2020 Residential Energy Consumption Survey

Household Questionnaire Specifications

v10, last updated 6/5/2020

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 Te 1 Yes 0 No	
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 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. XXXX-XXXX Expiration date: MM/DD/YYYY

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.

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=4: 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 of	describes your home?		
1 Mob	ile home		
2 Sing	le-family house detached from any other house		
	rtment in a building with 2 to 4 units		
5 Apa			
	If TYPEHUQ=1: PRIMRES		
NEXT	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: answer="" change="" continue=""></buttons:>	

CELLAR, CRAWL, CONCRETE, BASEOTH (Changed since 2015)				
ASK	If TYPEHUQ in(2,3)			
Is any part o	of your home built over	Yes	No	
	A basement? [CELLAR] 1 0			
A cr	awl space? [CRAWL]	1	0	
A concrete slab? [CONCRETE]		1	0	
Some other foundation? [BASEOTH] 1 0		0		
NEXT	If CELLAR=1: BASEFIN Else: ATTIC			
MODE				
WEB	SOFT PROMPT IF ALL MISSING: Di	d you mean	to leave this question blank?	
PROMPT	<buttons: answer="" change="" continue=""></buttons:>			

BASEFIN	BASEFIN		
ASK	If CELLAR=1		
	f your basement finished? For this survey, a "finished" basement has finishing materials on ling, and walls.		
NEXT	ATTIC		
MODE			
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>		

ATTIC

ATTIC		
ASK	If TYPEHUQ in(2,3)	
An attic is a have an attic 1 Yes 0 No		
NEXT	If ATTIC=1: ATTICFIN Else: STORIES	
MODE		
WEB	SOFT PROMPT IF MISSING: Did you mean to leave this question blank?	
PROMPT	<buttons: answer="" change="" continue=""></buttons:>	

ATTICFIN

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	
STORIES	
SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>	
,	

STORIES

ASK	If TYPEHUQ in(2,3)

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

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

NEXT	PRKGPLC1
MODE	
WEB	SOFT PROMPT IF MISSING: Did you mean to leave this question blank?
PROMPT	<buttons: answer="" change="" continue=""></buttons:>

PRKGPLC1

ASK	If TYPEHUQ in(2,3)
Does your h 1 Yes 0 No	ome have an attached garage?
NEXT	If PRKGPLC1=1: SIZEOFGARAGE Else: PRIMRES
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

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

PRIMRES
SOFT PROMPT IF MISSING: Did you mean to leave this guestion blank?
<buttons: answer="" change="" continue=""></buttons:>

PRIMRES

ASK AI	I respondents
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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=4: Is the home associated with the address on 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	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>
PROMPT	SOFT PROMPT IF PRIMRES=0: Just to confirm, this address is <u>not</u> your primary residence. Is that correct? <buttons: answer="" change="" continue=""></buttons:>

KOWNREN	т
ASK	All respondents
2 Ren	e ned by you or someone in your household? ted? upied without payment of rent?
NEXT	YEARMADE
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

YEARMADE (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: answer="" change="" continue=""></buttons:>

YEARMADE	ERANGE
ASK	If NOT 1600 le YEARMADE le 2021
	u do not know the exact year your home was built, it is helpful to have an estimate. About our home built?
1 Befo	ore 1950
2 195	0 to 1959
3 196	0 to 1969
4 197	0 to 1979
5 198	0 to 1989
6 199	0 to 1999
	0 to 2009
	0 to 2015
9 201	6 to 2020
NEXT	MOVER, MOVE20MON, MOVE21MON
MODE	
WEB	SOFT PROMPT IF MISSING: Did you mean to leave this question blank?
PROMPT	<buttons: answer="" change="" continue=""></buttons:>

MOVER, MOVE20MON, MOVE21MON (New for 2020)		
ASK	All respondents	
1 2019 2 2020	our household move in to this home? 9 or earlier 0 → In what month? [MOVE20MON: Character variable] 1 → 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: answer="" change="" continue=""></buttons:>	

VACANT (C	changed since 2015)
ASK	All respondents
Was your he	ome vacant for one or more months between January 2020 and now?
1 Yes 0 No -4 Dor	't know
-4 D01	
NEXT	SQFTEST
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: answer="" change="" continue=""></buttons:>

SQFTEST (Changed since 2015)		
ASK	All respondents	
What is the square footage of your home?		
	square feet	
{WE	B: ALLOW RANGE 0 – 99,999; PAPER: FIVE DIGITS}	
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 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: answer="" change="" continue=""></buttons:>	

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 <u>provide an estimate</u>. 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 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: answer="" change="" continue=""></buttons:>

SFSOURCE1, SFSOURCE2, SFSOURCE3, SFSOURCE4, SFSOURCE5, SFSOURCE6, SFSOURCE7 (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 (e.g., 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 checked someone else who knows [SFSOURCE5: 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_OTH]

NEXT	SQFTINCB, SQFTINCA, SQFTINCG
MODE	
WEB	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>
PROMPT	SOFT PROMPT IF SFSOURCE7=1 AND SFSOURCE7_OTH IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <buttons: answer="" change="" continue=""></buttons:>

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]?</sqftest>				
	Ye	es	No	Don't know
Bas	Basement [SQFTINCB] 1 0 -4			-4
Attic	c [SQFTINCA] 1	L	0	-4
Attached garage [SQFTINCG]		L	0	-4
NEXT	BEDROOMS, NCOMBATH, NHAFBATH, OTH	HRO	OMS	
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: answer="" change="" continue=""></buttons:>			

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.] <i>If none, please enter "0."</i>		
and	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		
MODE	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: answer="" change="" continue=""></buttons:>		

WALLTYPE (Changed since 2015)		
ASK	ASK All respondents	
What type of material is the outside of your home made of? <i>Select only one</i> . If more than one material is used, please select the one used the most.		
 Brick Wood Siding (aluminum, fiber cement, vinyl, or steel) Stucco Shingle (composition) Stone Concrete block Other ([WEB: specify below / PAPER: please specify]) [WALLTYPE_OTH] -4 Don't know 		
NEXT	ROOFTYPE	
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: answer="" change="" continue=""> SOFT PROMPT IF WALLTYPE=99 AND WALLTYPE_OTH IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <buttons: answer="" change="" continue=""></buttons:></buttons:>	

ROOFTYPE	
ASK	All respondents
What type of material is your home's roof made of? <i>Select only one</i> . If more than one material is used, please select the one used the most.	

- 1 2 3
- Ceramic or clay tiles Wood shingles/shakes
- Metal
- 4 Slate or synthetic slate5 Shingles (composition or asphalt)
- 6 Concrete tiles
- 99 Other ([WEB: specify below / PAPER: please specify]) [ROOFTYPE_OTH]
- -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: answer="" change="" continue=""></buttons:>
	SOFT PROMPT IF ROOFTYPE=99 AND ROOFTYPE_OTH IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <buttons: answer="" change="" continue=""></buttons:>

HIGHCEIL (Changed since 2015)		
ASK	All respondents	
ceilings in yo	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 PROMPTSOFT PROMPT IF MISSING: Did you mean to leave this question blank?PROMPT <buttons: answer="" change="" continue=""></buttons:>		

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: answer="" change="" continue=""></buttons:>

WINDOWS			
ASK	SK All respondents		
About how n	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 te	o 15 windows		
5 16 te	o 19 windows		
	6 20 to 29 windows		
7 30 or more windows			
-4 Don't know			
NEXT	TYPEGLASS		
MODE			
WEB SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you dor ROMPT know the answer you may select "Don't Know." <buttons: answer="" change="" continue=""></buttons:>			

TYPEGLASS

ASK All respondents

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

- Single-pane glass
 Double-pane glass
 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: answer="" change="" continue=""></buttons:>

	ORIGWIN (New for 2020)		
ASK	All respondents		
Are at least built?	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: answer="" change="" continue=""></buttons:>		

WINFRAME (Changed since 2015)			
ASK All respondents			
What frame	What frame material is used for most of the windows in your home?		
 Wood Metal (aluminum) Vinyl Composite Fiberglass -4 Don't know 			
NEXT	TREESHAD		
MODE	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: answer="" change="" continue=""></buttons:>		

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: answer="" change="" continue=""></buttons:>

ADQINSUL	ADQINSUL	
ASK	All respondents	
1 Well 2 Ade 3 Poo	3 Poorly insulated	
NEXT	DRAFTY	
MODE		
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>	

DRAFTY	
ASK	All respondents
1 All ti 2 Mos	o you or other members of your household find your home too drafty? ne time t of the time ne of the time er
NEXT	UGASHERE
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

UGASHERE	UGASHERE		
ASK	All respondents		
Is natural gas from underground pipes available in your neighborhood?			
1 Yes 0 No			
	0 No		
-4 Don	-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: answer="" change="" continue=""></buttons:>		

SWIMPOOL

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: answer="" change="" continue=""></buttons:>

MONPOOL

ASK	If SWIMPOOL=1
In the last y	ear, how many months was your swimming pool in use?
months	
{WI	EB: ALLOW RANGE 0 – 12, PAPER: TWO DIGITS}
NEXT	If MONPOOL ge 1: POOLPUMP Else: RECBATH
MODE	
WEB	SOFT PROMPT IF MISSING: Did you mean to leave this question blank?

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?			
0 No			
NEXT	FUELPOOL		
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: answer="" change="" continue=""></buttons:>		

FUELPOOL	FUELPOOL (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_OTH] -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: answer="" change="" continue=""> SOFT PROMPT IF FUELPOOL=99 AND FUELPOOL_OTH IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <buttons: answer="" change="" continue=""></buttons:></buttons:>	

RECBATH	RECBATH	
ASK	All respondents	
Does your h 1 Yes 0 No	ome have its own hot tub, spa, or Jacuzzi, other than a bathtub?	
NEXT	If RECBATH=1: MONTUB Else: APPLIANCES SECTION	
MODE		
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>	

MONTUB		
ASK	If RECBATH=1	
In the last year, how many months was your hot tub, spa, or Jacuzzi in use?		
	months	
{WE	{WEB: ALLOW RANGE 0 – 12, PAPER: TWO DIGITS}	
NEXT	If MONTUB ge 1: FUELTUB	
	Else: APPLIANCES SECTION	
MODE		
WEB	SOFT PROMPT IF MISSING: Did you mean to leave this question blank?	
PROMPT	<buttons: answer="" change="" continue=""></buttons:>	

FUELTUB (FUELTUB (Changed since 2015)	
ASK	If MONTUB ge 1	
5 Elec 1 Nati 2 Proj 3 Fue 99 Othe	used to heat the water in your hot tub, spa, or Jacuzzi? ctricity ural gas from underground pipes pane (bottled gas) I oil er ([WEB: specify below / PAPER: please specify]) [FUELTUB_OTH] '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: answer="" change="" continue=""> SOFT PROMPT IF FUELTUB=99 AND FUELTUB_OTH IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <buttons: answer="" change="" continue=""></buttons:></buttons:>	

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 (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. <i>If none, please enter "0."</i>		
	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: answer="" change="" continue=""></buttons:>	

SIZRFRI1

SIZRFRII	
ASK	If NUMFRIG>0
 What is the size of your [If NUMFRIG>1: most used] 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: answer="" change="" continue=""></buttons:>

TYPERFR1	
ASK	If SIZRFRI1>1
 Which of the following best describes your [If NUMFRIG>1: most used] refrigerator? 1 One door 2 Two doors, freezer next to the refrigerator 3 Two doors, freezer above the refrigerator 4 Two doors, freezer below 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: answer="" change="" continue=""></buttons:>

AGERFRI1	
ASK	If NUMFRIG>0
About how old is your [If NUMFRIG>1: 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	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: answer="" change="" continue=""></buttons:>

ICE	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: answer="" change="" continue=""></buttons:>	

SIZRFRI2	SIZRFRI2	
ASK	If NUMFRIG>1	
What is the size of your second most used refrigerator?		
2 Sma 3 Mec 4 Larg	 Small (17.5 cubic feet or less) Medium (17.6 to 22.5 cubic feet) Large (22.6 to 29.5 cubic feet) 	
NEXT	If SIZRFRI2>1: TYPERFR2 Else: MONRFRI2	
MODE		
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>	

TYPERFR2	
ASK	If SIZRFRI2>1
 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: answer="" change="" continue=""></buttons:>

MONRFRI2 (New for web/mail; used to be on CAPI)		
ASK	If NUMFRIG>1	
In the last year, how many months was your <u>second most used</u> refrigerator plugged in and turned on?		
	months	
{WE	{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: answer="" change="" continue=""></buttons:>	

AGERFRI2	AGERFRI2	
ASK	If NUMFRIG>1	
About how old is your second most used refrigerator? Your best estimate is fine.		
	s than 2 years old	
	to 4 years old	
	to 9 years old	
	to 19 years old	
	or more years old	
-4 Don't know		
NEXT	LOCRFRI2	
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: answer="" change="" continue=""></buttons:>	

LOCRFRI2	(Changed since 2015)	
ASK	If NUMFRIG>1	
Where is yo	Where is your second most used refrigerator located?	
2 Gar 3 Out 4 Mai	 3 Outside 4 Main living area 	
NEXT	WINECHILL	
MODE		
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""> SOFT PROMPT IF LOCRFRI2=99 AND LOCRFRI2_OTH IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <buttons: answer="" change="" continue=""></buttons:></buttons:>	

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: answer="" change="" continue=""></buttons:>

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 SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If your home has none of these, please enter "0." WEB PROMPT SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If your home

UPRTFRZR	
ASK	If NUMFREEZ>0
Which of the following best describes your [If NUMFREEZ>1: most used] 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: answer="" change="" continue=""></buttons:>

SIZFREEZ	SIZFREEZ	
ASK	If NUMFREEZ>0	
What is the	size of your [If NUMFREEZ>1: <u>most used]</u> freezer?	
2 Sma 3 Mec 4 Larg	 Small (17.5 cubic feet or less) Medium (17.6 to 22.5 cubic feet) Large (22.6 to 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: answer="" change="" continue=""></buttons:>	

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		

AGEFRZR			
ASK	If NUMFREEZ>0		
About how old is your [If NUMFREEZ>1: most used] freezer? Your best estimate is fine.			
1 Less	s than 2 years old		
	2 to 4 years old		
	5 to 9 years old		
	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 SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you know the answer you may select "Don't Know." <buttons: answer="" change="" continue=""></buttons:>			

RANGE, COOKTOP, OVEN (Changed since 2015)			
ASK	All respondents		
		Separate Cooktop	
The next questions are about ranges, separate cooktops, and wall ovens. <i>Please refer to the images above when answering these questions.</i>			
How many	ranges are in your home	e? A range is a cooktop attach	ed 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 h	ome? Do <u>not</u> include wall over	ns 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 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 that correct? Please be sure you are not counting each burner separately. BUTTONS: Change Answer / Continue>		/e {COOKTOP} separate cooktops. Is	
		ANGE ge 1 AND COOKTOP g pp. Is this correct?	e 1] You said you have both a range

RANGES

RANGEFUEL (Changed since 2015)

ASK	If RANGE>0
ASK	

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

- 5 Electricity
- 1 Natural gas from underground pipes
- Propane (bottled gas)
 Dual fuel

NEXT	If RANGEFUEL=5: RANGEINDT	
	Else: RCOOKUSE	
MODE	Paper: Include "most used" in question text.	
WEB	SOFT PROMPT IF MISSING: Did you mean to leave this question blank?	
PROMPT	<buttons: answer="" change="" continue=""></buttons:>	

RANGEIND	RANGEINDT (New for 2020)		
ASK	If RANGEFUEL=5		
	cooktop is a rare type of cooktop that requires specialized magnetic cookware. Does your an induction cooktop?		
NEXT	RCOOKUSE		
MODE			
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>		

RCOOKUSE (Changed since 2015)

ASK If RANGE>0

About how many times is the cooktop part of your [If RANGE>1: most used] 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: answer="" change="" continue=""></buttons:>

ROVENUSE (Changed since 2015)		
ASK	If RANGE>0	
About how many times is the oven part of your [If RANGE>1: most used] range used per week? If not used, please enter "0."		
times per week		
{WEB: ALLOW RANGE 0 – 99; PAPER: TWO DIGITS}		
NEXT	NEXT If COOKTOP>0: COOKTOPFUEL Else if OVEN>0: OVENFUEL Else: MICRO	

MODE	Paper: Include "most used" in question text.
WEB	SOFT PROMPT IF MISSING: Did you mean to leave this question blank?
PROMPT	<buttons: answer="" change="" continue=""></buttons:>

SEPARATE COOKTOPS

COOKTOPFUEL		
ASK	If COOKTOP>0	
What fuel does your [If COOKTOP>1: <u>most used] 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.	
WEB PROMPT		

СООКТОРІ	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: answer="" change="" continue=""></buttons:>		

COOKTOP	JSE	
ASK	If COOKTOP>0	

About how many times is your [If COOKTOP>1: <u>most used</u>] <u>separate cooktop</u> 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		

WALL OVENS

OVENFUEL	OVENFUEL (Changed since 2015)	
ASK	If OVEN>0	
5 Elec 1 Natu	bes your <u>wall oven</u> use? etricity ural gas from underground pipes bane (bottled gas)	
NEXT	OVENUSE	
MODE		
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>	

OVENUSE (Changed since 2015)		
ASK	If OVEN>0	
About how r	About how many times is your wall oven used per week? If not used, please enter "0."	
	times per week	
{WE	{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: answer="" change="" continue=""></buttons:>	

OTHER APPLIANCES

MICRO		
ASK	All respondents	
How many <u>r</u>	nicrowaves 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: answer="" change="" continue=""></buttons:>	

AMTMICRO	AMTMICRO		
ASK	If MICRO>0		
About how r	About how many times is your microwave used per week? If not used, please enter "0."		
	times per week		
{WE	{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: answer="" change="" continue=""></buttons:>		

OUTGRILL	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: answer="" change="" continue=""></buttons:>	

NUMMEAL		
ASK	All respondents	
	categories below best describes how often hot food is cooked in your home?	
	ee or more times a day	
	<i>r</i> o times a day lice a day	
	A few times each week	
5 Abo	5 About once a week	
	6 Less than once a week	
0 Never		
NEXT	USECOFFEE	
MODE		
WEB PROMPT		

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	
MODE		
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>	

TOAST, TOASTOVN, CROCKPOT, PRSSCOOK, RICECOOK, BLENDER, APPOTHER (Changed since 2015)			
ASK	All respondents		
Are any of t	he following small kitchen appliances <u>used at least once</u>	<u>a week</u> in yo	our home?
		Yes	No
Тоа	Ister [TOAST]	1	0
Toa	ster oven [TOASTOVN]	1	0
Cro	ck-Pot or slow cooker [CROCKPOT]	1	0
Inst	ant Pot or electric pressure cooker [PRSSCOOK]	1	0
Rice	e cooker [RICECOOK]	1	0
Blei	nder or juicer [BLENDER]	1	0
Other ([WEB: specify below / PAPER: please specify])			
[AP	POTHER, APPOTHER_OTH]	1	0
NEXT	DISHWASH		
MODE			
WEB	SOFT PROMPT IF ALL MISSING: Did you mean to le <buttons: answer="" change="" continue=""></buttons:>	ave this ques	stion blank?
PROMPT	SOFT PROMPT IF APPOTHER=1 AND APPOTHER	OTH IS MIS	SING: You selected
	Other (specify below) as your answer. Please provide <buttons: answer="" change="" continue=""></buttons:>		

DISHWASH	
ASK	All respondents
Does your h 1 Yes 0 No	ome have a dishwasher?
NEXT	If DISHWASH=1: DWASHUSE Else: CWASHER
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

DWASHUSE			
ASK	If DISHWASH=1		
About how r	About how many times is your dishwasher used per week? If not used, please enter "0."		
	times per week		
{WE	{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: answer="" change="" continue=""></buttons:>		

DWCYCLE (Changed since 2015)			
ASK	If DISHWASH=1		
Which cycle	is used most of the time when running your dishwasher?		
2 Nori	nal cycle <u>without</u> heated dry nal cycle <u>with</u> heated dry		
4 Ligh	ivy or "pots and pans" cycle It or delicate cycle		
	nergy saver uick cycle		
-4 Don	-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: answer="" change="" continue=""></buttons:>		

AGEDW	
ASK	If DISHWASH=1

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

- Less than 2 years old
 2 to 4 years old
 5 to 9 years old
 10 to 14 years old
 15 to 19 years old
 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: answer="" change="" continue=""></buttons:>

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 second sentence for all respondents.	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>	

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: answer="" change="" continue=""></buttons:>	

WASHLOAD		
ASK	If CWASHER=1	
About how I	About how many times is your clothes washer used per week? If not used, please enter "0."	
	times per week	
{WE	{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: answer="" change="" continue=""></buttons:>	

WASHTEMP	
ASK	If CWASHER=1
What water 1 Hot 2 War 3 Colo	
NEXT	AGECWASH
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

AGECWAS	AGECWASH	
ASK	If CWASHER=1	
About how c	old is your clothes washer? Your best estimate is fine.	
1 Les	s than 2 years old	
2 2 to	4 years old	
3 5 to	9 years old	
4 10 t	o 14 years old	
5 15 t	o 19 years old	
-4 Don't know		
NEXT	DRYER	

	DRTER
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: answer="" change="" continue=""></buttons:>
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 second sentence for all respondents.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

DRYRFUEL		
ASK	If DRYER=1	
5 Elec 1 Natu 2 Prop	 Natural gas from underground pipes Propane (bottled gas) 	
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: answer="" change="" continue=""></buttons:>	

DRYRUSE	DRYRUSE	
ASK	If DRYER=1	
	About how many times is your clothes dryer used per week? <i>If not used, please enter "0."</i> 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: answer="" change="" continue=""></buttons:>	

AGECDRYE	AGECDRYER		
ASK	If DRYER=1		
About how c	About how old is your clothes dryer? Your best estimate is fine.		
1 Less	1 Less than 2 years old		
	4 years old		
	10 to 14 years old		
	5 15 to 19 years old		
6 20 0	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: answer="" change="" continue=""></buttons:>		

ELECTRONICS

TVCOLOR	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: answer="" change="" continue=""></buttons:>	

TVSIZE1			
ASK	If TVCOLOR>0		
What is the size of your [If TVCOLOR>1: most used] 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: answer="" change="" continue=""></buttons:>		

TVTYPE1 (0	TVTYPE1 (Changed since 2015)	
ASK	If TVCOLOR>0	
What type of display does your [If TVCOLOR>1: most used] television have?		
1 LED	or OLED	
2 LCD		
3 Plas	ma	
	4 Projection	
5 Tub	5 Tube (non-flat screen)	
-4 Don't know		
NEXT	TVUSE1	
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: answer="" change="" continue=""></buttons:>	

TVUSE1 (New for 2020) ASK If TVCOLOR>0 What is the main use of your [If TVCOLOR>1: most used] television? Watching live programming 1 Watching recorded or on-demand programming from a set-top box 2 3 Streaming content via built-in smart TV apps Streaming content via a separate streaming device connected to the television 4 5 Playing video games 99 Other ([WEB: specify below / PAPER: please specify]) [TVUSE1_OTH] TVONWD1 NEXT MODE Paper: Include "most used" in question text. SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <BUTTONS: Change Answer / Continue> WEB SOFT PROMPT IF TVUSE1=99 AND TVUSE1 OTH IS MISSING: You selected Other PROMPT (specify below) as your answer. Please provide additional details in the textbox. <BUTTONS: Change Answer / Continue>

TVONWD1	TVONWD1 (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
MODE	Paper: Include "most used" in question text.
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

TVONWE1 (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: answer="" change="" continue=""></buttons:>

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	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

TVTYPE2 (0	TVTYPE2 (Changed since 2015)	
ASK	If TVCOLOR>1	
What type of display does your <u>second most used</u> television have?		
 LED or OLED LCD Plasma Projection Tube (non-flat screen) -4 Don't know 		
NEXT	TVUSE2	
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: answer="" change="" continue=""></buttons:>	

TVUSE2 (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 built-in smart TV apps 4 Streaming content via a separate streaming device connected to the television 5 Playing video games 99 Other ([WEB: specify below / PAPER: please specify]) [TVUSE2_OTH] 	
NEXT	TVONWD2
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""> SOFT PROMPT IF TVUSE2=99 AND TVUSE2_OTH IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <buttons: answer="" change="" continue=""></buttons:></buttons:>

TVONWD2 (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
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

TVONWE2 (Changed since 2015)	
ASK	If TVCOLOR>1
	but your <u>second most used</u> television's use on <u>weekends</u> , how many hours is it turned on nclude 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: answer="" change="" continue=""></buttons:>

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	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

TVTYPE3 (New for web/mail; used to be on CAPI)		
ASK	If TVCOLOR>2	
What type of display does your third most used television have?		
1 LED or OLED		
2 LCD	LCD	
3 Plas	Plasma	
	Projection	
5 Tub	ube (non-flat screen)	
-4 Don't know		
NEXT	TVUSE3	
MODE	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: answer="" change="" continue=""></buttons:>	

TVUSE3 (N	TVUSE3 (New for 2020)		
ASK	If TVCOLOR>2		
What is the	What is the main use of your third most used television?		
1 Wat	1 Watching live programming		
	ching recorded or on-demand programming from a set-top box		
3 Stre			
4 Stre	4 Streaming content via a separate streaming device connected to the television		
	5 Playing video games		
99 Oth	99 Other ([WEB: specify below / PAPER: please specify]) [TVUSE3_OTH]		
NEXT	TVONWD3		
MODE			
	SOFT PROMPT IF MISSING: Did you mean to leave this question blank?		
	<buttons: answer="" change="" continue=""></buttons:>		
WEB			
PROMPT	SOFT PROMPT IF TVUSE3=99 AND TVUSE3_OTH IS MISSING: You selected Other		
	(specify below) as your answer. Please provide additional details in the textbox.		
	<buttons: answer="" change="" continue=""></buttons:>		

TVONWD3 (New for web/mail; used to be on CAPI)	
ASK	If TVCOLOR>2
Thinking about your <u>third 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 [TVONWD3LT1: 1 if selected, 0 if not]	
NEXT	TVONWE3
MODE	
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

TVONWE3 (New for web/mail; used to be on CAPI)		
ASK	If TVCOLOR>2	
Thinking about your <u>third 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 [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: answer="" change="" continue=""></buttons:>	

CABLESAT since 2015)	, COMBODVR, SEPDVR, INTSTREAM, PLAYSTA, DVD, VCR, TVAUDIOSYS (Changed		
ASK	If TVCOLOR>0		
How many of each of the following are used in your home? <i>If none, please enter "0."</i> 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) [INSTSTREAM] 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: answer="" change="" continue=""></buttons:>		

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. <i>If none, please enter "0."</i> 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: answer="" change="" continue=""></buttons:>		

TELLWORK (New for web/mail; used to be on CAPI)				
ASK	All respondents			
Does anyon 1 Yes 0 No	e in your household telework or work from home? Include only work being done for pay.			
NEXT	If TELLWORK=1: TELLDAYS Else: ONLNEDUC			
MODE				
WEB PROMPT				

TELLDAYS (New for 2020)

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 DIGITS}

NEXT	TLDESKTOP, TLLAPTOP, TLTABLET, TLMONITOR, TLOTHER		
MODE			
WEB	SOFT PROMPT IF MISSING: Did you mean to leave this question blank?		
PROMPT	<buttons: answer="" change="" continue=""></buttons:>		

TLDESKTOP, TLLAPTOP, TLTABLET, TLMONITOR, TLOTHER (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]1Laptop computer [TLLAPTOP]1Tablet [TLTABLET]1External monitor [TLMONITOR]1Other ([WEB: specify below / PAPER: please specify])1[TLOTHER, TLOTHER_OTH]1		1 1 1	0 0 0 0	
NEXT	ONLNEDUC			
MODE				
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""> SOFT PROMPT IF TLOTHER=1 AND TLOTHER_OTH IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <buttons: answer="" change="" continue=""></buttons:></buttons:>			

ONLNEDUC (New for 2020)				
ASK	All respondents			
Is anyone in your household receiving online K-12 distance learning or enrolled in online college courses?				
NEXT	INTERNET			
MODE				
WEB SOFT PROMPT IF MISSING: Did you mean to leave this question blank?				
PROMPT	<buttons: answer="" change="" continue=""></buttons:>			

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: answer="" change="" continue=""></buttons:>		

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		
Cell	ular data plan for a smartphone				
	ther mobile device? [INTYPECELL]	1	0		
fiber	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 serviceinstalled in your home? [INTYPEOTH]10				
NEXT	SMARTSPK				
MODE					
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>				

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 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: answer="" change="" continue=""></buttons:>

SSLIGHT, SSTEMP, SSSECURE, SSTV, SSOTHER (New for 2020)					
ASK	If SMARTSPK>0				
Does your household control any of the following using your smart speaker(s)?					
		Yes	No		
	ting [SSLIGHT]	1	0		
	nperature [SSTEMP]	1	0		
Sec	urity system, cameras, or locks [SSSECURE]	1	0		
Tele	evision, set-top box, or streaming device [SSTV]	1	0		
	Other ([WEB: specify below / PAPER: please specify]) [SSOTHER, SSOTHER_OTH] 1 0				
NEXT	SPACE HEATING SECTION				
MODE					
SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>					
PROMPT SOFT PROMPT IF SSOTHER=1 AND SSOTHER_OTH IS MISSING: You selecter (specify below) as your answer. Please provide additional details in the textbox. <buttons: answer="" change="" continue=""></buttons:>					

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.

НЕАТНОМЕ	
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	
	If HEATHOME=1 and TYPEHUQ in(4,5): HEATAPT If HEATHOME=1 and TYPEHUQ in(1,2,3): EQUIPM
NEXT	If HEATHOME in(2,3): WHYNOHEAT Else: HUMIDTYPE
MODE	
WEB	SOFT PROMPT IF MISSING: Did you mean to leave this question blank?
PROMPT	<buttons: answer="" change="" continue=""></buttons:>

WHYNOHEAT (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_OTH]

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

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
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: answer="" change="" continue=""></buttons:>

EQUIPM (Changed since 2015)		
ASK	If HEATHOME=1	
What is the	main type of heating equipment used to provide heat for your home?	
	Central furnace Steam or hot water system with radiators or pipes Central heat pump	
	Built-in electric units installed in walls, ceilings, baseboards, or floors Portable electric heaters	
	Built-in room heater burning gas, oil, or kerosene Wood or pellet stove	
2 Stea 4 Cen 13 Duc 5 Buil 6 Buil 8 Woo 10 Port	am or hot water system with radiators or pipes am or hot water system with radiators or pipes atral heat pump tless heat pump, also known as a "mini-split" t-in electric units installed in walls, ceilings, baseboards, or floors t-in room heater burning gas, oil, or kerosene od or pellet stove table electric heaters er ([WEB: specify below / PAPER: please specify]) [EQUIPM_OTH]	
-4 Don	't know	
NEXT	FUELHEAT	
MODE		
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you do know the answer you may select "Don't Know." <buttons: answer="" change="" continue=""></buttons:>	

SOFT PROMPT IF EQUIPM=99 AND EQUIPM_OTH IS MISSING: You selected Other
(specify below) as your answer. Please provide additional details in the textbox.
<buttons: answer="" change="" continue=""></buttons:>

FUELHEAT

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_OTH]
- -4 Don't know

NEXT	EQUIPAGE
MODE	
WEB	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: answer="" change="" continue=""></buttons:>
PROMPT	SOFT PROMPT IF FUELHEAT=99 AND FUELHEAT_OTH IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <buttons: answer="" change="" continue=""></buttons:>

EQUIPAGE

EQUIP	EQUIPAGE		
AS	K If HEATHOME=1		
About	About how old is your home's main heating equipment? Your best estimate is fine.		
1	Less than 2 years old		
2	2 to 4 years old		
3	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
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: answer="" change="" continue=""></buttons:>

GEOHP (Ne	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		
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: answer="" change="" continue=""></buttons:>	

BACKUPHP (New for 2020)		
ASK If EQUIPM=4		
What type of 1 Elec 2 Natu 0 No t	0 No backup/none used	
NEXT EQUIPAUXTYPE		
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: answer="" change="" continue=""></buttons:>	

EQUIPAUXTYPE (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_OTH]	
NEXT	If EQUIPAUXTYPE>0: FUELAUX Else if FUELHEAT=7: WOODTYPE 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: answer="" change="" continue=""> SOFT PROMPT IF EQUIPAUXTYPE=99 AND EQUIPAUXTYPE_OTH IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <buttons: answer="" change="" continue=""></buttons:></buttons:>

ASK	If EQUIPAUXTYPE>0
ASK	

What is the fuel used by your home's secondary heating equipment?

- 5 Electricity1 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_OTH]
- -4 Don't know

NEXT	USEEQUIPAUX
MODE	
WEB	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: answer="" change="" continue=""></buttons:>
PROMPT	SOFT PROMPT IF FUELAUX=99 AND FUELAUX_OTH IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <buttons: answer="" change="" continue=""></buttons:>

USEEQUIP	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	
	at least once per week	
	a few times per month	
	only when it is very cold	
5 050	5 Use only in rare situations, such as when a guest is visiting	
	If FUELHEAT=7 or FUELAUX=7: WOODTYPE	
	Else if EQUIPM=10 OR EQUIPAUXTYPE=10: NUMPORTEL	
NEXT	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	SOFT PROMPT IF MISSING: Did you mean to leave this question blank?	
PROMPT	<buttons: answer="" change="" continue=""></buttons:>	

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?		
NEXT	If WOODTYPE=1: NUMCORDS, WOODAMT 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: Add explicit instruction to explain which respondents should answer this of		
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>	

NUMCORDS, WOODAMT (Changed since 2015)			
ASK	If WOODTYPE=1		
In the past y	In the past year, about how many cords of wood did your household use?		
16in. 16in. 1 cord			
4ft.			
	a cord or less ut one cord		
3 Abo	ut two cords		
 4 Three to five cords 5 More than five cords (please specify) cords [WOODAMT] 			
{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			
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>		

PELLETAMT, PELLETUNITS (Changed since 2015)		
ASK	If WOODTYPE=2	
In the past year, about how many pellets did your household use?		
Wood pellets		
	[PELLETAMT] [] 40-pound bags [PELLETUNITS=1] [] tons [PELLETUNITS=2]	
{VVE	EB: 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		
WEB PROMPT	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>	

	Now for 2020	\
NUMPORIEL	new lor 2020	
NUMPORTEL		

NOMPORTEL (New 101 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: answer="" change="" continue=""></buttons:>

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 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: answer="" change="" continue=""></buttons:>	

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		
{WE	{WEB: ALLOW RANGE 1 – 9; PAPER: ONE DIGIT}		
NEXT	If TYPEHUQ in(2,3): BASEHEAT, ATTCHEAT, GARGHEAT Else: HUMIDTYPE		
MODE	Paper: Add explicit instruction to explain which respondents should answer this question.		
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>		

BASEHEAT, ATTCHEAT, GARGHEAT (Changed since 2015)		
ASK	If HEATHOME=1 and TYPEHUQ in(2,3)	
Are the follo	wing spaces in your home heated?	
Basement [E	BASEHEAT]	
1 Yes		
0 No -3 Not	t applicable (my home does not have this space)	
Attic [ATTCH	HEAT)]	
1 Yes		
	No 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: answer="" change="" continue=""></buttons:>	

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 portable humidifier
- 2 Yes, a whole-home humidifier
- 0 No

NEXT	If HUMIDTYPE=1: NUMPORTHUM If HUMIDTYPE=2: USEHUMID Else: AIR CONDITIONING SECTION
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

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
MODE	
WEB	SOFT PROMPT IF MISSING: Did you mean to leave this question blank?
PROMPT	<buttons: answer="" change="" continue=""></buttons:>

LISEHLIMID (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

- Use only during winter months
 Use about half of the year
 Use all or almost all of the year
- 99 Other ([WEB: specify below / PAPER: please specify]) [USEHUMID_OTH]

NEXT	AIR CONDITIONING SECTION
MODE	
WEB	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>
PROMPT	SOFT PROMPT IF USEHUMID=99 AND USEHUMID_OTH IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <buttons: answer="" change="" continue=""></buttons:>

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: answer="" change="" continue=""></buttons:>

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	
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: answer="" change="" continue=""></buttons:>

ACEQUIPM (New for 2020)

ASK If AIRCOND=1

What is the main 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: answer="" change="" continue=""></buttons:>

ACEQUIPAGE (New for 2020)

About how old is your home's main air conditioning equipment? 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: answer="" change="" continue=""></buttons:>

ACEQUIPAUXTYPE (New for 2020)		
ASK	If AIRCOND=1	
In addition to your main air conditioning equipment, which of the following is used as a <u>second source</u> for cooling your home? If more than one, select the type most frequently used.		
0 No other equipment used		
	1 Central air conditioner	
	tral heat pump	
	tless heat pump, also known as a "mini-split"	
4 Window or wall air conditioner 5 Portable air conditioner		
	porative or swamp cooler	
	If ACEQUIPM=3 or ACEQUIPAUXTYPE=3: NUMDLHPAC	
	Else if ACEQUIPM=4 or ACEQUIPAUXTYPE=4: NUMWWAC	
NEXT	Else if ACEQUIPM=5 or ACEQUIPAUXTYPE=5: NUMPORTAC	
	Else if TYPEHUQ in(2,3): BASECOOL, ATTCCOOL, GARGCOOL Else: NUMCFAN, NUMFLOORFAN	
MODE		
MODE		
WEB	SOFT PROMPT IF MISSING: Did you mean to leave this question blank?	
PROMPT	<buttons: answer="" change="" continue=""></buttons:>	

NUMDLHPAC (New for 2020)

NOMDERPAC (New 101 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: Add explicit instruction to explain which respondents should answer this question.
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

NUMWWAC (Changed since 2020)		
ASK	If ACEQUIPM=4 or ACEQUIPAUXTYPE=4	
How many v	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	MODE Paper: Add explicit instruction to explain which respondents should answer this question.	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>	

NUMPORT	AC (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	ACEQUIPAGE
MODE	Paper: Add explicit instruction to explain which respondents should answer this question.
WEB	SOFT PROMPT IF MISSING: Did you mean to leave this question blank?
PROMPT	<buttons: answer="" change="" continue=""></buttons:>

BASECOOL, ATTCCOOL, GARGCOOL (Changed since 2015)			
ASK	If AIRCOND=1 and TYPEHUQ in(2,3)		
Are the follo	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 [ATTC	COOL]		
1 Yes			
0 No			
-3 Not	applicable (my home does not have this space)		
Attached ga	rage [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: answer="" change="" continue=""></buttons:>		

PROMPT <BUTTONS: Change Answer / Continue>

NUMCFAN, NUMFLOORFAN			
ASK	All respondents		
How many c	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]		
{FO	{FOR ALL: WEB: ALLOW RANGE 0 – 99; PAPER: TWO DIGITS}		
NEXT If NUMCFAN>0: USECFAN Else if TYPEHUQ in(2,3): HOUSEFAN, ATTICFAN Else: DEHUMTYPE			
MODE			
WEB PROMPT	home has none of these inlease enter "0 "		

USECFAN (New for web/mail; used to be on CAPI)		
ASK If NUMCFAN>0		
Thinking about the [If NUMCFAN>1: <u>most used] ceiling fan</u> , which of the following best describes how your household uses this fan?		
 Use only occasionally, such as when it is very hot or when guests are over Use only during summer months to stay cool Use about half of the year 		
4 Use	all or almost all of the year, such as for white noise or air circulation er ([WEB: specify below / PAPER: please specify]) [USECFAN_OTH]	
NEXT	If TYPEHUQ in(2,3): HOUSEFAN, ATTICFAN Else: DEHUMTYPE	
MODE	Paper: Include "most used" in question text.	
WEB	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>	
PROMPT	SOFT PROMPT IF USECFAN=99 AND USECFAN_OTH IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <buttons: answer="" change="" continue=""></buttons:>	

HOUSEFAN, ATTICFAN (Changed since 2015)				
ASK	If TYPEHUQ in(2,3)			
Are the following used in your home?				
		Yes	No	
Who	Whole house cooling fan [HOUSEFAN] 1 0			
Attic exhaust fan [ATTICFAN] 1 0				
NEXT	DEHUMTYPE			
MODE				
WEB	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank?			
PROMPT	<buttons: answer="" change="" continue=""></buttons:>			

DEHUMTYPE (New for 2020)		
ASK	If TYPEHUQ in(2,3)	
in your hom 1 Yes	rs remove moisture from the air and are often used in the summer. Is a dehumidifier used e? , a <u>portable</u> dehumidifier , a <u>whole-home</u> dehumidifier	
NEXT	IF DEHUMTYPE=1: NUMPORTDEHUM IF DEHUMTYPE=2: USEDEHUM Else: THERMOSTATS AND TEMPERATURES SECTION	
MODE		
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>	

NUMPORTDEHUM (New for 2020)			
ASK	If DEHUMTYPE=1		
How many p	How many portable dehumidifiers are used in your home?		
	portable dehumidifiers		
{WE	{WEB: ALLOW RANGE 1 – 9; PAPER: ONE DIGIT}		
NEXT	USEDEHUM		
MODE			
WEB PROMPT			

USEDEHUM (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 Othe	er ([WEB: specify below / PAPER: please specify]) [USEDEHUM_OTH]	
NEXT	THERMOSTATS AND TEMPERATURES SECTION	
MODE		
WEB	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>	
PROMPT	SOFT PROMPT IF USEDEHUM=99 AND USEDEHUM_OTH IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <buttons: answer="" change="" continue=""></buttons:>	

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?	
 Yes, a manual or non-programmable thermostat Yes, a programmable thermostat Yes, a "smart" or Internet-connected thermostat No -4 Don't know 	
NEXT	If HEATHOME=1: HEATCNTL If AIRCOND=1: COOLCNTL 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: answer="" change="" continue=""></buttons:>

HEATCNTL (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_OTH]

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	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>
PROMPT	SOFT PROMPT IF HEATCNTL=99 AND HEATCNTL_OTH IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <buttons: answer="" change="" continue=""></buttons:>

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 someone is home during the day?		
{FOR ALL: WEB: ALLOW RANGE 50 – 90; PAPER: TWO DIGITS}		
NEXT	If AIRCOND=1: COOLCNTL Else: WATER HEATING SECTION	
MODE	Paper: Ask of all respondents.	
WEB PROMPT		

COOLCNTL (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_OTH]		
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.	1	
SOFT PROMPT IF MISSING: Did you mean to leave this question blank?		
<buttons: answer="" change="" continue=""></buttons:>		
PROMPT SOFT PROMPT IF COOLCNTL=99 AND COOLCNTL_OTH IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox.		
Stiller (specify below) as your answer. Please provide additional details in the textbox. Sector (Specify below) as your answer. Please provide additional details in the textbox.		

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 someone is home during the day?		
{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: answer="" change="" continue=""></buttons:>	

WATER HEATING

WEB MOTIVATIONAL PROMPT #3: You are about three-quarters done with the survey. Thank you again for your participation so far!

The next section asks important questions about the water heater used in your home. This will give us a better understanding of your home's energy use.

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: (Still need to determine paper implementation of skip logic for this and next item. Do not want any respondents to think they should skip Water Heating section entirely.)
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: answer="" change="" continue=""></buttons:>

H2OMAIN (C	hanged since 2015)
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ASK	If TYPEHUQ in(1,2,3)
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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_OTH]

NEXT	WHEATSIZ
MODE	Paper: (Still need to determine paper implementation of skip logic for this and previous item. Do not want any respondents to think they should skip Water Heating section entirely.)
WEB	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>
PROMPT	SOFT PROMPT IF H2OMAIN=99 AND H2OMAIN_OTH IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <buttons: answer="" change="" continue=""></buttons:>

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		
	If WHEATSIZ in(1,2,3): WHEATBKT	
NEXT	Else: WHEATAGE	
MODE		
WEB	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: answer="" change="" continue=""></buttons:>	

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: answer="" change="" continue=""></buttons:>

WHEATAGE	
ASK	All respondents

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

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

- -4 Don't know

NEXT	FUELH2O
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: answer="" change="" continue=""></buttons:>

FUELH2O (Changed since 2015)	
ASK	All respondents
What fuel do	bes 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]) [FUELH20_OTH] -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: answer="" change="" continue=""> SOFT PROMPT IF FUELH2O=99 AND FUELH2O_OTH IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <buttons: answer="" change="" continue=""></buttons:></buttons:>

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 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: answer="" change="" continue=""></buttons:>	

FUELH2O2 (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 Wood 7 8 Solar thermal 99 Other ([WEB: specify below / PAPER: please specify]) [FUELH2O2_OTH] -4 Don't know NEXT LIGHTING SECTION MODE 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> WEB PROMPT SOFT PROMPT IF FUELH2O2=99 AND FUELH2O2 OTH 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 inside your home, 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	If LGTIN1TO4>0 or LGTIN4TO8>0 or LGTINMORE8>0: LGTINLED Else: LGTOUTANY	
MODE		
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>	

LGTINLED (Changed since 2015)	
ASK	If LGTIN1TO4>0 or LGTIN4TO8>0 or LGTINMORE8>0
What portion of the light bulbs used inside your home are LED bulbs?	
 All Most About half Some None 	
NEXT	LGTINCFL
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

LGTINCFL (Changed since 2015)	
ASK	If LGTIN1TO4>0 or LGTIN4TO8>0 or LGTINMORE8>0
What portio	n of the light bulbs used inside your home are CFL bulbs?
1 All 2 Mos 3 Abo 4 Son 0 Nor	ut half ne
NEXT	LGTINCAN
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

LGTINCAN (Changed since 2015)		
ASK	If LGTIN1TO4>0 or LGTIN4TO8>0 or LGTINMORE8>0	
What portion	n of the light bulbs used inside your home are incandescent or halogen bulbs?	
1 All 2 Mos 3 Abo 4 Son 0 Nor	ne	
NEXT	LGTOUTANY	
MODE		
WEB PROMPT		
LGTOUTAN	IY (New for 2020)	

LGTOUTANY	(New for 2020)
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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 are 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 SOFT PROMPT IF MISSING: Did you mean to leave this question blank? PROMPT <buttons: answer="" change="" continue=""></buttons:>	

LGTOUTNITE (N	lew for web/mail; used to be on CAPI)

ASK If LGTOUTANY=1

How many outside light bulbs are typically left on all night?

_____ light bulbs

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

NEXT	LGTOUTLED, LGTOUTCFL, LGTOUTCAN
MODE	
WEB	SOFT PROMPT IF MISSING: Did you mean to leave this question blank?
PROMPT	<buttons: answer="" change="" continue=""></buttons:>

LGTOUTLED, LGTOUTCFL, LGTOUTCAN (Changed since 2015)				
ASK	If LGTOUTANY=1			
Which of the following types of light bulbs are typically left on all night outside your home?				
		Yes	No	
LEC	LED bulbs [LGTOUTLED] 1 0			
CFL	_ bulbs [LGTOUTCFL]	1	0	
Incandescent or halogen bulbs [LGTOUTCAN] 1 0		0		
NEXT	ENERGY BILLS SECTION			
MODE				
WEB	B SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank?		ank?	
PROMPT	<buttons: answer="" change="" continue=""></buttons:>			

ENERGY BILLS

ELPAY		
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_OTH] -4 Don't know 		
NEXT	NGPAY	
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: answer="" change="" continue=""> SOFT PROMPT IF ELPAY=99 AND ELPAY_OTH IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <buttons: answer="" change="" continue=""></buttons:></buttons:>	

NGPAY (Changed since 2015)	
ASK	All respondents
1 Hou 2 All r 3 Son 99 Oth	onsible for paying for the <u>natural gas</u> used in this home? sehold is responsible for paying for <u>all</u> natural gas used in this home natural gas used in this home is included in the rent or condo fee he is paid by the household, some is included in the rent or condo fee er ([WEB: specify below / PAPER: please specify]) [NGPAY_OTH] 't know
NEXT	LPGPAY
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: answer="" change="" continue=""> SOFT PROMPT IF NGPAY=99 AND NGPAY_OTH IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <buttons: answer="" change="" continue=""></buttons:></buttons:>

LPGPAY (Changed since 2015)		
ASK	All respondents	
1 Hou 2 All p 3 Son 99 Othe -4 Don	onsible for paying for the <u>propane</u> used in this home? sehold is responsible for paying for <u>all</u> propane used in this home propane used in this home is included in the rent or condo fee ne is paid by the household, some is included in the rent or condo fee er ([WEB: specify below / PAPER: please specify]) [LPGPAY_OTH] 't know not use propane	
NEXT	FOPAY	
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: answer="" change="" continue=""> SOFT PROMPT IF LPGPAY=99 AND LPGPAY_OTH IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <buttons: answer="" change="" continue=""></buttons:></buttons:>	

FOPAY (Changed since 2015)

ASK All respondents

Who is responsible for paying for the fuel oil used in this home?

- Household is responsible for paying for <u>all</u> fuel oil used in this home All fuel oil used in this home is included in the rent or condo fee 1
- 2
- Some is paid by the household, some is included in the rent or condo fee 3
- 99 Other ([WEB: specify below / PAPER: please specify]) [FOPAY_OTH]
- -4 Don't know
- -3 Do not use fuel oil

NEXT	KFUELOT
MODE	
WEB	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: answer="" change="" continue=""></buttons:>
PROMPT	SOFT PROMPT IF FOPAY=99 AND FOPAY_OTH IS MISSING: You selected Other (specify below) as your answer. Please provide additional details in the textbox. <buttons: answer="" change="" continue=""></buttons:>

KFUELOT (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, BILLFOIL, BILLKER Else: SMARTMETER	
MODE		
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>	

BILLEL, BILLUG, BILLLPG, BILLFK		
ASK	If KFUELOT=1	
Which of your household's energy bills include costs for energy used for non-household purposes? <i>Please select all that apply.</i>		
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 or kerosene [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: answer="" change="" continue=""></buttons:>	

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: answer="" change="" continue=""></buttons:>

INTDATAACC (Changed since 2015)	
ASK	If SMARTMETER=1
Have you or home's sma 1 Yes 0 No	any member of your household ever accessed or viewed electricity usage data from your rt meter?
NEXT	MEDICALDEV
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

MEDICALDEV (New for web/mail; used to be on CAPI)	
ASK	All respondents
Are any med 1 Yes 0 No	lical devices used in your home, such as ventilators, nebulizers, or CPAP machines?
NEXT	POWEROUT
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

POWEROU	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	1 Yes 0 No		
-4 Don't know			
NEXT	If POWEROUT=1: WHYPOWEROUT 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: answer="" change="" continue=""></buttons:>		

WHYPOWEROUT (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_OTH]

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

BACKUP

BACKUF		
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? T <buttons: answer="" change="" continue=""></buttons:>	

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? <i>Please select all that apply.</i>		
Sola Sma	on-site generation system [NOGEN: 1 if selected, 0 if not] ar or photovoltaic system [SOLAR: 1 if selected, 0 if not] all wind turbine [WIND: 1 if selected, 0 if not] nbined heat and power system [COMBINED: 1 if selected, 0 if not]	
NEXT	NEXT If SOLAR=1: PVINSTALL 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: answer="" change="" continue=""></buttons:>	

PVINSTALL (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	
MODE		
WEB PROMPT	know the answer you may select "Don't Know "	

PVCAPACITY (New for 2020)			
ASK	If SOLAR=1		
What is the	capacity of your solar or photovoltaic system in kW (kilowatts)?		
	kW		
{WE	{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			
WEB PROMPT	know the answer you may select "Don't Know "		

OUTLET		
ASK	If TYPEHUQ in(1,2,3,4)	
vehicle?	1 Yes	
NEXT	ELECVEH	
MODE	MODE	
WEB PROMPT		

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		
WEB PROMPT SOFT PROMPT IF MISSING: Did you mean to leave this question blank? If you know the answer you may select "Don't Know." <buttons: answer="" change="" continue=""></buttons:>		

ELECVEH (Changed since 2015)		
ASK	All respondents	
	ny member of your household own or lease an electric vehicle? Please include both all- plug-in hybrid electric vehicles.	
NEXT	NEXT If ELECVEH=1: EVMAKE, EVMODEL, EVYEAR Else: OTHFUELUSE	
MODE		
WEB PROMPT		

EVMAKE, EVMODEL, EVYEAR (New for 2020)		
ASK	If ELECVEH=1	
Mak Moc	make, model, and model year of your electric vehicle? ie: [EVMAKE: Open-ended response] lel: [EVMODEL: Open-ended response] r: [EVYEAR] {WEB: ALLOW RANGE 1950 – 2021; PAPER: FOUR DIGITS}	
NEXT	EVCHRGHOME, EVCHRGAPT, EVCHRGWKS, EVCHRGBUS, EVCHRGMUNI, EVCHRGDLR, EVCHRGHWY, EVCHRGOTH	
MODE		
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>	

ASK	If ELECVEH=1		
At which of	the following places do you typically charge your electric v	ehicle?	
		Yes	No
Υοι	Ir home [EVCHRGHOME]	1	0
	Ir apartment building or complex [EVCHRGAPT]	1	0
	Ir workplace or school [EVCHRGWKS]	1	0
Sho	opping center or business you frequent [EVCHRGBUS] nicipal parking lot or building, including libraries	1	0
	post offices [EVCHRGMUNI]	1	0
	dealership [EVCHRGDLR]	1	0
	hway rest stop [EVCHRGHWY]	1	0
	ne other type of public charging station [EVCHRGOTH]	1	0
NEXT	If EVCHRGHOME=1: EVHOMEAMT Else: EVWKMILES		
MODE			
WEB	SOFT PROMPT IF ALL MISSING: Did you mean to leav	e this ques	stion blank?
PROMPT	<buttons: answer="" change="" continue=""></buttons:>		

EVHOMEAMT (New for 2020)

ASK If EVCHRGHOME=2

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

- 1 All at home (100%)

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

NEXT	EVCHRGTYPE
MODE	
WEB	SOFT PROMPT IF MISSING: Did you mean to leave this question blank?
PROMPT	<buttons: answer="" change="" continue=""></buttons:>

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	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

EVWKMILES (New for 2020)	
ASK	If ELECVEH=1
About how many total miles are driven in your electric vehicle per week? Open-ended response	
NEXT	OTHFUELUSE
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

OTHFUELUSE	
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 it is used. Open-ended response Do not use any other fuel [OTHFUELUSE_NA:1 if selected, 0 if not]	
NEXT	OTHACT
MODE	

ОТНАСТ	
ASK	All respondents
Are there any other devices used in your home that use a lot more energy than would usually be used in a home? 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 high energy-using activities [OTHACT_NA:1 if selected, 0 if not]	
NEXT	HOUSEHOLD CHARACTERISTICS SECTION
MODE	

HOUSEHOLD CHARACTERISTICS

WEB MOTIVATIONAL PROMPT #4: 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		

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_OTHER
MODE	

RACE_WHITE, RACE_BLACK, RACE_AIAN, RACE_ASIAN, RACE_NHPI, RACE_OTHER	
ASK	All respondents
What is your race? <i>Please select all that apply.</i> 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_OTHER: 1 if selected, 0 if not; RACE_OTHER_OTH]	
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: answer="" change="" continue=""></buttons:>

	, NUMADULT2 (Changed since 2015)
NOWICH ILD, NOWADOLI I	, NOWADOLIZ (Changed Since 2013)

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	

ATHOME	АТНОМЕ	
ASK	All respondents	
How many <u>v</u>	veekdays is someone at home most or all of the day?	
0 Non	-	
	1 1 day	
5 5 da	5 5 days	
NEXT	MONEYPY	
MODE		
WEB	SOFT PROMPT IF MISSING: Did you mean to leave this question blank?	
PROMPT	<buttons: answer="" change="" continue=""></buttons:>	

MONEYPY	(Changed since 2015)
ASK	All respondents
	income sources, which category best describes the total combined income of all nembers for the last year, before taxes and deductions?
1 Less	s than \$5,000
	00 - \$7,499
3 \$7,5	500 - \$9,999
4 \$10	,000 - \$12,499
	,500 - \$14,999
	,000 - \$19,999
	,000 - \$24,999
	,000 - \$29,999
	,000 - \$34,999
	,000 - \$39,999
	,000 - \$49,999
	,000 - \$59,999 ,000 - \$74,999
	,000 - \$74,999
	0,000 - \$149,999
16 \$150,000 or more	
10 410	
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 last year, how many months did your household reduce or forego expenses for basic household necessities, such as medicine or food, in order to pay an energy bill?

- 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: answer="" change="" continue=""></buttons:>

SCALEG	
ASK	All respondents
was unsafe 1 Alm 2 Son	ear, how many months did your household keep your home at a temperature that you felt or unhealthy? ost every month ne months 2 months er
NEXT	SCALEE
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

SCALEE	
ASK	All respondents
	ear, how many months did your household receive a disconnection notice, shut off notice, ery notice for an energy bill?
2 Som	ost every month ne months 2 months rer
NEXT	If SCALEE in(1,2,3): PAYHELP Else: NOHEATBROKE, NOHEATEL, NOHEATNG, NOHEATBULK
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

PAYHELP	
ASK	If SCALEE in(1,2,3)
	eceived that notice, did your household apply for and receive home energy assistance to ir energy bill?
NEXT	NOHEATBROKE, NOHEATEL, NOHEATNG, NOHEATBULK
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

NOHEATBROKE, NOHEATEL, NOHEATNG, NOHEATBULK	
ASK	All respondents
In the last 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? <i>Please select all that apply.</i> 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, kerosene, or wood 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: answer="" change="" continue=""></buttons:>

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}	
NEVT	

NEXT	NOHEATHELP
MODE	
WEB	SOFT PROMPT IF MISSING: Did you mean to leave this question blank?
PROMPT	<buttons: answer="" change="" continue=""></buttons:>

NOHEATHELP	
ASK	If NOHEATBROKE=1 or NOHEATEL=1 or NOHEATNG=1 or NOHEATBULK=1
When that h your heating 1 Yes 0 No	
NEXT	COLDMA
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

COLDMA	COLDMA	
ASK	All respondents	
In the last year, did anyone in your household need medical attention because your home was too cold? 1 Yes 0 No		
NEXT	NOACBROKE, NOACEL	
MODE		
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>	

NOACBROKE, NOACEL		
ASK	All respondents	
<u>cooling equi</u> You to p You	In the last year, was there ever a time your household was <u>unable to use your air conditioner or other</u> <u>cooling equipment</u> because any of the following events happened? <i>Please select all that apply</i> . 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	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank?	
PROMPT	<buttons: answer="" change="" continue=""></buttons:>	

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: answer="" change="" continue=""></buttons:>

PROMPT <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	НОТМА
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

НОТМА	
ASK	All respondents
In the last ye 1 Yes 0 No	ear, did anyone in your household need medical attention because your home was too hot?
NEXT	ENERGYASST
MODE	
WEB PROMPT	SOFT PROMPT IF MISSING: Did you mean to leave this question blank? <buttons: answer="" change="" continue=""></buttons:>

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	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: answer="" change="" continue=""></buttons:>	

ENERGYASST20, ENERGYASST19, ENERGYASST18, ENERGYASST17, ENERGYASST16, ENERGYASST0TH

ASK	If ENERGYASST=1	
	he following years did your household participate in a home energy assistance program? ct all that apply.	
	0 [ENERGYASST20: 1 if selected, 0 if not]	
	9 [ENERGYASST19: 1 if selected, 0 if not]	
201	2018 [ENERGYASST18: 1 if selected, 0 if not]	
201	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	SOFT PROMPT IF ALL MISSING: Did you mean to leave this question blank?	
PROMPT	<buttons: answer="" change="" continue=""></buttons:>	

FINAL QUESTIONS

WEB MOTIVATIONAL PROMPT #5: 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	
energy use.	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.	
Please prov your househ collected as	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 or Kerosene Supplier: [FKSUPPNAME] Account Number: [FKACCT]		
NEXT	If mail_type=4: OWGMSTADD, OWGMCITY, OWGMSTATE, OWGMZIP If MODE=Web and TYPEHUQ=5: MFNAME, MFCONTACT, MFROLE, MFPHONE, MFEMAIL Else: COMMENTS	
MODE		

OWGMSTADD, OWGMCITY, OWGMSTATE, OWGMZIP (New for 2020)	
ASK	If mail_type=4
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 prov	ide your home's physical address below.
Street Address: [OWGMSTADD] City: [OWGMCITY] State: [OWGMSTATE] Zip Code: [OWGMZIP]	
NEXT	If MODE=Web and TYPEHUQ=5: MFNAME, MFCONTACT, MFROLE, MFPHONE, MFEMAIL Else: COMMENTS
MODE	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."

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 (e.g., landlord, building owner,	
HOA president, office manager): [MFROLE]	
Contact Phone Number: [MFPHONE] Contact Email: [MFEMAIL]	
NEXT	COMMENTS
MODE	

COMMENT	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, <put and="" appropriate="" contact="" email="" information="" phone="">.</put>	
	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, <put and="" appropriate="" contact="" email="" information="" phone="">.</put>	