The 1992 Pacific Northwest Residential Energy Survey – Phase I

Book 6: Selected Crosstabulations for Publicly-Owned Generating Utilities

- Volume G: Eastern Washington
- Volume H: Western Washington
- Volume I: Western Oregon

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PNWRES92

*This document is a product of the
Energy Resources Development
and Implementation Process:*

Define Situation →
Identify Alternatives
Select Strategies
Implement Strategies
Evaluate Performance

Energy Resources Development and Implementation Process

The Energy Resources Program contains all the steps needed to plan for and manage energy resources. This chart reflects that process, with major tasks for each step. Though we display a linear process, it is a simplification; many interactions among the stages take place. Throughout the process, Bonneville asks customers, the Northwest Power Planning Council, utility and environmental groups, the public and others for their advice and comment.

*Customers
Northwest Power
Planning Council
Utility and
Environmental Groups
The Public*

Defining the Resource Picture

To define the resource picture, Bonneville assesses its customers' power requirements for the next 20 years and the supply of existing resources. Bonneville and the Northwest Power Planning Council publish energy demand forecasts, and analysts forecast how much power from existing resources will be available to meet projected uses. The difference must be met by new resources.

Identifying Alternatives

Analysts track potential resources and predict future supplies of conservation and generation resources, including imports and power exchanges. Analysts study all aspects of a resource: reliability, public opinion, cost, environmental impact, regulatory transmission and fuel constraints, and development time. Alternatives considered include opportunities for coordinating hydro system operations with Canada and for power purchases and transfers with Canadian and Southwest utilities.

Selecting Strategies

Using information on loads and resources, Bonneville weighs combinations of resources, their consequences, and public comment to choose the most appropriate and cost-effective resource strategy. The Resource Program documents this strategy.

Implementing Strategies

Fulfilling the plans in the Resource Program is the next step. Working with utilities, resource developers, interest groups, the public, and others, Bonneville sponsors conservation and generation programs and projects. BPA conducts environmental reviews of programs and projects and also provides oversight for generation projects. The result: megawatts of electricity generated or saved for the region.

Evaluating Performance

How well did actions meet BPA's objectives? Answering this question through program evaluation provides information on energy savings, energy production, costs and other measures of program quality. It is BPA's policy to evaluate all energy resource acquisitions.

The 1992 Pacific Northwest Residential Energy Survey - Phase I

(PNWRES92-I)

Book 6: Selected Crosstabulations for Publicly-Owned Generating Utilities

- **Volume G: Eastern Washington**
- **Volume H: Western Washington**
- **Volume I: Western Oregon**

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MASTER

4B

PREFACE

This book constitutes a portion of the *primary documentation* for the **1992 Pacific Northwest Residential Energy Survey, Phase I (PNWRES92-I)**.¹ The complete 33-volume set of primary documentation provides information needed by energy analysts and interpreters with respect to planning, execution, data collection, and data management of the PNWRES92-I process. Thirty of these volumes are devoted to different "views" of the data themselves, with each view having a special purpose or interest as its focus. Analyses and interpretations of these data will be the subjects of forthcoming publications.

Conducted during the late summer and fall months of 1992, PNWRES92-I had the over-arching goal of satisfying basic requirements for a variety of information about the stock of residential units in Bonneville's service region. Surveys with a similar goal were conducted in 1979 and 1983 and were respectively designated PNWRES79 and PNWRES83.

¹ From its planning stages, PNWRES92 was conceived as and intended to be a two-phase study: Phase I, the Telephone Survey, was to provide a modest amount of data on a large number (some 20,000) of Pacific Northwest households; Phase II, the On-Site Survey, was to provide a great deal of data on relatively few (perhaps 2,000-3,000) of the households interviewed in Phase I. Phase I households were intended also to provide a "surrogate population" of the region's households for specially focused future surveys.

PNWRES92-I differed from its two predecessors in several ways. It was designed to ...

... be conducted as a telephone survey—in contrast to an on-site/in-person interview.

.... include all classes of housing units in the Pacific Northwest—in contrast to those that could be reached only through cooperating electric utilities.

... assure coverage of six geographic sub-regions² and three utility types³—in contrast, again, to depending upon the cooperation and effort of a selection of electric utilities.

... provide data on some 20,000 housing units—in contrast to some 4,000-5,000 housing units interviewed in PNWRES79 and PNWRES83.

... provide a surrogate population of Pacific Northwest households as a basis for future, fine-tuned surveys aimed at specific issues or limited data needs.

In order to provide a record of intention and achievement, the 33 coordinated volumes—designated **Volume A through Volume AG**—were prepared by PNWRES92-I's principal contractor, the Applied Management & Planning Group of Los Angeles, CA. These volumes are collected and published in a series of 12 "books," each of which contains a particular subgroup of the 33 volumes:

Book 1: Volumes A and B. The Executive Summary, the Concordance, and the Glossary (A) and the Report on Methodology and the Technical Appendix (B).

Book 2: Volume C. Item-by-item crosstabulations⁴ for the Pacific Northwest Region.

Book 3: Volume D. Item-by-item crosstabulations for the four Bonneville Area Offices (Puget Sound, Lower Columbia, Upper Columbia, and Snake River).

² Western Montana, Idaho, Eastern Washington, Western Washington, Eastern Oregon, and Western Oregon.

³ Publicly-Owned Generating Utilities, Publicly-Owned Non-Generating Utilities, and Investor-Owned Utilities.

⁴ Item-by-item crosstabulations display all responses to each of 80 survey items (excepting confidential/sensitive items like names and addresses) for each of the 15 survey domains and for the Region (**Volume C**), Bonneville's four Area Offices (**Volume D**), and the four Pacific Northwest states (**Volume E**).

- Book 4: Volume E.** Item-by-item crosstabulations for the four Pacific Northwest states served by Bonneville (Western Montana, Idaho, Washington, and Oregon).
- Book 5: Volume F.** Selected crosstabulations⁵ for the Pacific Northwest Region.
- Book 6: Volumes G, H, and I.** Selected crosstabulations for the three publicly-owned *generating* utility domains: Eastern Washington (**G**), Western Washington (**H**), and Western Oregon (**I**).
- Book 7: Volumes J, K, L, M, N, and O.** Selected crosstabulations for the six publicly-owned *non-generating* utility domains: Western Montana (**J**), Idaho (**K**), Eastern Washington (**L**), Western Washington (**M**), Eastern Oregon (**N**), and Western Oregon (**O**).
- Book 8: Volumes P, Q, R, S, T, and U.** Selected crosstabulations for the six investor-owned utility domains: Western Montana (**P**), Idaho (**Q**), Eastern Washington (**R**), Western Washington (**S**), Eastern Oregon (**T**), and Western Oregon (**U**).
- Book 9: Volumes V, W, X, and Y.** Selected crosstabulations for Bonneville's four Area Offices: Puget Sound (**V**), Lower Columbia (**W**), Upper Columbia (**X**), and Snake River (**Y**).
- Book 10: Volumes Z, AA, AB, and AC.** Selected crosstabulations for the four states served by Bonneville: Washington (**Z**), Oregon (**AA**), Idaho (**AB**), and Western Montana (**AC**).
- Book 11: Volumes AD, AE, and AF.** Selected crosstabulations for the three categories of utilities in the Pacific Northwest: Public Generating (**AD**), Public Non-Generating (**AE**), and Investor-Owned (**AF**).
- Book 12: Volume AG.** A report of a post-survey study of PNWRES92-I non-respondents (conducted in late Spring 1993) and their reason(s) for not completing the original survey.

For additional information, comments, or data requests, contact David Mills: 503-230-7505.

To obtain copies of the reports, contact Kim Andersen, End-Use Research Section (RPEE), Bonneville Power Administration, P.O. Box 3621, Portland, OR 97208-3621: 503-230-5712.

*Individually-bound copies of **Volume A (Executive Summary, Concordance, and Glossary)** may be obtained from Bonneville's Public Information Office: 503-230-3055.*

⁵ "Selected crosstabulations" refers to a set of nine survey items of wide interest (Dwelling Type, Ownership Type, Year-of-Construction, Dwelling Size, Primary Space-Heating Fuel, Primary Water-Heating Fuel, Household Income for 1991, Utility Type, and Space-Heating Fuels: Systems and Equipment) that were crosstabulated among themselves and thus yielded 36 two-way tables for each of the several views displayed in **Volumes F through AF**.

1992 Pacific Northwest Residential Energy Survey Phase I

VOLUME G Eastern Washington (Public Generating) Crosstabulations

**Prepared for
Bonneville Power Administration
Portland, Oregon**

**by
Applied Management & Planning Group
Los Angeles**

Contract No.: DE-AC79-92BP25174

OVERVIEW OF 1992 PACIFIC NORTHWEST RESIDENTIAL ENERGY SURVEY

Phase I of the 1992 Pacific Northwest Residential Energy Survey (PNWRES92-I) was the third comprehensive survey of the region to provide data on energy usage, conservation awareness/behaviors and associated consumer characteristics for use in forecasting and planning by the Bonneville Power Administration.

Energy-use data from residential surveys conducted in 1979 and 1983 have been used extensively by Bonneville, the Pacific Northwest Utilities Conference Committee, the Northwest Power Planning Council, and by several of the utilities in the region. Since 1983, both increased fuel prices and conservation programs have impacted consumer behavior and have made it necessary to update the data base used for forecasting. In order to improve the accuracy of these forecasts, more detailed information was required concerning the use of residential energy in the Pacific Northwest. Thus, Bonneville contracted its third regional residential survey, PNWRES92-I.

A team of staff members, representing several constituencies within Bonneville's Office of Energy Resources, designed the data collection as a telephone survey. The Applied Management & Planning Group (AMPG), Los Angeles, California, was selected to carry out the survey, to summarize the data, and to prepare the initial documentation. Interviewing Services of America (ISA), Van Nuys, California, was subcontracted by AMPG to conduct the telephone interviews.

PNWRES92-I used random digit dialing (RDD) and computer-assisted telephone interviewing (CATI). The sample was stratified into 15 sampling domains defined by geographic area and utility type. A total of 20,170 interviews were completed from September 3, 1992, to December 9, 1992.

The survey's full documentation is divided among 33 volumes, which are displayed in the Project Concordance in the next section. All volumes are available both in printed form and on personal computers using **Bonneville Power Plus**. Volumes A and B provide detailed documentation. Volume C shows all survey items for each sampling domain, for the entire region. Each of the data tables in Volumes C through AF show both the sample counts and the weighted population counts, as well as a chart for the population counts.

Volume G presents selected crosstabulations for public generating utilities in Eastern Washington.

For additional information, comments, or data requests, contact David Mills: (503)230-7505. To obtain copies of the reports, contact Kim Andersen, End-Use Research Section (RPEE), Bonneville Power Administration, P.O. Box 3621, Portland, OR 97208-3621; (503)230-5712.

Listing of Tables and Charts

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Volume G: Eastern Washington (Public Generating) Crosstabulations

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Q16: Which of the following best describes your dwelling?
- G-2:** Year of Construction by Dwelling Type
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Q188&
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Q16: Which of the following best describes your dwelling?
- G-8:** Space-Heating Fuels: Systems and Equipment by Dwelling Type
Q16: Which of the following best describes your dwelling?
- G-9:** Year of Construction by Ownership Type
Q20: In what year was your home constructed?
Q18: Do you own your home, rent it, or occupy it under some other arrangement?
- G-10:** Dwelling Size in Square Feet by Ownership Type
Q24: What is the square footage of your home?
Q18: Do you own your home, rent it, or occupy it under some other arrangement?

Tables and Charts Survey Questions

Volume G: Eastern Washington (Public Generating) Crosstabulations

- G-11:** Primary Space-Heating Fuel Type by Ownership Type
Q46: What fuel do you use most to heat your home?
Q18: Do you own your home, rent it, or occupy it under some other arrangement?
- G-12:** Primary Water-Heating Fuel Type by Ownership Type
Q102: What fuel do you use most for heating water in your home?
Q18: Do you own your home, rent it, or occupy it under some other arrangement?
- G-13:** Household Income by Ownership Type
Q186: Was your total household income before taxes for 1991 above or below \$25,000?
Q188&
Q189: What is your household income?
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- G-14:** Utility Type by Ownership Type
Q18: Do you own your home, rent it, or occupy it under some other arrangement?
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Q18: Do you own your home, rent it, or occupy it under some other arrangement?
- G-16:** Dwelling Size in Square Feet by Year of Construction
Q24: What is the square footage of your home?
Q20: In what year was your home constructed?
- G-17:** Primary Space-Heating Fuel Type by Year of Construction
Q46: What fuel do you use most to heat your home?
Q20: In what year was your home constructed?
- G-18:** Primary Water-Heating Fuel Type by Year of Construction
Q102: What fuel do you use most for heating water in your home?
Q20: In what year was your home constructed?
- G-19:** Household Income by Year of Construction
Q186: Was your total household income before taxes for 1991 above or below \$25,000?
Q188&
Q189: What is your household income?
Q20: In what year was your home constructed?

Tables and Charts Survey Questions
Volume G: Eastern Washington (Public Generating) Crosstabulations

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Q46: What fuel do you use most to heat your home?
Q24: What is the square footage of your home?
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Q102: What fuel do you use most for heating water in your home?
Q24: What is the square footage of your home?
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Q186: Was your total household income before taxes for 1991 above or below \$25,000?
Q188&
Q189: What is your household income?
Q24: What is the square footage of your home?
- G-25:** Utility Type by Dwelling Size in Square Feet
Q24: What is the square footage of your home?
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Q24: What is the square footage of your home?
- G-27:** Primary Water-Heating Fuel Type by Primary Space-Heating Fuel Type
Q102: What fuel do you use most for heating water in your home?
Q46: What fuel do you use most to heat your home?
- G-28:** Household Income by Primary Space-Heating Fuel Type
Q186: Was your total household income before taxes for 1991 above or below \$25,000?
Q188&
Q189: What is your household income?
Q46: What fuel do you use most to heat your home?
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Q46: What fuel do you use most to heat your home?
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Q46: What fuel do you use most to heat your home?

Tables and Charts Survey Questions

Volume G: Eastern Washington (Public Generating) Crosstabulations

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Q188&
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Q102: What fuel do you use most for heating water in your home?
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Q102: What fuel do you use most for heating water in your home?
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Q188&
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Q186: Was your total household income before taxes for 1991 above or below \$25,000?
Q188&
Q189: What is your household income?
- G-36:** Space-Heating Fuels: Systems and Equipment by Utility Type

Table G-1: Ownership Type by Dwelling Type
Q18 by Q16

Raw Data

OWNERSHIP TYPE	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Own	300	1,146	13	1	1	19	4	1,484
Rent or Lease	38	222	52	4	20	81	1	418
Occupy without Payment	16	31	1	0	1	5	0	54
Don't Know	0	1	0	0	0	0	0	1
Refused	0	0	0	0	0	0	0	0
TOTAL	354	1,400	66	5	22	105	5	1,957

Weighted Data

OWNERSHIP TYPE	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Own	9,026	34,481	391	30	30	572	120	44,650
Rent or Lease	1,143	6,680	1,565	120	602	2,437	30	12,577
Occupy without Payment	481	933	30	0	30	150	0	1,625
Don't Know	0	30	0	0	0	0	0	30
Refused	0	0	0	0	0	0	0	0
TOTAL	10,651	42,123	1,986	150	662	3,159	150	58,882

Weighted Data

Chart G 1: Ownership Type by Dwelling Type
Q18 by Q16

Table G-2: Year of Construction by Dwelling Type
Q20 by Q16

Raw Data

YEAR OF CONSTRUCTION	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Before 1950	4	340	8	1	1	7	0	361
1950-59	9	269	7	0	0	4	1	290
1960-69	21	157	5	0	0	7	0	190
1970-78	122	180	5	0	3	20	1	331
1979-85	93	121	5	1	3	12	2	237
1986-88	32	51	5	1	1	4	0	94
1989-92	36	81	4	0	0	6	0	127
Don't Know	36	201	27	2	14	45	1	326
Refused	1	0	0	0	0	0	0	1
TOTAL	354	1,400	66	5	22	105	5	1,957

Weighted Data

YEAR OF CONSTRUCTION	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Before 1950	120	10,230	241	30	30	211	0	10,862
1950-59	271	8,094	211	0	0	120	30	8,725
1960-69	632	4,724	150	0	0	211	0	5,717
1970-78	3,671	5,416	150	0	90	602	30	9,959
1979-85	2,798	3,641	150	30	90	361	60	7,131
1986-88	963	1,534	150	30	30	120	0	2,828
1989-92	1,083	2,437	120	0	0	181	0	3,821
Don't Know	1,083	6,048	812	60	421	1,354	30	9,809
Refused	30	0	0	0	0	0	0	30
TOTAL	10,651	42,123	1,986	150	662	3,159	150	58,882

Weighted Data

Chart G-2: Year of Construction by Dwelling Type

Q20 by Q16

Table G-3: Dwelling Size in Square Feet by Dwelling Type

Q24 by Q16

Raw Data

DWELLING SIZE IN SQUARE FEET	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
< 750	14	23	1	1	0	6	0	45
750 to < 1000	58	80	7	0	2	21	2	170
1000 to < 1250	46	135	7	0	5	10	0	203
1250 to < 1500	47	141	4	0	1	1	1	195
1500 to < 1750	39	123	4	0	0	5	0	171
1750 to < 2000	18	121	4	0	1	3	1	148
2000 to < 2500	11	194	4	0	0	1	0	210
2500 to < 3000	2	100	2	0	0	1	0	105
3000 or >	8	110	2	1	0	3	0	124
Don't Know	111	370	31	3	13	54	1	583
Refused	0	3	0	0	0	0	0	3
TOTAL	354	1,400	66	5	22	105	5	1,957

Weighted Data

DWELLING SIZE IN SQUARE FEET	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
< 750	421	692	30	30	0	181	0	1,354
750 to < 1000	1,745	2,407	211	0	60	632	60	5,115
1000 to < 1250	1,384	4,062	211	0	150	301	0	6,108
1250 to < 1500	1,414	4,242	120	0	30	30	30	5,867
1500 to < 1750	1,173	3,701	120	0	0	150	0	5,145
1750 to < 2000	542	3,641	120	0	30	90	30	4,453
2000 to < 2500	331	5,837	120	0	0	30	0	6,318
2500 to < 3000	60	3,009	60	0	0	30	0	3,159
3000 or >	241	3,310	60	30	0	90	0	3,731
Don't Know	3,340	11,133	933	90	391	1,625	30	17,541
Refused	0	90	0	0	0	0	0	90
TOTAL	10,651	42,123	1,986	150	662	3,159	150	58,882

Weighted Data

Chart G-3: Dwelling Size in Square Feet by Dwelling Type

Q24 by Q16

Table G-4: Primary Space-Heating Fuel Type by Dwelling Type
Q46 by Q16

Raw Data

PRIMARY SPACE-HEATING FUEL TYPE	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Electricity	336	1,168	52	3	17	86	4	1,666
Natural Gas	1	52	2	0	0	2	0	57
Fuel Oil	1	48	0	0	0	0	0	49
Wood or Presto Logs	15	122	0	0	0	1	0	138
Propane or Bottled Gas	1	3	0	0	0	0	0	4
Kerosene	0	0	0	0	0	0	0	0
Coal	0	0	0	0	0	0	0	0
Solar	0	1	0	0	0	0	0	1
Geothermal	0	0	0	0	0	0	0	0
Other	0	1	0	0	0	0	0	1
No Heat	0	1	0	0	0	0	0	1
Not Asked	0	0	12	2	5	16	1	36
Don't Know	0	3	0	0	0	0	0	3
Refused	0	1	0	0	0	0	0	1
TOTAL	354	1,400	66	5	22	105	5	1,957

Table G-4: Primary Space-Heating Fuel Type by Dwelling Type
Q46 by Q16

Weighted Data

PRIMARY SPACE-HEATING FUEL TYPE	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Electricity	10,110	35,143	1,565	90	511	2,588	120	50,126
Natural Gas	30	1,565	60	0	0	60	0	1,715
Fuel Oil	30	1,444	0	0	0	0	0	1,474
Wood or Presto Logs	451	3,671	0	0	0	30	0	4,152
Propane or Bottled Gas	30	90	0	0	0	0	0	120
Kerosene	0	0	0	0	0	0	0	0
Coal	0	0	0	0	0	0	0	0
Solar	0	30	0	0	0	0	0	30
Geothermal	0	0	0	0	0	0	0	0
Other	0	30	0	0	0	0	0	30
No Heat	0	30	0	0	0	0	0	30
Not Asked	0	0	361	60	150	481	30	1,083
Don't Know	0	90	0	0	0	0	0	90
Refused	0	30	0	0	0	0	0	30
TOTAL	10,651	42,123	1,986	150	662	3,159	150	58,882

Weighted Data

Chart G-4: Primary Space-Heating Fuel Type by Dwelling Type

Q46 by Q16

Table G-5: Primary Water-Heating Fuel Type by Dwelling Type

Q102 by Q16

Raw Data

PRIMARY WATER-HEATING FUEL TYPE	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Electricity	346	1 363	49	3	18	69	4	1,852
Natural Gas	2	22	3	0	0	0	0	27
Fuel Oil	0	0	0	0	0	0	0	0
Wood	0	1	0	0	0	0	0	1
Propane or Bottled Gas	4	7	0	0	0	0	0	11
Solar	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
No Hot Water In Home	0	1	0	0	0	0	0	1
Not Asked	0	0	14	2	4	36	1	57
Don't Know	2	6	0	0	0	0	0	8
Refused	0	0	0	0	0	0	0	0
TOTAL	354	1,400	66	5	22	105	5	1,957

Weighted Data

PRIMARY WATER-HEATING FUEL TYPE	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Electricity	10,410	41 010	1,474	90	542	2,076	120	55,723
Natural Gas	50	662	90	0	0	0	0	812
Fuel Oil	0	0	0	0	0	0	0	0
Wood	0	30	0	0	0	0	0	30
Propane or Bottled Gas	120	211	0	0	0	0	0	331
Solar	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
No Hot Water In Home	0	30	0	0	0	0	0	30
Not Asked	0	0	421	60	120	1 083	30	1,715
Don't Know	60	181	0	0	0	0	0	241
Refused	0	0	0	0	0	0	0	0
TOTAL	10,651	42,123	1,986	150	662	3,159	150	58,882

Weighted Data

Chart G-5: Primary Water-Heating Fuel Type by Dwelling Type
Q102 by Q16

Table G-6: Household Income by Dwelling Type
Q186, Q188, Q189 by Q16

Raw Data

HOUSEHOLD INCOME	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Below \$5,000	7	20	2	1	2	8	0	40
\$5,000 to < \$10,000	25	54	7	1	4	17	1	109
\$10,000 to < \$15,000	43	85	4	0	1	14	1	148
\$15,000 to < \$20,000	28	71	7	0	0	11	0	117
\$20,000 to < \$25,000	51	136	10	0	0	6	0	203
\$25,000 to < \$30,000	41	158	6	0	2	10	0	217
\$30,000 to < \$40,000	41	224	9	0	4	8	1	287
\$40,000 to < \$50,000	23	138	2	0	1	4	0	168
\$50,000 to < \$60,000	9	94	2	0	2	1	0	108
\$60,000 to < \$80,000	7	55	2	1	0	3	0	68
\$80,000 to < \$100,000	3	29	1	0	1	1	1	36
\$100,000 or More	3	25	2	1	0	1	0	32
Don't Know	29	123	5	1	3	13	1	175
Refused	44	188	7	0	2	8	0	249
TOTAL	354	1,400	66	5	22	105	5	1,957

Table G-6: Household Income by Dwelling Type

Q186, Q188, Q189 by Q16

Weighted Data

HOUSEHOLD INCOME	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Below \$5,000	211	602	60	30	60	241	0	1,204
\$5,000 to < \$10,000	752	1,625	211	30	120	511	30	3,280
\$10,000 to < \$15,000	1,294	2,557	120	0	30	421	30	4,453
\$15,000 to < \$20,000	842	2,136	211	0	0	331	0	3,520
\$20,000 to < \$25,000	1,534	4,092	301	0	0	181	0	6,108
\$25,000 to < \$30,000	1,234	4,754	181	0	60	301	0	6,529
\$30,000 to < \$40,000	1,234	6,740	271	0	120	241	30	8,635
\$40,000 to < \$50,000	692	4,152	60	0	30	120	0	5,055
\$50,000 to < \$60,000	271	2,828	60	0	60	30	0	3,249
\$60,000 to < \$80,000	211	1,655	60	30	0	90	0	2,046
\$80,000 to < \$100,000	90	873	30	0	30	30	30	1,083
\$100,000 or More	90	752	60	30	0	30	0	963
Don't Know	873	3,701	150	30	90	391	30	5,265
Refused	1,324	5,657	211	0	60	241	0	7,492
TOTAL	10,651	42,123	1,986	150	662	3,159	150	58,882

Weighted Data

Chart G-6: Household Income by Dwelling Type

Q186, Q188, Q189 by Q16

Table G-7: Utility Type by Dwelling Type
TYPE by Q16

Raw Data

UTILITY TYPE	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Public Generating	354	1,400	66	5	22	105	5	1,957
Public Non-Generating	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0
TOTAL	354	1,400	66	5	22	105	5	1,957

Weighted Data

UTILITY TYPE	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Public Generating	10,651	42,123	1,986	150	662	3,159	150	58,882
Public Non-Generating	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0
TOTAL	10,651	42,123	1,986	150	662	3,159	150	58,882

Weighted Data

Chart G-7: Utility Type by Dwelling Type
TYPE by Q16

Table G-8: Space-Heating Fuels: Systems and Equipment by Dwelling Type
HEAT_EQP by Q16

Raw Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	DWELLING TYPE							TOTAL
		Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Multi-Unit:	Central Heat - All Units	0	0	6	1	4	14	1	26
	Central Heat - Several Units	0	0	5	1	0	2	0	8
	Unit Not Heated	0	0	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	0	6	0	0	0	0	0	6
	Wall, Floor, or Ceiling Units	1	8	1	0	0	0	0	10
	Portable Units	0	0	0	0	0	0	0	0
	Central Furnace	2	87	1	0	0	2	0	92
	Other	0	1	0	0	0	0	0	1
Electricity:	Heat Pump	22	127	2	0	0	3	0	154
	Portable Room Heaters	6	24	1	0	0	0	0	31
	Radiant Panels	13	78	5	0	1	7	3	107
	Steam or Hot Water Radiators	0	9	0	0	0	0	0	9
	Central Furnace	274	439	13	1	5	12	1	745
	Baseboard or Wall Units	18	489	31	2	11	60	0	611
	Other	0	1	0	0	0	1	0	2
Wood:	Free-Standing Stove	13	90	0	0	0	1	0	104
	Free-Standing Pellet Stove	1	6	0	0	0	0	0	7
	Central Furnace	0	10	0	0	0	0	0	10
	Fireplace with an Insert	0	10	0	0	0	0	0	10
	Fireplace without an Insert	1	6	0	0	0	0	0	7
Other:	Solar	0	1	0	0	0	0	0	1
	Geothermal	0	0	0	0	0	0	0	0
	Other	0	1	0	0	0	0	0	1
	No Heat	0	1	0	0	0	0	0	1
	Don't Know	3	4	1	0	1	3	0	12
	Refused	0	2	0	0	0	0	0	2
	TOTAL	354	1,400	66	5	22	105	5	1,957

Table G-8: Space-Heating Fuels: Systems and Equipment by Dwelling Type
HEAT_EQP by Q16

Weighted Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	DWELLING TYPE							TOTAL
		Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Multi-Unit:	Central Heat - All Units	0	0	181	30	120	421	30	782
	Central Heat - Several Units	0	0	150	30	0	60	0	241
	Unit Not Heated	0	0	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	0	181	0	0	0	0	0	181
	Wall, Floor, or Ceiling Units	30	241	30	0	0	0	0	301
	Portable Units	0	0	0	0	0	0	0	0
	Central Furnace	60	2,618	30	0	0	60	0	2,768
	Other	0	30	0	0	0	0	0	30
Electricity:	Heat Pump	662	3,821	60	0	0	90	0	4,634
	Portable Room Heaters	181	722	30	0	0	0	0	933
	Radiant Panels	391	2,347	150	0	30	211	90	3,219
	Steam or Hot Water Radiators	0	271	0	0	0	0	0	271
	Central Furnace	8,244	13,209	391	30	150	361	30	22,415
	Baseboard or Wall Units	542	14,713	933	50	331	1,805	0	18,384
	Other	0	30	0	0	0	30	0	60
Wood:	Free-Standing Stove	391	2,708	0	0	0	30	0	3,129
	Free-Standing Pellet Stove	30	181	0	0	0	0	0	211
	Central Furnace	0	301	0	0	0	0	0	301
	Fireplace with an Insert	0	301	0	0	0	0	0	301
	Fireplace without an Insert	30	181	0	0	0	0	0	211
Other:	Solar	0	30	0	0	0	0	0	30
	Geothermal	0	0	0	0	0	0	0	0
	Other	0	30	0	0	0	0	0	30
	No Heat	0	30	0	0	0	0	0	30
	Don't Know	90	120	30	0	30	90	0	361
	Refused	0	60	0	0	0	0	0	60
	TOTAL	10,651	42,123	1,986	150	662	3,159	150	58,882

Weighted Data

Chart G-8: Space-Heating Fuels: Systems and Equipment by Dwelling Type

HEAT_EQP by Q16

Space-Heating Fuels: Systems and Equipment

Table G-9: Year of Construction by Ownership Type
Q20 by Q18

Raw Data

YEAR OF CONSTRUCTION	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Before 1950	286	66	9	0	0	361
1950-59	238	46	6	0	0	290
1960-69	155	29	6	0	0	190
1970-78	287	35	9	0	0	331
1979-85	205	26	6	0	0	237
1986-88	83	10	1	0	0	94
1989-92	114	11	1	1	0	127
Don't Know	115	195	16	0	0	326
Refused	1	0	0	0	0	1
TOTAL	1,484	418	54	1	0	1,957

Weighted Data

YEAR OF CONSTRUCTION	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Before 1950	8,605	1,986	271	0	0	10,862
1950-59	7,161	1,384	181	0	0	8,725
1960-69	4,664	873	181	0	0	5,717
1970-78	8,635	1,053	271	0	0	9,959
1979-85	6,168	782	181	0	0	7,131
1986-88	2,497	301	30	0	0	2,828
1989-92	3,430	331	30	30	0	3,821
Don't Know	3,460	5,867	481	0	0	9,809
Refused	30	0	0	0	0	30
TOTAL	44,650	12,577	1,625	30	0	58,882

Weighted Data

Chart G-9: Year of Construction by Ownership Type
Q20 by Q18

Table G-10: Dwelling Size in Square Feet by Ownership Type

Q24 by Q18

Raw Data

DWELLING SIZE IN SQUARE FEET	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
< 750	21	21	3	0	0	45
750 to < 1000	101	64	5	0	0	170
1000 to < 1250	153	46	4	0	0	203
1250 to < 1500	159	33	3	0	0	195
1500 to < 1750	150	18	3	0	0	171
1750 to < 2000	133	12	3	0	0	148
2000 to < 2500	192	14	4	0	0	210
2500 to < 3000	100	2	3	0	0	105
3000 or >	115	8	1	0	0	124
Don't Know	357	200	25	1	0	583
Refused	3	0	0	0	0	3
TOTAL	1,484	418	54	1	0	1,957

Weighted Data

DWELLING SIZE IN SQUARE FEET	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
< 750	632	632	90	0	0	1,354
750 to < 1000	3,039	1,926	150	0	0	5,115
1000 to < 1250	4,603	1,384	120	0	0	6,108
1250 to < 1500	4,784	993	90	0	0	5,867
1500 to < 1750	4,513	542	90	0	0	5,145
1750 to < 2000	4,002	361	90	0	0	4,453
2000 to < 2500	5,777	421	120	0	0	6,318
2500 to < 3000	3,009	60	90	0	0	3,159
3000 or >	3,460	241	30	0	0	3,731
Don't Know	10,741	6,018	752	30	0	17,541
Refused	90	0	0	0	0	90
TOTAL	44,650	12,577	1,625	30	0	58,882

Weighted Data

Chart G-10: Dwelling Size in Square Feet by Ownership Type
Q24 by Q18

Table G-11: Primary Space-Heating Fuel Type by Ownership Type
Q46 by Q18

Raw Data

PRIMARY SPACE-HEATING FUEL TYPE	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Electricity	1,263	352	50	1	0	1,666
Natural Gas	42	15	0	0	0	57
Fuel Oil	44	5	0	0	0	49
Wood or Presto Logs	118	19	1	0	0	138
Propane or Bottled Gas	4	0	0	0	0	4
Kerosene	0	0	0	0	0	0
Coal	0	0	0	0	0	0
Solar	1	0	0	0	0	1
Geothermal	0	0	0	0	0	0
Other	1	0	0	0	0	1
No Heat	0	1	0	0	0	1
Not Asked	9	24	3	0	0	36
Don't Know	1	2	0	0	0	3
Refused	1	0	0	0	0	1
TOTAL	1,484	418	54	1	0	1,957

Table G-11: Primary Space-Heating Fuel Type by Ownership Type
Q46 by Q18

Weighted Data

PRIMARY SPACE-HEATING FUEL TYPE	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Electricity	38,001	10,591	1,504	30	0	50,126
Natural Gas	1,264	451	0	0	0	1,715
Fuel Oil	1,324	150	0	0	0	1,474
Wood or Presto Logs	3,550	572	30	0	0	4,152
Propane or Bottled Gas	120	0	0	0	0	120
Kerosene	0	0	0	0	0	0
Coal	0	0	0	0	0	0
Solar	30	0	0	0	0	30
Geothermal	0	0	0	0	0	0
Other	30	0	0	0	0	30
No Heat	0	30	0	0	0	30
Not Asked	271	722	90	0	0	1,083
Don't Know	30	60	0	0	0	90
Refused	30	0	0	0	0	30
TOTAL	44,650	12,577	1,625	30	0	58,882

Weighted Data

Chart G-11: Primary Space-Heating Fuel Type by Ownership Type
Q46 by Q18

Table G-12: Primary Water-Heating Fuel Type by Ownership Type

Q102 by Q18

Raw Data

PRIMARY WATER-HEATING FUEL TYPE	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Electricity	1,437	365	49	1	0	1,852
*Natural Gas	20	7	0	0	0	27
Fuel Oil	0	0	0	0	0	0
Wood	1	0	0	0	0	1
Propane or Bottled Gas	11	0	0	0	0	11
Solar	0	0	0	0	0	0
Other	0	0	0	0	0	0
No Hot Water In Home	1	0	0	0	0	1
Not Asked	10	43	4	0	0	57
Don't Know	4	3	1	0	0	8
Refused	0	0	0	0	0	0
TOTAL	1,484	418	54	1	0	1,957

Weighted Data

PRIMARY WATER-HEATING FUEL TYPE	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Electricity	43,236	10,982	1,474	30	0	55,723
Natural Gas	602	211	0	0	0	812
Fuel Oil	0	0	0	0	0	0
Wood	30	0	0	0	0	30
Propane or Bottled Gas	331	0	0	0	0	331
Solar	0	0	0	0	0	0
Other	0	0	0	0	0	0
No Hot Water In Home	30	0	0	0	0	30
Not Asked	301	1,294	120	0	0	1,715
Don't Know	120	90	30	0	0	241
Refused	0	0	0	0	0	0
TOTAL	44,650	12,577	1,625	30	0	58,882

Weighted Data

Chart G-12: Primary Water-Heating Fuel Type by Ownership Type
Q102 by Q18

Table G-13: Household Income by Ownership Type
Q186, Q188, Q189 by Q18

Raw Data

HOUSEHOLD INCOME	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Below \$5,000	16	22	2	0	0	40
\$5,000 to < \$10,000	55	50	4	0	0	109
\$10,000 to < \$15,000	94	49	4	1	0	148
\$15,000 to < \$20,000	69	45	3	0	0	117
\$20,000 to < \$25,000	144	49	10	0	0	203
\$25,000 to < \$30,000	167	43	7	0	0	217
\$30,000 to < \$40,000	227	50	10	0	0	287
\$40,000 to < \$50,000	152	14	2	0	0	168
\$50,000 to < \$60,000	95	11	2	0	0	108
\$60,000 to < \$80,000	59	4	5	0	0	68
\$80,000 to < \$100,000	32	4	0	0	0	36
\$100,000 or More	32	0	0	0	0	32
Don't Know	123	49	3	0	0	175
Refused	219	28	2	0	0	249
TOTAL	1,484	418	54	1	0	1,957

Table G-13: Household Income by Ownership Type
Q186, Q188, Q189 by Q18

Weighted Data

HOUSEHOLD INCOME	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Below \$5,000	481	662	60	0	0	1,204
\$5,000 to < \$10,000	1,655	1,504	120	0	0	3,280
\$10,000 to < \$15,000	2,828	1,474	120	30	0	4,453
\$15,000 to < \$20,000	2,076	1,354	90	0	0	3,520
\$20,000 to < \$25,000	4,333	1,474	301	0	0	6,108
\$25,000 to < \$30,000	5,025	1,294	211	0	0	6,529
\$30,000 to < \$40,000	6,830	1,504	301	0	0	8,635
\$40,000 to < \$50,000	4,573	421	60	0	0	5,055
\$50,000 to < \$60,000	2,858	331	60	0	0	3,249
\$60,000 to < \$80,000	1,775	120	150	0	0	2,046
\$80,000 to < \$100,000	963	120	0	0	0	1,083
\$100,000 or More	963	0	0	0	0	963
Don't Know	3,701	1,474	90	0	0	5,265
Refused	6,589	842	60	0	0	7,492
TOTAL	44,650	12,577	1,625	30	0	58,882

Weighted Data

Chart G-13: Household Income by Ownership Type
Q186, Q188, Q189 by Q18

Table G-14: Utility Type by Ownership Type
TYPE by Q18

Raw Data

UTILITY TYPE	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Public Generating	1,484	418	54	1	0	1,957
Public Non-Generating	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0
TOTAL	1,484	418	54	1	0	1,957

Weighted Data

UTILITY TYPE	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Public Generating	44,650	12,577	1,625	30	0	58,882
Public Non-Generating	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0
TOTAL	44,650	12,577	1,625	30	0	58,882

Weighted Data

Chart G-14: Utility Type by Ownership Type
TYPE by Q18

Table G-15: Space-Heating Fuels: Systems and Equipment by Ownership Type
HEAT_EQP by Q18

Raw Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	OWNERSHIP TYPE					TOTAL
		Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	8	15	3	0	0	26
	Central Heat - Several Units	1	7	0	0	0	8
	Unit Not Heated	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	5	1	0	0	0	6
	Wall, Floor, or Ceiling Units	4	6	0	0	0	10
	Portable Units	0	0	0	0	0	0
	Central Furnace	79	13	0	0	0	92
	Other	1	0	0	0	0	1
Electricity:	Heat Pump	145	7	2	0	0	154
	Portable Room Heaters	17	11	3	0	0	31
	Radiant Panels	72	31	4	0	0	107
	Steam or Hot Water Radiators	7	1	0	1	0	9
	Central Furnace	635	92	18	0	0	745
	Baseboard or Wall Units	383	205	23	0	0	611
	Other	1	1	0	0	0	2
Wood:	Free-Standing Stove	88	16	0	0	0	104
	Free-Standing Pellet Stove	7	0	0	0	0	7
	Central Furnace	9	1	0	0	0	10
	Fireplace with an Insert	8	1	1	0	0	10
	Fireplace without an Insert	6	1	0	0	0	7
Other:	Solar	1	0	0	0	0	1
	Geothermal	0	0	0	0	0	0
	Other	1	0	0	0	0	1
	No Heat	0	1	0	0	0	1
	Don't Know	4	8	0	0	0	12
	Refused	2	0	0	0	0	2
	TOTAL	1,484	418	54	1	0	1,957

Table G-15: Space-Heating Fuels: Systems and Equipment by Ownership Type
HEAT_EQP by Q18

Weighted Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	OWNERSHIP TYPE					TOTAL
		Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	241	451	90	0	0	782
	Central Heat - Several Units	30	211	0	0	0	241
	Unit Not Heated	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	150	30	0	0	0	181
	Wall, Floor, or Ceiling Units	120	181	0	0	0	301
	Portable Units	0	0	0	0	0	0
	Central Furnace	2,377	391	0	0	0	2,768
	Other	30	0	0	0	0	30
Electricity:	Heat Pump	4,363	211	60	0	0	4,634
	Portable Room Heaters	511	331	90	0	0	933
	Radiant Panels	2,166	933	120	0	0	3,219
	Steam or Hot Water Radiators	211	30	0	30	0	271
	Central Furnace	19,106	2,768	542	0	0	22,415
	Baseboard or Wall Units	11,524	6,168	692	0	0	18,384
	Other	30	30	0	0	0	60
Wood:	Free-Standing Stove	2,648	481	0	0	0	3,129
	Free-Standing Pellet Stove	211	0	0	0	0	211
	Central Furnace	271	30	0	0	0	301
	Fireplace with an Insert	241	30	30	0	0	301
	Fireplace without an Insert	181	30	0	0	0	211
Other:	Solar	30	0	0	0	0	30
	Geothermal	0	0	0	0	0	0
	Other	30	0	0	0	0	30
	No Heat	0	30	0	0	0	30
	Don't Know	120	241	0	0	0	361
	Refused	60	0	0	0	0	60
	TOTAL	44,650	12,577	1,625	30	0	58,882

Weighted Data

Chart G-15: Space-Heating Fuels: Systems and Equipment by Ownership Type
HEAT_EQP by Q18

Space-Heating Fuels: Systems and Equipment

Table G-16: Dwelling Size in Square Feet by Year of Construction
Q24 by Q20

Raw Data

DWELLING SIZE IN SQUARE FEET	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
< 750	5	9	5	3	5	3	1	14	0	45
750 to < 1000	37	22	9	34	27	6	7	28	0	170
1000 to < 1250	33	52	25	28	29	11	5	20	0	203
1250 to < 1500	29	44	22	40	24	5	12	19	0	195
1500 to < 1750	28	23	22	32	19	10	26	11	0	171
1750 to < 2000	35	20	16	18	31	14	12	2	0	148
2000 to < 2500	31	33	30	44	31	14	18	9	0	210
2500 to < 3000	18	10	12	30	7	8	16	4	0	105
3000 or >	21	12	9	24	21	12	18	7	0	124
Don't Know	123	64	40	78	43	11	12	211	1	583
Refused	1	1	0	0	0	0	0	1	0	3
TOTAL	361	290	190	331	237	94	127	326	1	1,957

Weighted Data

DWELLING SIZE IN SQUARE FEET	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
< 750	150	271	150	90	150	90	30	421	0	1,354
750 to < 1000	1,113	662	271	1,023	812	181	211	842	0	5,115
1000 to < 1250	993	1,565	752	842	873	331	150	602	0	6,108
1250 to < 1500	873	1,324	662	1,204	722	150	361	572	0	5,867
1500 to < 1750	842	692	662	963	572	301	782	331	0	5,145
1750 to < 2000	1,053	602	481	542	933	421	361	60	0	4,453
2000 to < 2500	933	993	903	1,324	933	421	542	271	0	6,318
2500 to < 3000	542	301	361	903	211	241	481	120	0	3,159
3000 or >	632	361	271	722	632	361	542	211	0	3,731
Don't Know	3,701	1,926	1,204	2,347	1,294	331	361	6,349	30	17,541
Refused	30	30	0	0	0	0	0	30	0	90
TOTAL	10,862	8,725	5,717	9,959	7,131	2,828	3,821	9,809	30	58,882

Weighted Data

Chart G-16: Dwelling Size in Square Feet by Year of Construction
Q24 by Q20

Table G-17: Primary Space-Heating Fuel Type by Year of Construction
Q46 by Q20

Raw Data

PRIMARY SPACE-HEATING FUEL TYPE	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Electricity	275	250	162	296	205	86	121	270	1	1,666
Natural Gas	17	10	9	2	2	0	0	17	0	57
Fuel Oil	20	18	3	1	0	0	0	7	0	49
Wood or Presto Logs	42	11	11	24	23	7	5	15	0	138
Propane or Bottled Gas	1	1	0	1	0	0	1	0	0	4
Kerosene	0	0	0	0	0	0	0	0	0	0
Coal	0	0	0	0	0	0	0	0	0	0
Solar	0	0	0	0	1	0	0	0	0	1
Geothermal	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	1	0	0	0	0	0	1
No Heat	0	0	0	0	0	0	0	1	0	1
Not Asked	4	0	5	6	6	1	0	14	0	36
Don't Know	1	0	0	0	0	0	0	2	0	3
Refused	1	0	0	0	0	0	0	0	0	1
TOTAL	361	290	190	331	237	94	127	326	1	1,957

Table G-17: Primary Space-Heating Fuel Type by Year of Construction

Q46 by Q20

Weighted Data

PRIMARY SPACE-HEATING FUEL TYPE	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Electricity	8,274	7,522	4,874	8,906	6,168	2,588	3,641	8,124	30	50,126
Natural Gas	511	301	271	60	60	0	0	511	0	1,715
Fuel Oil	602	542	90	30	0	0	0	211	0	1,474
Wood or Presto Logs	1,264	331	331	722	692	211	150	451	0	4,152
Propane or Bottled Gas	30	30	0	30	0	0	30	0	0	120
Kerosene	0	0	0	0	0	0	0	0	0	0
Coal	0	0	0	0	0	0	0	0	0	0
Solar	0	0	0	0	30	0	0	0	0	30
Geothermal	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	30	0	0	0	0	0	30
No Heat	0	0	0	0	0	0	0	30	0	30
Not Asked	120	0	150	181	181	30	0	421	0	1,083
Don't Know	30	0	0	0	0	0	0	60	0	90
Refused	30	0	0	0	0	0	0	0	0	30
TOTAL	10,862	8,725	5,717	9,959	7,131	2,828	3,821	9,809	30	58,882

Weighted Data

Chart G-17: Primary Space-Heating Fuel Type by Year of Construction

Q46 by Q20

Table G-18: Primary Water-Heating Fuel Type by Year of Construction

Q102 by Q20

Raw Data

PRIMARY WATER-HEATING FUEL TYPE	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Electricity	337	284	177	320	227	91	125	290	1	1,852
Natural Gas	10	3	5	2	0	0	0	7	0	27
Fuel Oil	0	0	0	0	0	0	0	0	0	0
Wood	0	0	0	0	1	0	0	0	0	1
Propane or Bottled Gas	2	2	1	1	3	1	1	0	0	11
Solar	0	0	0	0	0	0	0	0	0	0
Other	1	0	0	0	0	0	0	0	0	1
No Hot Water In Home	0	0	0	0	0	0	0	0	0	0
Not Asked	10	1	7	7	6	2	0	24	0	57
Don't Know	1	0	0	1	0	0	1	5	0	8
Refused	0	0	0	0	0	0	0	0	0	0
TOTAL	361	290	190	331	237	94	127	326	1	1,957

Weighted Data

PRIMARY WATER-HEATING FUEL TYPE	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Electricity	10,140	8,545	5,326	9,628	6,830	2,738	3,761	8,725	30	55,723
Natural Gas	301	90	150	60	0	0	0	211	0	812
Fuel Oil	0	0	0	0	0	0	0	0	0	0
Wood	0	0	0	0	30	0	0	0	0	30
Propane or Bottled Gas	60	60	30	30	90	30	30	0	0	331
Solar	0	0	0	0	0	0	0	0	0	0
Other	30	0	0	0	0	0	0	0	0	30
No Hot Water In Home	0	0	0	0	0	0	0	0	0	0
Not Asked	301	30	211	211	181	60	0	722	0	1,715
Don't Know	30	0	0	30	0	0	30	150	0	241
Refused	0	0	0	0	0	0	0	0	0	0
TOTAL	10,862	8,725	5,717	9,959	7,131	2,828	3,821	9,809	30	58,882

Weighted Data

Chart G-18: Primary Water-Heating Fuel Type by Year of Construction
Q102 by Q20

Table G-19: Household Income by Year of Construction

Q186, Q188, Q189 by Q20

Raw Data

HOUSEHOLD INCOME	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Below \$5,000	11	4	2	4	5	0	2	12	0	40
\$5,000 to < \$10,000	25	11	7	17	11	3	5	30	0	109
\$10,000 to < \$15,000	30	20	10	23	16	5	2	42	0	148
\$15,000 to < \$20,000	22	17	13	18	8	3	3	33	0	117
\$20,000 to < \$25,000	47	28	22	40	21	5	8	32	0	203
\$25,000 to < \$30,000	50	32	23	39	21	12	8	32	0	217
\$30,000 to < \$40,000	52	61	29	42	34	17	17	35	0	287
\$40,000 to < \$50,000	23	19	19	36	31	14	18	8	0	168
\$50,000 to < \$60,000	12	15	14	26	16	10	10	5	0	108
\$60,000 to < \$80,000	8	6	9	16	11	5	7	6	0	68
\$80,000 to < \$100,000	4	5	3	6	9	6	2	1	0	36
\$100,000 or More	5	1	6	4	5	2	9	0	0	32
Don't Know	36	31	9	18	17	2	11	50	1	175
Refused	36	40	24	42	32	10	25	40	0	249
TOTAL	361	290	190	331	237	94	127	326	1	1,957

Table G-19: Household Income by Year of Construction

Q186, Q188, Q189 by Q20

Weighted Data

HOUSEHOLD INCOME	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Below \$5,000	331	120	60	120	150	0	60	361	0	1,204
\$5,000 to < \$10,000	752	331	211	511	331	90	150	903	0	3,280
\$10,000 to < \$15,000	903	602	301	692	481	150	60	1,264	0	4,453
\$15,000 to < \$20,000	662	511	391	542	241	90	90	993	0	3,520
\$20,000 to < \$25,000	1,414	842	662	1,204	632	150	241	963	0	6,108
\$25,000 to < \$30,000	1,504	963	692	1,173	632	361	241	963	0	6,529
\$30,000 to < \$40,000	1,565	1,835	873	1,264	1,023	511	511	1,053	0	8,635
\$40,000 to < \$50,000	692	572	572	1,083	933	421	542	241	0	5,055
\$50,000 to < \$60,000	361	451	421	782	481	301	301	150	0	3,249
\$60,000 to < \$80,000	241	181	271	481	331	150	211	181	0	2,046
\$80,000 to < \$100,000	120	150	90	181	271	181	60	30	0	1,083
\$100,000 or More	150	30	181	120	150	60	271	0	0	963
Don't Know	1,083	933	271	542	511	60	331	1,504	30	5,265
Refused	1,083	1,204	722	1,264	963	301	752	1,204	0	7,492
TOTAL	10,862	8,725	5,717	9,959	7,131	2,828	3,821	9,809	30	58,882

Weighted Data

Chart G-19: Household Income by Year of Construction

Q186, Q188, Q189 by Q20

Table G-20: Utility Type by Year of Construction
TYPE by Q20

Raw Data

UTILITY TYPE	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Public Generating	361	290	190	331	237	94	127	326	1	1,957
Public Non-Generating	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0
TOTAL	361	290	190	331	237	94	127	326	1	1,957

Weighted Data

UTILITY TYPE	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Public Generating	10,862	8,725	5,717	9,959	7,131	2,828	3,821	9,809	30	58,882
Public Non-Generating	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0
TOTAL	10,862	8,725	5,717	9,959	7,131	2,828	3,821	9,809	30	58,882

Weighted Data

Chart G-20: Utility Type by Year of Construction
TYPE by Q20

Table G-21: Space-Heating Fuels: Systems and Equipment by Year of Construction
HEAT_EQP by Q20

Raw Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	YEAR OF CONSTRUCTION									TOTAL
		Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	2	0	4	6	6	1	0	7	0	26
	Central Heat - Several Units	2	0	1	0	0	0	0	5	0	8
	Unit Not Heated	0	0	0	0	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	1	2	3	0	0	0	0	0	0	6
	Wall, Floor, or Ceiling Units	2	1	0	0	0	0	0	7	0	10
	Portable Units	0	0	0	0	0	0	0	0	0	0
	Central Furnace	34	25	9	4	2	0	1	17	0	92
	Other	1	0	0	0	0	0	0	0	0	1
Electricity:	Heat Pump	11	18	13	21	33	15	35	8	0	154
	Portable Room Heaters	7	8	2	2	2	0	1	9	0	31
	Radiant Panels	23	20	18	15	6	2	0	23	0	107
	Steam or Hot Water Radiators	0	2	2	1	1	1	2	0	0	9
	Central Furnace	88	69	56	192	139	59	69	72	1	745
	Baseboard or Wall Units	145	132	71	64	24	8	13	154	0	611
	Other	1	0	0	0	0	1	0	0	0	2
Wood:	Free-Standing Stove	27	8	8	19	20	4	4	14	0	104
	Free-Standing Pellet Stove	4	0	0	0	1	1	1	0	0	7
	Central Furnace	5	0	1	2	0	2	0	0	0	10
	Fireplace with an Insert	3	2	1	2	1	0	0	1	0	10
	Fireplace without an Insert	3	1	1	1	1	0	0	0	0	7
Other:	Solar	0	0	0	0	1	0	0	0	0	1
	Geothermal	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	1	0	0	0	0	0	1
	No Heat	0	0	0	0	0	0	0	1	0	1
	Don't Know	1	1	0	1	0	0	1	8	0	12
	Refused	1	1	0	0	0	0	0	0	0	2
	TOTAL	361	290	190	331	237	94	127	326	1	1,957

Table G-21: Space-Heating Fuels: Systems and Equipment by Year of Construction
HEAT_EQP by Q20

Weighted Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	YEAR OF CONSTRUCTION									TOTAL
		Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	60	0	120	181	181	30	0	211	0	782
	Central Heat - Several Units	60	0	30	0	0	0	0	150	0	241
	Unit Not Heated	0	0	0	0	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	30	60	90	0	0	0	0	0	0	181
	Wall, Floor, or Ceiling Units	60	30	0	0	0	0	0	211	0	301
	Portable Units	0	0	0	0	0	0	0	0	0	0
	Central Furnace	1,023	752	271	120	60	0	30	511	0	2,768
	Other	30	0	0	0	0	0	0	0	0	30
Electricity:	Heat Pump	331	542	391	632	993	451	1,053	241	0	4,634
	Portable Room Heaters	211	241	60	60	60	0	30	271	0	933
	Radiant Panels	692	602	542	451	181	60	0	692	0	3,219
	Steam or Hot Water Radiators	0	60	60	30	30	30	60	0	0	271
	Central Furnace	2,648	2,076	1,685	5,777	4,182	1,775	2,076	2,166	30	22,415
	Baseboard or Wall Units	4,363	3,972	2,136	1,926	722	241	391	4,634	0	18,384
	Other	30	0	0	0	0	30	0	0	0	60
Wood:	Free-Standing Stove	812	241	241	572	602	120	120	421	0	3,129
	Free-Standing Pellet Stove	120	0	0	0	30	30	30	0	0	211
	Central Furnace	150	0	30	60	0	60	0	0	0	301
	Fireplace with an Insert	90	60	30	60	30	0	0	30	0	301
	Fireplace without an Insert	90	30	30	30	30	0	0	0	0	211
Other:	Solar	0	0	0	0	30	0	0	0	0	30
	Geothermal	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	30	0	0	0	0	0	30
	No Heat	0	0	0	0	0	0	0	30	0	30
	Don't Know	30	30	0	30	0	0	30	241	0	361
	Refused	30	30	0	0	0	0	0	0	0	60
TOTAL		10,862	8,725	5,717	9,959	7,131	2,828	3,821	9,809	30	58,882

Weighted Data

Chart G-21: Space-Heating Fuels: Systems and Equipment by Year of Construction

HEAT_EQP by Q20

Space-Heating Fuels: Systems and Equipment

Table G-22: Primary Space-Heating Fuel Type by Dwelling Size in Square Feet
Q46 by Q24

Raw Data

PRIMARY SPACE-HEATING FUEL TYPE	DWELLING SIZE IN SQUARE FEET											TOTAL
	< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Electricity	40	150	171	171	151	120	184	93	106	478	2	1,666
Natural Gas	0	2	9	5	4	2	6	2	3	23	1	57
Fuel Oil	0	4	2	1	1	6	7	3	3	22	0	49
Wood or Presto Logs	5	8	17	15	14	15	10	6	10	38	0	138
Propane or Bottled Gas	0	1	0	2	0	0	0	0	0	1	0	4
Kerosene	0	0	0	0	0	0	0	0	0	0	0	0
Coal	0	0	0	0	0	0	0	0	0	0	0	0
Solar	0	0	0	0	0	0	1	0	0	0	0	1
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	1	0	0	0	0	1
No Heat	0	0	0	0	0	0	0	0	0	1	0	1
Not Asked	0	4	4	1	1	4	1	1	2	18	0	36
Don't Know	0	0	0	0	0	1	0	0	0	2	0	3
Refused	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	45	170	203	195	171	148	210	105	124	583	3	1,957

Table G-22: Primary Space-Heating Fuel Type by Dwelling Size in Square Feet
Q46 by Q24

Weighted Data

PRIMARY SPACE-HEATING FUEL TYPE	DWELLING SIZE IN SQUARE FEET											TOTAL
	< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Electricity	1,204	4,513	5,145	5,145	4,543	3,611	5,536	2,798	3,189	14,382	60	50,126
Natural Gas	0	60	271	150	120	60	181	60	90	692	30	1,715
Fuel Oil	0	120	60	30	30	181	211	90	90	662	0	1,474
Wood or Presto Logs	150	241	511	451	421	451	301	181	301	1,143	0	4,152
Propane or Bottled Gas	0	30	0	60	0	0	0	0	0	30	0	120
Kerosene	0	0	0	0	0	0	0	0	0	0	0	0
Coal	0	0	0	0	0	0	0	0	0	0	0	0
Solar	0	0	0	0	0	0	30	0	0	0	0	30
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	30	0	0	0	0	30
No Heat	0	0	0	0	0	0	0	0	0	30	0	30
Not Asked	0	120	120	30	30	120	30	30	60	542	0	1,083
Don't Know	0	0	0	0	0	30	0	0	0	60	0	90
Refused	0	30	0	0	0	0	0	0	0	0	0	30
TOTAL	1,354	5,115	6,108	5,867	5,145	4,453	6,318	3,159	3,731	17,541	90	58,882

Weighted Data

Chart G-22: Primary Space-Heating Fuel Type by Dwelling Size in Square Feet
Q46 by Q24

Table G-23: Primary Water-Heating Fuel Type by Dwelling Size in Square Feet
Q102 by Q24

Raw Data

PRIMARY WATER-HEATING FUEL TYPE	DWELLING SIZE IN SQUARE FEET											TOTAL
	< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Electricity	38	160	193	191	167	147	203	100	119	531	3	1,852
Natural Gas	0	1	3	1	1	1	6	4	2	8	0	27
Fuel Oil	0	0	0	0	0	0	0	0	0	0	0	0
Wood	1	0	0	0	0	0	0	0	0	0	0	1
Propane or Bottled Gas	2	1	1	2	1	0	1	0	0	3	0	11
Solar	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0
No Hot Water In Home	0	0	0	0	0	0	0	0	1	0	0	1
Not Asked	4	7	6	1	2	0	0	1	2	34	0	57
Don't Know	0	1	0	0	0	0	0	0	0	7	0	8
Refused	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	45	170	203	195	171	148	210	105	124	583	3	1,957

Weighted Data

PRIMARY WATER-HEATING FUEL TYPE	DWELLING SIZE IN SQUARE FEET											TOTAL
	< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Electricity	1,143	4,814	5,807	5,747	5,025	4,423	6,108	3,009	3,580	15,977	90	55,723
Natural Gas	0	30	90	30	30	30	181	120	60	241	0	812
Fuel Oil	0	0	0	0	0	0	0	0	0	0	0	0
Wood	30	0	0	0	0	0	0	0	0	0	0	30
Propane or Bottled Gas	60	30	30	60	30	0	30	0	0	90	0	331
Solar	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0
No Hot Water In Home	0	0	0	0	0	0	0	0	30	0	0	30
Not Asked	120	211	181	30	60	0	0	30	60	1,023	0	1,715
Don't Know	0	30	0	0	0	0	0	0	0	211	0	241
Refused	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1,354	5,115	6,108	5,867	5,145	4,453	6,318	3,159	3,731	17,541	90	58,882

Weighted Data

Chart G-23: Primary Water-Heating Fuel Type by Dwelling Size in Square Feet
Q102 by Q24

Table G-24: Household Income by Dwelling Size in Square Feet
Q186, Q188, Q189 by Q24

Raw Data

HOUSEHOLD INCOME	DWELLING SIZE IN SQUARE FEET											TOTAL
	< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Below \$5,000	1	4	3	0	2	0	1	0	1	28	0	40
\$5,000 to < \$10,000	4	21	6	6	4	4	2	1	0	61	0	109
\$10,000 to < \$15,000	9	19	17	11	6	4	4	1	0	76	1	148
\$15,000 to < \$20,000	7	13	14	12	7	4	3	1	4	52	0	117
\$20,000 to < \$25,000	5	25	23	29	16	9	16	8	10	62	0	203
\$25,000 to < \$30,000	2	21	33	28	25	29	22	3	4	50	0	217
\$30,000 to < \$40,000	4	20	43	36	33	36	37	19	13	46	0	287
\$40,000 to < \$50,000	2	6	17	17	21	15	34	19	16	21	0	168
\$50,000 to < \$60,000	0	7	8	12	15	12	18	18	12	6	0	108
\$60,000 to < \$80,000	1	2	4	3	9	7	10	12	11	9	0	68
\$80,000 to < \$100,000	0	1	1	3	2	4	11	5	8	1	0	36
\$100,000 or More	0	0	1	2	1	1	11	4	12	0	0	32
Don't Know	2	13	11	13	12	5	11	1	10	97	0	175
Refused	8	18	22	23	18	18	30	13	23	74	2	249
TOTAL	45	170	203	195	171	148	210	105	124	583	3	1,957

Table G-24: Household Income by Dwelling Size in Square Feet
Q186, Q188, Q189 by Q24

Weighted Data

HOUSEHOLD INCOME	DWELLING SIZE IN SQUARE FEET										Refused	TOTAL
	< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know		
Below \$5,000	30	120	90	0	60	0	30	0	30	842	0	1,204
\$5,000 to < \$10,000	120	632	181	181	120	120	60	30	0	1,835	0	3,280
\$10,000 to < \$15,000	271	572	511	331	181	120	120	30	0	2,287	30	4,453
\$15,000 to < \$20,000	211	391	421	361	211	120	90	30	120	1,565	0	3,520
\$20,000 to < \$25,000	150	752	692	873	481	271	481	241	301	1,865	0	6,108
\$25,000 to < \$30,000	60	632	993	842	752	873	662	90	120	1,504	0	6,529
\$30,000 to < \$40,000	120	602	1,294	1,083	993	1,083	1,113	572	391	1,384	0	8,635
\$40,000 to < \$50,000	60	181	511	511	632	451	1,023	572	481	632	0	5,055
\$50,000 to < \$60,000	0	211	241	361	451	361	542	542	361	181	0	3,249
\$60,000 to < \$80,000	30	60	120	90	271	211	301	361	331	271	0	2,046
\$80,000 to < \$100,000	0	30	30	90	60	120	331	150	241	30	0	1,083
\$100,000 or More	0	0	30	60	30	30	331	120	361	0	0	963
Don't Know	60	391	331	391	361	150	331	30	301	2,919	0	5,265
Refused	241	542	662	692	542	542	903	391	692	2,227	60	7,492
TOTAL	1,354	5,115	6,108	5,867	5,145	4,453	6,318	3,159	3,731	17,541	90	58,882

Weighted Data

Chart G-24: Household Income by Dwelling Size in Square Feet

Q186, Q188, Q189 by Q24

Table G-25: Utility Type by Dwelling Size in Square Feet
TYPE by Q24

Raw Data

UTILITY TYPE	DWELLING SIZE IN SQUARE FEET											TOTAL
	< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Public Generating	45	170	203	195	171	148	210	105	124	583	3	1,957
Public Non-Generating	0	0	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	45	170	203	195	171	148	210	105	124	583	3	1,957

Weighted Data

UTILITY TYPE	DWELLING SIZE IN SQUARE FEET											TOTAL
	< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Public Generating	1,354	5,115	6,108	5,867	5,145	4,453	6,318	3,159	3,731	17,541	90	58,882
Public Non-Generating	0	0	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1,354	5,115	6,108	5,867	5,145	4,453	6,318	3,159	3,731	17,541	90	58,882

Weighted Data

Chart G-25: Utility Type by Dwelling Size in Square Feet
TYPE by Q24

Table G-26: Space-Heating Fuels: Systems and Equipment by Dwelling Size in Square Feet
HEAT_EQP by Q24

Raw Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	DWELLING SIZE IN SQUARE FEET										Refused	TOTAL
		< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know		
Multi-Unit:	Central Heat - All Units	0	3	3	1	1	4	1	1	1	11	0	26
	Central Heat - Several Units	0	1	1	0	0	0	0	0	1	5	0	8
	Unit Not Heated	0	0	0	0	0	0	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	0	0	0	0	0	2	0	1	2	1	0	6
	Wall, Floor, or Ceiling Units	0	0	1	0	0	0	0	0	0	8	1	10
	Portable Units	0	0	0	0	0	0	0	0	0	0	0	0
	Central Furnace	0	7	10	8	5	6	13	4	4	35	0	92
	Other	0	0	0	0	0	0	0	0	0	1	0	1
Electricity:	Heat Pump	0	4	11	10	16	21	28	18	28	17	1	154
	Portable Room Heaters	3	4	1	1	1	1	3	0	0	17	0	31
	Radiant Panels	2	13	5	10	9	5	8	8	3	44	0	107
	Steam or Hot Water Radiators	0	0	0	0	0	1	2	1	2	3	0	9
	Central Furnace	13	63	78	80	79	62	87	49	56	178	0	745
	Baseboard or Wall Units	22	64	76	70	46	29	56	17	17	213	1	611
	Other	0	1	0	0	0	0	0	0	0	1	0	2
Wood:	Free-Standing Stove	3	7	14	9	13	12	9	4	4	29	0	104
	Free-Standing Pellet Stove	0	0	1	2	0	0	1	1	1	1	0	7
	Central Furnace	0	0	0	1	0	1	0	1	4	3	0	10
	Fireplace with an Insert	0	1	2	1	1	2	0	0	0	3	0	10
	Fireplace without an Insert	2	0	0	2	0	0	0	0	1	2	0	7
Other:	Solar	0	0	0	0	0	0	1	0	0	0	0	1
	Geothermal	0	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	1	0	0	0	0	1
	No Heat	0	0	0	0	0	0	0	0	0	1	0	1
	Don't Know	0	1	0	0	0	1	0	0	0	10	0	12
	Refused	0	1	0	0	0	1	0	0	0	0	0	2
	TOTAL	45	170	203	195	171	148	210	105	124	583	3	1,957

Table G-26: Space-Heating Fuels: Systems and Equipment by Dwelling Size in Square Feet
HEAT_EQP by Q24

Weighted Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	DWELLING SIZE IN SQUARE FEET											TOTAL
		< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	0	90	90	30	30	120	30	30	30	331	0	782
	Central Heat - Several Units	0	30	30	0	0	0	0	0	30	150	0	241
	Unit Not Heated	0	0	0	0	0	0	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	0	0	0	0	0	60	0	30	60	30	0	181
	Wall, Floor, or Ceiling Units	0	0	30	0	0	0	0	0	0	241	30	301
	Portable Units	0	0	0	0	0	0	0	0	0	0	0	0
	Central Furnace	0	211	301	241	150	181	391	120	120	1,053	0	2,768
	Other	0	0	0	0	0	0	0	0	0	30	0	30
Electricity:	Heat Pump	0	120	331	301	481	632	842	542	842	511	30	4,634
	Portable Room Heaters	90	120	30	30	30	30	90	0	0	511	0	933
	Radiant Panels	60	391	150	301	271	150	241	241	90	1,324	0	3,219
	Steam or Hot Water Radiators	0	0	0	0	0	30	60	30	60	90	0	271
	Central Furnace	391	1,896	2,347	2,407	2,377	1,865	2,618	1,474	1,685	5,356	0	22,415
	Baseboard or Wall Units	662	1,926	2,287	2,106	1,384	873	1,685	511	511	6,409	30	18,384
	Other	0	30	0	0	0	0	0	0	0	30	0	60
Wood:	Free-Standing Stove	90	211	421	271	391	361	271	120	120	873	0	3,129
	Free-Standing Pellet Stove	0	0	30	60	0	0	30	30	30	30	0	211
	Central Furnace	0	0	0	30	0	30	0	30	120	90	0	301
	Fireplace with an Insert	0	30	60	30	30	60	0	0	0	90	0	301
	Fireplace without an Insert	60	0	0	60	0	0	0	0	30	60	0	211
Other:	Solar	0	0	0	0	0	0	30	0	0	0	0	30
	Geothermal	0	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	30	0	0	0	0	30
	No Heat	0	0	0	0	0	0	0	0	0	30	0	30
	Don't Know	0	30	0	0	0	30	0	0	0	301	0	361
	Refused	0	30	0	0	0	30	0	0	0	0	0	60
TOTAL		1,354	5,115	6,108	5,867	5,145	4,453	6,318	3,159	3,731	17,541	90	58,882

Chart G-26: Space-Heating Fuels: Systems and Equipment by Dwelling Size in Square Feet

Weighted Data

HEAT_EQP by Q24

Space-Heating Fuels: Systems and Equipment

Table G-27: Primary Water-Heating Fuel Type by Primary Space-Heating Fuel Type
Q102 by Q46

Raw Data

PRIMARY WATER-HEATING FUEL TYPE	PRIMARY SPACE-HEATING FUEL TYPE														TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood or Presto Logs	Propane or Bottled Gas	Kerosene	Coal	Solar	Geothermal	Other	No Heat	Not Asked	Don't Know	Refused	
Electricity	1,607	42	48	131	0	0	0	1	0	1	0	18	3	1	1,852
Natural Gas	9	14	1	2	0	0	0	0	0	0	1	0	0	0	27
Fuel Oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wood	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Propane or Bottled Gas	3	0	0	4	4	0	0	0	0	0	0	0	0	0	11
Solar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
No Hot Water In Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Not Asked	39	0	0	0	0	0	0	0	0	0	0	18	0	0	57
Don't Know	7	1	0	0	0	0	0	0	0	0	0	0	0	0	8
Refused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1,666	57	49	138	4	0	0	1	0	1	1	36	3	1	1,957

Weighted Data

PRIMARY WATER-HEATING FUEL TYPE	PRIMARY SPACE-HEATING FUEL TYPE														TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood or Presto Logs	Propane or Bottled Gas	Kerosene	Coal	Solar	Geothermal	Other	No Heat	Not Asked	Don't Know	Refused	
Electricity	48,351	1,264	1,444	3,942	0	0	0	30	0	30	0	542	90	30	55,723
Natural Gas	271	421	30	60	0	0	0	0	0	0	30	0	0	0	812
Fuel Oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wood	0	0	0	30	0	0	0	0	0	0	0	0	0	0	30
Propane or Bottled Gas	90	0	0	120	120	0	0	0	0	0	0	0	0	0	331
Solar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	30	0	0	0	0	0	0	0	0	0	0	0	0	0	30
No Hot Water In Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Not Asked	1,173	0	0	0	0	0	0	0	0	0	0	542	0	0	1,715
Don't Know	211	30	0	0	0	0	0	0	0	0	0	0	0	0	241
Refused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	50,126	1,715	1,474	4,152	120	0	0	30	0	30	30	1,083	90	30	58,882

Weighted Data

Chart G-27: Primary Water-Heating Fuel Type by Primary Space-Heating Fuel Type

Q102 by Q46

Table G-28: Household Income by Primary Space-Heating Fuel Type
Q186, Q188, Q189 by Q46

Raw Data

HOUSEHOLD INCOME	PRIMARY SPACE-HEATING FUEL TYPE														TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood or Presto Logs	Propane or Bottled Gas	Kerosene	Coal	Solar	Geothermal	Other	No Heat	Not Asked	Don't Know	Refused	
Below \$5,000	32	1	0	4	0	0	0	0	0	0	0	3	0	0	40
\$5,000 to < \$10,000	89	6	1	9	0	0	0	0	0	0	0	4	0	0	109
\$10,000 to < \$15,000	126	5	3	13	0	0	0	0	0	0	1	0	0	0	148
\$15,000 to < \$20,000	104	1	2	8	0	0	0	0	0	0	0	2	0	0	117
\$20,000 to < \$25,000	172	5	7	12	2	0	0	0	0	0	0	4	1	0	203
\$25,000 to < \$30,000	181	9	7	15	0	0	0	0	0	0	0	5	0	0	217
\$30,000 to < \$40,000	244	6	9	26	0	0	0	0	0	0	0	2	0	0	287
\$40,000 to < \$50,000	149	4	5	9	0	0	0	0	0	0	0	1	0	0	168
\$50,000 to < \$60,000	90	5	1	11	0	0	0	0	0	0	0	1	0	0	108
\$60,000 to < \$80,000	62	0	1	2	0	0	0	0	0	1	0	2	0	0	68
\$80,000 to < \$100,000	34	0	0	1	0	0	0	0	0	0	0	1	0	0	36
\$100,000 or More	26	2	1	2	0	0	0	0	0	0	0	1	0	0	32
Don't Know	145	3	7	15	1	0	0	0	0	0	0	3	1	0	175
Refused	212	10	5	11	1	0	0	1	0	0	0	7	1	1	249
TOTAL	1,666	57	49	138	4	0	0	1	0	1	1	36	3	1	1,957

Table G-28: Household Income by Primary Space-Heating Fuel Type

Q186, Q188, Q189 by Q46

Weighted Data

HOUSEHOLD INCOME	PRIMARY SPACE-HEATING FUEL TYPE														TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood or Presto Logs	Propane or Bottled Gas	Kerosene	Coal	Solar	Geothermal	Other	No Heat	Not Asked	Don't Know	Refused	
Below \$5,000	963	30	0	120	0	0	0	0	0	0	0	90	0	0	1,204
\$5,000 to < \$10,000	2,678	181	30	271	0	0	0	0	0	0	0	120	0	0	3,280
\$10,000 to < \$15,000	3,791	150	90	391	0	0	0	0	0	0	30	0	0	0	4,453
\$15,000 to < \$20,000	3,129	30	60	241	0	0	0	0	0	0	0	60	0	0	3,520
\$20,000 to < \$25,000	5,175	150	211	361	60	0	0	0	0	0	0	120	30	0	6,108
\$25,000 to < \$30,000	5,446	271	211	451	0	0	0	0	0	0	0	150	0	0	6,529
\$30,000 to < \$40,000	7,341	181	271	782	0	0	0	0	0	0	0	60	0	0	8,635
\$40,000 to < \$50,000	4,483	120	150	271	0	0	0	0	0	0	0	30	0	0	5,055
\$50,000 to < \$60,000	2,708	150	30	331	0	0	0	0	0	0	0	30	0	0	3,249
\$60,000 to < \$80,000	1,865	0	30	60	0	0	0	0	0	30	0	60	0	0	2,046
\$80,000 to < \$100,000	1,023	0	0	30	0	0	0	0	0	0	0	30	0	0	1,083
\$100,000 or More	782	60	30	60	0	0	0	0	0	0	0	30	0	0	963
Don't Know	4,363	90	211	451	30	0	0	0	0	0	0	90	30	0	5,265
Refused	6,379	301	150	331	30	0	0	30	0	0	0	211	30	30	7,492
TOTAL	50,126	1,715	1,474	4,152	120	0	0	30	0	30	30	1,083	90	30	58,882

Weighted Data

Chart G-28: Household Income by Primary Space-Heating Fuel Type
Q186, Q188, Q189 by Q46

Table G-29: Utility Type by Primary Space-Heating Fuel Type
TYPE by Q46

Raw Data

UTILITY TYPE	PRIMARY SPACE-HEATING FUEL TYPE														TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood or Presto Logs	Propane or Bottled Gas	Kerosene	Coal	Solar	Geothermal	Other	No Heat	Not Asked	Don't Know	Refused	
Public Generating	1,666	57	49	138	4	0	0	1	0	1	1	36	3	1	1,957
Public Non-Generating	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1,666	57	49	138	4	0	0	1	0	1	1	36	3	1	1,957

Weighted Data

UTILITY TYPE	PRIMARY SPACE-HEATING FUEL TYPE														TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood or Presto Logs	Propane or Bottled Gas	Kerosene	Coal	Solar	Geothermal	Other	No Heat	Not Asked	Don't Know	Refused	
Public Generating	50,126	1,715	1,474	4,152	120	0	0	30	0	30	30	1,083	90	30	58,882
Public Non-Generating	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	50,126	1,715	1,474	4,152	120	0	0	30	0	30	30	1,083	90	30	58,882

Weighted Data

Chart G-29: Utility Type by Primary Space-Heating Fuel Type
TYPE by Q46

Table G-30: Space-Heating Fuels: Systems and Equipment by Primary Space-Heating Fuel Type

HEAT_EQP by Q46

Raw Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	PRIMARY SPACE-HEATING FUEL TYPE														TOTAL
		Electricity	Natural Gas	Fuel Oil	Wood or Presto Logs	Propane or Bottled Gas	Kerosene	Coal	Solar	Geothermal	Other	No Heat	Not Asked	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	0	0	0	0	0	0	0	0	0	0	0	26	0	0	26
	Central Heat - Several Units	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8
	Unit Not Heated	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	0	3	3	0	0	0	0	0	0	0	0	0	0	0	6
	Wall, Floor, or Ceiling Units	0	8	2	0	0	0	0	0	0	0	0	0	0	0	10
	Portable Units	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Central Furnace	0	46	42	0	4	0	0	0	0	0	0	0	0	0	92
	Other	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Electricity:	Heat Pump	154	0	0	0	0	0	0	0	0	0	0	0	0	0	154
	Portable Room Heaters	31	0	0	0	0	0	0	0	0	0	0	0	0	0	31
	Radiant Panels	107	0	0	0	0	0	0	0	0	0	0	0	0	0	107
	Steam or Hot Water Radiators	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	Central Furnace	745	0	0	0	0	0	0	0	0	0	0	0	0	0	745
	Baseboard or Wall Units	611	0	0	0	0	0	0	0	0	0	0	0	0	0	611
	Other	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Wood:	Free-Standing Stove	0	0	0	104	0	0	0	0	0	0	0	0	0	0	104
	Free-Standing Pellet Stove	0	0	0	7	0	0	0	0	0	0	0	0	0	0	7
	Central Furnace	0	0	0	10	0	0	0	0	0	0	0	0	0	0	10
	Fireplace with an Insert	0	0	0	10	0	0	0	0	0	0	0	0	0	0	10
	Fireplace without an Insert	0	0	0	7	0	0	0	0	0	0	0	0	0	0	7
Other:	Solar	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
	No Heat	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
	Don't Know	6	0	1	0	0	0	0	0	0	0	0	2	3	0	12
	Refused	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2
	TOTAL	1,666	57	49	138	4	0	0	1	0	1	1	36	3	1	1,957

Table G-30: Space-Heating Fuels: Systems and Equipment by Primary Space-Heating Fuel Type
HEAT_EQP by Q46

Weighted Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	PRIMARY SPACE-HEATING FUEL TYPE														TOTAL
		Electricity	Natural Gas	Fuel Oil	Wood or Presto Logs	Propane or Bottled Gas	Kerosene	Coal	Solar	Geothermal	Other	No Heat	Not Asked	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	0	0	0	0	0	0	0	0	0	0	0	782	0	0	782
	Central Heat - Several Units	0	0	0	0	0	0	0	0	0	0	0	241	0	0	241
	Unit Not Heated	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	0	90	90	0	0	0	0	0	0	0	0	0	0	0	181
	Wall, Floor, or Ceiling Units	0	241	60	0	0	0	0	0	0	0	0	0	0	0	301
	Portable Units	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Central Furnace	0	1,384	1,264	0	120	0	0	0	0	0	0	0	0	0	2,768
	Other	0	0	30	0	0	0	0	0	0	0	0	0	0	0	30
Electricity:	Heat Pump	4,634	0	0	0	0	0	0	0	0	0	0	0	0	0	4,634
	Portable Room Heaters	933	0	0	0	0	0	0	0	0	0	0	0	0	0	933
	Radiant Panels	3,219	0	0	0	0	0	0	0	0	0	0	0	0	0	3,219
	Steam or Hot Water Radiators	271	0	0	0	0	0	0	0	0	0	0	0	0	0	271
	Central Furnace	22,415	0	0	0	0	0	0	0	0	0	0	0	0	0	22,415
	Baseboard or Wall Units	18,384	0	0	0	0	0	0	0	0	0	0	0	0	0	18,384
	Other	60	0	0	0	0	0	0	0	0	0	0	0	0	0	60
Wood:	Free-Standing Stove	0	0	0	3,129	0	0	0	0	0	0	0	0	0	0	3,129
	Free-Standing Pellet Stove	0	0	0	211	0	0	0	0	0	0	0	0	0	0	211
	Central Furnace	0	0	0	301	0	0	0	0	0	0	0	0	0	0	301
	Fireplace with an Insert	0	0	0	301	0	0	0	0	0	0	0	0	0	0	301
	Fireplace without an Insert	0	0	0	211	0	0	0	0	0	0	0	0	0	0	211
Other:	Solar	0	0	0	0	0	0	0	30	0	0	0	0	0	0	30
	Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	30	0	0	0	0	30
	No Heat	0	0	0	0	0	0	0	0	0	0	30	0	0	0	30
	Don't Know	181	0	30	0	0	0	0	0	0	0	0	60	90	0	361
	Refused	30	0	0	0	0	0	0	0	0	0	0	0	0	30	60
	TOTAL	50,126	1,715	1,474	4,152	120	0	0	30	0	30	30	1,083	90	30	58,882

Chart G-30: Space-Heating Fuels: Systems and Equipment by Primary Space-Heating Fuel Type

Weighted Data

HEAT_EQP by Q46

■ M: Central Heat - All Units	▤ M: Central Heat - Several Units	▥ M: Unit Not Heated	□ F: Steam or Hot Water Radiators
▨ F: Wall, Floor, or Ceiling Units	□ F: Portable Units	□ F: Central Furnace	■ F: Other
▧ E: Heat Pump	▩ E: Portable Room Heaters	▩ E: Radiant Panels	□ E: Steam or Hot Water Radiators
■ E: Central Furnace	▨ E: Baseboard or Wall Units	▧ E: Other	▧ W: Free-Standing Stove
▧ W: Free-Standing Pellet Stove	▤ W: Central Furnace	▧ W: Fireplace with an Insert	▩ W: Fireplace without an Insert
■ O: Solar	□ O: Geothermal	▥ O: Other	□ O: No Heat
▨ Don't Know	▩ Refused		

Space-Heating Fuels: Systems and Equipment

Table G-31: Household Income by Primary Water-Heating Fuel Type
Q186, Q188, Q189 by Q102

Raw Data

HOUSEHOLD INCOME	PRIMARY WATER-HEATING FUEL TYPE											TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood	Propane or Bottled Gas	Solar	Other	No Hot Water In Home	Not Asked	Don't Know	Refused	
Below \$5,000	35	1	0	1	0	0	0	0	3	0	0	40
\$5,000 to < \$10,000	91	2	0	0	3	0	0	0	13	0	0	109
\$10,000 to < \$15,000	139	2	0	0	0	0	0	0	6	1	0	148
\$15,000 to < \$20,000	110	1	0	0	0	0	0	0	6	0	0	117
\$20,000 to < \$25,000	193	4	0	0	2	0	0	0	3	1	0	203
\$25,000 to < \$30,000	205	2	0	0	1	0	0	0	7	2	0	217
\$30,000 to < \$40,000	278	4	0	0	1	0	0	0	3	1	0	287
\$40,000 to < \$50,000	166	2	0	0	0	0	0	0	0	0	0	168
\$50,000 to < \$60,000	105	2	0	0	0	0	0	0	1	0	0	108
\$60,000 to < \$80,000	65	0	0	0	0	0	0	0	2	1	0	68
\$80,000 to < \$100,000	34	2	0	0	0	0	0	0	0	0	0	36
\$100,000 or More	31	0	0	0	0	0	0	0	1	0	0	32
Don't Know	163	0	0	0	2	0	0	0	9	1	0	175
Refused	237	5	0	0	2	0	1	0	3	1	0	249
TOTAL	1,852	27	0	1	11	0	1	0	57	8	0	1,957

Table G-31: Household Income by Primary Water-Heating Fuel Type
Q186, Q188, Q189 by Q102

Weighted Data

HOUSEHOLD INCOME	PRIMARY WATER-HEATING FUEL TYPE											TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood	Propane or Bottled Gas	Solar	Other	No Hot Water In Home	Not Asked	Don't Know	Refused	
Below \$5,000	1,053	30	0	30	0	0	0	0	90	0	0	1,204
\$5,000 to < \$10,000	2,738	60	0	0	90	0	0	0	391	0	0	3,280
\$10,000 to < \$15,000	4,182	60	0	0	0	0	0	0	181	30	0	4,453
\$15,000 to < \$20,000	3,310	30	0	0	0	0	0	0	181	0	0	3,520
\$20,000 to < \$25,000	5,807	120	0	0	60	0	0	0	90	30	0	6,108
\$25,000 to < \$30,000	6,168	60	0	0	30	0	0	0	211	60	0	6,529
\$30,000 to < \$40,000	8,364	120	0	0	30	0	0	0	90	30	0	8,635
\$40,000 to < \$50,000	4,995	60	0	0	0	0	0	0	0	0	0	5,055
\$50,000 to < \$60,000	3,159	60	0	0	0	0	0	0	30	0	0	3,249
\$60,000 to < \$80,000	1,956	0	0	0	0	0	0	0	60	30	0	2,046
\$80,000 to < \$100,000	1,023	60	0	0	0	0	0	0	0	0	0	1,083
\$100,000 or More	933	0	0	0	0	0	0	0	30	0	0	963
Don't Know	4,904	0	0	0	60	0	0	0	271	30	0	5,265
Refused	7,131	150	0	0	60	0	30	0	90	30	0	7,492
TOTAL	55,723	812	0	30	331	0	30	0	1,715	241	0	58,882

Weighted Data

Chart G-31: Household Income by Primary Water-Heating Fuel Type

Q186, Q188, Q189 by Q102

Table G-32: Utility Type by Primary Water-Heating Fuel Type
TYPE by Q102

Raw Data

UTILITY TYPE	PRIMARY WATER-HEATING FUEL TYPE											TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood	Propane or Bottled Gas	Solar	Other	No Hot Water In Home	Not Asked	Don't Know	Refused	
Public Generating	1,852	27	0	1	11	0	1	0	57	8	0	1,957
Public Non-Generating	0	0	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1,852	27	0	1	11	0	1	0	57	8	0	1,957

Weighted Data

UTILITY TYPE	PRIMARY WATER-HEATING FUEL TYPE											TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood	Propane or Bottled Gas	Solar	Other	No Hot Water In Home	Not Asked	Don't Know	Refused	
Public Generating	55,723	812	0	30	331	0	30	0	1,715	241	0	58,882
Public Non-Generating	0	0	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	55,723	812	0	30	331	0	30	0	1,715	241	0	58,882

Weighted Data

Chart G-32: Utility Type by Primary Water-Heating Fuel Type
TYPE by Q102

Table G-33: Space-Heating Fuels: Systems and Equipment by Primary Water-Heating Fuel Type
HEAT_EQP by Q102

Raw Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	PRIMARY WATER-HEATING FUEL TYPE											TOTAL
		Electricity	Natural Gas	Fuel Oil	Wood	Propane or Bottled Gas	Solar	Other	No Hot Water In Home	Not Asked	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	12	0	0	0	0	0	0	0	14	0	0	26
	Central Heat - Several Units	4	0	0	0	0	0	0	0	4	0	0	8
	Unit Not Heated	0	0	0	0	0	0	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	6	0	0	0	0	0	0	0	0	0	0	6
	Wall, Floor, or Ceiling Units	7	2	0	0	0	0	0	0	0	1	0	10
	Portable Units	0	0	0	0	0	0	0	0	0	0	0	0
	Central Furnace	75	13	0	0	4	0	0	0	0	0	0	92
	Other	1	0	0	0	0	0	0	0	0	0	0	1
Electricity:	Heat Pump	152	2	0	0	0	0	0	0	0	0	0	154
	Portable Room Heaters	26	0	0	0	3	0	0	0	1	1	0	31
	Radiant Panels	101	0	0	0	0	0	0	0	6	0	0	107
	Steam or Hot Water Radiators	9	0	0	0	0	0	0	0	0	0	0	9
	Central Furnace	737	4	0	0	0	0	0	0	2	2	0	745
	Baseboard or Wall Units	577	3	0	0	0	0	1	0	27	3	0	611
	Other	2	0	0	0	0	0	0	0	0	0	0	2
Wood:	Free-Standing Stove	98	1	0	1	4	0	0	0	0	0	0	104
	Free-Standing Pellet Stove	7	0	0	0	0	0	0	0	0	0	0	7
	Central Furnace	9	1	0	0	0	0	0	0	0	0	0	10
	Fireplace with an Insert	10	0	0	0	0	0	0	0	0	0	0	10
	Fireplace without an Insert	7	0	0	0	0	0	0	0	0	0	0	7
Other:	Solar	1	0	0	0	0	0	0	0	0	0	0	1
	Geothermal	0	0	0	0	0	0	0	0	0	0	0	0
	Other	1	0	0	0	0	0	0	0	0	0	0	1
	No Heat	0	1	0	0	0	0	0	0	0	0	0	1
	Don't Know	8	0	0	0	0	0	0	0	3	1	0	12
	Refused	2	0	0	0	0	0	0	0	0	0	0	2
	TOTAL	1,852	27	0	1	11	0	1	0	57	8	0	1,957

Table G-33: Space-Heating Fuels: Systems and Equipment by Primary Water-Heating Fuel Type
HEAT_EQP by Q102

Weighted Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	PRIMARY WATER-HEATING FUEL TYPE											TOTAL
		Electricity	Natural Gas	Fuel Oil	Wood	Propane or Bottled Gas	Solar	Other	No Hot Water In Home	Not Asked	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	361	0	0	0	0	0	0	0	421	0	0	782
	Central Heat - Several Units	120	0	0	0	0	0	0	0	120	0	0	241
	Unit Not Heated	0	0	0	0	0	0	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	181	0	0	0	0	0	0	0	0	0	0	181
	Wall, Floor, or Ceiling Units	211	60	0	0	0	0	0	0	0	30	0	301
	Portable Units	0	0	0	0	0	0	0	0	0	0	0	0
	Central Furnace	2,257	391	0	0	120	0	0	0	0	0	0	2,768
	Other	30	0	0	0	0	0	0	0	0	0	0	30
Electricity:	Heat Pump	4,573	60	0	0	0	0	0	0	0	0	0	4,634
	Portable Room Heaters	782	0	0	0	90	0	0	0	30	30	0	933
	Radiant Panels	3,039	0	0	0	0	0	0	0	181	0	0	3,219
	Steam or Hot Water Radiators	271	0	0	0	0	0	0	0	0	0	0	271
	Central Furnace	22,175	120	0	0	0	0	0	0	60	60	0	22,415
	Baseboard or Wall Units	17,361	90	0	0	0	0	30	0	812	90	0	18,384
	Other	60	0	0	0	0	0	0	0	0	0	0	60
Wood:	Free-Standing Stove	2,949	30	0	30	120	0	0	0	0	0	0	3,129
	Free-Standing Pellet Stove	211	0	0	0	0	0	0	0	0	0	0	211
	Central Furnace	271	30	0	0	0	0	0	0	0	0	0	301
	Fireplace with an Insert	301	0	0	0	0	0	0	0	0	0	0	301
	Fireplace without an Insert	211	0	0	0	0	0	0	0	0	0	0	211
Other:	Solar	30	0	0	0	0	0	0	0	0	0	0	30
	Geothermal	0	0	0	0	0	0	0	0	0	0	0	0
	Other	30	0	0	0	0	0	0	0	0	0	0	30
	No Heat	0	30	0	0	0	0	0	0	0	0	0	30
	Don't Know	241	0	0	0	0	0	0	0	90	30	0	361
	Refused	60	0	0	0	0	0	0	0	0	0	0	60
TOTAL		55,723	812	0	30	331	0	30	0	1,715	241	0	58,882

Chart G-33: Space-Heating Fuels: Systems and Equipment by Primary Water-Heating Fuel Type

Weighted Data

HEAT_EQP by Q102

■ M: Central Heat - All Units	▤ M: Central Heat - Several Units	▥ M: Unit Not Heated	□ F: Steam or Hot Water Radiators
▨ F: Wall, Floor, or Ceiling Units	□ F: Portable Units	□ F: Central Furnace	■ F: Other
▧ E: Heat Pump	■ E: Portable Room Heaters	■ E: Radiant Panels	□ E: Steam or Hot Water Radiators
■ E: Central Furnace	▨ E: Baseboard or Wall Units	▧ E: Other	▩ W: Free-Standing Stove
▩ W: Free-Standing Pellet Stove	▤ W: Central Furnace	▥ W: Fireplace with an Insert	■ W: Fireplace without an Insert
■ O: Solar	□ O: Geothermal	■ O: Other	□ O: No Heat
▨ Don't Know	■ Refused		

Space-Heating Fuels: Systems and Equipment

Table G-34: Utility Type by Household Income

TYPE by Q186, Q188, Q189

Raw Data

UTILITY TYPE	HOUSEHOLD INCOME														TOTAL
	Below \$5K	\$5K to < \$10K	\$10K to < \$15K	\$15K to < \$20K	\$20K to < \$25K	\$25K to < \$30K	\$30K to < \$40K	\$40K to < \$50K	\$50K to < \$60K	\$60K to < \$80K	\$80K to < \$100K	\$100K or More	Don't Know	Refused	
Public Generating	40	109	148	117	203	217	287	168	108	68	36	32	175	249	1,957
Public Non-Generating	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	40	109	148	117	203	217	287	168	108	68	36	32	175	249	1,957

Weighted Data

UTILITY TYPE	HOUSEHOLD INCOME														TOTAL
	Below \$5K	\$5K to < \$10K	\$10K to < \$15K	\$15K to < \$20K	\$20K to < \$25K	\$25K to < \$30K	\$30K to < \$40K	\$40K to < \$50K	\$50K to < \$60K	\$60K to < \$80K	\$80K to < \$100K	\$100K or More	Don't Know	Refused	
Public Generating	1,204	3,280	4,453	3,520	6,108	6,529	8,635	5,055	3,249	2,046	1,083	963	5,265	7,492	58,882
Public Non-Generating	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1,204	3,280	4,453	3,520	6,108	6,529	8,635	5,055	3,249	2,046	1,083	963	5,265	7,492	58,882

Weighted Data

Chart G-34: Utility Type by Household Income
TYPE by Q186, Q188, Q189

Table G-35: Space-Heating Fuels: Systems and Equipment by Household Income
HEAT_EQP by Q186, Q188, Q189

Raw Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	HOUSEHOLD INCOME														TOTAL
		Below \$5K	\$5K to < \$10K	\$10K to < \$15K	\$15K to < \$20K	\$20K to < \$25K	\$25K to < \$30K	\$30K to < \$40K	\$40K to < \$50K	\$50K to < \$60K	\$60K to < \$80K	\$80K to < \$100K	\$100K or More	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	2	3	0	1	3	4	2	1	1	2	1	0	2	4	26
	Central Heat - Several Units	1	0	0	1	1	1	0	0	0	0	0	1	1	2	8
	Unit Not Heated	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	0	0	0	0	0	1	2	1	1	0	0	0	0	1	6
	Wall, Floor, or Ceiling Units	1	0	1	0	0	3	1	2	0	0	0	0	1	1	10
	Portable Units	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Central Furnace	0	7	7	3	13	12	12	6	5	1	0	3	9	14	92
	Other	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Electricity:	Heat Pump	0	3	3	5	8	17	21	20	15	9	8	10	4	31	154
	Portable Room Heaters	1	3	3	3	5	2	4	0	0	0	0	0	7	3	31
	Radiant Panels	4	8	13	10	9	12	15	11	4	1	1	0	10	9	107
	Steam or Hot Water Radiators	1	1	1	0	0	0	1	0	0	1	3	0	0	1	9
	Central Furnace	9	26	47	32	81	81	117	77	49	36	16	14	60	100	745
	Baseboard or Wall Units	17	48	58	52	69	68	85	41	22	15	6	2	61	67	611
	Other	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2
Wood:	Free-Standing Stove	2	8	10	8	9	12	18	8	7	1	0	2	12	7	104
	Free-Standing Pellet Stove	0	0	1	0	0	0	2	0	1	1	0	0	1	1	7
	Central Furnace	0	1	1	0	1	0	3	1	2	0	1	0	0	0	10
	Fireplace with an Insert	2	0	1	0	1	3	1	0	0	0	0	0	1	1	10
	Fireplace without an Insert	0	0	0	0	1	0	2	0	1	0	0	0	1	2	7
Other:	Solar	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
	No Heat	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	Don't Know	0	1	1	1	1	0	0	0	0	0	0	0	5	3	12
	Refused	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2
	TOTAL	40	109	148	117	203	217	287	168	108	68	36	32	175	249	1,957

Table G-35: Space-Heating Fuels: Systems and Equipment by Household Income

HEAT_EQP by Q186, Q188, Q189

Weighted Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	HOUSEHOLD INCOME														TOTAL
		Below \$5K	\$5K to < \$10K	\$10K to < \$15K	\$15K to < \$20K	\$20K to < \$25K	\$25K to < \$30K	\$30K to < \$40K	\$40K to < \$50K	\$50K to < \$60K	\$60K to < \$80K	\$80K to < \$100K	\$100K or More	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	60	90	0	30	90	120	60	30	30	60	30	0	60	120	782
	Central Heat - Several Units	30	0	0	30	30	30	0	0	0	0	0	30	30	60	241
	Unit Not Heated	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	0	0	0	0	0	30	60	30	30	0	0	0	0	30	181
	Wall, Floor, or Ceiling Units	30	0	30	0	0	90	30	60	0	0	0	0	30	30	301
	Portable Units	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Central Furnace	0	211	211	90	391	361	361	181	150	30	0	90	271	421	2,768
	Other	0	0	0	0	30	0	0	0	0	0	0	0	0	0	30
Electricity:	Heat Pump	0	90	90	150	241	511	632	602	451	271	241	301	120	933	4,634
	Portable Room Heaters	30	90	90	90	150	60	120	0	0	0	0	0	211	90	933
	Radiant Panels	120	241	391	301	271	361	451	331	120	30	30	0	301	271	3,219
	Steam or Hot Water Radiators	30	30	30	0	0	0	30	0	0	30	90	0	0	30	271
	Central Furnace	271	782	1,414	963	2,437	2,437	3,520	2,317	1,474	1,083	481	421	1,805	3,009	22,415
	Baseboard or Wall Units	511	1,444	1,745	1,565	2,076	2,046	2,557	1,234	662	451	181	60	1,835	2,016	18,384
	Other	0	0	0	30	0	30	0	0	0	0	0	0	0	0	60
Wood:	Free-Standing Stove	60	241	301	241	271	361	542	241	211	30	0	60	361	211	3,129
	Free-Standing Pellet Stove	0	0	30	0	0	0	60	0	30	30	0	0	30	30	211
	Central Furnace	0	30	30	0	30	0	90	30	60	0	30	0	0	0	301
	Fireplace with an Insert	60	0	30	0	30	90	30	0	0	0	0	0	30	30	301
	Fireplace without an Insert	0	0	0	0	30	0	60	0	30	0	0	0	30	60	211
Other:	Solar	0	0	0	0	0	0	0	0	0	0	0	0	0	30	30
	Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	30	0	0	0	0	30
	No Heat	0	0	30	0	0	0	0	0	0	0	0	0	0	0	30
	Don't Know	0	30	30	30	30	0	0	0	0	0	0	0	150	90	361
	Refused	0	0	0	0	0	0	30	0	0	0	0	0	0	30	60
TOTAL		1,204	3,280	4,453	3,520	6,108	6,529	8,635	5,055	3,249	2,046	1,083	963	5,265	7,492	58,882

Weighted Data

Chart G-35: Space-Heating Fuels: Systems and Equipment by Household Income

HEAT_EQP by Q186, Q188, Q189

Space-Heating Fuels: Systems and Equipment

Table G-36: Space-Heating Fuels: Systems and Equipment by Utility Type
HEAT_EQP by TYPE

Raw Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	UTILITY TYPE			TOTAL
		Public Generating	Public Non-Generating	Investor Owned	
Multi-Unit:	Central Heat - All Units	26	0	0	26
	Central Heat - Several Units	8	0	0	8
	Unit Not Heated	0	0	0	0
Fossil:	Steam or Hot Water Radiators	6	0	0	6
	Wall, Floor, or Ceiling Units	10	0	0	10
	Portable Units	0	0	0	0
	Central Furnace	92	0	0	92
	Other	1	0	0	1
Electricity:	Heat Pump	154	0	0	154
	Portable Room Heaters	31	0	0	31
	Radiant Panels	107	0	0	107
	Steam or Hot Water Radiators	9	0	0	9
	Central Furnace	745	0	0	745
	Baseboard or Wall Units	611	0	0	611
	Other	2	0	0	2
Wood:	Free-Standing Stove	104	0	0	104
	Free-Standing Pellet Stove	7	0	0	7
	Central Furnace	10	0	0	10
	Fireplace with an Insert	10	0	0	10
	Fireplace without an Insert	7	0	0	7
Other:	Solar	1	0	0	1
	Geothermal	0	0	0	0
	Other	1	0	0	1
	No Heat	1	0	0	1
	Don't Know	12	0	0	12
	Refused	2	0	0	2
	TOTAL	1,957	0	0	1,957

Table G-36: Space-Heating Fuels: Systems and Equipment by Utility Type
HEAT_EQP by TYPE

Weighted Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	UTILITY TYPE			TOTAL
		Public Generating	Public Non-Generating	Investor Owned	
Multi-Unit:	Central Heat - All Units	782	0	0	782
	Central Heat - Several Units	241	0	0	241
	Unit Not Heated	0	0	0	0
Fossil:	Steam or Hot Water Radiators	181	0	0	181
	Wall, Floor, or Ceiling Units	301	0	0	301
	Portable Units	0	0	0	0
	Central Furnace	2,768	0	0	2,768
	Other	30	0	0	30
Electricity:	Heat Pump	4,634	0	0	4,634
	Portable Room Heaters	933	0	0	933
	Radiant Panels	3,219	0	0	3,219
	Steam or Hot Water Radiators	271	0	0	271
	Central Furnace	22,415	0	0	22,415
	Baseboard or Wall Units	18,384	0	0	18,384
	Other	60	0	0	60
Wood:	Free-Standing Stove	3,129	0	0	3,129
	Free-Standing Pellet Stove	211	0	0	211
	Central Furnace	301	0	0	301
	Fireplace with an Insert	301	0	0	301
	Fireplace without an Insert	211	0	0	211
Other:	Solar	30	0	0	30
	Geothermal	0	0	0	0
	Other	30	0	0	30
	No Heat	30	0	0	30
	Don't Know	361	0	0	361
	Refused	60	0	0	60
	TOTAL	58,882	0	0	58,882

Weighted Data

Chart G-36: Space-Heating Fuels: Systems and Equipment by Utility Type

HEAT_EQP by TYPE

Space-Heating Fuels: Systems and Equipment

1992 Pacific Northwest Residential Energy Survey Phase I

VOLUME H Western Washington (Public Generating) Crosstabulations

**Prepared for
Bonneville Power Administration
Portland, Oregon**

**by
Applied Management & Planning Group
Los Angeles**

Contract No.: DE-AC79-92BP25174

OVERVIEW OF 1992 PACIFIC NORTHWEST RESIDENTIAL ENERGY SURVEY

Phase I of the 1992 Pacific Northwest Residential Energy Survey (PNWRES92-I) was the third comprehensive survey of the region to provide data on energy usage, conservation awareness/behaviors and associated consumer characteristics for use in forecasting and planning by the Bonneville Power Administration.

Energy-use data from residential surveys conducted in 1979 and 1983 have been used extensively by Bonneville, the Pacific Northwest Utilities Conference Committee, the Northwest Power Planning Council, and by several of the utilities in the region. Since 1983, both increased fuel prices and conservation programs have impacted consumer behavior and have made it necessary to update the data base used for forecasting. In order to improve the accuracy of these forecasts, more detailed information was required concerning the use of residential energy in the Pacific Northwest. Thus, Bonneville contracted its third regional residential survey, PNWRES92-I.

A team of staff members, representing several constituencies within Bonneville's Office of Energy Resources, designed the data collection as a telephone survey. The Applied Management & Planning Group (AMPG), Los Angeles, California, was selected to carry out the survey, to summarize the data, and to prepare the initial documentation. Interviewing Services of America (ISA), Van Nuys, California, was subcontracted by AMPG to conduct the telephone interviews.

PNWRES92-I used random digit dialing (RDD) and computer-assisted telephone interviewing (CATI). The sample was stratified into 15 sampling domains defined by geographic area and utility type. A total of 20,170 interviews were completed from September 3, 1992, to December 9, 1992.

The survey's full documentation is divided among 33 volumes, which are displayed in the Project Concordance in the next section. All volumes are available both in printed form and on personal computers using **Bonneville Power Plus**. Volumes A and B provide detailed documentation. Volume C shows all survey items for each sampling domain, for the entire region. Each of the data tables in Volumes C through AF show both the sample counts and the weighted population counts, as well as a chart for the population counts.

Volume H presents selected crosstabulations for public generating utilities in Western Washington.

For additional information, comments, or data requests, contact David Mills: (503)230-7505. To obtain copies of the reports, contact Kim Andersen, End-Use Research Section (RPEE), Bonneville Power Administration, P.O. Box 3621, Portland, OR 97208-3621; (503)230-5712.

Project Concordance

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Project Concordance
Glossary

Volume B:
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Technical Appendix

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(Item-by-Item)

Item-by-Item
Crosstabulations

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by Domain

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Area Office

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F

(Region)

Selected
Crosstabulations

Volume F:

Pacific
Northwest
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(Domains)

Selected
Crosstabulations
for Domains:

G: Eastern Washington (PG)
H: Western Washington (PG)
I: Western Oregon (PG)
J: Western Montana (PN)
K: Idaho (PN)
L: Eastern Washington (PN)
M: Western Washington (PN)
N: Eastern Oregon (PN)
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(Area Offices)

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for Area Offices:

V: Puget Sound
W: Lower Columbia
X: Upper Columbia
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Z-AC

(States)

Selected
Crosstabulations
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Z: Washington
AA: Oregon
AB: Idaho
AC: Montana

AD-AF

(Utilities)

Selected
Crosstabulations
for Utility Types:

AD: Public Generating
AE: Public Non-Generating
AF: Investor Owned

AG

(Non-
Respondent
Survey)

Volume AG:
Study of
Non-Respondents

Book 1: Volumes A and B
Book 2: Volume C
Book 3: Volume D
Book 4: Volume E
Book 5: Volume F
Book 6: Volumes G, H, and I
Book 7: Volumes J, K, L, M, N, and O
Book 8: Volumes P, Q, R, S, T, and U
Book 9: Volumes V, W, X, and Y
Book 10: Volumes Z, AA, AB, and AC
Book 11: Volumes AD, AE, and AF
Book 12: Volume AG

Key: PG = Public Generating Utility PN = Public Nongenerating Utility IO = Investor-Owned

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Q16: Which of the following best describes your dwelling?
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Q16: Which of the following best describes your dwelling?
- H-5:** Primary Water-Heating Fuel Type by Dwelling Type
Q102: What fuel do you use most for heating water in your home?
Q16: Which of the following best describes your dwelling?
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Q186: Was your total household income before taxes for 1991 above or below \$25,000?
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Q189: What is your household income?
Q16: Which of the following best describes your dwelling?
- H-7:** Utility Type by Dwelling Type
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- H-8:** Space-Heating Fuels: Systems and Equipment by Dwelling Type
Q16: Which of the following best describes your dwelling?
- H-9:** Year of Construction by Ownership Type
Q20: In what year was your home constructed?
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Q24: What is the square footage of your home?
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Q188&
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Q102: What fuel do you use most for heating water in your home?
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- H-19:** Household Income by Year of Construction
Q186: Was your total household income before taxes for 1991 above or below \$25,000?
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Table H-1: Ownership Type by Dwelling Type

Q18 by Q16

Raw Data

OWNERSHIP TYPE	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Own	102	1,053	12	2	5	39	0	1,213
Rent or Lease	8	202	56	14	41	248	2	571
Occupy without Payment	1	17	4	0	0	6	0	28
Don't Know	0	1	0	0	0	0	0	1
Refused	0	2	0	0	0	0	0	2
TOTAL	111	1,275	72	16	46	293	2	1,815

Weighted Data

OWNERSHIP TYPE	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Own	33,942	350,404	3,993	666	1,664	12,978	0	403,646
Rent or Lease	2,662	67,219	18,635	4,659	13,643	82,526	666	190,010
Occupy without Payment	333	5,657	1,331	0	0	1,997	0	9,317
Don't Know	0	333	0	0	0	0	0	333
Refused	0	666	0	0	0	0	0	666
TOTAL	36,937	424,278	23,959	5,324	15,307	97,501	666	603,972

Weighted Data

Chart H-1: Ownership Type by Dwelling Type
Q18 by Q16

Table H-2: Year of Construction by Dwelling Type
Q20 by Q16

Raw Data

YEAR OF CONSTRUCTION	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Othe.	
Before 1950	1	483	11	4	5	45	1	550
1950-59	4	204	3	1	2	12	0	226
1960-69	9	153	11	2	2	23	0	200
1970-78	33	121	8	3	3	34	0	202
1979-85	31	91	5	0	7	22	0	156
1986-88	7	36	3	0	3	25	0	74
1989-92	17	61	6	0	0	31	0	115
Don't Know	9	126	25	6	23	101	1	291
Refused	0	0	0	0	1	0	0	1
TOTAL	111	1,275	72	16	46	293	2	1,815

Weighted Data

YEAR OF CONSTRUCTION	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Before 1950	333	160,726	3,660	1,331	1,664	14,975	333	183,022
1950-59	1,331	67,884	998	333	666	3,993	0	75,205
1960-69	2,995	50,913	3,660	666	666	7,654	0	66,553
1970-78	10,981	40,265	2,662	998	998	11,314	0	67,219
1979-85	10,316	30,282	1,664	0	2,329	7,321	0	51,912
1986-88	2,329	11,980	998	0	998	8,319	0	24,625
1989-92	5,657	20,299	1,997	0	0	10,316	0	38,268
Don't Know	2,995	41,929	8,319	1,997	7,654	33,609	333	96,835
Refused	0	0	0	0	333	0	0	333
TOTAL	36,937	424,278	23,959	5,324	15,307	97,501	666	603,972

Weighted Data

Chart H-2: Year of Construction by Dwelling Type
Q20 by Q16

Table H-3: Dwelling Size in Square Feet by Dwelling Type
Q24 by Q16

Raw Data

DWELLING SIZE IN SQUARE FEET	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
< 750	10	25	2	1	8	47	1	94
750 to < 1000	13	76	10	2	9	65	0	175
1000 to < 1250	21	128	15	2	6	29	0	201
1250 to < 1500	17	135	4	0	3	17	0	176
1500 to < 1750	8	153	4	0	0	5	0	170
1750 to < 2000	8	125	5	1	2	5	0	146
2000 to < 2500	3	166	1	1	0	2	0	173
2500 to < 3000	0	90	2	0	0	1	0	93
3000 or >	2	114	2	0	1	1	0	120
Don't Know	29	262	27	9	17	121	1	466
Refused	0	1	0	0	0	0	0	1
TOTAL	111	1,275	72	16	46	293	2	1,815

Weighted Data

DWELLING SIZE IN SQUARE FEET	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
< 750	3,328	8,319	666	333	2,662	15,640	333	31,280
750 to < 1000	4,326	25,290	3,328	666	2,995	21,630	0	58,234
1000 to < 1250	6,988	42,594	4,992	666	1,997	9,650	0	66,886
1250 to < 1500	5,657	44,924	1,331	0	998	5,657	0	58,567
1500 to < 1750	2,662	50,913	1,331	0	0	1,664	0	56,570
1750 to < 2000	2,662	41,596	1,664	333	666	1,664	0	48,584
2000 to < 2500	998	55,239	333	333	0	666	0	57,569
2500 to < 3000	0	29,949	666	0	0	333	0	30,947
3000 or >	666	37,935	666	0	333	333	0	39,932
Don't Know	9,650	87,185	8,985	2,995	5,657	40,265	333	155,069
Refused	0	333	0	0	0	0	0	333
TOTAL	36,937	424,278	23,959	5,324	15,307	97,501	666	603,972

Weighted Data

Chart H-3: Dwelling Size in Square Feet by Dwelling Type
Q24 by Q16

Table H-4: Primary Space-Heating Fuel Type by Dwelling Type
Q46 by Q16

Raw Data

PRIMARY SPACE-HEATING FUEL TYPE	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Electricity	82	511	36	11	36	219	0	895
Natural Gas	4	412	14	2	3	10	0	445
Fuel Oil	1	242	0	0	0	1	0	244
Wood or Presto Logs	21	96	1	0	0	2	0	120
Propane or Bottled Gas	2	4	0	0	0	0	0	6
Kerosene	1	4	1	0	0	0	0	6
Coal	0	0	0	0	0	0	0	0
Solar	0	0	0	0	0	0	0	0
Geothermal	0	0	0	0	0	0	0	0
Other	0	5	1	0	0	0	0	6
No Heat	0	0	0	0	0	0	0	0
Not Asked	0	0	19	3	7	60	2	91
Don't Know	0	1	0	0	0	1	0	2
Refused	0	0	0	0	0	0	0	0
TOTAL	111	1,275	72	16	46	293	2	1,815

Table H-4: Primary Space-Heating Fuel Type by Dwelling Type
Q46 by Q16

Weighted Data

PRIMARY SPACE-HEATING FUEL TYPE	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Electricity	27,287	170,044	11,980	3,660	11,980	72,876	0	297,826
Natural Gas	1,331	137,100	4,659	666	998	3,328	0	148,081
Fuel Oil	333	80,530	0	0	0	333	0	81,195
Wood or Presto Logs	6,988	31,946	333	0	0	666	0	39,932
Propane or Bottled Gas	666	1,331	0	0	0	0	0	1,997
Kerosene	333	1,331	333	0	0	0	0	1,997
Coal	0	0	0	0	0	0	0	0
Solar	0	0	0	0	0	0	0	0
Geothermal	0	0	0	0	0	0	0	0
Other	0	1,664	333	0	0	0	0	1,997
No Heat	0	0	0	0	0	0	0	0
Not Asked	0	0	6,323	998	2,329	19,966	666	30,282
Don't Know	0	333	0	0	0	333	0	666
Refused	0	0	0	0	0	0	0	0
TOTAL	36,937	424,278	23,959	5,324	15,307	97,501	666	603,972

Weighted Data

Chart H-4: Primary Space-Heating Fuel Type by Dwelling Type Q46 by Q16

Table H-5: Primary Water-Heating Fuel Type by Dwelling Type

Q102 by Q16

Raw Data

PRIMARY WATER-HEATING FUEL TYPE	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Electricity	106	950	42	10	34	185	0	1,327
Natural Gas	3	303	6	1	0	7	0	320
Fuel Oil	0	5	1	0	0	0	0	6
Wood	0	3	0	0	0	0	0	3
Propane or Bottled Gas	1	6	0	0	0	0	0	7
Solar	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
No Hot Water In Home	0	0	0	0	0	0	0	0
Not Asked	0	0	21	5	11	96	2	135
Don't Know	1	8	2	0	1	5	0	17
Refused	0	0	0	0	0	0	0	0
TOTAL	111	1,275	72	16	46	293	2	1,815

Weighted Data

PRIMARY WATER-HEATING FUEL TYPE	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Electricity	35,273	316,129	13,976	3,328	11,314	61,562	0	441,582
Natural Gas	998	100,828	1,997	333	0	2,329	0	106,485
Fuel Oil	0	1,664	333	0	0	0	0	1,997
Wood	0	998	0	0	0	0	0	998
Propane or Bottled Gas	333	1,997	0	0	0	0	0	2,329
Solar	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
No Hot Water In Home	0	0	0	0	0	0	0	0
Not Asked	0	0	6,988	1,664	3,660	31,946	666	44,924
Don't Know	333	2,662	666	0	333	1,664	0	5,657
Refused	0	0	0	0	0	0	0	0
TOTAL	36,937	424,278	23,959	5,324	15,307	97,501	666	603,972

Weighted Data

Chart H-5: Primary Water-Heating Fuel Type by Dwelling Type

Q102 by Q16

Table H-6: Household Income by Dwelling Type

Q186, Q188, Q189 by Q16

Raw Data

HOUSEHOLD INCOME	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Less Than \$5,000	0	18	6	0	0	11	0	35
\$5,000 to < \$10,000	3	43	2	2	5	20	0	75
\$10,000 to < \$15,000	7	39	7	2	5	34	1	95
\$15,000 to < \$20,000	18	53	7	1	6	30	1	116
\$20,000 to < \$25,000	11	60	9	0	5	21	0	106
\$25,000 to < \$30,000	9	110	4	2	12	33	0	170
\$30,000 to < \$40,000	17	196	8	3	5	38	0	267
\$40,000 to < \$50,000	10	155	7	1	1	21	0	195
\$50,000 to < \$60,000	4	110	2	0	0	7	0	123
\$60,000 to < \$80,000	2	108	1	1	0	4	0	116
\$80,000 to < \$100,000	0	48	2	1	0	2	0	53
\$100,000 or More	0	33	1	0	0	2	0	36
Don't Know	11	89	7	2	5	26	0	140
Refused	19	213	9	1	2	44	0	288
TOTAL	111	1,275	72	16	46	293	2	1,815

Table H-6: Household Income by Dwelling Type

Q186, Q188, Q189 by Q16

Weighted Data

HOUSEHOLD INCOME	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Less Than \$5,000	0	5,990	1,997	0	0	3,660	0	11,647
\$5,000 to < \$10,000	998	14,309	666	666	1,664	6,655	0	24,958
\$10,000 to < \$15,000	2,329	12,978	2,329	666	1,664	11,314	333	31,613
\$15,000 to < \$20,000	5,990	17,637	2,329	333	1,997	9,983	333	38,601
\$20,000 to < \$25,000	3,660	19,966	2,995	0	1,664	6,988	0	35,273
\$25,000 to < \$30,000	2,995	36,604	1,331	666	3,993	10,981	0	56,570
\$30,000 to < \$40,000	5,657	65,222	2,662	998	1,664	12,645	0	88,849
\$40,000 to < \$50,000	3,328	51,579	2,329	333	333	6,988	0	64,890
\$50,000 to < \$60,000	1,331	36,604	666	0	0	2,329	0	40,930
\$60,000 to < \$80,000	666	35,939	333	333	0	1,331	0	38,601
\$80,000 to < \$100,000	0	15,973	666	333	0	666	0	17,637
\$100,000 or More	0	10,981	333	0	0	666	0	11,980
Don't Know	3,660	29,616	2,329	666	1,664	8,652	0	46,587
Refused	6,323	70,879	2,995	333	666	14,642	0	95,837
TOTAL	36,937	424,278	23,959	5,324	15,307	97,501	666	603,972

Weighted Data

Chart H-6: Household Income by Dwelling Type

Q186, Q188, Q189 by Q16

Table H-7: Utility Type by Dwelling Type
TYPE by Q16

Raw Data

UTILITY TYPE	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Public Generating	111	1,275	72	16	46	293	2	1,815
Public Non-Generating	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0
TOTAL	111	1,275	72	16	46	293	2	1,815

Weighted Data

UTILITY TYPE	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Public Generating	36,937	424,278	23,959	5,324	15,307	97,501	666	603,972
Public Non-Generating	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0
TOTAL	36,937	424,278	23,959	5,324	15,307	97,501	666	603,972

Weighted Data

Chart H-7: Utility Type by Dwelling Type
TYPE by Q16

Table H-8: Space-Heating Fuels: Systems and Equipment by Dwelling Type
HEAT_EQP by Q16

Raw Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	DWELLING TYPE							TOTAL
		Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Multi-Unit:	Central Heat - All Units	0	0	15	3	6	49	2	75
	Central Heat - Several Units	0	0	2	0	0	4	0	6
	Unit Not Heated	0	0	0	0	1	2	0	3
Fossil:	Steam or Hot Water Radiators	0	43	2	0	0	0	0	45
	Wall, Floor, or Ceiling Units	1	35	2	1	1	6	0	46
	Portable Units	1	2	1	0	0	0	0	4
	Central Furnace	6	571	9	1	1	5	0	593
	Other	0	2	0	0	0	0	0	2
Electricity:	Heat Pump	5	46	1	1	0	4	0	57
	Portable Room Heaters	2	7	1	0	2	5	0	17
	Radiant Panels	3	50	3	1	6	29	0	92
	Steam or Hot Water Radiators	1	8	0	0	0	3	0	12
	Central Furnace	67	132	3	1	2	15	0	220
	Baseboard or Wall Units	3	263	27	8	26	159	0	486
	Other	0	2	0	0	0	1	0	3
Wood:	Free-Standing Stove	19	55	0	0	0	0	0	74
	Free-Standing Pellet Stove	1	8	0	0	0	0	0	9
	Central Furnace	1	4	0	0	0	0	0	5
	Fireplace with an Insert	0	27	0	0	0	1	0	28
	Fireplace without an Insert	0	2	1	0	0	1	0	4
Other:	Solar	0	0	0	0	0	0	0	0
	Geothermal	0	0	0	0	0	0	0	0
	Other	0	5	1	0	0	0	0	6
	No Heat	0	0	0	0	0	0	0	0
	Don't Know	1	13	4	0	1	9	0	28
	Refused	0	0	0	0	0	0	0	0
	TOTAL	111	1,275	72	16	46	293	2	1,815

Table H-8: Space-Heating Fuels: Systems and Equipment by Dwelling Type
HEAT_EQP by Q16

Weighted Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	DWELLING TYPE							TOTAL
		Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Multi-Unit:	Central Heat - All Units	0	0	4,992	998	1,997	16,306	666	24,958
	Central Heat - Several Units	0	0	666	0	0	1,331	0	1,997
	Unit Not Heated	0	0	0	0	333	666	0	998
Fossil:	Steam or Hot Water Radiators	0	14,309	666	0	0	0	0	14,975
	Wall, Floor, or Ceiling Units	333	11,647	666	333	333	1,997	0	15,307
	Portable Units	333	666	333	0	0	0	0	1,331
	Central Furnace	1,997	190,010	2,995	333	333	1,664	0	197,331
	Other	0	666	0	0	0	0	0	666
Electricity:	Heat Pump	1,664	15,307	333	333	0	1,331	0	18,968
	Portable Room Heaters	666	2,329	333	0	666	1,664	0	5,657
	Radiant Panels	998	16,638	998	333	1,997	9,650	0	30,615
	Steam or Hot Water Radiators	333	2,662	0	0	0	998	0	3,993
	Central Furnace	22,295	43,925	998	333	666	4,992	0	73,209
	Baseboard or Wall Units	998	87,518	8,985	2,662	8,652	52,910	0	161,725
	Other	0	666	0	0	0	333	0	998
Wood:	Free-Standing Stove	6,323	18,302	0	0	0	0	0	24,625
	Free-Standing Pellet Stove	333	2,662	0	0	0	0	0	2,995
	Central Furnace	333	1,331	0	0	0	0	0	1,664
	Fireplace with an Insert	0	8,985	0	0	0	333	0	9,317
	Fireplace without an Insert	0	666	333	0	0	333	0	1,331
Other:	Solar	0	0	0	0	0	0	0	0
	Geothermal	0	0	0	0	0	0	0	0
	Other	0	1,664	333	0	0	0	0	1,997
	No Heat	0	0	0	0	0	0	0	0
	Don't Know	333	4,326	1,331	0	333	2,995	0	9,317
	Refused	0	0	0	0	0	0	0	0
TOTAL		36,937	424,278	23,959	5,324	15,307	97,501	666	603,972

Weighted Data

Chart H-8: Space-Heating Fuels: Systems and Equipment by Dwelling Type
HEAT_EQP by Q16

Space-Heating Fuels: Systems and Equipment

Table H-9: Year of Construction by Ownership Type
Q20 by Q18

Raw Data

YEAR OF CONSTRUCTION	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Before 1950	407	133	9	1	0	550
1950-59	185	40	0	0	1	226
1960-69	154	44	2	0	0	200
1970-78	149	52	1	0	0	202
1979-85	125	28	3	0	0	156
1986-88	48	25	1	0	0	74
1989-92	78	37	0	0	0	115
Don't Know	67	211	12	0	1	291
Refused	0	1	0	0	0	1
TOTAL	1,213	571	28	1	2	1,815

Weighted Data

YEAR OF CONSTRUCTION	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Before 1950	135,436	44,258	2,995	333	0	183,022
1950-59	61,562	13,311	0	0	333	75,205
1960-69	51,246	14,642	666	0	0	66,553
1970-78	49,582	17,304	333	0	0	67,219
1979-85	41,596	9,317	998	0	0	51,912
1986-88	15,973	8,319	333	0	0	24,625
1989-92	25,956	12,312	0	0	0	38,268
Don't Know	22,295	70,214	3,993	0	333	96,835
Refused	0	333	0	0	0	333
TOTAL	403,646	190,010	9,317	333	666	603,972

Weighted Data

Chart H-9: Year of Construction by Ownership Type
Q20 by Q18

Table H-10: Dwelling Size in Square Feet by Ownership Type

Q24 by Q18

Raw Data

DWELLING SIZE IN SQUARE FEET	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
< 750	25	66	3	0	0	94
750 to < 1000	72	103	0	0	0	175
1000 to < 1250	131	68	1	1	0	201
1250 to < 1500	145	28	2	0	1	176
1500 to < 1750	148	21	1	0	0	170
1750 to < 2000	126	18	2	0	0	146
2000 to < 2500	146	26	0	0	1	173
2500 to < 3000	84	9	0	0	0	93
3000 or >	115	5	0	0	0	120
Don't Know	220	227	19	0	0	466
Refused	1	0	0	0	0	1
TOTAL	1,213	571	28	1	2	1,815

Weighted Data

DWELLING SIZE IN SQUARE FEET	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
< 750	8,319	21,963	998	0	0	31,280
750 to < 1000	23,959	34,275	0	0	0	58,234
1000 to < 1250	43,592	22,628	333	333	0	66,886
1250 to < 1500	48,251	9,317	666	0	333	58,567
1500 to < 1750	49,250	6,988	333	0	0	56,570
1750 to < 2000	41,929	5,990	666	0	0	48,584
2000 to < 2500	48,584	8,652	0	0	333	57,569
2500 to < 3000	27,952	2,995	0	0	0	30,947
3000 or >	38,268	1,664	0	0	0	39,932
Don't Know	73,209	75,538	6,323	0	0	155,069
Refused	333	0	0	0	0	333
TOTAL	403,646	190,010	9,317	333	666	603,972

Weighted Data

Chart H-10: Dwelling Size in Square Feet by Ownership Type
Q24 by Q18

Table H-11: Primary Space-Heating Fuel Type by Ownership Type
Q46 by Q18

Raw Data

PRIMARY SPACE-HEATING FUEL TYPE	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Electricity	524	355	14	0	2	895
Natural Gas	333	104	8	0	0	445
Fuel Oil	219	24	1	0	0	244
Wood or Presto Logs	106	11	2	1	0	120
Propane or Bottled Gas	6	0	0	0	0	6
Kerosene	3	3	0	0	0	6
Coal	0	0	0	0	0	0
Solar	0	0	0	0	0	0
Geothermal	0	0	0	0	0	0
Other	5	1	0	0	0	6
No Heat	0	0	0	0	0	0
Not Asked	15	73	3	0	0	91
Don't Know	2	0	0	0	0	2
Refused	0	0	0	0	0	0
TOTAL	1,213	571	28	1	2	1,815

Table H-11: Primary Space-Heating Fuel Type by Ownership Type
Q46 by Q18

Weighted Data

PRIMARY SPACE-HEATING FUEL TYPE	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Electricity	174,370	118,132	4,659	0	666	297,826
Natural Gas	110,811	34,608	2,662	0	0	148,081
Fuel Oil	72,876	7,986	333	0	0	81,195
Wood or Presto Logs	35,273	3,660	666	333	0	39,932
Propane or Bottled Gas	1,997	0	0	0	0	1,997
Kerosene	998	998	0	0	0	1,997
Coal	0	0	0	0	0	0
Solar	0	0	0	0	0	0
Geothermal	0	0	0	0	0	0
Other	1,664	333	0	0	0	1,997
No Heat	0	0	0	0	0	0
Not Asked	4,992	24,292	998	0	0	30,282
Don't Know	666	0	0	0	0	666
Refused	0	0	0	0	0	0
TOTAL	403,646	190,010	9,317	333	666	603,972

Weighted Data

Chart H-11: Primary Space-Heating Fuel Type by Ownership Type

Q46 by Q18

Table H-12: Primary Water-Heating Fuel Type by Ownership Type

Q102 by Q18

Raw Data

PRIMARY WATER-HEATING FUEL TYPE	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Electricity	923	383	18	1	2	1,327
Natural Gas	254	61	5	0	0	320
Fuel Oil	4	1	1	0	0	6
Wood	3	0	0	0	0	3
Propane or Bottled Gas	6	1	0	0	0	7
Solar	0	0	0	0	0	0
Other	0	0	0	0	0	0
No Hot Water In Home	0	0	0	0	0	0
Not Asked	19	112	4	0	0	135
Don't Know	4	13	0	0	0	17
Refused	0	0	0	0	0	0
TOTAL	1,213	571	28	1	2	1,815

Weighted Data

PRIMARY WATER-HEATING FUEL TYPE	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Electricity	307,144	127,450	5,990	333	666	441,582
Natural Gas	84,523	20,299	1,664	0	0	106,485
Fuel Oil	1,331	333	333	0	0	1,997
Wood	998	0	0	0	0	998
Propane or Bottled Gas	1,997	333	0	0	0	2,329
Solar	0	0	0	0	0	0
Other	0	0	0	0	0	0
No Hot Water In Home	0	0	0	0	0	0
Not Asked	6,323	37,270	1,331	0	0	44,924
Don't Know	1,331	4,326	0	0	0	5,657
Refused	0	0	0	0	0	0
TOTAL	403,646	190,010	9,317	333	666	603,972

Weighted Data

Chart H-12: Primary Water-Heating Fuel Type by Ownership Type

Q102 by Q18

Table H-13: Household Income by Ownership Type

Q186, Q188, Q189 by Q18

Raw Data

HOUSEHOLD INCOME	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Below \$5,000	11	24	0	0	0	35
\$5,000 to < \$10,000	24	46	4	1	0	75
\$10,000 to < \$15,000	40	52	3	0	0	95
\$15,000 to < \$20,000	58	54	4	0	0	116
\$20,000 to < \$25,000	59	45	2	0	0	106
\$25,000 to < \$30,000	100	70	0	0	0	170
\$30,000 to < \$40,000	189	77	1	0	0	267
\$40,000 to < \$50,000	147	44	4	0	0	195
\$50,000 to < \$60,000	100	21	2	0	0	123
\$60,000 to < \$80,000	105	11	0	0	0	116
\$80,000 to < \$100,000	43	9	1	0	0	53
\$100,000 or More	35	1	0	0	0	36
Don't Know	82	56	2	0	0	140
Refused	220	61	5	0	2	288
TOTAL	1,213	571	28	1	2	1,815

Table H-13: Household Income by Ownership Type

Q186, Q188, Q189 by Q18

Weighted Data

HOUSEHOLD INCOME	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Below \$5,000	3,660	7,986	0	0	0	11,647
\$5,000 to < \$10,000	7,986	15,307	1,331	333	0	24,958
\$10,000 to < \$15,000	13,311	17,304	998	0	0	31,613
\$15,000 to < \$20,000	19,300	17,969	1,331	0	0	38,601
\$20,000 to < \$25,000	19,633	14,975	666	0	0	35,273
\$25,000 to < \$30,000	33,277	23,294	0	0	0	56,570
\$30,000 to < \$40,000	62,893	25,623	333	0	0	88,849
\$40,000 to < \$50,000	48,917	14,642	1,331	0	0	64,890
\$50,000 to < \$60,000	33,277	6,988	666	0	0	40,930
\$60,000 to < \$80,000	34,941	3,660	0	0	0	38,601
\$80,000 to < \$100,000	14,309	2,995	333	0	0	17,637
\$100,000 or More	11,647	333	0	0	0	11,980
Don't Know	27,287	18,635	666	0	0	46,587
Refused	73,209	20,299	1,664	0	666	95,837
TOTAL	403,646	190,010	9,317	333	666	603,972

Weighted Data

Chart H-13: Household Income by Ownership Type
Q186, Q188, Q189 by Q18

Table H-14: Utility Type by Ownership Type
TYPE by Q18

Raw Data

UTILITY TYPE	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Public Generating	1,213	571	28	1	2	1,815
Public Non-Generating	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0
TOTAL	1,213	571	28	1	2	1,815

Weighted Data

UTILITY TYPE	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Public Generating	403,646	190,010	9,317	333	666	603,972
Public Non-Generating	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0
TOTAL	403,646	190,010	9,317	333	666	603,972

Weighted Data

Chart H-14: Utility Type by Ownership Type
TYPE by Q18

Table H-15: Space-Heating Fuels: Systems and Equipment by Ownership Type
HEAT_EQP by Q18

Raw Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	OWNERSHIP TYPE					TOTAL
		Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	12	60	3	0	0	75
	Central Heat - Several Units	1	5	0	0	0	6
	Unit Not Heated	0	3	0	0	0	3
Fossil:	Steam or Hot Water Radiators	30	14	1	0	0	45
	Wall, Floor, or Ceiling Units	32	14	0	0	0	46
	Portable Units	2	2	0	0	0	4
	Central Furnace	491	95	7	0	0	593
	Other	0	2	0	0	0	2
Electricity:	Heat Pump	49	8	0	0	0	57
	Portable Room Heaters	6	10	1	0	0	17
	Radiant Panels	51	41	0	0	0	92
	Steam or Hot Water Radiators	7	3	2	0	0	12
	Central Furnace	184	34	2	0	0	220
	Baseboard or Wall Units	223	252	9	0	2	486
	Other	2	1	0	0	0	3
Wood:	Free-Standing Stove	66	6	1	1	0	74
	Free-Standing Pellet Stove	9	0	0	0	0	9
	Central Furnace	4	1	0	0	0	5
	Fireplace with an Insert	25	2	1	0	0	28
	Fireplace without an Insert	2	2	0	0	0	4
Other:	Solar	0	0	0	0	0	0
	Geothermal	0	0	0	0	0	0
	Other	5	1	0	0	0	6
	No Heat	0	0	0	0	0	0
	Don't Know	12	15	1	0	0	28
	Refused	0	0	0	0	0	0
TOTAL		1,213	571	28	1	2	1,815

Table H-15: Space-Heating Fuels: Systems and Equipment by Ownership Type
HEAT_EQP by Q18

Weighted Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	OWNERSHIP TYPE					TOTAL
		Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	3,993	19,966	998	0	0	24,958
	Central Heat - Several Units	333	1,664	0	0	0	1,997
	Unit Not Heated	0	998	0	0	0	998
Fossil:	Steam or Hot Water Radiators	9,983	4,659	333	0	0	14,975
	Wall, Floor, or Ceiling Units	10,649	4,659	0	0	0	15,307
	Portable Units	666	666	0	0	0	1,331
	Central Furnace	163,389	31,613	2,329	0	0	197,331
	Other	0	666	0	0	0	666
Electricity:	Heat Pump	16,306	2,662	0	0	0	18,968
	Portable Room Heaters	1,997	3,328	333	0	0	5,657
	Radiant Panels	16,971	13,643	0	0	0	30,615
	Steam or Hot Water Radiators	2,329	998	666	0	0	3,993
	Central Furnace	61,229	11,314	666	0	0	73,209
	Baseboard or Wall Units	74,207	83,857	2,995	0	666	161,725
	Other	666	333	0	0	0	998
Wood:	Free-Standing Stove	21,963	1,997	333	333	0	24,625
	Free-Standing Pellet Stove	2,995	0	0	0	0	2,995
	Central Furnace	1,331	333	0	0	0	1,664
	Fireplace with an Insert	8,319	666	333	0	0	9,317
	Fireplace without an Insert	666	666	0	0	0	1,331
Other:	Solar	0	0	0	0	0	0
	Geothermal	0	0	0	0	0	0
	Other	1,664	333	0	0	0	1,997
	No Heat	0	0	0	0	0	0
	Don't Know	3,993	4,992	333	0	0	9,317
	Refused	0	0	0	0	0	0
	TOTAL	403,646	190,010	9,317	333	666	603,972

Chart H-15: Space-Heating Fuels: Systems and Equipment by Ownership Type
HEAT_EQP by Q18

Weighted Data

Space-Heating Fuels: Systems and Equipment

Table H-16: Dwelling Size in Square Feet by Year of Construction
Q24 by Q20

Raw Data

DWELLING SIZE IN SQUARE FEET	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
< 750	30	5	7	12	7	6	3	23	1	94
750 to < 1000	55	15	18	22	17	13	15	20	0	175
1000 to < 1250	57	23	28	16	22	10	15	30	0	201
1250 to < 1500	49	32	14	24	18	10	20	9	0	176
1500 to < 1750	42	20	32	29	19	5	14	9	0	170
1750 to < 2000	50	20	17	13	21	6	12	7	0	146
2000 to < 2500	54	31	22	24	14	9	6	13	0	173
2500 to < 3000	30	16	10	14	9	4	8	2	0	93
3000 or >	45	19	19	11	13	5	7	1	0	120
Don't Know	137	45	33	37	16	6	15	177	0	466
Refused	1	0	0	0	0	0	0	0	0	1
TOTAL	550	226	200	202	156	74	115	291	1	1,815

Weighted Data

DWELLING SIZE IN SQUARE FEET	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
< 750	9,983	1,664	2,329	3,993	2,329	1,997	998	7,654	333	31,280
750 to < 1000	18,302	4,992	5,990	7,321	5,657	4,326	4,992	6,655	0	58,234
1000 to < 1250	18,968	7,654	9,317	5,324	7,321	3,328	4,992	9,983	0	66,886
1250 to < 1500	16,306	10,649	4,659	7,986	5,990	3,328	6,655	2,995	0	58,567
1500 to < 1750	13,976	6,655	10,649	9,650	6,323	1,664	4,659	2,995	0	56,570
1750 to < 2000	16,638	6,655	5,657	4,326	6,988	1,997	3,993	2,329	0	48,584
2000 to < 2500	17,969	10,316	7,321	7,986	4,659	2,995	1,997	4,326	0	57,569
2500 to < 3000	9,983	5,324	3,328	4,659	2,995	1,331	2,662	666	0	30,947
3000 or >	14,975	6,323	6,323	3,660	4,326	1,664	2,329	333	0	39,932
Don't Know	45,589	14,975	10,981	12,312	5,324	1,997	4,992	58,900	0	155,069
Refused	333	0	0	0	0	0	0	0	0	333
TOTAL	183,022	75,205	66,553	67,219	51,912	24,625	38,268	96,835	333	603,972

Weighted Data

Chart H-16: Dwelling Size in Square Feet by Year of Construction
Q24 by Q20

Table H-17: Primary Space-Heating Fuel Type by Year of Construction
Q46 by Q20

Raw Data

PRIMARY SPACE-HEATING FUEL TYPE	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Electricity	165	78	89	148	110	49	68	187	1	895
Natural Gas	209	50	64	22	17	15	28	40	0	445
Fuel Oil	119	79	25	2	1	0	0	18	0	244
Wood or Presto Logs	30	13	14	22	21	7	9	4	0	120
Propane or Bottled Gas	2	0	0	1	1	0	2	0	0	6
Kerosene	0	2	1	1	0	0	1	1	0	6
Coal	0	0	0	0	0	0	0	0	0	0
Solar	0	0	0	0	0	0	0	0	0	0
Geothermal	0	0	0	0	0	0	0	0	0	0
Other	1	1	2	1	0	0	1	0	0	6
No Heat	0	0	0	0	0	0	0	0	0	0
Not Asked	24	3	4	4	6	3	6	41	0	91
Don't Know	0	0	1	1	0	0	0	0	0	2
Refused	0	0	0	0	0	0	0	0	0	0
TOTAL	550	226	200	202	156	74	115	291	1	1,815

Table H-17: Primary Space-Heating Fuel Type by Year of Construction
Q46 by Q20

Weighted Data

PRIMARY SPACE-HEATING FUEL TYPE	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Electricity	54,907	25,956	29,616	49,250	36,604	16,306	22,628	62,227	333	297,826
Natural Gas	69,548	16,638	21,297	7,321	5,657	4,992	9,317	13,311	0	148,081
Fuel Oil	39,599	26,289	8,319	666	333	0	0	5,990	0	81,195
Wood or Presto Logs	9,983	4,326	4,659	7,321	6,988	2,329	2,995	1,331	0	39,932
Propane or Bottled Gas	666	0	0	333	333	0	666	0	0	1,997
Kerosene	0	666	333	333	0	0	333	333	0	1,997
Coal	0	0	0	0	0	0	0	0	0	0
Solar	0	0	0	0	0	0	0	0	0	0
Geothermal	0	0	0	0	0	0	0	0	0	0
Other	333	333	666	333	0	0	333	0	0	1,997
No Heat	0	0	0	0	0	0	0	0	0	0
Not Asked	7,986	998	1,331	1,331	1,997	998	1,997	13,643	0	30,282
Don't Know	0	0	333	333	0	0	0	0	0	666
Refused	0	0	0	0	0	0	0	0	0	0
TOTAL	183,022	75,205	66,553	67,219	51,912	24,625	38,268	96,835	333	603,972

Weighted Data

Chart H-17: Primary Space-Heating Fuel Type by Year of Construction

Q46 by Q20

Table H-18: Primary Water-Heating Fuel Type by Year of Construction

Q102 by Q20

Raw Data

PRIMARY WATER-HEATING FUEL TYPE	YEAR OF CONSTRUCTION									TOTAL
	Before									
	1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Electricity	342	185	143	173	134	54	81	214	1	1,327
Natural Gas	149	33	45	16	13	13	28	23	0	320
Fuel Oil	4	0	1	0	1	0	0	0	0	6
Wood	0	0	0	2	1	0	0	0	0	3
Propane or Bottled Gas	2	1	0	0	2	0	2	0	0	7
Solar	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
No Hot Water In Home	0	0	0	0	0	0	0	0	0	0
Not Asked	48	7	11	9	4	6	3	47	0	135
Don't Know	5	0	0	2	1	1	1	7	0	17
Refused	0	0	0	0	0	0	0	0	0	0
TOTAL	550	226	200	202	156	74	115	291	1	1,815

Weighted Data

PRIMARY WATER-HEATING FUEL TYPE	YEAR OF CONSTRUCTION									TOTAL
	Before									
	1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Electricity	113,806	61,562	47,586	57,569	44,591	17,969	26,954	71,212	333	441,582
Natural Gas	49,582	10,981	14,975	5,324	4,326	4,326	9,317	7,654	0	106,485
Fuel Oil	1,331	0	333	0	333	0	0	0	0	1,997
Wood	0	0	0	666	333	0	0	0	0	998
Propane or Bottled Gas	666	333	0	0	666	0	666	0	0	2,329
Solar	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
No Hot Water In Home	0	0	0	0	0	0	0	0	0	0
Not Asked	15,973	2,329	3,660	2,995	1,331	1,997	998	15,640	0	44,924
Don't Know	1,664	0	0	666	333	333	333	2,329	0	5,657
Refused	0	0	0	0	0	0	0	0	0	0
TOTAL	183,022	75,205	66,553	67,219	51,912	24,625	38,268	96,835	333	603,972

Weighted Data

Chart H-18: Primary Water-Heating Fuel Type by Year of Construction

Q102 by Q20

Table H-19: Household Income by Year of Construction
Q186, Q188, Q189 by Q20

Raw Data

HOUSEHOLD INCOME	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Below \$5,000	8	3	2	0	1	0	2	19	0	35
\$5,000 to < \$10,000	19	9	2	15	5	2	1	22	0	75
\$10,000 to < \$15,000	32	9	6	4	3	5	4	32	0	95
\$15,000 to < \$20,000	32	9	11	12	12	4	4	32	0	116
\$20,000 to < \$25,000	29	15	11	9	8	7	5	22	0	106
\$25,000 to < \$30,000	43	30	15	23	15	8	10	25	1	170
\$30,000 to < \$40,000	76	35	47	37	17	11	19	25	0	267
\$40,000 to < \$50,000	72	25	20	25	16	6	14	17	0	195
\$50,000 to < \$60,000	39	15	16	15	15	5	7	11	0	123
\$60,000 to < \$80,000	44	11	7	15	13	8	14	4	0	116
\$80,000 to < \$100,000	20	6	8	6	5	1	6	1	0	53
\$100,000 or More	11	6	4	7	3	4	1	0	0	36
Don't Know	40	11	16	11	11	5	6	40	0	140
Refused	85	42	35	23	32	8	22	41	0	288
TOTAL	550	226	200	202	156	74	115	291	1	1,815

Table H-19: Household Income by Year of Construction

Q186, Q188, Q189 by Q20

Weighted Data

HOUSEHOLD INCOME	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Below \$5,000	2,662	998	666	0	333	0	666	6,323	0	11,647
\$5,000 to < \$10,000	6,323	2,995	666	4,992	1,664	666	333	7,321	0	24,958
\$10,000 to < \$15,000	10,649	2,995	1,997	1,331	998	1,664	1,331	10,649	0	31,613
\$15,000 to < \$20,000	10,649	2,995	3,660	3,993	3,993	1,331	1,331	10,649	0	38,601
\$20,000 to < \$25,000	9,650	4,992	3,660	2,995	2,662	2,329	1,664	7,321	0	35,273
\$25,000 to < \$30,000	14,309	9,983	4,992	7,654	4,992	2,662	3,328	8,319	333	56,570
\$30,000 to < \$40,000	25,290	11,647	15,640	12,312	5,657	3,660	6,323	8,319	0	88,849
\$40,000 to < \$50,000	23,959	8,319	6,655	8,319	5,324	1,997	4,659	5,657	0	64,890
\$50,000 to < \$60,000	12,978	4,992	5,324	4,992	4,992	1,664	2,329	3,660	0	40,930
\$60,000 to < \$80,000	14,642	3,660	2,329	4,992	4,326	2,662	4,659	1,331	0	38,601
\$80,000 to < \$100,000	6,655	1,997	2,662	1,997	1,664	333	1,997	333	0	17,637
\$100,000 or More	3,660	1,997	1,331	2,329	998	1,331	333	0	0	11,980
Don't Know	13,311	3,660	5,324	3,660	3,660	1,664	1,997	13,311	0	46,587
Refused	28,285	13,976	11,647	7,654	10,649	2,662	7,321	13,643	0	95,837
TOTAL	183,022	75,205	66,553	67,219	51,912	24,625	38,268	96,835	333	603,972

Weighted Data

Chart H-19: Household Income by Year of Construction

Q186, Q188, Q189 by Q20

Table H-20: Utility Type by Year of Construction
TYPE by Q20

Raw Data

UTILITY TYPE	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Public Generating	550	226	200	202	156	74	115	291	1	1,815
Public Non-Generating	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0
TOTAL	550	226	200	202	156	74	115	291	1	1,815

Weighted Data

UTILITY TYPE	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Public Generating	183,022	75,205	66,553	67,219	51,912	24,625	38,268	96,835	333	603,972
Public Non-Generating	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0
TOTAL	183,022	75,205	66,553	67,219	51,912	24,625	38,268	96,835	333	603,972

Weighted Data

Chart H-20: Utility Type by Year of Construction
TYPE by Q20

Table H-21: Space-Heating Fuels: Systems and Equipment by Year of Construction
HEAT_EQP by Q20

Raw Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	YEAR OF CONSTRUCTION									TOTAL
		Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	21	2	3	3	5	2	4	35	0	75
	Central Heat - Several Units	2	1	1	0	0	0	1	1	0	6
	Unit Not Heated	1	0	0	1	0	0	0	1	0	3
Fossil:	Steam or Hot Water Radiators	19	9	5	2	3	1	1	5	0	45
	Wall, Floor, or Ceiling Units	17	10	7	2	2	0	2	6	0	46
	Portable Units	0	1	1	1	0	0	1	0	0	4
	Central Furnace	288	110	76	20	14	13	27	45	0	593
	Other	1	0	0	0	0	0	0	1	0	2
Electricity:	Heat Pump	11	8	6	6	11	3	5	7	0	57
	Portable Room Heaters	7	2	0	0	0	2	2	4	0	17
	Radiant Panels	13	4	8	16	14	10	4	22	1	92
	Steam or Hot Water Radiators	1	2	1	0	2	0	2	4	0	12
	Central Furnace	25	16	16	68	41	8	23	23	0	220
	Baseboard or Wall Units	106	46	58	58	42	26	30	120	0	486
	Other	1	0	0	0	0	0	1	1	0	3
Wood:	Free-Standing Stove	19	3	8	16	16	5	6	1	0	74
	Free-Standing Pellet Stove	2	1	0	1	2	0	2	1	0	9
	Central Furnace	1	1	1	0	1	1	0	0	0	5
	Fireplace with an Insert	8	7	5	4	2	0	1	1	0	28
	Fireplace without an Insert	0	1	0	1	0	1	0	1	0	4
Other:	Solar	0	0	0	0	0	0	0	0	0	0
	Geothermal	0	0	0	0	0	0	0	0	0	0
	Other	1	1	2	1	0	0	1	0	0	6
	No Heat	0	0	0	0	0	0	0	0	0	0
	Don't Know	6	1	2	2	1	2	2	12	0	28
	Refused	0	0	0	0	0	0	0	0	0	0
	TOTAL	550	226	200	202	156	74	115	291	1	1,815

Table H-21: Space-Heating Fuels: Systems and Equipment by Year of Construction
HEAT_EQP by Q20

Weighted Data

SPACE-HEATING FUELS: SYSTEMS AND EQUIPMENT	YEAR OF CONSTRUCTION										TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused		
Multi-Unit:	Central Heat - All Units	6,988	666	998	998	1,664	666	1,331	11,647	0	24,958
	Central Heat - Several Units	666	333	333	0	0	0	333	333	0	1,997
	Unit Not Heated	333	0	0	333	0	0	0	333	0	998
Fossil:	Steam or Hot Water Radiators	6,323	2,995	1,664	666	998	333	333	1,664	0	14,975
	Wall, Floor, or Ceiling Units	5,657	3,328	2,329	666	666	0	666	1,997	0	15,307
	Portable Units	0	333	333	333	0	0	333	0	0	1,331
	Central Furnace	95,837	36,604	25,290	6,655	4,659	4,326	8,985	14,975	0	197,331
	Other	333	0	0	0	0	0	0	333	0	666
Electricity:	Heat Pump	3,660	2,662	1,997	1,997	3,660	998	1,664	2,329	0	18,968
	Portable Room Heaters	2,329	666	0	0	0	666	666	1,331	0	5,657
	Radiant Panels	4,326	1,331	2,662	5,324	4,659	3,328	1,331	7,321	333	30,615
	Steam or Hot Water Radiators	333	666	333	0	666	0	666	1,331	0	3,993
	Central Furnace	8,319	5,324	5,324	22,628	13,643	2,662	7,654	7,654	0	73,209
	Baseboard or Wall Units	35,273	15,307	19,300	19,300	13,976	8,652	9,983	39,932	0	161,725
	Other	333	0	0	0	0	0	333	333	0	998
Wood:	Free-Standing Stove	6,323	998	2,662	5,324	5,324	1,664	1,997	333	0	24,625
	Free-Standing Pellet Stove	666	333	0	333	666	0	666	333	0	2,995
	Central Furnace	333	333	333	0	333	333	0	0	0	1,664
	Fireplace with an Insert	2,662	2,329	1,664	1,331	666	0	333	333	0	9,317
	Fireplace without an Insert	0	333	0	333	0	333	0	333	0	1,331
Other:	Solar	0	0	0	0	0	0	0	0	0	0
	Geothermal	0	0	0	0	0	0	0	0	0	0
	Other	333	333	666	333	0	0	333	0	0	1,997
	No Heat	0	0	0	0	0	0	0	0	0	0
	Don't Know	1,997	333	666	666	333	666	666	3,993	0	9,317
	Refused	0	0	0	0	0	0	0	0	0	0
	TOTAL	183,022	75,205	66,553	67,219	51,912	24,625	38,268	96,835	333	603,972

Weighted Data

Chart H-21: Space-Heating Fuels: Systems and Equipment by Year of Construction

HEAT_EQP by Q20

Space-Heating Fuels: Systems and Equipment

Table H-22: Primary Space-Heating Fuel Type by Dwelling Size in Square Feet
Q46 by Q24

Raw Data

PRIMARY SPACE-HEATING FUEL TYPE	DWELLING SIZE IN SQUARE FEET											TOTAL
	< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Electricity	58	108	118	102	78	62	57	31	31	250	0	895
Natural Gas	10	30	37	27	51	50	70	32	53	84	1	445
Fuel Oil	2	13	19	24	19	25	32	19	22	69	0	244
Wood or Presto Logs	8	9	16	18	18	7	10	8	9	17	0	120
Propane or Bottled Gas	1	1	1	0	1	0	1	0	1	0	0	6
Kerosene	0	0	0	2	1	1	1	0	0	1	0	6
Coal	0	0	0	0	0	0	0	0	0	0	0	0
Solar	0	0	0	0	0	0	0	0	0	0	0	0
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	1	1	1	0	0	0	1	2	0	0	6
No Heat	0	0	0	0	0	0	0	0	0	0	0	0
Not Asked	15	13	9	2	1	1	2	2	2	44	0	91
Don't Know	0	0	0	0	1	0	0	0	0	1	0	2
Refused	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	94	175	201	176	170	146	173	93	120	466	1	1,815

Table H-22: Primary Space-Heating Fuel Type by Dwelling Size in Square Feet
Q46 by Q24

Weighted Data

PRIMARY SPACE-HEATING FUEL TYPE	DWELLING SIZE IN SQUARE FEET											TOTAL
	< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Electricity	19,300	35,939	39,266	33,942	25,956	20,632	18,968	10,316	10,316	83,192	0	297,826
Natural Gas	3,328	9,983	12,312	8,985	16,971	16,638	23,294	10,649	17,637	27,952	333	148,081
Fuel Oil	666	4,326	6,323	7,986	6,323	8,319	10,649	6,323	7,321	22,961	0	81,195
Wood or Presto Logs	2,662	2,995	5,324	5,990	5,990	2,329	3,328	2,662	2,995	5,657	0	39,932
Propane or Bottled Gas	333	333	333	0	333	0	333	0	333	0	0	1,997
Kerosene	0	0	0	666	333	333	333	0	0	333	0	1,997
Coal	0	0	0	0	0	0	0	0	0	0	0	0
Solar	0	0	0	0	0	0	0	0	0	0	0	0
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	333	333	333	0	0	0	333	666	0	0	1,997
No Heat	0	0	0	0	0	0	0	0	0	0	0	0
Not Asked	4,992	4,326	2,995	666	333	333	666	666	666	14,642	0	30,282
Don't Know	0	0	0	0	333	0	0	0	0	333	0	666
Refused	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	31,280	58,234	66,886	58,567	56,570	48,584	57,569	30,947	39,932	155,069	333	603,972

Weighted Data

Chart H-22: Primary Space-Heating Fuel Type by Dwelling Size in Square Feet

Q46 by Q24

Table H-23: Primary Water-Heating Fuel Type by Dwelling Size in Square Feet
Q102 by Q24

Raw Data

PRIMARY WATER-HEATING FUEL TYPE	DWELLING SIZE IN SQUARE FEET											TOTAL
	< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Electricity	64	133	161	154	124	99	119	67	68	338	0	1,327
Natural Gas	4	16	30	19	42	40	53	23	46	46	1	320
Fuel Oil	0	0	0	0	0	2	0	0	0	4	0	6
Wood	0	0	1	0	0	0	0	0	1	1	0	3
Propane or Bottled Gas	2	0	1	0	1	1	1	0	1	0	0	7
Solar	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0
No Hot Water In Home	0	0	0	0	0	0	0	0	0	0	0	0
Not Asked	22	25	7	2	3	2	0	3	3	68	0	135
Don't Know	2	1	1	1	0	2	0	0	1	9	0	17
Refused	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	94	175	201	176	170	146	173	93	120	466	1	1,815

Weighted Data

PRIMARY WATER-HEATING FUEL TYPE	DWELLING SIZE IN SQUARE FEET											TOTAL
	< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Electricity	21,297	44,258	53,575	51,246	41,263	32,944	39,599	22,295	22,628	112,475	0	441,582
Natural Gas	1,331	5,324	9,983	6,323	13,976	13,311	17,637	7,654	15,307	15,307	333	106,485
Fuel Oil	0	0	0	0	0	666	0	0	0	1,331	0	1,997
Wood	0	0	333	0	0	0	0	0	333	333	0	998
Propane or Bottled Gas	666	0	333	0	333	333	333	0	333	0	0	2,329
Solar	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0
No Hot Water In Home	0	0	0	0	0	0	0	0	0	0	0	0
Not Asked	7,321	8,319	2,329	666	998	666	0	998	998	22,628	0	44,924
Don't Know	666	333	333	333	0	666	0	0	333	2,995	0	5,657
Refused	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	31,280	58,234	66,886	58,567	56,570	48,584	57,569	30,947	39,932	155,069	333	603,972

Weighted Data

Chart H-23: Primary Water-Heating Fuel Type by Dwelling Size in Square Feet
Q102 by Q24

Table H-24: Household Income by Dwelling Size in Square Feet
Q186, Q188, Q189 by Q24

Raw Data

HOUSEHOLD INCOME	DWELLING SIZE IN SQUARE FEET											TOTAL
	< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Below \$5,000	6	3	1	3	0	0	1	1	1	19	0	35
\$5,000 to < \$10,000	7	10	6	3	2	4	2	4	0	37	0	75
\$10,000 to < \$15,000	9	16	14	6	3	0	2	0	0	45	0	95
\$15,000 to < \$20,000	15	14	13	8	5	7	7	1	2	44	0	116
\$20,000 to < \$25,000	10	16	12	15	9	8	5	4	0	27	0	106
\$25,000 to < \$30,000	10	28	24	14	12	16	15	1	4	46	0	170
\$30,000 to < \$40,000	14	32	38	33	39	19	23	14	14	41	0	267
\$40,000 to < \$50,000	7	16	25	23	30	16	25	10	17	26	0	195
\$50,000 to < \$60,000	1	8	18	12	18	15	17	11	7	16	0	123
\$60,000 to < \$80,000	0	1	11	14	12	14	24	18	16	6	0	116
\$80,000 to < \$100,000	0	2	2	4	5	7	10	3	12	7	1	53
\$100,000 or More	0	0	2	1	2	2	5	9	14	1	0	36
Don't Know	4	9	13	11	6	7	7	4	5	74	0	140
Refused	11	20	22	29	27	31	30	13	28	77	0	288
TOTAL	94	175	201	176	170	146	173	93	120	466	1	1,815

Table H-24: Household Income by Dwelling Size in Square Feet

Q186, Q188, Q189 by Q24

Weighted Data

HOUSEHOLD INCOME	DWELLING SIZE IN SQUARE FEET											TOTAL
	< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Below \$5,000	1,997	998	333	998	0	0	333	333	333	6,323	0	11,647
\$5,000 to < \$10,000	2,329	3,328	1,997	998	666	1,331	666	1,331	0	12,312	0	24,958
\$10,000 to < \$15,000	2,995	5,324	4,659	1,997	998	0	666	0	0	14,975	0	31,613
\$15,000 to < \$20,000	4,992	4,659	4,326	2,662	1,664	2,329	2,329	333	666	14,642	0	38,601
\$20,000 to < \$25,000	3,328	5,324	3,993	4,992	2,995	2,662	1,664	1,331	0	8,985	0	35,273
\$25,000 to < \$30,000	3,328	9,317	7,986	4,659	3,993	5,324	4,992	333	1,331	15,307	0	56,570
\$30,000 to < \$40,000	4,659	10,649	12,645	10,981	12,978	6,323	7,654	4,659	4,659	13,643	0	88,849
\$40,000 to < \$50,000	2,329	5,324	8,319	7,654	9,983	5,324	8,319	3,328	5,657	8,652	0	64,890
\$50,000 to < \$60,000	333	2,662	5,990	3,993	5,990	4,992	5,657	3,660	2,329	5,324	0	40,930
\$60,000 to < \$80,000	0	333	3,660	4,659	3,993	4,659	7,986	5,990	5,324	1,997	0	38,601
\$80,000 to < \$100,000	0	666	666	1,331	1,664	2,329	3,328	998	3,993	2,329	333	17,637
\$100,000 or More	0	0	666	333	666	666	1,664	2,995	4,659	333	0	11,980
Don't Know	1,331	2,995	4,326	3,660	1,997	2,329	2,329	1,331	1,664	24,625	0	46,587
Refused	3,660	6,655	7,321	9,650	8,985	10,316	9,983	4,326	9,317	25,623	0	95,837
TOTAL	31,280	58,234	66,886	58,567	56,570	48,584	57,569	30,947	39,932	155,069	333	603,972

Weighted Data

Chart H-24: Household Income by Dwelling Size in Square Feet

Q186, Q188, Q189 by Q24

Table H-25: Utility Type by Dwelling Size in Square Feet
TYPE by Q24

Raw Data

UTILITY TYPE	DWELLING SIZE IN SQUARE FEET											TOTAL
	< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Public Generating	94	175	201	176	170	146	173	93	120	466	1	1,815
Public Non-Generating	0	0	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	94	175	201	176	170	146	173	93	120	466	1	1,815

Weighted Data

UTILITY TYPE	DWELLING SIZE IN SQUARE FEET											TOTAL
	< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Public Generating	31,280	58,234	66,886	58,567	56,570	48,584	57,569	30,947	39,932	155,069	333	603,972
Public Non-Generating	0	0	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	31,280	58,234	66,886	58,567	56,570	48,584	57,569	30,947	39,932	155,069	333	603,972

Weighted Data

Chart H-25: Utility Type by Dwelling Size in Square Feet
TYPE by Q24

Table H-26: Space-Heating Fuels: Systems and Equipment by Dwelling Size in Square Feet

HEAT_EQP by Q24

Raw Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	DWELLING SIZE IN SQUARE FEET											TOTAL
		< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	13	12	6	1	1	1	2	2	1	36	0	75
	Central Heat - Several Units	0	1	0	0	0	0	0	0	0	5	0	6
	Unit Not Heated	1	0	0	0	0	0	0	0	1	1	0	3
Fossil:	Steam or Hot Water Radiators	0	4	2	0	1	8	5	1	10	14	0	45
	Wall, Floor, or Ceiling Units	3	5	6	3	4	2	4	3	5	11	0	46
	Portable Units	0	0	0	1	1	1	0	0	0	1	0	4
	Central Furnace	10	35	49	49	65	65	94	47	59	119	1	593
	Other	0	0	0	0	0	0	1	0	0	1	0	2
Electricity:	Heat Pump	0	3	8	4	3	7	11	4	11	6	0	57
	Portable Room Heaters	2	1	2	0	0	2	0	2	0	8	0	17
	Radiant Panels	7	12	6	17	16	3	4	1	2	24	0	92
	Steam or Hot Water Radiators	0	0	0	3	1	1	1	0	1	5	0	12
	Central Furnace	7	22	29	27	23	18	21	12	9	52	0	220
	Baseboard or Wall Units	42	70	73	51	35	30	20	12	8	145	0	486
	Other	0	0	0	0	0	1	0	0	0	2	0	3
Wood:	Free-Standing Stove	4	7	12	13	10	6	6	4	3	9	0	74
	Free-Standing Pellet Stove	0	1	0	1	0	0	2	0	4	1	0	9
	Central Furnace	1	0	0	0	1	0	0	1	1	1	0	5
	Fireplace with an Insert	2	1	4	4	6	1	2	2	1	5	0	28
	Fireplace without an Insert	1	0	0	0	1	0	0	1	0	1	0	4
Other:	Solar	0	0	0	0	0	0	0	0	0	0	0	0
	Geothermal	0	0	0	0	0	0	0	0	0	0	0	0
	Other	0	1	1	1	0	0	0	1	2	0	0	6
	No Heat	0	0	0	0	0	0	0	0	0	0	0	0
	Don't Know	1	0	3	1	2	0	0	0	2	19	0	28
	Refused	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	94	175	201	176	170	146	173	93	120	466	1	1,815

Table H-26: Space-Heating Fuels: Systems and Equipment by Dwelling Size in Square Feet
HEAT_EQP by Q24

Weighted Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	DWELLING SIZE IN SQUARE FEET											TOTAL
		< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	4,326	3,993	1,997	333	333	333	666	666	333	11,980	0	24,958
	Central Heat - Several Units	0	333	0	0	0	0	0	0	0	1,664	0	1,997
	Unit Not Heated	333	0	0	0	0	0	0	0	333	333	0	998
Fossil:	Steam or Hot Water Radiators	0	1,331	666	0	333	2,662	1,664	333	3,328	4,659	0	14,975
	Wall, Floor, or Ceiling Units	998	1,664	1,997	998	1,331	666	1,331	998	1,664	3,660	0	15,307
	Portable Units	0	0	0	333	333	333	0	0	0	333	0	1,331
	Central Furnace	3,328	11,647	16,306	16,306	21,630	21,630	31,280	15,640	19,633	39,599	333	197,331
	Other	0	0	0	0	0	0	333	0	0	333	0	666
Electricity:	Heat Pump	0	998	2,662	1,331	998	2,329	3,660	1,331	3,660	1,997	0	18,968
	Portable Room Heaters	666	333	666	0	0	666	0	666	0	2,662	0	5,657
	Radiant Panels	2,329	3,993	1,997	5,657	5,324	998	1,331	333	666	7,986	0	30,615
	Steam or Hot Water Radiators	0	0	0	998	333	333	333	0	333	1,664	0	3,993
	Central Furnace	2,329	7,321	9,650	8,985	7,654	5,990	6,988	3,993	2,995	17,304	0	73,209
	Baseboard or Wall Units	13,976	23,294	24,292	16,971	11,647	9,983	6,655	3,993	2,662	48,251	0	161,725
	Other	0	0	0	0	0	333	0	0	0	666	0	998
Wood:	Free-Standing Stove	1,331	2,329	3,993	4,326	3,328	1,997	1,997	1,331	998	2,995	0	24,625
	Free-Standing Pellet Stove	0	333	0	333	0	0	666	0	1,331	333	0	2,995
	Central Furnace	333	0	0	0	333	0	0	333	333	333	0	1,664
	Fireplace with an Insert	666	333	1,331	1,331	1,997	333	666	666	333	1,664	0	9,317
	Fireplace without an Insert	333	0	0	0	333	0	0	333	0	333	0	1,331
Other:	Solar	0	0	0	0	0	0	0	0	0	0	0	0
	Geothermal	0	0	0	0	0	0	0	0	0	0	0	0
	Other	0	333	333	333	0	0	0	333	666	0	0	1,997
	No Heat	0	0	0	0	0	0	0	0	0	0	0	0
	Don't Know	333	0	998	333	666	0	0	0	666	6,323	0	9,317
	Refused	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		31,280	58,234	66,886	58,567	56,570	48,584	57,569	30,947	39,932	155,069	333	603,972

Chart H-26: Space-Heating Fuels: Systems and Equipment by Dwelling Size in Square Feet

Weighted Data

HEAT_EQP by Q24

Space-Heating Fuels: Systems and Equipment

Table H-27: Primary Water-Heating Fuel Type by Primary Space-Heating Fuel Type
Q102 by Q46

Raw Data

PRIMARY WATER-HEATING FUEL TYPE	PRIMARY SPACE-HEATING FUEL TYPE															TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood or Presto Logs	Propane or Bottled Gas	Kerosene	Coal	Solar	Geothermal	Other	No Heat	Not Asked	Don't Know	Refused		
Electricity	813	140	228	108	2	6	0	0	0	0	6	0	23	1	0	1,327
Natural Gas	15	291	7	6	0	0	0	0	0	0	0	0	1	0	0	320
Fuel Oil	0	0	5	0	0	0	0	0	0	0	0	0	1	0	0	6
Wood	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
Propane or Bottled Gas	0	0	0	3	4	0	0	0	0	0	0	0	0	0	0	7
Solar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No Hot Water In Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Not Asked	60	9	1	0	0	0	0	0	0	0	0	64	1	0	0	135
Don't Know	7	5	3	0	0	0	0	0	0	0	0	2	0	0	0	17
Refused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	895	445	244	120	6	6	0	0	0	6	0	91	2	0	0	1,815

Weighted Data

PRIMARY WATER-HEATING FUEL TYPE	PRIMARY SPACE-HEATING FUEL TYPE															TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood or Presto Logs	Propane or Bottled Gas	Kerosene	Coal	Solar	Geothermal	Other	No Heat	Not Asked	Don't Know	Refused		
Electricity	270,539	46,587	75,871	35,939	666	1,997	0	0	0	1,997	0	7,654	333	0	441,582	
Natural Gas	4,992	96,835	2,329	1,997	0	0	0	0	0	0	0	333	0	0	106,485	
Fuel Oil	0	0	1,664	0	0	0	0	0	0	0	0	333	0	0	1,997	
Wood	0	0	0	998	0	0	0	0	0	0	0	0	0	0	998	
Propane or Bottled Gas	0	0	0	998	1,331	0	0	0	0	0	0	0	0	0	2,329	
Solar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
No Hot Water In Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Not Asked	19,966	2,995	333	0	0	0	0	0	0	0	0	21,297	333	0	44,924	
Don't Know	2,329	1,664	998	0	0	0	0	0	0	0	0	666	0	0	5,657	
Refused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL	297,826	148,081	81,195	39,932	1,997	1,997	0	0	0	1,997	0	30,282	666	0	603,972	

Weighted Data

Chart H-27: Primary Water-Heating Fuel Type by Primary Space-Heating Fuel Type

Q102 by Q46

Table H-28: Household Income by Primary Space-Heating Fuel Type

Q186, Q188, Q189 by Q46

Raw Data

HOUSEHOLD INCOME	PRIMARY SPACE-HEATING FUEL TYPE														TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood or Presto Logs	Propane or Bottled Gas	Kerosene	Coal	Solar	Geothermal	Other	No Heat	Not Asked	Don't Know	Refused	
Below \$5,000	16	6	3	2	0	0	0	0	0	0	0	8	0	0	35
\$5,000 to < \$10,000	45	10	7	6	0	0	0	0	0	0	0	7	0	0	75
\$10,000 to < \$15,000	55	10	9	7	0	0	0	0	0	0	0	14	0	0	95
\$15,000 to < \$20,000	61	14	16	9	1	2	0	0	0	0	0	13	0	0	116
\$20,000 to < \$25,000	68	22	6	7	0	0	0	0	0	0	0	3	0	0	106
\$25,000 to < \$30,000	96	32	20	10	1	2	0	0	0	0	0	9	0	0	170
\$30,000 to < \$40,000	126	71	34	20	2	2	0	0	0	1	0	10	1	0	267
\$40,000 to < \$50,000	86	63	25	14	1	0	0	0	0	1	0	5	0	0	195
\$50,000 to < \$60,000	52	41	22	8	0	0	0	0	0	0	0	0	0	0	123
\$60,000 to < \$80,000	49	44	16	7	0	0	0	0	0	0	0	0	0	0	116
\$80,000 to < \$100,000	16	22	11	3	0	0	0	0	0	0	0	1	0	0	53
\$100,000 or More	12	15	7	0	0	0	0	0	0	1	0	1	0	0	36
Don't Know	81	23	16	9	0	0	0	0	0	0	0	11	0	0	140
Refused	132	72	52	18	1	0	0	0	0	3	0	9	1	0	288
TOTAL	895	445	244	120	6	6	0	0	0	6	0	91	2	0	1,815

Table H-28: Household Income by Primary Space-Heating Fuel Type
Q186, Q188, Q189 by Q46

Weighted Data

HOUSEHOLD INCOME	PRIMARY SPACE-HEATING FUEL TYPE														TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood or Presto Logs	Propane or Bottled Gas	Kerosene	Coal	Solar	Geothermal	Other	No Heat	Not Asked	Don't Know	Refused	
Below \$5,000	5,324	1,997	998	666	0	0	0	0	0	0	0	2,662	0	0	11,647
\$5,000 to < \$10,000	14,975	3,328	2,329	1,997	0	0	0	0	0	0	0	2,329	0	0	24,958
\$10,000 to < \$15,000	18,302	3,328	2,995	2,329	0	0	0	0	0	0	0	4,659	0	0	31,613
\$15,000 to < \$20,000	20,299	4,659	5,324	2,995	333	666	0	0	0	0	0	4,326	0	0	38,601
\$20,000 to < \$25,000	22,628	7,321	1,997	2,329	0	0	0	0	0	0	0	998	0	0	35,273
\$25,000 to < \$30,000	31,946	10,649	6,655	3,328	333	666	0	0	0	0	0	2,995	0	0	56,570
\$30,000 to < \$40,000	41,929	23,626	11,314	6,655	666	666	0	0	0	333	0	3,328	333	0	88,849
\$40,000 to < \$50,000	28,618	20,964	8,319	4,659	333	0	0	0	0	333	0	1,664	0	0	64,890
\$50,000 to < \$60,000	17,304	13,643	7,321	2,662	0	0	0	0	0	0	0	0	0	0	40,930
\$60,000 to < \$80,000	16,306	14,642	5,324	2,329	0	0	0	0	0	0	0	0	0	0	38,601
\$80,000 to < \$100,000	5,324	7,321	3,660	998	0	0	0	0	0	0	0	333	0	0	17,637
\$100,000 or More	3,993	4,992	2,329	0	0	0	0	0	0	333	0	333	0	0	11,980
Don't Know	26,954	7,654	5,324	2,995	0	0	0	0	0	0	0	3,660	0	0	46,587
Refused	43,925	23,959	17,304	5,990	333	0	0	0	0	998	0	2,995	333	0	95,837
TOTAL	297,826	148,081	81,195	39,932	1,997	1,997	0	0	0	1,997	0	30,282	666	0	603,972

Weighted Data

Chart H-28: Household Income by Primary Space-Heating Fuel Type

Q186, Q188, Q189 by Q46

Table H-29: Utility Type by Primary Space-Heating Fuel Type
TYPE by Q46

Raw Data

UTILITY TYPE	PRIMARY SPACE-HEATING FUEL TYPE														TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood or Presto Logs	Propane or Bottled Gas	Kerosene	Coal	Solar	Geothermal	Other	No Heat	Not Asked	Don't Know	Refused	
Public Generating	895	445	244	120	6	6	0	0	0	6	0	91	2	0	1,815
Public Non-Generating	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	895	445	244	120	6	6	0	0	0	6	0	91	2	0	1,815

Weighted Data

UTILITY TYPE	PRIMARY SPACE-HEATING FUEL TYPE														TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood or Presto Logs	Propane or Bottled Gas	Kerosene	Coal	Solar	Geothermal	Other	No Heat	Not Asked	Don't Know	Refused	
Public Generating	297,826	148,081	81,195	39,932	1,997	1,997	0	0	0	1,997	0	30,282	666	0	603,972
Public Non-Generating	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	297,826	148,081	81,195	39,932	1,997	1,997	0	0	0	1,997	0	30,282	666	0	603,972

Weighted Data

Chart H-29: Utility Type by Primary Space-Heating Fuel Type
TYPE by Q46

Table H-30: Space-Heating Fuels: Systems and Equipment by Primary Space-Heating Fuel Type
HEAT_EQP by Q46

Raw Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	PRIMARY SPACE-HEATING FUEL TYPE														TOTAL
		Natural Electricity	Gas	Fuel Oil	Wood or Presto Logs	Propane or Bottled Gas	Kerosene	Coal	Solar	Geothermal	Other	No Heat	Not Asked	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	0	0	0	0	0	0	0	0	0	0	0	75	0	0	75
	Central Heat - Several Units	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6
	Unit Not Heated	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
Fossil:	Steam or Hot Water Radiators	0	31	13	0	1	0	0	0	0	0	0	0	0	0	45
	Wall, Floor, or Ceiling Units	0	28	17	0	0	1	0	0	0	0	0	0	0	0	46
	Portable Units	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4
	Central Furnace	0	378	210	0	5	0	0	0	0	0	0	0	0	0	593
	Other	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
Electricity:	Heat Pump	57	0	0	0	0	0	0	0	0	0	0	0	0	0	57
	Portable Room Heaters	17	0	0	0	0	0	0	0	0	0	0	0	0	0	17
	Radiant Panels	92	0	0	0	0	0	0	0	0	0	0	0	0	0	92
	Steam or Hot Water Radiators	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
	Central Furnace	220	0	0	0	0	0	0	0	0	0	0	0	0	0	220
	Baseboard or Wall Units	486	0	0	0	0	0	0	0	0	0	0	0	0	0	486
	Other	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Wood:	Free-Standing Stove	0	0	0	74	0	0	0	0	0	0	0	0	0	0	74
	Free-Standing Pellet Stove	0	0	0	9	0	0	0	0	0	0	0	0	0	0	9
	Central Furnace	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5
	Fireplace with an Insert	0	0	0	28	0	0	0	0	0	0	0	0	0	0	28
	Fireplace without an Insert	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
Other:	Solar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6
	No Heat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Don't Know	8	7	4	0	0	0	0	0	0	0	0	7	2	0	28
	Refused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	895	445	244	120	6	6	0	0	0	6	0	91	2	0	1,815

Table H-30: Space-Heating Fuels: Systems and Equipment by Primary Space-Heating Fuel Type

HEAT_EQP by Q46

Weighted Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	PRIMARY SPACE-HEATING FUEL TYPE														TOTAL
		Electricity	Natural Gas	Fuel Oil	Wood or Presto Logs	Propane or Bottled Gas	Kerosene	Coal	Solar	Geothermal	Other	No Heat	Not Asked	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	0	0	0	0	0	0	0	0	0	0	0	24,958	0	0	24,958
	Central Heat - Several Units	0	0	0	0	0	0	0	0	0	0	0	1,997	0	0	1,997
	Unit Not Heated	0	0	0	0	0	0	0	0	0	0	0	998	0	0	998
Fossil:	Steam or Hot Water Radiators	0	10,316	4,326	0	333	0	0	0	0	0	0	0	0	0	14,975
	Wall, Floor, or Ceiling Units	0	9,317	5,657	0	0	333	0	0	0	0	0	0	0	0	15,307
	Portable Units	0	0	0	0	0	1,331	0	0	0	0	0	0	0	0	1,331
	Central Furnace	0	125,786	69,881	0	1,664	0	0	0	0	0	0	0	0	0	197,331
	Other	0	333	0	0	0	333	0	0	0	0	0	0	0	0	666
Electricity:	Heat Pump	18,968	0	0	0	0	0	0	0	0	0	0	0	0	0	18,968
	Portable Room Heaters	5,657	0	0	0	0	0	0	0	0	0	0	0	0	0	5,657
	Radiant Panels	30,615	0	0	0	0	0	0	0	0	0	0	0	0	0	30,615
	Steam or Hot Water Radiators	3,993	0	0	0	0	0	0	0	0	0	0	0	0	0	3,993
	Central Furnace	73,209	0	0	0	0	0	0	0	0	0	0	0	0	0	73,209
	Baseboard or Wall Units	161,725	0	0	0	0	0	0	0	0	0	0	0	0	0	161,725
	Other	998	0	0	0	0	0	0	0	0	0	0	0	0	0	998
Wood:	Free-Standing Stove	0	0	0	24,625	0	0	0	0	0	0	0	0	0	0	24,625
	Free-Standing Pellet Stove	0	0	0	2,995	0	0	0	0	0	0	0	0	0	0	2,995
	Central Furnace	0	0	0	1,664	0	0	0	0	0	0	0	0	0	0	1,664
	Fireplace with an Insert	0	0	0	9,317	0	0	0	0	0	0	0	0	0	0	9,317
	Fireplace without an Insert	0	0	0	1,331	0	0	0	0	0	0	0	0	0	0	1,331
Other:	Solar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	1,997	0	0	0	0	1,997
	No Heat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Don't Know	2,662	2,329	1,331	0	0	0	0	0	0	0	0	2,329	666	0	9,317
	Refused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		297,826	148,081	81,195	39,932	1,997	1,997	0	0	0	1,997	0	30,282	666	0	603,972

Chart H-30: Space-Heating Fuels: Systems and Equipment by Primary Space-Heating Fuel Type

Weighted Data

HEAT_EQP by Q46

Space-Heating Fuels: Systems and Equipment

Table H-31: Household Income by Primary Water-Heating Fuel Type
Q186, Q188, Q189 by Q102

Raw Data

HOUSEHOLD INCOME	PRIMARY WATER-HEATING FUEL TYPE											TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood	Propane or Bottled Gas	Solar	Other	No Hot Water In Home	Not Asked	Don't Know	Refused	
Below \$5,000	24	3	0	0	0	0	0	0	8	0	0	35
\$5,000 to < \$10,000	55	8	1	0	0	0	0	0	9	2	0	75
\$10,000 to < \$15,000	62	7	1	0	2	0	0	0	21	2	0	95
\$15,000 to < \$20,000	88	9	1	0	0	0	0	0	17	1	0	116
\$20,000 to < \$25,000	81	16	0	0	0	0	0	0	9	0	0	106
\$25,000 to < \$30,000	124	24	0	1	1	0	0	0	19	1	0	170
\$30,000 to < \$40,000	206	47	0	0	1	0	0	0	12	1	0	267
\$40,000 to < \$50,000	138	46	0	0	2	0	0	0	8	1	0	195
\$50,000 to < \$60,000	88	31	2	1	0	0	0	0	1	0	0	123
\$60,000 to < \$80,000	79	36	0	0	0	0	0	0	0	1	0	116
\$80,000 to < \$100,000	34	16	0	1	0	0	0	0	1	1	0	53
\$100,000 or More	20	14	0	0	0	0	0	0	2	0	0	36
Don't Know	111	12	0	0	0	0	0	0	13	4	0	140
Refused	217	51	1	0	1	0	0	0	15	3	0	288
TOTAL	1,327	320	6	3	7	0	0	0	135	17	0	1,815

Table H-31: Household Income by Primary Water-Heating Fuel Type
Q186, Q188, Q189 by Q102

Weighted Data

HOUSEHOLD INCOME	PRIMARY WATER-HEATING FUEL TYPE											TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood	Propane or Bottled Gas	Solar	Other	No Hot Water In Home	Not Asked	Don't Know	Refused	
Below \$5,000	7,986	998	0	0	0	0	0	0	2,662	0	0	11,647
\$5,000 to < \$10,000	18,302	2,662	333	0	0	0	0	0	2,995	666	0	24,958
\$10,000 to < \$15,000	20,632	2,329	333	0	666	0	0	0	6,988	666	0	31,613
\$15,000 to < \$20,000	29,283	2,995	333	0	0	0	0	0	5,657	333	0	38,601
\$20,000 to < \$25,000	26,954	5,324	0	0	0	0	0	0	2,995	0	0	35,273
\$25,000 to < \$30,000	41,263	7,986	0	333	333	0	0	0	6,323	333	0	56,570
\$30,000 to < \$40,000	68,550	15,640	0	0	333	0	0	0	3,993	333	0	88,849
\$40,000 to < \$50,000	45,922	15,307	0	0	666	0	0	0	2,662	333	0	64,890
\$50,000 to < \$60,000	29,283	10,316	666	333	0	0	0	0	333	0	0	40,930
\$60,000 to < \$80,000	26,289	11,980	0	0	0	0	0	0	0	333	0	38,601
\$80,000 to < \$100,000	11,314	5,324	0	333	0	0	0	0	333	333	0	17,637
\$100,000 or More	6,655	4,659	0	0	0	0	0	0	666	0	0	11,980
Don't Know	36,937	3,993	0	0	0	0	0	0	4,326	1,331	0	46,587
Refused	72,210	16,971	333	0	333	0	0	0	4,992	998	0	95,837
TOTAL	441,582	106,485	1,997	998	2,329	0	0	0	44,924	5,657	0	603,972

Weighted Data

Chart H-31: Household Income by Primary Water-Heating Fuel Type

Q186, Q188, Q189 by Q102

Table H-32: Utility Type by Primary Water-Heating Fuel Type
TYPE by Q102

Raw Data

UTILITY TYPE	PRIMARY WATER-HEATING FUEL TYPE											TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood	Propane or Bottled Gas	Solar	Other	No Hot Water In Home	Not Asked	Don't Know	Refused	
Public Generating	1,327	320	6	3	7	0	0	0	135	17	0	1,815
Public Non-Generating	0	0	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1,327	320	6	3	7	0	0	0	135	17	0	1,815

Weighted Data

UTILITY TYPE	PRIMARY WATER-HEATING FUEL TYPE											TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood	Propane or Bottled Gas	Solar	Other	No Hot Water In Home	Not Asked	Don't Know	Refused	
Public Generating	441,582	106,485	1,997	998	2,329	0	0	0	44,924	5,657	0	603,972
Public Non-Generating	0	0	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	441,582	106,485	1,997	998	2,329	0	0	0	44,924	5,657	0	603,972

Weighted Data

Chart H-32: Utility Type by Primary Water-Heating Fuel Type
TYPE by Q102

Table H-33: Space-Heating Fuels: Systems and Equipment by Primary Water-Heating Fuel Type

HEAT_EQP by Q102

Raw Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	PRIMARY WATER-HEATING FUEL TYPE											TOTAL
		Electricity	Natural Gas	Fuel Oil	Wood	Propane or Bottled Gas	Solar	Other	No Hot Water In Home	Not Asked	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	17	1	1	0	0	0	0	0	55	1	0	75
	Central Heat - Several Units	2	0	0	0	0	0	0	0	4	0	0	6
	Unit Not Heated	1	0	0	0	0	0	0	0	2	0	0	3
Fossil:	Steam or Hot Water Radiators	21	19	2	0	1	0	0	0	2	0	0	45
	Wall, Floor, or Ceiling Units	23	18	1	0	0	0	0	0	3	1	0	46
	Portable Units	4	0	0	0	0	0	0	0	0	0	0	4
	Central Furnace	322	257	2	0	3	0	0	0	5	4	0	593
	Other	2	0	0	0	0	0	0	0	0	0	0	2
Electricity:	Heat Pump	52	3	0	0	0	0	0	0	2	0	0	57
	Portable Room Heaters	15	0	0	0	0	0	0	0	2	0	0	17
	Radiant Panels	87	1	0	0	0	0	0	0	3	1	0	92
	Steam or Hot Water Radiators	12	0	0	0	0	0	0	0	0	0	0	12
	Central Furnace	210	7	0	0	0	0	0	0	1	2	0	220
	Baseboard or Wall Units	427	4	0	0	0	0	0	0	52	3	0	486
	Other	3	0	0	0	0	0	0	0	0	0	0	3
Wood:	Free-Standing Stove	66	4	0	2	2	0	0	0	0	0	0	74
	Free-Standing Pellet Stove	9	0	0	0	0	0	0	0	0	0	0	9
	Central Furnace	5	0	0	0	0	0	0	0	0	0	0	5
	Fireplace with an Insert	24	2	0	1	1	0	0	0	0	0	0	28
	Fireplace without an Insert	4	0	0	0	0	0	0	0	0	0	0	4
Other:	Solar	0	0	0	0	0	0	0	0	0	0	0	0
	Geothermal	0	0	0	0	0	0	0	0	0	0	0	0
	Other	6	0	0	0	0	0	0	0	0	0	0	6
	No Heat	0	0	0	0	0	0	0	0	0	0	0	0
	Don't Know	15	4	0	0	0	0	0	0	4	5	0	28
	Refused	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	1,327	320	6	3	7	0	0	0	135	17	0	1,815

Table H-33: Space-Heating Fuels: Systems and Equipment by Primary Water-Heating Fuel Type
HEAT_EQP by Q102

Weighted Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	PRIMARY WATER-HEATING FUEL TYPE											TOTAL
		Electricity	Natural Gas	Fuel Oil	Wood	Propane or Liquid Gas	Solar	Other	No Hot Water In Home	Not Asked	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	5,657	333	333	0	0	0	0	0	18,302	333	0	24,958
	Central Heat - Several Units	666	0	0	0	0	0	0	0	1,331	0	0	1,997
	Unit Not Heated	333	0	0	0	0	0	0	0	666	0	0	998
Fossil:	Steam or Hot Water Radiators	6,988	6,323	666	0	333	0	0	0	666	0	0	14,975
	Wall, Floor, or Ceiling Units	7,654	5,990	333	0	0	0	0	0	998	333	0	15,307
	Portable Units	1,331	0	0	0	0	0	0	0	0	0	0	1,331
	Central Furnace	107,151	85,521	666	0	998	0	0	0	1,664	1,331	0	197,331
	Other	666	0	0	0	0	0	0	0	0	0	0	666
Electricity:	Heat Pump	17,304	998	0	0	0	0	0	0	666	0	0	18,968
	Portable Room Heaters	4,992	0	0	0	0	0	0	0	666	0	0	5,657
	Radiant Panels	28,951	333	0	0	0	0	0	0	998	333	0	30,615
	Steam or Hot Water Radiators	3,993	0	0	0	0	0	0	0	0	0	0	3,993
	Central Furnace	69,881	2,329	0	0	0	0	0	0	333	666	0	73,209
	Baseboard or Wall Units	142,091	1,331	0	0	0	0	0	0	17,304	998	0	161,725
	Other	998	0	0	0	0	0	0	0	0	0	0	998
Wood:	Free-Standing Stove	21,963	1,331	0	666	666	0	0	0	0	0	0	24,625
	Free-Standing Pellet Stove	2,995	0	0	0	0	0	0	0	0	0	0	2,995
	Central Furnace	1,664	0	0	0	0	0	0	0	0	0	0	1,664
	Fireplace with an Insert	7,986	666	0	333	333	0	0	0	0	0	0	9,317
	Fireplace without an Insert	1,331	0	0	0	0	0	0	0	0	0	0	1,331
Other:	Solar	0	0	0	0	0	0	0	0	0	0	0	0
	Geothermal	0	0	0	0	0	0	0	0	0	0	0	0
	Other	1,997	0	0	0	0	0	0	0	0	0	0	1,997
	No Heat	0	0	0	0	0	0	0	0	0	0	0	0
	Don't Know	4,992	1,331	0	0	0	0	0	0	1,331	1,664	0	9,317
	Refused	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	441,582	106,485	1,997	998	2,329	0	0	0	44,924	5,657	0	603,972

Chart H-33: Space-Heating Fuels: Systems and Equipment by Primary Water-Heating Fuel Type

Weighted Data

HEAT_EQP by Q102

Space-Heating Fuels: Systems and Equipment

Table H-34: Utility Type by Household Income

TYPE by Q186, Q188, Q189

Raw Data

UTILITY TYPE	HOUSEHOLD INCOME														TOTAL
	Below \$5K	\$5K to < \$10K	\$10K to < \$15K	\$15K to < \$20K	\$20K to < \$25K	\$25K to < \$30K	\$30K to < \$40K	\$40K to < \$50K	\$50K to < \$60K	\$60K to < \$80K	\$80K to < \$100K	\$100K or More	Don't Know	Refused	
Public Generating	35	75	95	116	106	170	267	195	123	116	53	36	140	288	1,815
Public Non-Generating	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	35	75	95	116	106	170	267	195	123	116	53	36	140	288	1,815

Weighted Data

UTILITY TYPE	HOUSEHOLD INCOME														TOTAL
	Below \$5K	\$5K to < \$10K	\$10K to < \$15K	\$15K to < \$20K	\$20K to < \$25K	\$25K to < \$30K	\$30K to < \$40K	\$40K to < \$50K	\$50K to < \$60K	\$60K to < \$80K	\$80K to < \$100K	\$100K or More	Don't Know	Refused	
Public Generating	11,647	24,958	31,613	38,601	35,273	56,570	88,849	64,890	40,930	38,601	17,637	11,980	46,587	95,837	603,972
Public Non-Generating	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	11,647	24,958	31,613	38,601	35,273	56,570	88,849	64,890	40,930	38,601	17,637	11,980	46,587	95,837	603,972

Weighted Data

Chart H-34: Utility Type by Household Income

TYPE by Q186, Q188, Q189

Table H-35: Space-Heating Fuels: Systems and Equipment by Household Income

HEAT_EQP by Q186, Q188, Q189

Raw Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	HOUSEHOLD INCOME														TOTAL
		Below \$5K	\$5K to < \$10K	\$10K to < \$15K	\$15K to < \$20K	\$20K to < \$25K	\$25K to < \$30K	\$30K to < \$40K	\$40K to < \$50K	\$50K to < \$60K	\$60K to < \$80K	\$80K to < \$100K	\$100K or More	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	8	6	10	12	2	7	9	5	0	0	1	0	8	7	75
	Central Heat - Several Units	0	0	2	0	1	2	0	0	0	0	0	0	1	0	6
	Unit Not Heated	0	0	0	1	0	0	0	0	0	0	0	0	1	1	3
Fossil:	Steam or Hot Water Radiators	1	2	1	2	0	4	7	5	2	5	5	1	5	5	45
	Wall, Floor, or Ceiling Units	0	4	1	4	0	8	5	7	2	1	1	2	1	10	46
	Portable Units	0	0	0	2	0	0	2	0	0	0	0	0	0	0	4
	Central Furnace	7	11	17	25	28	40	94	76	59	54	26	19	28	109	593
	Other	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
Electricity:	Heat Pump	1	0	4	1	2	5	7	9	3	9	1	3	3	9	57
	Portable Room Heaters	1	0	1	4	1	0	3	1	1	1	0	0	2	2	17
	Radiant Panels	3	3	4	6	5	13	16	12	5	4	0	1	6	14	92
	Steam or Hot Water Radiators	0	0	2	0	1	2	2	1	0	0	0	0	2	2	12
	Central Furnace	0	6	11	16	17	21	28	21	15	14	4	5	20	42	220
	Baseboard or Wall Units	10	35	33	34	42	54	69	41	27	21	10	3	46	61	486
	Other	0	0	0	0	0	1	0	0	1	0	0	0	0	1	3
Wood:	Free-Standing Stove	1	5	2	5	3	5	14	7	7	5	1	0	8	11	74
	Free-Standing Pellet Stove	0	0	0	0	0	2	0	3	0	0	1	0	1	2	9
	Central Furnace	0	0	2	0	0	0	2	0	0	0	0	0	0	1	5
	Fireplace with an Insert	0	1	3	4	3	2	4	4	1	1	1	0	0	4	28
	Fireplace without an Insert	1	0	0	0	1	1	0	0	0	1	0	0	0	0	4
Other:	Solar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	1	1	0	0	0	1	0	3	6
	No Heat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Don't Know	2	2	2	0	0	1	4	2	0	0	2	1	8	4	28
	Refused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	35	75	95	116	106	170	267	195	123	116	53	36	140	288	1,815

Table H-35: Space-Heating Fuels: Systems and Equipment by Household Income
HEAT_EQP by Q186, Q188, Q189

Weighted Data

SPACE-HEATING FUELS: SYSTEMS AND EQUIPMENT	HOUSEHOLD INCOME															TOTAL
	Below \$5K	\$5K to \$10K	\$10K to \$15K	\$15K to \$20K	\$20K to \$25K	\$25K to \$30K	\$30K to \$40K	\$40K to \$50K	\$50K to \$60K	\$60K to \$80K	\$80K to \$100K	\$100K or More	Don't Know	Refused		
Multi-Unit:	Central Heat - All Units	2,662	1,997	3,328	3,993	666	2,329	2,995	1,664	0	0	333	0	2,662	2,329	24,958
	Central Heat - Several Units	0	0	666	0	333	666	0	0	0	0	0	0	333	0	1,997
	Unit Not Heated	0	0	0	333	0	0	0	0	0	0	0	0	333	333	998
Fossil:	Steam or Hot Water Radiators	333	666	333	666	0	1,331	2,329	1,664	666	1,664	1,664	333	1,664	1,664	14,975
	Wall, Floor, or Ceiling Units	0	1,331	333	1,331	0	2,662	1,664	2,329	666	333	333	666	333	3,328	15,307
	Portable Units	0	0	0	666	0	0	666	0	0	0	0	0	0	0	1,331
	Central Furnace	2,329	3,660	5,657	8,319	9,317	13,311	31,280	25,290	19,633	17,969	8,652	6,323	9,317	36,272	197,331
	Other	0	0	0	0	0	666	0	0	0	0	0	0	0	0	666
Electricity:	Heat Pump	333	0	1,331	333	666	1,664	2,329	2,995	998	2,995	333	998	998	2,995	18,968
	Portable Room Heaters	333	0	333	1,331	333	0	998	333	333	333	0	0	666	666	5,657
	Radiant Panels	998	998	1,331	1,997	1,664	4,326	5,324	3,993	1,664	1,331	0	333	1,997	4,659	30,615
	Steam or Hot Water Radiators	0	0	666	0	333	666	666	333	0	0	0	0	666	666	3,993
	Central Furnace	0	1,997	3,660	5,324	5,657	6,988	9,317	6,988	4,992	4,659	1,331	1,664	6,655	13,976	73,209
	Baseboard or Wall Units	3,328	11,647	10,981	11,314	13,976	17,969	22,961	13,643	8,985	6,988	3,328	998	15,307	20,299	161,725
	Other	0	0	0	0	0	333	0	0	333	0	0	0	0	333	998
Wood:	Free-Standing Stove	333	1,664	666	1,664	998	1,664	4,659	2,329	2,329	1,664	333	0	2,662	3,660	24,625
	Free-Standing Pellet Stove	0	0	0	0	0	666	0	998	0	0	333	0	333	666	2,995
	Central Furnace	0	0	666	0	0	0	666	0	0	0	0	0	0	333	1,664
	Fireplace with an Insert	0	333	998	1,331	998	666	1,331	1,331	333	333	333	0	0	1,331	9,317
	Fireplace without an Insert	333	0	0	0	333	333	0	0	0	333	0	0	0	0	1,331
Other:	Solar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	333	333	0	0	0	333	0	998	1,997
	No Heat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Don't Know	666	666	666	0	0	333	1,331	666	0	0	666	333	2,662	1,331	9,317
	Refused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	11,647	24,958	31,613	38,601	35,273	56,570	88,849	64,890	40,930	38,601	17,637	11,980	46,587	95,837	603,972

Weighted Data

Chart H-35: Space-Heating Fuels: Systems and Equipment by Household Income

HEAT_EQP by Q186, Q188, Q189

Space-Heating Fuels: Systems and Equipment

Table H-36: Space-Heating Fuels: Systems and Equipment by Utility Type
HEAT_EQP by TYPE

Raw Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	UTILITY TYPE			TOTAL
		Public Generating	Public Non-Generating	Investor Owned	
Multi-Unit:	Central Heat - All Units	75	0	0	75
	Central Heat - Several Units	6	0	0	6
	Unit Not Heated	3	0	0	3
Fossil:	Steam or Hot Water Radiators	45	0	0	45
	Wall, Floor, or Ceiling Units	46	0	0	46
	Portable Units	4	0	0	4
	Central Furnace	593	0	0	593
	Other	2	0	0	2
Electricity:	Heat Pump	57	0	0	57
	Portable Room Heaters	17	0	0	17
	Radiant Panels	92	0	0	92
	Steam or Hot Water Radiators	12	0	0	12
	Central Furnace	220	0	0	220
	Baseboard or Wall Units	486	0	0	486
	Other	3	0	0	3
Wood:	Free-Standing Stove	74	0	0	74
	Free-Standing Pellet Stove	9	0	0	9
	Central Furnace	5	0	0	5
	Fireplace with an Insert	28	0	0	28
	Fireplace without an Insert	4	0	0	4
Other:	Solar	0	0	0	0
	Geothermal	0	0	0	0
	Other	6	0	0	6
	No Heat	0	0	0	0
	Don't Know	28	0	0	28
	Refused	0	0	0	0
	TOTAL	1,815	0	0	1,815

Table H-36: Space-Heating Fuels: Systems and Equipment by Utility Type
HEAT_EQP by TYPE

Weighted Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	UTILITY TYPE			TOTAL
		Public Generating	Public Non-Generating	Investor Owned	
Multi-Unit:	Central Heat - All Units	24,958	0	0	24,958
	Central Heat - Several Units	1,997	0	0	1,997
	Unit Not Heated	998	0	0	998
Fossil:	Steam or Hot Water Radiators	14,975	0	0	14,975
	Wall, Floor, or Ceiling Units	15,307	0	0	15,307
	Portable Units	1,331	0	0	1,331
	Central Furnace	197,331	0	0	197,331
	Other	666	0	0	666
Electricity:	Heat Pump	18,968	0	0	18,968
	Portable Room Heaters	5,657	0	0	5,657
	Radiant Panels	30,615	0	0	30,615
	Steam or Hot Water Radiators	3,993	0	0	3,993
	Central Furnace	73,209	0	0	73,209
	Baseboard or Wall Units	161,725	0	0	161,725
	Other	998	0	0	998
Wood:	Free-Standing Stove	24,625	0	0	24,625
	Free-Standing Pellet Stove	2,995	0	0	2,995
	Central Furnace	1,664	0	0	1,664
	Fireplace with an Insert	9,317	0	0	9,317
	Fireplace without an Insert	1,331	0	0	1,331
Other:	Solar	0	0	0	0
	Geothermal	0	0	0	0
	Other	1,997	0	0	1,997
	No Heat	0	0	0	0
	Don't Know	9,317	0	0	9,317
	Refused	0	0	0	0
	TOTAL	603,972	0	0	603,972

Weighted Data

Chart H-36: Space-Heating Fuels: Systems and Equipment by Utility Type
HEAT_EQP by TYPE

Space-Heating Fuels: Systems and Equipment

1992 Pacific Northwest Residential Energy Survey Phase I

VOLUME I Western Oregon (Public Generating) Crosstabulations

**Prepared for
Bonneville Power Administration
Portland, Oregon**

**by
Applied Management & Planning Group
Los Angeles**

Contract No.: DE-AC79-92BP25174

OVERVIEW OF 1992 PACIFIC NORTHWEST RESIDENTIAL ENERGY SURVEY

Phase I of the 1992 Pacific Northwest Residential Energy Survey (PNWRES92-I) was the third comprehensive survey of the region to provide data on energy usage, conservation awareness/behaviors and associated consumer characteristics for use in forecasting and planning by the Bonneville Power Administration.

Energy-use data from residential surveys conducted in 1979 and 1983 have been used extensively by Bonneville, the Pacific Northwest Utilities Conference Committee, the Northwest Power Planning Council, and by several of the utilities in the region. Since 1983, both increased fuel prices and conservation programs have impacted consumer behavior and have made it necessary to update the data base used for forecasting. In order to improve the accuracy of these forecasts, more detailed information was required concerning the use of residential energy in the Pacific Northwest. Thus, Bonneville contracted its third regional residential survey, PNWRES92-I.

A team of staff members, representing several constituencies within Bonneville's Office of Energy Resources, designed the data collection as a telephone survey. The Applied Management & Planning Group (AMPG), Los Angeles, California, was selected to carry out the survey, to summarize the data, and to prepare the initial documentation. Interviewing Services of America (ISA), Van Nuys, California, was subcontracted by AMPG to conduct the telephone interviews.

PNWRES92-I used random digit dialing (RDD) and computer-assisted telephone interviewing (CATI). The sample was stratified into 15 sampling domains defined by geographic area and utility type. A total of 20,170 interviews were completed from September 3, 1992, to December 9, 1992.

The survey's full documentation is divided among 33 volumes, which are displayed in the Project Concordance in the next section. All volumes are available both in printed form and on personal computers using **Bonneville Power Plus**. Volumes A and B provide detailed documentation. Volume C shows all survey items for each sampling domain, for the entire region. Each of the data tables in Volumes C through AF show both the sample counts and the weighted population counts, as well as a chart for the population counts.

Volume I presents selected crosstabulations for public generating utilities in Western Oregon.

For additional information, comments, or data requests, contact David Mills: (503)230-7505. To obtain copies of the reports, contact Kim Andersen, End-Use Research Section (RPEE), Bonneville Power Administration, P.O. Box 3621, Portland, OR 97208-3621; (503)230-5712.

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Key: PG = Public Generating Utility PN = Public Nongenerating Utility IO = Investor-Owned

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Q188:
Q189: What is your household income?
Q18: Do you own your home, rent it, or occupy it under some other arrangement?
- I-14:** Utility Type by Ownership Type
Q18: Do you own your home, rent it, or occupy it under some other arrangement?
- I-15:** Space-Heating Fuels: Systems and Equipment by Ownership Type
Q18: Do you own your home, rent it, or occupy it under some other arrangement?
- I-16:** Dwelling Size in Square Feet by Year of Construction
Q24: What is the square footage of your home?
Q20: In what year was your home constructed?
- I-17:** Primary Space-Heating Fuel Type by Year of Construction
Q46: What fuel do you use most to heat your home?
Q20: In what year was your home constructed?
- I-18:** Primary Water-Heating Fuel Type by Year of Construction
Q102: What fuel do you use most for heating water in your home?
Q20: In what year was your home constructed?
- I-19:** Household Income by Year of Construction
Q186: Was your total household income before taxes for 1991 above or below \$25,000?
Q188:
Q189: What is your household income?
Q20: In what year was your home constructed?

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- I-20:** Utility Type by Year of Construction
Q20: In what year was your home constructed?
- I-21:** Space-Heating Fuels: Systems and Equipment by Year of Construction
Q20: In what year was your home constructed?
- I-22:** Primary Space-Heating Fuel Type by Dwelling Size in Square Feet
Q46: What fuel do you use most to heat your home?
Q24: What is the square footage of your home?
- I-23:** Primary Water-Heating Fuel Type by Dwelling Size in Square Feet
Q102: What fuel do you use most for heating water in your home?
Q24: What is the square footage of your home?
- I-24:** Household Income by Dwelling Size in Square Feet
Q186: Was your total household income before taxes for 1991 above or below \$25,000?
Q188&
Q189: What is your household income?
Q24: What is the square footage of your home?
- I-25:** Utility Type by Dwelling Size in Square Feet
Q24: What is the square footage of your home?
- I-26:** Space-Heating Fuels: Systems and Equipment by Dwelling Size in Square Feet
Q24: What is the square footage of your home?
- I-27:** Primary Water-Heating Fuel Type by Primary Space-Heating Fuel Type
Q102: What fuel do you use most for heating water in your home?
Q46: What fuel do you use most to heat your home?
- I-28:** Household Income by Primary Space-Heating Fuel Type
Q186: Was your total household income before taxes for 1991 above or below \$25,000?
Q188&
Q189: What is your household income?
Q46: What fuel do you use most to heat your home?
- I-29:** Utility Type by Primary Space-Heating Fuel Type
Q46: What fuel do you use most to heat your home?
- I-30:** Space-Heating Fuels: Systems and Equipment by Primary Space-Heating Fuel Type
Q46: What fuel do you use most to heat your home?

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- I-31:** Household Income by Primary Water-Heating Fuel Type
Q186: Was your total household income before taxes for 1991 above or below \$25,000?
Q188&
Q189: What is your household income?
Q102: What fuel do you use most for heating water in your home?
- I-32:** Utility Type by Primary Water-Heating Fuel Type
Q102: What fuel do you use most for heating water in your home?
- I-33:** Space-Heating Fuels: Systems and Equipment by Primary Water-Heating Fuel Type
Q102: What fuel do you use most for heating water in your home?
- I-34:** Utility Type by Household Income
Q186: Was your total household income before taxes for 1991 above or below \$25,000?
Q188&
Q189: What is your household income?
- I-35:** Space-Heating Fuels: Systems and Equipment by Household Income
Q186: Was your total household income before taxes for 1991 above or below \$25,000?
Q188&
Q189: What is your household income?
- I-36:** Space-Heating Fuels: Systems and Equipment by Utility Type

Table I-1: Ownership Type by Dwelling Type
Q18 by Q16

Raw Data

OWNERSHIP TYPE	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Own	95	1,094	21	2	5	16	1	1,234
Rent or Lease	9	218	117	8	43	208	4	607
Occupy without Payment	1	9	1	0	1	2	0	14
Don't Know	0	0	0	0	0	0	0	0
Refused	0	2	0	0	0	0	0	2
TOTAL	105	1,323	139	10	49	226	5	1,857

Weighted Data

OWNERSHIP TYPE	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Own	2,829	32,581	625	60	149	477	30	36,750
Rent or Lease	268	6,492	3,484	238	1,281	6,195	119	18,077
Occupy without Payment	30	268	30	0	30	60	0	417
Don't Know	0	0	0	0	0	0	0	0
Refused	0	60	0	0	0	0	0	60
TOTAL	3,127	39,401	4,140	298	1,459	6,731	149	55,304

Weighted Data

Chart I-1: Ownership Type by Dwelling Type

Q18 by Q16

Table I-2: Year of Construction by Dwelling Type
Q20 by Q16

Raw Data

YEAR OF CONSTRUCTION	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Before 1950	3	260	14	4	6	23	1	311
1950-59	5	225	9	0	3	3	0	245
1960-69	19	288	19	0	6	27	0	359
1970-78	36	255	29	0	9	33	0	362
1979-85	15	91	9	2	3	12	1	133
1986-88	9	28	0	0	1	4	0	42
1989-92	12	45	3	0	4	15	2	81
Don't Know	6	130	56	4	17	109	1	323
Refused	0	1	0	0	0	0	0	1
TOTAL	105	1,323	139	10	49	226	5	1,857

Weighted Data

YEAR OF CONSTRUCTION	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Before 1950	89	7,743	417	119	179	685	30	9,262
1950-59	149	6,701	268	0	89	89	0	7,296
1960-69	566	8,577	566	0	179	804	0	10,692
1970-78	1,072	7,594	864	0	268	983	0	10,781
1979-85	447	2,710	268	60	89	357	30	3,961
1986-88	268	834	0	0	30	119	0	1,251
1989-92	357	1,340	89	0	119	447	60	2,412
Don't Know	179	3,872	1,668	119	506	3,246	30	9,619
Refused	0	30	0	0	0	0	0	30
TOTAL	3,127	39,401	4,140	298	1,459	6,731	149	55,304

Weighted Data

Chart I-2: Year of Construction by Dwelling Type
Q20 by Q16

Table I-3: Dwelling Size in Square Feet by Dwelling Type
Q24 by Q16

Raw Data

DWELLING SIZE IN SQUARE FEET	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
< 750	7	17	7	1	4	42	2	80
750 to < 1000	13	90	19	2	20	44	1	189
1000 to < 1250	15	230	31	1	5	28	0	310
1250 to < 1500	17	204	8	0	1	7	0	237
1500 to < 1750	13	170	6	0	1	0	1	191
1750 to < 2000	9	168	11	0	0	1	0	189
2000 to < 2500	1	148	2	0	0	2	0	153
2500 to < 3000	1	64	1	0	0	0	0	66
3000 or >	1	44	2	0	0	3	0	50
Don't Know	28	188	52	6	17	99	1	391
Refused	0	0	0	0	1	0	0	1
TOTAL	105	1,323	139	10	49	226	5	1,857

Weighted Data

DWELLING SIZE IN SQUARE FEET	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
< 750	208	506	208	30	119	1,251	60	2,383
750 to < 1000	387	2,680	566	60	596	1,310	30	5,629
1000 to < 1250	447	6,850	923	30	149	834	0	9,232
1250 to < 1500	506	6,075	238	0	30	208	0	7,058
1500 to < 1750	387	5,063	179	0	30	0	30	5,688
1750 to < 2000	268	5,003	328	0	0	30	0	5,629
2000 to < 2500	30	4,408	60	0	0	60	0	4,557
2500 to < 3000	30	1,906	30	0	0	0	0	1,966
3000 or >	30	1,310	60	0	0	89	0	1,489
Don't Know	834	5,599	1,549	179	506	2,948	30	11,645
Refused	0	0	0	0	30	0	0	30
TOTAL	3,127	39,401	4,140	298	1,459	6,731	149	55,304

Weighted Data

Chart I-3: Dwelling Size in Square Feet by Dwelling Type

Q24 by Q16

Table I-4: Primary Space-Heating Fuel Type by Dwelling Type
Q46 by Q16

Raw Data

PRIMARY SPACE-HEATING FUEL TYPE	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Electricity	86	880	105	8	37	176	3	1,295
Natural Gas	6	215	8	0	2	5	0	236
Fuel Oil	3	78	1	0	1	0	0	83
Wood or Presto Logs	9	142	6	2	0	2	0	161
Propane or Bottled Gas	1	0	0	0	0	0	1	2
Kerosene	0	1	0	0	0	0	0	1
Coal	0	0	0	0	0	0	0	0
Solar	0	1	0	0	0	0	0	1
Geothermal	0	0	0	0	0	0	0	0
Other	0	4	0	0	0	0	0	4
No Heat	0	0	0	0	0	0	0	0
Not Asked	0	0	19	0	9	41	1	70
Don't Know	0	2	0	0	0	2	0	4
Refused	0	0	0	0	0	0	0	0
TOTAL	105	1,323	139	10	49	226	5	1,857

Table I-4: Primary Space-Heating Fuel Type by Dwelling Type
Q46 by Q16

Weighted Data

PRIMARY SPACE-HEATING FUEL TYPE	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Electricity	2,561	26,208	3,127	238	1,102	5,242	89	38,567
Natural Gas	179	6,403	238	0	60	149	0	7,028
Fuel Oil	89	2,323	30	0	30	0	0	2,472
Wood or Presto Logs	268	4,229	179	60	0	60	0	4,795
Propane or Bottled Gas	30	0	0	0	0	0	30	60
Kerosene	0	30	0	0	0	0	0	30
Coal	0	0	0	0	0	0	0	0
Solar	0	30	0	0	0	0	0	30
Geothermal	0	0	0	0	0	0	0	0
Other	0	119	0	0	0	0	0	119
No Heat	0	0	0	0	0	0	0	0
Not Asked	0	0	566	0	268	1,221	30	2,085
Don't Know	0	60	0	0	0	60	0	119
Refused	0	0	0	0	0	0	0	0
TOTAL	3,127	39,401	4,140	298	1,459	6,731	149	55,304

Weighted Data

Chart I-4: Primary Space-Heating Fuel Type by Dwelling Type

Q46 by Q16

Table I-5: Primary Water-Heating Fuel Type by Dwelling Type

Q102 by Q16

Raw Data

PRIMARY WATER-HEATING FUEL TYPE	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Electricity	96	1,150	94	7	41	148	2	1,538
Natural Gas	6	159	10	0	2	5	0	182
Fuel Oil	0	3	0	0	0	0	0	3
Wood	0	0	0	0	0	0	0	0
Propane or Bottled Gas	2	0	0	0	0	0	1	3
Solar	0	7	0	0	0	0	0	7
Other	0	0	0	0	0	0	0	0
No Hot Water In Home	0	0	0	0	0	0	0	0
Not Asked	0	0	34	2	6	71	2	115
Don't Know	1	4	1	1	0	2	0	9
Refused	0	0	0	0	0	0	0	0
TOTAL	105	1,323	139	10	49	226	5	1,857

Weighted Data

PRIMARY WATER-HEATING FUEL TYPE	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Electricity	2,859	34,249	2,799	208	1,221	4,408	60	45,804
Natural Gas	179	4,735	298	0	60	149	0	5,420
Fuel Oil	0	89	0	0	0	0	0	89
Wood	0	0	0	0	0	0	0	0
Propane or Bottled Gas	60	0	0	0	0	0	30	89
Solar	0	208	0	0	0	0	0	208
Other	0	0	0	0	0	0	0	0
No Hot Water In Home	0	0	0	0	0	0	0	0
Not Asked	0	0	1,013	60	179	2,114	60	3,425
Don't Know	30	119	30	30	0	60	0	268
Refused	0	0	0	0	0	0	0	0
TOTAL	3,127	39,401	4,140	298	1,459	6,731	149	55,304

Weighted Data

Chart I-5: Primary Water-Heating Fuel Type by Dwelling Type

Q102 by Q16

Table I-6: Household Income by Dwelling Type

Q186, Q188, Q189 by Q16

Raw Data

HOUSEHOLD INCOME	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Below \$5,000	3	19	10	0	7	27	1	67
\$5,000 to < \$10,000	9	50	8	2	5	35	0	109
\$10,000 to < \$15,000	11	71	18	5	4	41	0	150
\$15,000 to < \$20,000	11	80	13	0	7	14	0	125
\$20,000 to < \$25,000	10	87	18	1	6	24	1	147
\$25,000 to < \$30,000	15	145	12	0	5	13	1	191
\$30,000 to < \$40,000	12	218	14	0	4	23	2	273
\$40,000 to < \$50,000	7	146	10	0	3	6	0	172
\$50,000 to < \$60,000	2	88	2	0	2	5	0	99
\$60,000 to < \$80,000	1	85	4	0	0	1	0	91
\$80,000 to < \$100,000	1	36	2	0	0	2	0	41
\$100,000 or More	3	35	0	0	0	0	0	38
Don't Know	9	89	15	1	3	18	0	135
Refused	11	174	13	1	3	17	0	219
TOTAL	105	1,323	139	10	49	226	5	1,857

Table I-6: Household Income by Dwelling Type

Q186, Q188, Q189 by Q16

Weighted Data

HOUSEHOLD INCOME	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Below \$5,000	89	566	298	0	208	804	30	1,995
\$5,000 to < \$10,000	268	1,489	238	60	149	1,042	0	3,246
\$10,000 to < \$15,000	328	2,114	536	149	119	1,221	0	4,467
\$15,000 to < \$20,000	328	2,383	387	0	208	417	0	3,723
\$20,000 to < \$25,000	298	2,591	536	30	179	715	30	4,378
\$25,000 to < \$30,000	447	4,318	357	0	149	387	30	5,688
\$30,000 to < \$40,000	357	6,492	417	0	119	685	60	8,130
\$40,000 to < \$50,000	208	4,348	298	0	89	179	0	5,122
\$50,000 to < \$60,000	60	2,621	60	0	60	149	0	2,948
\$60,000 to < \$80,000	30	2,531	119	0	0	30	0	2,710
\$80,000 to < \$100,000	30	1,072	60	0	0	60	0	1,221
\$100,000 or More	89	1,042	0	0	0	0	0	1,132
Don't Know	268	2,651	447	30	89	536	0	4,020
Refused	328	5,182	387	30	89	506	0	6,522
TOTAL	3,127	39,401	4,140	298	1,459	6,731	149	55,304

Weighted Data

Chart I-6: Household Income by Dwelling Type

Q186, Q188, Q189 by Q16

Table I-7: Utility Type by Dwelling Type
TYPE by Q16

Raw Data

UTILITY TYPE	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Public Generating	105	1,323	139	10	49	226	5	1,857
Public Non-Generating	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0
TOTAL	105	1,323	139	10	49	226	5	1,857

Weighted Data

UTILITY TYPE	DWELLING TYPE							TOTAL
	Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Public Generating	3,127	39,401	4,140	298	1,459	6,731	149	55,304
Public Non-Generating	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0
TOTAL	3,127	39,401	4,140	298	1,459	6,731	149	55,304

Weighted Data

Chart I-7: Utility Type by Dwelling Type
TYPE by Q16

Table I-8: Space-Heating Fuels: Systems and Equipment by Dwelling Type
HEAT_EQP by Q16

Raw Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	DWELLING TYPE							TOTAL
		Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Multi-Unit:	Central Heat - All Units	0	0	15	0	7	35	1	58
	Central Heat - Several Units	0	0	3	0	1	2	0	6
	Unit Not Heated	0	0	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	0	13	1	0	0	0	0	14
	Wall, Floor, or Ceiling Units	0	28	2	0	1	3	0	34
	Portable Units	0	4	0	0	0	0	0	4
	Central Furnace	10	245	6	0	2	2	1	266
	Other	0	3	0	0	0	0	0	3
Electricity:	Heat Pump	22	123	4	0	1	2	0	152
	Portable Room Heaters	3	15	2	0	0	6	0	26
	Radiant Panels	9	372	62	3	18	92	0	556
	Steam or Hot Water Radiators	0	1	0	0	0	0	0	1
	Central Furnace	45	143	12	0	3	17	0	220
	Baseboard or Wall Units	7	214	23	3	14	54	3	318
	Other	0	8	1	0	0	0	0	9
Wood:	Free-Standing Stove	7	76	4	1	0	0	0	88
	Free-Standing Pellet Stove	0	13	0	1	0	0	0	14
	Central Furnace	0	1	0	0	0	0	0	1
	Fireplace with an Insert	2	47	2	0	0	2	0	53
	Fireplace without an Insert	0	5	0	0	0	0	0	5
Other:	Solar	0	1	0	0	0	0	0	1
	Geothermal	0	0	0	0	0	0	0	0
	Other	0	4	0	0	0	0	0	4
	No Heat	0	0	0	0	0	0	0	0
	Don't Know	0	7	2	2	2	11	0	24
	Refused	0	0	0	0	0	0	0	0
TOTAL		105	1,323	139	10	49	226	5	1,857

Table I-8: Space-Heating Fuels: Systems and Equipment by Dwelling Type
HEAT_EQP by Q16

Weighted Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	DWELLING TYPE							TOTAL
		Manufactured Home	Single Family Dwelling	Duplex	Triplex	Fourplex	Fiveplex or More	Other	
Multi-Unit:	Central Heat - All Units	0	0	447	0	208	1,042	30	1,727
	Central Heat - Several Units	0	0	89	0	30	60	0	179
	Unit Not Heated	0	0	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	0	387	30	0	0	0	0	417
	Wall, Floor, or Ceiling Units	0	834	60	0	30	89	0	1,013
	Portable Units	0	119	0	0	0	0	0	119
	Central Furnace	298	7,296	179	0	60	60	30	7,922
	Other	0	89	0	0	0	0	0	89
Electricity:	Heat Pump	655	3,663	119	0	30	60	0	4,527
	Portable Room Heaters	89	447	60	0	0	179	0	774
	Radiant Panels	268	11,079	1,846	89	536	2,740	0	16,558
	Steam or Hot Water Radiators	0	30	0	0	0	0	0	30
	Central Furnace	1,340	4,259	357	0	89	506	0	6,552
	Baseboard or Wall Units	208	6,373	685	89	417	1,608	89	9,470
	Other	0	238	30	0	0	0	0	268
Wood:	Free-Standing Stove	208	2,263	119	30	0	0	0	2,621
	Free-Standing Pellet Stove	0	387	0	30	0	0	0	417
	Central Furnace	0	30	0	0	0	0	0	30
	Fireplace with an Insert	60	1,400	60	0	0	60	0	1,578
	Fireplace without an Insert	0	149	0	0	0	0	0	149
Other:	Solar	0	30	0	0	0	0	0	30
	Geothermal	0	0	0	0	0	0	0	0
	Other	0	119	0	0	0	0	0	119
	No Heat	0	0	0	0	0	0	0	0
	Don't Know	0	208	60	60	60	328	0	715
	Refused	0	0	0	0	0	0	0	0
	TOTAL	3,127	39,401	4,140	298	1,459	6,731	149	55,304

Weighted Data

Chart I-8: Space-Heating Fuels: Systems and Equipment by Dwelling Type
HEAT_EQP by Q16

Space-Heating Fuels: Systems and Equipment

Table I-9: Year of Construction by Ownership Type
Q20 by Q18

Raw Data

YEAR OF CONSTRUCTION	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Before 1950	209	100	2	0	0	311
1950-59	204	41	0	0	0	245
1960-69	285	69	4	0	1	359
1970-78	281	79	2	0	0	362
1979-85	104	29	0	0	0	133
1986-88	40	2	0	0	0	42
1989-92	58	23	0	0	0	81
Don't Know	52	264	6	0	1	323
Refused	1	0	0	0	0	1
TOTAL	1,234	607	14	0	2	1,857

Weighted Data

YEAR OF CONSTRUCTION	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Before 1950	6,224	2,978	60	0	0	9,262
1950-59	6,075	1,221	0	0	0	7,296
1960-69	8,488	2,055	119	0	30	10,692
1970-78	8,369	2,353	60	0	0	10,781
1979-85	3,097	864	0	0	0	3,961
1986-88	1,191	60	0	0	0	1,251
1989-92	1,727	685	0	0	0	2,412
Don't Know	1,549	7,862	179	0	30	9,619
Refused	30	0	0	0	0	30
TOTAL	36,750	18,077	417	0	60	55,304

Weighted Data

Chart I-9: Year of Construction by Ownership Type

Q20 by Q18

Table I-10: Dwelling Size in Square Feet by Ownership Type
Q24 by Q18

Raw Data

DWELLING SIZE IN SQUARE FEET	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
< 750	17	63	0	0	0	80
750 to < 1000	92	95	2	0	0	189
1000 to < 1250	216	91	3	0	0	310
1250 to < 1500	196	39	1	0	1	237
1500 to < 1750	165	24	2	0	0	191
1750 to < 2000	166	22	1	0	0	189
2000 to < 2500	138	14	1	0	0	153
2500 to < 3000	63	3	0	0	0	66
3000 or >	44	6	0	0	0	50
Don't Know	137	249	4	0	1	391
Refused	0	1	0	0	0	1
TOTAL	1,234	607	14	0	2	1,857

Weighted Data

DWELLING SIZE IN SQUARE FEET	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
< 750	506	1,876	0	0	0	2,383
750 to < 1000	2,740	2,829	60	0	0	5,629
1000 to < 1250	6,433	2,710	89	0	0	9,232
1250 to < 1500	5,837	1,161	30	0	30	7,058
1500 to < 1750	4,914	715	60	0	0	5,688
1750 to < 2000	4,944	655	30	0	0	5,629
2000 to < 2500	4,110	417	30	0	0	4,557
2500 to < 3000	1,876	89	0	0	0	1,966
3000 or >	1,310	179	0	0	0	1,489
Don't Know	4,080	7,416	119	0	30	11,645
Refused	0	30	0	0	0	30
TOTAL	36,750	18,077	417	0	60	55,304

Weighted Data

Chart I-10: Dwelling Size in Square Feet by Ownership Type
Q24 by Q18

Table I-11: Primary Space-Heating Fuel Type by Ownership Type
Q46 by Q18

Raw Data

PRIMARY SPACE-HEATING FUEL TYPE	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Electricity	830	452	11	0	2	1,295
Natural Gas	184	50	2	0	0	236
Fuel Oil	69	14	0	0	0	83
Wood or Presto Logs	134	27	0	0	0	161
Propane or Bottled Gas	2	0	0	0	0	2
Kerosene	0	0	1	0	0	1
Coal	0	0	0	0	0	0
Solar	1	0	0	0	0	1
Geothermal	0	0	0	0	0	0
Other	4	0	0	0	0	4
No Heat	0	0	0	0	0	0
Not Asked	8	62	0	0	0	70
Don't Know	2	2	0	0	0	4
Refused	0	0	0	0	0	0
TOTAL	1,234	607	14	0	2	1,857

Table I-11: Primary Space-Heating Fuel Type by Ownership Type
Q46 by Q18

Weighted Data

PRIMARY SPACE-HEATING FUEL TYPE	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Electricity	24,719	13,461	328	0	60	38,567
Natural Gas	5,480	1,489	60	0	0	7,028
Fuel Oil	2,055	417	0	0	0	2,472
Wood or Presto Logs	3,991	804	0	0	0	4,795
Propane or Bottled Gas	60	0	0	0	0	60
Kerosene	0	0	30	0	0	30
Coal	0	0	0	0	0	0
Solar	30	0	0	0	0	30
Geothermal	0	0	0	0	0	0
Other	119	0	0	0	0	119
No Heat	0	0	0	0	0	0
Not Asked	238	1,846	0	0	0	2,085
Don't Know	60	60	0	0	0	119
Refused	0	0	0	0	0	0
TOTAL	36,750	18,077	417	0	60	55,304

Weighted Data

Chart I-11: Primary Space-Heating Fuel Type by Ownership Type
Q46 by Q18

Table I-12: Primary Water-Heating Fuel Type by Ownership Type

Q102 by Q18

Raw Data

PRIMARY WATER-HEATING FUEL TYPE	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Electricity	1,068	455	13	0	2	1,538
Natural Gas	136	46	0	0	0	182
Fuel Oil	2	1	0	0	0	3
Wood	0	0	0	0	0	0
Propane or Bottled Gas	3	0	0	0	0	3
Solar	7	0	0	0	0	7
Other	0	0	0	0	0	0
No Hot Water In Home	0	0	0	0	0	0
Not Asked	13	101	1	0	0	115
Don't Know	5	4	0	0	0	9
Refused	0	0	0	0	0	0
TOTAL	1,234	607	14	0	2	1,857

Weighted Data

PRIMARY WATER-HEATING FUEL TYPE	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Electricity	31,807	13,551	387	0	60	45,804
Natural Gas	4,050	1,370	0	0	0	5,420
Fuel Oil	60	30	0	0	0	89
Wood	0	0	0	0	0	0
Propane or Bottled Gas	89	0	0	0	0	89
Solar	208	0	0	0	0	208
Other	0	0	0	0	0	0
No Hot Water In Home	0	0	0	0	0	0
Not Asked	387	3,008	30	0	0	3,425
Don't Know	149	119	0	0	0	268
Refused	0	0	0	0	0	0
TOTAL	36,750	18,077	417	0	60	55,304

Weighted Data

Chart I-12: Primary Water-Heating Fuel Type by Ownership Type
Q102 by Q18

Table I-13: Household Income by Ownership Type
Q186, Q188, Q189 by Q18

Raw Data						
HOUSEHOLD INCOME	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Below \$5,000	18	47	2	0	0	67
\$5,000 to < \$10,000	38	69	2	0	0	109
\$10,000 to < \$15,000	57	91	2	0	0	150
\$15,000 to < \$20,000	64	60	1	0	0	125
\$20,000 to < \$25,000	79	68	0	0	0	147
\$25,000 to < \$30,000	138	52	1	0	0	191
\$30,000 to < \$40,000	207	65	1	0	0	273
\$40,000 to < \$50,000	140	29	3	0	0	172
\$50,000 to < \$60,000	87	12	0	0	0	99
\$60,000 to < \$80,000	82	8	1	0	0	91
\$80,000 to < \$100,000	38	3	0	0	0	41
\$100,000 or More	38	0	0	0	0	38
Don't Know	81	53	1	0	0	135
Refused	167	50	0	0	2	219
TOTAL	1,234	607	14	0	2	1,857

Table I-13: Household Income by Ownership Type
Q186, Q188, Q189 by Q18

Weighted Data

HOUSEHOLD INCOME	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Below \$5,000	536	1,400	60	0	0	1,995
\$5,000 to < \$10,000	1,132	2,055	60	0	0	3,246
\$10,000 to < \$15,000	1,698	2,710	60	0	0	4,467
\$15,000 to < \$20,000	1,906	1,787	30	0	0	3,723
\$20,000 to < \$25,000	2,353	2,025	0	0	0	4,378
\$25,000 to < \$30,000	4,110	1,549	30	0	0	5,688
\$30,000 to < \$40,000	6,165	1,936	30	0	0	8,130
\$40,000 to < \$50,000	4,169	864	89	0	0	5,122
\$50,000 to < \$60,000	2,591	357	0	0	0	2,948
\$60,000 to < \$80,000	2,442	238	30	0	0	2,710
\$80,000 to < \$100,000	1,132	89	0	0	0	1,221
\$100,000 or More	1,132	0	0	0	0	1,132
Don't Know	2,412	1,578	30	0	0	4,020
Refused	4,973	1,489	0	0	60	6,522
TOTAL	36,750	18,077	417	0	60	55,304

Weighted Data

Chart I-13: Household Income by Ownership Type

Q186, Q188, Q189 by Q18

Table I-14: Utility Type by Ownership Type
TYPE by Q18

Raw Data

UTILITY TYPE	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Public Generating	1,234	607	14	0	2	1,857
Public Non-Generating	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0
TOTAL	1,234	607	14	0	2	1,857

Weighted Data

UTILITY TYPE	OWNERSHIP TYPE					TOTAL
	Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Public Generating	36,750	18,077	417	0	60	55,304
Public Non-Generating	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0
TOTAL	36,750	18,077	417	0	60	55,304

Weighted Data

Chart I-14: Utility Type by Ownership Type
TYPE by Q18

Table I-15: Space-Heating Fuels: Systems and Equipment by Ownership Type
HEAT_EQP by Q18

Raw Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	OWNERSHIP TYPE					TOTAL
		Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	8	50	0	0	0	58
	Central Heat - Several Units	0	6	0	0	0	6
	Unit Not Heated	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	12	2	0	0	0	14
	Wall, Floor, or Ceiling Units	23	11	0	0	0	34
	Portable Units	3	0	1	0	0	4
	Central Furnace	214	50	2	0	0	266
	Other	3	0	0	0	0	3
Electricity:	Heat Pump	142	10	0	0	0	152
	Portable Room Heaters	12	14	0	0	0	26
	Radiant Panels	333	213	8	0	2	556
	Steam or Hot Water Radiators	1	0	0	0	0	1
	Central Furnace	175	44	1	0	0	220
	Baseboard or Wall Units	158	158	2	0	0	318
	Other	7	2	0	0	0	9
Wood:	Free-Standing Stove	69	19	0	0	0	88
	Free-Standing Pellet Stove	14	0	0	0	0	14
	Central Furnace	1	0	0	0	0	1
	Fireplace with an Insert	47	6	0	0	0	53
	Fireplace without an Insert	3	2	0	0	0	5
Other:	Solar	1	0	0	0	0	1
	Geothermal	0	0	0	0	0	0
	Other	4	0	0	0	0	4
	No Heat	0	0	0	0	0	0
	Don't Know	4	20	0	0	0	24
	Refused	0	0	0	0	0	0
TOTAL		1,234	607	14	0	2	1,857

Table I-15: Space-Heating Fuels: Systems and Equipment by Ownership Type
HEAT_EQP by Q18

Weighted Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	OWNERSHIP TYPE					TOTAL
		Own	Rent or Lease	Occupy without Payment	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	238	1,489	0	0	0	1,727
	Central Heat - Several Units	0	179	0	0	0	179
	Unit Not Heated	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	357	60	0	0	0	417
	Wall, Floor, or Ceiling Units	685	328	0	0	0	1,013
	Portable Units	89	0	30	0	0	119
	Central Furnace	6,373	1,489	60	0	0	7,922
	Other	89	0	0	0	0	89
Electricity:	Heat Pump	4,229	298	0	0	0	4,527
	Portable Room Heaters	357	417	0	0	0	774
	Radiant Panels	9,917	6,343	238	0	60	16,558
	Steam or Hot Water Radiators	30	0	0	0	0	30
	Central Furnace	5,212	1,310	30	0	0	6,552
	Baseboard or Wall Units	4,705	4,705	60	0	0	9,470
	Other	208	60	0	0	0	268
Wood:	Free-Standing Stove	2,055	566	0	0	0	2,621
	Free-Standing Pellet Stove	417	0	0	0	0	417
	Central Furnace	30	0	0	0	0	30
	Fireplace with an Insert	1,400	179	0	0	0	1,578
	Fireplace without an Insert	89	60	0	0	0	149
Other:	Solar	30	0	0	0	0	30
	Geothermal	0	0	0	0	0	0
	Other	119	0	0	0	0	119
	No Heat	0	0	0	0	0	0
	Don't Know	119	596	0	0	0	715
	Refused	0	0	0	0	0	0
TOTAL		36,750	18,077	417	0	60	55,304

Weighted Data

Chart I-15: Space-Heating Fuels: Systems and Equipment by Ownership Type

HEAT_EQP by Q18

Space-Heating Fuels: Systems and Equipment

Table I-16: Dwelling Size in Square Feet by Year of Construction
Q24 by Q20

Raw Data

DWELLING SIZE IN SQUARE FEET	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
< 750	20	5	12	8	7	2	3	23	0	80
750 to < 1000	42	21	25	36	15	4	7	39	0	189
1000 to < 1250	53	55	52	79	26	5	12	27	1	310
1250 to < 1500	29	36	47	66	23	4	9	23	0	237
1500 to < 1750	27	30	53	39	14	8	9	11	0	191
1750 to < 2000	26	36	44	43	16	6	8	10	0	189
2000 to < 2500	25	15	35	28	15	7	20	8	0	153
2500 to < 3000	8	7	19	19	3	3	1	6	0	66
3000 or >	14	7	15	6	1	1	5	1	0	50
Don't Know	67	33	57	38	13	2	7	174	0	391
Refused	0	0	0	0	0	0	0	1	0	1
TOTAL	311	245	359	362	133	42	81	323	1	1,857

Weighted Data

DWELLING SIZE IN SQUARE FEET	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
< 750	596	149	357	238	208	60	89	685	0	2,383
750 to < 1000	1,251	625	745	1,072	447	119	208	1,161	0	5,629
1000 to < 1250	1,078	1,638	1,549	2,353	774	149	357	804	30	9,232
1250 to < 1500	864	1,072	1,400	1,966	685	119	268	685	0	7,058
1500 to < 1750	804	893	1,578	1,161	417	238	268	328	0	5,688
1750 to < 2000	774	1,072	1,310	1,281	477	179	238	298	0	5,629
2000 to < 2500	745	447	1,042	834	447	208	596	238	0	4,557
2500 to < 3000	238	208	566	566	89	89	30	179	0	1,966
3000 or >	417	208	447	179	30	30	149	30	0	1,489
Don't Know	1,995	983	1,698	1,132	387	60	208	5,182	0	11,645
Refused	0	0	0	0	0	0	0	30	0	30
TOTAL	9,262	7,296	10,692	10,781	3,961	1,251	2,412	9,619	30	55,304

Weighted Data

Chart I-16: Dwelling Size in Square Feet by Year of Construction
Q24 by Q20

Table I-17: Primary Space-Heating Fuel Type by Year of Construction
Q46 by Q20

Raw Data

PRIMARY SPACE-HEATING FUEL TYPE	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Electricity	163	149	255	296	107	34	53	237	1	1,295
Natural Gas	60	35	51	28	14	5	18	25	0	236
Fuel Oil	37	30	6	2	0	0	0	8	0	83
Wood or Presto Logs	32	27	40	32	7	2	3	18	0	161
Propane or Bottled Gas	0	0	0	0	1	0	1	0	0	2
Kerosene	1	0	0	0	0	0	0	0	0	1
Coal	0	0	0	0	0	0	0	0	0	0
Solar	0	0	0	0	1	0	0	0	0	1
Geothermal	0	0	0	0	0	0	0	0	0	0
Other	2	1	0	0	0	1	0	0	0	4
No Heat	0	0	0	0	0	0	0	0	0	0
Not Asked	16	2	7	4	3	0	6	32	0	70
Don't Know	0	1	0	0	0	0	0	3	0	4
Refused	0	0	0	0	0	0	0	0	0	0
TOTAL	311	245	359	362	133	42	81	323	1	1,857

Table I-17: Primary Space-Heating Fuel Type by Year of Construction
Q46 by Q20

Weighted Data

PRIMARY SPACE-HEATING FUEL TYPE	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Electricity	4,854	4,437	7,594	8,815	3,187	1,013	1,578	7,058	30	38,567
Natural Gas	1,787	1,042	1,519	834	417	149	536	745	0	7,028
Fuel Oil	1,102	893	179	60	0	0	0	238	0	2,472
Wood or Presto Logs	953	804	1,191	953	208	60	89	536	0	4,795
Propane or Bottled Gas	0	0	0	0	30	0	30	0	0	60
Kerosene	30	0	0	0	0	0	0	0	0	30
Coal	0	0	0	0	0	0	0	0	0	0
Solar	0	0	0	0	30	0	0	0	0	30
Geothermal	0	0	0	0	0	0	0	0	0	0
Other	60	30	0	0	0	30	0	0	0	119
No Heat	0	0	0	0	0	0	0	0	0	0
Not Asked	477	60	208	119	89	0	179	953	0	2,085
Don't Know	0	30	0	0	0	0	0	89	0	119
Refused	0	0	0	0	0	0	0	0	0	0
TOTAL	9,262	7,296	10,692	10,781	3,961	1,251	2,412	9,619	30	55,304

Weighted Data

Chart I-17: Primary Space-Heating Fuel Type by Year of Construction

Q46 by Q20

Table I-18: Primary Water-Heating Fuel Type by Year of Construction
Q102 by Q20

Raw Data

PRIMARY WATER-HEATING FUEL TYPE	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Electricity	256	215	301	319	109	37	56	244	1	1,538
Natural Gas	27	21	42	34	15	4	18	21	0	182
Fuel Oil	0	2	1	0	0	0	0	0	0	3
Wood	0	0	0	0	0	0	0	0	0	0
Propane or Bottled Gas	0	0	1	0	1	0	1	0	0	3
Solar	1	3	3	0	0	0	0	0	0	7
Other	0	0	0	0	0	0	0	0	0	0
No Hot Water In Home	0	0	0	0	0	0	0	0	0	0
Not Asked	26	4	8	9	7	1	5	55	0	115
Don't Know	1	0	3	0	1	0	1	3	0	9
Refused	0	0	0	0	0	0	0	0	0	0
TOTAL	311	245	359	362	133	42	81	323	1	1,857

Weighted Data

PRIMARY WATER-HEATING FUEL TYPE	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Electricity	7,624	6,403	8,964	9,500	3,246	1,102	1,668	7,267	30	45,804
Natural Gas	804	625	1,251	1,013	447	119	536	625	0	5,420
Fuel Oil	0	60	30	0	0	0	0	0	0	89
Wood	0	0	0	0	0	0	0	0	0	0
Propane or Bottled Gas	0	0	30	0	30	0	30	0	0	89
Solar	30	89	89	0	0	0	0	0	0	208
Other	0	0	0	0	0	0	0	0	0	0
No Hot Water In Home	0	0	0	0	0	0	0	0	0	0
Not Asked	774	119	238	268	208	30	149	1,638	0	3,425
Don't Know	30	0	89	0	30	0	30	89	0	268
Refused	0	0	0	0	0	0	0	0	0	0
TOTAL	9,262	7,296	10,692	10,781	3,961	1,251	2,412	9,619	30	55,304

Weighted Data

Chart I-18: Primary Water-Heating Fuel Type by Year of Construction

Q102 by Q20

Table I-19: Household Income by Year of Construction
Q186, Q188, Q189 by Q20

Raw Data

HOUSEHOLD INCOME	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Below \$5,000	10	2	14	7	1	1	0	32	0	67
\$5,000 to < \$10,000	23	14	13	10	7	1	1	40	0	109
\$10,000 to < \$15,000	32	16	21	21	6	3	4	47	0	150
\$15,000 to < \$20,000	25	16	17	24	5	4	4	30	0	125
\$20,000 to < \$25,000	27	18	30	21	8	2	6	35	0	147
\$25,000 to < \$30,000	34	28	34	49	17	4	8	17	0	191
\$30,000 to < \$40,000	44	46	64	52	23	6	8	29	1	273
\$40,000 to < \$50,000	20	31	36	42	20	2	9	12	0	172
\$50,000 to < \$60,000	11	13	23	30	8	4	4	6	0	99
\$60,000 to < \$80,000	15	9	22	24	5	5	9	2	0	91
\$80,000 to < \$100,000	8	2	5	14	1	0	9	2	0	41
\$100,000 or More	5	1	10	10	6	4	2	0	0	38
Don't Know	22	17	22	20	10	3	4	37	0	135
Refused	35	32	48	38	16	3	13	34	0	219
TOTAL	311	245	359	362	133	42	81	323	1	1,857

Table I-19: Household Income by Year of Construction
Q186, Q188, Q189 by Q20

Weighted Data

HOUSEHOLD INCOME	YEAR OF CONSTRUCTION									TOTAL
	Before									
	1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Below \$5,000	298	60	417	208	30	30	0	953	0	1,995
\$5,000 to < \$10,000	685	417	387	298	208	30	30	1,191	0	3,246
\$10,000 to < \$15,000	953	477	625	625	179	89	119	1,400	0	4,467
\$15,000 to < \$20,000	745	477	506	715	149	119	119	893	0	3,723
\$20,000 to < \$25,000	804	536	893	625	238	60	179	1,042	0	4,378
\$25,000 to < \$30,000	1,013	834	1,013	1,459	506	119	238	506	0	5,688
\$30,000 to < \$40,000	1,310	1,370	1,906	1,549	685	179	238	864	30	8,130
\$40,000 to < \$50,000	596	923	1,072	1,251	596	60	268	357	0	5,122
\$50,000 to < \$60,000	328	387	685	893	238	119	119	179	0	2,948
\$60,000 to < \$80,000	447	268	655	715	149	149	268	60	0	2,710
\$80,000 to < \$100,000	238	60	149	417	30	0	268	60	0	1,221
\$100,000 or More	149	30	298	298	179	119	60	0	0	1,132
Don't Know	655	506	655	596	298	89	119	1,102	0	4,020
Refused	1,042	953	1,430	1,132	477	89	387	1,013	0	6,522
TOTAL	9,262	7,296	10,692	10,781	3,961	1,251	2,412	9,619	30	55,304

Weighted Data

Chart I-19: Household Income by Year of Construction

Q186, Q188, Q189 by Q20

Table I-20: Utility Type by Year of Construction
TYPE by Q20

Raw Data

UTILITY TYPE	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Public Generating	311	245	359	362	133	42	81	323	1	1,857
Public Non-Generating	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0
TOTAL	311	245	359	362	133	42	81	323	1	1,857

Weighted Data

UTILITY TYPE	YEAR OF CONSTRUCTION									TOTAL
	Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Public Generating	9,262	7,296	10,692	10,781	3,961	1,251	2,412	9,619	30	55,304
Public Non-Generating	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0
TOTAL	9,262	7,296	10,692	10,781	3,961	1,251	2,412	9,619	30	55,304

Weighted Data

Chart I-20: Utility Type by Year of Construction
TYPE by Q20

Table I-21: Space-Heating Fuels: Systems and Equipment by Year of Construction
HEAT_EQP by Q20

Raw Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	YEAR OF CONSTRUCTION									TOTAL
		Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	14	2	7	3	3	0	4	25	0	58
	Central Heat - Several Units	2	0	0	1	0	0	1	2	0	6
	Unit Not Heated	0	0	0	0	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	5	2	0	1	2	0	3	1	0	14
	Wall, Floor, or Ceiling Units	20	6	2	2	1	0	1	2	0	34
	Portable Units	2	1	0	0	0	0	0	1	0	4
	Central Furnace	70	54	55	27	12	5	15	28	0	266
	Other	1	2	0	0	0	0	0	0	0	3
Electricity:	Heat Pump	13	15	16	24	26	19	31	8	0	152
	Portable Room Heaters	8	4	1	4	0	0	0	9	0	26
	Radiant Panels	22	59	153	162	37	4	4	114	1	556
	Steam or Hot Water Radiators	1	0	0	0	0	0	0	0	0	1
	Central Furnace	26	18	23	75	36	8	9	25	0	220
	Baseboard or Wall Units	91	52	57	28	7	3	9	71	0	318
	Other	0	1	4	3	0	0	0	1	0	9
Wood:	Free-Standing Stove	23	9	17	21	3	2	1	12	0	88
	Free-Standing Pellet Stove	3	4	2	3	1	0	0	1	0	14
	Central Furnace	1	0	0	0	0	0	0	0	0	1
	Fireplace with an Insert	4	13	20	6	3	0	2	5	0	53
	Fireplace without an Insert	1	1	1	2	0	0	0	0	0	5
Other:	Solar	0	0	0	0	1	0	0	0	0	1
	Geothermal	0	0	0	0	0	0	0	0	0	0
	Other	2	1	0	0	0	1	0	0	0	4
	No Heat	0	0	0	0	0	0	0	0	0	0
	Don't Know	2	1	1	0	1	0	1	18	0	24
	Refused	0	0	0	0	0	0	0	0	0	0
	TOTAL	311	245	359	362	133	42	81	323	1	1,857

Table I-21: Space-Heating Fuels: Systems and Equipment by Year of Construction
HEAT_EQP by Q20

Weighted Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	YEAR OF CONSTRUCTION									TOTAL
		Before 1950	1950-59	1960-69	1970-78	1979-85	1986-88	1989-92	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	417	60	208	89	89	0	119	745	0	1,727
	Central Heat - Several Units	60	0	0	30	0	0	30	60	0	179
	Unit Not Heated	0	0	0	0	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	149	60	0	30	60	0	89	30	0	417
	Wall, Floor, or Ceiling Units	596	179	60	60	30	0	30	60	0	1,013
	Portable Units	60	30	0	0	0	0	0	30	0	119
	Central Furnace	2,085	1,608	1,638	804	357	149	447	834	0	7,922
	Other	30	60	0	0	0	0	0	0	0	89
Electricity:	Heat Pump	387	447	477	715	774	566	923	238	0	4,527
	Portable Room Heaters	238	119	30	119	0	0	0	268	0	774
	Radiant Panels	655	1,757	4,557	4,825	1,102	119	119	3,395	30	16,558
	Steam or Hot Water Radiators	30	0	0	0	0	0	0	0	0	30
	Central Furnace	774	536	685	2,234	1,072	238	268	745	0	6,552
	Baseboard or Wall Units	2,710	1,549	1,698	834	208	89	268	2,114	0	9,470
	Other	0	30	119	89	0	0	0	30	0	268
Wood:	Free-Standing Stove	685	268	506	625	89	60	30	357	0	2,621
	Free-Standing Pellet Stove	89	119	60	89	30	0	0	30	0	417
	Central Furnace	30	0	0	0	0	0	0	0	0	30
	Fireplace with an Insert	119	387	596	179	89	0	60	149	0	1,578
	Fireplace without an Insert	30	30	30	60	0	0	0	0	0	149
Other:	Solar	0	0	0	0	30	0	0	0	0	30
	Geothermal	0	0	0	0	0	0	0	0	0	0
	Other	60	30	0	0	0	30	0	0	0	119
	No Heat	0	0	0	0	0	0	0	0	0	0
	Don't Know	60	30	30	0	30	0	30	536	0	715
	Refused	0	0	0	0	0	0	0	0	0	0
	TOTAL	9,262	7,296	10,692	10,781	3,961	1,251	2,412	9,619	30	55,304

Weighted Data

Chart I-21: Space-Heating Fuels: Systems and Equipment by Year of Construction
HEAT_EQP by Q20

Space-Heating Fuels: Systems and Equipment

Table I-22: Primary Space-Heating Fuel Type by Dwelling Size in Square Feet
Q46 by Q24

Raw Data

PRIMARY SPACE-HEATING FUEL TYPE	DWELLING SIZE IN SQUARE FEET											TOTAL
	< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Electricity	68	130	221	183	123	127	105	41	28	268	1	1,295
Natural Gas	1	20	36	27	30	25	32	15	13	37	0	236
Fuel Oil	0	10	12	5	6	15	8	7	5	15	0	83
Wood or Presto Logs	3	16	32	21	31	19	6	2	1	30	0	161
Propane or Bottled Gas	1	0	0	0	0	0	0	0	0	1	0	2
Kerosene	0	1	0	0	0	0	0	0	0	0	0	1
Coal	0	0	0	0	0	0	0	0	0	0	0	0
Solar	0	0	0	0	1	0	0	0	0	0	0	1
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	1	1	0	0	2	0	0	0	0	0	4
No Heat	0	0	0	0	0	0	0	0	0	0	0	0
Not Asked	7	11	8	1	0	1	2	0	2	38	0	70
Don't Know	0	0	0	0	0	0	0	1	1	2	0	4
Refused	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	80	189	310	237	191	189	153	66	50	391	1	1,857

Table I-22: Primary Space-Heating Fuel Type by Dwelling Size in Square Feet
Q46 by Q24

Weighted Data

PRIMARY SPACE-HEATING FUEL TYPE	DWELLING SIZE IN SQUARE FEET											TOTAL
	< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Electricity	2,025	3,872	6,582	5,450	3,663	3,782	3,127	1,221	834	7,981	30	38,567
Natural Gas	30	596	1,072	804	893	745	953	447	387	1,102	0	7,028
Fuel Oil	0	298	357	149	179	447	238	208	149	447	0	2,472
Wood or Presto Logs	89	477	953	625	923	566	179	60	30	893	0	4,795
Propane or Bottled Gas	30	0	0	0	0	0	0	0	0	30	0	60
Kerosene	0	30	0	0	0	0	0	0	0	0	0	30
Coal	0	0	0	0	0	0	0	0	0	0	0	0
Solar	0	0	0	0	30	0	0	0	0	0	0	30
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	30	30	0	0	60	0	0	0	0	0	119
No Heat	0	0	0	0	0	0	0	0	0	0	0	0
Not Asked	208	328	238	30	0	30	60	0	60	1,132	0	2,085
Don't Know	0	0	0	0	0	0	0	30	30	60	0	119
Refused	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2,383	5,629	9,232	7,058	5,688	5,629	4,557	1,966	1,489	11,645	30	55,304

Weighted Data

Chart I-22: Primary Space-Heating Fuel Type by Dwelling Size in Square Feet

Q46 by Q24

Table I-23: Primary Water-Heating Fuel Type by Dwelling Size in Square Feet
Q102 by Q24

Raw Data

PRIMARY WATER-HEATING FUEL TYPE	DWELLING SIZE IN SQUARE FEET											TOTAL
	< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Electricity	49	157	278	209	164	164	124	52	34	306	1	1,538
Natural Gas	4	17	19	23	22	19	28	13	10	27	0	182
Fuel Oil	0	0	1	0	0	1	0	0	0	1	0	3
Wood	0	0	0	0	0	0	0	0	0	0	0	0
Propane or Bottled Gas	2	0	0	0	0	0	0	0	0	1	0	3
Solar	0	0	1	1	2	1	0	1	1	0	0	7
Other	0	0	0	0	0	0	0	0	0	0	0	0
No Hot Water In Home	0	0	0	0	0	0	0	0	0	0	0	0
Not Asked	25	15	9	4	1	3	1	0	3	54	0	115
Don't Know	0	0	2	0	2	1	0	0	2	2	0	9
Refused	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	80	189	310	237	191	189	153	66	50	391	1	1,857

Weighted Data

PRIMARY WATER-HEATING FUEL TYPE	DWELLING SIZE IN SQUARE FEET											TOTAL
	< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Electricity	1,459	4,676	8,279	6,224	4,884	4,884	3,693	1,549	1,013	9,113	30	45,804
Natural Gas	119	506	566	685	655	566	834	387	298	804	0	5,420
Fuel Oil	0	0	30	0	0	30	0	0	0	30	0	89
Wood	0	0	0	0	0	0	0	0	0	0	0	0
Propane or Bottled Gas	60	0	0	0	0	0	0	0	0	30	0	89
Solar	0	0	30	30	60	30	0	30	30	0	0	208
Other	0	0	0	0	0	0	0	0	0	0	0	0
No Hot Water In Home	0	0	0	0	0	0	0	0	0	0	0	0
Not Asked	745	447	268	119	30	89	30	0	89	1,608	0	3,425
Don't Know	0	0	60	0	60	30	0	0	60	60	0	268
Refused	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2,383	5,629	9,232	7,058	5,688	5,629	4,557	1,966	1,489	11,645	30	55,304

Weighted Data

Chart I-23: Primary Water-Heating Fuel Type by Dwelling Size in Square Feet
Q102 by Q24

Table I-24: Household Income by Dwelling Size in Square Feet
Q186, Q188, Q189 by Q24

Raw Data

HOUSEHOLD INCOME	DWELLING SIZE IN SQUARE FEET											TOTAL
	< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Below \$5,000	10	7	5	2	4	0	0	2	0	37	0	67
\$5,000 to < \$10,000	14	21	4	8	4	3	4	0	1	50	0	109
\$10,000 to < \$15,000	16	23	26	10	6	5	4	0	1	59	0	150
\$15,000 to < \$20,000	3	18	23	23	8	5	4	1	1	38	1	125
\$20,000 to < \$25,000	11	20	31	21	14	5	9	1	2	33	0	147
\$25,000 to < \$30,000	6	22	53	28	19	21	6	5	3	28	0	191
\$30,000 to < \$40,000	7	33	68	39	33	32	22	8	2	29	0	273
\$40,000 to < \$50,000	0	10	31	33	26	29	19	5	5	14	0	172
\$50,000 to < \$60,000	1	4	8	10	16	16	25	11	5	3	0	99
\$60,000 to < \$80,000	0	1	10	9	22	20	17	6	5	1	0	91
\$80,000 to < \$100,000	1	1	3	6	3	11	6	4	6	0	0	41
\$100,000 or More	1	0	1	2	0	3	13	8	9	1	0	38
Don't Know	4	10	22	14	9	13	6	3	2	52	0	135
Refused	6	19	25	32	27	26	18	12	8	46	0	219
TOTAL	80	189	310	237	191	189	153	66	50	391	1	1,857

Table I-24: Household Income by Dwelling Size in Square Feet

Q186, Q188, Q189 by Q24

Weighted Data

HOUSEHOLD INCOME	DWELLING SIZE IN SQUARE FEET											TOTAL
	< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Below \$5,000	298	208	149	60	119	0	0	60	0	1,102	0	1,995
\$5,000 to < \$10,000	417	625	119	238	119	89	119	0	30	1,489	0	3,246
\$10,000 to < \$15,000	477	685	774	298	179	149	119	0	30	1,757	0	4,467
\$15,000 to < \$20,000	89	536	685	685	238	149	119	30	30	1,132	30	3,723
\$20,000 to < \$25,000	328	596	923	625	417	149	268	30	60	983	0	4,378
\$25,000 to < \$30,000	179	655	1,578	834	566	625	179	149	89	834	0	5,688
\$30,000 to < \$40,000	208	983	2,025	1,161	983	953	655	238	60	864	0	8,130
\$40,000 to < \$50,000	0	298	923	983	774	864	566	149	149	417	0	5,122
\$50,000 to < \$60,000	30	119	238	298	477	477	745	328	149	89	0	2,948
\$60,000 to < \$80,000	0	30	298	268	655	596	506	179	149	30	0	2,710
\$80,000 to < \$100,000	30	30	89	179	89	328	179	119	179	0	0	1,221
\$100,000 or More	30	0	30	60	0	89	387	238	268	30	0	1,132
Don't Know	119	298	655	417	268	387	179	89	60	1,549	0	4,020
Refused	179	566	745	953	804	774	536	357	238	1,370	0	6,522
TOTAL	2,383	5,629	9,232	7,058	5,688	5,629	4,557	1,966	1,489	11,645	30	55,304

Weighted Data

Chart I-24: Household Income by Dwelling Size in Square Feet

Q186, Q188, Q189 by Q24

Table I-25: Utility Type by Dwelling Size in Square Feet
TYPE by Q24

Raw Data

UTILITY TYPE	DWELLING SIZE IN SQUARE FEET											TOTAL
	< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Public Generating	80	189	310	237	191	189	153	66	50	391	1	1,857
Public Non-Generating	0	0	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	80	189	310	237	191	189	153	66	50	391	1	1,857

Weighted Data

UTILITY TYPE	DWELLING SIZE IN SQUARE FEET											TOTAL
	< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Public Generating	2,383	5,629	9,232	7,058	5,688	5,629	4,557	1,966	1,489	11,645	30	55,304
Public Non-Generating	0	0	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2,383	5,629	9,232	7,058	5,688	5,629	4,557	1,966	1,489	11,645	30	55,304

Weighted Data

Chart I-25: Utility Type by Dwelling Size in Square Feet
TYPE by Q24

Table I-26: Space-Heating Fuels: Systems and Equipment by Dwelling Size in Square Feet
HEAT_EQP by Q24

Raw Data

SPACE-HEATING FUELS: SYSTEMS AND EQUIPMENT		DWELLING SIZE IN SQUARE FEET											TOTAL
		< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	6	7	7	1	0	1	1	0	2	33	0	58
	Central Heat - Several Units	1	2	0	0	0	0	1	0	0	2	0	6
	Unit Not Heated	0	0	0	0	0	0	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	0	1	1	1	2	2	2	1	3	1	0	14
	Wall, Floor, or Ceiling Units	0	8	7	3	3	1	1	2	2	7	0	34
	Portable Units	0	1	0	0	0	1	0	0	0	2	0	4
	Central Furnace	2	21	39	28	30	35	37	18	13	43	0	266
	Other	0	0	0	0	1	1	0	1	0	0	0	3
Electricity:	Heat Pump	1	3	18	25	22	24	35	9	3	12	0	152
	Portable Room Heaters	4	1	3	3	1	1	0	0	0	13	0	26
	Radiant Panels	24	63	118	80	51	53	29	17	13	108	0	556
	Steam or Hot Water Radiators	0	0	0	0	0	0	0	0	0	1	0	1
	Central Furnace	7	15	28	37	24	32	25	10	5	37	0	220
	Baseboard or Wall Units	30	48	52	36	23	16	16	5	6	85	1	318
	Other	1	0	2	2	2	1	0	0	1	0	0	9
Wood:	Free-Standing Stove	2	12	15	11	15	10	5	0	0	18	0	88
	Free-Standing Pellet Stove	0	2	4	2	1	3	0	1	0	1	0	14
	Central Furnace	0	0	0	0	0	0	0	0	0	1	0	1
	Fireplace with an Insert	1	2	11	7	15	4	1	1	1	10	0	53
	Fireplace without an Insert	0	0	2	1	0	2	0	0	0	0	0	5
Other:	Solar	0	0	0	0	1	0	0	0	0	0	0	1
	Geothermal	0	0	0	0	0	0	0	0	0	0	0	0
	Other	0	1	1	0	0	2	0	0	0	0	0	4
	No Heat	0	0	0	0	0	0	0	0	0	0	0	0
	Don't Know	1	2	2	0	0	0	0	1	1	17	0	24
	Refused	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	80	189	310	237	191	189	153	66	50	391	1	1,857

Table I-26: Space-Heating Fuels: Systems and Equipment by Dwelling Size in Square Feet
HEAT_EQP by Q24

Weighted Data

SPACE-HEATING FUELS: SYSTEMS AND EQUIPMENT		DWELLING SIZE IN SQUARE FEET										TOTAL	
		< 750	750 to < 1000	1000 to < 1250	1250 to < 1500	1500 to < 1750	1750 to < 2000	2000 to < 2500	2500 to < 3000	3000 or >	Don't Know		Refused
Multi-Unit:	Central Heat - All Units	179	208	208	30	0	30	30	0	60	983	0	1,727
	Central Heat - Several Units	30	60	0	0	0	0	30	0	0	60	0	179
	Unit Not Heated	0	0	0	0	0	0	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	0	30	30	30	60	60	60	30	89	30	0	417
	Wall, Floor, or Ceiling Units	0	238	208	89	89	30	30	60	60	208	0	1,013
	Portable Units	0	30	0	0	0	30	0	0	0	60	0	119
	Central Furnace	60	625	1,161	834	893	1,042	1,102	536	387	1,281	0	7,922
	Other	0	0	0	0	30	30	0	30	0	0	0	89
Electricity:	Heat Pump	30	89	536	745	655	715	1,042	268	89	357	0	4,527
	Portable Room Heaters	119	30	89	89	30	30	0	0	0	387	0	774
	Radiant Panels	715	1,876	3,514	2,383	1,519	1,578	864	506	387	3,216	0	16,558
	Steam or Hot Water Radiators	0	0	0	0	0	0	0	0	0	30	0	30
	Central Furnace	208	447	834	1,102	715	953	745	298	149	1,102	0	6,552
	Baseboard or Wall Units	893	1,430	1,549	1,072	685	477	477	149	179	2,531	30	9,470
	Other	30	0	60	60	60	30	0	0	30	0	0	268
Wood:	Free-Standing Stove	60	357	447	328	447	298	149	0	0	536	0	2,621
	Free-Standing Pellet Stove	0	60	119	60	30	89	0	30	0	30	0	417
	Central Furnace	0	0	0	0	0	0	0	0	0	30	0	30
	Fireplace with an Insert	30	60	328	208	447	119	30	30	30	298	0	1,578
	Fireplace without an Insert	0	0	60	30	0	60	0	0	0	0	0	149
Other:	Solar	0	0	0	0	30	0	0	0	0	0	0	30
	Geothermal	0	0	0	0	0	0	0	0	0	0	0	0
	Other	0	30	30	0	0	60	0	0	0	0	0	119
	No Heat	0	0	0	0	0	0	0	0	0	0	0	0
	Don't Know	30	60	60	0	0	0	0	30	30	506	0	715
	Refused	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		2,383	5,629	9,232	7,058	5,688	5,629	4,557	1,966	1,489	11,645	30	55,304

Chart I-26: Space-Heating Fuels: Systems and Equipment by Dwelling Size in Square Feet

Weighted Data

HEAT_EQP by Q24

Space-Heating Fuels: Systems and Equipment

Table I-27: Primary Water-Heating Fuel Type by Primary Space-Heating Fuel Type
Q102 by Q46

Raw Data

PRIMARY WATER-HEATING FUEL TYPE	PRIMARY SPACE-HEATING FUEL TYPE														TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood or Presto Logs	Propane or Bottled Gas	Kerosene	Coal	Solar	Geothermal	Other	No Heat	Not Asked	Don't Know	Refused	
Electricity	1,190	95	77	143	0	1	0	1	0	3	0	25	3	0	538
Natural Gas	30	138	0	10	0	0	0	0	0	1	0	3	0	0	82
Fuel Oil	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
Wood	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Propane or Bottled Gas	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3
Solar	5	0	1	1	0	0	0	0	0	0	0	0	0	0	7
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No Hot Water In Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Not Asked	66	1	0	5	0	0	0	0	0	0	0	42	1	0	115
Don't Know	4	2	2	1	0	0	0	0	0	0	0	0	0	0	9
Refused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1,295	236	83	161	2	1	0	1	0	4	0	70	4	0	1,857

Weighted Data

PRIMARY WATER-HEATING FUEL TYPE	PRIMARY SPACE-HEATING FUEL TYPE														TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood or Presto Logs	Propane or Bottled Gas	Kerosene	Coal	Solar	Geothermal	Other	No Heat	Not Asked	Don't Know	Refused	
Electricity	35,440	2,829	2,293	4,259	0	30	0	30	0	89	0	745	89	0	45,804
Natural Gas	893	4,110	0	298	0	0	0	0	0	30	0	89	0	0	5,420
Fuel Oil	0	0	89	0	0	0	0	0	0	0	0	0	0	0	89
Wood	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Propane or Bottled Gas	0	0	0	30	60	0	0	0	0	0	0	0	0	0	89
Solar	149	0	30	30	0	0	0	0	0	0	0	0	0	0	208
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No Hot Water In Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Not Asked	1,966	30	0	149	0	0	0	0	0	0	0	1,251	30	0	3,425
Don't Know	119	60	60	30	0	0	0	0	0	0	0	0	0	0	268
Refused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	38,567	7,028	2,472	4,795	60	30	0	30	0	119	0	2,085	119	0	55,304

Weighted Data

Chart I-27: Primary Water-Heating Fuel Type by Primary Space-Heating Fuel Type

Q102 by Q46

Table I-28: Household Income by Primary Space-Heating Fuel Type

Q186, Q188, Q189 by Q46

Raw Data

HOUSEHOLD INCOME	PRIMARY SPACE-HEATING FUEL TYPE														TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood or Presto Logs	Propane or Bottled Gas	Kerosene	Coal	Solar	Geothermal	Other	No Heat	Not Asked	Don't Know	Refused	
Below \$5,000	49	5	2	2	0	0	0	0	0	0	0	9	0	0	67
\$5,000 to < \$10,000	74	11	7	6	0	0	0	0	0	0	0	10	1	0	109
\$10,000 to < \$15,000	110	12	8	7	0	1	0	0	0	0	0	12	0	0	150
\$15,000 to < \$20,000	89	13	2	16	0	0	0	0	0	0	0	5	0	0	125
\$20,000 to < \$25,000	113	11	1	15	1	0	0	0	0	0	0	5	1	0	147
\$25,000 to < \$30,000	133	20	10	22	0	0	0	0	0	1	0	5	0	0	191
\$30,000 to < \$40,000	185	36	10	37	0	0	0	0	0	1	0	4	0	0	273
\$40,000 to < \$50,000	119	26	11	13	0	0	0	0	0	1	0	2	0	0	172
\$50,000 to < \$60,000	68	11	8	8	0	0	0	0	0	0	0	3	1	0	99
\$60,000 to < \$80,000	61	17	5	6	0	0	0	0	0	1	0	0	1	0	91
\$80,000 to < \$100,000	28	7	4	1	0	0	0	0	0	0	0	1	0	0	41
\$100,000 or More	31	5	1	1	0	0	0	0	0	0	0	0	0	0	38
Don't Know	90	19	7	10	1	0	0	0	0	0	0	8	0	0	135
Refused	145	43	7	17	0	0	0	1	0	0	0	6	0	0	219
TOTAL	1,295	236	83	161	2	1	0	1	0	4	0	70	4	0	1,857

Table I-28: Household Income by Primary Space-Heating Fuel Type
Q186, Q188, Q189 by Q46

Weighted Data

Weighted Data

HOUSEHOLD INCOME	PRIMARY SPACE-HEATING FUEL TYPE															TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood or Presto Logs	Propane or Bottled Gas	Kerosene	Coal	Solar	Geothermal	Other	No Heat	Not Asked	Don't Know	Refused		
Below \$5,000	1,459	149	60	60	0	0	0	0	0	0	0	268	0	0	1,995	
\$5,000 to < \$10,000	2,204	328	208	179	0	0	0	0	0	0	0	298	30	0	3,246	
\$10,000 to < \$15,000	3,276	357	238	208	0	30	0	0	0	0	0	357	0	0	4,467	
\$15,000 to < \$20,000	2,651	387	60	477	0	0	0	0	0	0	0	149	0	0	3,723	
\$20,000 to < \$25,000	3,365	328	30	447	30	0	0	0	0	0	0	149	30	0	4,378	
\$25,000 to < \$30,000	3,961	596	298	655	0	0	0	0	0	30	0	149	0	0	5,688	
\$30,000 to < \$40,000	5,510	1,072	298	1,102	0	0	0	0	0	30	0	119	0	0	8,130	
\$40,000 to < \$50,000	3,544	774	328	387	0	0	0	0	0	30	0	60	0	0	5,122	
\$50,000 to < \$60,000	2,025	328	238	238	0	0	0	0	0	0	0	89	30	0	2,948	
\$60,000 to < \$80,000	1,817	506	149	179	0	0	0	0	0	30	0	0	30	0	2,710	
\$80,000 to < \$100,000	834	208	119	30	0	0	0	0	0	0	0	30	0	0	1,221	
\$100,000 or More	923	149	30	30	0	0	0	0	0	0	0	0	0	0	1,132	
Don't Know	2,680	566	208	298	30	0	0	0	0	0	0	238	0	0	4,020	
Refused	4,318	1,281	208	506	0	0	0	30	0	0	0	179	0	0	6,522	
TOTAL	38,567	7,028	2,472	4,795	60	30	0	30	0	119	0	2,085	119	0	55,304	

Weighted Data

Chart I-28: Household Income by Primary Space-Heating Fuel Type

Q186, Q188, Q189 by Q46

Table I-29: Utility Type by Primary Space-Heating Fuel Type
TYPE by Q46

Raw Data

UTILITY TYPE	PRIMARY SPACE-HEATING FUEL TYPE														TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood or Presto Logs	Propane or Bottled Gas	Kerosene	Coal	Solar	Geothermal	Other	No Heat	Not Asked	Don't Know	Refused	
Public Generating	1,295	236	83	161	2	1	0	1	0	4	0	70	4	0	1,857
Public Non-Generating	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1,295	236	83	161	2	1	0	1	0	4	0	70	4	0	1,857

Weighted Data

UTILITY TYPE	PRIMARY SPACE-HEATING FUEL TYPE														TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood or Presto Logs	Propane or Bottled Gas	Kerosene	Coal	Solar	Geothermal	Other	No Heat	Not Asked	Don't Know	Refused	
Public Generating	38,567	7,028	2,472	4,795	60	30	0	30	0	119	0	2,085	119	0	55,304
Public Non-Generating	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	38,567	7,028	2,472	4,795	60	30	0	30	0	119	0	2,085	119	0	55,304

Weighted Data

Chart I-29: Utility Type by Primary Space-Heating Fuel Type
TYPE by Q46

Table I-30: Space-Heating Fuels: Systems and Equipment by Primary Space-Heating Fuel Type
HEAT_EQP by Q46

Raw Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	PRIMARY SPACE-HEATING FUEL TYPE														TOTAL
		Electricity	Natural Gas	Fuel Oil	Wood or Presto Logs	Propane or Bottled Gas	Kerosene	Coal	Solar	Geothermal	Other	No Heat	Not Asked	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	0	0	0	0	0	0	0	0	0	0	0	58	0	0	58
	Central Heat - Several Units	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6
	Unit Not Heated	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	0	12	2	0	0	0	0	0	0	0	0	0	0	0	14
	Wall, Floor, or Ceiling Units	0	24	10	0	0	0	0	0	0	0	0	0	0	0	34
	Portable Units	0	1	2	0	0	1	0	0	0	0	0	0	0	0	4
	Central Furnace	0	197	67	0	2	0	0	0	0	0	0	0	0	0	266
	Other	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
Electricity:	Heat Pump	152	0	0	0	0	0	0	0	0	0	0	0	0	0	152
	Portable Room Heaters	26	0	0	0	0	0	0	0	0	0	0	0	0	0	26
	Radiant Panels	556	0	0	0	0	0	0	0	0	0	0	0	0	0	556
	Steam or Hot Water Radiators	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Central Furnace	220	0	0	0	0	0	0	0	0	0	0	0	0	0	220
	Baseboard or Wall Units	318	0	0	0	0	0	0	0	0	0	0	0	0	0	318
	Other	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Wood:	Free-Standing Stove	0	0	0	88	0	0	0	0	0	0	0	0	0	0	88
	Free-Standing Pellet Stove	0	0	0	14	0	0	0	0	0	0	0	0	0	0	14
	Central Furnace	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	Fireplace with an Insert	0	0	0	53	0	0	0	0	0	0	0	0	0	0	53
	Fireplace without an Insert	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5
Other:	Solar	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
	No Heat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Don't Know	13	0	1	0	0	0	0	0	0	0	0	6	4	0	24
	Refused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	1,295	236	83	161	2	1	0	1	0	4	0	70	4	0	1,857

Table I-30: Space-Heating Fuels: Systems and Equipment by Primary Space-Heating Fuel Type
HEAT_EQP by Q46

Weighted Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	PRIMARY SPACE-HEATING FUEL TYPE														TOTAL
		Electricity	Natural Gas	Fuel Oil	Wood or Presto Logs	Propane or Bottled Gas	Kerosene	Coal	Solar	Geothermal	Other	No Heat	Not Asked	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	0	0	0	0	0	0	0	0	0	0	0	1,727	0	0	1,727
	Central Heat - Several Units	0	0	0	0	0	0	0	0	0	0	0	179	0	0	179
	Unit Not Heated	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	0	357	60	0	0	0	0	0	0	0	0	0	0	0	417
	Wall, Floor, or Ceiling Units	0	715	298	0	0	0	0	0	0	0	0	0	0	0	1,013
	Portable Units	0	30	60	0	0	30	0	0	0	0	0	0	0	0	119
	Central Furnace	0	5,867	1,995	0	60	0	0	0	0	0	0	0	0	0	7,922
	Other	0	60	30	0	0	0	0	0	0	0	0	0	0	0	89
Electricity:	Heat Pump	4,527	0	0	0	0	0	0	0	0	0	0	0	0	0	4,527
	Portable Room Heaters	774	0	0	0	0	0	0	0	0	0	0	0	0	0	774
	Radiant Panels	16,558	0	0	0	0	0	0	0	0	0	0	0	0	0	16,558
	Steam or Hot Water Radiators	30	0	0	0	0	0	0	0	0	0	0	0	0	0	30
	Central Furnace	6,552	0	0	0	0	0	0	0	0	0	0	0	0	0	6,552
	Baseboard or Wall Units	9,470	0	0	0	0	0	0	0	0	0	0	0	0	0	9,470
	Other	268	0	0	0	0	0	0	0	0	0	0	0	0	0	268
Wood:	Free-Standing Stove	0	0	0	2,621	0	0	0	0	0	0	0	0	0	0	2,621
	Free-Standing Pellet Stove	0	0	0	417	0	0	0	0	0	0	0	0	0	0	417
	Central Furnace	0	0	0	30	0	0	0	0	0	0	0	0	0	0	30
	Fireplace with an Insert	0	0	0	1,578	0	0	0	0	0	0	0	0	0	0	1,578
	Fireplace without an Insert	0	0	0	149	0	0	0	0	0	0	0	0	0	0	149
Other:	Solar	0	0	0	0	0	0	0	30	0	0	0	0	0	0	30
	Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	119	0	0	0	0	119
	No Heat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Don't Know	387	0	30	0	0	0	0	0	0	0	0	179	119	0	715
	Refused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	38,567	7,028	2,472	4,795	60	30	0	30	0	119	0	2,085	119	0	55,304

Chart I-30: Space-Heating Fuels: Systems and Equipment by Primary Space-Heating Fuel Type

Weighted Data

HEAT_EQP by Q46

Space-Heating Fuels: Systems and Equipment

Table I-31: Household Income by Primary Water-Heating Fuel Type
Q186, Q188, Q189 by Q102

Raw Data

HOUSEHOLD INCOME	PRIMARY WATER-HEATING FUEL TYPE											TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood	Propane or Bottled Gas	Solar	Other	No Hot Water In Home	Not Asked	Don't Know	Refused	
Below \$5,000	47	3	0	0	0	0	0	0	17	0	0	67
\$5,000 to < \$10,000	82	7	0	0	0	0	0	0	20	0	0	109
\$10,000 to < \$15,000	122	11	0	0	0	1	0	0	15	1	0	150
\$15,000 to < \$20,000	105	12	0	0	0	0	0	0	8	0	0	125
\$20,000 to < \$25,000	134	5	0	0	2	0	0	0	5	1	0	147
\$25,000 to < \$30,000	165	14	2	0	0	0	0	0	10	0	0	191
\$30,000 to < \$40,000	232	28	1	0	0	1	0	0	10	1	0	273
\$40,000 to < \$50,000	148	20	0	0	0	1	0	0	2	1	0	172
\$50,000 to < \$60,000	86	8	0	0	0	0	0	0	5	0	0	99
\$60,000 to < \$80,000	68	18	0	0	0	4	0	0	1	0	0	91
\$80,000 to < \$100,000	35	5	0	0	0	0	0	0	1	0	0	41
\$100,000 or More	28	9	0	0	0	0	0	0	0	1	0	38
Don't Know	106	14	0	0	1	0	0	0	13	1	0	135
Refused	180	28	0	0	0	0	0	0	8	3	0	219
TOTAL	1,538	182	3	0	3	7	0	0	115	9	0	1,857

Table I-31: Household Income by Primary Water-Heating Fuel Type

Q186, Q188, Q189 by Q102

Weighted Data

HOUSEHOLD INCOME	PRIMARY WATER-HEATING FUEL TYPE											TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood	Propane or Bottled Gas	Solar	Other	No Hot Water In Home	Not Asked	Don't Know	Refused	
Below \$5,000	1,400	89	0	0	0	0	0	0	506	0	0	1,995
\$5,000 to < \$10,000	2,442	208	0	0	0	0	0	0	596	0	0	3,246
\$10,000 to < \$15,000	3,633	328	0	0	0	30	0	0	447	30	0	4,467
\$15,000 to < \$20,000	3,127	357	0	0	0	0	0	0	238	0	0	3,723
\$20,000 to < \$25,000	3,991	149	0	0	60	0	0	0	149	30	0	4,378
\$25,000 to < \$30,000	4,914	417	60	0	0	0	0	0	298	0	0	5,688
\$30,000 to < \$40,000	6,909	834	30	0	0	30	0	0	298	30	0	8,130
\$40,000 to < \$50,000	4,408	596	0	0	0	30	0	0	60	30	0	5,122
\$50,000 to < \$60,000	2,561	238	0	0	0	0	0	0	149	0	0	2,948
\$60,000 to < \$80,000	2,025	536	0	0	0	119	0	0	30	0	0	2,710
\$80,000 to < \$100,000	1,042	149	0	0	0	0	0	0	30	0	0	1,221
\$100,000 or More	834	268	0	0	0	0	0	0	0	30	0	1,132
Don't Know	3,157	417	0	0	30	0	0	0	387	30	0	4,020
Refused	5,361	834	0	0	0	0	0	0	238	89	0	6,522
TOTAL	45,804	5,420	89	0	89	208	0	0	3,425	268	0	55,304

Weighted Data

Chart I-31: Household Income by Primary Water-Heating Fuel Type

Q186, Q188, Q189 by Q102

Table I-32: Utility Type by Primary Water-Heating Fuel Type
TYPE by Q102

Raw Data

UTILITY TYPE	PRIMARY WATER-HEATING FUEL TYPE											TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood	Propane or Bottled Gas	Solar	Other	No Hot Water In Home	Not Asked	Don't Know	Refused	
Public Generating	1,538	182	3	0	3	7	0	0	115	9	0	1,857
Public Non-Generating	0	0	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1,538	182	3	0	3	7	0	0	115	9	0	1,857

Weighted Data

UTILITY TYPE	PRIMARY WATER-HEATING FUEL TYPE											TOTAL
	Electricity	Natural Gas	Fuel Oil	Wood	Propane or Bottled Gas	Solar	Other	No Hot Water In Home	Not Asked	Don't Know	Refused	
Public Generating	45,804	5,420	89	0	89	208	0	0	3,425	268	0	55,304
Public Non-Generating	0	0	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	45,804	5,420	89	0	89	208	0	0	3,425	268	0	55,304

Weighted Data

Chart I-32: Utility Type by Primary Water-Heating Fuel Type
TYPE by Q102

Table I-33: Space-Heating Fuels: Systems and Equipment by Primary Water-Heating Fuel Type
HEAT_EQP by Q102

Raw Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	PRIMARY WATER-HEATING FUEL TYPE											TOTAL
		Electricity	Natural Gas	Fuel Oil	Wood	Propane or Bottled Gas	Solar	Other	No Hot Water In Home	Not Asked	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	18	3	0	0	0	0	0	0	37	0	0	58
	Central Heat - Several Units	4	0	0	0	0	0	0	0	2	0	0	
	Unit Not Heated	0	0	0	0	0	0	0	0	0	0	0	
Fossil:	Steam or Hot Water Radiators	6	7	0	0	0	0	0	0	0	1	0	14
	Wall, Floor, or Ceiling Units	23	10	0	0	0	0	0	0	0	1	0	
	Portable Units	4	0	0	0	0	0	0	0	0	0	0	
	Central Furnace	136	121	3	0	2	1	0	0	1	2	0	
	Other	3	0	0	0	0	0	0	0	0	0	0	
Electricity:	Heat Pump	140	11	0	0	0	0	0	0	1	0	0	152
	Portable Room Heaters	22	2	0	0	0	1	0	0	1	0	0	
	Radiant Panels	521	6	0	0	0	3	0	0	25	1	0	
	Steam or Hot Water Radiators	1	0	0	0	0	0	0	0	0	0	0	
	Central Furnace	202	8	0	0	0	0	0	0	10	0	0	
	Baseboard or Wall Units	284	2	0	0	0	1	0	0	28	3	0	
	Other	8	1	0	0	0	0	0	0	0	0	0	
Wood:	Free-Standing Stove	79	5	0	0	1	0	0	0	3	0	0	88
	Free-Standing Pellet Stove	11	2	0	0	0	0	0	0	0	1	0	
	Central Furnace	1	0	0	0	0	0	0	0	0	0	0	
	Fireplace with an Insert	47	3	0	0	0	1	0	0	2	0	0	
	Fireplace without an Insert	5	0	0	0	0	0	0	0	0	0	0	
Other:	Solar	1	0	0	0	0	0	0	0	0	0	0	1
	Geothermal	0	0	0	0	0	0	0	0	0	0	0	
	Other	3	1	0	0	0	0	0	0	0	0	0	
	No Heat	0	0	0	0	0	0	0	0	0	0	0	
	Don't Know	19	0	0	0	0	0	0	0	5	0	0	24
	Refused	0	0	0	0	0	0	0	0	0	0	0	
TOTAL		1,538	182	3	0	3	7	0	0	115	9	0	1,857

Table I-33: Space-Heating Fuels: Systems and Equipment by Primary Water-Heating Fuel Type
HEAT_EQP by Q102

Weighted Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	PRIMARY WATER-HEATING FUEL TYPE											TOTAL
		Electricity	Natural Gas	Fuel Oil	Wood	Propane or Bottled Gas	Solar	Other	No Hot Water In Home	Not Asked	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	536	89	0	0	0	0	0	0	1,102	0	0	1,727
	Central Heat - Several Units	119	0	0	0	0	0	0	0	60	0	0	179
	Unit Not Heated	0	0	0	0	0	0	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	179	208	0	0	0	0	0	0	0	30	0	417
	Wall, Floor, or Ceiling Units	685	298	0	0	0	0	0	0	0	30	0	1,013
	Portable Units	119	0	0	0	0	0	0	0	0	0	0	119
	Central Furnace	4,050	3,604	89	0	60	30	0	0	30	60	0	7,922
	Other	89	0	0	0	0	0	0	0	0	0	0	89
Electricity:	Heat Pump	4,169	328	0	0	0	0	0	0	30	0	0	4,527
	Portable Room Heaters	655	60	0	0	0	30	0	0	30	0	0	774
	Radiant Panels	15,516	179	0	0	0	89	0	0	745	30	0	16,558
	Steam or Hot Water Radiators	30	0	0	0	0	0	0	0	0	0	0	30
	Central Furnace	6,016	238	0	0	0	0	0	0	298	0	0	6,552
	Baseboard or Wall Units	8,458	60	0	0	0	30	0	0	834	89	0	9,470
	Other	238	30	0	0	0	0	0	0	0	0	0	268
Wood:	Free-Standing Stove	2,353	149	0	0	30	0	0	0	89	0	0	2,621
	Free-Standing Pellet Stove	328	60	0	0	0	0	0	0	0	30	0	417
	Central Furnace	30	0	0	0	0	0	0	0	0	0	0	30
	Fireplace with an Insert	1,400	89	0	0	0	30	0	0	60	0	0	1,578
	Fireplace without an Insert	149	0	0	0	0	0	0	0	0	0	0	149
Other:	Solar	30	0	0	0	0	0	0	0	0	0	0	30
	Geothermal	0	0	0	0	0	0	0	0	0	0	0	0
	Other	89	30	0	0	0	0	0	0	0	0	0	119
	No Heat	0	0	0	0	0	0	0	0	0	0	0	0
	Don't Know	566	0	0	0	0	0	0	0	149	0	0	715
	Refused	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	45,804	5,420	89	0	89	208	0	0	3,425	268	0	55,304

Chart I-33: Space-Heating Fuels: Systems and Equipment by Primary Water-Heating Fuel Type

Weighted Data

HEAT_EQP by Q102

Space-Heating Fuels: Systems and Equipment

Table I-34: Utility Type by Household Income
TYPE by Q186, Q188, Q189

Raw Data

UTILITY TYPE	HOUSEHOLD INCOME														TOTAL
	Below \$5K	\$5K to < \$10K	\$10K to < \$15K	\$15K to < \$20K	\$20K to < \$25K	\$25K to < \$30K	\$30K to < \$40K	\$40K to < \$50K	\$50K to < \$60K	\$60K to < \$80K	\$80K to < \$100K	\$100K or More	Don't Know	Refused	
Public Generating	67	109	150	125	147	191	273	172	99	91	41	38	135	219	1,857
Public Non-Generating	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	67	109	150	125	147	191	273	172	99	91	41	38	135	219	1,857

Weighted Data

UTILITY TYPE	HOUSEHOLD INCOME														TOTAL
	Below \$5K	\$5K to < \$10K	\$10K to < \$15K	\$15K to < \$20K	\$20K to < \$25K	\$25K to < \$30K	\$30K to < \$40K	\$40K to < \$50K	\$50K to < \$60K	\$60K to < \$80K	\$80K to < \$100K	\$100K or More	Don't Know	Refused	
Public Generating	1,995	3,246	4,467	3,723	4,378	5,688	8,130	5,122	2,948	2,710	1,221	1,132	4,020	6,522	55,304
Public Non-Generating	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Investor Owned	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1,995	3,246	4,467	3,723	4,378	5,688	8,130	5,122	2,948	2,710	1,221	1,132	4,020	6,522	55,304

Weighted Data

Chart I-34: Utility Type by Household Income
TYPE by Q186, Q188, Q189

Table I-35: Space-Heating Fuels: Systems and Equipment by Household Income

HEAT_EQP by Q186, Q188, Q189

Raw Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	HOUSEHOLD INCOME														TOTAL
		Below \$5K	\$5K to < \$10K	\$10K to < \$15K	\$15K to < \$20K	\$20K to < \$25K	\$25K to < \$30K	\$30K to < \$40K	\$40K to < \$50K	\$50K to < \$60K	\$60K to < \$80K	\$80K to < \$100K	\$100K or More	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	8	8	9	4	2	4	4	2	3	0	1	0	7	6	58
	Central Heat - Several Units	1	1	2	0	1	1	0	0	0	0	0	0	0	0	6
	Unit Not Heated	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	0	0	1	2	0	1	4	1	1	0	2	0	2	0	14
	Wall, Floor, or Ceiling Units	1	4	6	0	3	3	3	2	0	2	1	1	2	6	34
	Portable Units	0	1	2	0	0	0	1	0	0	0	0	0	0	0	4
	Central Furnace	6	13	12	13	10	26	38	33	18	20	8	5	23	41	266
	Other	0	0	0	0	0	0	0	1	0	0	0	0	0	2	3
Electricity:	Heat Pump	1	2	3	12	12	13	17	24	9	13	5	11	8	22	152
	Portable Room Heaters	3	4	6	1	1	1	3	3	0	1	0	0	0	3	26
	Radiant Panels	26	23	47	43	48	66	86	47	26	21	13	9	40	61	556
	Steam or Hot Water Radiators	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
	Central Furnace	3	12	14	10	14	18	34	20	15	13	9	8	16	34	220
	Baseboard or Wall Units	16	32	36	23	36	31	43	24	16	10	1	3	23	24	318
	Other	0	0	0	0	1	3	1	1	0	3	0	0	0	0	9
Wood:	Free-Standing Stove	0	5	6	11	10	8	21	5	4	3	0	1	5	9	88
	Free-Standing Pellet Stove	0	0	0	1	1	3	4	1	1	0	0	0	1	2	14
	Central Furnace	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	Fireplace with an Insert	2	1	1	4	2	10	11	6	3	3	1	0	4	5	53
	Fireplace without an Insert	0	0	0	0	2	1	1	1	0	0	0	0	0	0	5
Other:	Solar	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	1	1	1	0	1	0	0	0	0	4
	No Heat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Don't Know	0	3	5	1	4	0	1	0	3	1	0	0	4	2	24
	Refused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	67	109	150	125	147	191	273	172	99	91	41	38	135	219	1,857

Table I-35: Space-Heating Fuels: Systems and Equipment by Household Income
HEAT_EQP by Q186, Q188, Q189

Weighted Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	HOUSEHOLD INCOME														TOTAL
		Below \$5K	\$5K to < \$10K	\$10K to < \$15K	\$15K to < \$20K	\$20K to < \$25K	\$25K to < \$30K	\$30K to < \$40K	\$40K to < \$50K	\$50K to < \$60K	\$60K to < \$80K	\$80K to < \$100K	\$100K or More	Don't Know	Refused	
Multi-Unit:	Central Heat - All Units	238	238	268	119	60	119	119	60	89	0	30	0	208	179	1,727
	Central Heat - Several Units	30	30	60	0	30	30	0	0	0	0	0	0	0	0	179
	Unit Not Heated	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fossil:	Steam or Hot Water Radiators	0	0	30	60	0	30	119	30	30	0	60	0	60	0	417
	Wall, Floor, or Ceiling Units	30	119	179	0	89	89	89	60	0	60	30	30	60	179	1,013
	Portable Units	0	30	60	0	0	0	30	0	0	0	0	0	0	0	119
	Central Furnace	179	387	357	387	298	774	1,132	983	536	596	238	149	685	1,221	7,922
	Other	0	0	0	0	0	0	0	30	0	0	0	0	0	60	89
Electricity:	Heat Pump	30	60	89	357	357	387	506	715	268	387	149	328	238	655	4,527
	Portable Room Heaters	89	119	179	30	30	30	89	89	0	30	0	0	0	89	774
	Radiant Panels	774	685	1,400	1,281	1,430	1,966	2,561	1,400	774	625	387	268	1,191	1,817	16,558
	Steam or Hot Water Radiators	0	0	0	0	0	30	0	0	0	0	0	0	0	0	30
	Central Furnace	89	357	417	298	417	536	1,013	596	447	387	268	238	477	1,013	6,552
	Baseboard or Wall Units	477	953	1,072	685	1,072	923	1,281	715	477	298	30	89	685	715	9,470
	Other	0	0	0	0	30	89	30	30	0	89	0	0	0	0	268
Wood:	Free-Standing Stove	0	149	179	328	298	238	625	149	119	89	0	30	149	268	2,621
	Free-Standing Pellet Stove	0	0	0	30	30	89	119	30	30	0	0	0	30	60	417
	Central Furnace	0	0	0	0	0	0	0	0	0	0	0	0	0	30	30
	Fireplace with an Insert	60	30	30	119	60	298	328	179	89	89	30	0	119	149	1,578
	Fireplace without an Insert	0	0	0	0	60	30	30	30	0	0	0	0	0	0	149
Other:	Solar	0	0	0	0	0	0	0	0	0	0	0	0	0	30	30
	Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	30	30	30	0	30	0	0	0	0	119
	No Heat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Don't Know	0	89	149	30	119	0	30	0	89	30	0	0	119	60	715
	Refused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	1,995	3,246	4,467	3,723	4,378	5,688	8,130	5,122	2,948	2,710	1,221	1,132	4,020	6,522	55,304

Weighted Data

Chart I-35: Space-Heating Fuels: Systems and Equipment by Household Income

HEAT_EQP by Q186, Q188, Q189

Space-Heating Fuels: Systems and Equipment

Table I-36: Space-Heating Fuels: Systems and Equipment by Utility Type
HEAT_EQP by TYPE

Raw Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	UTILITY TYPE			TOTAL
		Public Generating	Public Non-Generating	Investor Owned	
Multi-Unit:	Central Heat - All Units	58	0	0	58
	Central Heat - Several Units	6	0	0	6
	Unit Not Heated	0	0	0	0
Fossil:	Steam or Hot Water Radiators	14	0	0	14
	Wall, Floor, or Ceiling Units	34	0	0	34
	Portable Units	4	0	0	4
	Central Furnace	266	0	0	266
	Other	3	0	0	3
Electricity:	Heat Pump	152	0	0	152
	Portable Room Heaters	26	0	0	26
	Radiant Panels	556	0	0	556
	Steam or Hot Water Radiators	1	0	0	1
	Central Furnace	220	0	0	220
	Baseboard or Wall Units	318	0	0	318
	Other	9	0	0	9
Wood:	Free-Standing Stove	88	0	0	88
	Free-Standing Pellet Stove	14	0	0	14
	Central Furnace	1	0	0	1
	Fireplace with an Insert	53	0	0	53
	Fireplace without an Insert	5	0	0	5
Other:	Solar	1	0	0	1
	Geothermal	0	0	0	0
	Other	4	0	0	4
	No Heat	0	0	0	0
	Don't Know	24	0	0	24
	Refused	0	0	0	0
	TOTAL	1,857	0	0	1,857

Table I-36: Space-Heating Fuels: Systems and Equipment by Utility Type
 HEAT_EQP by TYPE

Weighted Data

SPACE-HEATING FUELS:	SYSTEMS AND EQUIPMENT	UTILITY TYPE			TOTAL
		Public Generating	Public Non-Generating	Investor Owned	
Multi-Unit:	Central Heat - All Units	1,727	0	0	1,727
	Central Heat - Several Units	179	0	0	179
	Unit Not Heated	0	0	0	0
Fossil:	Steam or Hot Water Radiators	417	0	0	417
	Wall, Floor, or Ceiling Units	1,013	0	0	1,013
	Portable Units	119	0	0	119
	Central Furnace	7,922	0	0	7,922
	Other	89	0	0	89
Electricity:	Heat Pump	4,527	0	0	4,527
	Portable Room Heaters	774	0	0	774
	Radiant Panels	16,558	0	0	16,558
	Steam or Hot Water Radiators	30	0	0	30
	Central Furnace	6,552	0	0	6,552
	Baseboard or Wall Units	9,470	0	0	9,470
	Other	268	0	0	268
Wood:	Free-Standing Stove	2,621	0	0	2,621
	Free-Standing Pellet Stove	417	0	0	417
	Central Furnace	30	0	0	30
	Fireplace with an Insert	1,578	0	0	1,578
	Fireplace without an Insert	149	0	0	149
Other:	Solar	30	0	0	30
	Geothermal	0	0	0	0
	Other	119	0	0	119
	No Heat	0	0	0	0
	Don't Know	715	0	0	715
	Refused	0	0	0	0
	TOTAL	55,304	0	0	55,304

Weighted Data

Chart I-36: Space-Heating Fuels: Systems and Equipment by Utility Type
HEAT_EQP by TYPE

Space-Heating Fuels: Systems and Equipment

PNWRES92-I Primary Documentation Series

- Book 1: Volumes A and B.** The Executive Summary, the Concordance, and the Glossary (A) and the Report on Methodology and the Technical Appendix (B).
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- Book 3: Volume D.** Item-by-item crosstabulations for the four Bonneville Area Offices (Puget Sound, Lower Columbia, Upper Columbia, and Snake River).
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- Book 12: Volume AG.** A report of a post-survey of PNWRES92-I non-respondents (conducted in late Spring 1993) and their reason(s) for not completing the original survey.

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