2015 Residential Energy Consumption Survey (RECS)

Household Questionnaire – Computer-Assisted Personal Interview (CAPI)

Form EIA-457A

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HOW TO USE THIS QUESTIONNAIRE

Respondents from sampled housing units completed the 2015 Residential Energy Consumption Survey (RECS) household questionnaire by one of three modes: a *computer-assisted personal interview (CAPI)*, a *self-administered paper questionnaire*, or a *self-administered web questionnaire*. This document is a paper representation of the 2015 RECS computer-assisted questionnaire, which is programmed using a software called Blaise. These interviews were administered on a laptop brought to the sampled housing unit by a professional interviewer. The 2015 RECS self-administered paper questionnaire is separately available on the EIA website. The 2015 RECS self-administered web questionnaire is not publicly accessible, but is designed to be as similar as possible to the paper questionnaire.

PLEASE NOTE: All the question fills and skip patterns were handled automatically by the Blaise software and were transparent to the interviewer, so this document appears much more complex than the actual RECS instrument.

Each question is formatted as follows:

Variable name (New) (Changed from 2009)					
ASK					
Interviewer instructions Question text and response set					
NEXT					
Derived		**Show Card**		**CARI**	

Comments:
- **(New)** or (**Changed from 2009)** are displayed next to the variable name when applicable
- **ASK** describes what needs to be true for a question to be asked for a particular respondent
- Interviewers are trained to not read the instructions (shown in blue) aloud to respondents
- **NEXT** lists the variable name for the following question
- **Derived** is "Yes" if the variable is calculated for some or all respondents based on their responses to other questions
- **Show Card** is "Yes" if a physical card with a list of response options or pictures is shown to the respondent while the interviewer reads the question aloud
- **CARI** is "Yes" if the question was selected for computer audio-recorded interviewing (CARI), which means the interaction between the interviewer and respondent was recorded to allow for data quality review and analysis

If referencing this questionnaire as a resource when using the public use data file, most variable names and response sets will match those shown here. However, some variable names and response sets had to be modified when combining data across the three questionnaire modes. For that reason, the variable and response set codebook that accompanies the public use data file is the best source for variable descriptions and response codes.

SECTION A: STRUCTURAL CHARACTERISTICS

CARI (New)					
ASK	All respondents				

Some parts of this interview will be recorded for quality control purposes. I'd like to continue now unless you have any questions.
 	
   1 Gives consent to record interview
   0 Does not give consent to record interview					

NEXT	CONFIRM				
Derived		**Show Card**		**CARI**	Yes

CONFIRM					
ASK	All respondents				

Interviewer Task: If you haven't already, confirm you are at the correct address. Record your answer below.
 	
   1 Correct address as listed
   2 Mostly correct address, needs updating
   0 Not at correct address					

NEXT	If CONFIRM=1: INTHUQ If CONFIRM=2: CSTREET If CONFIRM=0: This is not the housing unit you are supposed to be interviewing. Excuse yourself and terminate the interview.				
Derived		**Show Card**		**CARI**	Yes

CSTREET					
ASK	If CONFIRM=2				
Interviewer Task: You are at the correct housing unit to be interviewed but there is a difference between the listed address and the actual address. Enter the actual housing unit address and continue the interview. Record the street address here. Open response					
NEXT	CCITY				
Derived		**Show Card**		**CARI**	Yes

CCITY					
ASK	If CONFIRM=2				

Interviewer Task: Record the city here.

    Open response

NEXT	CSTATE				
Derived		**Show Card**		**CARI**	

CSTATE					
ASK	If CONFIRM=2				

Interviewer Task: Record the state here.

    Open response

NEXT	CZIP				
Derived		**Show Card**		**CARI**	

CZIP					
ASK	If CONFIRM=2				

Interviewer Task: Record the zip code here.

    Open response

NEXT	INTHUQ				
Derived		**Show Card**		**CARI**	

INTHUQ	
ASK	All respondents

Interviewer Task: Record your observation of the housing unit type.

    2 Single-family detached house (a house detached from any other house)
    3 Single-family attached house (a house attached to one or more houses)
    4 Apartment building with 2 - 4 units
    5 Apartment building 5 or more units
    1 Mobile home

NEXT	If INTHUQ in(4,5): APTFLOOR
	If INTHUQ=3: SFAEND
	Else: PRIMRES

Derived		Show Card		CARI	

APTFLOOR (New)

ASK	If INTHUQ in(4,5)

Interviewer Task: Record what floor this apartment is on. If this is a basement apartment, enter "0."

    0 - 99

NEXT	APTINOUT

Derived		Show Card		CARI	

APTINOUT (New)

ASK	If INTHUQ in(4,5)

Interviewer Task: Record whether the main entrance to this apartment opens to an enclosed hallway, or to the outside.

    1 Enclosed hallway
    2 Outside

NEXT	PRIMRES

Derived		Show Card		CARI	

SFAEND (New)

ASK	If INTHUQ=3

Interviewer Task: Record whether this single-family attached home is an end unit.

    1 Yes
    0 No

NEXT	PRIMRES

Derived		Show Card		CARI	

PRIMRES

ASK	All respondents

I'd like to start with some general questions about your home.

Your primary residence is the home where you live for most of the year. Is this your primary residence?

    1 Yes
    0 No

NEXT	If PRIMRES=0: PRIMRESA If PRIMRES=1: CNFRMHUQ				
Derived		**Show Card**		**CARI**	

PRIMRESA

ASK	If PRIMRES=0

Is this the primary residence for anyone else who currently lives in this home?

    1 Yes
    0 No

NEXT	If PRIMRESA=1: Complete interview with primary resident when they are available. If PRIMRESA=0: This housing unit is out of scope. Excuse yourself and terminate the interview.				
Derived		**Show Card**		**CARI**	

CNFRMHUQ

ASK	If PRIMRES=1

My observation is that this residence is a [FILL: INTHUQ]. Do you agree with my observation?

    1 Yes
    0 No

NEXT	If CNFRMHUQ=0: ALTHUQ If CNFRMHUQ=1: KOWNRENT				
Derived		**Show Card**		**CARI**	Yes

ALTHUQ					
ASK	If CNFRMHUQ=0				

Which of the following do you believe best describes this home? Is it a single-family detached house, a single-family attached house, an apartment building with 2-4 units, an apartment building with 5 or more units, or a mobile home?
 	
    2 Single-family detached house
    3 Single-family attached house
    4 Apartment building with 2 - 4 units
    5 Apartment building 5 or more units
    1 Mobile home					

NEXT	REVHUQ				
Derived		**Show Card**		**CARI**	

REVHUQ					
ASK	If CNFRMHUQ=0				

Interviewer Task: If you agree with the householder's description, record "Use householder's description" below, and use the alternative as the type of housing unit throughout the remainder of the interview.
 	
If you disagree with the householder's description, record "Use RECS definition" below and tell the householder that: Although you have described this home as a [FILL: ALTHUQ], the definitions given to me by the Department of Energy describe this home as a [FILL:INTHUQ]. I have recorded your description, but in order to be consistent, I will need to refer to this home as a [FILL: INTHUQ] for the rest of the survey.
 	
    1 Use householder's definition
    2 Use RECS definition					

NEXT	KOWNRENT				
Derived		**Show Card**		**CARI**	

TYPEHUQ					
ASK					
Derived					
NEXT					
Derived	Yes	**Show Card**		**CARI**	

KOWNRENT					
ASK	All respondents				

Is this home…

    1 Owned or being bought by someone in your household,
    2 Rented, or
    3 Occupied without payment of rent?

NEXT	KOWNCOND				
Derived		**Show Card**		**CARI**	

KOWNCOND					
ASK	All respondents				

Is this home part of a condominium or cooperative?

    1 Yes
    0 No

NEXT	If KOWNCOND=1: CONDCOOP Else: YEARMADE				
Derived		**Show Card**		**CARI**	

CONDCOOP					
ASK	If KOWNCOND=1				

Which is it, a condominium or cooperative?

    1 Condominium
    2 Cooperative

NEXT	YEARMADE				
Derived		**Show Card**		**CARI**	

YEARMADE (Changed from 2009)	
ASK	All respondents

In what year was this structure built? Your best estimate is fine.

    1600 - 2016

NEXT	If YEARMADE in(-8,-9): YEARMADERANGE Else: OCCUPYY				
Derived		**Show Card**		**CARI**	Yes

YEARMADERANGE (Changed from 2009)

ASK	If YEARMADE in(-8,-9)

Place show card 2 in front of the respondent.

Please look at Card 2. Although you do not know the exact year this structure was built, it is helpful to have an estimate. About when was this structure built?

    1 Before 1950
    2 1950 to 1959
    3 1960 to 1969
    4 1970 to 1979
    5 1980 to 1989
    6 1990 to 1999
    7 2000 to 2009
    8 2010 to 2016

NEXT	OCCUPYY				
Derived	Yes	**Show Card**	Yes	**CARI**	Yes

OCCUPYY (Changed from 2009)

ASK	All respondents

In what year did your household move in? Your best estimate is fine.

    1600 - 2016

NEXT	If OCCUPYY in(-8,-9): OCCUPYYRANGE Else if OCCUPYY in(2015,2016): OCCUPYM Else: VACANT				
Derived		**Show Card**		**CARI**	

OCCUPYYRANGE (Changed from 2009)					
ASK	If OCCUPYY in(-8,-9)				

Place show card 2 in front of the respondent.

Please look at Card 2. Although you do not know the exact year your household moved in, it is helpful to have an estimate. About when did your household move in?

1 Before 1950
2 1950 to 1959
3 1960 to 1969
4 1970 to 1979
5 1980 to 1989
6 1990 to 1999
7 2000 to 2009
8 2010 to 2016

NEXT	VACANT				
Derived	Yes	**Show Card**	Yes	**CARI**	

OCCUPYM (Changed from 2009)					
ASK	If OCCUPYY in(2015,2016)				

In what month of that year did your household move in?

1 January
2 February
3 March
4 April
5 May
6 June
7 July
8 August
9 September
10 October
11 November
12 December

NEXT	VACANT				
Derived		**Show Card**		**CARI**	

VACANT (New)	
ASK	All respondents

During the last year, was your home vacant for one or more months?

1 Yes
0 No

NEXT	If TYPEHUQ=4: CONVERSION If TYPEHUQ=5: NUMFLRS If TYPEHUQ=1: TYPEHUQ4 If TYPEHUQ in(2,3): CELLAR				
Derived		**Show Card**		**CARI**	

CONVERSION (Changed from 2009)					
ASK	If TYPEHUQ=4				

Was your building originally designed and built as an apartment building or was it converted into an apartment building?
 	
   1 Built as an apartment building
   2 Converted into an apartment building					

NEXT	NUMAPTS				
Derived		**Show Card**		**CARI**	

NUMFLRS					
ASK	If TYPEHUQ=5				
How many floors are in this apartment building? 1 - 95					
NEXT	NUMAPTS				
Derived		**Show Card**		**CARI**	

NUMAPTS (Changed from 2009)					
ASK	If TYPEHUQ in(4,5)				
Approximately how many apartment units are in this building? 2 - 995					
NEXT	STUDIO				
Derived		**Show Card**		**CARI**	

TYPEHUQ4

ASK	If TYPEHUQ=1

Does your mobile home have any permanently attached structures, such as a room or porch that is enclosed from the wind and rain, that weren't part of the mobile home when it was first manufactured?

   1 Yes
   0 No

NEXT	BEDROOMS				
Derived		**Show Card**		**CARI**	

CELLAR (Changed from 2009)

ASK	If TYPEHUQ in(2,3)

Now think about the foundation of your home. Is any part of your home built over a basement?

   1 Yes
   0 No

NEXT	CRAWL				
Derived		**Show Card**		**CARI**	

CRAWL (Changed from 2009)

ASK	If TYPEHUQ in(2,3)

Is any part of your home built over a crawl space?

   1 Yes
   0 No

NEXT	CONCRETE				
Derived		**Show Card**		**CARI**	

CONCRETE (Changed from 2009)

ASK	If TYPEHUQ in(2,3)

Is any part of your home built on a concrete slab?

   1 Yes
   0 No

NEXT	If CELLAR=1: BASEFIN Else: ATTIC				
Derived		**Show Card**		**CARI**	

BASEFIN (Changed from 2009)					
ASK	If CELLAR=1				

For this survey, a "finished" basement has finishing materials on the floor, ceiling, and walls. Is all, some, or none of your basement finished?

   1 All
   2 Some
   3 None

NEXT	ATTIC				
Derived		**Show Card**		**CARI**	

ATTIC					
ASK	If TYPEHUQ in(2,3)				

An attic is an area directly below the roof, accessible by stairs, with space for you to stand upright and easily move about. Does your home have an attic?

   1 Yes
   0 No

NEXT	If ATTIC=1: ATTICFIN Else: STORIES				
Derived		**Show Card**		**CARI**	

ATTICFIN (Changed from 2009)					
ASK	If ATTIC=1				

For this survey, a "finished" attic has finishing materials on the floor, ceiling, and walls. Is all, some, or none of your attic finished?

   1 All
   2 Some
   3 None

NEXT	STORIES				
Derived		**Show Card**		**CARI**	

STUDIO

ASK	If TYPEHUQ in(4,5)

Is your apartment a one-room efficiency or studio apartment?

    1 Yes
    0 No

NEXT	If STUDIO=1: NCOMBATH Else: ONEFLRAPT

Derived		Show Card		CARI	

ONEFLRAPT (Changed from 2009)

ASK	If TYPEHUQ in(4,5) and STUDIO ne 1

Is the living space of your entire apartment unit on a single level?

    1 Yes
    0 No

NEXT	If ONEFLRAPT=0: NAPTFLRS Else: BEDROOMS

Derived	Yes	Show Card		CARI	

NAPTFLRS

ASK	If ONEFLRAPT=0

How many levels does your apartment unit have?

    2 - 9

NEXT	BEDROOMS

Derived	Yes	Show Card		CARI	

STORIES					
ASK	If TYPEHUQ in(2,3)				

Place show card 3 in front of the respondent.

Please look at Card 3. Not including basements or attics, how many stories does your home have?

    10 One story
    20 Two stories
    31 Three stories
    32 Four or more stories
    40 Split-level
    50 Some other type

NEXT	If STORIES=50: STORIESFU Else: BEDROOMS				
Derived		**Show Card**	Yes	**CARI**	

STORIESFU					
ASK	If STORIES=50				

Could you describe the building?

    Open response

NEXT	BEDROOMS				
Derived		**Show Card**		**CARI**	

BEDROOMS (Changed from 2009)					
ASK	If STUDIO ne 1				

How many bedrooms do you have in your home? [If TYPEHUQ in(2,3): Include bedrooms in finished attics or finished basements.]

    0 - 20

NEXT	NCOMBATH				
Derived	Yes	**Show Card**		**CARI**	

NCOMBATH (Changed from 2009)					
ASK	All respondents				
A full bathroom is one that has a sink with running water, a toilet, and either a bathtub or shower. How many full bathrooms do you have in your home? [If TYPEHUQ in(2,3): Include bathrooms in finished attics or finished basements.] 0 - 9					
NEXT	NHAFBATH				
Derived		**Show Card**		**CARI**	

NHAFBATH (Changed from 2009)					
ASK	All respondents				
A half-bathroom is one that has either a toilet or a bathtub or a shower. How many half bathrooms do you have? [If TYPEHUQ in(2,3): Include bathrooms in finished attics or finished basements.] 0 - 9					
NEXT	OTHROOMS				
Derived		**Show Card**		**CARI**	

OTHROOMS (Changed from 2009)					
ASK	If STUDIO ne 1				
Now think about other rooms in your home besides bedrooms and bathrooms. Not including unfinished areas, hallways, and closets, how many other rooms are there in your home? [If TYPEHUQ in(2,3): Include other rooms in finished attics or finished basements.] 1 - 20					
NEXT	If TYPEHUQ in(1,2,3): PRKGPLC1 If TYPEHUQ in(4,5): WALLTYPE				
Derived	Yes	**Show Card**		**CARI**	

TOTROOMS					
ASK					
Derived					
NEXT					
Derived	Yes	**Show Card**		**CARI**	

PRKGPLC1					
ASK	If TYPEHUQ in(1,2,3)				

Does your home have a garage that is attached to or part of your home?
 	
  1 Yes
  0 No					

NEXT	If PRKGPLC1=1: SIZEOFGARAGE Else: PRKGPLC2				
Derived		**Show Card**		**CARI**	

SIZEOFGARAGE					
ASK	If PRKGPLC1=1				

What is the size of that attached garage? Is it a one-car garage, a two-car garage, or is it a three-or-more-car garage?
 	
  1 One-car garage
  2 Two-car garage
  3 Three-or-more-car garage					

NEXT	GARGLOC				
Derived		**Show Card**		**CARI**	

GARGLOC					
ASK	If PRKGPLC1=1				

Is the garage attached to or part of the [If CELLAR=1: basement,] first floor, or some other floor of the home?
 	
  1 Part of basement
  2 Part of first floor
  3 Some other floor					

NEXT	WALLTYPE				
Derived		**Show Card**		**CARI**	

PRKGPLC2	
ASK	If PRKGPLC1=0

Does your home have a detached garage or covered carport?
 	
  1 Yes
  0 No	

NEXT	If PRKGPLC2=1: SIZEOFDETACH Else: WALLTYPE				
Derived		**Show Card**		**CARI**	

SIZEOFDETACH					
ASK	If PRKGPLC2=1				

Which does your home have? Is it a one-car garage, a two-car garage, a three-or-more-car garage, or is it a carport?

    1 One-car garage
    2 Two-car garage
    3 Three-or-more-car garage
    4 Carport

NEXT	WALLTYPE				
Derived		**Show Card**		**CARI**	

WALLTYPE (Changed from 2009)					
ASK	All respondents				

Place show card 4 in front of the respondent.

Please look at Card 4. What is the major outside wall material for this housing unit?

    1 Brick
    2 Wood
    3 Siding
    4 Stucco
    5 Shingle (composition)
    6 Stone
    7 Concrete or concrete block
    9 Other

NEXT	If WALLTYPE=9: WALLTYPEFU Else if TYPEHUQ in(1,2,3,4): ROOFTYPE Else: HIGHCEIL				
Derived		**Show Card**	Yes	**CARI**	

WALLTYPEFU					
ASK	If WALLTYPE=9				

Specify the type of other outside wall material.

    Open response

NEXT	If TYPEHUQ in(1,2,3,4): ROOFTYPE Else: HIGHCEIL				
Derived		**Show Card**		**CARI**	

ROOFTYPE (Changed from 2009)	
ASK	If TYPEHUQ in(1,2,3,4)

Place show card 5 in front of the respondent.

Please look at Card 5. What is the major roofing material on this housing unit?

  1 Ceramic or clay tiles
  2 Wood shingles/shakes
  3 Metal
  4 Slate or synthetic shake
  5 Shingles (composition or asphalt)
  7 Concrete tiles
  9 Other

NEXT	If ROOFTYPE=9: ROOFTYPEFU Else if TYPEHUQ=1: SLDDRS Else: HIGHCEIL				
Derived		**Show Card**	Yes	**CARI**	

ROOFTYPEFU	
ASK	If ROOFTYPE=9

Specify the type of other roofing material.

  Open response

NEXT	If TYPEHUQ=1: SLDDRS Else: HIGHCEIL				
Derived		**Show Card**		**CARI**	

HIGHCEIL	
ASK	If TYPEHUQ in(2,3,4,5)

Most ceilings are about 8 feet high which is about a foot higher than a standard door. Are any of the ceilings in your home unusually high?

  1 Yes
  0 No

NEXT	If HIGHCEIL ne 0: CATHCEIL Else: SLDDRS				
Derived		**Show Card**		**CARI**	

CATHCEIL

ASK	If HIGHCEIL ne 0

Cathedral ceilings are usually in rooms on the main floor and go all the way up to the roof. Are any of the ceilings in your home cathedral ceilings?

    1 Yes
    0 No

NEXT	SLDDRS				
Derived		**Show Card**		**CARI**	

SLDDRS (Changed from 2009)

ASK	All respondents

Does your home have any sliding glass doors?

    1 Yes
    0 No

NEXT	If SLDDRS=1: DOOR1SUM Else: WINDOWS				
Derived		**Show Card**		**CARI**	

DOOR1SUM (Changed from 2009)

ASK	If SLDDRS=1

How many sliding glass doors does your home have? Count each pair of sliding glass doors as one door.

    0 - 10

NEXT	WINDOWS				
Derived		**Show Card**		**CARI**	

WINDOWS (Changed from 2009)					
ASK	All respondents				

Place show card 6 in front of the respondent.

Please look at Card 6. About how many windows does your home have?

    10 1 to 2
    20 3 to 5
    30 6 to 9
    41 10 to 15
    42 16 to 19
    50 20 to 29
    60 30 or more

NEXT	TYPEGLASS				
Derived		**Show Card**	Yes	**CARI**	

TYPEGLASS (Changed from 2009)					
ASK	All respondents				

Not including storm windows, which best describes the type of glass in most of the windows in your home? Is it single-pane glass, double-pane glass, or triple-pane glass?

    1 Single-pane glass
    2 Double-pane glass
    3 Triple-pane glass

NEXT	WINFRAME				
Derived		**Show Card**		**CARI**	

WINFRAME (New)					
ASK	All respondents				

Place show card 7 in front of the respondent.

Please look at Card 7. What frame material is used for most of the windows in your home?

    1 Wood
    2 Metal (aluminum)
    3 Vinyl
    4 Composite
    5 Fiberglass
    9 Some other material

NEXT	If WINFRAME=9: WINFRAMEFU Else: NEWGLASS				
Derived		**Show Card**	Yes	**CARI**	Yes

WINFRAMEFU (New)					
ASK	If WINFRAME=9				

Could you tell me what that other material is?

    Open response

NEXT	NEWGLASS				
Derived		**Show Card**		**CARI**	

NEWGLASS					
ASK	All respondents				

How many of the windows in your home have been replaced since your household moved in? Is it all of the windows, some of the windows, or none of the windows?

    1 All of the windows
    2 Some of the windows
    3 None of the windows

NEXT	ADQINSUL				
Derived		**Show Card**		**CARI**	

ADQINSUL					
ASK	All respondents				

Regarding the insulation in your home, overall, would you say that your home is well insulated, adequately insulated, or poorly insulated?

    1 Well insulated
    2 Adequately insulated
    3 Poorly insulated
    4 No insulation (if volunteered)

NEXT	DRAFTY				
Derived		**Show Card**		**CARI**	

DRAFTY (Changed from 2009)					
ASK	All respondents				

How often do you or other members of your household find your home too drafty? Would you say it is…
 	
    1 All the time,
    2 Most of the time,
    3 Some of the time, or
    4 Never?					

NEXT	INSTLINS				
Derived		**Show Card**		**CARI**	

INSTLINS (Changed from 2009)					
ASK	All respondents				

Insulation is often added to the attic, ceiling, walls, crawl space, ducts, or pipes. Has any insulation been replaced or added to your home since your household moved in?
 	
    1 Yes
    0 No					

NEXT	INSTLWS				
Derived		**Show Card**		**CARI**	

INSTLWS					
ASK	All respondents				

Caulking and weather stripping is often done to seal windows, doors, and ducts. Has any portion of your home been caulked or weather stripped in order to seal air leaks since your household moved in?
 	
    1 Yes
    0 No					

NEXT	If TYPEHUQ in(2,3): ADDITION Else: UGASHERE				
Derived		**Show Card**		**CARI**	

ADDITION (New)					
ASK	If TYPEHUQ in(2,3)				

To the best of your knowledge, have any rooms or spaces been added to your home since it was originally constructed?
 	
   1 Yes
   0 No					

NEXT	UGASHERE				
Derived		**Show Card**	Yes	**CARI**	Yes

UGASHERE (New)					
ASK	All respondents				

Is natural gas from underground pipes available in this neighborhood?
 	
   1 Yes
   0 No					

NEXT	Section B				
Derived		**Show Card**		**CARI**	

IVCOMMAFILTER					
ASK	All respondents				

Interviewer Task: If you have any comments that might suggest that the data collected in the housing unit characteristics section should be analyzed by central office staff, enter 1. If you have no comments regarding the quality of data entered in this section, enter 2.
 	
   1 I have comments regarding the quality of data in this section
   2 I do not have comments					

NEXT	If IVCOMMAFILTER=1: IVCOMMA Else: Section B				
Derived		**Show Card**		**CARI**	

IVCOMMA	
ASK	If IVCOMMAFILTER=1
Interviewer Task: Record any information here about the characteristics of this housing unit that might provide clarification to the respondent's answers. Comments are not required but are encouraged to describe unique housing unit or household characteristics. Use this space to help explain extraordinary or abnormal responses. Open response	

NEXT	Section B				
Derived		**Show Card**		**CARI**	

SECTION B: KITCHEN APPLIANCES

STOVEN (Changed from 2009)					
ASK	All respondents				
Now I would like to ask you about kitchen appliances. Let's start with major cooking appliances. Place show card 8 in front of the respondent. Please look at Card 8. This first picture shows a stove or range, which has both a cooktop and an oven. How many stoves do you have in your home? 0 - 9					
NEXT	If STOVEN>0: STOVENFUEL Else: STOVE				
Derived		**Show Card**	Yes	**CARI**	

STOVENFUEL (Changed from 2009)					
ASK	If STOVEN>0				

What fuel does your [If STOVEN>1: most-used] stove or range use? Is it electricity, natural gas from underground pipes, propane (bottled gas), dual fuel, or some other fuel?
 	
   5 Electricity
   1 Natural gas from underground pipes
   2 Propane (bottled gas)
  13 Dual fuel
  21 Some other fuel					

NEXT	If STOVENFUEL=13: DUALCOOKTFUEL Else if STOVENFUEL=21: STOVENFUELFU Else: COOKTUSE				
Derived		**Show Card**		**CARI**	

DUALCOOKTFUEL (New)	
ASK	If STOVENFUEL=13

What fuel does the cooktop part of your dual fuel stove or range use? Is it…
 	
   5 Electricity,
   1 Natural gas from underground pipes,
   2 Propane (bottled gas), or
  21 Some other fuel?	

NEXT	DUALOVENFUEL				
Derived		**Show Card**		**CARI**	

DUALOVENFUEL (New)	
ASK	If STOVENFUEL=13

What fuel does the oven part of your dual fuel stove or range use? Is it…

    5 Electricity,
    1 Natural gas from underground pipes,
    2 Propane (bottled gas), or
  21 Some other fuel?

NEXT	COOKTUSE				
Derived		**Show Card**		**CARI**	

STOVENFUELFU	
ASK	If STOVENFUEL=21

Specify the type of other fuel used.

    Open response

NEXT	COOKTUSE				
Derived		**Show Card**		**CARI**	

COOKTUSE (New)	
ASK	If STOVEN>0

In a typical week, about how many times is the cooktop part of your [If STOVEN>1: most-used] stove or range used? If it's not used, then you can answer "0".

    0 - 50

NEXT	OVENUSE				
Derived		**Show Card**		**CARI**	

OVENUSE (Changed from 2009)	
ASK	If STOVEN>0

In a typical week, about how many times is the oven part of your [If STOVEN>1: most-used] stove or range used? If it's not used, then you can answer "0".

    0 - 50

NEXT	OVENCLN
Derived		**Show Card**		**CARI**	

OVENCLN (Changed from 2009)

ASK	If STOVEN>0

Does the oven part of your [If STOVEN>1: most-used] stove or range have a self-cleaning feature?

   1 Yes
   0 No

NEXT	STOVE
Derived		**Show Card**		**CARI**	

STOVE (Changed from 2009)

ASK	All respondents

Place show card 8 in front of the respondent.

Please look at Card 8. The second picture shows a separate cooktop without an oven. How many separate cooktops without an oven do you have in your home?

   0 - 9

NEXT	If STOVE>0: STOVEFUEL Else if STOVEN>0: RANGEHOOD Else: OVEN
Derived		**Show Card**	Yes	**CARI**	

STOVEFUEL

ASK	If STOVE>0

What fuel does your [If STOVE>1: most-used] separate cooktop use? Is it electricity, natural gas from underground pipes, propane (bottled gas) or some other fuel?

   5 Electricity
   1 Natural gas from underground pipes
   2 Propane (bottled gas)
  21 Some other fuel

NEXT	If STOVEFUEL=21: STOVEFUELFU Else: SEPCOOKTUSE
Derived		**Show Card**		**CARI**	

STOVEFUELFU					
ASK	If STOVEFUEL=21				
Specify the type of other fuel. Open response					
NEXT	SEPCOOKTUSE				
Derived		**Show Card**		**CARI**	

SEPCOOKTUSE (New)					
ASK	If STOVE>0				
In a typical week, about how many times is your [If STOVE>1: most-used] separate cooktop used? If it's not used, then you can answer "0". 0 - 50					
NEXT	RANGEHOOD				
Derived		**Show Card**		**CARI**	

RANGEHOOD (New)					
ASK	If STOVEN>0 or STOVE>0				

Does your household have a range hood or fan over your stove or cooktop?
 	
    1 Yes
    0 No					

NEXT	If RANGEHOOD=1: HOODVENT Else: OVEN				
Derived		**Show Card**		**CARI**	

HOODVENT (New)					
ASK	If RANGEHOOD=1				

Is your range hood or fan vented to the outside?
 	
    1 Yes
    0 No					

NEXT	OVEN				
Derived		**Show Card**		**CARI**	

OVEN (Changed from 2009)					
ASK	All respondents				

Place show card 8 in front of the respondent.

Please look at Card 8. The third picture shows a separate wall oven. How many separate wall ovens do you have in your home?

    0 - 9

NEXT	If OVEN>0: OVENFUEL Else: MICRO				
Derived		**Show Card**	Yes	**CARI**	

OVENFUEL					
ASK	If OVEN>0				

What fuel does your [If OVEN>1: most-used] separate wall oven use? Is it electricity, natural gas from underground pipes, propane (bottled gas) or some other fuel?

    5 Electricity
    1 Natural gas from underground pipes
    2 Propane (bottled gas)
   21 Some other fuel

NEXT	If OVENFUEL=21: OVENFUELFU Else: SEPOVENUSE				
Derived		**Show Card**		**CARI**	

OVENFUELFU					
ASK	If OVENFUEL=21				

Specify the type of other fuel.

    Open response

NEXT	SEPOVENUSE				
Derived		**Show Card**		**CARI**	

SEPOVENUSE (New)					
ASK	If OVEN>0				

In a typical week, about how many times is your [If OVEN>1: most-used] separate wall oven used? If it's not used, then you can answer "0".

    0 - 50

NEXT	SEPOVENCLN				
Derived		**Show Card**		**CARI**	

SEPOVENCLN (New)	
ASK	If OVEN>0

Does your [If OVEN>1: most-used] separate wall oven have a self-cleaning feature?

   1 Yes
   0 No

NEXT	MICRO				
Derived		**Show Card**		**CARI**	

MICRO (Changed from 2009)	
ASK	All respondents

How many microwaves do you have?

   0 - 9

NEXT	If MICRO>0: AMTMICRO Else: OUTGRILL				
Derived		**Show Card**		**CARI**	

AMTMICRO (Changed from 2009)	
ASK	If MICRO>0

In a typical week, about how many times is your microwave used? If it's not used, then you can answer "0".

   0 - 99

NEXT	DEFROST				
Derived		**Show Card**		**CARI**	

DEFROST	
ASK	If MICRO>0

Does your household use the microwave for defrosting?

   1 Yes
   0 No

NEXT	OUTGRILL				
Derived		**Show Card**		**CARI**	

OUTGRILL					
ASK	All respondents				

Does your household use an outdoor grill?
 	
   1 Yes
   0 No					

NEXT	If OUTGRILL=1: OUTGRILLFUEL Else: TOPGRILL				
Derived		**Show Card**		**CARI**	

OUTGRILLFUEL (Changed from 2009)					
ASK	If OUTGRILL=1				

What fuel does your outdoor grill use? Is it natural gas from underground pipes, propane (bottled gas), charcoal, or some other fuel?
 	
   1 Natural gas from underground pipes
   2 Propane (bottled gas)
  23 Charcoal
  21 Some other fuel					

NEXT	If OUTGRILLFUEL=21: OUTGRILLFUELFU Else: TOPGRILL				
Derived		**Show Card**		**CARI**	

OUTGRILLFUELFU					
ASK	If OUTGRILLFUEL=21				
Specify the type of other fuel. Open response					
NEXT	TOPGRILL				
Derived		**Show Card**		**CARI**	

TOPGRILL

ASK	All respondents

Does your household use a built-in indoor grill?

   1 Yes
   0 No

NEXT	If TOPGRILL=1: STGRILA Else: NUMMEAL

Derived		Show Card		CARI	

STGRILA

ASK	If TOPGRILL=1

What fuel does your built-in indoor grill use? Is it electricity, natural gas from underground pipes, propane (bottled gas) or some other fuel?

   5 Electricity
   1 Natural gas from underground pipes
   2 Propane (bottled gas)
  21 Some other fuel

NEXT	If STGRILA=21: STGILAFU Else: NUMMEAL

Derived		Show Card		CARI	

STGRILAFU

ASK	If STGRILA=21

Specify the type of other fuel.

   Open response

NEXT	NUMMEAL

Derived		Show Card		CARI	

NUMMEAL					
ASK	All respondents				

Place show card 9 in front of the respondent.

Please look at Card 9. Which of the categories shown best describes how often hot meals are usually cooked in your home?

  1 Three or more times a day
  2 Two times a day
  3 Once a day
  4 A few times each week
  5 About once a week
  6 Less than once a week
  0 Doesn't cook/Never cooks (if volunteered)

NEXT	TOAST, TOASTOVN, COFFEE, CROCKPOT, FOODPROC, RICECOOK, MIXER, BREAD, BLENDER, WAFFLE, APPOTHER, APPNONE				
Derived		**Show Card**	Yes	**CARI**	

TOAST, TOASTOVN, COFFEE, CROCKPOT, FOODPROC, RICECOOK, MIXER, BREAD, BLENDER, WAFFLE, APPOTHER, APPNONE (New)					
ASK	All respondents				

Place show card 10 in front of the respondent.

Please look at Card 10. Which of these small kitchen appliances are used at least once a week in your home?

Mark all that apply.

  Toaster (TOAST)
  Toaster oven (TOASTOVN)
  Coffee maker (COFFEE)
  Crock pot or slow cooker (CROCKPOT)
  Food processor (FOODPROC)
  Rice cooker (RICECOOK)
  Stand mixer (MIXER)
  Bread maker (BREAD)
  Blender or juicer (BLENDER)
  Waffle maker (WAFFLE)
  Other (APPOTHER)
  None (APPNONE)

NEXT	If APPOTHER=1: SMALLAPPFU Else: NUMFRIG				
Derived		**Show Card**	Yes	**CARI**	

SMALLAPPFU (New)					
ASK	If APPOTHER=1				
Could you tell me what other type of small kitchen appliances are used at least once a week in your home? Open response					
NEXT	NUMFRIG				
Derived		**Show Card**		**CARI**	

NUMFRIG (Changed from 2009)					
ASK	All respondents				
Next I'm going to ask about other kitchen appliances. How many refrigerators are plugged-in and turned on in your home? Include refrigerators in basements or garages, even if they are only used occasionally, and also include compact refrigerators and wine chillers. 0 - 9					
NEXT	If NUMFRIG>0: SIZERFR1 Else: SEPFREEZ				
Derived		**Show Card**		**CARI**	

SIZRFRI1 (Changed from 2009)					
ASK	If NUMFRIG>0				

Place show card 11 in front of the respondent.
 	
Please look at Card 11. How would you describe the size of [if NUMFRIG=1: your refrigerator?] [if NUMFRIG>1: the refrigerator used the most?]
 	
    1 Half-size or compact
    2 Small (17.5 cubic feet or less)
    3 Medium (17.6 to 22.5 cubic feet)
    4 Large (22.6 to 29.5 cubic feet)
    5 Very large (bigger than 29.5 cubic feet)					

NEXT	If SIZRFRI1=1: REFRIGT1 Else: TYPERFR1				
Derived		**Show Card**	Yes	**CARI**	

TYPERFR1 (Changed from 2009)					
ASK	If SIZRFRI1>1				

Place show card 12 in front of the respondent.
 	
Please look at Card 12. Which best describes this refrigerator?
 	
  1 One door
  21 Two doors, freezer next to the refrigerator
  22 Two doors, freezer above the refrigerator
  23 Two doors, freezer below the refrigerator
  5 Three or more doors
  4 Some other kind					

NEXT	REFRIGT1				
Derived		**Show Card**	Yes	**CARI**	

REFRIGT1 (Changed from 2009)					
ASK	If NUMFRIG>0				

What type of defrosting does this refrigerator have? Is it manual or automatic?
 	
  1 Manual
  2 Automatic
  3 No working freezer section (if volunteered)					

NEXT	ICE				
Derived		**Show Card**		**CARI**	

ICE (Changed from 2009)					
ASK	If NUMFRIG>0				

Does this refrigerator have through-the-door ice service?
 	
  1 Yes
  0 No					

NEXT	AGERFRI1				
Derived		**Show Card**		**CARI**	

AGERFRI1						
ASK	If NUMFRIG>0					

Place show card 1 in front of the respondent.

Please look at Card 1. About how old is this refrigerator? Your best estimate is fine.

    1 Less than 2 years old
    2 2 to 4 years old
    3 5 to 9 years old
    41 10 to 14 years old
    42 15 to 19 years old
    5 20 years or older
    6 As old as the home (if volunteered)

NEXT	If NUMFRIG>1: SIZERFR2 Else: SEPFREEZ					
Derived		**Show Card**	Yes	**CARI**		

SIZRFRI2 (Changed from 2009)						
ASK	If NUMFRIG>1					

Place show card 11 in front of the respondent.

Now I would like to ask you the same questions about the [if NUMFRIG=2: other] [if NUMFRIG>2: second most-used] refrigerator.

Please look at Card 11. How would you describe the size of your second refrigerator?

    1 Half-size or compact
    2 Small (17.5 cubic feet or less)
    3 Medium (17.6 to 22.5 cubic feet)
    4 Large (22.6 to 29.5 cubic feet)
    5 Very large (bigger than 29.5 cubic feet)

NEXT	If SIZRFRI2=1: REFRIGT2 Else: TYPERFR2					
Derived		**Show Card**	Yes	**CARI**		

TYPERFR2 (Changed from 2009)					
ASK	If SIZRFRI2>1				

Place show card 12 in front of the respondent.
 	
Please look at Card 12. Which best describes this refrigerator?
 	
  1 One door
  21 Two doors, freezer next to the refrigerator
  22 Two doors, freezer above the refrigerator
  23 Two doors, freezer below the refrigerator
  5 Three or more doors
  4 Some other kind					

NEXT	REFRIGT2				
Derived		**Show Card**	Yes	**CARI**	

REFRIGT2 (Changed from 2009)					
ASK	If NUMFRIG>1				

What type of defrosting does this refrigerator have? Is it manual or automatic?
 	
  1 Manual
  2 Automatic
  3 No working freezer section (if volunteered)					

NEXT	MONRFRI2				
Derived		**Show Card**		**CARI**	

MONRFRI2 (Changed from 2009)					
ASK	If NUMFRIG>1				
In the last year, how many months was this refrigerator plugged in and turned on? 0-12					
NEXT	AGERFRI2				
Derived		**Show Card**		**CARI**	

AGERFRI2					
ASK	If NUMFRIG>1				

Place show card 1 in front of the respondent.

Please look at Card 1. About how old is this refrigerator? Your best estimate is fine.

    1 Less than 2 years old
    2 2 to 4 years old
    3 5 to 9 years old
    41 10 to 14 years old
    42 15 to 19 years old
    5 20 years or older
    6 As old as the home (if volunteered)

NEXT	LOCRFRI2				
Derived		**Show Card**	Yes	**CARI**	

LOCRFRI2 (New)					
ASK	If NUMFRIG>1				

Where is your second most used refrigerator located? Is it the…

    1 Basement
    2 Garage
    3 Outside
    4 Main floor of house
    9 Other

NEXT	If LOCRFRI2=9: LOCRFRI2FU Else if NUMFRIG>2: SIZRFRI3 Else: SEPFREEZ				
Derived		**Show Card**		**CARI**	

LOCRFRI2FU (New)					
ASK	If LOCRFRI2=9				

Could you tell me what that other location is?

    Open response

NEXT	If NUMFRIG>2: SIZERFR3 Else: SEPFREEZ				
Derived		**Show Card**		**CARI**	

SIZRFRI3 (Changed from 2009)					
ASK	If NUMFRIG>2				

Place show card 11 in front of the respondent.

Now I would like to ask you the same questions about your third-most used refrigerator.

Please look at Card 11. How would you describe the size of your third refrigerator?

    1 Half-size or compact
    2 Small (17.5 cubic feet or less)
    3 Medium (17.6 to 22.5 cubic feet)
    4 Large (22.6 to 29.5 cubic feet)
    5 Very large (bigger than 29.5 cubic feet)

NEXT	If SIZRFRI3=1: REFRIGT3 Else: TYPERFR3				
Derived		**Show Card**	Yes	**CARI**	

TYPERFR3 (Changed from 2009)					
ASK	If SIZRFRI3>1				

Place show card 12 in front of the respondent.

Please look at Card 12. Which best describes this refrigerator?

    1 One door
    21 Two doors, freezer next to the refrigerator
    22 Two doors, freezer above the refrigerator
    23 Two doors, freezer below the refrigerator
    5 Three or more doors
    4 Some other kind

NEXT	REFRIGT3				
Derived		**Show Card**	Yes	**CARI**	

REFRIGT3 (Changed from 2009)	
ASK	If NUMFRIG>2

What type of defrosting does this refrigerator have? Is it manual or automatic?

    1 Manual
    2 Automatic
    3 No working freezer section (if volunteered)

NEXT	MONRFRI3				
Derived		**Show Card**		**CARI**	

MONRFRI3 (Changed from 2009)					
ASK	If NUMFRIG>2				

In the last year, how many months was this refrigerator plugged in and turned on?

    0 - 12

NEXT	AGERFRI3				
Derived		**Show Card**		**CARI**	

AGERFRI3					
ASK	If NUMFRIG>2				

Place show card 1 in front of the respondent.

Please look at Card 1. About how old is this refrigerator?

    1 Less than 2 years old
    2 2 to 4 years old
    3 5 to 9 years old
    41 10 to 14 years old
    42 15 to 19 years old
    5 20 years or older
    6 As old as the home (if volunteered)

NEXT	SEPFREEZ				
Derived		**Show Card**	Yes	**CARI**	

SEPFREEZ					
ASK	All respondents				

Does your household use a separate freezer that is not part of a refrigerator?

    1 Yes
    0 No

NEXT	If SEPFREEZ=1: NUMFREEZ Else: DISHWASH				
Derived		**Show Card**		**CARI**	

NUMFREEZ (Changed from 2009)					
ASK	If SEPFREEZ=1				
How many separate freezers are used in your home? 1 - 9					
NEXT	UPRTFRZR				
Derived		**Show Card**		**CARI**	

UPRTFRZR (Changed from 2009)					
ASK	If SEPFREEZ=1				

[If NUMFREEZ>1: Now I would like to ask some questions about the separate freezer that is used the most.]
 	
What model freezer is this? Is it an upright or is it a chest type?
 	
   1 Upright
   2 Chest					

NEXT	SIZFREEZ				
Derived		**Show Card**		**CARI**	

SIZFREEZ (Changed from 2009)					
ASK	If SEPFREEZ=1				

Place show card 11 in front of the respondent.
 	
Please look at Card 11. How would you describe the size of this freezer?
 	
   1 Half-size or compact
   2 Small (17.5 cubic feet or less)
   3 Medium (17.6 to 22.5 cubic feet)
   4 Large (22.6 to 29.5 cubic feet)
   5 Very large (bigger than 29.5 cubic feet)					

NEXT	FREEZER				
Derived		**Show Card**	Yes	**CARI**	

FREEZER (Changed from 2009)					
ASK	If SEPFREEZ=1				

What type of defrosting does this freezer have? Is it manual or automatic?
 	
   1 Manual
   2 Automatic					

NEXT	AGEFRZR				
Derived		**Show Card**		**CARI**	

AGEFRZR					
ASK	If SEPFREEZ=1				

Place show card 1 in front of the respondent.
 	
Please look at Card 1. About how old is this freezer?
 	
   1 Less than 2 years old
   2 2 to 4 years old
   3 5 to 9 years old
  41 10 to 14 years old
  42 15 to 19 years old
   5 20 years or older
   6 As old as the home (if volunteered)					

NEXT	If NUMFREEZ>1: UPRTFRZR2 Else: DISHWASH				
Derived		**Show Card**	Yes	**CARI**	

UPRTFRZR2					
ASK	If NUMFREEZ>1				

Now I would like to ask you the same questions about your second [If NUMFREEZ>2: most used] freezer.
 	
What model freezer is this? Is it an upright or is it a chest type?
 	
   1 Upright
   2 Chest					

NEXT	SIZFREEZ2				
Derived		**Show Card**		**CARI**	

SIZFREEZ2 (Changed from 2009)					
ASK	If NUMFREEZ>1				

Place show card 11 in front of the respondent.

Please look at Card 11. How would you describe the size of this freezer?

    1 Half-size or compact
    2 Small (17.5 cubic feet or less)
    3 Medium (17.6 to 22.5 cubic feet)
    4 Large (22.6 to 29.5 cubic feet)
    5 Very large (bigger than 29.5 cubic feet)

NEXT	FREEZER2				
Derived		**Show Card**	Yes	**CARI**	

FREEZER2 (Changed from 2009)					
ASK	If NUMFREEZ>1				

What type of defrosting does this freezer have? Is it manual or automatic?

    1 Manual
    2 Automatic

NEXT	AGEFRZR2				
Derived		**Show Card**		**CARI**	

AGEFRZR2					
ASK	If NUMFREEZ>1				

Place show card 1 in front of the respondent.

Please look at Card 1. About how old is this freezer?

    1 Less than 2 years old
    2 2 to 4 years old
    3 5 to 9 years old
    41 10 to 14 years old
    42 15 to 19 years old
    5 20 years or older
    6 As old as the home (if volunteered)

NEXT	DISHWASH				
Derived		**Show Card**	Yes	**CARI**	

DISHWASH (Changed from 2009)					
ASK	All respondents				

Does your household have a dishwasher?
 	
   1 Yes
   0 No					

NEXT	If DISHWASH=1: DWASHUSE Else: IVCOMMBFILTER				
Derived		**Show Card**		**CARI**	

DWASHUSE (Changed from 2009)					
ASK	If DISHWASH=1				
In a typical week, about how many times is your dishwasher used? If it's not used, then you can answer "0". 0 - 50					
NEXT	AGEDW				
Derived		**Show Card**		**CARI**	Yes

AGEDW					
ASK	If DISHWASH=1				

Place show card 1 in front of the respondent.
 	
Please look at Card 1. About how old is your dishwasher? Your best estimate is fine.
 	
   1 Less than 2 years old
   2 2 to 4 years old
   3 5 to 9 years old
  41 10 to 14 years old
  42 15 to 19 years old
   5 20 years or older
   6 As old as the home (if volunteered)					

NEXT	DWCYCLE				
Derived		**Show Card**	Yes	**CARI**	

DWCYCLE (New)					
ASK	If DISHWASH=1				

Place show card 13 in front of the respondent.

Please look at Card 13. Which cycle is used most of the time when running your dishwasher?

   1 Normal or default cycle without heated dry
   2 Normal or default cycle with heated dry
   3 Heavy or "pots and pans" cycle
   4 Light or delicate cycle
   5 Energy saver
   0 Dishwasher not used

NEXT	IVCOMMBFILTER				
Derived		**Show Card**	Yes	**CARI**	

IVCOMMBFILTER					
ASK	All respondents				

Interviewer Task: If you have any comments that might suggest that the data collected in the kitchen appliances section should be analyzed by central office staff, enter 1. If you have no comments regarding the quality of data entered in this section, enter 2.

   1 I have comments regarding the quality of data in this section
   2 I do not have comments

NEXT	If IVCOMMBFILTER=1: IVCOMMB Else: Section C				
Derived		**Show Card**		**CARI**	

IVCOMMB					
ASK	If IVCOMMBFILTER=1				

Interviewer Task: Record any information here about the kitchen appliances in this housing unit that might provide clarification to the respondent's answers. Comments are not required but are encouraged to describe unique housing unit or household characteristics. Use this space to help explain extraordinary or abnormal responses.

   Open response

NEXT	Section C				
Derived		**Show Card**		**CARI**	

SECTION C: HOME APPLIANCES AND ELECTRONICS

CWASHER (Changed from 2009)					
ASK	All respondents				

The next group of questions is about laundry appliances in your home.
 	
Does your household have a clothes washer? [If TYPEHUQ in(4,5): Do not include community clothes washers that are located in the basement or laundry room of your apartment building.]
 	
  1 Yes
  0 No					

NEXT	If CWASHER=1: TOPFRONT Else: DRYER				
Derived		**Show Card**		**CARI**	

TOPFRONT (Changed from 2009)					
ASK	If CWASHER=1				

Is your clothes washer top loading or front loading?
 	
  1 Top loading
  2 Front loading					

NEXT	WASHLOAD				
Derived		**Show Card**		**CARI**	

WASHLOAD (Changed from 2009)					
ASK	If CWASHER=1				
In a typical week, about how many times is your clothes washer used? If it's not used, then you can answer "0". 0 - 50					
NEXT	WASHTEMP				
Derived		**Show Card**		**CARI**	Yes

WASHTEMP					
ASK	If CWASHER=1				

What water temperature setting is typically used for the wash cycle of your clothes washer? Is it hot, warm, or cold water?

    1 Hot
    2 Warm
    3 Cold

NEXT	RNSETEMP				
Derived		**Show Card**		**CARI**	

RNSETEMP					
ASK	If CWASHER=1				

What water temperature setting is typically used for the rinse cycle of your clothes washer? Is it hot, warm, or cold water?

    1 Hot
    2 Warm
    3 Cold

NEXT	AGECWASH				
Derived		**Show Card**		**CARI**	

AGECWASH					
ASK	If CWASHER=1				

Place show card 1 in front of the respondent.

Please look at Card 1. About how old is your clothes washer? Your best estimate is fine.

    1 Less than 2 years old
    2 2 to 4 years old
    3 5 to 9 years old
    41 10 to 14 years old
    42 15 to 19 years old
    5 20 years or older
    6 As old as the home (if volunteered)

NEXT	DRYER				
Derived		**Show Card**	Yes	**CARI**	

DRYER (Changed from 2009)	
ASK	All respondents

Does your household have a clothes dryer? [If TYPEHUQ in(4,5): Do not include community clothes dryers that are located in the basement or laundry room of your apartment building.]

    1 Yes
    0 No

NEXT	If DRYER=1: DRYRFUEL Else: TVCOLOR
Derived		**Show Card**		**CARI**	

DRYRFUEL	
ASK	If DRYER=1

What fuel does your clothes dryer use? Is it electricity, natural gas from underground pipes, or propane (bottled gas)?

    5 Electricity
    1 Natural gas from underground pipes
    2 Propane (bottled gas)

NEXT	DRYRUSE
Derived		**Show Card**		**CARI**	

DRYRUSE (Changed from 2009)	
ASK	If DRYER=1

In a typical week, about how many times is your clothes dryer used? If it's not used, then you can answer "0".

    0 - 50

NEXT	AGECDRYER
Derived		**Show Card**		**CARI**	

AGECDRYER

ASK	If DRYER=1

Place show card 1 in front of the respondent.

Please look at Card 1. About how old is your clothes dryer? Your best estimate is fine.

   1 Less than 2 years old
   2 2 to 4 years old
   3 5 to 9 years old
  41 10 to 14 years old
  42 15 to 19 years old
   5 20 years or older
   6 As old as the home (if volunteered)

NEXT	TVCOLOR				
Derived		**Show Card**	Yes	**CARI**	

TVCOLOR (Changed from 2009)

ASK	All respondents

Now I'm going to ask some questions about your televisions and other electronic devices.

How many televisions are used in your home?

   0 - 15

NEXT	If TVCOLOR>0: TVSIZE1 Else: DESKTOP				
Derived		**Show Card**		**CARI**	

TVSIZE1 (Changed from 2009)

ASK	If TVCOLOR>0

Place show card 14 in front of the respondent.

Please look at Card 14. What is the size of your [If TVCOLOR>1: most-used] television?

   1 27 inches or less
   2 Between 28 and 39 inches
   3 Between 40 and 59 inches
   4 60 inches or more

NEXT	TVTYPE1				
Derived		**Show Card**	Yes	**CARI**	

TVTYPE1 (Changed from 2009)

ASK	If TVCOLOR>0

Place show card 15 in front of the respondent.

Please look at Card 15. What type of display does your [If TVCOLOR>1: most-used] television have?

   1 LCD
   2 Plasma
   3 LED
   4 Projection
   5 Standard Tube

NEXT	TVONWD1					
Derived		**Show Card**	Yes	**CARI**	

TVONWD1 (Changed from 2009)

ASK	If TVCOLOR>0

Place show card 16 in front of the respondent.

Please look at Card 16. Thinking about this television's use on weekdays, how many hours is this television turned on each day? Include the time it is on even if no one is actually watching it.

   1 Less than 1 hour
   2 1 to 3 hours
   3 4 to 6 hours
   4 7 to 10 hours
   5 More than 10 hours

NEXT	TVONWE1					
Derived		**Show Card**	Yes	**CARI**	

TVONWE1 (Changed from 2009)

ASK	If TVCOLOR>0

Thinking about this television's use on weekends, how many hours is this television turned on each day? Include the time it is on even if no one is actually watching it.

   1 Less than 1 hour
   2 1 to 3 hours
   3 4 to 6 hours
   4 7 to 10 hours
   5 More than 10 hours

NEXT	If TVCOLOR>1: TVSIZE2 Else: CABLESAT				
Derived		**Show Card**	Yes	**CARI**	

TVSIZE2 (Changed from 2009)

ASK	If TVCOLOR>1

Place show card 14 in front of the respondent.

Please look at Card 14. What is the size of your second most used television?

    1 27 inches or less
    2 Between 28 and 39 inches
    3 Between 40 and 59 inches
    4 60 inches or more

NEXT	TVTYPE2				
Derived		**Show Card**	Yes	**CARI**	

TVTYPE2 (Changed from 2009)

ASK	If TVCOLOR>1

Place show card 15 in front of the respondent.

Please look at Card 15. What type of display does the second most used television have?

    1 LCD
    2 Plasma
    3 LED
    4 Projection
    5 Standard Tube

NEXT	TVONWD2				
Derived		**Show Card**	Yes	**CARI**	

TVONWD2 (Changed from 2009)	
ASK	If TVCOLOR>1

Place show card 16 in front of the respondent.

Please look at Card 16. Thinking about this television's use on weekdays, how many hours is this television turned on each day? Include the time it is on even if no one is actually watching it.

1 Less than 1 hour
2 1 to 3 hours
3 4 to 6 hours
4 7 to 10 hours
5 More than 10 hours

NEXT	TVONWE2				
Derived		**Show Card**	Yes	**CARI**	

TVONWE2 (Changed from 2009)	
ASK	If TVCOLOR>1

Thinking about this television's use on weekends, how many hours is this television turned on each day? Include the time it is on even if no one is actually watching it.

1 Less than 1 hour
2 1 to 3 hours
3 4 to 6 hours
4 7 to 10 hours
5 More than 10 hours

NEXT	If TVCOLOR>2: TVSIZE3 Else: CABLESAT				
Derived		**Show Card**	Yes	**CARI**	

TVSIZE3 (Changed from 2009)	
ASK	If TVCOLOR>2

Place show card 14 in front of the respondent.

Please look at Card 14. What is the size of your third most used television?

1 27 inches or less
2 Between 28 and 39 inches
3 Between 40 and 59 inches
4 60 inches or more

NEXT	TVTYPE3
Derived		**Show Card**	Yes	**CARI**	

TVTYPE3 (Changed from 2009)

ASK	If TVCOLOR>2

Place show card 15 in front of the respondent.

Please look at Card 15. What type of display does the third most used television have?

1 LCD
2 Plasma
3 LED
4 Projection
5 Standard Tube

NEXT	TVONWD3
Derived		**Show Card**	Yes	**CARI**	

TVONWD3 (Changed from 2009)

ASK	If TVCOLOR>2

Place show card 16 in front of the respondent.

Please look at Card 16. Thinking about this television's use on weekdays, how many hours is this television turned on each day? Include the time it is on even if no one is actually watching it.

1 Less than 1 hour
2 1 to 3 hours
3 4 to 6 hours
4 7 to 10 hours
5 More than 10 hours

NEXT	TVONWE3
Derived		**Show Card**	Yes	**CARI**	

TVONWE3 (Changed from 2009)

ASK	If TVCOLOR>2

Thinking about this television's use on weekends, how many hours is this television turned on each day? Include the time it is on even if no one is actually watching it.

1 Less than 1 hour
2 1 to 3 hours
3 4 to 6 hours
4 7 to 10 hours
5 More than 10 hours

NEXT	CABLESAT				
Derived		**Show Card**	Yes	**CARI**	

CABLESAT (New)	
ASK	If TVCOLOR>0

Now I'm going to ask about devices that may be connected to televisions. How many of each of the following are used in your home?

Cable or satellite box without DVR

    0 - 15

NEXT	COMBODVR				
Derived		**Show Card**		**CARI**	Yes

COMBODVR (New)	
ASK	If TVCOLOR>0

Cable or satellite box with DVR

    0 - 15

NEXT	SEPDVR				
Derived		**Show Card**		**CARI**	Yes

SEPDVR (New)	
ASK	If TVCOLOR>0

Separate DVR (for example, TIVO)

    0 - 15

NEXT	PLAYSTA				
Derived		**Show Card**		**CARI**	Yes

PLAYSTA (New)	
ASK	If TVCOLOR>0

Video game console

    0 - 15

NEXT	DVD				
Derived		**Show Card**		**CARI**	Yes

DVD (New)	
ASK	If TVCOLOR>0

DVD or Blu-ray player

   0 - 15

NEXT	VCR				
Derived		**Show Card**		**CARI**	Yes

VCR (New)	
ASK	If TVCOLOR>0

VCR

   0 - 15

NEXT	INTSTREAM				
Derived		**Show Card**		**CARI**	Yes

INTSTREAM (New)	
ASK	If TVCOLOR>0

Internet streaming device (for example: Apple TV, Google Chromecast, Slingbox, or Roku)

   0 - 15

NEXT	TVAUDIOSYS				
Derived		**Show Card**		**CARI**	Yes

TVAUDIOSYS (New)	
ASK	If TVCOLOR>0

Home theater or audio system

   0 – 15

NEXT	If PLAYSTA1=1: VGUSAGE Else: DESKTOP				
Derived		**Show Card**		**CARI**	Yes

VGUSAGE (New)	
ASK	If PLAYSTA=1

Place show card 16 in front of the respondent.

Please look at Card 16. How many hours a day does your household use your video game consoles?

    1 Less than 1 hour
    2 1 to 3 hours
    3 4 to 6 hours
    4 7 to 10 hours
    5 More than 10 hours

NEXT	DESKTOP				
Derived		**Show Card**	Yes	**CARI**	

DESKTOP (New)	
ASK	All respondents

Now let's talk about computers. How many of each of the following are used in your home?

Desktop computers

    0-15

NEXT	NUMLAPTOP				
Derived		**Show Card**		**CARI**	

NUMLAPTOP (New)	
ASK	All respondents

Laptop computers

    0-15

NEXT	NUMTABLET				
Derived		**Show Card**		**CARI**	

NUMTABLET (New)

ASK	All respondents

Tablet computers or e-readers (for example: iPad or Kindle)

   0-15

NEXT	ELPERIPH				
Derived		Show Card		CARI	

ELPERIPH (New)

ASK	All respondents

Printers, scanners, fax machines, or copiers

   0-15

NEXT	NUMSMPHONE				
Derived		Show Card		CARI	

NUMSMPHONE (New)

ASK	All respondents

"Smart" phones (for example: iPhone)

   0-15

NEXT	CELLPHONE				
Derived		Show Card		CARI	

CELLPHONE (New)

ASK	All respondents

Other cellular phones

   0-15

NEXT	If DESKTOP+NUMLAPTOP+NUMTABLET>1 and ((DESKTOP>0 and NUMLAPTOP>0) or (NUMLAPTOP>0 and NUMTABLET>0) or (DESKTOP>0 and NUMTABLET>0)): PCTYPE1 Else if DESKTOP+NUMLAPTOP+NUMTABLET>0: TIMEON1 Else: INTERNET				
Derived		Show Card		CARI	

PCTYPE1 (Changed from 2009)	
ASK	If DESKTOP+NUMLAPTOP+NUMTABLET>1 and ((DESKTOP>0 and NUMLAPTOP>0) or (NUMLAPTOP>0 and NUMTABLET>0) or (DESKTOP>0 and NUMTABLET>0))

Thinking about the most-used computer, is it a desktop, a laptop, or a tablet?

   1 Desktop
   2 Laptop
   3 Tablet

NEXT	TIMEON1				
Derived		**Show Card**		**CARI**	

TIMEON1 (Changed from 2009)	
ASK	If DESKTOP+NUMLAPTOP+NUMTABLET>0

Place show card 16 in front of the respondent.

Please look at Card 16. Thinking about the [If DESKTOP+NUMLAPTOP+NUMTABLET>1: most used] computer, how many hours each day is it used?

   1 Less than 1 hour
   2 1 to 3 hours
   3 4 to 6 hours
   4 7 to 10 hours
   5 More than 10 hours

NEXT	If DESKTOP+NUMLAPTOP+NUMTABLET>2 and ((DESKTOP>0 and NUMLAPTOP>0) or (NUMLAPTOP>0 and NUMTABLET>0) or (DESKTOP>0 and NUMTABLET>0)): PCTYPE2 Else if DESKTOP+NUMLAPTOP+NUMTABLET>1: TIMEON2 Else: INTERNET				
Derived		**Show Card**	Yes	**CARI**	

PCTYPE2 (Changed from 2009)	
ASK	If DESKTOP+NUMLAPTOP+NUMTABLET>2 and ((DESKTOP>0 and NUMLAPTOP>0) or (NUMLAPTOP>0 and NUMTABLET>0) or (DESKTOP>0 and NUMTABLET>0))

Thinking about the second most used computer, is it a desktop, a laptop, or a tablet?

   1 Desktop
   2 Laptop
   3 Tablet

NEXT	TIMEON2				
Derived		**Show Card**		**CARI**	

TIMEON2 (Changed from 2009)	
ASK	If DESKTOP+NUMLAPTOP+NUMTABLET>1

Place show card 16 in front of the respondent.

Please look at Card 16. Thinking about the second most used computer, how many hours each day is it used?

    1 Less than 1 hour
    2 1 to 3 hours
    3 4 to 6 hours
    4 7 to 10 hours
    5 More than 10 hours

NEXT	If DESKTOP+NUMLAPTOP+NUMTABLET>3 and ((DESKTOP>0 and NUMLAPTOP>0) or (NUMLAPTOP>0 and NUMTABLET>0) or (DESKTOP>0 and NUMTABLET>0)): PCTYPE3 Else if DESKTOP+NUMLAPTOP+NUMTABLET>2: TIMEON3 Else: INTERNET			
Derived		**Show Card**	Yes	**CARI**	

PCTYPE3 (Changed from 2009)	
ASK	If DESKTOP+NUMLAPTOP+NUMTABLET>3 and ((DESKTOP>0 and NUMLAPTOP>0) or (NUMLAPTOP>0 and NUMTABLET>0) or (DESKTOP>0 and NUMTABLET>0))

Thinking about the third most used computer, is it a desktop, a laptop, or a tablet?

    1 Desktop
    2 Laptop
    3 Tablet

NEXT	TIMEON3			
Derived		**Show Card**		**CARI**	

TIMEON3 (Changed from 2009)	
ASK	If DESKTOP+NUMLAPTOP+NUMTABLET>2

Place show card 16 in front of the respondent.

Please look at Card 16. Thinking about the third most used computer, how many hours each day is it used?

    1 Less than 1 hour
    2 1 to 3 hours
    3 4 to 6 hours
    4 7 to 10 hours
    5 More than 10 hours

NEXT	INTERNET				
Derived		**Show Card**	Yes	**CARI**	

INTERNET (Changed from 2009)

ASK	All respondents

In your home, do you or any member of your household access the Internet?

    1 Yes
    0 No

NEXT	If INTERNET=1: INWIRELESS Else: AQUARIUM				
Derived		**Show Card**		**CARI**	

INWIRELESS (Changed from 2009)

ASK	If INTERNET=1

Is a wireless router used in your home for accessing the Internet?

    1 Yes
    0 No

NEXT	AQUARIUM				
Derived		**Show Card**		**CARI**	

AQUARIUM (Changed from 2009)

ASK	All respondents

Are any of the following used in your home?

Any large heated aquariums or 20 gallons or more?

    1 Yes
    0 No

NEXT	If TYPEHUQ in(1,2,3): WELLPUMP Else if SCFLAG=1 (only respondents in certain states): SWAMPCOL Else if DSFLAG=1 (only respondents in certain states): DIPSTICK Else: SECURITY				
Derived		**Show Card**		**CARI**	

WELLPUMP (Changed from 2009)

ASK	If TYPEHUQ in(1,2,3)

An electric pump for well water?

   1 Yes
   0 No

NEXT	If SCFLAG=1 (only respondents in certain states): SWAMPCOL Else if DSFLAG=1 (only respondents in certain states): DIPSTICK Else: SECURITY

Derived		Show Card		CARI	

SWAMPCOL

ASK	If SCFLAG=1 (only respondents in certain states)

An evaporative or swamp cooler?

   1 Yes
   0 No

NEXT	If DSFLAG=1 (only respondents in certain states): DIPSTICK Else: SECURITY

Derived		Show Card		CARI	

DIPSTICK

ASK	If DSFLAG=1 (only respondents in certain states)

Any automobile block heaters, dip-stick engine heaters, or battery blankets?

   1 Yes
   0 No

NEXT	SECURITY

Derived		Show Card		CARI	

SECURITY (New)

ASK	All respondents

Home security system?

   1 Yes
   0 No

NEXT	If TYPEHUQ in(1,2,3): SPRINKLER Else: MEDICALDEV				
Derived		**Show Card**		**CARI**	

SPRINKLER (New)					
ASK	If TYPEHUQ in(1,2,3)				

Outdoor sprinkler system?

  1 Yes
  0 No

NEXT	MEDICALDEV				
Derived		**Show Card**		**CARI**	

MEDICALDEV (New)					
ASK	All respondents				

Medical devices, such as ventilators, nebulizers, or CPAP machines?

  1 Yes
  0 No

NEXT	VACUUM				
Derived		**Show Card**		**CARI**	

VACUUM (New)					
ASK	All respondents				

Which of these types of rechargeable devices are typically plugged in in your home?

Rechargeable handheld or stick vacuum?

  1 Yes
  0 No

NEXT	FLASH				
Derived		**Show Card**		**CARI**	

FLASH (New)

ASK	All respondents

Rechargeable flashlight?

   1 Yes
   0 No

NEXT	TOOTH				
Derived		**Show Card**		**CARI**	

TOOTH (New)

ASK	All respondents

Rechargeable electric toothbrush?

   1 Yes
   0 No

NEXT	RAZOR				
Derived		**Show Card**		**CARI**	

RAZOR (New)

ASK	All respondents

Rechargeable electric razor?

   1 Yes
   0 No

NEXT	DRILL				
Derived		**Show Card**		**CARI**	

DRILL (New)

ASK	All respondents

Rechargeable drill or other power tool?

   1 Yes
   0 No

NEXT	IVCOMMCFILTER				
Derived		**Show Card**		**CARI**	

IVCOMMCFILTER	
ASK	All respondents

Interviewer Task: If you have any comments that might suggest that the data collected in the household appliances and electronics section should be analyzed by central office staff, enter 1. If you have no comments regarding the quality of data entered in this section, enter 2.
 	
  1 I have comments regarding the quality of data in this section
  2 I do not have comments	

NEXT	If IVCOMMCFILTER=1: IVCOMMC Else: Section D

Derived		**Show Card**		**CARI**	

IVCOMMC	
ASK	If IVCOMMCFILTER=1
Interviewer Task: Record any information here about the other appliances in this housing unit that might provide clarification to the respondent's answers. Open response	
NEXT	Section D

Derived		**Show Card**		**CARI**	

SECTION D: SPACE HEATING

HEATHOME	
ASK	All respondents

Now I have some questions about heating your home.
 	
Is your home heated during the winter?
 	
    1 Yes
    0 No	

NEXT	If TYPEHUQ in (4,5) and HEATHOME=1: APTHEAT If TYPEHUQ in (1,2,3) and HEATHOME=1: EQUIPM If HEATHOME=0: DNTHEAT Else: MOISTURE

Derived		**Show Card**		**CARI**	

DNTHEAT	
ASK	If HEATHOME=0

You have just told me that you don't heat your home during the winter. Just to clarify, is it that you have heating equipment but don't use it, or does your home just not have any heating equipment?
 	
    1 Have equipment, but don't use it
    2 Don't have equipment	

NEXT	If DNTHEAT=1: EQUIPNOHEAT Else: MOISTURE

Derived		**Show Card**		**CARI**	

EQUIPNOHEAT (Changed from 2009)	
ASK	If DNTHEAT=1

Place show card 17 in front of the respondent.

Even though you don't heat your home, we are still interested to know the type of equipment you have. Please look at Card 17. What type of heating equipment do you have?

    3 Central furnace
    4 Heat pump
    2 Steam/hot water system with radiators or pipes
    5 Built-in electric units installed in walls, ceilings, baseboards, or floors
    6 Built-in floor/wall pipeless furnace
    7 Built-in room heater burning oil, gas, or kerosene
    8 Heating stove burning wood
   10 Portable electric heaters
   11 Portable kerosene heaters
    9 Fireplace
   12 Cooking stove or oven
   21 Some other equipment

NEXT	If EQUIPNOHEAT=21: EQUIPNOHEATFU Else: FUELNOHEAT					
Derived		**Show Card**	Yes	**CARI**		

EQUIPNOHEATFU	
ASK	If EQUIPNONEAT=21

Could you tell me what that other heating equipment is?

    Open response

NEXT	FUELNOHEAT					
Derived		**Show Card**		**CARI**		

FUELNOHEAT

ASK	If HEATHOME=0

Place show card 18 in front of the respondent.

Please look at Card 18. What is the main fuel used for this heating equipment?

    5 Electricity
    1 Natural gas from underground pipes
    2 Propane (bottled gas)
    3 Fuel oil
    4 Kerosene
    7 Wood
    8 Solar
    9 District steam
    21 Some other fuel

NEXT	If FUELNOHEAT=21: FUELNOHEATFU Else: MOISTURE				
Derived		**Show Card**	Yes	**CARI**	

FUELNOHEATFU

ASK	If FUELNONEAT=21

Specify the type of other fuel.

    Open response

NEXT	MOISTURE				
Derived		**Show Card**		**CARI**	

APTHEAT (New)

ASK	If TYPEHUQ in (4,5) and HEATHOME=1

Is the main heating equipment for your apartment inside your home or is it in another part of this building?

    1 Main heating equipment inside my apartment
    2 In another part of the building

NEXT	EQUIPM				
Derived		**Show Card**		**CARI**	

EQUIPM (Changed from 2009)	
ASK	If HEATHOME=1

Place show card 17 in front of the respondent.

Let's start with the main source of heating in your home. Please look at Card 17. Please tell me which type of heating equipment provides most of the heat for your home.

   3 Central furnace
   4 Heat pump
   2 Steam/hot water system with radiators or pipes
   5 Built-in electric units installed in walls, ceilings, baseboards, or floors
   6 Built-in floor/wall pipeless furnace
   7 Built-in room heater burning oil, gas, or kerosene
   8 Heating stove burning wood
  10 Portable electric heaters
  11 Portable kerosene heaters
   9 Fireplace
  12 Cooking stove or oven
  21 Some other equipment

NEXT	If EQUIPM=21: EQUIPMFU If EQUIPM in(3,4): NUMEQUIPM If EQUIPM=10: NUMPORTELHEAT1 If EQUIPM in(5,8,11): MAINTHT Else: FUELHEAT				
Derived		**Show Card**	Yes	**CARI**	Yes

EQUIPMFU	
ASK	If EQUIPM=21

Could you tell me what that other heating equipment is?

   Open response

NEXT	FUELHEAT				
Derived		**Show Card**		**CARI**	

NUMEQUIPM (New)	
ASK	If EQUIPM in(3,4)

Do you have more than one [fill: EQUIPM]?

   1 Yes
   0 No

NEXT	If EQUIPM=4: HPTYPE1 Else: FUELHEAT				
Derived		**Show Card**		**CARI**	

NUMPORTELHEAT1 (New)	
ASK	If EQUIPM=10

How many portable electric heaters does your household use?

   1 - 15

NEXT	MAINTHT				
Derived		**Show Card**		**CARI**	

FUELHEAT (Changed from 2009)	
ASK	If HEATHOME=1 and EQUIPM ne 4, 5, 8, 10, 11

Place show card 18 in front of the respondent.

Please look at Card 18. What is the main fuel used for heating your home? That is, which fuel is the one that provides the most heat for your home?

Use the following probe if the respondent does not know: Please take a moment to review the list again. It may help to think about which of your energy bills increases in the winter.

   5 Electricity
   1 Natural gas from underground pipes
   2 Propane (bottled gas)
   3 Fuel oil
   4 Kerosene
   7 Wood
   8 Solar
   9 District steam
  21 Some other fuel

NEXT	If FUELHEAT=21: FUELHEATFU Else: MAINTHT				
Derived		**Show Card**	Yes	**CARI**	Yes

FUELHEATFU	
ASK	If FUELHEAT=21

Could you tell me what that other fuel is?

   Open response

NEXT	MAINTHT				
Derived		**Show Card**		**CARI**	

HPTYPE1 (New)					
ASK	If EQUIPM=4				

What type of heat pump do you have? Is it…

- 1 Electric air source
- 2 Geothermal or ground source
- 3 Natural gas

NEXT	HPBACKUP				
Derived		**Show Card**		**CARI**	Yes

HPBACKUP (New)					
ASK	If EQUIPM=4				

During the winter, how often does your heat pump switch to back-up or auxiliary heat? Is it…

- 0 Never
- 1 A few times
- 2 Some of the time
- 3 About all winter

NEXT	MAINTHT				
Derived		**Show Card**		**CARI**	

MAINTHT (Changed from 2009)					
ASK	If HEATHOME=1				

In the last year, has any routine maintenance been performed on your household's heating equipment? This includes replacing or cleaning the air filter.

- 1 Yes
- 0 No

NEXT	EQUIPAGE				
Derived		**Show Card**		**CARI**	

EQUIPAGE (Changed from 2009)

ASK	If HEATHOME=1

Place show card 1 in front of the respondent.

Please look at Card 1. Approximately how old is your household's [fill: EQUIPM]?

   1 Less than 2 years old
   2 2 to 4 years old
   3 5 to 9 years old
   41 10 to 14 years old
   42 15 to 19 years old
   5 20 years old
   6 As old as the home (if volunteered)

NEXT	THERMAIN				
Derived		**Show Card**	Yes	**CARI**	

THERMAIN (Changed from 2009)

ASK	If HEATHOME=1

Do you have a thermostat that controls your [fill: EQUIPM]?

   1 Yes
   0 No

NEXT	If THERMAIN=1: OTHTHERM Else: EQUIPMUSE				
Derived		**Show Card**	Yes	**CARI**	

OTHTHERM

ASK	If THERMAIN=1

Do you have more than one thermostat that controls your heating?

   1 Yes
   0 No

NEXT	If OTHTHERM=1: NUMTHERM Else: PROTHERM				
Derived		**Show Card**		**CARI**	

NUMTHERM (Changed from 2009)					
ASK	If OTHTHERM=1				

How many total thermostats do you have in your home?

    0 - 9

NEXT	PROTHERM				
Derived		**Show Card**		**CARI**	

PROTHERM					
ASK	If THERMAIN=1				

Some thermostats can be programmed so that different temperatures are automatically maintained at different times of the day. Is the thermostat that controls your main heating equipment programmable?

    1 Yes
    0 No

NEXT	EQUIPMUSE				
Derived		**Show Card**		**CARI**	

EQUIPMUSE (New)					
ASK	If HEATHOME=1				

Place show card 19 in front of the respondent.

Please look at Card 19. Which best describes how your household controls your main heating equipment most of the time?

    1 Set one temperature and leave it there most of the time
    2 Manually adjust the temperature at night or when no one is at home
    3 Program the thermostat to automatically adjust the temperature during the day and night at certain times
    4 Turn equipment on or off as needed
    5 Our household does not have control over the equipment
    9 Other

NEXT	If EQUIPMUSE=9: EQUIPMUSEFU Else: TEMPHOME				
Derived		**Show Card**	Yes	**CARI**	Yes

EQUIPMUSEFU (New)					
ASK	If EQUIPMUSE=9				
Could you describe how your household uses your main heating equipment? Open response					
NEXT					
Derived		**Show Card**		**CARI**	

TEMPHOME (Changed from 2009)					
ASK	If HEATHOME=1				
The next questions are about the temperature inside your home during the winter. If you have a thermostat, think about where your household sets the temperature for your main heating equipment. If you don't have a thermostat, your best guess about the temperature is fine. During the winter, what is the typical temperature when someone is home during the day? Enter degrees Fahrenheit. 40 - 96					
NEXT	TEMPGONE				
Derived		**Show Card**		**CARI**	Yes

TEMPGONE (Changed from 2009)					
ASK	If HEATHOME=1				
What is the typical temperature when no one is inside your home during the day? Enter degrees Fahrenheit. 40 - 96					
NEXT	TEMPNITE				
Derived		**Show Card**		**CARI**	

TEMPNITE (Changed from 2009)					
ASK	If HEATHOME=1				
What is the typical temperature inside your home at night? Enter degrees Fahrenheit. 40 - 96					

NEXT	HEATOTH				
Derived		**Show Card**		**CARI**	

HEATOTH					
ASK	If HEATHOME=1				

Does the main heating equipment for your home also heat any other apartments, condos, households, businesses, or farm buildings?

   1 Yes
   0 No

NEXT	EQUIPAUX				
Derived		**Show Card**		**CARI**	

EQUIPAUX (Changed from 2009)					
ASK	If HEATHOME=1				

Place show card 20 in front of the respondent.

You told me that [fill: EQUIPM] is the main source of heat in your home. Please look at Card 20. Does your household use any other types of heating equipment listed on Card 20?

   No other equipment (NOOTHEQU)
   Central furnace (WARMAIR)
   Heat pump (REVERSE)
   Steam/Hot water system with radiators or pipes (STEAMR)
   Built-in electric units installed in walls, ceilings, baseboards, or floors (PERMELEC)
   Built-in floor/wall pipeless furnace (PIPELESS)
   Built-in room heater burning gas, oil, or kerosene (ROOMHEAT)
   Heating stove burning wood (WOODKILN)
   Portable electric heaters (CARRYEL)
   Portable kerosene heaters (CARRYKER)
   Fireplace (CHIMNEY)
   Cooking stove or oven (RANGE)
   Some other equipment (DIFEQUIP)

   If No other equipment: EQUIPAUX=0;
   Else EQUIPAUX=1

NEXT	If EQUIPAUX=1: see skip logic for indivudal secondary fuel variables Else if CELLAR=1: BASEHEAT Else if ATTIC=1: ATTCHEAT Else if PRKGPLC1=1: GARGHEAT Else: MOISTURE				
Derived	Yes	**Show Card**	Yes	**CARI**	Yes

WARMAIR					
ASK					
Secondary heat is central furnace					
NEXT	FURNFUEL				
Derived		**Show Card**		**CARI**	

REVERSE					
ASK					
Secondary heat is heat pump					
NEXT	EQMAMT				
Derived		**Show Card**		**CARI**	

STEAMR					
ASK					
Secondary heat is steam/hot water system					
NEXT	RADFUEL				
Derived		**Show Card**		**CARI**	

PERMELEC					
ASK					
Secondary heat is built-in electric units					
NEXT	EQMAMT				
Derived		**Show Card**		**CARI**	

PIPELESS					
ASK					
Secondary heat is built-in floor/wall pipeless furnace					
NEXT	PIPEFUEL				
Derived		**Show Card**		**CARI**	

ROOMHEAT					
ASK					
Secondary heat is built-in room heater					
NEXT	RHMHTFUEL				
Derived		Show Card		CARI	

WOODKILN					
ASK					
Secondary heat is heating stove burning wood					
NEXT	EQMAMT				
Derived		Show Card		CARI	

CARRYEL					
ASK					
Secondary heat is portable electric heaters					
NEXT	NUMPORTELHEAT2				
Derived		Show Card		CARI	

CARRYKER					
ASK					
Secondary heat is portable kerosene heaters					
NEXT	EQMAMT				
Derived		Show Card		CARI	

CHIMNEY					
ASK					
Secondary heat is fireplace					
NEXT	FPFUEL				
Derived		Show Card		CARI	

RANGE					
ASK					
Secondary heat is cooking stove or oven					
NEXT	RNGFUEL				
Derived		Show Card		CARI	

DIFEQUIP					
ASK					
Secondary heat is some other equipment					
NEXT	AUXEQPFU				
Derived		Show Card		CARI	

AUXEQPFU					
ASK	If DIFEQUIP=1				
Could you tell me what that other heating equipment is? Open response					
NEXT	DIFFUEL				
Derived		Show Card		CARI	

FURNFUEL	
ASK	If WARMAIR=1

What fuel does the central furnace use? Is it…

    5 Electricity
    1 Natural gas from underground pipes
    2 Propane (bottled gas)
    3 Fuel oil
    4 Kerosene
    7 Wood
    8 Solar
    9 District steam
    21 Some other fuel

NEXT	If FURNFUEL=21: FURNFUELFU Else: EQMAMT				
Derived		**Show Card**		**CARI**	

FURNFUELFU					
ASK	If FURNFUEL=21				

Specify the type of other fuel.

    Open response

NEXT	EQMAMT				
Derived		**Show Card**		**CARI**	

RADFUEL					
ASK	If STEAMR=1				

What fuel does the steam/hot water system use? Is it…

    5 Electricity
    1 Natural gas from underground pipes
    2 Propane (bottled gas)
    3 Fuel oil
    4 Kerosene
    7 Wood
    8 Solar
    9 District steam
   21 Some other fuel

NEXT	If RADFUEL=21: RADFUELFU Else: EQMAMT				
Derived		**Show Card**		**CARI**	

RADFUELFU					
ASK	If RADFUEL=21				

Specify the type of other fuel.

    Open response

NEXT	EQMAMT				
Derived		**Show Card**		**CARI**	

PIPEFUEL

ASK	If PIPELESS=1

What fuel does the pipeless furnace use? Is it…

   5 Electricity
   1 Natural gas from underground pipes
   2 Propane (bottled gas)
   3 Fuel oil
   4 Kerosene
   7 Wood
   8 Solar
   9 District steam
 21 Some other fuel

NEXT	If PIPEFUEL=21: PIPEFUELFU Else: EQMAMT

Derived		Show Card		CARI	

PIPEFUELFU

ASK	If PIPEFUEL=21

Specify the type of other fuel.

   Open response

NEXT	EQMAMT

Derived		Show Card		CARI	

RMHTFUEL

ASK	If ROOMHEAT=1

What fuel does the room heater use? Is it…

   1 Natural gas from underground pipes
   2 Propane (bottled gas)
   3 Fuel oil
   4 Kerosene

NEXT	EQMAMT

Derived		Show Card		CARI	

FPFUEL

ASK	If CHIMNEY=1

What fuel does the fireplace use? Is it…

    1 Natural gas from underground pipes
    2 Propane (bottled gas)
    7 Wood
    21 Some other fuel

NEXT	If FPFUELFU=21: FPFUELFU Else if FPFUEL in(1,2): NGFPFLUE Else: EQMAMT

Derived		**Show Card**		**CARI**	

FPFUELFU

ASK	If FPFUEL=21

Specify the type of other fuel.

    Open response

NEXT	EQMAMT

Derived		**Show Card**		**CARI**	

NGFPFLUE

ASK	If FPFUEL in(1,2)

Does this fireplace have a flue to the outside or is it entirely self-contained?

    1 Flue to the outside
    2 Flueless (self contained)

NEXT	USNGFP

Derived		**Show Card**		**CARI**	

USENGFP (Changed from 2009)

ASK	If FPFUEL in(1,2)

During the winter how frequently does your household use the gas fireplace? Is it…

    1 Most days
    2 About once a week
    3 Fewer than 4 times each month

NEXT	EQMAMT				
Derived		**Show Card**		**CARI**	

RNGFUEL	
ASK	If RANGE=1

What fuel does the cooking stove use? Is it…

- 5 Electricity
- 1 Natural gas from underground pipes
- 2 Propane (bottled gas)
- 3 Fuel oil
- 4 Kerosene
- 7 Wood
- 21 Some other fuel

NEXT	If RNGFUEL=21: RNGFUELFU Else: EQMAMT				
Derived		**Show Card**		**CARI**	

RNGFUELFU	
ASK	If RNGFUEL=21

Specify the type of other fuel.

    Open response

NEXT	EQMAMT				
Derived		**Show Card**		**CARI**	

DIFFUEL	
ASK	If DIFEQUIP=1

What fuel does the other type of heating equipment use? Is it...

- 5 Electricity
- 1 Natural gas from underground pipes
- 2 Propane (bottled gas)
- 3 Fuel oil
- 4 Kerosene
- 7 Wood
- 8 Solar
- 9 District steam
- 21 Some other fuel

NEXT	If DIFFUEL=21: DIFFUELFU Else: EQMAMT				
Derived		**Show Card**		**CARI**	

DIFFUELFU					
ASK	If DIFFUEL=21:				

Specify the type of other fuel.

    Open response

NEXT	EQMAMT				
Derived		**Show Card**		**CARI**	

NUMPORTELHEAT2 (New)					
ASK	If CARRYEL=1				

How many portable electric heaters does your household use?

    1 - 15

NEXT	EQMAMT				
Derived		**Show Card**		**CARI**	

EQMAMT (Changed from 2009)					
ASK	If EQUIPAUX=1				

You've told me that your household uses more than one type of equipment to heat your home. How much of your home's heat is provided by [FILL: MainHeatingEquip]. Would you say almost all, about three-fourths, or closer to half of all your heat?

    1 Almost all
    2 About three-fourths
    3 Closer to half of all your heat

NEXT	If CELLAR=1: BASEHEAT Else if ATTIC=1: ATTCHEAT Else if PRKGPLC1=1: GARGHEAT Else: MOISTURE				
Derived		**Show Card**		**CARI**	

BASEHEAT (Changed from 2009)

ASK	If HEATHOME=1 and CELLAR=1

Is any part of your basement heated using the heating equipment you've told me about?

   1 Yes
   0 No

NEXT	If BASEHEAT=1: BASEHT2 Else if ATTIC=1: ATTCHEAT Else if PRKGPLC1=1: GARGHEAT Else: MOISTURE

Derived		**Show Card**		**CARI**	

BASEHT2 (Changed from 2009)

ASK	If BASEHEAT=1

About how much of your basement is heated? Is it…

   1 All
   2 About half
   3 Some

NEXT	If ATTIC=1: ATTCHEAT Else if PRKGPLC1=1: GARGHEAT Else: MOISTURE

Derived		**Show Card**		**CARI**	

ATTCHEAT (Changed from 2009)

ASK	If HEATHOME=1 and ATTIC=1

Is any part of your attic heated using the heating equipment you've told me about?

   1 Yes
   0 No

NEXT	If ATTCHEAT=1: ATTCHT2 Else if PRKGPLC1=1: GARGHEAT Else: MOISTURE

Derived		**Show Card**		**CARI**	

ATTCHT2 (Changed from 2009)

ASK	If ATTCHEAT=1

About how much of your attic is heated? Is it…

    1 All
    2 About half
    3 Some

NEXT	If PRKGPLC1=1: GARGHEAT Else: MOISTURE

Derived		**Show Card**		**CARI**	

GARGHEAT (Changed from 2009)

ASK	If HEATHOME=1 and PRKGPLC1=1

Is your garage heated using the heating equipment you've told me about?

    1 Yes
    0 No

NEXT	MOISTURE

Derived		**Show Card**		**CARI**	

MOISTURE (Changed from 2009)

ASK	All respondents

Humidifiers add moisture to the air and are often used in the winter. Is a humidifier used in your home?

    1 Yes
    0 No

NEXT	If MOISTURE=1: HUMIDTYPE Else: IVCOMMDFILTER

Derived		**Show Card**		**CARI**	

HUMIDTYPE (New)

ASK	If MOISTURE=1

Is your humidifier a portable humidifier or a whole home humidifier?

    1 Portable
    2 Whole home

NEXT	USEMOISTURE				
Derived		**Show Card**		**CARI**	

USEMOISTURE (Changed from 2009)					
ASK	If MOISTURE=1				

In the last year, how many months was the humidifier used?

   0 - 12

NEXT	IVCOMMDFILTER				
Derived		**Show Card**		**CARI**	

IVCOMMDFILTER					
ASK	All respondents				

Interviewer Task: If you have any comments that might suggest that the data collected in the space heating section should be analyzed by central office staff, enter 1. If you have no comments regarding the quality of data entered in this section, enter 2.

   1 I have comments regarding the quality of data in this section
   2 I do not have comments

NEXT	If IVCOMMDFILTER=1: IVCOMMD Else: Section E				
Derived		**Show Card**		**CARI**	

IVCOMMD					
ASK	If IVCOMMDFILTER=1				

Interviewer Task: Record any information here about the space heating equipment in this housing unit and its' usage that might provide clarification to the respondent's answers.

   Open response

NEXT	Section E				
Derived		**Show Card**		**CARI**	

SECTION E: AIR CONDITIONING

AIRCOND	
ASK	All respondents

Is any air conditioning equipment used in your home?
 	
    1 Yes
    0 No	

NEXT	If AIRCOND=1: COOLTYPE If AIRCOND=0: DNTAC Else: NUMCFAN

Derived		**Show Card**		**CARI**	

DNTAC (Changed from 2009)	
ASK	If AIRCOND=0

Just to clarify, do you have air conditioning equipment but don't use it, or does your home not have any air conditioning equipment?
 	
    1 Have equipment, but don't use it
    2 Don't have any air conditioning equipment	

NEXT	If DNTAC=1: COOLTYPENOAC Else: NUMCFAN

Derived		**Show Card**		**CARI**	

COOLTYPENOAC (Changed from 2009)	
ASK	If DNTAC=1

We are still interested to know about the air conditioning equipment in your home. What type of air conditioning equipment does your home have? Is it a central system, individual window, wall, or portable units, or both a central system AND individual units?
 	
    1 Central air conditioning system
    2 Individual window/wall or portable units
    3 Both a central system and individual units	

NEXT	NUMCFAN

Derived		**Show Card**		**CARI**	

COOLTYPE (Changed from 2009)					
ASK	If AIRCOND=1				

What type of air conditioning equipment does your home have? Is it a central system, individual window, wall, or portable units, or both a central system AND individual units?
 	
   1 Central air conditioning system
   2 Individual window/wall or portable units
   3 Both a central system and individual units					

NEXT	If COOLTYPE in(1,3): NUMCENAC If COOLTYPE=2: NUMBERAC Else: NUMCFAN				
Derived		**Show Card**		**CARI**	Yes

NUMCENAC (New)				
ASK	If COOLTYPE in(1,3)			

Do you have more than one central air conditioning unit?
 	
   1 Yes
   0 No				

NEXT	CENACHP			
Derived		**Show Card**		**CARI**	

CENACHP				
ASK	If COOLTYPE in(1,3)			

Is your central air conditioning system a heat pump?
 	
   1 Yes
   0 No				

NEXT	If CENACHP=1 and EQUIPM ne 4: HPTYPE2 Else: ACOTHERS			
Derived		**Show Card**		**CARI**	

HPTYPE2 (New)	
ASK	If CENACHP=1 and EQUIPM ne 4

What type of heat pump do you have? Is it…
 	
   1 Electric air source
   2 Geothermal or ground source
   3 Natural gas	

NEXT	HPDUCTS				
Derived		**Show Card**		**CARI**	

HPDUCTS (New)					
ASK	If CENACHP=1				

Does your heat pump deliver cold air through ducts and vents or is it a ductless system?

   1 Ducts and vents
   2 Ductless

NEXT	ACOTHERS				
Derived		**Show Card**		**CARI**	

ACOTHERS					
ASK	If COOLTYPE in(1,3)				

Does the central air conditioning equipment that cools your home also cool any other apartments, condos, households, businesses, or farm buildings?

   1 Yes
   0 No

NEXT	MAINTAC				
Derived		**Show Card**		**CARI**	

MAINTAC (Changed from 2009)					
ASK	If COOLTYPE in(1,3)				

In the last year, has any routine maintenance been performed on your household's central air conditioning equipment? This includes replacing or cleaning the air filter.

   1 Yes
   0 No

NEXT	AGECENAC				
Derived		**Show Card**		**CARI**	

AGECENAC					
ASK	If COOLTYPE in(1,3)				

Place show card 1 in front of the respondent.

Please look at Card 1. Approximately, how old is your central air conditioning equipment?

    1 Less than 2 years old
    2 2 to 4 years old
    3 5 to 9 years old
    41 10 to 14 years old
    42 15 to 19 years old
    5 20 years or older
    6 As old as the home (if volunteered)

NEXT	THERMAINAC				
Derived		**Show Card**	Yes	**CARI**	Yes

THERMAINAC (Changed from 2009)					
ASK	If COOLTYPE in(1,3)				

Do you have a thermostat that controls your central air conditioning equipment?

    1 Yes
    0 No

NEXT	If THERMAINAC=1: PROTHERM Else: USECENAC				
Derived		**Show Card**		**CARI**	

PROTHERMAC					
ASK	If THERMAINAC=1				

Some thermostats can be programmed so that different temperatures are automatically maintained at different times of the day. Is the thermostat that controls your central air conditioning equipment programmable?

    1 Yes
    0 No

NEXT	USCENAC				
Derived		**Show Card**		**CARI**	

USECENAC (Changed from 2009)

ASK	If COOLTYPE in(1,3)

Place show card 21 in front of the respondent.

Please look at Card 21. Which best describes how your household controls your central air conditioning equipment most of the time?

    1 Set one temperature and leave it there most of the time
    2 Manually adjust the temperature at night or when no one is at home
    3 Program the thermostat to automatically adjust the temperature during the day and night at certain times
    4 Turn equipment on or off as needed
    5 Our household does not have control over the equipment
    9 Other

NEXT	If USECENAC=9: USECENACFU Else if COOLTYPE=3: NUMBERAC Else if COOLTYPE=1: TEMPHOMEAC				
Derived		**Show Card**	Yes	**CARI**	Yes

USECENACFU (New)

ASK	If USECENAC=9

Could you describe how your household uses your central air conditioning equipment?

    Open response

NEXT	If COOLTYPE=3: NUMBERAC Else if COOLTYPE=1: TEMPHOMEAC				
Derived		**Show Card**		**CARI**	

NUMBERAC (Changed from 2009)

ASK	If COOLTYPE in(2,3)

How many individual window, wall, or portable air conditioning units do you use in your home?

    1 - 15

NEXT	WWTYPE				
Derived		**Show Card**		**CARI**	

WWTYPE (New)

ASK	If COOLTYPE in(2,3)

Is the [If NUMBERAC>1: most-used] individual air-conditioning unit installed in a window, installed in a wall, or is it a portable unit?

   1 Window
   2 Wall
   3 Portable

NEXT	WWACAGE				
Derived		**Show Card**		**CARI**	

WWACAGE (Changed from 2009)

ASK	If COOLTYPE in(2,3)

Place show card 1 in front of the respondent.

Please look at Card 1. Approximately, how old is the [If NUMBERAC>1: most-used] window, wall, or portable air conditioning unit in your home?

   1 Less than 2 years old
   2 2 to 4 years old
   3 5 to 9 years old
  41 10 to 14 years old
  42 15 to 19 years old
   5 20 years or older
   6 As old as the home (if volunteered)

NEXT	THERMAINWW				
Derived		**Show Card**	Yes	**CARI**	

THERMAINWW (New)

ASK	If COOLTYPE in(2,3)

Do you have a thermostat that controls your [If NUMBERAC>1: most used] individual air conditioning unit?

   1 Yes
   0 No

NEXT	If THERMAINWW=1: PROTHERM Else: USEWWAC				
Derived		**Show Card**		**CARI**	

PROTHERMWW (New)

ASK	If THERMAINWW=1

Some thermostats can be programmed so that different temperatures are automatically maintained at different times of the day. Is the thermostat that controls your [If NUMBERAC>1: most used] individual unit programmable?

    1 Yes
    0 No

NEXT	USEWWAC				
Derived		**Show Card**		**CARI**	

USEWWAC (Changed from 2009)

ASK	If COOLTYPE in(2,3)

Place show card 21 in front of the respondent.

Please look at Card 21. Which best describes how your household controls your [if NUMBERAC>1: most used] individual unit most of the time?

    1 Set one temperature and leave it there most of the time
    2 Manually adjust the temperature at night or when no one is at home
    3 Program the thermostat to automatically adjust the temperature during the day and night at certain times
    4 Turn equipment on or off as needed
    5 Our household does not have control over the equipment
    9 Other

NEXT	If USEWWAC=9: USEWWACFU Else: TEMPHOMEAC				
Derived		**Show Card**	Yes	**CARI**	

USEWWACFU (New)

ASK	If USEWWAC=9

Could you describe how your household uses your [if NUMBERAC>1: most used] individual unit?

    Open response

NEXT	TEMPHOMEAC				
Derived		**Show Card**		**CARI**	

TEMPHOMEAC (Changed from 2009)

ASK	If AIRCOND=1

The next questions are about the temperature inside your home during the summer. If you have a thermostat, think about where your household sets the temperature for your air conditioning equipment. If you do not have a thermostat, your best guess about the temperature is fine.

During the summer, what is the typical temperature when someone is home during the day?

Enter degrees Fahrenheit.

    40 - 96

NEXT	TEMPGONEAC

Derived		Show Card		CARI	

TEMPGONEAC (Changed from 2009)

ASK	If AIRCOND=1

What is the typical temperature when no one is inside your home during the day?

Enter degrees Fahrenheit.

    40 - 96

NEXT	TEMPNITEAC

Derived		Show Card		CARI	

TEMPNITEAC (Changed from 2009)

ASK	If AIRCOND=1

What is the typical temperature inside your home at night?

Enter degrees Fahrenheit.

    40 - 96

NEXT	If CELLAR=1: BASECOOL Else if ATTIC=1: ATTCCOOL Else if PRKGPLC1=1: GARGCOOL Else: NUMCFAN

Derived		Show Card		CARI	

BASECOOL (Changed from 2009)

ASK	If AIRCOND=1 and CELLAR=1

Is any part of your basement cooled using the air conditioning equipment you told me about?

   1 Yes
   0 No

NEXT	If BASECOOL=1: BASECL2 Else if ATTIC=1: ATTCCOOL Else if PRKGPLC1=1: GARGCOOL Else: NUMCFAN
Derived		**Show Card**		**CARI**	

BASECL2 (Changed from 2009)

ASK	If BASECOOL=1

About how much of your basement is cooled? Is it all, about half, or some?

   1 All
   2 About half
   3 Some

NEXT	If ATTIC=1: ATTCCOOL Else if PRKGPLC1=1: GARGCOOL Else: NUMCFAN
Derived		**Show Card**		**CARI**	

ATTCCOOL (Changed from 2009)

ASK	If AIRCOND=1 and ATTIC=1

Is any part of your attic cooled using the air conditioning equipment you told me about?

   1 Yes
   0 No

NEXT	If ATTCCOOL=1: ATTCCL2 Else if PRKGPLC1=1: GARGHEAT Else: NUMCFAN
Derived		**Show Card**		**CARI**	

ATTCCL2 (Changed from 2009)					
ASK	If ATTCCOOL=1				

About how much of your attic is cooled? Is it all, about half, or some?
 	
   1 All
   2 About half
   3 Some					

NEXT	If PRKGPLC1=1: GARGCOOL Else: NUMCFAN				
Derived		**Show Card**		**CARI**	

GARGCOOL (Changed from 2009)					
ASK	If AIRCOND=1 and PRKGPLC1=1				

Is your garage cooled using the air conditioning equipment you told me about?
 	
   1 Yes
   0 No					

NEXT	NUMCFAN				
Derived		**Show Card**		**CARI**	

NUMCFAN (Changed from 2009)					
ASK	All respondents				
Now let's talk about fans. How many of each of the following are used in your home? Ceiling fans 0 - 15					
NEXT	NUMFLOORFAN				
Derived		**Show Card**		**CARI**	

NUMFLOORFAN (New)	
ASK	All respondents
Floor, window, or table fans 0 - 15	

NEXT	If TYPEHUQ in(2,3): NUMWHOLEFAN Else if NUMCFAN>0: USECFAN Else: NOTMOIST				
Derived		**Show Card**		**CARI**	

NUMWHOLEFAN (New)					
ASK	If TYPEHUQ in(2,3)				
Whole house fans 0 - 15					
NEXT	NUMATTICFAN				
Derived		**Show Card**		**CARI**	

NUMATTICFAN (New)					
ASK	If TYPEHUQ in(2,3)				
Attic fans 0 - 15					
NEXT	If NUMCFAN>0: USECFAN Else: NOTMOIST				
Derived		**Show Card**		**CARI**	

USECFAN (Changed from 2009)					
ASK	If NUMCFAN>0				

Thinking about the ceiling fan [If NUMCFAN>1: that you use the most], how often is this fan used during the summer? Is it used only a few days or nights when it's really needed, used quite a bit, used just about all summer, or is it not used at all?
 	
   1 Used only a few days or nights when really needed
   2 Used quite a bit
   3 Used just about all summer
   4 Not used at all					

NEXT	NOTMOIST				
Derived		**Show Card**		**CARI**	

NOTMOIST (Changed from 2009)

ASK	All respondents

Dehumidifiers remove moisture from the air and are often used in the summer. Is a dehumidifier used in your home?

   1 Yes
   0 No

NEXT	If NOTMOIST=1: MOISTTYPE Else: TREESHAD

Derived		Show Card		CARI	

MOISTTYPE (New)

ASK	If NOTMOIST=1

Is your dehumidifier a portable dehumidifier or a whole home dehumidifier?

   1 Portable
   2 Whole home

NEXT	USENOTMOIST

Derived		Show Card		CARI	

USENOTMOIST (Changed from 2009)

ASK	If NOTMOIST=1

In the last year, how many months was the dehumidifier used?

   0 - 12

NEXT	TREESHAD

Derived		Show Card		CARI	

TREESHAD

ASK	All respondents

Do any large trees shade your home from the afternoon summer sun?

   1 Yes
   0 No

NEXT	IVCOMMEFILTER				
Derived		**Show Card**		**CARI**	

IVCOMMEFILTER (Changed from 2009)	
ASK	All respondents

Interviewer Task: If you have any comments that might suggest that the data collected in the air conditioning section should be analyzed by central office staff, enter 1. If you have no comments regarding the quality of data entered in this section, enter 2.

    1 I have comments regarding the quality of data in this section
    2 I do not have comments

NEXT	If IVCOMMEFILTER=1: IVCOMME; Else: Section F				
Derived		**Show Card**		**CARI**	

IVCOMME (Changed from 2009)	
ASK	If IVCOMMEFILTER=1

Interviewer Task: Record any information here about the air conditioning equipment in this housing unit and its' usage that might provide clarification to the respondent's answers.

    Open response

NEXT	Section F				
Derived		**Show Card**		**CARI**	

SECTION F: WATER HEATING

H2OHEATAPT (New)					
ASK	If TYPEHUQ in(4,5)				

Now let's talk about water heaters.

Do you have a water heater in your apartment or is the water heater located somewhere else in this building?

   1 In apartment
   2 Somewhere else in building

| **NEXT** | If H2OHEATAPT=1: FUELH2O
Else: IVCOMMFFILTER | | | | |
| **Derived** | | **Show Card** | | **CARI** | Yes |

FUELH2O (Changed from 2009)					
ASK	If TYPEHUQ in(1,2,3) or H2OHEATAPT=1				

[If TYPEHUQ in(1,2,3): Now let's talk about water heaters.]

Place show card 22 in front of the respondent.

Please look at Card 22. What fuel does your main water heater use?

   5 Electricity
   1 Natural gas from underground pipes
   2 Propane (bottled gas)
   3 Fuel oil
   4 Kerosene
   7 Wood
   8 Solar
  21 Some other fuel

| **NEXT** | If FUELH2O=21:FUELH2OFU
Else: WHEATSIZ | | | | |
| **Derived** | | **Show Card** | Yes | **CARI** | Yes |

FUELH2OFU	
ASK	If FUELH2O=21

Could you tell me what that other fuel used to heat water is?

    Open response

NEXT	WHEATSIZ				
Derived		**Show Card**		**CARI**	

WHEATSIZ (Changed from 2009)	
ASK	If TYPEHUQ in(1,2,3) or H2OHEATAPT=1

Place show card 23 in front of the respondent.

Please look at Card 23. What is the approximate size of the main water heater?

1 Small storage tank (30 gallons or less)
2 Medium storage tank (31 to 49 gallons)
3 Large storage tank (50 gallons or more)
4 Tankless or on-demand

NEXT	WHEATAGE				
Derived		**Show Card**	Yes	**CARI**	Yes

WHEATAGE (Changed from 2009)	
ASK	If TYPEHUQ in(1,2,3) or H2OHEATAPT=1

Place show card 1 in front of the respondent.

Please look at Card 1. Approximately how old is the main water heater?

1 Less than 2 years old
2 2 to 4 years old
3 5 to 9 years old
41 10 to 14 years old
42 15 to 19 years old
5 20 years or older
6 As old as the home (if volunteered)

NEXT	If WHEATSIZ in(1,2,3): WHEATBKT Else: MORETHAN1H2O				
Derived		**Show Card**	Yes	**CARI**	

WHEATBKT	
ASK	If WHEATSIZ in(1,2,3)

Has the main water heater in your home been insulated using a water heater blanket?

1 Yes
0 No

NEXT	MORETHAN1H2O				
Derived		Show Card		CARI	

MORETHAN1H2O (New)					
ASK	If TYPEHUQ in(1,2,3) or H2OHEATAPT=1				

Do you have more than one water heater?

    1 Yes
    0 No

NEXT	If MORETHAN1H2O=1: FUELH2O2 Else: IVCOMMFFILTER				
Derived		Show Card		CARI	

FUELH2O2 (Changed from 2009)					
ASK	If MORETHAN1H2O=1				

Place show card 22 in front of the respondent.

Please look at Card 22. Which fuel does your second water heater use?

    5 Electricity
    1 Natural gas from underground pipes
    2 Propane (bottled gas)
    3 Fuel oil
    4 Kerosene
    7 Wood
    8 Solar
  21 Some other fuel

NEXT	If FUELH2O2=21: FUELH2O2FU Else: WHEATSIZ2				
Derived		Show Card	Yes	CARI	

FUELH2O2FU					
ASK	If FUELH2O2=21				

Could you tell me what that other fuel used to heat water is?

    Open response

NEXT	WHEATSIZ2				
Derived		Show Card		CARI	

WHEATSIZ2 (Changed from 2009)

ASK	If MORETHAN1H2O=1

Place show card 23 in front of the respondent.

Please look at Card 23. What is the approximate size of the second water heater?

1 Small storage tank (30 gallons or less)
2 Medium storage tank (31 to 49 gallons)
3 Large storage tank (50 gallons or more)
4 Tankless or on-demand

NEXT	WHEATAGE2				
Derived		**Show Card**	Yes	**CARI**	

WHEATAGE2 (Changed from 2009)

ASK	If MORETHAN1H2O=1

Place show card 1 in front of the respondent.

Please look at Card 1. Approximately how old is the second water heater?

1 Less than 2 years old
2 2 to 4 years old
3 5 to 9 years old
41 10 to 14 years old
42 15 to 19 years old
5 20 years or older
6 As old as the home (if volunteered)

NEXT	IVCOMMFFILTER				
Derived		**Show Card**	Yes	**CARI**	

IVCOMMFFILTER (Changed from 2009)

ASK	All respondents

Interviewer Task: If you have any comments that might suggest that the data collected in the water heating section should be analyzed by central office staff, enter 1. If you have no comments regarding the quality of data entered in this section, enter 2.

1 I have comments regarding the quality of data in this section
2 I do not have comments

NEXT	If IVCOMMFFILTER=1: IVCOMMF Else: Section G				
Derived		**Show Card**		**CARI**	

IVCOMMF (Changed from 2009)					
ASK	If IVCOMMFFILTER=1				
Interviewer Task: Record any information here about the water heating equipment in this housing unit and its' usage that might provide clarification to the respondent's answers. Open response					
NEXT	Section G				
Derived		**Show Card**		**CARI**	

SECTION G: MISCELLANEOUS

LGTINNUM (New)					
ASK	All respondents				

Now let's turn to lighting and other uses of energy in your home.

Place show card 24 in front of the respondent.

Please look at Card 24. About how many light bulbs are installed inside your home? Include light bulbs in ceiling fixtures and fans, table and floor lamps, as well as those used infrequently, such as in hallways, closets, and garages. For fixtures with multiple bulbs, count each bulb separately.

  1 Fewer than 20 light bulbs
  2 20 to 39 light bulbs
  3 40 to 59 light bulbs
  4 60 to 79 light bulbs
  5 80 or more light bulbs

NEXT	LGTIN4				
Derived		**Show Card**	Yes	**CARI**	Yes

LGTIN4 (New)					
ASK	All respondents				

How many of the light bulbs inside your home are used at least 4 hours per day?

  0 - 99

NEXT	LGTINCAN				
Derived		**Show Card**		**CARI**	

LGTINCAN (New)		
ASK	All respondents	

Place show card 25 in front of the respondent.

Please look at Card 25. The first picture shows an incandescent light bulb. What portion of the light bulbs inside your home are incandescent bulbs? Is it…

  1 All,
  2 Most,
  3 About half,
  4 Some, or
  5 None?

NEXT	LGTINCFL				
Derived		**Show Card**	Yes	**CARI**	

LGTINCFL (New)					
ASK	All respondents				

The second picture shows a CFL bulb. What portion of the light bulbs inside your home are CFL bulbs? Is it…

    1 All,
    2 Most,
    3 About half,
    4 Some, or
    5 None?

NEXT	LGTINLED				
Derived		**Show Card**	Yes	**CARI**	Yes

LGTINLED (New)					
ASK	All respondents				

The third picture shows an LED bulb. What portion of the light bulbs inside your home are LED bulbs? Is it…

    1 All,
    2 Most,
    3 About half,
    4 Some, or
    5 None?

NEXT	LGTINCNTL				
Derived		**Show Card**	Yes	**CARI**	Yes

LGTINCNTL (New)					
ASK	All respondents				

Are any of the light bulbs inside your home controlled by timers or dimmer switches?

    1 Yes
    0 No

NEXT	If TYPEHUQ in(1,2,3): LGTOUTNUM Else: RECBATH				
Derived		**Show Card**		**CARI**	

LGTOUTNUM (New)

ASK	If TYPEHUQ in(1,2,3)

About how many light bulbs are installed outside your home? Is it…

- 0 None,
- 1 1 to 4 bulbs,
- 2 5 to 9 bulbs, or
- 3 10 or more bulbs?

NEXT	If LGTOUTNUM in(1,2,3): LGTOUTNITE Else: SWIMPOOL

Derived		Show Card		CARI	

LGTOUTNITE (New)

ASK	If LGTOUTNUM in(1,2,3)

How many of the light bulbs outside your home are typically left on all night?

0 - 25

NEXT	If LGTOUTNITE>0: LGTOUTCAN Else: LGTOUTCNTL

Derived		Show Card		CARI	

LGTOUTCAN (New)

ASK	If LGTOUTNITE>0

Which of these types of lights bulbs are typically left on all night outside your home?

Incandescent bulbs?

- 1 Yes
- 0 No

NEXT	LGTOUTCFL

Derived		Show Card		CARI	

LGTOUTCFL (New)

ASK	If LGTOUTNITE>0

CFL bulbs?

- 1 Yes
- 0 No

NEXT	LGTOUTLED				
Derived		**Show Card**		**CARI**	

LGTOUTLED (New)

ASK	If LGTOUTNITE>0

LED bulbs?

   1 Yes
   0 No

NEXT	LGTOUTNG				
Derived		**Show Card**		**CARI**	

LGTOUTNG (New)

ASK	If LGTOUTNITE>0

Natural gas lights?

   1 Yes
   0 No

NEXT	LGTOUTCNTL				
Derived		**Show Card**		**CARI**	

LGTOUTCNTL (New)

ASK	If LGTOUTNUM in(1,2,3)

Are any of the light bulbs outside your home controlled by motion detectors or light sensors?

   1 Yes
   0 No

NEXT	SWIMPOOL				
Derived		**Show Card**		**CARI**	

SWIMPOOL (Changed from 2009)

ASK	If TYPEHUQ in(1,2,3)

Does your home have its own swimming pool?

   1 Yes
   0 No

NEXT	If SWIMPOOL=1: MONPOOL Else: RECBATH				
Derived		**Show Card**		**CARI**	

MONPOOL (New)					
ASK	If SWIMPOOL=1				

In the last year, how many months was your swimming pool in use?

   0 - 12

NEXT	If MONPOOL ge 1: POOL Else: RECBATH				
Derived		**Show Card**		**CARI**	

POOL (Changed from 2009)					
ASK	If MONPOOL ge 1				

Is it a heated pool?

   1 Yes
   0 No

NEXT	If POOL=1: FUELPOOL Else: RECBATH				
Derived		**Show Card**		**CARI**	

FUELPOOL (Changed from 2009)					
ASK	If POOL=1				

What fuel is used to heat the water in your swimming pool? Is it…

   5 Electricity,
   1 Natural gas from underground pipes,
   2 Propane (bottled gas),
   3 Fuel oil,
   4 Kerosene,
   8 Solar, or
  21 Some other fuel?

NEXT	If FUELPOOL=21: FUELPOOLFU Else: RECBATH				
Derived		**Show Card**		**CARI**	

FUELPOOLFU

ASK	If FUELPOOL=21

Could you tell me what that other fuel used to heat the pool water is?

    Open response

NEXT	RECBATH				
Derived		**Show Card**		**CARI**	

RECBATH (Changed from 2009)

ASK	All respondents

Does your home have its own heated hot tub, spa, or Jacuzzi, other than a bathtub?

    1 Yes
    0 No

NEXT	If RECBATH=1: MONTUB Else: AUDIT				
Derived		**Show Card**		**CARI**	

MONTUB (New)

ASK	If RECBATH=1

In the last year, how many months was your hot tub, spa, or Jacuzzi in use?

    0 - 12

NEXT	If MONTUB ge 1: FUELTUB Else: AUDIT				
Derived		**Show Card**		**CARI**	

FUELTUB (Changed from 2009)

ASK	If MONTUB ge 1

What fuel is used to heat the water in your hot tub, spa, or Jacuzzi? Is it…

    5 Electricity,
    1 Natural gas from underground pipes,
    2 Propane (bottled gas),
    3 Fuel oil,
    4 Kerosene,
    8 Solar, or
    21 Some other fuel?

NEXT	If FUELTUB=21: FUELTUBFU Else: AUDIT				
Derived		**Show Card**		**CARI**	

FUELTUBFU					
ASK	If FUELTUB=21				

Could you tell me what that other fuel used to heat the water is?

    Open response

NEXT	AUDIT				
Derived		**Show Card**		**CARI**	

AUDIT					
ASK	All respondents				

A home energy audit is when a trained professional examines how energy is used in all parts of a home. After examining a home, the energy auditor will provide a list of ways to reduce energy use and save money on energy bills. Has your home had an energy audit?

    1 Yes
    0 No

NEXT	If AUDIT=1: AUDITCHG Else if KOWNRENT=1: EELIGHTS, EETHERM, FREEAUDIT, REBATEAPP, RECYCAPP, SUBLOAN, TAXCREDITAPP, TAXCREDITWIN, WEATHERIZATION, BENOTHER, BENNONE Else: ENERGYASST				
Derived		**Show Card**		**CARI**	

AUDITCHG (New)					
ASK	If AUDIT=1				

Did your household make any of the changes suggested by the energy auditor?

    1 Yes
    0 No

NEXT	If KOWNRENT=1: EELIGHTS, EETHERM, FREEAUDIT, REBATEAPP, RECYCAPP, SUBLOAN, TAXCREDITAPP, TAXCREDITWIN, WEATHERIZATION, BENOTHER, BENNONE Else: ENERGYASST				
Derived		**Show Card**		**CARI**	

EELIGHTS, EETHERM, FREEAUDIT, REBATEAPP, RECYCAPP, SUBLOAN, TAXCREDITAPP, TAXCREDITWIN, WEATHERIZATION, BENOTHER, BENNONE (New)					
ASK	If KOWNRENT=1				

Place show card 26 in front of the respondent.

Please look at Card 26. Has your household received any of these energy-related benefits or assistance for this home?

Mark all that apply.

    Free or subsidized energy-efficient light bulbs (EELIGHTS)
    Free or subsidized programmable thermostat (EETHERM)
    Free or subsidized home energy audit (FREEAUDIT)
    Utility or energy supplier rebate for new appliance or equipment (REBATEAPP)
    Recycling of old appliance or equipment (for example, a refrigerator) (RECYCAPP)
    Subsidized loan for new appliance or equipment (SUBLOAN)
    Tax credit for new appliance or equipment (TAXCREDITAPP)
    Tax credit for new windows or insulation (TAXCREDITWIN)
    Weatherization assistance program (WEATHERIZATION)
    Some other benefit (BENOTHER)
    No energy-related benefits or assistance (BENNONE)

NEXT	If BENOTHER=1: BENOTHERFU Else: ENERGYASST				
Derived		**Show Card**	Yes	**CARI**	Yes

BENOTHERFU (New)					
ASK	If BENOTHER=1				

Could you tell me what that other benefit was?

    Open response

NEXT	ENERGYASST				
Derived		**Show Card**		**CARI**	

ENERGYASST (New)	
ASK	All respondents

Has your household participated in a home energy assistance program that helps pay energy bills or fix broken equipment?

    1 Yes
    0 No

NEXT	If ENERGYASST=1: ENERGYASST11, ENERGYASST12, ENERGYASST13, ENERGYASST14, ENERGYASST15, ENERGYASSTOTH Else: ESWIN, ESFRIG, ESFREEZE, ESDISHW, ESCWASH, ESDRYER, ESWATER, ESLIGHT, ESNONE				
Derived		**Show Card**		**CARI**	

ENERGYASST11, ENERGYASST12, ENERGYASST13, ENERGYASST14, ENERGYASST15, ENERGYASSTOTH (New)

ASK	If ENERGYASST=1

In which of the following years did your household receive home energy assistance?

Mark all that apply.

    2011 (ENERGYASST11)
    2012 (ENERGYASST12)
    2013 (ENERGYASST13)
    2014 (ENERGYASST14)
    2015 (ENERGYASST15)
    Some other year(s) (ENERGYASSTOTH)

NEXT	ESWIN, ESFRIG, ESFREEZE, ESDISHW, ESCWASH, ESDRYER, ESWATER, ESLIGHT, ESNONE				
Derived		**Show Card**		**CARI**	

ESWIN, ESFRIG, ESFREEZE, ESDISHW, ESCWASH, ESDRYER, ESWATER, ESLIGHT, ESNONE (New)

ASK	All respondents

Place show card 27 in front of the respondent.

Please look at Card 27. Which of these products in your home are ENERGY STAR qualified?

Mark all that apply.

    Windows (ESWIN)
    Refrigerator (ESFRIG)
    Freezer (ESFREEZE)
    Dishwasher (ESDISHW)
    Clothes washer (ESCWASH)
    Clothes dryer (ESDRYER)
    Water heater (ESWATER)
    Light bulbs (ESLIGHT)
    None of these (ESNONE)

NEXT	If THERMAIN=1 or THERMAINAC=1: SMARTTHERM Else if TYPEHUQ in(1,2,3,4): OUTLET Else: ALTFUELPEV				
Derived		**Show Card**	Yes	**CARI**	

SMARTTHERM (New)					
ASK	If THERMAIN=1 or THERMAINAC=1				

Does your home have a "smart" or Internet-connected thermostat?
 	
   1 Yes
   0 No					

NEXT	If TYPEHUQ in(1,2,3,4): OUTLET Else: ALTFUELPEV				
Derived		**Show Card**		**CARI**	

OUTLET (Changed from 2009)					
ASK	If TYPEHUQ in(1,2,3,4)				

Do you or any member of your household park a car within about 20 feet of an electric outlet? Only outlets in garages, carports, or the exterior of the home are to be considered.
 	
   1 Yes
   0 No					

NEXT	ALTFUELPEV				
Derived		**Show Card**		**CARI**	

ALTFUELPEV (New)					
ASK	All respondents				

Do you or any member of your household own or lease any of the following alternative fuel vehicles?
 	
Plug-in electric vehicle or PEV?
 	
   1 Yes
   0 No					

NEXT	ALTFUELHYB				
Derived		**Show Card**		**CARI**	

ALTFUELHYB (New)	
ASK	All respondents

Gas-electric hybrid?
 	
   1 Yes
   0 No	

NEXT	ALTFUELE85				
Derived		**Show Card**		**CARI**	

ALTFUELE85 (New)					
ASK	All respondents				

E85 or "flex-fuel" vehicle?

   1 Yes
   0 No

NEXT	If ALTFUELE85=1: E85USE Else: IVCOMMGFILTER				
Derived		**Show Card**		**CARI**	

E85USE (New)					
ASK	If ALTFUELE85=1				

When buying fuel for the E85 vehicle, how often is E85 purchased, as compared with normal gasoline? Is it…

   1 All of the time
   2 Most of the time
   3 About half the time
   4 Some of the time
   5 Never

NEXT	IVCOMMGFILTER				
Derived		**Show Card**		**CARI**	

ELOTHER					
ASK					

Derived

NEXT					
Derived	Yes	**Show Card**		**CARI**	

UGOTH					
ASK					

Derived

NEXT	
Derived	Yes	**Show Card**		**CARI**	

LPOTHER	
ASK	
Derived	
NEXT	
Derived	Yes	**Show Card**		**CARI**	

FOOTHER	
ASK	
Derived	
NEXT	
Derived	Yes	**Show Card**		**CARI**	

KROTHER	
ASK	
Derived	
NEXT	
Derived	Yes	**Show Card**		**CARI**	

SOLOTHER	
ASK	
Derived	
NEXT	
Derived	Yes	**Show Card**		**CARI**	

WDOTHUSE	
ASK	
Derived	

NEXT					
Derived	Yes	**Show Card**		**CARI**	

IVCOMMGFILTER	
ASK	All respondents

Interviewer Task: If you have any comments that might suggest that the data collected in the miscellaneous section should be analyzed by central office staff, enter 1. If you have no comments regarding the quality of data entered in this section, enter 2.

   1 I have comments regarding the quality of data in this section
   2 I do not have comments

NEXT	If IVCOMMGFILTER=1: IVCOMMG Else: Section H				
Derived		**Show Card**		**CARI**	

IVCOMMG	
ASK	If IVCOMMGFILTER=1

Interviewer Task: Record any information here about the miscellaneous characteristics of this housing unit that might provide clarification to the respondent's answers.

   Open response

NEXT	Section H				
Derived		**Show Card**		**CARI**	

SECTION H: FUELS USED

BACKUP (New)	
ASK	If TYPEHUQ in(1,2,3,4)

Does your household have a back-up generator that can be used for generating electricity in case of a power outage or emergency?
 	
   1 Yes
   0 No	

NEXT	ONSITETYPE

Derived		**Show Card**		**CARI**	

ONSITETYPE (Changed from 2009)	
ASK	If TYPEHUQ in(1,2,3,4)

Place show card 28 in front of the respondent.
 	
Please look at Card 28. Not including back-up generators, does your home have any of these on-site systems that generates electricity?
 	
   0 No on-site generation system
   1 Solar or photovoltaic system
   2 Small wind turbine
   3 Combined heat and power system
   9 Some other on-site generation system	

NEXT	If ONSITETYPE=9: ONSITETYPEFU If ONSITETYPE in(1,2,3): ONSITEGRID Else: OTHFUELUSE

Derived		**Show Card**	Yes	**CARI**	

ONSITETYPEFU	
ASK	If ONSITETYPE=9
Could you tell me what that other on-site system is? Open response	
NEXT	ONSITEGRID

Derived		**Show Card**		**CARI**	

ONSITEGRID

ASK	If ONSITETYPE in(1,2,3,9)

Is your on-site system connected to the grid?

   1 Yes
   0 No

NEXT	ONSITEGENCAP				
Derived		**Show Card**		**CARI**	

ONSITEGENCAP (New)

ASK	If ONSITETYPE in(1,2,3,9)

"Capacity" is how much electricity a system can generate at one time. It is typically measured in kW (kilowatts). What is the capacity of your on-site system?

   Open response

NEXT	OTHFUELUSE				
Derived		**Show Card**		**CARI**	

OTHFUELUSE

ASK	All respondents

You have mentioned using [CAPI WILL LIST THE FUELS IDENTIFIED AS USED BY THE HOUSEHOLD]. Do you use [CAPI WILL LIST THE FUELS WHICH HAVE NOT BEEN IDENTIFIED AS USED BY THE HOUSEHOLD] as a fuel for any purpose in your home?

   1 Yes
   0 No

NEXT	If OTHFUELUSE=1: OTHFUELFU1, OTHFUELFU2, OTHFUELFU3, OTHFUELFU4, OTHFUELFU5, OTHFUELFU6, OTHFUELFU7 Else: ELPAY				
Derived		**Show Card**		**CARI**	

OTHFUELFU1, OTHFUELFU2, OTHFUELFU3, OTHFUELFU4, OTHFUELFU5, OTHFUELFU6, OTHFUELFU7				
ASK	If OTHFUELUSE=1				

Which of these other fuels do you also use? Is it…

Read responses and mark all that apply.

    5 Electricity,
    1 Natural gas,
    2 Propane (bottled gas),
    3 Fuel oil,
    4 Kerosene,
    7 Wood, or
    8 Solar energy?

NEXT	If OTHFUELFU1-7=5: OTHFUELFUEL Else if OTHFUELFU1-7=1: OTHFUELFUNG Else if OTHFUELFU1-7=2: OTHFUELFULP Else if OTHFUELFU1-7=3: OTHFUELFUFO Else if OTHFUELFU1-7=4: OTHFUELFUKE Else if OTHFUELFU1-7=7: OTHFUELFUWO Else if OTHFUELFU1-7=8: OTHFUELFUSO				
Derived		**Show Card**		**CARI**	

OTHFUELFUEL (New)				
ASK	If OTHFUELFU1-7=5				

Could you tell me how electricity is used in your home?

    Open response

NEXT	If OTHFUELFU1-7=1: OTHFUELFUNG Else if OTHFUELFU1-7=2: OTHFUELFULP Else if OTHFUELFU1-7=3: OTHFUELFUFO Else if OTHFUELFU1-7=4: OTHFUELFUKE Else if OTHFUELFU1-7=7: OTHFUELFUWO Else if OTHFUELFU1-7=8: OTHFUELFUSO Else: ELPAY				
Derived		**Show Card**		**CARI**	

OTHFUELFUNG (New)				
ASK	If OTHFUELFU1-7=1				

Could you tell me how natural gas is used in your home?

    Open response

NEXT	If OTHFUELFU1-7=2: OTHFUELFULP Else if OTHFUELFU1-7=3: OTHFUELFUFO Else if OTHFUELFU1-7=4: OTHFUELFUKE Else if OTHFUELFU1-7=7: OTHFUELFUWO Else if OTHFUELFU1-7=8: OTHFUELFUSO Else: ELPAY				
Derived		**Show Card**		**CARI**	

OTHFUELFULP (New)					
ASK	If OTHFUELFU1-7=2				

Could you tell me how propane is used in your home?

    Open response

NEXT	If OTHFUELFU1-7=3: OTHFUELFUFO Else if OTHFUELFU1-7=4: OTHFUELFUKE Else if OTHFUELFU1-7=7: OTHFUELFUWO Else if OTHFUELFU1-7=8: OTHFUELFUSO Else: ELPAY				
Derived		**Show Card**		**CARI**	

OTHFUELFUFO (New)					
ASK	If OTHFUELFU1-7=3				

Could you tell me how fuel oil is used in your home?

    Open response

NEXT	If OTHFUELFU1-7=4: OTHFUELFUKE Else if OTHFUELFU1-7=7: OTHFUELFUWO Else if OTHFUELFU1-7=8: OTHFUELFUSO Else: ELPAY				
Derived		**Show Card**		**CARI**	

OTHFUELFUKE (New)					
ASK	If OTHFUELFU1-7=4				

Could you tell me how kerosene is used in your home?

    Open response

NEXT	If OTHFUELFU1-7=7: OTHFUELFUWO Else if OTHFUELFU1-7=8: OTHFUELFUSO Else: ELPAY				
Derived		**Show Card**		**CARI**	

OTHFUELFUWO (New)

ASK	If OTHFUELFU1-7=7

Could you tell me how wood is used in your home?

    Open response

NEXT	If OTHFUELFU1-7=8: OTHFUELFUSO Else: ELPAY

Derived		Show Card		CARI	

OTHFUELFUSO (New)

ASK	If OTHFUELFU1-7=8

Could you tell me how solar is used in your home?

    Open response

NEXT	ELPAY

Derived		Show Card		CARI	

ELPAY (New)

ASK	If USEEL=1

Now I would like to ask you a few questions about how your energy bills are paid.

Place show card 29 in front of the respondent.

Please look at Card 29. Which of the following describes who is responsible for paying for the electricity used in this home

    1 Household is responsible for paying for all used in this home
    2 All used in this home is included in the rent or condo fee
    3 Some is paid by the household, some is included in the rent or condo fee
    9 Paid for some other way

NEXT	If ELPAY=3: PELHEAT Else if USENG=1: NGPAY Else if USEFO=1: FOPAY Else if USELP=1: LPGPAY Else if USEKERO=1: KERODEL Else if USEWOOD=1: WOODLOGS, WDSCRAP, WDPELLET, WDOTHER Else: IVCOMMHFILTER

Derived		Show Card	Yes	CARI	Yes

PELHEAT (Changed from 2009)	
ASK	If ELPAY=3

Place show card 30 in front of the respondent.

Please look at Card 30. For which electricity uses are the costs included in your rent or condo fee?

Heating?

   1 Yes
   0 No

NEXT	PELHOTWA				
Derived		**Show Card**	Yes	**CARI**	

PELHOTWA (Changed from 2009)	
ASK	If ELPAY=3

Water heating?

   1 Yes
   0 No

NEXT	PELAC				
Derived		**Show Card**	Yes	**CARI**	

PELAC (Changed from 2009)	
ASK	If ELPAY=3

Air conditioning?

   1 Yes
   0 No

NEXT	PELCOOK				
Derived		**Show Card**	Yes	**CARI**	

PELCOOK (Changed from 2009)	
ASK	If ELPAY=3

Cooking?

   1 Yes
   0 No

NEXT	PELLIGHT					
Derived		**Show Card**	Yes	**CARI**	

PELLIGHT (Changed from 2009)	
ASK	If ELPAY=3

Lighting and appliances?

   1 Yes
   0 No

NEXT	If USENG=1: NGPAY Else if USEFO=1: FOPAY Else if USELP=1: LPGPAY Else if USEKERO=1: KERODEL Else if USEWOOD=1: WOODLOGS, WDSCRAP, WDPELLET, WDOTHER Else: IVCOMMHFILTER

Derived		**Show Card**	Yes	**CARI**	

NGPAY (New)	
ASK	If USENG=1

Place show card 29 in front of the respondent.

Please look at Card 29. Which of the following describes who is responsible for paying for the natural gas used in this home?

   1 Household is responsible for paying for all used in this home
   2 All used in this home is included in the rent or condo fee
   3 Some is paid by the household, some is included in the rent or condo fee
   9 Paid for some other way

NEXT	If NGPAY=3: PUGHEAT Else if USEFO=1: FOPAY Else if USELP=1: LPGPAY Else if USEKERO=1: KERODEL Else if USEWOOD=1: WOODLOGS, WDSCRAP, WDPELLET, WDOTHER Else: IVCOMMHFILTER

Derived		**Show Card**	Yes	**CARI**	

PUGHEAT (Changed from 2009)					
ASK	If NGPAY=3				
For which natural gas uses are the costs included in your rent or condo fee? Heating? 1 Yes 0 No					
NEXT	PUGHOTWA				
Derived		**Show Card**		**CARI**	

PUGHOTWA (Changed from 2009)					
ASK	If NGPAY=3				
Water heating? 1 Yes 0 No					
NEXT	PUGCOOK				
Derived		**Show Card**		**CARI**	

PUGCOOK (Changed from 2009)					
ASK	If NGPAY=3				
Cooking? 1 Yes 0 No					
NEXT	PUGOTH				
Derived		**Show Card**		**CARI**	

PUGOTH (Changed from 2009)					
ASK	If NGPAY=3				
Other uses? 1 Yes 0 No					

	If USEFO=1: FOPAY
	Else if USELP=1: LPGPAY
NEXT	Else if USEKERO=1: KERODEL
	Else if USEWOOD=1: WOODLOGS, WDSCRAP, WDPELLET, WDOTHER
	Else: IVCOMMHFILTER

Derived		**Show Card**		**CARI**	

FOPAY (Changed from 2009)

ASK	If USEFO=1

Place show card 29 in front of the respondent.

Please look at Card 29. Which of the following describes who is responsible for paying for the fuel oil used in this home?

1 Household is responsible for paying for all used in this home
2 All used in this home is included in the rent or condo fee
3 Some is paid by the household, some is included in the rent or condo fee
9 Paid for some other way

	If USELP=1: LPGPAY
	Else if FOPAY in(1,3,4): QUANTFO
NEXT	Else if USEKERO=1: KERODEL
	Else if USEWOOD=1: WOODLOGS, WDSCRAP, WDPELLET, WDOTHER
	Else: IVCOMMHFILTER

Derived		**Show Card**	Yes	**CARI**	

LPGPAY (Changed from 2009)

ASK	If USELP=1

Place show card 29 in front of the respondent.

Please look at Card 29. Which of the following describes who is responsible for paying for the propane (bottled gas) used in this home?

1 Household is responsible for paying for all used in this home
2 All used in this home is included in the rent or condo fee
3 Some is paid by the household, some is included in the rent or condo fee
9 Paid for some other way

NEXT	If LPGPAY in(1,3,4): LPGDELV
	Else: LPGCASH

Derived		**Show Card**	Yes	**CARI**	

LPGDELV (Changed from 2009)

ASK	If LPGPAY in(1,3,4)

Is propane (bottled gas) delivered to your home?

   1 Yes
   0 No

NEXT	If LPGDELV=1: NDIFLPCO Else: LPGCASH

Derived		Show Card		CARI	

NDIFLPCO (Changed from 2009)

ASK	If LPGDELV=1

How many different companies delivered propane (bottled gas) to your home in the last year?

   0 - 9

NEXT	If NLPDELCO>0: NLPDELNC Else: LPGCASH

Derived		Show Card		CARI	

NLPDELNC (Changed from 2009)

ASK	If NLPDELCO>0

About how many deliveries did your household get in the last year?

   1 - 25

NEXT	LPGCASH

Derived		Show Card		CARI	

LPGCASH (New)

ASK	If USELP=1

In the last year, did your household buy propane (bottled gas) and bring it home?

   1 Yes
   0 No

NEXT	If LPGCASH=1: NLPGCASH Else if FOPAY in(1,3,4): QUANTFO Else if USEKERO=1: KERODEL Else if USEWOOD=1: WOODLOGS, WDSCRAP, WDPELLET, WDOTHER Else: IVCOMMHFILTER				
Derived		**Show Card**		**CARI**	

NLPGCASH (New)

ASK	If LPGCASH=1

In the last year, about how many times did your household buy propane and bring it home?

    1 - 99

NEXT	LPGTANKLB				
Derived		**Show Card**		**CARI**	

LPGTANKLB (New)

ASK	If LPGCASH=1

Thinking about the typical propane tank your household uses, how many pounds does it hold? Most cylinder exchange programs use 20 pound tanks.

    1 - 99

NEXT	PRICELPG				
Derived		**Show Card**		**CARI**	

PRICELPG (New)

ASK	If LPGCASH=1

In the last year, about how much did your household spend each time propane was purchased?

    1 - 999

NEXT	If FOPAY in(1,3,4): QUANTFO Else if USEKERO=1: KERODEL Else if USEWOOD=1: WOODLOGS, WDSCRAP, WDPELLET, WDOTHER Else: IVCOMMHFILTER				
Derived		**Show Card**		**CARI**	

QUANTFO (Changed from 2009)	
ASK	If FOPAY in(1,3,4)

Place show card 31 in front of the respondent.

Please look at Card 31. About how many gallons of fuel oil did your household use in the last year?

   1 Less than 100 gallons
   2 100 to 499 gallons
   3 500 to 1,000 gallons
   4 More than 1,000 gallons

NEXT	NDIFFOCO				
Derived		**Show Card**	Yes	**CARI**	

NDIFFOCO (Changed from 2009)	
ASK	If FOPAY in(1,3,4)

How many different companies delivered fuel oil to your home in the last year?

   0 - 9

NEXT	If NDIFFOCO>0: NFODELNC Else if USEKERO=1: KERODEL Else if USEWOOD=1: WOODLOGS, WDSCRAP, WDPELLET, WDOTHER Else: IVCOMMHFILTER				
Derived		**Show Card**		**CARI**	

NFODELNC (Changed from 2009)	
ASK	If NDIFFOCO>0

About how many deliveries did your household get in the last year?

   1 - 25

NEXT	If USEKERO=1: KERODEL Else if USEWOOD=1: WOODLOGS, WDSCRAP, WDPELLET, WDOTHER Else: IVCOMMHFILTER				
Derived		**Show Card**		**CARI**	

KERODEL					
ASK	If USEKERO=1				

Is kerosene delivered to your home?
 	
   1 Yes
   0 No					

NEXT	If KERODEL=1: NDIFKRCO Else: KEROCASH				
Derived		**Show Card**		**CARI**	

NDIFKRCO (Changed from 2009)					
ASK	If KERODEL=1				
How many different companies delivered kerosene to your household in the last year? 0 - 9					
NEXT	NKRDEL				
Derived		**Show Card**		**CARI**	

NKRDEL (Changed from 2009)					
ASK	If KERODEL=1				
About how many deliveries did your household get in the last year? 1 - 25					
NEXT	KEROCASH				
Derived		**Show Card**		**CARI**	

KEROCASH (Changed from 2009)					
ASK	If USEKERO=1				

Did your household buy kerosene in the last year and bring it home, that is, cash and carry?
 	
   1 Yes
   0 No					

NEXT	If KEROCASH=1: NOCRCASH Else if USEWOOD=1: WOODLOGS, WDSCRAP, WDPELLET, WDOTHER Else: IVCOMMHFILTER				
Derived		**Show Card**		**CARI**	

NOCRCASH (Changed from 2009)

ASK	If KEROCASH=1

How many times in the last year did your household buy kerosene and bring it home?

   1 - 55

NEXT	If NOCRCASH>1: NKRGALNC				
Derived		**Show Card**		**CARI**	

NKRGALNC (Changed from 2009)

ASK	If KEROCASH=1

On average, how many gallons of kerosene did your household buy and bring home each time?

   0 - 77

NEXT	PRICEKER				
Derived		**Show Card**		**CARI**	

PRICEKER

ASK	If KEROCASH=1

On average, about how much per gallon did your household pay for kerosene?

   0.50 - 5.00

NEXT	If USEWOOD=1: WOODLOGS, WDSCRAP, WDPELLET, WDOTHER Else: IVCOMMHFILTER				
Derived		**Show Card**		**CARI**	

WOODLOGS, WDSCRAP, WDPELLET, WDOTHER (Changed from 2009)

ASK	If USEWOOD=1

You mentioned that you use wood as a fuel in your household. What kind of wood does your household burn? Do you burn wood logs or split wood, wood scraps, wood pellets, or any other kind of wood?

Mark all that apply.

   Wood logs or split wood (WOODLOGS)
   Wood scraps (WOODSCRAP)
   Wood pellets (WDPELLET)
   Any other kind of wood (WDOTHER)

NEXT	If WDPELLET=1: PELLETAMT Else if WOODLOGS=1 or WDSCRAP=1 or WDOTHER=1: NUMCORDS Else: WOODPUR				
Derived		**Show Card**		**CARI**	

PELLETAMT (New)					
ASK	If WDPELLET=1				

In the last year, about how many 40-pound bags of wood pellets did your household burn? A ton (which may also be called a pallet) equals fifty 40-pound bags.

    0 - 999

NEXT	If WOODLOGS=1 or WDSCRAP=1 or WDOTHER=1: NUMCORDS Else: WOODPUR				
Derived		**Show Card**		**CARI**	

NUMCORDS (Changed from 2009)					
ASK	If WOODLOGS=1 or WDSCRAP=1 or WDOTHER=1				

Place show card 32 in front of the respondent.

Please look at Card 32. In the last year, about how many cords of wood did your household burn?

    1 Half a cord or less
    2 About one cord
    3 About two cords
    4 Three to five cords
    5 More than five cords

NEXT	If NUMCORDS=5: WWOODAMT Else: WOODPUR				
Derived		**Show Card**	Yes	**CARI**	

WOODAMT (Changed from 2009)					
ASK	If NUMCORDS=5				

In the last year, about how many cords of wood did your household burn?

    5.00 - 100.00

NEXT	WOODPUR				
Derived		**Show Card**		**CARI**	

WOODPUR (New)

ASK	If USEWOOD=1

Was the wood used by your household in the last year…

    1 Purchased by your household,
    2 Obtained free of charge, or
    3 A combination of purchased and obtained free of charge?

NEXT	If WOODPUR in(1,3): WOODCOST				
Derived		**Show Card**		**CARI**	

WOODCOST (New)

ASK	If WOODPUR in(1,3)

In the last year, about how much did your household spend on wood?

    0 - 99999

NEXT	IVCOMMHFILTER				
Derived		**Show Card**		**CARI**	

IVCOMMHFILTER

ASK	All respondents

Interviewer Task: If you have any comments that might suggest that the data collected in the fuels used section should be analyzed by central office staff, enter 1. If you have no comments regarding the quality of data entered in this section, enter 2.

    1 I have comments regarding the quality of data in this section
    2 I do not have comments

NEXT	If IVCOMMHFILTER=1: IVCOMMH Else: Section I				
Derived		**Show Card**		**CARI**	

IVCOMMH

ASK	If IVCOMMHFILTER=1

Interviewer Task: Record any information here about the fuels used by this housing unit that might provide clarification to the respondent's answers.

    Open response

NEXT	Section I				
Derived		**Show Card**		**CARI**	

SECTION I: HOUSING UNIT MEASUREMENT

SQFTEST (Changed from 2009)					
ASK	All respondents				
To understand the usage of energy in your home, we need to know about its size and shape. About how many square feet is your home? Your best estimate will do. 100 - 50,000					
NEXT	If CELLAR=1 and SQFTEST not in(DK,REF): SQFTINCB Else if ATTIC=1: SQFTINCA Else if PRKGPLC1=1: SQFTINCG Else if STORIES in(32,40,50,-9) or NAPTFLRS>3: MEASURE Else: SHAPE1FLRA				
Derived		**Show Card**		**CARI**	Yes

SQFTINCB (New)					
ASK	If CELLAR=1 and SQFTEST not in(DK,REF)				

Does your estimate of square footage include your basement?
 	
   1 Yes
   0 No					

NEXT	If ATTIC=1: SQFTINCA Else if PRKGPLC1=1: SQFTINCG Else if STORIES in(32,40,50,-9) or NAPTFLRS>3: MEASURE Else: SHAPE1FLRA				
Derived		**Show Card**		**CARI**	

SQFTINCA (New)					
ASK	If ATTIC=1 and SQFTEST not in(DK,REF)				

Does your estimate of square footage include your attic?
 	
   1 Yes
   0 No					

NEXT	If PRKGPLC1=1: SQFTINCG Else if STORIES in(32,40,50,-9) or NAPTFLRS>3: MEASURE Else: SHAPE1FLRA				
Derived		**Show Card**		**CARI**	

SQFTINCG (New)

ASK	If PRKGPLC1=1 and SQFTEST not in(DK,REF)

Does your estimate of square footage include your attached garage?

    1 Yes
    0 No

NEXT	If STORIES in(32,40,50,-9) or NAPTFLRS>3: MEASURE Else: SHAPE1FLRA

Derived		**Show Card**		**CARI**	

SHAPE1FLRA (Changed from 2009)

ASK	If STORIES not in(40,50)

Place show card 33 in front of the respondent.

Please look at Card 33. Thinking about the main or first floor of your home, let's work together to find which of these best describes the shape [If GARGLOC=2: including the garage].

    1 Square or Rectangle
    2 T-shaped (2 Squares or Rectangles)
    3 L-shaped (2 Squares or Rectangles)
    4 Some other shape

NEXT	If STORIES in(20,31) or NAPTFLRS>1: SHAPE2FLR Else if ATTICFIN in(1,2) or ATTCHEAT=1 or ATTCCOOL=1: SHAPEATTIC Else if CELLAR=1: SHAPEBASE Else: MEASURE

Derived		**Show Card**	Yes	**CARI**	

SHAPE2FLR

ASK	If STORIES in(20,31) or NAPTFLRS>1

Is the shape of the second floor of this housing unit the same as the first floor?

    1 Yes
    0 No

NEXT	If SHAPE2FLR=1: SIZE2FLR Else: SHAPE2FLRA

Derived		**Show Card**		**CARI**	

SIZE2FLR

ASK	If SHAPE2FLR=1

Is the size of the second floor of this housing unit the same as the first floor?

    1 Yes
    0 No

NEXT	If STORIES=31 or NAPTFLRS>2: SHAPE3FLR Else if ATTICFIN in(1,2) or ATTCHEAT=1 or ATTCCOOL=1: SHAPEATTIC Else if CELLAR=1: SHAPEBASE Else if GARGLOC=2 and SIZE2FLR=1: OVERGARG Else: MEASURE

Derived		Show Card		CARI	

SHAPE2FLRA (Changed from 2009)

ASK	If (STORIES in(20,31) or NAPTFLRS>1) and SHAPE2FLR ne 1

Place show card 33 in front of the respondent.

Please look at Card 33. Thinking about the second floor of your home, which best describes the shape?

    1 Square or Rectangle
    2 T-shaped (2 Squares or Rectangles)
    3 L-shaped (2 Squares or Rectangles
    4 Some other shape

NEXT	If STORIES=31 or NAPTFLRS>2: SHAPE3FLR Else if ATTICFIN in(1,2) or ATTCHEAT=1 or ATTCCOOL=1: SHAPEATTIC Else if CELLAR=1: SHAPEBASE Else: MEASURE

Derived		Show Card	Yes	CARI	

SHAPE3FLR

ASK	If STORIES=31 or NAPTFLRS>2

Is the shape of the third floor of this housing unit the same as the second floor?

    1 Yes
    0 No

NEXT	If SHAPE3FLR=1: SIZE3FLR Else: SHAPE3FLRA

Derived		Show Card		CARI	

SIZE3FLR

ASK	If SHAPE3FLR=1

Is the size of the third floor of this housing unit the same as the second floor?

   1 Yes
   0 No

NEXT	If ATTICFIN in(1,2) or ATTCHEAT=1 or ATTCCOOL=1: SHAPEATTIC Else if CELLAR=1: SHAPEBASE Else if GARGLOC=2 and SIZE2FLR=1: OVERGARG Else: MEASURE

Derived		**Show Card**		**CARI**	

SHAPE3FLRA (Changed from 2009)

ASK	If (STORIES=31 or NAPTFLRS>2) and SHAPE3FLR ne 1

Place show card 33 in front of the respondent.

Please look at Card 33. Thinking about the third floor of your home, which best describes the shape?

   1 Square or Rectangle
   2 T-shaped (2 Squares or Rectangles)
   3 L-shaped (2 Squares or Rectangles)
   4 Some other shape

NEXT	If ATTICFIN in(1,2) or ATTCHEAT=1 or ATTCCOOL=1: SHAPEATTIC Else if CELLAR=1: SHAPEBASE Else if GARGLOC=2 and SIZE2FLR=1: OVERGARG Else: MEASURE

Derived		**Show Card**	Yes	**CARI**	

SHAPEATTIC (Changed from 2009)

ASK	If ATTICFIN in(1,2) or ATTCHEAT=1 or ATTCCOOL=1

Is the shape of the attic of this home the same as the floor under it?

   1 Yes
   0 No

NEXT	If SHAPEATTIC=1: SIZEATTIC Else: SHAPEATTICA

Derived		**Show Card**		**CARI**	

SIZEATTIC					
ASK	If SHAPEATTIC=1				

	Is the size of the attic of this housing unit the same as the floor under it?
	
	   1 Yes
	   0 No				

NEXT	If CELLAR=1: SHAPEBASE Else if (GARGLOC=2 and STORIES=10 and SIZEATTIC=1) or (GARGLOC=2 and SIZE2FLR=1): OVERGARG Else: MEASURE				
Derived		**Show Card**		**CARI**	

SHAPEATTICA (Changed from 2009)					
ASK	If (ATTICFIN in(1,2) or ATTCHEAT=1 or ATTCCOOL=1) and SHAPEATTIC ne 1				

	Place show card 33 in front of the respondent.
	
	Please look at Card 33. Thinking about the attic of your home, which best describes the shape?
	
	   1 Square or Rectangle
	   2 T-shaped (2 Squares or Rectangles)
	   3 L-shaped (2 Squares or Rectangles)
	   4 Some other shape				

NEXT	If CELLAR=1: SHAPEBASE Else if GARGLOC=2 and SIZE2FLR=1: OVERGARG Else: MEASURE				
Derived		**Show Card**	Yes	**CARI**	

SHAPEBASE (Changed from 2009)					
ASK	If CELLAR=1				

	Is the shape of the basement of this home the same as the floor directly above it?
	
	   1 Yes
	   0 No				

NEXT	If SHAPEBASE=1: SIZEBASE Else: SHAPEBASEA				
Derived		**Show Card**		**CARI**	Yes

SIZEBASE					
ASK	If SHAPEBASE=1				

Is the size of the basement of this home the same as the floor directly above it?
 	
   1 Yes
   0 No					

NEXT	If (GARGLOC=1 and SIZEBASE=1) or (GARGLOC=2 and STORIES=10 and SIZEATTIC=1) or (GARGLOC=2 and SIZE2FLR=1): OVERGARG Else: MEASURE				
Derived		**Show Card**		**CARI**	Yes

SHAPEBASEA (Changed from 2009)					
ASK	If CELLAR=1 and SHAPEBASE ne 1				

Place show card 33 in front of the respondent.
 	
Please look at Card 33. Thinking about the basement of your home, which best describes the shape [If LocationOfGarage=1: including the garage]?
 	
   1 Square or Rectangle
   2 T-shaped (2 Squares or Rectangles)
   3 L-shaped (2 Squares or Rectangles)
   4 Some other shape					

NEXT	If (GARGLOC=2 and STORIES=10 and SIZEATTIC=1) or (GARGLOC=2 and SIZE2FLR=1): OVERGARG Else: MEASURE				
Derived		**Show Card**	Yes	**CARI**	

OVERGARG (New)					
ASK	If (GARGLOC=1 and SIZEBASE=1) or (GARGLOC=2 and STORIES=10 and SIZEATTIC=1) or (GARGLOC=2 and SIZE2FLR=1)				

I've recorded that your [if GARGLOC=1 and SIZEBASE=1: first floor] [if GARGLOC=2 and STORIES=10 and SIZEATTIC=1: attic] [if GARGLOC=2 and SIZE2FLR=1: second floor] is the same shape and size as your [if GARGLOC=1 and SIZEBASE=1: basement] [if GARGLOC=2: first floor], which includes your garage. Is there a room over your garage?
 	
   1 Yes
   0 No					

NEXT	MEASURE				
Derived		**Show Card**		**CARI**	

MEASURE (Changed from 2009)					
ASK	All respondents				

	[If SQFTEST=DK,RF: In order to best understand the usage of energy in your home; If SQFTEST>0: Even though you have given me your best estimate,] we need to know its exact size in square feet. With your permission, I would like to measure your home.
	
	  1 Measurements follow
	  2 Respondent refused				

NEXT	If MEASURE=1 and (STORIES in(32,40,50,-9) or NAPTFLRS>3 or SHAPE1FLRA=4 or SHAPE2FLRA=4 or SHAPE3FLRA=4 or SHAPEATTICA=4 or SHAPEBASEA=4): Green Book Else if MEASURE=1: Pink Worksheet Else: IVCOMMIFILTER				
Derived		**Show Card**		**CARI**	Yes

Green Book (Changed from 2009)					
ASK	If MEASURE=1 and (STORIES in(32,40,50,-9) or NAPTFLRS>3 or SHAPE1FLRA=4 or SHAPE2FLRA=4 or SHAPE3FLRA=4 or SHAPEATTICA=4 or SHAPEBASEA=4)				
	Interviewer Task: For housing units that are split-levels, have four or more floors, or have floors with non-standard shapes, the interviewer uses the "Green Book" to sketch each floor and record its measurements.				
NEXT	IVCOMMIFILTER				
Derived		**Show Card**		**CARI**	

Pink Worksheet (Changed from 2009)					
ASK	If MEASURE=1 and not Green Book				
	Interviewer Task: For all other housing units, the interviewer uses the "Pink Worksheet" to record the measurements for each floor, then enters the dimensions into CAPI.				
NEXT	IVCOMMIFILTER				
Derived		**Show Card**		**CARI**	

IVCOMMIFILTER					
ASK	All respondents				

	Interviewer Task: If you have any comments that might suggest that the data collected in the housing unit measurement section should be analyzed by central office staff, enter 1. If you have no comments regarding the quality of data entered in this section, enter 2.
	
	  1 I have comments regarding the quality of data in this section
	  2 I do not have comments				

NEXT	If IVCOMMIFILTER=1: IVCOMMI Else: Section J

Derived		**Show Card**		**CARI**	

IVCOMMI					
ASK	If IVCOMMIFILTER=1				

Interviewer Task: Record any information here about this household's measurements that might provide clarification to the respondent's answers.

    Open response

NEXT	Section J

Derived		**Show Card**		**CARI**	

SECTION J: FUEL BILLS

INTRO (Changed from 2009)	
ASK	If ELPAY in(1,3,4) or NGPAY in(1,3,4) or LPGDELV=1 or FOPAY in(1,3,4) or KERODEL=1

In this interview you have told me how your household uses energy. In addition, we would like to find out how much [ENTER THE FUELS THAT THE HOUSEHOLD USES] you actually used in the past year.

If it is alright with you, at the end of the interview I will also scan copies of these bills into my computer.

   1 Continue

NEXT	If ELPAY in(1,3,4): ELBILLTOSCAN Else if NGPAY in(1,3,4): NGBILLTOSCAN Else if LPGDELV=1: LPGBILLTOSCAN Else if FOPAY in(1,3,4): FOBILLTOSCAN Else if KERODEL=1: KEROBILLTOSCAN

Derived		**Show Card**		**CARI**	

ELBILLTOSCAN (Changed from 2009)	
ASK	If ELPAY in(1,3,4)

Do you have a recent electric bill that I can scan into my computer?

   1 Yes
   0 No

NEXT	If ELBILLTOSCAN=0: ELWHYNOT Else: ELSUPPNAME

Derived		**Show Card**		**CARI**	Yes

ELWHYNOT (Changed from 2009)	
ASK	If ELBILLTOSCAN=0

Please indicate why there is no bill to scan.

   1 Respondent only receives this bill electronically
   2 Confidentiality/privacy concern
   3 Respondent doesn't have this bill now
   4 Other

NEXT	ELSUPPNAME

Derived		**Show Card**		**CARI**	

ELSUPPNAME (Changed from 2009)					
ASK	If ELPAY in(1,3,4)				
What is the name of your household's electricity supplier? Interviewer attempts to find the response in a look-up table of known electricity suppliers. If supplier is not found, the interviewer records an open response.					
NEXT	If electricity supplier was found in look-up table: ELLOOKUPCNFRM Else if ELBILLTOSCAN=1 and electricity supplier was not found in look-up table: ELSUPPSTREET Else if NGPAY in(1,3,4): NGBILLTOSCAN Else if LPGDELV=1: LPGBILLTOSCAN Else if FOPAY in(1,3,4): FOBILLTOSCAN Else if KERODEL=1: KEROBILLTOSCAN Else: KFUELOT				
Derived		**Show Card**		**CARI**	

ELLOOKUPCNFRM					
ASK	If electricity supplier was found in look-up table				

Just to verify, I have selected that your electricity supplier is [SUPPLIER]. Is that correct?
 	
    1 Yes
    0 No					

NEXT	If ELLOOKUPCNFRM=0: ELSUPPNAME Else if NGPAY in(1,3,4): NGBILLTOSCAN Else if LPGDELV=1: LPGBILLTOSCAN Else if FOPAY in(1,3,4): FOBILLTOSCAN Else if KERODEL=1: KEROBILLTOSCAN Else: KFUELOT				
Derived		**Show Card**		**CARI**	

ELSUPPSTREET					
ASK	If ELBILLTOSCAN=1 and electricity supplier was not found in look-up table				
RECORD the supplier's street address as it appears on the bill here. Open response					
NEXT	ELSUPPCITY				
Derived		**Show Card**		**CARI**	

ELSUPPCITY

ASK	If ELBILLTOSCAN=1 and electricity supplier was not found in look-up table

RECORD the supplier's city as it appears on the bill here.

　　Open response

NEXT	ELSUPPSTATE				
Derived		Show Card		CARI	

ELSUPPSTATE

ASK	If ELBILLTOSCAN=1 and electricity supplier was not found in look-up table

RECORD the supplier's state as it appears on the bill here.

　　Open response

NEXT	ELSUPPZIP				
Derived		Show Card		CARI	

ELSUPPZIP

ASK	If ELBILLTOSCAN=1 and electricity supplier was not found in look-up table

RECORD the supplier's zip as it appears on the bill here.

　　Open response

NEXT	ELSUPPAREACODE				
Derived		Show Card		CARI	

ELSUPPAREACODE

ASK	If ELBILLTOSCAN=1 and electricity supplier was not found in look-up table

RECORD the supplier's area code as it appears on the bill here.

　　001 - 999

NEXT	ELSUPPTELNUMBER				
Derived		Show Card		CARI	

ELSUPPTELNUMBER					
ASK	If ELBILLTOSCAN=1 and electricity supplier was not found in look-up table				

RECORD the supplier's telephone number as it appears on the bill here.

    1000001 - 9999999

NEXT	If NGPAY in(1,3,4): NGBILLTOSCAN Else if LPGDELV=1: LPGBILLTOSCAN Else if FOPAY in(1,3,4): FOBILLTOSCAN Else if KERODEL=1: KEROBILLTOSCAN Else: KFUELOT				
Derived		**Show Card**		**CARI**	

NGBILLTOSCAN (Changed from 2009)					
ASK	If NGPAY in(1,3,4)				

Do you have a recent natural gas bill that I can scan into my computer?

    1 Yes
    0 No

NEXT	If NGBILLTOSCAN=0: NGWHYNOT Else: NGSUPPNAME				
Derived		**Show Card**		**CARI**	

NGWHYNOT (Changed from 2009)					
ASK	If NGBILLTOSCAN=0				

Please indicate why there is no bill to scan.

    1 Respondent only receives this bill electronically
    2 Confidentiality/privacy concern
    3 Respondent doesn't have this bill now
    4 Other

NEXT	NGSUPPNAME				
Derived		**Show Card**		**CARI**	

NGSUPPNAME (Changed from 2009)

ASK	If NGPAY in(1,3,4)

What is the name of your household's natural gas supplier?

Interviewer attempts to find the response in a look-up table of known natural gas suppliers. If supplier is not found, the interviewer records an open response.

NEXT	If natural gas supplier was found in look-up table: NGLOOKUPCNFRM Else if NGBILLTOSCAN=1 and natural gas supplier was not found in look-up table: NGSUPPSTREET Else if LPGDELV=1: LPGBILLTOSCAN Else if FOPAY in(1,3,4): FOBILLTOSCAN Else if KERODEL=1: KEROBILLTOSCAN Else: KFUELOT

Derived		Show Card		CARI	

NGLOOKUPCNFRM

ASK	If natural gas supplier was found in look-up table

Just to verify, I have selected that your natural gas supplier is [SUPPLIER]. Is that correct?

    1 Yes
    0 No

NEXT	If NGLOOKUPCNFRM=0: NGSUPPNAME Else if LPGPAY in(1,3,4): LPGBILLTOSCAN Else if FOPAY in(1,3,4): FOBILLTOSCAN Else if KERODEL=1: KEROBILLTOSCAN Else: KFUELOT

Derived		Show Card		CARI	

NGSUPPSTREET

ASK	If NGBILLTOSCAN=1 and natural gas supplier was not found in look-up table

RECORD the supplier's street address as it appears on the bill here.

    Open response

NEXT	NGSUPPCITY

Derived		Show Card		CARI	

NGSUPPCITY

ASK	If NGBILLTOSCAN=1 and natural gas supplier was not found in look-up table

RECORD the supplier's city as it appears on the bill here.

Open response

NEXT	NGSUPPSTATE				
Derived		Show Card		CARI	

NGSUPPSTATE

ASK	If NGBILLTOSCAN=1 and natural gas supplier was not found in look-up table

RECORD the supplier's state as it appears on the bill here.

Open response

NEXT	NGSUPPZIP				
Derived		Show Card		CARI	

NGSUPPZIP

ASK	If NGBILLTOSCAN=1 and natural gas supplier was not found in look-up table

RECORD the supplier's zip as it appears on the bill here.

Open response

NEXT	NGSUPPAREACODE				
Derived		Show Card		CARI	

NGSUPPAREACODE

ASK	If NGBILLTOSCAN=1 and natural gas supplier was not found in look-up table

RECORD the supplier's area code as it appears on the bill here.

001 - 999

NEXT	NGSUPPTELNUMBER				
Derived		Show Card		CARI	

NGSUPPTELNUMBER

ASK	If NGBILLTOSCAN=1 and natural gas supplier was not found in look-up table

RECORD the supplier's telephone number as it appears on the bill here.

    1000001 - 9999999

NEXT	If LPGDELV=1: LPGBILLTOSCAN Else if FOPAY in(1,3,4): FOBILLTOSCAN Else if KERODEL=1: KEROBILLTOSCAN Else: KFUELOT

Derived		Show Card		CARI	

LPGBILLTOSCAN (Changed from 2009)

ASK	If LPGDELV=1

Do you have a recent bill from your [If NDIFLPCO>1: most-used] propane (bottled gas) supplier that I can scan into my computer?

    1 Yes
    0 No

NEXT	If LPGBILLTOSCAN=0: LPGWHYNOT Else: LPGSUPPNAME1

Derived		Show Card		CARI	

LPGWHYNOT (Changed from 2009)

ASK	If LPGBILLTOSCAN=0

Please indicate why there is no bill to scan.

    1 Respondent only receives this bill electronically
    2 Confidentiality/privacy concern
    3 Respondent doesn't have this bill now
    4 Other

NEXT	LPGSUPPNAME1

Derived		Show Card		CARI	

LPGSUPPNAME1

ASK	If LPGDELV=1

What is the name of your household's [if NDIFLPCO>1: most used] propane (bottled gas) supplier?

    Open response

	If LPGBILLTOSCAN=1: LPGSUPPSTREET1
	Else if NDIFLPCO>1: LPGBILLTOSCAN2
NEXT	Else if FOPAY in(1,3,4): FOBILLTOSCAN
	Else if KERODEL=1: KEROBILLTOSCAN
	Else: KFUELOT

Derived		**Show Card**		**CARI**	

LPGSUPPSTREET1					

ASK	If LPGBILLTOSCAN=1

RECORD the supplier's street address as it appears on the bill here.

    Open response

NEXT	LPGSUPPCITY1

Derived		**Show Card**		**CARI**	

LPGSUPPCITY1					

ASK	If LPGBILLTOSCAN=1

RECORD the supplier's city as it appears on the bill here.

    Open response

NEXT	LPGSUPPSTATE1

Derived		**Show Card**		**CARI**	

LPGSUPPSTATE1					

ASK	If LPGBILLTOSCAN=1

RECORD the supplier's state as it appears on the bill here.

    Open response

NEXT	LPGSUPPZIP1

Derived		**Show Card**		**CARI**	

LPGSUPPZIP1					

ASK	If LPGBILLTOSCAN=1

RECORD the supplier's zip as it appears on the bill here.

    Open response

NEXT	LPGSUPPAREACODE1				
Derived		**Show Card**		**CARI**	

LPGSUPPAREACODE1

ASK	If LPGBILLTOSCAN=1

RECORD the supplier's area code as it appears on the bill here.

    001 - 999

NEXT	LPGSUPPTELNUMBER1				
Derived		**Show Card**		**CARI**	

LPGSUPPTELNUMBER1

ASK	If LPGBILLTOSCAN=1

RECORD the supplier's telephone number as it appears on the bill here.

    1000001 - 9999999

NEXT	If NDIFLPCO>1: LPGBILLTOSCAN2 Else if FOPAY in(1,3,4): FOBILLTOSCAN Else if KERODEL=1: KEROBILLTOSCAN Else: KFUELOT				
Derived		**Show Card**		**CARI**	

LPGBILLTOSCAN2

ASK	If NDIFLPCO>1

Earlier you told me that [FILL: NDIFLPCO] different companies delivered propane (bottled gas) to your home in the past 12 months. Do you have a recent bill from [If NDIFLPCO=2: your other; If NDIFLPCO>2: the second most-used] propane (bottled gas) supplier that I can scan into my computer?

    1 Yes
    0 No

NEXT	If LPGBILLTOSCAN2=0: LPGWHYNOT2 Else: LPGSUPPNAME2				
Derived		**Show Card**		**CARI**	

LPGWHYNOT2 (Changed from 2009)

ASK	If LPGBILLTOSCAN2=0

Please indicate why there is no bill to scan.

    1 Respondent only receives this bill electronically
    2 Confidentiality/privacy concern
    3 Respondent doesn't have this bill now
    4 Other

NEXT	LPGSUPPNAME2				
Derived		**Show Card**		**CARI**	

LPGSUPPNAME2

ASK	If NDIFLPCO>1

What is the name of your household's [If NDIFLPCO=2: other; If NDIFLPCO>2: second most used] propane (bottled gas) supplier?

    Open response

NEXT	If LPGBILLTOSCAN2=1: LPGSUPPSTREET2 Else if FOPAY in(1,3,4): FOBILLTOSCAN Else if KERODEL=1: KEROBILLTOSCAN Else: KFUELOT				
Derived		**Show Card**		**CARI**	

LPGSUPPSTREET2

ASK	If LPGBILLTOSCAN2=1

RECORD the supplier's street address as it appears on the bill here.

    Open response

NEXT	LPGSUPPCITY2				
Derived		**Show Card**		**CARI**	

LPGSUPPCITY2

ASK	If LPGBILLTOSCAN2=1

RECORD the supplier's city as it appears on the bill here.

    Open response

NEXT	LPGSUPPSTATE2				
Derived		Show Card		CARI	

LPGSUPPSTATE2	
ASK	If LPGBILLTOSCAN2=1

RECORD the supplier's state as it appears on the bill here.

   Open response

NEXT	LPGSUPPZIP2				
Derived		Show Card		CARI	

LPGSUPPZIP2	
ASK	If LPGBILLTOSCAN2=1

RECORD the supplier's zip as it appears on the bill here.

   Open response

NEXT	LPGSUPPAREACODE2				
Derived		Show Card		CARI	

LPGSUPPAREACODE2	
ASK	If LPGBILLTOSCAN2=1

RECORD the supplier's area code as it appears on the bill here.

   001 - 999

NEXT	LPGSUPPTELNUMBER2				
Derived		Show Card		CARI	

LPGSUPPTELNUMBER2	
ASK	If LPGBILLTOSCAN2=1

RECORD the supplier's telephone number as it appears on the bill here.

   1000001 - 9999999

NEXT	If FOPAY in(1,3,4): FOBILLTOSCAN Else if KERODEL=1: KEROBILLTOSCAN Else: KFUELOT				
Derived		**Show Card**		**CARI**	

FOBILLTOSCAN					
ASK	If FOPAY in(1,3,4)				

Do you have a recent bill from your [If NDIFFOCO>1: most-used] fuel oil supplier that I can scan into my computer?

    1 Yes
    0 No

NEXT	If FOBILLTOSCAN=0: FOWHYNOT Else: FOSUPPNAME1				
Derived		**Show Card**		**CARI**	

FOWHYNOT (Changed from 2009)					
ASK	If FOBILLTOSCAN=0				

Please indicate why there is no bill to scan.

    1 Respondent only receives this bill electronically
    2 Confidentiality/privacy concern
    3 Respondent doesn't have this bill now
    4 Other

NEXT	FOSUPPNAME1				
Derived		**Show Card**		**CARI**	

FOSUPPNAME1					
ASK	If FOPAY in(1,3,4)				

What is the name of your household's [if NDIFFOCO>1: most used] fuel oil supplier?

    Open response

NEXT	If FOBILLTOSCAN=1: FOSUPPSTREET1 Else if NDIFFOCO>1: FOBILLTOSCAN2 Else if KERODEL=1: KEROBILLTOSCAN Else: KFUELOT				
Derived		**Show Card**		**CARI**	

FOSUPPSTREET1

ASK	If FOBILLTOSCAN=1

RECORD the supplier's street address as it appears on the bill here.

   Open response

NEXT	FOSUPPCITY1

Derived		Show Card		CARI	

FOSUPPCITY1

ASK	If FOBILLTOSCAN=1

RECORD the supplier's city as it appears on the bill here.

   Open response

NEXT	FOSUPPSTATE1

Derived		Show Card		CARI	

FOSUPPSTATE1

ASK	If FOBILLTOSCAN=1

RECORD the supplier's state as it appears on the bill here.

   Open response

NEXT	FOSUPPZIP1

Derived		Show Card		CARI	

FOSUPPZIP1

ASK	If FOBILLTOSCAN=1

RECORD the supplier's zip as it appears on the bill here.

   Open response

NEXT	FOSUPPAREACODE1

Derived		Show Card		CARI	

FOSUPPAREACODE1					
ASK	If FOBILLTOSCAN=1				
RECORD the supplier's area code as it appears on the bill here. 001 - 999					
NEXT	FOSUPPTELNUMBER1				
Derived		**Show Card**		**CARI**	

FOSUPPTELNUMBER1					
ASK	If FOBILLTOSCAN=1				
RECORD the supplier's telephone number as it appears on the bill here. 1000001 - 9999999					
NEXT	If NDIFFOCO>1: FOBILLTOSCAN2 Else if KERODEL=1: KEROBILLTOSCAN Else: KFUELOT				
Derived		**Show Card**		**CARI**	

FOBILLTOSCAN2					
ASK	If FOPAY in(1,3,4) and NDIFFOCO>1				

Earlier you told me that [FILL: NDIFFOCO] different companies delivered fuel oil to your home in the past 12 months. Do you have a recent bill from [If NDIFFOCO=2: your other; If NDIFFOCO>2: the second most-used] fuel oil supplier that I can scan into my computer?
 	
  1 Yes
  0 No					

NEXT	If FOBILLTOSCAN2=0: FOWHYNOT2 Else: FOSUPPNAME2				
Derived		**Show Card**		**CARI**	

FOWHYNOT2 (Changed from 2009)	
ASK	If FOBILLTOSCAN2=0

Please indicate why there is no bill to scan.
 	
  1 Respondent only receives this bill electronically
  2 Confidentiality/privacy concern
  3 Respondent doesn't have this bill now
  4 Other

NEXT	FOSUPPNAME2				
Derived		**Show Card**		**CARI**	

FOSUPPNAME2	
ASK	If FOPAY in(1,3) and NDIFFOCO>1

What is the name of your household's [If NDIFFOCO=2: other; If NDIFFOCO>2: second most used] fuel oil supplier?

    Open response

NEXT	If FOBILLTOSCAN2=1: FOSUPPSTREET2 Else if KERODEL=1: KEROBILLTOSCAN Else: KFUELOT				
Derived		**Show Card**		**CARI**	

FOSUPPSTREET2	
ASK	If FOBILLTOSCAN2=1

RECORD the supplier's street address as it appears on the bill here.

    Open response

NEXT	FOSUPPCITY2				
Derived		**Show Card**		**CARI**	

FOSUPPCITY2	
ASK	If FOBILLTOSCAN2=1

RECORD the supplier's city as it appears on the bill here.

    Open response

NEXT	FOSUPPSTATE2				
Derived		**Show Card**		**CARI**	

FOSUPPSTATE2	
ASK	If FOBILLTOSCAN2=1

RECORD the supplier's state as it appears on the bill here.

    Open response

NEXT	FOSUPPZIP2				
Derived		**Show Card**		**CARI**	

FOSUPPZIP2					
ASK	If FOBILLTOSCAN2=1				

RECORD the supplier's zip as it appears on the bill here.

    Open response

NEXT	FOSUPPAREACODE2				
Derived		**Show Card**		**CARI**	

FOSUPPAREACODE2					
ASK	If FOBILLTOSCAN2=1				

RECORD the supplier's area code as it appears on the bill here.

    001 - 999

NEXT	FOSUPPTELNUMBER2				
Derived		**Show Card**		**CARI**	

FOSUPPTELNUMBER2					
ASK	If FOBILLTOSCAN2=1				

RECORD the supplier's telephone number as it appears on the bill here.

    1000001 - 9999999

NEXT	If KERODEL=1: KEROBILLTOSCAN Else: KFUELOT				
Derived		**Show Card**		**CARI**	

KEROBILLTOSCAN	
ASK	If KERODEL=1

Do you have a recent bill from your household's [If NDIFKRCO>1: most-used] kerosene supplier that I can scan into my computer?

    1 Yes
    0 No

NEXT	If KEROBILLTOSCAN=0: KEROWHYNOT Else: KEROSUPPNAME1				
Derived		**Show Card**		**CARI**	

KEROWHYNOT (Changed from 2009)	
ASK	If KEROBILLTOSCAN=0

Please indicate why there is no bill to scan.

    1 Respondent only receives this bill electronically
    2 Confidentiality/privacy concern
    3 Respondent doesn't have this bill now
    4 Other

NEXT	KEROSUPPNAME1				
Derived		**Show Card**		**CARI**	

KEROSUPPNAME1	
ASK	If KERODEL=1

What is the name of your household's [if NDIFKRCO>1: most used] kerosene supplier?

    Open response

NEXT	If KEROBILLTOSCAN=1: KEROSUPPSTREET1 Else if NDIFKRCO>1: KEROBILLTOSCAN2 Else: KFUELOT				
Derived		**Show Card**		**CARI**	

KEROSUPPSTREET1	
ASK	If KEROBILLTOSCAN=1

RECORD the supplier's street address as it appears on the bill here.

    Open response

NEXT	KEROSUPPCITY1				
Derived		**Show Card**		**CARI**	

KEROSUPPCITY1	
ASK	If KEROBILLTOSCAN=1

RECORD the supplier's city as it appears on the bill here.

    Open response

NEXT	KEROSUPPSTATE1					
Derived		**Show Card**		**CARI**	

KEROSUPPSTATE1		
ASK	If KEROBILLTOSCAN=1	
RECORD the supplier's state as it appears on the bill here. Open response		
NEXT	KEROSUPPZIP1	
Derived	**Show Card**	**CARI**

KEROSUPPZIP1		
ASK	If KEROBILLTOSCAN=1	
RECORD the supplier's zip as it appears on the bill here. Open response		
NEXT	KEROSUPPAREACODE1	
Derived	**Show Card**	**CARI**

KEROSUPPAREACODE1		
ASK	If KEROBILLTOSCAN=1	
RECORD the supplier's area code as it appears on the bill here. 001 - 999		
NEXT	KEROSUPPTELNUMBER1	
Derived	**Show Card**	**CARI**

KEROSUPPTELNUMBER1	
ASK	If KEROBILLTOSCAN=1
RECORD the supplier's telephone number as it appears on the bill here. 1000001 - 9999999	

NEXT	If NDIFKRCO>1: KEROBILLTOSCAN2 Else: KFUELOT				
Derived		**Show Card**		**CARI**	

KEROBILLTOSCAN2					
ASK	If NDIFKRCO>1				

Earlier you told me that [FILL: NDIFKRCO] different companies delivered kerosene to your home in the past 12 months. Do you have any recent bills from [If NDIFKRCO=2: your other; If NDIFKRCO>2: the second most-used] kerosene supplier that I can scan into my computer?

    1 Yes
    0 No

NEXT	If KEROBILLTOSCAN2=0: KEROWHYNOT2 Else: KEROSUPPNAME2				
Derived		**Show Card**		**CARI**	

KEROWHYNOT2 (Changed from 2009)					
ASK	If KEROBILLTOSCAN2=0				

Please indicate why there is no bill to scan.

    1 Respondent only receives this bill electronically
    2 Confidentiality/privacy concern
    3 Respondent doesn't have this bill now
    4 Other

NEXT	KEROSUPPNAME2				
Derived		**Show Card**		**CARI**	

KEROSUPPNAME2					
ASK	If NDIFKRCO>1				

What is the name of your household's [If NDIFKRCO=2: other; If NDIFKRCO>2: second most used] kerosene supplier?

    Open response

NEXT	If KEROBILLTOSCAN2=1: KEROSUPPSTREET1 Else: KFUELOT				
Derived		**Show Card**		**CARI**	

KEROSUPPSTREET2

ASK	If KEROBILLTOSCAN2=1

RECORD the supplier's street address as it appears on the bill here.

   Open response

NEXT	KEROSUPPCITY2				
Derived		Show Card		CARI	

KEROSUPPCITY2

ASK	If KEROBILLTOSCAN2=1

RECORD the supplier's city as it appears on the bill here.

   Open response

NEXT	KEROSUPPSTATE2				
Derived		Show Card		CARI	

KEROSUPPSTATE2

ASK	If KEROBILLTOSCAN2=1

RECORD the supplier's state as it appears on the bill here.

   Open response

NEXT	KEROSUPPZIP2				
Derived		Show Card		CARI	

KEROSUPPZIP2

ASK	If KEROBILLTOSCAN2=1

RECORD the supplier's zip as it appears on the bill here.

   Open response

NEXT	KEROSUPPAREACODE2				
Derived		Show Card		CARI	

KEROSUPPAREACODE2

ASK	If KEROBILLTOSCAN2=1

RECORD the supplier's area code as it appears on the bill here.

    001 - 999

NEXT	KEROSUPPTELNUMBER2				
Derived		Show Card		CARI	

KEROSUPPTELNUMBER2

ASK	If KEROBILLTOSCAN2=1

RECORD the supplier's telephone number as it appears on the bill here.

    1000001 - 9999999

NEXT	KFUELOT				
Derived		Show Card		CARI	

KFUELOT (Changed from 2009)

ASK	If ELPAY in(1,3,4) or NGPAY in(1,3,4) or LPGDELV=1 or FOPAY in(1,3,4) or KERODEL=1

Do any of your household energy bills include costs for energy used for non-household purposes, such as farm buildings or machinery, a business or office, or another house or apartment?

    1 Yes
    0 No

NEXT	If KFUELOT=1: FARM, TENANT, BUSINESS, OTHERUSE Else: SMARTMETER				
Derived		Show Card		CARI	

FARM, TENANT, BUSINESS, OTHERUSE					
ASK	If KFUELOT=1				

Place show card 34 in front of the respondent.

Please look at Card 34. For which of the purposes listed are costs of fuel included in your household fuel bills?

Mark all that apply.

    Farm buildings or machinery (FARM)
    The house or apartment of another household (TENANT)
    A business or office (BUSINESS)
    Some use other than your own personal use (OTHERUSE)

NEXT	If OTHERUSE=1: OTHUSEPRPSFU Else: BILLEL, BILLUG, BILLLPG, BILLFOIL, BILLKER				
Derived		**Show Card**	Yes	**CARI**	

OTHUSEPRPSFU (Changed from 2009)					
ASK	If OTHERUSE=1				

Could you tell me what that other use is?

    Open response

NEXT	BILLEL, BILLUG, BILLLPG, BILLFOIL, BILLKER				
Derived		**Show Card**		**CARI**	

BILLEL, BILLUG, BILLLPG, BILLFOIL, BILLKER (Changed from 2009)	
ASK	If KFUELOT=1

Which of your household's energy bills include costs for energy used for non-household purposes? Is it electricity, natural gas from underground pipes, propane (bottled gas), fuel oil, or kerosene?

Mark all that apply.

    Electricity (BILLEL)
    Natural gas from underground pipes (BILLUG)
    Propane (bottled gas) (BILLLPG)
    Fuel oil (BILLFOIL)
    Kerosene (BILLKER)

NEXT	If BILLEL=1: ELNONHSHLD Else if BILLUG=1: NGNONHSHLD Else if BILLLPG=1: LPGNONHSHLD Else if BILLFOIL=1: FONONHSHLD Else if BILLKER=1: KERONONHSHLD Else: SMARTMETER				
Derived		**Show Card**		**CARI**	

ELNONHSHLD (Changed from 2009)

ASK	If BILLEL=1

What portion of the electricity bill is for non-household uses? Is it…

    0 Very little,
    1 Some,
    2 About half,
    3 About three-quarters, or
    4 Most of it?

NEXT	If BILLUG=1: NGNONHSHLD Else if BILLLPG=1: LPGNONHSHLD Else if BILLFOIL=1: FONONHSHLD Else if BILLKER=1: KERONONHSHLD Else: SMARTMETER				
Derived		**Show Card**		**CARI**	

NGNONHSHLD (Changed from 2009)

ASK	If BILLUG=1

What portion of the natural gas bill is for non-household uses? Is it…

    0 Very little,
    1 Some,
    2 About half,
    3 About three-quarters, or
    4 Most of it?

NEXT	If BILLLPG=1: LPGNONHSHLD Else if BILLFOIL=1: FONONHSHLD Else if BILLKER=1: KERONONHSHLD Else: SMARTMETER				
Derived		**Show Card**		**CARI**	

LPGNONHSHLD (Changed from 2009)					
ASK	If BILLLPG=1				
What portion of the propane bill is for non-household uses? Is it… 0 Very little, 1 Some, 2 About half, 3 About three-quarters, or 4 Most of it?					
NEXT	If BILLFOIL=1: FONONHSHLD Else if BILLKER=1: KERONONHSHLD Else: SMARTMETER				
Derived		**Show Card**		**CARI**	

FONONHSHLD (Changed from 2009)					
ASK	If BILLFOIL=1				
What portion of the fuel oil bill is for non-household uses? Is it… 0 Very little, 1 Some, 2 About half, 3 About three-quarters, or 4 Most of it?					
NEXT	If BILLKER=1: KERONONHSHLD Else: SMARTMETER				
Derived		**Show Card**		**CARI**	

KERONONHSHLD (Changed from 2009)					
ASK	If BILLKER=1				
What portion of the kerosene bill is for non-household uses? Is it… 0 Very little, 1 Some, 2 About half, 3 About three-quarters, or 4 Most of it?					
NEXT	SMARTMETER				
Derived		**Show Card**		**CARI**	

SMARTMETER (New)	
ASK	All respondents

Does your home have a "smart meter," which records electricity usage in short time intervals and automatically transmits it to your utility company?
 	
  1 Yes
  0 No	

NEXT	If SMARTMETER=1: INTDATA Else if KOWNRENT in(2,3) or ELPAY in(2,3) or NGPAY in(2,3) or LPGPAY in(2,3) or FOPAY in(2,3): LLNAME Else: IVCOMMJFILTER					
Derived		**Show Card**		**CARI**	Yes	

INTDATA (New)	
ASK	If SMARTMETER=1

Does your household have access to hourly or daily electricity usage data recorded by your smart meter?
 	
  1 Yes
  0 No	

NEXT	If INTDATA=1: INTDATAACC Else if KOWNRENT in(2,3) or ELPAY in(2,3) or NGPAY in(2,3) or LPGPAY in(2,3) or FOPAY in(2,3): LLNAME Else: IVCOMMJFILTER					
Derived		**Show Card**		**CARI**		

INTDATAACC (New)	
ASK	If INTDATA=1

Have you or any member of your household ever accessed or viewed this electricity usage data?
 	
  1 Yes
  0 No	

NEXT	If KOWNRENT in(2,3) or ELPAY in(2,3) or NGPAY in(2,3) or LPGPAY in(2,3) or FOPAY in(2,3): LLNAME Else: IVCOMMJFILTER					
Derived		**Show Card**		**CARI**		

LLNAME (Changed from 2009)		
ASK	If KOWNRENT in(2,3) or ELPAY in(2,3) or NGPAY in(2,3) or LPGPAY in(2,3) or FOPAY in(2,3)	

We may need some additional information about the fuel used in this building. May I have the name of the person or company to whom you pay your rent or condo fee?

RECORD the name of the landlord here. If the respondent pays this fee to a company enter the company name in this field.

    Open response

NEXT	LLNAME2				
Derived		**Show Card**		**CARI**	

LLNAME2 (Changed from 2009)		
ASK	If KOWNRENT in(2,3) or ELPAY in(2,3) or NGPAY in(2,3) or LPGPAY in(2,3) or FOPAY in(2,3)	

RECORD the last name of the landlord here. If the respondent pays this fee to a company enter "company" in this field.

    Open response

NEXT	LLSTREET				
Derived		**Show Card**		**CARI**	

LLSTREET (Changed from 2009)		
ASK	If KOWNRENT in(2,3) or ELPAY in(2,3) or NGPAY in(2,3) or LPGPAY in(2,3) or FOPAY in(2,3)	

What is their street address?

RECORD the landlord's street address here.

    Open response

NEXT	LLCITY				
Derived		**Show Card**		**CARI**	

LLCITY (Changed from 2009)					
ASK	If KOWNRENT in(2,3) or ELPAY in(2,3) or NGPAY in(2,3) or LPGPAY in(2,3) or FOPAY in(2,3)				
What is their city? RECORD the landlord's city here. Open response					
NEXT	LLSTATE				
Derived		**Show Card**		**CARI**	

LLSTATE (Changed from 2009)					
ASK	If KOWNRENT in(2,3) or ELPAY in(2,3) or NGPAY in(2,3) or LPGPAY in(2,3) or FOPAY in(2,3)				
…and what state are they located in? RECORD the landlord's state here. Open response					
NEXT	LLZIP				
Derived		**Show Card**		**CARI**	

LLZIP (Changed from 2009)					
ASK	If KOWNRENT in(2,3) or ELPAY in(2,3) or NGPAY in(2,3) or LPGPAY in(2,3) or FOPAY in(2,3)				
…and what is their Zip code? RECORD the landlord's Zip code here. Open response					
NEXT	LLAREACODE				
Derived		**Show Card**		**CARI**	

LLAREACODE (Changed from 2009)					
ASK	If KOWNRENT in(2,3) or ELPAY in(2,3) or NGPAY in(2,3) or LPGPAY in(2,3) or FOPAY in(2,3)				
What is your landlord's area code and telephone number? RECORD the landlord's telephone number, starting with the area code here. 001 - 999					
NEXT	LLTELNUMBER				
Derived		**Show Card**		**CARI**	

LLTELNUMBER (Changed from 2009)					
ASK	If KOWNRENT in(2,3) or ELPAY in(2,3) or NGPAY in(2,3) or LPGPAY in(2,3) or FOPAY in(2,3)				
RECORD the landlord's local telephone number here. 1000001 - 9999999					
NEXT	If TYPEHUQ in(1,4,5): COMPLEXN Else: IVCOMMJFILTER				
Derived		**Show Card**		**CARI**	

COMPLEXN					
ASK	If (KOWNRENT in(2,3) or ELPAY in(2,3) or NGPAY in(2,3) or LPGPAY in(2,3) or FOPAY in(2,3)) and TYPEHUQ in(1,4,5)				

Does the complex or development where you live have a formal name?
 	
  1 Yes
  0 No					

NEXT	If COMPLEXN=1: CPLXNAME				
Derived		**Show Card**		**CARI**	

CPLXNAME	
ASK	If COMPLEXN=1
What is the name? Open response	

NEXT	IVCOMMJFILTER				
Derived		**Show Card**		**CARI**	

IVCOMMJFILTER					
ASK	All respondents				

Interviewer Task: If you have any comments that might suggest that the data collected in the fuel bills section should be analyzed by central office staff, enter 1. If you have no comments regarding the quality of data entered in this section, enter 2.

   1 I have comments regarding the quality of data in this section
   2 I do not have comments

NEXT	If IVCOMMJFILTER=1: IVCOMMJ Else: Section K				
Derived		**Show Card**		**CARI**	

IVCOMMJ					
ASK	If IVCOMMJFILTER=1				

Interviewer Task: Record any information here about this housing unit's fuel bills that might provide clarification to the respondent's answers.

   Open response

NEXT	Section K				
Derived		**Show Card**		**CARI**	

SECTION K: HOUSING UNIT CHARACTERISTICS

HHSEX (Changed from 2009)		
ASK	All respondents	

Now I have a few questions about the people living in this home.

Please record the gender of the respondent.

    1 Female
    2 Male

NEXT	HHAGE				
Derived		**Show Card**		**CARI**	

HHAGE (Changed from 2009)		
ASK	All respondents	

How old are you?

For ages over 95, enter 95.

    16 - 95

NEXT	EMPLOYHH				
Derived		**Show Card**		**CARI**	

EMPLOYHH (Changed from 2009)		
ASK	All respondents	

How would you describe your employment status? Would you say employed full-time, employed part-time, or not employed/retired?

    1 Employed full-time
    2 Employed part-time
    0 Not employed/retired

NEXT	SPOUSE				
Derived		**Show Card**		**CARI**	

SPOUSE (Changed from 2009)					
ASK	All respondents				

Are you living with a spouse or partner?
 	
   1 Yes
   0 No					

NEXT	SDESCENT				
Derived		**Show Card**		**CARI**	

SDESCENT (Changed from 2009)					
ASK	All respondents				

Are you Hispanic or Latino?
 	
   1 Yes
   0 No					

NEXT	RACE_WHITE, RACE_BLACK, RACE_AIAN, RACE_ASIAN, RACE_NHPI, RACE_OTH, RACE_HISP				
Derived		**Show Card**		**CARI**	

RACE_WHITE, RACE_BLACK, RACE_AIAN, RACE_ASIAN, RACE_NHPI, RACE_OTH, RACE_HISP (Changed from 2009)					
ASK	All respondents				

Place show card 35 in front of the respondent.
 	
Please look at Card 35. Which describes your race? You can select one or more categories.
 	
   White (RACE_WHITE)
   Black or African-American (RACE_BLACK)
   American Indian or Alaska Native (RACE_AIAN)
   Asian (RACE_ASIAN)
   Native Hawaiian or Other Pacific Islander (RACE_NHPI)
   Other (if volunteered) (RACE_OTH)
   Hispanic (if volunteered) (RACE_HISP)					

NEXT	EDUCATION				
Derived		**Show Card**	Yes	**CARI**	

EDUCATION (Changed from 2009)

ASK	All respondents

Place show card 36 in front of the respondent.

Please look at Card 36. What is the highest degree or level of school you have completed?

- 0 No schooling completed
- 1 Kindergarten to grade 12 (No Diploma)
- 2 High school diploma or GED
- 3 Some college, no degree
- 4 Associate's degree (for example: AA, AS)
- 5 Bachelor's degree (for example: BA, BS)
- 6 Master's degree (for example: MA, MS, MBA)
- 7 Professional degree (for example: MD, JD)
- 8 Doctorate degree (for example: PhD, EdD)

NEXT	NHSLDMEM				
Derived		**Show Card**	Yes	**CARI**	

NHSLDMEM (Changed from 2009)

ASK	All respondents

Including yourself, how many people usually live in this home? Do not include anyone who is just visiting, those away in the military, or children who are away at college.

   1 - 15

NEXT	If NHSLDMEM>1: AGEHHMEM2 Else: HBUSNESS				
Derived		**Show Card**		**CARI**	

AGEHHMEM2 (Changed from 2009)

ASK	If NHSLDMEM>1

[If NHSLDMEM>2: Other than yourself what is the age of the oldest person in this household?] [If NHSLDMEM=2: What is the age of the other person in this household?]

For ages over 95, enter 95.

   1 - 95

NEXT	If NHSLDMEM=3: AGEHHMEMY Else if NHSLDMEM>3: AGEHHMEM3 Else: HBUSNESS				
Derived		**Show Card**		**CARI**	

AGEHHMEM3

ASK	If NHSLDMEM>3

Of the [NUMBER OF REMAINING HOUSEHOLD MEMBERS] remaining members of this household, what is the age of the next oldest person?

For ages over 95, enter 95.

    1 - 95

NEXT	If NHSLDMEM=4: AGEHHMEMY Else if NHSLDMEM>4: AGEHHMEM4 Else: HBUSNESS

Derived	Yes	**Show Card**		**CARI**	

AGEHHMEM4

ASK	If NHSLDMEM>4

Of the [NUMBER OF REMAINING HOUSEHOLD MEMBERS] remaining members of this household, what is the age of the next oldest person?

For ages over 95, enter 95.

    1 - 95

NEXT	If NHSLDMEM=5: AGEHHMEMY Else if NHSLDMEM>5: AGEHHMEM5 Else: HBUSNESS

Derived	Yes	**Show Card**		**CARI**	

AGEHHMEM5

ASK	If NHSLDMEM>5

Of the [NUMBER OF REMAINING HOUSEHOLD MEMBERS] remaining members of this household, what is the age of the next oldest person?

For ages over 95, enter 95.

    1 - 95

NEXT	If NHSLDMEM=6: AGEHHMEMY Else if NHSLDMEM>6: AGEHHMEM6 Else: HBUSNESS

Derived	Yes	**Show Card**		**CARI**	

AGEHHMEM6

ASK	If NHSLDMEM>6

Of the [NUMBER OF REMAINING HOUSEHOLD MEMBERS] remaining members of this household, what is the age of the next oldest person?

For ages over 95, enter 95.

    1 - 95

NEXT	If NHSLDMEM=7: AGEHHMEMY Else if NHSLDMEM>7: AGEHHMEM7 Else: HBUSNESS

Derived	Yes	Show Card		CARI	

AGEHHMEM7

ASK	If NHSLDMEM>7

Of the [NUMBER OF REMAINING HOUSEHOLD MEMBERS] remaining members of this household, what is the age of the next oldest person?

For ages over 95, enter 95.

    1 - 95

NEXT	If NHSLDMEM=8: AGEHHMEMY Else if NHSLDMEM>8: AGEHHMEM8 Else: HBUSNESS

Derived	Yes	Show Card		CARI	

AGEHHMEM8

ASK	If NHSLDMEM>8

Of the [NUMBER OF REMAINING HOUSEHOLD MEMBERS] remaining members of this household, what is the age of the next oldest person?

For ages over 95, enter 95.

    1 - 95

NEXT	If NHSLDMEM=9: AGEHHMEMY Else if NHSLDMEM>9: AGEHHMEM9 Else: HBUSNESS

Derived	Yes	Show Card		CARI	

AGEHHMEM9

ASK	If NHSLDMEM>9

Of the [NUMBER OF REMAINING HOUSEHOLD MEMBERS] remaining members of this household, what is the age of the next oldest person?

For ages over 95, enter 95.

   1 - 95

NEXT	If NHSLDMEM=10 AGEHHMEMY Else if NHSLDMEM>10: AGEHHMEM10 Else: HBUSNESS

Derived	Yes	**Show Card**		**CARI**	

AGEHHMEM10

ASK	If NHSLDMEM>10

Of the [NUMBER OF REMAINING HOUSEHOLD MEMBERS] remaining members of this household, what is the age of the next oldest person?

For ages over 95, enter 95.

   1 - 95

NEXT	If NHSLDMEM=11: AGEHHMEMY Else if NHSLDMEM>11: AGEHHMEM11 Else: HBUSNESS

Derived	Yes	**Show Card**		**CARI**	

AGEHHMEM11

ASK	If NHSLDMEM>11

Of the [NUMBER OF REMAINING HOUSEHOLD MEMBERS] remaining members of this household, what is the age of the next oldest person?

For ages over 95, enter 95.

   1 - 95

NEXT	If NHSLDMEM=12: AGEHHMEMY Else if NHSLDMEM>12: AGEHHMEM12 Else: HBUSNESS

Derived	Yes	**Show Card**		**CARI**	

AGEHHMEM12

ASK	If NHSLDMEM>12

Of the [NUMBER OF REMAINING HOUSEHOLD MEMBERS] remaining members of this household, what is the age of the next oldest person?

For ages over 95, enter 95.

   1 - 95

NEXT	If NHSLDMEM=13: AGEHHMEMY Else if NHSLDMEM>13: AGEHHMEM13 Else: HBUSNESS

Derived	Yes	**Show Card**		**CARI**	

AGEHHMEM13

ASK	If NHSLDMEM>13

Of the [NUMBER OF REMAINING HOUSEHOLD MEMBERS] remaining members of this household, what is the age of the next oldest person?

For ages over 95, enter 95.

   1 - 95

NEXT	If NHSLDMEM=14: AGEHHMEMY Else if NHSLDMEM>14: AGEHHMEM14 Else: HBUSNESS

Derived	Yes	**Show Card**		**CARI**	

AGEHHMEM14

ASK	If NHSLDMEM>14

Of the [NUMBER OF REMAINING HOUSEHOLD MEMBERS] remaining members of this household, what is the age of the next oldest person?

For ages over 95, enter 95.

   1 - 95

NEXT	If NHSLDMEM=15: AGEHHMEMY Else: HBUSNESS

Derived	Yes	**Show Card**		**CARI**	

AGEHHMEM15					
ASK					
Derived 1 - 95					
NEXT					
Derived	Yes	**Show Card**		**CARI**	

AGEHHMEMY (Changed from 2009)					
ASK	If NHSLDMEM>2				
What is the age of the youngest person in this household? For ages over 95, enter 95. 1 - 95					
NEXT	HBUSNESS				
Derived		**Show Card**		**CARI**	

HBUSNESS					
ASK	All respondents				

Does anyone in this household operate a home-based business or service?
 	
     1 Yes
     0 No					

NEXT	If HBUSNESS=1: OTHBUS Else: ATHOME				
Derived		**Show Card**		**CARI**	

OTHBUS					
ASK	If HBUSNESS=1				
What kind of business or service is this? Open response					
NEXT	ATHOME				
Derived		**Show Card**		**CARI**	

ATHOME (Changed from 2009)					
ASK	All respondents				
In a typical week, how many weekdays is someone at home most or all of the day? 0 - 5					
NEXT	TELLWORK				
Derived		**Show Card**		**CARI**	

TELLWORK					
ASK	All respondents				
Does anyone in this household telecommute or telework at anytime during the week? 1 Yes 0 No					
NEXT	OTHWORK				
Derived		**Show Card**		**CARI**	

OTHWORK (Changed from 2009)					
ASK	All respondents				
Is there any other kind of activity occurring in your home that uses a lot more energy than would usually be used in a home? 1 Yes 0 No					
NEXT	If OTHWORK=1: OTHACT Else: WORKPAY				
Derived		**Show Card**		**CARI**	

OTHACT	
ASK	If OTHWORK=1
What is that activity? Open response	

NEXT	WORKPAY				
Derived		**Show Card**		**CARI**	

WORKPAY (Changed from 2009)	
ASK	All respondents

In the last year, did you or any member of your household receive income from any of the following sources:

Employment income from wages, salaries, commissions, bonuses, and tips from all jobs, as well as self-employment income from a business or farm?

   1 Yes
   0 No

NEXT	RETIREPY				
Derived		**Show Card**		**CARI**	

RETIREPY	
ASK	All respondents

Retirement income from Social Security, Railroad Retirement, pensions or other retirement funds?

   1 Yes
   0 No

NEXT	SSINCOME				
Derived		**Show Card**		**CARI**	

SSINCOME	
ASK	All respondents

Supplemental Security Income (SSI)?

   1 Yes
   0 No

NEXT	CASHBEN				
Derived		**Show Card**		**CARI**	

CASHBEN					
ASK	All respondents				

Welfare payments or cash assistance?
 	
  1 Yes
  0 No					

NEXT	INVESTMT				
Derived		**Show Card**		**CARI**	

INVESTMT					
ASK	All respondents				

Income from interest, dividends, rental properties, royalties, estates, or trusts?
 	
  1 Yes
  0 No					

NEXT	RGLRPAY				
Derived		**Show Card**		**CARI**	

RGLRPAY					
ASK	All respondents				

Any other regular sources of income such as Veterans' (VA) payments, survivor or disability pensions, unemployment compensation, child support, or alimony?
 	
  1 Yes
  0 No					

NEXT	MONEYPY				
Derived		**Show Card**		**CARI**	

MONEYPY (Changed from 2009)					
ASK	All respondents				

Place show card 37 in front of the respondent.

Please look at Card 37. Including all of the income sources I just asked you about, which category best describes the total combined income of all household members for the last year, before taxes and deducti

   1 Less than $10,000
   2 $10,000 to $19,999
   3 $20,000 to $29,999
   4 $30,000 to $39,999
   5 $40,000 to $49,999
   6 $50,000 to $59,999
   7 $60,000 to $69,999
   8 $70,000 to $79,999
   9 $80,000 to $99,999
  10 $100,000 to $119,999
  11 $120,000 to $139,999
  12 $140,000 or more

NEXT	IVCOMMKFILTER				
Derived		**Show Card**	Yes	**CARI**	

IVCOMMKFILTER					
ASK	All respondents				

Interviewer Task: If you have any comments that might suggest that the data collected in the household characteristics section should be analyzed by central office staff, enter 1. If you have no comments regarding the quality of data entered in this section, enter 2.

   1 I have comments regarding the quality of data in this section
   2 I do not have comments

NEXT	If IVCOMMKFILTER=1: IVCOMMK Else: Section L				
Derived		**Show Card**		**CARI**	

IVCOMMK					
ASK	If IVCOMMKFILTER=1				

Intervierwer Task: Record any information here about the household characteristics of this housing unit that might provide clarification to the respondent's answers.

   Open response

NEXT	Section L				
Derived		**Show Card**		**CARI**	

SECTION L: ENERGY INSECURITY and ASSISTANCE (LIHEAP)

SCALEB (Changed from 2009)		

ASK	All respondents

The last questions I have are about challenges your household may have had paying energy bills or maintaining heating and cooling in your home.

In the last year, how many months did your household reduce or forego expenses for basic household necessities, such as medicine or food, in order to pay an energy bill? Was it…

    1 Almost every month
    2 Some months
    3 1 or 2 months
    0 Never

NEXT	SCALEG

Derived		**Show Card**		**CARI**	

SCALEG (Changed from 2009)		

ASK	All respondents

In the last year, how many months did your household keep your home at a temperature that you felt was unsafe or unhealthy? Was it…

    1 Almost every month
    2 Some months
    3 1 or 2 months
    0 Never

NEXT	SCALEE

Derived		**Show Card**		**CARI**	

SCALEE (Changed from 2009)		

ASK	All respondents

In the last year, how many months did your household receive a disconnection notice, shut off notice, or nondelivery notice for an energy bill? Was it…

    1 Almost every month
    2 Some months
    3 1 or 2 months
    0 Never

NEXT	If SCALEE in(1,2,3): PAYHELP Else: NOHEATBROKE, NOHEATEL, NOHEATNG, NOHEATBULK				
Derived		**Show Card**		**CARI**	

PAYHELP (New)	

ASK	If SCALEE in(1,2,3)

When you received that notice, did your household apply for and receive home energy assistance to help pay your energy bill?

    1 Yes
    0 No

NEXT	NOHEATBROKE, NOHEATEL, NOHEATNG, NOHEATBULK				
Derived		**Show Card**		**CARI**	

NOHEATBROKE, NOHEATEL, NOHEATNG, NOHEATBULK (New)	

ASK	All respondents

Place show card 38 in front of the respondent.

Please look at Card 38. In the last year, was there ever a time your household was unable to use your main source of heat because any of these events happened?

Mark all that apply.

    Your heating equipment was broken and you couldn't afford to pay for the repair or replacement (NOHEATBROKE)
    You couldn't pay for electricity and it was disconnected (NOHEATEL)
    You couldn't pay for natural gas and it was disconnected (NOHEATNG)
    You ran out of fuel oil, propane, kerosene, or wood because you couldn't afford a delivery (NOHEATBULK)
    None of these happened

NEXT	If NOHEATBROKE=1 or NOHEATEL=1 or NOHEATNG=1 or NOHEATBULK=1: NOHEATDAYS Else: COLDMA				
Derived		**Show Card**	Yes	**CARI**	

NOHEATDAYS (New)	

ASK	If NOHEATBROKE=1 OR NOHEATEL=1 OR NOHEATNG=1 OR NOHEATBULK=1

About how many days was your household without heat?

    1 - 366

NEXT	NOHEATHELP				
Derived		**Show Card**		**CARI**	

NOHEATHELP (New)					
ASK	If NOHEATBROKE=1 OR NOHEATEL=1 OR NOHEATNG=1 OR NOHEATBULK=1				

When that happened, did your household apply for and receive home energy assistance to help restore your heating?

    1 Yes
    0 No

NEXT	COLDMA				
Derived		**Show Card**		**CARI**	

COLDMA (Changed from 2009)					
ASK	All respondents				

In the last year, did anyone in your household need medical attention because your home was too cold?

    1 Yes
    0 No

NEXT	NOACBROKE, NOACEL				
Derived		**Show Card**		**CARI**	

NOACBROKE, NOACEL (New)					
ASK	All respondents				

Place show card 39 in front of the respondent.

Please look at Card 39. In the last year, was there ever a time your household was unable to use your air conditioner or other cooling equipment because any of these events happened?

Mark all that apply.

    Your air conditioning equipment or other cooling equipment was broken and you couldn't afford to
    pay for the repair or replacement (NOACBROKE)
    You couldn't pay for electricity and it was disconnected (NOACEL)
    None of these happened

NEXT	If NOACBROKE=1 or NOACEL=1: NOACDAYS; Else HOTMA				
Derived		**Show Card**	Yes	**CARI**	

NOACDAYS (New)					
ASK	If NOACBROKE=1 or NOACEL=1				
About how many days was your household without its air conditioner or other cooling equipment? 1 - 366					
NEXT	NOACHELP				
Derived		**Show Card**		**CARI**	

NOACHELP (New)					
ASK	If NOACBROKE=1 or NOACEL=1				

When that happened, did your household apply for and receive home energy assistance to help restore your cooling?
 	
     1 Yes
     0 No					

NEXT	HOTMA				
Derived		**Show Card**		**CARI**	

HOTMA (Changed from 2009)					
ASK	All respondents				

In the last year, did anyone in your household need medical attention because your home was too hot?
 	
     1 Yes
     0 No					

NEXT	If ELPAY in(1,3) or NGPAY in(1,3) or LPGPAY in(1,3) or FOPAY in(1,3) or KERODEL=1: SIGNFORM Else: LANGUAGE				
Derived		**Show Card**		**CARI**	

SIGNFORM (Changed from 2009)	
ASK	If ELPAY in(1,3,4) or NGPAY in(1,3,4) or LPGPAY in(1,3,4) or FOPAY in(1,3,4) or KERODEL=1

This is the final question I have. In addition to the answers you've provided in this survey, we would like to find out how much energy your household actually used in the past year. Would you please sign this form that gives permission to your energy suppliers to provide this information to the U.S. Department of Energy?

Interviewer Task: Give the authorization form to the respondent and record whether the respondent signed the form or not.

    1 Authorization form signed
    0 Authorization form not signed

NEXT	LANGUAGE				
Derived		**Show Card**		**CARI**	Yes

LANGUAGE (New)	
ASK	All respondents

Interviewer Task: Record the language in which this interview was conducted.

    1 English
    2 Spanish
    3 Combination of English and Spanish
    4 Other

NEXT	If LANGUAGE=4: LANGUAGEFU Else: IVCOMMLFILTER				
Derived		**Show Card**		**CARI**	

LANGUAGEFU (New)	
ASK	If LANGUAGE=4

Interviewer Task: Please explain how this interview was conducted.

    Open response

NEXT	IVCOMMLFILTER				
Derived		**Show Card**		**CARI**	

IVCOMMLFILTER	
ASK	All respondents

Interviewer Task: If you have any comments that might suggest that the data collected in the energy assistance section should be analyzed by central office staff, enter 1. If you have no comments regarding the quality of data entered in this section, enter 2.
 	
   1 I have comments regarding the quality of data in this section
   2 I do not have comments	

NEXT	If IVCOMMLFILTER=1: IVCOMML Else: End survey

Derived		**Show Card**		**CARI**	

IVCOMML	
ASK	If IVCOMMLFILTER=1
Intervierwer Task: Record any information here about energy assistance received by this housing unit that might provide clarification to the respondent's answers. Open response	

NEXT	End survey

Derived		**Show Card**		**CARI**	