

THE PACIFIC NORTHWEST RESIDENTIAL ENERGY SURVEY

REPORT TO THE
BONNEVILLE POWER ADMINISTRATION
AND THE PACIFIC NORTHWEST
UTILITIES CONFERENCE COMMITTEE
JULY 1980

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Volume 6: Oregon Cross-Tabulations

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PREFACE

This report was prepared as an account of work by Elrick and Lavidge, Inc., under contract number DE-AC79-79BP13061 with the Bonneville Power Administration.

There are a total of twelve reports which present the results of the survey. Titles of these reports, along with a brief description of the contents, are listed below:

- Volume 1 - Executive Summary (approximately 85 pages) - survey highlights.
- Volume 2 - Technical Appendix (approximately 140 pages) - includes the sampling plan, the questionnaire, exhibit cards, interviewer instructions, and a description of sampling error.
- Volume 3 - Question-by-Question Results (approximately 165 pages) - responses to each question, tabulated by Pacific Northwest total, four states, and four climate zones.
- Volume 4 - Pacific Northwest Cross-Tabulations (approximately 250 pages) - provides cross-tabulations of about 30 major questions by nine categories: own, rent, dwelling type, age of dwelling, square feet, main heating fuel, income, electric rate level, annual electricity consumption, and annual gas consumption.
- Volume 5 - Washington Cross-Tabulations (approximately 250 pages)
- Volume 6 - Oregon Cross-Tabulations (approximately 250 pages)
- Volume 7 - Idaho Cross-Tabulations (approximately 250 pages)
- Volume 8 - Montana Cross-Tabulations (approximately 250 pages)
- Volume 9 - Climate Zone 1 Cross-Tabulations (approximately 250 pages)
- Volume 10 - Climate Zone 2 Cross-Tabulations (approximately 250 pages)
- Volume 11 - Climate Zone 3 Cross-Tabulations (approximately 250 pages)
- Volume 12 - Climate Zone 4 Cross-Tabulations (approximately 250 pages)

A limited number of copies of these reports may be obtained free of charge by writing to the following address.
(Note: Volumes 2 through 12 will not be available until late November 1980).

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Bonneville Power Administration
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Portland, OR. 97208

Pacific Northwest Residential Energy Survey

Volume 6: Oregon Cross Tabulations

Elrick & Lavidge, Inc.

San Francisco, California

Report to the Bonneville Power Administration and
the Pacific Northwest Utilities Conference Committee

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INTRODUCTION

This document is volume 6 of a 12-volume report on the Pacific Northwest Residential Energy Survey. Presented herein are the responses for the state of Oregon to fifty questions asked during the survey (plus four variables computed from responses to several other questions) cross-tabulated against responses to nine questions which represent key explanatory characteristics of residential energy use.

The nine key questions are: means of payment for housing; type of dwelling; year dwelling built; total square-footage of living space; type of fuel for main heating system; combined 1978 income; unit cost of electricity; annual electricity consumption; and annual natural gas consumption. The fifty questions and four computed variables which were cross-tabulated against the above, fall into six categories: dwelling characteristics; heating and air-conditioning systems; water heating; appliances; demographic and dwelling characteristics; and insulation.

The survey was conducted throughout the states of Washington, Oregon, Idaho, and Montana with a total of 4,030 households sampled. 1,165 households were sampled in Oregon, or 28.9 percent of the sample size. Washington has 31.7 percent of the total number of households in the Pacific Northwest. However, the sample for Oregon was not weighted in computing these cross-tabulations, since the sample was designed to be self-weighting for each of the four states and four climate zones.

The data provided in the tables include two sets of figures. The top number appearing in any box provides the absolute number of responses given for the answer category for each of the answers to the nine key questions. The absolute number of responses sum vertically to equal the total number of responses to the question for an answer category of the key question. The bottom number in any box indicates the percentage of the survey respondents in Oregon giving a particular answer to the question for an answer category of the key question. These may not sum exactly to 100 percent due to rounding errors, and a few questions permitted multiple responses so they will add to more than 100 percent.

This volume contains fifty-four tables. The answer categories of the nine key questions are listed along the horizontal axis at the top of each table. This list does not include all possible answers, but only those which received a substantial number of responses or are of

particular interest. The answer categories of the question against which the key questions are cross-tabulated are listed along the vertical axis on the left side of each table. Due to the number of answer categories for the key questions, the tables are generally four pages in length. This has also lead to the list of answer categories for two of the key questions (square-feet of living space and annual electricity consumption) being started on one page and continued on the next. In the few cases where the list of answer categories for a question exceeds the length possible for the vertical axis of a table, it is continued on the next page and the complete table is eight pages in length.

Definitions of terms used in the questions or the response categories can be found in the interviewers' instructions included in Volume 2, the Technical Appendix. Copies of the exhibit cards referred to in several of the questions are also included in Volume 2.

TABLE OF CONTENTS

<u>SUBJECT</u>	<u>PAGE</u>
<u>Dwelling Characteristics</u>	
Dwelling Type	1
Square Feet of Living Space	5
Percent of Square Feet Heated	9
Number of Windows	13
Percent of Windows with Storms or Insulating Glass	33
Number of Windows with Storms or Insulating Glass	45
Plastic over Windows or Doors	49
Weatherstripping	53
Caulking	57
 <u>Heating & Air-Conditioning Systems</u>	
Main Heating Fuel	61
Main Heating Equipment	65
Duct Insulation	69
Temperature of the House	73
Secondary Heating Equipment	85
Secondary Heating Fuel	97
Glass Door on Fireplace	101
Heat Exchanger on Fireplace	109
Air-Conditioning	117
 <u>Water Heating</u>	
Water Heating Fuel	121
Water Heater Insulation Wrap	125
Water Pipe Insulation	129

Appliances

Clothes Washing Machine	133
Clothes Dryer	137
Dishwasher	141
Refrigerator	149
Freezer	153

Demographic & Dwelling Characteristics

Number of Residents	157
Age of Head of Household	161
Urban/Rural Location	165

Insulation

Wall Insulation - Amount	169
Wall Insulation - Type	185
Percent of Ceiling Insulated	201
Space for Ceiling Insulation	205
Percent of Ground Floor Insulated	209
R-Value of Ceiling Insulation	213
R-Value of Insulation on Underside of Roof	217
R-Value of Ground Floor Insulation	221
R-Value of Crawl Space Insulation	225

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR007 Q10-TYPE OF DWELLING

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	OWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF			
	COL	PCT	DWELLING	DWELLING	HOME	DETACHED	ATTACHED	FAMILY	1964	1974	1979	OR LESS	ROW		
			IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	TOTAL	
VAR007															
MOBILE HOME	1	I	71	I	8	I	79	I	0	I	0	I	0	I	79
		I	8.7	I	2.3	I	100.0	I	0	I	0	I	0	I	6.8
SF-DETACHED	2	I	596	I	118	I	0	I	717	I	0	I	0	I	717
		I	73.4	I	34.0	I	0	I	100.0	I	0	I	0	I	61.5
SF-SEMI ATTACHED	3	I	111	I	36	I	0	I	148	I	0	I	15	I	148
		I	13.7	I	10.4	I	0	I	0	I	93.1	I	0	I	12.7
SF-ATT D 2 SIDES	4	I	8	I	3	I	0	I	0	I	11	I	0	I	11
		I	1.0	I	.9	I	0	I	0	I	6.9	I	0	I	.9
2-4 UNITS-DETACHD	5	I	13	I	19	I	0	I	0	I	32	I	10	I	32
		I	1.6	I	5.5	I	0	I	0	I	15.2	I	3.6	I	2.7
2-4 UNITS-1 ATTD	6	I	9	I	32	I	0	I	0	I	43	I	2	I	43
		I	1.1	I	9.2	I	0	I	0	I	20.5	I	.7	I	3.7
2-4 UNITS-2 ATTD	7	I	2	I	18	I	0	I	0	I	20	I	1	I	20
		I	.2	I	5.2	I	0	I	0	I	9.5	I	.4	I	1.7
5 OR MORE UNITS	8	I	2	I	113	I	0	I	0	I	115	I	9	I	115
		I	.2	I	32.6	I	0	I	0	I	54.8	I	3.3	I	9.9
COLUMN TOTAL			812		347		79		717		159		210		1165
			69.7		29.8		6.8		61.5		13.6		16.0		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR007 Q10-TYPE OF DWELLING

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD	
	COL PCT	1199 SF	1599 SF	1999 SF	OR MORE	ITY	GAS			ROW
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	INFUEL1	INFUEL2	INFUEL3	INFUEL4	TOTAL
VAR007										
MOBILE HOME	1	33	10	5	2	51	5	4	16	79
		9.6	3.8	3.3	1.5	10.4	1.9	1.9	9.5	6.8
SF-DETACHED	2	187	195	121	110	178	217	186	125	717
		54.5	73.9	79.1	80.9	36.3	83.1	86.9	74.0	61.5
SF-SEMI ATTACHED	3	47	43	23	17	89	20	13	22	148
		13.7	16.3	15.0	12.5	18.2	7.7	6.1	13.0	12.7
SF-ATT D 2 SIDES	4	4	3	1	2	3	2	0	2	11
		1.2	1.1	.7	1.5	.6	.8	.0	1.2	.9
2-4 UNITS-DETACHD	5	13	5	1	1	20	5	2	3	32
		3.8	1.9	.7	.7	4.1	1.9	.9	1.8	2.7
2-4 UNITS-1 ATTD	6	14	3	1	3	30	8	4	1	43
		4.1	1.1	.7	2.2	6.1	3.1	1.9	.6	3.7
2-4 UNITS-2 ATTD	7	11	1	0	0	19	0	0	0	20
		3.2	.4	0	0	3.9	0	0	0	1.7
5 OR MORE UNITS	8	34	4	1	1	100	4	5	0	115
		9.9	1.5	.7	.7	20.4	1.5	2.3	0	9.9
COLUMN TOTAL		343	264	153	136	490	261	214	169	1165
		29.4	22.7	13.1	11.7	42.1	22.4	18.4	14.5	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1165 VALID CASES

0 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR007 Q1D-TYPE OF DWELLING
 BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC
 ***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE													
	COL	PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	ROW											
			I	I	I	I	I	KWH	KWH	KWH				TOTAL											
VAR007			IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATES	IYRKWH1	IYRKWH2	IYRKWH3	I											
	1	I	23	I	19	I	13	I	10	I	7	I	0	I	19	I	60	I	5	I	7	I	22	I	79
MOBILE HOME		I	11.4	I	7.1	I	7.9	I	7.5	I	3.3	I	0	I	15.2	I	6.2	I	3.2	I	3.2	I	12.0	I	6.8
	2	I	98	I	146	I	107	I	98	I	157	I	30	I	63	I	624	I	112	I	161	I	118	I	717
SF-DETACHED		I	48.8	I	54.9	I	65.2	I	73.1	I	74.4	I	39.0	I	50.4	I	64.8	I	72.7	I	74.5	I	64.1	I	61.5
	3	I	16	I	26	I	15	I	14	I	35	I	35	I	32	I	81	I	10	I	20	I	29	I	148
SF-SEMI ATTACHED		I	8.0	I	9.8	I	9.1	I	10.4	I	16.6	I	45.5	I	25.6	I	8.4	I	6.5	I	9.3	I	15.8	I	12.7
	4	I	0	I	3	I	1	I	0	I	2	I	0	I	0	I	11	I	4	I	1	I	2	I	11
SF-ATT D 2 SIDES		I	0	I	1.1	I	.6	I	0	I	.9	I	0	I	0	I	1.1	I	2.6	I	.5	I	1.1	I	.9
	5	I	10	I	10	I	5	I	3	I	1	I	6	I	3	I	23	I	5	I	8	I	3	I	32
2-4 UNITS-DETACHD		I	5.0	I	3.8	I	3.0	I	2.2	I	.5	I	7.8	I	2.4	I	2.4	I	3.2	I	3.7	I	1.6	I	2.7
	6	I	14	I	12	I	9	I	2	I	5	I	3	I	7	I	33	I	2	I	5	I	4	I	43
2-4 UNITS-1 ATTD		I	7.0	I	4.9	I	5.5	I	1.5	I	2.4	I	3.9	I	5.6	I	3.4	I	1.3	I	2.3	I	2.2	I	3.7
	7	I	5	I	7	I	1	I	2	I	0	I	0	I	1	I	19	I	1	I	0	I	2	I	20
2-4 UNITS-2 ATTD		I	2.5	I	2.6	I	.6	I	1.5	I	0	I	0	I	.8	I	2.0	I	.6	I	0	I	1.1	I	1.7
	8	I	35	I	43	I	13	I	5	I	4	I	3	I	0	I	112	I	15	I	14	I	4	I	115
5 OR MORE UNITS		I	17.4	I	16.2	I	7.9	I	3.7	I	1.9	I	3.9	I	0	I	11.6	I	9.7	I	6.5	I	2.2	I	9.9
			201		266		164		134		211		77		125		963		154		216		184		1165
COLUMN TOTAL			17.3		22.8		14.1		11.5		18.1		6.6		10.7		82.7		13.2		18.5		15.8		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

* * * * * PAGE 2 OF 2

BANNER2

	COUNT	IMIGH	LOW	BELOW	ABOVE	HIGH		
	COL	PCT	I	AVERAGE	AVERAGE		POW	
			I				TOTAL	
VAR007			IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
	1		I 11 I	I 2 I	I 0 I	I 0 I	I 0 I	79
MOBILE HOME			I 6.7 I	I 2.6 I	I 0 I	I 0 I	I 0 I	6.8
	2		I 101 I	I 60 I	I 54 I	I 41 I	I 18 I	717
SF-DETACHED			I 61.2 I	I 76.9 I	I 83.1 I	I 87.2 I	I 90.0 I	61.5
	3		I 47 I	I 6 I	I 8 I	I 5 I	I 1 I	148
SF-SEMI ATTACHED			I 28.5 I	I 7.7 I	I 12.3 I	I 10.6 I	I 5.0 I	12.7
	4		I 0 I	I 2 I	I 1 I	I 0 I	I 0 I	11
SF-ATT D 2 SIDES			I 0 I	I 2.6 I	I 1.5 I	I 0 I	I 0 I	.9
	5		I 2 I	I 9 I	I 0 I	I 0 I	I 0 I	32
2-4 UNITS-DETACHD			I 1.2 I	I 6.4 I	I 0 I	I 0 I	I 0 I	2.7
	6		I 3 I	I 3 I	I 1 I	I 1 I	I 0 I	43
2-4 UNITS-1 ATTO			I 1.8 I	I 3.8 I	I 1.5 I	I 2.1 I	I 0 I	3.7
	7		I 1 I	I 0 I	I 0 I	I 0 I	I 0 I	20
2-4 UNITS-2 ATTO			I .6 I	I 0 I	I 0 I	I 0 I	I 0 I	1.7
	8		I 0 I	I 0 I	I 1 I	I 0 I	I 1 I	115
5 OR MORE UNITS			I 0 I	I 0 I	I 1.5 I	I 0 I	I 5.0 I	9.9
			I-----I	I-----I	I-----I	I-----I	I-----I	
COLUMN			165	78	65	47	20	1165
TOTAL			14.2	6.7	5.6	4.0	1.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1165 VALID CASES

0 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

SPACE TOTAL SF OF LIVING SPACE

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	IOWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF		
	COL	PCT	IOWELLING	DWELLING	HOME	DETACHED	ATTACHED	FAMILY		1964	1974	1979	OR LESS	ROW
			IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPAC1	TOTAL
SPACE														
799 AND LESS	1		98	157	29	95	17	115	56	32	39	28	256	256
			12.2	45.6	36.7	13.4	10.8	55.3	20.9	14.5	17.3	12.8	100.0	22.2
800 TO 1199	2		218	122	33	187	51	72	72	53	72	73	0	343
			27.2	35.5	41.8	26.4	32.5	34.6	26.9	24.1	31.9	33.5	0	29.8
1200 TO 1599	3		219	43	10	195	46	13	59	61	53	64	0	264
			27.3	12.5	12.7	27.5	29.3	6.3	22.0	27.7	23.5	29.4	0	22.9
1600 TO 1999	4		137	16	5	121	24	3	39	36	27	42	0	153
			17.1	4.7	6.3	17.1	15.3	1.4	14.6	16.4	11.9	19.3	0	13.3
2000 TO 2399	5		68	4	2	53	13	4	18	19	20	8	0	72
			8.5	1.2	2.5	7.5	8.3	1.9	6.7	8.6	8.8	3.7	0	6.3
2400 TO 2799	6		29	2	0	27	3	1	11	10	6	1	0	31
			3.6	.6	0	3.8	1.9	.5	4.1	4.5	2.7	.5	0	2.7
2800 OR MORE	7		33	0	0	30	3	0	13	9	9	2	0	33
			4.1	0	0	4.2	1.9	0	4.9	4.1	4.0	.9	0	2.9
COLUMN			802	344	79	708	157	208	268	220	226	218	256	1152
TOTAL			69.6	29.9	6.9	61.5	13.6	18.1	23.3	19.1	19.6	18.9	22.2	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

SPACE TOTAL SF OF LIVING SPACE

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

SPACE	COUNT COL PCT	1800 TO 11199 SF	1200 TO 1599 SF	1600 TO 1999 SF	2000 SF OR MORE	ELECTRIC ITY	NATURAL GAS	FUEL OIL	WOOD	ROW TOTAL
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
799 AND LESS	1	0	0	0	0	143	43	37	23	256
		0	0	0	0	29.4	16.5	17.8	13.8	22.2
800 TO 1199	2	343	0	0	0	168	69	49	47	343
		100.0	0	0	0	34.6	26.5	23.6	28.1	29.8
1200 TO 1599	3	0	264	0	0	92	70	47	49	264
		0	100.0	0	0	18.9	26.9	22.6	29.3	22.9
1600 TO 1999	4	0	0	153	0	52	39	26	34	153
		0	0	100.0	0	10.7	15.0	12.5	20.4	13.3
2000 TO 2399	5	0	0	0	72	19	22	20	10	72
		0	0	0	92.9	3.9	8.5	9.6	6.0	6.3
2400 TO 2799	6	0	0	0	31	6	10	12	3	31
		0	0	0	22.8	1.2	3.8	5.8	1.8	2.7
2800 OR MORE	7	0	0	0	33	6	7	17	1	33
		0	0	0	24.3	1.2	2.7	8.2	.6	2.9
COLUMN TOTAL		343	264	153	136	486	260	208	167	1152
		29.8	22.9	13.3	11.8	42.2	22.6	18.1	14.5	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1152 VALID CASES

13 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

SPACE TOTAL SF OF LIVING SPACE
 BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC
 ***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 - \$15,000-		\$20,000- \$25,000		13-16	17-20	25-28	LOW	BELOW	ABOVE		
	COL	PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	ROW
			I					KWH	KWH	KWH				TOTAL
SPACE			IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATE5	IYRKWH1	IYRKWH2	IYRKWH3	I
	1	I	89	I 75	I 29	I 22	I 5	I 9	I 22	I 225	I 37	I 43	I 33	I 256
799 AND LESS		I	44.9	I 28.6	I 17.7	I 16.7	I 2.4	I 11.7	I 17.9	I 23.6	I 24.5	I 20.3	I 18.2	I 22.2
	2	I	61	I 103	I 69	I 33	I 31	I 30	I 45	I 268	I 48	I 61	I 55	I 343
800 TO 1199		I	30.8	I 39.3	I 42.1	I 25.0	I 14.8	I 39.0	I 36.6	I 28.2	I 31.8	I 28.8	I 30.4	I 29.8
	3	I	31	I 51	I 32	I 41	I 63	I 16	I 29	I 219	I 39	I 41	I 39	I 264
1200 TO 1599		I	15.7	I 19.5	I 19.5	I 31.1	I 30.1	I 20.8	I 23.6	I 23.0	I 25.8	I 19.3	I 21.5	I 22.9
	4	I	13	I 22	I 20	I 19	I 54	I 10	I 16	I 127	I 19	I 35	I 20	I 153
1600 TO 1999		I	6.6	I 8.4	I 12.2	I 14.4	I 25.8	I 13.0	I 13.0	I 13.3	I 12.6	I 16.5	I 11.0	I 13.3
	5	I	1	I 6	I 6	I 11	I 32	I 7	I 8	I 57	I 4	I 14	I 16	I 72
2000 TO 2399		I	.5	I 2.3	I 3.7	I 8.3	I 15.3	I 9.1	I 6.5	I 6.0	I 2.6	I 6.6	I 8.8	I 6.3
	6	I	3	I 3	I 3	I 4	I 10	I 4	I 3	I 24	I 1	I 7	I 9	I 31
2400 TO 2799		I	1.5	I 1.1	I 1.8	I 3.0	I 4.8	I 5.2	I 2.4	I 2.5	I .7	I 3.3	I 5.0	I 2.7
	7	I	0	I 2	I 5	I 2	I 14	I 1	I 0	I 32	I 3	I 11	I 9	I 33
2800 OR MORE		I	0	I .8	I 3.0	I 1.5	I 6.7	I 1.3	I 0	I 3.4	I 2.0	I 5.2	I 5.0	I 2.9
			198	262	164	132	209	77	123	952	151	212	181	1152
COLUMN TOTAL			17.2	22.7	14.2	11.5	18.1	6.7	10.7	82.6	13.1	18.4	15.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE - 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

SPACE TOTAL SF OF LIVING SPACE

BY BANNER2 (TABULATING 1) INCOME * FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT COL	PCT	THIGH I	LOW I	BELOW AVERAGE I	ABOVE AVERAGE I	HIGH I	ROW TOTAL
			IYRKWH4	IYRTHRP1	IYRTHRM2	IYRTHRM3	IYRTHPM4	I
SPACE	-----	-----	-----	-----	-----	-----	-----	-----
799 AND LESS	1	I	6	I 15	I 3	I 1	I 0	I 256
		I	3.7	I 19.5	I 4.6	I 2.1	I 0	I 22.2
		I	-----	-----	-----	-----	-----	-----
800 TO 1199	2	I	30	I 28	I 21	I 11	I 2	I 343
		I	18.3	I 36.4	I 32.3	I 23.4	I 10.0	I 29.8
		I	-----	-----	-----	-----	-----	-----
1200 TO 1599	3	I	90	I 18	I 21	I 15	I 5	I 264
		I	30.5	I 23.4	I 32.3	I 31.9	I 25.0	I 22.9
		I	-----	-----	-----	-----	-----	-----
1600 TO 1999	4	I	44	I 12	I 9	I 12	I 4	I 153
		I	26.8	I 15.6	I 13.8	I 25.5	I 20.0	I 13.3
		I	-----	-----	-----	-----	-----	-----
2000 TO 2399	5	I	21	I 3	I 7	I 5	I 3	I 72
		I	12.8	I 3.9	I 10.8	I 10.6	I 15.0	I 6.3
		I	-----	-----	-----	-----	-----	-----
2400 TO 2799	6	I	9	I 1	I 3	I 1	I 2	I 31
		I	5.5	I 1.3	I 4.6	I 2.1	I 10.0	I 2.7
		I	-----	-----	-----	-----	-----	-----
2800 OR MORE	7	I	4	I 0	I 1	I 2	I 4	I 33
		I	2.4	I 0	I 1.5	I 4.3	I 20.0	I 2.9
		I	-----	-----	-----	-----	-----	-----
COLUMN			164	77	65	47	20	1152
TOTAL			14.2	6.7	5.6	4.1	1.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1152 VALID CASES

13 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

PHSPAC PERCENT OF SF OF HEATED LIVING SPACE
BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	OWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF		
	COL	PCT	DWELLING	DWELLING	HOME	DETACHED	ATTACHED	FAMILY	1964	1974	1979	OR LESS	ROW	
			IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPAC1	TOTAL
PHSPAC														
1	1	1	1	0	0	1	0	0	0	1	0	0	0	1
1 TO 10			.2	0	0	.2	0	0	0	.6	0	0	0	.1
11 TO 20	2	2	1	0	2	0	1	1	1	1	1	0	1	3
		.4	.7	0	.4	0	1.1	.7	.6	.7	0	1.1		.4
21 TO 30	3	7	0	0	6	1	0	2	2	1	1	1	1	7
		1.3	0	0	1.3	.8	0	1.4	1.2	.7	.6	1.1		1.0
31 TO 40	4	3	0	0	2	1	0	2	0	1	0	0	0	3
		.5	0	0	.4	.8	0	1.4	0	.7	0	0		.4
41 TO 50	5	14	11	1	16	2	8	9	4	3	4	5		27
		2.6	7.2	2.6	3.5	1.7	8.5	6.3	2.4	2.0	2.4	5.7		3.6
51 TO 60	6	13	1	0	11	1	2	7	1	5	1	1	1	14
		2.4	.7	0	2.4	.8	2.1	4.9	.6	3.3	.6	1.1		2.0
61 TO 70	7	14	4	1	12	3	2	5	4	5	2	3		18
		2.6	2.6	2.6	2.7	2.5	2.1	3.5	2.4	3.3	1.2	3.4		2.6
71 TO 80	8	30	9	1	27	4	3	14	10	4	4	6		35
		5.5	3.3	2.6	6.0	3.4	3.2	9.9	6.0	2.6	2.4	6.8		5.0
81 TO 90	9	41	10	3	38	7	3	10	15	8	9	5		51
		7.5	6.6	7.9	8.4	5.9	3.2	7.0	9.0	5.3	5.5	5.7		7.3
91 TO 99	10	33	3	1	30	2	3	7	8	13	7	1		36
		6.0	2.0	2.6	6.6	1.7	3.2	4.9	4.8	8.6	4.3	1.1		5.1
100	11	388	117	31	307	97	72	85	120	111	136	65		507
		71.1	77.0	81.6	67.9	82.2	76.6	59.9	72.3	73.0	82.9	73.9		72.2
COLUMN		546	152	38	452	118	94	142	166	152	164	88		702
TOTAL		77.8	21.7	5.4	64.4	16.8	13.4	20.2	23.6	21.7	23.4	12.5		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

PHSPAC PERCENT OF SF OF HEATED LIVING SPACE

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

PHSPAC	COUNT COL PCT	1800 TO 11199 SF	1200 TO 1599 SF	1600 TO 1999 SF	2000 SF OR MORE	ELECTRIC ITY	NATURAL GAS	FUEL OIL	WOOD	ROW TOTAL
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
1	1	0	0	0	1	0	1	0	0	1
1 TO 10		0	0	0	1.0	0	.6	0	0	.1
2	2	0	1	0	1	1	1	0	1	3
11 TO 20		0	.5	0	1.0	.3	.6	0	.9	.4
3	3	2	2	2	0	4	1	1	1	7
21 TO 30		1.0	1.0	1.9	0	1.3	.6	.9	.9	1.0
4	4	0	2	1	0	0	2	0	1	3
31 TO 40		0	1.0	.9	0	0	1.2	0	.9	.4
5	5	8	5	4	5	11	4	5	7	27
41 TO 50		3.9	2.6	3.7	4.8	3.6	2.5	4.3	6.6	3.8
6	6	2	1	4	6	4	6	3	1	14
51 TO 60		1.0	.5	3.7	5.8	1.3	3.7	2.6	.9	2.0
7	7	5	1	5	4	5	3	5	5	18
61 TO 70		2.4	.5	4.6	3.8	1.7	1.9	4.3	4.7	2.6
8	8	6	12	4	7	11	7	12	4	35
71 TO 80		2.9	6.1	3.7	6.7	3.6	4.3	10.3	3.8	5.0
9	9	14	23	5	4	18	12	10	10	51
81 TO 90		6.8	11.7	4.6	3.8	5.9	7.5	8.5	9.4	7.3
10	10	7	10	11	7	15	10	7	4	36
91 TO 99		3.4	5.1	10.2	6.7	5.0	6.2	6.0	3.8	5.1
11	11	162	139	72	69	234	114	74	72	507
100		78.6	70.9	66.7	66.3	77.2	70.8	63.2	67.9	72.2
COLUMN TOTAL		206	196	108	104	303	161	117	106	702
TOTAL		29.3	27.9	15.4	14.8	43.2	22.9	16.7	15.1	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

702 VALID CASES

463 MISSING CASES

PAGE 1 OF 2

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

PHSPAC PERCENT OF SF OF HEATED LIVING SPACE

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT	IMHIGH	LOW	BELOW	ABOVE	HIGH		ROW
	COL	PCT	I	AVERAGE	AVERAGE			TOTAL
			I					
			IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
PHSPAC								
1 TO 10	1		0	0	0	0	1	1
			0	0	0	0	6.7	.1
11 TO 20	2		1	1	0	0	0	3
			.8	2.1	0	0	0	.4
21 TO 30	3		3	0	0	1	0	7
			2.3	0	0	3.1	0	1.0
31 TO 40	4		0	0	0	0	1	3
			0	0	0	0	6.7	.4
41 TO 50	5		5	1	1	1	0	27
			3.8	2.1	2.3	3.1	0	3.8
51 TO 60	6		2	0	2	2	1	14
			1.5	0	4.7	6.3	6.7	2.0
61 TO 70	7		3	1	1	0	0	18
			2.3	2.1	2.3	0	0	2.6
71 TO 80	8		2	3	1	0	0	35
			1.5	6.3	2.3	0	0	5.0
81 TO 90	9		5	5	5	0	0	51
			3.8	10.4	11.6	0	0	7.3
91 TO 99	10		6	0	5	2	2	36
			4.6	0	11.6	6.3	13.3	5.1
100	11		103	37	28	26	10	507
			79.2	77.1	65.1	81.3	66.7	72.2
COLUMN			130	48	43	32	15	702
TOTAL			18.5	6.8	6.1	4.6	2.1	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

702 VALID CASES

463 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR019 Q11-NUMBER OF LARGE WINDOWS, GLASS DOORS

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	IOWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF	ROW												
	COL	PCT	IOWELLING	DWELLING	HOME	DETACHED	ATTACHED	FAMILY	1964	1974	1979	OR LESS	TOTAL												
			IPAY1	IPAY2	IOWELL1	IOWELL2	IOWELL3	IOWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACEL1	I											
VAR019																									
0	0	I	228	I	124	I	42	I	226	I	28	I	59	I	126	I	45	I	35	I	40	I	136	I	355
		I	28.2	I	35.7	I	53.2	I	31.6	I	17.8	I	28.1	I	46.3	I	20.5	I	15.4	I	18.3	I	53.1	I	30.6
1	1	I	200	I	143	I	17	I	181	I	51	I	95	I	64	I	50	I	84	I	76	I	73	I	344
		I	24.7	I	41.2	I	21.5	I	25.3	I	32.5	I	45.2	I	23.5	I	22.7	I	36.8	I	34.7	I	28.5	I	29.6
2	2	I	199	I	48	I	5	I	157	I	51	I	35	I	38	I	66	I	56	I	60	I	32	I	248
		I	24.6	I	13.8	I	6.3	I	21.9	I	32.5	I	16.7	I	14.0	I	30.0	I	24.6	I	27.4	I	12.5	I	21.3
3	3	I	95	I	21	I	8	I	78	I	15	I	15	I	24	I	34	I	24	I	23	I	13	I	116
		I	11.7	I	6.1	I	10.1	I	10.9	I	9.6	I	7.1	I	8.8	I	15.5	I	10.5	I	10.5	I	5.1	I	10.0
4	4	I	37	I	5	I	1	I	31	I	6	I	5	I	9	I	13	I	13	I	6	I	2	I	43
		I	4.6	I	1.4	I	1.3	I	4.3	I	3.8	I	2.4	I	3.3	I	5.9	I	5.7	I	2.7	I	.8	I	3.7
5	5	I	18	I	4	I	3	I	15	I	3	I	1	I	4	I	6	I	4	I	7	I	0	I	22
		I	2.2	I	1.2	I	3.8	I	2.1	I	1.9	I	.5	I	1.5	I	2.7	I	1.8	I	3.2	I	0	I	1.9
6	6	I	14	I	0	I	1	I	13	I	0	I	0	I	2	I	2	I	5	I	4	I	0	I	14
		I	1.7	I	0	I	1.3	I	1.8	I	0	I	0	I	.7	I	.9	I	2.2	I	1.8	I	0	I	1.2
7	7	I	3	I	1	I	1	I	2	I	1	I	0	I	0	I	2	I	0	I	1	I	0	I	4
		I	.4	I	.3	I	1.3	I	.3	I	.6	I	0	I	0	I	.9	I	0	I	.5	I	0	I	.3
8	8	I	4	I	0	I	1	I	3	I	0	I	0	I	1	I	0	I	2	I	1	I	0	I	4
		I	.5	I	0	I	1.3	I	.4	I	0	I	0	I	.4	I	0	I	.9	I	.5	I	0	I	.3
9	9	I	1	I	0	I	0	I	1	I	0	I	0	I	1	I	0	I	0	I	0	I	0	I	1
		I	.1	I	0	I	0	I	.1	I	0	I	0	I	.4	I	0	I	0	I	0	I	0	I	.1
10 TO 14	10	I	10	I	1	I	0	I	9	I	2	I	0	I	3	I	2	I	5	I	1	I	0	I	11
		I	1.2	I	.3	I	0	I	1.3	I	1.3	I	0	I	1.1	I	.9	I	2.2	I	.5	I	0	I	.9
	COLUMN		809		347		79		716		157		210		272		220		228		219		256		1162
	TOTAL		69.6		29.9		6.8		61.6		13.5		18.1		23.4		18.9		19.6		18.8		22.0		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR019 Q11-NUMBER OF LARGE WINDOWS, GLASS DOORS
BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

VAR019	COUNT COL PCT	1800 TO 11199 SF	1200 TO 1599 SF	1600 TO 1999 SF	2000 SF OR MORE	ELECTRIC ITY	NATURAL GAS	FUEL OIL	WOOD	ROW TOTAL
		ISPAC2	ISPAC3	ISPAC4	ISPAC5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
0	0	I 103 I	I 60 I	I 27 I	I 27 I	I 121 I	I 78 I	I 87 I	I 53 I	355
		I 30.1 I	I 22.7 I	I 17.6 I	I 20.0 I	I 24.7 I	I 30.0 I	I 40.8 I	I 31.5 I	30.6
1	1	I 123 I	I 69 I	I 46 I	I 26 I	I 174 I	I 62 I	I 49 I	I 51 I	344
		I 36.0 I	I 26.1 I	I 30.1 I	I 19.3 I	I 35.5 I	I 23.8 I	I 23.0 I	I 30.4 I	29.6
2	2	I 81 I	I 82 I	I 28 I	I 23 I	I 119 I	I 55 I	I 33 I	I 39 I	248
		I 23.7 I	I 31.1 I	I 18.3 I	I 17.0 I	I 24.3 I	I 21.2 I	I 15.5 I	I 23.2 I	21.3
3	3	I 23 I	I 26 I	I 27 I	I 26 I	I 46 I	I 32 I	I 23 I	I 14 I	116
		I 6.7 I	I 9.8 I	I 17.6 I	I 19.3 I	I 9.4 I	I 12.3 I	I 10.8 I	I 8.3 I	10.0
4	4	I 5 I	I 17 I	I 12 I	I 7 I	I 14 I	I 14 I	I 8 I	I 6 I	43
		I 1.5 I	I 6.4 I	I 7.8 I	I 5.2 I	I 2.9 I	I 5.4 I	I 3.8 I	I 3.6 I	3.7
5	5	I 3 I	I 6 I	I 8 I	I 5 I	I 9 I	I 5 I	I 4 I	I 3 I	22
		I .9 I	I 2.3 I	I 5.2 I	I 3.7 I	I 1.8 I	I 1.9 I	I 1.9 I	I 1.8 I	1.9
6	6	I 1 I	I 2 I	I 2 I	I 9 I	I 3 I	I 4 I	I 5 I	I 2 I	14
		I .3 I	I .8 I	I 1.3 I	I 6.7 I	I .6 I	I 1.5 I	I 2.3 I	I 1.2 I	1.2
7	7	I 1 I	I 1 I	I 1 I	I 1 I	I 1 I	I 1 I	I 1 I	I 0 I	4
		I .3 I	I .4 I	I .7 I	I .7 I	I .2 I	I .4 I	I .5 I	I 0 I	.3
8	8	I 0 I	I 1 I	I 0 I	I 3 I	I 1 I	I 2 I	I 1 I	I 0 I	4
		I 0 I	I .4 I	I 0 I	I 2.2 I	I .2 I	I .8 I	I .5 I	I 0 I	.3
9	9	I 1 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 1 I	I 0 I	1
		I .3 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I .5 I	I 0 I	.1
10 TO 14	10	I 1 I	I 0 I	I 2 I	I 8 I	I 2 I	I 7 I	I 1 I	I 0 I	11
		I .3 I	I 0 I	I 1.3 I	I 5.9 I	I .4 I	I 2.7 I	I .5 I	I 0 I	.9
COLUMN TOTAL		342	264	153	135	490	260	213	168	1162
		29.4	22.7	13.2	11.6	42.2	22.4	18.3	14.5	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1162 VALID CASES

3 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR019 Q11-NUMBER OF LARGE WINDOWS, GLASS DOORS

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

COUNT COL PCT	I\$0 TO I\$7,999	I\$8,000 - I\$14,999	I\$15,000- I\$19,999	I\$20,000- I\$24,999	I\$25,000 OR MORE	13-16 MILLS P KWH	17-20 MILLS P KWH	25-28 MILLS P KWH	LOW IYR KWH1	BELOW AVERAGE IYR KWH2	ABOVE AVERAGE IYR KWH3	ROW TOTAL
VAR019	IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATE5	IYR KWH1	IYR KWH2	IYR KWH3	I
0	I 93 I	I 89 I	I 47 I	I 31 I	I 37 I	I 20 I	I 32 I	I 303 I	I 52 I	I 70 I	I 55 I	I 355
	I 46.3 I	I 33.5 I	I 28.8 I	I 23.1 I	I 17.5 I	I 26.0 I	I 25.8 I	I 31.5 I	I 34.0 I	I 32.6 I	I 30.1 I	I 30.6
1	I 48 I	I 87 I	I 42 I	I 51 I	I 58 I	I 15 I	I 42 I	I 287 I	I 40 I	I 56 I	I 48 I	I 344
	I 23.9 I	I 32.7 I	I 25.8 I	I 38.1 I	I 27.5 I	I 19.5 I	I 33.9 I	I 29.9 I	I 26.1 I	I 26.0 I	I 26.2 I	I 29.6
2	I 36 I	I 51 I	I 47 I	I 30 I	I 51 I	I 25 I	I 30 I	I 193 I	I 31 I	I 42 I	I 47 I	I 248
	I 17.9 I	I 19.2 I	I 28.8 I	I 22.4 I	I 24.2 I	I 32.5 I	I 24.2 I	I 20.1 I	I 20.3 I	I 19.5 I	I 25.7 I	I 21.3
3	I 13 I	I 21 I	I 18 I	I 14 I	I 29 I	I 10 I	I 9 I	I 97 I	I 12 I	I 27 I	I 20 I	I 116
	I 6.5 I	I 7.9 I	I 11.0 I	I 10.4 I	I 13.7 I	I 13.0 I	I 7.3 I	I 10.1 I	I 7.8 I	I 12.6 I	I 10.9 I	I 10.0
4	I 3 I	I 11 I	I 6 I	I 7 I	I 12 I	I 5 I	I 3 I	I 35 I	I 6 I	I 14 I	I 4 I	I 43
	I 1.5 I	I 4.1 I	I 3.7 I	I 5.2 I	I 5.7 I	I 6.5 I	I 2.4 I	I 3.6 I	I 3.9 I	I 6.5 I	I 2.2 I	I 3.7
5	I 3 I	I 4 I	I 1 I	I 1 I	I 10 I	I 1 I	I 5 I	I 16 I	I 4 I	I 2 I	I 1 I	I 22
	I 1.5 I	I 1.9 I	I .6 I	I .7 I	I 4.7 I	I 1.3 I	I 4.0 I	I 1.7 I	I 2.6 I	I .9 I	I .5 I	I 1.9
6	I 3 I	I 3 I	I 1 I	I 0 I	I 5 I	I 0 I	I 1 I	I 13 I	I 2 I	I 3 I	I 3 I	I 14
	I 1.5 I	I 1.1 I	I .6 I	I 0 I	I 2.4 I	I 0 I	I .8 I	I 1.4 I	I 1.3 I	I 1.4 I	I 1.6 I	I 1.2
7	I 1 I	I 0 I	I 0 I	I 0 I	I 1 I	I 0 I	I 0 I	I 4 I	I 1 I	I 0 I	I 0 I	I 4
	I .5 I	I 0 I	I 0 I	I 0 I	I .5 I	I 0 I	I 0 I	I .4 I	I .7 I	I 0 I	I 0 I	I .3
8	I 0 I	I 0 I	I 1 I	I 0 I	I 1 I	I 0 I	I 1 I	I 3 I	I 1 I	I 0 I	I 2 I	I 4
	I 0 I	I 0 I	I .6 I	I 0 I	I .5 I	I 0 I	I .8 I	I .3 I	I .7 I	I 0 I	I 1.1 I	I .3
9	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 1 I	I 1 I	I 0 I	I 0 I	I 1
	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I .1 I	I .7 I	I 0 I	I 0 I	I .1
10 TO 14	I 1 I	I 0 I	I 0 I	I 0 I	I 7 I	I 1 I	I 1 I	I 9 I	I 3 I	I 1 I	I 3 I	I 11
	I .5 I	I 0 I	I 0 I	I 0 I	I 3.3 I	I 1.3 I	I .8 I	I .9 I	I 2.0 I	I .5 I	I 1.6 I	I .9
COLUMN TOTAL	201 17.3	266 22.9	163 14.0	134 11.5	211 18.2	77 6.6	124 10.7	961 82.7	153 13.2	215 18.5	183 15.7	1162 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR019 Q11-NUMBER OF LARGE WINDOWS, GLASS DOORS

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT COL	IMIGH PCT	LOW	BELOW AVERAGE	ABOVE AVERAGE	HIGH	ROW TOTAL	
			IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	
VAR019								
0	0	I	28	I	13	I	3	355
		I	17.0	I	20.0	I	15.0	30.6
1	1	I	42	I	16	I	4	344
		I	25.5	I	24.6	I	20.0	29.6
2	2	I	52	I	21	I	2	248
		I	31.9	I	32.3	I	10.0	21.3
3	3	I	25	I	7	I	4	116
		I	15.2	I	10.8	I	20.0	10.0
4	4	I	10	I	5	I	1	43
		I	6.1	I	7.7	I	5.0	3.7
5	5	I	5	I	1	I	0	22
		I	3.0	I	1.5	I	0	1.9
6	6	I	2	I	0	I	1	14
		I	1.2	I	0	I	5.0	1.2
7	7	I	0	I	0	I	1	4
		I	0	I	0	I	5.0	.3
8	8	I	0	I	2	I	0	4
		I	0	I	3.1	I	0	.3
9	9	I	0	I	0	I	0	1
		I	0	I	0	I	0	.1
10 TO 14	10	I	1	I	0	I	4	11
		I	.6	I	0	I	20.0	.9
COLUMN TOTAL			165	77	65	47	20	1162
			14.2	6.6	5.6	4.0	1.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1162 VALID CASES

3 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR020 Q11-NUMBER OF MEDIUM-SIZED WINDOWS

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 4

BANNER1

	COUNT	IOWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF													
	COL	PCT	IDWELLING	DNELLING	HOME	DETACHED	ATTACHED	FAMILY	1964.	1974	1979	OR LESS	ROW												
			IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPAC1	TOTAL											
VAR020																									
0	0	I	48	I	34	I	12	I	33	I	9	I	28	I	13	I	23	I	20	I	10	I	33	I	82
		I	5.9	I	9.8	I	15.2	I	4.6	I	5.7	I	13.3	I	4.8	I	10.5	I	8.8	I	4.6	I	12.9	I	7.1
1	1	I	72	I	48	I	8	I	61	I	17	I	35	I	17	I	25	I	28	I	19	I	35	I	121
		I	8.9	I	13.8	I	10.1	I	8.5	I	10.8	I	16.7	I	6.3	I	11.4	I	12.3	I	8.7	I	13.7	I	10.4
2	2	I	95	I	68	I	9	I	86	I	16	I	53	I	31	I	21	I	34	I	41	I	57	I	164
		I	11.7	I	19.6	I	11.4	I	12.0	I	10.2	I	25.2	I	11.4	I	9.5	I	14.9	I	18.7	I	22.3	I	14.1
3	3	I	100	I	54	I	11	I	78	I	28	I	37	I	24	I	24	I	36	I	40	I	35	I	154
		I	12.4	I	15.6	I	13.9	I	10.9	I	17.8	I	17.6	I	8.8	I	10.9	I	15.8	I	18.3	I	13.7	I	13.3
4	4	I	91	I	39	I	11	I	76	I	26	I	19	I	26	I	17	I	29	I	38	I	22	I	132
		I	11.2	I	11.2	I	13.9	I	10.6	I	16.6	I	9.0	I	9.6	I	7.7	I	12.7	I	17.4	I	8.6	I	11.4
5	5	I	98	I	33	I	9	I	86	I	19	I	17	I	31	I	24	I	32	I	19	I	24	I	131
		I	12.1	I	9.5	I	11.4	I	12.0	I	12.1	I	8.1	I	11.4	I	10.9	I	14.0	I	8.7	I	9.4	I	11.3
6	6	I	72	I	19	I	4	I	65	I	15	I	8	I	29	I	16	I	14	I	15	I	18	I	92
		I	8.9	I	5.5	I	5.1	I	9.1	I	9.6	I	3.8	I	10.7	I	7.3	I	6.1	I	6.8	I	7.0	I	7.9
7	7	I	54	I	14	I	5	I	49	I	11	I	4	I	21	I	17	I	11	I	11	I	14	I	69
		I	6.7	I	4.0	I	6.3	I	6.8	I	7.0	I	1.9	I	7.7	I	7.7	I	4.8	I	5.0	I	5.5	I	5.9
8	8	I	44	I	13	I	5	I	47	I	2	I	3	I	15	I	13	I	7	I	11	I	8	I	57
		I	5.4	I	3.7	I	6.3	I	6.6	I	1.3	I	1.4	I	5.5	I	5.9	I	3.1	I	5.0	I	3.1	I	4.9
9	9	I	27	I	10	I	1	I	27	I	5	I	4	I	14	I	8	I	6	I	3	I	3	I	37
		I	3.3	I	2.9	I	1.3	I	3.8	I	3.2	I	1.9	I	5.1	I	3.6	I	2.6	I	1.4	I	1.2	I	3.2
10 TO 14	10	I	72	I	13	I	3	I	75	I	5	I	2	I	32	I	20	I	9	I	11	I	5	I	85
		I	8.9	I	3.7	I	3.8	I	10.5	I	3.2	I	1.0	I	11.8	I	9.1	I	3.9	I	5.0	I	2.0	I	7.3
15 TO 19	11	I	27	I	1	I	1	I	24	I	3	I	0	I	13	I	10	I	2	I	1	I	2	I	28
		I	3.3	I	.3	I	1.3	I	3.4	I	1.9	I	0	I	4.8	I	4.5	I	.9	I	.5	I	.8	I	2.4
COLUMN			809		347		79		716		157		210		272		220		228		219		256		1162
TOTAL			69.6		29.9		6.8		61.6		13.5		18.1		23.4		18.9		19.6		18.8		22.0		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR020 Q11-NUMBER OF MEDIUM-SIZED WINDOWS

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 4

BANNER1

	COUNT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD	
	COL PCT	1199 SF	1999 SF	1999 SF	OR MORE	ITY	GAS			ROW
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	TOTAL
VAR020										
0		27	16	3	3	49	20	10	2	82
		7.9	6.1	2.0	2.2	10.0	7.7	4.7	1.2	7.1
1		44	24	10	5	56	17	15	27	121
		12.9	9.1	6.5	3.7	11.8	6.5	7.0	16.1	10.4
2		50	33	12	11	81	39	26	16	164
		14.6	12.9	7.8	8.1	16.5	15.0	12.2	9.5	14.1
3		56	37	17	8	87	25	18	21	154
		16.4	14.0	11.1	5.9	17.8	9.6	8.5	12.5	13.3
4		47	41	13	8	62	27	17	22	132
		13.7	15.5	8.5	5.9	12.7	10.4	8.0	13.1	11.4
5		37	35	17	17	51	36	17	18	131
		10.8	13.3	11.1	12.6	10.4	13.8	8.0	10.7	11.3
6		23	22	16	13	28	27	23	12	92
		6.7	8.3	10.5	9.6	5.7	10.4	10.8	7.1	7.9
7		14	15	17	7	24	15	13	16	69
		4.1	5.7	11.1	5.2	4.9	5.8	6.1	9.5	5.9
8		15	14	8	11	19	13	14	10	57
		4.4	5.3	5.2	8.1	3.9	5.0	6.6	6.0	4.9
9		12	8	6	7	3	8	16	8	37
		3.5	3.0	3.9	5.2	.6	3.1	7.5	4.8	3.2
10 TO 14		17	18	22	24	22	22	26	14	85
		5.0	6.1	14.4	17.6	4.5	8.5	12.2	8.3	7.3
15 TO 19		0	1	9	16	5	9	11	2	28
		0	.4	5.9	11.9	1.0	3.5	5.2	1.2	2.4
COLUMN		342	264	153	135	490	260	213	168	1162
TOTAL		29.4	22.7	13.2	11.6	42.2	22.4	18.3	14.5	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(INUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR020 Q11-NUMBER OF MEDIUM-SIZED WINDOWS

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 3 OF 4

BANNER1

	COUNT	OWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF			
	COL	PCT	IDWELLING	DWELLING	HOME	DETACHED	ATTACHED	FAMILY	1964	1974	1979	OR LESS	ROW		
			IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	TOTAL	
VAR020			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
	12	I	6	I	1	I	0	I	6	I	1	I	0	I	7
20 TO 29		I	.7	I	.3	I	0	I	.8	I	.6	I	0	I	.6
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
	13	I	3	I	0	I	0	I	3	I	0	I	0	I	3
30 OR MORE		I	.4	I	0	I	0	I	.4	I	0	I	0	I	.3
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
COLUMN			809		347		79		716		157		210		
TOTAL			69.6		29.9		6.8		61.6		13.5		18.1		1162
									272		220		228		256
									23.4		18.9		19.6		18.8
															22.0
															100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR020 011-NUMBER OF MEDIUM-SIZED WINDOWS

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 4 OF 4

BANNER1

	COUNT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD	
	COL PCT	11199 SF	1599 SF	1999 SF	OR MORE	ITY	GAS			ROW
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	TOTAL
VAR020										
12		0	1	3	3	0	2	5	0	7
20 TO 29		0	.4	2.0	2.2	0	.8	2.3	0	.6
13		0	1	0	2	1	0	2	0	3
30 OR MORE		0	.4	0	1.5	.2	0	.9	0	.3
COLUMN		342	264	153	135	490	260	213	168	1162
TOTAL		29.4	22.7	13.2	11.6	42.2	22.4	18.3	14.5	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1162 VALID CASES

3 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****
 VAR020 Q11-NUMBER OF MEDIUM-SIZED WINDOWS
 BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC
 ***** PAGE 1 OF 4

BANNER2

	COUNT	ISO TO	INCOME					MILLS P			LOW	BELOW		ABOVE	ROW
			\$17,999	\$18,000 - \$19,999	\$20,000 - \$24,999	\$25,000 OR MORE	13-16	17-20	25-28			AVERAGE	AVERAGE		
	COL PCT		I	I	I	I	KWH	KWH	KWH		IYR KWH1	IYR KWH2	IYR KWH3	I	TOTAL
VAR020			I	I	I	I	I	I	I	I	I	I	I	I	
0		0	I 17 I	I 20 I	I 13 I	I 7 I	I 11 I	I 8 I	I 5 I	I 69 I	I 7 I	I 15 I	I 13 I	I	82
			I 8.5 I	I 7.5 I	I 8.0 I	I 5.2 I	I 5.2 I	I 10.4 I	I 4.0 I	I 7.2 I	I 4.6 I	I 7.0 I	I 7.1 I	I	7.1
1		1	I 22 I	I 37 I	I 23 I	I 8 I	I 16 I	I 10 I	I 12 I	I 99 I	I 12 I	I 23 I	I 22 I	I	121
			I 10.9 I	I 13.9 I	I 14.1 I	I 6.0 I	I 7.6 I	I 13.0 I	I 9.7 I	I 10.3 I	I 7.8 I	I 10.7 I	I 12.0 I	I	10.4
2		2	I 32 I	I 49 I	I 24 I	I 13 I	I 22 I	I 5 I	I 19 I	I 140 I	I 22 I	I 30 I	I 20 I	I	164
			I 15.9 I	I 18.4 I	I 14.7 I	I 9.7 I	I 10.4 I	I 6.5 I	I 15.3 I	I 14.6 I	I 14.4 I	I 14.0 I	I 10.9 I	I	14.1
3		3	I 34 I	I 34 I	I 19 I	I 19 I	I 30 I	I 13 I	I 17 I	I 124 I	I 18 I	I 20 I	I 30 I	I	154
			I 16.9 I	I 12.8 I	I 11.7 I	I 14.2 I	I 14.2 I	I 16.9 I	I 13.7 I	I 12.9 I	I 11.8 I	I 9.3 I	I 16.4 I	I	13.3
4		4	I 24 I	I 27 I	I 19 I	I 19 I	I 22 I	I 7 I	I 15 I	I 110 I	I 19 I	I 21 I	I 15 I	I	-132
			I 11.9 I	I 10.2 I	I 11.7 I	I 14.2 I	I 10.4 I	I 9.1 I	I 12.1 I	I 11.4 I	I 12.4 I	I 9.8 I	I 8.2 I	I	11.4
5		5	I 25 I	I 29 I	I 20 I	I 16 I	I 20 I	I 11 I	I 18 I	I 102 I	I 24 I	I 22 I	I 18 I	I	131
			I 12.4 I	I 10.9 I	I 12.3 I	I 11.9 I	I 9.5 I	I 14.3 I	I 14.5 I	I 10.6 I	I 15.7 I	I 10.2 I	I 9.8 I	I	11.3
6		6	I 12 I	I 18 I	I 9 I	I 14 I	I 16 I	I 5 I	I 11 I	I 76 I	I 17 I	I 17 I	I 14 I	I	92
			I 6.0 I	I 6.8 I	I 5.5 I	I 10.4 I	I 7.6 I	I 6.5 I	I 8.9 I	I 7.9 I	I 11.1 I	I 7.9 I	I 7.7 I	I	7.9
7		7	I 9 I	I 18 I	I 7 I	I 8 I	I 16 I	I 4 I	I 9 I	I 56 I	I 9 I	I 12 I	I 8 I	I	69
			I 4.5 I	I 6.8 I	I 4.3 I	I 6.0 I	I 7.6 I	I 5.2 I	I 7.3 I	I 5.8 I	I 5.9 I	I 5.6 I	I 4.4 I	I	5.9
8		8	I 6 I	I 14 I	I 10 I	I 8 I	I 13 I	I 5 I	I 6 I	I 46 I	I 7 I	I 7 I	I 18 I	I	57
			I 3.0 I	I 5.3 I	I 6.1 I	I 6.0 I	I 6.2 I	I 6.5 I	I 4.8 I	I 4.8 I	I 4.6 I	I 3.3 I	I 9.8 I	I	4.9
9		9	I 8 I	I 3 I	I 3 I	I 2 I	I 7 I	I 3 I	I 5 I	I 29 I	I 7 I	I 11 I	I 5 I	I	37
			I 4.0 I	I 1.1 I	I 1.8 I	I 1.5 I	I 3.3 I	I 3.9 I	I 4.0 I	I 3.0 I	I 4.6 I	I 5.1 I	I 2.7 I	I	3.2
10 TO 14		10	I 10 I	I 14 I	I 13 I	I 14 I	I 24 I	I 4 I	I 5 I	I 76 I	I 9 I	I 19 I	I 12 I	I	85
			I 5.0 I	I 5.3 I	I 8.0 I	I 10.4 I	I 11.4 I	I 5.2 I	I 4.0 I	I 7.9 I	I 5.9 I	I 8.8 I	I 6.6 I	I	7.3
15 TO 19		11	I 1 I	I 2 I	I 2 I	I 4 I	I 11 I	I 2 I	I 2 I	I 24 I	I 2 I	I 12 I	I 8 I	I	28
			I .5 I	I .8 I	I 1.2 I	I 3.0 I	I 5.2 I	I 2.6 I	I 1.6 I	I 2.5 I	I 1.3 I	I 5.6 I	I 4.4 I	I	2.4
COLUMN TOTAL			201	266	163	134	211	77	124	961	153	215	183	1162	
			17.3	22.9	14.0	11.5	18.2	6.6	10.7	82.7	13.2	18.5	15.7	100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR020 Q11-NUMBER OF MEDIUM-SIZED WINDOWS

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 4

BANNER2

	COUNT COL	IN HIGH PCT	LOW	BELOW AVERAGE	ABOVE AVERAGE	HIGH	ROW TOTAL
			IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	
VAR020	0	6	5	6	2	1	82
0		3.6	6.5	9.2	4.3	5.0	7.1
1	12	2	7	6	1		121
1		7.3	2.6	10.8	12.8	5.0	10.4
2	17	7	12	5	2		164
2		10.3	9.1	18.5	10.6	10.0	14.1
3	22	10	9	6	0		154
3		13.3	13.0	13.8	12.8	0	13.3
4	15	10	6	6	4		132
4		9.1	13.0	9.2	12.8	20.0	11.4
5	25	12	11	3	3		131
5		15.2	15.6	16.9	6.4	15.0	11.3
6	16	7	5	6	5		92
6		9.7	9.1	7.7	12.8	25.0	7.9
7	12	8	1	1	0		69
7		7.3	10.4	1.5	2.1	0	5.9
8	12	5	2	0	1		57
8		7.3	6.5	3.1	0	5.0	4.9
9	4	4	0	1	0		37
9		2.4	5.2	0	2.1	0	3.2
10 TO 14	21	5	4	7	2		85
		12.7	6.5	6.2	14.9	10.0	7.3
15 TO 19	2	2	2	3	1		28
		1.2	2.6	3.1	6.4	5.0	2.4
COLUMN TOTAL	165	77	65	47	20	1162	
TOTAL	14.2	6.6	5.6	4.0	1.7	100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR020 Q11-NUMBER OF MEDIUM-SIZED WINDOWS

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 3 OF 4

BANNER2

	COUNT	ISO TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE	
	COL	PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P	AVERAGE	AVERAGE	ROW
								KWH	KWH	KWH			TOTAL
			I	I	I	I	I	I	I	I	I	I	I
VAR020			I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I
20 TO 29	12		I 0 I	I 1 I	I 1 I	I 1 I	I 3 I	I 0 I	I 0 I	I 7 I	I 0 I	I 5 I	I 0 I
			I 0 I	I .4 I	I .6 I	I .7 I	I 1.4 I	I 0 I	I 0 I	I .7 I	I 0 I	I 2.3 I	I 0 I
			I	I	I	I	I	I	I	I	I	I	I
30 OR MORE	13		I 1 I	I 0 I	I 0 I	I 1 I	I 0 I	I 0 I	I 0 I	I 3 I	I 0 I	I 1 I	I 0 I
			I .5 I	I 0 I	I 0 I	I .7 I	I 0 I	I 0 I	I 0 I	I .3 I	I 0 I	I .5 I	I 0 I
			I	I	I	I	I	I	I	I	I	I	I
COLUMN			201	266	163	134	211	77	124	961	153	215	183
TOTAL			17.3	22.9	14.0	11.5	18.2	6.6	10.7	82.7	13.2	18.5	15.7
													1162
													100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

* * * * * PAGE 4 OF 4

3 MISSING CASES

FILE PACIFICA (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR021 011-NUMBER OF SMALL WINDOWS

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 4

BANNER1

	COUNT	OWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF			
	COL	PCT	IDWELLING	DWELLING	HOME	DETACHED	ATTACHED	FAMILY	1964	1974	1979	OR LESS	ROW		
			IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	TOTAL	
VAR021															
0	0	I	71	I	101	I	4	I	61	I	23	I	84	I	172
		I	8.8	I	29.1	I	5.1	I	8.5	I	14.6	I	40.0	I	14.8
1	1	I	90	I	48	I	4	I	84	I	25	I	27	I	140
		I	11.1	I	13.8	I	5.1	I	11.7	I	15.9	I	12.9	I	12.0
2	2	I	139	I	74	I	6	I	129	I	36	I	42	I	213
		I	17.2	I	21.3	I	7.6	I	18.0	I	22.9	I	20.0	I	18.3
3	3	I	104	I	29	I	15	I	88	I	14	I	19	I	136
		I	12.9	I	8.4	I	19.0	I	12.3	I	8.9	I	9.0	I	11.7
4	4	I	72	I	26	I	11	I	56	I	16	I	15	I	98
		I	8.9	I	7.5	I	13.9	I	7.8	I	10.2	I	7.1	I	8.4
5	5	I	74	I	25	I	13	I	64	I	15	I	7	I	99
		I	9.1	I	7.2	I	16.5	I	8.9	I	9.6	I	3.3	I	8.5
6	6	I	47	I	7	I	4	I	40	I	4	I	6	I	54
		I	5.8	I	2.0	I	5.1	I	5.6	I	2.5	I	2.9	I	4.6
7	7	I	43	I	8	I	4	I	37	I	7	I	3	I	51
		I	5.3	I	2.3	I	5.1	I	5.2	I	4.5	I	1.4	I	4.4
8	8	I	38	I	10	I	5	I	36	I	4	I	4	I	49
		I	4.7	I	2.9	I	6.3	I	5.0	I	2.5	I	1.9	I	4.2
9	9	I	32	I	8	I	4	I	31	I	3	I	2	I	40
		I	4.0	I	2.3	I	5.1	I	4.3	I	1.9	I	1.0	I	3.4
10 TO 14	10	I	63	I	9	I	5	I	59	I	7	I	1	I	72
		I	7.8	I	2.6	I	6.3	I	8.2	I	4.5	I	.5	I	6.2
15 TO 19	11	I	21	I	2	I	3	I	20	I	0	I	0	I	23
		I	2.6	I	.6	I	3.8	I	2.8	I	0	I	0	I	2.0
COLUMN			809		347		79		716		157		210		
TOTAL			69.6		29.9		6.8		61.6		13.5		18.1		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR021 Q11-NUMBER OF SMALL WINDOWS

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 4

BANNER1

		COUNT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD		ROW							
		COL	PCT	11199 SF	1599 SF	1999 SF	OR MORE	ITY	GAS			TOTAL							
VAR021				ISPAC2	ISPAC3	ISPAC4	ISPAC5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	I							
0	0	I	93	I	23	I	21	I	15	I	118	I	23	I	16	I	11	I	172
		I	15.5	I	8.7	I	13.7	I	11.1	I	24.1	I	8.8	I	7.5	I	6.5	I	14.8
1	1	I	46	I	34	I	17	I	9	I	65	I	32	I	18	I	18	I	140
		I	13.5	I	12.9	I	11.1	I	6.7	I	13.3	I	12.3	I	8.5	I	10.7	I	12.0
2	2	I	69	I	44	I	31	I	27	I	96	I	54	I	21	I	35	I	213
		I	20.2	I	16.7	I	20.3	I	20.0	I	19.6	I	20.8	I	9.9	I	20.8	I	18.3
3	3	I	33	I	39	I	19	I	9	I	52	I	40	I	19	I	22	I	136
		I	9.6	I	14.8	I	12.4	I	6.7	I	10.6	I	15.4	I	8.9	I	13.1	I	11.7
4	4	I	30	I	30	I	11	I	8	I	40	I	21	I	22	I	13	I	98
		I	8.8	I	11.4	I	7.2	I	5.9	I	8.2	I	8.1	I	10.3	I	7.7	I	8.4
5	5	I	28	I	26	I	12	I	10	I	35	I	20	I	15	I	27	I	99
		I	8.2	I	9.8	I	7.8	I	7.4	I	7.1	I	7.7	I	7.0	I	16.1	I	8.5
6	6	I	20	I	11	I	7	I	6	I	22	I	9	I	16	I	7	I	54
		I	5.8	I	4.2	I	4.6	I	4.4	I	4.5	I	3.5	I	7.5	I	4.2	I	4.6
7	7	I	14	I	14	I	6	I	5	I	17	I	13	I	11	I	8	I	51
		I	4.1	I	5.3	I	3.9	I	3.7	I	3.5	I	5.0	I	5.2	I	4.8	I	4.4
8	8	I	14	I	12	I	5	I	10	I	15	I	10	I	14	I	9	I	49
		I	4.1	I	4.5	I	3.3	I	7.4	I	3.1	I	3.8	I	6.6	I	5.4	I	4.2
9	9	I	10	I	8	I	4	I	6	I	9	I	8	I	12	I	10	I	40
		I	2.9	I	3.0	I	2.6	I	4.4	I	1.8	I	3.1	I	5.6	I	6.0	I	3.4
10 TO 14	10	I	20	I	15	I	14	I	14	I	15	I	19	I	30	I	6	I	72
		I	5.8	I	5.7	I	9.2	I	10.4	I	3.1	I	7.3	I	14.1	I	3.6	I	6.2
15 TO 19	11	I	3	I	6	I	4	I	8	I	4	I	10	I	7	I	2	I	23
		I	.9	I	2.3	I	2.6	I	5.9	I	.8	I	3.8	I	3.3	I	1.2	I	2.0
		COLUMN	342	264	153	135	490	260	213	168	1162								
		TOTAL	29.4	22.7	13.2	11.6	42.2	22.4	18.3	14.5	100.0								

PERCENTS AND TOTALS BASED ON RESPONDENTS

(INUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR021 Q11-NUMBER OF SMALL WINDOWS

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 3 OF 4

BANNER1

COUNT COL PCT	OWN		RENT		MOBILE		SIN FAM		SIN FAM		MULTI-		PRE 1950	1950 TO	1965 TO	1975 TO	799 SF	ROW TOTAL
	DWELLING		DWELLING		HOME		DETACHED		ATTACHED		FAMILY			1964	1974	1979	OR LESS	
	IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPAC1							
VAR021																		
12	11	0	1	8	2	0	4	6	0	0	1							11
20 TO 29	1.4	0	1.3	1.1	1.3	0	1.5	2.7	0	0	.4							.9
13	4	0	0	3	1	0	1	2	1	0	0							4
30 OR MORE	.5	0	0	.4	.6	0	.4	.9	.4	0	0							.3
COLUMN TOTAL	809 69.6	347 29.9	79 6.8	716 61.6	157 13.5	210 18.1	272 23.4	220 18.9	228 19.6	219 18.8	256 22.0							1162 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR021 Q11-NUMBER OF SMALL WINDOWS

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 4 OF 4

BANNER1

	COUNT COL PCT	1800 TO 11199 SF	1200 TO 1599 SF	1600 TO 1999 SF	2000 SF OR MORE	ELECTRIC ITY	NATURAL GAS	FUEL OIL	WOOD	POW TOTAL
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
VAR021		-----	-----	-----	-----	-----	-----	-----	-----	
12		I 2 I	I 2 I	I 1 I	I 5 I	I 2 I	I 1 I	I 8 I	I 0 I	11
20 TO 29		I .6 I	I .8 I	I .7 I	I 3.7 I	I .4 I	I .4 I	I 3.8 I	I 0 I	.9
		-----	-----	-----	-----	-----	-----	-----	-----	
13		I 0 I	I 0 I	I 1 I	I 3 I	I 0 I	I 0 I	I 4 I	I 0 I	4
30 OR MORE		I 0 I	I 0 I	I .7 I	I 2.2 I	I 0 I	I 0 I	I 1.9 I	I 0 I	.3
		-----	-----	-----	-----	-----	-----	-----	-----	
COLUMN		342	264	153	135	490	260	213	168	1162
TOTAL		29.4	22.7	13.2	11.6	42.2	22.4	18.3	14.5	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1162 VALID CASES

3 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR021 Q11-NUMBER OF SMALL WINDOWS
BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 4

BANNER2

VAR021	COUNT COL PCT	1&0 TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE	ROW TOTAL
		1\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P KWH	MILLS P KWH	MILLS P KWH		AVERAGE	AVERAGE	
		IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATE5	IYR KWH1	IYR KWH2	IYR KWH3	
0	0	I 38 I	I 44 I	I 22 I	I 13 I	I 25 I	I 12 I	I 9 I	I 151 I	I 23 I	I 25 I	I 17 I	172
		I 18.9 I	I 16.5 I	I 13.5 I	I 9.7 I	I 11.8 I	I 15.6 I	I 7.3 I	I 15.7 I	I 15.0 I	I 11.6 I	I 9.3 I	14.8
1	1	I 27 I	I 30 I	I 22 I	I 20 I	I 21 I	I 11 I	I 11 I	I 118 I	I 24 I	I 19 I	I 23 I	140
		I 13.4 I	I 11.3 I	I 13.5 I	I 14.9 I	I 10.0 I	I 14.3 I	I 8.9 I	I 12.3 I	I 15.7 I	I 8.8 I	I 12.6 I	12.0
2	2	I 30 I	I 55 I	I 29 I	I 22 I	I 38 I	I 16 I	I 28 I	I 169 I	I 30 I	I 30 I	I 29 I	213
		I 14.9 I	I 20.7 I	I 17.8 I	I 16.4 I	I 18.0 I	I 20.8 I	I 22.6 I	I 17.6 I	I 19.6 I	I 14.0 I	I 15.8 I	18.3
3	3	I 27 I	I 31 I	I 15 I	I 22 I	I 20 I	I 6 I	I 15 I	I 115 I	I 18 I	I 20 I	I 26 I	136
		I 13.4 I	I 11.7 I	I 9.2 I	I 16.4 I	I 9.5 I	I 7.8 I	I 12.1 I	I 12.0 I	I 11.8 I	I 9.3 I	I 14.2 I	11.7
4	4	I 16 I	I 21 I	I 15 I	I 12 I	I 18 I	I 7 I	I 14 I	I 77 I	I 13 I	I 22 I	I 12 I	98
		I 8.0 I	I 7.9 I	I 9.2 I	I 9.0 I	I 8.5 I	I 9.1 I	I 11.3 I	I 8.0 I	I 8.5 I	I 10.2 I	I 6.6 I	8.4
5	5	I 14 I	I 20 I	I 22 I	I 12 I	I 19 I	I 5 I	I 14 I	I 80 I	I 10 I	I 22 I	I 16 I	99
		I 7.0 I	I 7.5 I	I 13.5 I	I 9.0 I	I 9.0 I	I 6.5 I	I 11.3 I	I 8.3 I	I 6.5 I	I 10.2 I	I 8.7 I	8.5
6	6	I 7 I	I 15 I	I 8 I	I 4 I	I 8 I	I 4 I	I 9 I	I 41 I	I 6 I	I 12 I	I 7 I	54
		I 3.5 I	I 5.6 I	I 4.9 I	I 3.0 I	I 3.8 I	I 5.2 I	I 7.3 I	I 4.3 I	I 3.9 I	I 5.6 I	I 3.8 I	4.6
7	7	I 4 I	I 18 I	I 5 I	I 4 I	I 11 I	I 4 I	I 8 I	I 39 I	I 8 I	I 13 I	I 10 I	51
		I 2.0 I	I 6.8 I	I 3.1 I	I 3.0 I	I 5.2 I	I 5.2 I	I 6.5 I	I 4.1 I	I 5.2 I	I 6.0 I	I 5.5 I	4.4
8	8	I 11 I	I 5 I	I 11 I	I 9 I	I 9 I	I 7 I	I 5 I	I 37 I	I 4 I	I 12 I	I 12 I	49
		I 5.5 I	I 1.9 I	I 6.7 I	I 6.7 I	I 4.3 I	I 9.1 I	I 4.0 I	I 3.9 I	I 2.6 I	I 5.6 I	I 6.6 I	4.2
9	9	I 7 I	I 8 I	I 7 I	I 6 I	I 9 I	I 0 I	I 4 I	I 36 I	I 6 I	I 13 I	I 10 I	40
		I 3.5 I	I 3.0 I	I 4.3 I	I 4.5 I	I 4.3 I	I 0 I	I 3.2 I	I 3.7 I	I 3.9 I	I 6.0 I	I 5.5 I	3.4
10 TO 14	10	I 13 I	I 18 I	I 4 I	I 5 I	I 23 I	I 3 I	I 7 I	I 62 I	I 8 I	I 18 I	I 16 I	72
		I 6.5 I	I 6.8 I	I 2.5 I	I 3.7 I	I 10.9 I	I 3.9 I	I 5.6 I	I 6.5 I	I 5.2 I	I 8.4 I	I 8.7 I	6.2
15 TO 19	11	I 5 I	I 0 I	I 2 I	I 3 I	I 8 I	I 2 I	I 0 I	I 21 I	I 3 I	I 6 I	I 1 I	23
		I 2.5 I	I 0 I	I 1.2 I	I 2.2 I	I 3.8 I	I 2.6 I	I 0 I	I 2.2 I	I 2.0 I	I 2.8 I	I .5 I	2.0
COLUMN TOTAL		201	266	163	134	211	77	124	961	153	215	183	1162
		17.3	22.9	14.0	11.5	18.2	6.6	10.7	82.7	13.2	18.5	15.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR021 Q11-NUMBER OF SMALL WINDOWS

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 4

BANNER2

	COUNT	THIGH	LOW	BELOW	ABOVE	HIGH							
	COL	PCT	I	AVERAGE	AVERAGE	I	ROW						
			I				TOTAL						
			IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I					
VAR021	0	I	17	I	5	I	5	I	2	I	172		
		I	10.3	I	6.5	I	7.7	I	10.6	I	10.0	I	14.8
		I		I		I		I		I		I	
	1	I	16	I	12	I	7	I	11	I	2	I	140
		I	9.7	I	15.6	I	10.8	I	23.4	I	10.0	I	12.0
		I		I		I		I		I		I	
	2	I	35	I	24	I	16	I	2	I	4	I	213
		I	21.2	I	31.2	I	24.6	I	4.3	I	20.0	I	18.3
		I		I		I		I		I		I	
	3	I	24	I	11	I	9	I	2	I	2	I	136
		I	14.5	I	14.3	I	13.8	I	4.3	I	10.0	I	11.7
		I		I		I		I		I		I	
	4	I	15	I	9	I	6	I	5	I	1	I	98
		I	9.1	I	6.5	I	9.2	I	10.6	I	5.0	I	8.4
		I		I		I		I		I		I	
	5	I	12	I	3	I	8	I	8	I	1	I	99
		I	7.3	I	3.9	I	12.3	I	17.0	I	5.0	I	8.5
		I		I		I		I		I		I	
	6	I	8	I	3	I	0	I	3	I	0	I	54
		I	4.8	I	3.9	I	0	I	6.4	I	0	I	4.6
		I		I		I		I		I		I	
	7	I	8	I	3	I	5	I	3	I	2	I	51
		I	4.8	I	3.9	I	7.7	I	6.4	I	10.0	I	4.4
		I		I		I		I		I		I	
	8	I	8	I	2	I	1	I	1	I	2	I	49
		I	4.8	I	2.6	I	1.5	I	2.1	I	10.0	I	4.2
		I		I		I		I		I		I	
	9	I	4	I	3	I	2	I	1	I	1	I	40
		I	2.4	I	3.9	I	3.1	I	2.1	I	5.0	I	3.4
		I		I		I		I		I		I	
	10	I	9	I	4	I	5	I	4	I	2	I	72
		I	5.5	I	5.2	I	7.7	I	8.5	I	10.0	I	6.2
		I		I		I		I		I		I	
	11	I	6	I	2	I	1	I	2	I	1	I	23
		I	3.6	I	2.6	I	1.5	I	4.3	I	5.0	I	2.0
		I		I		I		I		I		I	
		COLUMN	165		77		65		47		20		1162
		TOTAL	14.2		6.6		5.6		4.0		1.7		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR021 Q11-NUMBER OF SMALL WINDOWS

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 3 OF 4

BANNER2

		COUNT	\$8,000 - \$15,000-					\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE	
		COL PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P				AVERAGE	AVERAGE	ROW
			I					KWH	KWH	KWH						TOTAL
			IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATES	IYRKWH1	IYRKWH2	IYRKWH3	I		
VAR021			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
	12	I	2 I	I 1 I	I 1 I	I 1 I	I 1 I	I 0 I	I 0 I	I 11 I	I 0 I	I 2 I	I 4 I			11
20 TO 29		I	1.0 I	I .4 I	I .6 I	I .7 I	I .5 I	I 0 I	I 0 I	I 1.1 I	I 0 I	I .9 I	I 2.2 I			.9
			----- <th>-----</th> <th>-----</th> <th>-----</th> <th>-----</th> <th>-----</th> <th>-----</th> <th>-----</th> <th>-----</th> <th>-----</th> <th>-----</th> <th>-----</th> <th>-----</th> <th></th>	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
	13	I	0 I	I 0 I	I 0 I	I 1 I	I 1 I	I 0 I	I 0 I	I 4 I	I 0 I	I 1 I	I 0 I			4
30 OR MORE		I	0 I	I 0 I	I 0 I	I .7 I	I .5 I	I 0 I	I 0 I	I .4 I	I 0 I	I .5 I	I 0 I			.3
			----- <th>-----</th> <th>-----</th> <th>-----</th> <th>-----</th> <th>-----</th> <th>-----</th> <th>-----</th> <th>-----</th> <th>-----</th> <th>-----</th> <th>-----</th> <th>-----</th> <th></th>	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
		COLUMN	201	266	163	134	211	77	124	961	153	215	183			1162
		TOTAL	17.3	22.9	14.0	11.5	18.2	6.6	10.7	82.7	13.2	18.5	15.7			100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR021 Q11-NUMBER OF SMALL WINDOWS

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 4 OF 4

BANNER2

	COUNT	IMHIGH	LOW	BELOW	ABOVE	HIGH		
	COL	PCT	I	AVERAGE	AVERAGE		ROW	
			I				TOTAL	
			IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	
VAR021			I	I	I	I	I	
	12	I	1	I	0	I	0	I
20 TO 29		I	.6	I	0	I	0	I
		I		I		I		I
	13	I	2	I	0	I	0	I
30 OR MORE		I	1.2	I	0	I	0	I
		I		I		I		I
	COLUMN		165	77	65	47	20	1162
	TOTAL		14.2	6.6	5.6	4.0	1.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1162 VALID CASES

3 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

PILGWIN PERCENT OF LARGE WINDOWS WITH STORMS

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	OWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF													
	COL	PCT	IOWELLING	DWELLING	HOME	DETACHED	ATTACHED	FAMILY	1964	1974	1979	OR LESS	ROW	TOTAL											
			IPAY1	IPAY2	IOWELL1	IOWELL2	IOWELL3	IOWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACEL	I											
PILGWIN																									
0	0	I	262	I	174	I	10	I	243	I	71	I	115	I	87	I	101	I	116	I	45	I	91	I	439
		I	45.1	I	78.0	I	27.0	I	49.6	I	55.0	I	76.2	I	59.6	I	57.7	I	60.1	I	25.1	I	75.8	I	54.4
11 TO 20	2	I	3	I	1	I	0	I	4	I	0	I	0	I	2	I	0	I	2	I	0	I	0	I	4
		I	.5	I	.4	I	0	I	.8	I	0	I	0	I	1.4	I	0	I	1.0	I	0	I	0	I	.5
21 TO 30	3	I	1	I	0	I	0	I	1	I	0	I	0	I	0	I	0	I	1	I	0	I	0	I	1
		I	.2	I	0	I	0	I	.2	I	0	I	0	I	0	I	0	I	.5	I	0	I	0	I	.1
31 TO 40	4	I	14	I	0	I	0	I	12	I	1	I	1	I	2	I	6	I	4	I	1	I	0	I	14
		I	2.4	I	0	I	0	I	2.4	I	.8	I	.7	I	1.4	I	3.4	I	2.1	I	.6	I	0	I	1.7
41 TO 50	5	I	15	I	0	I	0	I	12	I	2	I	1	I	3	I	5	I	5	I	1	I	0	I	15
		I	2.6	I	0	I	0	I	2.4	I	1.6	I	.7	I	2.1	I	2.9	I	2.6	I	.6	I	0	I	1.9
61 TO 70	7	I	9	I	0	I	1	I	6	I	2	I	0	I	3	I	3	I	2	I	1	I	1	I	9
		I	1.5	I	0	I	2.7	I	1.2	I	1.6	I	0	I	2.1	I	1.7	I	1.0	I	.6	I	.8	I	1.1
71 TO 80	8	I	2	I	0	I	0	I	2	I	0	I	0	I	0	I	0	I	1	I	1	I	0	I	2
		I	.3	I	0	I	0	I	.4	I	0	I	0	I	0	I	0	I	.5	I	.6	I	0	I	.2
100	11	I	275	I	48	I	26	I	210	I	53	I	34	I	49	I	60	I	62	I	130	I	29	I	323
		I	47.3	I	21.9	I	70.3	I	42.9	I	41.1	I	22.5	I	33.6	I	34.3	I	32.1	I	72.6	I	23.3	I	40.0
COLUMN TOTAL			581		223		37		490		129		151		146		175		193		179		120		807
			72.0		27.6		4.6		60.7		16.0		18.7		18.1		21.7		23.9		22.2		14.9		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

PILGWIN PERCENT OF LARGE WINDOWS WITH STORMS

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT COL	PCT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD	ROW TOTAL
			11199 SF	1599 SF	1999 SF	OR MORE	ITY	GAS			
			ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
PILGWIN											
0	0		135	96	61	52	207	102	67	53	439
			56.5	47.1	48.4	48.1	56.1	56.0	53.2	46.1	54.4
11 TO 20	2		0	0	0	4	0	2	2	0	4
			0	0	0	3.7	0	1.1	1.6	0	.5
21 TO 30	3		0	0	0	1	0	1	0	0	1
			0	0	0	.9	0	.5	0	0	.1
31 TO 40	4		2	3	3	6	3	6	3	2	14
			.8	1.9	2.4	5.6	.8	3.3	2.4	1.7	1.7
41 TO 50	5		7	3	2	3	4	2	5	4	15
			2.9	1.5	1.6	2.8	1.1	1.1	4.0	3.5	1.9
61 TO 70	7		0	1	3	4	3	0	4	1	9
			0	.9	2.4	3.7	.8	0	3.2	.9	1.1
71 TO 80	8		0	0	1	1	1	1	0	0	2
			0	0	.8	.9	.3	.5	0	0	.2
100	11		95	101	56	37	151	68	45	55	323
			39.7	49.5	44.4	34.3	40.9	37.4	35.7	47.8	40.0
COLUMN TOTAL			239	204	126	108	369	182	126	115	807
			29.6	25.3	15.6	13.4	45.7	22.6	15.6	14.3	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

807 VALID CASES

358 MISSING CASES

PAGE 1 OF 2

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

PILGWIN PERCENT OF LARGE WINDOWS WITH STORMS

BY BANNER2 (TABULATING 11) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT COL PCT	IMHIGH I	LOW I	BELOW AVERAGE I	ABOVE AVERAGE I	HIGH I	ROW TOTAL
		IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
PILGWIN		-----I-----I-----I-----I-----I					
0	0	I 61 I	I 29 I	I 27 I	I 21 I	I 10 I	439
		I 44.5 I	I 60.4 I	I 51.9 I	I 53.8 I	I 58.8 I	54.4
		-----I-----I-----I-----I-----I					
11 TO 20	2	I 0 I	I 1 I	I 0 I	I 0 I	I 1 I	4
		I 0 I	I 2.1 I	I 0 I	I 0 I	I 5.9 I	.5
		-----I-----I-----I-----I-----I					
21 TO 30	3	I 0 I	I 0 I	I 0 I	I 0 I	I 1 I	1
		I 0 I	I 0 I	I 0 I	I 0 I	I 5.9 I	.1
		-----I-----I-----I-----I-----I					
31 TO 40	4	I 4 I	I 0 I	I 0 I	I 2 I	I 2 I	14
		I 2.9 I	I 0 I	I 0 I	I 5.1 I	I 11.8 I	1.7
		-----I-----I-----I-----I-----I					
41 TO 50	5	I 3 I	I 0 I	I 2 I	I 1 I	I 0 I	15
		I 2.2 I	I 0 I	I 3.8 I	I 2.6 I	I 0 I	1.9
		-----I-----I-----I-----I-----I					
61 TO 70	7	I 3 I	I 0 I	I 0 I	I 0 I	I 0 I	9
		I 2.2 I	I 0 I	I 0 I	I 0 I	I 0 I	1.1
		-----I-----I-----I-----I-----I					
71 TO 80	8	I 1 I	I 0 I	I 0 I	I 1 I	I 0 I	2
		I .7 I	I 0 I	I 0 I	I 2.6 I	I 0 I	.2
		-----I-----I-----I-----I-----I					
100	11	I 65 I	I 18 I	I 23 I	I 14 I	I 3 I	323
		I 47.4 I	I 37.5 I	I 44.2 I	I 35.9 I	I 17.6 I	40.0
		-----I-----I-----I-----I-----I					
	COLUMN TOTAL	137	48	52	39	17	807
		17.0	5.9	6.4	4.8	2.1	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

807 VALID CASES

358 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

PIMOWIN PERCENT OF MEDIUM WINDOWS WITH STORMS

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

PIMOWIN	COUNT COL PCT	IOWN IDWELLING	RENT IDWELLING	MOBILE IDWELLING	SIN FAM DETACHED	SIN FAM ATTACHED	MULTI- FAMILY	PRE 1950	1950 TO 1964	1965 TO 1974	1975 TO 1979	749 SF OR LESS	ROW TOTAL
		IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IHAGE1	IHAGE2	IHAGE3	IHAGE4	ISPACE1	
0	0	364	233	14	364	85	140	152	122	125	54	151	603
		48.1	74.4	20.9	53.5	57.8	77.3	58.7	62.2	60.4	26.1	67.7	56.0
11 TO 20	2	7	5	1	9	2	0	6	0	0	0	3	12
		.9	1.6	1.5	1.3	1.4	0	2.3	0	0	0	1.3	1.1
21 TO 30	3	4	2	0	4	1	1	4	0	0	1	2	6
		.5	.6	0	.6	.7	.6	1.5	0	0	.5	.9	.6
31 TO 40	4	15	1	1	12	1	2	6	6	3	0	1	16
		2.0	.3	1.5	1.8	.7	1.1	2.3	3.1	1.4	0	.4	1.5
41 TO 50	5	21	4	2	19	1	3	7	5	4	3	7	25
		2.8	1.3	3.0	2.8	.7	1.7	2.7	2.6	1.9	1.4	3.1	2.3
51 TO 60	6	7	1	0	6	2	0	3	1	1	0	1	8
		.9	.3	0	.9	1.4	0	1.2	.5	.5	0	.4	.7
61 TO 70	7	8	1	2	6	0	1	4	1	2	2	2	9
		1.1	.3	3.0	.9	0	.6	1.5	.5	1.0	1.0	.9	.8
71 TO 80	8	10	1	0	7	4	0	3	4	3	1	1	11
		1.3	.3	0	1.0	2.7	0	1.2	2.0	1.4	.5	.4	1.0
81 TO 90	9	10	2	1	9	2	0	2	2	3	1	3	12
		1.3	.6	1.5	1.3	1.4	0	.8	1.0	1.4	.5	1.3	1.1
91 TO 99	10	1	0	0	1	0	0	1	0	0	0	0	1
		.1	0	0	.1	0	0	.4	0	0	0	0	.1
100	11	310	63	46	244	49	34	71	55	66	145	52	373
		41.0	20.1	68.7	35.8	33.3	18.8	27.4	28.1	31.9	70.0	23.3	34.7
COLUMN TOTAL		757	313	67	681	147	181	259	196	207	207	223	1076
		70.4	29.1	6.2	63.3	13.7	16.8	24.1	18.2	19.2	19.2	20.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

PIMDWIN PERCENT OF MEDIUM WINDOWS WITH STORMS

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

PIMDWIN	COUNT COL PCT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD	ROW TOTAL
		1199 SF	1599 SF	1999 SF	OR MORE	ITY	GAS			
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
0	0	192	111	70	72	240	141	116	88	603
		61.1	45.1	47.0	54.5	54.8	58.7	57.1	53.0	56.0
11 TO 20	2	2	3	1	3	1	4	3	3	12
		.6	1.2	.7	2.3	.2	1.7	1.5	1.8	1.1
21 TO 30	3	1	2	1	0	1	1	4	0	6
		.3	.8	.7	0	.2	.4	2.0	0	.6
31 TO 40	4	4	4	4	3	1	5	9	1	16
		1.3	1.6	2.7	2.3	.2	2.1	4.4	.6	1.5
41 TO 50	5	4	7	4	3	5	5	10	5	25
		1.3	2.8	2.7	2.3	1.1	2.1	4.9	3.0	2.3
51 TO 60	6	1	0	5	1	3	2	1	2	8
		.3	0	3.4	.8	.7	.8	.5	1.2	.7
61 TO 70	7	1	4	2	0	6	1	1	1	9
		.3	1.6	1.3	0	1.4	.4	.5	.6	.8
71 TO 80	8	1	4	2	3	2	2	4	2	11
		.3	1.6	1.3	2.3	.5	.8	2.0	1.2	1.0
81 TO 90	9	1	4	1	3	5	3	3	0	12
		.3	1.6	.7	2.3	1.1	1.2	1.5	0	1.1
91 TO 99	10	1	0	0	0	1	0	0	0	1
		.3	0	0	0	.2	0	0	0	.1
100	11	106	107	59	44	173	76	52	64	373
		33.8	43.5	39.6	33.3	39.5	31.7	25.6	38.6	34.7
COLUMN TOTAL		314	246	149	132	438	240	203	166	1076
		29.2	22.9	13.8	12.3	40.7	22.3	18.9	15.4	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1076 VALID CASES

89 MISSING CASES

* * * * * PAGE 1 OF 2

COUNT	ISO TO	\$8,000 -	\$15,000 -	\$20,000 -	\$25,000 -	13-16	17-20	25-28	LOW	BELOW	ABOVE	ROW
COL PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	TOTAL
	I	I	I	I	I	KWH	KWH	KWH				
	INCOME1	INCOME2	INCOME3	INCOME4	INCOME5	IRATE2	IRATE3	IRATES	IYRKWH1	IYRKWH2	IYRKWH3	I
0	I 134 I	I 149 I	I 73 I	I 54 I	I 99 I	I 46 I	I 77 I	I 480 I	I 85 I	I 116 I	I 96 I	I 603 I
	I 72.8 I	I 59.2 I	I 49.3 I	I 42.9 I	I 49.5 I	I 66.7 I	I 65.8 I	I 53.9 I	I 58.2 I	I 58.3 I	I 56.5 I	I 56.0 I
2	I 2 I	I 3 I	I 1 I	I 2 I	I 2 I	I 1 I	I 1 I	I 10 I	I 5 I	I 2 I	I 0 I	I 12 I
	I 1.1 I	I 1.2 I	I .7 I	I 1.6 I	I 1.0 I	I 1.4 I	I .9 I	I 1.1 I	I 3.4 I	I 1.0 I	I 0 I	I 1.1 I
3	I 0 I	I 1 I	I 1 I	I 0 I	I 2 I	I 1 I	I 0 I	I 5 I	I 0 I	I 3 I	I 1 I	I 6 I
	I 0 I	I .4 I	I .7 I	I 0 I	I 1.0 I	I 1.4 I	I 0 I	I .6 I	I 0 I	I 1.5 I	I .6 I	I .6 I
4	I 1 I	I 2 I	I 4 I	I 3 I	I 5 I	I 0 I	I 1 I	I 15 I	I 2 I	I 7 I	I 4 I	I 16 I
	I .5 I	I .8 I	I 2.7 I	I 2.4 I	I 2.5 I	I 0 I	I .9 I	I 1.7 I	I 1.4 I	I 3.5 I	I 2.4 I	I 1.5 I
5	I 1 I	I 9 I	I 0 I	I 7 I	I 2 I	I 2 I	I 0 I	I 23 I	I 6 I	I 6 I	I 5 I	I 25 I
	I .5 I	I 3.7 I	I 0 I	I 5.6 I	I 1.0 I	I 2.9 I	I 0 I	I 2.6 I	I 4.1 I	I 3.0 I	I 2.9 I	I 2.3 I
6	I 2 I	I 1 I	I 1 I	I 1 I	I 3 I	I 1 I	I 1 I	I 6 I	I 1 I	I 1 I	I 2 I	I 8 I
	I 1.1 I	I .4 I	I .7 I	I .8 I	I 1.5 I	I 1.4 I	I .9 I	I .7 I	I .7 I	I .5 I	I 1.2 I	I .7 I
7	I 0 I	I 3 I	I 0 I	I 1 I	I 1 I	I 0 I	I 0 I	I 9 I	I 1 I	I 0 I	I 0 I	I 9 I
	I 0 I	I 1.2 I	I 0 I	I .8 I	I .5 I	I 0 I	I 0 I	I 1.0 I	I .7 I	I 0 I	I 0 I	I .8 I
8	I 0 I	I 1 I	I 0 I	I 2 I	I 5 I	I 1 I	I 0 I	I 10 I	I 2 I	I 2 I	I 1 I	I 11 I
	I 0 I	I .4 I	I 0 I	I 1.6 I	I 2.5 I	I 1.4 I	I 0 I	I 1.1 I	I 1.4 I	I 1.0 I	I .6 I	I 1.0 I
9	I 1 I	I 2 I	I 1 I	I 3 I	I 1 I	I 1 I	I 2 I	I 9 I	I 1 I	I 3 I	I 5 I	I 12 I
	I .5 I	I .8 I	I .7 I	I 2.4 I	I .5 I	I 1.4 I	I 1.7 I	I 1.0 I	I .7 I	I 1.5 I	I 2.9 I	I 1.1 I
10	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 1 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 1 I
	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 1.4 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I .1 I
11	I 43 I	I 78 I	I 67 I	I 53 I	I 80 I	I 15 I	I 35 I	I 323 I	I 43 I	I 59 I	I 56 I	I 373 I
	I 23.4 I	I 31.8 I	I 45.3 I	I 42.1 I	I 40.0 I	I 21.7 I	I 29.9 I	I 36.3 I	I 29.5 I	I 29.6 I	I 32.9 I	I 34.7 I
COLUMN	184	245	148	126	200	69	117	890	146	199	170	1076
TOTAL	17.1	22.8	13.8	11.7	18.6	6.4	10.9	82.7	13.6	18.5	15.8	100.0

:(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/02/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

PIMOWIN PERCENT OF MEDIUM WINDOWS WITH STORMS

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT COL	HIGH PCT	LOW	BELOW AVERAGE	ABOVE AVERAGE	HIGH	POW TOTAL
		I	I	I	I	I	
PIMOWIN		IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
0	0	I 77	I 45	I 29	I 31	I 11	I 603
		I 49.0	I 62.5	I 50.0	I 68.9	I 57.9	I 56.0
11 TO 20	2	I 1	I 1	I 0	I 0	I 2	I 12
		I .6	I 1.4	I 0	I 0	I 10.5	I 1.1
21 TO 30	3	I 0	I 1	I 0	I 0	I 0	I 6
		I 0	I 1.4	I 0	I 0	I 0	I .6
31 TO 40	4	I 0	I 1	I 0	I 1	I 1	I 16
		I 0	I 1.4	I 0	I 2.2	I 5.3	I 1.5
41 TO 50	5	I 1	I 2	I 0	I 2	I 0	I 25
		I .6	I 2.8	I 0	I 4.4	I 0	I 2.3
51 TO 60	6	I 3	I 1	I 0	I 0	I 0	I 8
		I 1.9	I 1.4	I 0	I 0	I 0	I .7
61 TO 70	7	I 3	I 0	I 0	I 0	I 1	I 9
		I 1.9	I 0	I 0	I 0	I 5.3	I .8
71 TO 80	8	I 3	I 0	I 2	I 0	I 1	I 11
		I 1.9	I 0	I 3.4	I 0	I 5.3	I 1.0
81 TO 90	9	I 0	I 1	I 0	I 1	I 0	I 12
		I 0	I 1.4	I 0	I 2.2	I 0	I 1.1
91 TO 99	10	I 0	I 0	I 0	I 0	I 0	I 1
		I 0	I 0	I 0	I 0	I 0	I .1
100	11	I 69	I 20	I 27	I 10	I 3	I 373
		I 43.9	I 27.8	I 46.6	I 22.2	I 15.8	I 34.7
		I	I	I	I	I	I
COLUMN TOTAL		157	72	58	45	19	1076
		14.6	6.7	5.4	4.2	1.8	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1076 VALID CASES

89 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

PISHWIN PERCENT OF SMALL WINDOWS WITH STORMS

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	DOWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF		
	COL	PCT	DWELLING	DWELLING	HOME	DETACHED	ATTACHED	FAMILY		1964	1974	1979	OR LESS	ROW
			IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	TOTAL
PISHWIN														
0	0		376	190	21	370	82	99	162	118	105	43	137	572
			51.2	77.6	28.4	56.7	61.2	78.6	64.0	61.1	56.8	25.4	68.9	58.0
1 TO 10	1		1	0	0	1	0	0	1	0	0	0	0	1
			.1	0	0	.2	0	0	.4	0	0	0	0	.1
11 TO 20	2		11	0	1	9	1	0	5	1	2	1	1	11
			1.5	0	1.4	1.4	.7	0	2.0	.5	1.1	.6	.5	1.1
21 TO 30	3		9	3	1	11	0	0	3	2	2	0	2	12
			1.2	1.2	1.4	1.7	0	0	1.2	1.0	1.1	0	1.0	1.2
31 TO 40	4		8	1	1	7	0	1	4	2	1	1	1	9
			1.1	.4	1.4	1.1	0	.8	1.6	1.0	.5	.6	.5	.9
41 TO 50	5		19	3	1	17	3	1	9	4	5	0	4	22
			2.6	1.2	1.4	2.6	2.2	.8	3.6	2.1	2.7	0	2.0	2.2
51 TO 60	6		3	2	1	3	1	0	4	0	0	0	2	5
			.4	.8	1.4	.5	.7	0	1.6	0	0	0	1.0	.5
61 TO 70	7		12	1	0	10	1	2	4	5	0	1	2	13
			1.6	.4	0	1.5	.7	1.6	1.6	2.6	0	.6	1.0	1.3
71 TO 80	8		10	0	1	8	1	0	4	2	1	2	2	10
			1.4	0	1.4	1.2	.7	0	1.6	1.0	.5	1.2	1.0	1.0
81 TO 90	9		8	0	2	5	1	0	1	2	2	2	3	8
			1.1	0	2.7	.8	.7	0	.4	1.0	1.1	1.2	1.5	.8
91 TO 99	10		1	0	0	1	0	0	0	0	0	0	0	1
			.1	0	0	.2	0	0	0	0	0	0	0	.1
100	11		277	45	45	210	44	23	56	57	67	119	45	322
			37.7	18.4	60.8	32.2	32.8	18.3	22.1	29.5	36.2	70.4	22.6	32.7
COLUMN TOTAL			735	245	74	652	134	126	253	193	185	169	199	986
			74.5	24.8	7.5	66.1	13.6	12.8	25.7	19.6	18.8	17.1	20.2	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

PISWIN PERCENT OF SMALL WINDOWS WITH STORMS

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

PISWIN	COUNT COL PCT	1800 TO 11199 SF	1200 TO 1999 SF	1600 TO 1999 SF	2000 SF OR MORE	ELECTRIC ITY	NATURAL GAS	FUEL OIL IMFUEL3	WOOD IMFUEL4	ROW TOTAL
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
0	0	174	113	71	71	198	146	120	89	572
		60.4	47.1	54.2	59.2	53.5	61.6	60.9	57.4	58.0
1 TO 10	1	0	0	1	0	0	0	1	0	1
		0	0	.8	0	0	0	.5	0	.1
11 TO 20	2	4	3	1	2	4	3	3	1	11
		1.4	1.2	.8	1.7	1.1	1.3	1.5	.6	1.1
21 TO 30	3	3	3	2	2	2	2	4	4	12
		1.0	1.2	1.5	1.7	.5	.8	2.0	2.6	1.2
31 TO 40	4	3	1	1	3	2	1	5	1	9
		1.0	.4	.8	2.5	.5	.4	2.5	.6	.9
41 TO 50	5	6	6	2	4	7	7	4	3	22
		2.1	2.5	1.5	3.3	1.9	3.0	2.0	1.9	2.2
51 TO 60	6	1	0	1	1	0	1	2	1	5
		.3	0	.8	.8	0	.4	1.0	.6	.5
61 TO 70	7	2	7	1	1	5	2	4	2	13
		.7	2.9	.8	.8	1.4	.8	2.0	1.3	1.3
71 TO 80	8	2	3	3	0	1	3	3	3	10
		.7	1.2	2.3	0	.3	1.3	1.5	1.9	1.0
81 TO 90	9	0	2	1	2	2	2	2	2	8
		0	.8	.8	1.7	.5	.8	1.0	1.3	.8
91 TO 99	10	0	0	0	1	1	0	0	0	1
		0	0	0	.8	.3	0	0	0	.1
100	11	93	102	47	33	148	70	49	49	322
		32.3	42.5	35.9	27.5	40.0	29.5	24.9	31.6	32.7
COLUMN TOTAL		288	240	131	120	370	237	197	155	986
		29.2	24.3	13.3	12.2	37.5	24.0	20.0	15.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

986 VALID CASES

179 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

PISMWIN PERCENT OF SMALL WINDOWS WITH STORMS

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE													
	COL	PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P	AVERAGE	AVERAGE	FORM												
			I	I	I	I	I	KWH	KWH	KWH			TOTAL												
			IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATE5	IYRKWH1	IYRKWH2	IYRKWH3	I											
PISMWIN			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----											
0	0	I	115	I	141	I	70	I	61	I	92	I	45	I	71	I	456	I	83	I	108	I	98	I	572
		I	70.6	I	63.8	I	50.4	I	50.8	I	49.5	I	69.2	I	61.7	I	56.6	I	64.3	I	56.8	I	59.8	I	58.0
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
1 TO 10	1	I	0	I	0	I	1	I	0	I	0	I	0	I	0	I	1	I	0	I	0	I	0	I	1
		I	0	I	0	I	0	I	.8	I	0	I	0	I	0	I	.1	I	0	I	0	I	0	I	.1
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
11 TO 20	2	I	2	I	3	I	0	I	0	I	3	I	2	I	1	I	8	I	2	I	2	I	4	I	11
		I	1.2	I	1.4	I	0	I	0	I	1.6	I	3.1	I	.9	I	1.0	I	1.6	I	1.1	I	2.4	I	1.1
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
21 TO 30	3	I	4	I	2	I	2	I	2	I	2	I	0	I	2	I	10	I	2	I	4	I	2	I	12
		I	2.5	I	.9	I	1.4	I	1.7	I	1.1	I	0	I	1.7	I	1.2	I	1.6	I	2.1	I	1.2	I	1.2
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
31 TO 40	4	I	1	I	3	I	1	I	1	I	2	I	0	I	0	I	9	I	0	I	3	I	1	I	9
		I	.6	I	1.4	I	.7	I	.8	I	1.1	I	0	I	0	I	1.1	I	0	I	1.6	I	.6	I	.9
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
41 TO 50	5	I	5	I	4	I	3	I	3	I	2	I	1	I	2	I	19	I	4	I	7	I	4	I	22
		I	3.1	I	1.8	I	2.2	I	2.5	I	1.1	I	1.5	I	1.7	I	2.4	I	3.1	I	3.7	I	2.4	I	2.2
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
51 TO 60	6	I	0	I	3	I	0	I	0	I	2	I	0	I	0	I	5	I	0	I	2	I	0	I	5
		I	0	I	1.4	I	0	I	0	I	1.1	I	0	I	0	I	.6	I	0	I	1.1	I	0	I	.5
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
61 TO 70	7	I	2	I	1	I	2	I	2	I	3	I	1	I	3	I	9	I	3	I	2	I	0	I	13
		I	1.2	I	.9	I	1.4	I	1.7	I	1.6	I	1.5	I	2.6	I	1.1	I	2.3	I	1.1	I	0	I	1.3
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
71 TO 80	8	I	1	I	3	I	2	I	0	I	1	I	1	I	1	I	8	I	0	I	7	I	2	I	10
		I	.6	I	1.4	I	1.4	I	0	I	.5	I	1.5	I	.9	I	1.0	I	0	I	3.7	I	1.2	I	1.0
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
81 TO 90	9	I	1	I	1	I	1	I	2	I	2	I	2	I	1	I	5	I	0	I	3	I	1	I	6
		I	.6	I	.9	I	.7	I	1.7	I	1.1	I	3.1	I	.9	I	.6	I	0	I	1.6	I	.6	I	.8
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
91 TO 99	10	I	0	I	0	I	0	I	1	I	0	I	0	I	0	I	1	I	0	I	0	I	0	I	1
		I	0	I	0	I	0	I	.8	I	0	I	0	I	0	I	.1	I	0	I	0	I	0	I	.1
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
100	11	I	32	I	60	I	58	I	47	I	77	I	13	I	34	I	275	I	35	I	52	I	52	I	322
		I	19.6	I	27.1	I	41.7	I	39.2	I	41.4	I	20.0	I	29.6	I	34.1	I	27.1	I	27.4	I	31.7	I	32.7
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
COLUMN TOTAL			163		221		139		120		186		65		115		806		129		190		164		986
			16.5		22.4		14.1		12.2		18.9		6.6		11.7		81.7		13.1		19.3		16.6		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

PISMWIN PERCENT OF SMALL WINDOWS WITH STORMS

BY BANNER2 (TABULATING 1) INCOME * FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT COL	HIGH PCT	LOW	BELOW AVERAGE	ABOVE AVERAGE	HIGH	ROW TOTAL
		IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	
PISMWIN	0	I 72 I I 48.6 I	I 44 I I 61.1 I	I 29 I I 48.3 I	I 31 I I 73.8 I	I 13 I I 72.2 I	572 58.0
1 TO 10	1	I 1 I I .7 I	I 0 I I 0 I	I 0 I I 0 I	I 0 I I 0 I	I 0 I I 0 I	1 .1
11 TO 20	2	I 1 I I .7 I	I 1 I I 1.4 I	I 1 I I 1.7 I	I 0 I I 0 I	I 0 I I 0 I	11 1.1
21 TO 30	3	I 1 I I .7 I	I 1 I I 1.4 I	I 1 I I 1.7 I	I 0 I I 0 I	I 0 I I 0 I	12 1.2
31 TO 40	4	I 1 I I .7 I	I 1 I I 1.4 I	I 0 I I 0 I	I 0 I I 0 I	I 0 I I 0 I	9 .9
41 TO 50	5	I 2 I I 1.4 I	I 4 I I 5.6 I	I 0 I I 0 I	I 1 I I 2.4 I	I 1 I I 5.6 I	22 2.2
51 TO 60	6	I 1 I I .7 I	I 0 I I 0 I	I 0 I I 0 I	I 0 I I 0 I	I 1 I I 5.6 I	5 .5
61 TO 70	7	I 3 I I 2.0 I	I 2 I I 2.8 I	I 0 I I 0 I	I 0 I I 0 I	I 0 I I 0 I	13 1.3
71 TO 80	8	I 1 I I .7 I	I 2 I I 2.8 I	I 0 I I 0 I	I 0 I I 0 I	I 0 I I 0 I	10 1.0
81 TO 90	9	I 2 I I 1.4 I	I 0 I I 0 I	I 0 I I 0 I	I 1 I I 2.4 I	I 0 I I 0 I	8 .8
91 TO 99	10	I 1 I I .7 I	I 0 I I 0 I	I 0 I I 0 I	I 0 I I 0 I	I 0 I I 0 I	1 .1
100	11	I 62 I I 41.9 I	I 17 I I 23.6 I	I 29 I I 48.3 I	I 9 I I 21.4 I	I 3 I I 16.7 I	322 32.7
	COLUMN TOTAL	148 15.0	72 7.3	60 6.1	42 4.3	18 1.8	986 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

986 VALID CASES

179 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

WINDINS Q12-NUMBER OF WINDOWS WITH INSULATION

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	IOWN	PENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF		ROW
	COL	PCT	IDWELLING	DWELLING	HOME	DETACHED	ATTACHED	FAMILY	1964	1974	1979	OR LESS		TOTAL
			IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPAC1	I
WINDINS														
	1		I 191	I 88	I 7	I 177	I 52	I 46	I 61	I 69	I 75	I 22	I 47	I 282
NONE			I 40.0	I 70.4	I 23.3	I 43.1	I 51.0	I 73.0	I 48.8	I 51.9	I 52.1	I 17.7	I 68.1	I 46.5
	2		I 287	I 37	I 23	I 234	I 50	I 17	I 64	I 64	I 69	I 102	I 22	I 324
SOME			I 60.0	I 29.6	I 76.7	I 56.9	I 49.0	I 27.0	I 51.2	I 48.1	I 47.9	I 82.3	I 31.9	I 53.5

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFICA (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

WINDINS Q12=NUMBER OF WINDOWS WITH INSULATION

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD	
	COL PCT	1199 SF	1599 SF	1999 SF	OR MORE	ITY	GAS			ROW
		ISPACE2	ISPACE3	ISPACE4	ISPACES	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	TOTAL
WINDINS		-----	-----	-----	-----	-----	-----	-----	-----	
NONE	1	I 86 I	I 67 I	I 39 I	I 40 I	I 111 I	I 78 I	I 46 I	I 41 I	282
		I 50.6 I	I 40.6 I	I 37.9 I	I 43.5 I	I 47.2 I	I 52.3 I	I 42.6 I	I 39.4 I	46.5
		-----	-----	-----	-----	-----	-----	-----	-----	
SOME	2	I 84 I	I 98 I	I 64 I	I 52 I	I 124 I	I 71 I	I 62 I	I 63 I	324
		I 49.4 I	I 59.4 I	I 62.1 I	I 56.5 I	I 52.8 I	I 47.7 I	I 57.4 I	I 60.6 I	53.5
		-----	-----	-----	-----	-----	-----	-----	-----	
COLUMN		170	165	103	92	235	149	108	104	606
TOTAL		28.1	27.2	17.0	15.2	38.8	24.6	17.8	17.2	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

606 VALID CASES

959 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

WINDINS Q12-NUMBER OF WINDOWS WITH INSULATION

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE	ROW												
	COL	PCT	\$17,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P	AVERAGE	AVERAGE	TOTAL												
			I	I	I	I	I	KWH	KWH	KWH	IYR KWH1	IYR KWH2	IYR KWH3	I											
			I	I	I	I	I	IRATE2	IRATE3	IRATE5	I	I	I	I											
WINDINS			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----												
	1	I	48	I	67	I	30	I	33	I	58	I	24	I	45	I	213	I	39	I	51	I	49	I	282
NONE		I	64.9	I	51.1	I	36.1	I	39.3	I	41.1	I	60.0	I	54.9	I	44.0	I	50.0	I	45.5	I	46.7	I	46.5
			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
	2	I	26	I	64	I	53	I	51	I	83	I	16	I	37	I	271	I	39	I	61	I	56	I	324
SOME		I	35.1	I	48.9	I	63.9	I	60.7	I	58.9	I	40.0	I	45.1	I	56.0	I	50.0	I	54.5	I	53.3	I	53.5
			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
	COLUMN		74		131		83		84		141		40		82		484		78		112		105		606
	TOTAL		12.2		21.6		13.7		13.9		23.3		6.6		13.5		79.9		12.9		18.5		17.3		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFICA (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

WINDINS Q12-NUMBER OF WINDOWS WITH INSULATION

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT	HIGH	LOW	BELOW	ABOVE	HIGH							
	COL	PCT	I	AVERAGE	AVERAGE		ROW						
			I				TOTAL						
			IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I					
WINDINS			-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----					
	1	I	45	I	22	I	18	I	17	I	6	I	282
NONE		I	39.5	I	52.4	I	43.9	I	53.1	I	42.9	I	46.5
		I	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----					
	2	I	69	I	20	I	23	I	15	I	8	I	324
SOME		I	60.5	I	47.6	I	56.1	I	46.9	I	57.1	I	53.5
		I	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----					
COLUMN			114		42		41		32		14		606
TOTAL			18.8		6.9		6.8		9.3		2.3		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

606 VALID CASES

559 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR025 Q13-PLASTIC COVERING ON WINDOWS, DOORS

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	OWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF		
	COL	PCT	DWELLING	DWELLING	HOME	DETACHED	ATTACHED	FAMILY				OR LESS	ROW	
			IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	TOTAL
VAR025														
ON ALL	1		47	23	2	55	6	7	21	13	7	8	12	70
			5.9	6.7	2.7	7.9	3.8	3.3	7.7	6.0	3.1	3.8	4.8	6.1
ON SOME	2		145	50	9	134	27	26	83	43	33	6	42	196
			18.3	14.6	12.0	19.1	17.1	12.4	30.5	19.9	14.7	2.9	16.7	17.2
NONE	3		601	270	64	511	125	176	168	160	185	196	197	876
			75.8	78.7	85.3	73.0	79.1	84.2	61.8	74.1	82.2	93.3	78.5	76.7
COLUMN			793	343	75	700	158	209	272	216	225	210	251	1142
TOTAL			69.4	30.0	6.6	61.3	13.8	18.3	23.8	18.9	19.7	18.4	22.0	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR025 Q13-PLASTIC COVERING ON WINDOWS, DOORS

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD		ROW
	COL PCT	11199 SF	1599 SF	1999 SF	OR MORE	ITY	GAS				TOTAL
		ISPACE2	ISPACE3	ISPACE4	ISPACES	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	I	
VAR025											
	1	I 28 I	I 18 I	I 6 I	I 5 I	I 21 I	I 25 I	I 7 I	I 15 I	I	70
ON ALL		I 8.3 I	I 7.0 I	I 4.0 I	I 3.8 I	I 4.4 I	I 9.7 I	I 3.4 I	I 8.9 I	I	6.1
	2	I 58 I	I 41 I	I 23 I	I 29 I	I 55 I	I 59 I	I 44 I	I 35 I	I	196
ON SOME		I 17.2 I	I 15.9 I	I 15.3 I	I 22.0 I	I 11.5 I	I 22.9 I	I 21.2 I	I 20.8 I	I	17.2
	3	I 252 I	I 199 I	I 121 I	I 98 I	I 402 I	I 174 I	I 157 I	I 118 I	I	876
NONE		I 74.6 I	I 77.1 I	I 80.7 I	I 74.2 I	I 84.1 I	I 67.4 I	I 75.5 I	I 70.2 I	I	76.7
	COLUMN	338	258	150	132	478	258	208	168		1142
	TOTAL	29.6	22.6	13.1	11.6	41.9	22.6	18.2	14.7		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1142 VALID CASES

23 MISSING CASES

PAGE 1 OF 2

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR025 Q13-PLASTIC COVERING ON WINDOWS, DOORS

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT	IMIGH	LOW	BELOW	ABOVE	HIGH		ROW
	COL	PCT	I	AVERAGE	AVERAGE			TOTAL
			I					
			IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
VAR025			-----	-----	-----	-----	-----	-----
	1	I	13	I	4	I	4	I
ON ALL		I	8.2	I	5.2	I	6.3	I
			-----	-----	-----	-----	-----	-----
	2	I	24	I	19	I	11	I
ON SOME		I	15.1	I	24.7	I	17.2	I
			-----	-----	-----	-----	-----	-----
	3	I	122	I	54	I	49	I
NONE		I	76.7	I	70.1	I	76.6	I
			-----	-----	-----	-----	-----	-----
	COLUMN		159		77		64	
	TOTAL		13.9		6.7		5.6	
							4.1	
							1.8	
								1142
								100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1142 VALID CASES

23 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR026 Q13-WEATHERSTRIPPING ON WINDOWS, DOORS

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	IOWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF	ROW												
	COL	PCT	IDWELLING	DWELLING	HOME	DETACHED	ATTACHED	FAMILY	1964	1974	1979	OR LESS	TOTAL												
			IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACEL	I											
VAR026																									
ON ALL	1	I	363	I	80	I	41	I	269	I	75	I	61	I	74	I	100	I	108	I	113	I	67	I	446
		I	46.2	I	24.5	I	55.4	I	39.2	I	47.8	I	30.7	I	27.5	I	46.1	I	49.5	I	55.4	I	27.6	I	39.9
ON SOME	2	I	233	I	85	I	13	I	220	I	41	I	45	I	105	I	66	I	47	I	43	I	63	I	319
		I	29.6	I	26.1	I	17.6	I	32.0	I	26.1	I	22.6	I	39.0	I	30.4	I	21.6	I	21.1	I	25.9	I	28.6
NONE	3	I	190	I	161	I	20	I	198	I	41	I	93	I	90	I	51	I	63	I	48	I	113	I	352
		I	24.2	I	49.4	I	27.0	I	28.8	I	26.1	I	46.7	I	33.5	I	23.5	I	28.9	I	23.5	I	46.5	I	31.5
COLUMN			786		326		74		687		157		199		269		217		218		204		243		1117
TOTAL			70.4		29.2		6.6		61.5		14.1		17.8		24.1		19.4		19.5		18.3		21.8		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

PAGE 2 OF 2

COUNT COL PCT	1800 TO 1199 SF	1200 TO 1599 SF	1600 TO 1999 SF	2000 SF OR MORE	ELECTRIC ITY	NATURAL GAS	FUEL OIL	WOOD	ROW TOTAL
	ISPACE2	ISPACE3	ISPACE4	ISPACE5	INFUEL1	INFUEL2	INFUEL3	INFUEL4	
1	121	116	67	71	213	104	65	57	446
	36.8	45.7	46.2	53.0	45.8	40.8	31.7	35.2	39.9
2	94	78	48	33	108	73	77	53	319
	28.6	30.7	33.1	24.6	23.2	28.6	37.6	32.7	28.6
3	114	60	30	30	144	78	63	52	352
	34.7	23.6	20.7	22.4	31.0	30.6	30.7	32.1	31.5
COLUMN TOTAL	329	254	145	134	465	255	205	162	1117
	29.5	22.7	13.0	12.0	41.6	22.8	18.4	14.5	100.0

40 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR026 Q13-WEATHERSTRIPPING ON WINDOWS, DOORS
BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	\$0 TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE	ROW
	COL PCT	\$17,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	TOTAL
		I	I	I	I	I	KWH	KWH	KWH	IYRKWH1	IYRKWH2	IYRKWH3	I
VAR026		I	I	I	I	I	I	I	I	I	I	I	I
ON ALL	1	I 46 I	I 88 I	I 65 I	I 54 I	I 104 I	I 26 I	I 60 I	I 360 I	I 51 I	I 84 I	I 68 I	446
		I 23.6 I	I 35.1 I	I 41.4 I	I 42.5 I	I 50.7 I	I 33.8 I	I 50.0 I	I 39.1 I	I 33.8 I	I 40.2 I	I 38.6 I	39.9
ON SOME	2	I 61 I	I 79 I	I 49 I	I 38 I	I 52 I	I 31 I	I 25 I	I 263 I	I 52 I	I 68 I	I 55 I	319
		I 31.3 I	I 31.5 I	I 31.2 I	I 29.9 I	I 25.4 I	I 40.3 I	I 20.8 I	I 28.6 I	I 34.4 I	I 32.5 I	I 31.3 I	28.6
NONE	3	I 88 I	I 84 I	I 43 I	I 35 I	I 49 I	I 20 I	I 35 I	I 297 I	I 48 I	I 57 I	I 53 I	352
		I 45.1 I	I 33.5 I	I 27.4 I	I 27.6 I	I 23.9 I	I 26.0 I	I 29.2 I	I 32.3 I	I 31.8 I	I 27.3 I	I 30.1 I	31.5
COLUMN		195	251	157	127	205	77	120	920	151	209	176	1117
TOTAL		17.5	22.5	14.1	11.4	18.4	6.9	10.7	82.4	13.5	18.7	15.8	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR026 Q13-WEATHERSTRIPPING ON WINDOWS, DOORS
BY BANNER2 (TABULATING 1) INCOME FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT	HIGH	LOW	BELOW	ABOVE	HIGH	
	COL PCT	I	I	AVERAGE	AVERAGE	I	ROW TOTAL
		IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
VAR026		I	I	I	I	I	I
	1	84	26	36	21	10	446
ON ALL		53.5	33.8	56.3	47.7	50.0	39.9
	2	38	24	16	11	6	319
ON SOME		24.2	31.2	25.0	25.0	30.0	28.6
	3	39	27	12	12	4	352
NONE		22.3	35.1	18.8	27.3	20.0	31.5
		I	I	I	I	I	I
	COLUMN	157	77	64	44	20	1117
	TOTAL	14.1	6.9	5.7	3.9	1.8	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1117 VALID CASES

48 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR027 Q13-CAULKING AROUND WINDOWS, DOORS

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT COL	TOWN PCT	RENT DWELLING	MOBILE DWELLING	SIN FAM DETACHED	SIN FAM ATTACHED	MULTI- FAMILY	PRE 1950	1950 TO 1964	1965 TO 1974	1975 TO 1979	799 SF OR LESS	ROW TOTAL
			IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1
VAR027	1		357	92	26	297	67	63	91	103	91	111	73
ON ALL			48.3	31.4	37.7	46.1	45.9	35.2	35.4	50.5	46.4	58.7	32.9
	2		109	23	5	96	15	16	51	29	19	12	21
ON SOME			14.7	7.8	7.2	14.9	10.3	8.9	19.8	14.2	9.7	6.3	9.5
	3		273	178	38	251	64	100	115	72	86	66	128
NONE			36.9	60.8	55.1	39.0	43.8	55.9	44.7	35.3	43.9	34.9	57.7
			739	293	69	644	146	179	257	204	196	189	222
COLUMN TOTAL			71.2	28.2	6.6	62.0	14.1	17.2	24.8	19.7	18.9	18.2	21.4
													1038
													100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFICA (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR027 Q13-CAULKING AROUND WINDOWS, DOORS

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD	
	COL PCT	1199 SF	1999 SF	1999 SF	OR MORE	ITY	GAS			RCW
										TOTAL
VAR027		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
	1	125	109	81	63	196	107	84	57	453
ON ALL		41.4	46.4	57.0	50.0	46.0	45.0	43.3	38.0	43.6
	2	35	36	16	21	39	32	35	20	132
ON SOME		11.6	15.3	11.3	16.7	9.2	13.4	18.0	13.3	12.7
	3	142	90	45	42	191	99	75	73	453
NONE		47.0	38.3	31.7	33.3	44.8	41.6	38.7	48.7	43.6
	COLUMN	302	235	142	126	426	238	194	150	1038
	TOTAL	29.1	22.6	13.7	12.1	41.0	22.9	18.7	14.5	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1038 VALID CASES

127 MISSING CASES

FILE PACIFICA (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR027 Q13-CAULKING AROUND WINDOWS, DOORS

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE													
	COL	PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P	AVERAGE	AVERAGE	ROW												
			I	I	I	I	I	KWH	KWH	KWH			TOTAL												
			I	I	I	I	I	IRATE2	IRATE3	IRATE5	IYRKWH1	IYRKWH2	IYRKWH3	I											
VAR027			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----											
	1	I	44	I	87	I	77	I	58	I	102	I	24	I	56	I	373	I	51	I	87	I	72	I	453
ON ALL		I	24.9	I	38.2	I	50.7	I	49.6	I	51.8	I	33.8	I	49.1	I	43.7	I	36.7	I	44.2	I	43.4	I	43.6
		I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----
	2	I	26	I	33	I	14	I	15	I	26	I	12	I	13	I	107	I	20	I	22	I	30	I	132
ON SOME		I	14.7	I	14.5	I	9.2	I	12.8	I	13.2	I	16.9	I	11.4	I	12.5	I	14.4	I	11.2	I	18.1	I	12.7
		I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----
	3	I	107	I	108	I	61	I	44	I	69	I	35	I	45	I	373	I	68	I	88	I	64	I	453
NONE		I	60.5	I	47.4	I	40.1	I	37.6	I	35.0	I	49.3	I	39.5	I	43.7	I	48.9	I	44.7	I	38.6	I	43.6
		I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----
	COLUMN		177		228		152		117		197		71		114		853		139		197		166		1038
	TOTAL		17.1		22.0		14.6		11.3		19.0		6.8		11.0		82.2		13.4		19.0		16.0		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR027 013-CAULKING AROUND WINDOWS, DOORS

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT COL	HIGH PCT	LOW	BELOW AVERAGE	ABOVE AVERAGE	HIGH	ROW TOTAL
		I	I	I	I	I	
		IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
VAR027		-----I-----I-----I-----I-----I-----I-----I					
ON ALL	1	I 81 I	I 23 I	I 34 I	I 24 I	I 10 I	I 453
		I 53.6 I	I 31.9 I	I 57.6 I	I 58.5 I	I 50.0 I	I 43.6
		-----I-----I-----I-----I-----I-----I-----I					
ON SOME	2	I 17 I	I 14 I	I 6 I	I 4 I	I 3 I	I 132
		I 11.3 I	I 19.2 I	I 10.2 I	I 9.8 I	I 15.0 I	I 12.7
		-----I-----I-----I-----I-----I-----I-----I					
NONE	3	I 53 I	I 36 I	I 19 I	I 13 I	I 7 I	I 453
		I 35.1 I	I 49.3 I	I 32.2 I	I 31.7 I	I 35.0 I	I 43.6
		-----I-----I-----I-----I-----I-----I-----I					
COLUMN TOTAL		151	73	59	41	20	1038
		14.5	7.0	5.7	3.9	1.9	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1038 VALID CASES

127 MISSING CASES

FILE PACIFIC4 (CREATION DATE - 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR029 Q15-TYPE OF FUEL FOR MAIN HEATING SYSTEM
BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT COL	IOWN PCT	RENT DWELLING	MOBILE HOME	SIN FAM DETACHED	SIN FAM ATTACHED	MULTI- FAMILY	PRE 1950	1950 TO 1964	1965 TO 1974	1975 TO 1979	799 SF OR LESS	ROW TOTAL
		IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	
VAR029	1	1	0	0	1	0	0	0	1	0	0	0	1
NO HEATING FUEL		.1	0	0	.1	0	0	0	.5	0	0	0	.1
NATURAL GAS	2	197	64	5	217	22	17	70	49	57	31	43	261
		24.3	18.6	6.3	30.3	13.8	8.2	25.5	22.2	25.0	14.2	16.9	22.4
BOTTLED GAS	3	8	6	3	7	3	1	2	1	4	4	4	14
		1.0	1.7	3.8	1.0	1.9	.5	.7	.5	1.8	1.8	1.6	1.2
FUEL OIL	4	177	34	4	186	13	11	110	55	10	2	37	214
		21.8	9.9	5.1	25.9	8.2	5.3	40.1	24.9	4.4	.9	14.6	18.4
ELECTRICITY	5	282	205	51	178	92	169	43	77	121	154	143	490
		34.7	59.4	64.6	24.8	57.9	81.3	15.7	34.8	53.1	70.3	56.3	42.1
KEROSENE	6	1	1	0	0	1	1	1	1	0	0	1	2
		.1	.3	0	0	.6	.5	.4	.5	0	0	.4	.2
COAL-COKE	7	1	0	0	1	0	0	1	0	0	0	0	1
		.1	0	0	.1	0	0	.4	0	0	0	0	.1
WOOD	8	140	29	16	125	24	4	43	33	35	28	23	169
		17.2	8.4	20.3	17.4	15.1	1.9	15.7	14.9	15.4	12.8	9.1	14.5
SOLAR COLLECTORS	9	0	1	0	1	0	0	1	0	0	0	0	1
		0	.3	0	.1	0	0	.4	0	0	0	0	.1
GEOTHERMAL	10	5	4	0	1	4	4	2	4	1	0	2	9
		.6	1.2	0	.1	2.5	1.9	.7	1.8	.4	0	.8	.8
OTHER HEATING FUEL	11	0	1	0	0	0	1	1	0	0	0	1	1
		0	.3	0	0	0	.5	.4	0	0	0	.4	.1
COLUMN TOTAL		812	349	79	717	159	208	274	221	228	219	254	1163
		69.8	29.7	6.8	61.7	13.7	17.9	23.6	19.0	19.6	18.8	21.8	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR029 Q15-TYPE OF FUEL FOR MAIN HEATING SYSTEM

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD	
	COL PCT	11199 SF	1599 SF	1999 SF	OR MORE	ITY	GAS			ROW
		ISPAC2	ISPAC3	ISPAC4	ISPACES	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	TOTAL
VAR029										
1		0	1	0	0	0	0	0	0	1
NO HEATING FUEL		0	.4	0	0	0	0	0	0	.1
2		69	70	39	39	0	261	0	0	261
NATURAL GAS		20.1	26.5	25.5	28.7	0	100.0	0	0	22.4
3		5	4	1	0	0	0	0	0	14
BOTTLED GAS		1.5	1.9	.7	0	0	0	0	0	1.2
4		49	47	26	49	0	0	214	0	214
FUEL OIL		14.3	17.8	17.0	36.0	0	0	100.0	0	18.4
5		168	92	52	31	490	0	0	0	490
ELECTRICITY		49.0	34.8	34.0	22.8	100.0	0	0	0	42.1
6		1	0	0	0	0	0	0	0	2
KEROSENE		.3	0	0	0	0	0	0	0	.2
7		0	0	0	1	0	0	0	0	1
COAL-COKE		0	0	0	.7	0	0	0	0	.1
8		47	49	34	14	0	0	0	169	169
WOOD		13.7	18.6	22.2	10.3	0	0	0	100.0	14.5
9		1	0	0	0	0	0	0	0	1
SOLAR COLLECTORS		.3	0	0	0	0	0	0	0	.1
10		3	1	1	2	0	0	0	0	9
GEOTHERMAL		.9	.4	.7	1.5	0	0	0	0	.8
11		0	0	0	0	0	0	0	0	1
OTHER HEAT'G FUEL		0	0	0	0	0	0	0	0	.1
COLUMN		343	264	153	136	490	261	214	169	1163
TOTAL		29.9	22.7	13.2	11.7	42.1	22.4	18.4	14.5	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1163 VALID CASES

2 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR029 Q15-TYPE OF FUEL FOR MAIN HEATING SYSTEM

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	140 TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE	
	COL	PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P	AVERAGE	AVERAGE	KWH
			I	I	I	I	I	KWH	KWH	KWH	I	I	I
			I	I	I	I	I	IRATE2	IRATE3	IRATE5	IYRKWH1	IYRKWH2	IYRKWH3
VAR029			I	I	I	I	I	I	I	I	I	I	I
NO HEATING FUEL	1		0	0	0	0	1	0	0	1	0	1	0
			0	0	0	0	.5	0	0	.1	0	.5	0
			I	I	I	I	I	I	I	I	I	I	I
NATURAL GAS	2		47	49	31	31	55	7	7	247	78	71	32
			23.5	18.4	18.9	23.1	26.1	9.2	5.6	25.7	50.6	32.9	17.4
			I	I	I	I	I	I	I	I	I	I	I
BOTTLED GAS	3		3	4	3	2	1	1	2	11	5	3	0
			1.5	1.5	1.8	1.5	.5	1.3	1.6	1.1	3.2	1.4	0
			I	I	I	I	I	I	I	I	I	I	I
FUEL OIL	4		42	34	25	24	48	5	12	197	25	67	38
			21.0	12.8	15.2	17.9	22.7	6.6	9.6	20.5	16.2	31.0	20.7
			I	I	I	I	I	I	I	I	I	I	I
ELECTRICITY	5		85	132	74	47	74	53	77	360	19	42	73
			42.5	49.6	45.1	35.1	35.1	69.7	61.6	37.4	12.3	19.4	39.7
			I	I	I	I	I	I	I	I	I	I	I
KEROSENE	6		0	1	0	0	1	1	0	1	0	0	1
			0	.4	0	0	.5	1.3	0	.1	0	0	.5
			I	I	I	I	I	I	I	I	I	I	I
COAL-COKE	7		0	0	0	1	0	0	0	1	0	0	0
			0	0	0	.7	0	0	0	.1	0	0	0
			I	I	I	I	I	I	I	I	I	I	I
WOOD	8		18	45	30	29	29	9	26	134	23	32	38
			9.0	16.9	18.3	21.6	13.7	11.8	20.8	13.9	14.9	14.8	20.7
			I	I	I	I	I	I	I	I	I	I	I
SOLAR COLLECTORS	9		0	0	1	0	0	0	1	0	0	0	0
			0	0	.6	0	0	0	.8	0	0	0	0
			I	I	I	I	I	I	I	I	I	I	I
GEOTHERMAL	10		5	0	0	0	2	0	0	9	4	0	2
			2.5	0	0	0	.9	0	0	.9	2.6	0	1.1
			I	I	I	I	I	I	I	I	I	I	I
OTHER HEAT'G FUEL	11		0	1	0	0	0	0	0	1	0	0	0
			0	.4	0	0	0	0	0	.1	0	0	0
			I	I	I	I	I	I	I	I	I	I	I
COLUMN			200	266	164	134	211	76	125	962	154	216	184
TOTAL			17.2	22.9	14.1	11.5	18.1	6.5	10.7	82.7	13.2	18.6	15.8
													1163
													100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR029 Q15-TYPE OF FUEL FOR MAIN HEATING SYSTEM

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT COL PCT	HIGH I	LOW I	BELOW AVERAGE I	ABOVE AVERAGE I	HIGH I	ROW TOTAL
		IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
VAR029		-----	-----	-----	-----	-----	-----
1		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	1
NO HEATING FUEL		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	.1
2		I 3 I	I 65 I	I 51 I	I 43 I	I 19 I	261
NATURAL GAS		I 1.8 I	I 83.3 I	I 78.5 I	I 91.5 I	I 95.0 I	22.4
3		I 1 I	I 2 I	I 2 I	I 0 I	I 0 I	14
BOTTLED GAS		I .6 I	I 2.6 I	I 3.1 I	I 0 I	I 0 I	1.2
4		I 11 I	I 1 I	I 0 I	I 0 I	I 0 I	214
FUEL OIL		I 6.7 I	I 1.3 I	I 0 I	I 0 I	I 0 I	18.4
5		I 126 I	I 3 I	I 3 I	I 1 I	I 0 I	490
ELECTRICITY		I 76.4 I	I 3.8 I	I 4.6 I	I 2.1 I	I 0 I	42.1
6		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	2
KEROSENE		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	.2
7		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	1
COAL-COKE		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	.1
8		I 24 I	I 7 I	I 9 I	I 3 I	I 0 I	169
WOOD		I 14.5 I	I 9.0 I	I 13.8 I	I 6.4 I	I 0 I	14.5
9		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	1
SOLAR COLLECTORS		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	.1
10		I 0 I	I 0 I	I 0 I	I 0 I	I 1 I	9
GEOTHERMAL		I 0 I	I 0 I	I 0 I	I 0 I	I 5.0 I	.8
11		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	1
OTHER HEAT'G FUEL		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	.1
COLUMN TOTAL		165 14.2	78 6.7	65 5.6	47 4.0	20 1.7	1163 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1163 VALID CASES

2 MISSING CASES

* * * * * PAGE 1 OF 2

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR033 Q19-TYPE OF MAIN HEATING SYSTEM

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD		ROW
	COL PCT	11199 SF	1599 SF	1999 SF	OR MORE	ITY	GAS				TOTAL
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	I	
VAR033											
ELEC HEAT PUMP	1	I 5 I	I 8 I	I 4 I	I 5 I	I 22 I	I 0 I	I 1 I	I 0 I	I	23
		I 1.5 I	I 3.0 I	I 2.6 I	I 3.7 I	I 4.5 I	I 0 I	I .5 I	I 0 I	I	2.0
FURNACE W DUCTS	2	I 116 I	I 118 I	I 77 I	I 81 I	I 93 I	I 188 I	I 150 I	I .6 I	I	442
		I 33.8 I	I 44.9 I	I 50.3 I	I 59.6 I	I 19.0 I	I 72.0 I	I 70.1 I	I 3.6 I	I	38.0
STEAM W RADIATOR	3	I 5 I	I 2 I	I 4 I	I 9 I	I 1 I	I 2 I	I 16 I	I 0 I	I	30
		I 1.5 I	I .8 I	I 2.6 I	I 6.6 I	I .2 I	I .8 I	I 7.5 I	I 0 I	I	2.6
RADIANT HEATING	4	I 0 I	I 1 I	I 0 I	I 0 I	I 1 I	I 0 I	I 1 I	I 0 I	I	2
		I 0 I	I .4 I	I 0 I	I 0 I	I .2 I	I 0 I	I .5 I	I 0 I	I	.2
PIPELESS FURNACE	5	I 16 I	I 3 I	I 4 I	I 1 I	I 6 I	I 21 I	I 11 I	I 0 I	I	40
		I 4.7 I	I 1.1 I	I 2.6 I	I .7 I	I 1.2 I	I 8.0 I	I 5.1 I	I 0 I	I	3.4
BLT-IN ELEC UNIT	6	I 123 I	I 63 I	I 28 I	I 24 I	I 353 I	I 1 I	I 0 I	I 0 I	I	355
		I 35.9 I	I 24.0 I	I 18.3 I	I 17.6 I	I 72.0 I	I .4 I	I 0 I	I 0 I	I	30.5
RM HTR W VENT	7	I 21 I	I 16 I	I 4 I	I 2 I	I 0 I	I 39 I	I 27 I	I 1 I	I	72
		I 6.1 I	I 6.1 I	I 2.6 I	I 1.5 I	I 0 I	I 14.9 I	I 12.6 I	I .6 I	I	6.2
RM HTR W-O VENT	8	I 6 I	I 2 I	I 0 I	I 1 I	I 0 I	I 10 I	I 4 I	I 0 I	I	18
		I 1.7 I	I .8 I	I 0 I	I .7 I	I 0 I	I 3.8 I	I 1.9 I	I 0 I	I	1.5
WOOD FIREPLACE	9	I 7 I	I 10 I	I 4 I	I 1 I	I 1 I	I 0 I	I 0 I	I 22 I	I	23
		I 2.0 I	I 3.8 I	I 2.6 I	I .7 I	I .2 I	I 0 I	I 0 I	I 13.0 I	I	2.0
WOOD BURN STOVE	10	I 42 I	I 39 I	I 28 I	I 12 I	I 2 I	I 0 I	I 3 I	I 140 I	I	146
		I 12.2 I	I 14.8 I	I 18.3 I	I 8.8 I	I .4 I	I 0 I	I 1.4 I	I 82.8 I	I	12.6
PORTABLE HEATER	11	I 2 I	I 0 I	I 0 I	I 0 I	I 11 I	I 0 I	I 0 I	I 0 I	I	11
		I .6 I	I 0 I	I 0 I	I 0 I	I 2.2 I	I 0 I	I 0 I	I 0 I	I	.9
OTHER HEATING EQ	12	I 0 I	I 1 I	I 0 I	I 0 I	I 0 I	I 0 I	I 1 I	I 0 I	I	1
		I 0 I	I .4 I	I 0 I	I 0 I	I 0 I	I 0 I	I .5 I	I 0 I	I	.1
COLUMN TOTAL		343	263	153	136	490	261	214	169	1163	
		29.5	22.6	13.2	11.7	42.1	22.4	18.4	14.5	100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

13 VALID CASES

2 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR033 Q19-TYPE OF MAIN HEATING SYSTEM

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE		
	COL	PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	ROW
								KWH	KWH	KWH				TOTAL
			IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATE5	IYRKWH1	IYRKWH2	IYRKWH3	
VAR033	1		1	6	0	5	5	1	5	17	0	0	3	23
ELEC HEAT PUMP			.5	2.3	0	3.7	2.4	1.3	4.0	1.8	0	0	1.6	2.0
	2		56	78	63	55	114	12	22	408	74	105	81	442
FURNACE W DUCTS			27.9	29.3	38.4	41.0	54.3	15.8	17.6	42.4	48.1	48.8	44.0	38.0
	3		11	3	3	1	6	1	1	28	7	6	3	30
STEAM W RADIATOR			5.5	1.1	1.8	.7	2.9	1.3	.8	2.9	4.5	2.8	1.6	2.6
	4		0	0	0	1	0	0	0	2	0	2	0	2
RADIANT HEATING			0	0	0	.7	0	0	0	.2	0	.9	0	.2
	5		9	8	1	6	7	3	4	33	11	10	4	40
PIPELESS FURNACE			4.5	3.0	.6	4.5	3.3	3.9	3.2	3.4	7.1	4.7	2.2	3.4
	6		64	102	54	33	44	44	52	259	16	35	44	355
BLT-IN ELEC UNIT			31.8	38.3	32.9	24.6	21.0	57.9	41.6	26.9	10.4	16.3	23.9	30.5
	7		31	18	8	3	5	3	8	61	19	15	7	72
RM HTR W VENT			15.4	6.8	4.9	2.2	2.4	3.9	6.4	6.3	12.3	7.0	3.8	6.2
	8		6	4	3	0	1	2	2	14	3	5	1	18
RM HTR W-O VENT			3.0	1.5	1.8	0	.5	2.6	1.6	1.5	1.9	2.3	.5	1.5
	9		0	5	4	2	4	2	3	18	3	5	1	23
WOOD FIREPLACE			0	1.9	2.4	1.5	1.9	2.6	2.4	1.9	1.9	2.3	.5	2.0
	10		18	39	28	27	24	8	24	114	20	28	36	146
WOOD BURN STOVE			9.0	14.7	17.1	20.1	11.4	10.5	19.2	11.9	13.0	13.0	19.6	12.6
	11		5	3	0	0	0	0	4	7	1	4	3	11
PORTABLE HEATER			2.5	1.1	0	0	0	0	3.2	.7	.6	1.9	1.6	.9
	12		0	0	0	1	0	0	0	1	0	0	1	1
OTHER HEATING EQ			0	0	0	.7	0	0	0	.1	0	0	.5	.1
COLUMN			201	266	164	134	210	76	125	962	154	215	184	1163
TOTAL			17.3	22.9	14.1	11.5	18.1	6.5	10.7	82.7	13.2	18.5	15.8	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR033 Q19-TYPE OF MAIN HEATING SYSTEM

BY BANNER2 (TABULATING 1) INCOME * FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT COL PCT	THIGH I	LOW I	BELOW AVERAGE I	ABOVE AVERAGE I	HIGH I	ROW TOTAL
		IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
VAR033							
ELEC HEAT PUMP	1	7	0	2	0	0	23
		4.2	0	3.1	0	0	2.0
FURNACE W DUCTS	2	38	38	42	39	18	442
		23.0	48.7	64.6	83.0	90.0	38.0
STEAM W RADIATOR	3	3	1	1	1	1	30
		1.8	1.3	1.5	2.1	5.0	2.6
RADIANT HEATING	4	0	0	0	0	0	2
		0	0	0	0	0	.2
PIPELESS FURNACE	5	1	9	5	0	0	40
		.6	11.5	7.7	0	0	3.4
BLT-IN ELEC UNIT	6	89	2	1	1	0	355
		53.9	2.6	1.5	2.1	0	30.5
RM HTR W VENT	7	1	16	4	3	0	72
		.6	20.5	6.2	6.4	0	6.2
RM HTR W-O VENT	8	1	9	1	0	1	18
		.6	6.4	1.5	0	5.0	1.5
WOOD FIREPLACE	9	3	1	1	0	0	23
		1.8	1.3	1.5	0	0	2.0
WOOD BURN STOVE	10	22	6	8	3	0	146
		13.3	7.7	12.3	6.4	0	12.6
PORTABLE HEATER	11	0	0	0	0	0	11
		0	0	0	0	0	.9
OTHER HEATING EQ	12	0	0	0	0	0	1
		0	0	0	0	0	.1
COLUMN TOTAL		165	78	65	47	20	1163
		14.2	6.7	5.6	4.0	1.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

63 VALID CASES

2 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR036 Q22-INSULATION ON DUCTS IN UNHEATED AREA

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	IOWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF	RGW
	COL	PCT	IDWELLING	DWELLING	HOME	DETACHED	ATTACHED	FAMILY	1964	1974	1979	OR LESS	TOTAL
			IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1
VAR036													
	1	I	137	I	12	I	25	I	103	I	15	I	6
YES		I	66.2	I	44.4	I	83.3	I	59.9	I	62.5	I	75.0
	2	I	70	I	15	I	5	I	69	I	9	I	2
NO		I	33.8	I	55.6	I	16.7	I	40.1	I	37.5	I	25.0
COLUMN			207		27		30		172		24		8
TOTAL			88.5		11.5		12.8		73.5		10.3		3.4
									20.5		23.5		20.9
											26.5		7.7
													18
													234
													100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR036 Q22-INSULATION ON DUCTS IN UNHEATED AREA
BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD		ROW
	COL PCT	1199 SF	1999 SF	1999 SF	OR MORE	ITY	GAS				TOTAL
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	I	
VAR036		1	36	46	32	21	54	57	33	3	149
YES		62.1	63.0	69.6	56.8	83.1	59.4	51.6	60.0		63.7
		2	22	27	14	16	11	39	31	2	85
NO		37.9	37.0	30.4	43.2	16.9	40.6	48.4	40.0		36.3
	COLUMN	58	73	46	37	65	96	64	5		234
	TOTAL	24.8	31.2	19.7	15.8	27.8	41.0	27.4	2.1		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

234 VALID CASES

19 MISSING CASES

***** C R O S S T A B U L A T I O N *****
 VAR036 Q22-INSULATION ON DUCTS IN UNHEATED AREA
 BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC
 ***** PAGE 1 OF *****

	COUNT COL PCT	\$8,000 - \$15,000-		\$15,000- \$20,000-		\$20,000- \$25,000		13-16		17-20		25-28		LOW		BELOW		ABOVE		ROW TOTAL
		17,999	14,999	19,999	24,999	OR MORE	MILLS P KWH	MILLS P KWH	MILLS P KWH					AVERAGE	AVERAGE					
		I INCOME1	I INCOME2	I INCOME3	I INCOME4	I INCOME5	I RATE2	I RATE3	I RATE5	I YRKWH1	I YRKWH2	I YRKWH3	I							
VAR036		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----				
YES	1	I 12 I 31 I 22 I 19 I 44 I 4 I 9 I 136 I 30 I 23 I 25 I 149																		
		I 50.0 I 79.5 I 71.0 I 55.9 I 62.9 I 57.1 I 81.8 I 63.0 I 68.2 I 50.0 I 61.0 I 63.7																		
		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----				
NO	2	I 12 I 8 I 9 I 15 I 26 I 3 I 2 I 80 I 14 I 23 I 16 I 85																		
		I 90.0 I 20.9 I 29.0 I 44.1 I 37.1 I 42.9 I 18.2 I 37.0 I 31.8 I 50.0 I 39.0 I 36.3																		
		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----				
	COLUMN	24	39	31	34	70	7	11	216	44	46	41	234							
	TOTAL	10.3	16.7	13.2	14.5	29.9	3.0	4.7	92.3	18.8	19.7	17.5	100.0							

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR036 Q22-INSULATION ON DUCTS IN UNHEATED AREA

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT	HIGH	LOW	BELOW	ABOVE	HIGH							
	COL	PCT	I	AVERAGE	AVERAGE		ROW						
			I				TOTAL						
			IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I					
VAR036			-----	-----	-----	-----	-----	-----					
	1	I	29	I	7	I	19	I	13	I	4	I	149
YES		I	90.6	I	53.8	I	70.4	I	65.0	I	40.0	I	63.7
			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	2	I	3	I	6	I	8	I	7	I	6	I	85
NO		I	9.4	I	46.2	I	29.6	I	35.0	I	60.0	I	36.3
			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	COLUMN		32		13		27		20		10		234
	TOTAL		13.7		5.6		11.5		8.5		4.3		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

234 VALID CASES

19 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR045 Q28-TEMPERATURE OF HOUSE DURING DAY

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	IOWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	749 SF		ROW											
	COL	PCT	IDWELLING	DWELLING	HOME	DETACHED	ATTACHED	FAMILY	1964	1974	1979	OR LESS		TOTAL											
			I	I	I	I	I	I	I	I	I	I	I												
VAR045			IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	I											
	0	I	8	I	11	I	2	I	7	I	0	I	10	I	3	I	3	I	3	I	4	I	7	I	19
TURNED OFF		I	1.0	I	3.3	I	2.6	I	1.0	I	0	I	4.9	I	1.1	I	1.4	I	1.3	I	1.8	I	2.9	I	1.7
	1	I	48	I	28	I	6	I	40	I	10	I	20	I	10	I	11	I	15	I	25	I	15	I	76
59 OR LESS		I	6.0	I	8.3	I	7.9	I	5.7	I	6.4	I	9.8	I	3.8	I	5.0	I	6.6	I	11.5	I	6.2	I	6.7
	2	I	121	I	63	I	15	I	102	I	21	I	46	I	36	I	33	I	38	I	42	I	47	I	184
60 TO 64		I	15.1	I	18.7	I	19.7	I	14.5	I	13.5	I	22.5	I	13.6	I	15.1	I	16.8	I	19.4	I	19.4	I	16.1
	3	I	173	I	71	I	21	I	152	I	34	I	39	I	52	I	49	I	53	I	46	I	50	I	246
65 TO 67		I	21.6	I	21.1	I	27.6	I	21.6	I	21.8	I	19.1	I	19.6	I	22.4	I	23.5	I	21.2	I	20.7	I	21.6
	4	I	173	I	49	I	13	I	159	I	24	I	28	I	65	I	38	I	46	I	37	I	30	I	224
68		I	21.6	I	14.5	I	17.1	I	22.6	I	15.4	I	13.7	I	24.5	I	17.4	I	20.4	I	17.1	I	12.4	I	19.6
	5	I	197	I	69	I	14	I	164	I	48	I	40	I	65	I	63	I	45	I	46	I	57	I	266
69 TO 71		I	24.6	I	20.5	I	18.4	I	23.3	I	30.8	I	19.6	I	24.5	I	28.8	I	19.9	I	21.2	I	23.6	I	23.3
	6	I	39	I	16	I	0	I	36	I	9	I	10	I	14	I	13	I	13	I	8	I	14	I	55
72 TO 74		I	4.9	I	4.7	I	0	I	5.1	I	5.8	I	4.9	I	5.3	I	5.9	I	5.8	I	3.7	I	5.8	I	4.8
	7	I	30	I	15	I	4	I	28	I	7	I	6	I	14	I	7	I	6	I	6	I	13	I	45
75 OR MORE		I	3.7	I	4.5	I	5.3	I	4.0	I	4.5	I	2.9	I	5.3	I	3.2	I	2.7	I	2.8	I	5.4	I	3.9
	9	I	11	I	19	I	1	I	17	I	3	I	5	I	6	I	2	I	7	I	3	I	9	I	26
VARIABLE TEMP		I	1.4	I	4.5	I	1.3	I	2.4	I	1.9	I	2.5	I	2.3	I	.9	I	3.1	I	1.4	I	3.7	I	2.3
			-----		-----		-----		-----		-----		-----		-----		-----		-----		-----		-----		-----
		COLUMN	800		337		76		705		156		204		265		219		226		217		242		1141
		TOTAL	70.1		29.5		6.7		61.8		13.7		17.9		23.2		19.2		19.8		19.0		21.2		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR045 Q28-TEMPERATURE OF HOUSE DURING DAY
BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD	
	COL PCT	1199 SF	1599 SF	1999 SF	OR MORE	ITY	GAS			ROW
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	TOTAL
VAR045										
TURNED OFF	0	9	1	2	0	11	4	1	3	19
		2.7	.4	1.3	0	2.3	1.6	.5	1.8	1.7
59 OR LESS	1	24	21	10	6	45	15	6	7	76
		7.1	8.1	6.5	4.5	9.4	5.9	2.9	4.2	6.7
60 TO 64	2	49	37	23	26	90	36	36	17	184
		14.5	14.2	15.0	19.4	18.8	14.1	17.1	10.2	16.1
65 TO 67	3	70	66	24	33	94	62	65	21	246
		20.6	25.4	15.7	24.6	19.6	24.3	31.0	12.6	21.6
68	4	67	54	34	39	85	64	51	22	224
		19.8	20.8	22.2	29.1	17.7	25.1	24.3	13.2	19.6
69 TO 71	5	85	60	39	18	108	56	39	52	266
		25.1	23.1	25.5	13.4	22.5	22.0	18.6	31.1	23.3
72 TO 74	6	16	12	8	5	23	8	6	15	55
		4.7	4.6	5.2	3.7	4.8	3.1	2.9	9.0	4.8
75 OR MORE	7	12	6	9	5	13	6	5	19	45
		3.5	2.3	5.9	3.7	2.7	2.4	2.4	11.4	3.9
VARIABLE TEMP	9	7	3	4	2	10	4	1	11	26
		2.1	1.2	2.6	1.5	2.1	1.6	.5	6.6	2.3
COLUMN TOTAL		339	260	153	134	479	255	210	167	1141
		29.7	22.8	13.4	11.7	42.0	22.3	18.4	14.6	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1141 VALID CASES

24 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR045 Q28-TEMPERATURE OF HOUSE DURING DAY

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	130 TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE	
	COL PCT	137,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	ROW
							KWH	KWH	KWH				TOTAL
VAR045		IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATE5	IYRKWH1	IYRKWH2	IYRKWH3	I
TURNED OFF	0	1	7	5	4	2	0	1	18	0	9	1	19
		.5	2.7	3.1	3.0	1.0	0	.6	1.9	0	4.3	.6	1.7
59 OR LESS	1	9	21	15	4	13	4	3	69	8	9	7	76
		4.6	8.0	9.3	3.0	6.2	5.2	2.4	7.3	5.2	4.3	3.9	6.7
60 TO 64	2	21	46	28	23	43	7	16	161	19	34	24	184
		10.8	17.6	17.3	17.3	20.6	9.1	13.0	17.1	12.4	16.1	13.3	16.1
65 TO 67	3	48	54	31	28	46	17	25	204	38	47	32	246
		24.7	20.6	19.1	21.1	22.0	22.1	20.3	21.7	24.8	22.3	17.7	21.6
68	4	29	48	27	31	46	14	20	190	29	44	46	224
		14.9	18.3	16.7	23.3	22.0	18.2	16.3	20.2	19.0	20.9	25.4	19.6
69 TO 71	5	55	62	34	31	41	26	38	202	38	45	49	266
		28.4	23.7	21.0	23.3	19.6	33.8	30.9	21.5	24.8	21.3	27.1	23.3
72 TO 74	6	9	12	7	6	10	4	8	43	9	8	11	55
		4.6	4.6	4.3	4.5	4.8	5.2	6.5	4.6	5.9	3.8	6.1	4.8
75 OR MORE	7	15	7	10	4	6	4	6	35	9	12	8	45
		7.7	2.7	6.2	3.0	2.9	5.2	4.9	3.7	5.9	5.7	4.4	3.9
VARIABLE TEMP	9	7	9	5	2	2	1	6	19	3	3	3	26
		3.6	1.9	3.1	1.5	1.0	1.3	4.9	2.0	2.0	1.4	1.7	2.3
COLUMN		194	262	162	133	209	77	123	941	153	211	181	1141
TOTAL		17.0	23.0	14.2	11.7	18.3	6.7	10.8	82.5	13.4	18.5	15.9	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR045 Q28-TEMPERATURE OF HOUSE DURING DAY
 BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC
 ***** PAGE 2 OF 2

BANNER2

	COUNT COL PCT	IMHIGH I	LOW I	BELOW AVERAGE I	ABOVE AVERAGE I	HIGH I	ROW TOTAL
		IYRKWH4	IYRTHR1	IYRTHR2	IYRTHR3	IYRTHR4	I
VAR045							
	0	I 0 I	I 1 I	I 1 I	I 0 I	I 0 I	19
TURNED OFF		I 0 I	I 1.3 I	I 1.5 I	I 0 I	I 0 I	1.7
	1	I 8 I	I 3 I	I 5 I	I 2 I	I 1 I	76
59 OR LESS		I 4.9 I	I 3.9 I	I 7.7 I	I 4.3 I	I 5.0 I	6.7
	2	I 20 I	I 7 I	I 8 I	I 6 I	I 3 I	184
60 TO 64		I 12.3 I	I 9.1 I	I 12.3 I	I 12.8 I	I 15.0 I	16.1
	3	I 33 I	I 19 I	I 12 I	I 17 I	I 6 I	246
65 TO 67		I 20.2 I	I 24.7 I	I 18.5 I	I 36.2 I	I 30.0 I	21.6
	4	I 37 I	I 17 I	I 17 I	I 10 I	I 6 I	224
68		I 22.7 I	I 22.1 I	I 26.2 I	I 21.3 I	I 30.0 I	19.6
	5	I 48 I	I 19 I	I 16 I	I 10 I	I 3 I	266
69 TO 71		I 29.4 I	I 24.7 I	I 24.6 I	I 21.3 I	I 15.0 I	23.3
	6	I 10 I	I 5 I	I 3 I	I 0 I	I 0 I	55
72 TO 74		I 6.1 I	I 6.5 I	I 4.6 I	I 0 I	I 0 I	4.8
	7	I 3 I	I 5 I	I 2 I	I 0 I	I 1 I	45
75 OR MORE		I 1.8 I	I 6.5 I	I 3.1 I	I 0 I	I 5.0 I	3.9
	9	I 4 I	I 1 I	I 1 I	I 2 I	I 0 I	26
VARIABLE TEMP		I 2.5 I	I 1.3 I	I 1.5 I	I 4.3 I	I 0 I	2.3
		I 163 I	I 77 I	I 65 I	I 47 I	I 20 I	1141
COLUMN TOTAL		14.3	6.7	5.7	4.1	1.8	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1141 VALID CASES

24 MISSING CASES

FILE PACIFICA (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR046 Q29-TEMP OF HOUSE BETWEEN SUNSET & 11 PM

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT COL PCT	TOWN IDWELLING	RENT IDWELLING	MOBILE IDWELLING	SIN FAM DETACHED	SIN FAM ATTACHED	MULTI- FAMILY	PRE 1950 1964	1950 TO 1964	1965 TO 1974	1975 TO 1979	799 SF OR LESS	ROW TOTAL
		IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	
VAR046	0	1	2	1	0	0	2	0	0	1	1	2	3
TURNED OFF		.1	.6	1.3	0	0	1.0	0	0	.4	.5	.8	.3
	1	12	11	1	12	3	7	6	1	6	6	5	23
59 OR LESS		1.5	3.3	1.3	1.7	1.9	3.4	2.2	.5	2.6	2.8	2.0	2.0
	2	68	34	5	67	5	25	23	19	22	16	24	102
60 TO 64		8.5	10.1	6.5	9.5	3.2	12.2	8.6	8.7	9.6	7.4	9.8	8.9
	3	155	74	16	136	31	48	45	43	46	52	49	231
65 TO 67		19.3	21.9	20.8	19.2	19.9	23.4	16.8	19.7	20.2	24.0	20.1	20.2
	4	187	64	17	166	33	36	64	46	48	49	41	252
68		23.3	18.9	22.1	23.5	21.2	17.6	23.9	21.1	21.1	22.6	16.8	22.0
	5	268	91	24	225	57	54	94	71	67	69	76	360
69 TO 71		33.4	26.9	31.2	31.8	36.5	26.3	35.1	32.6	29.4	31.8	31.1	31.4
	6	64	21	2	55	15	13	18	23	19	14	17	85
72 TO 74		8.0	6.2	2.6	7.8	9.6	6.3	6.7	10.6	8.3	6.5	7.0	7.4
	7	38	25	10	32	8	13	13	13	11	8	20	63
75 OR MORE		4.7	7.4	13.0	4.5	5.1	6.3	4.9	6.0	4.8	3.7	8.2	5.5
	9	9	16	1	14	4	7	5	2	8	2	10	26
VARIABLE TEMP		1.1	4.7	1.3	2.0	2.6	3.4	1.9	.9	3.5	.9	4.1	2.3
		802	338	77	707	156	205	268	218	228	217	244	1145
COLUMN TOTAL		70.0	29.5	6.7	61.7	13.6	17.9	23.4	19.0	19.9	19.0	21.3	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR046 Q29-TEMP OF HOUSE BETWEEN SUNSET & 11 PM

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT COL PCT	1800 TO 11199 SF	1200 TO 1599 SF	1600 TO 1999 SF	2000 SF OR MORE	ELECTRIC ITY	NATURAL GAS	FUEL OIL	WOOD	ROW TOTAL
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
VAR046										
TURNED OFF	0	1	0	0	0	3	0	0	0	3
		.3	0	0	0	.6	0	0	0	.3
99 OR LESS	1	5	9	4	0	16	5	1	1	23
		1.5	3.5	2.6	0	3.3	1.9	.5	.6	2.0
60 TO 64	2	24	17	17	19	46	22	21	10	102
		7.1	6.5	11.1	14.1	9.6	8.6	10.0	6.0	8.9
65 TO 67	3	69	64	21	26	102	57	54	11	231
		20.3	24.6	13.7	19.3	21.3	22.2	25.6	6.5	20.2
68	4	74	58	36	43	97	66	58	25	252
		21.8	22.3	23.5	31.9	20.3	25.7	27.5	14.9	22.0
69 TO 71	5	119	76	53	28	147	79	59	66	360
		35.0	29.2	34.6	20.7	30.7	30.7	28.0	39.3	31.4
72 TO 74	6	23	20	12	12	37	17	9	19	85
		6.8	7.7	7.8	8.9	7.7	6.6	4.3	11.3	7.4
75 OR MORE	7	18	13	7	5	19	7	6	29	63
		5.3	5.0	4.6	3.7	4.0	2.7	2.8	17.3	5.5
VARIABLE TEMP	9	7	3	3	2	12	4	3	7	26
		2.1	1.2	2.0	1.5	2.5	1.6	1.4	4.2	2.3
COLUMN TOTAL		340	260	193	135	479	257	211	168	1145
		29.7	22.7	13.4	11.8	41.8	22.4	18.4	14.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1145 VALID CASES

20 MISSING CASES

* * * * * PAGE 1 OF 2

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80.) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR046 Q29-TEMP OF HOUSE BETWEEN SUNSET & 11 PM

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT COL PCT	IMHIGH I	LOW I	BELOW AVERAGE I	ABOVE AVERAGE I	HIGH I	ROW TOTAL
		IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
VAR046		-----I-----I-----I-----I-----I-----I-----I					
TURNED OFF	0	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	3
		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	.3
		-----I-----I-----I-----I-----I-----I-----I					
59 OR LESS	1	I 2 I	I 1 I	I 1 I	I 0 I	I 1 I	23
		I 1.2 I	I 1.3 I	I 1.5 I	I 0 I	I 5.0 I	2.0
		-----I-----I-----I-----I-----I-----I-----I					
60 TO 64	2	I 14 I	I 7 I	I 7 I	I 3 I	I 1 I	102
		I 8.6 I	I 9.0 I	I 10.8 I	I 6.4 I	I 5.0 I	8.9
		-----I-----I-----I-----I-----I-----I-----I					
65 TO 67	3	I 31 I	I 14 I	I 14 I	I 12 I	I 5 I	231
		I 19.0 I	I 17.9 I	I 21.5 I	I 25.5 I	I 25.0 I	20.2
		-----I-----I-----I-----I-----I-----I-----I					
68	4	I 36 I	I 16 I	I 17 I	I 10 I	I 6 I	252
		I 22.1 I	I 20.5 I	I 26.2 I	I 21.3 I	I 30.0 I	22.0
		-----I-----I-----I-----I-----I-----I-----I					
69 TO 71	5	I 53 I	I 29 I	I 18 I	I 16 I	I 4 I	360
		I 32.5 I	I 37.2 I	I 27.7 I	I 34.0 I	I 20.0 I	31.4
		-----I-----I-----I-----I-----I-----I-----I					
72 TO 74	6	I 17 I	I 6 I	I 6 I	I 3 I	I 2 I	85
		I 10.4 I	I 7.7 I	I 9.2 I	I 6.4 I	I 10.0 I	7.4
		-----I-----I-----I-----I-----I-----I-----I					
75 OR MORE	7	I 5 I	I 5 I	I 1 I	I 1 I	I 1 I	63
		I 3.1 I	I 6.4 I	I 1.5 I	I 2.1 I	I 5.0 I	5.5
		-----I-----I-----I-----I-----I-----I-----I					
VARIABLE TEMP	9	I 5 I	I 0 I	I 1 I	I 2 I	I 0 I	26
		I 3.1 I	I 0 I	I 1.5 I	I 4.3 I	I 0 I	2.3
		-----I-----I-----I-----I-----I-----I-----I					
COLUMN TOTAL		163	78	65	47	20	1145
		14.2	6.6	5.7	4.1	1.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1145 VALID CASES

20 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR047 Q30-TEMP OF HOUSE BETWEEN 11 PM & 7 AM

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	DOWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF		
	COL	PCT	DWELLING	DWELLING	HOME	DETACHED	ATTACHED	FAMILY	1964	1974	1979	OR LESS	ROW	
			IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPAC1	TOTAL
VAR047														
TURNED OFF	0		43	32	8	38	4	25	19	12	16	7	26	75
			5.4	9.6	10.5	5.4	2.6	12.3	7.2	5.6	7.1	3.2	10.9	6.6
59 OR LESS	1		181	80	14	175	28	44	57	55	51	48	52	261
			22.8	24.0	18.4	25.1	18.1	21.6	21.6	25.5	22.6	22.1	21.8	23.0
60 TO 64	2		277	78	27	229	48	51	92	64	83	63	62	355
			34.9	23.4	35.5	32.8	31.0	25.0	34.8	29.6	36.7	29.0	25.9	31.3
65 TO 67	3		164	58	16	143	34	32	47	47	39	58	37	225
			20.7	17.4	21.1	20.5	21.9	15.7	17.8	21.8	17.3	26.7	15.5	19.9
68	4		53	32	4	53	11	18	21	12	14	18	26	86
			6.7	9.6	5.3	7.6	7.1	8.8	8.0	5.6	6.2	8.3	10.9	7.6
69 TO 71	5		37	26	2	30	14	17	13	15	11	11	13	63
			4.7	7.8	2.6	4.3	9.0	8.3	4.9	6.9	4.9	5.1	5.4	5.6
72 TO 74	6		10	4	0	5	5	4	3	6	2	2	3	14
			1.3	1.2	0	.7	3.2	2.0	1.1	2.8	.9	.9	1.3	1.2
75 OR MORE	7		2	7	1	2	2	4	0	1	0	3	6	9
			.3	2.1	1.3	.3	1.3	2.0	0	.5	0	1.4	2.5	.8
VARIABLE TEMP	9		27	17	4	23	9	9	12	4	10	7	14	45
			3.4	5.1	5.3	3.3	5.8	4.4	4.5	1.9	4.4	3.2	5.9	4.0
COLUMN TOTAL			794	334	76	698	155	204	264	216	226	217	239	1133
			70.1	29.5	6.7	61.6	13.7	18.0	23.3	19.1	19.9	19.2	21.1	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFICA (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR047 Q30-TEMP OF HOUSE BETWEEN 11 PM & 7 AM

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT COL PCT	1800 TO 11199 SF	1200 TO 1599 SF	1600 TO 1999 SF	2000 SF OR MORE	ELECTRIC ITY	NATURAL GAS	FUEL OIL	WOOD	ROW TOTAL
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
VAR047	0	28	10	5	5	41	11	14	9	75
TURNED OFF		8.3	3.9	3.3	3.7	9.6	4.3	6.7	5.5	6.6
	1	87	61	34	25	108	60	47	44	261
59 OR LESS		25.7	23.6	22.5	18.7	22.8	23.3	22.6	26.8	23.0
	2	94	89	51	53	129	102	76	36	355
60 TO 64		27.8	34.4	33.8	39.6	27.2	39.7	36.5	22.0	31.3
	3	63	66	28	29	97	46	45	30	225
65 TO 67		18.6	25.5	18.5	21.6	20.5	17.9	21.6	18.3	19.9
	4	29	13	13	8	39	21	15	8	86
68		7.4	5.0	8.6	6.0	8.2	8.2	7.2	4.9	7.6
	5	22	10	11	7	29	11	6	14	63
69 TO 71		6.5	3.9	7.3	5.2	6.1	4.3	2.9	8.5	5.6
	6	2	2	4	3	9	0	0	3	14
72 TO 74		.6	.8	2.6	2.2	1.9	0	0	1.8	1.2
	7	2	1	0	0	3	2	1	2	9
75 OR MORE		.6	.4	0	0	.6	.8	.5	1.2	.8
	9	15	7	5	4	19	4	4	18	45
VARIABLE TEMP		4.4	2.7	3.3	3.0	4.0	1.6	1.9	11.0	4.0
		338	259	151	134	474	257	208	164	1133
COLUMN TOTAL		29.8	22.9	13.3	11.8	41.8	22.7	18.4	14.5	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1133 VALID CASES

32 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR047 Q30-TEMP OF HOUSE BETWEEN 11 PM & 7 AM

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE		
	COL	PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	ROW
			I	I	I	I	I	KWH	KWH	KWH				TOTAL
			I	I	I	I	I	IRATE2	IRATE3	IRATE5	IYR KWH1	IYR KWH2	IYR KWH3	I
VAR047			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
TURNED OFF	0		I 17 I 22 I 10 I 11 I 4 I 6 I 12 I 57 I 9 I 18 I 15 I 75	I 8.8 I 8.5 I 6.3 I 8.3 I 1.9 I 7.8 I 9.8 I 6.1 I 5.9 I 8.6 I 8.3 I 6.6										
59 OR LESS	1		I 51 I 57 I 47 I 23 I 39 I 9 I 26 I 226 I 34 I 53 I 37 I 261	I 26.3 I 22.1 I 29.6 I 17.4 I 18.8 I 11.7 I 21.3 I 24.2 I 22.4 I 25.4 I 20.6 I 23.0										
60 TO 64	2		I 53 I 86 I 31 I 46 I 87 I 21 I 32 I 302 I 63 I 70 I 57 I 355	I 27.3 I 33.3 I 19.5 I 34.8 I 41.8 I 27.3 I 26.2 I 32.3 I 41.4 I 33.5 I 31.7 I 31.3										
65 TO 67	3		I 34 I 48 I 38 I 30 I 41 I 19 I 23 I 183 I 24 I 34 I 42 I 225	I 17.5 I 18.6 I 23.9 I 22.7 I 19.7 I 24.7 I 18.9 I 19.6 I 15.8 I 16.3 I 23.3 I 19.9										
68	4		I 14 I 21 I 12 I 7 I 15 I 7 I 5 I 74 I 9 I 16 I 13 I 86	I 7.2 I 8.1 I 7.5 I 5.3 I 7.2 I 9.1 I 4.1 I 7.9 I 5.9 I 7.7 I 7.2 I 7.6										
69 TO 71	5		I 12 I 9 I 11 I 11 I 9 I 10 I 9 I 44 I 5 I 9 I 7 I 63	I 6.2 I 3.5 I 6.9 I 8.3 I 4.3 I 13.0 I 7.4 I 4.7 I 3.3 I 4.3 I 3.9 I 5.6										
72 TO 74	6		I 0 I 3 I 2 I 1 I 4 I 3 I 4 I 7 I 1 I 1 I 3 I 14	I 0 I 1.2 I 1.3 I .8 I 1.9 I 3.9 I 3.3 I .7 I .7 I .5 I 1.7 I 1.2										
75 OR MORE	7		I 4 I 3 I 1 I 0 I 1 I 0 I 1 I 8 I 0 I 2 I 1 I 9	I 2.1 I 1.2 I .6 I 0 I .5 I 0 I .8 I .9 I 0 I 1.0 I .6 I .8										
VARIABLE TEMP	9		I 9 I 9 I 7 I 3 I 8 I 2 I 10 I 33 I 7 I 6 I 5 I 45	I 4.6 I 3.5 I 4.4 I 2.3 I 3.8 I 2.6 I 8.2 I 3.5 I 4.6 I 2.9 I 2.8 I 4.0										
COLUMN			194	258	159	132	208	77	122	934	152	209	180	1133
TOTAL			17.1	22.8	14.0	11.7	18.4	6.8	10.8	82.4	13.4	18.4	15.9	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR047 Q30-TEMP OF HOUSE BETWEEN 11 PM & 7 AM

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT COL PCT	IN I	HIGH I	LOW I	BELOW AVERAGE I	ABOVE AVERAGE I	HIGH I	ROW TOTAL
		IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I	
VAR047		-----	-----	-----	-----	-----	-----	
	0	I 7 I	I 3 I	I 5 I	I 0 I	I 1 I	I	75
TURNED OFF		I 4.3 I	I 3.8 I	I 7.7 I	I 0 I	I 5.0 I	I	6.6
		-----	-----	-----	-----	-----	-----	
	1	I 32 I	I 20 I	I 14 I	I 10 I	I 1 I	I	261
59 OR LESS		I 19.8 I	I 25.6 I	I 21.5 I	I 21.3 I	I 5.0 I	I	23.0
		-----	-----	-----	-----	-----	-----	
	2	I 45 I	I 38 I	I 27 I	I 19 I	I 7 I	I	355
60 TO 64		I 27.8 I	I 48.7 I	I 41.5 I	I 40.4 I	I 35.0 I	I	31.3
		-----	-----	-----	-----	-----	-----	
	3	I 40 I	I 8 I	I 10 I	I 10 I	I 6 I	I	225
65 TO 67		I 24.7 I	I 10.3 I	I 15.4 I	I 21.3 I	I 30.0 I	I	19.9
		-----	-----	-----	-----	-----	-----	
	4	I 12 I	I 3 I	I 5 I	I 3 I	I 4 I	I	86
68		I 7.4 I	I 3.8 I	I 7.7 I	I 6.4 I	I 20.0 I	I	7.6
		-----	-----	-----	-----	-----	-----	
	5	I 14 I	I 4 I	I 3 I	I 3 I	I 1 I	I	63
69 TO 71		I 8.6 I	I 5.1 I	I 4.6 I	I 6.4 I	I 5.0 I	I	5.6
		-----	-----	-----	-----	-----	-----	
	6	I 6 I	I 1 I	I 0 I	I 0 I	I 0 I	I	14
72 TO 74		I 3.7 I	I 1.3 I	I 0 I	I 0 I	I 0 I	I	1.2
		-----	-----	-----	-----	-----	-----	
	7	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I	9
75 OR MORE		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I	.8
		-----	-----	-----	-----	-----	-----	
	9	I 6 I	I 1 I	I 1 I	I 2 I	I 0 I	I	45
VARIABLE TEMP		I 3.7 I	I 1.3 I	I 1.5 I	I 4.3 I	I 0 I	I	4.0
		-----	-----	-----	-----	-----	-----	
COLUMN TOTAL		162	78	65	47	20		1133
		14.3	6.9	5.7	4.1	1.8		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1133 VALID CASES

32 MISSING CASES

FILE PACIFICA (CREATION DATE - 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR048 Q31-USE OF OTHER HEATING EQ IN LAST YR

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT COL PCT	IOWN IDWELLING	RENT IDWELLING	MOBILE HOME	SIN FAM DETACHED	SIN FAM ATTACHED	MULTI- FAMILY	PRE 1950	1950 TO 1964	1965 TO 1974	1975 TO 1979	799 SF OR LESS	RCW TOTAL
		IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPAC1	
VAR048	1	552	119	28	490	105	49	165	152	135	136	71	672
YES		68.2	34.3	35.4	68.6	66.0	23.3	60.7	69.1	59.2	62.1	27.7	57.8
	2	297	228	51	224	54	161	107	68	93	83	185	490
NO		31.8	65.7	64.6	31.4	34.0	76.7	39.3	30.9	40.8	37.9	72.3	42.2
COLUMN		809	347	79	714	159	210	272	220	228	219	256	1162
TOTAL		69.6	29.9	6.8	61.4	13.7	18.1	23.4	18.9	19.6	18.8	22.0	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFICA (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR048 Q31-USE OF OTHER HEATING EQ IN LAST YR

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD	
	COL PCT	11199 SF	1599 SF	1999 SF	OR MORE	ITY	GAS			ROW
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	TOTAL
VAR048		-----	-----	-----	-----	-----	-----	-----	-----	
YES	1	I 173	I 179	I 129	I 116	I 242	I 160	I 136	I 119	672
		I 50.4	I 68.3	I 84.3	I 85.9	I 49.4	I 61.3	I 64.2	I 70.4	57.8
		-----	-----	-----	-----	-----	-----	-----	-----	
NO	2	I 170	I 83	I 24	I 19	I 248	I 101	I 76	I 50	490
		I 49.6	I 31.7	I 15.7	I 14.1	I 50.6	I 38.7	I 35.8	I 29.6	42.2
		-----	-----	-----	-----	-----	-----	-----	-----	
	COLUMN	343	262	153	135	490	261	212	169	1162
	TOTAL	29.5	22.5	13.2	11.6	42.2	22.5	18.2	14.5	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1162 VALID CASES

3 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR048 Q31-USE OF OTHER HEATING EQ IN LAST YR

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 - \$15,000-					\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE										
	COL	PCT	\$17,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P				AVERAGE	AVERAGE	RGW									
			I					KWH	KWH	KWH						TOTAL									
			IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOMES	IRATE2	IRATE3	IRATES	IYRKWH1	IYRKWH2	IYRKWH3												
VAR048			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----									
YES	1	I	75	I	120	I	109	I	98	I	158	I	49	I	92	I	531	I	84	I	129	I	113	I	672
		I	37.3	I	45.1	I	66.5	I	73.7	I	75.6	I	63.6	I	73.6	I	55.3	I	54.5	I	60.6	I	61.4	I	57.8
		I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----
NO	2	I	126	I	146	I	55	I	35	I	51	I	28	I	33	I	429	I	70	I	84	I	71	I	490
		I	62.7	I	54.9	I	33.5	I	26.3	I	24.4	I	36.4	I	26.4	I	44.7	I	45.5	I	39.4	I	38.6	I	42.2
		I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----
	COLUMN		201		266		164		133		209		77		125		960		154		213		184		1162
	TOTAL		17.3		22.9		14.1		11.4		18.0		6.6		10.8		82.6		13.3		18.3		15.8		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR048 Q31-USE OF OTHER HEATING EQ IN LAST YR

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT COL PCT	IMHIGH I	LOW I	BELOW AVERAGE I	ABOVE AVERAGE I	HIGH I	ROW TOTAL
		IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
VAR048		-----I-----I-----I-----I-----I-----I-----I					
YES	1	I 134 I	I 39 I	I 50 I	I 36 I	I 14 I	I 672
		I 81.2 I	I 50.0 I	I 76.9 I	I 76.6 I	I 70.0 I	I 57.8
		-----I-----I-----I-----I-----I-----I-----I					
NO	2	I 31 I	I 39 I	I 15 I	I 11 I	I 6 I	I 490
		I 18.8 I	I 50.0 I	I 23.1 I	I 23.4 I	I 30.0 I	I 42.2
		-----I-----I-----I-----I-----I-----I-----I					
	COLUMN	169	78	65	47	20	1162
	TOTAL	14.2	6.7	5.6	4.0	1.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1162 VALID CASES

3 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR049 Q32-OTHER HEAT EQUIP USED IN LAST YR

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 4

BANNER1

	COUNT COL PCT	OWN IDWELLING	RENT IDWELLING	MOBILE HOME	SIN FAM DETACHED	SIN FAM ATTACHED	MULTI- FAMILY	PRE 1950	1950 TO 1964	1965 TO 1974	1975 TO 1979	749 SF OR LESS	ROW TOTAL
		IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	
VAR049		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
ELEC HEAT PUMP	1	I 2 I	I 1 I	I 1 I	I 1 I	I 0 I	I 1 I	I 0 I	I 1 I	I 0 I	I 2 I	I 0 I	3
		I .4 I	I .8 I	I 3.6 I	I .2 I	I 0 I	I 2.0 I	I 0 I	I .7 I	I 0 I	I 1.5 I	I 0 I	.4
FURNACE W DUCTS	2	I 37 I	I 5 I	I 10 I	I 26 I	I 5 I	I 1 I	I 11 I	I 4 I	I 12 I	I 13 I	I 1 I	42
		I 6.7 I	I 4.2 I	I 35.7 I	I 5.3 I	I 4.8 I	I 2.0 I	I 6.7 I	I 2.6 I	I 8.9 I	I 9.6 I	I 1.4 I	6.3
PIPELESS FURNACE	5	I 0 I	I 1 I	I 0 I	I 1 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	1
		I 0 I	I .8 I	I 0 I	I .2 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	.1
BLT-IN ELEC UNIT	6	I 60 I	I 12 I	I 2 I	I 59 I	I 6 I	I 5 I	I 22 I	I 14 I	I 14 I	I 10 I	I 9 I	72
		I 10.9 I	I 10.1 I	I 7.1 I	I 12.0 I	I 5.7 I	I 10.2 I	I 13.3 I	I 9.2 I	I 10.4 I	I 7.4 I	I 12.7 I	10.7
RM HTR W VENT	7	I 4 I	I 1 I	I 0 I	I 4 I	I 1 I	I 0 I	I 2 I	I 0 I	I 1 I	I 0 I	I 0 I	5
		I .7 I	I .8 I	I 0 I	I .8 I	I 1.0 I	I 0 I	I 1.2 I	I 0 I	I .7 I	I 0 I	I 0 I	.7
RM HTR W-O VENT	8	I 4 I	I 1 I	I 0 I	I 4 I	I 1 I	I 0 I	I 1 I	I 4 I	I 0 I	I 0 I	I 1 I	5
		I .7 I	I .8 I	I 0 I	I .8 I	I 1.0 I	I 0 I	I .6 I	I 2.6 I	I 0 I	I 0 I	I 1.4 I	.7
WOOD FIREPLACE	9	I 302 I	I 56 I	I 5 I	I 252 I	I 78 I	I 24 I	I 58 I	I 96 I	I 78 I	I 100 I	I 16 I	359
		I 54.7 I	I 47.1 I	I 17.9 I	I 51.4 I	I 74.3 I	I 49.0 I	I 35.2 I	I 63.2 I	I 57.8 I	I 73.5 I	I 22.5 I	53.4
WOOD BURN STOVE	10	I 64 I	I 9 I	I 5 I	I 60 I	I 6 I	I 2 I	I 23 I	I 17 I	I 16 I	I 8 I	I 12 I	73
		I 11.6 I	I 7.6 I	I 17.9 I	I 12.2 I	I 5.7 I	I 4.1 I	I 13.9 I	I 11.2 I	I 11.9 I	I 5.9 I	I 16.9 I	10.9
PORTABLE HEATER	11	I 43 I	I 30 I	I 4 I	I 49 I	I 5 I	I 15 I	I 29 I	I 3 I	I 12 I	I 1 I	I 29 I	73
		I 7.8 I	I 25.2 I	I 14.3 I	I 10.0 I	I 4.8 I	I 30.6 I	I 17.6 I	I 2.0 I	I 8.9 I	I .7 I	I 40.8 I	10.9
OTHER HEATING EQ	12	I 1 I	I 0 I	I 0 I	I 1 I	I 0 I	I 0 I	I 1 I	I 0 I	I 0 I	I 0 I	I 1 I	1
		I .2 I	I 0 I	I 0 I	I .2 I	I 0 I	I 0 I	I .6 I	I 0 I	I 0 I	I 0 I	I 1.4 I	.1
CODES 10+11	13	I 2 I	I 0 I	I 0 I	I 2 I	I 0 I	I 0 I	I 2 I	I 0 I	I 0 I	I 0 I	I 0 I	2
		I .4 I	I 0 I	I 0 I	I .4 I	I 0 I	I 0 I	I 1.2 I	I 0 I	I 0 I	I 0 I	I 0 I	.3
CODES 9+2	14	I 3 I	I 0 I	I 0 I	I 2 I	I 1 I	I 0 I	I 1 I	I 0 I	I 1 I	I 1 I	I 0 I	3
		I .5 I	I 0 I	I 0 I	I .4 I	I 1.0 I	I 0 I	I .6 I	I 0 I	I .7 I	I .7 I	I 0 I	.4
COLUMN TOTAL		552	119	28	490	105	49	165	152	135	136	71	672
		82.1	17.7	4.2	72.9	15.6	7.3	24.6	22.6	20.1	20.2	10.6	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFICA (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR049 Q32-OTHER HEAT EQUIP USED IN LAST YR
BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 4

BANNER1

	COUNT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD		PON
	COL	PCT	11199 SF	1599 SF	1999 SF	OR MORE	ITY	GAS			TOTAL
			ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	I
VAR049											
	1		2	0	1	0	2	0	0	1	3
ELEC HEAT PUMP			1.2	0	.8	0	.8	0	0	.8	.4
	2		10	13	12	6	0	1	1	40	42
FURNACE W DUCTS			5.8	7.3	9.3	5.2	0	.6	.7	33.6	6.3
	5		1	0	0	0	0	0	0	1	1
PIPELESS FURNACE			.6	0	0	0	0	0	0	.8	.1
	6		18	20	16	9	7	5	8	48	72
BLT-IN ELEC UNIT			10.4	11.2	12.4	7.8	2.9	3.1	5.9	40.3	10.7
	7		2	2	1	0	1	1	1	2	5
RM HTR W VENT			1.2	1.1	.8	0	.4	.6	.7	1.7	.7
	8		0	2	1	1	2	0	1	2	5
RM HTR W-O VENT			0	1.1	.8	.9	.8	0	.7	1.7	.7
	9		90	111	71	69	172	99	79	3	359
WOOD FIREPLACE			52.0	62.0	55.0	59.5	71.1	61.9	58.1	2.5	93.4
	10		20	16	11	14	32	24	15	1	73
WOOD BURN STOVE			11.6	8.9	8.5	12.1	13.2	15.0	11.0	.8	10.9
	11		23	9	8	2	16	21	15	17	73
PORTABLE HEATER			13.3	5.0	6.2	1.7	6.6	13.1	11.0	14.3	10.9
	12		0	0	0	0	0	0	1	0	1
OTHER HEATING EQ			0	0	0	0	0	0	.7	0	.1
	13		0	0	1	1	0	1	1	0	2
CODES 10+11			0	0	.8	.9	0	.6	.7	0	.3
	14		0	2	0	1	0	0	0	3	3
CODES 9+2			0	1.1	0	.9	0	0	0	2.5	.4
COLUMN TOTAL			173	179	129	116	242	160	136	119	672
			25.7	26.6	19.2	17.3	36.0	23.8	20.2	17.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(INUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR049 Q32-OTHER HEAT EQUIP USED IN LAST YR

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 3 OF 4

BANNER1

	COUNT	OWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF		ROW
	COL	PCT	DWELLING	DWELLING	HOME	DETACHED	ATTACHED	FAMILY	1964	1974	1979	OR LESS		TOTAL
			IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	I
VAR049	15		I	I	I	I	I	I	I	I	I	I	I	I
			9	1	0	8	1	1	3	5	0	0	1	10
CODES 9+6			1.6	.8	0	1.6	1.0	2.0	1.8	3.3	0	0	1.4	1.5
	16		I	I	I	I	I	I	I	I	I	I	I	I
			2	0	1	1	0	0	0	1	0	1	1	2
CODES 10+6			.4	0	3.6	.2	0	0	0	.7	0	.7	1.4	.3
	17		I	I	I	I	I	I	I	I	I	I	I	I
			2	0	0	2	0	0	2	0	0	0	0	2
CODES 10+9			.4	0	0	.4	0	0	1.2	0	0	0	0	.3
	18		I	I	I	I	I	I	I	I	I	I	I	I
			12	2	0	14	0	0	7	5	1	0	0	14
CODES 11+9			2.2	1.7	0	2.9	0	0	4.2	3.3	.7	0	0	2.1
	19		I	I	I	I	I	I	I	I	I	I	I	I
			5	0	0	4	1	0	3	2	0	0	0	5
MISC AD HT COMBO			.9	0	0	.8	1.0	0	1.8	1.3	0	0	0	.7
			I	I	I	I	I	I	I	I	I	I	I	I
COLUMN			552	119	28	490	105	49	165	152	135	136	71	672
TOTAL			82.1	17.7	4.2	72.9	15.6	7.3	24.6	22.6	20.1	20.2	10.6	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR049 Q32-OTHER HEAT EQUIP USED IN LAST YR

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 4 OF 4

BANNER1

	COUNT COL PCT	1800 TO 11199 SF	1200 TO 1599 SF	1600 TO 1999 SF	2000 SF OR MORE	ELECTRIC ITY	NATURAL GAS	FUEL OIL	WOOD	ROW TOTAL
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
VAR049		-----	-----	-----	-----	-----	-----	-----	-----	
	15	I 4 I	I 1 I	I 1 I	I 3 I	I 3 I	I 4 I	I 2 I	I 1 I	10
CODES 9+6		I 2.3 I	I .6 I	I .8 I	I 2.6 I	I 1.2 I	I 2.5 I	I 1.5 I	I .8 I	1.5
		-----	-----	-----	-----	-----	-----	-----	-----	
	16	I 0 I	I 1 I	I 0 I	I 0 I	I 1 I	I 0 I	I 1 I	I 0 I	2
CODES 10+6		I 0 I	I .6 I	I 0 I	I 0 I	I .4 I	I 0 I	I .7 I	I 0 I	.3
		-----	-----	-----	-----	-----	-----	-----	-----	
	17	I 0 I	I 0 I	I 1 I	I 1 I	I 0 I	I 1 I	I 1 I	I 0 I	2
CODES 10+9		I 0 I	I 0 I	I .8 I	I .9 I	I 0 I	I .6 I	I .7 I	I 0 I	.3
		-----	-----	-----	-----	-----	-----	-----	-----	
	18	I 2 I	I 1 I	I 3 I	I 8 I	I 5 I	I 3 I	I 6 I	I 0 I	14
CODES 11+9		I 1.2 I	I .6 I	I 2.3 I	I 6.9 I	I 2.1 I	I 1.9 I	I 4.4 I	I 0 I	2.1
		-----	-----	-----	-----	-----	-----	-----	-----	
	19	I 1 I	I 1 I	I 2 I	I 1 I	I 1 I	I 0 I	I 4 I	I 0 I	5
MISC AD HT COMBO		I .6 I	I .6 I	I 1.6 I	I .9 I	I .4 I	I 0 I	I 2.9 I	I 0 I	.7
		-----	-----	-----	-----	-----	-----	-----	-----	
COLUMN		173	179	129	116	242	160	136	119	672
TOTAL		25.7	26.6	19.2	17.3	36.0	23.8	20.2	17.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

672 VALID CASES

0 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR049 Q32-OTHER HEAT EQUIP USED IN LAST YR

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 4

BANNER2

	COUNT	ISO TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE	
	CCL PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	ROW
		I	I	I	I	I	KWH	KWH	KWH	IYR KWH1	IYR KWH2	IYR KWH3	TOTAL
VAR049		I	I	I	I	I	I	I	I	I	I	I	I
	1	I	I	I	I	I	I	I	I	I	I	I	I
ELEC HEAT PUMP		I	I	I	I	I	I	I	I	I	I	I	I
		I	I	I	I	I	I	I	I	I	I	I	I
	2	I	I	I	I	I	I	I	I	I	I	I	I
FURNACE W DUCTS		I	I	I	I	I	I	I	I	I	I	I	I
		I	I	I	I	I	I	I	I	I	I	I	I
	5	I	I	I	I	I	I	I	I	I	I	I	I
PIPELESS FURNACE		I	I	I	I	I	I	I	I	I	I	I	I
		I	I	I	I	I	I	I	I	I	I	I	I
	6	I	I	I	I	I	I	I	I	I	I	I	I
BLT-IN ELEC UNIT		I	I	I	I	I	I	I	I	I	I	I	I
		I	I	I	I	I	I	I	I	I	I	I	I
	7	I	I	I	I	I	I	I	I	I	I	I	I
RM HTR W VENT		I	I	I	I	I	I	I	I	I	I	I	I
		I	I	I	I	I	I	I	I	I	I	I	I
	8	I	I	I	I	I	I	I	I	I	I	I	I
RM HTR W-O VENT		I	I	I	I	I	I	I	I	I	I	I	I
		I	I	I	I	I	I	I	I	I	I	I	I
	9	I	I	I	I	I	I	I	I	I	I	I	I
WOOD FIREPLACE		I	I	I	I	I	I	I	I	I	I	I	I
		I	I	I	I	I	I	I	I	I	I	I	I
	10	I	I	I	I	I	I	I	I	I	I	I	I
WOOD BURN STOVE		I	I	I	I	I	I	I	I	I	I	I	I
		I	I	I	I	I	I	I	I	I	I	I	I
	11	I	I	I	I	I	I	I	I	I	I	I	I
PORTABLE HEATER		I	I	I	I	I	I	I	I	I	I	I	I
		I	I	I	I	I	I	I	I	I	I	I	I
	12	I	I	I	I	I	I	I	I	I	I	I	I
OTHER HEATING EQ		I	I	I	I	I	I	I	I	I	I	I	I
		I	I	I	I	I	I	I	I	I	I	I	I
	13	I	I	I	I	I	I	I	I	I	I	I	I
CODES 10+11		I	I	I	I	I	I	I	I	I	I	I	I
		I	I	I	I	I	I	I	I	I	I	I	I
	14	I	I	I	I	I	I	I	I	I	I	I	I
CODES 9+2		I	I	I	I	I	I	I	I	I	I	I	I
		I	I	I	I	I	I	I	I	I	I	I	I
COLUMN		75	120	109	98	158	49	92	531	84	129	113	672
TOTAL		11.2	17.9	16.2	14.6	23.5	7.3	13.7	79.0	12.5	19.2	16.8	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR049 Q32-OTHER HEAT EQUIP USED IN LAST YR

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 4

BANNER2

	COUNT COL	PCT	IMHIGH I	LOW I	BELOW AVERAGE I	ABOVE AVERAGE I	HIGH I	ROW TOTAL
			IYRKWH4 I	IYRTHRM1 I	IYRTHRM2 I	IYRTHRM3 I	IYRTHRM4 I	
VAR049								
1	1		0	0	0	0	0	3
ELEC HEAT PUMP			0	0	0	0	0	.4
2	1		3	2	6	3	0	42
FURNACE W DUCTS			2.2	5.1	12.0	8.3	0	6.3
5	1		0	0	0	0	0	1
PIPELESS FURNACE			0	0	0	0	0	.1
6	1		17	1	1	2	0	72
BLT-IN ELEC UNIT			12.7	2.6	2.0	5.6	0	10.7
7	1		0	1	1	0	0	5
RM HTR W VENT			0	2.6	2.0	0	0	.7
8	1		0	1	1	0	0	5
RM HTR W-O VENT			0	2.6	2.0	0	0	.7
9	1		93	16	26	25	11	359
WOOD FIREPLACE			69.4	41.0	52.0	69.4	78.6	53.4
10	1		11	7	10	2	1	73
WOOD BURN STOVE			8.2	17.9	20.0	5.6	7.1	10.9
11	1		2	7	3	4	1	73
PORTABLE HEATER			1.5	17.9	6.0	11.1	7.1	10.9
12	1		0	0	0	0	0	1
OTHER HEATING EQ			0	0	0	0	0	.1
13	1		0	1	0	0	0	2
CODES 10+11			0	2.6	0	0	0	.3
14	1		1	0	0	0	0	3
CODES 9+2			.7	0	0	0	0	.4
COLUMN TOTAL			134 19.9	39 5.8	50 7.4	36 5.4	14 2.1	672 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(INUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR049 Q32-OTHER HEAT EQUIP USED IN LAST YR

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 3 OF 4

BANNER2

	COUNT COL	PCT	1\$0 TO \$7,999	1\$8,000 - \$14,999	1\$15,000- \$19,999	1\$20,000- \$24,999	1\$25,000 OR MORE	13-16 MILLS P KWH	17-20 MILLS P KWH	25-28 MILLS P KWH	LOW IYRKWH1	BELOW AVERAGE IYRKWH2	ABOVE AVERAGE IYRKWH3	ROW TOTAL
VAR049			IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATE5	IYRKWH1	IYRKWH2	IYRKWH3	
15			0	1	2	3	3	1	2	7	1	0	4	10
CODES 9+6			0	.8	1.8	3.1	1.9	2.0	2.2	1.3	1.2	0	3.5	1.5
16			0	0	0	1	0	0	0	2	0	0	1	2
CODES 10+6			0	0	0	1.0	0	0	0	.4	0	0	.9	.3
17			0	0	1	1	0	0	0	2	0	0	0	2
CODES 10+9			0	0	.9	1.0	0	0	0	.4	0	0	0	.3
18			0	5	0	2	5	2	2	10	1	2	1	14
CODES 11+9			0	4.2	0	2.0	3.2	4.1	2.2	1.9	1.2	1.6	.9	2.1
19			0	1	0	2	1	0	1	4	1	2	2	5
MISC AD MT COMBO			0	.8	0	2.0	.6	0	1.1	.8	1.2	1.6	1.9	.7
COLUMN TOTAL			75	120	109	98	158	49	92	531	84	129	113	672
			11.2	17.4	16.2	14.6	23.5	7.3	13.7	79.0	12.5	19.2	16.8	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR049 Q32-OTHER HEAT EQUIP USED IN LAST YR
BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC
***** PAGE 4 OF 4

		BANNER2					ROW TOTAL
COUNT COL PCT		IMHIGH	LOW	BELOW AVERAGE	ABOVE AVERAGE	HIGH	
		IYRKWH4	IYRTHRP1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
VAR049		-----	-----	-----	-----	-----	-----
	15	I 2 I	I 1 I	I 2 I	I 0 I	I 0 I	10
CODES 9+6		I 1.5 I	I 2.6 I	I 4.0 I	I 0 I	I 0 I	1.5
		-----	-----	-----	-----	-----	-----
	16	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	2
CODES 10+6		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	.3
		-----	-----	-----	-----	-----	-----
	17	I 0 I	I 1 I	I 0 I	I 0 I	I 0 I	2
CODES 10+9		I 0 I	I 2.6 I	I 0 I	I 0 I	I 0 I	.3
		-----	-----	-----	-----	-----	-----
	18	I 5 I	I 0 I	I 0 I	I 0 I	I 1 I	14
CODES 11+9		I 3.7 I	I 0 I	I 0 I	I 0 I	I 7.1 I	2.1
		-----	-----	-----	-----	-----	-----
	19	I 0 I	I 1 I	I 0 I	I 0 I	I 0 I	5
MISC AD HT COMBO		I 0 I	I 2.6 I	I 0 I	I 0 I	I 0 I	.7
		-----	-----	-----	-----	-----	-----
COLUMN		134	39	50	36	14	672
TOTAL		19.9	5.8	7.4	5.4	2.1	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

672 VALID CASES

0 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR050 Q33-FUEL USED BY ADDITIONAL HEAT EQUIP

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	OWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF			
	COL	PCT	DWELLING	DWELLING	HOME	DETACHED	ATTACHED	FAMILY	1964	1974	1979	OR LESS		ROW	
			IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPAC1	TOTAL	
VAR050															
NATURAL GAS	1	I	19	I	3	I	0	I	17	I	4	I	1	I	22
		I	3.7	I	2.6	I	0	I	3.7	I	3.9	I	2.1	I	3.5
BOTTLED GAS	2	I	5	I	0	I	1	I	3	I	1	I	0	I	5
		I	1.0	I	0	I	3.7	I	.7	I	1.0	I	0	I	.8
FUEL OIL	3	I	5	I	5	I	0	I	9	I	1	I	0	I	10
		I	1.0	I	4.3	I	0	I	2.0	I	1.0	I	0	I	1.6
ELECTRICITY	4	I	118	I	43	I	16	I	112	I	12	I	21	I	161
		I	22.8	I	37.4	I	59.3	I	24.5	I	11.8	I	43.8	I	25.4
COAL-COKE	6	I	1	I	0	I	0	I	1	I	0	I	0	I	1
		I	.2	I	0	I	0	I	.2	I	0	I	0	I	.2
WOOD	7	I	368	I	64	I	10	I	313	I	84	I	26	I	433
		I	71.0	I	55.7	I	37.0	I	68.5	I	82.4	I	54.2	I	68.3
SOLAR COLLECTORS	8	I	1	I	0	I	0	I	1	I	0	I	0	I	1
		I	.2	I	0	I	0	I	.2	I	0	I	0	I	.2
GEOTHERMAL	9	I	1	I	0	I	0	I	1	I	0	I	0	I	1
		I	.2	I	0	I	0	I	.2	I	0	I	0	I	.2
COLUMN TOTAL			518		115		27		457		102		48		634
			81.7		18.1		4.3		72.1		16.1		7.6		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR050 Q33-FUEL USED BY ADDITIONAL HEAT EQUIP

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD		ROW
	COL PCT	1199 SF	1599 SF	1999 SF	OR MORE	ITY	GAS				TOTAL
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	I	
VAR050											
	1	I 7 I	I 7 I	I 6 I	I 2 I	I 2 I	I 1 I	I 1 I	I 18 I		22
NATURAL GAS		I 4.2 I	I 4.0 I	I 4.9 I	I 2.0 I	I .9 I	I .7 I	I .8 I	I 15.7 I		3.5
	2	I 0 I	I 2 I	I 1 I	I 1 I	I 0 I	I 0 I	I 0 I	I 5 I		5
BOTTLED GAS		I 0 I	I 1.1 I	I .8 I	I 1.0 I	I 0 I	I 0 I	I 0 I	I 4.3 I		.8
	3	I 2 I	I 3 I	I 3 I	I 1 I	I 1 I	I 0 I	I 2 I	I 7 I		10
FUEL OIL		I 1.2 I	I 1.7 I	I 2.5 I	I 1.0 I	I .4 I	I 0 I	I 1.6 I	I 6.1 I		1.6
	4	I 47 I	I 33 I	I 28 I	I 14 I	I 25 I	I 26 I	I 23 I	I 79 I		161
ELECTRICITY		I 28.5 I	I 19.0 I	I 23.0 I	I 13.9 I	I 10.7 I	I 17.4 I	I 18.9 I	I 68.7 I		25.4
	6	I 1 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 1 I	I 0 I		1
COAL-COKE		I .6 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I .8 I	I 0 I		.2
	7	I 108 I	I 128 I	I 84 I	I 83 I	I 205 I	I 121 I	I 95 I	I 5 I		433
WOOD		I 65.5 I	I 73.6 I	I 68.9 I	I 82.2 I	I 88.0 I	I 81.2 I	I 77.9 I	I 4.3 I		68.3
	8	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 1 I	I 0 I	I 0 I		1
SOLAR COLLECTORS		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I .7 I	I 0 I	I 0 I		.2
	9	I 0 I	I 1 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 1 I		1
GEOTHERMAL		I 0 I	I .6 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I .9 I		.2
COLUMN		165	174	122	101	233	149	122	115	634	
TOTAL		26.0	27.4	19.2	15.9	36.8	23.5	19.2	18.1	100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

634 VALID CASES

38 MISSING CASES

FILE PACIFICA (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR050 Q33-FUEL USED BY ADDITIONAL HEAT EQUIP

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000-	13-16	17-20	25-28	LOW	BELOW	ABOVE		
	COL	PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	ROW
			I	I	I	I	I	KWH	KWH	KWH	IYR	KWH	KWH	TOTAL
VAR050			I	I	I	I	I	I	I	I	I	I	I	
	1		1	8	4	2	4	1	2	19	9	5	3	22
NATURAL GAS			1.3	7.1	3.8	2.2	2.7	2.1	2.3	3.8	11.0	4.1	2.9	3.5
	2		1	1	1	1	0	0	2	3	0	3	1	5
BOTTLED GAS			1.3	.9	.9	1.1	0	0	2.3	.6	0	2.5	1.0	.8
	3		3	2	2	1	1	0	1	9	0	3	2	10
FUEL OIL			4.0	1.8	1.9	1.1	.7	0	1.1	1.8	0	2.5	2.0	1.6
	4		30	34	26	29	20	9	25	127	19	30	37	161
ELECTRICITY			40.0	30.4	24.5	32.6	13.7	18.8	28.7	25.5	23.2	24.8	36.3	25.4
	6		0	0	1	0	0	0	0	1	0	1	0	1
COAL-COKE			0	0	.9	0	0	0	0	.2	0	.8	0	.2
	7		39	66	72	56	121	38	57	338	53	79	59	433
WOOD			52.0	58.9	67.9	62.9	82.9	79.2	65.5	67.7	64.6	65.3	57.8	68.3
	8		1	0	0	0	0	0	0	1	0	0	0	1
SOLAR COLLECTORS			1.3	0	0	0	0	0	0	.2	0	0	0	.2
	9		0	1	0	0	0	0	0	1	1	0	0	1
GEOTHERMAL			0	.9	0	0	0	0	0	.2	1.2	0	0	.2
		COLUMN	75	112	106	89	146	48	87	499	82	121	102	634
		TOTAL	11.8	17.7	16.7	14.0	23.0	7.6	13.7	78.7	12.9	19.1	16.1	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR050 Q33-FUEL USED BY ADDITIONAL HEAT EQUIP

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT COL PCT	IMHIGH I	LOW I	BELOW AVERAGE I	ABOVE AVERAGE I	HIGH I	ROW TOTAL
		IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
VAR050		-----I-----I-----I-----I-----I-----I-----I					
NATURAL GAS	1	I 0 I	I 4 I	I 8 I	I 3 I	I 0 I	22
		I 0 I	I 11.4 I	I 17.4 I	I 8.3 I	I 0 I	3.5
		-----I-----I-----I-----I-----I-----I-----I					
BOTTLED GAS	2	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	5
		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	.8
		-----I-----I-----I-----I-----I-----I-----I					
FUEL OIL	3	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	10
		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	1.6
		-----I-----I-----I-----I-----I-----I-----I					
ELECTRICITY	4	I 22 I	I 8 I	I 4 I	I .6 I	I 1 I	161
		I 17.2 I	I 22.9 I	I 8.7 I	I 16.7 I	I 7.7 I	25.4
		-----I-----I-----I-----I-----I-----I-----I					
COAL-COKE	6	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	1
		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	.2
		-----I-----I-----I-----I-----I-----I-----I					
WOOD	7	I 106 I	I 23 I	I 34 I	I 27 I	I 12 I	433
		I 82.8 I	I 65.7 I	I 73.9 I	I 75.0 I	I 92.3 I	68.3
		-----I-----I-----I-----I-----I-----I-----I					
SOLAR COLLECTORS	8	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	1
		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	.2
		-----I-----I-----I-----I-----I-----I-----I					
GEOTHERMAL	9	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	1
		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	.2
		-----I-----I-----I-----I-----I-----I-----I					
COLUMN TOTAL		128	35	46	36	13	634
		20.2	5.5	7.3	5.7	2.1	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

634 VALID CASES

38 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR061 Q37-GLASS DOOR ON FIREPLACE #1

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	OWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF	PGW
	COL	PCT	DWELLING	DWELLING	HOME	DETACHED	ATTACHED	FAMILY	1964	1974	1979	OR LESS	TOTAL
			IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPAC1
VAR061													
HAVE	1		161	11	2	120	44	6	31	47	39	47	7
			51.6	17.5	40.0	45.8	52.4	25.0	50.0	49.0	45.9	46.5	43.8
DONT HAVE	2		151	52	3	142	40	18	31	49	46	54	9
			48.4	82.5	60.0	54.2	47.6	75.0	50.0	51.0	54.1	53.5	56.3
COLUMN			312	63	5	262	84	24	62	96	85	101	16
TOTAL			83.2	16.8	1.3	69.9	22.4	6.4	16.5	25.6	22.7	26.9	4.3
													375
													100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR061 037-GLASS DOOR ON FIREPLACE #1
BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	1000 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD	
	COL PCT	1199 SF	1599 SF	1999 SF	OR MORE	ITY	GAS			ROW
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	TOTAL
VAR061		-----	-----	-----	-----	-----	-----	-----	-----	
	1	I 39 I	I 62 I	I 35 I	I 27 I	I 86 I	I 48 I	I 28 I	I 7 I	172
HAVE		I 41.5 I	I 52.9 I	I 46.7 I	I 38.6 I	I 50.9 I	I 49.0 I	I 35.0 I	I 30.4 I	45.9
		-----	-----	-----	-----	-----	-----	-----	-----	
	2	I 55 I	I 56 I	I 40 I	I 43 I	I 83 I	I 50 I	I 52 I	I 16 I	203
DONT HAVE		I 58.5 I	I 47.9 I	I 53.3 I	I 61.4 I	I 49.1 I	I 51.0 I	I 65.0 I	I 69.6 I	54.1
		-----	-----	-----	-----	-----	-----	-----	-----	
	COLUMN	94	118	75	70	169	98	80	23	375
	TOTAL	25.1	31.5	20.0	18.7	45.1	26.1	21.3	6.1	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

375 VALID CASES

7 MISSING CASES

FILE PACIFICA (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR061 Q37-GLASS DOOR ON FIREPLACE #1

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE	ROW
	COL	PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P	AVERAGE	AVERAGE	TOTAL
			I	I	I	I	I	KWH	KWH	KWH	IYR KWH1	IYR KWH2	IYR KWH3
			I	I	I	I	I	IRATE2	IRATE3	IRATE5	I	I	I
VAR061			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	1	I	8	I 32	I 25	I 25	I 51	I 17	I 24	I 131	I 21	I 33	I 20
HAVE		I	33.3	I 55.2	I 42.4	I 58.1	I 45.9	I 51.5	I 51.1	I 44.4	I 52.5	I 48.5	I 38.5
	2	I	16	I 26	I 34	I 18	I 60	I 16	I 23	I 164	I 19	I 35	I 32
DONT HAVE		I	66.7	I 44.8	I 57.6	I 41.9	I 54.1	I 48.5	I 48.9	I 55.6	I 47.5	I 51.5	I 61.5
			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
COLUMN			24	58	59	43	111	33	47	295	40	68	52
TOTAL			6.4	15.9	15.7	11.5	29.6	8.8	12.5	78.7	10.7	18.1	13.9
													375
													100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

***** C R O S S T A B U L A T I O N *****

BY BANNER2 (TABULATING 1) INCOME * FUEL CONSUMPTION CHARACTERISTIC
* * * * * PAGE 2 OF 2

COUNT	IMHIGH	LOW	BELOW	ABOVE	HIGH	ROW
COL PCT	I		AVERAGE	AVERAGE		TOTAL
	IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
1	I 45	I 11	I 17	I 9	I 2	I 172
	I 47.9	I 64.7	I 63.0	I 37.5	I 18.2	I 45.9
2	I 49	I 6	I 10	I 15	I 9	I 203
	I 52.1	I 35.3	I 37.0	I 62.5	I 81.8	I 54.1
COLUMN	94	17	27	24	11	375
TOTAL	25.1	4.5	7.2	6.4	2.9	100.0

375 VALID CASES

7. MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR062 Q37-GLASS DOOR ON FIREPLACE #2

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	OWN	RENT	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	800 TO	1200 TO		
	COL	PCT	IDWELLING	DWELLING	DETACHED	ATTACHED	FAMILY	1964	1974	1979	1199 SF	1599 SF	PCT	
			IPAY1	IPAY2	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE2	ISPACE3	TOTAL
VAR062	1		8	1	6	2	1	1	2	1	2	0	2	9
HAVE			17.4	100.0	16.2	22.2	100.0	16.7	9.5	7.7	66.7	0	25.0	19.1
	2		38	0	31	7	0	5	19	12	1	4	6	38
DONT HAVE			82.6	0	83.8	77.8	0	83.3	90.5	92.3	33.3	100.0	75.0	80.9
COLUMN			46	1	37	9	1	6	21	13	3	4	8	47
TOTAL			97.9	2.1	78.7	19.1	2.1	12.8	44.7	27.7	6.4	8.5	17.0	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR062 Q37-GLASS DOOR ON FIREPLACE #2

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT COL PCT	I1600 TO I1999 SF	2000 SF OR MORE	ELECTRIC ITY	NATURAL GAS	FUEL OIL	WOOD	ROW TOTAL
		ISPAC4	ISPAC5	INFUEL1	INFUEL2	INFUEL3	INFUEL4	
VAR062		-----I	-----I	-----I	-----I	-----I	-----I	
HAVE	1	I 4 I	I 3 I	I 1 I	I 2 I	I 5 I	I 1 I	9
		I 33.3 I	I 13.0 I	I 14.3 I	I 13.3 I	I 21.7 I	I 100.0 I	19.1
		-----I	-----I	-----I	-----I	-----I	-----I	
DONT HAVE	2	I 8 I	I 20 I	I 6 I	I 13 I	I 18 I	I 0 I	38
		I 66.7 I	I 87.0 I	I 85.7 I	I 86.7 I	I 78.3 I	I 0 I	80.9
		-----I	-----I	-----I	-----I	-----I	-----I	
COLUMN TOTAL		12	23	7	15	23	1	47
		25.5	48.9	14.9	31.9	48.9	2.1	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

47 VALID CASES

335 MISSING CASES

FILE PACIFICA (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR062 Q37-CLASS DOOR ON FIREPLACE #2
BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

COUNT		\$8,000 - \$15,000-		\$20,000- \$25,000		13-16		17-20		25-28		LOW		BELOW		ABOVE		RCM TOTAL							
COL	PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P					AVERAGE	AVERAGE										
		I	I	I	I	I	KWH	KWH	KWH					IYRKWH1	IYRKWH2	IYRKWH3	I								
VAR062		-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I								
HAVE	1	I	1	I	0	I	0	I	4	I	3	I	0	I	1	I	8	I	2	I	2	I	2	I	9
		I	25.0	I	0	I	0	I	50.0	I	14.3	I	0	I	33.3	I	19.0	I	33.3	I	11.8	I	25.0	I	19.1
DONT HAVE	2	I	3	I	2	I	5	I	4	I	18	I	2	I	2	I	34	I	4	I	15	I	6	I	38
		I	75.0	I	100.0	I	100.0	I	50.0	I	85.7	I	100.0	I	66.7	I	81.0	I	66.7	I	88.2	I	75.0	I	80.9
		-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I								
COLUMN		4	2	5	8	21	2	3	42	6	17	8	47												
TOTAL		8.5	4.3	10.6	17.0	44.7	4.3	6.4	89.4	12.8	36.2	17.0	100.0												

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR062 037-GLASS DOOR ON FIREPLACE #2

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT COL PCT	HIGH I	LOW I	BELOW AVERAGE I	ABOVE AVERAGE I	HIGH I	ROW TOTAL
		IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
VAR062		-----	-----	-----	-----	-----	-----
HAVE	1	I 1 I	I 1 I	I 1 I	I 0 I	I 0 I	9
		I 14.3 I	I 33.3 I	I 100.0 I	I 0 I	I 0 I	19.1
		-----	-----	-----	-----	-----	-----
DONT HAVE	2	I 6 I	I 2 I	I 0 I	I 5 I	I 2 I	38
		I 85.7 I	I 66.7 I	I 0 I	I 100.0 I	I 100.0 I	80.9
		-----	-----	-----	-----	-----	-----
COLUMN TOTAL		7	3	1	5	2	47
		14.9	6.4	2.1	10.6	4.3	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

47 VALID CASES

335 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR065 Q38-HEAT EXCHANGER ON FIREPLACE #1

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	TOWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF													
	COL	PCT	IOWELLING	IOWELLING	HOME	DETACHED	ATTACHED	FAMILY	1964	1974	1979	OR LESS	ROW												
			IPAY1	IPAY2	IOWELL1	IOWELL2	IOWELL3	IOWELL4	IHAGE1	IHAGE2	IHAGE3	IHAGE4	ISPACEL	TOTAL											
VAR065																									
HAVE	1	I	100	I	10	I	1	I	79	I	26	I	4	I	14	I	28	I	22	I	39	I	5	I	110
		I	33.0	I	15.9	I	25.0	I	30.4	I	33.3	I	16.7	I	22.6	I	29.8	I	26.8	I	39.8	I	31.3	I	30.1
DONT HAVE	2	I	203	I	53	I	3	I	181	I	52	I	20	I	48	I	66	I	60	I	59	I	11	I	256
		I	67.0	I	84.1	I	75.0	I	69.6	I	66.7	I	83.3	I	77.4	I	70.2	I	73.2	I	60.2	I	68.8	I	69.9
COLUMN			303		63		4		260		78		24		62		94		82		98		16		366
TOTAL			82.8		17.2		1.1		71.0		21.3		6.6		16.9		25.7		22.4		26.8		4.4		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR065 Q38-HEAT EXCHANGER ON FIREPLACE #1

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD		ROW
	COL PCT	11199 SF	1599 SF	1999 SF	OR MORE	ITY	GAS				TOTAL
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	INFUEL1	INFUEL2	INFUEL3	INFUEL4	I	
VAR065		-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	
	1	I 28 I	I 35 I	I 27 I	I 14 I	I 59 I	I 21 I	I 22 I	I 7 I	I	110
HAVE		I 31.1 I	I 30.2 I	I 36.0 I	I 20.9 I	I 36.0 I	I 22.1 I	I 27.8 I	I 30.4 I	I	30.1
		-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	
	2	I 62 I	I 81 I	I 48 I	I 53 I	I 105 I	I 74 I	I 57 I	I 16 I	I	256
DONT HAVE		I 68.9 I	I 69.8 I	I 64.0 I	I 79.1 I	I 64.0 I	I 77.9 I	I 72.2 I	I 69.6 I	I	69.9
		-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	
	COLUMN	90	116	75	67	164	95	79	23		366
	TOTAL	24.6	31.7	20.5	18.3	44.8	26.0	21.6	6.3		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

366 VALID CASES

16 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR065 Q38-HEAT EXCHANGER ON FIREPLACE #1

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE														
	COL	PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	ROW												
			I					KWH	KWH	KWH				TOTAL												
			I					I	I	I	I	I	I													
VAR065			I					I	I	I	I	I	I													
	1		I	5	I	14	I	20	I	19	I	37	I	10	I	15	I	85	I	8	I	22	I	17	I	110
HAVE			I	20.8	I	24.6	I	35.7	I	44.2	I	33.6	I	32.3	I	31.9	I	29.5	I	20.0	I	33.3	I	32.7	I	30.1
			I					I				I				I				I						
	2		I	19	I	43	I	36	I	24	I	73	I	21	I	32	I	203	I	32	I	44	I	35	I	256
DONT HAVE			I	79.2	I	79.4	I	64.3	I	55.8	I	66.4	I	67.7	I	68.1	I	70.5	I	80.0	I	66.7	I	67.3	I	69.9
			I					I				I				I				I						
				24		57		56		43		110		31		47		288		40		66		52		366
				6.6		15.6		15.3		11.7		30.1		8.5		12.8		78.7		10.9		18.0		14.2		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

***** C R O S S T A B U L A T I O N *****

VAR065 Q38-HEAT EXCHANGER ON FIREPLACE #1
BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC
***** PAGE 2 OF

BANNER2

	COUNT	THIGH	LOW	BELOW	ABOVE	HIGH	
	COL	PCT	I	AVERAGE	AVERAGE		ROW
			I				TOTAL
			IYRKWH4	IYRTHR1	IYRTHR2	IYRTHR3	IYRTHR4 I
VAR065			-----I-----	-----I-----	-----I-----	-----I-----	-----I-----
	1	I	32 I	8 I	6 I	4 I	2 I
HAVE		I	35.2 I	47.1 I	22.2 I	17.4 I	18.2 I
			-----I-----	-----I-----	-----I-----	-----I-----	-----I-----
	2	I	99 I	9 I	21 I	19 I	9 I
DONT HAVE		I	64.8 I	52.9 I	77.8 I	82.6 I	81.8 I
			-----I-----	-----I-----	-----I-----	-----I-----	-----I-----
		COLUMN	91	17	27	23	11
		TOTAL	24.9	4.6	7.4	6.3	3.0
							100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

366 VALID CASES

16 MISSING CASES

* * * * * PAGE 1 OF 2

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR066 Q38-HEAT EXCHANGER ON FIREPLACE #2

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	11600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD	
	COL PCT	11999 SF	OR MORE	ITY	GAS			ROW
								TOTAL
		ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
VAR066	1	4	1	2	3	0	0	5
HAVE		36.4	4.3	28.6	20.0	0	0	10.9
	2	7	22	5	12	22	1	41
DONT HAVE		63.6	95.7	71.4	80.0	100.0	100.0	89.1
COLUMN		11	23	7	15	22	1	46
TOTAL		23.9	50.0	15.2	32.6	47.8	2.2	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

46 VALID CASES

336 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR066 Q38-HEAT EXCHANGER ON FIREPLACE #2

BY BANNER2 (TABULATING 1) INCOME * FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 - \$15,000-					\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE										
	COL	PCT	\$17,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P				AVERAGE	AVERAGE	ROW									
			I					KWH	KWH	KWH						TOTAL									
			IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATE5	IYRKWH1	IYRKWH2	IYRKWH3												
VAR066			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----									
	1	I	0	I	0	I	3	I	2	I	1	I	0	I	4	I	1	I	1	I	0	I	5		
HAVE		I	0	I	0	I	37.5	I	10.0	I	50.0	I	0	I	9.8	I	16.7	I	5.9	I	0	I	10.9		
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
	2	I	4	I	2	I	5	I	5	I	18	I	1	I	3	I	37	I	5	I	16	I	8	I	41
DONT HAVE		I	100.0	I	100.0	I	100.0	I	62.5	I	90.0	I	50.0	I	100.0	I	90.2	I	83.3	I	94.1	I	100.0	I	89.1
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
			4		2		5		8		20		2		3		41		6		17		8		46
			8.7		4.3		10.9		17.4		43.5		4.3		6.5		89.1		13.0		37.0		17.4		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR066 Q38-HEAT EXCHANGER ON FIREPLACE #2

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT	IMHIGH	LOW	BELOW	ABOVE	HIGH		ROW
	COL	PCT	I	AVERAGE	AVERAGE			TOTAL
			I					
			IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
VAR066			I-----I	I-----I	I-----I	I-----I	I-----I	
	1	I	2	I	1	I	0	I
HAVE		I	28.6	I	33.3	I	100.0	I
		I		I		I	0	I
	2	I	5	I	2	I	0	I
DONT HAVE		I	71.4	I	66.7	I	0	I
		I		I		I	100.0	I
		I		I		I	100.0	I
		I		I		I		I
COLUMN			7		3		1	
TOTAL			15.2		6.5		2.2	
							10.9	
							4.3	
								46
								100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

46 VALID CASES

336 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR069 Q39-TYPE OF AIR CONDITIONING SYSTEM

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	OWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF													
	COL	PCT	DWELLING	DWELLING	HOME	DETACHED	ATTACHED	FAMILY	1964	1974	1979	OR LESS		RGM											
			I	I	I	I	I	I	I	I	I	I		TOTAL											
			IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	I											
VAR069			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----											
CENTRAL SYSTEM	1	I	56	I	11	I	8	I	42	I	8	I	9	I	7	I	67								
		I	6.9	I	3.2	I	10.1	I	5.9	I	5.0	I	4.3	I	2.6	I	5.8								
INDIVIDUAL UNITS	2	I	118	I	36	I	12	I	84	I	26	I	34	I	49	I	156								
		I	14.5	I	10.4	I	15.2	I	11.7	I	16.4	I	16.2	I	17.9	I	13.4								
NONE	3	I	637	I	299	I	99	I	989	I	125	I	167	I	218	I	940								
		I	78.5	I	86.4	I	74.7	I	82.4	I	78.6	I	79.5	I	79.6	I	80.8								
COLUMN			811		346		79		715		159		210		274		221		227		218		256		1163
	TOTAL		69.7		29.8		6.8		61.5		13.7		18.1		23.6		19.0		19.5		18.7		22.0		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR069 Q39-TYPE OF AIR CONDITIONING SYSTEM

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT COL PCT	1800 TO 11199 SF	1200 TO 1599 SF	1600 TO 1999 SF	2000 SF OR MORE	ELECTRIC ITY	NATURAL GAS	FUEL OIL	WOOD	ROW TOTAL
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
VAR069		-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	
CENTRAL SYSTEM	1	I 16 I	I 15 I	I 13 I	I 16 I	I 29 I	I 17 I	I 12 I	I 7 I	67
		I 4.7 I	I 5.7 I	I 8.5 I	I 11.8 I	I 5.9 I	I 6.5 I	I 5.6 I	I 4.1 I	5.8
INDIVIDUAL UNITS	2	I 51 I	I 34 I	I 14 I	I 23 I	I 77 I	I 27 I	I 31 I	I 14 I	156
		I 14.9 I	I 12.9 I	I 9.2 I	I 16.9 I	I 15.8 I	I 10.3 I	I 14.5 I	I 8.3 I	13.4
NONE	3	I 275 I	I 214 I	I 126 I	I 97 I	I 382 I	I 217 I	I 171 I	I 148 I	940
		I 80.4 I	I 81.4 I	I 82.4 I	I 71.3 I	I 78.3 I	I 83.1 I	I 79.9 I	I 87.6 I	80.8
COLUMN TOTAL		342	263	153	136	488	261	214	169	1163
		29.4	22.6	13.2	11.7	42.0	22.4	18.4	14.5	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1163 VALID CASES

2 MISSING CASES

PAGE 1 OF 2

(CONTINUED)

PAGE 2 OF 2

2 MISSING CASES

FILE PACIFICA (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR075 Q45-TYPE OF FUEL USED FOR HEATING WATER

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	OWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF			
	COL	PCT	IDWELLING	DWELLING	HOME	DETACHED	ATTACHED	FAMILY	1964	1974	1979	OR LESS	ROW		
			IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACEL	TOTAL	
VAR075															
NO HOT WATER	1	I	1	I	0	I	0	I	0	I	1	I	0	I	1
		I	.1	I	0	I	0	I	.6	I	0	I	.5	I	.1
NATURAL GAS	2	I	114	I	27	I	4	I	112	I	17	I	8	I	141
		I	14.0	I	8.0	I	5.1	I	15.6	I	10.8	I	4.0	I	12.2
BOTTLED GAS	3	I	8	I	1	I	3	I	5	I	1	I	0	I	9
		I	1.0	I	.3	I	3.8	I	.7	I	.6	I	0	I	.8
FUEL OIL	4	I	11	I	8	I	1	I	12	I	2	I	4	I	19
		I	1.4	I	2.4	I	1.3	I	1.7	I	1.3	I	2.0	I	1.6
ELECTRICITY	5	I	673	I	292	I	71	I	583	I	133	I	184	I	971
		I	82.9	I	86.9	I	89.9	I	81.4	I	84.2	I	91.5	I	84.1
KEROSENE	6	I	0	I	2	I	0	I	1	I	0	I	1	I	2
		I	0	I	.6	I	0	I	.1	I	0	I	.5	I	.2
WOOD	8	I	1	I	1	I	0	I	1	I	1	I	0	I	2
		I	.1	I	.3	I	0	I	.1	I	.6	I	0	I	.2
GEOTHERMAL	10	I	4	I	4	I	0	I	2	I	3	I	3	I	8
		I	.5	I	1.2	I	0	I	.3	I	1.9	I	1.5	I	.7
MISC FUELS	11	I	0	I	1	I	0	I	0	I	1	I	0	I	1
		I	0	I	.3	I	0	I	0	I	.5	I	.4	I	.1
COLUMN TOTAL			812		336		79		716		158		201		1154
			70.4		29.1		6.8		62.0		13.7		17.4		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR075 Q45-TYPE OF FUEL USED FOR HEATING WATER

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD		ROW
	COL PCT	11199 SF	1599 SF	1999 SF	OR MORE	ITY	GAS				TOTAL
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	I	
VAR075											
1	I	0 I	1 I	0 I	0 I	1 I	0 I	0 I	0 I	I	1
NO HOT WATER	I	0 I	.4 I	0 I	0 I	.2 I	0 I	0 I	0 I	I	.1
2	I	38 I	43 I	24 I	21 I	3 I	111 I	3 I	19 I	I	141
NATURAL GAS	I	11.1 I	16.3 I	15.7 I	15.4 I	.6 I	42.9 I	1.4 I	11.3 I	I	12.2
3	I	2 I	1 I	1 I	1 I	0 I	1 I	0 I	4 I	I	9
BOTTLED GAS	I	.6 I	.4 I	.7 I	.7 I	0 I	.4 I	0 I	2.4 I	I	.8
4	I	5 I	3 I	1 I	2 I	0 I	0 I	.19 I	0 I	I	19
FUEL OIL	I	1.5 I	1.1 I	.7 I	1.5 I	0 I	0 I	9.0 I	0 I	I	1.6
5	I	293 I	214 I	126 I	110 I	481 I	147 I	189 I	142 I	I	971
ELECTRICITY	I	85.7 I	81.4 I	82.4 I	80.9 I	99.0 I	56.8 I	89.2 I	84.5 I	I	84.1
6	I	2 I	0 I	0 I	0 I	1 I	0 I	1 I	0 I	I	2
KEROSENE	I	.6 I	0 I	0 I	0 I	.2 I	0 I	.5 I	0 I	I	.2
8	I	0 I	0 I	0 I	0 I	0 I	0 I	0 I	2 I	I	2
WOOD	I	0 I	0 I	0 I	0 I	0 I	0 I	0 I	1.2 I	I	.2
10	I	2 I	1 I	1 I	2 I	0 I	0 I	0 I	1 I	I	8
GEOTHERMAL	I	.6 I	.4 I	.7 I	1.5 I	0 I	0 I	0 I	.6 I	I	.7
11	I	0 I	0 I	0 I	0 I	0 I	0 I	0 I	0 I	I	1
MISC FUELS	I	0 I	0 I	0 I	0 I	0 I	0 I	0 I	0 I	I	.1
COLUMN		342	263	153	136	486	259	212	168		1154
TOTAL		29.6	22.8	13.3	11.8	42.1	22.4	18.4	14.6		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1154 VALID CASES

11 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR075 045-TYPE OF FUEL USED FOR HEATING WATER
BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE	ROW
	COL PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	TOTAL
		I	I	I	I	I	KWH	KWH	KWH	IYR KWH1	IYR KWH2	IYR KWH3	I
VAR075		I	I	I	I	I	I	I	I	I	I	I	I
NO HOT WATER	1	0	0	0	0	0	0	0	0	0	0	0	1
		0	0	0	0	0	0	.8	0	0	0	0	.1
NATURAL GAS	2	18	28	15	19	32	5	6	130	65	26	9	141
		9.2	10.6	9.3	14.2	15.2	6.7	4.8	13.6	42.2	12.1	4.9	12.2
BOTTLED GAS	3	3	0	2	1	1	0	2	7	6	1	1	9
		1.5	0	1.2	.7	.5	0	1.6	.7	3.9	.5	.5	.8
FUEL OIL	4	5	6	2	1	3	0	1	18	3	6	2	19
		2.6	2.3	1.2	.7	1.4	0	.8	1.9	1.9	2.8	1.1	1.6
ELECTRICITY	5	165	229	140	113	174	70	115	786	76	182	170	971
		84.2	86.4	86.4	84.3	82.5	93.3	92.0	82.4	49.4	84.7	92.4	84.1
KEROSENE	6	0	0	2	0	0	0	0	2	0	0	1	2
		0	0	1.2	0	0	0	0	.2	0	0	.5	.2
WOOD	9	1	0	1	0	0	0	0	2	0	0	0	2
		.5	0	.6	0	0	0	0	.2	0	0	0	.2
GEOTHERMAL	10	4	1	0	0	1	0	0	8	4	0	1	8
		2.0	.4	0	0	.5	0	0	.8	2.6	0	.5	.7
MISC FUELS	11	0	1	0	0	0	0	0	1	0	0	0	1
		0	.4	0	0	0	0	0	.1	0	0	0	.1
COLUMN TOTAL		196	265	162	134	211	75	125	954	154	215	184	1154
		17.0	23.0	14.0	11.6	18.3	6.5	10.8	82.7	13.3	18.6	15.9	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR075 045-TYPE OF FUEL USED FOR HEATING WATER

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT	IMHIGH	LOW	BELOW	ABOVE	HIGH		
	COL	PCT	I	AVERAGE	AVERAGE		ROW	
			I				TOTAL	
			IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
VAR075			-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----
NO HOT WATER	1		I 1 I	I 0 I	I 0 I	I 0 I	I 0 I	I 1
			I .6 I	I 0 I	I 0 I	I 0 I	I 0 I	I .1
			-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----
NATURAL GAS	2		I 1 I	I 21 I	I 45 I	I 32 I	I 15 I	I 141
			I .6 I	I 26.9 I	I 69.2 I	I 68.1 I	I 75.0 I	I 12.2
			-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----
BOTTLED GAS	3		I 0 I	I 0 I	I 0 I	I 1 I	I 0 I	I 9
			I 0 I	I 0 I	I 0 I	I 2.1 I	I 0 I	I .8
			-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----
FUEL OIL	4		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 19
			I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 1.6
			-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----
ELECTRICITY	5		I 163 I	I 57 I	I 20 I	I 14 I	I 5 I	I 971
			I 98.8 I	I 73.1 I	I 30.8 I	I 29.8 I	I 25.0 I	I 84.1
			-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----
KEROSENE	6		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 2
			I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I .2
			-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----
WOOD	8		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 2
			I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I .2
			-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----
GEOTHERMAL	10		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 8
			I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I .7
			-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----
MISC FUELS	11		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 1
			I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I .1
			-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----
COLUMN			165	78	65	47	20	1154
TOTAL			14.3	6.8	5.6	4.1	1.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1154 VALID CASES

11 MISSING CASES

FILE PACIFICA (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR080 050-WATER HTR IS WRAPPED IN INSULATION
BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT COL	IOWN PCT	RENT IOWELLING	MOBILE DWELLING HOME	SIN FAM DETACHED	SIN FAM ATTACHED	MULTI- FAMILY	PRE 1950	1950 TO 1964	1965 TO 1974	1975 TO 1979	799 SF OR LESS	ROW TOTAL
		IPAY1	IPAY2	IOWELL1	IOWELL2	IOWELL3	IOWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	
VAR080		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
YES	1	I 104	I 11	I 12	I 76	I 20	I 7	I 19	I 29	I 31	I 27	I 9	115
		I 26.1	I 9.2	I 35.3	I 21.3	I 23.3	I 15.6	I 18.4	I 26.4	I 27.0	I 24.1	I 12.3	22.0
		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
NO	2	I 282	I 99	I 17	I 269	I 63	I 35	I 79	I 77	I 80	I 84	I 56	384
		I 70.7	I 82.5	I 50.0	I 75.4	I 73.3	I 77.8	I 76.7	I 70.0	I 69.6	I 75.0	I 76.7	73.6
		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
DONT KNOW	8	I 13	I 10	I 5	I 12	I 3	I 3	I 5	I 4	I 4	I 1	I 8	23
		I 3.3	I 8.3	I 14.7	I 3.4	I 3.5	I 6.7	I 4.9	I 3.6	I 3.5	I .9	I 11.0	4.4
		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
COLUMN		399	120	34	357	86	45	103	110	115	112	73	522
TOTAL		76.4	23.0	6.5	68.4	16.5	8.6	19.7	21.1	22.0	21.5	14.0	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR080 Q50-WATER HTR IS WRAPPED IN INSULATION

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD		ROW
	COL PCT	11199 SF	1599 SF	1999 SF	OR MORE	ITY	GAS				TOTAL
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	I	
VAR080		-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	I	
	1	I 39 I	I 38 I	I 16 I	I 13 I	I 52 I	I 27 I	I 14 I	I 21 I	I	115
YES		I 24.1 I	I 25.7 I	I 18.4 I	I 27.1 I	I 23.6 I	I 21.4 I	I 18.7 I	I 22.6 I	I	22.0
		-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	I	
	2	I 115 I	I 108 I	I 69 I	I 32 I	I 160 I	I 98 I	I 57 I	I 64 I	I	384
NO		I 71.0 I	I 73.0 I	I 79.3 I	I 66.7 I	I 72.7 I	I 77.8 I	I 76.0 I	I 68.8 I	I	73.6
		-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	I	
	8	I 8 I	I 2 I	I 2 I	I 3 I	I 8 I	I 1 I	I 4 I	I 9 I	I	23
DONT KNOW		I 4.9 I	I 1.4 I	I 2.3 I	I 6.3 I	I 3.6 I	I .8 I	I 5.3 I	I 8.6 I	I	4.4
		-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----	I	
	COLUMN	162	148	87	48	220	126	75	93		522
	TOTAL	31.0	28.4	16.7	9.2	42.1	24.1	14.4	17.8		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

522 VALID CASES

60 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR080 Q50-WATER HTR IS WRAPPED IN INSULATION
BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE	ROW
	COL	PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P	AVERAGE	AVERAGE	TOTAL
			I	I	I	I	I	KWH	KWH	KWH	I	I	I
			IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATE5	IYRKWH1	IYRKWH2	IYRKWH3
VAR080	1	I	10	I 21	I 19	I 15	I 30	I 9	I 7	I 99	I 18	I 13	I 21
YES		I	14.9	I 18.1	I 23.5	I 23.4	I 27.5	I 22.0	I 12.5	I 23.3	I 25.0	I 14.6	I 26.6
	2	I	54	I 87	I 61	I 46	I 75	I 32	I 47	I 305	I 51	I 74	I 54
NO		I	80.6	I 75.0	I 75.3	I 71.9	I 68.8	I 78.0	I 83.9	I 71.8	I 70.8	I 83.1	I 68.4
	8	I	3	I 8	I 1	I 3	I 4	I 0	I 2	I 21	I 3	I 2	I 4
DONT KNOW		I	4.5	I 6.9	I 1.2	I 4.7	I 3.7	I 0	I 3.6	I 4.9	I 4.2	I 2.2	I 5.1
	COLUMN		67	116	81	64	109	41	56	425	72	89	79
	TOTAL		12.8	22.2	15.5	12.3	20.9	7.9	10.7	81.4	13.8	17.0	15.1
													100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

PAGE 2 OF 2

COUNT	IMIGH	LOW	BELOW	ABOVE	HIGH	ROW	
COL	PCT	I	AVERAGE	AVERAGE		TOTAL	
		IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
1		I 24	I 7	I 11	I 7	I 1	I 115
		I 27.6	I 18.4	I 25.6	I 23.3	I 14.3	I 22.0
2		I 61	I 30	I 32	I 23	I 6	I 384
		I 70.1	I 78.9	I 74.4	I 76.7	I 85.7	I 73.6
8		I 2	I 1	I 0	I 0	I 0	I 23
		I 2.3	I 2.6	I 0	I 0	I 0	I 4.4
COLUMN		87	38	43	30	7	522
TOTAL		16.7	7.3	8.2	5.7	1.3	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

522 VALID CASES

60 MISSING CASES

* * * * * PAGE 1 OF 2

COUNT	IOWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF	ROW												
COL	PCT	IDWELLING	OWELLING	HOME	DETACHED	ATTACHED	FAMILY	1964	1974	1979	OR LESS	TOTAL												
	I	IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	I											
1	I	118	I	22	I	16	I	87	I	29	I	9	I	12	I	39	I	41	I	36	I	12	I	141
	I	29.6	I	18.3	I	47.1	I	24.4	I	33.3	I	20.0	I	11.8	I	35.5	I	35.3	I	32.1	I	16.4	I	27.0
2	I	243	I	81	I	7	I	239	I	50	I	30	I	77	I	66	I	59	I	67	I	47	I	326
	I	60.9	I	67.5	I	20.6	I	67.1	I	57.5	I	66.7	I	75.5	I	60.0	I	50.9	I	59.8	I	64.4	I	62.5
8	I	38	I	17	I	11	I	30	I	8	I	6	I	13	I	5	I	16	I	9	I	14	I	55
	I	9.5	I	14.2	I	32.4	I	8.4	I	9.2	I	13.3	I	12.7	I	4.5	I	13.8	I	8.0	I	19.2	I	10.5
COLUMN		399		120		34		356		87		45		102		110		116		112		73		522
TOTAL		76.4		23.0		6.5		68.2		16.7		8.6		19.5		21.1		22.2		21.5		14.0		100.0

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR081 Q51-HOT WATER PIPES ARE INSULATED

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD		ROW
	COL PCT	1199 SF	1599 SF	1999 SF	OR MORE	ITY	GAS				TOTAL
VAR081		ISPACE2	ISPACE3	ISPACE4	ISPACE5	INFUEL1	INFUEL2	INFUEL3	INFUEL4		
YES	1	I 91 I	I 36 I	I 30 I	I 11 I	I 61 I	I 30 I	I 13 I	I 36 I		141
		I 31.7 I	I 24.3 I	I 34.1 I	I 22.9 I	I 27.9 I	I 23.8 I	I 17.3 I	I 38.7 I		27.0
NO	2	I 97 I	I 99 I	I 48 I	I 32 I	I 133 I	I 87 I	I 55 I	I 45 I		326
		I 60.2 I	I 66.9 I	I 54.5 I	I 66.7 I	I 60.7 I	I 69.0 I	I 73.3 I	I 48.4 I		62.5
DONT KNOW	8	I 13 I	I 13 I	I 10 I	I 5 I	I 25 I	I 9 I	I 7 I	I 12 I		55
		I 8.1 I	I 8.8 I	I 11.4 I	I 10.4 I	I 11.4 I	I 7.1 I	I 9.3 I	I 12.9 I		10.5
COLUMN TOTAL		161	148	88	48	219	126	75	93		522
		30.8	28.4	16.9	9.2	42.0	24.1	14.4	17.8		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

522 VALID CASES

60 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR081 Q51-HOT WATER PIPES ARE INSULATED

BY BANNER2 (TABULATING 1) INCOME * FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 - \$15,000-		\$20,000-		\$25,000		13-16	17-20	25-28	LOW	BELOW	ABOVE	
	COL	PCT	\$17,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P			AVERAGE	AVERAGE	ROW
								KWH	KWH	KWH					TOTAL
			IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATE5	IYRKWH1	IYRKWH2	IYRKWH3	I	
VAR081			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
	1	I	11	I 27	I 22	I 18	I 40	I 13	I 15	I 113	I 17	I 24	I 25	I	141
YES		I	16.4	I 23.9	I 27.2	I 28.1	I 36.4	I 31.7	I 27.3	I 26.5	I 23.3	I 27.0	I 31.6	I	27.0
			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
	2	I	46	I 75	I 50	I 39	I 63	I 27	I 33	I 266	I 50	I 55	I 44	I	326
NO		I	68.7	I 65.2	I 61.7	I 60.9	I 57.3	I 65.9	I 60.0	I 62.4	I 68.5	I 61.8	I 55.7	I	62.5
			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
	8	I	10	I 13	I 9	I 7	I 7	I 1	I 7	I 47	I 6	I 10	I 10	I	55
DONT KNOW		I	14.9	I 11.3	I 11.1	I 10.9	I 6.4	I 2.4	I 12.7	I 11.0	I 8.2	I 11.2	I 12.7	I	10.5
			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
	COLUMN		67	115	81	64	110	41	55	426	73	89	79		522
	TOTAL		12.8	22.0	15.5	12.3	21.1	7.9	10.5	81.6	14.0	17.0	15.1		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

***** C R O S S T A B U L A T I O N *****

VAR001 051-HOT WATER PIPES ARE INSULATED

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

PAGE 2 OF 2

BANNER2

	COUNT COL PCT	THIGH I	LOW I	BELOW AVERAGE	ABOVE AVERAGE	HIGH I	ROW TOTAL
VAR001		IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
YES	1	I 28 I	I 9 I	I 13 I	I 9 I	I 3 I	141
		I 32.2 I	I 23.7 I	I 30.2 I	I 30.0 I	I 42.9 I	27.0
NO	2	I 53 I	I 28 I	I 29 I	I 18 I	I 3 I	326
		I 60.9 I	I 73.7 I	I 67.4 I	I 60.0 I	I 42.9 I	62.5
DONT KNOW	0	I 6 I	I 1 I	I 1 I	I 3 I	I 1 I	55
		I 6.9 I	I 2.6 I	I 2.3 I	I 10.0 I	I 14.3 I	10.5
		I 87 I	I 38 I	I 43 I	I 30 I	I 7 I	522
	COLUMN TOTAL	16.7	7.3	8.2	5.7	1.3	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

522 VALID CASES

60 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR084 Q54-HOME HAS CLOTHES WASHING MACHINE
BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT COL PCT	OWN IDWELLING	RENT DWELLING	MOBILE HOME	SIN FAM DETACHED	SIN FAM ATTACHED	MULTI- FAMILY	PRE 1950	1950 TO 1964	1965 TO 1974	1975 TO 1979	799 SF OR LESS	ROW TOTAL
		IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	
VAR084													
YES	1	752	154	60	648	145	59	241	198	182	172	111	912
		92.7	44.5	75.9	90.5	91.8	28.1	88.0	90.0	79.6	78.5	43.4	78.4
NO	2	59	192	19	68	13	151	33	22	46	47	145	251
		7.3	55.9	24.1	9.5	8.2	71.9	12.0	10.0	20.2	21.5	56.6	21.6
COLUMN		811	346	79	716	158	210	274	220	228	219	256	1163
TOTAL		69.7	29.8	6.8	61.6	13.6	18.1	23.6	18.9	19.6	18.8	22.0	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR084 Q54-HOME HAS CLOTHES WASHING MACHINE

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT COL PCT	1800 TO 11199 SF	1200 TO 1599 SF	1600 TO 1999 SF	2000 SF OR MORE	ELECTRIC ITY	NATURAL GAS	FUEL OIL	WOOD	ROW TOTAL
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	INFUEL1	INFUEL2	INFUEL3	INFUEL4	
VAR084										
YES	1	274	239	145	133	324	227	188	153	912
		80.1	90.9	94.8	97.8	66.3	87.3	87.9	90.5	78.4
NO	2	68	24	8	3	165	33	26	16	251
		19.9	9.1	5.2	2.2	33.7	12.7	12.1	9.5	21.6
COLUMN TOTAL		342	263	153	136	489	260	214	169	1163
TOTAL		29.4	22.6	13.2	11.7	42.0	22.4	18.4	14.5	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1163 VALID CASES

2 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR084 Q54-HOME HAS CLOTHES WASHING MACHINE
BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 -		\$15,000-		\$20,000-		\$25,000		13-16	17-20	25-28	LOW	BELOW	ABOVE	
	COL	PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P					AVERAGE	AVERAGE	ROW
			I					KWH	KWH	KWH							TOTAL
			I INCOME1	I INCOME2	I INCOME3	I INCOME4	I INCOME5	I RATE2	I RATE3	I RATE5	I YRKWH1	I YRKWH2	I YRKWH3	I			
VAR084			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	1	I	117	I 189	I 135	I 124	I 202	I 71	I 110	I 731	I 125	I 178	I 170	I			912
YES		I	58.2	I 71.3	I 82.3	I 92.5	I 95.7	I 92.2	I 88.0	I 76.1	I 81.2	I 82.4	I 92.4	I			78.4
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	2	I	84	I 76	I 29	I 10	I 9	I 6	I 15	I 230	I 29	I 38	I 14	I			251
NO		I	41.8	I 28.7	I 17.7	I 7.5	I 4.3	I 7.8	I 12.0	I 23.9	I 18.8	I 17.6	I 7.6	I			21.6
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	COLUMN		201	265	164	134	211	77	125	961	154	216	184				1163
	TOTAL		17.3	22.8	14.1	11.5	18.1	6.6	10.7	82.6	13.2	18.6	15.8				100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR084 Q54-HOME HAS CLOTHES WASHING MACHINE

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT COL PCT	HIGH I	LOW I	BELOW AVERAGE I	ABOVE AVERAGE I	HIGH I	ROW TOTAL
		IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
VAR084		I-----I	I-----I	I-----I	I-----I	I-----I	I
	1	I 161	I 65	I 64	I 45	I 19	I 912
YES		I 97.6	I 84.4	I 98.5	I 95.7	I 95.0	I 78.4
		I-----I	I-----I	I-----I	I-----I	I-----I	I
	2	I 4	I 12	I 1	I 2	I 1	I 251
NO		I 2.4	I 15.6	I 1.5	I 4.3	I 5.0	I 21.6
		I-----I	I-----I	I-----I	I-----I	I-----I	I
	COLUMN	165	77	65	47	20	1163
	TOTAL	14.2	6.6	5.6	4.0	1.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1163 VALID CASES

2 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR092 Q58-HOME HAS CLOTHES DRYER

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT COL PCT	IOWN IDWELLING	RENT IDWELLING	MOBILE HOME	SIN FAM DETACHED	SIN FAM ATTACHED	MULTI- FAMILY	PRE 1950	1950 TO 1964	1965 TO 1974	1975 TO 1979	799 SF OR LESS	ROW TOTAL
		IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	
VAR092													
YES	1	I 696	I 137	I 55	I 592	I 139	I 53	I 204	I 187	I 175	I 167	I 93	I 839
		I 85.7	I 39.5	I 69.6	I 82.6	I 87.4	I 25.2	I 74.5	I 84.6	I 76.8	I 76.3	I 36.3	I 72.0
NO	2	I 116	I 210	I 24	I 125	I 20	I 157	I 70	I 34	I 53	I 52	I 163	I 326
		I 14.3	I 60.5	I 30.4	I 17.4	I 12.6	I 74.8	I 25.5	I 15.4	I 23.2	I 23.7	I 63.7	I 28.0
COLUMN TOTAL		812 69.7	347 29.8	79 6.8	717 61.5	159 13.6	210 18.0	274 23.5	221 19.0	228 19.6	219 18.8	256 22.0	1165 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR092 Q58-HOME HAS CLOTHES DRYER

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT COL PCT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD	ROW TOTAL
		11199 SF	1999 SF	1999 SF	OR MORE	ITY	GAS			
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
VAR092	1	I 250	I 224	I 138	I 124	I 309	I 201	I 165	I 145	I 839
YES		I 72.9	I 84.8	I 90.2	I 91.2	I 63.1	I 77.0	I 77.1	I 85.8	I 72.0
	2	I 93	I 40	I 15	I 12	I 181	I 60	I 49	I 24	I 326
NO		I 27.1	I 15.2	I 9.8	I 8.8	I 36.9	I 23.0	I 22.9	I 14.2	I 28.0
		COLUMN								
		343	264	153	136	490	261	214	169	1165
	TOTAL	29.4	22.7	13.1	11.7	42.1	22.4	18.4	14.5	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1165 VALID CASES

0 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR092 058-HOME HAS CLOTHES DRYER

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

		COUNT	ISO TO		\$8,000 - \$15,000-		\$20,000- \$25,000		13-16		17-20		25-28		LOW	BELOW		ABOVE							
		COL	PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	AVERAGE	ROW						
				I					KWH	KWH	KWH	KWH	KWH	KWH					TOTAL						
VAR092				I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I						
				I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I						
YES	1	I	91	I	171	I	128	I	122	I	197	I	68	I	101	I	670	I	103	I	163	I	162	I	839
		I	45.3	I	64.3	I	78.0	I	91.0	I	93.4	I	88.3	I	80.8	I	69.6	I	66.9	I	75.5	I	88.0	I	72.0
NO	2	I	110	I	95	I	36	I	12	I	14	I	9	I	24	I	293	I	51	I	53	I	22	I	326
		I	94.7	I	35.7	I	22.0	I	9.0	I	6.6	I	11.7	I	19.2	I	30.4	I	33.1	I	24.5	I	12.0	I	28.0
				I																					
		COLUMN	201	266	164	134	211	77	125	963	154	216	184	1165											
		TOTAL	17.3	22.8	14.1	11.5	18.1	6.6	10.7	82.7	13.2	18.5	15.8	100.0											

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR092 Q58-HOME HAS CLOTHES DRYER

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT COL PCT	I HIGH I	LOW I	BELOW AVERAGE I	ABOVE AVERAGE I	HIGH I	ROW TOTAL
		IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
VAR092		-----I-----I-----I-----I-----I					
	1	I 159	I 59	I 60	I 44	I 17	I 839
YES		I 96.4	I 70.5	I 92.3	I 93.6	I 85.0	I 72.0
		-----I-----I-----I-----I-----I					
	2	I 6	I 23	I 5	I 3	I 3	I 326
NO		I 3.6	I 29.5	I 7.7	I 6.4	I 15.0	I 28.0
		-----I-----I-----I-----I-----I					
	COLUMN	165	78	65	47	20	1165
	TOTAL	14.2	6.7	5.6	4.0	1.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1165 VALID CASES

0 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR100 Q62-HOME HAS ELECTRIC DISHWASHER

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	IOWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF		
	COL	PCT	OWNELLING	OWNELLING	HOME	DETACHED	ATTACHED	FAMILY				OR LESS		ROW
			IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	TOTAL
VAR100														
YES	1		477	142	25	381	110	105	112	123	147	176	65	621
			58.7	40.9	31.6	53.1	69.2	50.0	40.9	55.7	64.5	80.4	25.4	53.3
NO	2		335	205	54	336	49	105	162	98	91	43	191	544
			41.3	59.1	68.4	46.9	30.8	50.0	59.1	44.3	35.5	19.6	74.6	46.7
COLUMN			812	347	79	717	159	210	274	221	228	219	256	1165
TOTAL			69.7	29.8	6.8	61.5	13.6	18.0	23.5	19.0	19.6	18.8	22.0	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR100 062-HOME HAS ELECTRIC DISHWASHER

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT COL PCT	1800 TO 1199 SF	1200 TO 1599 SF	1600 TO 1999 SF	2000 SF OR MORE	ELECTRIC ITY	NATURAL GAS	FUEL OIL	WOOD	ROW TOTAL
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	INFUEL1	INFUEL2	INFUEL3	INFUEL4	
VAR100	1	I 159	I 167	I 117	I 106	I 289	I 136	I 105	I 82	I 621
YES		I 46.4	I 63.3	I 76.5	I 77.9	I 59.0	I 52.1	I 49.1	I 48.5	I 53.3
	2	I 184	I 97	I 36	I 30	I 201	I 125	I 109	I 87	I 544
NO		I 53.6	I 36.7	I 23.5	I 22.1	I 41.0	I 47.9	I 50.9	I 51.5	I 46.7
		I-----	I-----	I-----	I-----	I-----	I-----	I-----	I-----	
	COLUMN	343	264	153	136	490	261	214	169	1165
	TOTAL	29.4	22.7	13.1	11.7	42.1	22.4	18.4	14.5	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1165 VALID CASES

0 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR100 Q62-HOME HAS ELECTRIC DISHWASHER

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

		COUNT	I40 TO		\$8,000 - \$15,000-		\$20,000- \$25,000		13-16		17-20		25-28		LOW	BELOW		ABOVE							
		COL	PCT	I\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P					AVERAGE	AVERAGE		ROW						
				I					KWH	KWH	KWH								TOTAL						
				IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATE5	IYRKNH1	IYRKNH2	IYRKNH3	I										
VAR100				-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----										
	1	I	38	I	123	I	90	I	91	I	173	I	44	I	73	I	504	I	47	I	130	I	105	I	621
YES		I	18.9	I	46.2	I	54.9	I	67.9	I	82.0	I	57.1	I	58.4	I	52.3	I	30.5	I	60.2	I	57.1	I	53.3
				-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----										
	2	I	163	I	143	I	74	I	43	I	38	I	33	I	52	I	459	I	107	I	86	I	79	I	544
NO		I	81.1	I	53.8	I	45.1	I	32.1	I	18.0	I	42.9	I	41.6	I	47.7	I	69.5	I	39.8	I	42.9	I	46.7
				-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----										
	COLUMN		201		266		164		134		211		77		125		963		154		216		184		1165
	TOTAL		17.3		22.8		14.1		11.5		18.1		6.6		10.7		82.7		13.2		18.5		15.8		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR100 Q62-HOME HAS ELECTRIC DISHWASHER
 BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC
 ***** PAGE 2 OF 2

BANNER2

	COUNT	HIGH	LOW	BELOW	ABOVE	HIGH							
	COL	PCT	I	AVERAGE	AVERAGE		ROW						
			I				TOTAL						
			IYRKHH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I					
VAR100			-----	-----	-----	-----	-----	-----					
YES	1	I	123	I	30	I	35	I	33	I	13	I	621
		I	74.5	I	38.5	I	53.8	I	70.2	I	65.0	I	53.3
			-----	-----	-----	-----	-----	-----	-----				
NO	2	I	42	I	48	I	30	I	14	I	7	I	544
		I	25.5	I	61.5	I	46.2	I	29.8	I	35.0	I	46.7
			-----	-----	-----	-----	-----	-----	-----				
	COLUMN		165		78		65		47		20		1165
	TOTAL		14.2		6.7		5.6		4.0		1.7		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1165 VALID CASES

0 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR109 Q67-TYPE OF REFRIGERATOR-#1

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT COL	IOWN PCT	RENT IDWELLING	MOBILE IDWELLING	SIN FAM DETACHED	SIN FAM ATTACHED	MULTI- FAMILY	PRE 1950	1950 TO 1964	1965 TO 1974	1975 TO 1979	799 SF OR LESS	ROW TOTAL
		IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	
VAR109	1	I 614	I 142	I 38	I 533	I 115	I 73	I 186	I 160	I 151	I 156	I 99	759
FROSTFREE		I 76.0	I 41.0	I 48.1	I 74.9	I 72.3	I 34.8	I 68.4	I 72.4	I 66.2	I 71.9	I 39.3	65.4
	2	I 194	I 204	I 41	I 179	I 44	I 137	I 86	I 61	I 77	I 61	I 153	401
NON-FROSTFREE		I 24.0	I 59.0	I 51.9	I 25.1	I 27.7	I 65.2	I 31.6	I 27.6	I 33.8	I 28.1	I 60.7	34.6
COLUMN TOTAL		808	346	79	712	159	210	272	221	228	217	252	1160
		69.7	29.8	6.8	61.4	13.7	18.1	23.4	19.1	19.7	18.7	21.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR109 Q67-TYPE OF REFRIGERATOR-#1

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT COL PCT	1800 TO 11199 SF	1200 TO 1599 SF	1600 TO 1999 SF	2000 SF OR MORE	ELECTRIC ITY	NATURAL GAS	FUEL OIL	WOOD	ROW TOTAL
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
VAR109		-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	
	1	I 209	I 213	I 119	I 110	I 291	I 181	I 159	I 116	I 759
FROSTFREE		I 60.9	I 80.7	I 78.3	I 80.9	I 59.4	I 70.2	I 74.3	I 69.5	I 65.4
		-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	
	2	I 134	I 51	I 33	I 26	I 199	I 77	I 55	I 51	I 401
NON-FROSTFREE		I 39.1	I 19.3	I 21.7	I 19.1	I 40.6	I 29.8	I 25.7	I 30.5	I 34.6
		-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	
COLUMN		343	264	152	136	490	258	214	167	1160
TOTAL		29.6	22.8	13.1	11.7	42.2	22.2	18.4	14.4	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1160 VALID CASES

5 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR109 Q67-TYPE OF REFRIGERATOR-#1

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	\$0 TO	\$8,000 -	\$15,000 -	\$20,000 -	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE	ROW
	COL PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	TOTAL
		I	I	I	I	I	KWH	KWH	KWH				
VAR109		IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATES	IYRKWH1	IYRKWH2	IYRKWH3	I
	1	I 99	I 151	I 108	I 93	I 175	I 54	I 88	I 617	I 86	I 141	I 141	I 759
FROSTFREE		I 49.3	I 57.2	I 66.3	I 69.9	I 83.3	I 70.1	I 71.0	I 64.3	I 56.2	I 65.9	I 76.6	I 65.4
	2	I 102	I 113	I 55	I 40	I 35	I 23	I 36	I 342	I 67	I 73	I 43	I 401
NON-FROSTFREE		I 50.7	I 42.8	I 33.7	I 30.1	I 16.7	I 29.9	I 29.0	I 35.7	I 43.8	I 34.1	I 23.4	I 34.6
		I-----	I-----	I-----	I-----	I-----	I-----	I-----	I-----	I-----	I-----	I-----	I
	COLUMN	201	264	163	133	210	77	124	959	153	214	184	1160
	TOTAL	17.3	22.8	14.1	11.5	18.1	6.6	10.7	82.7	13.2	18.4	15.9	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR109 Q67-TYPE OF REFRIGERATOR-#1

BY BANNER2 (TABULATING 1) INCOME * FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT	HIGH	LOW	BELOW	ABOVE	HIGH							
	COL	PCT	I	AVERAGE	AVERAGE		ROW						
			I				TOTAL						
			IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I					
VAR109			I-----I	I-----I	I-----I	I-----I	I-----I	I					
	1	I	133	I	45	I	49	I	39	I	13	I	759
FROSTFREE		I	80.6	I	58.4	I	75.4	I	83.0	I	65.0	I	65.4
		I	I-----I	I-----I	I-----I	I-----I	I-----I	I					
	2	I	32	I	32	I	16	I	8	I	7	I	401
NON-FROSTFREE		I	19.4	I	41.6	I	24.6	I	17.0	I	35.0	I	34.6
		I	I-----I	I-----I	I-----I	I-----I	I-----I	I					
COLUMN			165		77		65		47		20		1160
TOTAL			14.2		6.6		5.6		4.1		1.7		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1160 VALID CASES

5 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR111 Q67-TYPE OF REFRIGERATOR-#2

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	OWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF	
	COL	PCT	DWELLING	DWELLING	HOME	DETACHED	ATTACHED	FAMILY	1964	1974	1979	OR LESS	RQM
			IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPAC1
			I										
VAR111													
	1		45	9	3	36	8	3	9	7	18	13	4
FROSTFREE			29.8	29.4	42.9	29.8	25.0	33.3	19.1	17.5	48.6	50.0	22.2
			I										
	2		106	12	4	85	24	6	38	33	19	13	14
NON-FROSTFREE			70.2	70.6	57.1	70.2	75.0	66.7	80.9	82.5	51.4	50.0	77.8
			I										
COLUMN			151	17	7	121	32	9	47	40	37	26	18
TOTAL			89.3	10.1	4.1	71.6	18.9	5.3	27.8	23.7	21.9	15.4	10.7
			169										
			100.0										

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR111 067-TYPE OF REFRIGERATOR-#2

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD	
	COL PCT	1199 SF	1599 SF	1999 SF	OR MORE	ITY	GAS			ROW
										TOTAL
VAR111		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	I
	1	I 10	I 14	I 9	I 13	I 17	I 12	I 12	I 7	I 50
FROSTFREE		I 27.8	I 29.8	I 36.0	I 32.5	I 34.0	I 33.3	I 27.9	I 21.2	I 29.6
	2	I 26	I 33	I 16	I 27	I 33	I 24	I 31	I 26	I 119
NON-FROSTFREE		I 72.2	I 70.2	I 64.0	I 67.5	I 66.0	I 66.7	I 72.1	I 78.8	I 70.4
	COLUMN	36	47	25	40	50	36	43	33	169
	TOTAL	21.3	27.8	14.8	23.7	29.6	21.3	25.4	19.5	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

169 VALID CASES

996 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR111 Q67-TYPE OF REFRIGERATOR-#2

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE	
	COL PCT	\$17,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	ROW
		I	I	I	I	I	KWH	KWH	KWH	IYRKWH1	IYRKWH2	IYRKWH3	I
VAR111		I	I	I	I	I	IRATE2	IRATE3	IRATE5	I	I	I	I
	1	3	11	7	4	13	2	8	40	4	7	12	50
FROSTFREE		18.8	39.3	38.9	13.8	29.5	16.7	27.6	31.3	19.0	23.3	30.8	29.6
	2	13	17	11	25	31	10	21	88	17	23	27	119
NON-FROSTFREE		81.3	60.7	61.1	86.2	70.5	83.3	72.4	68.8	81.0	76.7	69.2	70.4
COLUMN		16	28	18	29	44	12	29	128	21	30	39	169
TOTAL		9.5	16.6	10.7	17.2	26.0	7.1	17.2	75.7	12.4	17.8	23.1	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR111 067-TYPE OF REFRIGERATOR-#2

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT	IMHIGH	LOW	BELOW	ABOVE	HIGH							
	COL	PCT	I		AVERAGE	AVERAGE	ROW						
			I				TOTAL						
			IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I					
VAR111			-----I-----	-----I-----	-----I-----	-----I-----	-----I-----						
	1	I	10	I	2	I	2	I	4	I	1	I	50
FROSTFREE		I	27.8	I	22.2	I	20.0	I	66.7	I	20.0	I	29.6
		I	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----						
	2	I	26	I	7	I	8	I	2	I	4	I	119
NON-FROSTFREE		I	72.2	I	77.8	I	80.0	I	33.3	I	80.0	I	70.4
		I	-----I-----	-----I-----	-----I-----	-----I-----	-----I-----						
	COLUMN		36		9		10		6		5		169
	TOTAL		21.3		5.3		5.9		3.6		3.0		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

169 VALID CASES

996 MISSING CASES

PAGE 1 OF 2

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR112 Q68-HOME HAS SEPARATE FOOD FREEZER

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT COL PCT	1800 TO 11199 SF	1200 TO 1599 SF	1600 TO 1999 SF	2000 SF OR MORE	ELECTRIC ITY	NATURAL GAS	FUEL OIL	WOOD	ROW TOTAL
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
VAR112										
YES	1	169 49.7	159 61.6	111 73.0	102 76.1	211 43.8	144 56.0	131 62.7	118 70.7	619 54.1
NO	2	171 50.3	99 38.4	41 27.0	32 23.9	271 56.2	113 44.0	78 37.3	49 29.3	526 45.9
COLUMN TOTAL		340 29.7	258 22.5	152 13.3	134 11.7	482 42.1	257 22.4	209 18.3	167 14.6	1145 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1145 VALID CASES

20 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR112 Q68-HOME HAS SEPARATE FOOD FREEZER

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE	
	COL PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	RCW
		I	I	I	I	I	KWH	KWH	KWH				TOTAL
		IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATE5	IYRKWH1	IYRKWH2	IYRKWH3	I
VAR112		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	1	I 85	I 110	I 89	I 93	I 150	I 50	I 83	I 486	I 78	I 134	I 125	I 619
YES		I 42.5	I 42.8	I 54.3	I 71.0	I 71.8	I 64.9	I 66.9	I 51.5	I 51.0	I 62.9	I 68.3	I 54.1
		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	2	I 119	I 147	I 75	I 38	I 59	I 27	I 41	I 458	I 75	I 79	I 58	I 526
NO		I 57.5	I 57.2	I 45.7	I 29.0	I 28.2	I 35.1	I 33.1	I 48.5	I 49.0	I 37.1	I 31.7	I 45.9
		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	COLUMN	200	257	164	131	209	77	124	944	153	213	183	1145
	TOTAL	17.5	22.4	14.3	11.4	18.3	6.7	10.8	82.4	13.4	18.6	16.0	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFICA (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR112 Q68-HOME HAS SEPARATE FOOD FREEZER
 BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC
 ***** PAGE 2 OF 2

BANNER2

	COUNT COL PCT	HIGH I	LOW I	BELOW AVERAGE I	ABOVE AVERAGE I	HIGH I	ROW TOTAL
		IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
VAR112	1	I 128	I 43	I 48	I 27	I 11	I 619
YES		I 79.0	I 55.8	I 73.8	I 57.4	I 55.0	I 54.1
	2	I 34	I 34	I 17	I 20	I 9	I 526
NO		I 21.0	I 44.2	I 26.2	I 42.6	I 45.0	I 45.9
	COLUMN TOTAL	162	77	65	47	20	1145
		14.1	6.7	5.7	4.1	1.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1145 VALID CASES

20 MISSING CASES

FILE PACIFICA (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR144 Q85-TOTAL NUMBER OF RESIDENTS

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

VAR144	COUNT COL PCT	TOWN IDWELLING	RENT IDWELLING	MOBILE IDWELLING	SIN FAM DETACHED	SIN FAM ATTACHED	MULTI- FAMILY	PRE 1950	1950 TO 1964	1965 TO 1974	1975 TO 1979	799 SF OR LESS	ROW TOTAL
		IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	
1	1	114	93	21	93	22	72	52	33	40	27	90	208
		14.2	27.2	26.9	13.1	13.8	34.8	19.2	15.1	17.7	12.4	35.7	18.1
2	2	321	109	25	267	62	80	118	94	73	65	102	434
		39.9	31.9	32.1	37.7	39.0	38.6	43.5	42.9	32.3	30.0	40.5	37.7
3	3	140	71	15	138	26	33	41	36	52	42	36	212
		17.4	20.8	19.2	19.5	16.4	15.9	15.1	16.4	23.0	19.4	14.3	18.4
4	4	131	41	12	114	29	17	32	24	39	51	15	172
		16.3	12.0	15.4	16.1	18.2	8.2	11.8	11.0	17.3	23.5	6.0	14.9
5	5	66	18	5	62	14	3	15	23	16	21	7	84
		8.2	5.3	6.4	8.8	8.8	1.4	5.5	10.5	7.1	9.7	2.8	7.3
6	6	21	3	0	19	4	1	5	5	4	9	1	24
		2.6	.9	0	2.7	2.5	.5	1.8	2.3	1.8	4.1	.4	2.1
7	7	3	2	0	3	1	1	3	0	0	2	0	5
		.4	.6	0	.4	.6	.5	1.1	0	0	.9	0	.4
8	8	5	3	0	7	1	0	4	2	1	0	0	8
		.6	.9	0	1.0	.6	0	1.5	.9	.4	0	0	.7
9	9	0	2	0	2	0	0	1	0	0	0	1	2
		0	.6	0	.3	0	0	.4	0	0	0	.4	.2
10 TO 15	10	3	0	0	3	0	0	0	2	1	0	0	3
		.4	0	0	.4	0	0	0	.9	.4	0	0	.3
COLUMN TOTAL		804	342	78	708	159	207	271	219	226	217	252	1152
		69.8	29.7	6.8	61.5	13.8	18.0	23.5	19.0	19.6	18.8	21.9	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR144 085-TOTAL NUMBER OF RESIDENTS

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD		ROW
	COL PCT	11199 SF	1599 SF	1999 SF	OR MORE	ITY	GAS				TOTAL
VAR144		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	I	
1	1	66	27	9	12	114	38	37	10		208
		19.4	10.3	5.9	9.0	23.5	14.8	17.5	6.0		18.1
2	2	145	100	45	36	182	89	99	55		434
		42.6	38.2	29.4	27.1	37.5	34.6	46.9	32.7		37.7
3	3	65	50	35	26	83	53	39	30		212
		19.1	19.1	22.9	19.5	17.1	20.6	18.5	17.9		18.4
4	4	43	52	34	28	64	43	22	38		172
		12.6	19.8	22.2	21.1	13.2	16.7	10.4	22.6		14.9
5	5	19	29	18	18	30	23	10	20		84
		4.4	9.5	11.8	13.5	6.2	8.9	4.7	11.9		7.3
6	6	4	5	6	7	8	7	0	9		24
		1.2	1.9	3.9	5.3	1.6	2.7	0	5.4		2.1
7	7	1	2	0	2	3	1	1	0		5
		.3	.8	0	1.5	.6	.4	.5	0		.4
8	8	1	1	3	3	0	2	2	4		8
		.3	.4	2.0	2.3	0	.8	.9	2.4		.7
9	9	0	0	1	0	0	1	0	1		2
		0	0	.7	0	0	.4	0	.6		.2
10 TO 15	10	0	0	2	1	1	0	1	1		3
		0	0	1.3	.8	.2	0	.5	.6		.3
COLUMN TOTAL		340	262	193	193	485	257	211	168		1152
		29.5	22.7	13.3	11.5	42.1	22.3	18.3	14.6		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1152 VALID CASES

2 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR144 085-TOTAL NUMBER OF RESIDENTS

BY BANNER2 (TABULATING 1) INCOME * FUEL CONSUMPTION CHARACTERISTIC.

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000-	13-16	17-20	25-28	LOW	BELOW	ABOVE	ROW	
	COL	PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P	AVERAGE	AVERAGE	TOTAL	
			I	I	I	I	I	KWH	KWH	KWH	I	I	I	
VAR144			I	I	I	I	I	I	I	I	I	I	I	
	1		72	67	22	8	7	15	14	179	48	41	21	208
			36.0	25.3	13.4	6.0	3.3	19.5	11.3	18.8	32.0	19.2	11.5	18.1
	2		79	94	62	44	74	29	51	354	61	105	66	434
			39.5	35.5	37.8	32.8	35.1	37.7	41.1	37.2	40.7	49.3	36.1	37.7
	3		24	54	33	24	44	9	17	186	18	33	33	212
			12.0	20.4	20.1	17.9	20.9	11.7	13.7	19.6	12.0	15.5	18.0	18.4
	4		14	30	26	37	47	15	26	131	12	26	34	172
			7.0	11.3	15.9	27.6	22.3	19.5	21.0	13.8	8.0	12.2	18.6	14.9
	5		5	15	15	14	28	7	9	68	7	5	21	84
			2.5	5.7	9.1	10.4	13.3	9.1	7.3	7.2	4.7	2.3	11.5	7.3
	6		2	3	5	4	7	1	4	19	4	2	3	24
			1.0	1.1	3.0	3.0	3.3	1.3	3.2	2.0	2.7	.9	1.6	2.1
	7		2	0	0	2	1	0	1	4	0	0	1	5
			1.0	0	0	1.5	.5	0	.8	.4	0	0	.5	.4
	8		1	1	1	1	2	1	1	6	0	1	4	8
			.5	.4	.6	.7	.9	1.3	.8	.6	0	.5	2.2	.7
	9		1	0	0	0	1	0	0	2	0	0	0	2
			.5	0	0	0	.5	0	0	.2	0	0	0	.2
	10 TO 15		0	1	0	0	0	0	1	2	0	0	0	3
			0	.4	0	0	0	0	.8	.2	0	0	0	.3
	COLUMN		200	265	164	134	211	77	124	951	150	213	183	1152
	TOTAL		17.4	23.0	14.2	11.6	18.3	6.7	10.8	82.6	13.0	18.5	15.9	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR144 Q85-TOTAL NUMBER OF RESIDENTS

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

VAR144	COUNT COL PCT	HIGH I	LOW I	BELOW AVERAGE I	ABOVE AVERAGE I	HIGH I	ROW TOTAL
		IYRKNH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
1	1	12	19	4	5	1	208
		7.3	25.0	6.3	10.6	5.0	18.1
2	2	51	29	28	7	3	434
		30.9	36.2	43.8	14.9	15.0	37.7
3	3	32	12	16	12	2	212
		19.4	15.8	25.0	25.5	10.0	18.4
4	4	34	14	11	10	6	172
		20.6	18.4	17.2	21.3	30.0	14.9
5	5	22	2	4	8	5	84
		13.3	2.6	6.3	17.0	25.0	7.3
6	6	7	0	1	4	1	24
		4.2	0	1.6	8.5	5.0	2.1
7	7	3	0	0	0	1	5
		1.8	0	0	0	5.0	.4
8	8	1	0	0	1	1	8
		.6	0	0	2.1	5.0	.7
9	9	1	0	0	0	0	2
		.6	0	0	0	0	.2
10 TO 15	10	2	0	0	0	0	3
		1.2	0	0	0	0	.3
COLUMN TOTAL		165	76	64	47	20	1152
		14.3	6.6	5.6	4.1	1.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1152 VALID CASES

2 MISSING CASES

FILE PACIFICA (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR164 Q89-AGE OF HEAD OF HOUSEHOLD

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	DOWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF		ROW
	COL	PCT	DWELLING	DWELLING	HOME	DETACHED	ATTACHED	FAMILY	1964	1974	1979	OR LESS		TOTAL
			IPAY1	IPAY2	IOWELL1	IOWELL2	IOWELL3	IOWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	I
VAR164	1		I	I	I	I	I	I	I	I	I	I	I	I
18 YRS OR LESS	1		I	0 I	1 I	0 I	1 I	0 I	0 I	0 I	0 I	0 I	1 I	1
			I	0 I	.3 I	0 I	.1 I	0 I	0 I	0 I	0 I	0 I	.4 I	.1
	2		I	34 I	84 I	7 I	38 I	8 I	66 I	12 I	8 I	23 I	36 I	119
19-24 YRS			I	4.3 I	24.6 I	9.1 I	5.4 I	5.0 I	31.9 I	4.4 I	3.7 I	10.2 I	16.6 I	10.4
	3		I	149 I	119 I	18 I	155 I	40 I	52 I	40 I	37 I	48 I	79 I	265
25-34 YRS			I	18.6 I	33.6 I	23.4 I	22.0 I	25.2 I	25.1 I	14.8 I	17.0 I	21.2 I	36.4 I	23.1
	4		I	141 I	58 I	13 I	125 I	37 I	25 I	43 I	36 I	48 I	44 I	260
35-44 YRS			I	17.6 I	17.0 I	16.9 I	17.7 I	23.3 I	12.1 I	15.9 I	16.5 I	21.2 I	20.3 I	17.4
	5		I	111 I	20 I	6 I	90 I	22 I	15 I	28 I	36 I	34 I	22 I	133
45-54 YRS			I	13.9 I	5.8 I	7.8 I	12.8 I	13.8 I	7.2 I	10.4 I	16.5 I	15.0 I	10.1 I	11.6
	6		I	153 I	19 I	13 I	124 I	23 I	12 I	47 I	46 I	29 I	23 I	172
55-64 YRS			I	19.1 I	5.6 I	16.9 I	17.6 I	14.5 I	5.8 I	17.4 I	21.1 I	12.8 I	10.6 I	15.0
	7		I	212 I	45 I	20 I	172 I	29 I	37 I	100 I	55 I	44 I	13 I	258
65 YRS OR MORE			I	26.5 I	13.2 I	26.0 I	24.4 I	18.2 I	17.9 I	37.0 I	25.2 I	19.5 I	6.0 I	22.5
			I											
COLUMN			800	342	77	705	159	207	270	218	226	217	250	1148
TOTAL			69.7	29.8	6.7	61.4	13.9	18.0	23.5	19.0	19.7	18.9	21.8	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR164 Q89-AGE OF HEAD OF HOUSEHOLD

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL	OIL	WOOD		ROW
	COL PCT	11199 SF	1599 SF	1999 SF	OR MORE	ITY	GAS					TOTAL
VAR164		ISPACE2	ISPACE3	ISPACE4	ISPACES	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	I		
18 YRS OR LESS	1	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	1	
		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	.1	
19-24 YRS	2	I 36 I	I 12 I	I 8 I	I 1 I	I 83 I	I 12 I	I 11 I	I 12 I	I 12 I	119	
		I 10.7 I	I 4.6 I	I 5.2 I	I .8 I	I 17.1 I	I 4.7 I	I 5.2 I	I 7.2 I	I 7.2 I	10.4	
25-34 YRS	3	I 94 I	I 69 I	I 30 I	I 22 I	I 121 I	I 54 I	I 27 I	I 54 I	I 54 I	265	
		I 27.9 I	I 24.8 I	I 19.6 I	I 16.5 I	I 24.9 I	I 21.3 I	I 12.8 I	I 32.5 I	I 32.5 I	23.1	
35-44 YRS	4	I 52 I	I 46 I	I 42 I	I 37 I	I 81 I	I 48 I	I 30 I	I 38 I	I 38 I	200	
		I 15.4 I	I 17.6 I	I 27.5 I	I 27.8 I	I 16.7 I	I 18.9 I	I 14.2 I	I 22.9 I	I 22.9 I	17.4	
45-54 YRS	5	I 30 I	I 37 I	I 29 I	I 19 I	I 55 I	I 36 I	I 20 I	I 21 I	I 21 I	133	
		I 8.9 I	I 14.1 I	I 19.0 I	I 14.3 I	I 11.3 I	I 14.2 I	I 9.5 I	I 12.7 I	I 12.7 I	11.6	
55-64 YRS	6	I 41 I	I 49 I	I 26 I	I 31 I	I 50 I	I 42 I	I 52 I	I 20 I	I 20 I	172	
		I 12.2 I	I 18.7 I	I 17.0 I	I 23.3 I	I 10.3 I	I 16.5 I	I 24.6 I	I 12.0 I	I 12.0 I	15.0	
65 YRS OR MORE	7	I 84 I	I 53 I	I 18 I	I 23 I	I 96 I	I 62 I	I 71 I	I 21 I	I 21 I	258	
		I 24.9 I	I 20.2 I	I 11.8 I	I 17.3 I	I 19.8 I	I 24.4 I	I 33.6 I	I 12.7 I	I 12.7 I	22.5	
COLUMN TOTAL		337	262	153	133	486	254	211	166		1148	
		29.4	22.8	13.3	11.6	42.3	22.1	18.4	14.5		100.0	

PERCENTS AND TOTALS BASED ON RESPONDENTS

1148 VALID CASES.

17 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR164 Q89-AGE OF HEAD OF HOUSEHOLD

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	INCOME					13-16 MILLS P KWH	17-20 MILLS P KWH	25-28 MILLS P KWH	LOW	BELOW AVERAGE	ABOVE AVERAGE	POW TOTAL
			\$7,999	\$8,000 - \$14,999	\$15,000 - \$19,999	\$20,000 - \$24,999	\$25,000 OR MORE							
VAR164			IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATE5	IYRKWH1	IYRKWH2	IYRKWH3	
18 YRS OR LESS	1	I	1	0	0	0	0	0	0	1	0	0	0	1
		I	.5	0	0	0	0	0	0	.1	0	0	0	.1
19-24 YRS	2	I	25	48	22	10	4	5	6	108	4	3	6	119
		I	12.4	18.1	13.4	7.5	1.9	6.5	4.9	11.4	2.7	1.4	3.3	10.4
25-34 YRS	3	I	29	68	50	43	50	18	21	226	23	40	37	265
		I	14.4	25.7	30.5	32.3	23.7	23.4	17.1	23.8	15.3	18.8	20.3	23.1
35-44 YRS	4	I	17	37	28	26	66	14	27	159	16	30	34	200
		I	8.5	14.0	17.1	19.5	31.3	18.2	22.0	16.8	10.7	14.1	18.7	17.4
45-54 YRS	5	I	11	25	20	22	37	8	25	100	12	28	27	133
		I	5.5	9.4	12.2	16.5	17.5	10.4	20.3	10.5	8.0	13.1	14.8	11.6
55-64 YRS	6	I	23	21	26	25	41	13	16	143	22	45	33	172
		I	11.4	7.9	15.9	18.8	19.4	16.9	13.0	15.1	14.7	21.1	18.1	15.0
65 YRS OR MORE	7	I	95	66	18	7	13	19	28	211	73	67	45	258
		I	47.3	24.9	11.0	5.3	6.2	24.7	22.8	22.3	48.7	31.5	24.7	22.5
COLUMN TOTAL			201	265	164	133	211	77	123	948	150	213	182	1148
			17.5	23.1	14.3	11.6	18.4	6.7	10.7	82.6	13.1	18.6	15.9	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR164 Q89-AGE OF HEAD OF HOUSEHOLD

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT COL PCT	HIGH I	LOW I	BELOW AVERAGE I	ABOVE AVERAGE I	HIGH I	ROW TOTAL
		IYRKWH4	IYRTHRP1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
VAR164		I-----I	I-----I	I-----I	I-----I	I-----I	I
18 YRS OR LESS	1	I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	1
		I 0 I	I 0 I	I 0 I	I 0 I	I 0 I	.1
		I-----I	I-----I	I-----I	I-----I	I-----I	I
19-24 YRS	2	I 3 I	I 3 I	I 0 I	I 1 I	I 0 I	119
		I 1.8 I	I 4.0 I	I 0 I	I 2.1 I	I 0 I	10.4
		I-----I	I-----I	I-----I	I-----I	I-----I	I
25-34 YRS	3	I 40 I	I 9 I	I 17 I	I 15 I	I 3 I	265
		I 24.2 I	I 12.0 I	I 26.6 I	I 31.9 I	I 15.0 I	23.1
		I-----I	I-----I	I-----I	I-----I	I-----I	I
35-44 YRS	4	I 44 I	I 14 I	I 14 I	I 10 I	I 7 I	200
		I 26.7 I	I 18.7 I	I 21.9 I	I 21.3 I	I 35.0 I	17.4
		I-----I	I-----I	I-----I	I-----I	I-----I	I
45-54 YRS	5	I 32 I	I 5 I	I 13 I	I 9 I	I 5 I	133
		I 19.4 I	I 6.7 I	I 20.3 I	I 19.1 I	I 25.0 I	11.6
		I-----I	I-----I	I-----I	I-----I	I-----I	I
55-64 YRS	6	I 25 I	I 11 I	I 11 I	I 5 I	I 3 I	172
		I 15.2 I	I 14.7 I	I 17.2 I	I 10.6 I	I 15.0 I	15.0
		I-----I	I-----I	I-----I	I-----I	I-----I	I
65 YRS OR MORE	7	I 21 I	I 33 I	I 9 I	I 7 I	I 2 I	258
		I 12.7 I	I 44.0 I	I 14.1 I	I 14.9 I	I 10.0 I	22.5
		I-----I	I-----I	I-----I	I-----I	I-----I	I
COLUMN TOTAL		165	75	64	47	20	1148
		14.4	6.5	5.6	4.1	1.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1148 VALID CASES

17 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VARI66 Q91-TYPE OF HOME LOCATION

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	OWN	RENT	MOBILE	SIN FAM	SIN FAM	MULTI-	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF	
	COL	PCT	IDWELLING	DWELLING	HOME	DETACHED	ATTACHED	FAMILY				OR LESS	ROW
			IPAY1	IPAY2	IDWELL1	IDWELL2	IDWELL3	IDWELL4	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPAC1
VARI66													
	1		669	310	41	606	140	197	237	196	191	170	213
URBAN AREA			82.7	89.6	52.6	84.9	88.1	94.3	86.5	89.5	83.8	78.0	83.9
	2		140	36	37	108	19	12	37	23	37	48	41
RURAL AREA			17.3	10.4	47.4	15.1	11.9	5.7	13.5	10.5	16.2	22.0	16.1
COLUMN			809	346	78	714	159	209	274	219	228	218	254
TOTAL			69.7	29.8	6.7	61.6	13.7	18.0	23.6	18.9	19.7	18.8	21.9
													1160
													100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR166 091-TYPE OF HOME LOCATION

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	1800 TO	1200 TO	1600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD	
	COL PCT	1199 SF	1599 SF	1999 SF	OR MORE	ITY	GAS			ROW
		ISPACE2	ISPACE3	ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	TOTAL
VAR166		-----	-----	-----	-----	-----	-----	-----	-----	
1		I 292 I	I 223 I	I 125 I	I 119 I	I 419 I	I 241 I	I 189 I	I 108 I	984
URBAN AREA		I 85.4 I	I 84.8 I	I 82.2 I	I 87.5 I	I 85.9 I	I 92.3 I	I 89.6 I	I 63.9 I	84.8
		-----	-----	-----	-----	-----	-----	-----	-----	
2		I 50 I	I 40 I	I 27 I	I 17 I	I 69 I	I 20 I	I 22 I	I 61 I	176
RURAL AREA		I 14.6 I	I 15.2 I	I 17.8 I	I 12.5 I	I 14.1 I	I 7.7 I	I 10.4 I	I 36.1 I	15.2
		-----	-----	-----	-----	-----	-----	-----	-----	
COLUMN		342	263	152	136	488	261	211	169	1160
TOTAL		29.5	22.7	13.1	11.7	42.1	22.5	18.2	14.6	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1160 VALID CASES

5 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR166 091-TYPE OF HOME LOCATION

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE	ROW
	COL	PCT	\$17,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P	AVERAGE	AVERAGE	TOTAL
			I	I	I	I	I	KWH	KWH	KWH	IYR	KWH	IYR
			IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATE5	IYR	KWH1	IYR
			I	I	I	I	I	I	I	I	I	I	I
VAR166			1	1	1	1	1	1	1	1	1	1	1
			169	230	132	108	183	77	80	827	138	177	150
URBAN AREA			82.5	86.5	81.5	81.2	87.1	100.0	64.5	86.2	89.6	82.3	81.5
			2	2	2	2	2	2	2	2	2	2	2
			35	36	30	25	27	0	44	132	16	38	34
RURAL AREA			17.5	13.5	18.5	18.8	12.9	0	35.5	13.8	10.4	17.7	18.5
			200	266	162	133	210	77	124	959	154	215	184
COLUMN			17.2	22.9	14.0	11.5	18.1	6.6	10.7	82.7	13.3	18.5	15.9
TOTAL													

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR166 091-TYPE OF HOME LOCATION

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT	HIGH	LOW	BELOW	ABOVE	HIGH							
	COL	PCT	I	AVERAGE	AVERAGE		ROW						
			I				TOTAL						
			IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I					
VAR166			-----	-----	-----	-----	-----	-----					
	1	I	134	I	72	I	61	I	42	I	19	I	984
URBAN AREA		I	82.2	I	92.3	I	93.8	I	89.4	I	95.0	I	84.8
		I	-----	I	-----	I	-----	I	-----	I	-----	I	-----
	2	I	29	I	6	I	4	I	5	I	1	I	176
RURAL AREA		I	17.8	I	7.7	I	6.2	I	10.6	I	5.0	I	15.2
		I	-----	I	-----	I	-----	I	-----	I	-----	I	-----
	COLUMN		163		78		65		47		20		1160
	TOTAL		14.1		6.7		5.6		4.1		1.7		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

1160 VALID CASES

5 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR202 Q100A-AMOUNT OF EXT WALL INSUL-GARAGE

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	OWN	RENT	SIN FAM	SIN FAM	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF	800 TO	1200 TO													
	COL	PCT	IDWELLING	DWELLING	DETACHED	ATTACHED	1964	1974	1979	OR LESS	1199 SF	1599 SF	ROW												
VAR202			I	I	I	I	I	I	I	I	I	I	TOTAL												
			IPAY1	IPAY2	IDWELL2	IDWELL3	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPAC1	ISPAC2	ISPAC3	I											
	2	I	42	I	20	I	49	I	13	I	3	I	19	I	22	I	62								
DO NOT KNOW		I	12.7	I	35.1	I	17.8	I	11.5	I	6.7	I	22.3	I	15.5	I	13.1	I	11.5	I	19.4	I	17.1	I	15.9
	3	I	141	I	24	I	114	I	51	I	39	I	49	I	40	I	26	I	16	I	42	I	58	I	165
NONE		I	42.6	I	42.1	I	41.3	I	45.1	I	86.7	I	43.8	I	36.4	I	26.3	I	61.5	I	42.9	I	45.0	I	42.4
	4	I	40	I	5	I	24	I	21	I	0	I	13	I	15	I	14	I	1	I	12	I	14	I	45
PART		I	12.1	I	8.8	I	8.7	I	18.6	I	0	I	11.6	I	13.6	I	14.1	I	3.8	I	12.2	I	10.9	I	11.6
	5	I	108	I	8	I	89	I	28	I	3	I	25	I	38	I	46	I	6	I	25	I	35	I	117
ALL		I	32.6	I	14.0	I	32.2	I	24.8	I	6.7	I	22.3	I	34.5	I	46.5	I	23.1	I	25.5	I	27.1	I	30.1
COLUMN			331		57		276		113		45		112		110		99		26		98		129		389
TOTAL			85.1		14.7		71.0		29.0		11.6		28.8		28.3		25.4		6.7		25.2		33.2		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFICA (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR202 Q100A-AMOUNT OF EXT WALL INSUL-GARAGE

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	11600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD	
	COUNT	11999 SF	OR MORE	ITY	GAS			ROW
								TOTAL
		ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
VAR202	2	13	9	24	15	13	9	62
DONT KNOW		17.8	8.9	16.0	12.6	24.1	14.8	15.9
	3	25	21	45	61	29	28	165
NONE		34.2	35.6	30.0	51.3	53.7	45.9	42.4
	4	8	9	25	12	2	5	45
PART		11.0	15.3	16.7	10.1	3.7	8.2	11.6
	5	27	24	56	31	10	19	117
ALL		37.0	40.7	37.3	26.1	18.5	31.1	30.1
COLUMN		73	99	150	119	54	61	389
TOTAL		18.8	15.2	38.6	30.6	13.9	15.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

PERCENTS AND TOTALS BASED ON RESPONDENTS

389 VALID CASES

487 MISSING CASES

389 VALID CASES

487 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR202 Q100A-AMOUNT OF EXT WALL INSUL-GARAGE

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 - \$15,000-		\$20,000- \$25,000		13-16	17-20	25-28	LOW	BELOW	ABOVE		
	COL	PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	ROW
			I					KWH	KWH	KWH				TOTAL
VAR202			I	I	I	I	I	I	I	I	I	I	I	
			I <td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td></td></td></td></td></td>	I <td>I<td>I<td>I<td></td></td></td></td>	I <td>I<td>I<td></td></td></td>	I <td>I<td></td></td>	I <td></td>	
	2		I 4	I 12	I 9	I 7	I 19	I 3	I 11	I 48	I 8	I 8	I 8	62
DONT KNOW			I 13.8	I 17.9	I 17.0	I 12.7	I 17.4	I 9.1	I 22.4	I 15.6	I 13.6	I 11.6	I 13.3	15.9
			I <td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td></td></td></td></td></td>	I <td>I<td>I<td>I<td></td></td></td></td>	I <td>I<td>I<td></td></td></td>	I <td>I<td></td></td>	I <td></td>	
	3		I 16	I 29	I 23	I 29	I 39	I 19	I 14	I 132	I 32	I 40	I 29	165
NONE			I 55.2	I 43.3	I 43.4	I 52.7	I 35.8	I 57.6	I 28.6	I 43.0	I 54.2	I 58.0	I 48.3	42.4
			I <td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td></td></td></td></td></td>	I <td>I<td>I<td>I<td></td></td></td></td>	I <td>I<td>I<td></td></td></td>	I <td>I<td></td></td>	I <td></td>	
	4		I 2	I 2	I 6	I 8	I 13	I 6	I 8	I 31	I 5	I 3	I 7	45
PART			I 6.9	I 3.0	I 11.3	I 14.5	I 11.9	I 18.2	I 16.3	I 10.1	I 8.5	I 4.3	I 11.7	11.6
			I <td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td></td></td></td></td></td>	I <td>I<td>I<td>I<td></td></td></td></td>	I <td>I<td>I<td></td></td></td>	I <td>I<td></td></td>	I <td></td>	
	5		I 7	I 24	I 15	I 11	I 38	I 5	I 16	I 96	I 14	I 18	I 16	117
ALL			I 24.1	I 35.8	I 28.3	I 20.0	I 34.9	I 15.2	I 32.7	I 31.3	I 23.7	I 26.1	I 26.7	30.1
			I <td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td>I<td></td></td></td></td></td></td>	I <td>I<td>I<td>I<td>I<td></td></td></td></td></td>	I <td>I<td>I<td>I<td></td></td></td></td>	I <td>I<td>I<td></td></td></td>	I <td>I<td></td></td>	I <td></td>	
COLUMN			29	67	53	55	109	33	49	307	59	69	60	389
TOTAL			7.5	17.2	13.6	14.1	28.0	8.5	12.6	78.9	15.2	17.7	15.4	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR202 Q100A-AMOUNT OF EXT WALL INSUL-GARAGE

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT	HIGH	LOW	BELOW	ABOVE	HIGH	
	COL	PCT	I	AVERAGE	AVERAGE	I	ROW
			I			I	TOTAL
			IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4
VAR202	2		I	I	I	I	I
			12	8	3	3	0
DONT KNOW			13.0	24.2	8.3	10.3	0
			I	I	I	I	I
	3		I	I	I	I	I
			29	13	20	15	6
NONE			31.5	39.4	55.6	51.7	60.0
			I	I	I	I	I
	4		I	I	I	I	I
			18	2	5	3	1
PART			19.6	6.1	13.9	10.3	10.0
			I	I	I	I	I
	5		I	I	I	I	I
			33	10	8	8	3
ALL			35.9	30.3	22.2	27.6	30.0
			I	I	I	I	I
			92	33	36	29	10
COLUMN			23.7	8.5	9.3	7.5	2.6
TOTAL							100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

389 VALID CASES

487 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR203 Q100A-AMOUNT OF EXT WALL INSUL-BASEMENT

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT COL PCT	IOWN IDWELLING	RENT IDWELLING	SIN FAM DETACHED	SIN FAM ATTACHED	PRE 1950	1950 TO 1964	1965 TO 1974	1975 TO 1979	799 SF OR LESS	800 TO 1199 SF	1200 TO 1599 SF	ROW TOTAL
		IPAY1	IPAY2	IDWELL2	IDWELL3	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	ISPACE2	ISPACE3	
VAR203		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
	2	I 25	I 6	I 28	I 3	I 13	I 6	I 4	I 0	I 0	I 7	I 11	31
DONT KNOW		I 12.2	I 20.0	I 12.7	I 21.4	I 10.7	I 12.8	I 20.0	I 0	I 0	I 13.2	I 19.6	13.2
	3	I 140	I 22	I 154	I 8	I 101	I 28	I 5	I 1	I 12	I 44	I 38	162
NONE		I 68.3	I 73.3	I 69.7	I 57.1	I 82.8	I 59.6	I 25.0	I 14.3	I 80.0	I 83.0	I 67.9	68.9
	4	I 17	I 1	I 17	I 1	I 5	I 6	I 6	I 1	I 2	I 0	I 4	18
PART		I 8.3	I 3.3	I 7.7	I 7.1	I 4.1	I 12.8	I 30.0	I 14.3	I 13.3	I 0	I 7.1	7.7
	5	I 23	I 1	I 22	I 2	I 3	I 7	I 5	I 5	I 1	I 2	I 3	24
ALL		I 11.2	I 3.3	I 10.0	I 14.3	I 2.5	I 14.9	I 25.0	I 71.4	I 6.7	I 3.8	I 5.4	10.2
		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
COLUMN		205	30	221	14	122	47	20	7	15	53	56	235
TOTAL		87.2	12.8	94.0	6.0	51.9	20.0	8.5	3.0	6.4	22.6	23.8	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

PAGE 2 OF 2

ROW
TOTAL

		ISPACE4	ISPACE9	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	TOTAL
VAR203								
	2	2	10	6	8	14	3	31
DONT KNOW		4.4	16.1	18.8	11.6	12.5	13.6	13.2
	3	34	31	15	47	82	18	162
NONE		75.6	50.0	46.9	68.1	73.2	81.8	68.9
	4	5	7	3	7	7	1	18
PART		11.1	11.3	9.4	10.1	6.3	4.5	7.7
	5	4	14	8	7	9	0	24
ALL		8.9	22.6	25.0	10.1	8.0	0	10.2
COLUMN TOTAL		45	62	32	69	112	22	235
		19.1	26.4	13.6	29.4	47.7	9.4	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

239 VALIO CASES

641 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR203 Q100A-AMOUNT OF EXT WALL INSUL-BASEMENT

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	1&0 TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE	
	COL PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	ROW
		I	I	I	I	I	KWH	KWH	KWH				TOTAL
		I	I	I	I	I	IRATE2	IRATE3	IRATE5	IYRKWH1	IYRKWH2	IYRKWH3	I
VAR203		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	2	I 3 I	I 2 I	I 5 I	I 3 I	I 7 I	I 4 I	I 0 I	I 27 I	I 4 I	I 7 I	I 6 I	I 31
DONT KNOW		I 9.4 I	I 5.0 I	I 19.2 I	I 10.3 I	I 11.9 I	I 36.4 I	I 0 I	I 12.3 I	I 10.3 I	I 10.4 I	I 15.4 I	I 13.2
	3	I 27 I	I 34 I	I 19 I	I 18 I	I 35 I	I 6 I	I 4 I	I 152 I	I 31 I	I 47 I	I 27 I	I 162
NONE		I 84.4 I	I 95.0 I	I 73.1 I	I 62.1 I	I 59.3 I	I 54.5 I	I 80.0 I	I 69.4 I	I 79.5 I	I 70.1 I	I 69.2 I	I 68.9
	4	I 1 I	I 2 I	I 1 I	I 3 I	I 6 I	I 1 I	I 0 I	I 17 I	I 2 I	I 8 I	I 1 I	I 18
PART		I 3.1 I	I 5.0 I	I 3.8 I	I 10.3 I	I 10.2 I	I 9.1 I	I 0 I	I 7.8 I	I 5.1 I	I 11.9 I	I 2.6 I	I 7.7
	5	I 1 I	I 2 I	I 1 I	I 5 I	I 11 I	I 0 I	I 1 I	I 23 I	I 2 I	I 5 I	I 5 I	I 24
ALL		I 3.1 I	I 5.0 I	I 3.8 I	I 17.2 I	I 18.6 I	I 0 I	I 20.0 I	I 10.5 I	I 5.1 I	I 7.5 I	I 12.8 I	I 10.2
		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	COLUMN	32	40	26	29	59	11	5	219	39	67	39	235
	TOTAL	13.6	17.0	11.1	12.3	25.1	4.7	2.1	93.2	16.6	28.5	16.6	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

* * * * * PAGE 2 OF 2

	COUNT	THIGH	LOW	BELOW	ABOVE	HIGH	ROW
	COL PCT	I	I	AVERAGE	AVERAGE	I	TOTAL
		IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
VAR203		---	---	---	---	---	---
	2	I 4 I	I 3 I	I 0 I	I 2 I	I 1 I	31
DONT KNOW		I 15.4 I	I 18.8 I	I 0 I	I 13.3 I	I 8.3 I	13.2
	3	I 11 I	I 10 I	I 11 I	I 11 I	I 6 I	162
NONE		I 42.3 I	I 62.5 I	I 84.6 I	I 73.3 I	I 50.0 I	68.9
	4	I 4 I	I 2 I	I 1 I	I 1 I	I 3 I	18
PART		I 15.4 I	I 12.5 I	I 7.7 I	I 6.7 I	I 25.0 I	7.7
	5	I 7 I	I 1 I	I 1 I	I 1 I	I 2 I	24
ALL		I 26.9 I	I 6.3 I	I 7.7 I	I 6.7 I	I 16.7 I	10.2
		---	---	---	---	---	---
		I 26 I	I 16 I	I 13 I	I 15 I	I 12 I	235
COLUMN		I 11.1 I	I 6.8 I	I 5.5 I	I 6.4 I	I 5.1 I	100.0
TOTAL							

PERCENTS AND TOTALS BASED ON RESPONDENTS

239 VALID CASES

641 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR204 Q100A-AMOUNT OF EXT WALL INSUL-FIRST FL

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	DOWN	RENT	SIN FAM	SIN FAM	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF	800 TO	1200 TO													
	COL	PCT	IDWELLING	DWELLING	DETACHED	ATTACHED	1964	1974	1979	OR LESS	1199 SF	1599 SF	ROW												
			I	I	I	I	I	I	I	I	I	I	TOTAL												
VAR204			IPAY1	IPAY2	IDWELL2	IDWELL3	IHAGE1	IHAGE2	IHAGE3	IHAGE4	ISPACE1	ISPACE2	ISPACE3	I											
	2	I	99	I	66	I	135	I	31	I	47	I	32	I	19	I	23	I	22	I	59	I	46	I	166
DONT KNOW		I	14.2	I	43.4	I	19.1	I	20.9	I	18.7	I	17.1	I	12.9	I	17.2	I	19.8	I	25.3	I	19.6	I	19.4
		I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	
	3	I	167	I	37	I	188	I	18	I	111	I	43	I	11	I	0	I	37	I	64	I	48	I	206
NONE		I	23.9	I	24.3	I	26.6	I	12.2	I	44.2	I	23.0	I	7.5	I	0	I	33.3	I	27.5	I	20.4	I	24.1
		I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	
	4	I	77	I	5	I	69	I	14	I	31	I	22	I	15	I	3	I	14	I	17	I	21	I	83
PART		I	11.0	I	3.3	I	9.8	I	9.5	I	12.4	I	11.8	I	10.2	I	2.2	I	12.6	I	7.3	I	8.9	I	9.7
		I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	
	5	I	356	I	44	I	315	I	85	I	62	I	90	I	102	I	108	I	38	I	93	I	120	I	400
ALL		I	50.9	I	28.9	I	44.6	I	57.4	I	24.7	I	48.1	I	69.4	I	80.6	I	34.2	I	39.9	I	51.1	I	46.8
		I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	-----	I	
			699		152		707		148		251		187		147		134		111		233		235		855
			81.8		17.8		82.7		17.3		29.4		21.9		17.2		15.7		13.0		27.3		27.5		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR204 Q100A-AMOUNT OF EXT WALL INSUL-FIRST FL

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	11600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD	
	COL PCT	11999 SF	OR MORE	ITY	GAS			ROW
								TOTAL
		ISPAC4	ISPAC5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
VAR204		-----	-----	-----	-----	-----	-----	
	2	I 19 I	I 18 I	I 56 I	I 39 I	I 46 I	I 19 I	166
DONT KNOW		I 13.5 I	I 14.9 I	I 21.6 I	I 16.5 I	I 23.4 I	I 13.1 I	19.4
		-----	-----	-----	-----	-----	-----	
	3	I 26 I	I 26 I	I 25 I	I 69 I	I 77 I	I 34 I	206
NONE		I 18.4 I	I 21.0 I	I 9.7 I	I 29.2 I	I 39.1 I	I 23.4 I	24.1
		-----	-----	-----	-----	-----	-----	
	4	I 15 I	I 15 I	I 23 I	I 22 I	I 16 I	I 20 I	83
PART		I 10.6 I	I 12.1 I	I 8.9 I	I 9.3 I	I 8.1 I	I 13.8 I	9.7
		-----	-----	-----	-----	-----	-----	
	5	I 81 I	I 65 I	I 155 I	I 106 I	I 58 I	I 72 I	400
ALL		I 57.4 I	I 52.4 I	I 59.8 I	I 44.9 I	I 29.4 I	I 49.7 I	46.8
		-----	-----	-----	-----	-----	-----	
	COLUMN	141	124	259	236	197	145	855
	TOTAL	16.5	14.5	30.3	27.6	23.0	17.0	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

855 VALID CASES

21 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR204 Q100A-AMOUNT OF EXT WALL INSUL-FIRST FL

BY BANNER2 (TABULATING 1) INCOME * FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	130 TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE	ROW
	COL PCT	\$17,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	TOTAL
		I	I	I	I	I	KWH	KWH	KWH	IYRKWH1	IYRKWH2	IYRKWH3	I
VAR204		I	I	I	I	I	I	I	I	I	I	I	I
DONT KNOW	2	I 23	I 35	I 33	I 15	I 31	I 11	I 16	I 139	I 18	I 28	I 21	I 166
		I 20.7	I 20.3	I 27.3	I 13.6	I 16.2	I 18.3	I 17.6	I 19.7	I 14.6	I 15.6	I 14.3	I 19.4
NONE	3	I 49	I 39	I 25	I 22	I 34	I 10	I 12	I 184	I 47	I 59	I 34	I 206
		I 44.1	I 22.7	I 20.7	I 20.0	I 17.8	I 16.7	I 13.2	I 26.1	I 38.2	I 33.0	I 23.1	I 24.1
PART	4	I 9	I 17	I 5	I 14	I 19	I 7	I 16	I 60	I 8	I 22	I 17	I 83
		I 8.1	I 9.9	I 4.1	I 12.7	I 9.9	I 11.7	I 17.6	I 8.5	I 6.5	I 12.3	I 11.6	I 9.7
ALL	5	I 30	I 81	I 58	I 59	I 107	I 32	I 47	I 321	I 50	I 70	I 75	I 400
		I 27.0	I 47.1	I 47.9	I 53.6	I 56.0	I 53.3	I 51.6	I 45.6	I 40.7	I 39.1	I 51.0	I 46.8
COLUMN		111	172	121	110	191	60	91	704	123	179	147	855
TOTAL		13.0	20.1	14.2	12.9	22.3	7.0	10.6	82.3	14.4	20.9	17.2	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

PAGE 2 OF 2

21 MISSING CASES

FILE PACIFICA (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR205 0100A-AMOUNT OF EXT WALL INSUL-SECOND FL

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	IOWN	RENT	SIN FAM	SIN FAM	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF	800 TO	1200 TO		
	COL	PCT	IOWELLING	DWELLING	DETACHED	ATTACHED	1964	1974	1979	OR LESS	1199 SF	1599 SF	ROW	
			I										TOTAL	
			IPAY1	IPAY2	IOWELL2	IOWELL3	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	ISPACE2	ISPACE3	I
VAR205			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
	2	I	27	I 17	I 40	I 5	I 18	I 4	I 4	I 5	I 1	I 11	I 17	45
DONT KNOW		I	13.8	I 50.0	I 19.4	I 20.8	I 14.1	I 16.0	I 14.8	I 25.0	I 11.1	I 27.5	I 28.3	19.6
	3	I	67	I 13	I 75	I 5	I 61	I 6	I 1	I 0	I 3	I 15	I 21	80
NONE		I	34.4	I 38.2	I 36.4	I 20.8	I 47.7	I 24.0	I 3.7	I 0	I 33.3	I 37.5	I 35.0	34.8
	4	I	19	I 0	I 17	I 2	I 11	I 3	I 5	I 0	I 1	I 3	I 6	19
PART		I	9.7	I 0	I 8.3	I 8.3	I 8.6	I 12.0	I 18.5	I 0	I 11.1	I 7.5	I 10.0	8.3
	5	I	82	I 4	I 74	I 12	I 38	I 12	I 17	I 15	I 4	I 11	I 16	86
ALL		I	42.1	I 11.8	I 35.9	I 50.0	I 29.7	I 48.0	I 63.0	I 75.0	I 44.4	I 27.5	I 26.7	37.4
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
		COLUMN	195	34	206	24	128	25	27	20	9	40	60	230
		TOTAL	64.8	14.8	89.6	10.4	55.7	10.9	11.7	8.7	3.9	17.4	26.1	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR205 Q100A-AMOUNT OF EXT WALL INSUL-SECOND FL
BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	11600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD	
	COL	PCT	11999 SF	OR MORE	ITY	GAS		ROW
								TOTAL
			ISPAC4	ISPAC5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4
VAR205	2		6	10	14	11	16	4
DONT KNOW			11.5	14.9	30.4	15.7	19.8	12.9
	3		20	19	5	25	37	12
NONE			38.5	28.4	10.9	35.7	45.7	38.7
	4		4	5	4	7	5	3
PART			7.7	7.5	8.7	10.0	6.2	9.7
	5		22	33	23	27	23	12
ALL			42.3	49.3	50.0	38.6	28.4	38.7
		COLUMN	52	67	46	70	81	31
		TOTAL	22.6	29.1	20.0	30.4	35.2	13.5
								230
								100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

230 VALID CASES

646 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR205 Q100A-AMOUNT OF EXT WALL INSUL-SECOND FL

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT COL PCT	I\$0 TO I\$7,999	\$8,000 - \$14,999	\$15,000- \$19,999	\$20,000- \$24,999	\$25,000 OR MORE	13-16 MILLS P KWH	17-20 MILLS P KWH	25-28 MILLS P KWH	LOW IYR KWH1	BELOW AVERAGE IYR KWH2	ABOVE AVERAGE IYR KWH3	ROW TOTAL
VAR205		IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATE5				
DCNT KNOW	2	I 5	I 5	I 8	I 6	I 12	I 3	I 5	I 37	I 1	I 12	I 6	45
		I 20.8	I 12.2	I 28.6	I 16.2	I 19.0	I 17.6	I 27.8	I 19.0	I 3.4	I 18.8	I 13.6	19.6
NONE	3	I 14	I 14	I 8	I 11	I 20	I 3	I 3	I 74	I 14	I 25	I 15	80
		I 58.3	I 34.1	I 28.6	I 29.7	I 31.7	I 17.6	I 16.7	I 37.9	I 48.3	I 39.1	I 36.4	34.8
PART	4	I 1	I 5	I 2	I 4	I 3	I 2	I 0	I 17	I 1	I 6	I 6	19
		I 4.2	I 12.2	I 7.1	I 10.8	I 4.8	I 11.8	I 0	I 8.7	I 3.4	I 9.4	I 13.6	8.3
ALL	5	I 4	I 17	I 10	I 16	I 28	I 9	I 10	I 67	I 13	I 21	I 16	86
		I 16.7	I 41.5	I 39.7	I 43.2	I 44.4	I 52.9	I 55.6	I 34.4	I 44.8	I 32.8	I 36.4	37.4
COLUMN TOTAL		24	41	28	37	63	17	18	195	29	64	44	230
		10.4	17.8	12.2	16.1	27.4	7.4	7.8	84.8	12.6	27.8	19.1	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR205 Q100A-AMOUNT OF EXT WALL INSUL-SECOND FL

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT	IMHIGH	LOW	BELOW	ABOVE	HIGH		
	COL	PCT	I	AVERAGE	AVERAGE		ROW	
			I				TOTAL	
			IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
VAR205	2		I 10	I 4	I 0	I 2	I 2	I 45
DONT KNOW			I 30.3	I 25.0	I 0	I 10.5	I 20.0	I 19.6
	3		I 5	I 5	I 3	I 5	I 4	I 80
NONE			I 15.2	I 31.3	I 23.1	I 26.3	I 40.0	I 34.8
	4		I 1	I 1	I 1	I 3	I 1	I 19
PART			I 3.0	I 6.3	I 7.7	I 15.8	I 10.0	I 8.3
	5		I 17	I 6	I 9	I 9	I 3	I 86
ALL			I 51.5	I 37.5	I 69.2	I 47.4	I 30.0	I 37.4
		COLUMN	33	16	13	19	10	230
		TOTAL	14.3	7.0	5.7	8.3	4.3	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

230 VALID CASES

646 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR207 0100A-TYPE OF EXT WALL INSUL-GARAGE
BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	DOWN	RENT	SIN FAM	SIN FAM	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF	800 TO	1200 TO		
	COL	PCT	DWELLING	DWELLING	DETACHED	ATTACHED	1964	1974	1979	OR LESS	1199 SF	1599 SF	ROW	
			IPAY1	IPAY2	IDWELL2	IDWELL3	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	ISPACE2	ISPACE3	TOTAL
VAR207														
	1		121	10	95	37	2	28	43	55	5	27	45	132
BATT-BLANKET			90.3	100.0	91.3	90.2	66.7	82.4	91.5	100.0	83.3	81.8	95.7	91.0
	2		8	0	6	2	1	6	1	0	1	5	1	8
LOOSE FILL			6.0	0	5.8	4.9	33.3	17.6	2.1	0	16.7	15.2	2.1	5.5
	3		5	0	3	2	0	0	3	0	0	1	1	5
RIGID FOAM			3.7	0	2.9	4.9	0	0	6.4	0	0	3.0	2.1	3.4
COLUMN			134	10	104	41	3	34	47	55	6	33	47	145
TOTAL			92.4	6.9	71.7	28.3	2.1	23.4	32.4	37.9	4.1	22.8	32.4	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS .

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR207 Q100A-TYPE OF EXT WALL INSUL-GARAGE

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT COL PCT	11600 TO 11999 SF	2000 SF OR MORE	ELECTRIC ITY	NATURAL GAS	FUEL OIL	WOOD	ROW TOTAL
		ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
VAR207		-----	-----	-----	-----	-----	-----	
	1	I 31 I	I 23 I	I 66 I	I 37 I	I 6 I	I 21 I	132
BATT-BLANKET		I 100.0 I	I 85.2 I	I 91.7 I	I 94.9 I	I 75.0 I	I 87.5 I	91.0
		-----	-----	-----	-----	-----	-----	
	2	I 0 I	I 1 I	I 4 I	I 1 I	I 2 I	I 1 I	8
LOOSE FILL		I 0 I	I 3.7 I	I 5.6 I	I 2.6 I	I 25.0 I	I 4.2 I	5.5
		-----	-----	-----	-----	-----	-----	
	3	I 0 I	I 3 I	I 2 I	I 1 I	I 0 I	I 2 I	5
RIGID FOAM		I 0 I	I 11.1 I	I 2.8 I	I 2.6 I	I 0 I	I 8.3 I	3.4
		-----	-----	-----	-----	-----	-----	
	COLUMN	31	27	72	39	8	24	145
	TOTAL	21.4	18.6	49.7	26.9	5.5	16.6	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

145 VALID CASES

17 MISSING CASES

PAGE 1 OF 2

(CONTINUED)

PAGE 2 OF 2

	COUNT	IMIGH	LOW	BELOW AVERAGE	ABOVE AVERAGE	HIGH	ROW TOTAL
	COL PCT	I	I	I	I	I	
		IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
VARZ07		-----I-	-----I-	-----I-	-----I-	-----I-	
BATT-BLANKET	1	I 42 I	I 12 I	I 11 I	I 9 I	I 2 I	132
		I 89.4 I	I 100.0 I	I 91.7 I	I 100.0 I	I 66.7 I	91.0
		-----I-	-----I-	-----I-	-----I-	-----I-	
LOOSE FILL	2	I 3 I	I 0 I	I 0 I	I 0 I	I 1 I	8
		I 6.4 I	I 0 I	I 0 I	I 0 I	I 33.3 I	5.5
		-----I-	-----I-	-----I-	-----I-	-----I-	
RIGID FOAM	3	I 2 I	I 0 I	I 1 I	I 0 I	I 0 I	5
		I 4.3 I	I 0 I	I 8.3 I	I 0 I	I 0 I	3.4
		-----I-	-----I-	-----I-	-----I-	-----I-	
COLUMN TOTAL		I 47 I	I 12 I	I 12 I	I 9 I	I 3 I	145
TOTAL		I 32.4 I	I 8.3 I	I 8.3 I	I 6.2 I	I 2.1 I	100.0

145 VALID CASES

17 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR208 Q100A-TYPE OF EXT WALL INSUL-BASEMENT

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	TOWN	RENT	SIN FAM	SIN FAM	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF	800 TO	1200 TO		
	COL	PCT	IDWELLING	DWELLING	DETACHED	ATTACHED	1964	1974	1979	OR LESS	1199 SF	1599 SF	ROW	
			I										TOTAL	
			IPAY1	IPAY2	IDWELL2	IDWELL3	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPAC1	ISPAC2	ISPAC3	I
VAR208			-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	
	1	I	34	I 2	I 33	I 3	I 8	I 12	I 9	I 6	I 3	I 1	I 7	I 36
BATT-BLANKET		I	89.5	I 100.0	I 89.2	I 100.0	I 100.0	I 92.3	I 90.0	I 100.0	I 100.0	I 50.0	I 100.0	I 90.0
		I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	
	2	I	3	I 0	I 3	I 0	I 0	I 1	I 1	I 0	I 0	I 1	I 0	I 3
LOOSE FILL		I	7.9	I 0	I 8.1	I 0	I 0	I 7.7	I 10.0	I 0	I 0	I 50.0	I 0	I 7.5
		I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	
	3	I	1	I 0	I 1	I 0	I 0	I 0	I 0	I 0	I 0	I 0	I 0	I 1
RIGID FOAM		I	2.6	I 0	I 2.7	I 0	I 0	I 0	I 0	I 0	I 0	I 0	I 0	I 2.5
		I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	-----I	
COLUMN			38	2	37	3	8	13	10	6	3	2	7	40
TOTAL			95.0	5.0	92.5	7.5	20.0	32.5	25.0	15.0	7.5	5.0	17.5	100.0

PERCENTS AND TOTALS BASED ON-RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR208 Q100A-TYPE OF EXT WALL INSUL-BASEMENT

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT COL PCT	11600 TO 11999 SF	2000 SF OR MORE	ELECTRIC ITY	NATURAL GAS	FUEL OIL	WOOD	ROW TOTAL
		ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
VAR208		-----	-----	-----	-----	-----	-----	
BATT-BLANKET	1	I 8 I	I 17 I	I 9 I	I 11 I	I 15 I	I 1 I	36
		I 88.9 I	I 89.5 I	I 81.8 I	I 91.7 I	I 93.8 I	I 100.0 I	90.0
LOOSE FILL	2	I 1 I	I 1 I	I 2 I	I 0 I	I 1 I	I 0 I	3
		I 11.1 I	I 5.3 I	I 18.2 I	I 0 I	I 6.3 I	I 0 I	7.5
RIGID FOAM	3	I 0 I	I 1 I	I 0 I	I 1 I	I 0 I	I 0 I	1
		I 0 I	I 5.3 I	I 0 I	I 8.3 I	I 0 I	I 0 I	2.5
COLUMN TOTAL		9	19	11	12	16	1	40
		22.5	47.5	27.5	30.0	40.0	2.5	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

40 VALID CASES

2 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR208 Q100A-TYPE OF EXT WALL INSUL-BASEMENT

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE		
	COL	PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	ROW
								KWH	KWH	KWH				TOTAL
			IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATE5	IYRKWH1	IYRKWH2	IYRKWH3	I
VAR208			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	1	I	1	4	2	6	14	1	1	34	4	11	5	36
BATT-BLANKET		I	50.0	100.0	100.0	75.0	93.3	100.0	100.0	89.5	100.0	84.6	100.0	90.0
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	2	I	1	0	0	1	1	0	0	3	0	1	0	3
LOOSE FILL		I	50.0	0	0	12.5	6.7	0	0	7.9	0	7.7	0	7.5
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	3	I	0	0	0	1	0	0	0	1	0	1	0	1
RIGID FOAM		I	0	0	0	12.5	0	0	0	2.6	0	7.7	0	2.5
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
			2	4	2	8	15	1	1	38	4	13	5	40
COLUMN			5.0	10.0	5.0	20.0	37.5	2.5	2.5	95.0	10.0	32.5	12.5	100.0
TOTAL														

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR208 Q100A-TYPE OF EXT WALL INSUL-BASEMENT

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT	IMHIGH	LOW	BELOW	ABOVE	HIGH		ROW					
	COL	PCT	I	AVERAGE	AVERAGE			TOTAL					
			I										
			IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I					
VAR208			I-----I	I-----I	I-----I	I-----I	I-----I						
	1	I	9	I	3	I	2	I	3	I	36		
BATT-BLANKET		I	81.8	I	100.0	I	50.0	I	100.0	I	100.0	I	90.0
		I	-----I	I-----I	I-----I	I-----I	I-----I						
	2	I	2	I	0	I	0	I	0	I	0	I	3
LOOSE FILL		I	18.2	I	0	I	0	I	0	I	0	I	7.5
		I	-----I	I-----I	I-----I	I-----I	I-----I						
	3	I	0	I	0	I	1	I	0	I	0	I	1
RIGID FOAM		I	0	I	0	I	50.0	I	0	I	0	I	2.5
		I	-----I	I-----I	I-----I	I-----I	I-----I						
			11		3		2		2		3		40
COLUMN			27.5		7.5		5.0		5.0		7.5		100.0
TOTAL													

PERCENTS AND TOTALS BASED ON RESPONDENTS

40 VALID CASES

2 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR209 Q100A-TYPE OF EXT WALL INSUL-FIRST FL

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	IOWN	RENT	SIN FAM	SIN FAM	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF	800 TO	1200 TO		
	COL	PCT	IDWELLING	DWELLING	DETACHED	ATTACHED	1964	1974	1979	OR LESS	1199 SF	1599 SF	ROW	
			I	I	I	I	I	I	I	I	I	I	TOTAL	
			IPAY1	IPAY2	IDWELL2	IDWELL3	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	ISPACE2	ISPACE3	I
VAR209			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	I
	1	I	321	I 30	I 284	I 68	I 57	I 86	I 88	I 97	I 27	I 80	I 115	I 352
BATT-BLANKET		I	81.3	I 69.8	I 79.6	I 82.9	I 65.5	I 81.9	I 84.6	I 95.1	I 61.4	I 78.4	I 87.1	I 80.2
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	I
	2	I	58	I 12	I 57	I 13	I 26	I 15	I 12	I 4	I 14	I 18	I 14	I 70
LOOSE FILL		I	14.7	I 27.9	I 16.0	I 15.9	I 29.9	I 14.3	I 11.5	I 3.9	I 31.8	I 17.6	I 10.6	I 15.9
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	I
	3	I	16	I 1	I 16	I 1	I 4	I 4	I 4	I 1	I 3	I 4	I 3	I 17
RIGID FOAM		I	4.1	I 2.3	I 4.5	I 1.2	I 4.6	I 3.8	I 3.8	I 1.0	I 6.8	I 3.9	I 2.3	I 3.9
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	I
COLUMN			395	43	357	82	87	105	104	102	44	102	132	439
TOTAL			90.0	9.8	81.3	10.7	19.8	23.9	23.7	23.2	10.0	23.2	30.1	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR209 Q100A-TYPE OF EXT WALL INSUL-FIRST FL

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	11600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD	
	COL PCT	11999 SF	OR MORE	ITY	GAS			ROW
		I	I	I	I	I	I	TOTAL
		ISPACE4	ISPACES	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	I
VAR209		-----I-----I-----I-----I-----I-----I-----I-----I						
	1	I 67 I	I 61 I	I 130 I	I 92 I	I 51 I	I 68 I	352
BATT-BLANKET		I 77.9 I	I 84.7 I	I 81.8 I	I 78.6 I	I 75.0 I	I 81.0 I	80.2
		-----I-----I-----I-----I-----I-----I-----I-----I						
	2	I 17 I	I 7 I	I 25 I	I 18 I	I 16 I	I 11 I	70
LOOSE FILL		I 19.8 I	I 9.7 I	I 15.7 I	I 15.4 I	I 23.5 I	I 13.1 I	15.9
		-----I-----I-----I-----I-----I-----I-----I-----I						
	3	I 2 I	I 4 I	I 4 I	I 7 I	I 1 I	I 5 I	17
RIGID FOAM		I 2.3 I	I 5.6 I	I 2.5 I	I 6.0 I	I 1.5 I	I 6.0 I	3.9
		-----I-----I-----I-----I-----I-----I-----I-----I						
	COLUMN	86	72	159	117	68	84	439
	TOTAL	19.6	16.4	36.2	26.7	15.5	19.1	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

439 VALID CASES

44 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR209 Q100A-TYPE OF EXT WALL INSUL-FIRST FL

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE		
	COL	PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	ROW
			I	I	I	I	I	KWH	KWH	KWH				TOTAL
			IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATE5	IYRKWH1	IYRKWH2	IYRKWH3	I
VAR209			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	1	I	19	67	47	62	97	27	47	278	47	62	68	352
BATT-BLANKET		I	61.3	72.0	79.7	88.6	85.8	73.0	85.5	80.1	83.9	73.8	79.1	80.2
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	2	I	8	22	9	7	14	10	6	54	5	18	15	70
LOOSE FILL		I	25.8	23.7	15.3	10.0	12.4	27.0	10.9	15.6	8.9	21.4	17.4	15.9
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	3	I	4	4	3	1	2	0	2	15	4	4	3	17
RIGID FOAM		I	12.9	4.3	5.1	1.4	1.8	0	3.6	4.3	7.1	4.8	3.5	3.9
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
COLUMN			31	93	59	70	113	37	55	347	56	84	86	439
TOTAL			7.1	21.2	13.4	15.9	25.7	8.4	12.5	79.0	12.8	19.1	19.6	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR209 Q100A-TYPE OF EXT WALL INSUL-FIRST FL

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT COL PCT	HIGH I	LOW I	BELOW AVERAGE	ABOVE AVERAGE	HIGH I	ROW TOTAL
		IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
VAR209		-----	-----	-----	-----	-----	-----
	1	I 81	I 24	I 35	I 21	I 7	I 352
BATT-BLANKET		I 86.2	I 70.6	I 81.4	I 87.5	I 77.8	I 80.2
		-----	-----	-----	-----	-----	-----
	2	I 10	I 7	I 5	I 2	I 2	I 70
LOOSE FILL		I 10.6	I 20.6	I 11.6	I 8.3	I 22.2	I 15.9
		-----	-----	-----	-----	-----	-----
	3	I 3	I 3	I 3	I 1	I 0	I 17
RIGID FOAM		I 3.2	I 8.8	I 7.0	I 4.2	I 0	I 3.9
		-----	-----	-----	-----	-----	-----
COLUMN		94	34	43	24	9	439
TOTAL		21.4	7.7	9.8	5.5	2.1	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

439 VALID CASES

44 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR210 Q100A-TYPE OF EXT WALL INSUL-SECOND FL

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	DOWN	RENT	SIN FAM	SIN FAM	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF	800 TO	1200 TO		
	COL	PCT	IDWELLING	DWELLING	DETACHED	ATTACHED	1964	1974	1979	OR LESS	1199 SF	1599 SF	ROW	
			1										TOTAL	
			IPAY1	IPAY2	IDWELL2	IDWELL3	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	ISPACE2	ISPACE3	I
VAR210			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	I
	1	I	70	I 3	I 63	I 10	I 29	I 12	I 16	I 13	I 3	I 8	I 14	I 73
BATT-BLANKET		I	73.7	I 75.0	I 74.1	I 71.4	I 65.9	I 80.0	I 76.2	I 86.7	I 60.0	I 61.5	I 70.0	I 73.7
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	I
	2	I	21	I 1	I 19	I 3	I 14	I 2	I 3	I 2	I 2	I 5	I 4	I 22
LOOSE FILL		I	22.1	I 25.0	I 22.4	I 21.4	I 31.8	I 13.3	I 14.3	I 13.3	I 40.0	I 38.5	I 20.0	I 22.2
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	I
	3	I	4	I 0	I 3	I 1	I 1	I 1	I 2	I 0	I 0	I 0	I 2	I 4
RIGID FOAM		I	4.2	I 0	I 3.5	I 7.1	I 2.3	I 6.7	I 9.5	I 0	I 0	I 0	I 10.0	I 4.0
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	I
COLUMN			95	4	85	14	44	15	21	15	5	13	20	99
TOTAL			96.0	4.0	85.9	14.1	44.4	15.2	21.2	15.2	5.1	13.1	20.2	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR210 Q100A-TYPE OF EXT WALL INSUL-SECOND FL

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT COL PCT	I1600 TO I1999 SF	2000 SF OR MORE	ELECTRIC ITY	NATURAL GAS	FUEL OIL	WOOD	ROW TOTAL
		ISPACE4	ISPACES	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
VAR210	1	18	30	18	23	20	11	73
BATT-BLANKET		75.0	81.1	72.0	69.7	76.9	78.6	73.7
	2	5	6	7	7	6	2	22
LOOSE FILL		20.8	16.2	28.0	21.2	23.1	14.3	22.2
	3	1	1	0	3	0	1	4
RIGID FOAM		4.2	2.7	0	9.1	0	7.1	4.0
	COLUMN	24	37	25	33	26	14	99
	TOTAL	24.2	37.4	25.3	33.3	26.3	14.1	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

99 VALID CASES

6 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR210 Q100A-TYPE OF EXT WALL INSUL-SECOND FL

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE		
	COL	PCT	\$17,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	ROW
			I	I	I	I	I	KWH	KWH	KWH				TOTAL
VAR210			IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATE5	IYRKWH1	IYRKWH2	IYRKWH3	I
BATT-BLANKET	1	I	2	13	8	17	25	3	8	62	9	19	13	73
		I	50.0	61.9	66.7	85.0	83.3	37.5	80.0	76.5	64.3	73.1	65.0	73.7
LOOSE FILL	2	I	2	7	4	3	3	5	1	16	3	6	7	22
		I	50.0	33.3	33.3	15.0	10.0	62.5	10.0	19.8	21.4	23.1	35.0	22.2
RIGID FOAM	3	I	0	1	0	0	2	0	1	3	2	1	0	4
		I	0	4.8	0	0	6.7	0	10.0	3.7	14.3	3.8	0	4.0
COLUMN			4	21	12	20	30	8	10	81	14	26	20	99
TOTAL			4.0	21.2	12.1	20.2	30.3	8.1	10.1	81.8	14.1	26.3	20.2	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR210 Q100A-TYPE OF EXT WALL INSUL-SECOND FL

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT	IMIGH	LOW	BELOW	ABOVE	HIGH							
	COL	PCT	I	AVERAGE	AVERAGE		ROW						
			I				TOTAL						
			IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I					
VAR210			I-----I	I-----I	I-----I	I-----I	I-----I	I					
	1	I	15	I	3	I	7	I	9	I	2	I	73
BATT-BLANKET		I	88.2	I	42.9	I	70.0	I	81.8	I	50.0	I	73.7
		I	I-----I	I-----I	I-----I	I-----I	I-----I	I					
	2	I	2	I	3	I	3	I	0	I	2	I	22
LOOSE FILL		I	11.8	I	42.9	I	30.0	I	0	I	50.0	I	22.2
		I	I-----I	I-----I	I-----I	I-----I	I-----I	I					
	3	I	0	I	1	I	0	I	2	I	0	I	4
RIGID FOAM		I	0	I	14.3	I	0	I	18.2	I	0	I	4.0
		I	I-----I	I-----I	I-----I	I-----I	I-----I	I					
		COLUMN	17	7	10	11	4	99					
		TOTAL	17.2	7.1	10.1	11.1	4.0	100.0					

PERCENTS AND TOTALS BASED ON RESPONDENTS

99 VALID CASES

6 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR215 Q1010-PERCENT INSUL-TOP SIDE OF CEILING
BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	IOWN	RENT	SIN FAM	SIN FAM	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF	800 TO	1200 TO													
	COL	PCT	IDWELLING	DWELLING	DETACHED	ATTACHED	1964	1974	1979	OR LESS	1199 SF	1599 SF	ROW												
			IPAY1	IPAY2	IDWELL2	IDWELL3	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	ISPACE2	ISPACE3	TOTAL											
VAR215																									
100	1	I	529	I	55	I	466	I	120	I	134	I	161	I	114	I	127	I	54	I	153	I	175	I	586
		I	74.6	I	35.7	I	65.6	I	76.4	I	53.6	I	84.3	I	75.5	I	93.4	I	49.1	I	64.8	I	73.2	I	67.6
76-99	2	I	19	I	3	I	20	I	2	I	8	I	5	I	6	I	1	I	5	I	1	I	7	I	22
		I	2.7	I	1.9	I	2.8	I	1.3	I	3.2	I	2.6	I	4.0	I	.7	I	4.5	I	.4	I	2.9	I	2.5
51-75	3	I	16	I	4	I	19	I	1	I	12	I	4	I	0	I	0	I	4	I	4	I	6	I	20
		I	2.3	I	2.6	I	2.7	I	.6	I	4.8	I	2.1	I	0	I	0	I	3.6	I	1.7	I	2.5	I	2.3
26-50	4	I	16	I	3	I	19	I	0	I	8	I	2	I	2	I	1	I	2	I	3	I	7	I	19
		I	2.3	I	1.9	I	2.7	I	0	I	3.2	I	1.0	I	1.3	I	.7	I	1.8	I	1.3	I	2.9	I	2.2
1-25	5	I	8	I	2	I	10	I	0	I	5	I	2	I	2	I	0	I	0	I	4	I	2	I	10
		I	1.1	I	1.3	I	1.4	I	0	I	2.0	I	1.0	I	1.3	I	0	I	0	I	1.7	I	.8	I	1.2
0	6	I	82	I	34	I	107	I	11	I	65	I	8	I	8	I	2	I	27	I	33	I	22	I	118
		I	11.6	I	22.1	I	15.1	I	7.0	I	26.0	I	4.2	I	5.3	I	1.5	I	24.5	I	14.0	I	9.2	I	13.6
DONT KNOW	8	I	39	I	53	I	69	I	23	I	18	I	9	I	19	I	5	I	18	I	38	I	20	I	92
		I	5.5	I	34.4	I	9.7	I	14.6	I	7.2	I	4.7	I	12.6	I	3.7	I	16.4	I	16.1	I	8.4	I	10.6
COLUMN			709		154		710		157		250		191		151		136		110		236		239		867
TOTAL			81.8		17.8		81.9		18.1		28.8		22.0		17.4		15.7		12.7		27.2		27.6		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR215 Q1018-PERCENT INSUL-TOP SIDE OF CEILING

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	11600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD	
	COL PCT	11999 SF	OR MORE	ITY	GAS			ROW
								TOTAL
		ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
VAR215	1	103	93	201	157	117	95	586
100		72.0	72.7	75.3	66.5	59.1	64.2	67.6
	2	1	7	8	10	3	1	22
76-99		.7	5.5	3.0	4.2	1.5	.7	2.5
	3	4	2	3	6	6	5	20
51-75		2.8	1.6	1.1	2.5	3.0	3.4	2.3
	4	5	2	4	7	5	3	19
26-50		3.5	1.6	1.5	3.0	2.5	2.0	2.2
	5	1	3	1	4	3	2	10
1-25		.7	2.3	.4	1.7	1.5	1.4	1.2
	6	19	16	12	32	42	32	118
0		13.3	12.5	4.5	13.6	21.2	21.6	13.6
	8	10	5	38	20	22	10	92
DONT KNOW		7.0	3.9	14.2	8.5	11.1	6.8	10.6
		143	128	267	236	198	148	867
	COLUMN	16.5	14.8	30.8	27.2	22.8	17.1	100.0
	TOTAL							

PERCENTS AND TOTALS BASED ON RESPONDENTS

867 VALID CASES

9 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR215 Q101R-PERCENT INSUL-TOP SIDE OF CEILING

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	1\$0 TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE	ROW	
	COL	PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	ROW
			I	I	I	I	I	KWH	KWH	KWH				TOTAL
VAR215			I	I	I	I	I	I	I	I	I	I	I	
	1		47	121	82	78	153	49	65	472	85	123	100	586
100			42.0	69.5	67.2	70.3	78.9	75.4	69.1	66.7	67.5	68.3	68.0	67.6
	2		4	1	4	4	6	1	2	19	4	2	3	22
76-99			3.6	.6	3.3	3.6	3.1	1.5	2.1	2.7	3.2	1.1	2.0	2.5
	3		1	8	1	7	2	2	1	17	3	4	5	20
51-75			.9	4.6	.8	6.3	1.0	3.1	1.1	2.4	2.4	2.2	3.4	2.3
	4		3	5	1	3	6	1	2	16	5	5	5	19
26-50			2.7	2.9	.8	2.7	3.1	1.5	2.1	2.3	4.0	2.8	3.4	2.2
	5		3	3	3	0	1	0	1	9	1	3	3	10
1-25			2.7	1.7	2.5	0	.5	0	1.1	1.3	.8	1.7	2.0	1.2
	6		37	17	13	12	14	6	14	98	22	33	18	118
0			33.0	9.8	10.7	10.8	7.2	9.2	14.9	13.8	17.5	18.3	12.2	13.6
	8		17	19	18	7	12	6	9	77	6	10	13	92
DONT KNOW			15.2	10.9	14.8	6.3	6.2	9.2	9.6	10.9	4.8	5.6	8.9	10.6
		COLUMN	112	174	122	111	194	65	94	708	126	180	147	867
		TOTAL	12.9	20.1	14.1	12.8	22.4	7.5	10.8	81.7	14.5	20.8	17.0	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

* * * * * PAGE 2 OF 2

9 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR216 Q101C-ENOUGH SPACE FOR INSULATION-CEILIN

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	TOWN	RENT	SIN FAM	SIN FAM	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF	800 TO	1200 TO		
	COL	PCT	DWELLING	DWELLING	DETACHED	ATTACHED	1964	1974	1979	OR LESS	1199 SF	1599 SF	ROW	
			IPAY1	IPAY2	IDWELL2	IDWELL3	IHAGE1	IHAGE2	IHAGE3	IHAGE4	ISPACE1	ISPACE2	ISPACE3	TOTAL
VAR216														
YES	1		105	32	131	7	71	18	10	4	26	31	37	138
			84.7	88.9	87.9	58.3	82.6	90.0	66.7	100.0	86.7	83.8	90.2	85.7
NO	2		19	4	18	5	15	2	5	0	4	6	4	23
			15.3	11.1	12.1	41.7	17.4	10.0	33.3	0	13.3	16.2	9.8	14.3
COLUMN			124	36	149	12	86	20	15	4	30	37	41	161
TOTAL			77.0	22.4	92.5	7.5	53.4	12.4	9.3	2.5	18.6	23.0	25.5	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR216 Q101C-ENOUGH SPACE FOR INSULATION-CEILIN

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT		11600 TO 2000 SF		ELECTRIC NATURAL		FUEL OIL WOOD		ROW TOTAL
	COL	PCT	11999 SF	OR MORE	ITY	GAS			
			ISPACE4	ISPACES	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
VAR216			-----	-----	-----	-----	-----	-----	
YES	1		25	18	19	47	38	34	138
			92.6	72.0	86.4	94.0	79.2	82.9	85.7
	2		2	7	3	3	10	7	23
NO			7.4	28.0	13.6	6.0	20.8	17.1	14.3
			-----	-----	-----	-----	-----	-----	
COLUMN			27	25	22	50	48	41	161
TOTAL			16.8	15.5	13.7	31.1	29.8	25.5	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

161 VALID CASES

28 MISSING CASES

PAGE 1 OF 2

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR216 Q101C-ENOUGH SPACE FOR INSULATION-CEILIN

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT	HIGH	LOW	BELOW	ABOVE	HIGH							
	COL	PCT	I	AVERAGE	AVERAGE		ROW						
			I				TOTAL						
			IYRKH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHPM4						
VAR216			I-----I	I-----I	I-----I	I-----I	I-----I						
	1	I	9	I	21	I	6	I	6	I	4	I	138
YES		I	75.0	I	100.0	I	85.7	I	85.7	I	100.0	I	85.7
			I-----I	I-----I	I-----I	I-----I	I-----I						
	2	I	3	I	0	I	1	I	1	I	0	I	23
NO		I	25.0	I	0	I	14.3	I	14.3	I	0	I	14.3
			I-----I	I-----I	I-----I	I-----I	I-----I						
	COLUMN		12		21		7		7		4		161
	TOTAL		7.5		13.0		4.3		4.3		2.5		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

161 VALID CASES

20 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR230 Q1038-PERCENT INSULATION-GROUND FLOOR

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT COL PCT	IOWN IDWELLING	RENT DWELLING	SIN FAM DETACHED	SIN FAM ATTACHED	PRE 1950 1964	1950 TO 1964	1965 TO 1974	1975 TO 1979	799 SF OR LESS	800 TO 1199 SF	1200 TO 1599 SF	ROW TOTAL
		IPAY1	IPAY2	IDWELL2	IDWELL3	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	ISPACE2	ISPACE3	
VAR230	1	116	15	87	44	22	21	33	48	8	38	42	131
100		18.3	11.5	14.0	30.3	9.8	12.0	25.4	42.1	8.1	17.5	19.6	17.1
	2	2	0	1	1	0	1	1	0	0	1	0	2
76-99		.3	0	.2	.7	0	.6	.8	0	0	.5	0	.3
	3	9	0	9	0	6	3	0	0	2	1	3	9
51-75		1.4	0	1.4	0	2.7	1.7	0	0	2.0	.5	1.4	1.2
	4	18	1	17	2	4	4	4	5	3	1	7	19
26-50		2.8	.8	2.7	1.4	1.8	2.3	3.1	4.4	3.0	.5	3.3	2.5
	5	11	0	9	2	4	3	1	2	1	3	1	11
1-25		1.7	0	1.4	1.4	1.8	1.7	.8	1.8	1.0	1.4	.5	1.4
	6	434	86	442	81	179	130	75	47	73	146	139	523
0		68.6	65.6	71.1	55.9	79.6	74.3	57.7	41.2	73.7	67.3	65.0	68.2
	8	43	29	57	15	10	13	16	12	12	27	22	72
DONT KNOW		6.8	22.1	9.2	10.3	4.4	7.4	12.3	10.5	12.1	12.4	10.3	9.4
		633	131	622	145	225	175	130	114	99	217	214	767
	TOTAL	82.5	17.1	81.1	18.9	29.3	22.8	16.9	14.9	12.9	28.3	27.9	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR230 Q1038-PERCENT INSULATION-GROUND FLOOR

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	11600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD		ROW
	COL	PCT	11999 SF	OR MORE	ITY	GAS			TOTAL
			ISPACE4	ISPACE9	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
VAR230									
	1		26	19	64	31	19	15	131
100			21.8	13.9	27.4	14.7	10.9	11.5	17.1
	2		0	1	1	0	0	1	2
76-99			0	.9	.4	0	0	.8	.3
	3		2	1	3	1	3	2	9
51-75			1.7	.9	1.3	.5	1.7	1.5	1.2
	4		5	2	7	5	2	4	19
26-50			4.2	1.9	3.0	2.4	1.1	3.1	2.5
	5		3	2	3	3	5	0	11
1-25			2.5	1.9	1.3	1.4	2.9	0	1.4
	6		79	80	122	158	125	104	523
0			66.4	74.1	52.1	74.9	71.8	79.4	68.2
	8		4	7	34	13	20	5	72
DONT KNOW			3.4	6.5	14.5	6.2	11.5	3.8	9.4
		COLUMN	119	108	234	211	174	131	767
		TOTAL	15.5	14.1	30.5	27.5	22.7	17.1	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

767 VALID CASES

44 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR230 Q1038-PERCENT INSULATION-GROUND FLOOR

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 - \$15,000-					\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE	
	COL	PCT	\$17,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P				AVERAGE	AVERAGE	ROW
			I					KWH	KWH	KWH						TOTAL
			IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATE5	IYRKWH1	IYRKWH2	IYRKWH3			
VAR230			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
	1	I	8	25	15	21	33	12	19	100	11	20	25			131
100		I	8.1	15.6	14.3	20.6	20.6	20.3	22.1	16.1	9.3	12.9	19.5			17.1
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----			
	2	I	0	1	1	0	0	0	0	2	1	0	0			2
76-99		I	0	.6	1.0	0	0	0	0	.3	.8	0	0			.3
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----			
	3	I	0	1	3	1	2	0	2	7	0	2	0			9
51-75		I	0	.6	2.9	1.0	1.2	0	2.3	1.1	0	1.3	0			1.2
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----			
	4	I	0	6	2	3	4	1	0	18	4	3	2			19
26-50		I	0	3.7	1.9	2.9	2.5	1.7	0	2.9	3.4	1.9	1.6			2.5
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----			
	5	I	2	3	0	2	2	1	1	9	4	1	1			11
1-25		I	2.0	1.9	0	2.0	1.2	1.7	1.2	1.4	3.4	.6	.8			1.4
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----			
	6	I	77	107	71	70	110	39	54	430	89	124	93			523
0		I	77.8	66.9	67.6	68.6	68.8	66.1	62.8	69.1	75.4	80.0	72.7			68.2
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----			
	8	I	12	17	13	5	9	6	10	56	9	5	7			72
DONT KNOW		I	12.1	10.6	12.4	4.9	5.6	10.2	11.6	9.0	7.6	3.2	5.5			9.4
		I	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----			
			99	160	105	102	160	59	86	622	118	155	129			767
			12.9	20.9	13.7	13.3	20.9	7.7	11.2	81.1	15.4	20.2	16.7			100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR230 Q103B-PERCENT INSULATION-GROUND FLOOR

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT COL PCT	HIGH I	LOW I	BELOW AVERAGE	ABOVE AVERAGE	HIGH I	ROW TOTAL
		IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
VAR230		I-----I	I-----I	I-----I	I-----I	I-----I	I
	1	I 27 I	I 5 I	I 11 I	I 6 I	I 3 I	I 131
100		I 20.5 I	I 8.2 I	I 18.3 I	I 14.3 I	I 18.8 I	I 17.1
		I-----I	I-----I	I-----I	I-----I	I-----I	I
	2	I 0 I	I 0 I	I 1 I	I 0 I	I 0 I	I 2
76-99		I 0 I	I 0 I	I 1.7 I	I 0 I	I 0 I	I .3
		I-----I	I-----I	I-----I	I-----I	I-----I	I
	3	I 3 I	I 2 I	I 0 I	I 0 I	I 0 I	I 9
51-75		I 2.3 I	I 3.3 I	I 0 I	I 0 I	I 0 I	I 1.2
		I-----I	I-----I	I-----I	I-----I	I-----I	I
	4	I 4 I	I 1 I	I 2 I	I 1 I	I 1 I	I 19
26-50		I 3.0 I	I 1.6 I	I 3.3 I	I 2.4 I	I 6.3 I	I 2.5
		I-----I	I-----I	I-----I	I-----I	I-----I	I
	5	I 3 I	I 1 I	I 1 I	I 1 I	I 0 I	I 11
1-25		I 2.3 I	I 1.6 I	I 1.7 I	I 2.4 I	I 0 I	I 1.4
		I-----I	I-----I	I-----I	I-----I	I-----I	I
	6	I 81 I	I 46 I	I 41 I	I 34 I	I 11 I	I 523
0		I 61.4 I	I 75.4 I	I 68.3 I	I 81.0 I	I 68.8 I	I 68.2
		I-----I	I-----I	I-----I	I-----I	I-----I	I
	8	I 14 I	I 6 I	I 4 I	I 0 I	I 1 I	I 72
DONT KNOW		I 10.6 I	I 9.8 I	I 6.7 I	I 0 I	I 6.3 I	I 9.4
		I-----I	I-----I	I-----I	I-----I	I-----I	I
	COLUMN	132	61	60	42	16	767
	TOTAL	17.2	8.0	7.8	5.5	2.1	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

767 VALID CASES

44 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR230 01038-PERCENT INSULATION-GROUND FLOOR

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT COL PCT	130 TO \$7,999	\$8,000 - \$14,999	\$15,000- \$19,999	\$20,000- \$24,999	\$25,000 OR MORE	13-16 MILLS P KWH	17-20 MILLS P KWH	25-28 MILLS P KWH	LOW IYRKWH1	BELOW AVERAGE IYRKWH2	ABOVE AVERAGE IYRKWH3	ROW TOTAL
VAR230		IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATE5	IYRKWH1	IYRKWH2	IYRKWH3	I
100	1	8	25	15	21	33	12	19	100	11	20	25	131
		8.1	15.6	14.3	20.6	20.6	20.3	22.1	16.1	9.3	12.9	19.5	17.1
76-99	2	0	1	1	0	0	0	0	2	1	0	0	2
		0	.6	1.0	0	0	0	0	.3	.8	0	0	.3
51-75	3	0	1	3	1	2	0	2	7	0	2	0	9
		0	.6	2.9	1.0	1.2	0	2.3	1.1	0	1.3	0	1.2
26-50	4	0	6	2	3	4	1	0	18	4	3	2	19
		0	3.7	1.9	2.9	2.5	1.7	0	2.9	3.4	1.9	1.6	2.5
1-25	5	2	3	0	2	2	1	1	9	4	1	1	11
		2.0	1.9	0	2.0	1.2	1.7	1.2	1.4	3.4	.6	.8	1.4
0	6	77	107	71	70	110	39	54	430	89	124	93	523
		77.8	66.9	67.6	68.6	68.8	66.1	62.8	69.1	75.4	80.0	72.7	68.2
DONT KNOW	8	12	17	13	5	9	6	10	56	9	5	7	72
		12.1	10.6	12.4	4.9	5.6	10.2	11.6	9.0	7.6	3.2	5.5	9.4
COLUMN TOTAL		99	160	105	102	160	59	86	622	118	155	129	767
		12.9	20.9	13.7	13.3	20.9	7.7	11.2	81.1	15.4	20.2	16.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

VAR230 Q103B-PERCENT INSULATION-GROUND FLOOR

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT	IMHIGH	LOW	BELOW	ABOVE	HIGH	
	COL	PCT	I	AVERAGE	AVERAGE		ROW
			I				TOTAL
			IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4
VAR230	1	I	I	I	I	I	I
	1	I	27	I	5	I	11
100	I	20.5	I	8.2	I	18.3	I
	2	I	0	I	0	I	0
76-99	I	0	I	0	I	1.7	I
	3	I	3	I	2	I	0
51-75	I	2.3	I	3.3	I	0	I
	4	I	4	I	1	I	2
26-50	I	3.0	I	1.6	I	3.3	I
	5	I	3	I	1	I	1
1-25	I	2.3	I	1.6	I	1.7	I
	6	I	81	I	46	I	41
0	I	61.4	I	75.4	I	68.3	I
	8	I	14	I	6	I	4
DONT KNOW	I	10.6	I	9.8	I	6.7	I
COLUMN		132	61	60	42	16	767
TOTAL		17.2	8.0	7.8	5.5	2.1	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

767 VALID CASES

44 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

RCEIL Q101E-R VALUE OF INSULATION-CEILING TOP
BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	DOWN	RENT	SIN FAM	SIN FAM	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF	800 TO	1200 TO		
	COL	PCT	IDWELLING	DWELLING	DETACHED	ATTACHED	1964	1974	1979	OR LESS	1199 SF	1599 SF	ROW	
			I	I	I	I	I	I	I	I	I	I	TOTAL	
RCEIL			IPAY1	IPAY2	IDWELL2	IDWELL3	IHAGE1	IHAGE2	IHAGE3	IHAGE4	ISPACE1	ISPACE2	ISPACE3	I
	0		I 44 I	I 15 I	I 49 I	I 10 I	I 12 I	I 10 I	I 13 I	I 10 I	I 8 I	I 22 I	I 12 I	50
Don't Know			I 7.5 I	I 20.8 I	I 9.1 I	I 8.1 I	I 7.1 I	I 5.7 I	I 10.2 I	I 8.0 I	I 12.3 I	I 13.0 I	I 6.1 I	8.9
	1		I 53 I	I 7 I	I 47 I	I 13 I	I 23 I	I 19 I	I 8 I	I 4 I	I 6 I	I 14 I	I 21 I	60
1 TO 9			I 9.0 I	I 9.7 I	I 8.7 I	I 10.6 I	I 13.7 I	I 10.9 I	I 6.3 I	I 3.2 I	I 9.2 I	I 8.3 I	I 10.7 I	9.0
	2		I 179 I	I 24 I	I 168 I	I 35 I	I 68 I	I 55 I	I 29 I	I 28 I	I 22 I	I 60 I	I 57 I	203
9 TO 15			I 30.3 I	I 33.3 I	I 31.1 I	I 28.5 I	I 40.5 I	I 31.4 I	I 22.7 I	I 22.4 I	I 33.8 I	I 35.5 I	I 28.9 I	30.6
	3		I 110 I	I 7 I	I 100 I	I 17 I	I 22 I	I 33 I	I 27 I	I 26 I	I 9 I	I 27 I	I 40 I	117
15 TO 21			I 18.6 I	I 9.7 I	I 18.5 I	I 13.8 I	I 13.1 I	I 18.9 I	I 21.1 I	I 20.8 I	I 13.8 I	I 16.0 I	I 20.3 I	17.6
	4		I 118 I	I 14 I	I 110 I	I 24 I	I 30 I	I 32 I	I 27 I	I 36 I	I 14 I	I 25 I	I 44 I	134
21 TO 27			I 20.0 I	I 19.4 I	I 20.3 I	I 19.5 I	I 17.9 I	I 18.3 I	I 21.1 I	I 28.8 I	I 21.5 I	I 14.8 I	I 22.3 I	20.2
	5		I 40 I	I 4 I	I 33 I	I 11 I	I 4 I	I 14 I	I 13 I	I 10 I	I 3 I	I 12 I	I 9 I	44
27 TO 34			I 6.8 I	I 5.6 I	I 6.1 I	I 8.9 I	I 2.4 I	I 8.0 I	I 10.2 I	I 8.0 I	I 4.6 I	I 7.1 I	I 4.6 I	6.6
	6		I 32 I	I 0 I	I 23 I	I 9 I	I 6 I	I 8 I	I 7 I	I 10 I	I 1 I	I 8 I	I 10 I	32
34 TO 41			I 5.4 I	I 0 I	I 4.3 I	I 7.3 I	I 3.6 I	I 4.6 I	I 5.5 I	I 8.0 I	I 1.5 I	I 4.7 I	I 5.1 I	4.8
	7		I 14 I	I 1 I	I 11 I	I 4 I	I 3 I	I 4 I	I 4 I	I 1 I	I 2 I	I 1 I	I 4 I	15
41+			I 2.4 I	I 1.4 I	I 2.0 I	I 3.3 I	I 1.8 I	I 2.3 I	I 3.1 I	I .8 I	I 3.1 I	I .6 I	I 2.0 I	2.3
			I-----I	I-----I	I-----I	I-----I	I-----I	I-----I	I-----I	I-----I	I-----I	I-----I	I-----I	
COLUMN			590	72	541	123	168	175	128	125	65	169	197	664
TOTAL			88.9	10.8	81.5	18.5	25.3	26.4	19.3	18.8	9.8	25.5	29.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

RCEIL Q101E-R VALUE OF INSULATION-CEILING TOP

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	11600 TO	2000 SF	ELECTRIC	NATURAL	FUEL	OIL	WOOD		ROW
	COL PCT	11999 SF	OR MORE	ITY	GAS					TOTAL
RCEIL		ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	I		
	0	I 9 I	I 7 I	I 25 I	I 11 I	I 12 I	I 9 I	I		59
Don't Know		I 7.6 I	I 6.7 I	I 11.4 I	I 5.9 I	I 8.9 I	I 8.5 I	I		8.9
	1	I 7 I	I 12 I	I 15 I	I 19 I	I 14 I	I 10 I	I		60
1 TO 9		I 5.9 I	I 11.5 I	I 6.8 I	I 10.2 I	I 10.4 I	I 9.4 I	I		9.0
	2	I 28 I	I 31 I	I 62 I	I 50 I	I 57 I	I 27 I	I		203
9 TO 15		I 23.5 I	I 29.8 I	I 28.2 I	I 26.7 I	I 42.2 I	I 25.5 I	I		30.6
	3	I 24 I	I 14 I	I 42 I	I 45 I	I 13 I	I 16 I	I		117
15 TO 21		I 20.2 I	I 13.5 I	I 19.1 I	I 24.1 I	I 9.6 I	I 15.1 I	I		17.6
	4	I 30 I	I 21 I	I 44 I	I 39 I	I 24 I	I 23 I	I		134
21 TO 27		I 25.2 I	I 20.2 I	I 20.0 I	I 20.9 I	I 17.8 I	I 21.7 I	I		20.2
	5	I 11 I	I 8 I	I 15 I	I 15 I	I 5 I	I 9 I	I		44
27 TO 34		I 9.2 I	I 7.7 I	I 6.8 I	I 8.0 I	I 3.7 I	I 8.5 I	I		6.6
	6	I 6 I	I 7 I	I 10 I	I 7 I	I 6 I	I 9 I	I		32
34 TO 41		I 5.0 I	I 6.7 I	I 4.5 I	I 3.7 I	I 4.4 I	I 8.5 I	I		4.8
	7	I 4 I	I 4 I	I 7 I	I 1 I	I 4 I	I 3 I	I		15
41+		I 3.4 I	I 3.8 I	I 3.2 I	I .5 I	I 3.0 I	I 2.8 I	I		2.3
		I-----I	I-----I	I-----I	I-----I	I-----I	I-----I	I		
COLUMN		119	104	220	187	135	106			664
TOTAL		17.9	15.7	33.1	28.2	20.3	16.0			100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

664 VALID CASES

94 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

RCEIL Q101E-R VALUE OF INSULATION-CEILING TOP

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	\$0 TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE	
	COL PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	ROW
		I	I	I	I	I	KWH	KWH	KWH				TOTAL
RCEIL		IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATE5	IYRKWH1	IYRKWH2	IYRKWH3	I
	0	I 4 I	I 18 I	I 7 I	I 6 I	I 10 I	I 3 I	I 10 I	I 46 I	I 5 I	I 6 I	I 9 I	59
Don't Know		I 6.9 I	I 12.7 I	I 7.9 I	I 6.5 I	I 5.9 I	I 5.6 I	I 14.1 I	I 8.5 I	I 5.2 I	I 4.4 I	I 7.6 I	8.9
	1	I 5 I	I 14 I	I 7 I	I 7 I	I 15 I	I 6 I	I 7 I	I 47 I	I 9 I	I 15 I	I 13 I	60
1 TO 9		I 8.6 I	I 9.9 I	I 7.9 I	I 7.5 I	I 8.8 I	I 11.1 I	I 9.9 I	I 8.7 I	I 9.3 I	I 10.9 I	I 10.9 I	9.0
	2	I 30 I	I 43 I	I 29 I	I 27 I	I 43 I	I 16 I	I 24 I	I 163 I	I 28 I	I 48 I	I 37 I	203
9 TO 15		I 51.7 I	I 30.3 I	I 32.6 I	I 29.0 I	I 25.3 I	I 29.6 I	I 33.8 I	I 30.2 I	I 28.9 I	I 35.0 I	I 31.1 I	30.6
	3	I 8 I	I 21 I	I 19 I	I 19 I	I 31 I	I 14 I	I 6 I	I 97 I	I 15 I	I 26 I	I 19 I	117
15 TO 21		I 13.8 I	I 14.8 I	I 21.3 I	I 20.4 I	I 18.2 I	I 25.9 I	I 8.5 I	I 18.0 I	I 15.5 I	I 19.0 I	I 16.0 I	17.6
	4	I 10 I	I 24 I	I 20 I	I 20 I	I 37 I	I 5 I	I 13 I	I 116 I	I 24 I	I 25 I	I 23 I	134
21 TO 27		I 17.2 I	I 16.9 I	I 22.5 I	I 21.5 I	I 21.8 I	I 9.3 I	I 18.3 I	I 21.5 I	I 24.7 I	I 18.2 I	I 19.3 I	20.2
	5	I 0 I	I 10 I	I 3 I	I 5 I	I 19 I	I 2 I	I 7 I	I 35 I	I 9 I	I 7 I	I 6 I	44
27 TO 34		I 0 I	I 7.0 I	I 3.4 I	I 5.4 I	I 11.2 I	I 3.7 I	I 9.9 I	I 6.5 I	I 9.3 I	I 5.1 I	I 5.0 I	6.6
	6	I 1 I	I 8 I	I 3 I	I 5 I	I 12 I	I 5 I	I 4 I	I 23 I	I 5 I	I 7 I	I 7 I	32
34 TO 41		I 1.7 I	I 5.6 I	I 3.4 I	I 5.4 I	I 7.1 I	I 9.3 I	I 5.6 I	I 4.3 I	I 5.2 I	I 5.1 I	I 5.9 I	4.8
	7	I 0 I	I 4 I	I 1 I	I 4 I	I 3 I	I 3 I	I 0 I	I 12 I	I 2 I	I 3 I	I 5 I	15
41+		I 0 I	I 2.8 I	I 1.1 I	I 4.3 I	I 1.8 I	I 5.6 I	I 0 I	I 2.2 I	I 2.1 I	I 2.2 I	I 4.2 I	2.3
		I-----I	I-----I	I-----I	I-----I	I-----I	I-----I	I-----I	I-----I	I-----I	I-----I	I-----I	
COLUMN TOTAL		58	142	89	93	170	54	71	539	97	137	119	664
		8.7	21.4	13.4	14.0	25.6	8.1	10.7	81.2	14.6	20.6	17.9	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

RCEIL Q101E-R VALUE OF INSULATION-CEILING TOP

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT	INHIGH	LOW	BELOW	ABOVE	HIGH							
	COL	PCT	I	AVERAGE	AVERAGE		ROW						
			I				TOTAL						
			IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHPM4						
RCEIL			I-----I	I-----I	I-----I	I-----I	I-----I						
Don't Know	0	I	15	I	1	I	4	I	1	I	59		
		I	11.5	I	2.0	I	1.8	I	10.5	I	7.1	I	8.9
		I	-----I	I-----I	I-----I	I-----I	I-----I						
1 TO 9	1	I	9	I	4	I	9	I	3	I	1	I	60
		I	6.9	I	8.2	I	15.8	I	7.9	I	7.1	I	9.0
		I	-----I	I-----I	I-----I	I-----I	I-----I						
9 TO 15	2	I	31	I	13	I	12	I	9	I	4	I	203
		I	23.7	I	26.5	I	21.1	I	23.7	I	28.6	I	30.6
		I	-----I	I-----I	I-----I	I-----I	I-----I						
15 TO 21	3	I	27	I	15	I	10	I	9	I	2	I	117
		I	20.6	I	30.6	I	17.5	I	23.7	I	14.3	I	17.6
		I	-----I	I-----I	I-----I	I-----I	I-----I						
21 TO 27	4	I	29	I	8	I	17	I	7	I	4	I	134
		I	22.1	I	16.3	I	29.8	I	18.4	I	28.6	I	20.2
		I	-----I	I-----I	I-----I	I-----I	I-----I						
27 TO 34	5	I	9	I	4	I	4	I	3	I	2	I	44
		I	6.9	I	8.2	I	7.0	I	7.9	I	14.3	I	6.6
		I	-----I	I-----I	I-----I	I-----I	I-----I						
34 TO 41	6	I	8	I	4	I	4	I	2	I	0	I	32
		I	6.1	I	8.2	I	7.0	I	5.3	I	0	I	4.8
		I	-----I	I-----I	I-----I	I-----I	I-----I						
41+	7	I	3	I	0	I	0	I	1	I	0	I	15
		I	2.3	I	0	I	0	I	2.6	I	0	I	2.3
		I	-----I	I-----I	I-----I	I-----I	I-----I						
COLUMN			131		49		57		38		14		664
TOTAL			19.7		7.4		8.6		5.7		2.1		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

664 VALID CASES

94 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

RROOF Q1020-R VALUE OF INSULATION-UNDER ROOF

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

	COUNT	TOWN	RENT	SIN FAM	SIN FAM	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF	800 TO	1200 TO	
	CCL	PCT	DWELLING	DWELLING	DETACHED	ATTACHED	1964	1974	1979	OR LESS	1199 SF	1549 SF	RCW
													TOTAL
			IPAY1	IPAY2	IDWELL2	IDWELL3	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPACE1	ISPACE2	ISPACE3
RROOF													
	0		20	10	23	7	7	5	5	6	2	12	6
Don't Know			18.0	50.0	21.3	30.4	13.5	22.7	23.8	31.6	25.0	37.5	16.2
	1		14	1	11	4	7	3	3	1	1	4	3
1 TO 9			12.6	5.0	10.2	17.4	13.5	13.6	14.3	5.3	12.5	12.5	8.1
	2		42	6	40	8	23	7	8	6	2	10	20
9 TO 15			37.8	30.0	37.0	34.8	44.2	31.8	38.1	31.6	25.0	31.3	54.1
	3		8	0	8	0	3	1	1	1	0	2	2
15 TO 21			7.2	0	7.4	0	5.8	4.5	4.8	5.3	0	6.3	5.4
	4		22	3	22	3	11	5	3	4	3	2	5
21 TO 27			19.8	15.0	20.4	13.0	21.2	22.7	14.3	21.1	37.5	6.2	12.5
	5		2	0	2	0	0	0	0	1	0	1	1
27 TO 34			1.8	0	1.9	0	0	0	0	5.3	0	3.1	2.7
	7		3	0	2	1	1	1	1	0	0	1	0
41+			2.7	0	1.9	4.3	1.9	4.5	4.6	0	0	3.1	0
COLUMN			111	20	108	23	52	22	21	19	8	32	37
TOTAL			84.7	15.3	82.4	17.6	39.7	16.8	16.0	14.5	6.1	24.4	28.2

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFICA (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

RROOF Q1020-R VALUE OF INSULATION-UNDER ROOF

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT COL PCT	11600 TO 11999 SF	2000 SF OR MORE	ELECTRIC ITY	NATURAL GAS	FUEL OIL	WOOD	ROW TOTAL
		ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	
RROOF								
Don't Know	0	5	4	10	6	7	6	30
		25.0	13.8	30.3	16.7	20.6	26.1	22.9
1 TO 9	1	3	4	3	7	4	1	15
		15.0	13.8	9.1	19.4	11.8	4.3	11.5
9 TO 15	2	7	7	9	15	12	9	48
		35.0	24.1	27.3	41.7	35.3	39.1	36.6
15 TO 21	3	1	1	3	2	2	0	8
		5.0	3.4	9.1	5.6	5.9	0	6.1
21 TO 27	4	3	12	6	6	8	5	25
		15.0	41.4	18.2	16.7	23.5	21.7	19.1
27 TO 34	5	0	0	1	0	0	1	2
		0	0	3.0	0	0	4.3	1.5
41+	7	1	1	1	0	1	1	3
		5.0	3.4	3.0	0	2.0	4.3	2.3
COLUMN TOTAL		20 15.3	29 22.1	33 25.2	36 27.5	34 26.0	23 17.6	131 100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

131 VALID CASES

150 MISSING CASES.

FILE PACIFICA (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

RROOF Q1020-R VALUE OF INSULATION-UNDER ROOF

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE		
	COL	PCT	\$7,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	KWH
								KWH	KWH	KWH				TOTAL
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
ROOF			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
			I	I	I	I	I	I	I	I	I	I	I	I
</														

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

RROOF Q1020-R VALUE OF INSULATION-UNDER ROOF

BY BANNER2 (TABULATING 1) INCOME * FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT	IMHIGH	LOW	BELOW	ABOVE	HIGH	ROW
	COL	PCT		AVERAGE	AVERAGE		TOTAL
			I	I	I	I	
			IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4
RROOF			I	I	I	I	I
	0		4	1	1	2	1
Don't Know			21.1	10.0	12.5	18.2	25.0
	1		1	1	4	3	0
1 TO 9			5.3	10.0	50.0	27.3	0
	2		5	5	1	6	1
9 TO 15			26.3	50.0	12.5	54.5	25.0
	3		2	1	0	0	0
15 TO 21			10.5	10.0	0	0	0
	4		6	2	2	0	2
21 TO 27			31.6	20.0	25.0	0	50.0
	5		0	0	0	0	0
27 TO 34			0	0	0	0	0
	7		1	0	0	0	0
41+			5.3	0	0	0	0
			19	10	8	11	4
COLUMN			14.5	7.6	6.1	8.4	3.1
TOTAL							131
							100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

131 VALID CASES

150 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

RGROUND Q103E-R VALUE OF INSULATION-GROUND FLOOR

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

RGROUND	COUNT COL PCT	TOWN IDWELLING	RENT DWELLING	SIN FAM DETACHED	SIN FAM ATTACHED	PRE 1950 1964	1950 TO 1964	1965 TO 1974	1975 TO 1979	799 SF OR LESS	800 TO 1199 SF	1200 TO 1599 SF	RGW TOTAL
		IPAY1	IPAY2	IDWELL2	IDWELL3	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPAC1	ISPAC2	ISPAC3	
	0	I 45	I 10	I 39	I 16	I 8	I 11	I 14	I 17	I 2	I 11	I 17	55
Don't Know		I 31.3	I 58.8	I 35.1	I 32.0	I 24.2	I 33.3	I 35.9	I 36.2	I 15.4	I 28.2	I 33.3	34.2
	1	I 12	I 1	I 8	I 5	I 3	I 5	I 3	I 2	I 1	I 4	I 3	13
1 TO 9		I 8.3	I 5.9	I 7.2	I 10.0	I 9.1	I 15.2	I 7.7	I 4.3	I 7.7	I 10.3	I 5.9	8.1
	2	I 61	I 3	I 43	I 21	I 17	I 12	I 14	I 19	I 7	I 18	I 23	64
9 TO 15		I 42.4	I 17.6	I 38.7	I 42.0	I 51.5	I 36.4	I 35.9	I 40.4	I 53.8	I 46.2	I 45.1	39.8
	3	I 2	I 1	I 3	I 0	I 1	I 1	I 0	I 1	I 0	I 1	I 1	3
15 TO 21		I 1.4	I 5.9	I 2.7	I 0	I 3.0	I 3.0	I 0	I 2.1	I 0	I 2.6	I 2.0	1.9
	4	I 22	I 2	I 16	I 8	I 4	I 3	I 7	I 8	I 3	I 5	I 6	24
21 TO 27		I 15.3	I 11.8	I 14.4	I 16.0	I 12.1	I 9.1	I 17.9	I 17.0	I 23.1	I 12.8	I 11.8	14.9
	5	I 2	I 0	I 2	I 0	I 0	I 1	I 1	I 0	I 0	I 0	I 1	2
27 TO 34		I 1.4	I 0	I 1.8	I 0	I 0	I 3.0	I 2.6	I 0	I 0	I 0	I 2.0	1.2
		I 144	I 17	I 111	I 50	I 33	I 33	I 39	I 47	I 13	I 39	I 51	161
		I 89.4	I 10.6	I 68.9	I 31.1	I 20.5	I 20.5	I 24.2	I 29.2	I 8.1	I 24.2	I 31.7	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFICA (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

RGROUND Q103E-R VALUE OF INSULATION-GROUND FLOOR

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT	11600 TO	2000 SF	ELECTRIC	NATURAL	FUEL OIL	WOOD								
	COL	PCT	11999 SF	OR MORE	ITY	GAS		ROW							
								TOTAL							
RGROUND			ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4							
	0	I	13	I	11	I	28	I	12	I	10	I	4	I	55
Don't Know		I	39.4	I	52.4	I	36.4	I	35.3	I	34.5	I	22.2	I	34.2
	1	I	4	I	0	I	4	I	7	I	1	I	0	I	13
1 TO 9		I	12.1	I	0	I	5.2	I	20.6	I	3.4	I	0	I	8.1
	2	I	7	I	7	I	31	I	10	I	14	I	8	I	64
9 TO 15		I	21.2	I	33.3	I	40.3	I	29.4	I	48.3	I	44.4	I	39.8
	3	I	1	I	0	I	1	I	1	I	0	I	1	I	3
15 TO 21		I	3.0	I	0	I	1.3	I	2.9	I	0	I	5.6	I	1.9
	4	I	8	I	2	I	11	I	4	I	4	I	5	I	24
21 TO 27		I	24.2	I	9.5	I	14.3	I	11.8	I	13.8	I	27.8	I	14.9
	5	I	0	I	1	I	2	I	0	I	0	I	0	I	2
27 TO 34		I	0	I	4.8	I	2.6	I	0	I	0	I	0	I	1.2
COLUMN			33		21		77		34		29		18		161
TOTAL			20.5		13.0		47.8		21.1		18.0		11.2		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

161 VALID CASES

127 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

RGROUND Q103E-R VALUE OF INSULATION-GROUND FLOOR

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE													
	COL	PCT	ISO TO	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P		AVERAGE	AVERAGE	ROW											
								KWH	KWH	KWH				TOTAL											
RGROUND			IINCOME1	IINCOME2	IINCOME3	IINCOME4	IINCOME5	IRATE2	IRATE3	IRATE5	IYRKNH1	IYRKNH2	IYRKNH3	I											
	0	I	4	I	8	I	12	I	5	I	11	I	2	I	10	I	43	I	9	I	5	I	9	I	55
Don't Know		I	30.8	I	26.7	I	70.6	I	22.7	I	28.2	I	13.3	I	43.5	I	35.0	I	50.0	I	22.7	I	32.1	I	34.2
	1	I	0	I	2	I	0	I	2	I	2	I	0	I	4	I	9	I	1	I	2	I	3	I	13
1 TO 9		I	0	I	6.7	I	0	I	9.1	I	5.1	I	0	I	17.4	I	7.3	I	5.6	I	9.1	I	10.7	I	8.1
	2	I	7	I	19	I	2	I	11	I	17	I	11	I	7	I	46	I	3	I	13	I	11	I	64
9 TO 15		I	53.8	I	50.0	I	11.8	I	50.0	I	43.6	I	73.3	I	30.4	I	37.4	I	16.7	I	59.1	I	39.3	I	39.8
	3	I	1	I	1	I	1	I	0	I	0	I	0	I	1	I	2	I	1	I	0	I	0	I	3
15 TO 21		I	7.7	I	3.3	I	5.9	I	0	I	0	I	0	I	4.3	I	1.6	I	5.6	I	0	I	0	I	1.9
	4	I	1	I	4	I	2	I	4	I	9	I	2	I	1	I	21	I	4	I	2	I	5	I	24
21 TO 27		I	7.7	I	13.3	I	11.8	I	18.2	I	23.1	I	13.3	I	4.3	I	17.1	I	22.2	I	9.1	I	17.9	I	14.9
	5	I	0	I	0	I	0	I	0	I	0	I	0	I	0	I	2	I	0	I	0	I	0	I	2
27 TO 34		I	0	I	0	I	0	I	0	I	0	I	0	I	0	I	1.6	I	0	I	0	I	0	I	1.2
COLUMN			13		30		17		22		39		15		23		123		18		22		28		161
TOTAL			8.1		18.6		10.6		13.7		24.2		9.3		14.3		76.4		11.2		13.7		17.4		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

RGROUND Q103E-R VALUE OF INSULATION-GROUND FLOOR

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 2 OF 2

BANNER2

	COUNT	THIGH	LOW	BELOW	ABOVE	HIGH		
	COL	PCT	I	AVERAGE	AVERAGE		ROW	
			I				TOTAL	
			IYRKNH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	I
RGROUND			-----	-----	-----	-----	-----	-----
	0		I 14 I	I 2 I	I 3 I	I 3 I	I 3 I	55
Don't Know			I 34.1 I	I 25.0 I	I 21.4 I	I 37.5 I	I 75.0 I	34.2
			-----	-----	-----	-----	-----	-----
	1		I 2 I	I 1 I	I 4 I	I 1 I	I 1 I	13
1 TO 9			I 4.9 I	I 12.5 I	I 28.6 I	I 12.5 I	I 25.0 I	8.1
			-----	-----	-----	-----	-----	-----
	2		I 13 I	I 2 I	I 5 I	I 2 I	I 0 I	64
9 TO 15			I 31.7 I	I 25.0 I	I 35.7 I	I 25.0 I	I 0 I	39.8
			-----	-----	-----	-----	-----	-----
	3		I 1 I	I 1 I	I 1 I	I 0 I	I 0 I	3
15 TO 21			I 2.4 I	I 12.5 I	I 7.1 I	I 0 I	I 0 I	1.9
			-----	-----	-----	-----	-----	-----
	4		I 9 I	I 2 I	I 1 I	I 2 I	I 0 I	24
21 TO 27			I 22.0 I	I 25.0 I	I 7.1 I	I 25.0 I	I 0 I	14.9
			-----	-----	-----	-----	-----	-----
	5		I 2 I	I 0 I	I 0 I	I 0 I	I 0 I	2
27 TO 34			I 4.9 I	I 0 I	I 0 I	I 0 I	I 0 I	1.2
			-----	-----	-----	-----	-----	-----
COLUMN			41	8	14	8	4	161
TOTAL			25.5	5.0	8.7	5.0	2.5	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

161 VALID CASES

127 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

RCRAWL Q104E-R VALUE OF INSULATION-CRAWL SPACE

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 1 OF 2

BANNER1

		COUNT	IOWN	RENT	SIN FAM	SIN FAM	PRE 1950	1950 TO	1965 TO	1975 TO	799 SF	800 TO	1200 TO	
		COL PCT	IDWELLING	DWELLING	DETACHED	ATTACHED		1964	1974	1979	OR LESS	1199 SF	1599 SF	ROW
			I											TOTAL
			IPAY1	IPAY2	IDWELL2	IDWELL3	IMAGE1	IMAGE2	IMAGE3	IMAGE4	ISPAC1	ISPAC2	ISPAC3	I
RCRAWL		0	I 174	I 29	I 184	I 19	I 93	I 34	I 23	I 13	I 15	I 56	I 50	203
	Don't Know		I 73.4	I 82.9	I 78.0	I 52.8	I 93.0	I 75.6	I 60.5	I 27.7	I 75.0	I 76.7	I 68.5	74.6
		1	I 10	I 0	I 9	I 1	I 0	I 1	I 2	I 7	I 0	I 1	I 5	10
	1 TO 9		I 4.2	I 0	I 3.8	I 2.8	I 0	I 2.2	I 5.3	I 14.9	I 0	I 1.4	I 6.9	3.7
		2	I 40	I 3	I 34	I 9	I 7	I 5	I 8	I 21	I 5	I 11	I 12	43
	9 TO 15		I 16.9	I 8.6	I 14.4	I 25.0	I 7.0	I 11.1	I 21.1	I 44.7	I 25.0	I 15.1	I 16.4	15.8
		3	I 2	I 2	I 3	I 1	I 0	I 3	I 0	I 1	I 0	I 1	I 3	4
	15 TO 21		I .8	I 5.7	I 1.3	I 2.8	I 0	I 6.7	I 0	I 2.1	I 0	I 1.4	I 4.1	1.5
		4	I 10	I 1	I 5	I 6	I 0	I 2	I 4	I 5	I 0	I 4	I 3	11
	21 TO 27		I 4.2	I 2.9	I 2.1	I 16.7	I 0	I 4.4	I 10.5	I 10.6	I 0	I 5.5	I 4.1	4.0
		5	I 1	I 0	I 1	I 0	I 0	I 0	I 1	I 0	I 0	I 0	I 0	1
	27 TO 34		I .4	I 0	I .4	I 0	I 0	I 0	I 2.6	I 0	I 0	I 0	I 0	.4
COLUMN TOTAL			237	35	236	36	100	45	38	47	20	73	73	272
			87.1	12.9	86.8	13.2	36.8	16.5	14.0	17.3	7.4	26.8	26.8	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

RCRAWL Q104E-R VALUE OF INSULATION-CRAWL SPACE

BY BANNER1 (TABULATING 1) DWELLING AND FUEL CHARACTERISTICS

***** PAGE 2 OF 2

BANNER1

	COUNT COL PCT	I1600 TO I1999 SF		2000 SF OR MORE		ELECTRIC ITY		NATURAL GAS		FUEL OIL		WOOD		ROW TOTAL
		ISPACE4	ISPACE5	IMFUEL1	IMFUEL2	IMFUEL3	IMFUEL4	I		I		I		
RCRAWL		-----	-----	-----	-----	-----	-----	-----		-----	-----	-----	-----	
	0	I 29	I 50	I 30	I 57	I 94	I 19	I		I		I		203
Don't Know		I 63.0	I 89.3	I 44.8	I 76.0	I 95.9	I 65.5	I		I		I		74.6
		-----	-----	-----	-----	-----	-----	-----		-----	-----	-----	-----	
	1	I 4	I 0	I 1	I 6	I 0	I 3	I		I		I		10
1 TO 9		I 8.7	I 0	I 1.5	I 8.0	I 0	I 10.3	I		I		I		3.7
		-----	-----	-----	-----	-----	-----	-----		-----	-----	-----	-----	
	2	I 11	I 3	I 28	I 8	I 3	I 4	I		I		I		43
9 TO 15		I 23.9	I 5.4	I 41.8	I 10.7	I 3.1	I 13.8	I		I		I		15.8
		-----	-----	-----	-----	-----	-----	-----		-----	-----	-----	-----	
	3	I 0	I 0	I 2	I 2	I 0	I 0	I		I		I		4
15 TO 21		I 0	I 0	I 3.0	I 2.7	I 0	I 0	I		I		I		1.5
		-----	-----	-----	-----	-----	-----	-----		-----	-----	-----	-----	
	4	I 2	I 2	I 5	I 2	I 1	I 3	I		I		I		11
21 TO 27		I 4.3	I 3.6	I 7.5	I 2.7	I 1.0	I 10.3	I		I		I		4.0
		-----	-----	-----	-----	-----	-----	-----		-----	-----	-----	-----	
	5	I 0	I 1	I 1	I 0	I 0	I 0	I		I		I		1
27 TO 34		I 0	I 1.8	I 1.5	I 0	I 0	I 0	I		I		I		.4
		-----	-----	-----	-----	-----	-----	-----		-----	-----	-----	-----	
		COLUMN	46	56	67	75	98	29		272				
		TOTAL	16.9	20.6	24.6	27.6	36.0	10.7		100.0				

PERCENTS AND TOTALS BASED ON RESPONDENTS

272 VALID CASES

99 MISSING CASES

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

RCRAWL Q104E-R VALUE OF INSULATION-CRAWL SPACE

BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC

***** PAGE 1 OF 2

BANNER2

	COUNT	ISO TO	\$8,000 -	\$15,000-	\$20,000-	\$25,000	13-16	17-20	25-28	LOW	BELOW	ABOVE													
	COL	PCT	\$17,999	\$14,999	\$19,999	\$24,999	OR MORE	MILLS P	MILLS P	MILLS P	AVERAGE	AVERAGE	ROW												
			I	I	I	I	I	KWH	KWH	KWH			TOTAL												
			I	I	I	I	I	I	I	I	I	I	I												
RCRAWL			I	I	I	I	I	I	I	I	I	I	I												
	0	I	28	I	33	I	23	I	28	I	54	I	6	I	12	I	185	I	29	I	59	I	29	I	203
Don't Know		I	96.6	I	70.2	I	79.3	I	66.7	I	75.0	I	40.0	I	63.2	I	77.7	I	85.3	I	85.5	I	78.4	I	74.6
	1	I	0	I	1	I	1	I	2	I	3	I	0	I	2	I	8	I	2	I	3	I	1	I	10
1 TO 9		I	0	I	2.1	I	3.4	I	4.8	I	4.2	I	0	I	10.5	I	3.4	I	5.9	I	4.3	I	2.7	I	3.7
	2	I	1	I	9	I	4	I	11	I	10	I	5	I	4	I	34	I	2	I	7	I	6	I	43
9 TO 15		I	3.4	I	19.1	I	13.8	I	26.2	I	13.9	I	33.3	I	21.1	I	14.3	I	5.9	I	10.1	I	16.2	I	15.8
	3	I	0	I	2	I	1	I	0	I	0	I	1	I	0	I	3	I	0	I	0	I	0	I	4
15 TO 21		I	0	I	4.3	I	3.4	I	0	I	0	I	6.7	I	0	I	1.3	I	0	I	0	I	0	I	1.5
	4	I	0	I	2	I	0	I	1	I	5	I	3	I	1	I	7	I	1	I	0	I	1	I	11
21 TO 27		I	0	I	4.3	I	0	I	2.4	I	6.9	I	20.0	I	5.3	I	2.9	I	2.9	I	0	I	2.7	I	4.0
	5	I	0	I	0	I	0	I	0	I	0	I	0	I	0	I	1	I	0	I	0	I	0	I	1
27 TO 34		I	0	I	0	I	0	I	0	I	0	I	0	I	0	I	.4	I	0	I	0	I	0	I	.4
COLUMN			29		47		29		42		72		15		19		238		34		69		37		272
TOTAL			10.7		17.3		10.7		15.4		26.5		5.5		7.0		87.5		12.5		25.4		13.6		100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

(CONTINUED)

FILE PACIFIC4 (CREATION DATE = 07/08/80) PACIFIC NORTHWEST RESIDENTIAL ENERGY STUDY

***** C R O S S T A B U L A T I O N *****

RCRAWL Q104E-R VALUE OF INSULATION-CRAWL SPACE
BY BANNER2 (TABULATING 1) INCOME + FUEL CONSUMPTION CHARACTERISTIC
***** PAGE 2 OF 2

BANNER2

	COUNT COL PCT	IMIGH	LOW	BELOW AVERAGE	ABOVE AVERAGE	HIGH	ROW TOTAL
		IYRKWH4	IYRTHRM1	IYRTHRM2	IYRTHRM3	IYRTHRM4	
RCRAWL							
Don't Know	0	20	15	13	11	8	203
		52.6	83.3	72.2	68.8	88.9	74.6
1 TO 9	1	0	0	0	3	1	10
		0	0	0	18.8	11.1	3.7
9 TO 15	2	11	2	4	2	0	43
		28.9	11.1	22.2	12.5	0	15.8
15 TO 21	3	2	1	0	0	0	4
		5.3	5.6	0	0	0	1.5
21 TO 27	4	4	0	1	0	0	11
		10.5	0	5.6	0	0	4.0
27 TO 34	5	1	0	0	0	0	1
		2.6	0	0	0	0	.4
COLUMN TOTAL		38	18	18	16	9	272
		14.0	6.6	6.6	5.9	3.3	100.0

PERCENTS AND TOTALS BASED ON RESPONDENTS

272 VALID CASES

99 MISSING CASES