## 2015 RECS Household Questionnaire July 13, 2015

## SECTION A: STRUCTURAL CHARACTERISTICS

| CARI (New) |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
| ASK | All respondents | CARI |  |  |
| Some parts of this interview will be recorded for quality control purposes. I'd like to continue now unless <br> you have any questions. <br> 1 Gives consent to record interview <br> 0 <br> Does not give consent to record interview |  |  |  |  |
| NEXT | CONFIRM | Show Card |  |  |
| Derived |  |  |  |  |


| CONFIRM |  |  | CONFIRM |
| :---: | :---: | :---: | :---: |
| ASK | All respondents |  |  |
| Interviewer Task: If you haven't already, confirm you are at the correct address. Record your answer below. <br> 1 Correct address as listed <br> 2 Mostly correct address, needs updating <br> 0 Not at correct address |  |  |  |
| NEXT | If CONFIRM=1: INTHUQ <br> If CONFIRM=2: CSTREET <br> If CONFIRM $=0$ : This is not the housing unit you are supposed to be interviewing. Excuse yourself and terminate the interview. |  |  |
| Derive | Show Card | CARI | Yes |



| CCITY |  |  |  | ConfirmCity |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If CONFIRM=2 |  |  |  |
| Interviewer Task: Record the city here. <br> Open response |  |  |  |  |
| NEXT ${ }^{\text {CSTATE }}$ |  |  |  |  |
| Derived |  | Show Card | CARI |  |


| CSTATE |  |  |  |  |  |  |  | ConfirmState |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| ASK | If CONFIRM=2 |  |  |  |  |  |  |  |
| Interviewer Task: Record the state here. <br> Open response |  |  |  |  |  |  |  |  |
| NEXT | CZIP | Show Card |  |  |  |  |  |  |
| Derived |  | CARI |  |  |  |  |  |  |




| APTFLOOR (New) |  |  |  | APTFLOOR |
| :---: | :---: | :---: | :---: | :---: |
| 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) |  |  |  | APTINOUT |
| 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. <br> 1 Enclosed hallway <br> 2 Outside |  |  |  |  |
| NEXT | PRIMRES |  |  |  |
| Derived |  | Show Card | CARI |  |



| PRIMRES |  |  | PRIMRES |
| :---: | :---: | :---: | :---: |
| ASK | All respondents |  |  |
| I'd like <br> Your pr <br> 1 | start with some general questions abou mary residence is the home where you live es | Is this | residence? |
| NEXT | If PRIMRES=0: PRIMRESA If PRIMRES=1: CNFRMHUQ |  |  |
| Derived | Show Card | CARI |  |


| PRIMRESA |  |  | PRIMRESA |
| :---: | :---: | :---: | :---: |
| ASK | If PRIMRES=0 |  |  |
| $\begin{aligned} & 1 \text { Yes } \\ & 0 \text { No } \end{aligned}$ |  |  |  |
| NEXT | NEXT ${ }^{\text {a }}$ If PRIMRESA=0: This housing unit is out of scope. Excuse yourself and terminate the interview. |  |  |
| Derived | d | CARI |  |
| CNFRMHUQ |  |  | ConfirmHUQ |
| ASK | If PRIMRES=1 |  |  |
| My obs 1 | ervation is that this residence is a [FILL: IN Yes Vo | with my | tion? |
| NEXT If CNFRMHUQ=1: KOWNRENT |  |  |  |
| Derived | d $\quad$ Show Card | CARI | Yes |
| ALTHUQ |  |  | Description |
| ASK | If CNFRMHUQ=0 |  |  |
| 2 Single-family detached house, <br> 3 Single-family attached house, <br> 4 an Apartment building with $2-4$ units, 5 an Apartment building 5 or more units, or 1 a Mobile home? |  |  |  |
| NEXT | REVHUQ |  |  |
| Derived | - Show Card | CARI |  |
| REVHUQ |  |  | ReviseHUQ |
| 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. <br> 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 <br> 2 Use RECS definition |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| NEXT ${ }^{\text {K }}$ KOWNRENT |  |  |  |  |
| Derived |  | Show Card | CARI |  |
| TYPEHUQ |  |  |  | ypeOfHome |
| ASK |  |  |  |  |
| Derived |  |  |  |  |
| NEXT |  |  |  |  |
| Derived | Yes | Show Card | CARI |  |
| KOWNRENT |  |  |  | OwnOrRent |
| ASK | All responden |  |  |  |
| Is this [lf TYPEHUQ=1,2,3: home] [If TYPEHUQ=4,5: apartment]. <br> 1 Owned or being bought by someone in your household, <br> 2 Rented, or <br> 3 Occupied without payment of rent? |  |  |  |  |
| NEXT KOWNCOND |  |  |  |  |
| Derived |  | Show Card | CARI |  |
| KOWNCOND |  |  |  | ndoOrCoop |
| ASK ${ }^{\text {All respondents }}$ |  |  |  |  |
| Is this home part of a condominium or cooperative?$\begin{aligned} & 1 \text { Yes } \\ & 0 \text { No } \end{aligned}$ |  |  |  |  |
| NEXT If KOWNCOND=1: CONDCOOP <br> Else: YEARMADE |  |  |  |  |
| Derived |  | Show Card | CARI |  |
| CONDCOOP |  |  |  | ndoOrCoop |
| ASK If KOWNCOND=1 |  |  |  |  |
| Which is $\begin{aligned} & 1 \mathrm{Cc} \\ & 2 \mathrm{Cc} \end{aligned}$ | is it, a condomin <br> Condominium ooperative | erative? |  |  |


| NEXT | YEARMADE |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Derived |  | Show Card |  | CARI |  |


| YEARMADE (Changed from 2009) |  |  |  | YearBuilt |
| :---: | :---: | :---: | :---: | :---: |
| ASK | All respondents |  |  |  |
| In what year was this structure built? Your best estimate is fine.1600-2015 |  |  |  |  |
| NEXT | If YEARMADE in(-8,-9): YEARMADERANGE Else: OCCUPYY |  |  |  |
| Derived |  | Show Card | CARI | Yes |


| YEARMADERANGE (Changed from 2009) |  |  |  |  | YearBuiltEst |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASK | If YEARMADE in(-8,-9) |  |  |  |  |
| Place sh <br> Please have an $\begin{array}{ll} 1 & \mathrm{Be} \\ 2 & 19 \\ 3 & 19 \\ 4 & 19 \\ 5 & 10 \\ 6 & 19 \\ 7 & 20 \\ 8 & 20 \end{array}$ |  | spondent. <br> do not know this structure |  | ucture | is helpful to |
| NEXT | OCCUPYY |  |  |  |  |
| Derived | Yes | Show Card | Yes | CARI | Yes |




OCCUPYM (Changed from 2009)
MonthMovedIn
ASK $\quad$ If OCCUPYY in $(2014,2015)$

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 $\quad$ 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


| CONVERSION (Changed from 2009) |  |  |  |  | OriginallyApt |
| :--- | :--- | :--- | :---: | :---: | :---: |
| ASK | If TYPEHUQ=4 |  |  |  |  |
| Was your building originally designed and built as an apartment building or was it converted into an <br> apartment building? |  |  |  |  |  |
| 1 <br> Built as an apartment building <br> 2 <br> Converted into an apartment building |  |  |  |  |  |
| NEXT | NUMAPTS | Show Card |  |  |  |
| Derived |  | CARI |  |  |  |


\left.| LOOKLIKE |  |  |  |  |  | MoreLikeApt |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: |
| ASK |  |  |  |  |  |  |
| Deleted |  |  |  |  |  |  |
| NEXT |  | Show Card |  | CARI |  |  |$\right]$


| NUMFLRS |  |  |  |  |  |  | NumberOfFloors |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| ASK | If TYPEHUQ=5 |  |  |  |  |  |  |
| How many floors are in this apartment building? |  |  |  |  |  |  |  |
| $1-95$ |  |  |  |  |  |  |  |


| NUMAPTS (Changed from 2009) |  |  |  | NumberOfAptUnits |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If TYPEH |  |  |  |
| Approxim $2-9$ | mately how | t units are in |  |  |
| NEXT | STUDIO |  |  |  |
| Derived |  | Show Card | CARI |  |



| CELLAR, CRAWL, CONCRETE |  |  | Basement, CrawlSpace, ConcreteSlab |  |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If TYPEHUQ in $(2,3)$ |  |  |  |
| Now think about the foundation of your home. Is any part of your home over a... <br> Mark all that apply. <br> Basement, (CELLAR) <br> Crawl space, or (CRAWL) <br> Concrete slab? (CONCRETE) |  |  |  |  |
| NEXT | If CELLAR=1: BASEFIN Else: ATTIC |  |  |  |
| Derive |  | Show Card | CARI |  |


| BASEFIN (Changed from 2009) FinishedBsmnt |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| 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 |


| ATTIC | HaveAnAttic |
| :--- | :--- |
| 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 <br> Else: STORIES |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Derived |  | Show Card |  | CARI |  |







| NHAFBATH (Changed from 2009) |  |  | NumHalfBaths |
| :---: | :---: | :---: | :---: |
| ASK | All respondents |  |  |
| A half-bathroom is one that has either a toilet or a bathtub or a shower. How many half bathrooms do you have? [If BASEFIN in $(1,2)$ or ATTICFIN in $(1,2)$ : Include bathrooms in finished attics or finished basements.]$0-9$ |  |  |  |
| NEXT | OTHROOMS |  |  |
| Derived | Show Card | CARI |  |



| SIZEOFGARAGE |  |
| :--- | :--- |
| ASK | If PRKGPLC1 $=1$ | SizeOfGarage



| GARGLOC |  |  | LocationOfGarage |  |
| :---: | :---: | :---: | :---: | :---: |
| 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? <br> 1 Part of basement <br> 2 Part of first floor <br> 3 Some other floor |  |  |  |  |
| NEXT | WALLTYPE |  |  |  |
| Derived |  | Show Card | CARI |  |



| WALLTYPE (Changed from 2009) |  |  |  | OutsideWall |
| :---: | :---: | :---: | :---: | :---: |
| ASK | All respondents |  |  |  |
| 1 Brick <br> 2 Wood <br> 3 Siding <br> 4 Stucco <br> 5 Shingle (composition) <br> 6 Stone <br> 7 Concrete or concrete block <br> 9 Other |  |  |  |  |
| NEXT | If WALLTYPE=9: WALLTYPEFU <br> Else if TYPEHUQ in(1,2,3,4): ROOFTYPE <br> Else: HIGHCEIL |  |  |  |
| Derive | Show Card | Yes | CARI |  |


ROOFTYPE (Changed from 2009) RoofType

ASK
Place show card X in front of the respondent.
Please look at Card X . What is the major roofing material on this housing unit?
1 Ceramic or clay tiles
2 Wood shingles/shakes
3 Metal
4 Slate or synthetic shake
5 Shingles (composition or asphalt)
7 Concrete tiles
9 Other

| NEXT | If ROOFTYPE=9: ROOFTYPEFU Else if TYPEHUQ=1: SLDDRS Else: HIGHCEIL |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Derived |  | Show Card | Yes | CARI |  |
| ROOFTYPEFU |  |  |  |  | RooftypeFU |
| ASK | If ROOFTYPE=9 |  |  |  |  |
| Could you tell me what that other material is? <br> Open response |  |  |  |  |  |
| NEXT | If TYPEHUQ=1: SLDDRS Else: HIGHCEIL |  |  |  |  |
| Derived |  | Show Card |  | CARI |  |
| HIGHCEIL |  |  |  |  | AnyHighCeilings |
| 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? <br> 1 Yes 0 No |  |  |  |  |  |
| NEXT | If HIGHCEIL ne 0: CATHCEIL Else: SLDDRS |  |  |  |  |
| Derived |  | Show Card |  | CARI |  |

CATHCEIL

## AnyCathedralCeilings

ASK
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 $\quad$ SLDDRS

| Derived | Show Card |  | CARI |  |
| :--- | :--- | :--- | :--- | :--- |


| SLDDRS (Changed from 2009) |  |
| :--- | :--- | SIdingGlassDoors

Does your home have any sliding glass doors?
1 Yes
0 No

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| NEXT | If SLDDRS=1: DOOR1SUM <br> Else: WINDOWS |  |  |  |  |  |  |  |  |  |
| Derived |  |  |  |  |  |  | Show Card |  | CARI |  |


| DOOR1SUM |  |  | NumSldingDoors |  |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If SLDDRS=1 |  |  |  |
| How many sliding glass doors does your home have? Count each pair of sliding glass doors as one door.$0-10$ |  |  |  |  |
| NEXT | WINDOWS |  |  |  |
| Derived |  | Show Card | CARI |  |



## TYPEGLASS

TypeOfWindowGlass

## ASK $\quad$ All respondents

Place show card X in front of the respondent.
Please look at Card X. Which picture best describes the type of glass in most of the windows in your home? Do not consider storm windows.

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

| NEXT | WINFRAME |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Derived | Show Card | Yes | CARI |  |






| IVCOMMA |  |  | IVerCommentsA |
| :---: | :---: | :---: | :---: |
| 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. <br> Open response |  |  |  |
| NEXT | Section B |  |  |
| Derived | - ${ }^{\text {d }}$ Show Card | CARI |  |

## SECTION B: KITCHEN APPLIANCES



| What fuel does the cooktop part of your dual fuel stove or range use? |  |
| :--- | :--- | :--- | :--- |
| 5 | Electricity, |
| 1 | Natural gas from underground pipes, |
| 2 | Propane (bottled gas), |
| 21 | Some other fuel? | | NEXT | OVENUSE | Chow Card |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Derived |  | CARI |  |  |


| STOVENFUELFU |  |  |  |
| :--- | :--- | :--- | :--- |
| ASK | If STOVENFUEL=21 | ComboStoveOvenFU |  |
| Could you tell me what that other type of fuel is? |  |  |  |
| Open response |  |  |  |



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

Open response

| NEXT | OVENCLN |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Derived | Show Card | Yes | CARI |  |


| OVENCLN |  |
| :--- | :--- |
| ASK | If STOVEN $>0$ |
| Does the oven part of your [most-used] stove or range have a self-cleaning feature? |  |





| OVENFUEL |  |  | OvenFuel, OvenFuelA |  |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If OVEN>0 |  |  |  |
| What fuel does your [most-used] separate wall oven use? Is it.... <br> 5 Electricity, <br> 1 Natural gas from underground pipes, <br> 2 Propane (bottled gas), or <br> 21 Some other fuel? |  |  |  |  |
| NEXT | If OVENFUEL=21: OVENFUELFU Else: SEPOVENUSE |  |  |  |
| Derive |  | Show Card | CARI |  |


| OVENFUELFU |  |  |  |  |  |  | OvenFueIFU |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| ASK | If OVENFUEL=21 |  |  |  |  |  |  |
| Could you tell me what that other type of fuel is? |  |  |  |  |  |  |  |
| Open response |  |  |  |  |  |  |  |



| Does your household use the microwave for defrostin |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 1 \text { Yes } \\ & 0 \text { No } \end{aligned}$ |  |  |  |  |
| NEXT $\begin{aligned} & \text { If STOVEN>0 or STOVE>1: RANGEHOOD } \\ & \text { Else: OUTGRILL }\end{aligned}$ |  |  |  |  |
| Derived |  | Show Card | CARI |  |
| RANGEHOOD (New) |  |  |  | RangeHood |
| ASK | If ST |  |  |  |
| Does your <br> 1 Y <br> 0 N | $\begin{aligned} & 1 \text { Yes } \\ & 0 \text { No } \end{aligned}$ | hood or fan |  |  |
| NEXT If RANGEHOOD=1: HOODVENT <br> Else: OUTGRILL |  |  |  |  |
| Derived |  | Show Card | CARI |  |
| HOODVENT (New) |  |  |  | HoodVent |
| ASK | If RA |  |  |  |
| Is your r <br> 1 Y 0 N | range <br> es <br> o | the outside? |  |  |
| NEXT | OUT |  |  |  |
| Derived |  | Show Card | CARI |  |

OutDoorGrill


| OUTGRILLFUEL (Changed from 2009) |  |
| :--- | :--- |
| ASK | If OUTGRILL=1 |
| What fuel does your outdoor grill use? Is it... |  |


| 1 Natural gas from underground pipes, <br> 2 Propane (bottled gas), <br> 23 Charcoal, or <br> 21 Some other fuel? |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| NEXT | If OUTGRILLFUEL=21: OUTGRILLFUELFU Else: TOPGRILL |  |  |  |
| Derived |  | Show Card | CARI |  |
| OUTGRILLFUELFU |  |  |  | tDrGrilFuelFU |
| ASK | If OU |  |  |  |
| Could you tell me what that other type of fuel is? <br> Open response |  |  |  |  |
| NEXT ${ }^{\text {T }}$ TOPGRILL |  |  |  |  |
| Derived |  | Show Card | CARI |  |
| TOPGRILL |  |  |  | StoveTopGrill |
| ASK | All re |  |  |  |
| Does your household use a built-in indoor grill?$\begin{aligned} & 1 \text { Yes } \\ & 0 \text { No } \end{aligned}$ |  |  |  |  |
| NEXT If TOPGRILL=1: STGRILA <br> Else: NUMMEAL |  |  |  |  |
| Derived |  | Show Card | CARI |  |
| STGRILA |  |  |  | APPGrillFuel |
| ASK If TOPGRILL=1 |  |  |  |  |
| What fuel does your built-in indoor grill use? Is it. <br> 5 Electricity, <br> 1 Natural gas from underground pipes, <br> 2 Propane (bottled gas), or <br> 21 Some other fuel? |  |  |  |  |
| NEXT | If ST Else |  |  |  |
| Derived | d | Show Card | CARI |  |





| 35 to 9 years old <br> 4110 to 14 years old <br> 4215 to 19 years old <br> 520 years or older <br> 6 As old as the home (if volunteered) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NEXT | If NUMFRIG>1: SIZERFR2 Else: SEPFREEZ |  |  |  |  |
| Derived |  | Show Card | Yes | CARI |  |
| SIZRFRI2 (Changed from 2009) |  |  |  |  | SizeOfFrig2 |
| ASK | If NU |  |  |  |  |
| Place show card 10 in front of the respondent. <br> Please look at Card 10. How would you describe the size of your second refrigerator? <br> 1 Half-size or compact <br> 2 Small (17.5 cubic feet or less) <br> 3 Medium ( 17.6 to 22.5 cubic feet) <br> 4 Large (22.6 to 29.5 cubic feet) <br> 5 Very large (bigger than 29.5 cubic feet) |  |  |  |  |  |
| NEXT If SIZRFRI2=1: REFRIGT2 <br> Else: TYPERFR2 |  |  |  |  |  |
| Derived |  | Show Card | Yes | CARI |  |
| TYPERFR2 (Changed from 2009) |  |  |  |  | ypeOfFrig2 |
| ASK | If SIZ |  |  |  |  |
| Place show card 9 in front of the respondent. <br> Please look at Card 9. Which of the pictures best describes this refriger <br> 1 One door <br> 21 Two doors, freezer next to the refrigerator <br> 22 Two doors, freezer above the refrigerator <br> 23 Two doors, freezer below the refrigerator <br> 5 Three or more doors <br> 4 Some other kind |  |  |  |  |  |
| NEXT REFRIGT2 |  |  |  |  |  |
| Derived |  | Show Card | Yes | CARI |  |
| REFRIGT2 (Changed from 2009) |  |  |  |  | DfrostFrig2 |
| ASK | If NU |  |  |  |  |
| What type of defrosting does this refrigerator have? Is it... <br> 1 Manual |  |  |  |  |  |


| 2 <br> 2 Automatic |  |
| :--- | :--- | :--- | :--- | :--- |
| 3 | No working freezer section (if volunteered) |


| MONRFRI2 (Changed from 2009) |  |  |  | MnthsFrig2On |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If NUMFRIG>1 |  |  |  |
| In the last year, how many months was this refrigerator plugged in and turned on?$0-12$ |  |  |  |  |
| NEXT AGERFRI2 |  |  |  |  |
| Derived |  | Show Card | CARI |  |

## AGERFRI2

AgeOfFrig2
ASK If NUMFRIG>1

Place show card 11 in front of the respondent.
Please look at Card 11. About how old is this refrigerator? Your best estimate is fine.
1 Less than 2 years old
22 to 4 years old
35 to 9 years old
4110 to 14 years old
4215 to 19 years old
520 years or older
6 As old as the home (if volunteered)

| NEXT | LOCRFRI2 |
| :--- | :--- |


| Derived |  | Show Card | Yes | CARI |
| :--- | :--- | :--- | :--- | :--- |


| LOCRFRI2 (New) LocationOfFrig2 |  |  |
| :--- | :--- | :--- |
| 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 <br> Else if NUMFRIG>2: SIZRFRI3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Else: SEPFREEZ |  |


| LOCRFRI2FU |  |  | LocationOfFrig2FU |  |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If LOCRFRI2=9 |  |  |  |
| Could you tell me what that other location is? |  |  |  |  |
| Open response |  |  |  |  |
| NEXT | If NUMFRIG>2: SIZERFR3 Else: SEPFREEZ |  |  |  |
| Derived |  | Show Card | CARI |  |



## TYPERFR3 (Changed from 2009)

TypeOfFrig3

| ASK | If SIZRFRI $3>1$ |
| :--- | :--- |

Place show card 9 in front of the respondent.
Please look at Card 9. Which of the pictures best describes this refrigerator?
1 One door
21 Two doors, freezer next to the refrigerator
22 Two doors, freezer above the refrigerator
23 Two doors, freezer below the refrigerator
5 Three or more doors
4 Some other kind

| NEXT | REFRIGT3 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Derived |  | Show Card | Yes | CARI |  |


| REFRIGT3 (Changed from 2009) |  |  |  | DfrostFrig3 |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If $\mathrm{NUMFRIG>2}$ |  |  |  |
| What type of defrosting does this refrigerator have? Is <br> 1 Manual <br> 2 Automatic <br> 3 No working freezer section (if volunteered) |  |  |  |  |
| NEXT | MONRFRI3 |  |  |  |
| Derived |  | Show Card | CARI |  |


| MONRFRI3 (Changed from 2009) |  |  |  | MnthsFrig3On |
| :---: | :---: | :---: | :---: | :---: |
| 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 |  |



## SEPFREEZ

UseSepFreezer
ASK $\quad$ All respondents

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


| FREEZER |  |  |  |  |  |  |  | DfrstFreezer |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| ASK | If SEPFREEZ=1 |  |  |  |  |  |  |  |
| What type of defrosting does this freezer have? Is it... |  |  |  |  |  |  |  |  |
| 1 | Manual |  |  |  |  |  |  |  |
| 2 | Automatic |  |  |  |  |  |  |  |


| AGEFRZR |  |  |  |  | AgeOffreezer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASK | If SEPFREEZ=1 |  |  |  |  |
| Place show card 11 in front of the respondent. <br> Please look at Card 11. About how old is this freezer? <br> 1 Less than 2 years old <br> 22 to 4 years old <br> 35 to 9 years old <br> 4110 to 14 years old <br> 4215 to 19 years old <br> 520 years or older <br> 6 As old as the home (if volunteered) |  |  |  |  |  |
| NEXT |  |  |  |  |  |
| Derive |  | Show Card | Yes | CARI |  |

UPRTFRZR2
TypeSepFreezer2
ASK $\quad$ If NUMFREEZ>1
Now I would like to ask you the same questions about the second most used freezer. What model freezer is this? Is it...

1 An upright or
2 A chest?

| NEXT | SIZFREEZ2 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: |
| Derived | Show Card |  | CARI |  |  |  |


| SIZFREEZ2 |  |
| :--- | :--- |
| ASK | If NUMFREEZ>1 |
| Place show card 10 in front of the respondent. |  |
| Please look at Card 10. How would you describe the size of this freezer? |  |



| FREEZER2 |  |  |  | DfrstFreezer2 |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If NUMFREEZ>1 |  |  |  |
| What type of defrosting does this freezer have? Is it... <br> 1 Manual <br> 2 Automatic |  |  |  |  |
| NEXT | AGEFRZR2 |  |  |  |
| Derived |  | Show Card | CARI |  |


| AGEFRZR2 |  |  |  | AgeOfFreezer2 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASK | If NUMFREEZ>1 |  |  |  |  |
| Place show card 11 in front of the respondent. <br> Please look at Card 11. About how old is this freezer? <br> 1 Less than 2 years old <br> 22 to 4 years old <br> 35 to 9 years old <br> 4110 to 14 years old <br> 4215 to 19 years old <br> 520 years or older <br> 6 As old as the home (if volunteered) |  |  |  |  |  |
| NEXT DISHWASH |  |  |  |  |  |
| Deriv |  | Show Card | Yes | CARI |  |


| DISHWASH (Changed from 2009) |  |  |  | UseDishWasher |
| :---: | :---: | :---: | :---: | :---: |
| ASK | All |  |  |  |
| $\begin{aligned} & 1 \text { Yes } \\ & 0 \text { No } \end{aligned}$ |  |  |  |  |
| NEXT | If $D$ <br> Els | USE |  |  |
| Derived |  | Show Card | CARI |  |





| IVCOMMBFILTER |  |
| :--- | :--- |
| ASK | All respondents |
|  |  |


| Interviewer Task: If you have any comments that might suggest that the data collected in the kitchen appliances section should be analyzed by central office staff, enter 1. If you have no comments regarding the quality of data entered in this section, enter 2. <br> 1 I have comments regarding the quality of data in this section <br> 2 I do not have comments |  |  |  |
| :---: | :---: | :---: | :---: |
| NEXT | If IVCOMMBFILTER=1: IVCOMMB Else: Section C |  |  |
| Derive |  | Show Card | CARI |


| IVCOMMB |  |  | IVerCommentsB |
| :---: | :---: | :---: | :---: |
| 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. <br> Open response |  |  |  |
| NEXT | Section C |  |  |
| Derived | Show Card | CARI |  |

## SECTION C: HOME APPLIANCES AND ELECTRONICS

| CWASHER (Changed from 2009) |  | ClothesWash |
| :---: | :---: | :---: |
| ASK | All respondents |  |
| Does y located $\begin{aligned} & 1 \\ & 0 \end{aligned}$ | household have a clothes washer? [D in the basement or laundry room of your es <br> No | mmunity clothe ng.] |
| NEXT | If CWASHER=1: TOPFRONT Else: DRYER |  |
| Derived | Show Card | CARI |


| TOPFRONT |  |  | TopOrFrontLoading |  |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If CWASHER=1 |  |  |  |
| Is your washing machine one that you load from the top or one that you load from the front? <br> 1 Top loading <br> 2 Front loading |  |  |  |  |
| NEXT | WASHLOAD |  |  |  |
| Derived |  | Show Card | CARI |  |


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


| WASHTEMP |  |
| :--- | :--- |
| ASK | If CWASHER=1 |
| What water temperature setting is typically used for the wash cycle of your clothes washer? Is it hot, |  |
| warm, or cold water? |  |
| 1 <br> 2 |  |
| 2 Wot |  |
| 3 Corm |  |


| NEXT | RNSETEMP |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Derived |  | Show Card |  | CARI |  |


| RNSETEMP |  |  | RinseWaterTemp |  |
| :---: | :---: | :---: | :---: | :---: |
| 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? <br> 1 Hot <br> 2 Warm <br> 3 Cold |  |  |  |  |
| NEXT | AGECWASH |  |  |  |
| Derived |  | Show Card | CARI |  |


| AGECWASH |  |  |  | AgeofClothesWasher |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If CWASHER=1 |  |  |  |
| Place show card 11 in front of the respondent. <br> Please look at Card 11. About how old is your clothes washer? Your best estimate is fine. <br> 1 Less than 2 years old <br> 22 to 4 years old <br> 35 to 9 years old <br> 410 to 14 years old <br> 515 to 19 years old <br> 620 years or older <br> 7 As old as the home (if volunteered) |  |  |  |  |
| NEXT | DRYER |  |  |  |
| Derived |  | Show Card | Yes | CARI |


| DRYER (Changed from 2009) |  | ClothesDryer, ClothesDryerA |
| :--- | :--- | :--- |
| ASK | All respondents |  |

Does your household have a clothes dryer? [Do not include community clothes dryers that are located in the basement or laundry room of your apartment building.]

1 Yes
0 No



| NEXT | TVONWE1 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Derived |  | Show Card | Yes | CARI |  |






Place show card 19 in front of the respondent.
Please look at Card 19. What type of display does the third most used television have?
1 Standard Tube
2 Flat Screen LCD
3 Flat Screen Plasma
4 Projection
5 Flat Screen LED
NEXT TVONWD3

| Derived | Show Card | Yes | CARI |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

TVONWD3 (Changed from 2009)

## TimeTVOnWeekdaysC

ASK $\quad$ If TVCOLOR>2
Place show card 21 in front of the respondent.
Please look at Card 21. 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
21 to 3 hours
34 to 6 hours
47 to 10 hours
5 More than 10 hours
NEXT $\quad$ TVONWE3

| Derived | Show Card | Yes | CARI |  |
| :--- | :--- | :--- | :--- | :--- |


| TVONWE3 (Changed from 2009) |  |  |  | TimeTVOnWeekendsC |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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. <br> 1 Less than 1 hour <br> 21 to 3 hours <br> 34 to 6 hours <br> 47 to 10 hours <br> 5 More than 10 hours |  |  |  |  |  |
| NEXT | CABLESAT |  |  |  |  |
| Derived |  | Show Card | Yes | CARI |  |

CABLESAT (New)
CABLESAT
ASK If TVCOLOR>0

Place show card $X X$ in front of the respondent.

| Please look at Card XX. How many of each of the following are used in your home? <br> Cable or satellite box without DVR <br> $0-10$ |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
| NEXT COMBODVR Show Card Yes CARI |  |  |  |  |
| Derived | Yes |  |  |  |


| COMBODVR (New) |  |  |  |  | COMBODVR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASK | If TVCOLOR>0 |  |  |  |  |
| Cable or satellite box with DVR |  |  |  |  |  |
| 0-10 |  |  |  |  |  |
| NEXT | SEPDVR |  |  |  |  |
| Derived |  | Show Card | Yes | CARI | Yes |


| SEPDVR (New) |  |  |  |  | SEPDVR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASK | If TVCOLOR>0 |  |  |  |  |
| Separate DVR (for example, TIVO) |  |  |  |  |  |
| 0-10 |  |  |  |  |  |
| NEXT ${ }^{\text {PLAYSTA }}$ |  |  |  |  |  |
| Derived |  | Show Card | Yes | CARI | Yes |


| PLAYSTA (New) |  |  |  |  | PLAYSTA |
| :--- | :--- | :--- | :--- | :---: | :---: |
| ASK | If TVCOLOR>0 |  |  |  |  |
| Video game console |  |  |  |  |  |
| $0-10$ |  |  |  |  |  |
| NEXT | DVD | Show Card | Yes |  |  |
| Derived |  | CARI | Yes |  |  |


| DVD (New) |  |  |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| ASK | If TVCOLOR>0 |  |  |  |  |  |  |
| DVD or Blu-ray player |  |  |  |  |  |  |  |
| $0-10$ |  |  |  |  |  |  |  |


| NEXT | VCR | CARI | Yes |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Derived |  | Show Card | Yes | CARI |


| VCR (New) |  |  |  |  |  |  | VCR |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: |
| ASK | If TVCOLOR>0 |  |  |  |  |  |  |
| VCR |  |  |  |  |  |  |  |
| $0-10$ |  |  |  |  |  |  |  |
| NEXT | INTSTREAM |  |  |  |  |  |  |
| Derived |  | Show Card | Yes | CARI | Yes |  |  |



| TVAUDIOSYS (New) |  |  |  |  | TVAUDIOSYS |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASK | If TVCOLOR>0 |  |  |  |  |
| Home <br> 0 | eater or audio |  |  |  |  |
| NEXT | If PLAYSTA1 Else: DESKT |  |  |  |  |
| Derived |  | Show Card | Yes | CARI | Yes |


| VGUSAG (New) |  |
| :--- | :--- |
| ASK | If PLAYSTA=1 |

Place show card 21 in front of the respondent.
Please look at Card 21. How many hours a day are spent playing video games?
1 Less than 1 hour
21 to 3 hours
34 to 6 hours
47 to 10 hours
5 More than 10 hours

| NEXT | DESKTOP |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Derived |  | Show Card | Yes | CARI |  |


| DESKTOP (New) |  |  |  |  | NumOfPCs |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASK | All respondents |  |  |  |  |
| Place show card XX in front of the respondent. <br> Please look at Card XX. How many of each of the following are used in your home? <br> Desktop computers |  |  |  |  |  |
| NEXT | NUMLAPTOP |  |  |  |  |
| Derived |  | Show Card | Yes | CARI |  |


| NUMLAPTOP (New) |  |  |  |  | NumOfLaptops |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASK | All respondent |  |  |  |  |
| Laptop computers |  |  |  |  |  |
| 0-15 |  |  |  |  |  |
| NEXT ${ }^{\text {NUM }}$ (ABLET |  |  |  |  |  |
| Derived |  | Show Card | Yes | CARI |  |


| NUMTABLET (New) |  |  |  |  | NumOfTablets |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASK | All respondents |  |  |  |  |
| Tablet computers or e-readers (for example: iPad or Kindle) |  |  |  |  |  |
| NEXT | ELPERIPH |  |  |  |  |
| Derived |  | Show Card | Yes | CARI |  |


| ELPERIPH (Changed from 2009) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | PCPrinter


| NUMSMPHONE (New) |  |  |  | NumOfSmartphones |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASK | All respondents |  |  |  |  |
| "Smart" phones (for example, iPhone or Android) |  |  |  |  |  |
| NEXT | CELLPHONE |  |  |  |  |
| Derived |  | Show Card | Yes | CARI |  |


| CELLPHONE (New) |  |  |  |  |  |  | NumOfCellphones |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| ASK | All respondents |  |  |  |  |  |  |
| Other cellular phones |  |  |  |  |  |  |  |
| $0-15$ |  |  |  |  |  |  |  |


| PCTYPE1 (Changed from 2009) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| ASK | If NUMLAPTOP+NUMTABLET+NUMPC>0 |  |  |  |
| Thinking about your [most-used] computer, is it a desktop, a laptop, or a tablet? |  |  |  |  |
| 1 | Desktop model |  |  |  |
| 2 | Laptop |  |  |  |
| 3 | Tablet |  |  |  |



| Thinking about your th <br> 1 Desktop model <br> 2 Laptop <br> 3 Tablet |  | computer, is | or a tab |
| :---: | :---: | :---: | :---: |
| NEXT | TIMEON3 |  |  |
| Derived |  | Show Card | CARI |


| TIMEON3 (Changed from 2009) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASK | If NUMLAPTOP+NUMTABLET+NUMPC>2 |  |  |  |  |
| 1 Less than 1 hour <br> 21 to 3 hours <br> 34 to 6 hours <br> 47 to 10 hours <br> 5 More than 10 hours |  |  |  |  |  |
| NEXT ${ }^{\text {INTER }}$ |  |  |  |  |  |
| Derived |  | Show Card | Yes | CARI |  |
| NEXT |  |  |  |  |  |
| Derived |  | Show Card |  | CARI |  |
| NEXT |  |  |  |  |  |
| Derived |  | Show Card |  | CARI |  |


| INTERNET (Changed from 2009) |  |  |  |  | Internet |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASK | If NUMPC+NUMLAPTOP+NUMTABLET+NUMSMPHONE>0 |  |  |  |  |
| Please look at Card X. In your home, do you or any member of your household access the Internet?$\begin{aligned} & 1 \text { Yes } \\ & 0 \text { No } \end{aligned}$ |  |  |  |  |  |
| NEXT | If INTERNET=1: INDIALUP, INDSL, INCABLE, INFIOS, INMOBILE, INSATEL Else: AQUARIUM, WELLPUMP, SWAMPCOL, DIPSTICK, SECURITY, SPRINKLER, MEDICALDEV |  |  |  |  |
| Derived |  | Show Card | Yes | CARI |  |

INWIRELESS (Changed from 2009) HaveWireRouter

ASK If INTERNET=1

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


| AQUARIUM, WELLPUMP, SWAMPCOL, DIPSTICK, SECURITY, SPRINKLER, MEDICALDEV (New) (Changed from 2009) |  | Aquarium, WellWaterPump, SwampCooler, EngineHeaters, SecuritySystem, SprinklerSystem, MedicalDevice |  |
| :---: | :---: | :---: | :---: |
| SK | All respondents |  |  |
| Are any of the following used in your home? <br> Read responses and mark all that apply. <br> Large heated aquariums of 20 gallons or more (AQUARIUM) <br> [If TYPEHUQ in $(1,2,3)$ : Electric pump for well water] (WELLPUMP) <br> [If SCFLAG=1 (only respondents in certain states): Evaporative or swamp cooler] (SWAMPCOL) <br> [If DSFLAG=1 (only respondents in certain states): Automobile block heaters, dip-stick engine <br> heaters, or battery blankets] (DIPSTICK) <br> Home security system (SECURITY) <br> [If TYPEHUQ in $(1,2,3)$ : Outdoor sprinkler system] (SPRINKLER) <br> Medical devices, such as ventilators, nebulizers, or CPAP machines (MEDICALDEV) |  |  |  |
| NEXT |  |  |  |
| Derived | Show Card | CARI |  |


| VACUUM, FLASH, TOOTH, RAZOR, DRILL (New) VACUUM, FLASH, TOOTH, RAZOR, DRILL |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
| ASK | All respondents |  |  |  |
| Place show card X in front of the respondent. |  |  |  |  |
| Please look at Card X. Which of these types of electric rechargeable devices are typically plugged in in <br> your home? <br> Mark all that apply. <br> Handheld vacuum (VACUUM) <br> Flashlight (FLASH) <br> Electric toothbrush (TOOTH) <br> Electric razor (RAZOR) <br> Drill or other power tool (DRILL) |  |  |  |  |
| NEXT | IVCOMMCFILTER |  |  |  |
| Derived | Show Card | Yes |  |  |


| IVCOMMCFILTER |  |
| :--- | :--- |
| ASK | All respondents |
| IVCOMMCFILTER |  |
| 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 comments regarding the quality of data entered in this section, enter <br> 1 I have comments regarding the quality of data in this section <br> 2 I do not have comments |  |  |  |
| :---: | :---: | :---: | :---: |
| NEXT | If IVCOMMCFILTER=1: IVCOMMC Else: Section D |  |  |
| Derive |  | Show Card | CARI |


| IVCOMC |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| ASK | If IVCOMMCFILTER=1 | IVerCommentsC |  |  |  |  |  |  |
| Interviewer Task: Record any information here about the other appliances in this housing unit that might <br> provide clarification to the respondent's answers. <br> Open response |  |  |  |  |  |  |  |  |
| NEXT | Section D | Show Card |  |  |  |  |  |  |
| Derived |  |  |  |  |  |  | CARI |  |

## SECTION D: SPACE HEATING



| DNTHEAT |  |  | DontHeatHome |
| :---: | :---: | :---: | :---: |
| 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? <br> 1 Have equipment, but don't use it <br> 2 Don't have equipment |  |  |  |
| NEXT | If DNTHEAT=1: EQUIPNOHEAT Else: MOISTURE |  |  |
| Derived | Show Card | CARI |  |

## EQUIPNOHEAT (Changed from 2009) APPMainHeatingEquipB

ASK If DNTHEAT=1

Place show card X 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 X . 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 Heating stove burning wood
10 Portable electric heaters
11 Portable kerosene heaters
9 Fireplace
21 Some other equipment


| 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 |  |  |  |



| EQUIPM | FU |  |  | D3FollowUp |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If EQUIPM=21 |  |  |  |
| Could you tell me what that other heating equipment is? <br> Open response |  |  |  |  |
| NEXT | FUELHEAT |  |  |  |
| Derived |  | Show Card | CARI |  |
| NUMEQUIPM (New) |  |  |  | NUMEQUIPM |
| ASK | If EQUIPM in $(3,4)$ |  |  |  |
| Do you <br> 1 | have more than es |  | Do you have more than one [EQUIPM]? |  |


| 0 No |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| NEXT | If EQUIPM =4: HPTYPE1 <br> Else: FUELHEAT |  | Show Card |  |  |  |  |  |  |  |
| Derived |  | CARI |  |  |  |  |  |  |  |  |


| NUMPORTELHEAT1 (New) |  |  |  | NUMPORTELHEAT1 |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If EQUIPM=10 |  |  |  |
| How many portable electric heaters does your household use? |  |  |  |  |
| NEXT | MAINTHT |  |  |  |
| Derived |  | Show Card | CARI |  |

FUELHEAT (Changed from 2009)
MainHeatingFuel
ASK $\quad$ If HEATHOME=1 and EQUIPM ne 4, 5, 7, 10, 11
Place show card X in front of the respondent.
Please look at Card X. 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?

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 <br> Else: MAINTHT |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Derived |  | Show Card | Yes | CARI | Yes |


| FUELHEATFU |  |  |  | D4FollowUp |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If FUELHEAT=21 |  |  |  |
| Could you tell me what that other fuel is? |  |  |  |  |
| Open response |  |  |  |  |
| NEXT | MAINTHT |  |  |  |
| Derived |  | Show Card | CARI |  |


| HPTYPE1 (New) |  |  |  | HPTYPE1 |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If $\mathrm{EQUIPM}=4$ |  |  |  |
| What type of heat pump do you have? Is it... <br> 1 Electric air source <br> 2 Geothermal or ground source <br> 3 Natural gas |  |  |  |  |
| NEXT HPBACKUP |  |  |  |  |
| Derived |  | Show Card | CARI | Yes |
| HPBACKUP (New) |  |  |  | PBACKUP |
| ASK | ASK If EQUIPM=4 |  |  |  |
| During the winter, how often does your heat pump switch to back-up or auxiliary heat? Is it... <br> 0 Never <br> 1 A few times <br> 2 Some of the time <br> 3 About all winter |  |  |  |  |
| NEXT MAINTHT |  |  |  |  |
| Derived |  | Show Card | CARI |  |
| MAINTHT (Changed from 2009) |  |  |  | HeatMaint |
| 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. <br> 1 Yes <br> 0 No |  |  |  |  |
| NEXT EQUIPAGE |  |  |  |  |
| Derived |  | Show Card | CARI |  |
| EQUIPAGE (Changed from 2009) |  |  |  | HeatEquip |
| ASK If HEATHOME=1 |  |  |  |  |
| Place sh <br> Please <br> 1 Le <br> 22 <br> 35 <br> 4110 <br> 421 | how card XX in fro <br> look at Card XX. A <br> ess than 2 years to 4 years old to 9 years old 0 to 14 years old 5 to 19 years old | espondent. <br> tely how old is | n heati |  |




| NEXT | TEMPGONE |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Derived |  | Show Card |  | CARI | Yes |  |


| TEMPGONE (Changed from 2009) |  |  |  | TempSetWhenOut |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If HEATHOME=1 |  |  |  |
| What is th <br> Open | the typical te n response | n no one is in | the da |  |
| NEXT | TEMPNITE |  |  |  |
| Derived |  | Show Card | CARI |  |


| TEMPNITE (Changed from 2009) |  |  |  | TempSetWhenAsleep |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If HEATHOME=1 |  |  |  |
| Open response |  |  |  |  |
| NEXT | HEATOTH |  |  |  |
| Derived |  | Show Card | CARI |  |


| HEATOTH |  |  |  | HeatOthers |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If HEATHOME=1 |  |  |  |
| Does the main heating equipment for your home also heat any other apartments, condos, households, businesses, or farm buildings? |  |  |  |  |
| NEXT EQUIPAUX |  |  |  |  |
| Derive |  | Show Card | CARI |  |


| EQUIPAUX |  |
| :--- | :--- |
| ASK | If HEATHOME=1 |

Place show card $X X$ in front of the respondent.
You told me that [EQUIPM] is the main source of heat in your home. Please look at Card XX. Does your household use any other types of heating equipment listed on Card XX?

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)


| PERMELEC |  |  |  | PERMELEC |
| :---: | :---: | :---: | :---: | :---: |
| ASK |  |  |  |  |
| Secondary heat is Buit in Electric Units |  |  |  |  |
| NEXT | If CE If CE If CE If CE | $=1$ : ATTCHE ne 1 and PR ne 1 and PR | AT; <br> MT |  |
| Derived |  | Show Card | CARI |  |
| PIPELESS |  |  |  | PIPELESS |
| ASK |  |  |  |  |
| Secondary heat is Built in floor/wall pipeless furnace |  |  |  |  |
| NEXT PIPEFUEL |  |  |  |  |
| Derived |  | Show Card | CARI |  |
| ROOMHEAT |  |  |  | ROOMHEAT |
| ASK |  |  |  |  |
| Secondary heat is Built in room heaters |  |  |  |  |
| NEXT RHMHTFUEL |  |  |  |  |
| Derived |  | Show Card | CARI |  |
| WOODKILN |  |  |  | WOODKILN |
| ASK |  |  |  |  |
| Secondary heat is Heating Stove |  |  |  |  |
| NEXT | If CE If CE If CE If CE | $=1$ : ATTCHE ne 1 and PRK ne 1 and PRK | AT; <br> MT |  |
| Derived |  | Show Card | CARI |  |
| CARRYEL |  |  |  | CARRYEL |
| ASK |  |  |  |  |
| Secondary heat is Portable electric heaters |  |  |  |  |


|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NEXT | NUMPORTELHEAT2 | Show Card |  | CARI |  |
| Derived |  |  |  |  |  |



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



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


| AUXEQPFU | D7FollowUp |
| :--- | :--- |
| ASK | If DIFEQUIP $=1$ |


| Could you tell me what that other heating equipment is? |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: | :---: |
| Open response |  |  |  |  |  |




| RADFUEL |  |  |
| :--- | :--- | :---: |
| ASK | If STEAMR=1 |  |
| What fuel does the steam/hot water system use? Is it... |  |  |
|  |  |  |
| 5 | Electricity |  |
| 1 Natural gas from underground pipes |  |  |
| 2 | Propane (bottled gas) |  |
| 3 | Fuel oil |  |



| NEXT <br> Derived |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Show Card | CARI |  |
| RMHTFUEL |  |  |  | RoomHeaterFuel |
| ASK | If ROO |  |  |  |
| What fuel does the room heater use? Is it... <br> 1 Natural gas from underground pipes <br> 2 Propane (bottled gas) <br> 3 Fuel oil <br> 4 Kerosene |  |  |  |  |
| NEXT | If CELLAR=1: BASEHEAT; <br> If CELLAR ne 1 and ATTIC=1: ATTCHEAT; <br> If CELLAR ne 1 and ATTIC ne 1 and PRKGPLC1=1: GARGHEAT; <br> If CELLAR ne 1 and ATTIC ne 1 and PRKGPLC1 ne 1: EQMAMT |  |  |  |
| Derived |  | Show Card | CARI |  |




| NGFPFLUE (Changed from 2009) |  |  |  | GasFirePlaceFlue |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If FPFU |  |  |  |
| Does this fireplace have a flue to the outside or is it entirely self-contained? <br> 1 Flue to the outside <br> 2 Flueless (self contained) |  |  |  |  |
| NEXT USNGFP |  |  |  |  |
| Derived |  | Show Card | CARI |  |
| USENGFP (Changed from 2009) |  |  |  | FreqNatGasFirePIUsed |
| ASK If FPFUEL=1 |  |  |  |  |
| During the winter how frequently does your household use the gas fireplace? Is it... <br> 1 Most days <br> 2 About once a week <br> 3 Fewer than 4 times each month |  |  |  |  |
| NEXT | If CELL <br> If CELL <br> If CELL <br> If CELL | $=1$ : ATTCHE ne 1 and PR ne 1 and PR | C1=1: GARGHEAT; C1 ne 1: EQMAMT |  |
| Derived |  | Show Card | CARI |  |
| RNGFUEL |  |  | APPCookingEquipFuel, CookingEquipFuel |  |
| ASK | If RAN |  |  |  |
| What fuel does the cooking stove use? Is it.. <br> 5 Electricity <br> 1 Natural gas from underground pipes <br> 2 Propane (bottled gas) <br> 3 Fuel oil <br> 4 Kerosene <br> 7 Wood <br> 21 Some other fuel |  |  |  |  |
| NEXT | If CELL <br> If CELL <br> If CELL <br> If CELL | $=1$ : ATTCHE ne 1 and PRK ne 1 and PRK | C1=1: GARGHEAT; C1 ne 1: EQMAMT |  |
| Derived |  | Show Card | CARI |  |
| RNGFUELFU |  |  |  | D5a6FollowUp |
| ASK | If RNGFUEL=21 |  |  |  |
| Could you tell me what that other fuel is? |  |  |  |  |




| NEXT | MOISTURE | Show Card |  | CARI |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Derived |  | Show |  |  |  |


| MOISTURE |  |  | Humidifier |
| :---: | :---: | :---: | :---: |
| ASK | All respondents |  |  |
| Humidifiers add moisture to the air and are often used in the winter. Is a humidifier used in your home? <br> 1 Yes <br> 0 No |  |  |  |
| NEXT | If MOISTURE=1: HUMIDTYPE Else: IVCOMMDFILTER |  |  |
| Derived | Show Card | CARI |  |


| HUMIDTYPE (New) |  |  |  | HumidifierType |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If MOISTURE=1 |  |  |  |
| 1 Portable <br> 2 Whole home |  |  |  |  |
| NEXT | USEMOISTURE |  |  |  |
| Derived |  | Show Card | CARI |  |


| USEMOISTURE (Changed from 2009) |  |  |  | HumidifierUse |
| :---: | :---: | :---: | :---: | :---: |
| ASK ${ }^{\text {A }}$ If MOISTURE=1 |  |  |  |  |
| 1 less than 1 month, <br> 21 to 3 months, <br> 34 to 6 months, <br> 47 to 9 months, <br> 510 to 11 months, but not all year, or <br> 6 Turned on all year long? |  |  |  |  |
| NEXT IVCOMMDFILTER |  |  |  |  |
| Derived |  | Show Card | CARI |  |


| $\mid$ IVCOMMDFILTER |
| :--- |
| ASK |
| IVCOMMDFILTER 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 <br> 2 I do not have comments |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| NEXT | If IVCOMMDFILTER=1: IVCOMMD; Else: Section E |  |  |  |
| Derived |  | Show Card | CARI |  |
| IVCOMMD |  |  |  | IVerCommentsD |
| 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. <br> Open response |  |  |  |  |
| NEXT | Section E |  |  |  |
| Derived |  | Show Card | CARI |  |

## SECTION E: AIR CONDITIONING



| Please look at Card XX. What type of air conditioning equipment does your home have? Is it... |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
| 1 | Central air conditioning system |  |  |  |
| 2 | Individual window/wall or portable units |  |  |  |
| 3 | Both a central system and individual units |  |  |  |


| NUMCENAC (New) |  |  |  | NUMCENAC |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If COOLTYPE in $(1,3)$ |  |  |  |
| $\begin{aligned} & 1 \text { Yes } \\ & 0 \text { No } \end{aligned}$ |  |  |  |  |
| NEXT | CENACHP |  |  |  |
| Derived |  | Show Card | CARI |  |



| HPTYPE2 (New) |  |  |  |  |  |  |  | HPTYPE2 |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| 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 |  |  |  |  |  |  |  |  |


| HPDUCTS (New) |  |  |  | HaveDuctWork |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If $\mathrm{CENACHP}=1$ |  |  |  |
| Does your heat pump deliver cold air through ducts and vents or is it a ductless system? <br> 1 Ducts and vents <br> 2 Ductless |  |  |  |  |
| NEXT | ACOTHERS |  |  |  |
| Derived |  | Show Card | CARI |  |



| MAINTAC (Changed from 2009) |  | CACMaint |
| :--- | :--- | :--- |
| 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) |
|  | AgeOfCenACEquip |
| Place show card 11 in front of the respondent. |  |
| Please look at Card 11. Approximately, how old is your central air conditioning equipment? |  |
|  |  |
| 1 | Less than 2 years old |
| 22 to 4 years old |  |
| 35 to 9 years old |  |
| 41 to 14 years old |  |
| 4215 to 19 years old |  |
| 5 | 20 years or older |
| 6 As old as the home (if volunteered) |  |


|  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| NEXT | THERMAINAC | CARI | Yes |  |  |  |
| Derived |  | Show Card | Yes | CARI |  |  |




## USECENAC (Changed from 2009)

AmtCenACUsed
ASK $\quad$ If COOLTYPE in $(1,3)$

Place show card $X$ in front of the respondent.
Please look at Card X. 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

\left.| NEXT | If USECENAC=9: USECENACFU; |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |
|  |  |$\right]$|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Derived |  |  |  |  |  |  |  | Show Card | Yes | CARI | Yes |


| USECENACFU |  |  |  |  |  |  |  | USECENACFU |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| ASK | If USECENAC=9 |  |  |  |  |  |  |  |
| Could you describe how your household uses your central air conditioning equipment? |  |  |  |  |  |  |  |  |
| Open response |  |  |  |  |  |  |  |  |



| WWTYPE |  |  | WWTYPE, WWTYPEA |  |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If COOLTYPE in(2,3) |  |  |  |
| Is the [most-used] individual air-conditioning unit installed in a window, installed in a wall, or is it a portable unit? <br> 1 Window <br> 2 Wall <br> 3 Portable |  |  |  |  |
| NEXT | WWACAGE |  |  |  |
| Derived |  | Show Card | CARI |  |

## WWACAGE <br> AgeOfWindowAC, AgeOfWindowACA

 ASK $\quad$ If COOLTYPE in $(2,3)$Place show card $X X$ in front of the respondent.
Please look at Card XX. Approximately, how old is the [most-used] individual air conditioning unit in your home?

1 Less than 2 years old



| PROTHERMWW (New) |  |  |  | ISACThermostatSetBack |
| :--- | :--- | :--- | :--- | :--- |
| ASK | If THERMAINWW=1 |  |  |  |
| Some thermostats can be programmed so that different temperatures are automatically maintained at <br> different times of the day. Is the thermostat that controls your most used individual unit programmable? <br> 1 Yes <br> 0 No |  |  |  |  |
| NEXT | USEWW | Show Card |  |  |
| Derived |  | CARI |  |  |

## USEWWAC (Changed from 2009) <br> AmtWindowACUsed

ASK
Place show card X in front of the respondent.
Please look at Card X. Which best describes how your household controls your 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



| BASECL2 (Changed from 2009) |  |  |  | APPHowCoolBsmnt |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If BASE |  |  |  |
| 1 All <br> 2 About half <br> 3 Some |  |  |  |  |
| NEXT | If ATTIC=1: ATTCCOOL; <br> If ATTIC ne 1 and PRKGPLC1=1: GARGCOOL; <br> If ATTIC ne 1 and PRKGPLC1 ne 1: NUMCFAN |  |  |  |
| Derived |  | Show Card | CARI |  |


| ATTCCOOL (Changed from 2009) |  |  | ATTCCOOL |
| :---: | :---: | :---: | :---: |
| ASK | If AIRCOND=1 and ATTIC=1 |  |  |
| Is any <br> 1 | of your attic cooled using the air cond | told me |  |
| NEXT | If ATTCCOOL=1: ATTCCL2; <br> if ATTCCOOL ne 1 and PRKGPLC1=1: <br> If ATTCHEAT ne 1 and PRKGPLC1 ne |  |  |
| Derived | Show Card | CARI |  |

## ATTCCL2 (Changed from 2009)

APPHowCoolAttic
ASK If ATTCCOOL=1

About how much of your attic is cooled? Is it...
$\square$

| GARGCOOL (Changed from 2009) |  |  |  |  | HowCoolGarage |
| :--- | :--- | :--- | :--- | :---: | :---: |
| ASK | If AIRCOND=1 and PRKGPLC1=1 |  |  |  |  |
|  |  |  |  |  |  |
| Is your garage cooled using the air conditioning equipment you told me about? |  |  |  |  |  |
| 1 Yes |  |  |  |  |  |
| 0 | No |  |  |  |  |



| NUMFLOORFAN (NEW) |  |  |  |  | NUMFLOORFAN |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASK | All respondents |  |  |  |  |
| Floor or window fans |  |  |  |  |  |
| 0-15 |  |  |  |  |  |
| Whole house fan (NUMWHOLEFAN) Attic fan (NUMATTICFAN) |  |  |  |  |  |
| NEXT | NUMWHOLEFAN |  |  |  |  |
| Derived |  | Show Card | Yes | CARI |  |


| NUMWHOLEFAN (New) |  |  |  | NUMWHOLEFAN |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASK | All respondents |  |  |  |  |
| Whole house fans |  |  |  |  |  |
| 0-15 |  |  |  |  |  |
| NEXT | NUMATTICFAN |  |  |  |  |
| Derived |  | Show Card | Yes | CARI |  |


| NUMATTICFAN (New) |  |  |  |  | NUMATTICFAN |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASK | All r |  |  |  |  |
| Attic fans |  |  |  |  |  |
| 0-15 |  |  |  |  |  |
| NEXT | If NUMCFAN>0: USECFAN Else: NOTMOIST |  |  |  |  |
| Derived |  | Show Card | Yes | CARI |  |



| NOTMOIST |  |  | Dehumidifier |
| :---: | :---: | :---: | :---: |
| ASK | All respondents |  |  |
| Dehumidifiers remove moisture from the air and are often used in the summer. Is a dehumidifier used in your home? |  |  |  |
| NEXT | If NOTMOIST=1: MOISTTYPE Else: TREESHAD |  |  |
| Derived | Show Card | CARI |  |


| MOISTTYPE (New) |  |  | DehumidifierType |
| :---: | :---: | :---: | :---: |
| ASK | If NOTMOIST=1 |  |  |
| Is your $\begin{aligned} & 1 \mathrm{P} \\ & 2 \mathrm{~W} \end{aligned}$ | dehumidifier a portable dehumidifier or a ortable Whole home |  |  |
| NEXT USENOTMOIST |  |  |  |
| Derived | Show Card | CARI |  |
| USENOTMOIST (Changed from 2009) |  |  | DehumidifierUse |
| ASK | If $\mathrm{NOTMOIST}=1$ |  |  |
| 1 less than 1 month, <br> 21 to 3 months, <br> 34 to 6 months, <br> 47 to 9 months, <br> 510 to 11 months, but not all year, or <br> 6 Turned on all year long? |  |  |  |
| NEXT TREESHAD |  |  |  |
| Derived Show Card $\quad$ CARI |  |  |  |
| TREESHAD |  |  | ShadeTree |
| ASK | All respondents |  |  |
| $\begin{aligned} & 1 \text { Yes } \\ & 0 \text { No } \end{aligned}$ |  |  |  |
| NEXT ${ }^{\text {IV }}$ IVCOMMEFILTER |  |  |  |
| Derived | Show Card | CARI |  |
| IVCOMMEFILTER (Changed from 2009) |  |  | IVCOMMEFILTER |
| 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. <br> 1 I have comments regarding the quality of data in this section <br> 2 I do not have comments |  |  |  |


| NEXT | If IVCOMMEFILTER=1: IVCOMME; Else: Section F |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Derived |  | Show Card | CARI |  |
| IVCOMME (Changed from 2009) |  |  |  | IVCOMME |
| 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. <br> Open response |  |  |  |  |
| NEXT | Section F |  |  |  |
| Derived |  | Show Card | CARI |  |

## SECTION F: WATER HEATING

| H2OHEATAPT (New) |  | H2OHEATAPT |  |
| :---: | :---: | :---: | :---: |
| ASK | If TYPEHUQ in(4,5) |  |  |
| Do you have a water heater in your apartment or is the water heater located somewhere else in this building? <br> 1 In apartment <br> 2 Somewhere else in building |  |  |  |
| NEXT | If H2OHEATAPT=1: FUELH2O; Else: IVCOMMFFILTER |  |  |
| Derived | Show Card | CARI | Yes |


| FUELH2O (Changed from 2009) |  | APPMainWaterHeatingFuel, APPMainWaterHeatingFuelA |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASK If TYPEHUQ in $(1,2,3)$ or H2OHEATAPT=1 |  |  |  |  |  |
| Place show card XX in front of the respondent. <br> Please look at Card XX. What fuel does your main water heater use? <br> 5 Electricity <br> 1 Natural gas from underground pipes <br> 2 Propane (bottled gas) <br> 3 Fuel oil <br> 4 Kerosene <br> 7 Wood <br> 8 Solar <br> 21 Some other fuel |  |  |  |  |  |
| NEXT | If FUELH2O=21:FUELH2OFU; Else: WHEATSIZ |  |  |  |  |
| Derived |  | Show Card | Yes | CARI | Yes |


| FUELH2OFU |  |  |  | E3FollowUp |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If FUELH2O=21 |  |  |  |
| Could you tell me what that other fuel is? |  |  |  |  |
| Open response |  |  |  |  |
| NEXT | If H2OTYPE2=1: WHEATSIZ2; If H2OTYPE2=2: WHEATAGE2 |  |  |  |
| Derived |  | Show Card | CARI |  |


| WHEATSIZ (Changed from 2009) |  |  |  | APPSizeOfWaterHeater |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASK | If TYPEHUQ in $(1,2,3)$ or H2OHEATAPT=1 |  |  |  |  |
| Place show card $X X$ in front of the respondent. <br> Please look at Card XX. What is the approximate size of the main water heater? <br> 1 Small storage tank (30 gallons or less) <br> 2 Medium storage tank ( 31 to 49 gallons) <br> 3 Large storage tank ( 50 gallons or more) <br> 4 Tankless or on-demand |  |  |  |  |  |
| NEXT | WHEATAGE |  |  |  |  |
| Derived |  | Show Card | Yes | CARI | Yes |
| WHEATAGE (Changed from 2009) AgeHotH2OEquip <br> ASK |  |  |  |  |  |
|  |  |  |  |  |  |
| Place show card XX in front of the respondent. <br> Please look at Card XX. Approximately how old is the main water heater? <br> 1 Less than 2 years old <br> 22 to 4 years old <br> 35 to 9 years old <br> 4110 to 14 years old <br> 4215 to 19 years old <br> 520 years or older <br> 6 As old as the home (if volunteered) |  |  |  |  |  |
| NEXT | If WHEATSIZ in ( $1,2,3$ ): WHEATBKT; Else: MORETHAN1H2O |  |  |  |  |
| Derived |  | Show Card | Yes | CARI |  |
| WHEATBKT |  |  |  |  | WHBlanket |
| ASK | If WHEATSIZ in (1,2,3) |  |  |  |  |
| Has the main water heater in your home been insulated using a water heater blanket? <br> 1 Yes <br> 0 No |  |  |  |  |  |
| NEXT | MORETHAN1H2O |  |  |  |  |
| Derived |  | Show Card |  | CARI |  |
| MORETHAN1H2O (New) |  |  |  |  | MORETHAN1H2O |
| ASK | If TYPEHUQ in $(1,2,3)$ or H2OHEATAPT=1 |  |  |  |  |
| Do you have more than one water heater? |  |  |  |  |  |


| $\begin{aligned} & 1 \text { Yes } \\ & 0 \text { No } \end{aligned}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NEXT | If MORETHAN1H2O=1: FUELH2O2; Else: IVCOMMFFILTER |  |  |  |  |
| Derived | Show Card |  |  | CARI |  |
| FUELH2O2 (Changed from 2009) |  |  |  |  | APPOtherH2OFuel |
| ASK | If MORETHAN1H2O=1 |  |  |  |  |
| Place show card XX in front of the respondent. <br> Please look at Card XX. Which fuel does your second water heater use? <br> 5 Electricity <br> 1 Natural gas from underground pipes <br> 2 Propane (bottled gas) <br> 3 Fuel oil <br> 4 Kerosene <br> 7 Wood <br> 8 Solar <br> 21 Some other fuel |  |  |  |  |  |
| NEXT | If FUELH2O2=21:FUELH2O2FU; Else: WHEATSIZ2 |  |  |  |  |
| Derived |  | Show Card | Yes | CARI |  |
| FUELH2O2FU |  |  |  |  | E3aFollowUp |
| ASK | If FUELH2O2=21 |  |  |  |  |
| Could you tell me what that other fuel is? <br> Open response |  |  |  |  |  |
| NEXT If H2OTYPE2=1: WHEATSIZ2; <br> If H2OTYPE2=2: WHEATAGE2 | If H2OTYPE2=1: WHEATSIZ2; If H2OTYPE2=2: WHEATAGE2 |  |  |  |  |
| Derived |  | Show Card |  | CARI |  |
| WHEATSIZ2 (Changed from 2009) |  |  |  | APPSizeOfWaterHeater2 |  |
| ASK | If MORETHAN1H2O=1 |  |  |  |  |
| Please look at Card XX. What is the approximat <br> 1 Small storage tank (30 gallons or less) <br> 2 Medium storage tank (31 to 49 gallons) <br> 3 Large storage tank (50 gallons or more) <br> 4 Tankless or on-demand |  |  | of th | ter hea |  |


|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NEXT | WHEATAGE2 |  |  |  |  |
| Derived |  | Show Card | Yes | CARI |  |


| WHEATAGE2 (Changed from 2009) |  |  |  |  | aterHeater2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASK | If MORETHAN1H2O=1 |  |  |  |  |
| 1 Less than 2 years old <br> 22 to 4 years old <br> 35 to 9 years old <br> 4110 to 14 years old <br> 4215 to 19 years old <br> 520 years or older <br> 6 As old as the home (if volunteered) |  |  |  |  |  |
| NEXT | If WHEATSIZ2 in ( $1,2,3$ ): WHEATBKT2; Else: IVCOMMFFILTER |  |  |  |  |
| Derived |  | Show Card | Yes | CARI |  |


| IVCOMMFFILTER (Changed from 2009) |  |  |  | IVCOMMFFILTER |
| :---: | :---: | :---: | :---: | :---: |
| 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. <br> 1 I have comments regarding the quality of data in this section <br> 2 I do not have comments |  |  |  |  |
| NEXT | If IVCOMMFFILTER=1: IVCOMMF Else: Section G |  |  |  |
| Derive |  | Show Card | CARI |  |


| IVCOMMF (Changed from 2009) |  |  |  | IVCOMMF |
| :---: | :---: | :---: | :---: | :---: |
| 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. <br> Open response |  |  |  |  |
| NEXT Section G |  |  |  |  |
| Derive |  | Show Card | CARI |  |

## SECTION G: MISCELLANEOUS


FUELPOOL (Changed from 2009) APPPoolFuel
ASK

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 <br> Else: RECBATH |  |  |  |  |  |  |  |  |  |  |
| Derived |  |  |  |  |  |  |  | Show Card |  | CARI |  |


| FUELPOOLFU |  |  |  | G2a1FollowUp |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If FUELPOOL=21 |  |  |  |
| Could you tell me what that other fuel is? |  |  |  |  |
| Open response |  |  |  |  |
| NEXT | RECBATH |  |  |  |
| Derived |  | Show Card | CARI |  |


| RECBATH (Changed from 2009) |  |  |  | HotTub |
| :---: | :---: | :---: | :---: | :---: |
| ASK | All respondents |  |  |  |
| $\begin{aligned} & 1 \text { Yes } \\ & 0 \text { No } \end{aligned}$ |  |  |  |  |
| NEXT | If RECBATH=1: MONTUB <br> Else: LGTINNUM |  |  |  |
| Derived |  | Show Card | CARI |  |
| MONTUB (New) |  |  |  | MONTUB |
| ASK | If RECBATH=1 |  |  |  |
| In the last year, how many months was your hot tub, spa, or Jacuzzi in use?$0-12$ |  |  |  |  |
| NEXT | FUELTUB |  |  |  |
| 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),
3 Fuel oil,
4 Kerosene,
8 Solar, or

| 21 Some other fuel? |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: |
| NEXT | If FUELTUB=21: FUELTUBFU <br> Else: LGTINNUM |  |  |  |  |  |  |
| Derived |  | Show Card |  | CARI |  |  |  |



| LGTINNUM (New) |  |
| :--- | :--- |
| ASK | All respondents |

Place show card $X$ in front of the respondent.
Please look at Card X. 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
220 to 39 light bulbs
340 to 59 light bulbs
460 to 79 light bulbs
580 or more light bulbs


| LGTINCAN (New) |  | LGTINCAN |
| :--- | :--- | :--- |
| ASK | All respondents |  |

Place show card X in front of the respondent.
Please look at Card X. What portion of the light bulbs inside your home are incandescent bulbs?

```
1 \mp@code { A l l }
2 \text { Most}
3 About half
4 Some
5 \mp@code { N o n e }
```

| NEXT | LGTINCFL |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Derived | Show Card | Yes | CARI |  |

LGTINCFL (New)

## LGTINCFL

ASK $\quad$ All respondents
Place show card X in front of the respondent.
Please look at Card X . What portion of the light bulbs inside your home are CFL bulbs?
1 All
2 Most
3 About half
4 Some
5 None
NEXT LGTINLED

| Derived | Show Card | Yes | CARI | Yes |
| :--- | :--- | :--- | :--- | :--- |

LGTINLED (New)

## LGTINLED

ASK $\quad$ All respondents
Place show card X in front of the respondent.
Please look at Card X . What portion of the light bulbs inside your home are LED bulbs?
1 All
2 Most
3 About half
4 Some
5 None

LGTINCNTL (New)

LGTINCNTL
ASK $\quad$ All respondents

| Are any of the light bulbs inside your home controlled by timers or dimmer switches? |
| :--- |
| 1 <br> Yes <br> 0 |
| No | | NEXT | LGTIN4 | Show Card |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Derived |  | CARI |  |  |


| LGTIN4 (New) |  |  |  | LGTIN4 |
| :---: | :---: | :---: | :---: | :---: |
| ASK | All respondents |  |  |  |
| How many of the light bulbs inside your home are used at least 4 hours per day?$0-99$ |  |  |  |  |
| NEXT | If TYPEHUQ in(1,2,3): LGTOUTNUM Else: AUDIT |  |  |  |
| Derived |  | Show Card | CARI |  |




| LGTOUTCAN, LGTOUTCFL, LGTOUTLED, |  |
| :--- | :--- |
| LGTOUTNG (New) | LGTOUTCAN, LGTOUTCFL, LGTOUTLED, |
| LGTOUTNG |  |

Place show card X in front of the respondent.
Please look at Card X. Which of these types of lights bulbs are typically left on all night outside your home?

Mark all that apply.
Incandescent bulbs (LGTOUTCAN) CFL bulbs (LGTOUTCFL)


| EELIGHTS, EETHERM, FREEAUDIT REBATEAPP, RECYCAPP, SUBLOAN, TAXCREDITAPP, TAXCREDITWIN, WEATHERIZATION, BENOTHER (New) |  |  | EELIGHTS, EETHERM, FREEAUDIT, REBATEAPP, RECYCAPP, SUBLOAN, TAXCREDITAPP, TAXCREDITWIN, WEATHERIZATION, BENOTHER |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASK | If KOWNRENT= |  |  |  |  |
| 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) |  |  |  |  |  |
| NEXT | If BENOTHER= Else: ENERGYA | HERFU |  |  |  |
| Derived |  | Show Card | Yes | CARI | Yes |
| BENOTHERFU (New) |  |  |  |  | BENOTHERFU |
| ASK | If BENOTHER=1 |  |  |  |  |
| Could you <br> Open | ou tell me what th <br> n response | enefit was? |  |  |  |
| NEXT ENERGYASST |  |  |  |  |  |
| Derived |  | Show Card |  | CARI |  |
| ENERGYASST (New) |  |  |  |  | ENERGYASST |
| ASK | All respondents |  |  |  |  |
| Has your broken e <br> 1 Ye <br> 0 N | r household particip equipment? <br> es <br> No | a home ener | sistan | that he | rgy bills or fix |




## ALTFUELPEV, ALTFUELHYB, ALTFUELE85 (New) ALTFUELPEV, ALTFUELHYB, ALTFUELE85

ASK $\quad$ All respondents
Do you or any member of your household own or lease any of the following alternative fuel vehicles?
Mark all that apply.
Plug-in electric vehicle or PEV (ALTFUELPEV)
Gas-electric hybrid (ALTFUELHYB)
E85 or "flex-fuel" vehicle (ALTFUELE85)

NEXT If ALTFUELE85=1: E85USE

| Derived | Show Card |  | CARI |  |
| :--- | :--- | :--- | :--- | :--- |


$|$| E85USE (New) |  |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| ASK | If ALTFUELE85=1 |  |  |  |  |  |

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

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

|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NEXT | IVCOMMGFILTER |  |  |  |  |
| Derived |  | Show Card |  | CARI |  |




## KROTHER

## ASK

Derived

| NEXT | Show Card |  | CARI |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Derived | Yes | Sha |  |  |


| SOLOTHER |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ASK |  |  |  |  |  |
| Derived |  |  |  |  |  |
|  |  |  |  |  |  |
| NEXT |  |  |  |  |  |
| Derived | Yes | Show Card |  | CARI |  |


| WDOTHUSE |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
| ASK |  |  |  |  |  |
| Derived |  |  |  |  |  |
|  |  |  |  |  |  |
| NEXT |  | Show Card |  |  |  |
| Derived | Yes |  | CARI |  |  |


| IVCOMM | MGFILTER |  |  | 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. <br> 1 I have comments regarding the quality of data in this section <br> 2 I do not have comments |  |  |  |  |
| NEXT | If IVCOMMGFILTER=1: IVCOMMG Else: Section H |  |  |  |
| Derived |  | Show Card | CARI |  |
| IVCOMMG |  |  |  | IVerComments |
| 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. <br> Open response |  |  |  |  |
| NEXT | Section H |  |  |  |
| Derived |  | Show Card | CARI |  |

## SECTION H: FUELS USED

| BACKUP (New) |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
| ASK | All respondents | BACKUP |  |  |
| Does your household have a back-up generator that can be used for generating electricity in case of a <br> power outage or emergency? |  |  |  |  |
| 1 <br> Yes <br> 0 |  |  |  |  |
| No |  |  |  |  |
| NEXT | ONSITETYPE | Show Card |  |  |




ONSITEGRID
GridConnect
ASK
Is your on-site system connected to the grid?

| $\begin{aligned} & 1 \mathrm{Yes} \\ & 0 \text { No } \end{aligned}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| NEXT | ONSITEGENCAP |  |  |  |
| Derived |  | Show Card | CARI |  |
| ONSITEGENCAP (New) |  |  |  | ONSITEGENCAP |
| ASK | If ONSITETYPE in( $1,2,3,9$ ) |  |  |  |
| "Capacity" is how much electricity a system can generate at one time. It is typically measured in kW (kilowatts). What is the capacity of your on-site system? <br> Open response |  |  |  |  |
| NEXT | OTHFUELUSE |  |  |  |
| Derived |  | Show Card | CARI |  |
| OTHFUELUSE |  |  | INTRO |  |
| ASK | All respondents |  |  |  |
| You have mentioned using [CAPI WILL LIST THE FUELS IDENTIFIED AS USED BY THE HOUSEHOLD]. Do you use [CAPI WILL LIST THE FUELS WHICH HAVE NOT BEEN IDENTIFIED AS USED BY THE HOUSEHOLD] as a fuel for any purpose in your home? <br> 1 Yes <br> 0 No |  |  |  |  |
| NEXT | If OTHFUELUSE=1: USEEL, USENG, USELP, USEFO, USEKERO, USEWOOD, USESOLAR Else if USEEL=1: ELPAY <br> Else if USENG=1: NGPAY <br> Else if USEFO=1: FOPAY <br> Else if USELP=1: LPGPAY <br> Else if USEKERO=1: KERODEL <br> Else if USEWOOD=1: WOODLOGS, WDSCRAP, WDPELLET, WDOTHER <br> Else: IVCOMMHFILTER |  |  |  |
| Derived |  | Show Card | CARI |  |
| USEEL, USENG, USELP, USEFO, Whic USEKERO, USEWOOD, USESOLAR |  |  | 1, WhichOnes2, WhichOnes3, WhichOnes4, WhichOnes5, WhichOnes6, WhichOnes7 |  |
| ASK | If OTHFUELUSE=1 |  |  |  |
| Electricity, (USEEL) <br> Natural gas, (USENG) <br> Propane (bottled gas), (USELP) <br> Fuel oil, (USEFO) <br> Kerosene, (USEKERO) |  |  |  |  |



Please look at Card X. For which electricity uses are the costs included in your rent or condo fee?
Mark all that apply.
Heating (PELHEAT)
Water heating (PELHOTWA)
Air conditioning (PELAC)
Cooking (PELCOOK)
Lighting and appliances (PELLIGHT)

NGPAY (New) WhoPaysNatGas

ASK If USENG=1
Place show card X in front of the respondent.
Please look at Card X . 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 natural gas used in this home
2 All natural gas 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


| PUGHEAT, PUGHOTWA, <br> PUGCOOK, PUGOTH (Changed from 2009) <br> ASK <br> WhoPaysNatGasHeat, WhoPaysNatGasHotH2O, <br> WhoPaysNatGasCook, WhoPaysNatGasOther |
| :--- | :--- |
| Place show card X in front of the respondent. |
| Please look at Card X. For which electricity uses are the costs included in your rent or condo fee? |
| Mark all that apply. |
| $\quad$Heating (PUGHEAT) <br> Water heating (PUGHOTWA) |


| Cooking (PUGCOOK) <br> Other uses (PUGOTH) |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| NEXT | If USEFO=1: FOPAY <br> Else if USELP=1: LPGPAY <br> Else if USEKERO=1: KERODEL <br> Else if USEWOOD=1: WOODLOGS, WDSCRAP, WDPELLET, WDOTHER <br> Else: IVCOMMHFILTER |  |  |  |  |  |  |  |  |  |
| Derived |  |  |  |  |  |  | Show Card | Yes | CARI |  |


| FOPAY (Changed from 2009) | WhoPaysFuelOil |
| :--- | :--- |
| ASK | If USEFO $=1$ |

Place show card X in front of the respondent.
Please look at Card X . 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 fuel oil used in this home
2 All fuel oil 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 USELP=1: LPGPAY <br> Else QUANTFO |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Derived | Show Card | Yes | CARI |  |



| LPGDELV |  |
| :--- | :--- |
| ASK | If USELP=1 |
| Is propane (bottled gas) delivered to your home? |  |
|  |  |


| $\begin{aligned} & 1 \text { Yes } \\ & 0 \text { No } \end{aligned}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| NEXT | If LPGDELV=1: NDIFLPCO Else: LPGCASH |  |  |  |
| Derived |  | Show Card | CARI |  |
| NDIFLPCO (Changed from 2009) NumBttldGasCos |  |  |  |  |
| ASK | If LP |  |  |  |
| How many different companies delivered propane (bottled gas) to your home in the last year?$0-10$ |  |  |  |  |
| NEXT | If NLPDELNC>0: NLPDELNC Else: LPGCASH |  |  |  |
| Derived | Show Card |  | CARI |  |
| NLPDELNC (Changed from 2009) |  |  |  | NumBttldGasDels |
| ASK | If NLPDELNC>0 |  |  |  |
| About how many deliveries did your household get in the last year?$0-25$ |  |  |  |  |
| $$ | LPGCASH |  |  |  |
| Derived |  | Show Card | CARI |  |
| LPGCASH (New) |  |  |  | LPGCASH |
| ASK | If $\mathrm{USELP}=1$ |  |  |  |
| In the last year, did your household buy propane (bottled gas) and bring it home?$\begin{aligned} & 1 \text { Yes } \\ & 0 \text { No } \end{aligned}$ |  |  |  |  |
| NEXT | ```If LPGCASH=1: NLPGCASH Else if USEFO=1: QUANTFO Else if USEKERO=1: KERODEL Else if USEWOOD=1: WOODLOGS, WDSCRAP, WDPELLET, WDOTHER Else: IVCOMMHFILTER``` |  |  |  |
| Derived |  | Show Card | CARI |  |
| NLPGCASH (New) |  |  |  | NLPGCASH |
| 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) |  |  |  |  | NLPGALNC |
| 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 ${ }^{\text {PRICELPG }}$ | PRICELPG |  |  |  |  |
| Derived |  | Show Card |  | CARI |  |
| PRICELPG (New) |  |  |  |  | PRICELPG |
| ASK | If LPGCASH=1 |  |  |  |  |
| About how much did your household spend each time propane was purchased in the last year?$1-999$ |  |  |  |  |  |
| NEXT | ```If USEFO=1: QUANTFO Else if USEKERO=1: KERODEL Else if USEWOOD=1: WOODLOGS, WDSCRAP, WDPELLET, WDOTHER Else: IVCOMMHFILTER``` |  |  |  |  |
| Derived |  | Show Card |  | CARI |  |
| QUANTFO (Changed from 2009) |  |  |  | GalsFuelOilUsed |  |
| ASK | If USEFO=1 |  |  |  |  |
| Place show card $X$ in front of the respondent. <br> Please look at Card X . About how many gallons of fuel oil did your household use in the last year? <br> 1 Less than 100 gallons <br> 2100 to 499 gallons <br> 3500 to 1,000 gallons <br> 4 More than 1,000 gallons |  |  |  |  |  |
| NEXT | NDIFFOCO |  |  |  |  |
| Derived |  | Show Card | Yes | CARI |  |
| NDIFFOCO (Changed from 2009) |  |  |  |  | NumFuelOilCos |
| ASK | If USEFO=1 |  |  |  |  |
| How many different companies delivered fuel oil to your home in the last year? |  |  |  |  |  |


| 0-10 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NEXT | ```If NDIFFOCO>0: NFODELNC Else if USEKERO=1: KERODEL Else if USEWOOD=1: WOODLOGS, WDSCRAP, WDPELLET, WDOTHER Else: IVCOMMHFILTER``` |  |  |  |  |
| Derived |  | Show Card | CARI |  |  |
| NFODELNC (Changed from 2009) |  |  |  | NumFuelOilDels |  |
| ASK | If NDIFFOCO>0 |  |  |  |  |
| About how many deliveries did your household get in the last year?$0-25$ |  |  |  |  |  |
| NEXT | If USEKERO=1: KERODEL <br> Else if USEWOOD=1: WOODLOGS, WDSCRAP, WDPELLET, WDOTHER <br> Else: IVCOMMHFILTER |  |  |  |  |
| Derived |  | Show Card | CARI |  |  |
| KERODEL |  |  |  | KeroseneDelivered |  |
| ASK | If USEKERO=1 |  |  |  |  |
| Is kerosene delivered to your home?$\begin{aligned} & 1 \text { Yes } \\ & 0 \text { No } \end{aligned}$ |  |  |  |  |  |
| NEXT | If KERODEL=1: NDIFKRCO Else: KEROCASH |  |  |  |  |
| Derived |  | Show Card | CARI |  |  |
| NDIFKRCO (Changed from 2009) |  |  |  | NumKeroseneCos |  |
| ASK | If KERODEL=1 |  |  |  |  |
| How many different companies delivered kerosene to your home in the last year?$0-10$ |  |  |  |  |  |
| NEXT | If NDIFKRCO $>0$ : NKRDEL |  |  |  |  |
| Derived |  | Show Card | CARI |  |  |
| NKRDEL (Changed from 2009) |  |  |  | NumKeroseneDels |  |
| ASK | If NDIFKRCO>0 |  |  |  |  |
| About how many deliveries did your household get in the last year? |  |  |  |  |  |


| $0-25$ |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: |
| NEXT | KEROCASH | Show Card |  | CARI |  |  |  |
| Derived |  |  |  |  |  |  |  |



| NOCRCASH (Changed from 2009) |  |  | NumKeroCashBuys |
| :---: | :---: | :---: | :---: |
| ASK | If $\mathrm{KEROCASH}=1$ |  |  |
| How many times in the last year did your household buy kerosene and bring it home?$0-55$ |  |  |  |
| NEXT | If NOCRCASH>1: NKRGALNC |  |  |
| Derived |  | CARI |  |



| PRICEKER |  |
| :--- | :--- |
| ASK | If KEROCASH=1 |

On average, about how much per gallon did your household pay for kerosene?
0.50-5.00



| WDAMOUNT (Changed from 2009) |  |  |  | AmtWoodBurned |
| :---: | :---: | :---: | :---: | :---: |
| 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 |  |



| WOODCOST (New) |  |  |  | WOODCOST |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If WOODPU |  |  |  |
| About <br> 0 | ow much did 99999 | d spend on |  |  |
| NEXT | IVCOMMHF |  |  |  |
| Derived |  | Show Card | CARI |  |


| IVCOMMFILTER |  | 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 |  |
| IVCOMMHFILTER |  |  |  | IVerCommentsH |
| 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. <br> Open response |  |  |  |  |
| NEXT | Section I |  |  |  |
| Derived |  | Show Card | CARI |  |

## SECTION I: HOUSING UNIT MEASUREMENT




| SIZE2FLR |  | Footprint2ndFloorSize |  |
| :---: | :---: | :---: | :---: |
| ASK | If SHAPE2FLR=1 |  |  |
| $\begin{aligned} & 1 \text { Yes } \\ & 0 \text { No } \end{aligned}$ |  |  |  |
| NEXT | If STORIES in $(31,32)$ or NAPTFLRS>2: SHAPE3FLR <br> Else if ATTICFIN in $(1,2)$ or ATTCHEAT=1: SHAPEATTIC <br> Else if CELLAR=1: SHAPEBASE <br> Else if GARGLOC=2 and SIZE2FLR=1: OVERGARG <br> Else: MEASURE |  |  |
| Derive | Show Card | CARI |  |

## SHAPE2FLRA (Changed from 2009)

ASK
Place show card X in front of the respondent.
Please look at Card X. Thinking about the second floor of your home, which best describes the shape?
1 Square or Rectangle
2 T-shaped (2 Squares or Rectangles)
3 L-shaped (2 Squares or Rectangles
4 Some other shape

| NEXT | If STORIES in(31,32) or NAPTFLRS>2: SHAPE3FLR <br> Else if ATTICFIN in(1,2) or ATTCHEAT=1: SHAPEATTIC <br> Else if CELLAR=1: SHAPEBASE <br> Else: MEASURE |
| :--- | :--- | :--- | :--- | :--- |

## SHAPE3FLR <br> Footprint3rdFloorShape

ASK
Is the shape of the third floor of this home the same as the second floor?
1 Yes
0 No

| NEXT | If SHAPE3FLR=1: SIZE3FLR Else: SHAPE3FLRA |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Derived |  | Show Card | CARI |  |
| SIZE3FLR |  |  | Footprint3rdFloorSize |  |
| ASK | If SHAPE3FLR=1 |  |  |  |
| Is the size of the third floor of this home the same as the second floor? <br> 1 Yes 0 No |  |  |  |  |
| NEXT | If ATTICFIN in $(1,2)$ or ATTCHEAT=1: SHAPEATTIC Else if CELLAR=1: SHAPEBASE <br> Else if GARGLOC=2 and SIZE2FLR=1: OVERGARG Else: MEASURE |  |  |  |
| Derived |  |  | CARI |  |
| SHAPE3FLRA (Changed from 2009) |  |  |  | ShapeOf3rdFloor |
| ASK | If (STORIES in $(31,32)$ or NAPTFLRS>2) and SHAPE3FLR ne 1 |  |  |  |
| Place show card X in front of the respondent. <br> Please look at Card X. Thinking about the third floor of your home, which best describes the shape? <br> 1 Square or Rectangle <br> 2 T-shaped (2 Squares or Rectangles) <br> 3 L-shaped (2 Squares or Rectangles <br> 4 Some other shape |  |  |  |  |
| NEXT | ```If ATTICFIN in(1,2) or ATTCHEAT=1: SHAPEATTIC Else if CELLAR=1: SHAPEBASE Else if GARGLOC=2 and SIZE2FLR=1: OVERGARG Else: MEASURE``` |  |  |  |
| Derived |  | Yes | CARI |  |
| SHAPEATTIC (Changed from 2009) |  |  | FootprintAtticShape |  |
| ASK | If ATTICFIN in(1,2) or ATTCHEAT=1 |  |  |  |
| Is the shape of the attic of this home the same as the floor under it?$\begin{aligned} & 1 \text { Yes } \\ & 0 \text { No } \end{aligned}$ |  |  |  |  |
| NEXT | If SHAPEATTIC=1: SIZEATTIC Else: SHAPEATTICA |  |  |  |
| Derived |  |  | CARI |  |


| SIZEATTIC |  |  |  | FootprintAtticSize |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASK | If SHAPEATTIC=1 |  |  |  |  |
| Is the siz $\begin{aligned} & 1 \\ & 0 \end{aligned}$ | ize of t <br> es o | he same as th | or un |  |  |
| NEXT | If CELLAR=1: SHAPEBASE <br> Else if (GARGLOC=2 and STORIES=10 and SIZEATTIC=1) or (GARGLOC=2 and SIZE2FLR=1): OVERGARG <br> Else: MEASURE |  |  |  |  |
| Derived |  | Show Card |  | CARI |  |
| SHAPEATTICA (Changed from 2009) |  |  |  |  | ShapeOfAttic |
| ASK | If ATTICFIN in(1,2) or ATTCHEAT=1 and SHAPEATTIC ne 1 |  |  |  |  |
| Place show card X in front of the respondent. <br> Please look at Card X . Thinking about the attic of your home, which best describes the sha <br> 1 Square or Rectangle <br> 2 T-shaped (2 Squares or Rectangles) <br> 3 L-shaped (2 Squares or Rectangles <br> 4 Some other shape |  |  |  |  |  |
| NEXT | If CELLAR=1: SHAPEBASE <br> Else if GARGLOC=2 and SIZE2FLR=1: OVERGARG Else: MEASURE |  |  |  |  |
| Derived |  | Show Card | Yes | CARI |  |
| SHAPEBASE (Changed from 2009) |  |  |  | FootprintBasementShape |  |
| ASK | If CELLAR=1 |  |  |  |  |
| Is the shape of the basement of this home the same as the floor directly above it?$\begin{aligned} & 1 \text { Yes } \\ & 0 \text { No } \end{aligned}$ |  |  |  |  |  |
| NEXT | If SHAPEBASE=1: SIZEBASE Else: SHAPEBASEA |  |  |  |  |
| Derived |  | Show Card |  | CARI | Yes |
| SIZEBASE |  |  |  | FootprintBasementSize |  |
| ASK | If SHAPEBASE=1 |  |  |  |  |
| Is the size of the basement of this home the same as the floor directly above it? <br> 1 Yes |  |  |  |  |  |



| NEXT | TOTSQFT_EN |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Derived |  | Show Card |  | CARI |  |


| TOTSQFT_EN |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If MEASURE=1 |  |  |  |
| Interviewer Task: Use the measurement worksheet to record the measurements of each level of this home. |  |  |  |  |
| NEXT | IVCOMMIFILT |  |  |  |
| Derived | Yes | Show Card | CARI |  |


| IVCOMMIFILTER |  |  |  | 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. <br> 1 I have comments regarding the quality of data in this section <br> 2 I do not have comments |  |  |  |  |
| NEXT | If IVCOMMIFILTER=1: IVCOMMI Else: Section J |  |  |  |
| Derive |  | Show Card | CARI |  |


| IVCOMMI |  |  |  | IVerCommentsI |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If IVCOMMIFILTER=1 |  |  |  |
| Interviewer Task: Record any information here about this household's measurements that might provide clarification to the respondent's answers. <br> Open response |  |  |  |  |
| NEXT | Section J |  |  |  |
| Derived |  | Show Card | CARI |  |

## SECTION J: FUEL BILLS

| ELBILLTOSCAN (Changed from 2009) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| ASK | If ELPAY in(1,3) |  |  |  | HaveElecBilltoScan



| ELSUPPNAME (Changed from 2009) |  |  | ElecSupplierName |
| :---: | :---: | :---: | :---: |
| ASK | If ELPAY in $(1,3)$ |  |  |
| Interviewer attempts to find the response in a look-up table of known electricity suppliers. If supplier is not found, the interviewer records an open response. |  |  |  |
| NEXT | If electricity supplier was found in look-up Else if ELBILLTOSCAN=1 and electricit ELSUPPSTREET <br> Else if NGPAY in $(1,3)$ : NGBILLTOSCAN <br> Else if LPGPAY in $(1,3)$ : LPGBILLTOSC <br> Else if FOPAY in(1,3): FOBILLTOSCAN <br> Else if KERODEL=1: KEROBILLTOSC <br> Else: KFUELOT | FRM din look | up table: |
| Derived | Show Card | CARI |  |


| ELSUPPSTREET | ElecSupplierAddress |
| :--- | :--- |
| 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 | Show Card |  | CARI |  |  |
| Derived |  |  |  |  |  |  |

## ELSUPPCITY

ElecSupplierCity
ASK $\quad$ 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 $\quad$ ELSUPPSTATE

| Derived |  | Show Card |  | CARI |
| :--- | :--- | :--- | :--- | :--- |


| ELSUPPSTATE |  |  |  | ElecSupplierState |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If ELBILLTOSCAN=1 and electricity supplier was not found in look-up table |  |  |  |
| RECORD <br> Open | D the supplie <br> n response | appears on th |  |  |
| NEXT | ELSUPPZIP |  |  |  |
| Derived |  | Show Card | CARI |  |


| ELSUPPZIP |  |  | ElecSupplierZIP |  |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If ELBILLTOSCAN=1 and electricity supplier was not found in look-up table |  |  |  |
| RECOR <br> Open | D the | pears on the |  |  |
| NEXT | ELS |  |  |  |
| Derived |  | Show Card | CARI |  |


| ELSUPPAREACODE |  |  | 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 |  |  |  |
| Derive |  | Show Card | CARI |  |



| 3 Respondent doesn't have this bill now 4 Other |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| NEXT NGSUPPNAME |  |  |  |  |
| Derived |  | Show Card | CARI |  |
| NGSUPPNAME (Changed from 2009) |  |  |  | NGSupplierName |
| ASK | If NGPAY in $(1,3)$ |  |  |  |
| What is the name of your household's natural gas supplier? <br> Interviewer attempts to find the response in a look-up table of known natural gas suppliers. If supplier is not found, the interviewer records an open response. |  |  |  |  |
| NEXT | If natural gas supplier was found in look-up table: NGLOOKUPCNFRM Else if NGBILLTOSCAN=1 and natural gas supplier was not found in look-up table: NGSUPPSTREET <br> Else if LPGPAY in(1,3): LPGBILLTOSCAN <br> Else if FOPAY in(1,3): FOBILLTOSCAN <br> Else if KERODEL=1: KEROBILLTOSCAN <br> Else: KFUELOT |  |  |  |
| Derived |  | Show Card | CARI |  |
| NGSUPPSTREET NGSupplierAddress |  |  |  |  |
| ASK | If NGBILLTOSCAN=1 and natural gas supplier was not found in look-up table |  |  |  |
| RECORD the supplier's street address as it appears on the bill here. Open response |  |  |  |  |
| NEXT | NGSUPPCITY |  |  |  |
| Derived |  | Show Card | CARI |  |
| NGSUPPCITY |  |  | NGSupplierCity |  |
| 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. <br> Open response |  |  |  |  |
| NEXT | NGSUPPSTATE |  |  |  |
| Derived |  | Show Card | CARI |  |
| NGSUPPSTATE |  |  | NGSupplierState |  |
| ASK | If NGBILLTOSCAN=1 and natural gas supplier was not found in look-up table |  |  |  |
| RECORD the supplier's state as it appears on the bill here. |  |  |  |  |


| Open response |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NEXT | NGSUPPZIP | Show Card |  | CARI |  |
| Derived |  |  |  |  |  |




| NGSUPPTELNUMBER |  | NGSuppTeINumber |  |
| :---: | :---: | :---: | :---: |
| ASK | If NGBILLTOSCAN=1 and natural gas supplier was not found in look-up table |  |  |
| RECORD the supplier's telephone number as it appears on the bill here.1000001-9999999 |  |  |  |
| NEXT | If LPGPAY in(1,3): LPGBILLTOSCAN <br> Else if FOPAY in(1,3): FOBILLTOSCAN <br> Else if KERODEL=1: KEROBILLTOSCAN <br> 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? |  |
| Yes <br> 0 |  |
|  |  |


| NEXT | If NGLOOKUPCNFRM=0: NGSUPPNAME Else if LPGPAY in $(1,3)$ : LPGBILLTOSCAN Else if FOPAY in(1,3): FOBILLTOSCAN Else if KERODEL=1: KEROBILLTOSCAN Else: KFUELOT |  |
| :---: | :---: | :---: |
| Derived | Show Card | CARI |


| LPGBILLTOSCAN (Changed from 2009) |  |  | HaveLPGBilltoScan |
| :---: | :---: | :---: | :---: |
| ASK | If LPGPAY in $(1,3)$ and 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? |  |  |  |
| NEXT | If LPGBILLTOSCAN=0: LPGWHYNOT Else if LPGDELV=1: LPGSUPPNAME1 Else if FOPAY in(1,3): FOBILLTOSCAN Else if KERODEL=1: KEROBILLTOSCAN Else: KFUELOT |  |  |
| Derived | Show Card | CARI |  |


| LPGWHYNOT (Changed from 2009) |  |  | WhyNotHaveLPGBill |
| :---: | :---: | :---: | :---: |
| ASK | If LPGBILLTOSCAN=0 |  |  |
| Please indicate why there is no bill to scan. <br> 1 Respondent only receives this bill electronically <br> 2 Confidentiality/privacy concern <br> 3 Respondent doesn't have this bill now <br> 4 Other |  |  |  |
| NEXT | If LPGDELV=1: LPGSUPPNAME1 <br> Else if FOPAY in(1,3): FOBILLTOSCAN Else if KERODEL=1: KEROBILLTOSCAN Else: KFUELOT |  |  |
| Derived | Show Card | CARI |  |


| LPGSPNAME1 |  |
| :--- | :--- |
| ASK | If LPGPAY in(1,3) and LPGDELV=1 |

What is the name of your household's [if NDIFLPCO>1: most used] propane (bottled gas) supplier?
Open response


| LPGSUPPSTREET1 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| ASK | If LPGBILLTOSCAN=1 and LPGDELV=1 | LPGSupplierAddress1 |  |  |
| RECORD the supplier's street address as it appears on the bill here. |  |  |  |  |
| Open response |  |  |  |  |


| LPGSUPPCITY1 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| ASK | If LPGBILLTOSCAN=1 and LPGDELV=1 | LPGSupplierCity1 |  |  |
| RECORD the supplier's city as it appears on the bill here. |  |  |  |  |
| Open response |  |  |  |  |


| LPGSUPPSTATE1 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| ASK | If LPGBILLTOSCAN=1 and LPGDELV=1 |  |  |  |
| RECORD the supplier's state as it appears on the bill here. |  |  |  |  |
| Open response |  |  |  |  |


| LPGSUPPIP1 |  |  |  |  |  | LPGSupplierZIP1 |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: |
| ASK | If LPGBILLTOSCAN=1 and LPGDELV=1 |  |  |  |  |  |
| RECORD the supplier's zip as it appears on the bill here. |  |  |  |  |  |  |
| Open response |  |  |  |  |  |  |


| LPGSUPPAREACODE1 |  |  |  | LPGSuppAreaCode1A |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If LPGBILLTOSCAN=1 and LPGDELV=1 |  |  |  |
| RECORD the supplier's area code as it appears on the bill here.001-999 |  |  |  |  |
| NEXT | LPGSUPPTELNUMBER1 |  |  |  |
| Derived |  | Show Card | CARI <br> LPGSuppTeINumber1A |  |
| LPGSUPPTELNUMBER1 |  |  |  |  |
| ASK | If LPGBILLTOSCAN=1 and LPGDELV=1 |  |  |  |
| RECORD the supplier's telephone number as it appears on the bill here.1000001-9999999 |  |  |  |  |
| NEXT | If NDIFLPCO>1: LPGBILLTOSCAN2 <br> Else if FOPAY in $(1,3)$ : FOBILLTOSCAN <br> Else if KERODEL=1: KEROBILLTOSCAN <br> Else: KFUELOT |  |  |  |
| Derived |  | Show Card | CARI |  |
| LPGBILLTOSCAN2 |  |  |  | HaveLPGBilltoScan2 |
| 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? <br> 1 Yes <br> 0 No |  |  |  |  |
| NEXT | If LPGBILLTOSCAN2=0: LPGWHYNOT2 Else: LPGSUPPNAME2 |  |  |  |
| Derived |  | Show Card | CARI |  |
| LPGWHYNOT2 (Changed from 2009) |  |  |  | WhyNotHaveLPGBill2 |
| ASK | If LPGBILLTOSCAN2=0 |  |  |  |
| 1 Respondent only receives this bill electronically <br> 2 Confidentiality/privacy concern <br> 3 Respondent doesn't have this bill now <br> 4 Other |  |  |  |  |


| NEXT | LPGSUPPNAME2 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Derived |  | Show Card |  | CARI |  |


| LPGSUPPNAME2 |  |  | LPGSupplierName2 |  |
| :---: | :---: | :---: | :---: | :---: |
| 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? <br> Open response |  |  |  |  |
| NEXT | ```If LPGBILLTOSCAN2=1: LPGSUPPSTREET2 Else if FOPAY in(1,3): FOBILLTOSCAN Else if KERODEL=1: KEROBILLTOSCAN Else: KFUELOT``` |  |  |  |
| Derived |  | Show Card | CARI |  |


| LPGSUPPSTREET2 |  |  | LPGSupplierAddress2 |  |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If LPGBILLTOSCAN2=1 |  |  |  |
| RECORD the supplier's street address as it appears on the bill here. <br> Open response |  |  |  |  |
| NEXT | LPGSUPPCITY2 |  |  |  |
| Derived |  | Show Card | CARI |  |



| LPGSUPPSTATE2 |  |  |  | LPGSupplierState2 |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If LPGBILLTOSCAN2=1 |  |  |  |
| RECORD the supplier's state as it appears on the bill here. <br> Open response |  |  |  |  |
| NEXT | LPGSUPPZIP |  |  |  |
| Derived |  | Show Card | CARI |  |


| LPGSUPPZIP2 |  |  |  | LPGSupplierZIP2 |
| :---: | :---: | :---: | :---: | :---: |
| 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 |  |  |  | LPGSuppAreaCode2A |
| 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 |  |  | LPGSuppTelNumber2A |  |
| 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): FOBILLTOSCAN <br> Else if KERODEL=1: KEROBILLTOSCAN <br> Else: KFUELOT |  |  |  |
| Derived |  | Show Card | CARI |  |




| FOSUPPSTATE1 |  |  |  | FOSupplierState1 |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If $\mathrm{FOBILLTOSCAN=1}$ |  |  |  |
| RECORD the supplier's state as it appears on the bill here. <br> Open response |  |  |  |  |
| NEXT | FOSUPPZIP1 |  |  |  |
| Derived |  | Show Card | CARI |  |
| FOSUPPZIP1 |  |  |  | FOSupplierZIP1 |
| ASK | If $\mathrm{FOBILLTOSCAN=1}$ |  |  |  |
| RECORD the supplier's zip as it appears on the bill here. <br> Open response |  |  |  |  |
| NEXT | FOSUPPAREACODE1 |  |  |  |
| Derived |  | Show Card | CARI |  |



| FOSUPPTELNUMBER1 |  | FOSuppTeINumber1A |  |
| :---: | :---: | :---: | :---: |
| ASK | If FOBILLTOSCAN=1 |  |  |
| RECORD the supplier's telephone number as it appears on the bill here.1000001-9999999 |  |  |  |
| NEXT | If NDIFFOCO>1: FOBILLTOSCAN2 <br> Else if KERODEL=1: KEROBILLTOSCAN Else: KFUELOT |  |  |
| Derive | Show Card | CARI |  |

FOBILLTOSCAN2
HaveFOBilltoScan2
ASK $\quad$ If FOPAY in $(1,3)$ 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


| RECORD the supplier's city as it appears on the bill here. |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| Open response |  |  |  |  |  |  |
| NEXT | FOSUPPSTATE2 |  |  |  |  |  |
| Derived |  | Show Card |  |  |  |  |

FOSUPPSTATE2
FOSupplierState2
ASK If FOBILLTOSCAN2=1

RECORD the supplier's state as it appears on the bill here.
Open response

| NEXT | FOSUPPZIP2 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Derived |  | Show Card |  | CARI |  |

FOSUPPZIP2
FOSupplierZIP2
ASK

RECORD the supplier's zip as it appears on the bill here.
Open response

| NEXT | FOSUPPAREACODE2 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Derived |  | Show Card |  | CARI |  |


| FOSUPPAREACODE2 |  |  | FOSuppAreaCode2A |  |
| :---: | :---: | :---: | :---: | :---: |
| 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
FOSuppTeINumber2A
ASK If FOBILLTOSCAN2=1

RECORD the supplier's telephone number as it appears on the bill here.
1000001-9999999


|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NEXT | KEROSUPPCITY1 |  |  |  |  |
| Derived |  | Show Card |  | CARI |  |


| KEROSUPPCITY1 KeroSupplierCity1 |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: |
| ASK | If KEROBILLTOSCAN=1 |  |  |  |  |  |  |
| RECORD the supplier's city as it appears on the bill here. |  |  |  |  |  |  |  |
| Open response |  |  |  |  |  |  |  |
| NEXT | KEROSUPPSTATE1 | Show Card |  | CARI |  |  |  |



| KEROSUPPZIP1 |  |  |  | KeroSupplierZIP1 |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If KEROBILLTOSCAN=1 |  |  |  |
| RECORD the supplier's zip as it appears on the bill here. <br> Open response |  |  |  |  |
| NEXT KEROSUPPAREACODE1 |  |  |  |  |
| Deriv |  | Show Card | CARI |  |







|  | If BILLUG=1: NGNONHSHLD <br> NEXT <br> Else if BILLLPG=1: LPGNONHSHLD <br> Else if BILLFOIL=1: FONONHSHLD <br> Else if BILLKER=1: KERONONHSHLD <br> Else: SMARTMETER |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Derived |  |  |  |  |  |


| NGNONHSHLD |  |  |  | HowMuchNatGas |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASK | If BILLUG=1 |  |  |  |  |
| Place show card X in front of the respondent. <br> Please look at Card X . What portion of the natural gas bill is for non-househo ```O Very little (1-4%) 1 Some (5-33%) 2 About half (34-66%) 3 About three-quarters (67-95%) 4 Most of it (96-99%)``` |  |  |  |  |  |
| NEXT | If BILLLPG=1: LPGNONHSHLD <br> Else if BILLFOIL=1: FONONHSHLD <br> Else if BILLKER=1: KERONONHSHLD <br> Else: SMARTMETER |  |  |  |  |
| Derived |  | Show Card | Yes | CARI |  |



| FONONHSHLD |  |
| :--- | :--- |
| ASK | If BILLFOIL=1 |
| Place show card $X$ in front of the respondent. |  |
| Please look at Card $X$. What portion of the fuel oil bill is for non-household uses? |  |





| LLTELNUMBER (Changed from 2009) |  |  |  | LLTeINumber |
| :---: | :---: | :---: | :---: | :---: |
| 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 TYP <br> Else: | MPLEXN |  |  |
| Derived |  | Show Card | CARI |  |
| COMPLEXN |  |  |  | lexHaveName |
| ASK | If TYP |  |  |  |
| Does th <br> 1 <br> 0 | e comp <br> es <br> o | where you live |  |  |
| NEXT If COMPLEXN=1: CPLXNAME |  |  |  |  |
| Derived |  | Show Card | CARI |  |
| CPLXNAME |  |  |  | ComplexName |
| ASK | If COM |  |  |  |
| What is Ope | the na |  |  |  |
| NEXT | IVCOMMJFILTER |  |  |  |
| Derived |  | Show Card | CARI |  |
| IVCOMMJFILTER |  |  |  | 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. <br> 1 I have comments regarding the quality of data in this section <br> 2 I do not have comments |  |  |  |  |
| NEXT | If IVCOMMJFILTER=1: IVCOMMJ Else: Section K |  |  |  |
| Derived |  | Show Card | CARI |  |



## SECTION K: HOUSING UNIT CHARACTERISTICS



| HHAGE (Changed from 2009) |  |  | AgeOfHH |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| ASK | All respondents |  |  |  |  |  |  |  |
| How old are you? |  |  |  |  |  |  |  |  |
| For ages over 95, enter 95. |  |  |  |  |  |  |  |  |
| 16-95 |  |  |  |  |  |  |  |  |
| NEXT | EMPLOYHH | Show Card |  |  |  |  |  |  |
| Derived |  |  |  |  |  |  | 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) |  |  |  | HispanicDescent |  |
| ASK | All respondents |  |  |  |  |
| Are you Hispanic or Latino?$\begin{aligned} & 1 \text { Yes } \\ & 0 \text { No } \end{aligned}$ |  |  |  |  |  |
| 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, <br> RACE_NHPI, RACE_OTH, RACE_HISP (Changed from 2009) <br> RacialOrigin |  |  |  |  |  |
| ASK | All respondents |  |  |  |  |
| Place show card X in front of the respondent. <br> Please look at Card X. Which describes your race? You can select one or more categories. <br> White (RACE_WHITE) <br> Black or African-American (RACE_BLACK) <br> American Indian or Alaska Native (RACE_AIAN) <br> Asian (RACE_ASIAN) <br> Native Hawaiian or Other Pacific Islander (RACE_NHPI) <br> Other (if volunteered) (RACE_OTH) <br> Hispanic (if volunteered) (RACE_HISP) |  |  |  |  |  |
| NEXT | EDUCATION |  |  |  |  |
| Derived |  | Show Card | Yes | CARI |  |

EDUCATION (Changed from 2009) Education
ASK $\quad$ All respondents

Place show card X in front of the respondent.
Please look at Card X . 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

| NEXT | NHSLDMEM |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Derived |  | Show Card | Yes | CARI |  |
| NHSLDMEM (Changed from 2009) |  |  |  |  | NumInHH |
| 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) |  |  | AgeofHHMember2 |
| :---: | :---: | :---: | :---: |
| ASK | If $\mathrm{NHSLDMEM}>1$ |  |  |
| Other than yourself what is the age of the oldest person in this household? <br> For ages over 95, enter 95. $1-95$ |  |  |  |
| NEXT | If NHSLDMEM=3: AGEHHMEMY Else if NHSLDMEM>3: AGEHHMEM3 Else: HBUSNESS |  |  |
| Derived | Show Card | CARI |  |

## AGEHHMEM3

AgeOfHHMember3
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

 AgeOfHHMember4 ASK $\quad$ If NHSLDMEM $>4$Of the [NUMBER OF REMAINING HOUSEHOLD MEMBERS] remaining members of this household,

| what is the age of the next oldest person? <br> For ages over 95, enter 95. <br> 1 - 95 |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| NEXT | If NHSLDMEM=5: AGEHHMEMY <br> Else if NHSLDMEM>5: AGEHHMEM5 <br> Else: HBUSNESS |  |  |  |  |  |  |  |  |  |
| Derived |  |  |  |  |  | Yes | Show Card |  | CARI |  |


| AGEHHMEM5 |  |  |  | AgeOfHHMember5 |
| :---: | :---: | :---: | :---: | :---: |
| 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? <br> For ages over 95, enter 95. $1-95$ |  |  |  |  |
| NEXT | If NHSLDMEM=6: AGEHHMEMY Else if NHSLDMEM>6: AGEHHMEM6 Else: HBUSNESS |  |  |  |
| Derive | Yes | Show Card | CARI |  |



| AGEHHEM7 |  |
| :--- | :--- |
| 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. |  |
| $1-95$ |  |



## AGEHHMEM8

## AgeOfHHMember8

ASK If NHSLDMEM>8

Of the [NUMBER OF REMAINING HOUSEHOLD MEMBERS] remaining members of this household, what is the age of the next oldest person?

For ages over 95, enter 95.
1-95

| NEXT | If NHSLDMEM=9: AGEHHMEMY <br> Else if NHSLDMEM 9 : AGEHHMEM9 <br> Else: HBUSNESS |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Derived |  |  |  |  |  |  | Yes | Show Card |  | CARI |  |


| AGEHHMEM9 |  |  |  | AgeOfHHMember9 |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If $\mathrm{NHSLDMEM}>9$ |  |  |  |
| Of the [NUMBER OF REMAINING HOUSEHOLD MEMBERS] remaining members of this household, what is the age of the next oldest person? <br> 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 |  |


| AGEHEM10 | AgeOfHHMember10 |
| :--- | :--- |
| ASK | If NHSLDMEM $>10$ |

Of the [NUMBER OF REMAINING HOUSEHOLD MEMBERS] remaining members of this household, what is the age of the next oldest person?

For ages over 95, enter 95.
1-95

| NEXT | If NHSLDMEM=11: AGEHHMEMY <br> Else if NHSLDMEM>11: AGEHHMEM11 <br> Else: HBUSNESS |  |  |
| :---: | :---: | :---: | :---: |
| Derived | Yes | Show Card | CARI |


| AGEHHMEM11 |  |  | AgeOfHHMember11 |  |
| :---: | :---: | :---: | :---: | :---: |
| 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? <br> For ages over 95, enter 95. 1-95 |  |  |  |  |
| NEXT | If NHSLDMEM=12: AGEHHMEMY Else if NHSLDMEM>12: AGEHHMEM12 Else: HBUSNESS |  |  |  |
| Derive | Yes | Show Card | CARI |  |


| AGEHHMEM12 |  |  |  | AgeOfHHMember12 |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If $\mathrm{NHSLDMEM}>12$ |  |  |  |
| Of the [NUMBER OF REMAINING HOUSEHOLD MEMBERS] remaining members of this household, what is the age of the next oldest person? <br> For ages over 95, enter 95. 1-95 |  |  |  |  |
| NEXT | If NHSLDMEM=13: AGEHHMEMY <br> Else if NHSLDMEM>13: AGEHHMEM13 <br> Else: HBUSNESS |  |  |  |
| Derived | Yes | Show Card | CARI |  |

## AGEHHMEM13

AgeOfHHMember13
ASK If NHSLDMEM>13

Of the [NUMBER OF REMAINING HOUSEHOLD MEMBERS] remaining members of this household, what is the age of the next oldest person?

For ages over 95, enter 95.
1-95

| NEXT | If NHSLDMEM=14: AGEHHMEMY <br> Else if NHSLDMEM>14: AGEHHMEM14 <br> Else: HBUSNESS |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
|  | Derived |  |  |  |  |  |  | Yes | Show Card |  |  |


| AGEHHMEM14 |  |  | AgeOfHHMember14 |  |
| :---: | :---: | :---: | :---: | :---: |
| 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? <br> For ages over 95, enter 95. 1-95 |  |  |  |  |
| NEXT | If NHSLDMEM=15: AGEHHMEMY Else: HBUSNESS |  |  |  |
| Derive | Yes | Show Card | CARI |  |



| AGEHHMEMY (Changed from 2009) |  |  |  | AgeofHHMemberY |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If NHSLDMEM>2 |  |  |  |
| What is the age of the youngest person in this household? <br> For ages over 95, enter 95. $1-95$ |  |  |  |  |
| NEXT | HBUSNESS |  |  |  |
| Derived |  | Show Card | CARI |  |


| HBUSNESS HomeBaseBusiness |  |
| :--- | :--- |
| ASK | All respondents |

Does anyone in this household operate a home-based business or service?
1 Yes
0 No

|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NEXT | If HBUSNESS=1: OTHBUS <br> Else: ATHOME |  |  |  |  |  |  |  |  |  |  |
| Derived |  |  |  |  |  |  |  | Show Card |  | CARI |  |


| OTHBUS |  |  |  |  |  |  | J11FollowUp |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| ASK | If HBUSNESS=1 |  |  |  |  |  |  |
| What kind of business or service is this? |  |  |  |  |  |  |  |
| Open response |  |  |  |  |  |  |  |



| TELLWORK |  |  | TeleWorking |
| :---: | :---: | :---: | :---: |
| ASK | All respondents |  |  |
| Does an <br> 1 Y <br> 0 N | yyone in this household telecommute or <br> es <br> No | ng the |  |
| NEXT | OTHWORK |  |  |
| Derived | Show Card | CARI |  |

## OTHWORK (Changed from 2009)

## UnusualActivity

ASK $\quad$ 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





| IVCOMMK |  |  |  | IVerCommentsK |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If IVCOMMKFILTER=1 |  |  |  |
| Interviewer Task: Record any information here about the household characteristics of this housing unit that might provide clarification to the respondent's answers. <br> Open response |  |  |  |  |
| NEXT | Section L |  |  |  |
| Derived |  | Show Card | CARI |  |

## SECTION L: ENERGY INSECURITY and ASSISTANCE (LIHEAP)






| NOHEATBROKE, NOHEATEL, NOHEATNG, <br> NOHEATBULK (New) |  |
| :--- | :--- |
| ASK | All respondents |

Place show card $X$ in front of the respondent.
Please look at Card X. 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.
1 Your heating equipment was broken and you couldn't afford to pay for the repair or replacement
2 You couldn't pay for electricity and it was disconnected
3 You couldn't pay for natural gas and it was disconnected
4 You ran out of fuel oil, propane, kerosene, or wood because you couldn't afford a delivery
0 None of these happened


| NOHEATDAYS (New) |  |  |  | NOHEA |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If NOHEATBROKE=1 OR NOHEATEL=1 OR NOHEATNG=1 OR NOHEATBULK=1 |  |  |  |
| About how many days was your household without heat? |  |  |  |  |
| NEXT | NOHEATHELP |  |  |  |
| Derive |  | Show Card | CARI |  |

NOHEATHELP (New)

| ASK | If NOHEATBROKE=1 OR NOHEATEL=1 OR NOHEATNG=1 OR NOHEATBULK=1 |
| :--- | :--- |

When that happened, did your household apply for and receive home energy assistance to help restore
your heating?

1 Yes
0 No

| NEXT | COLDMA |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Derived |  | Show Card |  | CARI |

COLDMA (Changed from 2009) MedicalAttnCold

| ASK | All respondents |
| :--- | :--- |

In the last year, did anyone in your household need medical attention because your home was too cold?


| NOACBROKE, NOACEL (New) |  |
| :--- | :--- |
| ASK | All respondents |

Place show card X in front of the respondent.
Please look at Card X. 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.
1 Your air conditioning equipment or other cooling equipment was broken and you couldn't afford to pay for the repair or replacement
2 You couldn't pay for electricity and it was disconnected
0 None of these happened

| NEXT | If NOACBROKE=1 <br> Else HOTMA |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Derived |  | Show Card | Yes | CARI |  |


| NOACDAYS (New) |  |  |  | NOACDAYS |
| :---: | :---: | :---: | :---: | :---: |
| ASK | If NOACBROKE=1 or NOACEL=1 |  |  |  |
| About how many days was your household without its air conditioner or other cooling equipment?$0-366$ |  |  |  |  |
| NEXT | NOACHELP |  |  |  |
| Derived |  | Show Card | CARI |  |

## NOACHELP (New)

NOACHELP
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?



| SIGNFORM (Changed from 2009) |  |  |
| :--- | :--- | :--- |
| ASK | All respondents | SIGNFORM |
| This is the last question I have. In addition to the answers you've provided in this survey, we would like to <br> find out how much energy your household actually used in the past year. Would you please sign this form <br> that gives permission to your energy suppliers to provide this information to the U.S. Department of <br> Energy? |  |  |
| Interviewer Task: Give the authorization form to the respondent and record whether the respondent <br> signed the form or not. <br> 1 Authorization form signed <br> Outhorization form not signed |  |  |
| NEXT | LANGUAGE | Show Card |
| Derived |  | CARI |



| LANGUAGEFU (New) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| ASK | If LANGUAGE=4 |  |  |  |
| Interviewer Task: Please explain how this interview was conducted. |  |  |  |  |
| Open response |  |  |  |  |

