Independent Statistics & Analysis

U.S. Energy Information Administration

Residential Energy Consumption Survey (RECS)
Form EIA-457A
2020 Household Questionnaire

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How to Use This Questionnaire

The 2020 Residential Energy Consumption Survey (RECS) will rely on self-administered paper and web instruments. The primary purpose of these specifications is to document the wording of questions and responses seen by respondents, as well as the skip logic that guides respondents through the paper and web instruments. A secondary purpose of these specifications is to document metadata for various RECS project needs – this includes variable names, variable types, response set values, and allowable numeric ranges.

The template for each item in these specifications is as follows:

VARIABLE1	
ASK	All respondents

Question Text
 	
    1   Yes
    0 No	

Spanish translation of question text	
NEXT	VARIABLE2
MODE	Comments about implementation in paper and/or web instrument
WEB PROMPT	Type of web prompt (HARD/SOFT), condition, and message displayed

In the example above, the responses to VARIABLE1 would be stored as values of 1 and 0. For questions that require a numeric response, the allowable range is specified in this format: {WEB: ALLOW RANGE 0 – 99; PAPER: TWO DIGITS}. For most numeric items, the allowable ranges for the web and paper instruments are logically consistent.

The following is a list of response set conventions that will generally be used for the 2020 RECS project:

- Yes/No questions: 1 for Yes, 0 for No
- Select-all-that-apply questions: 1 if selected, 0 if not
- Other response: 99
- Not Applicable response: -3
- Explicit Don't Know response: -4
- Illegible responses (paper only): -5
- Multiple responses to single response question (paper only): -6

Introductory Questionnaire Text

If MODE=Web:

Introduction and Consent

We hope you enjoy completing this questionnaire, and appreciate greatly your help in understanding how energy gets consumed in people's homes throughout the United States.

Please remember the following important points:

- You must be age 18 or older to participate.
- Completing this survey should take about 30 minutes.
- Your name will never be connected to the answers you provide, and the data we collect will be used only for statistical purposes.
- Taking part in this survey is entirely voluntary. You can skip any questions you do not wish to answer. There is no penalty if you choose to skip any question or any part of the questionnaire.

If you are age 18 or older and wish to participate, please click the Next button below to begin the survey.

If you do not wish to participate in this study, please close your browser window.

OMB No. 1905-0092
Expiration date: 09/30/2023

If MODE=Paper:

We hope you enjoy completing this questionnaire, and appreciate greatly your help in understanding how energy gets consumed in people's homes throughout the United States.

OMB No. 1905-0092
Expiration date: 09/30/2023

Your Home

If MODE=Web and mail_type in(1,2,3): Please answer the following questions about the home at [FILL: street address from sample file: "address1" or "address1, address2" (if address2 is non-missing)].

If MODE=Web and mail_type in(4,5): Please answer the following questions about the home associated with the address on the letter you received.

If MODE=Paper: Please answer the following questions about the home associated with the address on the enclosed letter.

TYPEHUQ	
ASK	All respondents
Which best describes your home? 1 Mobile home 2 Single-family house detached from any other house 3 Single-family house attached to one or more other houses (for example: duplex, row house, or townhome) 4 Apartment in a building with 2 to 4 units 5 Apartment in a building with 5 or more units	
NEXT	If TYPEHUQ=1: PRIMRES If TYPEHUQ in(2,3): CELLAR, CRAWL, CONCRETE, BASEOTH If TYPEHUQ in(4,5): BASEAPT
MODE	
WEB PROMPT	HARD PROMPT IF MISSING: Please provide an answer to this question to continue.

BASEAPT	
ASK	If TYPEHUQ in(4,5)
Is your apartment located in the basement of your building? 1 Yes 0 No	
NEXT	PRIMRES
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

CELLAR, CRAWL, CONCRETE, BASEOTH (Changed since 2015)	
ASK	If TYPEHUQ in(2,3)

Is any part of your home built over…

	Yes	No
A basement? [CELLAR]	1	0
A crawl space? [CRAWL]	1	0
A concrete slab? [CONCRETE]	1	0
Some other foundation? [BASEOTH]	1	0

NEXT	If CELLAR=1: BASEFIN Else: ATTIC
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

BASEFIN	
ASK	If CELLAR=1

Is any part of your basement finished? For this survey, a "finished" basement has finishing materials on the floor, ceiling, and walls.

1 Yes
0 No

NEXT	ATTIC
MODE	Paper – Include skip information before the question: *(If any part of your home is built over a basement)*
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

ATTIC	
ASK	If TYPEHUQ in(2,3)

An attic is a space just below the roof of your home where a person can stand up. Does your home have an attic?

1 Yes
0 No

NEXT	If ATTIC=1: ATTICFIN Else: STORIES
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

ATTICFIN

ASK	If ATTIC=1

Is any part of your attic finished? For this survey, a "finished" attic has finishing materials on the floor, ceiling, and walls.

   1   Yes
   0   No

NEXT	STORIES
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

STORIES

ASK	If TYPEHUQ in(2,3)

Not including basements or attics, how many stories does your home have?

   1   One story
   2   Two stories
   3   Three stories
   4   Four or more stories
   5   Split-level

NEXT	PRKGPLC1
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

PRKGPLC1

ASK	If TYPEHUQ in(2,3)

Does your home have an attached garage?

   1   Yes
   0   No

NEXT	If PRKGPLC1=1: SIZEOFGARAGE Else: PRIMRES
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

SIZEOFGARAGE	
ASK	If PRKGPLC1=1

What is the size of your attached garage?

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

NEXT	PRIMRES
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

PRIMRES	
ASK	All respondents

If MODE=Web and mail_type in(1,2,3): Is the home at [FILL: street address from sample file: "address1" or "address1, address2" (if address2 is non-missing)] your primary residence? Your primary residence is the place where you live most of the year. *If MODE=Web and mail_type in(4,5):* Is the home associated with the address on the letter you received your primary residence? Your primary residence is the place where you live most of the year. *If MODE=Paper:* Is the home associated with the address on the enclosed letter your primary residence? Your primary residence is the place where you live most of the year.

   1   Yes
   0   No

NEXT	KOWNRENT
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF PRIMRES=0: Just to confirm, this address is **not** your primary residence. Is that correct? <BUTTONS: Change Answer / Continue>

KOWNRENT	
ASK	All respondents

Is your home…

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

NEXT	YEARMADE, YEARMADE_DK
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

YEARMADE, YEARMADE_DK (New for web/mail; used to be on CAPI)	
ASK	All respondents

In what year was your home built?

    _____

        {WEB: ALLOW RANGE 1600 – 2021; PAPER: FOUR DIGITS}

        Don't know [YEARMADE_DK: 1 if selected, 0 if not]

NEXT	If 1600 le YEARMADE le 2021: MOVER, MOVE20MON, MOVE21MON Else: YEARMADERANGE
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't Know." <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 1600 to 2021. <BUTTONS: Change Answer / Continue>

YEARMADERANGE	
ASK	If NOT 1600 le YEARMADE le 2021

Although you do not know the exact year your home was built, it is helpful to have an estimate. About when was your home built?

    1   Before 1950
    2   1950 to 1959
    3   1960 to 1969
    4   1970 to 1979
    5   1980 to 1989
    6   1990 to 1999
    7   2000 to 2009
    8   2010 to 2015
    9   2016 to 2020

NEXT	MOVER, MOVE20MON, MOVE21MON
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

MOVER, MOVE20MON, MOVE21MON (New for 2020)	
ASK	All respondents

When did your household move in to this home?

    1   2019 or earlier
    2   2020 → In what month? _____ [MOVE20MON: Character variable]
    3   2021 → In what month? _____ [MOVE21MON: Character variable]

NEXT	VACANT
MODE	Web: Use dropdown menus to select months (i.e. January, February). Do not allow month to be selected until the corresponding year has been selected.
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

VACANT (Changed since 2015)	
ASK	All respondents

Was your home vacant for one or more months <u>between January 2020 and now</u>?
 	
   1   Yes
   0   No
 	
  -4 Don't know	

NEXT	SQFTEST, SQFTEST_DK
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

SQFTEST, SQFTEST_DK (Changed since 2015)	
ASK	All respondents

What is the square footage of your home?
 	
      _____ square feet
 	
      {WEB: ALLOW RANGE 0 – 99,999; PAPER: FIVE DIGITS, COMMA FORMAT}
 	
      Don't know [SQFTEST_DK: 1 if selected, 0 if not]	

NEXT	If 0 le SQFTEST le 99,999: SFSOURCE1, SFSOURCE2, SFSOURCE3, SFSOURCE4, SFSOURCE5, SFSOURCE6, SFSOURCE7, SFSOURCE7_other Else: SQFTRANGE
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't Know." <BUTTONS: Change Answer / Continue>

SQFTRANGE (New for 2020)	
ASK	If NOT 0 le SQFTEST le 99,999

We understand that you might not know how many square feet your home is. A home's size is closely related to its energy use, so we would like you to provide an estimate. Please tell us which category best describes the square footage of your home.

    1   Less than 600 square feet
    2   600 to 799 square feet
    3   800 to 999 square feet
    4   1,000 to 1,499 square feet
    5   1,500 to 1,999 square feet
    6   2,000 to 2,499 square feet
    7   2,500 to 2,999 square feet
    8   3,000 square feet or more

   -4   Don't know (*Select this option only if you are unable to provide a guess*)

NEXT	If 1 le SQFTRANGE le 8: SFSOURCE1, SFSOURCE2, SFSOURCE3, SFSOURCE4, SFSOURCE5, SFSOURCE6, SFSOURCE7, SFSOURCE7_other Else: BEDROOMS, NCOMBATH, NHAFBATH, OTHROOMS
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

SFSOURCE1, SFSOURCE2, SFSOURCE3, SFSOURCE4, SFSOURCE5, SFSOURCE6, SFSOURCE7, SFSOURCE7_other (New for 2020)	
ASK	If (0 le SQFTEST le 99,999) or (1 le SQFTRANGE le 8)

What sources of information did you use to determine your home's square footage? *Please select all that apply.*

    I remember from when I bought or leased my home [SFSOURCE1: 1 if selected, 0 if not]
    I checked an Internet site (for example: Zillow) [SFSOURCE2: 1 if selected, 0 if not]
    I checked my property tax documents [SFSOURCE3: 1 if selected, 0 if not]
    I checked my lease or mortgage documents [SFSOURCE4: 1 if selected, 0 if not]
    I asked someone else who knows [SFSOURCE5: 1 if selected, 0 if not]
    I made an estimate [SFSOURCE6: 1 if selected, 0 if not]
    Other ([WEB: specify below / PAPER: please specify]) [SFSOURCE7: 1 if selected, 0 if not; SFSOURCE7_other]

NEXT	SQFTINCB, SQFTINCA, SQFTINCG
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF SFSOURCE7=1 AND SFSOURCE7_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

SQFTINCB, SQFTINCA, SQFTINCG (Changed since 2015)	
ASK	If ((0 le SQFTEST le 99,999) OR (1 le SQFTRANGE le 8))

Are any of the following areas included in your answer of [FILL: <SQFTEST> square feet / SQFTRANGE]?

	Yes	No	Don't know
Basement [SQFTINCB]	1	0	-4
Attic [SQFTINCA]	1	0	-4
Attached garage [SQFTINCG]	1	0	-4

NEXT	BEDROOMS, NCOMBATH, NHAFBATH, OTHROOMS
MODE	Paper: Use alternate question text – Are any of the following areas included in the square footage you provided?
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't Know." <BUTTONS: Change Answer / Continue>

BEDROOMS, NCOMBATH, NHAFBATH, OTHROOMS	
ASK	All respondents

How many of the following types of rooms are in your home? [If BASEFIN=1 or ATTICFIN=1: Include rooms in finished basements and finished attics.] *If none, please enter "0."*

_____ Number of <u>bedrooms</u> [BEDROOMS]
_____ Number of <u>full bathrooms</u> (A full bathroom includes a sink with running water, a toilet, and a bath or shower.) [NCOMBATH]
_____ Number of <u>half bathrooms</u> (A half bathroom includes a sink with running water and either a toilet, a bath, or a shower.) [NHAFBATH]
_____ Number of <u>other rooms</u> (Include kitchens, laundry rooms, living or family rooms, home offices, etc. Do not include hallways, closets, or rooms you already counted above.) [OTHROOMS]

{BEDROOMS/NCOMBATH/NHAFBATH: WEB: ALLOW RANGE 0 – 9; PAPER: ONE DIGIT. OTHROOMS: WEB: ALLOW RANGE 0 – 99; PAPER: TWO DIGITS}

NEXT	WALLTYPE, WALLTYPE_other
MODE	Paper: Present "include" statement for all respondents.
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? If your home has none of these, please enter "0." <BUTTONS: Change Answer / Continue>

WALLTYPE, WALLTYPE_other (Changed since 2015)	
ASK	All respondents

What type of material is the outside of your home made of? *Select only one*. If more than one material is used, please select the one used the most.

    1   Brick
    2   Wood
    3   Siding (aluminum, fiber cement, vinyl, or steel)
    4   Stucco
    5   Shingle (composition)
    6   Stone
    7   Concrete block
    99   Other ([WEB: specify below / PAPER: please specify]) [WALLTYPE_other]

   -4   Don't know

NEXT	ROOFTYPE, ROOFTYPE_other
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue> SOFT PROMPT IF WALLTYPE=99 AND WALLTYPE_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

ROOFTYPE, ROOFTYPE_other	
ASK	All respondents

What type of material is your home's roof made of? *Select only one.* If more than one material is used, please select the one used the most.

    1   Ceramic or clay tiles
    2   Wood shingles/shakes
    3   Metal
    4   Slate or synthetic slate
    5   Shingles (composition or asphalt)
    6   Concrete tiles
  99   Other ([WEB: specify below / PAPER: please specify]) [ROOFTYPE_other]

  -4   Don't know

NEXT	HIGHCEIL
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue> SOFT PROMPT IF ROOFTYPE=99 AND ROOFTYPE_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

HIGHCEIL (Changed since 2015)	
ASK	All respondents

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 higher than 8 feet?

    1   Yes
    0   No

NEXT	DOOR1SUM
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

DOOR1SUM (Changed since 2015)	
ASK	All respondents

Thinking only about doors that open to the outside, how many <u>sliding glass doors</u> and <u>French doors</u> does your home have? Count each set of doors as one door. *If none, please enter "0."*

_____ Sliding glass and French doors

{WEB: ALLOW RANGE 0 – 9; PAPER: ONE DIGIT}

NEXT	WINDOWS
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If your home has none of these, please enter "0." <BUTTONS: Change Answer / Continue>

WINDOWS	
ASK	All respondents

About how many windows does your home have?

1   1 or 2 windows
2   3 to 5 windows
3   6 to 9 windows
4   10 to 15 windows
5   16 to 19 windows
6   20 to 29 windows
7   30 or more windows

-4   Don't know

NEXT	TYPEGLASS
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

TYPEGLASS	
ASK	All respondents

Not counting storm windows, which best describes the glass in most of the windows in your home?

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

  -4 Don't know

NEXT	ORIGWIN
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

ORIGWIN (New for 2020)	
ASK	All respondents

Are at least half of your home's windows the original windows that were installed when the home was built?

    1   Yes
    0   No

  -4 Don't know

NEXT	WINFRAME
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

WINFRAME (Changed since 2015)	
ASK	All respondents

What frame material is used for most of the windows in your home?

    1   Wood
    2   Metal (aluminum)
    3   Vinyl
    4   Composite
    5   Fiberglass

  -4   Don't know

NEXT	TREESHAD
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

TREESHAD (New for web/mail; used to be on CAPI)	
ASK	All respondents

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

    1   Yes
    0   No

NEXT	ADQINSUL
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

ADQINSUL	
ASK	All respondents

Which of the following best describes the insulation level of your home?

    1   Well insulated
    2   Adequately insulated
    3   Poorly insulated
    4   Not insulated

NEXT	DRAFTY
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

DRAFTY	
ASK	All respondents

How often do you or other members of your household find your home too drafty?

   1   All the time
   2   Most of the time
   3   Some of the time
   4   Never

NEXT	UGASHERE
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

UGASHERE	
ASK	All respondents

Is natural gas from underground pipes available in your neighborhood?

   1   Yes
   0   No

  -4   Don't know

NEXT	If TYPEHUQ in(1,2,3): SWIMPOOL If TYPEHUQ in(4,5): RECBATH
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

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

Does your home have its own swimming pool?

   1   Yes
   0   No

NEXT	If SWIMPOOL=1: MONPOOL Else: RECBATH
MODE	Paper: Ask of all respondents.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

MONPOOL	
ASK	If SWIMPOOL=1

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

_____ months

{WEB: ALLOW RANGE 0 – 12, PAPER: TWO DIGITS}

NEXT	If MONPOOL ge 1: POOLPUMP Else: RECBATH
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 0 to 12. <BUTTONS: Change Answer / Continue>

POOLPUMP (New for 2020)	
ASK	If MONPOOL ge 1

Does your swimming pool have a variable-speed pump, which uses less energy by adjusting the motor speed?

1 Yes
0 No

-4 Don't know

NEXT	FUELPOOL, FUELPOOL_other
MODE	Paper: Ask if SWIMPOOL=1.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

FUELPOOL, FUELPOOL_other (Changed since 2015)	
ASK	If MONPOOL ge 1

What fuel is used to heat the water in your swimming pool?
 	
   0   None, my swimming pool is not heated
   5   Electricity
   1   Natural gas from underground pipes
   2   Propane (bottled gas)
   3   Fuel oil
  99 Other ([WEB: specify below / PAPER: please specify]) [FUELPOOL_other]
 	
 -4 Don't know	

NEXT	RECBATH
MODE	Paper: Ask if SWIMPOOL=1.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue> SOFT PROMPT IF FUELPOOL=99 AND FUELPOOL_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

RECBATH	
ASK	All respondents

Does your home have its own hot tub, spa, or Jacuzzi, other than a bathtub?
 	
  1   Yes
  0 No	

NEXT	If RECBATH=1: MONTUB Else: APPLIANCES SECTION
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

MONTUB	
ASK	If RECBATH=1

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

_____ months

{WEB: ALLOW RANGE 0 – 12, PAPER: TWO DIGITS}

NEXT	If MONTUB ge 1: FUELTUB, FUELTUB_other Else: APPLIANCES SECTION
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 0 to 12. <BUTTONS: Change Answer / Continue>

FUELTUB, FUELTUB_other (Changed since 2015)	
ASK	If MONTUB ge 1

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

- 5   Electricity
- 1   Natural gas from underground pipes
- 2   Propane (bottled gas)
- 3   Fuel oil
- 99   Other ([WEB: specify below / PAPER: please specify]) [FUELTUB_other]

- -4   Don't know

NEXT	APPLIANCES SECTION
MODE	Paper: Ask if RECBATH=1.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue> SOFT PROMPT IF FUELTUB=99 AND FUELTUB_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

Appliances

WEB MOTIVATIONAL PROMPT #1: Thank you for your participation so far! The next questions are about appliances in your home and will provide valuable information for this study.

NUMFRIG (Changed since 2015)	
ASK	All respondents
How many refrigerators are plugged-in and turned on in your home? Include compact refrigerators and refrigerators in basements or garages, even if they are only used occasionally. *If none, please enter "0."* _____ refrigerators {WEB: ALLOW RANGE 0 – 9; PAPER: ONE DIGIT}	
NEXT	If NUMFRIG>0: SIZRFRI1 Else: WINECHILL
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If your home has none of these, please enter "0." <BUTTONS: Change Answer / Continue>

SIZRFRI1	
ASK	If NUMFRIG>0
What is the size of your [If NUMFRIG>1: <u>most used</u>] refrigerator? 1 Half-size or compact 2 Small (17.5 cubic feet or less) 3 Medium (17.6 to 22.5 cubic feet) 4 Large (22.6 to 29.5 cubic feet) 5 Very large (bigger than 29.5 cubic feet)	
NEXT	If SIZRFRI1=1: AGEFRI1 Else: TYPERFR1
MODE	Paper: Include "most used" in question text.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

TYPERFR1	
ASK	If SIZRFRI1>1 or missing

Which of the following best describes your [If NUMFRIG>1: <u>most used</u>] refrigerator?

   1   One door
   2   Two doors, freezer <u>next</u> to the refrigerator
   3   Two doors, freezer <u>above</u> the refrigerator
   4   Two doors, freezer <u>below</u> the refrigerator
   5   Three or more doors

NEXT	AGERFRI1
MODE	Paper: Include "most used" in question text.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

AGERFRI1	
ASK	If NUMFRIG>0

About how old is your [If NUMFRIG>1: <u>most used</u>] refrigerator? Your best estimate is fine.

   1   Less than 2 years old
   2   2 to 4 years old
   3   5 to 9 years old
   4   10 to 14 years old
   5   15 to 19 years old
   6   20 or more years old

  -4 Don't know

NEXT	ICE
MODE	Paper: Include "most used" in question text.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

ICE	
ASK	If NUMFRIG>0

Does your [If NUMFRIG>1: <u>most used]</u> refrigerator have through-the-door ice service?

    1   Yes
    0   No

NEXT	If NUMFRIG>1: SIZRFRI2 Else: WINECHILL
MODE	Paper: Include "most used" in question text.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

SIZRFRI2	
ASK	If NUMFRIG>1

What is the size of your <u>second most used</u> refrigerator?

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

NEXT	If SIZRFRI2=1: MONRFRI2 Else: TYPERFR2
MODE	Paper – Include checkpoint before the question: *If you have only one refrigerator → Go to #50*
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

TYPERFR2	
ASK	If SIZRFRI2>1 or missing

Which of the following best describes your <u>second most used</u> refrigerator?

    1   One door
    2   Two doors, freezer <u>next</u> to the refrigerator
    3   Two doors, freezer <u>above</u> the refrigerator
    4   Two doors, freezer <u>below</u> the refrigerator
    5   Three or more doors

NEXT	MONRFRI2
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

MONRFRI2 (New for web/mail; used to be on CAPI)	
ASK	If NUMFRIG>1

In the past year, how many months was your second most used refrigerator plugged in and turned on?

_____ months

{WEB: ALLOW RANGE 0 – 12; PAPER: TWO DIGITS}

NEXT	AGERFRI2
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 0 to 12. <BUTTONS: Change Answer / Continue> |

AGERFRI2	
ASK	If NUMFRIG>1

About how old is your second most used refrigerator? Your best estimate is fine.

1   Less than 2 years old
2   2 to 4 years old
3   5 to 9 years old
4   10 to 14 years old
5   15 to 19 years old
6   20 or more years old

-4 Don't know

NEXT	LOCRFRI2, LOCRFRI2_other
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

LOCRFRI2, LOCRFRI2_other (Changed since 2015)	
ASK	If NUMFRIG>1

Where is your <u>second most used</u> refrigerator located?

- 1 Basement
- 2 Garage
- 3 Outside
- 4 Main living area
- 99 Other ([WEB: specify below / PAPER: please specify]) [LOCRFRI2_other]

NEXT	WINECHILL
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF LOCRFRI2=99 AND LOCRFRI2_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

WINECHILL (New for 2020)	
ASK	All respondents

Does your home have a wine chiller?

- 1 Yes
- 0 No

NEXT	NUMFREEZ
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

NUMFREEZ	
ASK	All respondents

How many stand-alone freezers are plugged-in and turned on in your home? *If none, please enter "0."*

  _____ freezers

  {WEB: ALLOW RANGE 0 – 9; PAPER: ONE DIGIT}

NEXT	If NUMFREEZ>0: UPRTFRZR Else: RANGE, COOKTOP, OVEN
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If your home has none of these, please enter "0." <BUTTONS: Change Answer / Continue>

UPRTFRZR	
ASK	If NUMFREEZ>0

Which of the following best describes your [If NUMFREEZ>1: <u>most used</u>] freezer?

1 Upright
2 Chest

NEXT	SIZFREEZ
MODE	Paper: Include "most used" in question text.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

SIZFREEZ	
ASK	If NUMFREEZ>0

What is the size of your [If NUMFREEZ>1: <u>most used</u>] freezer?

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

NEXT	FREEZER
MODE	Paper: Include "most used" in question text.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

FREEZER (New for web/mail; used to be on CAPI)	
ASK	If NUMFREEZ>0

What type of defrosting does your [If NUMFREEZ>1: <u>most used</u>] freezer have?

1 Manual
2 Automatic

NEXT	AGEFRZR
MODE	Paper: Include "most used" in question text.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

AGEFRZR	
ASK	If NUMFREEZ>0

About how old is your [If NUMFREEZ>1: <u>most used</u>] freezer? Your best estimate is fine.

    1   Less than 2 years old
    2   2 to 4 years old
    3   5 to 9 years old
    4   10 to 14 years old
    5   15 to 19 years old
    6   20 or more years old

   -4 Don't know

NEXT	RANGE, COOKTOP, OVEN
MODE	Paper: Include "most used" in question text.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

RANGE, COOKTOP, OVEN (Changed since 2015)	
ASK	All respondents

Range   **Separate Cooktop**   **Wall Oven**

The next questions are about ranges, separate cooktops, and wall ovens. *Please refer to the images above when answering these questions.*

How many <u>ranges</u> are in your home? A range is a cooktop attached to an oven.

    _____ ranges [RANGE]

How many <u>separate cooktops</u> are in your home? Count the entire cooktop, not the number of burners. Do <u>not</u> include cooktops that are part of a range.

    _____ separate cooktops [COOKTOP]

How many <u>wall ovens</u> are in your home? Do <u>not</u> include wall ovens that are part of a range.

    _____ wall ovens [OVEN]

    {FOR ALL: WEB: ALLOW RANGE 0 – 9; PAPER: ONE DIGIT}

NEXT	If RANGE>0: RANGEFUEL Else if COOKTOP>0: COOKTOPFUEL Else if OVEN>0: OVENFUEL Else: MICRO
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? If your home has none of these, please enter "0." <BUTTONS: Change Answer / Continue> SOFT PROMPT IF COOKTOP>3: You said you have {COOKTOP} separate cooktops. Is that correct? Please be sure you are not counting each burner separately. <BUTTONS: Change Answer / Continue> SOFT PROMPT IF RANGE ge 1 AND COOKTOP ge 1: You said you have both a range and a separate cooktop. Is this correct? <BUTTONS: Change Answer / Continue>

RANGEFUEL (Changed since 2015)	
ASK	If RANGE>0

What fuel does your [If RANGE>1: <u>most used</u>] range use?

- 5 Electricity
- 1 Natural gas from underground pipes
- 2 Propane (bottled gas)
- 13 Electricity and gas (dual-fuel range)

NEXT	If RANGEFUEL=5: RANGEINDT Else: RCOOKUSE
MODE	Paper: Include "most used" in question text. Include checkpoint before the question: *If your home does <u>not</u> have a <u>range</u> → Go to #63.* Include skip information before the question: *(If your home has a range)*
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

RANGEINDT (New for 2020)	
ASK	If RANGEFUEL=5

An induction cooktop is a rare type of cooktop that requires specialized magnetic cookware. Does your range have an induction cooktop?

- 1 Yes
- 0 No

NEXT	RCOOKUSE
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

RCOOKUSE (Changed since 2015)	
ASK	If RANGE>0

About how many times is the <u>cooktop part of your</u> [If RANGE>1: <u>most used</u>] range used per week? *If not used, please enter "0."*

_____ times per week

{WEB: ALLOW RANGE 0 – 99; PAPER: TWO DIGITS}

NEXT	ROVENUSE
MODE	Paper: Include "most used" in question text.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

ROVENUSE (Changed since 2015)

ASK	If RANGE>0

About how many times is the <u>oven part of your [If RANGE>1: most used] range</u> used per week? *If not used, please enter "0."*

_____ times per week

{WEB: ALLOW RANGE 0 – 99; PAPER: TWO DIGITS}

NEXT	If COOKTOP>0: COOKTOPFUEL Else if OVEN>0: OVENFUEL Else: MICRO
MODE	Paper: Include "most used" in question text.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

COOKTOPFUEL

ASK	If COOKTOP>0

What fuel does your [If COOKTOP>1: <u>most used</u>] <u>separate cooktop</u> use?

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

NEXT	If COOKTOPFUEL=5: COOKTOPINDT Else: COOKTOPUSE
MODE	Paper: Include "most used" in question text. Include checkpoint before the question: *If your home does <u>not</u> have a <u>separate cooktop</u> → Go to #66.* Include skip information before the question: *(If your home has a separate cooktop)*
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

COOKTOPINDT (New for 2020)

ASK	If COOKTOPFUEL=5

An induction cooktop is a rare type of cooktop that requires specialized magnetic cookware. Is your separate cooktop an induction cooktop?

1   Yes
0   No

NEXT	COOKTOPUSE
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

COOKTOPUSE	
ASK	If COOKTOP>0

About how many times is your [If COOKTOP>1: most used] separate cooktop used per week? *If not used, please enter "0."*

_____ times per week

{WEB: ALLOW RANGE 0 – 99; PAPER: TWO DIGITS}

NEXT	If OVEN>0: OVENFUEL Else: MICRO
MODE	Paper: Include "most used" in question text.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

OVENFUEL (Changed since 2015)	
ASK	If OVEN>0

What fuel does your wall oven use?

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

NEXT	OVENUSE
MODE	Include checkpoint before the question: *If your home does not have a wall oven → Go to #68.* Include skip information before the question: *(If your home has a wall oven)*
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

OVENUSE (Changed since 2015)	
ASK	If OVEN>0

About how many times is your wall oven used per week? *If not used, please enter "0."*

_____ times per week

{WEB: ALLOW RANGE 0 – 99; PAPER: TWO DIGITS}

NEXT	MICRO
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

MICRO	
ASK	All respondents

How many <u>microwaves</u> are in your home?
 	
     _____ microwaves
 	
     {WEB: ALLOW RANGE 0 – 9; PAPER: ONE DIGIT}	

NEXT	If MICRO>0: AMTMICRO Else: OUTGRILLFUEL
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If your home has none of these, please enter "0." <BUTTONS: Change Answer / Continue>

AMTMICRO	
ASK	If MICRO>0

About how many times is your microwave used per week? *If not used, please enter "0."*
 	
     _____ times per week
 	
     {WEB: ALLOW RANGE 0 – 99; PAPER: TWO DIGITS}	

NEXT	OUTGRILLFUEL
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

OUTGRILLFUEL	
ASK	All respondents

Does your household use an outdoor grill?
 	
    1   Yes, natural gas grill
    2   Yes, propane grill
  23 Yes, charcoal grill
    0 No	

NEXT	NUMMEAL
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

NUMMEAL	
ASK	All respondents

Which of the categories below best describes how often hot food is cooked in your home?

    1   Three or more times a day
    2   Two times a day
    3   Once a day
    4   A few times each week
    5   About once a week
    6   Less than once a week
    0   Never

NEXT	USECOFFEE
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

USECOFFEE (New for 2020)	
ASK	All respondents

How frequently is an electric coffee maker used in your home? Include drip coffee makers, single-serve machines, and espresso machines.

    1   Every day or almost every day
    2   A few times each week
    3   Only occasionally
    0   Never

NEXT	TOAST, TOASTOVN, CROCKPOT, PRSSCOOK, RICECOOK, BLENDER, APPOTHER, APPOTHER_other
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

TOAST, TOASTOVN, CROCKPOT, PRSSCOOK, RICECOOK, BLENDER, APPOTHER, APPOTHER_other (Changed since 2015)	
ASK	All respondents

Are any of the following small kitchen appliances <u>used at least once a week</u> in your home?

	Yes	No
Toaster [TOAST]	1	0
Toaster oven [TOASTOVN]	1	0
Crock-Pot or slow cooker [CROCKPOT]	1	0
Instant Pot or electric pressure cooker [PRSSCOOK]	1	0
Rice cooker [RICECOOK]	1	0
Blender or juicer [BLENDER]	1	0
Other ([WEB: specify below / PAPER: please specify]) [APPOTHER, APPOTHER_other]	1	0

NEXT	DISHWASH
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF APPOTHER=1 AND APPOTHER_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

DISHWASH	
ASK	All respondents

Does your home have a dishwasher?

1   Yes
0   No

NEXT	If DISHWASH=1: DWASHUSE Else: CWASHER
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

DWASHUSE	
ASK	If DISHWASH=1

About how many times is your dishwasher used per week? *If not used, please enter "0."*

_____ times per week

{WEB: ALLOW RANGE 0 – 99; PAPER: TWO DIGITS}

NEXT	DWCYCLE
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

DWCYCLE (Changed since 2015)	
ASK	If DISHWASH=1

Which cycle is used <u>most of the time</u> when running your dishwasher?

1 Normal cycle <u>without</u> heated dry
2 Normal cycle <u>with</u> heated dry
3 Heavy or "pots and pans" cycle
4 Light or delicate cycle
5 Energy saver cycle
6 Quick cycle

-4 Don't know

-3 Dishwasher not used

NEXT	AGEDW
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

AGEDW	
ASK	If DISHWASH=1

About how old is your dishwasher? Your best estimate is fine.

   1   Less than 2 years old
   2   2 to 4 years old
   3   5 to 9 years old
   4   10 to 14 years old
   5   15 to 19 years old
   6   20 or more years old

 -4   Don't know

NEXT	CWASHER
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

CWASHER	
ASK	All respondents

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

   1   Yes
   0   No

NEXT	If CWASHER=1: TOPFRONT Else: DRYER
MODE	Paper: Display modified second sentence for all respondents: "Do not include community clothes washers that are located in the basement or laundry room of an apartment building."
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

TOPFRONT	
ASK	If CWASHER=1

Is your clothes washer top loading or front loading?

   1   Top loading
   2   Front loading

NEXT	WASHLOAD
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

WASHLOAD	
ASK	If CWASHER=1

About how many times is your clothes washer used per week? *If not used, please enter "0."*

_____ times per week

{WEB: ALLOW RANGE 0 – 99; PAPER: TWO DIGITS}

NEXT	WASHTEMP
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

WASHTEMP	
ASK	If CWASHER=1

What water temperature setting is typically used for the <u>wash</u> cycle of your clothes washer?

1   Hot
2   Warm
3   Cold

NEXT	AGECWASH
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

AGECWASH	
ASK	If CWASHER=1

About how old is your clothes washer? Your best estimate is fine.

1   Less than 2 years old
2   2 to 4 years old
3   5 to 9 years old
4   10 to 14 years old
5   15 to 19 years old
6   20 or more years old

-4   Don't know

NEXT	DRYER
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

DRYER	
ASK	All respondents

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

    1   Yes
    0   No

NEXT	If DRYER=1: DRYRFUEL Else: ELECTRONICS SECTION
MODE	Paper: Display modified second sentence for all respondents: "Do not include community clothes dryers that are located in the basement or laundry room of an apartment building."
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

DRYRFUEL	
ASK	If DRYER=1

What fuel does your clothes dryer use?

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

   -4   Don't know

NEXT	DRYRUSE
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

DRYRUSE	
ASK	If DRYER=1

About how many times is your clothes dryer used per week? *If not used, please enter "0."*

    _____ times per week

    {WEB: ALLOW RANGE 0 – 99; PAPER: TWO DIGITS}

NEXT	AGECDRYER
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

AGECDRYER	
ASK	If DRYER=1

About how old is your clothes dryer? Your best estimate is fine.

 1 Less than 2 years old
 2 2 to 4 years old
 3 5 to 9 years old
 4 10 to 14 years old
 5 15 to 19 years old
 6 20 or more years old

 -4 Don't know

NEXT	ELECTRONICS SECTION
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

Electronics

TVCOLOR	
ASK	All respondents

How many televisions are used in your home? *If none, please enter "0."*
 	
    _____ televisions
 	
    {WEB: ALLOW RANGE 0 – 99; PAPER: TWO DIGITS}	

NEXT	If TVCOLOR>0 : TVSIZE1 Else: DESKTOP, NUMLAPTOP, NUMTABLET, ELPERIPH, NUMSMPHONE, CELLPHONE
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If your home has none of these, please enter "0." <BUTTONS: Change Answer / Continue>

TVSIZE1	
ASK	If TVCOLOR>0

What is the size of your [If TVCOLOR>1: <u>most used</u>] television?
 	
    1   27 inches or less
    2   28 to 39 inches
    3   40 to 59 inches
    4 60 inches or more	

NEXT	TVTYPE1
MODE	Paper: Include "most used" in question text.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

TVTYPE1 (Changed since 2015)	
ASK	If TVCOLOR>0

What type of display does your [If TVCOLOR>1: <u>most used</u>] television have?

    1   LED or OLED
    2   LCD
    3   Plasma
    4   Projection
    5   Tube (non-flat screen)

   -4   Don't know

NEXT	TVUSE1, TVUSE1_other
MODE	Paper: Include "most used" in question text.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

TVUSE1, TVUSE1_other (New for 2020)	
ASK	If TVCOLOR>0

What is the main use of your [If TVCOLOR>1: <u>most used</u>] television?

    1   Watching live programming
    2   Watching recorded or on-demand programming from a set-top box
    3   Streaming content via <u>built-in smart TV apps</u>
    4   Streaming content via <u>a separate streaming device connected to the television</u>
    5   Playing video games
   99 Other ([WEB: specify below / PAPER: please specify]) [TVUSE1_other]

NEXT	TVONWD1, TVONWD1LT1
MODE	Paper: Include "most used" in question text.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF TVUSE1=99 AND TVUSE1_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

TVONWD1, TVONWD1LT1 (Changed since 2015)

ASK	If TVCOLOR>0

Thinking about your [If TVCOLOR>1: <u>most used</u>] television's use on <u>weekdays</u>, how many hours is it turned on each day? Include the time it is on even if no one is actually watching it.

    _____ hours per day

    {WEB: ALLOW RANGE 0 – 24; PAPER: TWO DIGITS}

    Less than one hour [TVONWD1LT1: 1 if selected, 0 if not]

NEXT	TVONWE1, TVONWE1LT1
MODE	Paper: Include "most used" in question text.
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 0 to 24. <BUTTONS: Change Answer / Continue>

TVONWE1, TVONWE1LT1 (Changed since 2015)

ASK	If TVCOLOR>0

Thinking about your [If TVCOLOR>1: <u>most used</u>] television's use on <u>weekends</u>, how many hours is it turned on each day? Include the time it is on even if no one is actually watching it.

    _____ hours per day

    {WEB: ALLOW RANGE 0 – 24; PAPER: TWO DIGITS}

    Less than one hour [TVONWE1LT1: 1 if selected, 0 if not]

NEXT	If TVCOLOR>1: TVSIZE2 Else: CABLESAT, COMBODVR, SEPDVR, PLAYSTA, DVD, VCR, INTSTREAM, TVAUDIOSYS
MODE	Paper: Include "most used" in question text.
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 0 to 24. <BUTTONS: Change Answer / Continue>

TVSIZE2	
ASK	If TVCOLOR>1

What is the size of your <u>second most used</u> television?

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

NEXT	TVTYPE2
MODE	Paper: Include checkpoint before the question: *If you have only one television → Go to #103*
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

TVTYPE2 (Changed since 2015)	
ASK	If TVCOLOR>1

What type of display does your <u>second most used</u> television have?

   1   LED or OLED
   2   LCD
   3   Plasma
   4   Projection
   5   Tube (non-flat screen)

   -4   Don't know

NEXT	TVUSE2, TVUSE2_other
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

TVUSE2, TVUSE2_other (New for 2020)	
ASK	If TVCOLOR>1

What is the main use of your <u>second most used</u> television?

    1   Watching live programming
    2   Watching recorded or on-demand programming from a set-top box
    3   Streaming content via <u>built-in smart TV apps</u>
    4   Streaming content via <u>a separate streaming device connected to the television</u>
    5   Playing video games
  99   Other ([WEB: specify below / PAPER: please specify]) [TVUSE2_other]

NEXT	TVONWD2, TVONWD2LT1
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF TVUSE2=99 AND TVUSE2_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

TVONWD2, TVONWD2LT1 (Changed since 2015)	
ASK	If TVCOLOR>1

Thinking about your <u>second most used</u> television's use on <u>weekdays</u>, how many hours is it turned on each day? Include the time it is on even if no one is actually watching it.

    _____ hours per day

    {WEB: ALLOW RANGE 0 – 24; PAPER: TWO DIGITS}

    Less than one hour [TVONWD2LT1: 1 if selected, 0 if not]

NEXT	TVONWE2, TVONWE2LT1
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 0 to 24. <BUTTONS: Change Answer / Continue>

TVONWE2, TVONWE2LT1 (Changed since 2015)	
ASK	If TVCOLOR>1

Thinking about your <u>second most used</u> television's use on <u>weekends</u>, how many hours is it turned on each day? Include the time it is on even if no one is actually watching it.

_____ hours per day

{WEB: ALLOW RANGE 0 – 24; PAPER: TWO DIGITS}

Less than one hour [TVONWE2LT1: 1 if selected, 0 if not]

NEXT	If TVCOLOR>2: TVSIZE3 Else: CABLESAT, COMBODVR, SEPDVR, INTSTREAM, PLAYSTA, DVD, VCR, TVAUDIOSYS
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 0 to 24. <BUTTONS: Change Answer / Continue>

TVSIZE3 (New for web/mail; used to be on CAPI)	
ASK	If TVCOLOR>2

What is the size of your <u>third most used</u> television?

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

NEXT	TVTYPE3
MODE	Paper: Include checkpoint before the question: *If you have only two televisions → Go to #103.*
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

TVTYPE3 (New for web/mail; used to be on CAPI)	
ASK	If TVCOLOR>2

What type of display does your <u>third most used</u> television have?

    1   LED or OLED
    2   LCD
    3   Plasma
    4   Projection
    5   Tube (non-flat screen)

  -4   Don't know

NEXT	TVUSE3, TVUSE3_other
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

TVUSE3, TVUSE3_other (New for 2020)	
ASK	If TVCOLOR>2

What is the main use of your <u>third most used</u> television?

    1   Watching live programming
    2   Watching recorded or on-demand programming from a set-top box
    3   Streaming content via <u>built-in smart TV apps</u>
    4   Streaming content via <u>a separate streaming device connected to the television</u>
    5   Playing video games
  99   Other ([WEB: specify below / PAPER: please specify]) [TVUSE3_other]

NEXT	TVONWD3, TVONWD3LT1
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF TVUSE3=99 AND TVUSE3_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

TVONWD3, TVONWD3LT1 (New for web/mail; used to be on CAPI)	
ASK	If TVCOLOR>2

Thinking about your third most used television's use on weekdays, how many hours is it turned on each day? Include the time it is on even if no one is actually watching it.

_____ hours per day

{WEB: ALLOW RANGE 0 – 24; PAPER: TWO DIGITS}

Less than one hour [TVONWD3LT1: 1 if selected, 0 if not]

NEXT	TVONWE3, TVONWE3LT1
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 0 to 24. <BUTTONS: Change Answer / Continue>

TVONWE3, TVONWE3LT1 (New for web/mail; used to be on CAPI)	
ASK	If TVCOLOR>2

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

_____ hours per day

{WEB: ALLOW RANGE 0 – 24; PAPER: TWO DIGITS}

Less than one hour [TVONWE3LT1: 1 if selected, 0 if not]

NEXT	CABLESAT, COMBODVR, SEPDVR, INTSTREAM, PLAYSTA, DVD, VCR, TVAUDIOSYS
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 0 to 24. <BUTTONS: Change Answer / Continue>

CABLESAT, COMBODVR, SEPDVR, INTSTREAM, PLAYSTA, DVD, VCR, TVAUDIOSYS (Changed since 2015)	
ASK	If TVCOLOR>0
How many of each of the following are used in your home? *If none, please enter "0."* ____ Number of cable or satellite boxes <u>without</u> DVR [CABLESAT] ____ Number of cable or satellite boxes <u>with</u> DVR [COMBODVR] ____ Number of separate DVRs (for example: TIVO) [SEPDVR] ____ Number of Internet streaming devices (for example: Apple TV, Google Chromecast, Amazon Fire TV, or Roku) [INTSTREAM] ____ Number of video game consoles [PLAYSTA] ____ Number of DVD or Blu-ray players [DVD] ____ Number of VCRs [VCR] ____ Number of home theater or audio systems [TVAUDIOSYS] {FOR ALL: WEB: ALLOW RANGE 0 – 99; PAPER: TWO DIGITS}	
NEXT	DESKTOP, NUMLAPTOP, NUMTABLET, ELPERIPH, NUMSMPHONE, CELLPHONE
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? If your home has none of these, please enter "0." <BUTTONS: Change Answer / Continue>

DESKTOP, NUMLAPTOP, NUMTABLET, ELPERIPH, NUMSMPHONE, CELLPHONE	
ASK	All respondents
How many of each of the following are used in your home? Include equipment provided by an employer or school for use at home. *If none, please enter "0."* ____ Number of desktop computers [DESKTOP] ____ Number of laptop computers [NUMLAPTOP] ____ Number of tablet computers or e-readers (for example: iPad or Kindle) [NUMTABLET] ____ Number of printers, scanners, fax machines, or copiers [ELPERIPH] ____ Number of "smart" phones (for example: iPhone or Android) [NUMSMPHONE] ____ Number of other cellular phones [CELLPHONE] {FOR ALL: WEB: ALLOW RANGE 0 – 99; PAPER: TWO DIGITS}	
NEXT	TELLWORK
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? If your home has none of these, please enter "0." <BUTTONS: Change Answer / Continue>

TELLWORK (New for web/mail; used to be on CAPI)	
ASK	All respondents

Does anyone in your household telework or work from home? Include only work being done for pay.
 	
  1   Yes
  0 No	

NEXT	If TELLWORK=1: TELLDAYS Else: ONLNEDUC
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

TELLDAYS (New for 2020)	
ASK	If TELLWORK=1

In the past week, on how many days did at least one person in your household telework or work from home?
 	
     _____ days
 	
    {WEB: ALLOW RANGE 0 – 7; PAPER: ONE DIGIT}	

NEXT	TLDESKTOP, TLLAPTOP, TLTABLET, TLMONITOR, TLOTHER, TLOTHER_other
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 0 to 7. <BUTTONS: Change Answer / Continue>

TLDESKTOP, TLLAPTOP, TLTABLET, TLMONITOR, TLOTHER, TLOTHER_other (New for 2020)	
ASK	If TELLWORK=1

In your home, which of the following types of computer equipment are used for teleworking or working from home?

	Yes	No
Desktop computer [TLDESKTOP]	1	0
Laptop computer [TLLAPTOP]	1	0
Tablet [TLTABLET]	1	0
External monitor [TLMONITOR]	1	0
Other ([WEB: specify below / PAPER: please specify]) [TLOTHER, TLOTHER_other]	1	0

NEXT	ONLNEDUC
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

SOFT PROMPT IF TLOTHER=1 AND TLOTHER_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue> |

ONLNEDUC (New for 2020)	
ASK	All respondents

Is anyone in your household receiving online K-12 distance learning or enrolled in online college courses?

1 Yes
0 No

NEXT	INTERNET
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

INTERNET (Changed since 2015)	
ASK	All respondents

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

    1   Yes, by paying a cell phone company or Internet service provider
    2   Yes, without paying a cell phone company or Internet service provider
    0   No access to the Internet

NEXT	If INTERNET=1: INTYPECELL, INTYPEBROAD, INTYPEOTH If INTERNET=2: SMARTSPK Else: SPACE HEATING SECTION
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

INTYPECELL, INTYPEBROAD, INTYPEOTH (New for 2020)	
ASK	If INTERNET=1

Do you or any member of your household have access to the Internet using a…

	Yes	No
Cellular data plan for a smartphone or other mobile device? [INTYPECELL]	1	0
Broadband (high speed) Internet service such as cable, fiber optic, or DSL service installed in your home? [INTYPEBROAD]	1	0
Satellite, dial-up, or some other Internet service installed in your home? [INTYPEOTH]	1	0

NEXT	SMARTSPK
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

SMARTSPK (New for 2020)	
ASK	If INTERNET>0

How many "smart" or Internet-connected speakers (such as an Amazon Echo, Google Home, or Apple HomePod) are used in your home?

_____ smart speakers

{WEB: ALLOW RANGE 0 – 9, PAPER: ONE DIGIT}

NEXT	If SMARTSPK>0: SSLIGHT, SSTEMP, SSSECURE, SSTV, SSOTHER, SSOTHER_other Else: SPACE HEATING SECTION
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If your home has none of these, please enter "0." <BUTTONS: Change Answer / Continue>

SSLIGHT, SSTEMP, SSSECURE, SSTV, SSOTHER, SSOTHER_other (New for 2020)	
ASK	If SMARTSPK>0

Does your household control any of the following using your smart speaker(s)?

	Yes	No
Lighting [SSLIGHT]	1	0
Temperature [SSTEMP]	1	0
Security system, cameras, or locks [SSSECURE]	1	0
Television, set-top box, or streaming device [SSTV]	1	0
Other ([WEB: specify below / PAPER: please specify]) [SSOTHER, SSOTHER_other]	1	0

NEXT	SPACE HEATING SECTION
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF SSOTHER=1 AND SSOTHER_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

Space Heating

WEB MOTIVATIONAL PROMPT #2: Thanks for your participation so far! You are about halfway done. Your responses are very important to the study.

The next questions are about heating and cooling equipment in your home.

HEATHOME	
ASK	All respondents

Is your home heated during the winter?
 	
    1   Yes
    2   No, I do not have any heating equipment
    3 No, I have heating equipment but do not use it	

NEXT	If HEATHOME=1 and TYPEHUQ in(4,5): HEATAPT If HEATHOME=1 and TYPEHUQ in(1,2,3): EQUIPM, EQUIPM_other If HEATHOME in(2,3): WHYNOHEAT, WHYNOHEAT_other Else: HUMIDTYPE
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

WHYNOHEAT, WHYNOHEAT_other (New for 2020)	
ASK	If HEATHOME in(2,3)

Which of the following best explains why your home is not heated during the winter?
 	
    1   I live in a warm area where heating isn't needed
    2   I recently moved into this home and have not been here during the winter yet
    3   My heating equipment is broken or I can't afford to heat my home
    4   I do not live in this home during the winter
    99 Other ([WEB: specify below / PAPER: please specify]) [WHYNOHEAT_other]	

NEXT	HUMIDTYPE
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF WHYNOHEAT=99 AND WHYNOHEAT_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

HEATAPT (New for 2020)	
ASK	If HEATHOME=1 and TYPEHUQ in(4,5)

Is your apartment primarily heated by equipment that serves multiple units in your building, such as a furnace or boiler located in a basement or mechanical room?

    1   Yes
    0   No

   -4 Don't know

NEXT	EQUIPM, EQUIPM_other
MODE	Paper: Include checkpoint before the question: *If your home is <u>not</u> heated during the winter → Go to #131.* Include skip information before the question: *(If you live in an apartment)*
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

EQUIPM, EQUIPM_other (Changed since 2015)	
ASK	If HEATHOME=1

What is the <u>main</u> type of heating equipment used to provide heat for your home?

- 3   Central furnace
- 2   Steam or hot water system with radiators or pipes
- 4   Central heat pump
- 13 Ductless heat pump, also known as a "mini-split"
- 5   Built-in electric units installed in walls, ceilings, baseboards, or floors
- 6   Built-in room heater burning gas or oil
- 8   Wood or pellet stove
- 10 Portable electric heaters
- 99 Other ([WEB: specify below / PAPER: please specify]) [EQUIPM_other]

-4 Don't know

NOTE: Graphics will accompany these response options. On web, they are formatted like this:

NEXT	FUELHEAT, FUELHEAT_other
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

	SOFT PROMPT IF EQUIPM=99 AND EQUIPM_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

FUELHEAT, FUELHEAT_other

ASK	If HEATHOME=1

What is the fuel used by your home's <u>main heating equipment</u>?

- 5 Electricity
- 1 Natural gas from underground pipes
- 2 Propane (bottled gas)
- 3 Fuel oil
- 7 Wood or pellets
- 99 Other ([WEB: specify below / PAPER: please specify]) [FUELHEAT_other]

- -4 Don't know

NEXT	EQUIPAGE
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue> SOFT PROMPT IF FUELHEAT=99 AND FUELHEAT_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

EQUIPAGE

ASK	If HEATHOME=1

About how old is your home's <u>main heating equipment</u>? Your best estimate is fine.

- 1 Less than 2 years old
- 2 2 to 4 years old
- 3 5 to 9 years old
- 4 10 to 14 years old
- 5 15 to 19 years old
- 6 20 or more years old

- -4 Don't know

NEXT	If EQUIPM=4: GEOHP Else: EQUIPAUXTYPE, EQUIPAUXTYPE_other
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

GEOHP (New for 2020)	
ASK	If EQUIPM=4

Does your home have a geothermal/ground source heat pump?

   1   Yes
   0   No

  -4 Don't know

NEXT	BACKUPHP
MODE	Paper: Include checkpoint before the question: *Answer #s 119 and 120 if your home's main heating equipment is a central heat pump. Otherwise, go to #121.* Include skip information before the question: *(If your main heating equipment is a central heat pump)*
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

BACKUPHP (New for 2020)	
ASK	If EQUIPM=4

Many heat pumps have a backup or emergency heating method that can be used when it is very cold. What type of backup or emergency heating does your heat pump use?

   1   Electric backup
   2   Natural gas backup (dual-fuel system)
   0   No backup/none used

  -4 Don't know

NEXT	EQUIPAUXTYPE, EQUIPAUXTYPE_other
MODE	Paper: Include skip information before the question: *(If your main heating equipment is a central heat pump)*
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

EQUIPAUXTYPE, EQUIPAUXTYPE_other (Changed since 2015)	
ASK	If HEATHOME=1

In addition to your main heating equipment, which of the following is used as a <u>second source</u> for heating your home? If more than one, select the type most frequently used.

    0   No other equipment used
  10   Portable electric heaters
    9   Fireplace
    8   Wood or pellet stove
    5   Built-in electric units installed in walls, ceilings, baseboards, or floors
  13   Ductless heat pump, also known as a "mini-split"
  99   Other ([WEB: specify below / PAPER: please specify]) [EQUIPAUXTYPE_other]

NEXT	If EQUIPAUXTYPE>0: FUELAUX, FUELAUX_other Else if FUELHEAT=7: WOODTYPE Else if EQUIPM=10: NUMPORTEL Else if EQUIPM=13: NUMDLHP Else if TYPEHUQ in(2,3): BASEHEAT, ATTCHEAT, GARGHEAT Else: HUMIDTYPE
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF EQUIPAUXTYPE=99 AND EQUIPAUXTYPE_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

FUELAUX, FUELAUX_other (New for web/mail; used to be on CAPI)	
ASK	If EQUIPAUXTYPE>0

What is the fuel used by your home's <u>secondary heating equipment</u>?

    5   Electricity
    1   Natural gas from underground pipes
    2   Propane (bottled gas)
    3   Fuel oil
    7   Wood or pellets
   99   Other ([WEB: specify below / PAPER: please specify]) [FUELAUX_other]

   -4   Don't know

NEXT	USEEQUIPAUX
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue> SOFT PROMPT IF FUELAUX=99 AND FUELAUX_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

USEEQUIPAUX (New for 2020)	
ASK	If EQUIPAUXTYPE>0

Which of the following best describes how your household uses the <u>secondary heating equipment</u> during the heating season?

    1   Use all or almost all of the time
    2   Use at least once per week
    3   Use a few times per month
    4   Use only when it is very cold
    5   Use only in rare situations, such as when a guest is visiting

NEXT	If FUELHEAT=7 or FUELAUX=7: WOODTYPE Else if EQUIPM=10 OR EQUIPAUXTYPE=10: NUMPORTEL Else if EQUIPAUXTYPE=9: NUMFIREPLC Else if EQUIPM=13 OR EQUIPAUXTYPE=13: NUMDLHP Else if TYPEHUQ in(2,3): BASEHEAT, ATTCHEAT, GARGHEAT Else: HUMIDTYPE
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

WOODTYPE (New for web/mail; used to be on CAPI)	
ASK	If FUELHEAT=7 or FUELAUX=7

You reported that your home is heated with wood or pellets. Which of the following does your household use?

    1   Wood logs or split wood
    2   Pellets

NEXT	If WOODTYPE=1: NUMCORDS, NUMCORDS_other If WOODTYPE=2: PELLETAMT, PELLETUNITS Else if EQUIPM=10 OR EQUIPAUXTYPE=10: NUMPORTEL Else if EQUIPAUXTYPE=9: NUMFIREPLC Else if EQUIPM=13 OR EQUIPAUXTYPE=13: NUMDLHP Else if TYPEHUQ in(2,3): BASEHEAT, ATTCHEAT, GARGHEAT Else: HUMIDTYPE
MODE	Paper: Include checkpoint before the question: *Answer #s 124-126 if your home is heated with wood or pellets. Otherwise, go to #127.* Instead of first sentence, include skip information before the question: *(If your home is heated with wood or pellets)*
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

NUMCORDS, NUMCORDS_other (Changed since 2015)	
ASK	If WOODTYPE=1

In the past year, about how many cords of wood did your household use?

1 cord
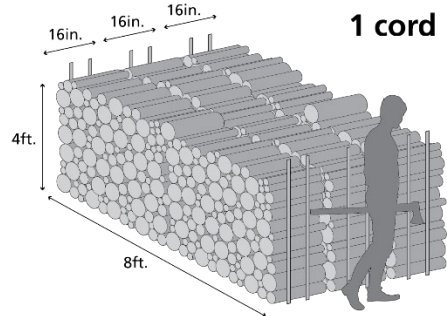
1   Half a cord or less
2   About one cord
3   About two cords
4   Three to five cords
5   More than five cords (please specify) _____ cords [NUMCORDS_other]

{WEB: ALLOW RANGE 5 – 99, PAPER: TWO DIGITS}

NEXT	If EQUIPM=10 or EQUIPAUXTYPE=10: NUMPORTEL Else if EQUIPAUXTYPE=9: NUMFIREPLC Else if EQUIPM=13 OR EQUIPAUXTYPE=13: NUMDLHP Else if TYPEHUQ in(2,3): BASEHEAT, ATTCHEAT, GARGHEAT Else: HUMIDTYPE
MODE	Paper: Include skip information before the question: *(If you use wood logs or split wood)*
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 5 to 99. <BUTTONS: Change Answer / Continue>

PELLETAMT, PELLETUNITS (Changed since 2015)	
ASK	If WOODTYPE=2

In the past year, about how many pellets did your household use?

Wood pellets

_____ [PELLETAMT]   Select unit: [ ] 40-pound bags [PELLETUNITS=1]
[ ] tons [PELLETUNITS=2]

{WEB: ALLOW RANGE 0 – 999, PAPER: THREE DIGITS}

NEXT	If EQUIPM=10 or EQUIPAUXTYPE=10: NUMPORTEL Else if EQUIPAUXTYPE=9: NUMFIREPLC Else if EQUIPM=13 OR EQUIPAUXTYPE=13: NUMDLHP Else if TYPEHUQ in(2,3): BASEHEAT, ATTCHEAT, GARGHEAT Else: HUMIDTYPE
MODE	Paper: Include skip information before the question: *(If you use pellets)*
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

NUMPORTEL (New for 2020)	
ASK	If EQUIPM=10 or EQUIPAUXTYPE=10

How many portable electric heaters are used in your home?

_____ portable electric heaters

{WEB: ALLOW RANGE 1 – 9; PAPER: ONE DIGIT}

NEXT	If EQUIPAUXTYPE=9: NUMFIREPLC Else if EQUIPM=13 OR EQUIPAUXTYPE=13: NUMDLHP Else if TYPEHUQ in(2,3): BASEHEAT, ATTCHEAT, GARGHEAT Else: HUMIDTYPE
MODE	Paper: Ask all respondents.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 1 to 9. <BUTTONS: Change Answer / Continue>

NUMFIREPLC (New for 2020)	
ASK	If EQUIPAUXTYPE=9

How many fireplaces are used in your home?

_____ fireplaces

{WEB: ALLOW RANGE 1 – 9; PAPER: ONE DIGIT}

NEXT	If EQUIPM=13: NUMDLHP Else if TYPEHUQ in(2,3): BASEHEAT, ATTCHEAT, GARGHEAT Else: HUMIDTYPE
MODE	Paper: Ask all respondents.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 1 to 9. <BUTTONS: Change Answer / Continue>

NUMDLHP (New for 2020)	
ASK	If EQUIPM=13 OR EQUIPAUXTYPE=13

How many ductless heat pump indoor units or "heads" are used to heat your home?

_____ indoor units

{WEB: ALLOW RANGE 1 – 9; PAPER: ONE DIGIT}

NEXT	If TYPEHUQ in(2,3): BASEHEAT, ATTCHEAT, GARGHEAT Else: HUMIDTYPE
MODE	Paper: Include checkpoint before the question: *Continue to #129 if your home is heated with a ductless heat pump or "mini split." Otherwise, go to #130.* Include skip information before the question: *(If your home is heated with a ductless heat pump or "mini split")*
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 1 to 9. <BUTTONS: Change Answer / Continue>

BASEHEAT, ATTCHEAT, GARGHEAT (Changed since 2015)	
ASK	If HEATHOME=1 and TYPEHUQ in(2,3)

Are the following spaces in your home heated?

Basement [BASEHEAT]
    1   Yes
    0   No
  -3   Not applicable (my home does not have this space)
Attic [ATTCHEAT)]
    1   Yes
    0   No
  -3   Not applicable (my home does not have this space)
Attached garage [GARGHEAT]
    1   Yes
    0   No
  -3   Not applicable (my home does not have this space)

NEXT	HUMIDTYPE
MODE	Paper: Ask all respondents.
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

HUMIDTYPE (New for 2020)	
ASK	All respondents

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

    1   Yes, a <u>portable</u> humidifier
    2   Yes, a <u>whole-home</u> humidifier
    0   No

NEXT	If HUMIDTYPE=1: NUMPORTHUM If HUMIDTYPE=2: USEHUMID, USEHUMID_other Else: AIR CONDITIONING SECTION
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

NUMPORTHUM (New for 2020)	
ASK	If HUMIDTYPE=1
How many portable humidifiers are used in your home? _____ portable humidifiers {WEB: ALLOW RANGE 1 – 9; PAPER: ONE DIGIT}	
NEXT	USEHUMID, USEHUMID_other
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 1 to 9. <BUTTONS: Change Answer / Continue>

USEHUMID, USEHUMID_other (New for 2020)	
ASK	If HUMIDTYPE>0
Which of the following best describes how your household uses the humidifier? 1 Use only occasionally, such as when someone in the household is sick 2 Use only during winter months 3 Use about half of the year 4 Use all or almost all of the year 99 Other ([WEB: specify below / PAPER: please specify]) [USEHUMID_other]	
NEXT	AIR CONDITIONING SECTION
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF USEHUMID=99 AND USEHUMID_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

Air Conditioning

AIRCOND	
ASK	All respondents

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

NEXT	If AIRCOND=1 and TYPEHUQ in(4,5): COOLAPT If AIRCOND=1 and TYPEHUQ in(1,2,3): ACEQUIPM Else: NUMCFAN, NUMFLOORFAN
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

COOLAPT (New for 2020)	
ASK	If AIRCOND=1 and TYPEHUQ in(4,5)

Is your apartment primarily cooled by equipment that serves multiple units in your building?
 	
  1   Yes
  0   No
 	
 -4 Don't know	

NEXT	ACEQUIPM
MODE	Paper: Include skip information before the question: *(If you live in an apartment)*
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

ACEQUIPM (New for 2020)	
ASK	If AIRCOND=1

What is the <u>main</u> type of air conditioning equipment used to cool your home?

    1   Central air conditioner
    2   Central heat pump
    3   Ductless heat pump, also known as a "mini-split"
    4   Window or wall air conditioner
    5   Portable air conditioner
    6   Evaporative or swamp cooler

  -4 Don't know

NEXT	ACEQUIPAGE
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

ACEQUIPAGE (New for 2020)	
ASK	If AIRCOND=1

About how old is your home's <u>main air conditioning equipment</u>? Your best estimate is fine.

    1   Less than 2 years old
    2   2 to 4 years old
    3   5 to 9 years old
    4   10 to 14 years old
    5   15 to 19 years old
    6   20 or more years old

  -4 Don't know

NEXT	ACEQUIPAUXTYPE
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

ACEQUIPAUXTYPE (New for 2020)

ASK	If AIRCOND=1

In addition to your main air conditioning equipment, which of the following is used as a second source for cooling your home? If more than one, select the type most frequently used.

    0   No other equipment used
    1   Central air conditioner
    2   Central heat pump
    3   Ductless heat pump, also known as a "mini-split"
    4   Window or wall air conditioner
    5   Portable air conditioner
    6   Evaporative or swamp cooler

NEXT	If ACEQUIPM=3 or ACEQUIPAUXTYPE=3: NUMDLHPAC Else if ACEQUIPM=4 or ACEQUIPAUXTYPE=4: NUMWWAC Else if ACEQUIPM=5 or ACEQUIPAUXTYPE=5: NUMPORTAC Else if TYPEHUQ in(2,3): BASECOOL, ATTCCOOL, GARGCOOL Else: NUMCFAN, NUMFLOORFAN
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

NUMDLHPAC (New for 2020)

ASK	If ACEQUIPM=3 or ACEQUIPAUXTYPE=3

How many ductless heat pump indoor units or "heads" are used to cool your home?

    _____ indoor units

    {WEB: ALLOW RANGE 1 – 9; PAPER: ONE DIGIT}

NEXT	If ACEQUIPM=4 or ACEQUIPAUXTYPE=4: NUMWWAC Else if ACEQUIPM=5 or ACEQUIPAUXTYPE=5: NUMPORTAC Else if TYPEHUQ in (2,3): BASECOOL, ATTCCOOL, GARGCOOL Else: NUMCFAN, NUMFLOORFAN
MODE	Paper: Include checkpoint before the question: *Answer #139 if your home is cooled with a ductless heat pump or "mini split." Otherwise, go to #140.* Include skip information before the question: *(If your home is cooled with a ductless heat pump or "mini split")*
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 1 to 9. <BUTTONS: Change Answer / Continue>

NUMWWAC (Changed since 2015)

ASK	If ACEQUIPM=4 or ACEQUIPAUXTYPE=4

How many window or wall air conditioners are used in your home?

_____ window or wall air conditioners

{WEB: ALLOW RANGE 1 – 9; PAPER: ONE DIGIT}

NEXT	Else if ACEQUIPAUXTYPE=5 OR ACEQUIPM=5: NUMPORTAC Else if TYPEHUQ in(2,3): BASECOOL, ATTCCOOL, GARGCOOL Else: NUMCFAN, NUMFLOORFAN
MODE	Paper: Include checkpoint before the question: *Answer #140 if a window or wall air conditioner is used in your home. Otherwise, go to #141.* Include skip information before the question: *(If a window or wall air conditioner is used in your home)*
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 1 to 9. <BUTTONS: Change Answer / Continue>

NUMPORTAC (New for 2020)

ASK	If ACEQUIPM=5 or ACEQUIPAUXTYPE=5

How many portable air conditioners are used in your home?

_____ portable air conditioners

{WEB: ALLOW RANGE 1 – 9; PAPER: ONE DIGIT}

NEXT	If TYPEHUQ in (2,3): BASECOOL, ATTCCOOL, GARGCOOL Else: NUMCFAN, NUMFLOORFAN
MODE	Paper: Include checkpoint before the question: *Answer #141 if a portable air conditioner is used in your home. Otherwise, go to #142.* Include skip information before the question: *(If a portable air conditioner is used in your home)*
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 1 to 9. <BUTTONS: Change Answer / Continue>

BASECOOL, ATTCCOOL, GARGCOOL (Changed since 2015)

ASK	If AIRCOND=1 and TYPEHUQ in(2,3)

Are the following spaces in your home air-conditioned?

Basement [BASECOOL]
- 1   Yes
- 0   No
- -3 Not applicable (my home does not have this space)

Attic [ATTCCOOL]
- 1   Yes
- 0   No
- -3 Not applicable (my home does not have this space)

Attached garage [GARGCOOL]
- 1   Yes
- 0   No
- -3 Not applicable (my home does not have this space)

NEXT	NUMCFAN, NUMFLOORFAN
MODE	Paper: Ask all respondents.
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

NUMCFAN, NUMFLOORFAN

ASK	All respondents

How many of the following types of fans does your household use? *If none, please enter "0."*

_____ Number of <u>ceiling</u> fans [NUMCFAN]
_____ Number of <u>floor or window</u> fans [NUMFLOORFAN]

{FOR ALL: WEB: ALLOW RANGE 0 – 99; PAPER: TWO DIGITS}

NEXT	If NUMCFAN>0: USECFAN, USECFAN_other Else if TYPEHUQ in(2,3): HOUSEFAN, ATTICFAN Else: DEHUMTYPE
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? If your home has none of these, please enter "0." <BUTTONS: Change Answer / Continue>

USECFAN, USECFAN_other (New for web/mail; used to be on CAPI)	
ASK	If NUMCFAN>0

Thinking about the [If NUMCFAN>1: <u>most used</u>] ceiling fan, which of the following best describes how your household uses this fan?

    1   Use only occasionally, such as when it is very hot or when guests are over
    2   Use only during summer months to stay cool
    3   Use about half of the year
    4   Use all or almost all of the year, such as for white noise or air circulation
   99   Other ([WEB: specify below / PAPER: please specify]) [USECFAN_other]

NEXT	If TYPEHUQ in(2,3): HOUSEFAN, ATTICFAN Else: DEHUMTYPE
MODE	Paper: Include "most used" in question text. Include checkpoint before the question: *If no ceiling fans are used → Go to #145.* Include skip information before the question: *(If ceiling fans are used)*
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF USECFAN=99 AND USECFAN_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

HOUSEFAN, ATTICFAN (Changed since 2015)			
ASK	If TYPEHUQ in(2,3)		

Are the following used in your home?

	Yes	No
Whole house cooling fan [HOUSEFAN]	1	0
Attic exhaust fan [ATTICFAN]	1	0

NEXT	DEHUMTYPE
MODE	Paper: Ask of all respondents.
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

DEHUMTYPE (New for 2020)	
ASK	All respondents

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

  1   Yes, a <u>portable</u> dehumidifier
  2   Yes, a <u>whole-home</u> dehumidifier
  0   No

NEXT	If DEHUMTYPE=1: NUMPORTDEHUM If DEHUMTYPE=2: USEDEHUM, USEDEHUM_other Else: THERMOSTATS AND TEMPERATURES SECTION
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

NUMPORTDEHUM (New for 2020)	
ASK	If DEHUMTYPE=1

How many portable dehumidifiers are used in your home?

  _____ portable dehumidifiers

   {WEB: ALLOW RANGE 1 – 9; PAPER: ONE DIGIT}

NEXT	USEDEHUM, USEDEHUM_other
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 1 to 9. <BUTTONS: Change Answer / Continue>

USEDEHUM, USEDEHUM_other (New for 2020)	
ASK	If DEHUMTYPE>0

Which of the following best describes how your household uses the dehumidifier?

    1   Use only occasionally, such as when someone in the household is suffering from allergies
    2   Use only during summer months
    3   Use about half of the year
    4   Use all or almost all of the year
  99   Other ([WEB: specify below / PAPER: please specify]) [USEDEHUM_other]

NEXT	THERMOSTATS AND TEMPERATURES SECTION
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF USEDEHUM=99 AND USEDEHUM_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

Thermostats and Temperatures

TYPETHERM (New for 2020)	
ASK	If HEATHOME=1 or AIRCOND=1

Does your household use a thermostat to control the temperature inside your home?

    1   Yes, a manual or non-programmable thermostat
    2   Yes, a programmable thermostat
    3   Yes, a "smart" or Internet-connected thermostat
    0   No

  -4   Don't know

NEXT	If HEATHOME=1: HEATCNTL, HEATCNTL_other If AIRCOND=1: COOLCNTL, COOLCNTL_other Else: WATER HEATING SECTION
MODE	Paper: Ask of all respondents.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

HEATCNTL, HEATCNTL_other (New for 2020)	
ASK	If HEATHOME=1

Which of the following best describes how your household controls the indoor temperature <u>during the winter</u>?

    1   Set one temperature and leave it there most of the time
    2   Manually adjust the temperature
    3   Programmable or smart thermostat automatically adjusts the temperature
    4   Turn equipment on or off as needed
    5   Our household does not have control over the temperature
  99   Other ([WEB: specify below / PAPER: please specify]) [HEATCNTL_other]

NEXT	TEMPHOME, TEMPGONE, TEMPNITE
MODE	Paper: Ask of all respondents. Include additional response option – "Do not heat my home". Use response code of "-3" for this response option.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF HEATCNTL=99 AND HEATCNTL_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

TEMPHOME, TEMPGONE, TEMPNITE (Changed since 2015)	
ASK	If HEATHOME=1

The next questions are about the temperature inside your home during the <u>winter</u>. If you have a thermostat, think about where your household sets the temperature for your main heating equipment. If you do not have a thermostat, your best estimate about the temperature is fine.

During the winter, what is your home's typical indoor temperature…

     When <u>someone is home during the day</u>?   _____ degrees [TEMPHOME]
     When <u>no one is inside your home during the day</u>?   _____ degrees [TEMPGONE]
     Inside your home <u>at night</u>?   _____ degrees [TEMPNITE]

     {FOR ALL: WEB: ALLOW RANGE 50 – 90; PAPER: TWO DIGITS}

NEXT	If AIRCOND=1: COOLCNTL, COOLCNTL_other Else: WATER HEATING SECTION
MODE	Paper: Ask of all respondents.
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF ANY OUT OF RANGE: Your response was outside the expected range of 50 to 90. <BUTTONS: Change Answer / Continue>

COOLCNTL, COOLCNTL_other (New for 2020)	
ASK	If AIRCOND=1

Which of the following best describes how your household controls the indoor temperature <u>during the summer</u>?

    1   Set one temperature and leave it there most of the time
    2   Manually adjust the temperature
    3   Programmable or smart thermostat automatically adjusts the temperature
    4   Turn equipment on or off as needed
    5   Our household does not have control over the temperature
   99 Other ([WEB: specify below / PAPER: please specify]) [COOLCNTL_other]

NEXT	TEMPHOMEAC, TEMPGONEAC, TEMPNITEAC
MODE	Paper: Ask of all respondents. Include additional response option – "Do not air-condition my home". Use response code of "-3" for this response option.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF COOLCNTL=99 AND COOLCNTL_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

TEMPHOMEAC, TEMPGONEAC, TEMPNITEAC (Changed since 2015)	
ASK	If AIRCOND=1

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

During the summer, what is your home's typical indoor temperature…

When <u>someone is home during the day</u>?	_____ degrees [TEMPHOMEAC]
When <u>no one is inside your home during the day</u>?	_____ degrees [TEMPGONEAC]
Inside your home <u>at night</u>?	_____ degrees [TEMPNITEAC]

{FOR ALL: WEB: ALLOW RANGE 50 – 90; PAPER: TWO DIGITS}

NEXT	WATER HEATING SECTION
MODE	Paper: Ask of all respondents.
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF ANY OUT OF RANGE: Your response was outside the expected range of 50 to 90. <BUTTONS: Change Answer / Continue>

Water Heating

H2OAPT (New for 2020)	
ASK	If TYPEHUQ in(4,5)

Does your hot water come from a water heater that serves multiple units in your building?

    1   Yes
    0   No

  -4 Don't know

NEXT	WHEATSIZ
MODE	Paper: Include checkpoint before the question: *If you live in a single-family house or a mobile home → Go to #155.* Include skip information before the question: *(If you live in an apartment)*
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

H2OMAIN, H2OMAIN_other (Changed since 2015)	
ASK	If TYPEHUQ in(1,2,3)

Where is the main water heating equipment for your home located?

    1   Main living space
    2   Basement
    3   Garage
    4   Outside
  99 Other ([WEB: specify below / PAPER: please specify]) [H2OMAIN_other]

NEXT	WHEATSIZ
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

SOFT PROMPT IF H2OMAIN=99 AND H2OMAIN_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue> |

WHEATSIZ	
ASK	All respondents

What is the approximate size of your main water heater?

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

    -4 Don't know

NEXT	If WHEATSIZ in(1,2,3): WHEATBKT Else: WHEATAGE
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

WHEATBKT (New for web/mail; used to be on CAPI)	
ASK	If WHEATSIZ in(1,2,3)

Is your main water heater insulated using a water heater blanket?

    1   Yes
    0   No

NEXT	WHEATAGE
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

WHEATAGE	
ASK	All respondents

About how old is your main water heater? Your best estimate is fine.

    1   Less than 2 years old
    2   2 to 4 years old
    3   5 to 9 years old
    4   10 to 14 years old
    5   15 to 19 years old
    6   20 or more years old

  -4 Don't know

NEXT	FUELH2O, FUELH2O_other
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

FUELH2O, FUELH2O_other (Changed since 2015)	
ASK	All respondents

What fuel does your main water heater use?

    5   Electricity
    1   Natural gas from underground pipes
    2   Propane (bottled gas)
    3   Fuel oil
    7   Wood
    8   Solar thermal
  99 Other ([WEB: specify below / PAPER: please specify]) [FUELH2O_other]

  -4 Don't know

NEXT	MORETHAN1H2O
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue> SOFT PROMPT IF FUELH2O=99 AND FUELH2O_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

MORETHAN1H2O	
ASK	All respondents

Do you have more than one water heater?

   1   Yes
   0   No

  -4 Don't know

NEXT	If MORETHAN1H2O=1: FUELH2O2, FUELH2O2_other Else: LIGHTING SECTION
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

FUELH2O2, FUELH2O2_other (Changed since 2015)	
ASK	If MORETHAN1H2O=1

What fuel does your second water heater use?

   5   Electricity
   1   Natural gas from underground pipes
   2   Propane (bottled gas)
   3   Fuel oil
   7   Wood
   8   Solar thermal
  99 Other ([WEB: specify below / PAPER: please specify]) [FUELH2O2_other]

  -4 Don't know

NEXT	LIGHTING SECTION
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue> SOFT PROMPT IF FUELH2O2=99 AND FUELH2O2_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

Lighting

LGTIN1TO4, LGTIN4TO8, LGTINMORE8 (New for 2020)	
ASK	All respondents

The next questions are about light bulbs inside your home. For fixtures with multiple bulbs, count each bulb separately.

Thinking about the light bulbs <u>inside your home</u>, how many are turned on…

       Between 1 and 4 hours per day?   _____ light bulbs [LGTIN1TO4]
       Between 4 and 8 hours per day?   _____ light bulbs [LGTIN4TO8]
       More than 8 hours per day?   _____ light bulbs [LGTINMORE8]

       {FOR ALL: WEB: ALLOW RANGE 0 – 99; PAPER: TWO DIGITS}

NEXT	LGTINLED
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

LGTINLED (Changed since 2015)	
ASK	All respondents

What portion of the light bulbs used <u>inside your home</u> are <u>LED</u> bulbs?

   1   All
   2   Most
   3   About half
   4   Some
   0   None

NEXT	LGTINCFL
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

LGTINCFL (Changed since 2015)	
ASK	All respondents

What portion of the light bulbs used <u>inside your home</u> are <u>CFL</u> bulbs?

    1   All
    2   Most
    3   About half
    4   Some
    0   None

NEXT	LGTINCAN
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

LGTINCAN (Changed since 2015)	
ASK	All respondents

What portion of the light bulbs used <u>inside your home</u> are <u>incandescent or halogen</u> bulbs?

    1   All
    2   Most
    3   About half
    4   Some
    0   None

NEXT	LGTOUTANY
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

LGTOUTANY (New for 2020)	
ASK	All respondents

The next questions are about outside light bulbs. [If TYPEHUQ in (4,5): For apartments, only include light bulbs connected to your unit.]

Does your home have any <u>outside light bulbs</u> that are typically left on all night? Do not include light bulbs controlled by motion detectors or solar lights that do not use electricity.

    1   Yes
    0   No

NEXT	If LGTOUTANY=1: LGTOUTNITE Else: ENERGY BILLS SECTION
MODE	Paper: Display second sentence for all respondents.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

LGTOUTNITE (New for web/mail; used to be on CAPI)	
ASK	If LGTOUTANY=1

How many <u>outside light bulbs</u> are typically left on all night?

_____ light bulbs

{WEB: ALLOW RANGE 1 – 99; PAPER: TWO DIGITS}

NEXT	LGTOUTLED, LGTOUTCFL, LGTOUTCAN
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 1 to 99. <BUTTONS: Change Answer / Continue>

LGTOUTLED, LGTOUTCFL, LGTOUTCAN (Changed since 2015)	
ASK	If LGTOUTANY=1

Which of the following types of light bulbs are typically left on all night <u>outside your home</u>?

	Yes	No
LED bulbs [LGTOUTLED]	1	0
CFL bulbs [LGTOUTCFL]	1	0
Incandescent or halogen bulbs [LGTOUTCAN]	1	0

NEXT	ENERGY BILLS SECTION
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

Energy Bills

ELPAY, ELPAY_other	
ASK	All respondents

Who is responsible for paying for the <u>electricity</u> used in this home?

    1   Household is responsible for paying for <u>all</u> electricity used in this home
    2   All electricity 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
  99 Other ([WEB: specify below / PAPER: please specify]) [ELPAY_other]

  -4 Don't know

NEXT	NGPAY, NGPAY_other
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue> SOFT PROMPT IF ELPAY=99 AND ELPAY_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

NGPAY, NGPAY_other (Changed since 2015)	
ASK	All respondents

Who is responsible for paying for the <u>natural gas</u> used in this home?

    1   Household is responsible for paying for <u>all</u> 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
  99 Other ([WEB: specify below / PAPER: please specify]) [NGPAY_other]

  -4 Don't know

  -3 Do not use natural gas

NEXT	LPGPAY, LPGPAY_other
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue> SOFT PROMPT IF NGPAY=99 AND NGPAY_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

LPGPAY, LPGPAY_other (Changed since 2015)	
ASK	All respondents

Who is responsible for paying for the <u>propane</u> used in this home?

  1   Household is responsible for paying for <u>all</u> propane used in this home
  2   All propane 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
  99 Other ([WEB: specify below / PAPER: please specify]) [LPGPAY_other]

  -4 Don't know

  -3 Do not use propane

NEXT	FOPAY, FOPAY_other
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue> SOFT PROMPT IF LPGPAY=99 AND LPGPAY_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

FOPAY, FOPAY_other (Changed since 2015)	
ASK	All respondents

Who is responsible for paying for the <u>fuel oil</u> used in this home?

  1   Household is responsible for paying for <u>all</u> 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
  99 Other ([WEB: specify below / PAPER: please specify]) [FOPAY_other]

  -4 Don't know

  -3 Do not use fuel oil

NEXT	KFUELOT
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue> SOFT PROMPT IF FOPAY=99 AND FOPAY_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

KFUELOT (Changed since 2015)	
ASK	All respondents

Do any of your household energy bills include costs for energy used for non-household purposes, such as farm buildings or machinery, a small business, or another house or apartment?

    1   Yes
    0   No

NEXT	If KFUELOT=1: BILLEL, BILLUG, BILLLPG, BILLFK Else: SMARTMETER
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

BILLEL, BILLUG, BILLLPG, BILLFK	
ASK	If KFUELOT=1

Which of your household's energy bills include costs for energy used for non-household purposes?
Please select all that apply.

        Electricity [BILLEL: 1 if selected, 0 if not]
        Natural gas from underground pipes [BILLUG: 1 if selected, 0 if not]
        Propane (bottled gas) [BILLLPG: 1 if selected, 0 if not]
        Fuel oil [BILLFK: 1 if selected, 0 if not]

NEXT	SMARTMETER
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

SMARTMETER	
ASK	All respondents

Does your home have a "smart meter," which records electricity usage in short time intervals and automatically transmits it to your utility company?

    1   Yes
    0   No

    -4   Don't know

NEXT	If SMARTMETER=1: INTDATAACC Else: MEDICALDEV
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

INTDATAACC (Changed since 2015)	
ASK	If SMARTMETER=1

Have you or any member of your household ever accessed or viewed electricity usage data from your home's smart meter?

    1   Yes
    0   No

NEXT	MEDICALDEV
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

MEDICALDEV (New for web/mail; used to be on CAPI)	
ASK	All respondents

Are any medical devices used in your home, such as ventilators, nebulizers, or CPAP machines?

    1   Yes
    0   No

NEXT	POWEROUT
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

POWEROUT (New for 2020)	
ASK	All respondents

During the past year, has your entire home had a power outage lasting at least 24 hours?

    1   Yes
    0   No

   -4   Don't know

NEXT	If POWEROUT=1: WHYPOWEROUT, WHYPOWEROUT_other Else: BACKUP
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

WHYPOWEROUT, WHYPOWEROUT_other (New for 2020)	
ASK	If POWEROUT=1

Which of the following best describes why this power outage occurred? If you experienced multiple power outages during the past year, please select the reason for the longest outage.

    1   Natural disaster or weather event
    2   Unable to pay electric bills
    3   Electric utility had a planned or unplanned blackout
    99 Other ([WEB: specify below / PAPER: please specify]) [WHYPOWEROUT_other]

NEXT	BACKUP
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF WHYPOWEROUT=99 AND WHYPOWEROUT_other IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

BACKUP	
ASK	All respondents

Does your household have a back-up generator that can be used for generating electricity in case of a power outage or emergency?

    1   Yes
    0   No

NEXT	NOGEN, SOLAR, WIND, COMBINED
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

NOGEN, SOLAR, WIND, COMBINED (Changed since 2015)

ASK	All respondents

Not including back-up generators, does your home have any of these on-site systems that generate electricity? *Please select all that apply.*

       No on-site generation system [NOGEN: 1 if selected, 0 if not]
       Solar or photovoltaic system [SOLAR: 1 if selected, 0 if not]
       Small wind turbine [WIND: 1 if selected, 0 if not]
       Combined heat and power system [COMBINED: 1 if selected, 0 if not]

NEXT	If SOLAR=1: PVINSTALL, PVINSTALL_DK Else if TYPEHUQ in(1,2,3,4): OUTLET Else if TYPEHUQ=5: APTEVCHG
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

PVINSTALL, PVINSTALL_DK (New for 2020)

ASK	If SOLAR=1

In what year was your solar or photovoltaic system installed?

     _____

       {WEB: ALLOW RANGE 1950 – 2021, PAPER: FOUR DIGITS}

       Don't know [PVINSTALL_DK: 1 if selected, 0 if not]

NEXT	PVCAPACITY, PVCAPACITY_DK
MODE	Paper: Include checkpoint before the question: *If your home does not have a solar or photovoltaic system → Go to #184.* Include skip information before the question: *(If your home has a solar or photovoltaic system)*
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't Know." <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 1950 to 2021. <BUTTONS: Change Answer / Continue>

PVCAPACITY, PVCAPACITY_DK (New for 2020)	
ASK	If SOLAR=1

What is the capacity of your solar or photovoltaic system in kW (kilowatts)?

     _____ kW

     {WEB: ALLOW RANGE 0 – 99; PAPER: TWO DIGITS}

     Don't know [PVCAPACITY_DK: 1 if selected, 0 if not]

NEXT	If TYPEHUQ in(1,2,3,4): OUTLET If TYPEHUQ=5: APTEVCHG
MODE	Paper: Include skip information before the question: *(If your home has a solar or photovoltaic system)*
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't Know." <BUTTONS: Change Answer / Continue>

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

Is there an electrical outlet within 20 feet of where you or any member of your household park a vehicle?

    1   Yes
    0   No

NEXT	ELECVEH
MODE	Paper: Ask of all respondents.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

APTEVCHG (New for 2020)	
ASK	If TYPEHUQ=5

Do you have access to an electric vehicle charger at your apartment building or complex?

    1   Yes
    0   No

   -4   Don't know

NEXT	ELECVEH
MODE	Paper: Ask if TYPEHUQ in(4,5). Include skip information before the question: *(If you live in an apartment)*
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you don't know the answer you may select "Don't know." <BUTTONS: Change Answer / Continue>

ELECVEH (Changed since 2015)	
ASK	All respondents

Do you or any member of your household own or lease an electric vehicle? Please include both all-electric and plug-in hybrid electric vehicles.

    1   Yes
    0   No

NEXT	If ELECVEH=1: EVMAKE, EVMODEL, EVYEAR Else: OTHFUELUSE, OTHFUELUSE_NA
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

EVMAKE, EVMODEL, EVYEAR (New for 2020)	
ASK	If ELECVEH=1

What is the make, model, and year of your electric vehicle?

        Make: [EVMAKE: Open-ended response]
        Model: [EVMODEL: Open-ended response]
        Year: [EVYEAR] {WEB: ALLOW RANGE 1950 – 2021; PAPER: FOUR DIGITS}

NEXT	EVCHRGHOME, EVCHRGAPT, EVCHRGWKS, EVCHRGBUS, EVCHRGMUNI, EVCHRGDLR, EVCHRGHWY, EVCHRGOTH
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 1950 to 2021. <BUTTONS: Change Answer / Continue>

EVCHRGHOME, EVCHRGAPT, EVCHRGWKS, EVCHRGBUS, EVCHRGMUNI, EVCHRGDLR, EVCHRGHWY, EVCHRGOTH (New for 2020)	
ASK	If ELECVEH=1

At which of the following places do you typically charge your electric vehicle?

	Yes	No
Your home [EVCHRGHOME]	1	0
Your apartment building or complex [EVCHRGAPT]	1	0
Your workplace or school [EVCHRGWKS]	1	0
Shopping center or business you frequent [EVCHRGBUS]	1	0
Municipal parking lot or building, including libraries and post offices [EVCHRGMUNI]	1	0
Car dealership [EVCHRGDLR]	1	0
Highway rest stop [EVCHRGHWY]	1	0
Some other type of public charging station [EVCHRGOTH]	1	0

NEXT	If EVCHRGHOME=1: EVHOMEAMT Else: EVWKMILES
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

EVHOMEAMT (New for 2020)	
ASK	If EVCHRGHOME=1

About how much of the charging for your electric vehicle is typically done at your home?

1   All at home (100%)
2   Almost all at home (80% - 99%)
3   Most at home (60% - 79%)
4   About half at home (40% - 59%)
5   Some at home (20% - 39%)
6   Very little or none at home (0% - 19%)

NEXT	EVCHRGTYPE
MODE	Paper: Ask if ELECVEH=1
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

EVCHRGTYPE (New for 2020)

ASK	If EVCHRGHOME=1

Which best describes the electric vehicle charger used at your home?

    1   Level 1 charger (typical household 120 volt outlet)
    2   Level 2 charger (higher-powered 240 volt outlet)

NEXT	EVWKMILES
MODE	Paper: Ask if ELECVEH = 1. Include additional response option – "Do not have or use charger at home". Use response code of "-3" for this response option.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

EVWKMILES (New for 2020)

ASK	If ELECVEH=1

About how many total miles are driven in your electric vehicle per week?

       Open-ended response

      _____ miles per week

NEXT	OTHFUELUSE, OTHFUELUSE_NA
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

OTHFUELUSE, OTHFUELUSE_NA

ASK	All respondents

Are there any other fuels used in your home that you have not already answered about? If so, please list the fuel(s) and how they are used.

       Open-ended response

       Do not use any other fuel [OTHFUELUSE_NA:1 if selected, 0 if not]

NEXT	OTHACT, OTHACT_NA
MODE	

OTHACT, OTHACT_NA	
ASK	All respondents

Are there any other devices used in your home that use a lot of energy that you have not already answered about? Examples include air purifiers, water softeners, sump pumps, well pumps, engine block heaters, power tools, woodworking or hobby equipment, aquariums, etc.

     Open-ended response

     No other high energy use devices [OTHACT_NA:1 if selected, 0 if not]

NEXT	HOUSEHOLD CHARACTERISTICS SECTION
MODE	

Household Characteristics

WEB MOTIVATIONAL PROMPT #3: You're almost there! Next, we have a few questions about you and your household.

HHSEX	
ASK	All respondents

What is your sex?
 	
    1   Female
    2 Male	

NEXT	HHAGE
MODE	

HHAGE	
ASK	All respondents

What is your age?
 	
    _____ years old
 	
    {WEB: ALLOW RANGE 18 – 110; PAPER: THREE DIGITS}	

NEXT	EMPLOYHH
MODE	
WEB PROMPT	SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 18 to 110. <BUTTONS: Change Answer / Continue>

EMPLOYHH	
ASK	All respondents

Which best describes your current employment status?
 	
    1   Employed full-time
    2   Employed part-time
    3   Retired
    4 Not employed	

NEXT	EDUCATION
MODE	

EDUCATION	
ASK	All respondents

What is the highest degree or level of school you have completed?

1 Less than high school diploma or GED
2 High school diploma or GED
3 Some college or Associate's degree
4 Bachelor's degree (for example: BA, BS)
5 Master's, Professional, or Doctoral degree (for example: MA, MS, MBA, MD, JD, PhD)

NEXT	SDESCENT
MODE	

SDESCENT	
ASK	All respondents

Are you Hispanic or Latino?

1 Yes
0 No

NEXT	RACE_WHITE, RACE_BLACK, RACE_AIAN, RACE_ASIAN, RACE_NHPI, RACE_OTH, RACE_OTH_other
MODE	

RACE_WHITE, RACE_BLACK, RACE_AIAN, RACE_ASIAN, RACE_NHPI, RACE_OTH, RACE_OTH_other	
ASK	All respondents

What is your race? *Please select all that apply.*

White [RACE_WHITE: 1 if selected, 0 if not]
Black or African-American [RACE_BLACK: 1 if selected, 0 if not]
American Indian or Alaska Native [RACE_AIAN: 1 if selected, 0 if not]
Asian [RACE_ASIAN: 1 if selected, 0 if not]
Native Hawaiian or Other Pacific Islander [RACE_NHPI: 1 if selected, 0 if not]
Other ([WEB: specify below / PAPER: please specify]) [RACE_OTH: 1 if selected, 0 if not; RACE_OTH_other]

NEXT	NHSLDMEM
MODE	

NHSLDMEM	
ASK	All respondents
Including yourself, how many people live in this home? Do not include anyone who is just visiting, those away in the military, or children who are away at college. _____ household members {WEB: ALLOW RANGE 1 – 20; PAPER: TWO DIGITS}	
NEXT	NUMCHILD, NUMADULT1, NUMADULT2
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 1 to 20. <BUTTONS: Change Answer / Continue>

NUMCHILD, NUMADULT1, NUMADULT2 (Changed since 2015)	
ASK	All respondents
How many members of your household are in the following age categories? 0 to 17 years old [NUMCHILD] _____ household members 18 to 64 years old [NUMADULT1] _____ household members 65 years or older [NUMADULT2] _____ household members {FOR ALL: WEB: ALLOW RANGE 0 – 20; PAPER: TWO DIGITS}	
NEXT	ATHOME
MODE	
WEB PROMPT	SOFT PROMPT IF ANY OUT OF RANGE: Your response was outside the expected range of 0 to 20. <BUTTONS: Change Answer / Continue>

ATHOME	
ASK	All respondents

How many <u>weekdays</u> is someone at home most or all of the day?

    0   None
    1   1 day
    2   2 days
    3   3 days
    4   4 days
    5   5 days

NEXT	MONEYPY
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

MONEYPY (Changed since 2015)	
ASK	All respondents

Including all income sources, which category best describes the total combined income of all household members for the past year, before taxes and deductions?

    1   Less than $5,000
    2   $5,000 - $7,499
    3   $7,500 - $9,999
    4   $10,000 - $12,499
    5   $12,500 - $14,999
    6   $15,000 - $19,999
    7   $20,000 - $24,999
    8   $25,000 - $29,999
    9   $30,000 - $34,999
  10 $35,000 - $39,999
  11 $40,000 - $49,999
  12 $50,000 - $59,999
  13 $60,000 - $74,999
  14 $75,000 - $99,999
  15 $100,000 - $149,999
  16 $150,000 or more

NEXT	ENERGY ASSISTANCE SECTION
MODE	

Energy Assistance

SCALEB	
ASK	All respondents

The following questions are about challenges your household may have had paying energy bills or maintaining heating and cooling in your home.
 	
In the past year, how many months did your household reduce or forego expenses for basic household necessities, such as medicine or food, in order to pay an energy bill?
 	
   1   Almost every month
   2   Some months
   3   1 or 2 months
   0 Never	

NEXT	SCALEG
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

SCALEG	
ASK	All respondents

In the past year, how many months did your household keep your home at a temperature that you felt was unsafe or unhealthy?
 	
   1   Almost every month
   2   Some months
   3   1 or 2 months
   0 Never	

NEXT	SCALEE
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

SCALEE	
ASK	All respondents

In the past year, how many months did your household receive a disconnection notice, shut off notice, or nondelivery notice for an energy bill?
 	
   1   Almost every month
   2   Some months
   3   1 or 2 months
   0 Never	

NEXT	If SCALEE in(1,2,3): PAYHELP Else: NOHEATBROKE, NOHEATEL, NOHEATNG, NOHEATBULK, NOHEATNONE
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

PAYHELP	
ASK	If SCALEE in(1,2,3)

When you received that notice, did your household apply for and receive home energy assistance to help pay your energy bill?
 	
   1   Yes
   0 No	

NEXT	NOHEATBROKE, NOHEATEL, NOHEATNG, NOHEATBULK, NOHEATNONE
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

NOHEATBROKE, NOHEATEL, NOHEATNG, NOHEATBULK, NOHEATNONE	
ASK	All respondents

In the past year, was there ever a time your household was <u>unable to use your main source of heat</u> because any of the following events happened? *Please select all that apply.*

> Your heating equipment was broken and you couldn't afford to pay for the repair or replacement [NOHEATBROKE: 1 if selected, 0 if not]
> You couldn't pay for electricity and it was disconnected [NOHEATEL: 1 if selected, 0 if not]
> You couldn't pay for natural gas and it was disconnected [NOHEATNG: 1 if selected, 0 if not]
> You ran out of fuel oil, propane, wood, or pellets because you couldn't afford a delivery [NOHEATBULK: 1 if selected, 0 if not]
>
> None of these happened [NOHEATNONE:1 if selected, 0 if not]

NEXT	If NOHEATBROKE=1 or NOHEATEL=1 or NOHEATNG=1 or NOHEATBULK=1: NOHEATDAYS Else: COLDMA
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

NOHEATDAYS	
ASK	If NOHEATBROKE=1 or NOHEATEL=1 or NOHEATNG=1 or NOHEATBULK=1

About how many days was your household without heat?

> _____ days
>
> {WEB: ALLOW RANGE 1 – 366, PAPER: THREE DIGITS}

NEXT	NOHEATHELP
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 1 to 366. <BUTTONS: Change Answer / Continue>

NOHEATHELP	
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
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

COLDMA	
ASK	All respondents

In the past year, did anyone in your household need medical attention because your home was too cold?
 	
   1 Yes
   0 No	

NEXT	NOACBROKE, NOACEL, NOACNONE
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

NOACBROKE, NOACEL, NOACNONE	
ASK	All respondents

In the past year, was there ever a time your household was <u>unable to use your air conditioner or other cooling equipment</u> because any of the following events happened? *Please select all that apply.*
 	
     Your air conditioning equipment or other cooling equipment was broken and you couldn't afford to pay for the repair or replacement [NOACBROKE: 1 if selected, 0 if not]
     You couldn't pay for electricity and it was disconnected [NOACEL: 1 if selected, 0 if not]
 	
     None of these happened [NOACNONE:1 if selected, 0 if not]	

NEXT	If NOACBROKE=1 or NOACEL=1: NOACDAYS Else: HOTMA
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

NOACDAYS	
ASK	If NOACBROKE=1 or NOACEL=1
About how many days was your household without air conditioning? _____ days {WEB: ALLOW RANGE 1 – 366, PAPER: THREE DIGITS}	
NEXT	NOACHELP
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> SOFT PROMPT IF OUT OF RANGE: Your response was outside the expected range of 1 to 366. <BUTTONS: Change Answer / Continue>

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? 1 Yes 0 No	
NEXT	HOTMA
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

HOTMA	
ASK	All respondents
In the past year, did anyone in your household need medical attention because your home was too hot? 1 Yes 0 No	
NEXT	ENERGYASST
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

ENERGYASST (Changed since 2015)	
ASK	All respondents

Including times when you received assistance for heating and cooling bills, has your household participated in a home energy assistance program that helps to pay energy bills or fix broken equipment?
 	
   1   Yes
   0 No	

NEXT	If ENERGYASST=1: ENERGYASST20, ENERGYASST19, ENERGYASST18, ENERGYASST17, ENERGYASST16, ENERGYASSTOTH Else: FINAL QUESTIONS SECTION
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

ENERGYASST20, ENERGYASST19, ENERGYASST18, ENERGYASST17, ENERGYASST16, ENERGYASSTOTH	
ASK	If ENERGYASST=1

In which of the following years did your household participate in a home energy assistance program? *Please select all that apply.*
 	
       2020 [ENERGYASST20: 1 if selected, 0 if not]
       2019 [ENERGYASST19: 1 if selected, 0 if not]
       2018 [ENERGYASST18: 1 if selected, 0 if not]
       2017 [ENERGYASST17: 1 if selected, 0 if not]
       2016 [ENERGYASST16: 1 if selected, 0 if not]
       Some other year(s) [ENERGYASSTOTH: 1 if selected, 0 if not]	

NEXT	FINAL QUESTIONS SECTION
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

Final Questions

WEB MOTIVATIONAL PROMPT #4: Thank you for participating! Only a few final questions remain. Please click "Next" to continue.

ELSUPPNAME, ELACCT, NGSUPPNAME, NGACCT, LPSUPPNAME, LPACCT, FKSUPPNAME, FKACCT (Changed since 2015)	
ASK	All respondents

An important part of this study is to link the information you've provided in this survey to your actual energy use. The study's findings are less valuable without this information, as it helps us learn exactly how much energy your household used in the past year.

To keep the survey as short as possible, we would like to access this information on your behalf. Please provide the names of your energy supplier(s) and the account number for each fuel used by your household. Providing your account number ensures we get the correct energy use data. All data collected as part of the Residential Energy Consumption Survey, including energy use data, is used only for statistical purposes and will remain strictly confidential.

Electricity
Supplier: [ELSUPPNAME]
Account Number: [ELACCT]

Natural Gas
Supplier: [NGSUPPNAME]
Account Number: [NGACCT]

Propane
Supplier: [LPSUPPNAME]
Account Number: [LPACCT]

Fuel Oil
Supplier: [FKSUPPNAME]
Account Number: [FKACCT]

NEXT	If mail_type in(4,5): OWGMSTADD, OWGMCITY, OWGMSTATE, OWGMZIP If MODE=Web and TYPEHUQ=5: MFNAME, MFCONTACT, MFROLE, MFPHONE, MFEMAIL Else: COMMENTS
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue>

OWGMSTADD1, OWGMSTADD2, OWGMCITY, OWGMSTATE, OWGMZIP, OWGMZIP4 (New for 2020)	
ASK	If mail_type in(4,5)

It is helpful to know the physical address of each home in this study to understand the impact of local weather conditions on home energy use.

Please provide your home's physical address below.

Street Address: _____ [OWGMSTADD1]
_____ [OWGMSTADD2]
City: _____ [OWGMCITY]
State: _____ [OWGMSTATE]
ZIP Code: _____-____ [OWGMZIP, OWGMZIP4]

{OWGMZIP: WEB: ALLOW RANGE 0 – 99999, PAPER: FIVE DIGITS.
OWGMZIP4: WEB: ALLOW RANGE 0 – 9999, PAPER: FOUR DIGITS}

NEXT	If MODE=Web and TYPEHUQ=5: MFNAME, MFCONTACT, MFROLE, MFPHONE, MFEMAIL Else: COMMENTS
MODE	Web: Use dropdown menu of state names for OWGMSTATE. Paper: Ask of all respondents. Instead of second sentence, use alternate text: "If your household received this mailing at a P.O. Box, please provide your home's physical address below." Collect 2-character postal code for state.
WEB PROMPT	

MFNAME, MFCONTACT, MFROLE, MFPHONE, MFEMAIL (New for 2020)	
ASK	If MODE=Web and TYPEHUQ=5

We would like to contact someone knowledgeable about your entire building or complex to ask some questions about energy use in common areas.

Please provide the following information. Your survey responses are confidential, and we will NOT share any of your responses.

Building, Community, or Development Name: _____ [MFNAME]
Building Contact Person: _____ [MFCONTACT]
Building Contact Title (for example: landlord, building owner,
HOA president, office manager): _____ [MFROLE]
Contact Phone Number: _____ [MFPHONE]
Contact Email: _____ [MFEMAIL]

NEXT	COMMENTS
MODE	
WEB PROMPT	

COMMENTS	
ASK	All respondents
Thank you for helping us learn how Americans use energy in their homes. We greatly appreciate your help! If you have any additional thoughts about any of the survey topics or the survey itself, please share them here: Open-ended response	
NEXT	End of survey
MODE	Web: Display following text after the open-ended response, followed by a Finish button: **To complete the survey, please click "Finish" below.** Once you click "Finish" you will receive your cash thank you in about 3 weeks. If you have questions about this survey, please email us at recs@rti.org or call toll-free at 1-833-947-2573. Paper: Display following text after the open-ended response: Please return this questionnaire in the enclosed postage-paid return envelope. If you have questions about this survey, please email or call us. Email: recs@rti.org / Phone: 1-833-947-2573 (toll-free)
WEB PROMPT	