17	20
$700 to $799	25	18	17	1	7
$800 or more	197	164	87	77	33
Median	420	525	528	522	291
Fuels not used or free	2 714	2 000	1 325	675	714
Specified renter occupied[2]	4 987	4 204	3 293	911	782
Fuel oil, kerosene, coal, wood, etc., paid for	339	207	144	63	132
Less than $100	65	35	25	10	30
$100 to $199	51	32	23	9	19
$200 to $299	52	23	13	10	29
$300 to $399	37	18	9	8	19
$400 to $499	18	5	2	3	13
$500 to $599	18	16	10	6	3
$600 to $699	11	6	3	2	5
$700 to $799	22	17	13	4	5
$800 or more	65	56	46	10	9
Median	304	376	503	327	258
Included in rent	1 000	941	814	127	60
Fuels not used or free	3 647	3 057	2 336	721	591
ALL OCCUPIED HOUSING UNITS					
Total	9 163	7 128	5 222	1 907	2 034
Heating Equipment					
Owner occupied	4 123	2 916	1 926	989	1 207
Warm-air furnace	2 003	1 600	1 059	541	403
Heat pump	43	35	9	26	8
Steam or hot water	506	487	384	103	19
Built-in electric units	174	85	44	41	88
Floor, wall, or pipeless furnace	360	292	178	114	68
Room heaters with flue	288	153	95	59	135
Room heaters without flue	497	179	124	55	318
Fireplaces, stoves, or portable heaters	239	74	29	45	166
None	12	10	5	6	2
Renter occupied	5 040	4 213	3 295	917	827
Warm-air furnace	1 774	1 557	1 177	379	218
Heat pump	41	35	20	14	6
Steam or hot water	1 294	1 255	1 080	175	39
Built-in electric units	395	347	248	99	48
Floor, wall, or pipeless furnace	452	396	289	107	57
Room heaters with flue	314	228	180	49	85
Room heaters without flue	502	271	221	50	231
Fireplaces, stoves, or portable heaters	183	54	34	20	129
None	85	70	47	23	15
ALL OCCUPIED HOUSING UNITS					
Total	9 163	7 128	5 222	1 907	2 034
UNITS OCCUPIED LAST WINTER					
Total	6 009	6 164	4 523	1 641	1 845
Insufficient Heat					
Closure of rooms:					
Owner occupied	3 997	2 822	1 870	951	1 175
With heating equipment	3 987	2 813	1 867	946	1 174
No rooms closed	3 647	2 630	1 740	889	1 018
Closed certain rooms	307	157	106	51	149
Living room only	24	12	7	4	13
Dining room only	5	2	2	-	3
1 or more bedrooms only	169	86	57	29	83
Other rooms or combination of rooms	99	56	38	18	43
Not reported	9	2	2	-	8
Not reported	34	26	20	6	7
No heating equipment	10	9	3	6	1
Renter occupied	4 012	3 342	2 653	690	669
With heating equipment	3 954	3 293	2 621	672	660
No rooms closed	3 470	2 919	2 324	596	551
Closed certain rooms	419	320	254	66	99
Living room only	38	27	24	3	11
Dining room only	7	7	5	2	-
1 or more bedrooms only	261	212	167	45	49
Other rooms or combination of rooms	110	73	58	15	37
Not reported	3	2	-	2	2
Not reported	64	53	43	10	11
No heating equipment	58	49	31	18	9
Additional heat source:					
Owner occupied	3 997	2 822	1 870	951	1 175
With specified heating equipment[3]	3 262	2 566	1 718	849	696
No additional heat source used	2 735	2 190	1 475	715	545
Used kitchen stove, fireplace, or portable heater	405	293	192	101	113
Not reported	122	84	51	33	38
Lacking specified heating equipment or none	735	256	153	103	479

See footnotes at end of table.

Table F-1. Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics for Housing Units With Black Householder: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Inside SMSA's			Outside SMSA's
		Total	In central city	Not in central city	
UNITS OCCUPIED LAST WINTER—Con.					
Insufficient Heat—Con.					
Additional heat source—Con.					
Renter occupied	4 012	3 342	2 653	690	669
With specified heating equipment[3]	3 381	3 029	2 416	612	353
No additional heat source used	2 513	2 244	1 780	464	269
Used kitchen stove, fireplace, or portable heater	751	689	552	137	62
Not reported	118	96	84	12	22
Lacking specified heating equipment or none	630	313	236	77	317
Rooms lacking specified heat source:					
Owner occupied	3 997	2 822	1 870	951	1 175
With specified heating equipment[3]	3 262	2 566	1 718	849	696
No rooms lacking air ducts, registers, radiators, or heaters	2 494	2 015	1 348	667	479
Rooms lacking air ducts, registers, radiators, or heaters	662	482	326	156	180
1 room	152	118	94	24	34
2 rooms	144	112	77	36	31
3 rooms or more	366	252	156	97	114
Not reported	106	69	44	25	38
Lacking specified heating equipment or none	735	256	153	103	479
Renter occupied	4 012	3 342	2 653	690	669
With specified heating equipment[3]	3 381	3 029	2 416	612	353
No rooms lacking air ducts, registers, radiators, or heaters	2 630	2 406	1 925	480	224
Rooms lacking air ducts, registers, radiators, or heaters	659	555	427	129	104
1 room	216	202	161	41	14
2 rooms	197	167	129	38	29
3 rooms or more	247	186	137	49	61
Not reported	92	68	64	3	24
Lacking specified heating equipment or none	630	313	236	77	317
Housing unit uncomfortably cold:					
Owner occupied	3 997	2 822	1 870	951	1 175
With specified heating equipment[3]	3 262	2 566	1 718	849	696
Lacking specified heating equipment or none	735	256	153	103	479
Housing unit not uncomfortably cold for 24 hours or more	573	192	113	79	381
Housing unit uncomfortably cold for 24 hours or more	136	51	32	19	85
Not reported	26	13	8	5	13
Renter occupied	4 012	3 342	2 653	690	669
With specified heating equipment[3]	3 381	3 029	2 416	612	353
Lacking specified heating equipment or none	630	313	236	77	317
Housing unit not uncomfortably cold for 24 hours or more	443	223	167	56	219
Housing unit uncomfortably cold for 24 hours or more	162	75	54	22	86
Not reported	26	15	15	-	11
ALL OCCUPIED HOUSING UNITS					
Total	9 163	7 128	5 222	1 907	2 034
Air Conditioning					
Owner occupied	4 123	2 916	1 926	989	1 207
With air conditioning	2 417	1 802	1 185	617	615
Room units	1 567	1 133	822	312	433
1	982	650	463	187	331
2	427	336	251	85	91
3	117	110	83	26	7
4	29	25	18	8	4
5 or more	13	13	7	6	-
Central system	851	669	364	305	182
With no air conditioning	1 706	1 113	741	372	592
Renter occupied	5 040	4 213	3 295	917	827
With air conditioning	1 939	1 634	1 156	478	305
Room units	1 132	943	717	227	188
1	910	735	561	174	175
2	179	165	122	44	13
3	31	31	24	7	-
4	10	10	10	-	-
5 or more	2	2	-	2	-
Central system	807	690	439	251	117
With no air conditioning	3 101	2 579	2 140	439	522

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Table G-1. Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics for Housing Units With Householder of Spanish Origin: 1983

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Inside SMSA's			Outside SMSA's
		Total	In central city	Not in central city	
ALL OCCUPIED HOUSING UNITS					
Total	4 594	3 890	2 312	1 578	703
House Heating Fuel					
Owner occupied	1 977	1 560	795	765	418
Utility gas	1 388	1 144	643	502	242
Bottled, tank, or LP gas	95	45	2	43	50
Fuel oil	83	72	39	33	11
Kerosene, etc.	2	2	2	-	-
Electricity	326	244	87	157	83
Coal or coke	-	-	-	-	-
Wood	36	14	-	14	23
Solar heat	-	-	-	-	-
Other fuel	-	-	-	-	-
None	48	39	22	17	9
Renter occupied	2 617	2 331	1 518	813	286
Utility gas	1 469	1 293	797	496	176
Bottled, tank, or LP gas	64	40	11	29	24
Fuel oil	515	500	449	51	15
Kerosene, etc.	3	2	-	2	1
Electricity	423	371	182	189	52
Coal or coke	-	-	-	-	-
Wood	8	6	-	6	3
Solar heat	-	-	-	-	-
Other fuel	16	16	16	-	-
None	119	104	63	41	16
Monthly Cost Paid for Electricity					
Specified owner occupied[1]	1 662	1 330	677	653	332
Electricity paid for	1 661	1 329	677	652	332
Less than $10	7	7	-	7	-
$10 to $19	79	57	20	36	22
$20 to $29	239	189	78	111	50
$30 to $39	281	225	117	108	56
$40 to $49	197	152	79	73	45
$50 to $59	196	163	100	63	34
$60 to $79	276	217	102	116	58
$80 to $99	127	97	51	46	30
$100 to $149	157	136	87	49	21
$150 or more	102	87	43	44	15
Median	51	52	54	48	47
No electricity used	1	1	-	1	-
Specified renter occupied[2]	2 585	2 314	1 516	799	271
Electricity paid for	2 107	1 875	1 205	670	232
Less than $10	95	90	53	37	5
$10 to $19	365	343	200	143	23
$20 to $29	474	430	294	136	44
$30 to $39	412	376	265	110	36
$40 to $49	247	228	159	69	19
$50 to $59	168	137	82	55	31
$60 to $79	163	141	82	59	22
$80 to $99	80	55	29	26	25
$100 to $149	72	53	27	26	19
$150 or more	31	23	13	10	8
Median	33	32	32	32	44
Included in rent	468	429	301	128	37
No electricity used	12	10	10	-	2
Monthly Cost Paid for Utility, Bottled, Tank, or LP Gas					
Specified owner occupied[1]	1 662	1 330	677	653	332
Gas paid for	1 404	1 136	605	531	268
Less than $10	40	27	14	13	14
$10 to $14	100	88	56	32	12
$15 to $19	123	107	43	64	16
$20 to $24	235	182	81	101	52
$25 to $29	121	99	38	62	22
$30 to $39	231	184	108	76	47
$40 to $49	171	146	73	73	25
$50 to $69	212	159	103	56	53
$70 to $99	106	85	50	35	21
$100 or more	66	59	40	19	7
Median	33	33	36	29	34
No gas used	258	194	72	122	64
Specified renter occupied[2]	2 585	2 314	1 516	799	271
Gas paid for	1 589	1 414	960	454	175
Less than $10	237	219	149	70	19
$10 to $14	288	277	172	105	12
$15 to $19	238	214	153	61	23
$20 to $24	207	189	139	50	18
$25 to $29	137	123	65	58	15
$30 to $39	164	142	95	47	21
$40 to $49	122	99	69	30	23
$50 to $69	106	82	63	19	24
$70 to $99	51	37	29	8	14
$100 or more	39	32	28	4	7
Median	21	19	20	18	30
Included in rent	640	585	394	191	55
No gas used	357	315	161	154	41

See footnotes at end of table.

Table G-1. **Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics for Housing Units With Householder of Spanish Origin: 1983**—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Inside SMSA's			Outside SMSA's
		Total	In central city	Not in central city	
ALL OCCUPIED HOUSING UNITS—Con.					
Yearly Cost Paid for Fuel Oil, Kerosene, Coal, Wood, Etc.					
Specified owner occupied[1]	1 662	1 330	677	653	332
Fuel oil, kerosene, coal, wood, etc., paid for	149	109	47	63	40
Less than $100	34	27	17	10	7
$100 to $199	29	22	12	10	8
$200 to $299	16	10	2	9	6
$300 to $399	14	7	-	7	7
$400 to $499	6	3	-	3	3
$500 to $599	6	4	2	2	3
$600 to $699	3	1	-	1	2
$700 to $799	3	2	2	-	1
$800 or more	37	33	12	22	4
Median	266	256	149	344	289
Fuels not used or free	1 513	1 221	630	591	292
Specified renter occupied[2]	2 585	2 314	1 516	799	271
Fuel oil, kerosene, coal, wood, etc., paid for	60	52	37	15	8
Less than $100	22	21	16	5	2
$100 to $199	13	12	7	5	1
$200 to $299	6	6	4	3	-
$300 to $399	1	-	-	-	1
$400 to $499	-	-	-	-	-
$500 to $599	4	4	2	2	-
$600 to $699	2	2	2	-	-
$700 to $799	2	-	-	-	2
$800 or more	11	8	7	1	3
Median	160	143	140	...	...
Included in rent	601	562	448	114	39
Fuels not used or free	1 924	1 701	1 031	670	224
ALL OCCUPIED HOUSING UNITS					
Total	4 594	3 890	2 312	1 578	703
Heating Equipment					
Owner occupied	1 977	1 560	795	765	418
Warm-air furnace	945	766	361	405	179
Heat pump	49	35	11	23	14
Steam or hot water	138	126	86	40	12
Built-in electric units	79	51	16	35	28
Floor, wall, or pipeless furnace	307	263	128	135	44
Room heaters with flue	97	61	33	28	36
Room heaters without flue	213	150	105	44	63
Fireplaces, stoves, or portable heaters	102	70	33	37	32
None	48	39	22	17	9
Renter occupied	2 617	2 331	1 518	813	286
Warm-air furnace	617	524	305	219	94
Heat pump	26	25	14	11	3
Steam or hot water	708	689	587	103	18
Built-in electric units	156	134	63	71	22
Floor, wall, or pipeless furnace	536	500	257	244	36
Room heaters with flue	178	144	94	50	34
Room heaters without flue	181	133	98	35	47
Fireplaces, stoves, or portable heaters	94	77	38	39	17
None	119	104	63	41	16
ALL OCCUPIED HOUSING UNITS					
Total	4 594	3 890	2 312	1 578	703
UNITS OCCUPIED LAST WINTER					
Total	3 796	3 203	1 876	1 326	594
Insufficient Heat					
Closure of rooms:					
Owner occupied	1 862	1 475	744	731	387
With heating equipment	1 817	1 440	724	716	378
No rooms closed	1 701	1 361	684	677	341
Closed certain rooms	86	57	32	24	30
Living room only	5	4	4	-	1
Dining room only	4	4	2	2	-
1 or more bedrooms only	62	39	23	16	23
Other rooms or combination of rooms	14	8	4	5	5
Not reported	2	2	-	2	-
Not reported	30	22	8	15	7
No heating equipment	44	35	20	15	9
Renter occupied	1 935	1 728	1 133	595	207
With heating equipment	1 853	1 654	1 086	569	199
No rooms closed	1 642	1 474	945	528	168
Closed certain rooms	186	160	128	32	26
Living room only	23	21	20	2	2
Dining room only	4	2	-	2	2
1 or more bedrooms only	123	107	85	22	16
Other rooms or combination of rooms	34	28	23	5	5
Not reported	2	2	-	2	-
Not reported	25	21	12	8	4
No heating equipment	82	73	47	26	9
Additional heat source:					
Owner occupied	1 862	1 475	744	731	387
With specified heating equipment[3]	1 514	1 227	588	640	287
No additional heat source used	1 373	1 117	525	592	256
Used kitchen stove, fireplace, or portable heater	88	69	41	28	19
Not reported	53	42	22	20	11
Lacking specified heating equipment or none	348	248	156	92	100

See footnotes at end of table.

Table G-1. Fuel, Fuel Cost, Heating, and Air Conditioning Characteristics for Housing Units With Householder of Spanish Origin: 1983—Con.

[Numbers in thousands. Data based on sample, see text. For minimum base for derived figures (percent, median, etc.) and meaning of symbols, see text]

Characteristics	Total	Inside SMSA's			Outside SMSA's
		Total	In central city	Not in central city	
UNITS OCCUPIED LAST WINTER—Con.					
Insufficient Heat—Con.					
Additional heat source—Con.					
Renter occupied	1 935	1 728	1 133	595	207
With specified heating equipment[3]	1 636	1 491	978	513	145
No additional heat source used	1 304	1 185	743	442	119
Used kitchen stove, fireplace, or portable heater	280	256	199	58	23
Not reported	53	50	37	13	3
Lacking specified heating equipment or none	299	237	155	82	62
Rooms lacking specified heat source:					
Owner occupied	1 862	1 475	744	731	387
With specified heating equipment[3]	1 514	1 227	588	640	287
No rooms lacking air ducts, registers, radiators, or heaters	1 039	847	404	443	192
Rooms lacking air ducts, registers, radiators, or heaters	423	338	154	184	86
1 room	100	77	31	46	24
2 rooms	103	83	36	47	20
3 rooms or more	220	178	86	91	43
Not reported	52	42	30	12	9
Lacking specified heating equipment or none	348	248	156	92	100
Renter occupied	1 935	1 728	1 133	595	207
With specified heating equipment[3]	1 636	1 491	978	513	145
No rooms lacking air ducts, registers, radiators, or heaters	1 064	973	679	293	92
Rooms lacking air ducts, registers, radiators, or heaters	536	486	276	210	50
1 room	196	179	111	68	17
2 rooms	190	173	90	82	17
3 rooms or more	151	135	75	60	16
Not reported	36	32	23	10	3
Lacking specified heating equipment or none	299	237	155	82	62
Housing unit uncomfortably cold:					
Owner occupied	1 862	1 475	744	731	387
With specified heating equipment[3]	1 514	1 227	588	640	287
Lacking specified heating equipment or none	348	248	156	92	100
Housing unit not uncomfortably cold for 24 hours or more	277	207	133	75	69
Housing unit uncomfortably cold for 24 hours or more	53	27	14	13	26
Not reported	18	14	10	4	4
Renter occupied	1 935	1 728	1 133	595	207
With specified heating equipment[3]	1 636	1 491	978	513	145
Lacking specified heating equipment or none	299	237	155	82	62
Housing unit not uncomfortably cold for 24 hours or more	206	169	113	55	37
Housing unit uncomfortably cold for 24 hours or more	82	59	35	25	23
Not reported	10	9	7	2	2
ALL OCCUPIED HOUSING UNITS					
Total	4 594	3 890	2 312	1 578	703
Air Conditioning					
Owner occupied	1 977	1 560	795	765	418
With air conditioning	1 119	888	450	438	231
Room units	531	409	235	175	122
1	338	252	139	113	86
2	148	119	78	42	29
3	20	15	6	9	4
4	19	16	8	8	3
5 or more	7	7	4	3	-
Central system	588	478	215	263	110
With no air conditioning	858	672	345	327	186
Renter occupied	2 617	2 331	1 518	813	286
With air conditioning	958	841	477	364	117
Room units	597	520	325	195	77
1	485	424	267	157	62
2	97	82	47	35	15
3	12	12	9	4	-
4	2	2	2	-	-
5 or more	-	-	-	-	-
Central system	361	321	152	169	40
With no air conditioning	1 659	1 490	1 041	449	169

[1]Limited to one-unit structures on less than 10 acres and no business on property.
[2]Excludes one-unit structures on 10 acres or more.
[3]Excludes room heaters without flue or vent, fireplaces, stoves, and portable heaters.

Appendix A

Area Classifications, Definitions and Explanations of Subject Characteristics, and Facsimile of the Annual Housing Survey Questionnaire: 1983

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AREA CLASSIFICATIONS

Urban and rural residence—Urban housing makes up all housing units in urbanized areas and in places of 2,500 inhabitants or more outside urbanized areas. More specifically, urban housing consists of all housing units in (a) places of 2,500 inhabitants or more incorporated as cities, villages, boroughs (except Alaska), and towns (except in the New England States, New York, and Wisconsin), but excluding those housing units in the rural portions of extended cities; (b) unincorporated places of 2,500 inhabitants or more; and (c) other territory, incorporated or unincorporated, included in urbanized areas. Housing units not classified as urban constitute rural housing. Information on the historical development of the urban-rural definition appears in the 1970 Population Census PC(1)-A reports.

In the Annual Housing Survey, the urban and rural residence classification of the housing units is the same as in the 1970 census.

Farm-nonfarm residence—In rural areas, occupied housing units are subdivided into rural-farm housing, which makes up all rural units on farms, and rural-nonfarm housing, which makes up the remaining rural units. Occupied housing units are classified as farm units if they are located on places of 10 acres or more from which sales of farm products amounted to $50 or more during the 12-month period prior to the interview or on places of less than 10 acres from which sales of farm products amounted to $250 or more during the 12-month period prior to the interview. Occupied units in rural territory which do not meet the definition for farm housing are classified as nonfarm. All vacant units in rural areas also are classified as nonfarm.

Counties—The primary divisions of most of the States are termed counties; in Louisiana, the corresponding areas are termed parishes. Alaska has no counties; in this State, areas designated as census divisions have been defined for general statistical purposes by the State in cooperation with the Census Bureau and are treated as county equivalents. Four States (Maryland, Missouri, Nevada, and Virginia) contain one or more cities that are independent of any county; for statistical purposes, these independent cities are treated as county equivalents.

Standard metropolitan statistical areas—The definitions of standard metropolitan statistical areas (SMSA's) used in the Annual Housing Survey (AHS) correspond to the 243 SMSA's used in the 1970 census. These include the 228 SMSA's defined and named in the Bureau of the Budget publication, *Standard Metropolitan Statistical Areas: 1967*, U.S. Government Printing Office, Washington, D.C. 20402. After 1967, 15 SMSA's were added, of which 2 were defined in January 1968, and an additional 13 were defined in February 1971 as a result of the 1970 census. Changes in SMSA definition criteria, boundaries, and titles made after February 1971 are not reflected in this series of reports. SMSA's are defined by the Office of Management and Budget (formerly Bureau of the Budget).

Except in the New England States, an SMSA is a county or group of contiguous counties which contains at least one city of 50,000 inhabitants or more, or "twin cities" with a combined population of at least 50,000. In addition to the county or counties containing such a city or cities, contiguous counties are included in an SMSA if, according to certain criteria, they are socially and economically integrated with the central city. In the New England States, SMSA's consist of towns and cities instead of counties. Each SMSA must include at least one central city, and the complete title of an SMSA identifies the central city or cities. For a detailed description of the criteria used in defining SMSA's, see the Bureau of the Budget publication cited in the preceding paragraph.

In this report, figures for "in central city" refer to all housing units within the legal city boundaries. For a few central cities, the figures include some housing units in parts of the city classified as rural in the 1970 census.

DEFINITIONS AND EXPLANATIONS OF SUBJECT CHARACTERISTICS

General

As stated in the introduction, the 1983 Annual Housing Survey (AHS) was conducted by interview. The survey interviewers were instructed to read the questions directly from the questionnaire. The definitions and explanations given for each subject are, to a considerable extent, drawn from various technical and procedural materials used in the collection of the data. This material helped the field interviewers to understand more fully the intent of each question and thus to resolve problems or unusual cases. Additional explanatory information has been added to this portion of the text to assist the user in understanding the statistics.

Comparability with 1973 through 1981 Annual Housing Surveys—Most of the concepts and definitions used in the 1973

through 1981 and 1983 reports are essentially the same. However, there are significant differences in the measurement of housing losses between the 1973 report, and the 1974 through 1981 and 1983 reports. In the 1974 through 1981 and 1983 reports, the data refer to losses of individual housing units, but in 1973, a housing unit was counted as a loss only when the whole structure in which the unit was located was lost from the inventory. In addition, the source of the 1970 data in the 1974 through 1981 and 1983 reports is the 1970 census unpublished tabulations; however, the 1970 data in the 1973 report are from both published and unpublished tabulations.

A difference also exists between the weighting procedures used for the 1983 AHS and the 1973 through 1980 AHS. The independent household estimates used in the weighting of data in the 1983 AHS are Current Population Survey (CPS) estimates derived from the 1980 census. The CPS independent household estimates used in the weighting of data in the 1973 through 1980 Annual Housing Surveys were derived from the 1970 census. The 1970-based estimates are about 2 percent smaller than the 1980-based estimates. A detailed explanation appears in appendix B.

Additional differences, if any, are discussed under the particular subject later in the section. Because of the relatively small sample size, particular care should be taken in making year to year comparisons, especially where there are small differences between the figures (see appendix B).

Comparability with 1970 Census of Housing data—The concepts and definitions are essentially the same for items that appear in both the 1970 census and the 1983 survey.

There is a major difference, however, in the time period of the "recent mover" classification (see parts D and E of this series). In the Annual Housing Survey, "recent movers" are households that moved into their unit during the 12 months prior to the interview, a time period of 1 year or less. In the 1970 Census of Housing reports, different time periods were used. In Volume II, *Metropolitan Housing Characteristics,* the shortest time period for "year moved into unit" is 1969 to March 1970 (1¼ years); in Volume IV, *Components of Inventory Change,* the time period is 1969 to December 1970 (approximately 2 years); and Volume VII, No. 5, *Mover Households,* the time period is April 1965 to March 1970 (approximately 5 years). Other definitional differences, if any, are discussed under the particular subject.

Additional differences between the 1983 Annual Housing Survey data and the 1970 census data may be attributed to several factors. These include the extensive use of self-enumeration in the census in contrast to direct interview in the Annual Housing Survey; differences in processing procedures; the estimation procedures and sample designs; the sampling variability of the estimates from the Annual Housing Survey; to a smaller extent, the sampling variability associated with the sample data from the census; the nonsampling errors associated with the Annual Housing Survey estimates; and the nonsampling errors associated with the census data.

Statistics on counts and characteristics of changes in the housing inventory between the 1960 and 1970 censuses are given for the United States and for 15 selected SMSA's in the 1970 Census of Housing, Volume IV, *Components of Inventory Change.* In volume IV, the data are based on information for a sample of housing units enumerated in late 1970 as part of the 1970 census. Data are provided for such components of change between 1960 and 1970 as new construction, conversions, other additions, demolitions, mergers, other losses, and housing units that were the same in 1960 and in 1970.

In parts A and E of this series, data for some of these components are shown; i.e., new construction, demolition (or disaster), and other losses (some other means). The 1983 data on new construction were obtained primarily from a sample of units selected from building permits. The 1970 *Components of Inventory Change* data were obtained from the 1970 census tabulations of the "year structure built" item; i.e., housing units built in 1960 or later were classified as added by "new construction."

Data as of 1971 for mortgage status, real estate taxes last year, and selected monthly housing costs are presented in the 1970 Census of Housing, Volume V, *Residential Finance.* In volume V, the data are based on information collected for a sample of housing units in the Residential Finance Survey which was conducted in 1971 as part of the 1970 census. The 1971 report provided data on financing homeowner and rental properties, including characteristics of the mortgages, properties, and owners.

Differences in the concepts and definitions between the data in this report and volume V include the following. The basic unit of tabulation in this report is the housing unit; in volume V, it is the property. Data on mortgage in this report are based on the occupant's answer; in volume V, mortgage status was verified by the lender. In this report, real estate taxes and selected monthly housing costs reflect the total amount of real estate taxes and housing costs, excluding special assessments. In volume V, the tabulations for real estate taxes and selected monthly housing costs include special assessments.

Comparability with 1980 Census of Housing data—Most of the concepts and definitions are the same for items that appear in both the 1980 census and the 1983 Annual Housing Survey (AHS).

There are one major difference and two minor differences, however, in the housing unit definition. The major difference is that the 1980 census includes vacant mobile homes as housing units; the 1983 AHS excludes these units. The first minor difference is that the housing unit definition in the 1983 AHS requires a unit to be separate living quarters and have direct access or complete kitchen facilities; for the 1980 census, the complete kitchen facilities alternative was dropped with direct access required of all units. The second minor difference is that, in the 1983 AHS, living arrangements containing five or more persons, not related to the person in charge, were classified as group quarters; in the 1980 census, the requirement was raised to nine or more persons not related to the person in charge.

Owner-occupied cooperatives were identifed in the 1983 AHS. These units were not identified separately in the 1980 census, but were included in the overall count of owner-occupied units.

The 1980 census will provide data on vacant-for-rent and renter-occupied condominium units.

Additionally, in the 1983 AHS, complete plumbing facilities and telephone available need only to be located in the structure in which the housing unit is located. In the 1980 census, these items must be inside the specific housing unit. Other definitional differences are discussed under the particular subject.

Additional differences between the 1983 Annual Housing Survey data and the 1980 census data may be attributed to several factors. These include the extensive use of self-enumeration in the census in contrast to direct interview in the AHS; differences in processing procedures; the estimation procedures and sample designs; the sampling variability of the estimates from the AHS to a smaller extent, the sampling variability associated with the sample data from the census; the nonsampling errors associated with the AHS estimates; and the nonsampling errors associated with the census data.

Comparability with 1970 and 1980 Censuses of Population data—In the 1970 and 1980 censuses, data for years of school completed were based on responses to two questions—the highest grade or year of regular school each household member attended, and whether or not that grade or year was completed. In the 1983 AHS, data for years of school completed were based on responses to a single question—the highest grade or year of regular school completed by the householder. Therefore, the 1983 AHS may overstate the education level of the householder; that is, respondents may have reported the grade or year the householder was currently enrolled in or had last been enrolled in whether or not the grade or year was completed. Other definitional differences, if any, are discussed under the particular subject.

Comparability with other current reports—This series of reports contains information similar to that contained in some of the other current Census Bureau reports, such as the Current Housing Report, *Housing Vacancies,* the Current Population Reports, and the Current Construction Reports, published by the Bureau of the Census. Because of procedural differences, care should be taken when comparing data from the Annual Housing Survey with data from other current surveys.

Comparability with Housing Vacancy Survey—Data on vacancy rates and characteristics of vacant units from the Housing Vacancy Survey are available for the United States by inside and outside standard metropolitan statistical areas. This nationwide survey, with a sample size of approximatley 71,000 units (interviews obtained for approximately 60,000 occupied and vacant housing units), is conducted monthly by the Bureau of the Census in conjunction with its Current Population Survey. Data are published quarterly and annually in Current Housing Reports, Series H-111, *Housing Vacancies.*

The concepts and definitions used in the 1983 Annual Housing Survey and the Housing Vacancy Survey are the same. Differences may be attributed to factors such as sampling variability, nonsampling errors, survey techniques, and processing procedures.

Current Population Reports from the Current Population Survey—The Current Population Survey is a monthly sample survey of approximately 71,000 designated sample units. From the data collected in the Current Population Survey, the Bureau issues several publications under the general title, "Current Population Reports." Included are reports on household and family characteristics, mobility of the population, and income.

Although the concepts and definitions used in this report are essentially the same as those used in the Current Population Reports, and the intent of both the Annual Housing Survey and the Current Population Survey is the same, there is a major difference in the concept of "mover." In parts D and E, householders that moved into their units during the 12 months prior to the interview are classified as "recent movers." In the Current Population Survey, individuals whose current place of residence is different from that of March 1970 are classified as "movers."

There also may be significant differences in the data on income and years of school completed. The time period covering income data in this series of reports refers to the 12 months prior to the date of the interview, while the time period for income data in the Current Population Survey refers to the calendar year prior to the date of the interview. There are also significant differences in the way income questions are asked. For "years of school completed by householder," the differences cited in the section, "Comparability with 1970 and 1980 Censuses of Population data," also applies to the Current Population Survey.

Additional differences between the 1983 Annual Housing Survey and the Current Population Survey may be attributed to factors such as the sampling variability and nonsampling errors of the figures from the two surveys, survey procedures and techniques, and processing procedures.

Current Construction Reports from the Survey of Construction—The Census Bureau issues several publications under the general title, "Current Construction Reports." The data for these reports are primarily from the Survey of Construction.

The Survey of Construction consists of approximately 16,000 permit-issuing places throughout the United States. The reports from the survey contain current data on housing starts and completions, construction authorized by building permits, housing units authorized for demolition in permit-issuing places, new one-unit structures sold and for sale, characteristics of new housing, and value of new construction put in place. The concepts and definitions used in this report differ from some of those used in the Survey of Construction. The major difference is that the Survey of Construction shows counts and characteristics of housing units in various stages of construction through completion. The Annual Housing Survey shows counts and characteristics of the existing housing inventory. Additional differences between the 1983 Annual Housing Survey and the Survey of Construction may be attributed to factors such as the sampling variability and nonsampling errors of the figures from the two surveys, survey procedures and techniques, and processing procedures.

Living Quarters

Living quarters are classified as either housing units or group quarters. Usually, living quarters are in structures intended for residential use (e.g., one-unit structure, apartment house, hotel or motel, boarding house, or mobile home or trailer). Living quarters may also be in structures intended for nonresidential use (e.g., the rooms in a warehouse where a watchman lives), as well as in places such as tents, caves, and old railroad cars.

Housing unit—A housing unit is a house, an apartment, a group of rooms, or a single room occupied or intended for occupancy as separate living quarters. Separate living quarters are those in which the occupants do not live and eat with any other persons in the structure and which have either (1) direct access from the outside of the building or through a common hall which is used or intended to be used by the occupants of another unit or by the general public or (2) complete kitchen facilities for the exclusive use of the occupants. The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share living arrangements (except as described in the section on group quarters). For vacant units, the criteria of separateness, direct access, and complete kitchen facilities for exclusive use are applied to the intended occupants whenever possible. If the information cannot be obtained, the criteria are applied to the previous occupants. Both occupied and vacant housing units are included in the housing inventory, except that mobile homes, trailers, tents, caves, boats, railroad cars, and the like, are included only if they are occupied.

Group quarters—Group quarters are living arrangements for institutional inmates or for other groups containing five or more persons not related to the person in charge. Group quarters are located most frequently in institutions, boarding houses, military barracks, college dormitories, fraternity and sorority houses, hospitals, monasteries, convents, and ships. A house or apartment is considered group quarters if it is shared by the person in charge and five or more nonrelatives or, if there is no person in charge, by six or more unrelated persons. Information on the housing characteristics of group quarters was not collected.

Mobile homes, hotels, rooming houses, etc.—Mobile homes or trailers, tents, boats, or railroad cars are not considered housing units if vacant, used only for business, or used only for vacations.

Occupied rooms or suites of rooms in hotels, motels, and similar places are classified as housing units only when occupied by permanent residents; i.e., persons who consider the hotel as their usual place of residence or have no usual place of residence elsewhere. Vacant rooms or suites of rooms are classified as housing units only if located in hotels, motels, and similar places in which 75 percent or more of the accommodations are occupied by permanent residents.

If any of the occupants in a rooming or boarding house live and eat separately from everyone else in the building and have either direct access or complete kitchen facilities for exclusive use, their quarters are classified as separate housing units. The remaining quarters are combined. If the combined quarters contain four or fewer roomers unrelated to the householder, they are classified as one housing unit; if the combined quarters contain five or more roomers unrelated to the householder or person in charge, they are classified as group quarters. In a dormitory, residence hall, or similar place, living quarters of the supervisory staff and other employees are separate housing units if they satisfy the housing unit criteria; other living quarters are considered group quarters.

Institutions—Living quarters of staff personnel are separate housing units if they satisfy the housing unit criteria. Other living quarters are considered group quarters.

Year-round housing units—Data on housing characteristics are limited to year-round housing units; i.e., all occupied units plus vacant units which are intended for year-round use. Vacant units intended for seasonal occupancy and vacant units held for migratory labor are excluded because it is difficult to obtain reliable information for them. However, this report does present counts of the total housing inventory which includes all vacant, seasonal, and migratory housing units.

The statistics in the 1974 through 1981 and 1983 reports shown for "all year-round housing units" may not be comparable to the corresponding data shown in the 1973 reports, because the 1974 through 1981 and 1983 tabulations included an estimation procedure which adjusted the survey counts of "vacant year-round" and "vacant—seasonal and migratory" units separately to independent current estimates. (See section on "Estimation" in appendix B.) In 1973, "vacant—seasonal and migratory" units were combined with several categories of year-round vacancies (rented or sold, not occupied; held for occasional use; and other vacant) and adjusted to the combined total of the independent estimates for these categories. Thus, the 1974 through 1981 and 1983 data for "vacant—seasonal and migratory" housing units and for "all year-round housing units" adhere more closely to the independently derived current estimates than they did in 1973. The 1974 through 1981 and 1983 characteristics for "all occupied units," "owner occupied," and "renter occupied" are, however, comparable with the corresponding 1973 data.

Changes in the Housing Inventory

Units added by new construction—A housing unit built in April 1970 or later is classified as a unit added by "new construction." Information was collected on vacant units under construction at the time of the interview only if construction had proceeded to the point that all exterior windows and doors were installed and final usable floors were in place. Housing units built during this period but removed from the housing inventory before the interview are not reflected in the new construction counts for the 1970 to 1983 period. In the Annual Housing Survey, data on new construction were obtained primarily from a sample of units selected from building permits; in the 1970 Census of Housing, Volume IV, *Components of Inventory Change,* new construction data were obtained from tabulations of the 1970 census sample records of units built in 1960 or later.

Units lost from the inventory—Characteristics are presented for the total of all units removed from the 1973 housing inventory in 1973 or later through demolition, disaster, or other means. Separate counts of "demolition or disaster" losses and of "other losses" are shown in part A of this series. The 1974 through 1981 and 1983 surveys cover all losses, including those in structures that were not completely lost.

Units lost through demolition or disaster—A housing unit which existed in October 1973 and was torn down on the initiative of a public agency or as a result of action on the part of the owner is classified as a unit lost through demolition. Units destroyed by fire, flood, or other natural causes are classified as units lost through disaster. In the 1973 survey, a housing unit was counted as a demolition or disaster loss when the whole structure in which it was located was lost from the inventory. In the 1974 through 1981 and 1983 surveys and in the 1970 Census of Housing, Volume IV, *Components of Inventory Change,* the data on losses refer to all housing unit losses, including losses of units in structures which still contained one or more housing units. In addition, units lost through disaster were counted in 1970 as "units lost through other means."

Units lost through other means—Any housing unit which existed in October 1973 is counted as lost through other means when it was lost from the housing inventory through means other than demolition or disaster. This component includes the following types of losses:

1. Housing units lost by change to group quarters; for example, a housing unit that was occupied by a family in 1973 and by a family and five lodgers at the time of the 1983 survey.
2. Housing units lost from the inventory because they are vacant and either the roof, walls, doors, or windows no longer protect the interior from the elements or the unit is severely damaged by fire.
3. Vacant housing units lost from the inventory because there is positive evidence (sign, notice, mark on the house or block) that the units are scheduled for demolition or rehabilitation or that they are condemned for reasons of health or safety so that further occupany is prohibited.
4. Housing units lost by change to entirely nonresidential use.
5. Housing units moved from site since October 1973. Such moves in the same area do not necessarily result in a net loss from the total inventory since they presumably represent units added in the place to which they were moved.

In the 1973 Annual Housing Survey, a housing unit was counted as lost through other means when the entire structure in which it was located was lost to the housing inventory through means other than demolition or disaster. In the 1974 through 1981 and 1983 surveys, the data on losses refer to all housing unit losses including losses of units in structures which still contained one or more housing units.

Unspecified units—There are other components of change in the housing inventory for which the AHS provides no specific measures. The survey procedures do not include a measure of conversions and mergers and units added from other sources such as nonresidential structures. The net effect of these omissions on the change in the total housing inventory is not known.

Housing units changed by conversion—Conversion refers to the creation of two or more housing units from fewer units through structural alteration or change in use. Structural alteration includes such changes as adding a room or installing partitions to form another housing unit. Change in use is a simple rearrangement in the use of space without structural alteration, such as locking a door which closes off one or more rooms to form a separate housing unit.

Housing units changed by merger—A merger is the result of combining two or more housing units into fewer units through structural alteration or change in use. Structural alteration includes such changes as the removal of partitions or dismantling of kitchen facilities. Change in use may result from a simple rearrangement of space without structural alteration, such as unlocking a door which formerly separated two housing units. A change in use also occurs, for example, when a family occupies both floors of a house which formerly contained a separate housing unit on each floor.

Housing units added through other sources—Any housing unit added to the inventory through sources other than new construction or conversion is classified as a unit added through other sources. This component includes units created from living quarters previously classified as group quarters and units created from nonresidential space such as a store, garage, or barn. Also included are units moved from one site to another. Such units, if moved within the same area, do not necessarily result in a net addition to the total inventory since they presumably represent units lost in the place from which they moved. A previously vacant mobile home or trailer, whether on a different site or the same site, is a net addition if currently occupied as a housing unit.

Occupancy and Vacancy Characteristics

Population in housing units—Included are all persons living in housing units. Persons living in group quarters are excluded.

Occupied housing units—A housing unit is classified as occupied if a person or group of persons is living in it at the time of the interview or if the occupants are only temporarily absent, for example, on vacation. However, if the unit was occupied entirely by persons with a usual place of residence elsewhere, the unit is classified as vacant. By definition, the count of occupied housing units is the same as the count of households.

Race—The classification of "race" refers to the race of the householder occupying the housing unit. However, the concept of race as used by the Census Bureau does not denote clear-cut scientific definitions of biological stock. The interviewer was to report the race of the householder in three categories: White, Black (Negro), and other. The last category includes American

Indian, Chinese, Eskimo, Japanese, Korean, and any other race except White and Black. Figures on tenure are given separately for White and Black householders; housing units with householders of other races are included in the total in table 1 of parts A and E and may be derived by subtracting the sum of White and Black from the total. More detailed characteristics of units with Black householder are presented in separate tables.

Spanish origin—The classification "Spanish origin" refers to the origin of the householder occupying the housing unit. Detailed characteristics of units with householder of Spanish origin are presented in separate tables. Spanish origin was determined on the basis of a question that asked for self-identification of a person's origin or descent. Respondents were asked to select their origins from a flash card. Persons of Spanish origin were those who indicated that their origin was either Mexican American, Chicano, Mexican, Mexicano, Puerto Rican, Cuban, Central or South American, or other Spanish. Persons of Spanish origin may be of any race.

Care should be exercised in the interpretation of differences in the estimated counts of Spanish-origin households between the 1983 Annual Housing Survey, the 1970 census, 1980 census, and other current surveys. In the 1970 census and current surveys' reports, Spanish persons are identifed according to various criteria: Birthplace, birthplace of parents, language, surname, and origin or descent. In addition, research indicates that 1970 estimates of Spanish-origin households may be significantly overstated in the South Region and North Central Region. In the 1980 census the categories are essentially the same as the 1983 AHS, except the category "Central or South American" has been dropped.

Tenure—A housing unit is owner occupied if the owner or co-owner lives in the unit, even if it is mortgaged or not fully paid for. A cooperative or condominium unit is owner occupied only if the owner or co-owner lives in it. All other occupied units are classified as renter occupied, including units rented for cash rent and those occupied without payment of cash rent.

Site tenure—Separate data are available on tenure of mobile home and trailer sites. Site tenure for owner-occupied mobile homes and trailers is restricted to mobile homes and trailers on less than 10 acres. The site is owned if the occupants own or are buying the site on which the mobile home is located. The site is considered rented if the occupants pay a rental fee for the use of the site, the site rent is paid by someone not living in the sample housing unit, or the occupants neither own nor pay cash rent for the site.

Previous occupancy—The classification of previous occupancy is divided into two categories, "previously occupied" and "not previously occupied." "Previously occupied" indicates that some person or persons, *not* related to the householder by blood, marriage, or adoption occupied the sample housing unit prior to the householder's or other related household member's occupancy. "Not previously occupied" indicates that either the householder or some other current household member related to the householder by blood, marriage, or adoption was the *first* occupant of the sample unit.

Cooperatives and condominiums—A cooperative is a type of ownership whereby a group of housing units is owned by a corporation of member-owners. Each individual member is entitled to occupy an individual housing unit and is a shareholder in the corporation which owns the property.

A condominium is a type of ownership that enables a person to own an apartment or house in a project of similarly owned units. The owner has the deed and very likely the mortgage on the unit occupied. The owner may also hold common or joint ownership in some or all common areas such as grounds, hallways, entrances, elevators, etc.

Cooperative or condominium ownership may apply to various types of structures including single-family houses, rowhouses, townhouses, etc., as well as apartment buildings.

Duration of occupancy—Data on "duration of occupancy" are based on information for the householder; the data refer to the period when present occupancy began. Statistics are shown on whether the householder lived in the housing unit "less than 3 months" or "3 months or longer." A householder who "lived here last winter," must have moved into the unit prior to the previous February.

Year householder moved into unit—The data are based on the information reported for the householder and refer to the year of latest move. Thus, if the householder moved back into a housing unit previously occupied, the year of the latest move was to be reported; if the householder moved from one apartment to another in the same building, the year the householder moved into the present housing unit was to be reported. The intent is to establish the year the present occupancy by the householder began. The year the householder moves is not necessarily the same year other members of the household move, although in the great majority of cases, the entire household moves at the same time.

Prior to 1980, data on year moved into unit was collected for the head of household. For an explanation, see the definition of householder on page App-18.

Recent movers—Households that moved into their present housing units within 12 months prior to the date of the interview are termed "recent movers." The household is classified by year moved into unit on the basis of information reported for the householder.

Present and previous units of recent movers—The present unit is the housing unit occupied by the recent mover householder at the time of the interview. The previous unit is the housing unit from which the householder moved. If the householder moved more than once during the 12 months prior to the date of the interview, the previous unit is the one from which the householder last moved.

Same or different householder—Characteristics of the present and previous units occupied by recent movers are largely restricted to households that were essentially the same in the two housing units. The definitions of the characteristics for the previous unit are generally the same as those for the present unit.

A household for which the householder in the present unit is the same person as the householder in the previous unit (identified in the tables as "same householder") is considered essentially the same even though there may have been some changes in the composition of the household. Conversely, a household in which there was no change except for a new householder was considered a household with "different householder."

Data for householders whose previous residence was outside the United States are tabulated in the category "different householder."

Main reason for move from previous residence—The statistics presented are restricted to housing units occupied by recent movers in which the present householder was also the householder at the previously occupied unit. The classification categories refer to the principal reason the householder moved into the present unit. The category "job related reasons" refers to reasons such as job transfer, to look for work, to take a new job, entered or left U.S. Armed Forces, retirement, commuting reasons, school attendance, and other job related reasons.

The category "family status" refers to reasons such as needed larger house or apartment, divorced or separated, widowed, to be closer to relatives, newly married, family increased in size, family decreased in size, to establish own household, schools, wanted neighborhood with children, wanted neighborhood without children, and other family related reasons.

The category "housing needs" refers to reasons such as wanted to own residence, neighborhood overcrowded, change in racial or ethnic composition of neighborhood, wanted better neighborhood, wanted more expensive place or better investment, lower rent or less expensive house, wanted better house, displaced by urban renewal, highway construction, or other public activity, displaced by private action, wanted to rent residence, wanted residence with more conveniences, and occurrence of natural disaster.

The category "other reasons" includes crime, wanted change of climate and other reasons for moving which do not fall into any of the above classifications.

Main reason for move into present residence or neighborhood—The statistics presented are restricted to housing units occupied by recent movers in which the present householder was also the householder at the previously occupied unit. The classification categories refer to the principal reason the householder moved into the present unit. The category "job related reasons" refers to job transfer, to look for work, to take a new job, entered U.S. Armed Forces, retirement, commuting reasons, school attendance, and other job related reasons.

The category "family status" refers to reasons such as needed larger house or apartment, to be closer to relatives, wanted neighborhood with children, wanted neighborhood without children, and schools.

The category "housing needs" refers to reasons such as neighborhood less crowded, racial or ethnic composition of neighborhood, wanted better neighborhood, wanted more expensive place or better investment, residence with more conveniences, lower rent or less expensive house, and other housing needs.

The category "other reasons" includes low crime, change of climate, and other reasons for move into present neighborhood which do not fall into any of the above classifications.

Homeownership—Data are shown for householders who, during the 12 months prior to their interview, moved into the sample housing unit. These data are restricted to owner-occupied housing units and show the number of previously owned units which the householder occupied as his/her usual place of residence. Excluded from the count of previously owned units are vacation homes purchased for rental or commercial purposes.

Owner or manager on property—These statistics are based on the number of housing units in structures of two or more units with the owner, resident manager, or superintendent living on the property. The category "with owner on property" refers to the owner and not the agent, resident manager, or superintendent. "With resident manager or superintendent on property" refers to a resident manager, superintendent, janitor, or other representative of the owner.

Vacant housing unit—A housing unit is vacant if no one is living in it at the time of the interview, unless its occupants are only temporarily absent. In addition, a vacant unit may be one which is occupied entirely by persons who have a usual residence elsewhere.

New units not yet occupied are classified as vacant housing units if construction has reached a point where all exterior windows and doors are installed and final usable floors are in place. Vacant units are excluded if the roof, walls, windows, or doors no longer protect the interior from the elements, if the unit is severely damaged by fire, or if there is positive evidence (such as a sign on the house or block) that the unit is to be demolished or is condemned. Also excluded are quarters being used entirely for nonresidential purposes, such as a store or an office; or quarters used for storing business supplies or inventory, machinery, or agricultural products.

The concepts and definitions of vacant housing units used in this report are the same as those used in the 1970 Census of Housing reports.

Vacancy status—Vacant housing units are classified as either "seasonal and migratory" or "year-round." Seasonal units are intended for occupancy during only certain seasons of the year. Included are units intended for recreational use, such as beach cottages and hunting cabins, and vacant units held for herders and lodgers. Migratory units are vacant units held for occupancy by migratory labor employed in farm work during the crop season.

Year-round vacant housing units are available or intended for occupancy at any time of the year. A unit in a resort area which

is usually occupied on a year-round basis is considered year-round. A unit used only occasionally throughout the year is also considered year-round. Year-round vacant units are subdivided as follows:

For sale only—Vacant year-round units "for sale only" also include vacant units in a cooperative or condominium project if the individual units are offered for sale only.

For rent—Vacant year-round units "for rent" also include vacant units offered either for rent or for sale.

Rented or sold, not occupied—If any money rent has been paid or agreed upon but the new renter has not moved in as of the date of the interview, or if the unit has recently been sold but the new owner has not yet moved in, the year-round vacant unit is classified as "rented or sold, not occupied."

Held off market—A housing unit which is neither for sale nor for rent, or rented or sold, not occupied, is classified as held off market. Included are units held for occasional use, units temporarily occupied by persons with a usual residence elsewhere, and other vacants.

Held for occasional use—This category consists of vacant year-round units which are held for weekend or other occasional use throughout the year. The intent of this question was to identify homes reserved by their owners as second homes. Because of the difficulty of distinguishing between this category and seasonal vacancies, it is possible that some second homes are classified as seasonal and vice versa.

Temporarily occupied by URE (persons with usual residence elsewhere)—If all the persons in a housing unit usually live elsewhere, that unit is classified as vacant, provided the usual place of residence is held for the household and is not offered for rent or for sale. For example, a beach cottage occupied at the time of the interview by a family who has a usual place of residence in the city is included in the count of vacant units. If the house in the city was in the survey sample, it would be reported "occupied" and would be included in the count of occupied units since the occupants are only temporarily absent.

Other vacant—If a vacant year-round unit does not fall into any of the classifications specified in the distribution, it is classified as "other vacant." For example, this category includes units held for settlement of an estate, units held for occupancy by a caretaker or janitor, and units held for personal reasons of the owner. If separate distributions are not presented for "held for occasional use" or "temporarily occupied by URE" housing units, these categories are also included.

Characteristics of vacant housing are limited to year-round vacant units. Vacant units intended for seasonal occupancy and vacant units held for migratory labor are excluded because it is difficult to obtain reliable information for them. However, counts of seasonal units are given in parts A and E of this report series.

The 1974 through 1981 and 1983 counts for "seasonal and migratory," "year-round, rented or sold, not occupied," "year-round, held for occasional use," and "year-round, other vacant" may not be comparable to the corresponding counts shown in the 1973 reports, because a more detailed estimation procedure was used in the 1974 through 1981 and 1983 tabulations. For 1974 through 1981 and 1983, the estimation procedure adjusted the survey counts of "vacant year-round" and "vacant—seasonal and migratory" units separately to independent current estimates. (See section on "Estimation" in appendix B.) In 1973, "vacant—seasonal and migratory" units were combined with several categories of year-round vacancies (rented or sold, not occupied; held for occasional use; and other vacant) and were adjusted to the combined total of the independent estimates for these categories. Thus, the 1974 through 1981 and 1983 data for vacant units adhere more closely to the independent estimates than the 1973 data.

Homeowner vacancy rate—The 1983 homeowner vacancy rate is the number of year-round vacant units for sale as a percent of the total homeowner inventory; i.e., all owner-occupied units and year-round vacant units for sale or sold, not occupied. The homeowner vacancy rate for 1970 excludes vacant units sold but not occupied.

Rental vacancy rate—The 1983 rental vacancy rate is the number of year-round vacant units for rent as a percent of the total rental inventory; i.e., all renter-occupied units and all year-round vacant units for rent or rented, not occupied. The rental vacancy rate for 1970 excludes vacant units rented but not occupied.

Duration of vacancy—The statistics on duration of vacancy refer to the length of time (in months) from the date the last occupants moved from the unit to the date of the interview. The data, therefore, do not provide a direct measure of the total length of time units remain vacant. For newly constructed units which have never been occupied, the duration of vacancy is counted from the date construction was completed. For recently converted or merged units, the time is reported from the date conversion or merger was completed. Units occupied entirely by persons with usual place of residence elsewhere are excluded from the data.

Housing unit boarded up—Statistics for this item are only provided for vacant housing units. "Boarded up" refers to the covering of windows and doors by wood, metal, or similar materials to prevent entry into the housing unit. A one-unit structure or a given housing unit in a multiunit structure may be boarded up. This item was collected by interviewer observation.

Utilization Characteristics

Persons—All persons occupying the housing unit are counted. These persons include not only occupants related to the householder but also any lodgers, roomers, boarders, partners, wards, foster children, and resident employees who share the living quarters of the householder. (Prior to 1980, head of household was used, see definition of householder on page App-18.) The data on persons show categories of the number

of one-person through seven-or-more person households by the number of housing units.

A person is counted at the usual place of residence for that person. This refers to the place where the person lives and sleeps most of the time. This place is not necessarily the same as a legal residence, voting residence, or domicile.

Rooms—The statistics on rooms are for the number of housing units with specified number of rooms. Rooms counted include whole rooms used for living purposes, such as living rooms, dining rooms, bedrooms, kitchens, finished attic or basement rooms, recreation rooms, permanently enclosed porches that are suitable for year-round use, and lodger's rooms. Also included are rooms used for offices by persons living in the unit.

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 only of shelves or cabinets.

Not included in the count of rooms are bathrooms, halls, foyers or vestibules, balconies, closets, alcoves, pantries, strip or pullman kitchens, laundry or furnace rooms, unfinished attics or basements, other unfinished space used for storage, open porches, trailers used only as bedrooms, and offices used only by persons not living in the unit.

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.

Persons per room—Persons per room is computed for each occupied housing unit by dividing the number of persons in the unit by the number of rooms in the unit. Therefore, the figures shown refer to the number of housing units having the specified ratio of persons per room.

Bedrooms—The number of bedrooms in a housing unit is the count of rooms used mainly for sleeping, even if also used for other purposes. Rooms reserved for sleeping, such as guest rooms, even through used infrequently, are counted as bedrooms. On the other hand, rooms used mainly for other purposes, even though used also for sleeping, such as a living room with a hideaway bed, are not considered bedrooms. A housing unit consisting of only one room, such as a one-room efficiency apartment, is classified by definition as having no bedroom.

Data on bedroom lacking privacy are shown for housing units with two or more bedrooms. Housing units have bedrooms lacking privacy when it is necessary to pass through a bedroom to get to another room, such as a den, and/or to get to the bathroom. The bathroom access criterion is applied only to units with one complete bathroom or one bathroom plus a half bath in which the half bath lacks a flush toilet.

Structural Characteristics

Conventional housing units—Housing units not defined as mobile homes or trailers by this survey are classified as conventional.

Complete kitchen facilities—A housing unit has complete kitchen facilities when it has all three of the following for the exclusive use of the occupants of the unit: (1) An installed sink with piped water, (2) a range or cookstove, and (3) a mechanical refrigerator. All kitchen facilities must be located in the structure. They need not be in the same room. Quarters with only portable cooking equipment are not considered as having a range or cookstove. An icebox is not included as a mechanical refrigerator.

The kitchen facilities are for the exclusive use of the occupants when they are used only by the occupants of one housing unit, including lodgers or other unrelated persons living in the unit. When a structure consists of only one housing unit, all equipment located inside the structure is classified, by definition, for exclusive use.

For vacant units from which one or all of the kitchen facilities had been removed, the kitchen facilities used by the last occupant were to be reported.

Basement—Statistics on basements are based on the number of housing units located in structures built with a basement. A structure has a basement if there is enclosed space in which persons can walk upright under all or part of the building.

Basements in structures with occupied units are further classified by signs of water leakage. The category "with signs of water leakage" consists of units in which the basement shows signs of water having leaked in from the outside, even if the signs only appear when it rains or during other similar situations. "No signs of water leakage" means that the basement shows no signs of water leakage, or that the signs of water leakage are caused by a problem inside the structure such as faulty plumbing. If the basement shows signs of water having leaked in from the outside but the problem causing the leakage has been corrected, the unit was classified as having no signs of water leakage.

Year structure built—Year structure built refers to when the building was first constructed, not when it was remodeled, added to, or converted. The figures refer to the number of units in structures built during the specified periods and in existence at the time of the interview. For mobile homes and trailers, the manufacturer's model year was assumed to be the year built. Statistics are based on the respondent's estimates and are, therefore, subject to the respondent's ability to properly classify the year built for the building.

Units in structure—In determining the number of housing units in a structure, all units, both occupied and vacant, were counted. The statistics are presented for the number of housing units in structures of specified type and size, not by the number of residential structures.

A structure is a separate building if it has either open space on all sides or is separated from other structures by dividing walls that extend from ground to roof. Structures containing only one housing unit are further classified as detached or attached.

A one-unit structure is detached if it has open space on all four sides even though it has an adjoining shed or garage. A one-unit structure is attached if it has one or more walls extending from ground to roof which divide it from other adjoining structures, such as in rowhouses, townhouses, etc.

Mobile homes and trailers are shown as a separate category. When one or more rooms have been added to a mobile home or trailer, it is classified as a one-unit structure. If, however, only a porch or shed has been added, it is still counted as a mobile home or trailer.

Elevator in structure—Statistics on elevator in structure are for the number of housing units in structures with four floors or more which have a passenger elevator. Units are classified as "without elevator" in a structure of four floors or more if the structure has no passenger elevator or if the only elevator service is for freight.

In a group of six or more mobile homes—Mobile homes and trailers that are gathered close together are considered to be in a group. This may be a large mobile home park containing many units or it may be a small number grouped together on a single site or adjacent sites.

Roof—Housing units "with signs of water leakage" are those in which the roof shows signs of water having leaked in from the outside or where the roof leaks when it rains. "No signs of water leakage" means that the roof shows no signs of water having leaked in from the outside, or that the roof shows signs of water leakage but the problem causing the leakage has been corrected. If the signs of water leakage are caused by a problem inside the structure such as faulty plumbing, the unit was classified as having no signs of water leakage.

Interior walls and ceilings—Statistics are presented on whether or not there are open cracks or holes and broken plaster or peeling paint on the interior walls or ceilings of a housing unit. Included are cracks or holes that do not go all the way through to the next room or to the outdoors. Hairline cracks or cracks that appear in the walls or ceilings but are not large enough for a fingernail file to be inserted and very small holes caused by nails or other similar objects are not considered to be open cracks or holes.

Broken plaster or peeling paint must be on the inside walls or ceilings, and at least one area of the broken plaster or peeling paint must be approximately one square foot or larger.

Interior floors—Data are shown on whether there are holes in the interior floors of a housing unit. The holes do not have to go through the floor. Excluded are very small holes caused by nails or other similar objects.

Boarded-up buildings on same street—Statistics on boarded-up buildings on the same street are based on the interviewer's observation from the main entrance of the building in which the sample unit is located. Buildings are classified as boarded up if they are permanently vacant and show severe signs of neglect; have most of their visible windows broken or missing; or have their windows and doors covered by wood, metal, or some other similar material to prevent entry.

Overall opinion of structure—The data presented are based on the respondent's overall opinion of the house or building as a place to live. The respondent was asked to rate the structure as excellent, good, fair, or poor.

Common stairways—The statistics on common stairways are presented for housing units in two-or-more-unit structures with common stairways. The figures for "loose steps" and "loose railings" reflect the physical condition of the stairway; i.e., whether there are loose, broken, or missing steps or stair railings. Common stairways are stairways which are usually used by the occupants of more than one housing unit or by the general public. They may be either inside the structure or attached to the outside of the building.

Light fixtures in public halls—These statistics are presented for housing units in structures of two-or-more units with public halls which have light fixtures. Data include whether the light fixtures are in working order. Light fixtures include wall lights, ceiling lights, or table lamps in the public halls of the building. Public halls are used by the occupants of more than one housing unit or by the general public.

Electric wiring—A housing unit is classified as having exposed electric wiring if the unit has any wiring that is not enclosed, either in the walls or in metal coverings, or if the wiring is outside the walls but enclosed in some material other than metal. Extension cords and other types of wiring that extend from a wall outlet to an appliance or lamp are not considered as exposed wiring.

Electric wall outlets—A housing unit is classified as having electric wall outlets in each room if there is at least one working electric wall outlet or wall plug in each room of the unit. A working electric wall outlet or wall plug is one that is in operating condition; i.e., can be used when needed. If a room does not have an electric wall outlet, an extension cord used in place of a wall outlet is not considered to be an electric wall outlet.

Electric fuses and circuit breakers—These statistics are presented for occupied housing units which have had an electric circuit fuse blown or breaker switch tripped during the 3 months prior to the interview. The data are restricted to households whose householder has been at the present address for at least 90 days prior to the date of the interview. A blown fuse or tripped breaker switch results in the temporary loss of electricity until the fuse is replaced or the breaker switch reset. Blown fuses inside certain appliances or equipment (such as some large air conditioners) are counted as "blown fuses or tripped breaker switches."

Plumbing Characteristics

Plumbing facilities—The category "with all plumbing facilities" consists of housing units which have hot and cold piped water inside the structure as well as a flush toilet and a bathtub or shower inside the structure for the exclusive use of the occupants of the housing unit. All plumbing facilities must be located in the structure but they need not be in the same room. Lacking some or all plumbing facilities means that the unit does not have all three specified plumbing facilities (hot and cold piped water, flush toilet, and bathtub or shower) inside the structure,

or that the toilet or bathing facilities are also for the use of the occupants of other housing units.

Complete bathrooms—A housing unit is classified as having a complete bathroom if it has a room with a flush toilet and bathtub or shower and a washbasin, as well as piped hot water in the structure for the exclusive use of the occupants of the unit. A half bathroom has either a flush toilet or a bathtub or shower for exclusive use, but does not have all the facilities for a complete bathroom.

The category "also used by another household" consists of units with bathroom facilities which are also for the use of the occupants of other housing units.

The category "none" consists of units with no bathroom facilities, units with only a half bathroom, and units with all bathroom facilites but not in one room.

Source of water or water supply—A public system or private company refers to a common source supplying running water to six or more housing units. The water may be supplied by a city, county, water district, or private water company, or it may be obtained from a well which supplies six or more housing units. If a well provides water for five or fewer housing units, it is classified as an individual well. Individual wells are further classified by whether they were originally drilled or dug. Water sources such as springs, creeks, rivers, cisterns, ponds, or lakes are included in the "other" category.

For housing units that had piped water inside the structure, respondents were asked to provide information on breakdowns or failures in the water supply.

The water may be available from sources such as a sink, washbasin, bathtub, or shower. A housing unit is classified as having "no piped water inside structure" if the unit has no piped water or if the only piped water available is outside the structure; for example, on an open porch or in another building. Data on breakdowns or failures of water supply are shown if the housing unit was occupied by the householder at least 90 days prior to interview and if the breakdown or failure lasted 6 consecutive hours or longer during the 90 days prior to the interview.

Breakdowns or failures in the water supply mean that the housing unit was completely without running water from its regular source. A housing unit was considered to be completely without running water if (1) the water system serving the unit supplied no water at all, (2) no water was available in the unit due to a breakdown or failure in the water supply inside the structure, or (3) the equipment and facilities (i.e., faucets in the kitchen and the bathroom sinks, faucet and shower in the bathtub, flush toilet, etc.) were all inoperable. If the faucet in the kitchen was broken, but the one in the bathtub was working, the unit was not classified as being completely without water.

Housing units with a breakdown or failure in the water supply are also classified according to the number of breakdowns or failures and to the most common source of the problem. "Problems inside the building" refer to such problems as broken pipes in the housing unit (or building) or turning the water off in the housing unit (or building) for maintenance and repairs.

"Problems outside the building" refer to such problems as power failures, breaks in the main water line, or shutdowns by the water company for maintenance and repairs.

Availability of piped water—Units with no piped water in the building are classified by whether piped water is available within a quarter of a mile.

Sewage disposal—A public sewer is connected to a city, county, sanitary district, neighborhood, or subdivision sewer system. It may be operated by a governmental body or private organization. A septic tank or cesspool is an underground tank or pit used for disposal of sewage. Small sewage treatment plants, which in some localities are called neighborhood septic tanks, are classified as public sewers. A chemical toilet uses chemicals to breakdown or dissolve sewage; a privy refers to an outhouse or other small shelter outside the unit which contains a toilet. Units for which sewage is disposed of in some other way are included in the "other"category.

The data on breakdowns or failures in the means of sewage disposal are limited to units in which the means of sewage disposal are a public sewer, septic tank, or cesspool. The breakdown or failure may have been the result of an overloaded sewage disposal system, lack of running water, a broken or cracked tank, etc. Data on breakdowns are shown if the housing unit was occupied by the householders at least 90 days prior to the interview and if the breakdown or failure lasted 6 consecutive hours or longer during the 90 days prior to the interview.

Flush toilet—The statistics on breakdowns or failures of flush toilet are limited to housing units that had all plumbing facilities with only one flush toilet; that is, one complete bathroom or one complete bathroom plus a half bath without a flush toilet. The flush toilet may be completely unusable because of broken pipes, stopped up soil pipe, lack of water supplied to the flush toilet, or some other reason.

Housing units with breakdown or failure in flush toilet are classified by the number of breakdowns or failures and to the most common source of the problem. "Problems inside the building" refer to such breakdowns or failures as broken pipes in the unit (or building), a cracked or broken bowl, or faulty flushing mechanism. "Problems outside the building" refer to such breakdowns or failures as breaks in the main water or sewer line or shutdowns by the water company for maintenance or repairs.

Data on breakdowns or failures of flush toilet are shown if the housing unit was occupied by the householder at least 90 days prior to the interview, and if the breakdown or failure lasted 6 consecutive hours or more during the 90 days prior to the interview.

Equipment, Fuels, and Services

Telephone available—A housing unit is classified as having a telephone if there is one available to the occupants of the unit for receiving calls. The telephone may be located outside or inside the housing unit, and one telephone may serve the

occupants of several units. The number of housing units with a telephone available, therefore, does not indicate the number of telephones installed in homes.

Heating equipment—Warm-air furnace refers to a central system which provides warm air through ducts leading to various rooms. A heat pump refers to an electric all-in-one heating-cooling system which utilizes indoor and outdoor coils, a refrigerant, and a compressor to provide heating in the winter and cooling in the summer. Only heat pumps that are centrally installed with ducts to the rooms are included in this category. Steam or hot water refers to a central heating system in which heat from steam or hot water is delivered through radiators or other outlets. Built-in electric units are permanently installed in floors, walls, ceilings, or baseboards. A floor, wall, or pipeless furnace delivers warm air to the room right above the furnace or to the room(s) on one or both sides of the wall in which the furnace is installed.

Room heaters with flue include circulating heaters, convectors, radiant gas heaters, and other nonportable heaters that burn gas, oil, kerosene, or other liquid fuels, and connect to a flue, vent, or chimney to remove smoke and fumes. Room heaters without flue include any room heater (not portable) that burns gas, oil, or kerosene and does not connect to a flue, vent, or chimney. Fireplaces, stoves, or portable heaters include room heaters that burn coal, coke, charcoal, wood, or other solids. It also includes portable room heaters that burn kerosene, gasoline, fuel oil, or other liquid fuel, as well as portable electric heaters that get current from an electrical wall outlet.

For vacant units from which the heating equipment had been removed, the equipment used by the last occupants was to be reported.

For breakdowns or failures of heating equipment, data are shown for housing units occupied by the householder during the winter prior to the interview if the equipment was unusable for 6 consecutive hours or longer during that time. To qualify as having lived here "last winter," the householder must have moved into the unit prior to February 1983.

Heating equipment is considered unusable if it cannot be used for the purposes intended; the breakdown or failure may be caused by broken pipes, electrical or gas parts out of order, or downed power lines.

Insufficient heat—The statistics presented refer to housing units in which the householder occupied the unit during the winter prior to the date of the interview. To qualify as having lived here "last winter" the householder must have moved into the unit prior to February 1983.

Separate data are shown for units with additional heat source, rooms which lacked specified heat source, and housing units with closed rooms. The term "specified heating equipment" includes warm-air furnace; steam or hot water system; built-in electric units; floor, wall, or pipeless furnace; and room heaters with flue. Excluded are room heaters without flue or vent, fireplaces, stoves, and portable heaters.

The data on additional heat source refer to units with "specified heating equipment" which *had* to use additional sources of heat to supplement the regular heating system because the regular system did not provide enough heat. Additional sources of heat such as kitchen stoves, fireplaces, or portable heaters, may have been used only in the mornings or on very cold evenings. Electric blankets, heating pads, or hot water bottles are not considered additional sources of heat.

"Rooms lacking specified heat source" include rooms lacking hot air ducts, registers, radiators, and room heaters. The intent of this item was to identify rooms in housing units with "specified heating equipment" which did not contain the means of conveying the heat to the room. The kitchen was not considered to be a room for this item.

In addition, data are shown for rooms which were closed because they could not be kept warm. The rooms must have been closed for 7 consecutive days or longer during the previous winter, and the unit must have "heating equipment." For this item also, the kitchen was not considered a room.

Separate data are also shown for housing units with rooms which were so cold for 24 hours or more that it caused discomfort to the occupants. Housing units with specified heating equipment were excluded from this item. The purpose of this item was to determine if the absence of the more sophisticated types of heating equipment caused discomfort to the occupants of the unit.

Air conditioning—Air conditioning is defined as the cooling of air by a refrigeration unit; excluded are evaporative coolers, fans, blowers which are not connected to a refrigeration unit. A room unit is an individual air conditioner which is installed in a window or an outside wall and generally intended to cool one room, although it may sometimes be used to cool more than one room. A central system is a central installation which air conditions the entire housing unit. In an apartment building, a central system may cool all apartments in the building; each apartment may have its own central system; or there may be several systems, each providing central air conditioning for a group of apartments. A central installation with individual room controls is a central air-conditioning system.

House heating fuel—Utility gas is gas piped through underground pipes from a central system to serve the neighborhood. Bottled, tank, or LP gas is pressurized gas stored in tanks or bottles which are refilled or exchanged when empty. Fuel oil is heating oil normally supplied by truck to a storage tank for use by the heating system. Kerosene, etc., includes kerosene, gasoline, alcohol, and other combustible liquids. Electricity is generally supplied by means of above or underground electric power lines. Coal or coke refers to coal or any coal derivative usually delivered by means of a truck. Wood refers to the use of wood or wood charcoal, etc., as a fuel. Solar heat refers to the use of energy available from sunlight as a heating fuel source.

Services and Neighborhood Conditions

Extermination service—The statistics on extermination service refer to households that have been at their present address for at least 3 months prior to the date of the interview and who reported that they had seen mice or rats or signs or traces of

their presence *inside* the house or building during the last 3 months. Signs of mice and rats or traces of their presence include droppings, holes in the wall, or ripped or torn food containers. Regular extermination service refers to periodic visits by a licensed company or individual who uses chemicals and sprays to control or kill pests and rodents. The regular service interval may be once a month, four times a year, or any other such interval. Irregular extermination service includes visits by an exterminator who is called only when needed by the household or building manager, or where it is known that a building is serviced but it is not known whether the service is regular or irregular. No extermination service includes units in a house or building that has not been serviced during the 12 months prior to the interview and where it is not known if there is any extermination service.

Overall opinion of neighborhood—The data presented are based on the respondent's overall opinion of the neighborhood. The respondent was asked to rate the street or neighborhood as excellent, good, fair, or poor.

Neighborhood conditions and neighborhood services—The statistics presented are based on the respondent's opinion and attitude toward the neighborhood in which he/she lives. Thus, the respondent's answer may or may not reflect the actual description of the neighborhood. Furthermore, the respondent may not have the same opinion as a neighbor about the neighborhood services; for example, the respondent may feel that the street lighting or neighborhood shopping facilities are inadequate while a neighbor may not.

Neighborhood conditions, and neighborhood conditions and wish to move—Data on neighborhood conditions are based on the respondent's answers to a three-part question concerning specific neighborhood conditions. The respondent was asked (1) if the condition was present, (2) if the condition was bothersome, and (3) if the condition was so objectionable that the respondent would like to move from the neighborhood.

1. Street noise—Street noise refers to noise made by children playing outdoors, noise from a factory or business, or any other sounds that the respondent considers street noise.
2. Streets need repair—The data are based on the respondent's opinion that the streets, either paved or unpaved, are continually in need of repair or are bordered by open ditches used for water or sewage drainage.
3. Crime—This category refers to all forms of street and neighborhood crime such as petty theft, assaults against the person, burglary, etc., or any related activities that the respondent judges to be a crime.
4. Litter—Included are all types of trash, debris, or junk such as paper, cans, or abandoned cars in the street, on empty lots, or on properties on the street, which the respondent considers as litter.
5. Abandoned buildings—This category refers to both single and multiunit buildings which the respondent reported to be abandoned or boarded up. Included in this category are remains of previous buildings.
6. Commercial or industrial—This category refers to commercial, industrial, or other activities, including both large and small industries as well as businesses and stores, that the respondent considers to be nonresidential.
7. Odors—This category refers to the respondent's opinion concerning fumes, smoke, or gas coming from cars, trucks, nearby industries, factories, businesses, etc.

Neighborhood services—Data on neighborhood services are based on the respondent's answer to a series of questions concerning neighborhood services. Police protection, outdoor recreation facilities, and hospitals or health clinics were covered by a two-part question in which the respondent was asked (1) if a particular neighborhood service was satisfactory and (2) if the condition was so unsatisfactory that the respondent would like to move from the neighborhood.

1. Police protection—This category refers to the respondent's opinion about the presence, quality, quantity, and response time of services that should be provided by the police.
2. Outdoor recreation facilities, such as parks, playgrounds, or swimming pools—This category refers to the respondent's assessment of neighborhood outdoor recreation facilities.
3. Hospitals and health clinics—This category refers to the quality and proximity of health facilities, etc., serving the local community in the opinion of the respondent.

The respondent was also asked a three-part question on public transportation: (1) if service is available, (2) if service is satisfactory, and (3) if any member of the household used the service at least once a week.

Data were also collected on satisfaction with neighborhood shopping such as grocery stores and drug stores, and whether or not these stores are located within 1 mile of the neighborhood.

Respondents were asked a three-part question on public elementary schools: (1) if children within the household attended public elementary school or private elementary school, (2) if the public elementary school is satisfactory, and (3) if the public elementary school is within 1 mile of the neighborhood.

Overall opinion of neighborhood—The data presented are based on the respondent's overall opinion of the neighborhood according to conditions and neighborhood services available (described in preceding paragraphs). The respondent was asked to rate the neighborhood as excellent, good, fair, or poor.

Financial Characteristics

Value—Value is the respondent's estimate of how much the property (house and lot) would sell for if it were for sale. The statistics on value are shown only for one-unit structures on less than 10 acres having no commercial establishment or medical or dental office on the property. Owner-occupied cooperatives, condominiums, and mobile homes and trailers are excluded from the value tabulations.

Value-income ratio—The value-income ratio is computed by dividing the value of the housing unit by the total money income of the family or primary individual. The data are presented for the same owner-occupied units for which value was tabulated (see "Value" for exclusions). The ratio was computed separately for each unit and was rounded to the nearest tenth. In reporting value, respondents were asked to select an appropriate class interval. The midpoints of the value intervals were used in the computation of the value-income ratio, except that a mean of $3,500 was assigned for values less than $5,000 and a mean of $325,000 was assigned for values of $300,000 or more. For income, the dollar amounts were used. Units occupied by families or primary individuals who reported no income or net loss make up the category "not computed."

The 1983 income statistics are for the 12 months prior to the date of the interview. For 1970, the income statistics cover the calendar year 1969.

Sales price asked—For vacant housing units, the sales price is the amount asked for the property at the time of the interview and may differ from the price at which the property is sold. The statistics on sales price asked are shown only for vacant for sale one-unit structures on less than 10 acres having no commercial establishment or medical or dental office on the property.

Garage or carport on property—The garage or carport must be currently available for use by the occupants of the housing unit; i.e., members of the household can use it for parking even if it is currently used as a storage area for items such as lawn equipment or furniture. It may be attached to the house or it may be completely unattached, but it must be on the property. Excluded are garages or carports that have been converted to other uses such as living quarters, an area used for business purposes, an area rented to someone else, or for some reason cannot be used for parking.

Mortgage—The data are restricted to owner-occupied, one-unit structures on less than 10 acres having no commercial establishment or medical or dental office on the property. The data exclude owner-occupied cooperative and condominium units. A mortgage refers to all forms of debt where the property is pledged as security for payment of the debt. It includes such debt instruments as deeds of trust, trust deeds, mortgage bonds, and vendor liens. In the first three arrangements, usually a third party, known as the trustee, holds the title to the property until the debt is paid. In the vendor lien arrangement, the title is kept by the buyer but the seller (vendor) reserves, in the deed to the buyer, a lien on the property to secure payment of the balance of the purchase price. Also included as a mortgage are contracts to purchase, land contracts, and lease-purchase agreements where the title to the property remains with the seller until the agreed upon payments have been made by the buyer.

Housing units which are owned free and clear make up the category units with no mortgage. Also included in this category are housing units in which the owner has no mortgage but pays a ground rent; that is, the occupant owns the unit but leases, rents, or pays a fee for the use of the land.

Major source of down payment—This item refers to the source of the capital used to purchase the property (house or lot) or condominium unit. It includes capital used for outright purchases. The categories include sale of previous home, savings, borrowing other than mortgage on property, gift, land on which structure was built, and other sources.

Installment loan or contract—The data are limited to owner-occupied mobile homes and trailers on less than 10 acres. Mobile homes and trailers where payments are being made towards their purchase make up the category, "with installment loan or contract."

Mortgage insurance—The data are restricted to owner-occupied housing units with a mortgage. In adddition, the units must be one-unit structures on less than 10 acres without a commercial establishment or medical or dental office on the property. Owner-occupied cooperatives, condominiums, and mobile homes and trailers are excluded from the tabulations on mortgage insurance.

Mortgage insurance is financial protection provided to the lender in case the borrower fails to keep up the required mortgage payments and defaults on the loan. Such insurance protection is offered by both the Government, acting as an insurance agent, and by private mortgage insurance companies. The Federal government agencies that currently insure or guarantee mortgages include the Federal Housing Administration (FHA), the Veterans' Administration (VA), and the Farmers Home Administration. Mortgages or loans that are not insured or guaranteed by FHA, VA, or the Farmers Home Administration are referred to as "conventional" mortgages. Mortgage debts insured or guaranteed by State or local government agencies are not included in the category "insured by FHA, VA, or Farmers Home Administration."

The Federal Housing Administration insures loans on homes. The Veterans' Administration guarantees or insures loans under the Serviceman's Readjustment Act (G.I. Bill). The Farmers Home Administration provides much the same service as FHA, but confines its assistance to rural areas.

Private mortgage insurance companies provide insurance protection to lenders so that borrowers may obtain conventional loans with higher loan-to-value ratios than noninsured loans. Down payment and monthly payments are often less than for noninsured loans but terms are generally longer and the borrower pays an insurance premium as part of the monthly mortgage payment. The data on private mortgage insurance is not separable from data on other conventional loans and is therefore included in the category "not insured or insured by private mortgage insurance."

Monthly mortgage payment—The data are limited to owner-occupied, one-unit structures on less than 10 acres having no commercial establishment or medical or dental office on the property. The data present the monthly dollar amount paid for the mortgage, principal and interest only. Real estate taxes and fire hazard insurance costs are excluded from the data even if they are included in the regular payment to the lender.

Real estate taxes last year—The data are restricted to owner-occupied, one-unit structures on less than 10 acres having no commercial establishment or medical or dental office on the property. The data exclude owner-occupied cooperatives, condominiums, and mobile homes and trailers. "Real estate taxes last year" refers to the yearly total amount of all real estate taxes payable on the entire property during the last billing period. It includes State and local real estate taxes. Not included are payments on delinquent taxes due from prior years or payments for special assessments, facilities, or services. When the real estate taxes are included in the mortgage, a separate amount for the taxes is obtained.

In part C, the mean real estate taxes for last year per $1,000 value of the property (house and lot) are presented. Housing units for which no taxes are paid are excluded from the computation of the mean.

Property insurance—This refers to fire and hazard insurance; that is, policies which protect the unit and its contents against loss due to damage by fire, lightning, wind, hail, explosion, etc. Homeowners' policies are also included since this type of insurance has fire and hazard insurance together with other types of homeowner protection such as liability. If the cost of the insurance was included as part of the mortgage payments, a separate amount for the insurance was obtained. The amount of the insurance premium reported was the amount paid for an entire 12-month period even if made in two or more installments. Property insurance is shown only as a component of selected monthly housing costs and selected monthly housing costs as percentage of income. The data are presented separately for owner-occupied, one-unit structures on less than 10 acres with no commercial establishment or medical or dental office on the property and for owner-occupied mobile homes and trailers on less than 10 acres. That data exclude owner-occupied cooperative and condominium units.

Selected monthly housing costs—The data are presented separately for owner-occupied, one-unit structures on less than 10 acres having no commercial establishment or medical or dental office on the property and for owner-occupied mobile homes and trailers on less than 10 acres. The data exclude owner-occupied cooperative and condominium units. Separate distributions are shown by whether or not there is a mortgage or, for mobile homes and trailers, by whether or not there is an installment loan or contract. Selected monthly housing costs is the monthly sum of payments for the mortgage, or installment loan or contract, real estate taxes (including taxes on mobile home or trailer site if the site is owned), property insurance, utilities (electricity, gas, water, and sewage disposal), fuels (oil, coal, kerosene, wood, etc.), and garbage collection.

Households with a mortgage or similar debt that failed to report the amount of their payment and/or those households that did not report their real estate taxes are included in the "not reported" category. Likewise, for mobile homes and trailers, households that had an installment loan or contract but did not report their loan payment and/or their taxes are also included in the "not reported" category.

Selected monthly housing costs as percentage of income—The yearly housing costs (selected monthly housing costs multiplied by 12) are expressed as a percentage of the total income of the family or primary individual. The percentage is presented for the same owner-occupied units for which selected monthly housing costs were tabulated (for exclusions, see "selected monthly housing costs"). The percentage was computed separately for each unit and was rounded to the nearest tenth of a percent. For income and selected monthly housing costs, the dollar amounts were used. Units occupied by families or primary individuals who reported no income or a net loss make up the category "not computed."

Households that did not report the amount of the mortgage or similar debt and/or real estate taxes were included in the "not reported" category.

Alterations and repairs during the last 12 months—The statistics refer to the 12 months prior to the interview and are restricted to owner-occupied, one-unit structures on less than 10 acres without a commercial establishment or medical or dental office on the property.

The data are presented according to whether the alterations and repairs cost less than $250 or $250 or more. The total cost of the labor and materials was to be reported. However, if the labor was performed by the occupants or provided without charge, only the cost of the materials was obtained. The cost pertains to a single job; for example, if several jobs were done, each costing less than $250 but the sum total was over $250, it was reported as costing less than $250 since none of the jobs by themselves cost $250 or more.

Additions—Additions refer to floor space built onto, above, or below an existing unit in order to increase the enclosed space within the house; for example, a bedroom or basement added onto a house. It may also be construction of other buildings on the property. The building, such as a garage, may not necessarily be attached.

Alterations—These are permanent changes made either to the inside or outside of a structure including the surrounding grounds. Alterations inside the structure include any type of remodeling resulting in permanent modification of space; for example, construction of a breakfast nook in a kitchen. It may involve completely remodeling a room, such as a kitchen or bathroom, or a structural change, such as separation of living and dining areas by a permanent room divider. It may also include attached equipment installed in the house for the first time; i.e., built-in dishwasher. Alterations outside the structure consist of installation walks, driveways, fences, storm windows or doors, planting trees or shrubbery, or swimming pools built into the ground.

Replacements—This refers to the *complete* substitution of a new piece of fixed equipment, surfacing, or fixed appliances for an old item that was previously there; for example, a new gas furnace or central air-conditioning system for one that no longer functioned properly. Excluded are appliances such as clothes washers, refrigerators, or window air-conditioners.

Repairs—This refers to jobs necessary for maintenance and preventive care of the structure, property, or fixed equipment; for example, painting, papering, floor sanding, mending water pipes, and replacing parts of large equipment such as a furnace valve.

Purchase price of mobile home—This item refers to owner-occupied mobile homes and trailers on less than 10 acres. The purchase price is the total cost of the mobile home or trailer at the time of purchase including the down payment but excluding site costs or closing costs. The "not purchased" category refers to mobile homes and trailers that were not purchased by any occupant of the unit; e.g., if the unit was acquired as a gift.

Year mobile home acquired—This item pertains to owner-occupied mobile homes and trailers on less than 10 acres. Year acquired is the calendar year that the current owner took possession of the mobile home or trailer, not the year the mobile home or trailer was manufactured. "Acquired" includes purchase as well as other forms of taking possession such as inheritance, gift, trade, and foreclosure.

Mobile home acquired new—The data pertain to owner-occupied mobile homes and trailers on less than 10 acres. Acquired new means that no other person or family lived in the mobile home or used it for a business, etc., before the present owner acquired it.

Contract rent—Contract rent is the monthly rent agreed to, or contracted for, even if the furnishings, utilities, or services are included. The statistics on rent exclude one-unit structures on 10 acres or more. Rent data for mobile homes and trailers are not restricted by acreage. Rental units occupied without payment of cash rent are shown separately as no cash rent in the rent tabulations.

Gross rent—The computed rent, termed "gross rent," is the contract rent plus the estimated average monthly cost of utilities (electricity, gas, water) and fuels (oil, coal, kerosene, wood, etc.) if these items are paid for by the renter (or paid for by someone else, such as a relative, welfare agency, or friend) in addition to rent. Contract rent is the monthly rent agreed to, or contracted for, regardless of any furnishings, utilities, or services that may be included. Thus, gross rent is intended to eliminate differentials which result from varying methods of including utilities and fuels as part of the rental payment. The estimated costs of water and fuels are reported on a yearly basis, but they are converted to monthly figures in the computation process.

The statistics on rent exclude one-unit structures on 10 acres or more. Rent data for mobile homes and trailers are not restricted by acreage. Rental units occupied without payment of cash rent are shown separately as no cash rent in the rent tabulations.

Gross rent in nonsubsidized housing—The gross rent for nonsubsidized housing units excludes units reported in public housing projects, units with Federal, State, or local government rent subsidies, as well as one-unit structures on 10 acres or more. In this report, data on nonsubsidized units are not based on government or local records; the figures are, therefore, subject to the ability of a respondent to properly classify the unit as subsidized or nonsubsidized housing.

Gross rent as percentage of income—The yearly gross rent (monthly gross rent multiplied by 12) is expressed as a percentage of the total income of the family or primary individual. The percentage is presented for the same renter-occupied units for which gross rent is tabulated; thus, the statistics on gross rent as percentage of income reflect the exclusion of certain renter-occupied housing units. The percentage is computed separately for each unit and is rounded to the nearest whole number. For gross rent and income, the dollar amounts are used in the computation. Units for which no cash rent is paid and units occupied by families or primary individuals who report no income or a net loss comprise the category "not computed."

The 1983 income statistics are for the 12 months prior to the date of the interview. For 1970, the income statistics cover the calendar year 1969.

Gross rent in nonsubsidized housing as percentage of income—This item is computed in the same manner as "gross rent as percentage of income" except that rent and income for public and subsidized housing units are excluded. Data on nonsubidized units in this report are not based on government or local records; they are, therefore, subject to the ability of a respondent to properly classify the unit as subsidized or nonsubsidized housing.

Inclusion in rent (garbage collection)—Counts are shown separately for housing units in which garbage collection is included in the rent. The data are restricted to renter-occupied units for which cash rent is paid and exclude one-unit structures on 10 acres or more.

Included are housing units which have garbage collection service available in connection with the building. The service may be public or private and must be available without additional cost to the renter. If the garbage (food waste) is collected by one company and the trash (paper, cans, etc.) by another, the data refer to the garbage collection service.

Rent asked—For vacant housing units, the rent is the amount asked for the unit at the time of the interview and may differ from the rent contracted for when the unit was occupied. The data are for vacant, year-round housing units for rent, excluding one-unit structures on 10 acres or more. The median rent asked is shown separately for housing units in which the rent includes payment for utilities (electricity, gas, and water) and fuels (oil, coal, kerosene, wood, etc.). Median rent asked is also shown for housing units in which the rent includes payment for utilities and fuels, as well as garbage collection service.

Public, private, or subsidized housing—A housing unit is classified as being in a public housing project if the structure in which the unit is located is owned by a local housing authority or other public agency, such as a housing and redevelopment authority or a housing development agency, and operated as public housing. These organizations may receive subsidies from

the Federal or State government but the local agency owns the property. All other housing units are classified as private housing.

Private housing units are further classified by whether the units are subsidized; that is, the respondent pays a lower rent because a Federal, State, or local government program pays part of the cost of construction, building mortgage, or operating expenses. These programs include (1) the interest subsidy programs of the Department of Housing and Urban Development (HUD) for rental and cooperative housing for moderate-income families, (2) the rent supplement program where part of the rent for low-income families occupying certain types of rental housing projects is paid by HUD, and (3) the direct loan program of HUD for housing the elderly.

The statistics on public or subsidized housing exclude one-unit structures on 10 acres or more and rental units occupied without payment of cash rent. In addition, the data are not based on government or local records; the figures are, therefore, subject to the ability of a respondent to properly classify the unit as public or private and, if private, as subsidized or nonsubsidized housing.

Household Characteristics

Household—A household consists of all the persons who occupy a housing unit. By definition, the count of households is the same as the count of occupied housing units.

Householder—The householder is the first household member 18 years old or over who is the owner or renter of the sample unit. If no household member occupying the sample unit owns or rents the unit, the householder is the first household member listed who is 18 years old or older. In the AHS reports for 1973 through 1979 the concept head of household was used. One person in each household was designated as the head, that is the person who was regarded as the head by the respondent. However, if a married woman living with her husband was reported as the head, her husband was considered the head for the purpose of simplifying the tabulations.

Household composition by age of householder—Statistics by age of householder are presented separately for two-or-more-person households and for one-person households. Households having two or more persons are further subdivided as follows:

Married-couple families, no nonrelatives—Each household in this group consists of the householder and spouse, and other persons, if any, all of whom are related to the householder.

Other male householder—This category includes households with male householders who are married, but with wife absent because of separation or other reason where husband and wife maintain separate residences; and male householders who are widowed, divorced, or single. Also included are households with male householder, wife present and nonrelatives living with them.

Other female householder—This category includes households with female householders who are married, but with husband absent because of separation or other reason where husband and wife maintain separate residences; and female householders who are widowed, divorced, or single. Also included are households with female householder, husband present, and nonrelatives living with them.

Households consisting of only one person are shown separately for male householder and female householder under the category "one-person households."

Family or primary individual—Housing units are occupied by either families or primary individuals. The term "family" refers to the householder and all (one or more) other persons living in the same household who are related to the householder by blood, marriage, or adoption. If the householder lives alone or with nonrelatives only, then the householder is considered a "primary individual."

Married couples related to the householder of a family are included in the family and are not considered as separate families. A lodger, servant, or other person unrelated to the householder is considered a member of the household but not of the family.

In the statistics on household composition, families are always included in one of the three major groups of two-or-more-person households. Primary individuals with nonrelatives living with them are tabulated as other male or female householder. Primary individuals living alone are always tabulated as one-person households.

Subfamily—A subfamily is a married couple with or without children, or one parent with one or more own single (never married) children under 18 years old, living in a household and related to, but not including, the householder or spouse. The most common example of a subfamily is a young married couple sharing the home of the husband's or wife's parents.

Age of householder—The age classification refers to the age reported for the householder as of that person's last birthday.

Persons 65 years old and over—All persons, including the householder, who are members of the household and are 65 years old and over, are included in the count of persons 65 years old and over.

Own children under 18 years old—Statistics on presence of own children of householder, are shown in this report. A child under 18 years old is defined as an own child if he or she is a single (never married) son, daughter, stepchild, or adopted child of a householder. Own children of subfamilies are excluded from the total count of own children.

Other relative of householder—This category includes all persons related to the householder by blood, marriage, or adoption except wife, husband, or child of householder and members of subfamilies.

Nonrelative—A nonrelative of the householder is any person in the household who is not related to the householder by blood, marriage, or adoption. Roomers, boarders, lodgers, partners, resident employees, wards, and foster children are included in this category.

Years of school completed by householder—The statistics refer to the highest grade of regular school completed and not to the highest grade attended. For persons still attending school, the highest grade completed is one less than the one in which they are currently enrolled. Regular school refers to formal education obtained in graded public, private, or parochial schools, colleges, universities, or professional schools, whether day or night school, and whether attendance was full or part time. That is, "regular schooling" is formal education which may advance a person toward an elementary or high school diploma, college, university, or professional school degree. Schooling or tutoring in other than regular schools is counted only if the credits obtained are regarded as transferable to a school in the regular school system. Householders whose highest grade completed was in a foreign school system or in an ungraded school were instructed to report the approximate equivalent grade (or years) in the regular United States school system. They were not reported as having completed a given grade if they dropped out or failed to pass the last grade attended. Education received in the following types of schools is not counted as "regular schooling": Vocational schools, trade schools, business schools, and noncredit adult education classes.

Income—The statistics on income in the Annual Housing Survey are based on the respondent's reply to questions on income for the 12 months prior to the interview and are the sum of the amounts reported for wage and salary income, net self-employment income, Social Security or railroad retirement income, public assistance or welfare payments, and all other money income. The figures represent the amount of income received before deductions for personal income taxes, Social Security, union dues, bond purchases, health insurance premiums, Medicare deductions, etc.

In this report series, the statistics relate to the money income of the family or primary individual occupying the housing unit, i.e., the sum of the income of the householder and all other members of the family 15 years old and over, or the income of the primary individual. Incomes of persons living in the unit but not related to the householder are not included in this sum.

Wage or salary income is defined as the total money earnings received for work performed as an employee at any time during the 12-month period prior to the interview. It includes wages, salaries, piece-rate payments, commissions, tips, cash bonuses, and Armed Forces pay. Net self-employment income is defined as net money income (gross receipts minus operating expenses) received from a business, professional practice, partnership, or farm in which the person was self-employed.

Social Security or railroad retirement income includes cash receipts of Social Security pensions; survivors' benefits; disability insurance programs for retired persons, dependents of deceased insured workers, or disabled workers; and deductions for Medicare and health insurance premiums. Cash receipts of retirement, disability, and survivors' benefit payments made by the U.S. Government under the Railroad Retirement Act are also included. Separate payments received for hospital or other medical care are not included.

Income from all other sources includes money income received from sources such as periodic payments from estates and trust funds; dividends; interest; net rental income (or loss) from property rentals; net receipts from roomers or boarders; net royalties; public assistance or welfare payments which include cash receipts received from public assistance programs, such as old age assistance, aid to families with dependent children, and aid to the blind or totally disabled; unemployment insurance benefits; money received for transportation and/or subsistence by persons participating in special governmental training programs, such as the Area Redevelopment Act and the Manpower Development and Training Act; workmen's compensation cash benefits; periodic payments by the Veterans' Administration to disabled members of the Armed Forces or to survivors of deceased veterans; public or private pensions; periodic receipts from insurance policies or annuities; alimony or child support from persons who are not members of the household; net gambling gains; and nonservice scholarships and fellowships.

Receipts from the following sources were not included as income: Value of income "in kind," such as free living quarters, housing subsidies, food stamps, or food produced and consumed in the home; money received from the sale of property (unless the recipient was engaged in the business of selling such property); money borrowed; tax refund; withdrawal of bank deposits; accrued interest on uncashed savings bonds; exchange of money between relatives living in the same household; and gifts and lump-sum insurance payments, inheritances, and other types of lump-sum receipts.

The income statistics and the characteristics of the household refer to different periods in time. For 1983, the income data refer to the 12 months prior to the interview, and the household characteristics refer to the date of the interview. For 1970, income data refer to the calendar year 1969, but the household characteristics refer to April 1, 1970. Thus, family income does not include amounts received by persons who were members of the family during all or part of the income period if these persons no longer resided with the family at the time of the interview. On the other hand, family income includes amounts reported by related persons who did not reside with the family during the entire income period but who were members of the family at the time of the interview. For most families, however, the income reported was received by persons who were members of the family throughout the income period.

There may be significant differences in the income data between the Annual Housing Survey and other Bureau of the Census' surveys and censuses. For example, the time period for income data in the Annual Housing Survey refers to the 12 months prior to the interview while other income data generally refer to the calendar year prior to the date of the interview. Additional differences in the income data may be attributed to the various ways income questions are asked, the sampling variability and nonsampling errors between the Annual Housing Survey and other Bureau surveys and censuses, survey procedures and techniques, and processing procedures.

Facsimile of the Annual Housing Survey Questionnaire: 1983

O.M.B. No. 2528-0017: Approval Expires March 31, 1984

1. Control number (cc 1)
PSU | Segment | Serial

2. Sample (cc 4) (Circle one)
F 1 or F 2

Office use only (Ck. Dg.)

NOTICE – All information which would permit identification of the individual will be held in strict confidence by law, under U.S. Code, title 13, section 9a. It may be seen only by sworn Census employees and may be used only for statistical purposes.

Exact address (cc 5a)

FORM AHS-2 (2-9-83)
U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
ACTING AS COLLECTING AGENT FOR
DEPARTMENT OF HOUSING AND
URBAN DEVELOPMENT

ANNUAL HOUSING SURVEY

NATIONAL SAMPLE – 1983

3. Household No. (cc 2)

4. Type of segment (cc 3)
1 ☐ Area
2 ☐ Address
3 ☐ Permit
4 ☐ Special place
5 ☐ Cen-Sup

5a. Interviewer name

b. Code

c. Date of first visit
Month | Day | Year

d. Date interview completed
Month | Day | Year

e. Line No. of HH respondent (cc 10)

6. LAND USE
RURAL
(001) 1 ☐ Reg. units OR Sp. Pl. units coded 85–88 in Control Card item 5c
2 ☐ Sp. Pl. units not coded 85–88 in Control Card item 5c
URBAN
3 ☐ All Reg. and Sp. Pl. units

7a. Status of control number
(002) 1 ☐ Control number in sample previously – *Skip to Item 8*
☐ Control number in sample for first time this enumeration period – *Fill Item 7b*

b. Reason for adding control number
(002) 2 ☐ New construction
3 ☐ Mobile home moved in
4 ☐ House moved in
5 ☐ Unit resulted from structural conversion
6 ☐ Conversion of nonresidential unit
7 ☐ Other – *Specify*

8. Type of interview
Interview
(003) 1 ☐ Regular – *(One or more "Y's" in cc 11c)*
2 ☐ URE – *(All "N's" in cc 11c)*
3 ☐ Vacant
} *Skip to Section II, page 3*
4 ☐ Noninterview – ☐ Type A or B – *Skip to 159, page 54*; ☐ Type C – *Enclose completed AHS-397 and go to Control Card item 39*

Section I (TRANSCRIBE FROM CONTROL [redacted]

9. Reason for noninterview (cc 40d)
a. Type A
(004) 1 ☐ No one home
2 ☐ Temporarily absent
3 ☐ Refused
4 ☐ Unable to locate
5 ☐ Other occupied – *Specify*

b. Type B
(004) 10 ☐ Units for nonresidential use (e.g., business school, or commercial storage)
11 ☐ OTHER unit, except unoccupied site for mobile home or tent
} *Fill item 9e*
12 ☐ Unoccupied site for mobile home or tent
13 ☐ Under construction – not ready
14 ☐ Scheduled to be demolished
15 ☐ Condemned or occupancy prohibited by law
16 ☐ Interior exposed to the elements
17 ☐ Unit severely damaged by fire
18 ☐ Other – *Specify*
} *Fill items 9d and e*
19 ☐ Permit granted – construction not started

9. Reason for noninterview (cc 40d) – Continued
c. Type C
(004) 30 ☐ Unit eliminated in structural conversion
31 ☐ Demolished
32 ☐ Disaster loss (flood, tornado, etc.)
33 ☐ Disaster loss – fire
34 ☐ House or mobile home moved
35 ☐ Merged – not in current sample
36 ☐ Built after April 1, 1970
37 ☐ Other – *Specify*

38 ☐ Unused permit – abandoned
(Fill for type B14 thru B18 only)

d. Unit boarded-up (cc 40e)
(005) 1 ☐ Yes
2 ☐ No
(Fill for type B10, 11, 14–18 only)

e. Status of structure *(Item 8, Form AHS-397)*
(006) 1 ☐ Structure currently has no housing units
2 ☐ Structure currently has one or more housing units

Section I – Continued (TRANSCRIBE FROM CONTROL CARD)

10. Structure originally built (cc 6)
☐ April 1, 1970 or later
(007) Month (01–12) | Year
OR
(007) 1 ☐ 1969 to March 31, 1970
2 ☐ 1965–1968
3 ☐ 1960–1964
4 ☐ 1950–1959
5 ☐ 1940–1949
6 ☐ 1939 or earlier
OFFICE USE ONLY
(007) x ☐

11. Access (cc 9d)
(008) 1 ☐ Direct
2 ☐ Through another unit

12. Type of living quarters (cc 9b and c)
HOUSING UNIT
(009) 1 ☐ House, apartment, flat
2 ☐ HU in nontransient hotel, motel, etc.
3 ☐ HU permanent in transient hotel, motel, etc.
4 ☐ HU in rooming house
5 ☐ Mobile home or trailer with NO permanent room added
6 ☐ Mobile home or trailer WITH one or more permanent rooms added
7 ☐ HU not specified above – *Specify*

OTHER UNIT *(Treat as Type B Noninterview)*
8 ☐ Quarters not HU in rooming or boarding house
9 ☐ Unit not permanent in transient hotel, motel, etc.
10 ☐ Unoccupied tent site or trailer site
11 ☐ OTHER unit not specified above – *Specify*

13. Occupancy status (cc 40c)
(010) 1 ☐ "Reg. Occu." or "Occu." – Skip to Section IVA, page 8
2 ☐ Vac. – Skip to Section XV, page 56
3 ☐ "URE, Occu." or "URE" – Skip to Section IVA, page 8

Type B and Type C Noninterviews (cc 40c = *blank*) – *Skip to Section XV, page 56*

NOTES

QUESTIONNAIRE ITEMS TO BE FILLED FOR NONINTERVIEWS AND VACANT INTERVIEWS

NONINTERVIEWS			VACANT INTERVIEWS
TYPE A	TYPE B	TYPE C	
I.D. Items 1, 2 and Address* 3–5a** 6–8	I.D. Items 1, 2 and Address* 3–5a** 6–8	I.D. Items 1, 2 and Address* 3–5a** 6–8	I.D. Items 1, 2 and Address* 3–8**
Section I Items 9a 11 12 13	Section I Items 9b 9d and e *(Where appropriate)* 11 12	Section I Items 9c	Section I Items 10–13
Section XIV, page 54 Section XV, page 56	Section XIV, page 54 Section XV, page 56	Section XV, page 56	Section II, page 3 Section III, pages 4–7 Section XIV, page 54 Section XV, page 56

*NOTE – Fill items 1 and 2 only if AHS-2 is not labeled or if control number on label is incorrect. In addition, the complete address of the sample unit must be entered or updated on each questionnaire.

**NOTE – In item 5a enter the relationship of the person providing the information for the Noninterview or Vacant interview; e.g., manager, agent, or neighbor. If no one was consulted, leave item 5a blank.

FORM AHS-2 (2-9-83) Page 2

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

Section II – REGULAR, URE, AND VACANT INTERVIEWS

1. How many rooms are in this house (apartment)? Do not count bathrooms, porches, balconies, foyers, halls, or half-rooms.	(022) _____ Number of rooms (022) OFFICE USE ONLY x ☐
2. How many bedrooms are in this house (apartment)? Count rooms used mainly for sleeping even if used for other purposes.	(024) _____ Number of bedrooms OR 0 ☐ None
3. Does this house (building) have complete kitchen facilities; that is, a kitchen sink with piped water, a refrigerator and a range or a cookstove which are available for your use (the use of the intended occupants)?	(026) 1 ☐ Yes – For this household only 2 ☐ Yes – Also used by another household 3 ☐ No
4a. Does the water for this house (apartment) come from a public or private system; an individual well; or some other source such as a spring, creek, river, cistern, etc.?	(028) 1 ☐ A public system or private company – Skip to 5 2 ☐ An individual well – Ask 4b 3 ☐ Some other source – Specify _____ Skip to 5
b. Is the well drilled or dug?	(812) 1 ☐ Drilled 2 ☐ Dug
5. What means of sewage disposal does this house (building) have?	(030) 1 ☐ Public sewer 2 ☐ Septic tank or cesspool 3 ☐ Chemical toilet 4 ☐ Privy 5 ☐ Use facilities in another structure 6 ☐ Other – Specify _____
☐ Vacant interview – Skip to 7 6. How is this house (apartment) heated – by gas, oil, electricity, or with some other fuel? (Mark the ONE used most)	(032) GAS 1 ☐ From underground pipes serving the neighborhood 2 ☐ Bottled, tank, or LP 3 ☐ Fuel oil 4 ☐ Kerosene, etc. 5 ☐ Electricity 6 ☐ Coal or coke 7 ☐ Wood 8 ☐ Solar heat 9 ☐ Other fuel 0 ☐ No fuel used
7. Is there a garage or carport on this property which is currently available for your use (the use of the intended occupants)?	(034) 1 ☐ Yes 2 ☐ No

(See item 8, page 1)
☐ Regular or URE interview – Skip to Section IVB, page 10
☐ Vacant interview – Go to Section III, page 4

FORM AHS-2 (2-9-83)

PGM 3

Section III – VACANT INTERVIEWS

1a. How many living quarters, both occupied and vacant, are there in this house (building)?	(101) 1 ☐ Mobile home or trailer (NO permanent room attached) – Skip to item 2a 2 ☐ One, detached from any other building (includes mobile home or trailer WITH one or more permanent rooms attached) 3 ☐ One, attached to one or more buildings 4 ☐ 2 5 ☐ 3 or 4 6 ☐ 5 to 9 7 ☐ 10 to 19 8 ☐ 20 to 49 9 ☐ 50 or more } Skip to item 2a (101) OFFICE USE ONLY x ☐
OBSERVATION b. Is any part of this property used as a commercial establishment?	(103) 1 ☐ Yes 2 ☐ No
OBSERVATION c. Is any part of this property used as a medical or dental office?	(104) 1 ☐ Yes 2 ☐ No
2a. How many stories (floors) are there in this house (building)? Do not count the basement. (MARK mobile homes by observation)	(105) 1 ☐ 1 to 3 – Skip to 3 2 ☐ 4 to 6 3 ☐ 7 to 12 4 ☐ 13 or more
OBSERVATION b. Is there a passenger elevator in this building?	(106) 1 ☐ Yes 2 ☐ No
3. Does this house (building) have complete plumbing facilities; that is, hot and cold piped water, a flush toilet and a bathtub or shower, which are available for the use of the intended occupants of this house (apartment)?	→ Are these facilities ONLY for the use of the intended occupants? (107) 1 ☐ Yes – Used for this household only – Ask 4 2 ☐ No – Also used by another household – Skip to 5 3 ☐ No – Skip to 5
4. A complete bathroom is a room with a flush toilet, a bathtub or shower, and a washbasin with piped water. A half bathroom has at least a flush toilet or a bathtub or shower, but does not have all the facilities for a complete bathroom How many complete bathrooms and half bathrooms does this house (apartment) have?	(Mark only one box) (108) 1 ☐ Complete plumbing facilities but not in one room 2 ☐ 1 complete bathroom 3 ☐ 1 complete bathroom plus a half bath with no flush toilet 4 ☐ 1 complete bathroom plus a half bath with flush toilet 5 ☐ 2 complete bathrooms 6 ☐ More than 2 complete bathrooms

NOTES

FORM AHS-2 (2-9-83)

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

Section III – VACANT INTERVIEWS – Continued

5. What type of heating equipment does this house (apartment) have?

(MARK heating equipment to be used most)

SHOW FLASHCARD B

(109)
1 ☐ Central warm-air furnace with ducts in individual rooms
2 ☐ Heat pump
3 ☐ Steam or hot water system
4 ☐ Built-in electric units (permanently installed in wall, ceiling, or baseboard)
5 ☐ Floor, wall, or pipeless furnace
6 ☐ Room heater(s) WITH flue or vent burning gas, oil, or kerosene
7 ☐ Room heater(s) WITHOUT flue or vent burning gas, oil, or kerosene
8 ☐ Fireplaces, stoves, or portable room heaters
9 ☐ Unit has no heating equipment

6a. Is this unit intended for year-round use, for occupancy only on a seasonal basis, or for use by migrant workers?

[redacted] – *Ask 6b*

(117)
10 ☐ Seasonal – summers only
11 ☐ Seasonal – winters only
12 ☐ Other seasonal – *Specify in Notes*
9 ☐ Migratory
} *Skip to 7*

NOTES – Other seasonal use

OFFICE USE ONLY (117) × ☐

b. Is this house (apartment) for rent, for sale only, rented not occupied, sold not occupied, held for occasional use, or something else?

(117)
1 ☐ For rent, OR for sale or for rent
2 ☐ For sale only – regular ownership
3 ☐ For sale only – condominium ownership
} *Skip to 7*
4 ☐ For sale only – cooperative ownership – *Ask 6c*
5 ☐ Rented, not occupied
6 ☐ Sold, not occupied
7 ☐ Held for occasional use
8 ☐ Other vacant – *Specify* _____
} *Skip to 7*

– *Enclose INTERCOMM describing the situation in detail.*

OFFICE USE ONLY (117) × ☐

c. To the Census Bureau, a cooperative is property which is owned by a corporation. Each shareholder is entitled to occupy an individual unit. Is this what you mean when you say this is a cooperative?

[redacted]

7. How many months has this house (apartment) been vacant?

(119)
1 ☐ Less than 1 month
2 ☐ 1 month up to 2 months
3 ☐ 2 months up to 6 months
4 ☐ 6 months up to 12 months
5 ☐ 1 year up to 2 years
6 ☐ 2 years or more

OBSERVATION
8a. Is the unit boarded up?

(120) 1 ☐ Yes 2 ☐ No

OBSERVATION
b. Are there any buildings (other than this building) with windows broken or boarded up on this street?

(121) 1 ☐ Yes 2 ☐ No

FORM AHS-2 (2-9-83) Page 5

Section III – VACANT INTERVIEWS – Continued

9. Does this place have 10 acres or more?

(122) 1 ☐ Yes, 10 acres or more 2 ☐ No, less than 10 acres

CHECK ITEM A

VACANCY STATUS *(See item 6b, page 5)*

☐ **FOR RENT, OR FOR SALE OR FOR RENT** *(6b, box 1)*
(See item 1a, page 4, and item 9 above)
☐ One-unit structure on less than 10 acres – *Skip to item 11*
☐ One-unit structure on 10 acres or more – *Skip to item 13, page 7*
☐ Two-or-more unit structure or a mobile home or trailer – *Skip to item 11*

☐ **FOR SALE ONLY** *(6b, box 2, 3, or 4)*
REGULAR OWNERSHIP
(See items 1a, 1b, 1c on page 4, and item 9 above)
☐ One-unit structure on less than 10 acres and there is no commercial establishment or medical or dental office on the property – *Ask item 10*
☐ All others – *Skip to item 14, page 7*
☐ **A CONDOMINIUM** – *Ask item 10*
☐ **A COOPERATIVE** – *Skip to item 14, page 7*

☐ **ALL OTHERS** *(6b, box 5, 6, 7, 8, DK, NA, REF, or Blank)*
☐ Other vacants, units rented or sold, units held for occasional use, seasonal, and similar units – *Skip to item 13, page 7*

10. What is the sale price asked for this property (condominium unit)?

SHOW FLASHCARD D

(126)
1 ☐ Less than $5,000
2 ☐ $ 5,000 – $ 7,499
3 ☐ 7,500 – 9,999
4 ☐ 10,000 – 12,499
5 ☐ 12,500 – 14,999
6 ☐ 15,000 – 17,499
7 ☐ 17,500 – 19,999
8 ☐ 20,000 – 22,499
9 ☐ 22,500 – 24,999
10 ☐ 25,000 – 27,499
11 ☐ 27,500 – 29,999
12 ☐ 30,000 – 34,999
13 ☐ 35,000 – 39,999
14 ☐ 40,000 – 44,999
15 ☐ 45,000 – 49,999
16 ☐ 50,000 – 54,999
17 ☐ 55,000 – 59,999
18 ☐ 60,000 – 64,999
19 ☐ 65,000 – 69,999
20 ☐ 70,000 – 74,999
21 ☐ 75,000 – 79,999
22 ☐ 80,000 – 89,999
23 ☐ 90,000 – 99,999
24 ☐ 100,000 – 124,999
25 ☐ 125,000 – 149,999
26 ☐ 150,000 – 199,999
27 ☐ 200,000 – 249,999
28 ☐ 250,000 – 299,999
29 ☐ 300,000 or more
} *Skip to item 14, page 7*

11. What is the MONTHLY rent?

(Mark the frequency of payment box and enter the MONTHLY rent. If rent is not to be paid by the month, compute the MONTHLY rent in the "Notes" space, and enter the MONTHLY rent on the line provided.)

(Include site rent for mobile homes if it is to be paid separately.)

(151) $ _____ . [00] Per month

(152) 1 ☐ More frequently than once a month
2 ☐ Less frequently than once a month
3 ☐ Once a month

Notes

FORM AHS-2 (2-9-83) Page 6

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

Section III – VACANT INTERVIEWS – Continued

12a. In addition to rent, does the renter also pay for electricity?	(156)	1 ☐ Yes 2 ☐ No, included in rent 3 ☐ No, electricity not used
b. In addition to rent, does the renter also pay for gas?	(158)	1 ☐ Yes 2 ☐ No, included in rent 3 ☐ No, gas not used
c. In addition to rent, does the renter also pay for water?	(160)	1 ☐ Yes 2 ☐ No, included in rent or no charge
d. In addition to rent, does the renter also pay for oil, coal, kerosene, wood, OR any other fuel?	(162)	1 ☐ Yes 2 ☐ No, included in rent 3 ☐ No, these fuels not used or obtained free
e. In addition to rent, does the renter also pay for garbage (food waste) collection?	(164)	1 ☐ Yes 2 ☐ No
13. Is this house (apartment) part of a condominium?	(527)	1 ☐ Yes, part of a condominium 2 ☐ No
14. How many rooms in this house (apartment) do NOT have hot air ducts, registers, radiators, or room heaters? Do not count the kitchen or bathroom(s).	(803)	1 ☐ None 2 ☐ 1 room 3 ☐ 2 rooms 4 ☐ 3 or more rooms
15. Does each room in this house (apartment) have a working electric wall outlet (wall plug)?	(808)	1 ☐ Yes 2 ☐ No
16. Is all the wiring in this house (apartment) concealed in the walls or in metal coverings? Do not count appliance cords, extension cords, or chandelier cords.	(809)	1 ☐ Yes 2 ☐ No
17a. Is it necessary to go through any bedroom to get to any bathroom?	(810)	1 ☐ Yes 2 ☐ No
b. Is it necessary to go through any bedroom to get to any other room?	(811)	1 ☐ Yes 2 ☐ No
18. Is there a basement in this house (building)? (*A basement is an enclosed space in which persons can walk upright under all or part of the building.*)	(841)	1 ☐ Yes 2 ☐ No

CHECK ITEM B

Part 1 (See item *1a, page 4*) – Units in structure
- ☐ One-unit structure or a mobile home or trailer – *Skip to 159, page 54*
- ☐ Two or more unit structure – *Go to part 2*

Part 2 (See item *6a–b, page 5*) – Tenure
- ☐ For sale (box 2, 3 or 4 marked) – *Skip to 156a, page 54*
- ☐ All others (box 1 or 5 through 12) – *Ask 19a*

19a. Does the owner of this building/Do you (if speaking to the owner) live on this property?	(631)	1 ☐ Yes – *Skip to 156a, page 54* 2 ☐ No 3 ☐ Don't know
b. Is there a resident manager, superintendent or janitor who lives on this property?	(632)	1 ☐ Yes 2 ☐ No 3 ☐ Don't know } *Skip to 156a, page 54*

Section IVA – REGULAR (OR URE) INTERVIEWS

TRANSCRIBE

PGM 4 →

1. Line number of household respondent (See item 5e, page 1) (090) ☐☐ [redacted]

HOUSEHOLD CHARACTERISTICS – *TRANSCRIBE FROM CONTROL CARD*

2a. Line number (cc 10)	2b. Relationship to reference person (cc 11b) *Transcribe information for all persons listed in control card item 11a whose line number is not deleted. INCLUDE REFERENCE PERSON.*	OFFICE USE ONLY	2c. Household member (cc 11c) CIRCLE ONE: Yes	No	2d. Age (cc 14)	2e. Marital status (For persons 14+) (cc 15) 1 – Married 2 – Widowed 3 – Divorced 4 – Separated 5 – Never married ENTER CODE IN UNSHADED AREA	2f. Race (cc 16) *Note – If using green co convert the written entry using the following codes:* 1 – White 2 – Negro 3 – Other ENTER CODE IN UNSHADED AREA	2g. Sex (cc 17) CIRCLE ONE: Male	Female
	[redacted]		1	2		[redacted]	[redacted]	1	2
	[redacted]		1	2		[redacted]	[redacted]	1	2
	[redacted]		1	2		[redacted]	[redacted]	1	2
	[redacted]		1	2		[redacted]	[redacted]	1	2
	[redacted]		1	2		[redacted]	[redacted]	1	2
	[redacted]		1	2		[redacted]	[redacted]	1	2
	[redacted]		1	2		[redacted]	[redacted]	1	2
	[redacted]		1	2		[redacted]	[redacted]	1	2
	[redacted]		1	2		[redacted]	[redacted]	1	2
	[redacted]		1	2		[redacted]	[redacted]	1	2
	[redacted]		1	2		[redacted]	[redacted]	1	2
	[redacted]		1	2		[redacted]	[redacted]	1	2
	[redacted]		1	2		[redacted]	[redacted]	1	2
	[redacted]		1	2		[redacted]	[redacted]	1	2
	[redacted]		1	2		[redacted]	[redacted]	1	2
	[redacted]		1	2		[redacted]	[redacted]	1	2
	[redacted]		1	2		[redacted]	[redacted]	1	2

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

PGM 5

Section IVA – REGULAR (OR URE) INTERVIEWS – Continued

TRANSCRIBE FROM CONTROL CARD

3. Highest grade completed by reference person (cc 19)

(091)
- 0 ☐ Never attended school
- 1 ☐ Kindergarten
- 2 ☐ First
- 3 ☐ Second
- 4 ☐ Third
- 5 ☐ Fourth
- 6 ☐ Fifth
- 7 ☐ Sixth
- 8 ☐ Seventh
- 9 ☐ Eighth
- 10 ☐ Ninth
- 11 ☐ Tenth
- 12 ☐ Eleventh
- 13 ☐ Twelfth

College (Academic years)

- 14 ☐ C1
- 15 ☐ C2
- 16 ☐ C3
- 17 ☐ C4
- 18 ☐ C5
- 19 ☐ C6 or more

4. Ethnic origin (cc 20)

(092)
- 1 ☐ Mexican-American
- 2 ☐ Chicano
- 3 ☐ Mexican
- 4 ☐ Mexicano
- 5 ☐ Puerto Rican
- 6 ☐ Cuban
- 7 ☐ Central or South American
- 8 ☐ Other Spanish – *Specify* _____
- 9 ☐ Other – *Specify* _____

5. When reference person moved in (cc 21)

After April 1, 1970

(093) Month (01–12) | Year

OR

(093)
- 1 ☐ 1965 to April 1, 1970
- 2 ☐ 1960 to 1964
- 3 ☐ 1950 to 1959
- 4 ☐ 1949 or earlier

(093) OFFICE USE ONLY: x ☐

6. Use of telephone (cc 38a)

(095)
- 1 ☐ Yes
- 2 ☐ No

INTERVIEWER INSTRUCTION ➡ Go to Section XV, page 56

FORM AHS-2 (2-9-83)

Page 9

Section IVB – REGULAR (OR URE) INTERVIEWS

7a. Are your living quarters owned or being bought by you or by someone else in your household?

[redacted] **Are they owned as a cooperative or condominium?**

(100)
- 1 ☐ No, regular ownership – *Skip to 8a*
- 2 ☐ Yes, a cooperative – *Skip to 7c*
- 3 ☐ Yes, a condominium – *Skip to 8a*
- ☐ No – *Ask 7b*

(100) OFFICE USE ONLY: x ☐

b. Are your living quarters rented for cash by you or by someone else or occupied without payment of cash rent?

(100)
- 4 ☐ Rented for cash
- 5 ☐ Occupied without payment of cash rent

} *Skip to 8a*

c. To the Census Bureau, a cooperative is property which is owned by a corporation. Each shareholder is entitled to occupy an individual unit. Is this what you mean when you say this is a cooperative?

[redacted]

8a. How many living quarters, both occupied and vacant, are there in this house (building)?

(101)
- 1 ☐ Mobile home or trailer (no permanent room attached) – *Go to 8b*
- 2 ☐ One, detached from any other building (includes mobile home or trailer WITH one or more permanent rooms attached)
- 3 ☐ One, attached to one or more buildings
- 4 ☐ 2 . . . . . .
- 5 ☐ 3 or 4 . . . . . .

} *Skip to 8c*

- 6 ☐ 5 to 9
- 7 ☐ 10 to 19
- 8 ☐ 20 to 49
- 9 ☐ 50 or more

} *Skip to 9a*

(101) OFFICE USE ONLY: x ☐

OBSERVATION

b. How many mobile homes are in this group?

(102)
- 1 ☐ 1–5
- 2 ☐ 6–99
- 3 ☐ 100 or more

} *Skip to 9a*

OBSERVATION

c. Is any part of this property used as a commercial establishment?

(103)
- 1 ☐ Yes
- 2 ☐ No

OBSERVATION

d. Is any part of this property used as a medical or dental office?

(104)
- 1 ☐ Yes
- 2 ☐ No

9a. How many stories (floors) are in this house (building)? Do not count the basement.

(MARK mobile homes by observation.)

(105)
- 1 ☐ 1 to 3 – *Skip to 10*
- 2 ☐ 4 to 6
- 3 ☐ 7 to 12
- 4 ☐ 13 or more

b. Is there a passenger elevator in this building?

(106)
- 1 ☐ Yes
- 2 ☐ No

10. Do you have complete plumbing facilities in this house (building); that is, hot and cold piped water, a flush toilet and a bathtub or shower, which are available for your use?

(107)
- 1 ☐ Yes – For this household only
- 2 ☐ Yes – Also used by another household
- 3 ☐ No . . . . . .

} *Skip to 12*

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Page 10

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

Section IVB – REGULAR (OR URE) INTERVIEWS – Continued

11. A complete bathroom is a room with a flush toilet, a bathtub or shower, and a washbasin with piped water. A half bathroom has at least a flush toilet or a bathtub or shower, but does not have all the facilities for a complete bathroom.

How many complete bathrooms and half bathrooms do you have?

(Mark only one box)

(108)
1 ☐ Complete plumbing facilities but not in one room
2 ☐ 1 complete bathroom
3 ☐ 1 complete bathroom plus half bath with no flush toilet
4 ☐ 1 complete bathroom plus half bath with flush toilet
5 ☐ 2 complete bathrooms
6 ☐ More than 2 complete bathrooms

12. What type of heating equipment does your house (apartment) have?

(MARK heating equipment used most.)

SHOW FLASHCARD B

(109)
1 ☐ Central warm-air furnace with ducts in individual rooms
2 ☐ Heat pump
3 ☐ Steam or hot water system
4 ☐ Built-in electric units (permanently installed in wall, ceiling, or baseboard)
5 ☐ Floor, wall, or pipeless furnace
6 ☐ Room heater(s) WITH flue or vent burning gas, oil, or kerosene
7 ☐ Room heater(s) WITHOUT flue or vent burning gas, oil, or kerosene
8 ☐ Fireplaces, stoves, or portable room heater(s)
9 ☐ Unit has no heating equipment

OFFICE USE ONLY
(109) x ☐

13a. Do you have air conditioning, either individual room units or a central system?

(110) 1 ☐ Yes
2 ☐ No – *Skip to 14a*

b. Which do you have?

(111) 1 ☐ Central – *Skip to 14a*
2 ☐ Room units

c. How many room units do you have?

(112) _____ Room units

14a. Does this house (apartment) have open cracks or holes in the interior walls or ceiling? *(Do not include hairline cracks)*

(113) 1 ☐ Yes
2 ☐ No

b. Does this house (apartment) have holes in the floors?

(114) 1 ☐ Yes
2 ☐ No

15a. Is there any area of broken plaster on the ceiling or inside walls which is larger than this piece of paper?
(SHOW CLOSED INTERVIEWER FLASHCARD AND INFORMATION BOOKLET)

(115) 1 ☐ Yes
2 ☐ No

b. Is there any area of peeling paint on the ceiling or inside walls which is larger than this piece of paper?
(SHOW CLOSED INTERVIEWER FLASHCARD AND INFORMATION BOOKLET)

(116) 1 ☐ Yes
2 ☐ No

OBSERVATION

16. Are there any buildings with windows broken or boarded up on this street?

(121) 1 ☐ Yes
2 ☐ No

FORM AHS-II (2-0-83)

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Section IVB – REGULAR (OR URE) INTERVIEWS – Continued

17. Does this place have 10 acres or more?

(122) 1 ☐ Yes
2 ☐ No

CHECK ITEM A

Part 1 (See item 6, page 1)

Rural

☐ Regular units OR Special Place units coded 85–88 (box 1 marked in item 6) – *Go to part 2 below*

☐ Special Place units not coded 85–88 (box 2 marked in item 6) – *Skip to Check Item B*

Urban

☐ All Regular and Special Place units (box 3 marked in item 6) – *Skip to Check Item B*

Part 2 (See item 17 above)

☐ On 10 acres or more – *Ask 18a*

☐ On less than 10 acres – *Skip to 18b*

18a. During the past 12 months, did sales of crops, livestock and other farm products from this place amount to $50 or more?

(123) 1 ☐ Yes – *Skip to 18c*
2 ☐ No – *Skip to Check Item B*

b. During the past 12 months, did sales of crops, livestock and other farm products from this place amount to $250 or more?

(124) 1 ☐ Yes
2 ☐ No – *Skip to Check Item B*

c. During the past 12 months, did sales of crops, livestock and other farm products from this place amount to $1,000 or more?

(125) 1 ☐ Yes
2 ☐ No

CHECK ITEM B

TENURE *(See items 7a and 7b, page 10)*

1 ☐ **OWNED AS A COOPERATIVE** – *Skip to Check Item F, page 16*

2 ☐ **OWNED AS A CONDOMINIUM** – *Ask 19, page 13*

☐ **OWNED OR BEING BOUGHT (Regular ownership)**

If this is a –

(See item 8a, page 10)
3 ☐ Mobile home or trailer (no permanent room attached) on less than 10 acres ("No" marked in item 17) – *Skip to item 20, page 13*
4 ☐ One-unit structure on less than 10 acres ("No" marked in item 17) and there is no commercial establishment or medical or dental office on the property ("No" in items 8c and 8d) – *Ask 19, page 13*
5 ☐ Other owned units – *Skip to Check Item F, page 16*

☐ **RENTED FOR CASH**

If this is a –

(See item 8a, page 10)
6 ☐ One-unit structure on less than 10 acres ("No" marked in item 17) – *Skip to item 26, page 14*
7 ☐ One-unit structure on 10 acres or more ("Yes" marked in item 17) – *Skip to Check Item F, page 16*
8 ☐ Two-or-more unit structure or mobile home or trailer – *Skip to item 26, page 14*

☐ **OCCUPIED WITHOUT PAYMENT OF CASH RENT**

If this is a –

(See item 8a, page 10)
9 ☐ One-unit structure on less than 10 acres ("No" marked in item 17) – *Skip to item 28, page 15*
10 ☐ One-unit structure on 10 acres or more ("Yes" marked in item 17) – *Skip to Check Item F, page 16*
11 ☐ Two-or-more unit structure, or a mobile home or trailer – *Skip to Check Item D, page 15*

FORM AHS-II (2-0-83)

Page 12

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

Section IVB – REGULAR (OR URE) INTERVIEWS – Continued

19. How much do you think this property, that is, house and lot, (condominium unit), would sell for on today's market?
SHOW FLASHCARD D

(126)
1 ☐ Less than $5,000
2 ☐ $ 5,000 – $ 7,499
3 ☐ 7,500 – 9,999
4 ☐ 10,000 – 12,499
5 ☐ 12,500 – 14,999
6 ☐ 15,000 – 17,499
7 ☐ 17,500 – 19,999
8 ☐ 20,000 – 22,499
9 ☐ 22,500 – 24,999
10 ☐ 25,000 – 27,499
11 ☐ 27,500 – 29,999
12 ☐ 30,000 – 34,999
13 ☐ 35,000 – 39,999
14 ☐ 40,000 – 44,999
15 ☐ 45,000 – 49,999
16 ☐ 50,000 – 54,999
17 ☐ 55,000 – 59,999
18 ☐ 60,000 – 64,999
19 ☐ 65,000 – 69,999
20 ☐ 70,000 – 74,999
21 ☐ 75,000 – 79,999
22 ☐ 80,000 – 89,999
23 ☐ 90,000 – 99,999
24 ☐ 100,000 – 124,999
25 ☐ 125,000 – 149,999
26 ☐ 150,000 – 199,999
27 ☐ 200,000 – 249,999
28 ☐ 250,000 – 299,999
29 ☐ 300,000 or more

CHECK ITEM B
(See Check Item B, page 12)
☐ **OWNED AS A CONDOMINIUM** (Box 2 marked) – *Skip to Check Item F, page 16*
☐ All others – *Skip to item 23*

20. Do you own this mobile home (trailer) SITE or is it rented? (127) 1 ☐ Owned 2 ☐ Rented for cash or occupied without payment of cash rent

21a. In what year did you acquire this mobile home (trailer)? (128) [redacted]

b. Was the mobile home (trailer) NEW when you acquired it? (129) 1 ☐ Yes 2 ☐ No

c. When you acquired this mobile home (trailer), what was the purchase price? Do not include the price of the site or closing costs. (130) $_____. [redacted] Purchase price
0 ☐ Not purchased

22. Do you have an installment loan or contract on this mobile home (trailer) or do you own it free and clear? (131) 1 ☐ Installment loan or contract – *Skip to 24a, page 14* 2 ☐ Owned free and clear – *Skip to 25a, page 14*

23. Do you have a mortgage, deed of trust, or land contract on this property, that is house and lot, or do you own it free and clear? (132) 1 ☐ Mortgage, deed of trust, or land contract 2 ☐ Owned free and clear – *Skip to 25a, page 14*

NOTES

FORM AHS-2 (2-9-83) Page 13

Section IVB – REGULAR (OR URE) INTERVIEWS – Continued

24a. In regard to the mortgage (loan), what are the required payments to the lender? If more than one mortgage (loan) on this property (mobile home or trailer), give the total amount of the payments.
(If there are separate loans on the mobile home and its site, combine amounts.)
(133) $_____. 00
PER
(134) 1 ☐ Month 2 ☐ Year ☐ Other – *Specify* _____

b. In regard to the mortgage (loan), do the required payments include –
(1) Real estate taxes on this property? (135) 1 ☐ Yes 2 ☐ No
(2) Fire and hazard insurance? (136) 1 ☐ Yes 2 ☐ No

NOTE – *Ask 25a for all categories before asking 25b.*

NOTE – *Ask 25b only for those categories in 25a which were answered "Yes."*

25a. (1) Do you pay for electricity? (137) 1 ☐ Yes 2 ☐ No
25b. (1) In the past 12 months, what was the average MONTHLY cost for electricity? (138) $_____. 00

(2) Do you pay for gas? (139) 1 ☐ Yes 2 ☐ No
(2) In the past 12 months, what was the average MONTHLY cost for gas? (140) $_____. 00

(3) Do you pay for oil, coal, kerosene, wood, OR any other fuel? (141) 1 ☐ Yes 2 ☐ No, these fuels not used or obtained free
(3) What is the YEARLY cost for oil, coal, kerosene, wood and any other fuel? (142) $_____. 00

(4) Do you pay for fire and hazard insurance? *(Also include if part of mortgage payments.)* (143) 1 ☐ Yes 2 ☐ No
(4) What is the YEARLY cost for fire and hazard insurance? (144) $_____. 00

(5) Do you pay for real estate taxes? *(Also include if part of mortgage payments.)* (145) 1 ☐ Yes 2 ☐ No
(5) What is the YEARLY cost for real estate taxes? *(Do not include taxes in arrears from previous years.)* (146) $_____. 00

(6) Do you pay for water supply and/or sewage disposal separately from real estate taxes? (147) 1 ☐ Yes 2 ☐ No or payment included in real estate taxes
(6) What is the YEARLY cost for water supply and sewage disposal? (148) $_____. 00

25c. Do you pay for garbage (food waste) collection separately from real estate taxes? (149) 1 ☐ Yes 2 ☐ No, or payment included in real estate taxes – *Skip to Check Item F, page 16*

d. What is the YEARLY cost for garbage (food waste) collection? (150) $_____. [redacted] *Skip to Check Item F, page 16*

26. What is the MONTHLY rent? (151) $_____. 00
(Mark the frequency of payment box and enter the MONTHLY rent. If rent is not paid by the month, compute the MONTHLY rent in "Notes" space and enter the monthly rent on the line provided.)
(Do not include site rent for mobile homes if it is paid separately.)
(152) 1 ☐ More frequently than once a month 2 ☐ Less frequently than once a month 3 ☐ Once a month

NOTES

FORM AHS-2 (2-9-83) Page 14

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

Section IVB – REGULAR (OR URE) INTERVIEWS – Continued

CHECK ITEM D (See item 8a, page 10)
- ☐ Mobile home or trailer (no permanent room attached) – Ask 27
- ☐ All others – Skip to 28

27. Do you own the mobile home site or is it rented? (153) 1 ☐ Owned; 2 ☐ Rented for cash or occupied without payment of cash rent

28. Is this house (apartment) in a public housing project; that is, is it owned by a local housing authority or other local public agency? (154) 1 ☐ Yes – Skip to 30a; 2 ☐ No

29. Are you paying a lower rent because the Federal, state or local government is paying part of the cost? (155) 1 ☐ Yes; 2 ☐ No

NOTE – *Ask 30a for all categories before asking 30b. Exclude phrase "In addition to rent" for sample units OCCUPIED WITHOUT PAYMENT OF CASH RENT.*

NOTE – *Ask 30b only for those categories in 30a which were answered "Yes."*

30a. (1) In addition to rent, do you pay for electricity? (156) 1 ☐ Yes; 2 ☐ No, included in rent or supplied free; 3 ☐ No, electricity not used

30b. (1) In the past 12 months, what was the average MONTHLY cost for electricity? (157) $ _____ .00

(2) In addition to rent, do you pay for gas? (158) 1 ☐ Yes; 2 ☐ No, included in rent or supplied free; 3 ☐ No, gas not used

(2) In the past 12 months, what was the average MONTHLY cost for gas? (159) $ _____ .00

(3) In addition to rent, do you pay for water? (160) 1 ☐ Yes; 2 ☐ No, included in rent or no charge

(3) What is the YEARLY cost for water? (161) $ _____ .00

(4) In addition to rent, do you pay for oil; coal, kerosene, wood, OR any other fuel? (162) 1 ☐ Yes; 2 ☐ No, included in rent; 3 ☐ No, these fuels not used or obtained free

(4) What is the YEARLY cost for oil, coal, kerosene, wood, and any other fuel? (163) $ _____ .00

(5) In addition to rent, do you pay for garbage (food waste) collection? (164) 1 ☐ Yes; 2 ☐ No

(5) What is the YEARLY cost for garbage (food waste) collection? (165) $ _____ .00

NOTES

FORM AHS-2 (2-9-83) Page 15

Section IVB – REGULAR (OR URE) INTERVIEWS – Continued

CHECK ITEM E (See Check Item B, page 12)
- ☐ Rented for cash (box 6, 7, or 8 marked) – Ask 31
- ☐ Occupied without payment of cash rent (box 9, 10, or 11 marked) – Skip to Check Item F

31. Do you rent this apartment (house) furnished or unfurnished? (166) 1 ☐ Furnished; 2 ☐ Unfurnished

CHECK ITEM F (See item 8, page 1)
- ☐ URE interview – Ask 32
- ☐ Regular Interview – Skip to item 33

32. Is this UNIT intended for year-round use, for occupancy only on a seasonal basis, or for use by migrant workers? (167)
- 8 ☐ YEAR ROUND (occupied temporarily at time of interview)
- 10 ☐ Seasonal – summers only
- 11 ☐ Seasonal – winters only
- 12 ☐ Other seasonal – Specify _____
- 9 ☐ Migratory

} Skip to Check Item H, page 21

33. In the past 12 months, how much did . . . earn in wages, salaries, tips, and commissions before taxes and deductions?

(Obtain income for reference person and all household members 15+ RELATED TO REFERENCE PERSON by blood, marriage, or adoption.)

(If more than six persons, enter in the "Notes" beginning with the sixth person and then combine the amounts for all these persons on the last "Amount" line. Leave the Line No. blank.)

Line No.	Amount (Dollars only)
(168)	(169) $ _____ .
(170)	(171) $ _____ .
(172)	(173) $ _____ .
(174)	(175) $ _____ .
(176)	(177) $ _____ .
(178)	(179) $ _____ .

Notes

34a. In the past 12 months, how much did this family (you) earn in net income from its (your) own business, professional practice or partnership? (180) $ _____ .

(Exclude income previously reported in item 33. Probe if identical amounts are reported. Indicate that identical amounts are correct by marking this box ☐.)

(181) 1 ☐ None; 2 ☐ Lost money *(Enter amount LOST on line above)*

b. In the past 12 months, how much did this family (you) earn in net income from farming or ranching? (182) $ _____ .

(Exclude income previously reported in items 33 and 34a. Probe if identical amounts are reported. Indicate that identical amounts are correct by marking this box ☐.)

(183) 1 ☐ None; 2 ☐ Lost money *(Enter amount LOST on line above)*

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Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

Section IVB – REGULAR INTERVIEWS – Continued

NOTE – *Ask 35a for all categories before asking 35b.*

(Obtain income for reference person and all household members 15+ RELATED TO REFERENCE PERSON by blood, marriage, or adoption.)

35a. In the past 12 months, did any member of this family (you) receive any money from –

NOTE – *Ask 35b only for those categories in 35a which were answered "Yes"*

35b. How much was received from (source of income) in the past 12 months?

(1) Social Security or Railroad Retirement payments?	184 1 ☐ Yes 2 ☐ No	185 $ _____ . 00
(2) Estates, trusts, or dividends?	186 1 ☐ Yes 2 ☐ No	187 $ _____ . 00
(3) Interest on savings accounts, bonds, money market funds or other interest bearing accounts?	188 1 ☐ Yes 2 ☐ No	189 $ _____ . 00
(4) Net rental income?	190 1 ☐ Yes 2 ☐ No	191 $ _____ . 00
(5) Welfare payments or other public assistance such as SSI?	192 1 ☐ Yes 2 ☐ No	193 $ _____ . 00
(6) Unemployment compensation?	194 1 ☐ Yes 2 ☐ No	195 $ _____ . 00
(7) Worker's compensation?	196 1 ☐ Yes 2 ☐ No	197 $ _____ . 00
(8) Government employee pensions?	198 1 ☐ Yes 2 ☐ No	199 $ _____ . 00
(9) Veterans payments?	200 1 ☐ Yes 2 ☐ No	201 $ _____ . 00
(10) Private pensions or annuities or payments from IRA or Keogh accounts?	202 1 ☐ Yes 2 ☐ No	203 $ _____ . 00
(11) Alimony or child support?	204 1 ☐ Yes 2 ☐ No	205 $ _____ . 00
(12) Regular contributions from persons not living in this household?	206 1 ☐ Yes 2 ☐ No	207 $ _____ . 00
(13) Anything else?	208 1 ☐ Yes 2 ☐ No	209 $ _____ . 00

NOTE – *Exclude income previously reported. Probe if an amount in item 35b is identical to an amount in item 33 or 34. Indicate that identical amounts are correct by marking this box* ☐.

CHECK ITEM G

(See Control Card items 11b, 11c, and 14)

☐ Household contains household members 15+ NOT RELATED TO THE REFERENCE PERSON by blood, marriage, or adoption – *Ask 36, page 18*

☐ All others – Skip to Section V, *page 21*

Section IVB – REGULAR INTERVIEWS – Continued

36. In the past 12 months, how much did . . . earn in wages, salaries, tips, and commissions before taxes and deductions? →

(Obtain income for household members 15+ NOT RELATED TO REFERENCE PERSON by blood, marriage, or adoption.)

37a. In the past 12 months, how much did . . . earn in net income from his (her) own business, professional practice, or partnership? →

(Exclude income previously reported in item 36. Probe if identical amounts are reported for an individual. Indicate that identical amounts are correct by marking this box ☐.)

b. In the past 12 months, how much did . . . earn in net income from farming or ranching? →

(Exclude income previously reported in items 36 and 37a. Probe if identical amounts are reported for an individual. Indicate that identical amounts are correct by marking this box ☐.)

NOTE – *Ask 38b for each "Yes" response in 38a. Ask 38a (and 38b as appropriate) for all categories before asking 38c.*

38a. In the past 12 months, did . . . *(Names of ALL household members 15+ NOT RELATED TO REFERENCE PERSON by blood, marriage, or adoption)* **receive any money from –**

38b. Who received this type of income? *(Enter line numbers)*

(1) Social Security or Railroad retirement payments?	210 1 ☐ Yes 2 ☐ No	_____
(2) Estates, trusts, or dividends?	211 1 ☐ Yes 2 ☐ No	_____
(3) Interest on savings accounts, bonds, money market funds or other interest bearing accounts?	212 1 ☐ Yes 2 ☐ No	_____
(4) Net rental income?	213 1 ☐ Yes 2 ☐ No	_____
(5) Welfare payments or other public assistance such as SSI?	214 1 ☐ Yes 2 ☐ No	_____
(6) Unemployment compensation?	215 1 ☐ Yes 2 ☐ No	_____
(7) Worker's compensation?	216 1 ☐ Yes 2 ☐ No	_____
(8) Government employee pensions?	217 1 ☐ Yes 2 ☐ No	_____
(9) Veterans payments?	218 1 ☐ Yes 2 ☐ No	_____
(10) Private pensions or annuities or payments from IRA or Keogh accounts?	219 1 ☐ Yes 2 ☐ No	_____
(11) Alimony or child support?	220 1 ☐ Yes 2 ☐ No	_____
(12) Regular contributions from persons not living in this household?	221 1 ☐ Yes 2 ☐ No	_____
(13) Anything else?	222 1 ☐ Yes 2 ☐ No	_____

NOTES

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

Section IVB – REGULAR INTERVIEWS – Continued

(223) Line No.	(242) Line No.	(261) Line No.	(280) Line No.
36. (224) $ _____ . 00	36. (243) $ _____ . 00	36. (262) $ _____ . 00	36. (281) $ _____ . 00
37a. (225) $ _____ . 00 (226) 1 ☐ None 2 ☐ Lost money (Enter amount LOST on line above)	37a. (244) $ _____ . 00 (245) 1 ☐ None 2 ☐ Lost money (Enter amount LOST on line above)	37a. (263) $ _____ . 00 (264) 1 ☐ None 2 ☐ Lost money (Enter amount LOST on line above)	37a. (282) $ _____ . 00 (283) 1 ☐ None 2 ☐ Lost money (Enter amount LOST on line above)
b. (227) $ _____ . 00 (228) 1 ☐ None 2 ☐ Lost money (Enter amount LOST on line above)	b. (246) $ _____ . 00 (247) 1 ☐ None 2 ☐ Lost money (Enter amount LOST on line above)	b. (265) $ _____ . 00 (266) 1 ☐ None 2 ☐ Lost money (Enter amount LOST on line above)	b. (284) $ _____ . 00 (285) 1 ☐ None 2 ☐ Lost money (Enter amount LOST on line above)
38c. How much did . . . receive from (Source of income) in the past 12 months?	38c. How much did . . . receive from (Source of income) in the past 12 months?	38c. How much did . . . receive from (Source of income) in the past 12 months?	38c. How much did . . . receive from (Source of income) in the past 12 months?
(1) (229) $ _____ . 00	(1) (248) $ _____ . 00	(1) (267) $ _____ . 00	(1) (286) $ _____ . 00
(2) (230) $ _____ . 00	(2) (249) $ _____ . 00	(2) (268) $ _____ . 00	(2) (287) $ _____ . 00
(3) (231) $ _____ . 00	(3) (250) $ _____ . 00	(3) (269) $ _____ . 00	(3) (288) $ _____ . 00
(4) (232) $ _____ . 00	(4) (251) $ _____ . 00	(4) (270) $ _____ . 00	(4) (289) $ _____ . 00
(5) (233) $ _____ . 00	(5) (252) $ _____ . 00	(5) (271) $ _____ . 00	(5) (290) $ _____ . 00
(6) (234) $ _____ . 00	(6) (253) $ _____ . 00	(6) (272) $ _____ . 00	(6) (291) $ _____ . 00
(7) (235) $ _____ . 00	(7) (254) $ _____ . 00	(7) (273) $ _____ . 00	(7) (292) $ _____ . 00
(8) (236) $ _____ . 00	(8) (255) $ _____ . 00	(8) (274) $ _____ . 00	(8) (293) $ _____ . 00
(9) (237) $ _____ . 00	(9) (256) $ _____ . 00	(9) (275) $ _____ . 00	(9) (294) $ _____ . 00
(10) (238) $ _____ . 00	(10) (257) $ _____ . 00	(10) (276) $ _____ . 00	(10) (295) $ _____ . 00
(11) (239) $ _____ . 00	(11) (258) $ _____ . 00	(11) (277) $ _____ . 00	(11) (296) $ _____ . 00
(12) (240) $ _____ . 00	(12) (259) $ _____ . 00	(12) (278) $ _____ . 00	(12) (297) $ _____ . 00
(13) (241) $ _____ . 00	(13) (260) $ _____ . 00	(13) (279) $ _____ . 00	(13) (298) $ _____ . 00

NOTE – *Exclude income previously reported. Probe if an amount in item 38c is identical to an amount in item 36, 37a, or 37b. Indicate that identical amounts are correct by marking this box* ☐.

NOTES

NOTES

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

PGM 6

Section V – MAINTENANCE AND MORTGAGE SUPPLEMENT

CHECK ITEM H

(See Check Item B, page 12)

- ☐ Owned or being bought – One-unit structure on less than 10 acres and there is no commercial establishment or medical or dental office on the property (box 4 marked) – Ask item 39a
- ☐ All others – Skip to item 39e

39a. (1) During the past 12 months were any additions made to your property such as a room, basement, porch, or garage?

(301) 1 ☐ Yes
2 ☐ No – Skip to b(1)

(2) Did any one job cost $250 or more?

(302) 1 ☐ Yes
2 ☐ No

b. (1) During the past 12 months have any alterations been made to your property such as remodeling the kitchen or a bathroom, installing walks, driveways, fences, storm windows or doors, or planting trees or shrubbery?

(303) 1 ☐ Yes
2 ☐ No – Skip to c(1)

(2) Did any one job cost $250 or more?

(304) 1 ☐ Yes
2 ☐ No

c. (1) During the past 12 months have you had any replacement jobs on your property such as resurfacing the roof or outer walls, replacing gutters or downspouts, or replacing or installing fixed heating, electrical, or plumbing equipment? (Do not include appliances such as clothes washers, refrigerators, window air conditioners, etc.)

(305) 1 ☐ Yes
2 ☐ No – Skip to d(1)

(2) Did any one job cost $250 or more?

(306) 1 ☐ Yes
2 ☐ No

d. (1) During the past 12 months have you made any repairs on your property such as painting or papering a room, or patching a driveway or broken fence?

(312) 1 ☐ Yes
2 ☐ No – Skip to 39e

(2) Did any one job cost $250 or more?

(313) 1 ☐ Yes
2 ☐ No

e. What is the name of the company which supplies electricity to this house (building)?

Name of company _____

(314) 1 ☐ Generate own electricity
2 ☐ No electricity used
3 ☐ Don't know

(314) OFFICE USE ONLY

Section V – MAINTENANCE AND MORTGAGE SUPPLEMENT – Continued

CHECK ITEM I

Part (1) (See Check Item B, page 12)
- ☐ Box 1 or 2 marked – Ask 40a
- ☐ Box 3 or 4 marked – Go to Part (2)
- ☐ Box 5 marked – Go to Part (3)
- ☐ Box 6, 7, 8, 9, 10, or 11 marked – Skip to Check Item J

Part (2) (See items 22 and 23, page 13)
- ☐ Installment loan or contract, mortgage, deed of trust, or land contract – Skip to 40d
- ☐ Owned free and clear – Skip to Check Item J
- ☐ "DK," "NA," "REF," or Blank in items 22 and 23 – Skip to Check Item J

Part (3) (See item 8a, page 10)
- ☐ Box 1 marked – Skip to 40b
- ☐ All others – Skip to 40c

40a. Is there a mortgage or loan on this condominium (cooperative) or is it owned free and clear?

(307) 1 ☐ Mortgage or loan – Skip to 40d
2 ☐ Owned free and clear – Skip to Check Item J

b. Do you have an installment loan or contract on this mobile home (trailer) or do you own it free and clear?

(307) 1 ☐ Installment loan or contract – Skip to 40d
2 ☐ Owned free and clear – Skip to Check Item J

c. Do you have a mortgage or loan on this house (apartment) or do you own it free and clear?

(307) 1 ☐ Mortgage or loan
2 ☐ Owned free and clear – Skip to Check Item J

d. What kind of mortgage (loan) do you have?

SHOW FLASHCARD E

(308) 1 ☐ Federal Housing Administration
2 ☐ Veterans Administration
3 ☐ Farmers Home Administration
4 ☐ Other mortgage

CHECK ITEM J

Mark all three parts (see cc 21 and item 5d, page 1)

Part (1) Reference person lived here last 90 days. . . . . (309) 1 ☐ Yes 2 ☐ No

Part (2) Reference person moved into this house or apartment before February 1983. . . . . (310) 1 ☐ Yes 2 ☐ No

Part (3) Reference person MOVED here since a year ago today (month and day in item 5d, page 1) . . . (311) 1 ☐ Yes – Go to Check Item K 2 ☐ No – Skip to Check Item S, page 30

CHECK ITEM K

Part (1) (See item 8, page 1)
- ☐ URE Interview – Go to Check Item T, page 31
- ☐ Regular Interview – Go to Part 2 below

Part (2) (See items 7a and 7b, page 10)
- ☐ Regular ownership (box 1 marked) – Go to Part 3 below
- ☐ Owned as a cooperative (box 2 marked) – Skip to Check Item L, page 23
- ☐ Owned as a condominium (box 3 marked) – Go to Part 3 below
- ☐ Rented for cash or occupied without payment of cash rent (box 4 or 5 marked) – Skip to 44, page 23

Part (3) (See item 8a, page 10)
- ☐ Mobile home or trailer (no permanent room attached) – Skip to Check Item L, page 23
- ☐ All others – Ask 41a, page 23

NOTES

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

Section VI – RECENT MOVERS SUPPLEMENT

41a. Was this property (condominium unit) purchased in the past 12 months? (401)
1 ☐ Yes
2 ☐ No – Skip to Check Item L

b. When this house and lot (condominium unit) was acquired, what was the purchase price? Do not include closing costs. (402) $ _____ .00

c. What was the MAJOR source of the down payment used for the purchase or construction of this property (condominium unit)? (403)
1 ☐ Sale of previous home (only if sold during 12-month period preceding acquisition of present home)
2 ☐ Sale of other real property or other investment (including stock)
3 ☐ Savings (cash, bank deposits, share accounts, or bonds)
4 ☐ Borrowing other than a mortgage on this property
5 ☐ Gift
6 ☐ Land on which structure was built
7 ☐ Other – *Specify* _____
8 ☐ No down payment required

CHECK ITEM L
(See item 40d, page 22)
☐ Kind of mortgage specified (box 1, 2, 3 or 4 marked OR "NA," "DK" or "REF" entered) – *Ask 42a*
☐ Item 40d blank – Skip to *43a*

42a. Earlier you told me that this property (mobile home) is mortgaged. When you acquired this property did you originate (place) a new mortgage or assume an existing mortgage? (404)
1 ☐ Originated mortgage
2 ☐ Assumed mortgage – Skip to *43a*

b. At the time you acquired this property (mobile home), what was the amount of the mortgage? Do not include second trusts, or any other loan associated with the property. (405) $ _____ .00

43a. Is this the first home . . . (Reference person) has ever owned as his (her) usual residence? (406)
1 ☐ Yes – *Skip to 44*
2 ☐ No – *Ask 43b*

b. Including this home, how many homes has . . . (Reference person) owned altogether? Do not include vacation homes, or homes purchased for commercial or rental purposes. (407)
1 ☐ Two
2 ☐ Three or more

44. Was . . . (Reference person) the first occupant(s) of this house (apartment) or did someone else live here before . . . (Reference person)? (408)
1 ☐ First occupants
2 ☐ Previously occupied

45. The following questions are about the place where . . . (Reference person) lived before moving here. What was the address of . . .'s (Reference person) previous residence?

Number	Street	Apartment
City, town, or place		
County	State	ZIP Code

OR

(409) 0 ☐ Outside the United States – *Skip to 67, page 29*

(409) OFFICE USE ONLY ☐☐☐☐☐

46. Did . . . (Reference person) live inside the incorporated limits of (Name of place in item 45)? (460)
1 ☐ Yes
2 ☐ No, lived outside incorporated limits or place not incorporated

Section VI – RECENT MOVERS SUPPLEMENT – Continued

47. Please look at this card.

SHOW FLASHCARD F

What are the reasons . . . (Reference person) moved FROM that residence?

(Mark all answers given)

EMPLOYMENT
(410) 1 ☐ Job transfer
2 ☐ To look for work
3 ☐ To take a new job
4 ☐ Entered or left U.S. Armed Forces
5 ☐ Retirement
6 ☐ Commuting reasons
(411) 7 ☐ To attend school
8 ☐ Other employment reasons – *Specify* _____

FAMILY
(412) 09 ☐ Needed larger house or apartment
10 ☐ Divorced or separated
11 ☐ Widowed
(413) 12 ☐ To be closer to relatives
13 ☐ Newly married
14 ☐ Family increased
(414) 15 ☐ Family decreased
16 ☐ To establish own household
17 ☐ Other family reasons – *Specify* _____

OTHER
(415) 18 ☐ Neighborhood overcrowded
19 ☐ Change in racial or ethnic composition of neighborhood
20 ☐ Crime
(416) 21 ☐ Wanted neighborhood with children
22 ☐ Wanted neighborhood without children
23 ☐ Wanted better neighborhood
(417) 24 ☐ Wanted more expensive place or better investment
25 ☐ Wanted to own residence
26 ☐ Wanted better house
(418) 27 ☐ Wanted to rent residence
28 ☐ Wanted residence with more conveniences
29 ☐ Lower rent or less expensive house
(419) 30 ☐ Wanted change of climate
31 ☐ Displaced by urban renewal, highway construction, or other public activity
32 ☐ Displaced by private action
(420) 33 ☐ Schools
34 ☐ Natural disaster
35 ☐ Other – *Specify* _____

INTERVIEWER INSTRUCTION ➡
Two or more boxes marked in item 47 – *Ask 48*
If only ONE box is marked in item 47 – *Transcribe code to item 48 and fill Check Item M, page 25*

48. Of the reasons you just mentioned, what was the MAIN reason . . . (Reference person) moved from that residence? (421) ☐☐ Box number of MAIN reason

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

Section XI – RECENT MOVERS SUPPLEMENT – Continued

CHECK ITEM N

(See item 48, page 24)

- ☐ If "29" entered in item 48 – *Ask 49a*
- ☐ If "32" entered in item 48 – *Skip to 49b*
- ☐ All others – *Skip to 50a, page 26*

49a. Did you want or need lower rent or a less expensive house because . . .'s (Reference person) income was reduced, . . .'s (Reference person) housing costs greatly increased, or some other reason?

(Mark all answers given)

(422)
1 ☐ Income reduced
2 ☐ Housing costs greatly increased
3 ☐ Other – *Specify* _____

} *Skip to 50a, page 26*

b. Were you displaced because –

(Read answer categories and mark all answers given)

SHOW FLASHCARD G

(423)
1 ☐ The owner was converting the building to a condominium?
2 ☐ The owner closed the building for rehabilitation?
3 ☐ The owner closed the building but gave no reason?
4 ☐ The owner sold the building?
5 ☐ The rents were raised?
6 ☐ The building was converted to nonresidential use?

(424)
7 ☐ The owner wanted unit for own use or use of his/her family?
8 ☐ Other reason? – *Specify* _____

NOTES

Section XI – RECENT MOVERS SUPPLEMENT – Continued

50a. Please look at this card.

SHOW FLASHCARD H

What are the reasons . . . (Reference person) moved TO this particular neighborhood?

(Mark all answers given then ask 50b)

b. What are the reasons . . . (Reference person) moved TO this particular residence?

(Mark all additional answers given)

EMPLOYMENT

(425)
1 ☐ Job transfer
2 ☐ To look for work
3 ☐ To take a new job
4 ☐ Entered U.S. Armed Forces
5 ☐ Retirement
6 ☐ Commuting reasons

(426)
7 ☐ To attend school
8 ☐ Other employment reasons – *Specify* _____

FAMILY

(427)
9 ☐ Needed larger house or apartment
10 ☐ To be closer to relatives
11 ☐ Other family reasons – *Specify* _____

OTHER

(428)
12 ☐ Neighborhood less crowded
13 ☐ Racial or ethnic composition of neighborhood
14 ☐ Low crime rate

(429)
15 ☐ Wanted neighborhood with children
16 ☐ Wanted neighborhood without children
17 ☐ Wanted better neighborhood

(430)
18 ☐ Wanted more expensive place or better investment
19 ☐ Residence with more conveniences.
20 ☐ Lower rent or less expensive house

(431)
21 ☐ Change of climate
22 ☐ Schools
23 ☐ Other – *Specify* _____

INTERVIEWER INSTRUCTIONS
- Two or more boxes marked in item 50 – *Ask 51*
- If only ONE box is marked in item 50 – *Transcribe code to item 51 and ask 52a*

51. Of all the reasons you just mentioned, what is the MAIN reason . . . (Reference person) moved to this particular residence or neighborhood?

(432) ☐☐ Box number of MAIN reason

52a. Was . . . (Reference person) the person or one of the persons who owned or rented the previous residence at the time he (she) moved?

(433)
☐ Yes
1 ☐ Respondent is the reference person – *Skip to 53, page 27*
2 ☐ Respondent is not the reference person – *Ask 52b*
☐ No
3 ☐ Respondent is the reference person – *Skip to 53, page 27*
4 ☐ Respondent is not the reference person – *Ask 52b*

b. Were you also a member of . . .'s (Reference person) household in the previous residence?

(434)
1 ☐ Yes
2 ☐ No

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

Section VI – RECENT MOVERS SUPPLEMENT – Continued

53. How many rooms were in THAT residence? Do not count bathrooms, porches, balconies, halls, foyers, or half-rooms.	(435) _____ Number
54. How many bedrooms were in THAT residence? Count rooms used mainly for sleeping, even if used for other purposes.	(436) _____ Number
55. How many persons were living THERE at the time . . . (Reference person) moved?	(437) _____ Number
56. Were there complete plumbing facilities in that building; that is, hot and cold piped water, a flush toilet, and a bathtub or shower?	(438) ☐ Yes; Were these facilities used by that household only? 1 ☐ Yes – Used by that household only; 2 ☐ No – Also used by another household; 3 ☐ No
57. How many living quarters, both occupied and vacant, were in that building?	(439) 1 ☐ Mobile home or trailer (no permanent room attached); 2 ☐ One, detached from any other building (includes mobile home or trailer WITH one or more permanent rooms attached); 3 ☐ One, attached to one or more buildings; 4 ☐ 2; 5 ☐ 3 or 4; 6 ☐ 5 to 9; 7 ☐ 10 to 19; 8 ☐ 20 to 49; 9 ☐ 50 or more

CHECK ITEM N (See item 52a, page 26)
☐ "No" (box 3 or 4) marked – Skip to item 67, page 29
☐ All others (box 1 or 2 marked or "NA," "DK," or "Ref." entered) – Ask 58a

58a. Was that residence owned or being bought by someone in the household?	(440) ☐ Yes; Was it owned as a cooperative or condominium? 1 ☐ No – Skip to Check Item O, page 28; 2 ☐ Yes, a cooperative – Skip to 58c; 3 ☐ Yes, a condominium – Skip to 60, page 28; ☐ No – Ask 58b
b. Was it rented for cash rent or occupied without payment of cash rent?	(440) 4 ☐ Rented for cash; 5 ☐ Occupied without payment of cash rent } Skip to Check Item O, page 28
c. To the Census Bureau, a cooperative is property which is owned by a corporation. Each shareholder is entitled to occupy an individual unit. Is this what you mean when you say that it was a cooperative?	☐ Yes – Skip to 67, page 29; ☐ No – Reach 58a and correct the entry

NOTES

FORM AHS-2 (2-9-83) Page 27

Section VI – RECENT MOVERS SUPPLEMENT – Continued

CHECK ITEM O

TENURE OF PREVIOUS RESIDENCE (See item 58, page 27)

REGULAR OWNERSHIP (Box 1 marked in 58a)
(See item 57, page 27)
☐ One-unit structure – Ask 59a
☐ Two-or-more unit structure, or a mobile home or trailer – Skip to 67, page 29

RENTED FOR CASH OR OCCUPIED WITHOUT PAYMENT OF CASH RENT (Box 4 or 5 marked in 58b)
(See item 57, page 27)
☐ One-unit structure – Skip to 61
☐ Two-or-more unit structure, or a mobile home or trailer – Skip to Check Item P

59a. Was that house on a place of 10 acres or more?	(441) 1 ☐ Yes – Skip to 67, page 29; 2 ☐ No
b. Was there a commercial establishment or medical or dental office on the property?	(442) 1 ☐ Yes – Skip to 67, page 29; 2 ☐ No
60. What was the value of that property when . . . (Reference person) moved; that is, about how much did that property (house and lot) (condominium unit) sell for, or would it have sold for, had it been for sale? *SHOW FLASHCARD D*	(443) 1 ☐ Less than $5,000; 2 ☐ $ 5,000 – $ 7,499; 3 ☐ 7,500 – 9,999; 4 ☐ 10,000 – 12,499; 5 ☐ 12,500 – 14,999; 6 ☐ 15,000 – 17,499; 7 ☐ 17,500 – 19,999; 8 ☐ 20,000 – 22,499; 9 ☐ 22,500 – 24,999; 10 ☐ 25,000 – 27,499; 11 ☐ 27,500 – 29,999; 12 ☐ 30,000 – 34,999; 13 ☐ 35,000 – 39,999; 14 ☐ 40,000 – 44,999; 15 ☐ 45,000 – 49,999; 16 ☐ 50,000 – 54,999; 17 ☐ 55,000 – 59,999; 18 ☐ 60,000 – 64,999; 19 ☐ 65,000 – 69,999; 20 ☐ 70,000 – 74,999; 21 ☐ 75,000 – 79,999; 22 ☐ 80,000 – 89,999; 23 ☐ 90,000 – 99,999; 24 ☐ 100,000 – 124,999; 25 ☐ 125,000 – 149,999; 26 ☐ 150,000 – 199,999; 27 ☐ 200,000 – 249,999; 28 ☐ 250,000 – 299,999; 29 ☐ 300,000 or more } Skip to 67, page 29
61. Was that house on a place of 10 acres or more?	(444) 1 ☐ Yes – Skip to 67, page 29; 2 ☐ No

(See item 58b, page 27)
☐ Rented for cash – Ask 62
☐ Occupied without payment of cash rent – Skip to 63, page 29

62. What was the MONTHLY rent for that apartment (house)? *(If rent was not paid by the month, write amount and time period covered in "Notes" space, then compute MONTHLY rent and enter on line provided.) (Include site rent for mobile homes if it was paid separately.)*	(445) $_____.■ Per month

NOTES

FORM AHS-2 (2-9-83) Page 28

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

Section VI – RECENT MOVERS SUPPLEMENT – Continued

63. Was that house (apartment) in a public housing project; that is, was it owned by a local housing authority or other local public agency? (446) 1 ☐ Yes – *Skip to 65a* 2 ☐ No

64. Did . . . (Reference person) pay a lower rent because the Federal, state, or local government was paying part of the cost? (447) 1 ☐ Yes 2 ☐ No

NOTE – *Ask 65a for all categories before asking 65b. (Exclude phrase "In addition to rent" for sample units OCCUPIED WITHOUT PAYMENT OF CASH RENT.)*

NOTE – *Ask 65b only for those categories in 65a which were answered "Yes."*

65a. (1) In addition to rent, did that household pay for electricity? (448) 1 ☐ Yes 2 ☐ No, included in rent or supplied free 3 ☐ No, electricity not used

65b. (1) What was the average MONTHLY cost for electricity? (449) $ _____ . [redacted]

(2) In addition to rent, did that household pay for gas? (450) 1 ☐ Yes 2 ☐ No, included in rent or supplied free 3 ☐ No, gas not used

(2) What was the average MONTHLY cost for gas? (451) $ _____ . [redacted]

(3) In addition to rent, did that household pay for water? (452) 1 ☐ Yes 2 ☐ No, included in rent or no charge

(3) What was the YEARLY cost for water? (453) $ _____ . [redacted]

(4) In addition to rent, did that household pay for oil, coal, kerosene, wood, OR any other fuel? (454) 1 ☐ Yes 2 ☐ No, included in rent 3 ☐ No, these fuels not used or obtained free

(4) What was the YEARLY cost for oil, coal, kerosene, wood, and any other fuel? (455) $ _____ . [redacted]

(5) In addition to rent, did that household pay for garbage (food waste) collection? (456) 1 ☐ Yes 2 ☐ No

(5) What was the YEARLY cost for garbage (food waste) collection? (457) $ _____ . [redacted]

NOTES

CHECK ITEM Q *(See item 58b, page 27)*
☐ Rented for cash – *Ask 66*
☐ Occupied without payment of cash rent – *Skip to 67*

66. Was that apartment (house) rented furnished or unfurnished? (458) 1 ☐ Furnished 2 ☐ Unfurnished

67. Besides the move to the present residence, how many other times did . . . (Reference person) move in the past 12 months?
(Do not include visits or vacations.) (459) 1 ☐ None 2 ☐ One 3 ☐ Two 4 ☐ Three or more

Section VII – ENERGY SUPPLEMENT

CHECK ITEM R *(See items 33 and 34, page 16)*
☐ Sum of income entered in these items is $25,000 or more – *Skip to Check Item T, page 31*
☐ All others – *Read introduction then ask 68a*

INTRODUCTION The government has an energy assistance program which helps to pay home heating or cooling costs, and helps with energy-related emergencies, such as lack of heating or cooling in the home. This assistance can be received directly by the household, or it can be paid directly to the electric or gas company or fuel dealer.

68a. Between October 1982 and September 1983 did your household receive assistance of this type for HOME HEATING from the Federal, state, or local government? (461) 1 ☐ Yes – *Ask 68b* 2 ☐ No – *Skip to 69b*

b. Was that for your household's –

(1) Current residence? (462) 1 ☐ Yes 2 ☐ No

(2) Previous residence? (463) 1 ☐ Yes 2 ☐ No } *Skip to 69b*

CHECK ITEM S *(See items 33 and 34, page 16)*
☐ Sum of income entered in these items is $25,000 or more – *Skip to Check Item T, page 31*
☐ All others – *Read introduction then ask 69a*

INTRODUCTION The government has an energy assistance program which helps to pay home heating or cooling costs, and helps with energy-related emergencies, such as lack of heating or cooling in the home. This assistance can be received directly by the household, or it can be paid directly to the electric or gas company or fuel dealer.

69a. Between October 1982 and September 1983 did your household receive assistance of this type for HOME HEATING from the Federal, state, or local government? (464) 1 ☐ Yes 2 ☐ No

b. Between October 1982 and September 1983 did your household receive assistance of this type for HOME COOLING from the Federal, state, or local government? (465) 1 ☐ Yes 2 ☐ No (466) OFFICE USE ONLY ☐

c. Between October 1982 and September 1983 did your household receive assistance of this type for any HOME ENERGY-RELATED EMERGENCY from the Federal, state, or local government? (467) 1 ☐ Yes 2 ☐ No

70. The government has a program which helps some people to save home energy by either providing and installing such things as insulation, storm windows or doors, weatherstripping and caulking; or providing furnace tuneups and repairs; or repairing broken doors and windows. Between October 1982 and September 1983, did your household receive any such services from the Federal, state or local government? (468) 1 ☐ Yes 2 ☐ No

71. In the past 12 months did you or any member of your household receive any payments or benefits from –

a. Aid to Families with Dependent Children (AFDC)? (469) 1 ☐ Yes 2 ☐ No

b. Supplemental Security Income (SSI)? (470) 1 ☐ Yes 2 ☐ No

c. Food Stamps? (471) 1 ☐ Yes 2 ☐ No

d. General Assistance or other public assistance? (472) 1 ☐ Yes 2 ☐ No

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

~ PGM 7 ↓

Section VIII – MOBILE HOME SUPPLEMENT

CHECK ITEM T

Part (1) (See Item 8a, page 10)
- ☐ Mobile home or trailer (no permanent room attached) – Ask 72
- ☐ All others – Go to part (2)

Part (2) (See Check Item B, page 12)
- ☐ Box 1 or 2 marked – Go to Check Item DD, page 43
- ☐ Box 4 marked – Go to Section XI, page 46
- ☐ Box 5 marked – Go to Check Item CC, page 39
- ☐ Box 6 through 11 marked – Go to Check Item DD, page 43

72. Including this mobile home, how many mobile homes has . . . (Reference person) owned or rented as a primary residence?
(Do not include mobile homes purchased, or rented for commercial purposes or used as a second home)

(701)
- 0 ☐ None
- 1 ☐ One
- 2 ☐ Two
- 3 ☐ Three or more

73. Is this mobile home anchored, that is, is it secured with tiedowns or by other means?

(702)
- 1 ☐ Yes
- 2 ☐ No
- 3 ☐ Don't know

74. Is this mobile home on a permanent masonry foundation, resting on a concrete pad, up on blocks but not on a concrete pad, or set up some other way?

(703)
- 1 ☐ Permanent masonry foundation
- 2 ☐ Concrete pad
- 3 ☐ Up on blocks, no concrete pad
- 4 ☐ Other – Specify _____

75a. Is this mobile home a single-wide or a double-wide?

(704)
- 1 ☐ Single wide
- 2 ☐ Double wide

b. What is the width of this mobile home?

(705)
- 1 ☐ Less than 8 feet
- 2 ☐ 8 feet
- 3 ☐ 10 feet
- 4 ☐ 12 feet
- 5 ☐ 14 feet
- 6 ☐ 16 feet
- 7 ☐ 20 feet
- 8 ☐ 24 feet or more

CHECK ITEM U

(See Item 21b, page 13)
- ☐ Mobile home was NEW when acquired – Ask 76
- ☐ All others – Skip to Check Item V, page 32

76. Who set up this mobile home on this site?

(706)
- 1 ☐ Dealer
- 2 ☐ Professional set-up person employed by dealer or park
- 3 ☐ Professional mover or transport company who specializes in mobile home installation
- 4 ☐ Manufacturer
- 5 ☐ Household member
- 6 ☐ Other – Specify _____

Section VIII – MOBILE HOME SUPPLEMENT – Continued

77. When you acquired your mobile home, did you receive –

a. An owner's manual . . . . . (707)
- 1 ☐ Yes
- 2 ☐ No
- 3 ☐ Don't know

b. An owner information card? . . . . . (708)
- 1 ☐ Yes
- 2 ☐ No
- 3 ☐ Don't know

c. Set-up or installation instructions? . . . . . (709)
- 1 ☐ Yes
- 2 ☐ No
- 3 ☐ Don't know

d. A full warranty on the mobile home? . . . . . (710)
- 1 ☐ Yes – Skip to Check Item V
- 2 ☐ No
- 3 ☐ Don't know

e. A limited warranty on the mobile home? . . . . . (711)
- 1 ☐ Yes
- 2 ☐ No
- 3 ☐ Don't know

CHECK ITEM V

(See Item 7a–b, page 10)
- ☐ Owned or being bought (box 1, 2, or 3 marked in item 7a) – Ask 78a
- ☐ Rented for cash or occupied without payment of cash rent (box 4 or 5 marked in item 7b) – Skip to 82a, page 34

78a. Was this mobile home placed on this site in the past 12 months?

(712)
- 1 ☐ Yes
- 2 ☐ No – Skip to 82a, page 34

b. Was this mobile home damaged while being transported?

(713)
- 1 ☐ Yes
- 2 ☐ No – Skip to 79a

c. Describe the damage.

Description of damage _____

(714) ☐☐☐ OFFICE USE ONLY

SHOW FLASHCARD I

d. Please look at this card. Who repaired the damage(s)?
(Mark all answers given)

(715) *
- 1 ☐ Dealer or someone hired by dealer
- 2 ☐ Manufacturer
- 3 ☐ Household member
- 4 ☐ Someone hired by a household member
- 5 ☐ Someone else
- 6 ☐ Not repaired or not resolved

79a. At the time of installation, were there problems connecting this mobile home to any utility because the utility connections on this mobile home did not fit or work properly?

(716)
- 1 ☐ Yes
- 2 ☐ No – Skip to 80a

b. Which of the following utility connections did not fit or work properly –
(Read all answer categories and mark all answers given)

(717) *
- 1 ☐ Electricity?
- 2 ☐ Natural gas?
- 3 ☐ Bottled gas?
- 4 ☐ Water supply?
- 5 ☐ Sewage disposal?
- 6 ☐ Other – Specify _____

SHOW FLASHCARD I

c. Please look at this card. Who fixed this (these) problem(s)?
(Mark all answers given)

(718) *
- 1 ☐ Dealer or someone hired by dealer
- 2 ☐ Manufacturer
- 3 ☐ Household member
- 4 ☐ Someone hired by a household member
- 5 ☐ Someone else
- 6 ☐ Not repaired or not resolved

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

Section VIII – MOBILE HOME SUPPLEMENT – Continued

80a. At the time of installation, was this mobile home correctly leveled?	(719) 1 ☐ Yes – *Skip to 81a* 2 ☐ No
b. Did this cause any problems?	(720) 1 ☐ Yes 2 ☐ No – *Skip to 81a*
c. Describe the problem(s).	Description of problem(s) (721) ☐☐☐ OFFICE USE ONLY
SHOW FLASHCARD I d. Please look at this card. Who fixed the problem(s)? *(Mark all answers given)*	(722) 1 ☐ Dealer or someone hired by the dealer 2 ☐ Manufacturer 3 ☐ Household member 4 ☐ Someone hired by a household member 5 ☐ Someone else 6 ☐ Not repaired or not resolved
81a. Did you have any other installation problems?	(723) 1 ☐ Yes 2 ☐ No – *Skip to 82a*
b. What were these problems?	Description of problems (724) ☐☐☐ OFFICE USE ONLY
SHOW FLASHCARD I c. Please look at this card. Who fixed this (these) problem(s)? *(Mark all answers given)*	(725) 1 ☐ Dealer or someone hired by the dealer 2 ☐ Manufacturer 3 ☐ Household member 4 ☐ Someone hired by a household member 5 ☐ Someone else 6 ☐ Not repaired or not resolved

NOTES

Section VIII – MOBILE HOME SUPPLEMENT – Continued

INTERVIEWER INSTRUCTION *Ask 82a for all categories before asking 82b and 82c*

82a. IN THE PAST 12 MONTHS, did you have –	
(1) Any problems with uneven settling of blocks, foundation, or supports?	(726) 1 ☐ Yes 2 ☐ No
Single-wide – *Mark box 3 and skip to (3)* (2) Any problems with joining of double-wide sections?	(727) 1 ☐ Yes 2 ☐ No 3 ☐ Single
(3) Any leaks in the roof?	(728) 1 ☐ Yes 2 ☐ No
(4) Any other roof problems?	(729) 1 ☐ Yes 2 ☐ No
(5) Warped siding or other siding problems?	(730) 1 ☐ Yes 2 ☐ No
(6) Air leaks in the walls?	(731) 1 ☐ Yes 2 ☐ No
(7) Any inoperative doors or windows?	(732) 1 ☐ Yes 2 ☐ No
(8) Any other outside wall problems?	(733) 1 ☐ Yes 2 ☐ No
(9) Buckling of inside walls?	(734) 1 ☐ Yes 2 ☐ No
(10) Any other inside wall problems?	(735) 1 ☐ Yes 2 ☐ No
(11) Buckling floors?	(736) 1 ☐ Yes 2 ☐ No
(12) Holes in the floors? *(Mark from item 14b, page 11)*	(737) 1 ☐ Yes 2 ☐ No
(13) Any other floor problems?	(738) 1 ☐ Yes 2 ☐ No
(14) Any problems with electrical wiring?	(739) 1 ☐ Yes 2 ☐ No
(15) Any problems with electrical fixtures, outlets, etc?	(740) 1 ☐ Yes 2 ☐ No
(16) Any large appliance breakdowns? Include original equipment only.	(741) 1 ☐ Yes 2 ☐ No
(17) Any other electrical problems?	(742) 1 ☐ Yes 2 ☐ No
(18) Any leaking pipes or plumbing fixtures?	(743) 1 ☐ Yes 2 ☐ No
(19) Any water heater problems?	(744) 1 ☐ Yes 2 ☐ No
(20) Any sewer or septic tank problems?	(745) 1 ☐ Yes 2 ☐ No
(21) Any other plumbing problems?	(746) 1 ☐ Yes 2 ☐ No
No heating equipment – *Mark box 3 and skip to (23)* (22) A breakdown in the heating equipment; that is, was it completely unusable for 6 consecutive hours or more?	(747) 1 ☐ Yes 2 ☐ No 3 ☐ None
No heating equipment – *Mark box 3 and skip to (24)* (23) Any other heating problems?	(748) 1 ☐ Yes 2 ☐ No 3 ☐ None
No air-conditioning – *Mark box 3 and skip to (25)* (24) Any air-conditioning problem?	(749) 1 ☐ Yes 2 ☐ No 3 ☐ None
(25) Any interior odors or fumes? *Do not include cooking odors*	(750) 1 ☐ Yes 2 ☐ No

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

Section VIII – MOBILE HOME SUPPLEMENT – Continued

NOTE – *Ask 82b and c only for those categories in 82a which were answered "Yes"*

82b. IN THE PAST 12 MONTHS, how many problems did you have with (Specify problem in 82a)	82c. *SHOW FLASHCARD I.* Please look at this card. Who repaired this (these) problem(s)? *(Mark all answers given)*					
	Dealer or someone hired by dealer	Manufacturer	Household member	Someone hired by household member	Someone else	Problem not repaired
(1) (751) _____ Number	(776) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
(2) (752) _____ Number	(777) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
(3) (753) _____ Number	(778) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
(4) (754) _____ Number	(779) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
(5) (755) _____ Number	(780) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
(6) (756) _____ Number	(781) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
(7) (757) _____ Number	(782) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
(8) (758) _____ Number	(783) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
(9) (759) _____ Number	(784) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
(10) (760) _____ Number	(785) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
(11) (761) _____ Number	(786) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
(12) (762) _____ Number	(787) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
(13) (763) _____ Number	(788) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
(14) (764) _____ Number	(789) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
(15) (765) _____ Number	(790) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
(16) (766) _____ Number	(791) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
(17) (767) _____ Number	(792) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
(18) (768) _____ Number	(793) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
(19) (769) _____ Number	(794) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
(20) (770) _____ Number	(795) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
(21) (771) _____ Number	(796) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
(22) (772) _____ Number	(797) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
(23) (773) _____ Number	(798) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
(24) (774) _____ Number	(799) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
(25) (775) _____ Number	(846) * 1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐

FORM AHS-E (2-9-83)

Section VIII – MOBILE HOME SUPPLEMENT – Continued

CHECK ITEM V

(See item 82a(25), page 34, Interior Odors or Fumes)

☐ Yes box marked – *Ask 83*

☐ No box marked – *Skip to 84*

83. You mentioned noticing odors or fumes inside your home. What caused the odors or fumes?

Describe _____

(847) OFFICE USE ONLY
1 ☐ F
2 ☐ O

3 ☐ Don't know

84. Does your mobile home have a RED metal manufacturer's label?

(848) 1 ☐ Yes
2 ☐ No
3 ☐ Don't know

CHECK ITEM X

(See Check Item B, page 12)

☐ Owner occupied mobile home or trailer on less than 10 acres (box 3 marked) –
(See item 22, page 13) { ☐ Installment loan or contract – *Skip to 87*
☐ Owned free and clear – *Ask 85*

☐ Rented for cash (box 8 marked) – *Skip to Check Item AA, page 38*

☐ No cash rent (box 11 marked) – *Skip to Check Item AA, page 38*

☐ All others – *Skip to 95, page 38*

85. Did you place or assume a mortgage (loan) when you acquired this mobile home?

(849) 1 ☐ Yes – *Skip to 87*
2 ☐ No

86. How did you acquire this mobile home?

(850) 1 ☐ Inheritance or gift
2 ☐ Paid all cash
3 ☐ Other manner – *Specify* _____

87. Including this site, on how many sites have you placed this mobile home since you have owned it?

(851) 1 ☐ 1
2 ☐ 2–3
3 ☐ 4 or more

CHECK ITEM Y

(See item 25b(5), page 14, Real Estate Taxes)

☐ An entry of an amount, "NA," "DK," or "Refused" in item 25b(5) – *Ask 88a*

☐ Item 25b(5) is blank – *Skip to 89a*

88a. Earlier you told me that you pay real estate taxes. Do you also pay a personal property tax, or an annual license fee or similar annual charge, for this mobile home?

(Mark all answers given)

(852) *
1 ☐ Yes – personal property tax
2 ☐ Yes – license fee or similar annual charge
3 ☐ No
4 ☐ Don't know
} *Skip to Check Item Z, page 37*

b. What is the yearly cost?
(If more than one tax or fee, enter total yearly cost of all such payments. Do not include real estate taxes.

(853) $ _____ . ☐ 00 *Skip to Check Item Z, page 37*

FORM AHS-E (2-9-83)

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

Section VIII – MOBILE HOME SUPPLEMENT – Continued

89a. Do you pay a personal property tax or an annual license fee or similar annual charge for this mobile home?

(Do not include condominium fee)
(Mark all answers given)

(854) *
1 ☐ Yes – personal property tax
2 ☐ Yes – license fee or similar annual charge
3 ☐ No
4 ☐ Don't know
} *Skip to Check Item Z*

b. What is the yearly cost?
(If more than one tax or fee, enter total yearly cost of all such payments.)

(855) $ _____ . 00

CHECK ITEM Z

Part 1 (See Check Item B, page 12)
☐ Condominium (box 2 marked) – Skip to 96, page 38
☐ All others – Go to part 2

Part 2 (See item 20, page 13)
☐ Site owned – Ask 90
☐ Site rented or occupied without payment of cash rent – Skip to 91
☐ Item 20 is "NA," "DK" or "Ref." – Go to item 97, page 38

90. How much do you think this property, that is, mobile home and land, would sell for on today's market?

SHOW FLASHCARD T

(856)
1 ☐ Less than $5,000
2 ☐ $5,000–$7,499
3 ☐ 7,500– 9,999
4 ☐ 10,000–12,499
5 ☐ 12,500–14,999
6 ☐ 15,000–17,499
7 ☐ 17,500–19,999
8 ☐ 20,000–22,499
9 ☐ 22,500–24,999
10 ☐ 25,000–27,499
11 ☐ 27,500–29,999
12 ☐ 30,000–34,999
13 ☐ 35,000–39,999
14 ☐ 40,000–44,999
15 ☐ 45,000–49,999
16 ☐ 50,000–54,999
17 ☐ 55,000–59,999
18 ☐ 60,000–64,999
19 ☐ 65,000–69,999
20 ☐ 70,000–74,999
21 ☐ 75,000 or more
} *SKIP TO 97, page 38*

91. How much do you think this mobile home would sell for on today's market?

SHOW FLASHCARD T

(857)
1 ☐ Less than $5,000
2 ☐ $5,000–$7,499
3 ☐ 7,500– 9,999
4 ☐ 10,000–12,499
5 ☐ 12,500–14,999
6 ☐ 15,000–17,499
7 ☐ 17,500–19,999
8 ☐ 20,000–22,499
9 ☐ 22,500–24,999
10 ☐ 25,000–27,499
11 ☐ 27,500–29,999
12 ☐ 30,000–34,999
13 ☐ 35,000–39,999
14 ☐ 40,000–44,999
15 ☐ 45,000–49,999
16 ☐ 50,000–54,999
17 ☐ 55,000–59,999
18 ☐ 60,000–64,999
19 ☐ 65,000–69,999
20 ☐ 70,000–74,999
21 ☐ 75,000 or more

92. What is the MONTHLY rent for this site?

(Mark the frequency of payment box and enter the MONTHLY site rent. (If rent is not paid by the month, compute the MONTHLY site rent in "Notes" space, and enter the monthly site rent on the line provided.)

(566) $ _____ . 00 Per month
0 ☐ No cash rent

(567)
1 ☐ More frequently than once a month
2 ☐ Less frequently than once a month
3 ☐ Once a month

NOTES

} *Skip to 97, page 38*

Section VIII – MOBILE HOME SUPPLEMENT – Continued

CHECK ITEM AA

(See item 27, page 15)
☐ Site owned – *Skip to 95*
☐ Site rented or occupied without payment of cash rent – *Ask 93*

93. Is the site rent included with the rent for the mobile home?

(858)
1 ☐ Yes – *Skip to 95*
2 ☐ No

94. What is the MONTHLY rent for this site?

Mark the frequency of payment box and enter the MONTHLY site rent. (If rent is not paid by the month, compute the MONTHLY site rent in "Notes" space, and enter the monthly site rent on the line provided.)

(566) $ _____ . 00 Per month
0 ☐ No cash rent

(567)
1 ☐ More frequently than once a month
2 ☐ Less frequently than once a month
3 ☐ Once a month

NOTES

95. Was this mobile home NEW when . . . (Reference person) moved in?

(859)
1 ☐ Yes
2 ☐ No
3 ☐ Don't know
} *Skip to 97*

96. Was the mobile home (trailer) NEW when you acquired it?

(860)
1 ☐ Yes
2 ☐ No

97. Would you recommend mobile home living to others?

(861)
1 ☐ Yes
2 ☐ Sometimes
3 ☐ No

98. How would you rate this mobile home as a place to live – would you say it is excellent, good, fair, or poor?

(862)
1 ☐ Excellent
2 ☐ Good
3 ☐ Fair
} *Skip to Check Item BB*
4 ☐ Poor – *Ask 99*

99. Why did you rate this mobile home as a poor place to live?

(Mark all answers given)

(863) *
1 ☐ Location (neighborhood problems, commuting problems, etc.)
2 ☐ Quality of construction or workmanship
3 ☐ Size (mobile home is too small or too large)
4 ☐ Safety (fire hazard, wind or flood hazard, falls or other personal injuries)
5 ☐ Too expensive – (utilities, maintenance, charges or fees)
6 ☐ Bad investment
(864) 7 ☐ Other – *Specify*

_____

_____

CHECK ITEM BB

(See Check Item B, page 12)
☐ Box 1 or 2 marked – *Go to Check Item DD, page 43*
☐ Box 3 marked – *Go to Section XI, page 46*
☐ Box 5 marked – *Ask 100a*
☐ Box 8 or 11 – *Skip to Check Item DD, page 43*

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

Section IX – HOUSING COST SUPPLEMENT

100a. Do you own the mobile home (trailer) SITE or is it rented?	(565) 1 ☐ Owned – *Skip to 101a* 2 ☐ Rented for cash or occupied without payment of cash rent
b. What is the MONTHLY rent for this site? *(Mark the frequency of payment box and enter the MONTHLY site rent. (If rent is not paid by the month, compute the MONTHLY site rent in "Notes" space, and enter the monthly site rent on the line provided).)*	(566) $_____ . [00] Per month 0 ☐ No cash rent (567) 1 ☐ More frequently than once a month 2 ☐ Less frequently than once a month 3 ☐ Once a month
101a. In what year did you acquire this mobile home (trailer)?	(568) 19____
b. Was the mobile home (trailer) NEW when you acquired it?	(569) 1 ☐ Yes 2 ☐ No
c. When you acquired this mobile home (trailer), what was the purchase price? Do not include the price of the site or closing costs.	(570) $_____ . [00] Purchase price 0 ☐ Not purchased
CHECK ITEM CC	*(See item 40d, page 22)* ☐ Kind of mortgage specified (box 1, 2, 3, or 4 marked or "DK," "NA," or "REF" entered) – *Ask 102* ☐ Item 40d blank – *Skip to 105, page 40*
102. Earlier you told me that your residence is mortgaged. In regard to that mortgage, what are the required payments to the lender? If more than one mortgage (loan), on this property, give the total amount of the payments.	(534) $_____ . [00] PER (535) 1 ☐ Month 2 ☐ Year ☐ Other – Specify _____
103a. In regard to the mortgage (loan), do the required payments include mortgage payments for property other than your residence? *(For example – Farm buildings, the house or apartment of another household, or a business or office)*	(571) 1 ☐ Yes 2 ☐ No – *Skip to 104*
b. How much of the *(specify amount in item 102)* is for YOUR RESIDENCE?	(572) $_____ . [00] 0 ☐ Don't know
104. In regard to the mortgage, do the required payments include – (1) Real estate taxes for your residence?	(573) 1 ☐ Yes 2 ☐ No
(2) Fire and hazard insurance for your residence?	(574) 1 ☐ Yes 2 ☐ No

NOTES

Section IX – HOUSING COST SUPPLEMENT – Continued

105a. Do you pay for electricity?	(575) 1 ☐ Yes 2 ☐ No or electricity not used – *Skip to 106a*
b. In the past 12 months, what was the average MONTHLY cost for electricity?	(576) $_____ . [00]
c. Does any part of that amount cover electricity for use other than for your residence? *(For example – Farm buildings, the house or apartment of another household, or a business or office)*	(577) 1 ☐ Yes 2 ☐ No – *Skip to 106a*
d. How much of the *(specify amount in item 105b)* is for YOUR RESIDENCE?	(578) $_____ . [00] 0 ☐ Don't know
e. Is that based on separate metering?	(579) 1 ☐ Yes 2 ☐ No
106a. Do you pay for gas?	(580) 1 ☐ Yes 2 ☐ No or gas not used – *Skip to 107a*
b. In the past 12 months, what was the average MONTHLY cost for gas?	(581) $_____ . [00]
c. Does any part of that amount cover gas for use other than for your residence? *(For example: Farm buildings, the house or apartment of another household, or a business or office)*	(582) 1 ☐ Yes 2 ☐ No – *Skip to 107a*
d. How much of the *(specify amount in item 106b)* is for YOUR RESIDENCE?	(583) $_____ . [00] 0 ☐ Don't know
e. Is that based on separate metering?	(584) 1 ☐ Yes 2 ☐ No
107a. Do you pay for water supply and/or sewage disposal?	(585) 1 ☐ Yes 2 ☐ No – *Skip to 108a*
b. What is the YEARLY cost for water supply and sewage disposal?	(586) $_____ . [00]
c. Does any part of that amount cover water supply and/or sewage disposal for use other than for your residence? *(For example: Farm buildings, the house or apartment of another household, or a business or office)*	(587) 1 ☐ Yes 2 ☐ No – *Skip to 108a*
d. How much of the *(specify amount in item 107b)* is for YOUR RESIDENCE?	(588) $_____ . [00] 0 ☐ Don't know
e. Is that based on separate metering?	(589) 1 ☐ Yes 2 ☐ No

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

Section IX – HOUSING COST SUPPLEMENT – Continued

108a. Do you pay for oil, coal, kerosene, wood, OR any other fuel?	(590) 1 ☐ Yes 2 ☐ No – *Skip to 109a*
b. What is the YEARLY cost for oil, coal, kerosene, wood, or any other fuel?	(591) $ _____ . 00
c. Does any part of that amount cover fuels for use other than for your residence? *(For example: Farm buildings, the house or apartment of another household, or a business or office)*	(592) 1 ☐ Yes 2 ☐ No – *Skip to 109a*
d. How much of the *(specify amount in item 108b)* is for YOUR RESIDENCE?	(593) $ _____ . 00 0 ☐ Don't know
109a. Do you pay for fire and hazard insurance? *(Also include if part of mortgage payment)*	(594) 1 ☐ Yes 2 ☐ No – *Skip to 110a*
b. What is the YEARLY cost for fire and hazard insurance?	(595) $ _____ . 00
c. Does any part of that amount cover fire and hazard insurance for property other than your residence? *(For example: Farm buildings, the house or apartment of another household, or a business or office)*	(596) 1 ☐ Yes 2 ☐ No – *Skip to 110a*
d. How much of the *(specify amount in item 109b)* is for YOUR RESIDENCE?	(597) $ _____ . 00 0 ☐ Don't know
e. Is that based on separate premiums?	(598) 1 ☐ Yes 2 ☐ No
110a. Do you pay for real estate taxes? *(Also include if part of mortgage payment)*	(599) 1 ☐ Yes 2 ☐ No – *Skip to 111a*
b. What is the YEARLY cost for real estate taxes? *(Do not include taxes in arrears from previous years)*	(600) $ _____ . 00
c. Does any part of that amount cover real estate taxes for property other than your residence? *(For example: Farm buildings, the house or apartment of another household, or a business or office)*	(601) 1 ☐ Yes 2 ☐ No – *Skip to 111a*
d. How much of the *(specify amount in item 110b)* is for YOUR RESIDENCE?	(602) $ _____ . 00 0 ☐ Don't know
e. Is that based on separate assessments?	(603) 1 ☐ Yes 2 ☐ No

FORM AHS-2 (2-8-83)

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Section IX – HOUSING COST SUPPLEMENT – Continued

111a. Do you pay for garbage (food waste) collection separately from real estate taxes?	(604) 1 ☐ Yes 2 ☐ No or payment included in real estate taxes – *Skip to 112*
b. What is the YEARLY cost for garbage (food waste) collection?	(605) $ _____ . 00
c. Does any part of that amount cover garbage (food waste) collection for other than your residence?	(606) 1 ☐ Yes 2 ☐ No – *Skip to 112*
d. How much of the *(specify amount in item 111b)* is for YOUR RESIDENCE?	(607) $ _____ . 00 0 ☐ Don't know
e. Is that based on separate bills?	(608) 1 ☐ Yes 2 ☐ No
112. How much do you think this property (that is, house and lot) would sell for on today's market? ***SHOW FLASHCARD D*** *For multi-unit structures, obtain value of housing unit only.*	(609) 1 ☐ Less than $5,000 2 ☐ $ 5,000 – $ 7,499 3 ☐ 7,500 – 9,999 4 ☐ 10,000 – 12,499 5 ☐ 12,500 – 14,999 6 ☐ 15,000 – 17,499 7 ☐ 17,500 – 19,999 8 ☐ 20,000 – 22,499 9 ☐ 22,500 – 24,999 10 ☐ 25,000 – 27,499 11 ☐ 27,500 – 29,999 12 ☐ 30,000 – 34,999 13 ☐ 35,000 – 39,999 14 ☐ 40,000 – 44,999 15 ☐ 45,000 – 49,999 16 ☐ 50,000 – 54,999 17 ☐ 55,000 – 59,999 18 ☐ 60,000 – 64,999 19 ☐ 65,000 – 69,999 20 ☐ 70,000 – 74,999 21 ☐ 75,000 – 79,999 22 ☐ 80,000 – 89,999 23 ☐ 90,000 – 99,999 24 ☐ 100,000 – 124,999 25 ☐ 125,000 – 149,999 26 ☐ 150,000 – 199,999 27 ☐ 200,000 – 249,999 28 ☐ 250,000 – 299,999 29 ☐ 300,000 or more } *Skip to section XI, page 46*

NOTES

FORM AHS-2 (2-8-83)

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Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

~ PGM 8 ↓

Section X – CONDOMINIUM/COOPERATIVE SUPPLEMENT

CHECK ITEM DD

(See Check Item B, page 12)

- ☐ Owned as a cooperative (box 1 marked) – Skip to 114
- ☐ Owned as a condominium (box 2 marked) – Skip to 114
- ☐ Rented for cash or occupied without payment of cash rent (box 6, 7, 8, 9, 10 or 11 marked) – Ask 113

113. Is this apartment (house) part of a condominium? (527)
1 ☐ Yes – Skip to 116a
2 ☐ No – Skip to Section XI, page 46

114. Was this building converted from rental housing to condominium (cooperative) housing? (528)
1 ☐ Yes
2 ☐ No
3 ☐ Don't know
} Skip to 116a

115. In what year was this unit converted to condominium (cooperative) ownership? (529)
0 ☐ 1983
1 ☐ 1981–1982
2 ☐ 1979–1980
3 ☐ 1976–1978
4 ☐ 1970–1975
5 ☐ Before 1970
6 ☐ Don't know

116a. A development is a building or group of buildings under a single management. How many condominium (cooperative) units are there in THIS development? (Read answer categories) (530)
1 ☐ Less than 50
2 ☐ 50–99
3 ☐ 100–499
4 ☐ 500 or more
5 ☐ Don't know

b. Are any (other) units in this development rented or for rent? (531)
1 ☐ Yes
2 ☐ No
3 ☐ Don't know

117a. What is the name of the condominium (cooperative) development? (532)

b. What is the telephone number of the management office, sales office, or real estate office for the condominium (cooperative) development? (533)

Area code	Number
	–

CHECK ITEM EE

Part (1) (See item 8, page 1)
- ☐ URE Interview – Skip to Section XI, page 46
- ☐ Regular Interview – Go to Part (2) below

Part (2) (See Check Item B, page 12)
- ☐ Owned as a cooperative or condominium (box 1 or 2 marked) – Go to Part (3) below
- ☐ All others – Skip to Section XI, page 46

Part (3) (See item 40d, page 22)
- ☐ Kind of mortgage specified (box 1, 2, 3 or 4 marked or "NA," "DK" or "REF" entered) – Ask 118, page 44
- ☐ Item 40d blank – Skip to 119a, page 44

NOTES

Section X – CONDOMINIUM/COOPERATIVE SUPPLEMENT – Continued

118. Earlier you told me that this unit is mortgaged. In regard to that mortgage, what are the required payments to the lender? If more than one mortgage (loan) on this condominium, (cooperative) give the total amount of the payments. (534) $_____ . 00
PER (535)
1 ☐ Month
2 ☐ Year
☐ Other – Specify _____

119a. Do you pay for fire and hazard insurance? (Also include fire and hazard insurance that is included in mortgage payments.) (536)
1 ☐ Yes
2 ☐ No – Skip to 120a

b. What is the YEARLY cost? (537) $_____ . 00

120a. Are the real estate taxes included in the mortgage payment (cooperative maintenance fee)? (538)
1 ☐ Yes – Skip to 120c
2 ☐ No

b. Do you pay real estate taxes separately? (539)
1 ☐ Yes
2 ☐ No – Skip to 121

c. What is the YEARLY cost? (Do not include taxes in arrears from previous years.) (540) $_____ . 00

121. How much is your condominium (cooperative maintenance) fee? (541) $_____ . 00
PER (542)
1 ☐ Month
2 ☐ Year
☐ Other – Specify _____

122a. Does your condominium (cooperative maintenance) fee include electricity? (543)
1 ☐ Yes – Skip to 123a
2 ☐ No

b. Do you pay for electricity separately? (544)
1 ☐ Yes
2 ☐ No or electricity not used – Skip to 123a

c. In the past 12 months, what was the average MONTHLY cost for electricity? (545) $_____ . 00

123a. Does your condominium (cooperative maintenance) fee include gas? (546)
1 ☐ Yes – Skip to 124a
2 ☐ No

b. Do you pay for gas separately? (547)
1 ☐ Yes
2 ☐ No or gas not used – Skip to 124a

c. In the past 12 months, what was the average MONTHLY cost for gas? (548) $_____ . 00

124a. Does your condominium (cooperative maintenance) fee include water supply and/or sewage disposal? (549)
1 ☐ Yes – Skip to 125a, page 45
2 ☐ No

b. Do you pay for water supply and/or sewage disposal separately (550)
1 ☐ Yes
2 ☐ No – Skip to 125a, page 45

c. What is the YEARLY cost for water supply and sewage disposal? (551) $_____ . 00

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

Section X – CONDOMINIUM/COOPERATIVE SUPPLEMENT – Continued

125a. Does your condominium (cooperative maintenance) fee include oil, coal, kerosene, wood, OR any other fuel?	(552) 1 ☐ Yes – *Skip to 126a* 2 ☐ No
b. Do you pay for oil, coal, kerosene, wood, OR any other fuel separately?	(553) 1 ☐ Yes 2 ☐ No – *Skip to 126a*
c. What is the YEARLY cost for oil, coal, kerosene, wood, and any other fuel?	(554) $ _____ . [00]
126a. Does your condominium (cooperative maintenance) fee include garbage (food waste) collection?	(555) 1 ☐ Yes – *Skip to 127* 2 ☐ No
b. Do you pay for garbage (food waste) collection separately from real estate taxes?	(556) 1 ☐ Yes 2 ☐ No or payment included in real estate taxes – *Skip to 127*
c. What is the YEARLY cost for garbage (food waste) collection?	(557) $ _____ . [00]
127. Does your condominium (cooperative maintenance) fee include –	
(1) Upkeep and maintenance of the common property, buildings, equipment, and grounds?	(558) 1 ☐ Yes 2 ☐ No
(2) Off-street parking?	(559) 1 ☐ Yes 2 ☐ No
(3) Swimming facilities?	(560) 1 ☐ Yes 2 ☐ No
(4) Other recreational facilities?	(561) 1 ☐ Yes 2 ☐ No
(5) Security personnel?	(562) 1 ☐ Yes 2 ☐ No
(6) Anything else?	(563) 1 ☐ Yes – *Specify* _____ 2 ☐ No

NOTES

PGM 9 ↓

Section XI – HOUSING QUALITY AND EQUIPMENT BREAKDOWN SUPPLEMENT

Now I have some questions concerning problems you may have experienced in this home.

(See Check Item J, Part (2), page 22)
Part (1) Reference person moved into this house (apartment) before February 1983
☐ Yes – *Go to Part (2) below*
☐ No – *Skip to Check Item GG*
(See item 12, page 11)
Part (2) Heating Equipment
☐ Room heater(s) WITHOUT flue or vent (box 7 marked) – *Ask 128*
☐ Fireplaces, stoves, or portable room heater(s) (box 8 marked) – *Ask 128*
☐ Unit has no heating equipment (box 9 marked) – *Ask 128*
☐ All others – *Skip to 129*

128. During the time period of December 1982 through February 1983 was this house (apartment) so cold for 24 hours or more that it caused you discomfort?	(801) 1 ☐ Yes 2 ☐ No } *Skip to 131*
129. During the time period of December 1982 through February 1983 when your regular heating system was working, did you, at any time, have to use additional sources of heat BECAUSE YOUR REGULAR SYSTEM DID NOT PROVIDE ENOUGH HEAT?	(802) 1 ☐ Yes 2 ☐ No } *Skip to 130*

(See item 12, page 11)
HEATING EQUIPMENT
☐ Room heater(s) WITHOUT flue or vent (box 7 marked) – *Skip to 131*
☐ Fireplaces, stoves, or portable room heater(s) (box 8 marked) – *Skip to 131*
☐ Unit has no heating equipment (box 9 marked) – *Skip to 131*
☐ All others – *Ask 130*

130. How many rooms in this house (apartment) do NOT have hot air ducts, registers, radiators, or room heaters? Do not count kitchen or bathroom(s).	(803) 1 ☐ None 2 ☐ 1 room 3 ☐ 2 rooms 4 ☐ 3 or more rooms
131. Does each room in this house (apartment) have a working electric wall outlet (wall plug)?	(806) 1 ☐ Yes 2 ☐ No
132. Is all the wiring in this house (apartment) concealed in the walls or in metal coverings? Do not count appliance cords, extension cords or chandelier cords.	(809) 1 ☐ Yes 2 ☐ No
133a. Is it necessary to go through any bedroom to get to any bathroom?	(810) 1 ☐ Yes 2 ☐ No
b. Is it necessary to go through any bedroom to get to any other room?	(811) 1 ☐ Yes 2 ☐ No

CHECK ITEM HH
(See item 10, page 10) – Complete plumbing facilities
☐ Yes – *Skip to Check Item II, page 47*
☐ No – *Ask 134a*

134. Do you have piped water –	
a. In this building?	(825) 1 ☐ Yes – *Skip to Check Item II* 2 ☐ No
b. Available within ¼ mile?	(845) 1 ☐ Yes 2 ☐ No

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

Section XI – HOUSING QUALITY AND EQUIPMENT BREAKDOWN SUPPLEMENT – Continued

CHECK ITEM II

(See Check Item J, Part (1), page 21)
Reference person lived here last 90 days
☐ Yes – Ask 135a
☐ No – Skip to Check Item KK, page 48

135a. Have any electric fuses blown or breaker switches tripped in this house (apartment) in the last 90 days?	(816)	1 ☐ Yes 2 ☐ No . . . . . } Skip to 136a 3 ☐ Don't know
b. How many times did this happen?	(817)	1 ☐ 1 2 ☐ 2 3 ☐ 3 or more
136a. At any time in the last 90 days, have you seen any mice or rats, or signs of mice or rats in this house (building)?	(818)	1 ☐ Yes 2 ☐ No – Skip to Check Item JJ
b. Is this house (building) serviced by an exterminator for mice or rats regularly, only when needed, irregularly, or not at all?	(819)	1 ☐ Regularly 2 ☐ Only when needed 3 ☐ Irregularly 4 ☐ Not at all

CHECK ITEM JJ

Part 1 (See item 8, page 1)
☐ Regular interview – Go to part 2
☐ URE interview – Skip to 142a, page 48
Part 2 (See item 134a, page 46) – Piped water
☐ Yes or blank – Ask 137a
☐ No – Skip to 138a

137a. At any time in the last 90 days, were you COMPLETELY without running water?	(826)	1 ☐ Yes 2 ☐ No – Skip to 138a
b. Were you completely without running water for 6 consecutive hours or more?	(827)	1 ☐ Yes 2 ☐ No . . . . . } Skip to 138a 3 ☐ Don't know
c. How many times?	(828)	1 ☐ 1 2 ☐ 2 3 ☐ 3 or more
d. What was the (most common) reason you were completely without water for 6 consecutive hours or more – was it because of problems inside the building or problems outside the building?	(829)	1 ☐ Inside 2 ☐ Outside
138a. At any time in the last 90 days was there a breakdown in your flush toilet or toilets, such that there were no usable toilets?	(830)	1 ☐ Yes 2 ☐ No – Skip to 139a, page 48
b. Did any of these breakdowns last 6 consecutive hours or more?	(831)	1 ☐ Yes 2 ☐ No – Skip to 139a, page 48
c. How many of these breakdowns were there?	(832)	1 ☐ 1 2 ☐ 2 3 ☐ 3 4 ☐ 4 or more
d. What was the (most common) reason you were completely without the use of your flush toilet for 6 consecutive hours or more – was it because of problems inside the building or problems outside the building?	(833)	1 ☐ Inside 2 ☐ Outside

Section XI – HOUSING QUALITY AND EQUIPMENT BREAKDOWN SUPPLEMENT – Continued

139a. At any time in the last 90 days, was there a breakdown in your sewage disposal system such that it was completely unusable?	(834)	1 ☐ Yes 2 ☐ No – Skip to Check Item KK
b. Did any of these breakdowns last 6 consecutive hours or more?	(835)	1 ☐ Yes 2 ☐ No . . . . . } Skip to Check Item KK 3 ☐ Don't know
c. How many of these breakdowns were there?	(836)	1 ☐ 1 2 ☐ 2 3 ☐ 3 or more

(See Check Item J, part (2), page 22)
Part (1) Reference person moved into this house (apartment) before February 1983
☐ Yes – Go to Part (2) below
☐ No – Skip to 142a
(See item 12, page 11)
Part (2) Heating equipment
☐ Unit has no heating equipment (box 9 marked) – Skip to 142a
☐ All others – Ask 140a

140a. During the time period of December 1982 through February 1983, was there a breakdown in your heating equipment; that is, was it completely unusable for 6 consecutive hours or more?	(837)	1 ☐ Yes 2 ☐ No – Skip to 141a
b. How many times did that happen?	(838)	1 ☐ 1 2 ☐ 2 3 ☐ 3 4 ☐ 4 or more
141a. During the time period of December 1982 through February 1983, did you completely close certain rooms for a week or longer because you couldn't get them warm? Include kitchen and bathroom(s).	(839)	1 ☐ Yes 2 ☐ No – Skip to 142a
b. Which rooms? *Mark all answers given*	(840)	1 ☐ Living room 2 ☐ Dining room 3 ☐ One or more bedrooms 4 ☐ Other – Specify _____
142a. Is there a basement in this house (building)? *(A basement is an enclosed space in which persons can walk upright under all or part of the building.)*	(841)	1 ☐ Yes 2 ☐ No – Skip to Check Item LL
b. Does the basement show any signs of water having leaked in from the outside?	(842)	1 ☐ Yes 2 ☐ No 3 ☐ Don't know

(See item 8a, page 10)
☐ Mobile home or trailer (no permanent room attached) – Skip to 145a, page 49
☐ All others – Ask 143

143. Does the roof of this house (building) leak?	(843)	1 ☐ Yes 2 ☐ No 3 ☐ Don't know
144. In view of all the things we have talked about, how would you rate this house (building) as a place to live – would you say it is excellent, good, fair, or poor?	(844)	1 ☐ Excellent 2 ☐ Good 3 ☐ Fair 4 ☐ Poor

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

Section XII – NEIGHBORHOOD QUALITY SUPPLEMENT

NOTE – Ask all categories in 145a before asking 145b

NOTE – Ask 145b only for those categories in 145a which were answered "Yes"

145a. The following questions are concerned with different aspects of your present neighborhood. Here is a list of conditions which many people have on their streets. Which, if any, do you have?		b. Does the (Condition) bother you?	c. Is it so objectionable that you would like to move from the neighborhood?
(1) Street (highway) noise?	901 * 1 ☐ Yes 2 ☐ No	(1) 3 ☐ Yes – Ask c 4 ☐ No	5 ☐ Yes 6 ☐ No
(2) Streets or roads continually in need of repair, or open ditches?	902 * 1 ☐ Yes 2 ☐ No	(2) 3 ☐ Yes – Ask c 4 ☐ No	5 ☐ Yes 6 ☐ No
(3) Neighborhood crime?	903 * 1 ☐ Yes 2 ☐ No	(3) 3 ☐ Yes – Ask c 4 ☐ No	5 ☐ Yes 6 ☐ No
(4) Trash, litter, or junk in the streets (roads), or on empty lots, or on properties in this neighborhood?	904 * 1 ☐ Yes 2 ☐ No	(4) 3 ☐ Yes – Ask c 4 ☐ No	5 ☐ Yes 6 ☐ No
(5) Boarded-up or abandoned structures?	905 * 1 ☐ Yes 2 ☐ No	(5) 3 ☐ Yes – Ask c 4 ☐ No	5 ☐ Yes 6 ☐ No
(6) Industries, businesses, stores, or other nonresidential activities?	906 * 1 ☐ Yes 2 ☐ No	(6) 3 ☐ Yes – Ask c 4 ☐ No	5 ☐ Yes 6 ☐ No
(7) Odors, smoke, or gas?	907 * 1 ☐ Yes 2 ☐ No	(7) 3 ☐ Yes – Ask c 4 ☐ No	5 ☐ Yes 6 ☐ No

NOTE – Ask ALL categories in 146a before asking 146b

NOTE – Ask 146b only for those categories in 146a which were answered "No"

146a. The following questions are concerned with neighborhood services. Do you have –		146b. Is the (Service) so unsatisfactory that you would like to move from the neighborhood?
(1) Satisfactory police protection?	908 1 ☐ Yes 2 ☐ No 3 ☐ Don't know	909 1 ☐ Yes 2 ☐ No
(2) Satisfactory outdoor recreation facilities such as parks, playgrounds, or swimming pools?	910 1 ☐ Yes 2 ☐ No 3 ☐ Don't know	911 1 ☐ Yes 2 ☐ No
(3) Satisfactory hospitals or health clinics?	912 1 ☐ Yes 2 ☐ No 3 ☐ Don't know	913 1 ☐ Yes 2 ☐ No

Section XII – NEIGHBORHOOD QUALITY SUPPLEMENT – Continued

147a. Is there public transportation for this area?	914	1 ☐ Yes 2 ☐ No – Skip to 148a
b. Is it satisfactory?	915	1 ☐ Yes 2 ☐ No 3 ☐ Don't know
c. Does anyone in the household (Do you) use public transportation at least once a week?	916	1 ☐ Yes 2 ☐ No
148a. Do you have satisfactory neighborhood shopping, that is grocery stores or drug stores?	917	1 ☐ Yes 2 ☐ No . . . . . 3 ☐ Don't know . . . } Skip to Check Item MM
b. Are any of these stores within one mile of here?	918	1 ☐ Yes 2 ☐ No

CHECK ITEM MM

Part (1) (See item 8, page 1)

☐ Regular Interview – Go to part (2) below

☐ URE Interview – Skip to 150

Part (2) (See Control Card items 11c and 14)

☐ Household members 5 through 13 years of age – Ask 149a

☐ No household members 5 through 13 years of age – Skip to 149b

149a. Does your child (Do your children) attend a public elementary school or a private elementary school? (Mark all that apply.)	919 *	1 ☐ Public elementary school 2 ☐ Private elementary school 3 ☐ Other school 4 ☐ Does not attend school
b. Is the public elementary school that children living at this address attend (would attend) satisfactory? (If more than one public elementary school, ask about the closest one to the area.)	920	1 ☐ Yes 2 ☐ No 3 ☐ Don't know
c. Is that public elementary school within one mile of here?	921	1 ☐ Yes 2 ☐ No
150. In view of all the things we have talked about, how would you rate this neighborhood as a place to live – would you say it is excellent, good, fair, or poor?	922	1 ☐ Excellent 2 ☐ Good 3 ☐ Fair 4 ☐ Poor

NOTES

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

NOTES

Section XIII – HOUSING NEEDS SUPPLEMENT

CHECK ITEM NN

Part (1) – *(See CC Items 11c, 14 and 17)*

☐ Unit contains female household member(s), 35 years of age or older (Y circled in item 11C, 35 or over in item 14 and F circled in item 17) – *Go to Part 2*

☐ All others – *Skip to Check Item 00, page 54*

Part (2) – Transcribe the line number for all eligible persons from CC Item 10 to 151a, 152a, 153a and 154a as needed. Then read the introduction.

INTRODUCTION — **The following questions are about changing household sizes. As children grow up and leave home, the parents housing needs may also change.**

151a. Line number *(CC Item 10)*	(645) ☐☐ Line number
b. **Has . . . raised any children to adulthood?**	(646) 1 ☐ Yes 2 ☐ No – *Go to interviewer instruction below* 3 ☐ OFFICE USE ONLY
c. **How many children was that?**	(647) ☐☐ Number of children
d. **Have any of them (has that child) left home?** *(ONLY include children away attending school if they live there year round.)*	(648) 1 ☐ Yes 2 ☐ No – *Go to interviewer instruction below*
e. **(Of the children who have left home,) how long ago did (the last one) he/she leave?** *(Read answer categories)*	(649) 1 ☐ **Within the last year** 2 ☐ **More than 1 but less than 3 years ago** 3 ☐ **3 years to less than 5 years ago** 4 ☐ **5 years to less than 10 years ago** 5 ☐ **10 years ago or more**

INTERVIEWER INSTRUCTION ➧ If not the last female household member 35 years of age or older – *Complete items 152b–e for next eligible person.*
If last eligible person – *Go to Check Item 00, page 54*

152a. Line number *(CC Item 10)*	(650) ☐☐ Line number
b. **Has . . . raised any children to adulthood?**	(651) 1 ☐ Yes 2 ☐ No – *Go to interviewer instruction below* 3 ☐ OFFICE USE ONLY
c. **How many children was that?**	(652) ☐☐ Number of children
d. **Have any of them (has that child) left home?** *(ONLY include children away attending school if they live there year round.)*	(653) 1 ☐ Yes 2 ☐ No – *Go to interviewer instruction below*
e. **(Of the children who have left home,) how long ago did (the last one) he/she leave?** *(Read answer categories)*	(654) 1 ☐ **Within the last year** 2 ☐ **More than 1 but less than 3 years ago** 3 ☐ **3 years to less than 5 years ago** 4 ☐ **5 years to less than 10 years ago** 5 ☐ **10 years ago or more**

INTERVIEWER INSTRUCTION ➧ If not the last female household member 35 years of age or older – *Complete items 153b–e for next eligible person.*
If last eligible person – *Go to Check Item 00, page 54*

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

Section XIII – HOUSING NEEDS SUPPLEMENT – Continued

153a. Line number *(CC item 10)*	(655) ☐☐ Line number
b. Has . . . raised any children to adulthood?	(656) 1 ☐ Yes 2 ☐ No – *Go to interviewer instruction below* 3 ☐ OFFICE USE ONLY
c. How many children was that?	(657) ☐☐ Number of children
d. Have any of them (has that child) left home? *(ONLY include children away attending school if they live there year round.)*	(658) 1 ☐ Yes 2 ☐ No – *Go to interviewer instruction below*
e. (Of the children who have left home,) how long ago did (the last one) he/she leave? *(Read answer categories)*	(659) 1 ☐ Within the last year 2 ☐ More than 1 but less than 3 years ago 3 ☐ 3 years to less than 5 years ago 4 ☐ 5 years to less than 10 years ago 5 ☐ 10 years ago or more

INTERVIEWER INSTRUCTION ➡ If not the last female household member 35 years of age or older – *Complete items 154b–e for next eligible person.*
If last eligible person – *Go to Check Item OO, page 54*

154a. Line number *(CC item 10)*	(660) ☐☐ Line number
b. Has . . . raised any children to adulthood?	(661) 1 ☐ Yes 2 ☐ No – *Go to Check Item OO, page 54* 3 ☐ OFFICE USE ONLY
c. How many children was that?	(662) ☐☐ Number of children
d. Have any of them (has that child) left home? *(ONLY include children away attending school if they live there year round.)*	(663) 1 ☐ Yes 2 ☐ No – *Go to Check Item OO, page 54*
e. (Of the children who have left home,) how long ago did (the last one) he/she leave? *(Read answer categories)*	(664) 1 ☐ Within the last year 2 ☐ More than 1 but less than 3 years ago 3 ☐ 3 years to less than 5 years ago 4 ☐ 5 years to less than 10 years ago 5 ☐ 10 years ago or more

NOTES

Section XIV – SUPPLEMENTAL ITEMS

Part (1) *(See Item 8a, page 10)*
☐ One unit structure or mobile home (box 1, 2, 3 marked) – *Skip to 159*
☐ Two or more unit structure (box 4–9 marked) – *Go to part 2*

Part (2) *(See Check Item B, page 12)*
☐ Rented for cash (box 8 marked) – *Ask 155a*
☐ Occupied without payment of cash rent (box 11 marked) – *Ask 155a*
☐ All others – *Skip to 156a*

155a. Does the owner of this building live on this property?	(631) 1 ☐ Yes – *Skip to 156a* 2 ☐ No 3 ☐ Don't know
b. Is there a resident manager, superintendent, or janitor who lives on this property?	(632) 1 ☐ Yes 2 ☐ No 3 ☐ Don't know
156a. Are there loose, broken, or missing steps on any common stairways inside this building or attached to this building?	(633) 1 ☐ Yes 2 ☐ No 3 ☐ No common stairways – *Fill item 157a*
b. Are all stair railings firmly attached?	(634) 1 ☐ Yes 2 ☐ No 3 ☐ No stair railings
OBSERVATION 157a. Do the public halls in this building have light fixtures?	(635) 1 ☐ Yes 2 ☐ No . . . . . } *Skip to 158* 3 ☐ No public halls } *Skip to 158*
OBSERVATION b. Are the light fixtures in working order?	(636) 1 ☐ All in working order 2 ☐ Some in working order 3 ☐ None in working order
OBSERVATION 158. How many stories (floors) are there from the main entrance of the building to the main entrance of the apartment?	(637) 1 ☐ None, on same floor 2 ☐ One (up or down) 3 ☐ Two or more (up or down)
OBSERVATION 159. Are there abandoned buildings on this street?	(638) 1 ☐ Yes, one 2 ☐ Yes, more than one 3 ☐ No
OBSERVATION 160. What is the condition of streets and roads in this neighborhood?	(639) 1 ☐ No repairs needed 2 ☐ Minor repairs needed 3 ☐ Major repairs needed
OBSERVATION 161. Is there trash, litter, or junk in the streets (roads), or on empty lots, or on properties in this neighborhood?	(640) 1 ☐ None 2 ☐ Minor accumulation 3 ☐ Moderate accumulation 4 ☐ Heavy accumulation

NOTES

Facsimile of the Annual Housing Survey Questionnaire: 1983—Continued

Section XIV – SUPPLEMENTAL ITEMS – Continued

(See items 8, 9a and b, page 1)
- ☐ Regular or URE Interview – *Fill 162a*
- ☐ Vacant Interview – *Fill 162a*
- ☐ Type A – *Go to Control Card item 39*
- ☐ Type B – *Enclose completed AHS-397 and go to Control Card item 39*

162a. Was this interview conducted by personal visit or telephone?
- (641) 1 ☐ Personal visit – *Fill item 162b*
- 2 ☐ Telephone – *Skip to Check Item QQ*

b. Why was a personal interview conducted for this unit?
- (642) 1 ☐ Unit in panel 2, 4, or 6
- ☐ Unit in panel 1, 3, or 5 AND
  - 2 ☐ Unit is in sample for first time this enumeration period
  - 3 ☐ Unit was a noninterview last enumeration period
  - 4 ☐ Unit in a TA special place
  - 5 ☐ Unit was vacant last enumeration period and now is occupied
  - 6 ☐ Replacement household discovered
  - 7 ☐ Address contacted is not exact address entered in control card item 5a (or label)
  - 8 ☐ No one answered repeated calls at different times of day and evening
  - 9 ☐ Wrong telephone number
  - 10 ☐ No telephone number recorded in control card item 38b
  - 11 ☐ Refused telephone interview
  - 12 ☐ Other – *Specify* _____

(See item 8, page 1)
- ☐ Regular or URE Interview – *Go to Control Card item 38a*
- ☐ Vacant Interview – *Go to Control Card item 39*

NOTES

PGM 0 ↓

Section XV – CINCH SUPPLEMENT

CHECK ITEM RR

Part (1)
- (665) 1 ☐ AHS-400 NOT received for this segment – *END SUPPLEMENT*
- ☐ AHS-400 received for this segment – *Go to Part (2) below*

Part (2) (See *label or item 2, page 1*)
- ☐ F1 sample code
  - ☐ Code 1 marked on AHS-400
    - (665) 4 ☐ 1983 serial number same as 1973 serial number – *END SUPPLEMENT*
    - 5 ☐ 1983 serial number different from 1973 serial number – *Skip to item 164*
  - (665) 2 ☐ Code 2 marked on AHS-400 – *Skip to item 163*
    (Reminder – Also mark this code on ALL questionnaires completed for F1 units involved in a conversion or merger with a 1973 unit listed on the AHS-400.)
  - 3 ☐ Unit added since 1973 – *END SUPPLEMENT (Do NOT mark for a unit resulting from a conversion or merger with a unit listed on the AHS-400)*
- ☐ F2 sample code
  - (665) 2 ☐ Unit involved with a conversion or merger with a unit listed on the AHS-400 – *Skip to item 163*
  - 3 ☐ Unit NOT involved in a conversion or merger with a unit listed on the AHS-400 – *END SUPPLEMENT*

163. Enter year of change (*from column (6) of the AHS-400*).
- (666) 1 ☐ 1981–1983
- 2 ☐ 1979–1980
- 3 ☐ 1976–1978
- 4 ☐ 1974–1975
- 5 ☐ 1973 or earlier

} *END SUPPLEMENT*

164. Enter 1973 serial number (*from column (2) of AHS-400*).
- 1973 Serial No.
- (667) ☐☐ *END SUPPLEMENT*

OFFICE USE ONLY
- a. (923) ☐☐☐
- b. (924) ☐☐
- c. (925) ☐☐

NOTES

☆ U.S. GOVERNMENT PRINTING OFFICE: 1983—[illegible]

Appendix B

Source and Reliability of the Estimates

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SAMPLE DESIGN

The 1983 estimates are based on data collected from August 1983 through December 1983 for the Annual Housing Survey (AHS), which was conducted by the Bureau of the Census, acting as collection agent for the Department of Housing and Urban Development. The sample for this survey was spread over 461 sample areas (called primary sampling units), comprising 923 counties and independent cities with coverage in each of the 50 States and the District of Columbia.

Approximately 71,800 sample housing units (both occupied and vacant) were eligible for interview in the 1983 Annual Housing Survey. Of this number, 3,800 interviews were classified as "noninterview" for various reasons. Occupied housing units were classified as "noninterview" mainly, because the occupants refused to be interviewed after repeated calls. For vacant housing units, interviews were not obtained because an informed respondent was not found after repeated visits. In addition to the 71,800 eligible housing units, there were also 4,600 sample units which were visited but were ineligible for interview for the AHS in terms of collecting information relevant to the 1983 housing inventory.

Selection of sample areas—The United States was divided into areas made up of counties and independent cities referred to as primary sampling units (PSU's). These PSU's were then grouped into 376 strata, 156 of which consisted of only one PSU which was in sample with certainty. These 156 strata were mostly the larger SMSA's and were called self-representing (SR) since the sample from the sample area represented just that PSU. Each one of the other 220 strata consisted of a group of PSU's and were referred to as non-self-representing (NSR), since the sample of housing units from the sample PSU in a stratum represented the other PSU's in the stratum as well.

One PSU was selected from each NSR stratum with probability proportionate to the 1970 census population of the PSU. (This resulted in 220 NSR sample PSU's.) In addition, the NSR strata were grouped into 110 pairs and one stratum was picked at random from each pair. From this stratum, an additional PSU was selected independently of the other PSU selected from the stratum. Since the two PSU's were independently selected, it was possible for the same PSU to be selected twice. This occurred in 25 instances, producing an additional 85 NSR sample PSU's, thus giving a grand total of 461 PSU's.

Designation of sample housing units for the 1983 survey—The sample housing units designated to be interviewed in the 1983 survey consisted of the following categories, which are described in detail in succeeding sections.

1. All sample housing units that were interviewed in the 1981 survey (which included all sample housing units that were selected as part of the 1976 Coverage Improvement Program).

2. Rural units, which were deleted in 1981 as part of the reduction of rural housing units, were reinstated for the 1983 survey.
3. All sample housing units that were either type A noninterviews (i.e., units eligible to be interviewed) or type B noninterviews (i.e., units not eligible for interview at the time of survey but which could become eligible in the future) in the 1983 survey. (For a list of reasons for type A and type B noninterviews, see the facsimile of the 1983 AHS questionnaire, page App-20).
4. All sample housing units that were selected from the list of building permits issued since the 1981 survey. (This sample represented the housing units built in permit-issuing areas, since the 1981 survey.)
5. Housing units added as the result of the updated listings in selected areas which do not issue building permits.

Selection of the 1973 sample housing units—The overall sampling rate used to select the sample for the 1973 AHS was about 1 in 1,366. The within-PSU sampling rate for the AHS was determined so that the overall probability of selection for each sample housing unit was the same (e.g., if the probability of selecting a NSR PSU was 1 in 10, then the within-PSU sampling rate would be 1 in 136.6).

Within the sample PSU's, a sample of the housing units enumerated in the 1970 Census of Population and Housing was selected for the AHS. In addition, a sample of new construction building permits was also selected to represent the units constructed since the 1970 census. These samples were selected at about twice the rate mentioned previously (i.e., at 2 in 1,366), thereby producing a sample twice as large as needed. This sample was split into two equal-sized samples—one to be used for the AHS, and one to be held in reserve for possible future use for the AHS. The procedure used to split this sample into equal-sized samples is described in the next section.

The sample of 1970 census units was selected in several stages. Within the sample PSU's, the first step was the selection of a sample of census enumeration districts (ED's), administrative units used in the 1970 census. The probability of selection for an ED was proportional to the following 1970 census counts of housing units (HU's) and persons in group quarters, combined in the following formula:

$$\frac{\text{Number of HU's in the ED} + \dfrac{\text{Number of group quarters persons in ED}}{3}}{4}$$

The next step was to select an expected cluster of about four neighboring housing units within each sample ED. For most of the ED's, the selection was accomplished using the list of addresses for the ED as compiled in the 1970 census (these ED's are referred to as address ED's). However, in those ED's where addresses were incomplete or inadequate (mostly rural areas), the selection process was accomplished using area sampling methods. These ED's were divided into segments (i.e., small land areas with well-defined boundaries having an expected size of four, or a multiple of four, housing units) and a segment was selected. Those selected segments with an expected size which was a multiple of four were further subsampled at the time of interview so that an expected four housing units were chosen for interview.

The sample of new construction housing units was selected from building permits issued since January 1970. Within each sample PSU, the building permits were chronologically ordered by month issued, and compact clusters of approximately four housing units were created. These clusters were then sampled at the rate of 2 in 1,366. Housing units constructed since the 1970 census in areas which do not issue building permits were brought into the sample as a result of the area sample described above.

Splitting of the sample—The described sample selection procedure produced clusters (or segments) of size-four housing units for the sample taken from the census address frame, the new construction frame, and the area sampling frame (mainly rural areas). Clusters of this size should result in a minimum loss in precision for estimates of housing characteristics in rural areas because of the heterogeneity of neighboring units. However, clusters of size-two housing units were considered to be more optimum within those areas where the housing characteristics of neighboring units tend to be very similar (i.e., urban areas and new construction units). A splitting operation was then carried out for clusters selected from the census address and the new construction frames. This consisted of halving each sample cluster from these frames. Thus, two housing units from each of these clusters were included in the survey and two housing units were held in reserve. No splitting operation was carried out within the clusters selected from the area sampling frame; every other area sample cluster of four housing units was used for the survey and the remaining clusters were assigned to the reserve sample.

CEN-SUP sample—Housing units at addresses missed in the census or inadequately described in the 1970 census address register did not have a chance of being selected for the AHS sample in address ED's. Consequently, a special operation was undertaken to develop a separate sample called the census supplemental (CEN-SUP) sample to represent these units. Due to time constraints on this operation, only 40 percent of the CEN-SUP units were ready to be interviewed in 1973. The rest were interviewed for the first time in the 1974 AHS.

Selection of supplemental sample housing units in rural areas—In 1974, it was decided to increase the reliability of the AHS estimates of rural housing characteristics by doubling the number of sample housing units from rural areas. This was accomplished by activating the reserve sample, selected in the original sampling operations in 1973, from rural areas only. For the reserve sample selected in census address and new construction frames, the other half of each rural cluster (an expected two housing units) was activated in 1974. Similarly, for the area sampling frame, the entire reserve cluster (an expected four housing units) was activated in 1974 if the cluster was rural. This supplementation increased the overall probability of selection for sample housing units in rural areas to about 2 in 1,366; whereas, the

overall probability of selection for sample housing units in urban areas remained at 1 in 1,366.

Selection of sample housing units for the 1976 Coverage Improvement Program—The 1976 Coverage Improvement Program was undertaken to correct certain deficiencies in the AHS national sample from the census address and new construction frames. The coverage deficiencies included the following types of housing units:

1. New construction housing units from building permits issued prior to January 1970 for which construction had not been completed at the time of the 1970 census.
2. Houses that had been moved onto their present site since the 1970 census.
3. Mobile homes and trailers placed in parks either missed in the 1970 census or established since the 1970 census.
4. Mobile homes and trailers placed outside parks since the 1970 census or vacant at the time of the 1970 census.

A sample of new construction housing units whose permits were issued before January 1970 was selected in two stages. In the first stage, the units whose permits were issued before January 1970, but which were completed after the census, were identified from the Survey of Construction (SOC), a survey of building permits conducted monthly by the Bureau of the Census. In the second stage, these units were then sampled so that the overall probability of selection was about 1 in 1,320.

A sample of mobile homes and trailers placed in a park that was missed by the census or established after the census was also selected in two stages. During the first stage, a list of mobile home parks was obtained from commercial listings. This list was then supplemented by additional parks identified by a canvassing operation similar to that performed in ED's where area sampling methods are used. The second stage consisted of dividing the parks into clusters of an expected size of four sites. These clusters were then sampled so that the overall probability of selection was about 1 in 1,366.

For the remaining housing units (i.e., mobile homes and trailers placed outside parks since the 1970 census, mobile homes and trailers vacant at the time of the 1970 census, and houses that had been moved onto their present site since the 1970 census), the sampling was done in three stages. First, a subsample of the regular AHS sample housing units from the census address frame was selected. Second, succeeding structures that had been eligible to be selected from the census address frame were then listed until eight structures (excluding mobile home parks) were found. Finally, the intervening structures that had been listed which did not have a chance of selection in the AHS were identified and the units within these structures were interviewed.

1977 and 1981 sample reductions—By 1977, the addition to the sample, primarily from new construction and the coverage improvements, had increased the total sample size (interviews plus noninterviews) to about 81,000 housing units. The sample was reduced by about 7 percent to approximately 75,000 in 1977. This reduction did not include any CEN-SUP units or units which were selected as part of the 1976 Coverage Improvement Program. Initially, the overall sample was further reduced in 1981 by about 5 percent. Subsequently, the rural sample was reduced by about 25 percent in 125 large SMSA's[1] and by about 50 percent in small SMSA's[1] and outside SMSA's. These reductions brought the sample size down to approximately 60,000 housing units in 1981. The rural units involved in this subsequent reduction in 1981 were reinstated for the 1983 survey bringing the total sample size, with new construction, back up to about 76,000 units.

Supplemental sample from nonresidential conversions—The purpose of this sample was to improve the coverage in address ED's (i.e., ED's in which 1970 census address listings were used for selecting the AHS sample) of housing units created in structures that were completely nonresidential at the time of the 1970 census. This sample was derived from listings created for the Commercial Victimization Survey (CVS), a nationally representative area sample survey conducted by the Census Bureau for the Department of Justice. Each of the CVS area segments was initially canvassed either in 1972 or 1975 and eligible business establishments were listed. These listings were updated every 6 months with the last updating in the last half of 1977. Each basic address containing a business establishment listed for CVS was visited for the 1980 *Components of Inventory Change Survey* (CINCH), which was conducted in conjunction with the 1980 AHS, to identify housing units (HU's) in structures which were completely nonresidential at the time of the 1970 census. These cases were later matched to the 1970 census address listings to identify those cases in address ED's and as an additional check to see if housing units existed in these structures at the time of the 1970 census. Due to the timing constraints associated with these operations, these cases were not included for the 1980 AHS but were included for the 1981 and 1983 surveys.

1983 telephone interviewing experiment—A large scale telephone interviewing experiment was conducted in conjunction with the 1983 AHS national sample in order to provide more definitive information about the effect of telephone interviewing on AHS data. About one-half (3 of 6 panels) of the 1983 AHS sample was designated for telephone interviewing for the experiment. Among the cases assigned for telephone interviewing, only those sample housing units that had been interviewed in 1981 and had a telephone number available were eligible to be interviewed by telephone. Since one-half of the total AHS national sample was assigned for telephone interviewing, its possible effect on the data is mentioned in the section on "Reliability of the Estimates" of this appendix.

ESTIMATION

In 1983, the AHS estimates employed a three-stage ratio estimation procedure. However, prior to implementation of the procedure, the basic weight (i.e., the inverse of the probability of selection) was adjusted to account for the type A noninterview housing units encountered in the AHS. This noninterview

[1]A large SMSA is one with a 1970 population of 250,000 persons or more and a small SMSA is one with a 1970 population of less than 250,000.

adjustment was done separately for occupied and vacant units. The noninterview adjustment was equal to the following ratio:

$$\frac{\text{Interviewed housing units + Noninterviewed housing units}}{\text{Interviewed housing units}}$$

The first-stage ratio estimation procedure was employed for sample housing units from non-self-representing (NSR) PSU's only. This procedure was designed to reduce the contribution to the variance arising from the sampling of PSU's. The first-stage ratio estimation procedure takes into account the differences that existed at the time of the 1980 census in the distribution by tenure and residence of the housing population estimated from the sample NSR PSU's and that of the NSR housing population in each of the four census regions of the country.

The first-stage ratio estimation factor for each specified category was as follows:

$$\frac{\text{The 1980 census housing population in the residence-tenure category for all NSR strata in a census region}}{\text{Estimates of the housing population category using 1980 census housing counts for sample NSR PSU's in a census region}}$$

The numerators of the ratios were calculated by obtaining the 1980 census housing counts for each of the residence-tenure categories for each NSR stratum and summing these counts across the NSR strata in each census region. The denominators were calculated by obtaining the 1980 census housing counts for each of the residence-tenure categories for each NSR sample PSU, weighting these counts by the inverse of the probability of selecting that PSU, and summing these weighted counts across the NSR sample PSU's in each census region. The computed first-stage ratio estimation factor was then applied to the existing weight for each NSR sample unit in each first-stage ratio estimation category.

The second-stage ratio estimation procedure was designed to adjust the AHS sample estimate of conventional new construction housing units; i.e., sample units built April 1, 1970 or later, to independently derived current estimates where a known deficiency in the AHS sample exists (see the section on nonsampling error) for each of the four regions: These estimates were considered to be the best estimates available for the number of conventional new construction units in these categories.

The second-stage ratio estimation factor was as follows:

$$\frac{\text{Current best estimate of new construction in the category}}{\text{AHS sample estimate of new construction units in the category}}$$

The numerators of the ratios were derived from data based on the Survey of Construction (SOC). The denominators of the ratios were obtained from the weighted estimates for the AHS sample units using the existing weight after the first-stage ratio estimation procedure. The computed second-stage ratio estimation factor was then applied to the existing weight for each sample unit in each second-stage ratio estimation category.

The third-stage ratio estimation procedure was employed for all the AHS sample units. This procedure was designed to adjust the AHS sample estimates of housing units (i.e., the estimates employing the noninterview, first-stage, and second-stage adjustments) to current vacant housing estimates for four (type of vacant unit) categories and to independently derived current housing estimates for 24 categories of occupied housing units. Each of the categories for occupied units is a combination of the characteristics of residence, tenure, race of householder, and sex of householder.

The third-stage ratio estimation factor for each specified category was as follows:

$$\frac{\text{Current independent estimate of housing units in the category}}{\text{AHS sample estimate of housing units in the category}}$$

The numerators of the ratios for occupied housing units were derived from data based on the Current Population Survey (CPS), a sample household survey conducted monthly by the Bureau of the Census. CPS household estimates based on the 1980 census were used as the independent controls in this adjustment. (Prior to the 1981 survey, 1970 census-based controls were used. The 1970-based estimates were about 2 percent smaller than the 1980-based estimates. This difference should be taken into consideration when comparing the 1983 AHS estimates to the AHS estimates for 1980 or earlier years. The numerators of the ratios for vacant housing units were derived from data based on the Housing Vacancy Survey (HVS), a quarterly vacancy survey also conducted by the Bureau of the Census. The denominators of the ratios were obtained from the weighted estimates for the AHS sample units, using the existing weight after the second-stage ratio estimation procedure. The computed third-stage ratio estimation factor was then applied to the existing weight for each sample unit in each third-stage ratio estimation category.

The second-stage and the third-stage ratio estimation procedures were iterated in order to bring the AHS estimates into close agreement with both sets of independent estimates. The second-stage was modified so that the estimates for all 30 categories for four regions of new construction would be identical to the estimates before the third stage. Hence, the repeated second stage had the effect of controlling the AHS sample estimates of new construction units to the unbiased sample estimates of mobile homes for 10 categories of four regions, and of adjusting the AHS sample estimate of conventional new construction units for 20 categories for four regions to the independently derived current estimates.

The numerators were either the unbiased weighted estimates for the AHS sample housing units, using the existing weight after the first-stage ratio estimation procedure (i.e., the estimates employing the noninterview and first-stage adjustments) or the independent estimate derived from data based on the Survey of Construction (SOC).

The denominators of the ratios in this iterative process were obtained from the weighted estimates for the AHS sample units after the previous stage of ratio estimation. The factors resulting from this iterative process were then applied to the existing weight on the appropriate records, and the resulting product was used as the final weight for tabulation.

The third-stage ratio estimation procedure, as well as the overall estimation procedure, reduced the sampling error for most

statistics below what would have been obtained by simply weighting the results of the sample by the inverse of the probability of selection. The distribution of the housing population selected for the sample differed somewhat, by chance, from that of the Nation as a whole in such basic housing characteristics as tenure, vacancy status, residence, race of householder, and sex of householder. These characteristics are probably closely correlated with other housing characteristics measured for the AHS. Therefore, through the use of the three-stage ratio estimation procedure one can expect the sample estimate to be improved substantially.

RELIABILITY OF THE ESTIMATES

There are two types of possible errors associated with estimates based on data from sample surveys—sampling and nonsampling errors. The following is a description of the sampling and nonsampling errors associated with the AHS national sample.

Sampling errors—The particular sample used for this survey is one of a large number of possible samples of the same size that could have been selected using the same sample design. Even if the same questionnaires, instructions, and interviewers were used, estimates from each of the different samples would differ from each other. The variability between estimates from all possible samples is defined as sampling error. One common measure of sampling error is the standard error, which measures the precision with which an estimate from a sample approximates the average result of all possible samples. In addition, the standard error, as calculated for this report, also partially reflects the variation in the estimates due to some nonsampling errors, but it does not measure, as such, any systematic biases in the data. Therefore, the accuracy of the estimates depends on both the sampling and nonsampling errors, measured by the standard error, and biases and some additional nonsampling errors not measured by the standard error.

The sample estimate and its estimated standard error enable one to construct interval estimates so that the interval includes the average result of all possible samples with a known probability. For example, if all possible samples were selected, and each of these samples was surveyed under essentially the same general conditions and an estimate and its estimated standard error were calculated for each sample, then:

1. Approximately 68 percent of the intervals from one standard error below the estimate to one standard error above the estimate would include the average result of all possible samples;
2. Approximately 90 percent of the intervals from 1.6 standard errors below the estimate to 1.6 standard errors above the estimate would include the average result of all possible samples;
3. Approximately 95 percent of the intervals from two standard errors below the estimate to two standard errors above the estimate would include the average result of all possible samples.

The average result of all possible samples either is or is not contained in any particular computed interval. However, for a particular sample one can say with specified confidence that the average result of all possible samples is included in the constructed interval.

The figures presented in the tables (pages App-56 and App-57) are approximations to the standard errors of various estimates shown in this report. In order to derive standard errors that would be applicable to a wide variety of items and also could be prepared at a moderate cost, a number of approximations were required. As a result, the table of standard errors provide an indication of the order of magnitude of the standard errors rather than the precise standard error for any specific item.

Standard errors of estimates of levels—Tables I and II present the standard errors applicable to the 1983 national and regional housing inventory estimates in this report. Linear interpolation should be used to determine standard errors for levels of estimates not specifically shown in tables I and II.

Standard errors of estimates of percentages—The reliability of an estimated percentage, computed by using sample data for both numerator and denominator, depends upon both the size of the percentage and the size of the total upon which the percentage is based. Estimated percentages are relatively more reliable than the corresponding estimates of the numerators of the percentages, particularly if the percentages are 50 percent or more.

Tables III and IV present the standard errors of estimated percentages. Two-way interpolation should be used to determine standard errors for estimated percentages not specifically shown in tables III and IV.

Included in tables I through IV are estimates of standard errors for estimates of zero and zero percent. These estimates of standard errors are considered to be overestimates of the true standard errors and should be used primarily for construction of confidence intervals for characteristics when an estimate of zero is obtained.

Standard errors of ratios—For ratios of the form (100) (x/y), where x is not a subclass of y, tables III and IV underestimate the standard error of the ratio when there is little or no correlation between x and y. For this type of ratio, a better approximation of the standard error may be obtained by letting the standard error of the ratio be approximately equal to:

$$(100)\left(\frac{x}{y}\right)\sqrt{\left(\frac{\sigma_x}{x}\right)^2 + \left(\frac{\sigma_y}{y}\right)^2}$$

where: x = the numerator of the ratio
y = the denominator of the ratio
σ_x = the standard error of the numerator
σ_y = the standard error of the denominator

Illustration of the use of the standard error tables. Illustration I—Table A-1 of this report shows that in the United States there

were 29,914,000 renter-occupied housing units in 1983. Interpolation in standard error table I shows that the standard error of an estimate of this size is approximately 205,000. The following interpolating procedure was used.

The information presented in the following table was extracted from standard error table I. The entry for "x" is the one sought.

Size of estimate (000)	Standard error (000)
25,000	200
29,914	x
50,000	227

By vertically interpolating between 200 and 227, the entry for "x" is determined to be 205.

$$29{,}914 - 25{,}000 = 4{,}914$$
$$50{,}000 - 25{,}000 = 25{,}000$$
$$200 + \frac{4{,}914}{25{,}000}(227 - 200) = 205$$

Consequently, the 68-percent confidence interval, as shown by these data, is from 29,709,000 to 30,119,000 housing units. Therefore, a conclusion that the average estimate of 1983 housing units of this type lies within a range computed in this way would be correct for roughly 68 percent of all possible samples. Similarly, we could conclude that the average estimate derived from all possible samples lies within the interval from 29,586,000 to 30,242,000 housing units with 90 percent confidence; and that the average estimate lies within the interval from 29,504,000 to 30,324,000 housing units with 95 percent confidence.

Table A-1 also shows that of the 29,914,000 renter-occupied housing units in 1983, 15,925,000, or 53.2 percent, heat with utility gas. Interpolation in standard error table III (i.e., interpolation on both the base and percent) of this appendix shows that the standard error of the above percentage is 0.5 percentage points. The following interpolating procedure was used.

The information presented in the following table was extracted from standard error table III. The entry for "p" is the one sought.

Base of percentage (000)	Estimated percentage		
	50	53.2	75
25,000	0.5	a	0.4
29,914		p	
50,000	0.3	b	0.3

1. By horizontal interpolation between 0.5 and 0.4, the entry for cell "a" is determined to be 0.5.

$$53.2 - 50.0 = 3.2$$
$$75.0 - 50.0 = 25.0$$
$$0.5 + \frac{3.2}{25.0}(0.4 - 0.5) = 0.5$$

2. By horizontal interpolation between 0.3 and 0.3, using the same procedure as in step 1, the entry for cell "b" is determined to be 0.3.
3. By vertical interpolation between 0.5 and 0.3, using the same procedure as in step 1, the entry for "p" is determined to be 0.5.

Consequently, the 68-percent confidence interval, as shown by these data, is from 52.7 to 53.7 percent; the 90-percent confidence interval is from 52.4 to 54.0 percent; and the 95-percent confidence interval is from 52.2 to 54.2 percent.

Illustration II—Table E-1 of this report shows that in all occupied housing units of the West Region in 1983 there were 9,955,000 owner-occupied housing units. Interpolation in standard error table II of this appendix shows that the standard error of an estimate of this size is approximately 215,000. Consequently, the 68-percent confidence interval is from 9,740,000 to 10,170,000 housing units. Therefore, a conclusion that the average estimate derived from all possible samples of 1983 owner-occupied housing units in the West Region lies within a range computed in this way would be correct for roughly 68 percent of all possible samples. Similarly, we could conclude that the average estimate derived from all possible samples lies within the interval from 9,611,000 to 10,299,000 housing units with 90 percent confidence; and that the average estimate lies within the interval from 9,525,000 to 10,385,000 housing units with 95 percent confidence.

Table E-1 also shows that of the 9,955,000 owner-occupied housing units in the West Region, 2,699,000, or 27.1 percent, have a central air-conditioning system. Interpolation in standard error table IV (i.e., interpolation on both the base and the percent) shows that the standard error of the above percentage is 0.7 percentage points. Consequently, the 68-percent confidence interval, as shown by these data, is from 26.4 to 27.8 percent; the 90-percent confidence interval is from 26.0 to 28.2 percent; and the 95-percent confidence interval is from 25.7 to 28.5 percent.

Differences—The standard errors shown are not directly applicable to differences between two sample estimates. The standard error of a difference between estimates is approximately equal to the square root of the sum of the squares of standard errors of each estimate considered separately. This formula is quite accurate for the difference between separate and uncorrelated characteristics in the same area. If there is a high positive correlation between the two characteristics, the formula will overestimate the true error. If there is a high negative correlation between the two characteristics, the formula will underestimate the true standard error.

Illustration of the computation of the standard error of a difference—Table A-1 of this report shows that of all renter-occupied housing units in the United States in 1983 there were 6,767,000 units which heated with electricity. Thus, the apparent difference between the number of 1983 renter-occupied housing units which heated with utility gas and those which heated with electricity is 9,158,000. Interpolation in standard

error table I shows that the standard error of 15,925,000 is approximately 163,000 and the standard error on an estimate of 6,767,000 is approximately 116,000. Therefore, the standard error of the estimated difference of 9,158,000 is about 200,000.

$$200{,}000 = \sqrt{(163{,}000)^2 + (116{,}000)^2}$$

Consequently, the 68-percent confidence interval for the 9,158,000 difference is from 8,958,000 to 9,358,000 housing units. Therefore, a conclusion that the average estimate of this difference derived from all possible samples lies within a range computed in this way would be correct for roughly 68 percent of all possible samples. Similarly, the 90-percent confidence interval is from 8,838,000 to 9,478,000 housing units, and the 95-percent confidence interval is from 8,758,000 to 9,558,000. Thus, we can conclude with 95 percent confidence that the number of 1983 renter-occupied housing units heated with utility gas is greater than the number which heated with electricity.

Medians—For the medians presented in certain tables, the sampling error depends on the size of the base and on the distribution upon which the median is based. An approximate method for measuring the reliability of the estimated median is to determine an interval about the estimated median so that there is a stated degree of confidence that the average median from all possible samples lies within the interval. The following procedure may be used to estimate confidence limits of a median based on sample data.

1. From the appropriate standard error table, determine the standard error of a 50-percent characteristic on the base of the median.
2. Add to and subtract from 50 percent the standard error determined in step 1.
3. Using the distribution of the characteristic, determine the confidence interval corresponding to the two points determined in step 2. To find the lower endpoint of the confidence interval, it is necessary to know into which interval of the distribution the lower percentage limit falls. Similarly, to find the upper endpoint of the confidence interval, it is necessary to know into which interval of the distribution the upper percentage limit falls. These two distribution intervals could be different, although this will not happen very often.

For about 68 out of 100 possible samples, the average median from all possible samples would lie between these two values.

A two-standard-error confidence interval may be determined by finding the values corresponding to 50 percent plus and minus twice the standard error determined in step 1. For about 95 out of 100 possible samples, the average median from all possible samples would lie between these two values.

Illustration of the computation of the 95-percent confidence interval for a median—Table A-2 of this report shows the median income of families and primary individuals in specified owner-occupied housing units was $26,100 in 1983. The base of the distribution from which this median was determined is 43,535,000 housing units.

1. From standard error table III, the standard error of a 50-percent characteristic on the base of 43,535,000 is approximately 0.4 percentage points.
2. To obtain a two-standard-error confidence interval on the estimated median, add to and subtract from 50 percent twice the standard error determined in step 1. This yields percentage limits of 49.2 and 50.8
3. From the distribution for "income of families and primary individuals" in table A-2, the interval for specified owner-occupied housing units with income $25,000 to $35,000 corresponds to the 49.2 percent derived in step 2. About 20,773,000 housing units, or 47.7 percent, fall below this interval and 8,709,000 housing units, or 20.0 percent, fall within this interval. By linear interpolation, the lower limit of the 95-percent confidence interval is found to be about:

$$\$25{,}000 + (\$35{,}000 - \$25{,}000)\,\frac{(49.2 - 47.7)}{20.0} = \$25{,}800$$

Similarly, the interval for specified owner-occupied housing units with income $25,000 to $35,000 corresponds to the 50.8 percent derived in step 2. About 20,773,000 housing units, or 47.7 percent, fall below this interval, and 8,709,000 housing units, or 20.0 percent, fall within this interval. The upper limit of the 95-percent confidence interval is found to be about:

$$\$25{,}000 + (\$35{,}000 - \$25{,}000)\,\frac{(50.8 - 47.7)}{20.0} = \$26{,}600$$

Thus, the 95-percent confidence interval ranges from $25,800 to $26,600.

Nonsampling errors—In general, nonsampling errors can be attributed to many sources: Inability to obtain information about all cases; definitional difficulties; differences in the interpretation of questions; inability or unwillingness to provide correct information on the part of respondents; mistakes in recording or coding the data; and other errors of collection, response, processing, coverage, and estimation for missing data. As can be seen from the list, nonsampling errors are not unique to sample surveys since they can, and do, occur in complete censuses as well.

Obtaining a measurement of the total nonsampling error associated with the estimates from a survey is very difficult, considering the number of possible sources of error. However, an attempt was made to measure some of the nonsampling errors associated with the estimates for the 1983 AHS national sample.

Reinterview program—For the AHS national sample, a study was conducted to obtain a measurement of some of the components of the nonsampling error associated with the AHS estimates. A reinterview program was conducted for a subsample of the AHS households. These households were revisited and answers to some of the questions on the AHS questionnaire were obtained again. The original interview and the reinterview were assumed to be two independent readings and thus, were the

basis for the measurement of the "content" error of these AHS estimates.

As part of the reinterview, an additional check was carried out for interviewer evaluation and quality control. This check was made at each of these households to determine if the following was done during the original interview.

1. The correct housing unit was visited.
2. The correct number of housing units were interviewed at that address.
3. The correct information on "Year Built" was obtained.
4. The correct information on "Tenure" was obtained.
5. The correct information on "Household Composition" was obtained.
6. The correct information on "Type of Housing Unit" was obtained.
7. The correct information on "Occupancy Status" was obtained.

The results of the 1983 and 1981 reinterview studies were not available at the time of publication. The results of the 1980 reinterview study which are presented in the Census Bureau memorandum, "Analysis of the Reinterview Data from the 1980 Annual Housing Survey—National Sample" are presented here. The results of this study showed that 64 percent of the nonattitudinal items showed moderate levels of inconsistency while another 12 percent showed high levels of inconsistency. All of the attitudinal items showed moderate to high levels of inconsistency. Moderate levels indicate that there are some problems with inconsistent reporting and high levels indicate that improvements are needed in the data collection methods or that the category concepts themselves are ambiguous.

Cross-tabulations involving those items, which are subject to substantial levels of inconsistency may be subject to a large distortion as a consequence of the associated high level of response variance, and thus, are considered to be less reliable than comparable cross-tabulations which do not involve these data. Tables in this report which contain such cross-tabulations have been footnoted with a cautionary statement. Since the reinterview program only measured inconsistencies for a sample of the items on the questionnaire, there may be other items with high levels of inconsistency which are not footnoted because they have not been a part of the reinterview program.

The 1970 census reinterview results provide illustrations of possible nonsampling errors for some of the items which also appear in the AHS. For example, median value of homes was consistently underestimated by about 5 percent, and the average monthly cost of electricity and utility gas were consistently overestimated although the net effect on average gross rent was fairly small.

A possible explanation for the results of the AHS and census reinterview studies, as well as the surveys themselves, is that the data are based on the answers given by the respondents who may lack precise information. Also, because the results of the reinterview studies are derived from sample surveys, there is sampling error associated with these estimates of nonsampling error. Therefore, the possibility of such errors should be taken into account when considering the results of these studies.

Coverage errors—A deficiency in the representation of conventional new construction (non-mobile home or trailer) for the AHS new construction sample (mentioned previously in the section on estimation) is an example of coverage errors. During the sampling of building permits, only those issued more than 4 months before the survey began were eligible to be selected to represent conventional new construction. Due to time constraints, it is not possible to sample units whose permits are issued less than 4 months in advance of the survey.

It is estimated that the 1983 AHS sample missed about 0.8 percent (i.e., about 180,000 units) of conventional housing units built after April 1970 because the permits for these units, which were built before October 1983, were issued less than 4 months in advance of the survey. The second-stage ratio estimation procedure was employed to reduce the effect of this deficiency although some bias in the AHS estimates of conventional new construction probably still exists. Review of the second-stage ratio estimation procedures indicated that we have consistently overcompensated for this deficiency every year since 1975 by ratio adjusting the new construction to counts of new construction for the end of the interview period, which has been December or January, instead of October. This overcompensation may inflate the new construction counts by 100,000 to 300,000 units. This procedure was corrected in 1983 for this overcompensation and the length of time from the previous enumeration is not consistent with what it has been in the past.

In addition, the 1976 Coverage Improvement Program also had certain deficiencies. First, when the canvassing was done to identify mobile homes and trailer parks that were not in the sample frame or not on the commercial lists, only 92 percent of the census address frame ED's were represented.

Deficiencies also existed in the nonresidential supplemental sample. For most of the areas in sample, the initial CVS listings were created in 1975. Any structures in these areas which were nonresidential at the time of the 1970 census and converted to residential use between 1973 and 1975 did not have a chance of being in sample. The CVS sample was also updated every six months until 1977. If a basic address was totally nonresidential at the time of the 1970 census but was not listed in CVS as of 1977, it did not have a chance of being in sample.

Finally, it is felt that deficiencies also exist in ED's where area sampling methods are used. As before, it had been assumed that all housing units located inside these ED's would be represented in the sample. However, it has been estimated that the 1983 AHS sample missed as much as 2 percent (i.e., as much as 400,000 units) of all housing units in ED's where area sampling methods are used because these units are not listed during the canvassing.

The third stage of ratio estimation corrects for these deficiencies as far as the total count of housing is concerned; i.e., it adjusts the estimate of the total housing inventory to the best available estimate. However, biases of subtotals would still remain.

Effects of ratio estimation on estimates of change—As stated previously, 1981 was the first AHS for which 1980 census-based estimates, rather than 1970 census-based estimates, were used in the third-stage ratio estimation procedure. The 1980-based estimates are about 2 percent higher than the corresponding 1970-based estimates. This will cause estimates of change involving the 1981 or 1983 AHS data to be overstated. However, estimates of percent change between 1981 and 1983 should not be affected. This overstatement should be taken into consideration during the analysis of estimates of change.

Possible effects of telephone interviewing on the data—A preliminary analysis of the 1983 telephone interviewing experiment has been completed. It has been concluded that data collected, using the telephone interviewing procedures, were not sufficiently different from data collected by regular personal interviews to preclude basing the 1983 AHS national sample published data on both telephone and personal interview data.

Rounding errors—In errors associated with processing, the rounding of estimates introduces another source of error in the data, the severity of which depends on the statistics being measured. The effect of rounding is significant relative to the sampling error only for small percentages, median number of persons, and median number of rooms when these figures are derived from relatively large bases. This means that confidence intervals formed from the standard errors given may be distorted, and thus should be taken into account when considering the results of this survey. Also, since medians in this report were computed using unrounded data, instead of the rounded published data, they can differ from medians calculated directly from the published data.

TABLE I. **Standard Errors of Estimated Numbers of National and Regional Housing Units: 1983 (Excluding Estimates of Housing Units for the West Region and of Housing Units With Householder of Spanish Origin)**

(68 chances out of 100)

Size of estimate (000)	Standard error		Size of estimate (000)	Standard error	
	National (000)	Regional (000)		National (000)	Regional (000)
0	2	2	2,500	73	72
5	3	3	5,000	101	105
10	5	4	7,500	122	132
25	7	7	10,000	139	155
50	10	10	25,000	200	276
100	15	14	50,000	227	453
250	23	22	75,000	186	...
500	33	32	90,000	105	...
1,000	46	45	93,500	63	...

TABLE II. **Standard Errors of Estimated Numbers of Housing Units for the West Region and of Housing Units With Householder of Spanish Origin: 1983**

(68 chances out of 100)

Size of estimate (000)	Standard error (000)	Size of estimate (000)	Standard error (000)
0	3	500	36
5	4	1,000	52
10	5	2,500	87
25	8	5,000	134
50	11	10,000	216
100	16	25,000	445
250	25		

TABLE III. **Standard Errors of Estimated Percentages of Housing Units: 1983 (Excluding Estimated Percentages of Housing Units for the West Region and of Housing Units With Householder of Spanish Origin)**

(68 chances out of 100)

Base of percentage (000)	Estimated percentage							
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
5	30.20	30.20	30.20	30.20	30.20	30.20	30.20	32.90
10	17.80	17.80	17.80	17.80	17.80	17.80	20.10	23.20
25	8.00	8.00	8.00	8.00	8.80	10.50	12.70	14.70
50	4.10	4.10	4.10	4.50	6.20	7.40	9.00	10.40
100	2.10	2.10	2.10	3.20	4.40	5.20	6.40	7.30
250	0.90	0.90	1.30	2.00	2.80	3.30	4.00	4.60
500	0.40	0.70	0.90	1.40	2.00	2.30	2.80	3.30
1,000	0.20	0.50	0.70	1.00	1.40	1.70	2.00	2.30
2,500	0.09	0.30	0.40	0.60	0.90	1.00	1.30	1.50
5,000	0.04	0.20	0.30	0.50	0.60	0.70	0.90	1.00
7,500	0.03	0.20	0.20	0.40	0.50	0.60	0.70	0.80
10,000	0.02	0.15	0.20	0.30	0.40	0.50	0.60	0.70
25,000	0.01	0.09	0.13	0.20	0.30	0.30	0.40	0.50
50,000	0.01	0.07	0.09	0.14	0.20	0.20	0.30	0.30
75,000	0.01	0.05	0.08	0.12	0.20	0.20	0.20	0.30
90,000	0.01	0.05	0.07	0.11	0.15	0.20	0.20	0.20
93,500	0.01	0.05	0.07	0.10	0.14	0.20	0.20	0.20

TABLE IV. **Standard Errors of Estimated Percentages of Housing Units for the West Region and of Housing Units With Householder of Spanish Origin: 1983**

(68 chances out of 100)

Base of percentage (000)	Estimated percentage							
	0 or 100	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
5	33.40	33.40	33.40	33.40	33.40	33.40	33.40	35.40
10	20.00	20.00	20.00	20.00	20.00	20.00	21.70	25.00
25	9.10	9.10	9.10	9.10	9.50	11.30	13.70	15.80
50	4.80	4.80	4.80	4.90	6.70	8.00	9.70	11.20
100	2.40	2.40	2.40	3.40	4.70	5.70	6.90	7.90
250	1.00	1.00	1.40	2.20	3.00	3.60	4.30	5.00
500	0.50	0.70	1.00	1.50	2.10	2.50	3.10	3.50
1,000	0.20	0.50	0.70	1.10	1.50	1.80	2.20	2.50
2,500	0.10	0.30	0.40	0.70	0.90	1.10	1.40	1.60
5,000	0.05	0.20	0.30	0.50	0.70	0.80	1.00	1.10
10,000	0.03	0.20	0.20	0.30	0.50	0.60	0.70	0.80
25,000	0.01	0.10	0.14	0.20	0.30	0.40	0.40	0.50

Table Finding Guide, Part F

Subjects, by Type, Area, and Table Number

(This guide lists all subjects covered in this report. Data are shown for owner- and renter-occupied housing units. Tables with the prefix letter "A" are for the United States total, "B" for the Northeast Region, "C" for the Midwest Region, "D" for the South Region, and "E" for the West Region)

Subject	United States/Regions			
	Inside SMSA's (In/Not in central city) Outside SMSA's	Income	Value	Gross rent
FUELS AND FUEL COSTS				
House heating fuel	A-1,B-1,C-1,D-1,E-1	A-2,B-2,C-2,D-2,E-2	A-3,B-3,C-3,D-3,E-3	A-4,B-4,C-4,D-4,E-4
Monthly cost paid for electricity				
Monthly cost paid for utility, bottled, tank, or LP gas				
Yearly cost paid for fuel oil, kerosene, coal, wood, etc.				
HEATING AND AIR CONDITIONING				
Heating equipment	A-1,B-1,C-1,D-1,E-1	A-2,B-2,C-2,D-2,E-2	A-3,B-3,C-3,D-3,E-3	A-4,B-4,C-4,D-4,E-4
Insufficient heat:				
Closure of rooms				
Additional heat source				
Rooms lacking specified heat source				
Housing unit uncomfortably cold				
Air conditioning				
HOUSEHOLD CHARACTERISTICS				
Persons	–	–	–	–
	Housing units in structure	Number of rooms per housing unit	Year structure built	Monthly cost paid for electricity
FUELS AND FUEL COSTS				
House heating fuel	A-5,B-5,C-5,D-5,E-5	A-6,B-6,C-6,D-6,E-6	A-7,B-7,C-7,D-7,E-7	A-8,B-8,C-8,D-8,E-8
Monthly cost paid for electricity				
Monthly cost paid for utility, bottled, tank, or LP gas	A-5,B-5,C-5,E-5,E-5	A-6,B-6,C-6,D-6,E-6	A-7,B-7,C-7,D-7,E-7	–
Yearly cost paid for fuel oil, kerosene, coal, wood, etc.				
HEATING AND AIR CONDITIONING				
Heating equipment	A-5,B-5,C-5,D-5,E-5	A-6,B-6,C-6,D-6,E-6	A-7,B-7,C-7,D-7,E-7	A-8,B-8,C-8,D-8,E-8
Insufficient heat:				
Closure of rooms				
Additional heat source				
Rooms lacking specified heat source	A-5,B-5,C-5,D-5,E-5	A-6,B-6,C-6,D-6,E-6	A-7,B-7,C-7,D-7,E-7	–
Housing unit uncomfortably cold				
Air conditioning	A-5,B-5,C-5,D-5,E-5	A-6,B-6,C-6,D-6,E-6	A-7,B-7,C-7,D-7,E-7	A-8,B-8,C-8,D-8,E-8
HOUSEHOLD CHARACTERISTICS				
Persons	–	–	–	A-8,B-8,C-8,D-8,E-8

TABLE FINDING GUIDE—Continued

Subject	United States/Regions—Continued		United States Units occupied by households with—	
	Monthly cost paid for gas	Yearly cost paid for fuel oil, kerosene, coal, wood, etc.	Black householder	Householder of Spanish origin
FUELS AND FUEL COSTS				
House heating fuel	A-9,B-9,C-9,D-9,E-9	A-10,B-10,C-10,D-10,E-10	F-1	G-1
Monthly cost paid for electricity				
Montly cost paid for utility, bottled, tank, or LP gas	—	—	F-1	G-1
Yearly cost paid for fuel oil, kerosene, coal, wood, etc.				
HEATING AND AIR CONDITIONING				
Heating equipment	A-9,B-9,C-9,D-9,E-9	A-10,B-10,C-10,D-10,E-10	F-1	G-1
Insufficient heat:				
Closure of rooms				
Additional heat source	—	—	F-1	G-1
Rooms lacking specified heat source				
Housing unit uncomfortably cold				
Air conditioning	A-9,B-9,C-9,D-9,E-9	A-10,B-10,C-10,D-10,E-10	F-1	G-1
HOUSEHOLD CHARACTERISTICS				
Persons	A-9,B-9,C-9,D-9,E-9	A-10,B-10,C-10,D-10,E-10	—	

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