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 r	Variable name (New) (Changed from 2009)					
ASK						
Interviewe Question t		uctions d 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

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

ASK If CONFIRM=2

Interviewer Task: Record the city here.

Open response

NEXT CSTATE

Derived Show Card CARI

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 If PRIMRES=0: PRIMRESA **NEXT** If PRIMRES=1: CNFRMHUQ CARI

Show Card

Derived

PRIMR	PRIMRESA						
ASK	If PRIME	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.							
Derive	d		Show Card		CARI		

CNFRN	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	k		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	
Doilloa	Ollott Gala	O/ 11 11	i

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

Delived Oak	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

KOWN	KOWNCOND						
ASK	All respo	espondents					
Is this home part of a condominium or cooperative? 1 Yes 0 No							
NEXT	NEXT If KOWNCOND=1: CONDCOOP Else: YEARMADE						
Derive	t		Show Card		CARI		

CONDO	COOP						
ASK	If KOWN	If KOWNCOND=1					
1 (Which is it, a condominium or cooperative? 1 Condominium 2 Cooperative						
NEXT	NEXT YEARMADE						
Derive	b		Show Card		CARI		

YEARMADE (Changed from 2009)					
ASK	ASK All respondents				
	year was this structure built? Your best estimate is fine.				

NEXT		MADE in(-8,-9): Y CCUPYY	/EARMADERANG	SE .		
Derive	d		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	OCCUF	PYY				
Derive	d	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 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

NFXT	VACANT
INEVI	I VACAINI

DerivedYesShow CardYesCARI

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 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

CELLA	CELLAR (Changed from 2009)									
ASK	If TYPEHUQ in(2,3)									
1 \	Now think about the foundation of your home. Is any part of your home built over a basement? 1 Yes 0 No									
NEXT	NEXT CRAWL									
Derive	erived Show Card CARI									

CRAW	CRAWL (Changed from 2009)									
ASK	If TYPEHUQ in(2,3)									
1 \	Is any part of your home built over a crawl space? 1 Yes 0 No									
NEXT	NEXT CONCRETE									
Derive	Derived Show Card CARI									

CONCI	CONCRETE (Changed from 2009)							
ASK If TYPEHUQ in(2,3)								
	part of your home built on a concrete slab? Yes 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 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	STUDIO							
ASK	If TYPEHUQ in(4,5)							
1 \	Is your apartment a one-room efficiency or studio apartment? 1 Yes 0 No							
NEXT	NEXT If STUDIO=1: NCOMBATH Else: ONEFLRAPT							
Derive								

ONEFL	ONEFLRAPT (Changed from 2009)									
ASK	If TYPEHUQ in(4,5) and STUDIO ne 1									
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										
Derive	Derived Yes Show Card CARI									

NAPTF	NAPTFLRS									
ASK	If ONEFLRAPT=0									
	How many levels does your apartment unit have? 2 - 9									
NEXT BEDROOMS										
Derive	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

NCOM	NCOMBATH (Changed from 2009)									
ASK	All respondents									
many f	ull bathroor r finished		ink with running wan your home? [If T							
NEXT	NHAFB	ATH								
Derive	d d		Show Card		CARI					
NHAFE	BATH (C	hanged from 200	9)							
ASK	All resp	ondents	·							
	ve? [If TY		her a toilet or a ba clude bathrooms i							
NEXT	OTHRO	OMS								
Derive	d		Show Card		CARI					
OTHRO	OOMS (C	hanged from 200	09)							
ASK	If STUD	IO ne 1								
areas,	hallways, other roo	and closets, how	ur home besides b many other rooms cs or finished base	are there in your						
NEXT		HUQ in(1,2,3): PR HUQ in(4,5): WAL								
Derive	d	Yes	Show Card		CARI					
TOTRO	TOTROOMS									
ASK										
Derived	Derived									
NEXT										
Derive	d	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 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

If WALLTYPE=9: WALLTYPEFU

NEXT

Else if TYPEHUQ in(1,2,3,4): ROOFTYPE

Else: HIGHCEIL

Derived Yes CARI

WALLTYPEFU

ASK If WALLTYPE=9

Specify the type of other outside wall material.

Open response

NEXT		HUQ in(1,2,3,4): F GHCEIL	ROOFTYPE		
Derive	t		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

If ROOFTYPE=9: ROOFTYPEFU

NEXT 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 HIGH(Else: SL	CEIL ne 0: CATHO DDRS	CEIL		
Derive	d		Show Card	CARI	

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

CARI

Show Card

Derived

SLDDR	SLDDRS (Changed from 2009)					
ASK	All respo	Il respondents				
Does your home have any sliding glass doors? 1 Yes 0 No						
NEXT	IEXT If SLDDRS=1: DOOR1SUM Else: WINDOWS					
Derived			Show Card		CARI	

DOOR?	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	EXT WINDOWS					
Derive	t		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	TYPEGL	ASS

Derived Show Card Yes	CARI
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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

NFXT	I WINFRAME

Derived	t t	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				
Derive	d		Show Card	Yes	CARI	Yes

WINFR	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 ADQINS	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 DRAFT	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	
Delived	Onow Cara	OAIN	

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	
Delived	SHOW Caru	CAINI	
DCITTCA	Ollow Cala		

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

DerivedShow CardYesCARIYes

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	В			
Derive	d		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

N	FXT	

If STOVENFUEL=13: DUALCOOKTFUEL Else if STOVENFUEL=21: STOVENFUELFU

Else: COOKTUSE

Derived

Show Card

CARI

DUALCOOKTFUEL (New)

ASK If ST

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	OVENC	LN			
Derive	b		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

If STOVE>0: STOVEFUEL

NEXT | 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

Else: GET GOOKTOOL

Derived Show Card CARI

STOVE	STOVEFUELFU							
ASK	If STOV	'EFUEL=21						
	the type	of other fuel.						
NEXT	SEPCO	OKTUSE						
Derive	d		Show Card		CARI			
SEPCO	SEPCOOKTUSE (New)							

SEPCO	EPCOOKTUSE (New)								
ASK	If STOVE>0								
it's not	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	NEXT RANGEHOOD								
Derive	d		Show Card		CARI				

RANGI	RANGEHOOD (New)						
ASK	If STOV	If STOVEN>0 or STOVE>0					
1 \	Does your household have a range hood or fan over your stove or cooktop? 1 Yes 0 No						
NEXT	NEXT If RANGEHOOD=1: HOODVENT Else: OVEN						
Derive	d		Show Card		CARI		

HOOD	HOODVENT (New)						
ASK	If RANG	SEHOOD=1					
1 1	Is your range hood or fan vented to the outside? 1 Yes 0 No						
NEXT	NEXT OVEN						
Derive							

OVEN (Changed from 2009)

ASK All re

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

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	SEPOV	ENCLN			
Derive	d		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

CARI

Show Card

NEXT

Derived

MICRO

MICRO	MICRO (Changed from 2009)						
ASK	All resp	ondents					
	How many microwaves do you have? 0 - 9						
NEXT If MICRO>0: AMTMICRO Else: OUTGRILL							
Derive	d		Show Card		CARI		

AMTM	MTMICRO (Changed from 2009)								
ASK	If MICRO>0								
"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								
Derive	d		Show Card		CARI				

DEFRO	DEFROST					
ASK	ASK If MICRO>0					
	our household use the microwave for defrosting? Yes 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	NEXT TOPGRILL							
Derive	t		Show Card		CARI			

TOPGRILL							
ASK	All respondents						
Does your household use a built-in indoor grill? 1 Yes 0 No							
NEXT	NEXT If TOPGRILL=1: STGRILA Else: NUMMEAL						
Derive	Derived Show Card CARI						

STGRI	STGRILA								
ASK	If TOPG	If TOPGRILL=1							
propan 5 E 1 N 2 F	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	NEXT If STGRILA=21: STGILAFU Else: NUMMEAL								
Derive	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

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

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
116/1	INEI INIO IZ

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
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

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)

NEVT	11/

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

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

NEVT	
INEVI	

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					
Derive	d		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	T SEPFREEZ					
Derived		Show Card	Yes	CARI		

SEPFREEZ							
ASK	K 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							
Derive	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

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 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

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)

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

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)

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

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	I IVCOMMBEILTER

ived Show Card	Yes	CARI
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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				
Derive	d		Show Card	CARI	

SECTION C: HOME APPLIANCES AND ELECTRONICS

CWASI	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 CWA	SHER=1: TOPFR(RYER	ONT			
Derive	d		Show Card		CARI	
TOPFR	ONT (C	hanged from 200	9)			
ASK	ASK If CWASHER=1					
Is your clothes washer top loading or front loading? 1 Top loading 2 Front loading						
NEXT	WASHL	OAD				
Derive	d		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						

CARI

Yes

Show Card

NEXT | WASHTEMP

Derived

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

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

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)

NI	EYT	
ıw	$-\Delta I$	

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	I TVTYPE1

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	TVONWD [*]

Derived	Show Card	Yes	CARI	
Derived	Show Card	res	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
11-71	IVOINVEI

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
 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

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 TVTYPE	≣3				
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	
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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

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

CABLES	SAT				
		Show Card	Yes	CARI	
		CABLESAT			

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			1		
Derived		Show Card		CARI	Yes
DVD (New)					
ASK If TVCC	DLOR>0				
DVD or Blu-ray p	olayer				
0 - 15					
NEXT VCR					
Derived		Show Card		CARI	Yes
VCR (New)					
ASK If TVCC	DLOR>0				
	-				
VCR					
0 - 15					
NEXT INTSTR	REAM				
Derived		Show Card		CARI	Yes
INTSTREAM (N	ew)				
	DLOR>0				
Internet streamir	ng device (for exa	mple: Apple TV, G	Soogle Chromeca	st, Slingbox, or Ro	oku)
0 - 15					
NEXT TVAUD	IOSYS				
Derived		Show Card		CARI	Yes
	1				
TVAUDIOSYS (New)					
ASK If TVCOLOR>0					
1	1.0000000				
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

•					
District of	OI:	OI V		OADI	
Derived	Snow	Card Ye	es l	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

NUMTA	ABLET (N	lew)				
ASK	All respondents					
Tablet	computer	s or e-readers (fo	r example: iPad or	Kindle)		
	•	s of c readers (for	cxampic. If ad of	Tanaic)		
0-1	5					
NEXT	ELPERI	PH				
Derive	d		Show Card		CARI	
ELPER	IPH (Nev	v)				
ASK	All resp	ondents				
Printers	s. scanne	rs, fax machines,	or copiers			
		, , , , , , , , , , , , , , , , , , , ,	o. oop.o.o			
0-1	5					
NEXT	NUMSN	1PHONE				
Derive	d		Show Card		CARI	
NUMSI	MPHONE	(New)				
ASK	All resp	ondents				
"Smart'	" nhones	(for example: iPho	nno)			
	•	(ioi example, ir no	nie)			
0-1	5					
NEXT	CELLPH	HONE				
Derive	d		Show Card		CARI	
CELLP	HONE (N	lew)				
ASK	ASK All respondents					
Other cellular phones						
0-1	0-15					
	If DESK	TOP+NUMU APTO	DP+NI IMTARI ET:	>1 and ((DESKT)	P>0 and NHMH Δ	PTOP>0\ or
NEXT	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					
		TERNET	AF I OF +NUIVI AE	DLET >U. TIIVIEUN	I	
Derive	d		Show Card		CARI	

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

Derived	k		Show Card		CARI		
TIMEO	TIMEON1 (Changed from 2009)						
ASK	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

NEXT TIMEON1

- 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) If DESKTOP+NUMLAPTOP+NUMTABLET>2 and ((DESKTOP>0 and NUMLAPTOP>0) or **ASK** (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

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

NEVT	TIMEONIS

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				

INTERI	INTERNET (Changed from 2009)								
ASK	All respo	ondents							
1 1	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									

INWIRE	INWIRELESS (Changed from 2009)								
ASK	If INTER	RNET=1							
1)	Is a wireless router used in your home for accessing the Internet? 1 Yes 0 No								
NEXT	AQUARIUM								
Derive	ved Show Card CARI								

AQUA	AQUARIUM (Changed from 2009)								
ASK	All resp	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								
Derive	d		Show Card		CARI				

WELLPUMP (Changed from 2009)								
ASK	If TYPE	HUQ in(1,2,3)						
1 \	An electric pump for well water? 1 Yes 0 No							
NEXT	Else if [AG=1 (only respo DSFLAG=1 (only r ECURITY						
Derive	d		Show Card		CARI			
SWAM	PCOL							
ASK	If SCFLAG=1 (only respondents in certain states)							
An evaporative or swamp cooler? 1 Yes 0 No								

DIPSTI	DIPSTICK							
ASK	If DSFL	AG=1 (only respor	ndents in certain s	tates)				
1 1	Any automobile block heaters, dip-stick engine heaters, or battery blankets? 1 Yes 0 No							
NEXT	NEXT SECURITY							
Derive	d	_	Show Card		CARI			

CARI

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

Show Card

NEXT

Derived

SECURITY (New)							
ASK	All respondents						
Home se	ecurity system?						
1 Ye 0 Ne							

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 MEDICALDEV NEXT **CARI Show Card** Derived

MEDIC	MEDICALDEV (New)							
ASK	All respo	ondents						
1 1	Medical devices, such as ventilators, nebulizers, or CPAP machines? 1 Yes 0 No							
NEXT	T VACUUM							
Derive	t		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	NEXT FLASH							
Derived			Show Card		CARI			

FLASH	l (New)							
ASK	All respondents							
1 `	Rechargeable flashlight? 1 Yes 0 No							
NEXT	тоотн							
Derive	d		Show Card		CARI			
TOOTH	l (New)							
ASK	All resp	ondents						
Rechar	geable el	ectric toothbrush?						
1 ° 1 0	Yes No							
NEXT	RAZOR							
Derive	d		Show Card		CARI			
RAZOF	R (New)							
ASK	All resp	ondents						
Rechar	geable el	ectric razor?						
1 ° 1 0	Yes No							
NEXT	DRILL							
Derive	d		Show Card		CARI			
DRILL	(New)							
ASK	ASK All respondents							
Rechargeable drill or other power tool?								
	1 Yes 0 No							
NEXT	IVCOMI	MCFILTER						
Derive	d		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

SECTION D: SPACE HEATING

HEATH	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			

DNTHE	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	NEXT If DNTHEAT=1: EQUIPNOHEAT Else: MOISTURE								
Derived 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

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

EQUIP	EQUIPNOHEATFU							
ASK	If EQUIF	If EQUIPNONEAT=21						
Could you tell me what that other heating equipment is? Open response								
NEXT	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

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

If EQUIPM=21: EQUIPMFU

If EQUIPM in(3,4): NUMEQUIPM

NEXT 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	MAINTH	MAINTHT					
Derive	d		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 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

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 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

Derived

THERMAIN

THERM	THERMAIN (Changed from 2009)							
ASK	If HEAT	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								

Yes

CARI

Show Card

отнтн	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

Derive	d	Show Card CARI						
PROTE	PROTHERM							
ASK	If THER	MAIN=1						
	t times of es		nmed so that differ ermostat that cont					
NEXT	NEXT EQUIPMUSE							
Derive	ved Show Card CARI							

EQUIP	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		PMUSE=9: EQUII EMPHOME	PMUSEFU			
Derive	d		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	HEATO	ТН			
Derive	d		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

WARM	AIR							
ASK								
Second	Secondary heat is central furnace							
NEXT	FURNF	UEL						
Derive	d		Show Card		CARI			
REVER	RSE							
ASK								
Second	lary heat	is heat pump						
NEXT	EQMAN	1T						
Derive	d		Show Card		CARI			
STEAM	IR .							
ASK								
Second	dary heat	is steam/hot water	system					
NEXT	RADFU	EL						
Derive	d		Show Card		CARI			
PERME	ELEC							
ASK								
Second	lary heat	is built-in electric ι	units					
NEXT	EQMAN	1T						
Derive	d		Show Card		CARI			
PIPELE	ESS							
ASK								
Second	lary heat	is built-in floor/wal	l pipeless furnace					
NEXT	PIPEFU	EL						
Derive	d		Show Card		CARI			

ROOM	HEAT							
ASK								
Second	Secondary heat is built-in room heater							
NEXT	RHMHTFUEL							
Derive	d		Show Card		CARI			
WOOD	KILN							
ASK								
Second	dary heat	is heating stove b	urning wood					
NEXT	EQMAN	I T						
Derive	d		Show Card		CARI			
CARRY	/EL							
ASK								
Second	dary heat	is portable electric	c heaters					
NEXT	NUMPO	RTELHEAT2						
Derive	d		Show Card		CARI			
CARRY	/KER							
ASK								
Second	dary heat	is portable kerose	ne heaters					
NEXT	EQMAN	IT .						
Derive	d		Show Card		CARI			
CHIMN	ΙΕΥ							
ASK								
Second	dary heat	is fireplace						
NEXT	FPFUEL							
Derive	d		Show Card		CARI			

RANGE	ANGE						
ASK							
Second	econdary heat is cooking stove or oven						
NEXT	RNGFU	EL					
Derive	d		Show Card		CARI		

DIFEQ	DIFEQUIP						
ASK							
Second	Secondary heat is some other equipment						
NEXT	NEXT AUXEQPFU						
Derive	rived Show Card CARI						

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

FURNFUEL ASK If WARMAIR=1

What fuel does the central furnace use? Is it...

- 5 Electricity1 Natural gas from underground pipes2 Propane (bottled gas)
- 3 Fuel oil
- 4 Kerosene
- 7 Wood
- 8 Solar
- 9 District steam
- 21 Some other fuel

NEXT	If FURN Else: EC	FUEL=21: FURNI QMAMT	FUELFU		
Derive	d		Show Card	CARI	

FURNE	FURNFUELFU						
ASK	If FURN	If FURNFUEL=21					
	Specify the type of other fuel. Open response						
NEXT	NEXT EQMAMT						
Derive							

RADFU	RADFUEL								
ASK	If STEAMR=1								
5 E 1 N 2 F 3 F 4 F 7 N 8 S 9 E	Lel does the steam/hot water system use? Is it Electricity Natural gas from underground pipes Propane (bottled gas) Fuel oil Kerosene Wood Solar District steam Some other fuel								
NEXT	NEXT If RADFUEL=21: RADFUELFU Else: EQMAMT								

RADFU	RADFUELFU							
ASK	If RADF	UEL=21						
	Specify the type of other fuel. Open response							
NEXT	IEXT EQMAMT							
Derive	erived Show Card CARI							

CARI

Show Card

Derived

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 If PIPEFUEL=21: PIPEFUELFU **NEXT** Else: EQMAMT Derived **Show Card CARI**

PIPEFU	PIPEFUELFU							
ASK	If PIPER	FUEL=21						
	Specify the type of other fuel. Open response							
NEXT	NEXT EQMAMT							
Derive	rived Show Card CARI							

RMHTF	UEL										
ASK	If ROOM	ИНЕАТ=1									
1 N 2 F 3 F	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	NEXT EQMAMT										
Derive	Derived CARI 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 DIFFU	JEL=21: DIFFUEL QMAMT	FU		
Derive	t		Show Card	CARI	

DIFFUE	DIFFUELFU							
ASK	If DIFFU	JEL=21:						
	Specify the type of other fuel. Open response							
NEXT	NEXT EQMAMT							
Derive	Derived Show Card CARI							

NUMPO	NUMPORTELHEAT2 (New)								
ASK	If CARE	RYEL=1							
	How many portable electric heaters does your household use? 1 - 15								
NEXT	NEXT EQMAMT								
Derive	Derived CARI CARI								

EQMAN	Γ (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

If CELLAR=1: BASEHEAT **NEXT**

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)

If BASEHEAT=1 **ASK**

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

1 All

2 About half

3 Some

If ATTIC=1: ATTCHEAT

NEXT 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

If ATTCHEAT=1: ATTCHT2 **NEXT**

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

CARI

Show Card

Derived

GARGI	GARGHEAT (Changed from 2009)							
ASK	If HEAT	HOME=1 and PR	KGPLC1=1					
1 1	Is your garage heated using the heating equipment you've told me about? 1 Yes 0 No							
NEXT	MOISTURE							
Derive	ed Show Card CARI							

MOIST	MOISTURE (Changed from 2009)							
ASK	All respo	ondents						
home?	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	NEXT If MOISTURE=1: HUMIDTYPE Else: IVCOMMDFILTER							
Derive	Derived CARI CARI							

HUMIDTYPE (New)								
ASK								
1 [humidifier a portable humidifier or a whole home humidifier? Portable Whole home							

NEXT	USEMO	ISTURE			
Derive	d		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

AIRCO	AIRCOND							
ASK	All resp	ondents						
	Yes	oning equipment u	used in your home	?				
NEXT	NEXT If AIRCOND=1: COOLTYPE If AIRCOND=0: DNTAC Else: NUMCFAN							
Derive	Perived Show Card CARI							

DNTAG	DNTAC (Changed from 2009)							
ASK	If AIRCOND=0							
air con	clarify, do you have air conditioning equipment but don't use it, or does your home not have any ditioning equipment? Have equipment, but don't use it Don't have any air conditioning equipment							
NEXT	If DNTAC=1: COOLTYPENOAC Else: NUMCFAN							

COOLTYPENOAC (Changed from 2009)				
ASK	If DNTAC=1			

CARI

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?

Show Card

1 Central air conditioning system

Derived

- 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)

NEYT	Т

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

Show Card CARI Derived

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

Derived

If USECENAC=9: USECENACFU Else if COOLTYPE=3: NUMBERAC Else if COOLTYPE=1: TEMPHOMEAC

Derived Show Card Yes CARI Yes

Show Card

USECE	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					

CARI

NUMBI	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									
Derive	d		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

Dorived	Show Card	Voc	CARI	
Derived	Snow Card	l Yes	LCARI	

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 THERMA

If THERMAINWW=1: PROTHERM

Else: USEWWAC

Derived 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	
	011011 0010	~	

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

If BASECOOL=1: BASECL2
Else if ATTIC=1: ATTCCOOL
Else if PRKGPLC1=1: GARGCOOL
Else: NUMCFAN

Show Card

Derived

CARI

BASEC	BASECL2 (Changed from 2009)								
ASK	If BASECOOL=1								
1 A	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									
Derive	d		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

GARG	GARGCOOL (Changed from 2009)									
ASK	If AIRC	OND=1 and PRK	GPLC1=1							
1)	Is your garage cooled using the air conditioning equipment you told me about? 1 Yes 0 No									
NEXT	NEXT NUMCFAN									
Derive	erived Show Card CARI									

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

NUMFL	NUMFLOORFAN (New)						
ASK	All respondents						
Floor, v	vindow, or table fans						

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

NUMA	NUMATTICFAN (New)								
ASK	If TYPEHUQ in(2,3)								
Attic fans 0 - 15									
NEXT If NUMCFAN>0: USECFAN Else: NOTMOIST									
Derive	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 NOTMO	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

CARI

Show Card

Derived

MOIST	MOISTTYPE (New)								
ASK	If NOTM	If NOTMOIST=1							
1 1	Is your dehumidifier a portable dehumidifier or a whole home dehumidifier? 1 Portable 2 Whole home								
NEXT	NEXT USENOTMOIST								
Derive	Derived Show Card CARI								

USENC	USENOTMOIST (Changed from 2009)									
ASK	If NOTM	MOIST=1								
	In the last year, how many months was the dehumidifier used? 0 - 12									
NEXT TREESHAD										
Derive	Derived Show Card CARI									

TREES	TREESHAD						
ASK	SK All respondents						
	large trees shade your home from the afternoon summer sun? Yes No						

NEXT IVCOM	IMEFILTER			
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	WHEAT	SIZ			
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 | ".VV

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	MORET	HAN1H2O			
Derive	d		Show Card	CARI	

MORE	MORETHAN1H2O (New)								
ASK	If TYPE	HUQ in(1,2,3) or I	H2OHEATAPT=1						
1 1	Do you have more than one water heater? 1 Yes 0 No								
NEXT	If MORETHAN1H2O=1: FUELH2O2 Else: IVCOMMFFILTER								
Derive	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	If FUELH2O2=21: FUELH2O2FU

Derived	Show Card Yes	CARI
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FUELH	FUELH2O2FU							
ASK	If FUELH2O2=21							
Could you tell me what that other fuel used to heat water is? Open response								
NEXT WHEATSIZ2								
Derive	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)

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								
Derive	Derived CARI 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

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	LGTINC	FL				
Derive	d		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 CARI

ASK If TYPEHUQ in(1,2,3) About how many light bulbs are installed outside your home? Is it... O 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 LGTO	TOUTNUM 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 LGTO	OUTNITE>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 bu	Yes			
1 0	No			

NEXT LGT	OUTLED		-				
Derived		Show Card		CARI			
LGTOUTLED (New)							
ASK If LO	ASK If LGTOUTNITE>0						
LED bulbs?							
1 Yes							
0 No							
NEXT LGT	NEXT LGTOUTNG						
Derived		Show Card		CARI			
LGTOUTNG	(New)						
ASK If LO							
Natural gas I	gnts?						
1 Yes							
0 No							
NEXT LGT	OUTCNTL						
Derived		Show Card		CARI			
LGTOUTCN	ΓL (New)						
ASK If LO	STOUTNUM in(1,2,3)					
Are any of th	a liabt bulba autaida	vour home controll	ad by mation data	otoro or light con	oro?		
Are any or th	e light bulbs outside	your nome control	led by motion dete	ctors or light sens	SOIS?		
1 Yes 0 No							
0 110							
NEXT SW	MPOOL						
IILXI OW			l				
Derived		Show Card		CARI			
		Show Card		CARI			
Derived	(Changed from 20			CARI			
Derived SWIMPOOL	(Changed from 20 (PEHUQ in(1,2,3)			CARI			
SWIMPOOL ASK If T	'PEHUQ in(1,2,3)	09)		CARI			
SWIMPOOL ASK If T		09)		CARI			
SWIMPOOL ASK If T	'PEHUQ in(1,2,3)	09)		CARI			

NEXT		POOL=1: MONPO	OOL		
Derive	t		Show Card	CARI	

MONPO	MONPOOL (New)							
ASK	If SWIM	If SWIMPOOL=1						
	In the last year, how many months was your swimming pool in use? 0 - 12							
NEXT	NEXT If MONPOOL ge 1: POOL Else: RECBATH							
Derive								

POOL	POOL (Changed from 2009)							
ASK	If MONE	POOL ge 1						
Is it a heated pool? 1 Yes 0 No								
NEXT	NEXT If POOL=1: FUELPOOL Else: RECBATH							
Derive	Derived Show Card CARI							

FUELP	FUELPOOL (Changed from 2009)							
ASK	If POOL	.=1						
5 E 1 N 2 F 3 F 4 P 8 S	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							
Derive	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

CARI

Show Card

RECB#	RECBATH (Changed from 2009)							
ASK	All respo	All respondents						
1 1	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							
Derive	Derived Show Card CARI							

MONT	MONTUB (New)								
ASK	If RECE	SATH=1							
	In the last year, how many months was your hot tub, spa, or Jacuzzi in use? 0 - 12								
NEXT	NEXT If MONTUB ge 1: FUELTUB Else: AUDIT								
Derive									

Derived Show Card CARI FUELTUB (Changed from 2009)

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),

If MONTUB ge 1

3 Fuel oil,

ASK

Derived

- 4 Kerosene,
- 8 Solar, or
- 21 Some other fuel?

NEXT	If FUEL Else: Al	TUB=21: FUELTU JDIT	JBFU		
Derive	t		Show Card	CARI	

FUELT	FUELTUBFU							
ASK	If FUEL	TUB=21						
	Could you tell me what that other fuel used to heat the water is? Open response							
NEXT	NEXT AUDIT							
Derive	erived CARI							

AUDIT	
ASK	All respondents
home. save m	e energy audit is when a trained professional examines how energy is used in all parts of a After examining a home, the energy auditor will provide a list of ways to reduce energy use and loney on energy bills. Has your home had an energy audit? Yes
NEXT	If AUDIT=1: AUDITCHG Else if KOWNRENT=1: EELIGHTS, EETHERM, FREEAUDIT, REBATEAPP, RECYCAPP, SUBLOAN, TAXCREDITAPP, TAXCREDITWIN, WEATHERIZATION, BENOTHER, BENNONE Else: ENERGYASST

CARI

Show Card

Derived

AUDIT	UDITCHG (New)						
ASK	If AUDIT=1						
1 1	Did your household make any of the changes suggested by the energy auditor? 1 Yes 0 No						
NEXT	NEXT If KOWNRENT=1: EELIGHTS, EETHERM, FREEAUDIT, REBATEAPP, RECYCAPP, SUBLOAN, TAXCREDITAPP, TAXCREDITWIN, WEATHERIZATION, BENOTHER, BENNONE Else: ENERGYASST						
Derive							

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, ENERGYASST0TH 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 (ENERGYASST12)
2013 (ENERGYASST13)
2014 (ENERGYASST14)
2015 (ENERGYASST15)
Some other year(s) (ENERGYASSTOTH)

NEXT ESWIN, ESFRIG, ESFREEZE, ESDISHW, ESCWASH, ESDRYER, ESWATER, ESLIGHT, ESNONE

CARI

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

Show Card

ASK All respondents

Derived

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)

If THERMAIN=1 or THERMAINAC=1: SMARTTHERM

NEXT | Else if TYPEHUQ in(1,2,3,4): OUTLET

Else: ALTFUELPEV

Derived Yes CARI

SMART	SMARTTHERM (New)						
ASK	If THERMAIN=1 or THE	RMAINAC=1					
·	our home have a "smart" o Yes No	or Internet-connecte	ed thermostat?				
NEXT	IEXT If TYPEHUQ in(1,2,3,4): OUTLET Else: ALTFUELPEV						
Derive	d	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	NEXT ALTFUELE85									
Derive	d		Show Card		CARI					
ALTFU	ALTFUELE85 (New)									
ASK	ASK All respondents									
1 \	E85 or "flex-fuel" vehicle? 1 Yes 0 No									
NEXT		UELE85=1: E85U	SE							
Derive	d		Show Card		CARI					
E85US	E (New)									
ASK	If ALTF	JELE85=1								
1	All of the t Most of th About half Some of the	ime e time f the time	cle, how often is E	85 purchased, as	compared with no	ormal gasoline?				
NEXT	IVCOM	MGFILTER				<u> </u>				
Derive	d		Show Card		CARI					
ELOTH	IER									
ASK										
Derived	Derived									
NEXT	NEXT									
Derive	Derived Yes Show Card CARI									
UGOTH	UGOTH									
ASK										
Derived	t									

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		T		
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

ONSITE	ГҮРЕ	(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 ONSI	TETYPE=9: ONSI TETYPE in(1,2,3) THFUELUSE						
Derive	ved Show Card Yes CARI							

ONSIT	ONSITETYPEFU								
ASK	If ONSITETYPE=9								
	Could you tell me what that other on-site system is? Open response								
NEXT ONSITEGRID									
Derive	Derived Show Card CARI								

ONSITEGRID If ONSITETYPE in(1,2,3,9) ASK Is your on-site system connected to the grid? 1 Yes 0 No ONSITEGENCAP NEXT **Show Card** CARI **Derived**

ONSIT	ONSITEGENCAP (New)									
ASK	If ONSITETYPE in(1,2,3,9)									
(kilowa	"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										
Derive	Derived Show Card CARI									

OTHFU	OTHFUELUSE											
ASK	All respondents											
HOUSE USED I	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	NEXT If OTHFUELUSE=1: OTHFUELFU1, OTHFUELFU2, OTHFUELFU3, OTHFUELFU4, OTHFUELFU5, OTHFUELFU6, OTHFUELFU7 Else: ELPAY											
Derive	d		Show Card		CARI							

	OTHFUELFU1, OTHFUELFU2, OTHFUELFU3, OTHFUELFU4, OTHFUELFU5, OTHFUELFU6, OTHFUELFU7									
ASK	If OTHFUELUSE=1									
5 E 1 N 2 F 3 F 4 H 7 V	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	Else if OTHFUELFU1-7=4: OTHFUELFUKE Else if OTHFUELFU1-7=7: OTHFUELFUWO Else if OTHFUELFU1-7=8: OTHFUELFUSO									
Derive	d		Show Card		CARI					

OTHFU	OTHFUELFUEL (New)									
ASK	If OTHFUELFU1-7=5									
	Could you tell me how electricity is used in your home? Open response									
NEXT	Else if OTHFUELFU1-7=7: OTHFUELFUWO Else if OTHFUELFU1-7=8: OTHFUELFUSO									
Derive	d		Else: ELPAY Derived Show Card CARI							

OTHFUELFUNG (New)									
ASK									
	ou tell me how natural gas is used in your home? en 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

ASK If OTHFUELFU1-7=2

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

Open response

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

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

If OTHFUELFU1-7=7: OTHFUELFUWO
Else if OTHFUELFU1-7=8: OTHFUELFUSO
Else: ELPAY

Derived Show Card CARI

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

CARI

OTHFU	OTHFUELFUSO (New)								
ASK	If OTHFUELFU1-7=8								
	Could you tell me how solar is used in your home? Open response								
NEXT	NEXT ELPAY								
Derive	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.

Show Card

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

Derived

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

PELHE	AT (Cha	anged from 2009)				
ASK If ELPAY=3							
		30 in front of the	-				
Please	look at C	ard 30. For which	electricity uses a	re the costs includ	led in your rent or	condo fee?	
Heating	g?						
1 \ 0 N	Yes No						
NEVE	DELLIO	T14/4					
NEXT	PELHO	IVVA	01 0 1	[, ,	OARI		
Derive	<u>a</u>		Show Card	Yes	CARI		
DEI UC	TWA (C	hanged from 20	00)				
ASK	If ELPA		09)				
ASK	II ELFA	1=3					
Water h	neating?						
1 \	Yes .						
1 0							
NEVE	551.40						
NEXT	PELAC				0.151	Ι	
Derive	d		Show Card	Yes	CARI		
DEL AC	· /Chana	and from 2000)					
		jed from 2009)					
ASK	If ELPA	Y=3					
Air con	ditioning?	•					
1 \	Yes .						
1 0							
NEXT	PELCO	OK 		Ι.,			
Derive	d		Show Card	Yes	CARI		
DEL OC	2017 (01						
	,	anged from 2009	3)				
ASK	If ELPA	Y=3					
Cookin	g?						
1 \	Yes .						
1 0							
1							

NEXT PELLIG	HT				
Derived		Show Card	Yes	CARI	

PELLIC	PELLIGHT (Changed from 2009)							
ASK	If ELPA	If ELPAY=3						
1 1	Lighting and appliances? 1 Yes 0 No							
NEXT	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							
Derive	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	Else if U Else if U Else if U Else if U	NY=3: PUGHEAT JSEFO=1: FOPAN JSELP=1: LPGPAN JSEKERO=1: KEF JSEWOOD=1: WO COMMHFILTER	·Υ	CRAP, WDPELLE	T, WDOTHER	
Derive	Show Card Yes CARI					

PUGH	PUGHEAT (Changed from 2009)						
ASK	ASK If NGPAY=3						
For wh	ich natura	ol age uses are the	e costs included in	n your rent or cond	lo foo?		
		ii gas uses are tile	e costs included ii	r your rent or cond	10 166 :		
Heating	g?						
1 0	Yes No						
	T						
NEXT	PUGHC	TWA	ı	T		<u> </u>	
Derive	d		Show Card		CARI		
PUGH	OTWA (C	Changed from 20	09)				
ASK	If NGPA						
Water	heating?						
1 0	Yes						
0	INO						
NEXT	PUGCC	OK				<u> </u>	
Derive	d		Show Card		CARI		
	2017 (21	14					
	1	anged from 2009	9)				
ASK	If NGPA	\Y=3					
Cookin	ıg?						
	Yes						
0	No						
NEXT	PUGOT	·H					
Derive	Derived Show Card CARI						
PUGOTH (Changed from 2009)							
ASK If NGPAY=3							
Other uses?							
1	Yes						
Ö							

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 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 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

NLPDELCO>0

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

1 - 25

NEXT LPGCASH

Show Card

CARI

ASK If USELP=1

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

1 Yes
0 No

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)

NEXT

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

וו ואטור

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

KEROI	KERODEL						
ASK	ASK If USEKERO=1						
Is kero	sene deliv	vered to your hom	e?				
1 ° 1 0	Yes No						
NEXT		DEL=1: NDIFKROEROCASH	CO				
Derive	d		Show Card		CARI		
NDIFK	RCO (Ch	nanged from 2009	9)				
ASK	If KERC	DEL=1					
How m	•	ent companies de	livered kerosene t	o your household	in the last year?		
NEXT	NKRDE	L					
Derive	d		Show Card		CARI		
NKRDI	EL (Char	nged from 2009)					
ASK	If KERC	DEL=1					
About h	·	deliveries did yo	ur household get i	n the last year?			
NEXT	KEROC	ASH					
Derive	d		Show Card		CARI		
KERO	CASH (C	hanged from 200	09)				
ASK							
Did your household buy kerosene in the last year and bring it home, that is, cash and carry? 1 Yes 0 No							
NEXT	Else if U	CASH=1: NOCR JSEWOOD=1: WO COMMHFILTER	OODLOGS, WDS	CRAP, WDPELLE			
Derive	d		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

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?

Show Card

- 1 Half a cord or less
- 2 About one cord

Derived

- 3 About two cords
- 4 Three to five cords
- 5 More than five cords

NEXT		If NUMCORDS=5: WWOODAMT Else: WOODPUR					
Derive	d		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

SQFTE	SQFTEST (Changed from 2009)							
ASK	All respondents							
how ma	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							
Derive	Derived Show Card CARI Yes							

SQFTII	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							
Derive	d		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							
Derive	d		Show Card		CARI		

SQFTII	SQFTINCG (New)						
ASK	If PRKGPLC1=1 and SQFTEST not in(DK,REF)						
1 \	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						
Derive							

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					
	Yes	ne second floor of	this housing unit t	he same as the fi	rst floor?	
NEXT	EXT If SHAPE2FLR=1: SIZE2FLR Else: SHAPE2FLRA					
Derive	d		Show Card		CARI	

SIZE2F	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						
Derive	d		Show Card		CARI		

SHAPE	SHAPE2FLRA (Changed from 2009)							
ASK	If (STO	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?								
2 T 3 L	 1 Square or Rectangle 2 T-shaped (2 Squares or Rectangles) 3 L-shaped (2 Squares or Rectangles 4 Some other shape 							
NEXT	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							
Derive	Derived Show Card Yes CARI							

SHAPE	SHAPE3FLR							
ASK	If STORIES=31 or NAPTFLRS>2							
1 \	Is the shape of the third floor of this housing unit the same as the second floor? 1 Yes 0 No							
NEXT	NEXT If SHAPE3FLR=1: SIZE3FLR Else: SHAPE3FLRA							
Derive	Derived Show Card CARI							

SIZE3F	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							
Derive	d		Show Card		CARI		

SHAPE	SHAPE3FLRA (Changed from 2009)							
ASK	If (STORIES=31 or NAPTFLRS>2) and SHAPE3FLR ne 1							
Please 1 S 2 7 3 L	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 3	Some oth	er snape						
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								
Derive	Derived Show Card Yes CARI							

SHAPE	SHAPEATTIC (Changed from 2009)						
ASK	If ATTICFIN in(1,2) or ATTCHEAT=1 or ATTCCOOL=1						
1 `	Is the shape of the attic of this home the same as the floor under it? 1 Yes 0 No						
NEXT	NEXT If SHAPEATTIC=1: SIZEATTIC Else: SHAPEATTICA						
Derive	Derived Show Card CARI						

SIZEAT	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	NEXT If CELLAR=1: SHAPEBASE Else if (GARGLOC=2 and STORIES=10 and SIZEATTIC=1) or (GARGLOC=2 and SIZE2FLR=1): OVERGARG Else: MEASURE					
Derive	d		Show Card		CARI	

SHAPE	ATTICA (Changed from 2009)
ASK	If (ATTICFIN in(1,2) or ATTCHEAT=1 or ATTCCOOL=1) and SHAPEATTIC ne 1
Please 1 S 2 7 3 L	how card 33 in front of the respondent. look at Card 33. Thinking about the attic of your home, which best describes the shape? Square or Rectangle T-shaped (2 Squares or Rectangles) L-shaped (2 Squares or Rectangles) Some other shape
NEXT	If CELLAR=1: SHAPEBASE Else if GARGLOC=2 and SIZE2FLR=1: OVERGARG Else: MEASURE

Show Card

Derived

SHAPEBASE (Changed from 2009)						
ASK	If CELLAR=1					
1 \	Is the shape of the basement of this home the same as the floor directly above it? 1 Yes 0 No					
NEXT	NEXT If SHAPEBASE=1: SIZEBASE Else: SHAPEBASEA					
Derive	Derived Show Card CARI Yes					

Yes

CARI

SIZEBA	SIZEBASE						
ASK	If SHAP	EBASE=1					
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							
Derive	rived 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 If (GARGLOC=2 and STORIES=10 and SIZEATTIC=1) or (GARGLOC=2 and SIZE2FLR=1): OVERGARG Else: MEASURE

Show Card

Derived

OVERGARG (New)							
ASK		GARGLOC=1 and SIZEBASE=1) or (GARGLOC=2 and STORIES=10 and SIZEATTIC=1) 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	MEASU	RE					
Derived			Show Card		CARI		
Derived			Snow Card		CARI		

Yes

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

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

NEXT

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 IVCO	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.

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

NEXT

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

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 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

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	NGSUP	PNAME			
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.

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

NEXT | 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

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 NGSUPPSTATE

Show Card

NEXT

Derived

NGSUF	NGSUPPSTATE							
ASK	If NGBII	_LTOSCAN=1 and	d natural gas supp	lier was not found	d in look-up table			
RECOR	RD the su	pplier's state as it	appears on the bi	ll here.				
Ор	en respor	nse						
NEVE	NOOLID	D.710						
NEXI	NEXT NGSUPPZIP							
Derive	d		Show Card		CARI			

CARI

NGSUF	NGSUPPZIP							
ASK	If NGBIL	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	T NGSUPPAREACODE							
Derive	d		Show Card		CARI			

NGSUF	NGSUPPAREACODE							
ASK	If NGBII	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	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

If LPGDELV=1: LPGBILLTOSCAN

NEXT 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

Else if FOPAY in(1,3,4): FOBILLTOSCAN Else if KERODEL=1: KEROBILLTOSCAN

Else: KFUELOT

Derived Show Card CARI

LPGSUPPSTREET1

NEXT

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	LPGSU	PPAREACODE1			
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

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

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

CARI

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

Derived

Derived

NEXT FOSUPPNAME1

Show Card

Show Card

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

If FOBILLTOSCAN=1: FOSUPPSTREET1
Else if NDIFFOCO>1: FOBILLTOSCAN2
Else if KERODEL=1: KEROBILLTOSCAN
Else: KFUELOT

Derived Show Card CARI

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

FOSUF	FOSUPPCITY1							
ASK	If FOBIL	If FOBILLTOSCAN=1						
	RECORD the supplier's city as it appears on the bill here. Open response							
NEXT	NEXT FOSUPPSTATE1							
Derive	Derived Show Card CARI							

FOSUP	FOSUPPSTATE1							
ASK	If FOBIL	If FOBILLTOSCAN=1						
_	RECORD the supplier's state as it appears on the bill here. Open response							
NEXT	FOSUP	PZIP1						
Derive								

FOSUF	FOSUPPZIP1							
ASK	If FOBIL	If FOBILLTOSCAN=1						
	RECORD the supplier's zip as it appears on the bill here. Open response							
NEXT	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

If NDIFFOCO>1: FOBILLTOSCAN2

NEXT | 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	FOSUP	FOSUPPNAME2					
Derive	d		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

If FOBILLTOSCAN2=1: FOSUPPSTREET2

NEXT 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	FOSUP	FOSUPPZIP2					
Derive	d		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		f KEROBILLTOSCAN=0: KEROWHYNOT Else: KEROSUPPNAME1					
Derive	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 NDIF	KRCO>1: KEROB FUELOT	ILLTOSCAN2			
Derive	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 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

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

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
Open response

NEXT
KEROSUPPZIP2

Derived
Show Card
CARI

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

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?

If BILLUG=1: NGNONHSHLD
Else if BILLPG=1: LPGNONHSHLD
Else if BILLPG=1: FONONHSHLD
Else if BILLFOIL=1: FONONHSHLD
Else if BILLKER=1: KERONONHSHLD
Else: SMARTMETER

CARI

Show Card

Derived

NGNONHSHLD (Changed from 2009)							
ASK	If BILLUG=1						
0 \ 1 \ 2 \ 3 \	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							
Derive	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?

If BILLFOIL=1: FONONHSHLD

NEXT

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

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

CARI

Yes

Show Card

Derived

INTDA	INTDATA (New)						
ASK	If SMAR	RTMETER=1					
meter?	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							
Derive	d	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							
Derive	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

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

LLSTA	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)							
RECOF	and what state are they located in? RECORD the landlord's state here. Open response							
NEXT LLZIP								
Derive	Derived Show Card CARI							

LLZIP	(Change	d 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)							
RECOF	and what is their Zip code? RECORD the landlord's Zip code here. Open response							
NEXT LLAREACODE								
Derive	Derived Show Card CARI							

LLAREACODE (Changed from 2009) If KOWNRENT in(2,3) or ELPAY in(2,3) or NGPAY in(2,3) or LPGPAY in(2,3) or FOPAY **ASK** 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 **Show Card** CARI

Derived

LLTEL	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							
Derive	Derived Show Card CARI						

COMPI	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)						
1)	Does the complex or development where you live have a formal name? 1 Yes 0 No						
NEXT	NEXT If COMPLEXN=1: CPLXNAME						
Derive	Derived Show Card CARI						

CPLXN	CPLXNAME						
ASK	If COMPLEXN=1						
	en response						

NEXT IVC	OMMJFILTER			
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

SECTION K: HOUSING UNIT CHARACTERISTICS

HHSEX	HHSEX (Changed from 2009)							
ASK	All respondents							
Please 1 F		v questions about e gender of the re	the people living i	n this home.				
NEXT HHAGE								
Derive	Derived Show Card CARI							

HHAGI	HHAGE (Changed from 2009)							
ASK	All respo	ondents						
For age	How old are you? For ages over 95, enter 95. 16 - 95							
NEXT	NEXT EMPLOYHH							
Derive	ived Show Card CARI							

EMDL C	EMPLOYHH (Changed from 2009)							
EWIPLO	יותה (כ	nanged from 200	19)					
ASK	All respo	ondents						
time, or 1 E 2 E	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	NEXT SPOUSE							
Derive	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 | 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)

NEYT	NHSLDMEM
INEVI	INUSEDIMEIM

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

If NHSLDMEM=3: AGEHHMEMY

NEXT | Else if NHSLDMEM>3: AGEHHMEM3

Else: HBUSNESS

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

If NHSLDMEM=5: AGEHHMEMY

NEXT | 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

If NHSLDMEM=6: AGEHHMEMY

NEXT | Else if NHSLDMEM>6: AGEHHMEM6

Else: HBUSNESS

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

If NHSLDMEM=8: AGEHHMEMY

NEXT | 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

If NHSLDMEM=9: AGEHHMEMY

NEXT | Else if NHSLDMEM>9: AGEHHMEM9

Else: HBUSNESS

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

If NHSLDMEM=11: AGEHHMEMY

NEXT | 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

If NHSLDMEM=12: AGEHHMEMY

NEXT | Else if NHSLDMEM>12: AGEHHMEM12

Else: HBUSNESS

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

If NHSLDMEM=14: AGEHHMEMY

NEXT | 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

AGEH	HMEM15							
ASK								
	·							
Derived	d							
1 -	95							
NEVT								
NEXT Derive		Vac	Show Card		CARI			
Derive	<u>a</u>	Yes	Snow Card		CARI			
AGEH	-MEMY	(Changed from 2	nna)					
ASK		.DMEM>2	003)					
AOIX	II IVI IOL	.DIVILIVI/Z						
What is	the age	of the youngest pe	erson in this house	hold?				
For age	es over 95	5, enter 95.						
		,						
1 -	95							
NEXT	HBUSN	ESS						
Derive	d		Show Card		CARI			
HBUSN	NESS							
ASK	All resp	ondents						
Does a	nyone in	this household ope	erate a nome-base	ea business or se	rvice?			
1 Y	Yes							
Ur	NO							
NEXT		SNESS=1: OTHBU	S					
	Else: A	THOME	Oh avv Cand		CADI			
Derive	<u>a</u>		Show Card		CARI			
OTUDUO								
OTHBUS ASK KURLICHECC A								
ASK	ASK If HBUSNESS=1							
What kind of business or service is this?								
Open response								
Ор	on respon	130						
NEXT	ATHOM	IE						
Derive	d		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

TELLW	TELLWORK						
ASK	All respo	ondents					
Does anyone in this household telecommute or telework at anytime during the week? 1 Yes 0 No							
NEXT	NEXT OTHWORK						
Derive	d		Show Card		CARI		

отни	OTHWORK (Changed from 2009)						
ASK	All respo	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							
Derive	d		Show Card		CARI		

OTHACT					
ASK	If OTHWORK=1				
	en 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 CARI

SSINCOME

ASK All respondents

Supplemental Security Income (SSI)?

1 Yes

0 No

NEXT | CASHBEN

CASHE	BEN					
ASK	All respo	ondents				
1 \	Welfare payments or cash assistance? 1 Yes 0 No					
NEXT	INVEST	MT				
Derive	d		Show Card		CARI	
INVES	ТМТ					
ASK	All respo	ondents				
Income from interest, dividends, rental properties, royalties, estates, or trusts? 1 Yes 0 No						
NEXT	RGLRP	AY				
Derive	d		Show Card		CARI	

RGLRF	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
- 7 \$60,000 to \$69,998
- 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	
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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	NEXT If SCALEE in(1,2,3): PAYHELP Else: NOHEATBROKE, NOHEATEL, NOHEATNG, NOHEATBULK						
Derive	d		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

If NOHEATBROKE=1 or NOHEATEL=1 or NOHEATNG=1 or NOHEATBULK=1: NEXT NOHEATDAYS

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

NEVE	COLDMA
NEXI	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

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 respo	respondents				
In the last year, did anyone in your household need medical attention because your home was too hot? 1 Yes 0 No						
NEXT	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

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