

U.S. Department of Energy 1-4
1993 Residential Energy Consumption Survey
Household Questionnaire



TIME BEGAN: _____

INTRODUCTION TO INTERVIEW

Hello, I am _____ from Response Analysis Corporation, a social science research firm. Here is my identification. We are conducting a study for the U.S. Department of Energy about energy consumption in homes.

Although your response is voluntary, we hope you will participate in this important study of energy usage. Your name and address will be kept strictly confidential.

I have some questions I would like to ask the person who rents or owns this residence.

Did you receive the letter from the Department of Energy regarding this survey? (IF NOT, HAND A COPY OF THE LETTER TO THE RESPONDENT.)

INTERVIEWER: IF ASKED ABOUT CONFIDENTIALITY, REFER THE RESPONDENT TO THE BACK OF THE LETTER.

GO TO SECTION B ON PAGE 2.

Location #: _____ 10-15

Housing Unit #: _____ 16-17



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TABLE OF CONTENTS

SECTION A: PREINTERVIEW OBSERVATION	1
SECTION B: HOUSING TYPE	2
SECTION C: HOME HEATING	8
SECTION D: AIR CONDITIONING	16
SECTION E: WATER HEATING	21
SECTION F: LIGHTS	25
SECTION G: APPLIANCES	27
Cooking	27
Refrigerators and Freezers	29
Washer and Dryer	33
Dishwasher/TV/Waterbeds	34
Other Appliances	35
Pools and Hot Tubs	36
SECTION H: CONSERVATION MEASURES AND USAGE	38
Insulation	38
New Technologies	40
Windows/Doors	41
Cooling Fans	44
SECTION I: DEMAND SIDE MANAGEMENT	45
SECTION J: FUEL USED	48
Electricity	48
Natural Gas	49
Bottled Gas (LPG or Propane)	50
Fuel Oil	51
Kerosene	53
Wood	55
SECTION K: FUEL BILLS	57
Additional Suppliers	67
Authorization Form	68
Nonhousehold Uses	69
SECTION L: BACKGROUND INFORMATION	74
Income	78
SECTION M: PROGRAM PARTICIPATION	80
SECTION N: VEHICLES	83
Vehicle Identification Number	94
NEW HOME SUPPLEMENT	95
SECTION O: HOUSING MEASUREMENTS	98
Garage/Basement	98
Measurements	100
SECTION P: INTERVIEWER OBSERVATION	111

Section A: PREINTERVIEW OBSERVATION

A-1. INTERVIEWER: CIRCLE TYPE OF BUILDING IN WHICH RESPONDENT LIVES

- a. SINGLE-FAMILY DETACHED 2
- b. SINGLE-FAMILY ATTACHED (TOWNHOUSE, DUPLEX,
OR ROWHOUSE) 3
- c. MOBILE HOME OR TRAILER 1 --> [A-3]
- d. HOUSE OR BUILDING WITH 2 TO 4 APARTMENT UNITS 4 --> [A-3]
- e. HOUSE OR BUILDING WITH 5 OR MORE APARTMENT
UNITS 5 --> [A-3]

18

INTERVIEWER: MARK FOLDOUT PAGE UNDER A-1 "HOUSING STRUCTURE."

IF SINGLE-FAMILY, RECORD

A-2. INTERVIEWER: CIRCLE STYLE OF SINGLE-FAMILY HOME OR TOWNHOUSE BASED ON GENERAL APPEARANCE FROM OUTSIDE.

- a. ONE STORY 1
- b. TWO STORIES 2
- c. THREE STORIES 3
- d. SPLIT-LEVEL 4
- e. OTHER (SPECIFY): _____ 5

19

A-3. INTERVIEWER: CIRCLE ONE NUMBER BELOW TO SHOW THE KIND OF AREA THAT THIS HOUSEHOLD IS IN.

- a. CITY 1
- b. TOWN 2
- c. SUBURBS 3
- d. RURAL OR OPEN COUNTRY 4

20

Section B: HOUSING TYPE

B-1. First, I have some questions about your household so I can better understand your answers to the home energy use questions that come later. Does any other family besides your own or a person unrelated to you share this home/apartment with you?

YES 1 21
NO 0 --> [B-3]

IF "YES" ON B-1, ASK:

B-2. Does the additional family (or unrelated person):

a. Live and eat separately from other persons in the apartment or building?

YES 1 22
NO 0 --> [B-3]

b. Have direct access from outside the building or through a common hall?

YES 1 --> [BOX 1] 23
NO 0 --> [B-3]

BOX 1

INTERVIEWER: IF THE ANSWERS IN B-2 ARE BOTH "YES", THEN THIS ADDRESS HAS SEPARATE LIVING QUARTERS. FOLLOW THESE INSTRUCTIONS:

- WRITE THE ADDRESS FOR THE SEPARATE LIVING QUARTERS ON YOUR HOUSING UNIT ADDRESS LIST.
- SEE THE SAMPLING INSTRUCTIONS IN YOUR TRAINING MANUAL TO DETERMINE WHETHER AN ADDITIONAL INTERVIEW SHOULD BE COMPLETED.

CHECK ONE OF THESE AND PROCEED AS INSTRUCTED:

___ YES, AN ADDITIONAL INTERVIEW IS REQUIRED. READ TO RESPONDENT "Please **exclude** the family members and the space of the separate living quarters from this interview."

___ NO, AN ADDITIONAL INTERVIEW IS **NOT** REQUIRED. READ TO RESPONDENT "Please **include** the family members and the space of the separate living quarters in this interview."

B-3. Do you or members of your household own this home or do you rent?

- a. OWN/BUYING 1
 - b. RENT 2
 - c. OCCUPIED WITHOUT PAYMENT OF RENT 3
- 24

INTERVIEWER: MARK FOLDOUT PAGE UNDER B-3 'TENURE'.

B-4. Is this home/apartment part of a condominium or cooperative?

- YES, CONDOMINIUM 1
 - YES, COOPERATIVE 2
 - NO 0
- 25

INTERVIEWER: IF 'CONDOMINIUM,' MARK B-4 UNDER 'CONDOMINIUM' ON FOLDOUT PAGE.

IF 'RENT,' OR 'OCCUPIED WITHOUT PAYMENT OF RENT' ON B-3, ASK; OTHERWISE --> [B-7]:

B-5. Is this residence in a public housing project – that is, is it owned by a housing authority?

- YES 1 --> [B-7]
 - NO 0
 - DON'T KNOW 6
- 26

IF 'NO' OR 'DON'T KNOW' ON B-5, ASK:

B-6. Is your household paying lower rent because the federal, State, or local government is paying part of the cost?

- YES 1
 - NO 0
 - DON'T KNOW 6
- 27

INTERVIEWER: MILITARY HOUSING DOES NOT QUALIFY AS PAYING LOWER RENT FOR QUESTION B-6.

B-7. Please turn to Exhibit B-7. Approximately, in what year was this (house/building) built?

BEFORE 1940	01	1988	09	
1940-1949	02	1989	10	
1950-1959	03	1990	11	
1960-1969	04	1991	12	28-29
1970-1979	05	1992	13	
1980-1984	06	1993	14	
1985-1986	07	1994	15	
1987	08			

INTERVIEWER: IF BUILT IN 1988 OR LATER, MARK UNDER B-7 *BUILT 1988 OR LATER* ON FOLDOUT PAGE.

B-8. Did your household move into this home/apartment after December 1991?

YES	1	30
NO	0 --> [B-10]	

IF *YES* ON B-8, ASK:

B-9. In what year and month did your household move in?

YEAR				
1992	1			
1993	2			31
1994	3			
MONTH				
JANUARY	01	JULY	07	
FEBRUARY	02	AUGUST	08	
MARCH	03	SEPTEMBER	09	32-33
APRIL	04	OCTOBER	10	
MAY	05	NOVEMBER	11	
JUNE	06	DECEMBER	12	

INTERVIEWER: IF *1993 or 1994* MARK UNDER B-9 *YEAR MOVED IN* ON FOLDOUT PAGE.

B-10. How many of each of the following rooms does this home/apartment have? (ASK EACH ITEM AND RECORD NUMBER FOR EACH.)

INTERVIEWER: FOR ONE-ROOM EFFICIENCY OR STUDIO APARTMENT, RECORD *0 BEDROOMS* AND CORRECT NUMBER OF BATHROOMS.

a. Bedrooms? NUMBER: 34
 NONE 0

INTERVIEWER: FULL BATHROOM -- SINK WITH RUNNING WATER AND FLUSH TOILET AND BATHTUB OR SHOWER.
 HALF BATHROOM -- TOILET OR BATHTUB OR SHOWER.

b. Full bathrooms? NUMBER: 35
 NONE 0

c. Half bathrooms? NUMBER: 36
 NONE 0

d. All other rooms; do not count laundry room, foyers, or unfinished storage space. Only count porches if they are enclosed and used year-round. NUMBER: 37
 NONE 0

B-11. Please turn to Exhibit B-11. What is the major type of outside wall construction material for this home/apartment? IF TWO MATERIALS ARE USED, CIRCLE THE ONE USED MORE.

- a. BRICK 01
 - b. WOOD 02
 - c. SIDING (ALUMINUM, VINYL, OR STEEL) 03
 - d. STUCCO 04
 - e. COMPOSITION (ASBESTOS SHINGLE, ETC.) 05
 - f. STONE 06
 - g. CONCRETE OR CONCRETE BLOCK 07
 - h. GLASS 08
 - i. OTHER (SPECIFY): _____ 21
 - j. DON'T KNOW 96
- 38-39

B-12. Is natural gas from underground pipes available in this neighborhood?

YES	1
NO	0
DON'T KNOW	6

40

THIS PAGE INTENTIONALLY LEFT BLANK.

SECTION C: HOME HEATING

MAIN SPACE HEATING

C-1. Please turn to Exhibit C-1. What is the one main equipment used for heating your home?

INTERVIEWER: CIRCLE ONLY ONE UNDER C-1.

C-2. Please turn to the "Blue Card". For the main heating equipment in your home, what type of fuel or fuels does your household use with that equipment?

INTERVIEWER: ASK ABOUT MAIN HEATING FUELS EVEN IF EQUIPMENT IS NOT KNOWN.
SHADED CELLS INDICATE FUEL NOT USED IN THAT TYPE OF EQUIPMENT.

MAIN HEATING FUELS AND EQUIPMENT

C-1.	MAIN HEATING EQUIPMENT	C-2. [CIRCLE ALL THAT APPLY]										D O N T K N O W F U E L
		E L E C T R I C I T Y	N A T U R A L G A S	L P G / P R O P A N E	F U E L	K E R O S E N E	W O O D	C O A L o r C O K E	S O L A R	O T H E R S P E C I F Y:		
03	a. CENTRAL WARM-AIR FURNACE WITH DUCTS TO INDIVIDUAL ROOMS (NOT Heat Pump)	05	01	02	03	04	07	06	08	21		96
02	b. STEAM/HOT WATER SYSTEM WITH RADIATORS/CONVECTORS IN ROOM OR PIPES IN FLOOR	05	01	02	03	04	07	06	08	21		96
05	c. BUILT-IN ELECTRIC UNITS (Permanently installed in wall, ceiling, or baseboard.)	05										96
04	d. HEAT PUMP	05										96
06	e. FLOOR/WALL/PIPELESS FURNACE - NOT PORTABLE	05	01	02	03	04	07	06		21		96
07	f. ROOM HEATER (Burning Gas, Oil, or Kerosene.) - NOT PORTABLE		01	02	03	04						96
08	g. HEATING STOVE BURNING WOOD, COAL OR COKE						07	06		21		96
10	h. PORTABLE ELECTRIC HEATER(S)	05										96
11	i. PORTABLE KEROSENE HEATER(S)					04						96
09	j. FIREPLACE(S)	05	01	02			07	06		21		96
12	k. COOKING STOVE (Used to heat home as well as for cooking.)	05	01	02	03	04	07	06		21		96
21	l. EQUIPMENT NOT LISTED (SPECIFY): -->	05	01	02	03	04	07	06	08			96
96	m. DON'T KNOW EQUIPMENT	05	01	02	03	04	07	06	08	21		96
00	n. NO HEATING EQUIPMENT USED --> [D-1]											

43-48

INTERVIEWER: IF TWO FUELS ARE MARKED FOR MAIN EQUIPMENT, WRITE HERE THE FUEL THAT PROVIDES MORE HEAT: _____

RECORD ON FOLDOUT PAGE. FOR ALL FUELS CIRCLED IN C-2, CIRCLE '1' IN 'FUEL USED' COLUMN. ALSO, IF ELECTRICITY OR NATURAL GAS 'FOR HOME HEATING', CIRCLE '1' FOR 'YES' IN 'USAGE' COLUMN.

49-50

C-3. Please turn back to Exhibit C-1. What other types of heating equipment are used in your home, including those that are used JUST occasionally?

INTERVIEWER: FOR "OTHER HEATING FUELS AND EQUIPMENT" GRID ON NEXT PAGE, CIRCLE ALL THAT APPLY UNDER C-3.

C-4. Please turn to the "Blue Card". For each type of other heating equipment that you have, I'm going to ask you what type of fuel or fuels you use with that equipment. Let's start with...?

INTERVIEWER: READ EACH TYPE OF EQUIPMENT MENTIONED IN C-3, CIRCLE TYPE OF FUEL USED. IF "NO OTHER HEATING EQUIPMENT" IS USED, CIRCLE "00" UNDER C-3 AND SKIP TO C-6.

ASK ABOUT SUPPLEMENTAL HEATING FUELS EVEN IF EQUIPMENT IS NOT KNOWN.

SHADED CELLS INDICATE FUEL NOT USED IN THAT TYPE OF EQUIPMENT.

OTHER HEATING FUELS AND EQUIPMENT

C-3.		C-4. [CIRCLE ALL THAT APPLY]											
OTHER EQUIP	OTHER HEATING EQUIPMENT	ELECTRICITY	NATURAL GAS	LPG / PROPANE	FUEL OIL	KEROSENE	WOOD	COAL or COKE	SOLAR	OTHER SPECIFY:		DONT KNOW FUEL	
	00	a. NO OTHER HEATING EQUIPMENT USED --> [C-6]											96
03	b. CENTRAL WARM-AIR FURNACE WITH DUCTS TO INDIVIDUAL ROOMS (NOT Heat Pump)	05	01	02	03	04	07	06	08	21		96	63-70
02	c. STEAM/HOT WATER SYSTEM WITH RADIATORS/CONVECTORS IN ROOM OR PIPES IN FLOOR	05	01	02	03	04	07	06	08	21		96	71-78
05	d. BUILT-IN ELECTRIC UNITS (Permanently installed in wall, ceiling, or baseboard.)	05										96	79-82
04	e. HEAT PUMP	05										96	83-86
06	f. FLOOR/WALL/PIPELESS FURNACE - NOT PORTABLE	05	01	02	03	04	07	06		21		96	87-94
07	g. ROOM HEATER (Burning gas, oil, or Kerosene.) - NOT PORTABLE		01	02	03	04						96	95-102
08	h. HEATING STOVE BURNING WOOD, COAL OR COKE						07	06		21		96	103-110
10	i. PORTABLE ELECTRIC HEATER(S)	05										96	111-114
11	j. PORTABLE KEROSENE HEATER(S)					04						96	115-118
09	k. FIREPLACE(S)	05	01	02			07	06		21		96	119-126
12	l. COOKING STOVE (Used to heat home as well as for cooking.)	05	01	02	03	04	07	06		21		96	127-134
21	m. OTHER EQUIPMENT (SPECIFY): -->	05	01	02	03	04	07	06	08			96	135-142
96	n. DON'T KNOW EQUIPMENT	05	01	02	03	04	07	06	08	21		96	143-150

INTERVIEWER: RECORD ON FOLDOUT PAGE. FOR ALL FUELS CIRCLED IN C-4, CIRCLE '1' IN 'FUEL USED' COLUMN. IF ELECTRICITY OR NATURAL GAS, ALSO CIRCLE '1' FOR 'YES' 'FOR HOME HEATING' IN 'USAGE' COLUMN.

IF OTHER HEATING EQUIPMENT USED, ASK: OTHERWISE --> [C-6]:

C-5. Going back to your main heating equipment - (EQUIPMENT FROM C-1). Does this equipment provide all or almost all of the heat for your home, about three-fourths, or closer to half of the heat for your home?

- ALL OR ALMOST ALL (MORE THAN 95%) 1
- ABOUT THREE-FOURTHS (67%-94%) 2
- CLOSER TO HALF (66% OR LESS) 3
- DON'T KNOW 6

IF 'SOLAR HEATING' ON C-2 OR C-4, ASK; OTHERWISE --> [C-7]:

C-6. Does your solar heating system REQUIRE pumps or fans (other than ceiling fans) to circulate warm air or hot fluids between solar collectors and the rooms they heat?

- YES 1
- NO 0
- DON'T KNOW 6

HOME TEMPERATURES

C-7. At what temperature does your household usually keep your home in the winter?

a. During the day, when someone is at home?

DEGREES FAHRENHEIT: 205-6
 HEAT TURNED OFF 95

b. During the day, when no one is at home?

DEGREES FAHRENHEIT: 207-8
 HEAT TURNED OFF 95

c. During sleeping hours?

DEGREES FAHRENHEIT: 209-10
 HEAT TURNED OFF 95

INTERVIEWER: IF RESPONDENT KEEPS DIFFERENT PARTS OF THE HOUSE AT DIFFERENT TEMPERATURES, WE WANT THE TEMPERATURE IN THE PART OF THE HOUSE WHERE THE PEOPLE ARE. IF, FOR EXAMPLE, THE HEAT IS TURNED OFF UPSTAIRS DURING THE DAY BECAUSE THE FAMILY IS DOWNSTAIRS, WE WANT THE DOWNSTAIRS TEMPERATURE.

IF THE RESPONDENT DOESN'T KNOW THE TEMPERATURE, BUT KNOWS THERMOSTAT SETTING, RECORD THERMOSTAT SETTING. OTHERWISE, PROBE FOR BEST ESTIMATE.

C-8. Please look at Exhibit C-8. For your main heating equipment, can you use a thermostat to adjust the temperature in your home during the heating season?

YES 1
 NO 0 211
 DON'T KNOW 6

INTERVIEWER: IF NEEDED, PLEASE READ "A thermostat automatically responds to temperature changes and turns the heat on/off until the desired temperature is reached."

C-9. Please turn to the "Yellow Card". Approximately, how old is your household's main heating equipment?

- LESS THAN 2 YEARS OLD 1
- 2 - 4 YEARS OLD 2
- 5 - 9 YEARS OLD 3 --> [C-16]
- 10 - 19 YEARS OLD 4 --> [C-16]
- 20 YEARS OR OLDER 5 --> [C-16]
- DON'T KNOW 6 --> [C-16]

212

IF MAIN HEATING EQUIPMENT LESS THAN 5 YEARS OLD, ASK; OTHERWISE --> [C-16]

C-10. Since January 1, 1990, has your household purchased a new main heating system either to replace an older system or as part of the purchase of a new home?

- YES, PURCHASED REPLACEMENT 1 --> [C-12]
- YES, CAME WITH HOME PURCHASE 2
- NO 0 --> [C-16]

213

IF "CAME WITH HOME PURCHASE" ON C-10, ASK:

C-11. Did your household select the system or did the system come standard with the newly purchased home?

- HOUSEHOLD SELECTED 1 --> [C-15]
- STANDARD WITH NEW HOME 0 --> [C-16]

214

C-12. How well was the older equipment working when your household replaced it? Was it working very well, well, not well, or not working at all?

- VERY WELL 1
- WELL 2
- NOT WELL 3
- NOT WORKING AT ALL 4
- DID NOT HAVE HEATING SYSTEM BEFORE/
WAS NOT REPLACED 5 --> [C-15]
- DON'T KNOW 6

215

C-13. Does the new heating system use the same fuel as the heating equipment it replaced?

- YES 1
 - NO 0
 - DON'T KNOW 6
- 216

C-14. How do you like your new heating system compared to the old one? Do you like it better than the old, the same, or did you like the old equipment better?

- LIKE IT BETTER THAN OLD 1
 - LIKE IT SAME AS OLD 2
 - LIKED OLD EQUIPMENT BETTER 3
 - DON'T KNOW 6
- 217

C-15. Thinking back to why your household decided to purchase this new heating system. Please tell me, for each of the following reasons, whether it was very important, somewhat important, or not important to your decision.

	VERY IMPORTANT	SOMEWHAT IMPORTANT	NOT IMPORTANT	DON'T KNOW	
a. Purchase Price a.	1	2	3	6	218
b. Reputation of Manufacturer b.	1	2	3	6	219
c. Energy Efficiency c.	1	2	3	6	220
d. Rebate or Availability of Low-Interest Financing d.	1	2	3	6	221

INTERVIEWER: ASK EVERYONE C-16.

C-16. Does the main system for heating your home also heat one or more other apartments, condos, households, businesses, or farm buildings?

- YES 1
 - NO, HEATING EQUIPMENT IS FOR RESPONDENT'S HOME ONLY 0
 - DON'T KNOW 6
- 222

Section D. AIR CONDITIONING

D-1. Does your household have air-conditioning equipment (either a central system with, or without a heat pump, or wall, or window units?) CIRCLE ALL THAT APPLY.

- | | | |
|---|-------------|-----|
| YES, CENTRAL SYSTEM WITH A HEAT PUMP | 1 | 232 |
| YES, CENTRAL SYSTEM WITHOUT A HEAT PUMP | 2 | 233 |
| YES, INDIVIDUAL (WINDOW/WALL) UNITS | 3 | 234 |
| NO | 0 --> [E-1] | 235 |

INTERVIEWER: RECORD ON FOLDOUT PAGE.

CIRCLE ON THE FOLDOUT PAGE UNDER ELECTRICITY "FOR AIR-CONDITIONING", CIRCLE "1" FOR "YES" UNDER "USAGE" COLUMN IF INDIVIDUAL "WINDOW OR WALL UNITS."

D-2. Last summer did your household's air-conditioning (central or window/wall units) cool your entire house or some of the rooms?

- | | | |
|-------------------------------------|-------------|-----|
| ENTIRE HOUSE OR APARTMENT | 1 --> [D-4] | |
| SOME OF THE ROOMS | 2 | 236 |
| DID NOT LIVE HERE LAST SUMMER | 3 --> [D-4] | |
| NO ROOMS COOLED | 0 --> [D-4] | |

IF "SOME OF THE ROOMS" ON D-2, ASK:

D-3. How many rooms were cooled by your household's air-conditioning last summer?

NUMBER OF ROOMS: 237-8

CENTRAL AIR-CONDITIONING

INTERVIEWER: IF "CENTRAL SYSTEM" ON D-1, ASK. OTHERWISE SKIP TO BOX 2, PAGE 20.

D-4. Please turn to Exhibit D-4. Which statement on this exhibit best describes the way your household used the central air-conditioner(s) last summer?

- DID NOT USE AT ALL 0
- TURNED ON ONLY A FEW DAYS OR NIGHTS WHEN
REALLY NEEDED 1
- TURNED ON QUITE A BIT 2 239
- TURNED ON JUST ABOUT ALL SUMMER 3
- NOT HERE LAST SUMMER 4
- OTHER (SPECIFY): _____ 5

D-5. Does your household's central air-conditioner run on electricity or is it one of the few that uses natural gas or bottled gas? (DO NOT COUNT FREON AS GAS)

- ELECTRICITY 05
- NATURAL GAS (GAS FROM UNDERGROUND PIPES) 01 240-41
- BOTTLED GAS (LPG OR PROPANE) 02
- DON'T KNOW 96

INTERVIEWER: CHECK FOLDOUT PAGE. CIRCLE "FUEL USED" COLUMN IF FUEL NOT ALREADY MARKED.

ALSO, IF ELECTRICITY, "FOR AIR CONDITIONING," CIRCLE "1" FOR "YES" UNDER THE "USAGE" COLUMN.

IF NATURAL GAS, "FOR OTHER" APPLIANCES CIRCLE "1" FOR "YES" UNDER THE "USAGE" COLUMN.

D-6. Does your household's central air-conditioning equipment that cools your home also cool other apartments, condos, houses, businesses, or farm buildings?

- NO, A/C IS FOR RESPONDENT'S HOME ONLY 0
- YES, A/C COOLS ONE OR MORE OTHER APARTMENTS,
HOUSES, OR BUSINESSES 1 -> [BOX 2] 242
- DON'T KNOW 6 -> [BOX 2:
PAGE 20]

IF "NO, A/C IS FOR RESIDENTS HOME ONLY" ON D-6, ASK:

D-7. Please look at the "Yellow Card". How old is your household's central air-conditioning equipment?

- LESS THAN 2 YEARS OLD 1
- 2 - 4 YEARS OLD 2
- 5 - 9 YEARS OLD 3 --> [BOX 2]
- 10 - 19 YEARS OLD 4 --> [BOX 2]
- 20 YEARS OR OLDER 5 --> [BOX 2]
- DON'T KNOW 6 --> [BOX 2]

243

D-8. Since January 1, 1990, has your household purchased new central air-conditioning equipment for this home or acquired new central air-conditioning as part of the purchase of a new home?

- YES, PURCHASED FOR EXISTING HOME 1 --> [D-10]
- YES, CAME WITH HOME PURCHASE 2
- NO 0 --> [BOX 2]
- DON'T KNOW 6 --> [BOX 2]

244

IF "CAME WITH HOME PURCHASE" ON D-8, ASK:

D-9. Did your household select the model or did the model come standard with the new home?

- HOUSEHOLD SELECTED 1 --> [D-12]
- STANDARD WITH NEW HOME 0 --> [BOX 2]
- DON'T KNOW 6 --> [BOX 2]

245

IF "PURCHASED FOR EXISTING HOME" ON D-8, ASK:

D-10. Did the new central air-conditioning equipment replace another central air-conditioner, replace a window/wall air conditioner, add to the existing equipment in your home, or did your household have no air-conditioning equipment before this purchase?

- REPLACED CENTRAL UNIT 1
- REPLACED WINDOW/WALL UNIT 2
- ADDITIONAL EQUIPMENT 3 --> [D-12]
- NO EQUIPMENT BEFORE 4 --> [D-12]
- DON'T KNOW 6 --> [D-12]

246

D-11. How well was the old air-conditioner working when you replaced it? Very well, well, not well, or not working at all?

- VERY WELL 1
- WELL 2
- NOT WELL 3
- NOT WORKING AT ALL 4
- DON'T KNOW 6

247

D-12. Thinking back to why your household decided to purchase this new air-conditioner. Please tell me, for each of the following reasons, whether it was very important, somewhat important, or not important to your decision.

	VERY IMPORTANT	SOMEWHAT IMPORTANT	NOT IMPORTANT	DON'T KNOW	
a. Purchase Price a.	1	2	3	6	248
b. Reputation of Manufacturer . . b.	1	2	3	6	249
c. Energy Efficiency c.	1	2	3	6	250
d. Rebate or Availability of Low-Interest Financing d.	1	2	3	6	251

WINDOW/WALL AIR-CONDITIONING

BOX 2

INTERVIEWER: IF "INDIVIDUAL WINDOW/WALL UNITS" ON D-1, ASK. OTHERWISE SKIP TO E-1, PAGE 21.

D-13. How many window or wall air-conditioning units does your household have?

NUMBER OF WINDOW/WALL UNITS: 252-3

D-14. (Is the window/wall air conditioner a heat pump?) How many of the window/wall air-conditioners are heat pumps?

- NO/NONE 0
 - YES/ONE 1
 - TWO 2
 - THREE OR MORE 3
 - DON'T KNOW 6
- 254

D-15. Please turn to the "Yellow Card". About how old is your household's **MOST-USED** unit?
 "Most-Used" is the unit that is used more often than any other unit.

- LESS THAN 2 YEARS 1
 - 2 - 4 YEARS 2
 - 5 - 9 YEARS 3
 - 10 - 19 YEARS 4
 - 20 YEARS OR OLDER 5
 - DON'T KNOW 6
- 255

D-16. Please look at Exhibit D-16. Which statement best describes the way your household used the (most used) wall or window unit air conditioner(s) last summer?

- DID NOT USE AT ALL 0
 - TURNED ON ONLY A FEW DAYS OR NIGHTS WHEN REALLY NEEDED 1
 - TURNED ON QUITE A BIT 2
 - TURNED ON JUST ABOUT ALL SUMMER 3
 - DID NOT LIVE HERE LAST SUMMER 4
 - OTHER (SPECIFY): _____ 5
- 256

Section E. WATER HEATING

E-1. Please turn to the "Blue Card". Which fuel is used most for heating water for washing or bathing?
CIRCLE ONLY ONE.

- | | | |
|---|--------------|--------|
| ELECTRICITY | 05 | |
| NATURAL GAS (GAS FROM UNDERGROUND PIPES) | 01 | |
| BOTTLED GAS (LPG OR PROPANE) | 02 | |
| FUEL OIL | 03 | |
| KEROSENE OR COAL OIL | 04 | 266-67 |
| COAL OR COKE | 06 | |
| WOOD | 07 | |
| SOLAR | 08 | |
| OTHER (SPECIFY): _____ | 21 | |
| DON'T KNOW | 96 | |
| NO WATER HEATING DONE FOR WASHING/BATHING | 00 --> [F-1] | |

INTERVIEWER: CHECK FOLDOUT PAGE. CIRCLE '1' UNDER 'FUEL USED' IF FUEL NOT ALREADY MARKED.

ALSO, IF ELECTRICITY OR NATURAL GAS, 'FOR HOT WATER' CIRCLE '1' FOR 'YES' UNDER 'USAGE' COLUMN.

E-2. Does the main equipment for heating water for your home also heat water for other apartments, condos, houses, businesses, or farm buildings?

- | | | |
|---|-------------|-----|
| NO, HOT WATER EQUIPMENT IS FOR RESPONDENT'S HOME ONLY | 0 | |
| YES | 1 --> [E-9] | 268 |
| DON'T KNOW | 6 --> [E-9] | |

IF "NO, HOT WATER EQUIPMENT IS FOR RESPONDENT'S HOME ONLY" ON E-2, ASK:

- E-3. Please turn to Exhibit E-3. How large is your household's main water heater tank?
- | | | |
|----------------------------------|---|-----|
| SMALL (30 GALLONS OR LESS) | 1 | |
| MEDIUM (31 TO 49 GALLONS) | 2 | 269 |
| LARGE (50 GALLONS OR MORE) | 3 | |
| DON'T KNOW | 6 | |

E-4. Please look at the "Yellow Card". Approximately how old is your household's main water heater?
(INTERVIEWER: PROBE FOR BEST GUESS.)

LESS THAN 2 YEARS	1	
2 - 4 YEARS	2	
5 - 9 YEARS	3 -->	[E-9] 270-71
10 - 19 YEARS	4 -->	[E-9]
20 YEARS OR MORE	5 -->	[E-9]
DON'T KNOW	6 -->	[E-9]
NO SEPARATE WATER HEATER	0 -->	[E-9]

E-5. Since January 1, 1990, has your household purchased a new main water heater either to replace an older one or as part of the purchase of a new home?

YES, PURCHASED REPLACEMENT	1 -->	[E-7] 272
YES, CAME WITH HOME PURCHASE	2	
NO	0 -->	[E-9]
DON'T KNOW	6 -->	[E-9]

IF "CAME WITH HOME PURCHASE" ON E-5, ASK:

E-6. Did your household select the model or did the model come standard with the new home?

HOUSEHOLD SELECTED	1 -->	[E-8]
STANDARD WITH NEW HOME	0 -->	[E-9] 273
DON'T KNOW	6 -->	[E-9]

IF "PURCHASED REPLACEMENT" ON E-5, ASK:

E-7. Does the new water heater use the same fuel as the equipment it replaced?

YES	1	
NO	0	274
DON'T KNOW	6	

E-8. Think back to why your household decided to purchase this new water heater. Please tell me, for each of the following reasons, whether it was very important, somewhat important, or not important to your decision.

	VERY IMPORTANT	SOMEWHAT IMPORTANT	NOT IMPORTANT	DON'T KNOW	
a. Purchase Price a.	1	2	3	6	275
b. Immediate Availability b.	1	2	3	6	276
c. Energy Efficiency c.	1	2	3	6	277
d. Rebate or Availability of Low-Interest Financing d.	1	2	3	6	278

E-9. Please turn to Exhibit E-9. The following questions will help us learn about your household's hot water usage. How many baths or showers are taken in the household in a week? Please be sure to count all the times a bath or shower is used by anyone in the house.

9 OR FEWER A WEEK	1	
10 - 20 A WEEK	2	279
21 OR MORE A WEEK	3	
DON'T KNOW	6	

E-10. In addition to (FUEL FROM E-1), does your household use any other fuel for heating water for washing or bathing?

YES	1	280
NO	0 --> [F-1]	

E-11. Please turn to the 'Blue Card.' What is this additional water heating fuel?

ELECTRICITY	05
NATURAL GAS (GAS FROM UNDERGROUND PIPES) ..	01
BOTTLED GAS (LPG OR PROPANE)	02
FUEL OIL	03
KEROSENE OR COAL OIL	04
COAL OR COKE	06
WOOD	07
SOLAR	08
OTHER (SPECIFY): _____	21
DON'T KNOW	96

287-32

INTERVIEWER: CHECK FOLDOUT PAGE. CIRCLE '1' FOR 'FUEL USED' IF FUEL NOT ALREADY CIRCLED.

ALSO, IF ELECTRICITY OR NATURAL GAS USED 'FOR HOT WATER', CIRCLE '1' FOR 'YES' UNDER THE 'USAGE' COLUMN ON THE FOLDOUT PAGE.

Section F. LIGHTS

INDOOR LIGHTS

F-1. Please turn to Exhibit F-1. Thinking of a typical November weekday, please tell me the number of indoor lights your household has turned on for each of the following time periods.

	F-1. NUMBER OF LIGHTS	F-2. NUMBER OF FLUORESCENT LIGHTS
a. More than 12 hours per day	NONE 00	NONE 00
b. Between 4 hours and 12 hours per day	NONE 00	NONE 00
c. Between 1 hour and 4 hours per day	NONE 00	NONE 00

293-96

297-300

301-04

FOR EACH ANSWER OF 1 LIGHT OR MORE IN "a" THROUGH "c" IN F-1 ABOVE, ASK F-2:

F-2. Of the (NUMBER) indoor lights on (HOURS), how many are fluorescent? _____

OUTDOOR LIGHTS

F-3. Please turn to Exhibit F-3. Thinking about a typical November weekday, please indicate all the statements that describe the outdoor lights used by your household.

	<u>YES</u>	<u>NO</u>	
a. NO OUTDOOR LIGHTS OR RARELY USED	1	0	305
b. OUTDOOR LIGHTS TURNED ON DURING THE EVENING, BUT TURNED OFF BEFORE BEDTIME	1	0	306
c. OUTDOOR LIGHTS LEFT ON ALL NIGHT	1	0	307
d. OUTDOOR LIGHTS WITH A TIMER, MOTION SENSOR, OR PHOTOSENSOR	1	0	308
e. OUTDOOR GAS LIGHT	1	0	309
f. HIGH INTENSITY DISCHARGE (HID) OUTDOOR LIGHTS, SUCH AS METAL HALIDE OR HIGH PRESSURE SODIUM LIGHTS	1	0	310
g. TOTAL WATTAGE OF ALL OUTDOOR LIGHTS IS LESS THAN 150 WATTS	1	0	311
h. DON'T KNOW	1	0	312

INTERVIEWER: RECORD ON FOLDOUT PAGE. IF GAS OUTDOOR LIGHT, CIRCLE "1" FOR "YES" ON THE "USAGE" COLUMN UNDER NATURAL GAS "FOR OTHER APPLIANCES."

Section G. APPLIANCES

COOKING

G-1. Turn to the "Blue Card". What fuel is used most for cooking in your home/apartment?

- | | | |
|--|--------|--------|
| ELECTRICITY | 05 | |
| NATURAL GAS (GAS FROM UNDERGROUND PIPES) | 01 | |
| BOTTLED GAS (LPG OR PROPANE) | 02 | |
| FUEL OIL | 03 | |
| KEROSENE OR COAL OIL | 04 | 331-32 |
| COAL OR COKE | 06 | |
| WOOD | 07 | |
| SOLAR | 08 | |
| OTHER (SPECIFY): _____ | 21 | |
| DON'T KNOW | 96 | |
| NO COOKING DONE | 00 --> | [G-6] |

INTERVIEWER: CHECK FOLDOUT PAGE. CIRCLE *1* FOR 'FUEL USED' IF FUEL NOT ALREADY CIRCLED.

ALSO, IF ELECTRICITY OR NATURAL GAS, 'FOR COOKING' CIRCLE *1* FOR 'YES' UNDER THE 'USAGE' COLUMN.

G-2. Please turn to Exhibit G-2. Which of these categories best describes, on average, how often hot meals are usually cooked in your home?

- | | | |
|--------------------------------|---|-----|
| a. 2 OR MORE TIMES A DAY | 1 | |
| b. ONCE A DAY | 2 | |
| c. A FEW TIMES PER WEEK | 3 | 333 |
| d. ABOUT ONCE A WEEK | 4 | |
| e. LESS THAN ONCE A WEEK | 5 | |
| f. DON'T KNOW | 6 | |

G-3. Please turn to Exhibit G-3. Which of the following equipment is used for cooking in your home/apartment?

G-3. COOKING EQUIPMENT USED	YES	NO	G-4. TYPE OF FUEL USED	
a. Stovetop or Burners (DO NOT INCLUDE GAS GRILLS) 334	1	0	Electricity	5
			Natural Gas	1
			Bottled Gas (LPG or Propane) ..	2
			Other	8
335-36				
b. Oven (NOT MICROWAVE OR TOASTER OVEN) 339	1	0	Electricity	5
			Natural Gas	1
			Bottled Gas (LPG or Propane) ..	2
			Other	8
340-41				
c. Toaster Oven	1	0		
344				
d. Outdoor Gas Grill	1	0	Natural Gas	1
			Bottled Gas (LPG or Propane) ..	2
345				
346				
e. Microwave Oven	1	0		
348				

INTERVIEWER: FOR STANDARD COMBINATION UNITS, OVEN AND STOVETOP, RECORD BOTH AS *YES*.

FOR EACH *YES* ON G-3, ASK:

G-4. Which fuel is used for (COOKING EQUIPMENT)? _____

INTERVIEWER: CHECK FOLDOUT PAGE. CIRCLE *1* FOR *FUEL USED* IF FUELS NOT ALREADY CIRCLED.

DO NOT MARK BOTTLED GAS (LPG OR PROPANE) IF ONLY USE OF BOTTLED GAS (LPG OR PROPANE) IS FOR AN OUTDOOR GRILL.

ALSO, IF ELECTRICITY OR NATURAL GAS *FOR COOKING* CIRCLE *1* FOR *YES* UNDER THE *USAGE* COLUMN.

IF MICROWAVE USED, ASK:

G-5. Please turn to Exhibit G-5. How much of your food is cooked in the microwave?

a. MOST OR ALL 1

b. ABOUT HALF 2

c. SOME OR VERY LITTLE 3

d. USED ONLY FOR SNACKS, DEFROSTING OR REHEATING FOOD 4

e. DON'T KNOW 6

349

REFRIGERATORS AND FREEZERS

G-6. How many refrigerators in your home are used either regularly or occasionally?

- ONE 1
 - TWO 2
 - THREE OR MORE 3
 - NONE 0
- 350

INTERVIEWER: CIRCLE COLUMNS A AND B ON PAGE 31 IF TWO OR MORE REFRIGERATORS.
CIRCLE ONLY COLUMN A ON GRID IF ONE REFRIGERATOR.

G-7. Does your household use a separate freezer that is not part of the refrigerator?

- YES 1
 - NO 0 -> [BOX 3]
- 351

INTERVIEWER: CIRCLE COLUMN C ON GRID IF "YES"

IF "YES" ON G-7, ASK:

G-8. How many freezers in your home are used either regularly or occasionally?

- ONE 1 -> [BOX 3]
 - TWO 2 -> [BOX 3]
 - THREE OR MORE 3 -> [BOX 3]
- 352

BOX 3

IF ONLY ONE REFRIGERATOR, ASK COLUMN A

IF MORE THAN ONE REFRIGERATOR, ASK COLUMNS A AND B
READ FOR COLUMN "A": "Let's start with the refrigerator used most often."

READ FOR COLUMN "B": "Next I'd like to ask the same questions for the second most used refrigerator."

IF MORE THAN ONE FREEZER, ASK ABOUT THE LARGEST ONE.

IF NO REFRIGERATOR OR FREEZER, SKIP TO G-22.

ASK ALL FOR COLUMN 'A' BEFORE GOING ON TO COLUMN 'B' OR 'C'

COLUMN: A B C

	(Most Used) Refrigerator	Second Most Used Refrigerator	(Largest) Freezer
G-9. Please look at the top of Exhibit G-9. How old is your household's (COLUMN A, B or C)?	353	358	363
a. LESS THAN 2 YEARS OLD a.	1	1	1
b. 2-4 YEARS OLD b.	2	2	2
c. 5-9 YEARS OLD c.	3	3	3
d. 10-19 YEARS OLD d.	4	4	4
e. 20 YEARS OLD OR MORE e.	5	5	5
f. DON'T KNOW f.	6	6	6
G-10. Please look at the bottom of Exhibit G-9. What is the size of your household's (COLUMN A, B, or C)?	354	359	364
a. VERY SMALL (10 CUBIC FEET OR LESS) a.	1	1	1
b. SMALL (11-14 CUBIC FEET) b.	2	2	2
c. MEDIUM (15-18 CUBIC FEET) c.	3	3	3
d. LARGE (19-22 CUBIC FEET) d.	4	4	4
e. VERY LARGE (23+ CUBIC FEET) e.	5	5	5
f. DON'T KNOW f.	6	6	6
G-11. Please turn to Exhibit G-11. What type is your household's (COLUMN A or B)?	355	360	
a. HALF-SIZE OR QUARTER a.	1	1	
b. REGULAR WITH SINGLE DOOR b.	2	2	
c. TWO DOORS - TOP AND BOTTOM c.	3	3	
d. TWO DOORS - SIDE BY SIDE d.	4	4	
e. OTHER (SPECIFY: _____) e.	5	5	
f. DON'T KNOW f.	6	6	
G-12. What type of defrosting does your household's (COLUMN A, B, or C) have, manual or frost-free?	356	361	365
a. MANUAL DEFROST a.	1	1	1
b. FROST-FREE (AUTOMATIC OR SEMI-AUTOMATIC DEFROST) b.	2	2	2
c. NO WORKING FREEZER SECTION (VOLUNTEERED)c.	3	3	
d. DON'T KNOW d.	6	6	6

| | |
v v v
CONTINUE ON NEXT PAGE

COLUMN: A B C

	(Most Used) Refrigerator	Second Most Used Refrigerator	(Largest) Freezer
G-13. Does your household's most-used refrigerator have a through-the-door ice service? (COLUMN A only)	367		
YES a.	1		
NO b.	0		
G-14. How many months in 1993 was the second most used refrigerator turned on? (COLUMN B only)		368	
a. 1-3 Months a.		1	
b. 4-6 Months b.		2	
c. 7-9 Months c.		3	
d. 10-12 Months d.		4	
G-15. Is the freezer an upright or chest model? (COLUMN C only).			369
a. AN UPRIGHT (VERTICAL CABINET WITH DOOR ON FRONT) a.			1
b. A CHEST-TYPE (HORIZONTAL CABINET WITH DOOR ON TOP) b.			2

G-16. Since January 1, 1990, has your household purchased a new refrigerator to replace an older one, or as part of the purchase of a new home?

 YES, PURCHASED REPLACEMENT 1 --> [G-18] 370
 YES, CAME WITH HOME PURCHASE 2 371
 NO 0 --> [G-22] 372

IF "YES, CAME WITH HOME PURCHASE" IN G-16, ASK:

G-17. Did your household select the model or did the model come standard with the newly purchased home?

 HOUSEHOLD SELECTED 1 --> [G-18] 373
 STANDARD WITH NEW HOME 0 --> [G-22]

IF *YES, PURCHASED REPLACEMENT* ON G-16, ASK:

G-18. Was the new refrigerator a replacement for your household's most-used refrigerator?

- YES 1
- NO 0 --> [G-21] 374
- DON'T KNOW 6

G-19. What did your household do with the old refrigerator?

- USE AS SECOND REFRIGERATOR 1
- SOLD, GAVE AWAY, OR DONATED TO CHARITY
FOR FURTHER USE 2 375
- DISCARDED WITHOUT FURTHER USE 3
- OTHER (SPECIFY): _____ ... 5
- DON'T KNOW 6

G-20. How well was the old refrigerator working when your household bought the new one?
Very well, well, not well, or not working at all.

- VERY WELL 1
- WELL 2
- NOT WELL 3 376
- NOT WORKING AT ALL 4
- DON'T KNOW 6

G-21. Think back to why your household decided to purchase your new refrigerator.
Please tell me, for each of the following reasons, whether it was very important,
somewhat important, or not important to your decision.

		VERY IMPORTANT	SOMEWHAT IMPORTANT	NOT IMPORTANT	DON'T KNOW	
a. Purchase Price	a.	1	2	3	6	377
b. Size	b.	1	2	3	6	378
c. Energy Efficiency	c.	1	2	3	6	379
d. Availability	d.	1	2	3	6	380

WASHER AND DRYER

G-22. Does your household use a clothes washer in your home/apartment?

YES 1 381
 NO 0 --> [G-24]

INTERVIEWER: DO NOT INCLUDE COMMUNITY WASHERS AND DRYERS THAT ARE LOCATED IN THE BASEMENT OR LAUNDRY ROOM OF APARTMENT BUILDING.

IF 'YES' ON G-22, ASK:

G-23. Please look at Exhibit G-23. How many loads of laundry are washed in your household's clothes washer in an average week?

1 TO 5 LOADS 1
 6 TO 10 LOADS 2
 11 TO 15 LOADS 3 382
 16 OR MORE LOADS 4
 DON'T KNOW 6

G-24. Does your household use an electric or gas clothes dryer in your home/apartment?

a. ELECTRIC CLOTHES DRYER 1 383
 b. NATURAL GAS CLOTHES DRYER 2 384
 c. BOTTLED GAS CLOTHES DRYER 3 385
 d. NONE USED 0 386

INTERVIEWER: CHECK FOLDOUT PAGE. CIRCLE '1' FOR APPROPRIATE 'FUEL USED' IF NOT ALREADY CIRCLED.

ALSO, IF NATURAL GAS DRYER, 'FOR OTHER APPLIANCES' CIRCLE '1' FOR 'YES' UNDER 'USAGE' COLUMN.

DISHWASHER

G-25. Does your household use an automatic dishwasher?

YES 1 387
 NO 0 --> [G-27]

IF "YES" ON G-25, ASK:

G-26. Please turn to Exhibit G-26. How often does your household use the dishwasher in an average week?

A FEW TIMES A WEEK (1 - 3) 1
 SEVERAL TIMES A WEEK (4 - 6) 2
 EVERY DAY OF THE WEEK (7) 3 388
 MORE THAN EVERY DAY (8+) 4
 DON'T KNOW 6

TV

G-27. How many color television sets does your household use?

COLOR TV SETS NUMBER: 389

G-28. How many black and white television sets does your household use?

BLACK AND WHITE TV SETS NUMBER: 390

WATERBEDS

G-29. Does your household use any waterbed heaters?

YES 1 391
 NO 0 --> [G-32]

IF "YES" ON G-29, ASK:

G-30. How many waterbed heaters does your household use?

ONE	1	
TWO	2	392
THREE OR MORE	3	

G-31. How many of these waterbed heaters are used all year long?

NONE	0	
ONE	1	393
TWO	2	
THREE OR MORE	3	

OTHER APPLIANCES

G-32. Please turn to Exhibit G-32. Please tell me which of the appliances on the Exhibit are used in your home/apartment? (CIRCLE ALL THAT APPLY.)

	<u>YES</u>	<u>NO</u>	
a. HEATED AQUARIUM (20 GALLONS OR LARGER)	1	0	394
b. ELECTRIC DEHUMIDIFIER	1	0	395
c. ELECTRIC HUMIDIFIER	1	0	396
d. ELECTRIC PUMP FOR WELL WATER	1	0	397
e. EXHAUST FAN (INCLUDE BATHROOM, KITCHEN OR BASEMENT EXHAUST FANS)	1	0	398
f. AIR CLEANER (PORTABLE FLOOR OR FURNACE MODEL)	1	0	399
g. EVAPORATIVE COOLER (SWAMP COOLER)	1	0	400
h. PERSONAL COMPUTER	1	0	401
i. LASER PRINTER FOR COMPUTER (NOT DOT MATRIX) .	1	0	402
j. FACSIMILE MACHINE (FAX)	1	0	403
k. PHOTOCOPIER (SEPARATE FROM FACSIMILE MACHINE)	1	0	404

POOLS AND HOT TUBS

INTERVIEWER: CHECK A-1 "HOUSING STRUCTURE" ON FOLDOUT PAGE. IF SINGLE FAMILY OR MOBILE HOME, ASK THE FOLLOWING QUESTIONS; OTHERWISE, SKIP TO H-1 ON PAGE 38.

G-33. Does your home have its own swimming pool with a filtering system?

YES	1	405
NO	0 --> [G-36]	

IF "YES" ON G-33, ASK:

G-34. Is it a heated pool?

YES, HEATED	1	406
NO	0 --> [G-36]	

IF "YES" ON G-34, ASK:

G-35. Please turn to the "Blue Card" and tell me what fuel is used **most often** to heat the pool water? (IF MORE THAN ONE FUEL USED, CHECK FUEL USED MOST OFTEN.)

ELECTRICITY	05	
NATURAL GAS (UNDERGROUND PIPES)	01	
BOTTLED GAS (LPG OR PROPANE GAS)	02	
FUEL OIL	03	
KEROSENE OR COAL OIL	04	407-08
COAL OR COKE	06	
WOOD	07	
SOLAR	08	
OTHER (SPECIFY): _____	21	
DON'T KNOW	96	

INTERVIEWER: CHECK FOLDOUT PAGE. CIRCLE "1" FOR "FUEL USED" IF NOT ALREADY CIRCLED.

ALSO, IF NATURAL GAS, "FOR OTHER APPLIANCES" CIRCLE "1" FOR "YES" UNDER "USAGE" COLUMN.

G-36. Does your home have a heated hot tub, spa, or jacuzzi, other than a bathtub?

YES 1 409
NO 0 --> [H-1]

INTERVIEWER: IF AFTER EACH USE, THE WATER DRAINS OUT, CIRCLE "NO" FOR G-36 AND SKIP TO H-1.

IF "YES" ON G-36, ASK:

G-37. Please turn to the "Blue Card". Which fuel is used to heat the water in your hot tub, spa, or jacuzzi? (IF MORE THAN ONE FUEL USED, CIRCLE FUEL USED MOST OFTEN)

ELECTRICITY 05
NATURAL GAS (GAS FROM UNDERGROUND PIPES) .. 01
BOTTLED GAS (LPG OR PROPANE GAS) 02
FUEL OIL 03
KEROSENE OR COAL OIL 04 410-11
COAL OR COKE 06
WOOD 07
SOLAR 08
OTHER (SPECIFY): _____ .. 21
DON'T KNOW 96

INTERVIEWER: CHECK FOLDOUT PAGE. CIRCLE "1" FOR "FUEL USED" IF NOT ALREADY CIRCLED.
ALSO, IF NATURAL GAS, "FOR OTHER APPLIANCES" CIRCLE "1" FOR "YES" UNDER "USAGE" COLUMN.

Section H. CONSERVATION MEASURES AND USAGE

INSULATION

H-1. Overall, would you say that this home/apartment is well insulated, adequately insulated, or poorly insulated? Insulation includes window caulking or weather stripping.

WELL INSULATED	1	
ADEQUATELY INSULATED	2	
POORLY INSULATED	3	412
NO INSULATION (VOLUNTEERED)	4	
DON'T KNOW	6	

INTERVIEWER: CHECK A-1 "HOUSING STRUCTURE" ON THE FOLDOUT PAGE. IF SINGLE-FAMILY HOME OR MOBILE HOME, ASK H-2, OTHERWISE SKIP TO H-3.

H-2. Does your home have any of the following insulation?

	YES	NO	DON'T KNOW	
a. Roof or Ceiling Insulation	1	0	6	413
b. Insulation in Outside Walls	1	0	6	414
c. Insulation (Blanket) Around the Hot Water Heater	1	0	6	415
d. Insulation Around Hot Water Pipes	1	0	6	416
e. Insulation Around Heating and/or Cooling Ducts .	1	0	6	417
f. Weather Stripping Around Any Windows or Doors to the Outside	1	0	6	418
g. Caulking	1	0	6	419

INTERVIEWER: ASK EVERYONE

H-3. Does your home have any of the following?

	YES	NO	DON'T KNOW	
a. Automatic Set-back or Clock Thermostat	1	0	6	420
b. Regular Maintenance of Heating System/ Furnace	1	0	6	421
c. Large Tree(s) That Shade Your House or Apartment from the Afternoon Summer Sun	1	0	6	422

NEW TECHNOLOGIES

H-4. Please turn to Exhibit H-4. There are new products designed to save energy. They are just becoming available and most people may not have heard about them yet. Have you heard of any of the following:

NEW PRODUCTS	H-4. Have Heard		H-5. Used In Home			
	YES	NO	YES	NO	DK	
a. Low-E Window Glass a.	1	0	1	0	6	423-24
b. Instantaneous (or Point-of-Use) Water Heater b.	1	0	1	0	6	425-26
c. Ground-Source Heat Pump c.	1	0	1	0	6	427-28
d. Water-Source Heat Pump d.	1	0	1	0	6	429-30
e. Thermal Storage e.	1	0	1	0	6	431-32
f. Heat Pump Water Heater f.	1	0	1	0	6	433-34
g. "Combo Heater" Gas-Fired Water Heater with Heat Exchanger for Space Heatingg.	1	0	1	0	6	435-36
h. Halogen Light Bulbs h.	1	0	1	0	6	437-38
i. Compact Fluorescent Light Bulbs i.	1	0	1	0	6	439-40

FOR EACH "YES" ON H-4, ASK, OTHERWISE --> [H-6]

H-5. Does your household use (NEW PRODUCT) in your home? ▲

WINDOWS/DOORS

H-6. How many sliding glass doors does your household have that go from a heated area to the outside or to an unheated area?

NUMBER OF SLIDING GLASS DOORS: 441
NONE 0 --> [H-8]

INTERVIEWER: COUNT EACH PAIR OF SLIDING GLASS DOORS AS ONE DOOR.

H-7. Please turn to Exhibit H-7. Which describes the glass in your sliding door?

- SINGLE PANE GLASS 1
 - DOUBLE PANE GLASS 2
 - DOUBLE PANE GLASS WITH LOW-E COATING 3
 - TRIPLE PANE GLASS 4
 - TRIPLE PANE GLASS WITH LOW-E COATING 5
 - DON'T KNOW 6
- 442

INTERVIEWER: IF ASKED, LOW-E COATING IS A TRANSPARENT, MICROSCOPIC LAYER OF METALLIC MATERIAL APPLIED AT THE FACTORY TO THE INSIDE OF A DOUBLE- OR TRIPLE-PANE GLASS TO REDUCE HEAT TRANSFER.

H-8. Please turn to Exhibit H-8. How many windows does your home have? Each window that opens **separately** should be counted as one window. Include basement, attic, garage, and porch windows **only if these areas are heated.**

NUMBER OF WINDOWS 443-44

INTERVIEWER: IF ASKED, DOUBLE HUNG SLIDER WINDOWS COUNT AS ONE WINDOW. EACH WINDOW THAT OPENS SEPARATELY SHOULD BE COUNTED AS ONE WINDOW. ALSO COUNT WINDOWS THAT ARE FIXED IN PLACE. DO NOT INCLUDE WINDOWS (GLASS PANELS) IN DOORS.

H-9. Please turn to Exhibit H-9. Which best describes most of the windows in your home? Do not consider storm windows.

- | | | |
|--|---|-----|
| SINGLE-PANE GLASS | 1 | |
| DOUBLE-PANE GLASS | 2 | |
| DOUBLE-PANE GLASS WITH LOW-E COATING | 3 | 445 |
| TRIPLE-PANE GLASS | 4 | |
| TRIPLE-PANE GLASS WITH LOW-E COATING | 5 | |
| DON'T KNOW | 6 | |

INTERVIEWER: IF ASKED, LOW-E COATING IS A TRANSPARENT, MICROSCOPIC LAYER OF METALLIC MATERIAL APPLIED AT THE FACTORY TO THE INSIDE OF A DOUBLE- OR TRIPLE-PANE GLASS TO REDUCE HEAT TRANSFER

H-10. Do you have storm windows or plastic coverings on most of your windows?

- | | | |
|------------------------------|---|-----|
| YES, STORM WINDOWS | 1 | 446 |
| YES, PLASTIC COVERINGS | 2 | 447 |
| NO | 0 | 448 |

INTERVIEWER READ: "Please do not consider storm windows in answering the following questions."

H-11. Exhibit H-9 shows the location of the window frame. Is most of the window glass held in place by a metal or nonmetal frame? (If storm windows are present, answer for regular windows, not the storm windows.)

- | | | |
|---------------------------------|---|-----|
| METAL (ALUMINUM OR STEEL) | 1 | |
| NONMETAL (WOOD OR VINYL) | 2 | 449 |
| OTHER | 3 | |
| DON'T KNOW | 6 | |

H-12. How many of the original windows have been replaced, all, some, or none of the windows? (Exclude additions onto the house.)

- | | | |
|---------------------------|--------------|-----|
| ALL OF THE WINDOWS | 1 --> [H-14] | |
| SOME OF THE WINDOWS | 2 | 450 |
| NONE OF THE WINDOWS | 0 --> [H-15] | |
| DON'T KNOW | 6 --> [H-15] | |

IF "SOME" ON H-12, ASK:

H-13. Please turn to Exhibit H-13. Which best describes most of the replacement windows?
CIRCLE ONE ONLY.

- SINGLE-PANE GLASS 1
- DOUBLE-PANE GLASS 2
- DOUBLE-PANE GLASS WITH LOW-E COATING 3
- TRIPLE-PANE GLASS 4
- TRIPLE-PANE GLASS WITH LOW-E COATING 5
- DON'T KNOW 6

451

H-14. Please turn to the "Yellow Card". Approximately how long ago were the windows replaced?

- LESS THAN 2 YEARS 1
- 2 - 4 YEARS 2
- 5 - 9 YEARS 3
- 10 - 19 YEARS 4
- 20 YEARS OR MORE 5
- DON'T KNOW 6

452

COOLING FANS

H-15. Which fans did your household use to assist in cooling your home last summer?

TYPES OF HOUSEHOLD FANS	YES	NO	NOT HERE LAST SUMMER	DON'T KNOW	
a. Window Fan	1	0	5	6	453
b. Portable Table or Floor Fan	1	0	5	6	454
c. Attic Exhaust Fan	1	0	5	6	455
d. "Whole House" Cooling Fan (usually in attic or entrance to attic)	1	0	5	6	456
e. Ceiling Fan	1	0	5	6	457

IF USE CEILING FAN ON H-15, ASK:

H-16. How many ceiling fans does your household use? ... Number: 458

HOME ACTIVITIES

H-17. On a typical weekday in this home, is there:

	YES	NO	DON'T KNOW	
a. Operation of a home-based service or business? .	1	0	6	459
b. Some other activity requiring <u>a lot</u> of energy? If "YES" (SPECIFY): _____ ...	1	0	6	460
c. Someone home all day?	1	0	6	461

INTERVIEWER: "Lot of Energy" DOES NOT MEAN HUMAN ENERGY, SUCH AS HOUSEWORK

Section I. DEMAND-SIDE MANAGEMENT

INTERVIEWER READ: *This next Section applies only to your experiences living in this home/apartment.*

I-1. Please turn to Exhibit I-1. Are any of these programs offered by your electric utility, natural gas utility, or through some other group?

YES	1	
NO	0 -->	[BOX 4: 465
DON'T KNOW	6	PAGE 48]

I-2. Has your household participated in any of these programs for this home during the last 12 months?

YES	1	
NO	0 -->	[BOX 4] 466
DON'T KNOW	6 -->	[BOX 4: PAGE 48]

INTERVIEWER: CHECK FOLDOUT PAGE. IF HOUSEHOLD USES NATURAL GAS, ASK I-3, OTHERWISE SKIP TO I-4.

I-3. Were these electric or natural gas programs? (CIRCLE ALL THAT APPLY.)

ELECTRIC PROGRAM	5	467
NATURAL GAS PROGRAM	1	468
DON'T KNOW	6	469

INTERVIEWER: IF THE RESPONDENT HAS QUESTIONS CONCERNING DEFINITIONS FOR THE FOLLOWING QUESTIONS, REFER TO EXHIBIT I-1.

I-4. Has your household had a home energy audit within the past 12 months?

YES	1	
NO	0	470
DON'T KNOW	6	

I-5. Has your household participated in a load control program within the past 12 months where you agreed to allow your electric utility to shut off some equipment in your home during the weekday in return for a discount on your utility bill?

YES	1		
NO	0 --> [I-7]		471
DON'T KNOW	6 --> [I-7]		

IF "YES" ON I-5, ASK:

I-6. Was the discount offered for the air-conditioner, the water heater, or other appliance or equipment? (CIRCLE ALL THAT APPLY)

	<u>YES</u>	<u>NO</u>	
AIR-CONDITIONER	1	0	472
WATER HEATER	1	0	473
OTHER APPLIANCE/EQUIPMENT	1	0	474
DON'T KNOW	1	0	475

I-7. Has your household participated in an energy conservation program in the last 12 months where you received some equipment or service, such as a water heater blanket, low flow showerhead, or furnace maintenance?

YES	1		
NO	0 --> [I-9]		476
DON'T KNOW	6 --> [I-9]		

IF "YES" ON I-7, ASK:

I-8. Please turn to Exhibit I-8. Which energy conservation items were received by your household?

	<u>YES</u>	<u>NO</u>	
COMPACT FLUORESCENT LIGHT BULBS	1	0	477
LOW-FLOW SHOWERHEAD	1	0	478
WATER HEATER BLANKET	1	0	479
INSULATION	1	0	480
CAULKING/WEATHER STRIPPING	1	0	481
ENERGY-CONSERVING WINDOWS	1	0	482
MAINTENANCE--HEATING SYSTEM, ETC.	1	0	483
OTHER ITEM (SPECIFY): _____ .	1	0	484
DON'T KNOW	1	0	485

I-9. Did your household receive, within the last 12 months, a low interest loan, rebate or other financial incentive to encourage you to buy energy-efficient equipment?

YES	1	
NO	0 --> [I-12]	495
DON'T KNOW	6 --> [I-12]	

IF "YES" ON I-9, ASK:

I-10. Please turn to Exhibit I-10. For what type of equipment did your household get a rebate or other financial incentive? (CIRCLE ALL THAT APPLY)

	YES	NO	
AIR CONDITIONING EQUIPMENT	1	0	496
WATER HEATER	1	0	497
HEATING EQUIPMENT	1	0	498
REFRIGERATOR	1	0	499
COMPACT FLUORESCENT LIGHT BULBS	1	0	500
OTHER (SPECIFY): _____	1	0	501
DON'T KNOW	1	0	502

I-11. How important was the utility's financial assistance in making the decision to purchase the energy efficient equipment? Was it very important, somewhat important, or would you have bought it anyway?

VERY IMPORTANT	2	
SOMEWHAT IMPORTANT	1	503
WOULD HAVE BOUGHT IT ANYWAY	0	
DON'T KNOW	6	

I-12. Has your household participated in a program within the last 12 months that encouraged you to switch fuels for certain equipment in your home?

YES	1	
NO	0	504
DON'T KNOW	6	

I-13. Has your household participated in a time-of-use rate program within the last 12 months, where you receive cheaper electric rates if you use electricity at certain times of the day when demand is lowest?

YES	1	
NO	0	505
DON'T KNOW	6	

Section J. FUEL USED

BOX 4

INTERVIEWER: USE THE FOLDOUT PAGE TO CHECK AND UPDATE THE ANSWERS TO THE FOLLOWING QUESTIONS.

INTERVIEWER READ: "To be sure that I have the correct information about which fuels are used for certain purposes, I need to double check the following."

- J-1. I have circled that your household uses (READ EACH FUEL CIRCLED "YES" UNDER "FUEL USED" ON THE FOLDOUT PAGE.) Is that correct?

INTERVIEWER: CHECK [] IF NO CHANGES, OTHERWISE INDICATE CHANGES ON FOLDOUT.

- J-2. During 1993, did your household use (READ EACH FUEL NOT CIRCLED "YES" UNDER "FUEL USED" ON THE FOLDOUT PAGE. CIRCLE EACH "YES" OR "NO.")

ELECTRICITY

- J-3. Now, let's talk about electricity. I have circled that electricity is used for (READ EACH USE CIRCLED "YES" UNDER "USAGE" ON THE FOLDOUT PAGE.) Is that correct?

INTERVIEWER: CHECK [] IF NO CHANGES, OTHERWISE INDICATE CHANGES ON FOLDOUT.

- J-4. During 1993, did your household use electricity for (READ EACH FUEL NOT CIRCLED "YES" UNDER "USAGE" ON THE FOLDOUT PAGE. CIRCLE EACH "YES" OR "NO.")

FOR EACH USAGE OF ELECTRICITY, ASK:

- J-5. Did your household pay for the electricity used for (USE), or was it included in the rent or condo fee, or was it paid some other way? (CIRCLE THE ANSWER UNDER "HOW USAGE IS PAID" FOR EACH "YES" CIRCLED UNDER "USAGE.")

NATURAL GAS

BOX 5

INTERVIEWER: CHECK FOLDOUT PAGE. IF NATURAL GAS USED, CONTINUE, OTHERWISE CHECK HERE [] AND SKIP TO BOX 6, (BOTTLED GAS) PAGE 50.

J-6. Now let's talk about natural gas. I have circled that natural gas is used for (READ EACH USE CIRCLED "YES" UNDER "USAGE" ON THE FOLDOUT PAGE.) Is that correct?

INTERVIEWER: CHECK [] IF NO CHANGES, OTHERWISE INDICATE CHANGES ON FOLDOUT.

J-7. During 1993, did your household use natural gas for (READ EACH USAGE NOT CIRCLED "YES" UNDER "USAGE" ON THE FOLDOUT PAGE. CIRCLE EACH "YES" OR "NO".)

FOR EACH USAGE OF NATURAL GAS, ASK:

J-8. Did your household pay for the natural gas used for (USE), or was it included in the rent or condo fee, or was it paid some other way? (CIRCLE THE ANSWER UNDER "HOW USAGE IS PAID" FOR EACH "YES" CIRCLED UNDER "USAGE.")

J-9. Does your household combine with others in your building or development (Home Owners Association) to buy or contract for natural gas from someone other than the local gas utility and then have the local utility deliver the gas? Gas bought this way is often called "gas transported for the account of others," "transported gas," "spot market gas," or "direct purchase gas."

YES 1
 NO 0 --> [BOX 6] 517
 DON'T KNOW 6 --> [BOX 6]

IF "YES" ON J-9, ASK:

J-10. Can you give me the name of the company or broker or another contact person that can give me more information about direct purchase gas?

Contact Person: _____

Telephone Number: () _____

Company Name: _____

Address: _____

City/State/ZIP: _____

Unable to provide more information 0

518

BOTTLED GAS (LPG OR PROPANE)

BOX 6

INTERVIEWER: CHECK FOLDOUT PAGE, IF "BOTTLED GAS" USED, CONTINUE, OTHERWISE CHECK HERE [] SKIP TO BOX 7 (FUEL OIL), PAGE 51.

J-11. Is your bottled gas paid for by your household, included in your rent or condo fee, or is it paid by some other means?

- PAID BY HOUSEHOLD 1
- INCLUDED IN RENT OR CONDO FEE 2 --> [BOX 7] 520
- OTHER WAY (SPECIFY ON FOLDOUT PAGE) 5 --> [BOX 7]

INTERVIEWER: CIRCLE THE ANSWER UNDER "HOW USAGE IS PAID" FOR BOTTLED GAS ON FOLDOUT PAGE.

J-12. Is bottled gas delivered to your home?

- YES 1
- NO 0 --> [BOX 7] 521
- DON'T KNOW 6 --> [BOX 7]

INTERVIEWER: MARK UNDER "FUEL DELIVERED" ON FOLDOUT PAGE.

IF "YES" ON J-12, ASK:

J-13. How many different companies delivered bottled gas to you since January 1, 1993?

- ONE 1
- TWO 2 522
- THREE OR MORE 3
- DON'T KNOW 6

J-14. About how many deliveries did your household get in the past 12 months?

- NUMBER OF DELIVERIES
- NOT SURE 96 523-24
- DID NOT LIVE HERE FULL 12 MONTHS 95 --> [BOX 7]

FUEL OIL

BOX 7

INTERVIEWER: CHECK FOLDOUT PAGE, IF FUEL OIL USED, CONTINUE, OTHERWISE CHECK HERE [] AND SKIP TO BOX 8 (KEROSENE SECTION), PAGE 53.

J-15. Is your fuel oil paid by your household, included in your rent or condo fee, or is it paid some other way?

- PAID BY HOUSEHOLD 1
- INCLUDED IN RENT OR CONDO FEE 2 --> [BOX 8] 526
- OTHER WAY (SPECIFY ON FOLDOUT PAGE) 5 --> [BOX 8: PAGE 53]

INTERVIEWER: CIRCLE THE ANSWER UNDER *HOW USAGE IS PAID* FOR FUEL OIL ON FOLDOUT PAGE.

J-16. Please turn to Exhibit J-16. About how much fuel oil did your household use in the past 12 months, just approximately?

- a. 99 GALLONS OR LESS 1
- b. 100-499 GALLONS 2
- c. 500-999 GALLONS 3 527
- d. 1,000 GALLONS OR MORE 4
- e. DON'T KNOW 6

J-17. Is fuel oil delivered to your home?

- YES 1
- NO 0 --> [BOX 8] 528
- DON'T KNOW 6 --> [BOX 8: PAGE 53]

INTERVIEWER: MARK UNDER *FUEL DELIVERED* ON FOLDOUT PAGE.

J-18. How many different companies delivered fuel oil to your household since January 1, 1993?

ONE	1
TWO	2
THREE OR MORE	3
DON'T KNOW	6

529

J-19. About how many deliveries did your household get in the past 12 months?

NUMBER OF DELIVERIES	<input type="text"/>
NOT SURE	96

530-31

KEROSENE

BOX 8

INTERVIEWER: CHECK FOLDOUT PAGE. IF KEROSENE IS USED, CONTINUE, OTHERWISE, CHECK HERE [] AND SKIP TO J-28, PAGE 55.

J-20. Is kerosene delivered to your (home/apartment)?

- YES 1
- NO 0 --> [J-23] 533
- DON'T KNOW 6 --> [J-23]

INTERVIEWER: MARK UNDER 'FUEL DELIVERED' ON FOLDOUT PAGE.

IF 'YES' ON J-20, ASK:

J-21. How many different companies delivered kerosene to your household since January 1, 1993?

- ONE 1
- TWO 2 534
- THREE OR MORE 3
- DON'T KNOW 6

J-22. About how many deliveries did your household get in the past 12 months?

- NUMBER OF DELIVERIES 535-36
- NOT SURE 96

J-23. Did your household buy kerosene in the past 12 months and bring it home, that is, cash and carry?

YES	1	
NO	0 --> [J-28]	537
DON'T KNOW	6 --> [J-28]	

IF 'YES' ON J-23, ASK:

J-24. How many times in the past 12 months did your household buy kerosene and bring it home?

NUMBER OF TIMES	<input type="text"/>	
NOT SURE	96	538-39
DID NOT LIVE HERE FULL 12 MONTHS	95	

J-25. Please turn to Exhibit J-25. These are common sizes for kerosene containers. On average how much kerosene did your household buy and bring home each time?

1 GALLON	1	
3 GALLONS	2	
5 GALLONS	3	540
55 GALLONS	4	
OTHER (SPECIFY): _____	5	
NOT SURE	6	

J-26. About how much per gallon did your household pay for kerosene, on the average?

PRICE	\$_____ PER GALLON --> [J-28]	541-43
NOT SURE	996	

IF 'NOT SURE' ON J-26, ASK:

J-27. About how much did you pay for kerosene each time your household bought it (total amount)?

PRICE	\$_____ IN TOTAL	544-48
NOT SURE	99996	

WOOD

INTERVIEWER: ASK EVERYONE.

J-28. Please turn to Exhibit J-28. We may have covered this before. Have any wood logs or other wood such as wood scraps or pellets been burned in the past 12 months? (CIRCLE ALL THAT APPLY.)

- YES, WOOD LOGS 1 549
- YES, WOOD SCRAPS SUCH AS MILL WASTE OR BARK 2 550
- YES, WOOD PELLETS 3 551
- NO WOOD BURNED 0 --> [BOX 9: 552
PAGE 57]

J-29. Please turn to Exhibit J-29. Where were the wood, scraps, pellets or other material burned? (CIRCLE ALL THAT APPLY.)

- HEATING STOVE 1 553
- FIREPLACE INSERT 2 554
- FIREPLACE WITHOUT INSERT 3 --> [J-31] 555
- FURNACE 4 --> [J-31] 556
- PELLET STOVE 5 --> [BOX 9: 557
PAGE 57]

IF "HEATING STOVE" OR "FIREPLACE INSERT" ON J-29, ASK:

- J-30. Does the (heating stove/fireplace insert) have EPA certification?
- YES 1
 - NO 0 558
 - DON'T KNOW 6

IF "YES, WOOD LOGS" OR "YES, WOOD SCRAPS" ON J-28, ASK; OTHERWISE --> [BOX 9]

- J-31. Please turn to Exhibit J-31. Using the pictures, about how much wood has your household burned in the past 12 months?
- LESS THAN 1/4 CORD 1 --> [J-33]
 - 1/4 TO 1/3 OF A CORD 2 --> [J-33]
 - ABOUT 1/2 CORD 3 --> [J-33] 559
 - MORE THAN 1/2 BUT LESS THAN ONE FULL CORD ... 4 --> [J-33]
 - ONE CORD OR MORE 5

IF "ONE CORD OR MORE" IN J-31, ASK:

J-32. Please turn to Exhibit J-32. Using the pictures as references, how many cords were burned?

NUMBER OF CORDS BURNED: CORDS

560-61

INTERVIEWER: PROBE FOR RESPONDENT'S BEST ESTIMATE OF NUMBER OF CORDS BURNED. RECORD ANSWER TO NEAREST CORD, OR CORD PLUS FRACTION, (FOR EXAMPLE: 1, 1 1/2, 4, 10, 12, AND SO ON).

J-33. Did your household purchase any firewood for your home in the past 12 months?

YES 1 562
 NO 0 --> [BOX 9]

J-34. Please look again at Exhibit J-34. Which category best describes how much wood your household bought the last time you bought wood?

LESS THAN 1/4 CORD 1
 1/4 TO 1/3 OF A CORD 2
 ABOUT 1/2 CORD 3 563
 MORE THAN 1/2 CORD BUT LESS THAN ONE
 FULL CORD 4
 ONE CORD OR MORE 5 --> [J-36]

J-35. Please turn to Exhibit J-35. How much did your household pay for that wood?

a. \$10 OR LESS 01 --> [BOX 9]
 b. \$11 - \$25. 02 --> [BOX 9]
 c. \$26 - \$50. 03 --> [BOX 9]
 d. \$51 - \$75. 04 --> [BOX 9] 564-65
 e. \$76 - \$100. 05 --> [BOX 9]
 f. \$101 OR MORE. 06 --> [BOX 9]
 g. DON'T KNOW 96 --> [BOX 9]

IF "ONE CORD OR MORE" IN J-34, ASK:

J-36. How much did your household pay per cord of wood?

PRICE PER CORD \$.00
 DON'T KNOW 996

566-68

Section K: FUEL BILLS

BOX 9

INTERVIEWER: CHECK THE FOLDOUT PAGE. IF THE HOUSEHOLD PAYS FOR ANY TYPE OF ENERGY, COMPLETE THIS SECTION. IF ALL FUELS ARE INCLUDED IN RENT, FEES OR OTHER, CHECK HERE [] AND SKIP TO BOX 16, PAGE 71.

ELECTRICITY BILL

INTERVIEWER: CHECK FOLDOUT PAGE, IF ELECTRICITY BILL IS PAID BY THE HOUSEHOLD, CONTINUE. OTHERWISE CHECK HERE [] AND SKIP TO BOX 10, PAGE 59.

K-1. What is the name, address, telephone number and account number for your household's electricity supplier?

SUPPLIER NAME: _____

STREET ADDRESS: _____

CITY: _____

581

STATE: _____ ZIP: _____

TELEPHONE: _____

ACCOUNT NUMBER: _____

582

INTERVIEWER: IT IS VERY IMPORTANT TO OBTAIN THE ACCOUNT NUMBERS FROM THE RESPONDENT. PLEASE ENCOURAGE THEM TO LOOK UP THE NUMBERS, IF POSSIBLE.

K-2. Does your electricity bill come addressed to you or is it in another name?

- a. SAME NAME 1 --> [BOX 10] 583
- b. ANOTHER NAME 2

K-3. What is the billing name and address?

BILLING NAME: _____

STREET ADDRESS: _____

584

CITY: _____

STATE: _____ ZIP: _____

K-4. Please turn to the "Beige Card". Just for our records, what is the relationship of this person to you?

- a. SPOUSE 01
- b. PARTNER 02
- c. PARENT OR GRANDPARENT 03
- d. SIBLING 04
- e. CHILD OR GRANDCHILD 05
- f. OTHER RELATED INDIVIDUAL 06
- g. ROOMMATE 07
- h. OTHER UNRELATED INDIVIDUAL OR COMPANY 08
- i. REFUSED 09

585-06

NATURAL GAS BILL

BOX 10

INTERVIEWER: CHECK FOLDOUT PAGE, IF NATURAL GAS BILL IS PAID BY THE HOUSEHOLD, CONTINUE. OTHERWISE CHECK HERE [] AND SKIP TO BOX 11, ON PAGE 61.

K-5. What is the name, address, telephone number and account number for your household's natural gas supplier?

SUPPLIER NAME: _____

STREET ADDRESS: _____

CITY: _____

588

STATE: _____ ZIP: _____

TELEPHONE: _____

ACCOUNT NUMBER: _____

589

INTERVIEWER: IT IS VERY IMPORTANT TO OBTAIN THE ACCOUNT NUMBERS FROM THE RESPONDENT. PLEASE ENCOURAGE THEM TO LOOK UP THE NUMBERS, IF POSSIBLE.

K-6. Does your natural gas bill come addressed to you or is it in another name?

- a. SAME NAME 1 --> [BOX 11] 590
- b. ANOTHER NAME 2

K-7. What is the billing name and address?

BILLING NAME: _____

STREET ADDRESS: _____

591

CITY: _____

STATE: _____ ZIP: _____

K-8. Please turn to the "Beige Card". Just for our records, what is the relationship of this person to you?

- a. SPOUSE 01
- b. PARTNER 02
- c. PARENT OR GRANDPARENT 03
- d. SIBLING 04
- e. CHILD OR GRANDCHILD 05
- f. OTHER RELATED INDIVIDUAL 06
- g. ROOMMATE 07
- h. OTHER UNRELATED INDIVIDUAL OR COMPANY 08
- i. REFUSED 09

592-93

BOTTLED GAS (LPG) BILL

BOX 11

INTERVIEWER: CHECK FOLDOUT PAGE, IF BOTTLED GAS BILL IS PAID BY THE HOUSEHOLD, AND BOTTLED GAS IS DELIVERED TO HOUSEHOLD CONTINUE, OTHERWISE CHECK HERE [] AND SKIP TO BOX 12, ON PAGE 63.

K-9. What is the name, address, telephone number and account number for your household's bottled gas supplier?

SUPPLIER NAME: _____

STREET ADDRESS: _____

CITY: _____

595

STATE: _____ ZIP: _____

TELEPHONE: _____

ACCOUNT NUMBER: _____

596

INTERVIEWER: IT IS VERY IMPORTANT TO OBTAIN THE ACCOUNT NUMBERS FROM THE RESPONDENT. PLEASE ENCOURAGE THEM TO LOOK UP THE NUMBERS, IF POSSIBLE.

K-10. Does your bottled gas bill come addressed to you or is it in another name?

- a. SAME NAME 1 --> [BOX 12] 597
- b. ANOTHER NAME 2

K-11. What is the billing name and address?

BILLING NAME: _____

STREET ADDRESS: _____

598

CITY: _____

STATE: _____ ZIP: _____

K-12. Please turn to "Beige Card". Just for our records, what is the relationship of this person to you?

- a. SPOUSE 01
- b. PARTNER 02
- c. PARENT OR GRANDPARENT 03
- d. SIBLING 04
- e. CHILD OR GRANDCHILD 05
- f. OTHER RELATED INDIVIDUAL 06
- g. ROOMMATE 07
- h. OTHER UNRELATED INDIVIDUAL OR COMPANY 08
- i. REFUSED 09

599-600

INTERVIEWER: RECORD ADDITIONAL SUPPLIERS ON PAGE 67.

FUEL OIL BILL

BOX 12

INTERVIEWER: CHECK FOLDOUT PAGE, IF THE FUEL OIL BILL IS PAID BY THE HOUSEHOLD AND FUEL OIL IS DELIVERED TO THE HOUSEHOLD CONTINUE, OTHERWISE, CHECK HERE [] AND SKIP TO BOX 13, PAGE 65.

K-13. What is the name, address, telephone number and account number for your household's fuel oil supplier?

SUPPLIER NAME: _____

STREET ADDRESS: _____

CITY: _____

602

STATE: _____ ZIP: _____

TELEPHONE: _____

ACCOUNT NUMBER: _____

603

INTERVIEWER: IT IS VERY IMPORTANT TO OBTAIN THE ACCOUNT NUMBERS FROM THE RESPONDENT. PLEASE ENCOURAGE THEM TO LOOK UP THE NUMBERS, IF POSSIBLE.

K-14. Does your fuel oil bill come addressed to you or is it in another name?

- a. SAME NAME 1 --> [BOX 13] 604
- b. ANOTHER NAME 2

K-15. What is the billing name and address?

BILLING NAME: _____

STREET ADDRESS: _____

605

CITY: _____

STATE: _____ ZIP: _____

K-16. Please turn to the "Beige Card". Just for our records, what is the relationship of this person to you?

- a. SPOUSE 01
- b. PARTNER 02
- c. PARENT OR GRANDPARENT 03
- d. SIBLING 04
- e. CHILD OR GRANDCHILD 05
- f. OTHER RELATED INDIVIDUAL 06
- g. ROOMMATE 07
- h. OTHER UNRELATED INDIVIDUAL OR COMPANY 08
- i. REFUSED 09

608-07

INTERVIEWER: RECORD ADDITIONAL SUPPLIERS ON PAGE 67.

KEROSENE BILL

BOX 13

INTERVIEWER: CHECK FOLDOUT PAGE, IF THE KEROSENE IS DELIVERED TO THE HOUSEHOLD CONTINUE, OTHERWISE CHECK HERE [] AND SKIP TO BOX 14, PAGE 68.

K-17. What is the name, address, telephone number and account number for your household's kerosene supplier?

SUPPLIER NAME: _____

STREET ADDRESS: _____

CITY: _____

609

STATE: _____ ZIP: _____

TELEPHONE: _____

ACCOUNT NUMBER: _____

610

INTERVIEWER: IT IS VERY IMPORTANT TO OBTAIN THE ACCOUNT NUMBERS FROM THE RESPONDENT. PLEASE ENCOURAGE THEM TO LOOK UP THE NUMBERS, IF POSSIBLE.

K-18. Does your kerosene bill come addressed to you or is it in another name?

- a. SAME NAME 1 --> [BOX 14: 611
- b. ANOTHER NAME 2 PAGE 68]

K-20. What is the billing name and address?

BILLING NAME: _____

STREET ADDRESS: _____

612

CITY: _____

STATE: _____ ZIP: _____

K-21. Please turn to the "Beige Card". Just for our records, what is the relationship of this person to you?

- a. SPOUSE 01
- b. PARTNER 02
- c. PARENT OR GRANDPARENT 03
- d. SIBLING 04
- e. CHILD OR GRANDCHILD 05
- f. OTHER RELATED INDIVIDUAL 06
- g. ROOMMATE 07
- h. OTHER UNRELATED INDIVIDUAL OR COMPANY 08
- i. REFUSED 09

673-14

INTERVIEWER: RECORD ADDITIONAL SUPPLIERS ON PAGE 67.

INTERVIEWER: USE THIS PAGE TO RECORD ADDITIONAL BOTTLED GAS/FUEL OIL/KEROSENE SUPPLIERS

ADDITIONAL SUPPLIERS

FUEL:

[] BOTTLED GAS SUPPLIER NAME:
[] FUEL OIL STREET ADDRESS:
[] KEROSENE
CITY:
STATE:
TELEPHONE:
ACCOUNT NUMBER:

615

NOTES:

FUEL:

[] BOTTLED GAS SUPPLIER NAME:
[] FUEL OIL STREET ADDRESS:
[] KEROSENE
CITY:
STATE:
TELEPHONE:
ACCOUNT NUMBER:

616

NOTES:

FUEL:

[] BOTTLED GAS SUPPLIER NAME:
[] FUEL OIL STREET ADDRESS:
[] KEROSENE
CITY:
STATE:
TELEPHONE:
ACCOUNT NUMBER:

617

NOTES:

AUTHORIZATION FORM

BOX 14

INTERVIEWER: COMPLETE THE AUTHORIZATION FORM NOW FOR ANY FUELS PAID FOR BY THE HOUSEHOLD (SEE FOLDOUT PAGE). USE THE YELLOW PAGE INSERTED IN THE QUESTIONNAIRE.

ON THE AUTHORIZATION FORM:

STEP 1: ENTER THE NAME OF EACH COMPANY THAT SUPPLIED FUEL TO THE HOUSEHOLD IN THE APPROPRIATE BOX. THIS INFORMATION WAS OBTAINED ON THE PREVIOUS PAGES.

STEP 2: EITHER YOU OR THE RESPONDENT ENTER THE RESPONDENT'S NAME, ADDRESS, AND TELEPHONE NUMBER.

STEP 3: HAVE THE RESPONDENT SIGN THE AUTHORIZATION FORM.

READ TO RESPONDENT:

The Department of Energy is interested in how much energy households use and pay for and household participation in energy programs. With your permission on this form, your supplier of electricity, natural gas, bottled gas, fuel oil or kerosene will provide your household information to Response Analysis Corporation, who is conducting this survey for the Department of Energy.

All your information is kept confidential and will be combined with information from other households across the United States to indicate national and regional trends.

K-22. Will you please enter your name, address, and sign this Authorization Form.

AUTHORIZATION FORM SIGNED 1
AUTHORIZATION FORM NOT SIGNED 0

613

NONHOUSEHOLD USES

BOX 15

INTERVIEWER: CHECK FOLDOUT PAGE. IF USE OF ANY FUEL IS PAID BY HOUSEHOLD, ASK OTHERWISE, GO TO BOX 16, PAGE 71.

K-23. Please turn to the "Pink Card". Look at the top. Do any of your household fuel bills in 1993 include fuel used for any of the purposes listed on the card?

- YES 1
- NO 0 --> [BOX 16] 619
- DON'T KNOW 6 --> [BOX 16: PAGE 71]

IF "YES" ON K-23, ASK:

K-24. For which of the purposes listed at the top of the card are costs of fuel included in your household fuel bills? (CIRCLE ALL THAT APPLY.)

- FARM BUILDINGS OR MACHINERY 1 620
- THE HOUSE OR APARTMENT OF ANOTHER HOUSEHOLD 2 621
- A BUSINESS OR OFFICE 3 622
- SOME USE OTHER THAN FOR YOUR OWN HOUSEHOLD (SPECIFY): _____ 4 623

K-25. Which fuel bills include costs of fuel used for purposes other than your own living quarters? (CIRCLE ALL THAT APPLY.)

- NATURAL GAS (FROM UNDERGROUND PIPES) 1 624
- BOTTLED GAS (LPG OR PROPANE) 2 625
- FUEL OIL 3 626
- KEROSENE OR COAL OIL 4 627
- ELECTRICITY 5 628

INTERVIEWER: ASK THE FOLLOWING QUESTIONS FOR EACH FUEL CIRCLED IN K-25.

IF "NATURAL GAS (FROM UNDERGROUND PIPES)" ON K-25, ASK:

K-26. Please refer again to the "Pink Card." What portion of the natural gas bill is for nonhousehold uses in 1993?

VERY LITTLE (1-4%)	0
SOME (5-33%)	1
ABOUT HALF (34-66%)	2
ABOUT 3/4 (67-95%)	3
MOST ALL OF IT (96-99%)	4

620

IF "BOTTLED GAS" ON K-25, ASK:

K-27. Please refer again to the "Pink Card". What portion of the bottled gas bill is for nonhousehold uses in 1993?

VERY LITTLE (1-4%)	0
SOME (5-33%)	1
ABOUT HALF (34-66%)	2
ABOUT 3/4 (67-95%)	3
MOST ALL OF IT (96-99%)	4

630

IF "FUEL OIL" ON K-25, ASK:

K-28. Please refer again to the "Pink Card". What portion of the fuel oil bill is for nonhousehold uses in 1993?

VERY LITTLE (1-4%)	0
SOME (5-33%)	1
ABOUT HALF (34-66%)	2
ABOUT 3/4 (67-95%)	3
MOST ALL OF IT (96-99%)	4

631

IF "KEROSENE OR COAL OIL" ON K-25, ASK:

K-29. Please refer again to the "Pink Card". What portion of the kerosene bill is for nonhousehold uses in 1993?

VERY LITTLE (1-4%)	0
SOME (5-33%)	1
ABOUT HALF (34-66%)	2
ABOUT 3/4 (67-95%)	3
MOST ALL OF IT (96-99%)	4

632

IF "ELECTRICITY" ON K-25, ASK:

K-30. Please refer again to the "Pink Card". What portion of the electric bill is for nonhousehold uses in 1993?

- VERY LITTLE (1-4%) 0
- SOME (5-33%) 1
- ABOUT HALF (34-66%) 2
- ABOUT 3/4 (67-95%) 3
- MOST ALL OF IT (96-99%) 4

633

BOX 16

INTERVIEWER: ASK K-31 ONLY IF DATA NOT AVAILABLE FROM AUTHORIZATION FORM. OTHERWISE SKIP TO BOX 17.

K-31. For interview verification purposes, may I have your name, phone number, and mailing address please? My supervisor may want to call you to see if I really have talked to you.

RESPONDENT'S NAME: _____

STREET ADDRESS: _____

CITY OR TOWN/STATE/ZIP CODE: _____

TELEPHONE NUMBER: AREA CODE: () _____

BOX 17

INTERVIEWER: CHECK FOLDOUT PAGE, IF "CONDOMINIUM" OR "RENT" OR "OCCUPIED WITHOUT PAYMENT OF RENT", ASK K-32. OTHERWISE SKIP TO L-1.

K-32. We may be needing some additional information about fuels used in this building (house). May I have the name of the person or company to whom you pay rent or who is responsible for paying the fuel bills for this building (house)?

NAME: _____

STREET ADDRESS: _____

CITY OR TOWN/STATE/ZIP CODE: _____

TELEPHONE NUMBER: AREA CODE: () _____

634

IF LIVES IN AN APARTMENT OR MOBILE HOME COMPLEX ASK, OTHERWISE, --> L-1.

K-33. Does this (building/development/complex/park) have a name?

YES 1
NO 0 --> [L-1]

635

K-34. What is the name?

NAME: _____

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION L: BACKGROUND INFORMATION

INTERVIEWER: ASK EVERYONE

L-1. Now I have some questions about the people who live here. Please tell me their relationship to (HOUSEHOLDER) and their ages on their last birthday. First, I need to get this information for (HOUSEHOLDER).

COMPLETE INFORMATION IN COLUMN A THROUGH C FOR HOUSEHOLDER FIRST. THEN ASK FOR EACH REMAINING PERSON. RECORD RELATIONSHIP, NOT NAMES.

INTERVIEWER: PERSONS WHO ARE NORMALLY MEMBERS OF THE HOUSEHOLD, BUT WHO ARE NOW LIVING AWAY FROM HOME (e.g., college students or members of the armed forces) SHOULD NOT BE LISTED

PERSON NUMBER	CHECK BOX IN THIS COLUMN TO IDENTIFY RESPONDENT	L-1. COLUMN A	COLUMN B		COLUMN C	L-3. COLUMN D			
		RELATIONSHIP TO HOUSEHOLDER	SEX		AGE	EMPLOYMENT STATUS (AGE 14+)			
			FEMALE	MALE		FULL TIME	PART TIME	NOT EMPLOYED	
1	[]	Householder	1	2		1	2	0	646-52
2	[]		1	2		1	2	0	653-59
3	[]		1	2		1	2	0	660-66
4	[]		1	2		1	2	0	667-73
5	[]		1	2		1	2	0	674-80
6	[]		1	2		1	2	0	681-87
7	[]		1	2		1	2	0	688-94
8	[]		1	2		1	2	0	695-701
9	[]		1	2		1	2	0	702-08
10	[]		1	2		1	2	0	709-15
11	[]		1	2		1	2	0	716-22
12	[]		1	2		1	2	0	723-29

730-31

L-2. I have listed (READ RELATIONSHIPS FROM L-1 IN GRID). Have I missed:
[QUESTIONS ANSWERED 'YES' ADD TO LISTING]

	<u>YES</u>	<u>NO</u>
a. Any babies or small children?	1	0
b. Any lodgers, boarders, or persons in your employment who live there?	1	0
c. Anyone who usually lives here but is away traveling or in the hospital?	1	0
d. Anyone else staying here who does not have a regular residence elsewhere?	1	0

INTERVIEWER: MARK NUMBER OF HOUSEHOLD MEMBERS UNDER 'HOUSEHOLD MEMBERS' ON FOLDOUT PAGE.

INTERVIEWER: FOR EACH PERSON 14 YEARS OR OLDER ON L-1 COLUMN C, ASK L-3.

L-3. Is (he/she) now employed full-time, that is 30 hours or more per week, employed part-time, or not employed? (RECORD UNDER L-3 COLUMN D ON GRID)

L-4. How many people in this household drive a car on a fairly regular basis -- that is, at least once a month?

NUMBER OF REGULAR DRIVERS:

NONE 00

DON'T KNOW 96

732-33

L-5. For background statistical purposes, I have a few questions about the (householder). Please look at Exhibit L-5. What is the highest grade or year (HOUSEHOLDER) completed in school or college?

GRADE SCHOOL/HIGH SCHOOL		
KINDERGARTEN TO 4TH GRADE	04	
5TH, 6TH, 7TH OR 8TH GRADES	08	
9TH TO 11TH GRADES	11	
12TH GRADE OR HIGH SCHOOL DIPLOMA	12	
COLLEGE:		
1 YEAR	13	
2 YEARS	14	
3 YEARS	15	734-35
4 YEARS	16	
5 YEARS	17	
6 OR MORE YEARS OF COLLEGE	18	
NEVER ATTENDED SCHOOL	00	
DON'T KNOW	96	

L-6. Please look at Exhibit L-6. Which best describes (HOUSEHOLDER)?

NOW MARRIED	1	
WIDOWED	2	
DIVORCED OR SEPARATED	3	736
NEVER MARRIED	4	
UNMARRIED LIVING WITH PARTNER	5	

L-7. Is (HOUSEHOLDER) of Spanish or Hispanic origin or descent?

YES	1	
NO	0	737
DON'T KNOW	6	

L-8. Please turn to Exhibit L-8. Which of the groups on the exhibit best describes (HOUSEHOLDER)?

WHITE	1	
BLACK	2	
AMERICAN INDIAN, ALASKAN NATIVE	3	738
ASIAN, PACIFIC ISLANDER	4	
OTHER (SPECIFY): _____	5	

INCOME

L-9. Please turn to Exhibit L-9. In the past 12 months, did you or any member of your family living here receive any income or benefits from these sources? When we say "family," we mean all related persons living in this household.

(INTERVIEWER: READ AND MARK "YES" OR "NO" FOR EACH ITEM.)

	<u>YES</u>	<u>NO</u>	
a. Wages and salaries	1	0	739
b. Self-employed from a business or farm	1	0	740
c. Social Security or Railroad Retirement	1	0	741
d. Pensions and other retirement funds	1	0	742
e. Food Stamps	1	0	743
f. Aid to Families with Dependent Children (AFDC)	1	0	744
g. Unemployment Compensation	1	0	745
h. Supplemental Security Income (SSI)	1	0	746
i. General assistance or other public assistance	1	0	747

L-10. Now please look at the next Exhibit L-10. This is a list of income groups. Please tell me which group letter best describes the total combined income in the past 12 months of all members of your family living here, from all sources -- wages, interest, alimony, Social Security, and so forth -- before taxes and deductions.

CIRCLE NUMBER FOR INCOME GROUP

- | | | |
|----------------------------------|--|------------|
| A. LESS THAN \$3,000 . 01 <┐ | O. \$22,500 - \$24,999 . 15 <┐ | |
| B. \$3,000 - \$3,999 02 | P. \$25,000 - \$27,499 . 16 | CHECK |
| C. \$4,000 - \$4,999 03 | Q. \$27,500 - \$29,999 . 17 | BOX 18 |
| D. \$5,000 - \$5,999 04 | R. \$30,000 - \$32,499 . 18 | --> NEXT |
| E. \$6,000 - \$7,499 05 | S. \$32,500 - \$34,999 . 19 | PAGE |
| F. \$7,500 - \$8,999 06 | SKIP T. \$35,000 - \$39,999 . 20 | |
| G. \$9,000 - \$9,999 07 | --> TO U. \$40,000 - \$44,999 . 21 <┐ | 748-48 |
| H. \$10,000 - \$10,999 . . 08 | BOX 19 | |
| I. \$11,000 - \$12,499 . . 09 | PAGE 80 V. \$45,000 - \$49,999 . 22 <┐ | SKIP |
| J. \$12,500 - \$13,999 . . 10 | W \$50,000 - \$74,999 . 23 | --> TO |
| K. \$14,000 - \$14,999 . . 11 | X. \$75,000 - \$99,999 . 24 | N-1 ON |
| L. \$15,000 - \$17,499 . . 12 | Y. \$100,000 OR MORE 25 <┐ | PAGE 83 |
| M. \$17,500 - \$19,999 . . 13 | | |
| N. \$20,000 - \$22,499 . . 14 <┐ | DON'T KNOW 96 <┐ | |
| | REFUSED 97 | --> [L-11] |
| | <┐ | |

PROBE IF "DON'T KNOW" OR "REFUSED" ON L-10, ASK:

L-11. Was your family income in the last 12 months under \$45,000?

- YES, INCOME UNDER \$45,000 1 --> [BOX 19]
- NO 0 --> [N-1]
- DON'T KNOW 6 --> [BOX 19]
- REFUSED 7 --> [BOX 19]

750

BOX 18

INTERVIEWER: CHECK INCOME FROM L-10 WITH NUMBER OF HOUSEHOLD MEMBERS ON FOLDOUT PAGE. IF IT MATCHES BELOW, GO TO [N-1] ON PAGE 83. OTHERWISE, GO TO BOX 19 ON THE NEXT PAGE.

<u>If Income Group</u>	<u>Number of Household Members is</u>	<u>then</u>
O	1	go to [N-1]
P	1 or 2	go to [N-1]
Q	1 or 2	go to [N-1]
R	1, 2, or 3	go to [N-1]
S	1, 2, or 3	go to [N-1]
T	1, 2, 3, or 4	go to [N-1]
U	1, 2, 3, 4, or 5	go to [N-1]

Section M: PROGRAM PARTICIPATION

BOX 19

INTERVIEWER: THESE QUESTIONS REFER TO ANY HOME THE RESPONDENT OCCUPIED IN THE LAST YEAR.

M-1. Please turn to Exhibit M-1. This shows some examples of how a person can weatherize a home, for example, improve the heating system, insulate walls, insulate the hot water heater, weather strip or caulk, and so on. During the last year -- from October 1992 to September 1993 -- did you receive any help from the government in paying the costs of weatherizing your home?

YES	1	
NO	0	767
DON'T KNOW	6	

M-2. Are you aware of an energy assistance program that helps people pay for their heating, cooling, and other home energy costs? Some names used for the program are HEAP, LIHEAP, and HEAT. It is run by State, county, or local government. The assistance can be paid directly to the household or to the electric or gas company or fuel supplier. If heat is included in a household's rent, the payment can be used to help reduce the rent. Are you aware of this energy assistance program?

YES	1	762
NO	0	

M-3. Please turn to Exhibit M-3. During the last year -- from October 1992, through September 1993 -- did anyone in your household receive government assistance for any of the following:

	YES	NO	DON'T KNOW	
a. Help in paying home <u>heating</u> costs?	1	0	6	763
b. Help in paying home <u>cooling</u> or air-conditioning costs?	1	0	6	764
c. Help with <u>other</u> home energy costs?	1	0	6	765
d. Emergency supplies, such as blankets, portable heaters, or temporary emergency shelter due to loss of home heat?	1	0	6	766

INTERVIEWER: IF ALL "NO" OR "DON'T KNOW" IN M-3, SKIP TO M-7.

IF "YES" IN M-3, ASK M-4., OTHERWISE --> [M-7]

M-4. Please describe this help.

IF "YES" IN M-3a, (HEATING ASSISTANCE), ASK:

M-5. Please turn to EXHIBIT M-5. You mentioned that your household got help in paying for home heating costs. How were these payments received?
(READ EACH AND CIRCLE "YES" OR "NO")

	<u>YES</u>	<u>NO</u>	<u>DON'T KNOW</u>	
a. Check to household	1	0	6	767
b. Sent directly to utility company or fuel dealer	1	0	6	768
c. Coupon/voucher to household	1	0	6	769
d. Two-party check to household	1	0	6	770
e. Other (SPECIFY): _____	1	0	6	771

M-6. About how much money for your heating assistance did you or your utility or fuel supplier receive from October 1992 to September 1993?

AMOUNT RECEIVED	\$ _____	.00	772-75
NOT SURE		9996	

M-7. Please think about the home or homes you lived in last year -- that is, the time period from October 1992 to September 1993. Was there ever a time during that period when you wanted to use your main source of heat, but could not, for one or more of the following reasons: (CIRCLE "YES" OR "NO" FOR EACH ITEM.)

	<u>YES</u>	<u>NO</u>	
a. Your heating system was <u>broken</u> and you were <u>unable</u> to pay for its repair or replacement?	1	0	776
b. You <u>ran out</u> of fuel oil, kerosene, LPG, coal, or wood because you were unable to pay for a delivery?	1	0	777
c. The utility company discontinued your gas or electric service because you were <u>unable</u> to pay your bill?	1	0	778

INTERVIEWER: IF ALL ITEMS MARKED "NO," SKIP TO N-1.

IF YES TO M-7 "a," "b," or "c", ASK: OTHERWISE --> [N-1].

M-8. Thinking about these times that you went without heat--how many separate times were there?
 TOTAL TIMES: 779-80

M-9. Altogether, how many hours or days were you without heat from October 1992 to September 1993?
 HOURS: OR DAYS: 781-83

M-10. During which month or months were you without heat? (CHECK ALL THAT APPLY.)

01 OCTOBER ('92)	784-85	08	MAY ('93)	798-99
02 NOVEMBER ('92)	786-87	09	JUNE ('93)	800-01
03 DECEMBER ('92)	788-89	10	JULY ('93)	802-03
04 JANUARY ('93)	790-91	11	AUGUST ('93)	804-05
05 FEBRUARY ('93)	792-93	12	SEPTEMBER ('93)	806-07
06 MARCH ('93)	794-95			
07 APRIL ('93)	796-97	96	NOT SURE	808-08

M-11. During these times, were you able to heat your home in some other way?

YES	1	810
NO	0	

Section N: VEHICLES

N-1. Do you or other members of your household own or have the regular use of any cars, trucks, vans, or similar vehicles? (DO NOT INCLUDE MOTORCYCLES OR MOPEDS. SEE INSTRUCTIONS ON NEXT PAGE.)

YES 1
NO 0 --> [BOX 20:
PAGE 95]

913

INTERVIEWER: "REGULAR USE" MEANS THE VEHICLE IS KEPT AT HOME AND IS AVAILABLE FOR SOME PERSONAL USE.

N-2. How many do you have?

NUMBER OF VEHICLES:

914-15

N-2. IF HOUSEHOLD HAS MORE THAN EIGHT VEHICLES, MARK ANSWERS FOR THE EIGHT VEHICLES USED MOST. USE VEHICLE SUPPLEMENT FORM FOR VEHICLES 5-8.

INTERVIEWER READ TO RESPONDENT: "I'd like you to describe each vehicle your household owns or uses. First, let's start with the vehicle you use most often."
ASK SERIES OF QUESTIONS FOR EACH VEHICLE.

SPECIAL INSTRUCTIONS:
N-4. MODEL NAME: A MODEL NAME MAY CONSIST OF SEVERAL PARTS -- BE SURE TO GET THE COMPLETE MODEL NAME. HERE ARE SOME EXAMPLES, WHERE THE COMPLETE MODEL NAME IS IN PARENTHESES: FORD (GALAXY), CHEVROLET (V10 SUBURBAN, GMC (V15 JIMMY), TOYOTA (2WD CARGO VAN). IF RESPONDENT DOES NOT KNOW THE MODEL NAME OF A TRUCK, PROBE FOR SIZE (1/2 TON, 3/4 TON, ETC.)
N-30. EXPLAIN WHAT THE VIN IS IF RESPONDENT DOES NOT KNOW. IF RESPONDENT QUESTIONS NEED FOR VIN, SAY: "The VIN is a set of codes assigned to a vehicle at the factory that, when decoded, describes several of the vehicle's characteristics. These characteristics may then be used to calculate an estimated miles per gallon for that specific type of vehicle."
SHOW EXHIBIT N-30 OF POSSIBLE VIN LOCATIONS. ATTEMPT TO SECURE VIN FROM ONE OF THESE DOCUMENT SOURCES. RECORD THE VIN AND VERIFY FOR CORRECTNESS.
IF VEHICLE AVAILABLE--RECORD VIN FROM VEHICLE ITSELF.

VEHICLES PAGE

QUESTION															
N-3. What is the make?	MAKE														
N-4. What is the <u>model name</u> ? (SEE INSTRUCTIONS)	MODEL														
N-5. What is the <u>model year</u> ?	YEAR														
N-6. Please turn to Exhibit N-6. What is the type of vehicle? (CIRCLE ONE). WRITE ADDITIONAL IDENTIFYING INFORMATION IN MARGIN.	<table style="width: 100%; border: none;"> <tr><td>CAR</td><td style="text-align: right;">01</td></tr> <tr><td>STATION WAGON</td><td style="text-align: right;">02</td></tr> <tr><td>LARGE VAN</td><td style="text-align: right;">03</td></tr> <tr><td>MINI VAN</td><td style="text-align: right;">04</td></tr> <tr><td>PICKUP TRUCK</td><td style="text-align: right;">05</td></tr> <tr><td>SPORT-UTILITY VEHICLE ..</td><td style="text-align: right;">06</td></tr> <tr><td>OTHER (SPECIFY):</td><td style="text-align: right;">21</td></tr> </table>	CAR	01	STATION WAGON	02	LARGE VAN	03	MINI VAN	04	PICKUP TRUCK	05	SPORT-UTILITY VEHICLE ..	06	OTHER (SPECIFY):	21
CAR	01														
STATION WAGON	02														
LARGE VAN	03														
MINI VAN	04														
PICKUP TRUCK	05														
SPORT-UTILITY VEHICLE ..	06														
OTHER (SPECIFY):	21														
N-7. Does it have an air conditioner?	YES 1 NO 0														
N-8. Does it have an automatic transmission or manual shift?	AUTOMATIC TRANSMISSION 1 MANUAL SHIFT 2 DON'T KNOW 6														
N-9. How many cylinders does the engine have?	3-CYLINDERS 03 4-CYLINDERS 04 5-CYLINDERS 05 6-CYLINDERS 06 8-CYLINDERS 08 OTHER 21 DON'T KNOW 96														

	VEHICLE #1	VEHICLE #2	VEHICLE #3	VEHICLE #4
N-3.	MAKE 916-17	MAKE 992-93	MAKE 1067-68	MAKE 1153-54
N-4.	MODEL 918-19	MODEL 994-95	MODEL 1069-70	MODEL 1155-56
N-5.	19 920-21	19 996-97	19 1071-72	19 1157-58
N-6.	CAR 01 STATN WAGON .. 02 LARGE VAN 03 MINI VAN 04 PICK UP TRUCK . 05 SPORT UTILITY .. 06 21 922-23	CAR 01 STATN WAGON .. 02 LARGE VAN 03 MINI VAN 04 PICK UP TRUCK . 05 SPORT UTILITY .. 06 21 998-99	CAR 01 STATN WAGON . 02 LARGE VAN 03 MINI VAN 04 PICK UP TRUCK 05 SPORT UTILITY . 06 21 1073-74	CAR 01 STATN WAGON .. 02 LARGE VAN 03 MINI VAN 04 PICK UP TRUCK . 05 SPORT UTILITY .. 06 21 1159-60
N-7.	YES 1 NO 0 924	YES 1 NO 0 1000	YES 1 NO 0 1075	YES 1 NO 0 1161
N-8.	AUTOMATIC 1 MANUAL 2 DON'T KNOW 6 925	AUTOMATIC 1 MANUAL 2 DON'T KNOW 6 1001	AUTOMATIC 1 MANUAL 2 DON'T KNOW ... 6 1076	AUTOMATIC 1 MANUAL 2 DON'T KNOW 6 1162
N-9.	3 CYLINDERS ... 03 4 CYLINDERS ... 04 5 CYLINDERS ... 05 6 CYLINDERS ... 06 8 CYLINDERS ... 08 OTHER 21 DON'T KNOW ... 96 926-27	3 CYLINDERS ... 03 4 CYLINDERS ... 04 5 CYLINDERS ... 05 6 CYLINDERS ... 06 8 CYLINDERS ... 08 OTHER 21 DON'T KNOW ... 96 1002-03	3 CYLINDERS .. 03 4 CYLINDERS .. 04 5 CYLINDERS .. 05 6 CYLINDERS .. 06 8 CYLINDERS .. 08 OTHER 21 DON'T KNOW .. 96 1077-78	3 CYLINDERS ... 03 4 CYLINDERS ... 04 5 CYLINDERS ... 05 6 CYLINDERS ... 06 8 CYLINDERS ... 08 OTHER 21 DON'T KNOW ... 96 1163-64

QUESTION	
<p>N-10. Does it have front-wheel, rear-wheel, or 4-wheel drive? (IF RESPONDENT SAYS COMBINATION THAT INCLUDES 4-WHEEL DRIVE, MARK 4-WHEEL DRIVE.)</p>	<p>FRONT-WHEEL 1 REAR-WHEEL 2 4-WHEEL 3 OTHER: (Specify) 5 DON'T KNOW 6</p>
<p>N-11. Does the fuel system use a carburetor, fuel injection, or is it a diesel engine or an electric vehicle?</p>	<p>CARBURETOR 1 FUEL INJECTION 2 DIESEL 3-> [N-13] ELECTRIC 4-> [N-14] OTHER: (Specify) 5 DON'T KNOW 6</p>
<p>N-12. Please turn to Exhibit N-12. During the past year, what type of fuel did this vehicle use?</p>	<p>UNLEADED GASOLINE Regular (87-88.9 Octane) 01 Mid-grade (89-90.9 Octane) 02 Premium (91 or Greater Octane) 03</p> <p>LEADED GASOLINE 04 ETHANOL BLEND (Gasohol) 05 NATURAL GAS 06 PROPANE 07 ALCOHOL 08 OTHER: (Specify) 21</p> <p>DON'T KNOW 96</p>
<p>N-13. When fuel was purchased for this vehicle during the past year, was most of the fuel purchased at full-service pumps or self-service pumps? (IF "MINI-SERVICE," RECORD AS SELF-SERVICE.)</p>	<p>FULL-SERVICE 1 SELF-SERVICE 2 BOTH EQUALLY 3 OTHER: (Specify) 5 DON'T KNOW 6</p>
<p>N-14. Did you get this vehicle within the past 12 months or did you get it before that? (CIRCLE ONE, THEN ASK APPROPRIATE FOLLOW-UP QUESTION)</p>	<p>WITHIN PAST 12 MONTHS 1 BEFORE THAT 2-> [N-17]</p>

	VEHICLE #1	VEHICLE #2	VEHICLE #3	VEHICLE #4
N-10.	FRONT WHEEL . . . 1 REAR WHEEL . . . 2 4 WHEEL 3 5 DON'T KNOW . . . 6 928	FRONT WHEEL . . . 1 REAR WHEEL . . . 2 4 WHEEL 3 5 DON'T KNOW . . . 6 1004	FRONT WHEEL . . . 1 REAR WHEEL . . . 2 4 WHEEL 3 5 DON'T KNOW . . . 6 1079	FRONT WHEEL . . . 1 REAR WHEEL . . . 2 4 WHEEL 3 5 DON'T KNOW . . . 6 1165
N-11.	CARBURETOR . . . 1 FUEL INJECTION . 2 DIESEL->[N-13] . 3 ELECTRIC->[N-14] 4 5 DON'T KNOW . . . 6 929	CARBURETOR . . . 1 FUEL INJECTION . 2 DIESEL->[N-13] . 3 ELECTRIC->[N-14] 4 5 DON'T KNOW . . . 6 1005	CARBURETOR . . . 1 FUEL INJECTION . 2 DIESEL->[N-13] . 3 ELECTRIC->[N-14] 4 5 DON'T KNOW . . . 6 1080	CARBURETOR . . . 1 FUEL INJECTION . 2 DIESEL->[N-13] . 3 ELECTRIC->[N-14] 4 5 DON'T KNOW . . . 6 1166
N-12.	UNLEADED GAS Reg. (87-88.9 oct).01 Mid. (89-90.9 oct).02 Prem. (91+ oct) . 03 LEADED GAS 04 ETHANOL BND . . . 05 NATURAL GAS . . . 06 PROPANE 07 ALCOHOL 08 OTHER->[N-14] . 21 DON'T KNOW . . . 96 930-31	UNLEADED GAS Reg. (87-88.9 oct). 01 Mid. (89-90.9 oct). 02 Prem. (91+ oct) . . 03 LEADED GAS 04 ETHANOL BND . . . 05 NATURAL GAS . . . 06 PROPANE 07 ALCOHOL 08 OTHER->[N-14] . 21 DON'T KNOW . . . 96 1006-07	UNLEADED GAS Reg. (87-88.9 oct).01 Mid. (89-90.9 oct).02 Prem. (91+ oct) . 03 LEADED GAS 04 ETHANOL BND . . . 05 NATURAL GAS . . . 06 PROPANE 07 ALCOHOL 08 OTHER->[N-14] 21 DON'T KNOW . . . 96 1081-82	UNLEADED GAS Reg. (87-88.9 oct).01 Mid. (89-90.9 oct).02 Prem. (91+ oct) . 03 LEADED GAS 04 ETHANOL BND . . . 05 NATURAL GAS . . . 06 PROPANE 07 ALCOHOL 08 OTHER->[N-14] . 21 DON'T KNOW . . . 96 1167-68
N-13.	FULL SERVICE . . . 1 SELF SERVICE . . 2 BOTH 3 5 DON'T KNOW . . . 6 932	FULL SERVICE . . . 1 SELF SERVICE . . . 2 BOTH 3 5 DON'T KNOW . . . 6 1008	FULL SERVICE . . . 1 SELF SERVICE . . . 2 BOTH 3 5 DON'T KNOW . . . 6 1083	FULL SERVICE . . . 1 SELF SERVICE . . . 2 BOTH 3 5 DON'T KNOW . . . 6 1169
N-14.	WITHIN 12 MNTHS 1 BEFORE->[N-17] 2 933	WITHIN 12 MNTHS . 1 BEFORE->[N-17] . 2 1009	WITHIN 12 MNTHS 1 BEFORE->[N-17] 2 1084	WITHIN 12 MNTHS . 1 BEFORE->[N-17] . 2 1170

QUESTION	
IF "WITHIN PAST 12 MONTHS," ASK:	MONTH
N-15. In what month and year did you get it?	YEAR
N-16. Approximately how many miles has it been driven since you obtained it?	MILES
IF "BEFORE THAT," ASK:	MILES PAST 12 MOS.
N-17. Approximately how many miles has it been driven in the past 12 months?	
N-18. What is your best estimate of the average miles per gallon (MPG) for this vehicle?	MPG DON'T KNOW 6
N-19. Please look at Exhibit N-19. What is the basis for your estimate of miles per gallon?	FUEL PURCHASE LOG 1 COMPUTER 2 ADVERTISED 3 ROUGH ESTIMATE 4 DON'T KNOW 6
N-20. What is the sex of the household member who usually drives this vehicle?	FEMALE 1 MALE 2 DON'T KNOW DRIVER 6
N-21. What is the approximate age of the household member who usually drives this vehicle?	AGE DON'T KNOW AGE 96

	VEHICLE #1	VEHICLE #2	VEHICLE #3	VEHICLE #4
N-15.	MONTH YEAR 934-37	MONTH YEAR 1010-13	MONTH YEAR 1085-88	MONTH YEAR 1171-74
N-16.	MILES 938-42	MILES 1014-18	MILES 1089-93	MILES ->[N-18] 1175-79
N-17.	MILES 943-47	MILES 1019-23	MILES 1094-98	MILES 1180-84
N-18.	MPG DK->[N-20] 96 948-49	MPG DK->[N-20] . . . 96 1024-25	MPG DK->[N-20] . . . 96 1099-1100	MPG DK->[N-20] 96 1185-86
N-19.	LOG 1 COMPUTER 2 ADVERTISED . . . 3 ESTIMATE 4 DON'T KNOW . . . 6 950	LOG 1 COMPUTER 2 ADVERTISED . . . 3 ESTIMATE 4 DON'T KNOW . . . 6 1026	LOG 1 COMPUTER 2 ADVERTISED . . . 3 ESTIMATE 4 DON'T KNOW . . . 6 1101	LOG 1 COMPUTER 2 ADVERTISED . . . 3 ESTIMATE 4 DON'T KNOW . . . 6 1187
N-20.	FEMALE 1 MALE 2 DON'T KNOW . . . 6 951	FEMALE 1 MALE 2 DON'T KNOW . . . 6 1027	FEMALE 1 MALE 2 DON'T KNOW . . . 6 1102	FEMALE 1 MALE 2 DON'T KNOW . . . 6 1188
N-21.	AGE DON'T KNOW . . . 96 952-53	AGE DON'T KNOW . . 96 1028-29	AGE DON'T KNOW . . 96 1103-04	AGE DON'T KNOW . . . 96 1189-90

QUESTION	
N-22. Please look at Exhibit N-22. Where is this vehicle usually parked at home?	GARAGE 1
	CARPORT 2
	DRIVEWAY 3
	STREET 4
	PARKING LOT 5
	PARKING GARAGE 6
	IT VARIES 7
	OTHER: (Specify) _____ 8
N-23. Other than commuting, is this vehicle used for business purposes?	YES 1
	NO 3
	DON'T KNOW 6
IF USED FOR BUSINESS PURPOSES, ASK:	
N-24. What percent of total miles is for business purposes?	PERCENT 96
	DON'T KNOW 96
N-25. Is this vehicle owned or leased by your employer?	YES 1
	NO 0
	DON'T KNOW 6
IF "YES" ON N-25, ASK:	
N-26. Please look at Exhibit N-26. How would you best describe the organization or business that owns or leases this vehicle?	POLICE/FIRE 1
	OTHER GOVERNMENT 2
	TAXI 3
	UTILITY COMPANY 4
	SALES 5
	AUTO DEALER 6
	OTHER BUSINESS 7
N-27. Is this vehicle refueled at a central site?	YES 1
	NO 0
	DON'T KNOW 6

	VEHICLE #1	VEHICLE #2	VEHICLE #3	VEHICLE #4
N-22.	GARAGE 1 CARPORT 2 DRIVEWAY 3 STREET 4 PARKING LOT ... 5 PARKING GARAGE 6 VARIES 7 _____ 8 954	GARAGE 1 CARPORT 2 DRIVEWAY 3 STREET 4 PARKING LOT ... 5 PARKING GARAGE 6 VARIES 7 _____ 8 1030	GARAGE 1 CARPORT 2 DRIVEWAY 3 STREET 4 PARKING LOT ... 5 PARKING GARAGE 6 VARIES 7 _____ 8 1105	GARAGE 1 CARPORT 2 DRIVEWAY 3 STREET 4 PARKING LOT ... 5 PARKING GARAGE . 6 VARIES 7 _____ . 8 1181
N-23.	YES 1 NO->[N-28] 0 DON'T KNOW ... 6 955	YES 1 NO->[N-28] 0 DON'T KNOW ... 6 1031	YES 1 NO->[N-28] 0 DON'T KNOW ... 6 1106	YES 1 NO->[N-28] 0 DON'T KNOW ... 6 1192
N-24.	_____ 96 DON'T KNOW .. 96 956-57	_____ 96 DON'T KNOW ... 96 1032-33	_____ 96 DON'T KNOW ... 96 1107-08	_____ 96 DON'T KNOW 96 1193-94
N-25.	YES 1 NO->[N-28] 0 DK->[N-28] 6 958	YES 1 NO->[N-28] 0 DK->[N-28] 6 1034	YES 1 NO->[N-28] 0 DK->[N-28] 6 1109	YES 1 NO->[N-28] 0 DK->[N-28] 6 1195
N-26.	POLICE/FIRE 1 OTHER GOVN ... 2 TAXI 3 UTIL COMPANY .. 4 SALES 5 AUTO DEALER ... 6 OTHR BUSINESS . 7 959	POLICE/FIRE 1 OTHER GOVN 2 TAXI 3 UTIL COMPANY ... 4 SALES 5 AUTO DEALER 6 OTHR BUSINESS .. 7 1035	POLICE/FIRE 1 OTHER GOVN 2 TAXI 3 UTIL COMPANY ... 4 SALES 5 AUTO DEALER 6 OTHR BUSINESS .. 7 1110	POLICE/FIRE 1 OTHER GOVN 2 TAXI 3 UTIL COMPANY 4 SALES 5 AUTO DEALER 6 OTHR BUSINESS ... 7 1196
N-27.	YES 1 NO 0 DON'T KNOW ... 6 960	YES 1 NO 0 DON'T KNOW ... 6 1036	YES 1 NO 0 DON'T KNOW ... 6 1111	YES 1 NO 0 DON'T KNOW ... 6 1197

QUESTION	
<p>N-28. Is the vehicle here now? (CIRCLE ANSWER, READ APPROPRIATE FOLLOW-UP QUESTION.)</p>	<p>YES VEHICLE HERE 1 NO 0-> [N29]</p>
<p>IF "YES," READ: I would like to get the Vehicle Identification Number and odometer reading <u>directly from the vehicle</u>. I'll do that at the end of the interview. Do you know what a Vehicle Identification Number or VIN is? (IF DON'T KNOW, EXPLAIN VIN BY SHOWING EXHIBIT N-30. THEN, ASK QUESTIONS N-3 THRU N-30 FOR NEXT VEHICLE.</p>	
<p>N-29. ODOMETER READING RECORD FROM OBSERVATION OR ASK IF "NO" ON N-28.: Approximately what is the odometer reading for this vehicle? RECORD WHETHER ACTUAL OR ESTIMATE.</p>	<p>ODOMETER Actual Reading 1 Estimate 2 DON'T KNOW 6</p>
<p>N-30. VEHICLE IDENTIFICATION NUMBER I would like to get the Vehicle Identification Number or VIN Number for this vehicle. Do you know what the VIN Number is? (IF DON'T KNOW, EXPLAIN VIN BY SHOWING EXHIBIT N-30.) RECORD FROM OBSERVATION OR ASK IF "NO" ON N-28: Do you have any records that may contain the VIN Number such as an insurance card, registration, title, or bill of sale?</p>	<p>VIN FROM OBSERVATION 4 VIN FROM RECORDS 5 VIN REFUSED 7 VIN NOT OBTAINED 8</p>

INTERVIEWER: ASK N-3 THRU N-30 FOR NEXT VEHICLE.

	VEHICLE #1	VEHICLE #2	VEHICLE #3	VEHICLE #4
N-28.	HERE 1 NO->[N-29] 0	HERE 1 NO->[N-29] 0	HERE 1 NO->[N-29] 0	HERE 1 NO->[N-29] 0
	961	1037	1112	1198
<div style="border: 1px solid black; padding: 5px; margin: 5px auto; width: 80%;"> 962-67 1038-43 1113-18 1198-1204 </div>				
N-29.	(Circle One)	(Circle One)	(Circle One)	(Circle One)
	ACTUAL 1 ESTIMATE 2 DON'T KNOW ... 6	ACTUAL 1 ESTIMATE 2 DON'T KNOW ... 6	ACTUAL 1 ESTIMATE 2 DON'T KNOW ... 6	ACTUAL 1 ESTIMATE 2 DON'T KNOW ... 6
	968	1044	1119	1205
N-30.	OBSERVATION .. 4 RECORDS 5 REFUSED 7 NOT OBTAINED .. 8 GET VIN #, WRITE IN NEXT PAGE ↓	OBSERVATION ... 4 RECORDS 5 REFUSED 7 NOT OBTAINED ... 8 GET VIN #, WRITE IN NEXT PAGE ↓	OBSERVATION ... 4 RECORDS 5 REFUSED 7 NOT OBTAINED ... 8 GET VIN #, WRITE IN NEXT PAGE ↓	OBSERVATION 4 RECORDS 5 REFUSED 7 NOT OBTAINED 8 GET VIN #, WRITE IN NEXT PAGE ↓
	969	1045	1120	1206

Form EIA-457A (1993)

VIN #1:

970

986

VIN #2

1046

1062

VIN #3

1121

1137

VIN #4

1207

1223

NEW HOME SUPPLEMENT

BOX 20

INTERVIEWER: CHECK FOLDOUT PAGE. ASK THIS SECTION IF SINGLE-FAMILY HOME, OWNED (NOT RENTED), AND BUILT IN 1988 OR LATER. OTHERWISE GO TO THE LIGHTING SUPPLEMENT, IF HOUSEHOLD HAS BEEN SELECTED FOR THE LIGHTING SUPPLEMENT. (SEE THE HOUSING UNIT RECORD SHEET.)

INTERVIEWER READ: *Since this is a (relatively) new house, I have a few questions about this house.*

NH-1. Do you know which side of your home faces the South?

YES	1	1234
NO	0 --> [NH-3]	

If *YES* on NH-1, ASK:

NH-2. Using your best estimate, does the side of your home facing the South have more, the same, or less glass area than the North side of your home?

MORE GLASS AREA	1	
SAME GLASS AREA	2	1235
LESS GLASS AREA	3	
NO GLASS AREA ON SOUTH SIDE	0	

INTERVIEWER READ: *Here are some questions that relate to the technical characteristics of your house. You might remember some of these items from the materials you received when you bought the house.*

NH-3. What is your best estimate of the R-value of the insulation in the roof or ceiling, or perhaps you know the inches of insulation? (R-VALUES RANGE FROM 4 TO 49.)

R-VALUE	□	OR	INCHES	□	... --> [NH-5]
DON'T KNOW					9996
NO INSULATION					0000 --> [NH-5]

1236-39

IF "DON'T KNOW" ON NH-3, ASK:

NH-4. When you purchased your home, were you informed that the insulation in your roof or ceiling meets or exceeds the building code for your location?

- MEETS THE BUILDING CODES 1
 - EXCEEDS THE BUILDING CODES 2
 - DON'T REMEMBER/NOT INFORMED 6
- 1240

INTERVIEWER: CHECK FOLDOUT PAGE. IF CENTRAL AIR CONDITIONING CONTINUE, OTHERWISE SKIP TO NH-7.

IF HAS CENTRAL AIR-CONDITIONING, ASK; OTHERWISE --> [NH-7]

NH-5. For your central air-conditioner, what is your best estimate of the size of the cooling capacity in tons or Btu? (12,000 Btu per hour = 1 ton cooling capacity.)

- TONS OR BTU/HOUR
 - DON'T KNOW 9996
- 1241-44

NH-6. Is your air-conditioner a high-efficiency unit?

- YES 1
 - NO 0
 - DON'T KNOW 6
- 1249

NH-7. Is your heating equipment a high-efficiency unit?

- YES 1
 - NO 0
 - DON'T KNOW 6
- 1250

NH-8. Can you set thermostats for your main heating equipment so that you have different temperatures in sections of your home? This is usually called "Zoned-Heating".

- YES 1
 - NO/NO THERMOSTAT 2
 - DON'T KNOW 6
- 1251

NH-9. Please don't try to find them, but we are interested in whether you maintain files or still have the brochures pertaining to information about the characteristics of your home and major appliances?

YES	1
NO	0
DON'T KNOW	6

1252

INTERVIEWER: SEE THE HOUSING UNIT RECORD SHEET. IF THE HOUSING UNIT HAS BEEN SELECTED FOR THE LIGHTING SUPPLEMENT, GO TO THE LIGHTING SUPPLEMENT, OTHERWISE CONTINUE WITH SECTION O.

Section O. HOUSING MEASUREMENTS

GARAGE

BOX 21

INTERVIEWER: CHECK FOLDOUT PAGE: IF SINGLE-FAMILY OR MOBILE HOME, CONTINUE. OTHERWISE, SKIP TO O-2.

O-1. Please turn to Exhibit O-1. Which of these does your home have here? CIRCLE ALL THAT APPLY.

	<u>YES</u>	<u>NO</u>	
a. NO GARAGE	1	0	1266
b. ONE-CAR GARAGE	1	0	1267
c. TWO-CAR GARAGE	1	0	1268
d. THREE OR MORE CAR GARAGE	1	0	1269
e. COVERED CARPORT	1	0	1270

BASEMENT

IF SINGLE-FAMILY HOME OR BUILDING WITH 2-4 UNITS, ASK. OTHERWISE, --> [O-5].

O-2. Please turn to Exhibit O-2. Does your home have a basement, an enclosed crawl space, a crawl space open to the outside, a concrete slab, or a combination of these?

A BASEMENT	1	
CRAWL SPACE -- ENCLOSED	2	
CRAWL SPACE -- OPEN TO THE OUTSIDE	3	1271
CONCRETE SLAB	4 --> [O-5]	
COMBINATION (MARK ALL BELOW THAT APPLY)	5	
BASEMENT	1	1272
CRAWL SPACE -- ENCLOSED	2	1273
CRAWL SPACE -- OPEN TO THE OUTSIDE	3	1274
CONCRETE SLAB	4	1275

INTERVIEWER: REMEMBER TO INCLUDE BASEMENT ON DIAGRAM. DO NOT INCLUDE CRAWL SPACE.

O-3. About how much of the basement/crawl space would you say is warm enough to sit, work, or play in during the winter months -- all, part, or none?

- ALL 1
- PART 2
- NONE 0

1276

O-4. Do you have insulation in the floor area above the basement/crawl space?

- YES, ALL 1
- YES, PART 2
- NO 0
- DON'T KNOW 6

1277

O-5. Please turn to Exhibit O-5. How much longer do you plan to live in this home?

- LESS THAN 1 YEAR 01
- 1-2 YEARS 02 --> [O-7]
- 3-5 YEARS 03 --> [O-7]
- 6-10 YEARS 04 --> [O-7]
- MORE THAN 10 YEARS 05 --> [O-7]
- REST OF MY LIFE/AS LONG AS I CAN 06 --> [O-7]
- NOT SURE 96

1278-79

IF 'LESS THAN 1 YEAR' ON O-5, ASK:

O-6. Do you know where and when you may be moving?

- YES 1
- ADDRESS OR CITY: _____
- MONTH/YEAR: _____
- NO 2

1280

MEASUREMENTS

INTERVIEWER: ALWAYS DO MEASUREMENTS FROM THE OUTSIDE WHERE POSSIBLE. IF NOT POSSIBLE, READ TO RESPONDENT: *With your home, I think it would be most appropriate to measure the inside.*

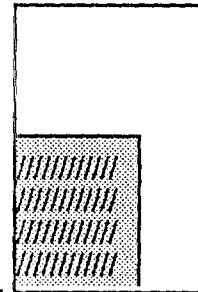
UNHEATED AREAS: WITHIN THE HOUSING UNIT THAT YOU MEASURE, INDICATE UNHEATED AREA(S) IN THE DIAGRAMS WITH SHADING. GIVE DIMENSIONS OF UNHEATED AREA(S).

USE BLANK PAGES FACING MEASUREMENT PAGES FOR ADDITIONAL SKETCHES, MEASUREMENTS, AND EXPLANATIONS.

RECORD ALL MEASUREMENTS ON DIAGRAMS TO NEAREST FOOT.

DO NOT INCLUDE OPEN PORCH IN DIAGRAM

SHADE UNHEATED AREAS THIS WAY.....



O-7. To understand the usage of energy in your (house/apartment), we need to know its size in square feet. With your permission, I would like to measure your home.

MEASUREMENTS FOLLOW 1
RESPONDENT REFUSED 7 --> [BOX 22: 1281
OTHER: 2 PAGE 110]

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NOTES REGARDING BASEMENT MEASUREMENTS

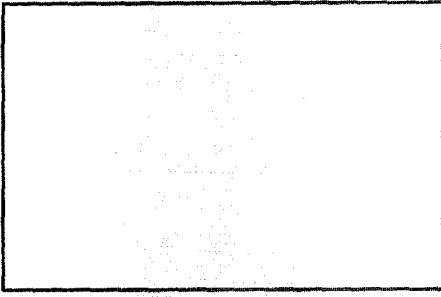
FOR OFFICE USE ONLY

Floor Codes				Unit A		Unit B			Unit C			Unit D			# of Units
1301	02	03	04	05-06	07-08	09	10-11	12-13	14	15-16	17-18	19	20-21	22-23	24

BASEMENT MEASUREMENTS FOR HOME/APARTMENT

Single-Family Home or Townhouse []	Apartment in 2-4 Unit Building []	Apartment in 5+ Unit Building []	Mobile Home []
Garage type: <input type="checkbox"/> No garage this floor <input type="checkbox"/> Heated attached (INCLUDE) <input type="checkbox"/> Unheated attached (INCLUDE/SHADE) <input type="checkbox"/> Detached (DO NOT INCLUDE)	EXCLUDE GARAGE	DO NOT MEASURE BASEMENT	MOBILE HOMES DO NOT HAVE BASEMENTS
Include all enclosed space in basement Do not measure crawl space	Include only space for exclusive or primary use by household	↓	↓
Floor is: <input type="checkbox"/> All heated <input type="checkbox"/> All unheated (SHADE) <input type="checkbox"/> Partially heated (SHADE UNHEATED PART)			

INTERVIEWER: REMEMBER TO SHADE UNHEATED AREAS. IN A BASEMENT, THE AREA IS HEATED IF IT WARM ENOUGH TO SIT, WORK, OR PLAY IN DURING THE WINTER.

Diagram for Floor with Rectangular Shape	Diagram for Floor if Other than Rectangular
 <div style="text-align: right; margin-top: 20px;">[]</div> <div style="text-align: center; margin-top: 20px;">[]</div>	

INTERVIEWER: Measurements based on Inside Outside Other: Specify _____

NOTES REGARDING FIRST FLOOR MEASUREMENTS

FOR OFFICE USE ONLY

Floor Codes			Unit A			Unit B			Unit C			Unit D			# of Units
1326	27	28	29	30-31	32-33	34	35-36	37-38	39	40-41	42-43	44	45-46	47-48	49

FIRST FLOOR MEASUREMENTS FOR HOME/APARTMENT

Single-Family Home or Townhouse []	Apartment in 2-4 Unit Building []	Apartment in 5+ Unit Building []	Mobile Home []
Include all space enclosed from the weather			
Garage type: <input type="checkbox"/> No garage <input type="checkbox"/> Heated attached (INCLUDE) <input type="checkbox"/> Unheated attached (INCLUDE/SHADE) <input type="checkbox"/> Detached (DO NOT INCLUDE)	EXCLUDE GARAGE	EXCLUDE GARAGE	Garage type: <input type="checkbox"/> No garage <input type="checkbox"/> Heated attached (INCLUDE) <input type="checkbox"/> Unheated Attached (INCLUDE/SHADE) <input type="checkbox"/> Detached (DO NOT INCLUDE)
Floor is: <input type="checkbox"/> All heated <input type="checkbox"/> All unheated - SHADE <input type="checkbox"/> Part heated and part unheated - SHADE UNHEATED PART			
Porch type: <input type="checkbox"/> No porch <input type="checkbox"/> Heated <u>Enclosed</u> Porch - INCLUDE IN DRAWING <input type="checkbox"/> Unheated <u>Enclosed</u> Porch -- INCLUDE IN DRAWING AND SHADE <input type="checkbox"/> Open Porch -- DO NOT INCLUDE			

Diagram for Floor with Rectangular Shape	Diagram for Floor if Other than Rectangular
<div style="border: 1px solid black; width: 80%; height: 80%; margin: 0 auto;"></div> <p style="margin-top: 20px;">[]</p>	
INTERVIEWER: Measurements based on <input type="checkbox"/> Inside <input type="checkbox"/> Outside <input type="checkbox"/> Other: Specify _____	
IF NO ADDITIONAL FLOORS OR ATTIC, GO TO BOX 22, PAGE 110.	

NOTES REGARDING SECOND FLOOR MEASUREMENTS

FOR OFFICE USE ONLY

Floor Codes			Unit A			Unit B			Unit C			Unit D			# of Units
1351	52	53	54	55-56	57-58	59	60-61	62-63	64	65-66	67-68	69	70-71	72-73	74

SECOND FLOOR OF HOME/APARTMENT

Single-Family Home or Townhouse []	Apartment In 2-4 Unit Building []	Apartment In 5+ Unit Building []	Mobile Home []
Garage type: <input type="checkbox"/> No garage <input type="checkbox"/> Heated attached (INCLUDE) <input type="checkbox"/> Unheated attached (INCLUDE/SHADE) <input type="checkbox"/> Detached (DO NOT INCLUDE)	EXCLUDE GARAGE	EXCLUDE GARAGE	Garage type: <input type="checkbox"/> No garage <input type="checkbox"/> Heated attached (INCLUDE) <input type="checkbox"/> Unheated attached (INCLUDE/SHADE) <input type="checkbox"/> Detached (DO NOT INCLUDE)
Floor is: <input type="checkbox"/> All heated <input type="checkbox"/> All unheated - SHADE <input type="checkbox"/> Part heated and part unheated - SHADE UNHEATED PART			
Porch type: <input type="checkbox"/> No Porch <input type="checkbox"/> Heated <u>Enclosed</u> Porch - INCLUDE IN DRAWING <input type="checkbox"/> Unheated <u>Enclosed</u> Porch -- INCLUDE IN DRAWING AND SHADE <input type="checkbox"/> Open Porch -- DO NOT INCLUDE			

Diagram for Floor with Rectangular Shape	Diagram for Floor if Other than Rectangular
<div style="border: 1px solid black; width: 80%; margin: 0 auto; height: 80%;"></div> <div style="text-align: center; margin-top: 10px;">[]</div>	
[]	
INTERVIEWER: Measurements based on <input type="checkbox"/> Inside <input type="checkbox"/> Outside <input type="checkbox"/> Other: Specify _____	
IF NO ADDITIONAL FLOORS OR ATTIC, GO TO BOX 22, PAGE 110.	

THIRD FLOOR OF HOME/APARTMENT

Single-Family Home or Townhouse <input type="checkbox"/>	Apartment in 2-4 Unit Building <input type="checkbox"/>	Apartment in 5+ Unit Building <input type="checkbox"/>	Mobile Home <input type="checkbox"/>
Include all space enclosed from the weather			
Floor is: <ul style="list-style-type: none"> <input type="checkbox"/> All heated <input type="checkbox"/> All unheated - SHADE <input type="checkbox"/> Part heated and part unheated - SHADE UNHEATED PART 			
Porch type: <ul style="list-style-type: none"> <input type="checkbox"/> No porch <input type="checkbox"/> Heated <u>Enclosed</u> Porch - INCLUDE IN DRAWING <input type="checkbox"/> Unheated <u>Enclosed</u> Porch -- INCLUDE IN DRAWING AND SHADE <input type="checkbox"/> Open Porch -- DO NOT INCLUDE 			

Diagram for Floor with Rectangular Shape <div style="border: 1px solid black; width: 80%; height: 150px; margin: 10px auto;"></div> <div style="text-align: center; margin-top: 10px;"> <input type="checkbox"/> </div>	Diagram for Floor if Other than Rectangular <div style="border: 1px solid black; width: 100%; height: 150px; margin: 10px auto;"></div>
INTERVIEWER: Measurements based on <input type="checkbox"/> Inside <input type="checkbox"/> Outside <input type="checkbox"/> Other: Specify _____	
IF NO ADDITIONAL FLOORS OR ATTIC, GO TO BOX 22, PAGE 110.	

FOR OFFICE USE ONLY

Floor Codes			Unit A				Unit B			Unit C			Unit D			# of Units
1376	77	78	79	80-81	82-83	84	85-86	87-88	89	90-91	92-93	94	95-96	97-98	99	

ATTIC OF HOME

INTERVIEWER: IF APARTMENT IN 2-4 UNITS, ATTIC MUST BE FOR EXCLUSIVE USE OF HOUSEHOLD.

IF APARTMENT IN 5+ UNITS BUILDING, DO NOT INCLUDE

Single-Family Home or Townhouse []	Apartment in 2-4 Unit Building []	Apartment in 5+ Unit Building []	Mobile Home []
--	---	--	------------------------

Attic is:

[] Heated - DRAW

[] All unheated and finished - DRAW

[] Part heated and part unheated - SHADE UNHEATED PART

[] Unheated and unfinished - DO NOT DRAW

<p>Diagram for Attic with Rectangular Shape</p> <div style="border: 1px solid black; width: 80%; height: 100px; margin: 10px auto;"></div> <p style="text-align: center;">[]</p> <p style="text-align: center;">[]</p>	<p>Diagram for Floor if Other than Rectangular</p>
---	---

INTERVIEWER: Measurements based on [] Inside [] Outside [] Other: Specify _____

FOR OFFICE USE ONLY

Floor Codes			Unit A			Unit B			Unit C			Unit D			# of Units
1400	01	02	03	04-05	06-07	08	09-10	11-12	13	14-15	16-17	18	19-20	21-22	23

BOX 22

INTERVIEWER: DID YOU REMEMBER TO INSPECT VEHICLES FOR VIN NUMBERS AND ODOMETER READINGS?	
YES	[]
NO - PLEASE DO SO NOW (VINS ON PAGE 94)	[]

This is the end of the interview. Thank you very much for your help.

TIME ENDED: _____

Section P. INTERVIEWER OBSERVATION

FILL IN AND CHECK THAT ALL INFORMATION IS COMPLETE:

P-1. LENGTH OF INTERVIEW: _____ MINUTES 1424-26

P-2. INTERVIEWER'S SIGNATURE: _____ DATE: _____ 1427-30

P-3. INTERVIEWER'S I.D.#: _____ 1431-34

FILL THIS OUT AFTER YOU COMPLETE THE INTERVIEW.

P-4. WHAT PROBLEMS, IF ANY, DID YOU HAVE IN MEASURING THIS (HOME/APARTMENT)?

P-5. WHAT EFFECT, IF ANY, DID THESE PROBLEMS HAVE ON THE ACCURACY OF YOUR MEASUREMENTS?

P-6. WHAT IS UNIQUE OR UNUSUAL ABOUT THIS HOUSEHOLD THAT IS RELATED TO ITS USE OF ENERGY?

P-7. WHICH QUESTION WAS THE MOST TROUBLESOME FOR THE RESPONDENT TO UNDERSTAND OR ANSWER?

P-8. WAS THERE A PROBLEM GETTING THE AUTHORIZATION FORM SIGNED? WHAT COULD BE DONE TO DEAL WITH THIS IN THE FUTURE?

P-9. WHAT ELSE WOULD IT BE HELPFUL FOR US TO KNOW ABOUT THIS HOUSING UNIT OR INTERVIEW?

P-10. DO YOU HAVE ANY SUGGESTIONS TO IMPROVE THE SURVEY FOR HOMES LIKE THIS ONE?



