1. In what year did your family move into this house (apartment)?

<table>
<thead>
<tr>
<th>Year Range</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before 1940</td>
<td>01</td>
</tr>
<tr>
<td>1940-1949</td>
<td>02</td>
</tr>
<tr>
<td>1950-1959</td>
<td>03</td>
</tr>
<tr>
<td>1960-1964</td>
<td>04</td>
</tr>
<tr>
<td>1965-1969</td>
<td>05</td>
</tr>
<tr>
<td>1970-1974</td>
<td>06</td>
</tr>
<tr>
<td>1975-1979</td>
<td>07</td>
</tr>
<tr>
<td>1980</td>
<td>08</td>
</tr>
<tr>
<td>1981</td>
<td>09</td>
</tr>
<tr>
<td>1982</td>
<td>10</td>
</tr>
</tbody>
</table>

IF "1981" OR "1982," ASK:

2. In which month did you move in? (SPECIFY MONTH AND ENTER LAST DIGIT OF YEAR.)

<table>
<thead>
<tr>
<th>Month</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. In what year was this house (building) built? Just your estimate.

<table>
<thead>
<tr>
<th>Year Range</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before 1940</td>
<td>01</td>
</tr>
<tr>
<td>1940-1949</td>
<td>02</td>
</tr>
<tr>
<td>1950-1959</td>
<td>03</td>
</tr>
<tr>
<td>1960-1964</td>
<td>04</td>
</tr>
<tr>
<td>1965-1969</td>
<td>05</td>
</tr>
<tr>
<td>1970-1974</td>
<td>06</td>
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<tr>
<td>1975-1979</td>
<td>07</td>
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<tr>
<td>1977</td>
<td>08</td>
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<tr>
<td>1978</td>
<td>09</td>
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<tr>
<td>1979</td>
<td>10</td>
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<tr>
<td>1980</td>
<td>11</td>
</tr>
<tr>
<td>1981</td>
<td>12</td>
</tr>
<tr>
<td>1982</td>
<td>13</td>
</tr>
</tbody>
</table>
4. What material is mainly used on the outside walls of your (house/building)? (IF TWO MATERIALS ARE USED ABOUT THE SAME AMOUNT, MARK TWO BOXES.)

- [ ] BRICK 127
- [ ] WOOD 128
- [ ] CONCRETE 129
- [ ] STUCCO 130
- [ ] STONE 131
- [ ] ALUMINUM SIDING 132
- [ ] COMPOSITION (ASBESTOS SHINGLE, ETC.) 133
- [ ] GLASS 134
- [ ] OTHER (SPECIFY): _____________ 135

5. Altogether (counting all areas that are used as year-round living space), how many rooms do you have in your living quarters? Do not count bathrooms, unheated porches, foyers, or hallways. (SEE INSTRUCTION BELOW.)

   NUMBER OF ROOMS: ___________________________ 136-137

6. How many complete bathrooms and how many half-bathrooms do you have? (A complete bathroom is a room with a flush toilet, bathtub or shower, and a sink/washbasin with running water. A half-bath has at least a flush toilet or bathtub or shower, but does not have all the facilities for a complete bathroom.)

   NUMBER OF COMPLETE BATHROOMS: ____________________ 138
   [ ] NONE

   NUMBER OF HALF BATHROOMS: ____________________ 139
   [ ] NONE

**INTERVIEWER INSTRUCTIONS:**

Q. 5 -- Generally count any room as long as it is a comfortable place to rest, read, study, etc., year-round.

Do not count laundry rooms, unfinished attics or basements, open porches, or unfinished space used for storage.
HAND RESPONDENT EXHIBIT 7

7. What is the main heating equipment for your home?
   01[] HOT WATER PIPES RUNNING THROUGH A SLAB FLOOR (RADIANT HEATING)
   02[] STEAM OR HOT WATER SYSTEM WITH RADIATORS OR CONVECTORS
   03[] CENTRAL WARM-AIR FURNACE WITH DUCTS TO INDIVIDUAL ROOMS (DO NOT COUNT HEAT PUMP HERE) -- ASK Q. 8
   04[] HEAT PUMP
   05[] BUILT-IN ELECTRIC UNITS (PERMANENTLY INSTALLED IN WALL, CEILING, OR BASEBOARD)
   06[] FLOOR, WALL, OR PIPELESS FURNACE
   07[] ROOM HEATER BURNING GAS, OIL, KEROSENE
   08[] HEATING STOVE BURNING WOOD, COAL, COKE -- ASK Q. 9
   09[] FIREPLACE(S)
   10[] PORTABLE HEATER(S)
   21[] OTHER (SPECIFY): _____________________________
   96[] DON'T KNOW
   00[] NO HEATING EQUIPMENT USED -- SKIP TO Q. 23

IF "CENTRAL WARM AIR," ASK:

   8. Is the warm air forced through the ducts by a fan?
      1[] YES
      0[] NO
      6[] DON'T KNOW

IF "HEATING STOVE BURNING WOOD, COAL, COKE," ASK:

   9. Is the stove airtight?
      1[] YES
      0[] NO
      6[] DON'T KNOW

TAKE BACK EXHIBIT 7

IF 2 OR MORE HOUSING UNITS IN BUILDING, ASK Q. 10. OTHERWISE, SKIP TO Q. 11.

10. Is your home heated by a central system for your building (or group of buildings) or is the main heating equipment for your living quarters only?
    1[] CENTRAL SYSTEM FOR BUILDING(S)
    2[] MAIN HEATING EQUIPMENT FOR THESE LIVING QUARTERS ONLY
    6[] DON'T KNOW
11. What is the main fuel used for heating this house (apartment)?

- [ ] GAS FROM UNDERGROUND PIPES SERVING THE NEIGHBORHOOD
- [ ] LPG GAS (BOTTLED OR TANK GAS)
- [ ] FUEL OIL
- [ ] KEROSENE OR COAL OIL
- [ ] ELECTRICITY
- [ ] COAL OR COKE
- [ ] WOOD
- [ ] SOLAR COLLECTORS
- [ ] OTHER (SPECIFY): __________

[ ] DON'T KNOW

12. In November of 1980 was the main fuel used to heat this house (apartment) the same as it is now?

- [ ] YES -- SKIP TO Q. 14
- [ ] NO
- [ ] DON'T KNOW -- SKIP TO Q. 14
- [ ] NO FUEL USED -- SKIP TO Q. 14

13. What was the main fuel used to heat this house (apartment) in November of 1980?

- [ ] GAS FROM UNDERGROUND PIPES SERVING THE NEIGHBORHOOD
- [ ] LPG GAS (BOTTLED OR TANK GAS)
- [ ] FUEL OIL
- [ ] KEROSENE OR COAL OIL
- [ ] ELECTRICITY
- [ ] COAL OR COKE
- [ ] WOOD
- [ ] SOLAR COLLECTORS
- [ ] OTHER (SPECIFY): __________

[ ] NO FUEL USED
[ ] DON'T KNOW
14. Do you have a thermostat, radiator valve, or other control to adjust the temperature in your (house/apartment) during the heating season?

[ ] YES
[ ] NO -- SKIP TO Q. 18

IF "YES," ASK:

15. At what temperature do you usually keep your house (apartment) during the day in the wintertime when someone is at home? (SEE INSTRUCTION BELOW.)

[ ] DEGREES FAHRENHEIT

95[ ] HEAT TURNED OFF

16. At what temperature do you usually keep your house (apartment) during the day in the wintertime when no one is at home? (SEE INSTRUCTION BELOW.)

[ ] DEGREES FAHRENHEIT

95[ ] HEAT TURNED OFF

17. At what temperature do you usually keep your house (apartment) during sleeping hours in the wintertime? (SEE INSTRUCTION BELOW.)

[ ] DEGREES FAHRENHEIT

95[ ] HEAT TURNED OFF

INTERVIEWER INSTRUCTIONS:

Q. 15-17 -- If respondent keeps different sections of the house at different temperatures, we want to know the temperature in the part of the house where the people are. If, for example, the heat is turned off upstairs during the day because the family is downstairs, we want the downstairs temperature.

If respondent doesn't know temperature, but does know thermostat setting, record thermostat setting. Otherwise, probe for best estimate.
HAND RESPONDENT EXHIBIT 18

18. You have already mentioned your main heating equipment. Are any of these types of equipment used in your home in addition to your main equipment?

IF "YES," ASK:

19. What type(s) do you use? (IF MORE THAN ONE TYPE IS MENTIONED, MARK ONLY THE ONE USED MOST.)

01[ ] HOT WATER PIPES RUNNING THROUGH A SLAB FLOOR (RADIANT HEATING)
02[ ] STEAM OR HOT WATER SYSTEM WITH RADIATORS OR CONVECTORS
03[ ] CENTRAL WARM-AIR FURNACE WITH DUCTS TO INDIVIDUAL ROOMS (DO NOT COUNT HEAT PUMP HERE) -- ASK Q. 20
04[ ] HEAT PUMP
05[ ] BUILT-IN ELECTRIC UNITS (PERMANENTLY INSTALLED IN WALL, CEILING, OR BASEBOARD)
06[ ] FLOOR, WALL, OR PIPELESS FURNACE
07[ ] ROOM HEATER BURNING GAS, OIL, KEROSENE
08[ ] HEATING STOVE BURNING WOOD, COAL, COKE - ASK Q. 21
09[ ] FIREPLACE(S)
10[ ] PORTABLE HEATER(S) ▲
21[ ] OTHER (SPECIFY): ________________________________
96[ ] DON'T KNOW

IF "CENTRAL WARM AIR," ASK:

20. Is the warm air forced through the ducts by a fan?

1[ ] YES
0[ ] NO
6[ ] DON'T KNOW

IF "HEATING STOVE BURNING WOOD, COAL, COKE," ASK:

21. Is the stove airtight?

1[ ] YES
0[ ] NO
6[ ] DON'T KNOW

TURN TO EXHIBIT 22

22. What fuel is used by this additional equipment?

01[ ] GAS FROM UNDERGROUND PIPES SERVING THE NEIGHBORHOOD
02[ ] LPG GAS (BOTTLLED OR TANK GAS)
03[ ] FUEL OIL
04[ ] KEROSENE OR COAL OIL
05[ ] ELECTRICITY
06[ ] COAL OR COKE
07[ ] WOOD
08[ ] SOLAR COLLECTORS
21[ ] OTHER (SPECIFY): ________________________________
96[ ] DON'T KNOW
23. Has any wood been burned in your home in the past 12 months?

YES 0[] NO -- SKIP TO Q. 29

HAND RESPONDENT EXHIBIT 24

24. Did your household burn less than a rack, or one rack or more? A rack is 16 in. x 4 ft. x 8 ft. or one-third of a cord.

IF "YES," ASK:

25. About how many racks or cords of wood did you burn in the past 12 months? (PROBE FOR BEST ESTIMATE.)

NUMBER OF RACKS (16 in. x 4 ft. x 8 ft.):

OR

NUMBER OF CORDS (4 ft. x 4 ft. x 8 ft.):

[] DON'T KNOW

26. Did you purchase any wood to burn in your home in the last 12 months?

YES 0[] NO -- TAKE BACK EXHIBIT 24; SKIP TO Q. 29

27. On your household's most recent purchase of wood, how was the wood measured: by the rack, cord, or some other measure? (IF "TRUCKLOAD," PROBE FOR SIZE OF TRUCK).

RACK 2[] CORD 5[] OTHER (SPECIFY)

28. About what was the price per (rack/ cord/other measure) on your household's most recent purchase of wood?

PRICE: $ ___________

TAKE BACK EXHIBIT 24
29. Which fuel is used most for heating water?

01[] GAS FROM UNDERGROUND PIPES SERVING THE NEIGHBORHOOD
02[] LPG GAS (BOTTLED OR TANK GAS)
03[] FUEL OIL
04[] KEROSENE OR COAL OIL
05[] ELECTRICITY
06[] COAL OR COKE
07[] WOOD
08[] SOLAR COLLECTORS
21[] OTHER (SPECIFY): _____________

00[] NO FUEL USED -- TAKE BACK EXHIBIT 29/31; 96[] DON'T KNOW

30. In addition to your main fuel, do you use any other fuel for heating water?

IF "YES," ASK:

31. What is the additional fuel?

01[] GAS FROM UNDERGROUND PIPES SERVING THE NEIGHBORHOOD
02[] LPG GAS (BOTTLED OR TANK GAS)
03[] FUEL OIL
04[] KEROSENE OR COAL OIL
05[] ELECTRICITY
06[] COAL OR COKE
07[] WOOD
08[] SOLAR COLLECTORS
21[] OTHER (SPECIFY): _____________

TAKE BACK EXHIBIT 29/31

IF 2 OR MORE HOUSING UNITS IN BUILDING, ASK Q. 32. OTHERWISE, SKIP TO Q. 33.

32. Is your hot water supplied by a central system for your building (or group of buildings) or is the water heater for your living quarters only?

1[] CENTRAL SYSTEM FOR BUILDING(S)
2[] FOR THESE LIVING QUARTERS ONLY
6[] DON'T KNOW
33. Do you have air-conditioning equipment, either a central system or individual window or wall units? (MARK ALL THAT APPLY.)

- [] YES, CENTRAL SYSTEM
- [] YES, INDIVIDUAL (WINDOW/WALL) UNITS -- SKIP TO Q. 36
- [] NO -- SKIP TO Q. 38

IF "CENTRAL SYSTEM" ON Q. 33, ASK:

34. Does the central air-conditioning system use gas from underground pipes, LPG, or electricity?

- [] GAS FROM UNDERGROUND PIPES SERVING THE NEIGHBORHOOD
- [] LPG GAS (BOTTLED OR TANK GAS)
- [] ELECTRICITY
- [] DON'T KNOW

IF 2 OR MORE HOUSING UNITS IN BUILDING, ASK Q. 35. OTHERWISE SKIP TO Q. 36.

35. Is it a central air-conditioning system for your building (or group of buildings) or is the main air-conditioning equipment for your living quarters only?

- [] CENTRAL SYSTEM FOR BUILDING
- [] AIR-CONDITIONING IS FOR THESE LIVING QUARTERS ONLY
- [] DON'T KNOW

36. How many rooms in your house (apartment) can be cooled by your air-conditioning? Do not count bathrooms, hallways, foyers, or enclosed porches.

NUMBER OF ROOMS: 95

- [] ENTIRE HOUSE OR APARTMENT

HAND RESPONDENT EXHIBIT 37

37. Which of the statements on this exhibit best describes the way you used your air conditioner(s) last summer? (MARK ONLY ONE.)

- [] DID NOT USE AT ALL
- [] TURNED ON ONLY A FEW DAYS OR NIGHTS WHEN REALLY NEEDED
- [] TURNED ON QUITE A BIT
- [] TURNED ON JUST ABOUT ALL SUMMER
- [] OTHER (SPECIFY): ___________________

TAKE BACK EXHIBIT 37
38. How many doors do you have in your home that go from a heated area to the outside or to an unheated area? (SEE INSTRUCTION BELOW.)

HAND RESPONDENT EXHIBIT 39

39. Please look at this exhibit of different kinds of doors. How many of each of these types of doors do you have?

<table>
<thead>
<tr>
<th>Q. 39 NUMBER OF DOORS</th>
<th>Q. 40 NUMBER WITH STORM DOOR OR INSULATING GLASS</th>
<th>Q. 41 NUMBER STORM DOORS PUT IN JANUARY 1, 1980</th>
<th>Q. 42 MONTH:</th>
<th>Q. 43 YEAR:</th>
<th>Q. 44 APPOXIMATE COST:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Sliding glass doors 220</td>
<td>221</td>
<td>222</td>
<td>223-226</td>
<td>198</td>
<td>$ __________.00</td>
</tr>
<tr>
<td>[] NONE</td>
<td>[] NONE</td>
<td>[] NONE</td>
<td>227-230</td>
<td>[] IN PROCESS</td>
<td>[] DON'T KNOW</td>
</tr>
<tr>
<td>b. Other doors to the outside 232</td>
<td>233</td>
<td>234</td>
<td>235-238</td>
<td>198</td>
<td>$ __________.00</td>
</tr>
<tr>
<td>[] NONE</td>
<td>[] NONE</td>
<td>[] NONE</td>
<td>239-242</td>
<td>[] IN PROCESS</td>
<td>[] DON'T KNOW</td>
</tr>
</tbody>
</table>

TAKE BACK EXHIBIT 39

FOR EACH TYPE OF DOOR FOR WHICH ANSWER IS "ONE OR MORE," ASK:

40. (Does/How many of) the [ ] doors have (a storm door/ storm doors) or insulating glass?

FOR EACH TYPE OF STORM DOOR OR DOOR WITH INSULATING GLASS, ASK:

41. How many of the storm/insulated glass doors were put in your home since January 1, 1980?

   IF ONE OR MORE, ASK:

   42. In what month and year did you get (it/them)?

   43. Approximately what (did/will) the job cost you? (SEE INSTRUCTION BELOW.)

   44. (Did you pay/Are you paying) both for the door(s) and having the door(s) put in, only for the door(s) themselves, or what?

INTERVIEWER INSTRUCTIONS:

Q. 38-39 -- Count each pair of sliding glass doors as one door. Include doors that go to an unheated porch or garage. Do not include doors to a heated hallway in an apartment building, doors that are permanently sealed shut, or doors to an unheated attic or basement.

Q. 43 -- If the job included the cost of more than just this item, and if respondent is unable to break down the cost among the different types, note below what was included, and record the total cost.
45. How many windows do you have in your home? Please include basement, attic, garage, and porch windows only if these areas are heated. (SEE INSTRUCTION BELOW.)

46. How many of the windows have storm windows or insulating glass? (SEE INSTRUCTIONS BELOW.)

47. How many of the storm windows or windows with insulating glass were put in your home since January 1, 1980?

48. In what month and year were they put in?

49. Approximately what (did/will) the job cost you? (SEE INSTRUCTION BELOW.)

50. (Did you pay/Are you paying) for the windows and having them put in, only for the windows themselves, or what?

INTERVIEWER INSTRUCTIONS:

Q. 45 -- Each window that opens separately should be counted as one window. Also count windows that are fixed in place. Do not include windows (glass panels) in doors.

Q. 46 -- Windows made of double glass and other types of insulating glass count the same as storm windows.

Q. 49 -- If the job included the cost of more than just this item, and if respondent is unable to break down the cost among the different types, note what was included below and record the total cost.
51. Do you have insulation in all, or some, or none of the outside walls of your home?
   1[] ALL
   2[] SOME
   0[] NONE
   6[] DON'T KNOW

52. Do you have roof or ceiling insulation?
   1[] YES
   0[] NO -- SKIP TO Q. 56
   6[] DON'T KNOW -- SKIP TO Q. 56

IF "YES," ASK:

HAND RESPONDENT EXHIBIT 53

53. About how much of the roof or ceiling area is insulated?
   0[] NONE, VERY LITTLE (LESS THAN 5%)
   1[] 1/4 (5 - 33%)
   2[] 1/2 (34 - 66%)
   3[] 3/4 (67 - 95%)
   4[] ALL (96 - 100%)

TURN TO EXHIBIT 54

54. This exhibit shows different kinds of insulation. Please tell me whether or not you have each one in your roof or ceiling area.

<table>
<thead>
<tr>
<th>Insulation Type</th>
<th>1[] YES</th>
<th>0[] NO</th>
<th>6[] DON'T KNOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. BATT/BLANKET</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. LOOSE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PARTICLES/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOOSE FILL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. FIRM FOAM/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIRM PLASTIC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. SPRAYED-IN</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>URETHANE FOAM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. OTHER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(SPECIFY):</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

55. About how many inches of (INSULATION TYPE) do you have in your roof or ceiling area?

TAKE BACK EXHIBIT 54
CONTINUE IF ONE-FAMILY HOUSE OR MOBILE HOME. IF 2 OR MORE UNITS IN BUILDING, SKIP TO Q. 69.

HAND RESPONDENT EXHIBIT 56

56. Does this house have a basement, an enclosed crawl space, a crawl space open to the outside, a concrete slab, or a combination of these?

1[] BASEMENT
2[] CRAWL SPACE -- ENCLOSED
3[] CRAWL SPACE -- OPEN TO THE OUTSIDE
4[] CONCRETE SLAB -- SKIP TO Q. 59
5[] COMBINATION (MARK ALL THAT APPLY.)

[] BASEMENT
[] CRAWL SPACE -- ENCLOSED
[] CRAWL SPACE -- OPEN TO THE OUTSIDE
[] CONCRETE SLAB

TAKE BACK EXHIBIT 56

IF "BASEMENT," "CRAWL SPACE," OR "COMBINATION," ASK:

57. Is all, part, or none of the basement or crawl space heated? (SEE INSTRUCTION BELOW.)

1[] ALL
2[] PART
0[] NONE

IF "PART" OR "NONE" IS HEATED, ASK:

HAND RESPONDENT EXHIBIT 58

58. About how much of the floor area above the unheated basement or crawl space is insulated?

0[] NONE, VERY LITTLE (LESS THAN 5%)
1[] 1/4 (5 - 33%)
2[] 1/2 (34 - 66%)
3[] 3/4 (67 - 95%)
4[] ALL (96 - 100%)
5[] DON'T KNOW

TAKE BACK EXHIBIT 58

INTERVIEWER INSTRUCTIONS:

Q. 57 -- If respondent asks, a basement is considered heated if it is a comfortable place to work, read, study, play, etc., year-round.
CONTINUE IF ONE-FAMILY HOUSE OR MOBILE HOME. IF 2 OR MORE UNITS IN BUILDING, SKIP TO Q. 69.

HAND RESPONDENT EXHIBIT 59

59. Please look at this list and tell me which items, if any, have been added or installed in your home since January 1, 1980. (SEE INSTRUCTION BELOW.)

<table>
<thead>
<tr>
<th>Q. 59</th>
<th>Q. 60</th>
<th>Q. 61</th>
<th>Q. 62</th>
<th>Q. 63</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Roof or ceiling insulation&lt;br&gt;&lt;br&gt;1[ ] YES 318&lt;br&gt;0[ ] NO&lt;br&gt;2[ ] IN PROCESS</td>
<td>MONTH: _______&lt;br&gt;YEAR: 198&lt;br&gt;1[ ] IN PROCESS</td>
<td>1[ ] BATT/BLANKET 323&lt;br&gt;2[ ] LOOSE PARTICLES/LOOSE FILL&lt;br&gt;3[ ] FIRM FOAM/FIRM PLASTIC&lt;br&gt;4[ ] SPRAYED-IN URETHANE FOAM&lt;br&gt;5[ ] OTHER OR COMBINATION&lt;br&gt;(SPECIFY):&lt;br&gt;6[ ] DON'T KNOW</td>
<td>APPROXIMATE COST: $_______-00&lt;br&gt;1[ ] DON'T KNOW 324-327</td>
<td>1[ ] LABOR AND MATERIALS&lt;br&gt;2[ ] MATERIALS ONLY 328</td>
</tr>
<tr>
<td>b. Insulation in the outside walls&lt;br&gt;&lt;br&gt;1[ ] YES 329&lt;br&gt;0[ ] NO&lt;br&gt;2[ ] IN PROCESS</td>
<td>MONTH: _______&lt;br&gt;YEAR: 198&lt;br&gt;1[ ] IN PROCESS</td>
<td>1[ ] BATT/BLANKET 334&lt;br&gt;2[ ] LOOSE PARTICLES/LOOSE FILL&lt;br&gt;3[ ] FIRM FOAM/FIRM PLASTIC&lt;br&gt;4[ ] SPRAYED-IN URETHANE FOAM&lt;br&gt;5[ ] OTHER OR COMBINATION&lt;br&gt;(SPECIFY):&lt;br&gt;6[ ] DON'T KNOW</td>
<td>APPROXIMATE COST: $_______-00&lt;br&gt;1[ ] DON'T KNOW 335-338</td>
<td>1[ ] LABOR AND MATERIALS&lt;br&gt;2[ ] MATERIALS ONLY 339</td>
</tr>
<tr>
<td>c. Insulation in the basement or crawl space below floor of house&lt;br&gt;&lt;br&gt;1[ ] YES 340&lt;br&gt;0[ ] NO&lt;br&gt;2[ ] IN PROCESS</td>
<td>MONTH: _______&lt;br&gt;YEAR: 198&lt;br&gt;1[ ] IN PROCESS</td>
<td>1[ ] BATT/BLANKET 345&lt;br&gt;2[ ] LOOSE PARTICLES/LOOSE FILL&lt;br&gt;3[ ] FIRM FOAM/FIRM PLASTIC&lt;br&gt;4[ ] SPRAYED-IN URETHANE FOAM&lt;br&gt;5[ ] OTHER OR COMBINATION&lt;br&gt;(SPECIFY):&lt;br&gt;6[ ] DON'T KNOW</td>
<td>APPROXIMATE COST: $_______-00&lt;br&gt;1[ ] DON'T KNOW 346-349</td>
<td>1[ ] LABOR AND MATERIALS&lt;br&gt;2[ ] MATERIALS ONLY 350</td>
</tr>
</tbody>
</table>

TAKE BACK EXHIBIT 59

FOR EACH "YES" OR "IN PROCESS" ANSWER, ASK:

60. In what month and year was the work completed? (SEE INSTRUCTION BELOW.)

HAND RESPONDENT EXHIBIT 61

61. What type of insulation is it? (SEE INSTRUCTION BELOW.)

TAKE BACK EXHIBIT 61

62. Approximately what (did/will) the job cost you? (SEE INSTRUCTION BELOW.)

63. (Did you pay/Are you paying) for labor and materials, only for materials, or what?

INTERVIEWER INSTRUCTIONS:

Q. 59 -- Mark "Yes," "No," or "In Process," for each item. Count as "In Process" any work started but not yet completed. Do not count changes made before this household moved in.

Q. 60 -- If household has done item more than once, write down the most recent date.

Q. 61 -- If more than one type of insulation, mark one used most.

Q. 62 -- If the job included the cost of more than just this item, and if respondent is unable to break down the cost among the different types, note what was included below and record the total cost.
CONTINUE IF ONE-FAMILY HOUSE OR MOBILE HOME. IF 2 OR MORE UNITS IN BUILDING, SKIP TO Q. 69.

HAND RESPONDENT EXHIBIT 64

64. Please look at this list and as I read each item tell me which, if any, have been added or installed in your home since January 1, 1980. (SEE INSTRUCTION BELOW.)

<table>
<thead>
<tr>
<th>Q. 64</th>
<th>Q. 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>[]</td>
<td>[]</td>
</tr>
<tr>
<td>a. An automatic or clock thermostat</td>
<td>b. Adjustments to thermostat control (recalibration)</td>
</tr>
<tr>
<td>[]</td>
<td>[]</td>
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<td>[]</td>
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<tr>
<td>[]</td>
<td>[]</td>
</tr>
<tr>
<td>[]</td>
<td>[]</td>
</tr>
</tbody>
</table>

FOR EACH "YES," ASK:

65. In what month and year was the work completed? (SEE INSTRUCTION BELOW.)

TAKE BACK EXHIBIT 64

INTERVIEWER INSTRUCTIONS:

Q. 64 -- Mark "Yes," "No," or "In Process" for each item. Count as "In Process" any work started but not yet completed. Do not count any changes made before this household moved in.

Q. 65 -- If household has done item more than once, write down the most recent date.
CONTINUE IF ONE-FAMILY HOUSE OR MOBILE HOME. IF 2 OR MORE UNITS IN BUILDING, SKIP TO Q. 69.

66. Do you have your own swimming pool?  
(SEE INSTRUCTION BELOW.)

IF "YES," ASK:

67. Do you use a heater to heat the water?

IF "YES," ASK:

HAND RESPONDENT EXHIBIT 68

68. What fuel is used for the heater?

TAKE BACK EXHIBIT 68

INTERVIEWER INSTRUCTIONS:

Q. 66 -- Do NOT count ponds, hot tubs, jacuzzis, or children's wading pools as swimming pools.
ASK EVERYONE

69. Do you have a refrigerator in your home that you use regularly or occasionally?

IF "YES," ASK:

70. Do you have one refrigerator or more than one that is presently in use? (How many altogether?)

ASK ABOUT EACH REFRIGERATOR -- FIRST ASK ABOUT REFRIGERATOR USED MOST: (SEE INSTRUCTION BELOW.)

71. Is it electric or gas?

HAND RESPONDENT EXHIBIT 72

72. Which of these best describes your refrigerator? (MARK ONE)

- Freezer section (or ice cube section) must be defrosted periodically ................
- Freezer section defrosts automatically after frost builds up (catch pan must be emptied)...
- Full frost-free (frost does not build up)....
- No working freezer section ................

TAKE BACK EXHIBIT 72

73. Do you have a home freezer, one that is separate from the refrigerator, that is presently in use?

IF "YES," ASK:

74. Do you have one freezer or more than one that is presently in use? (How many altogether?)

ASK ABOUT EACH FREEZER -- ASK FIRST ABOUT FREEZER USED MOST: (SEE INSTRUCTION BELOW.)

INTERVIEWER INSTRUCTIONS:

Q. 71-72 -- If respondent has more than two refrigerators, ask about two used most.

Q. 75-76 -- If respondent has more than two freezers, ask about two used most.
HAND RESPONDENT EXHIBIT 77

77. Thinking of all the different kinds of cooking done here, including cooking in the oven, on a range, and with small appliances, which fuel is used most?

TAKE BACK EXHIBIT 77

78. Does your household use an oven of any type, including microwave or convection ovens, for cooking at least occasionally?

IF "YES," ASK:

79. Do you have one oven or more than one oven that you presently use? (How many altogether?) (SEE INSTRUCTION BELOW.)

ASK ABOUT EACH OVEN -- ASK FIRST ABOUT OVEN USED MOST: (SEE INSTRUCTION BELOW.)

80. Is your oven electric or gas?

IF "ELECTRIC," ASK:

81. Is it a microwave oven?

INTERVIEWER INSTRUCTIONS:

Q. 79 -- Do NOT count toaster ovens in count of ovens.

Q. 80 -- If respondent has more than two ovens, ask about two used most.
HAND RESPONDENT EXHIBIT 82

82. Please look at this list and, as I read each item, tell me which of these you use here in your (home/apartment)?

<table>
<thead>
<tr>
<th>Item</th>
<th>YES</th>
<th>NO</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric Range (Stove-Top or Burners)</td>
<td>Y</td>
<td>N</td>
<td>519</td>
</tr>
<tr>
<td>Gas Range (Stove-Top or Burners)</td>
<td>Y</td>
<td>N</td>
<td>520</td>
</tr>
<tr>
<td>Outdoor Gas Grill</td>
<td>Y</td>
<td>N</td>
<td>521</td>
</tr>
<tr>
<td>Automatic Clothes Washer</td>
<td>Y</td>
<td>N</td>
<td>522</td>
</tr>
<tr>
<td>Wringer Washing Machine (Electric)</td>
<td>Y</td>
<td>N</td>
<td>523</td>
</tr>
<tr>
<td>Electric Dishwasher</td>
<td>Y</td>
<td>N</td>
<td>524</td>
</tr>
<tr>
<td>Electric Clothes Dryer</td>
<td>Y</td>
<td>N</td>
<td>525</td>
</tr>
<tr>
<td>Gas Clothes Dryer</td>
<td>Y</td>
<td>N</td>
<td>526</td>
</tr>
<tr>
<td>Outdoor Gas Light</td>
<td>Y</td>
<td>N</td>
<td>527</td>
</tr>
<tr>
<td>Electric Dehumidifier</td>
<td>Y</td>
<td>N</td>
<td>528</td>
</tr>
<tr>
<td>Electric Humidifier</td>
<td>Y</td>
<td>N</td>
<td>529</td>
</tr>
<tr>
<td>Evaporative Cooler (Swamp Cooler)</td>
<td>Y</td>
<td>N</td>
<td>530</td>
</tr>
<tr>
<td>Black and White Television Set</td>
<td></td>
<td></td>
<td>531</td>
</tr>
<tr>
<td>Color Television Set</td>
<td></td>
<td></td>
<td>532</td>
</tr>
</tbody>
</table>

IF "YES" FOR BLACK AND WHITE TV SET, ASK:

83. How many black and white television sets do you use here in your home?

IF "YES" FOR COLOR TV SET, ASK:

84. How many color television sets do you use here in your home?

TAKE BACK EXHIBIT 82
Now some questions about cars.

85. How many members of your household can drive a car?  

HAND RESPONDENT EXHIBIT 86

86. Do you or other members of your household own or have the regular use of any cars, trucks, vans, or similar vehicles? (DO NOT INCLUDE MOTORCYCLES OR MOPEDS.)  

IF "YES," ASK:

87. How many do you have?

ASK ABOUT EACH VEHICLE.

88. Which type(s) do you have?  

(SEE INSTRUCTION BELOW.)

<table>
<thead>
<tr>
<th>VEHICLE NUMBER</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

STATION WAGON  
AUTOMOBILE  
JEEP OR SIMILAR VEHICLE  
PASSENGER VAN OR MINIBUS  
CARGO VAN  
PICKUP TRUCK  
OTHER TRUCK  
MOTOR HOME  
OTHER (SPECIFY):

TAKE BACK EXHIBIT 86

89. Please tell me the make and model year (of each one). ENTER LAST TWO DIGITS OF MODEL YEAR.)

<table>
<thead>
<tr>
<th>MAKE</th>
<th>542-543</th>
<th>560-561</th>
<th>568-569</th>
<th>566-567</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODEL YEAR</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>MODEL NAME</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

90. What is the model name (of each one)?  

(SEE INSTRUCTION BELOW.)

INTERVIEWER INSTRUCTIONS:

Q. 86 -- "Regular use" means keeping the vehicle at home.

Q. 88 -- If household has more than four vehicles, mark answers for the four vehicles used most.

Q. 90 -- For pick-up trucks and vans, be sure to get a specific model name (examples: Chevrolet Luv, Ford Courier, GMC G1500, or Datsun 620, etc.) If respondent does not know model name, probe for size of truck (1/2 ton, 3/4 ton, etc.).
91. Now I have some questions about the people who live here. Please tell me who they are in relation to (HOUSEHOLDER). I also would like to know their ages on their last birthday. Please begin with (HOUSEHOLDER). (SEE INSTRUCTION BELOW.)

<table>
<thead>
<tr>
<th>PERSON NUMBER</th>
<th>WHO IS RESPONDENT?</th>
<th>RELATIONSHIP TO HOUSEHOLDER</th>
<th>SEX</th>
<th>AGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>HOUSEHOLDER</td>
<td>1[]</td>
<td>2[]</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>1[]</td>
<td>2[]</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>1[]</td>
<td>2[]</td>
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<tr>
<td>4</td>
<td></td>
<td></td>
<td>1[]</td>
<td>2[]</td>
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<tr>
<td>5</td>
<td></td>
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<td>1[]</td>
<td>2[]</td>
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<tr>
<td>6</td>
<td></td>
<td></td>
<td>1[]</td>
<td>2[]</td>
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<tr>
<td>7</td>
<td></td>
<td></td>
<td>1[]</td>
<td>2[]</td>
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<tr>
<td>8</td>
<td></td>
<td></td>
<td>1[]</td>
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<tr>
<td>9</td>
<td></td>
<td></td>
<td>1[]</td>
<td>2[]</td>
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<tr>
<td>10</td>
<td></td>
<td></td>
<td>1[]</td>
<td>2[]</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td>1[]</td>
<td>2[]</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td>1[]</td>
<td>2[]</td>
</tr>
</tbody>
</table>

I have listed (READ RELATIONSHIPS FROM Q. 91 ABOVE). Have I missed....................

... 92. Any babies or small children?  
[ ] YES (ADD TO LISTING)  
[ ] NO

... 93. Any lodgers, boarders, or persons in your employ who live here?  
[ ] YES (ADD TO LISTING)  
[ ] NO

... 94. Anyone who usually lives here but is away traveling or in the hospital? (SEE INSTRUCTION BELOW.)  
[ ] YES (ADD TO LISTING)  
[ ] NO

... 95. Anyone else staying here who does not have a regular residence elsewhere?  
[ ] YES (ADD TO LISTING)  
[ ] NO

96. Does another family share your home with you?  
[ ] YES (SEE INSTRUCTION BELOW.)  
[ ] NO

**INTERVIEWER INSTRUCTIONS:**

For questions on this and the following pages, where the term "HOUSEHOLDER" is inserted, use the appropriate designation -- you, your husband, wife, partner -- depending on who is the householder and whom you are interviewing.

Q. 91 -- Be sure to list relationships, not names. Include members of a second family that share the housing unit. Check box to indicate which household member is the respondent.

Q. 94 -- Persons who are normally members of the household but who are now living away from home (e.g., college students or members of the Armed Forces) should not be listed.

Q. 96 -- If another family has a separate apartment that is defined by our rules as a separate housing unit, the additional housing unit should be listed on your housing unit address list for this location. See sampling instructions as to whether an additional interview should be completed. Go back over this interview, excluding that part of the house that is defined as a separate housing unit.

If the second family's space does not meet the definition of a separate housing unit, be sure that the members of this second family are included in the list of household members above.
INTERVIEWER: MARK ANSWER. ASK, IF NECESSARY.

HOUSEHOLDER'S MARITAL STATUS

97. Which of the following best describes (HOUSEHOLDER): now married, widowed, divorced or separated, or never married?

1[ ] NOW MARRIED
2[ ] WIDOWED
3[ ] DIVORCED OR SEPARATED
4[ ] NEVER MARRIED

HAND RESPONDENT EXHIBIT 98

98. Which of the groups on this exhibit best describes (HOUSEHOLDER)?

1[ ] WHITE
2[ ] BLACK OR NEGRO
3[ ] AMERICAN INDIAN, ALASKAN NATIVE
4[ ] ASIAN, PACIFIC ISLANDER
5[ ] OTHER (SPECIFY): ___________

TAKE BACK EXHIBIT 98

99. Is (HOUSEHOLDER) of Spanish or Hispanic origin or descent?

1[ ] YES
2[ ] NO
I have just a few questions for background statistical purposes.

100. What is the highest grade (or year) (HOUSEHOLDER) attended in school?

- [ ] NEVER ATTENDED SCHOOL -- SKIP TO Q. 102
- [ ] FIRST
- [ ] SECOND
- [ ] THIRD
- [ ] FOURTH
- [ ] FIFTH
- [ ] SIXTH
- [ ] SEVENTH
- [ ] EIGHTH
- [ ] NINTH
- [ ] TENTH
- [ ] ELEVENTH
- [ ] TWELFTH
- [ ] COLLEGE (ACADEMIC YEARS)
  - [ ] 1
  - [ ] 2
  - [ ] 3
  - [ ] 4
  - [ ] 5
  - [ ] 6
  - [ ] 7
  - [ ] 8
  - [ ] 9
  - [ ] 10
  - [ ] 11
  - [ ] 12
  - [ ] 13
  - [ ] 14
  - [ ] 15
  - [ ] 16
  - [ ] 17
  - [ ] 18
  - [ ] OR MORE

101. Did (HOUSEHOLDER) finish that grade (or year)?

- [ ] YES
- [ ] NO

102. At any time in 1980, did (HOUSEHOLDER) work for pay at a job or business?

- [ ] YES
- [ ] NO -- SKIP TO Q. 104

IF "YES," ASK:

103. During 1980, how many weeks did (HOUSEHOLDER) work even for a few hours? Include paid vacation and sick leave as work.

- [ ] LOOKING FOR WORK (OR ON LAY-OFF)
- [ ] ILL OR DISABLED AND UNABLE TO WORK
- [ ] TAKING CARE OF FAMILY
- [ ] GOING TO SCHOOL
- [ ] UNABLE TO FIND WORK
- [ ] IN ARMED FORCES
- [ ] RETIRED
- [ ] DOING SOMETHING ELSE

HAND RESPONDENT EXHIBIT 104/109

TAKE BACK EXHIBIT 104/109
IF HOUSEHOLDER HAS A SPOUSE/PARTNER IN THE HOUSEHOLD, ASK Q. 105 ff. OTHERWISE SKIP TO Q. 110.

105. What is the highest grade (or year) that (SPOUSE/PARTNER) attended in school? (SEE INSTRUCTION BELOW.)

00[] NEVER ATTENDED SCHOOL -- SKIP TO Q. 107
01[] FIRST
02[] SECOND
03[] THIRD
04[] FOURTH
05[] FIFTH
06[] SIXTH
07[] SEVENTH
08[] EIGHTH
09[] NINTH
10[] TENTH
11[] ELEVENTH
12[] TWELFTH
13[] C1
14[] C2
15[] C3
16[] C4
17[] C5
18[] C6 OR MORE

106. Did (SPOUSE/PARTNER) finish that grade (or year)?

1[] YES
0[] NO

107. At any time in 1980, did (SPOUSE/PARTNER) work for pay at a job or business?

1[] YES
0[] NO -- SKIP TO Q. 109

IF "YES," ASK:

108. During 1980, how many weeks did (SPOUSE/PARTNER) work even for a few hours? Include paid vacation and sick leave as work.

NUMBER OF WEEKS:

IF LESS THAN 50 WEEKS ON Q. 108, OR "NO" ON Q. 107, ASK:

HAND RESPONDENT EXHIBIT 104/109

109. What was the main reason (SPOUSE/PARTNER) did not work (the remaining weeks) in 1980?

01[] LOOKING FOR WORK (OR ON LAY-OFF)
02[] ILL OR DISABLED AND UNABLE TO WORK
03[] TAKING CARE OF FAMILY
04[] GOING TO SCHOOL
05[] UNABLE TO FIND WORK
06[] IN ARMED FORCES
07[] RETIRED
08[] DOING SOMETHING ELSE

TAKE BACK EXHIBIT 104/109

INTERVIEWER INSTRUCTIONS:

For questions on this page, where the term "SPOUSE/PARTNER" is inserted, use the appropriate designation -- you, your husband, wife, partner -- depending on who is the householder and whom you are interviewing.
HAND RESPONDENT EXHIBIT 110

110. In 1980 did you or any member of your family living here receive any money from: (INTERVIEWER, READ EACH ITEM.)

A. Wages or salaries? 1[ ] YES 0[ ] NO 819
B. Self employment from business or farm? 1[ ] YES 0[ ] NO 820
C. Dividends, estates, trusts, interest on savings accounts or bonds? 1[ ] YES 0[ ] NO 821
D. Net rental income? 1[ ] YES 0[ ] NO 822
E. Government employee pensions? 1[ ] YES 0[ ] NO 823
F. Social Security or Railroad Retirement payments? 1[ ] YES 0[ ] NO 824
G. Private pensions or annuities? 1[ ] YES 0[ ] NO 825
H. Disability payments from Social Security or Railroad? 1[ ] YES 0[ ] NO 826
I. Aid to Families with Dependent Children (AFDC)? 1[ ] YES 0[ ] NO 827
J. Supplementary Security Income (SSI)? 1[ ] YES 0[ ] NO 828
K. Other public assistance? (SPECIFY): 1[ ] YES 0[ ] NO 829
L. Veterans' payments? 1[ ] YES 0[ ] NO 830
M. Unemployment compensation? 1[ ] YES 0[ ] NO 831
N. Workmen's compensation? 1[ ] YES 0[ ] NO 832
O. Alimony or child support? 1[ ] YES 0[ ] NO 833
P. Regular contributions from non-family members living in this household or from people outside the household? 1[ ] YES 0[ ] NO 834
Q. Any other source of income? (SPECIFY): 1[ ] YES 0[ ] NO 835

TAKE BACK EXHIBIT 110

111. In 1980 did you or any member of your family living here receive food stamps? 1[ ] YES 0[ ] NO 836

HAND RESPONDENT EXHIBIT 112

112. Since October 1980, did you or any member of your family living here receive any of the following forms of assistance from the government in paying your energy costs? (INTERVIEWER, READ EACH ITEM.)

[] Cash payment to household specifically to help pay for energy costs 837
[] Vouchers or coupons to give to utility companies or fuel dealers to help pay for energy costs 838
[] Government payments to your utility company or fuel dealer on your behalf to help pay for energy costs 839
[] Other energy assistance: (SPECIFY) ___________________________________________ 840

TAKE BACK EXHIBIT 112
HAND RESPONDENT EXHIBIT 113

113. Now let's look at this list of income groups. Please tell me which group letter best describes the total combined income in 1980 of all members of your family living here, from all sources -- wages, dividends, Social Security, and so forth -- before taxes and deductions. (Family includes all related persons living in this household.)

CIRCLE LETTER FOR INCOME GROUP

01 A LOSS
02 B $0 - $2,999
03 C $3,000 - $3,999
04 D $4,000 - $4,999
05 E $5,000 - $5,999
06 F $6,000 - $6,999
07 G $7,000 - $7,999
08 H $8,000 - $8,999
09 I $9,000 - $9,999
10 J $10,000 - $10,999
11 K $11,000 - $11,999
12 L $12,000 - $12,999
13 M $13,000 - $13,999
14 N $14,000 - $14,999
15 O $15,000 - $16,999
16 P $17,000 - $19,999
17 Q $20,000 - $24,999
18 R $25,000 - $29,999
19 S $30,000 - $34,999
20 T $35,000 - $39,999
21 U $40,000 - $49,999
22 V $50,000 - $74,999
23 W $75,000 OR OVER
24 X DON'T KNOW
25 Y REFUSED

TAKE BACK EXHIBIT 113

114. Do you or members of your household own your home or do you rent?

1[ ] OWN (BUYING)
2[ ] RENT -- SKIP TO Q. 116
3[ ] OCCUPIED WITHOUT PAYMENT OF RENT -- SKIP TO Q. 117

IF "OWN (BUYING)," ASK:

115. Is this house (apartment) part of a condominium or cooperative?

1[ ] YES, CONDOMINIUM
2[ ] YES, COOPERATIVE
0[ ] NO

IF "RENT," ASK:

116. What is the monthly rent of your house/apartment?

$ _________.00 PER MONTH

[ ] OCCUPIED WITHOUT PAYMENT

IF RENT IS NOT PAID BY THE MONTH, NOTE IN THE SPACE BELOW THE TIME PERIOD COVERED AND THE AMOUNT PAID PER TIME PERIOD.

TIME PERIOD COVERED: _______________________

AMOUNT PAID PER TIME PERIOD: $ _________.00
117. We may have covered some of these points before, but just to be sure, please look at this exhibit and tell me whether these fuels are used for these purposes in your household.

<table>
<thead>
<tr>
<th>Fuel Source</th>
<th>Used</th>
<th>Not Used</th>
<th>Paid by Household</th>
<th>Included in Rent</th>
<th>Other (Specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELECTRICITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. For Hot Water</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>b. For Heating Your Home</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>c. For Air-Conditioning (Central or Window/Wall Units)</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>d. For Cooking</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>e. For Lighting and Other Appliances</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>GAS FROM UNDERGROUND PIPES SERVING YOUR NEIGHBORHOOD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. For Hot Water</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>g. For Heating Your Home</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>h. For Central Air-Conditioning</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>i. For Cooking</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>j. For Other Appliances (Include Outside Gas Light Here)</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>LPG GAS (BOTTLED OR TANK GAS)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>k. For Hot Water</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>l. For Heating Your Home</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>m. For Central Air-Conditioning</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>n. For Cooking Inside Home</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>o. For Cooking on Outdoor Grill</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>p. For Other Appliances (Include Outside Gas Light Here)</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>FUEL OIL OR KEROSENE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q. For Hot Water</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>r. For Heating Your Home</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>s. For Cooking</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

**FOR EACH USE OF EACH FUEL, ASK:**

118. Is that paid for by your household, included in your rent, or do you get it some other way?

**TAKE BACK EXHIBIT 117**

**IF UNDERGROUND GAS IS NOT USED, ASK Q. 119. OTHERWISE, SKIP TO INSTRUCTION FOR Q. 120.**

119. Is gas from underground pipes available in this neighborhood?

2[ ] Yes
0[ ] No
6[ ] Don't Know

**IF ALL FUEL BILLS ARE INCLUDED IN RENT, SKIP TO Q. 136.**
120. About how many deliveries of LPG does your household usually get in a year?

NUMBER OF DELIVERIES: \[ \square \] 950-951

94\[] cash and carry, pick up at store

95\[] lived here less than 1 year

121. Did you buy LPG for this house (apartment) in the past 12 months from one company or from more than one company?

1\[] one company

2\[] more than one company

IF "MORE THAN ONE COMPANY," ASK:

122. How many different companies?

2\[] two

3\[] three

4\[] four or more

123. About how many deliveries of fuel oil/kerosene does your household usually get in a year?

NUMBER OF DELIVERIES: \[ \square \] 954-955

95\[] lived here less than 1 year

124. Did you buy fuel oil/kerosene for this house (apartment) in the past 12 months from one company or from more than one company?

1\[] one company

2\[] more than one company

IF "MORE THAN ONE," ASK:

125. How many different companies?

2\[] two

3\[] three

4\[] four or more
IF HOUSEHOLD USES AND PAYS FOR ELECTRICITY, GAS (FROM UNDERGROUND PIPES OR LPG), OR FUEL OIL/KEROSENE IN Q. 118, ASK Q. 126 ff. OTHERWISE, SKIP TO INSTRUCTION FOR Q. 136.

HAND RESPONDENT EXHIBIT 126

126. Do any of your household electric, gas, fuel oil, or kerosene bills include charges for fuel used for purposes other than for your own living quarters, such as farm buildings or machinery, the house or apartment of another household, a business or office, or anything else?

[i] YES

[o] NO -- TAKE BACK EXHIBIT 126

SKIP TO INSTRUCTION FOR Q. 132.

IF "YES," ASK:

127. Which fuel bills include charges for fuel used for purposes other than your own living quarters? (MARK AS MANY AS APPLY.)

[i] ELECTRICITY

[o] GAS FROM UNDERGROUND PIPES

[i] LPG GAS (BOTTLED OR TANK GAS)

[o] FUEL OIL OR KEROSENE

TURN TO EXHIBIT 128-131

IF "ELECTRICITY" ON Q. 127, ASK:

128. About how much of your household's electricity bill is used for non-household uses such as farm buildings or machinery, the house or apartment of another household, a business or office, or anything else?

[o] VERY LITTLE (LESS THAN 5%)

[i] 1/4 (5 - 33%)

[i] 1/2 (34 - 66%)

[i] 3/4 (67 - 95%)

IF "GAS FROM UNDERGROUND PIPES" ON Q. 127, ASK:

129. About how much of your household's gas bill is used for non-household uses such as farm buildings or machinery, the house or apartment of another household, a business or office, or anything else?

[o] VERY LITTLE (LESS THAN 5%)

[i] 1/4 (5 - 33%)

[i] 1/2 (34 - 66%)

[i] 3/4 (67 - 95%)

IF "LPG GAS" ON Q. 127, ASK:

130. About how much of your household's LPG bill is used for non-household uses such as farm buildings or machinery, the house or apartment of another household, a business or office, or anything else?

[o] VERY LITTLE (LESS THAN 5%)

[i] 1/4 (5 - 33%)

[i] 1/2 (34 - 66%)

[i] 3/4 (67 - 95%)

IF "FUEL OIL OR KEROSENE" ON Q. 127, ASK:

131. About how much of your household's fuel oil/kerosene bill is used for non-household uses such as farm buildings or machinery, the house or apartment of another household, a business or office, or anything else?

[o] VERY LITTLE (LESS THAN 5%)

[i] 1/4 (5 - 33%)

[i] 1/2 (34 - 66%)

[i] 3/4 (67 - 95%)

TAKE BACK EXHIBIT 128-131
CONTINUE IF ANY ELECTRIC, GAS (FROM UNDERGROUND PIPES OR LPG), OR FUEL OIL/KEROSENE BILLS ARE PAID BY HOUSEHOLD. OTHERWISE, SKIP TO INSTRUCTION FOR Q. 136.

132. In addition to the types of fuel you use, we are interested in the quantities used and in the amount that people pay for electricity, gas, fuel oil, or kerosene in different parts of the United States.

I have a form that would authorize the companies that supply your household to provide that information to Response Analysis Corporation. The authorization applies to the period from January 1981 through April 1985.

Since this study is being done nationwide, it will give a good picture of the differences in fuel cost and usage all over the country. The information is needed to help establish important national energy policies.

INTERVIEWER: REMOVE THE AUTHORIZATION FORM FROM THE QUESTIONNAIRE AND HAND TO RESPONDENT. EITHER YOU OR RESPONDENT SHOULD FILL IN THE NAME(S) OF COMPANIES. IF MORE THAN ONE LPG OR FUEL OIL OR KEROSENE COMPANY HAS BEEN USED SINCE JANUARY 1, 1981, FILL IN ADDITIONAL COMPANY NAMES ON OTHER SIDE OF FORM. PLEASE PRINT.

1[] AUTHORIZATION FORM SIGNED
0[] AUTHORIZATION FORM NOT SIGNED -- INTERVIEWER, EXPLAIN BELOW:

IF AUTHORIZATION FORM IS SIGNED, ASK Q. 133 ff. OTHERWISE, SKIP TO INSTRUCTION FOR Q. 136.

133. Do your fuel bills come addressed to (LAST NAME OF SIGNATURE ON AUTHORIZATION FORM), or are they in another name? 1[] SAME AS LAST NAME -- SKIP TO INSTRUCTION FOR Q. 135
2[] ANOTHER NAME

IF BILL IS IN ANOTHER NAME, ASK:

134. What is that name and address:

BILLING NAME: ____________________________

STREET ADDRESS: ____________________________

CITY AND STATE: ____________________________

ZIP CODE: ____________________________

IF HOUSEHOLD SIGNED THE AUTHORIZATION FORM, ASK Q. 135. OTHERWISE, SKIP TO INSTRUCTION FOR Q. 136.

135. Would it be possible for you to give me your customer number at your electric/gas company? This number is on your bills from the company.

ELECTRIC COMPANY -- CUSTOMER NUMBER: ____________________________

[] NOT AVAILABLE/REFUSED

GAS (FROM UNDERGROUND PIPES) -- CUSTOMER NUMBER: ____________________________

[] NOT AVAILABLE/REFUSED
U.S. DEPARTMENT OF ENERGY SURVEY
Authorization Form for
Residential Energy Consumption Survey

I hereby give permission to the company (companies) below to provide information to Response Analysis Corporation (or other designee of the U.S. Department of Energy) for confidential use in connection with their survey for the U.S. Department of Energy.

This authorization covers use of fuels (electricity, natural gas or LPG, fuel oil or kerosene) by my household from January 1, 1981 through April 30, 1985, including:
1) the total amount of fuels used by my household.
2) the total price charged for fuels by my household.

Companies are authorized to provide this information by monthly periods or by delivery date, whichever applies.

A photocopy of this authorization may be accepted with the same authority as the original.

Signature: ____________________________
Date: ____________________________

<table>
<thead>
<tr>
<th>YOUR NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADDRESS</td>
</tr>
<tr>
<td>APT. NO.</td>
</tr>
<tr>
<td>CITY OR POST OFFICE</td>
</tr>
<tr>
<td>TELEPHONE</td>
</tr>
<tr>
<td>AREA CODE:</td>
</tr>
</tbody>
</table>

PLEASE COMPLETE ONE BLOCK BELOW FOR EACH FUEL USED BY YOUR HOUSEHOLD
(IF MORE THAN ONE SUPPLIER OF A PARTICULAR FUEL USE THE OTHER SIDE OF THIS SHEET)

ELECTRICITY

<table>
<thead>
<tr>
<th>PRINT FULL NAME OF ELECTRIC COMPANY</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOCATION OF COMPANY (IF KNOWN) – CITY AND STATE</td>
</tr>
<tr>
<td>TELEPHONE</td>
</tr>
<tr>
<td>AREA CODE:</td>
</tr>
</tbody>
</table>

GAS
from underground pipes or LPG (bottled or tank gas)

<table>
<thead>
<tr>
<th>PRINT FULL NAME OF GAS COMPANY</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOCATION OF COMPANY (IF KNOWN) – CITY AND STATE</td>
</tr>
<tr>
<td>TELEPHONE</td>
</tr>
<tr>
<td>AREA CODE:</td>
</tr>
</tbody>
</table>

FUEL OIL or KEROSENE

<table>
<thead>
<tr>
<th>PRINT FULL NAME OF OIL COMPANY</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOCATION OF COMPANY (IF KNOWN) – CITY AND STATE</td>
</tr>
<tr>
<td>TELEPHONE</td>
</tr>
<tr>
<td>AREA CODE:</td>
</tr>
<tr>
<td>GAS</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td><strong>SECOND GAS COMPANY</strong></td>
</tr>
<tr>
<td>LOCATION OF COMPANY (IF KNOWN) – CITY AND STATE</td>
</tr>
<tr>
<td>TELEPHONE</td>
</tr>
<tr>
<td><strong>THIRD GAS COMPANY</strong></td>
</tr>
<tr>
<td>LOCATION OF COMPANY (IF KNOWN) – CITY AND STATE</td>
</tr>
<tr>
<td>TELEPHONE</td>
</tr>
<tr>
<td><strong>SECOND FUEL OIL/KEROSENE COMPANY</strong></td>
</tr>
<tr>
<td>LOCATION OF COMPANY (IF KNOWN) – CITY AND STATE</td>
</tr>
<tr>
<td>TELEPHONE</td>
</tr>
<tr>
<td><strong>THIRD FUEL OIL/KEROSENE COMPANY</strong></td>
</tr>
<tr>
<td>LOCATION OF COMPANY (IF KNOWN) – CITY AND STATE</td>
</tr>
<tr>
<td>TELEPHONE</td>
</tr>
</tbody>
</table>
IF HOUSEHOLD HAS ONE OR MORE FUELS "INCLUDED IN RENT" OR "OTHER" (SEE Q. 118), ASK Q. 136.
OTHERWISE, SKIP TO Q. 137.

136. We may be needing some additional information about fuels used in this building (house). May I have the name of the person or company to whom you pay rent or who is responsible for paying the fuel bills for this building (house)?

NAME: ________________________________________________________

TELEPHONE NUMBER: (AREA CODE: _____) _________________________________

STREET ADDRESS: __________________________________________________

CITY OR TOWN/STATE/ZIP CODE: _______________________________________

ASK EVERYONE

137. For interview verification purposes, may I have your name, phone number, and mailing address please?

RESPONDENT'S NAME: ________________________________________________

TELEPHONE NUMBER: (AREA CODE: _____) _________________________________

STREET ADDRESS: __________________________________________________

CITY OR TOWN/STATE/ZIP CODE: _______________________________________

138. So far, we've been talking about things in your household that affect your energy use. What we need also is a measure of your year-round living space.

With your permission, I would like to measure your home. I can do it from the inside or the outside. With your home, I think it would be most accurate to do it on the (inside/outside). (SEE INSTRUCTION BELOW.)

INDICATE WHETHER THE MEASUREMENT IS DONE INSIDE OR OUTSIDE THE HOME.

1 [] INSIDE
2 [] OUTSIDE
5 [] OTHER (PLEASE SPECIFY): __________

139. Are any of the areas measured not heated during most of the heating season?

1 [] YES -- INDICATE UNHEATED AREA(S) ON THE DIAGRAM WITH LINES LIKE THIS (/////////).
0 [] NO

INTERVIEWER OBSERVATION:

140. MARK TYPE OF HOUSING UNIT:

1 [] MOBILE HOME OR TRAILER
2 [] ONE-FAMILY HOUSE

1 [] ONE STORY
2 [] TWO STORY
3 [] THREE STORY
4 [] SPLIT LEVEL
5 [] OTHER (SPECIFY): __________

IF ONE-FAMILY HOUSE, MARK STYLE

3 [] APARTMENT BUILDING OR OTHER STRUCTURE WITH TWO OR MORE UNITS

INTERVIEWER INSTRUCTIONS:

Q. 138 -- The general rule for this question is to include measurements for all parts of the housing unit enclosed from the weather. Include basements that are enclosed from the weather, whether or not there is finished space, and attached garages that are enclosed from the weather. Include attics only if there is some heated or finished space.

Do not include: Crawl spaces, sheds, garages, carports, or porches that are open to the weather or detached from the house; attics that do not have finished or heated space.

Note any measurement problems on page 37. Use the back cover for rough sketches.
RECORD MEASUREMENTS ON DIAGRAM TO NEAREST FOOT

RECTANGULAR SHAPE OR DIAGRAM OTHER SHAPES

Basement
1[ ] Full 2[ ] Half Basement

First story
1[ ] Full story 2[ ] Half story

DIAGRAM SECOND AND THIRD STORY ON NEXT PAGE.

FOR OFFICE USE ONLY

<table>
<thead>
<tr>
<th>Flr Codes</th>
<th>Unit A</th>
<th>Unit B</th>
<th>Unit C</th>
<th>Unit D</th>
<th># of Units</th>
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</thead>
<tbody>
<tr>
<td>1043 44 45 46 47-48 49-50</td>
<td>51 52-53 54-55</td>
<td>56 57-58 59-60</td>
<td>61 62-63 64-65</td>
<td>66</td>
<td></td>
</tr>
</tbody>
</table>
**RECORD MEASUREMENTS ON DIAGRAM TO NEAREST FOOT**

**RECTANGULAR SHAPE**

<table>
<thead>
<tr>
<th>Second story</th>
<th>Full story</th>
<th>Half story</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
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</tbody>
</table>

**DIAGRAM OTHER SHAPES**

<table>
<thead>
<tr>
<th>Third story</th>
<th>Full story</th>
<th>Half story</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
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</tbody>
</table>

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**FOR OFFICE USE ONLY**

1109-1110:11

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<th>Flr Codes</th>
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<th>Unit B</th>
<th>Unit C</th>
<th>Unit D</th>
<th># of Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1135</td>
<td>36</td>
<td>37</td>
<td>38</td>
<td>39-40</td>
<td>41-42</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1209-1210:12

<table>
<thead>
<tr>
<th></th>
<th>Heated</th>
<th>Unheated</th>
<th>DK Htd/Unhtd</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1211-1215</td>
<td>1216-1220</td>
<td>1221-1225</td>
<td></td>
<td></td>
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</tbody>
</table>

**TOTAL**

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
INTERVIEWER REPORT ON MEASUREMENT OF YEAR-ROUND LIVING SPACE

A. What problems, if any, did you have in measuring this house/apartment?

B. What effect, if any, did these problems have on the accuracy of your measurement?

TIME INTERVIEW COMPLETED: _______________  LENGTH OF INTERVIEW: _______________  MINUTES

INTERVIEWER'S SIGNATURE: ___________________________  DATE: _______________

INTERVIEWER'S I.D. #: ___________________________