Table HC5-1a. Appliances by Climate Zone, Million U.S. Households, 2001

Appliance Types and Characteristics RSE Column Factor:			2,000 CDD or More				
	Total	More than 7,000 HDD	5,500 to 7,000 HDD	4,000 to 5,499 HDD	Fewer than 4,000 HDD	and Fewer than 4,000 HDD	RSE Row Factors
	0.4	1.9					
Total	107.0	9.2	28.6	24.0	21.0	24.1	7.8
Kitchen Appliances							
Cooking Appliances							
Oven	101.7	9.1	27.9	23.1	19.4	22.2	7.8
1	95.2 6.5	8.7 0.4	26.0 1.9	21.6 1.5	17.7 1.7	21.2	7.9 14.7
							14.7
Most Used Oven	101.7 63.0	9.1 6.4	27.9 16.4	23.1 13.3	19.4 11.3	22.2 15.5	7.8 8.1
Natural Gas	34.3	1.8	10.4	8.9	7.4	5.9	9.5
LPG	4.4	1.0	1.0	0.9	0.7	0.8	24.1
Other	Q	Q	Q	Q	Q	Q	NF
Most Used Self-Cleaning Oven	48.2	4.7	15.1	10.8	8.1	9.6	7.8
Continuous Manual Start	11.2 37.0	0.9 3.7	3.7 11.4	2.3 8.5	1.8 6.3	2.5 7.1	15.7 8.5
Wardar Start			11.4	0.0	0.0		
Range	105.7	9.2	28.3	23.8	20.6	23.8	7.8
1 2 or More	100.5 5.2	8.9 0.3	26.7 1.5	22.6 1.2	19.3 1.3	23.0 0.7	7.9 15.8
Most Used Range	105.7	9.2	28.3	23.8	20.6	23.8	7.8
Electric	64.2	6.4	16.3	13.6	11.7	16.3	8.3
Natural Gas	36.7	1.8	10.9	9.3	8.1	6.7	9.5
LPG	4.7	1.0	1.1	1.0	0.8	0.8	23.7
Other	Q	Q	Q	Q	Q	Q	NF
Built-in/Stove-top Grill	2.9	Q	0.5	0.6	0.6	1.0	22.3
Electric	1.8	Q	0.4	0.3	0.3	0.6	28.0
Natural GasLPG	1.0 Q	Q Q	Q Q	0.3 Q	0.2 Q	0.3 Q	31.7 NF
Other	Q	Q	Q	Q	Q	Q	NF
Refrigerators and Freezers							
Refrigerators	106.8	9.2	28.6	24.0	20.9	24.1	7.8
1 2 or More	88.7	7.3	23.3	20.0	17.6	20.6	8.0
∠ UI IVIUI €	18.1	2.0	5.3	4.1	3.3	3.5	9.9
Most-Used Refrigerator Defrost Method							
Frost-Free	96.9	8.0	25.7	21.8	19.1	22.3	7.8
Manual	9.9	1.3	2.9	2.2	1.8	1.7	14.5
Type of Refrigerator							
2-Doors (top and bottom)	73.0	6.8	20.5	16.6	13.3	15.8	7.1
2-Doors (side-by-side)	27.1	1.8	6.5	5.7	6.4	6.7	9.3
Regular (single door) Half-Size/Other	5.7 1.0	0.5 Q	1.4 Q	1.5 0.2	1.0 0.3	1.3 0.3	15.3 28.5

Table HC5-1a. Appliances by Climate Zone, Million U.S. Households, 2001 (Continued)

Appliance Types and Characteristics RSE Column Factor:							
			2,000 CDD				
	Total	More than 7,000 HDD	5,500 to 7,000 HDD	4,000 to 5,499 HDD	Fewer than 4,000 HDD	or More and Fewer than 4,000 HDD	RSE Row Factor
	0.4						
Ago of Pofrigorator							
Age of Refrigerator Less than 2 Years	14.5	0.9	4.0	3.0	3.0	3.6	10.5
2 to 4 Years	20.7	1.6	5.0	5.3	4.1	4.6	10.3
5 to 9 Years	31.1	2.7	7.8	6.8	6.6	7.3	7.4
10 to 19 Years	26.7	2.7	7.6	5.8	5.2	5.4	10.6
20 Years or More	7.1	0.9	2.2	1.6	0.9	1.5	15.0
Don't Know	6.7	0.5	2.0	1.5	1.1	1.6	16.
Size of Refrigerator							
Very Small (Less than 11 cf)	0.6	Q	Q	Q	Q	Q	59.8
Small (11-14 cf)	5.7	0.7	1.6	1.2	0.8	1.3	17.7
Medium (15-18 cf)	52.2	4.6	14.2	12.6	10.0	10.8	8.2
Large (19-22 cf)	43.0	3.5	11.5	9.0	8.9	10.2	7.8
Very Large (23 or More cf)	5.3	0.3	1.1	1.1	1.1	1.6	18.3
Through-the-Door Ice/Water Service							
Yes	22.1	1.2	5.1	4.4	5.4	5.9	9.6
No	84.9	8.0	23.6	19.6	15.6	18.1	7.9
Freezer (separate)	34.2	4.3	9.3	7.6	6.2	6.8	11.2
12 or more	30.8 3.4	3.5 0.8	8.6 0.8	7.0 0.6	5.7 0.5	6.1 0.8	10.6 25.0
Most-Used Freezer							
Defrost Method							
Frost-Free	12.2	1.3	3.2	2.4	2.0	3.3	13.4
Manual	22.0	3.0	6.1	5.2	4.2	3.6	12.4
Type of Freezer							
Upright Chest	17.8 16.5	1.9 2.4	5.4 4.0	3.8 3.8	3.4 2.8	3.4 3.5	10.5 14.9
	10.5	2.4	4.0	3.0	2.0	3.3	14.3
Age of Freezer							
Less than 2 Years	3.1	0.3	0.9	0.6	0.6	0.8	20.3
2 to 4 Years	4.6	0.5	1.5	1.0	0.7	0.9	16.7
5 to 9 Years	6.8	0.9	1.7	1.6	1.2	1.4	15.0
10 to 19 Years	11.7	1.4	2.9	2.7	2.4	2.3	13.6
20 Years or More	7.3	1.2	2.2	1.5	1.2	1.2	17.2
Don't Know	0.6	Q	Q	Q	Q	Q	49.0
Freezer Size Very Small (Less than 11 cf)	2.5	0.4	0.7	0.5	0.5	0.4	21.4
Small (11-14 cf)	8.2	1.0	2.3	1.6	1.4	1.9	15.1
Medium (15-18 cf)	13.3	1.5	3.5	3.1	2.1	2.9	14.7
Large (19-22 cf)	8.7	1.3	2.3	2.0	1.6	1.4	13.7
Very Large (23 or More cf)	1.6	0.1	0.4	0.3	0.5	Q Q	27.8
Other Kitchen Appliances							
Dishwasher	56.7	4.7	14.7	12.3	11.2	13.7	7.4
Electric Coffee Makers	65.5	6.7	18.0	14.7	12.1	13.9	7.9
Electric Toaster Oven	36.1	1.9	8.2	9.1	7.6	9.3	8.8
Microwave Oven	92.1	8.8	24.8	20.0	17.9	20.7	7.1

Table HC5-1a. Appliances by Climate Zone, Million U.S. Households, 2001 (Continued)

Appliance Types and Characteristics RSE Column Factor:				Climate Zone ¹			
	Total		2,000 CDD				
		More than 7,000 HDD	5,500 to 7,000 HDD	4,000 to 5,499 HDD	Fewer than 4,000 HDD	or More and Fewer than 4,000 HDD	RSE Row Factors
	0.4	1.9					
Households With Electric						,	
Air-Conditioning Equipment	82.9 2.1	5.4 Q	20.9 0.4	20.2 0.3	14.2 0.8	22.1 0.4	8.1 22.7
Households Using Electric Air-Conditioning ²	80.8	5.3	20.5	19.9	13.4	21.8	8.2
Type of Electric Air-Conditioning Used							
Central Air-Conditioning ³	57.5	3.1	12.9	12.7	10.5	18.2	9.2
Without a Heat Pump	46.2	3.0	12.1	9.8	7.0	14.3	10.7
With a Heat Pump	11.3	Q	0.9	2.9	3.5	3.9	19.1
Room Air-Conditioning	23.3	2.2	7.6	7.2	2.9	3.6	11.3
1 Unit	12.8	1.4	4.5	3.4	1.9	1.5	13.5
2 Units 3 or More Units	7.5 3.0	0.5 0.2	2.2 0.8	2.5 1.2	0.8 0.2	1.4 0.7	13.8 20.1
Entertainment							
Color Television Sets	105.8	9.2	28.4	23.8	20.6	23.8	7.8
1	29.3	3.3	7.8	6.3	5.2	6.8	9.7
2	38.4	3.2	10.3	8.8	7.5	8.6	7.5
3	23.3	1.7	6.3	5.2	4.8	5.3	8.8
4 5 or More	10.2 4.5	0.6 0.3	2.9 1.2	2.4 1.1	2.2 0.8	2.0 1.2	13.2 14.8
Large Sergen Television Sets	36.6	2.7	0.2	77	6.0	0.0	10.1
Large Screen Television Sets	27.3	3.7 2.8	9.3 7.1	7.7 5.6	6.9 5.1	9.0 6.7	10.1
2	7.9	0.8	1.8	1.7	1.7	2.0	14.5
3 or More	1.4	Q	0.4	0.5	Q	Q	49.4
Cable/Satellite Dish Antennas	82.2	7.1	22.6	19.0	15.9	17.6	7.1
Cable Network	68.3	5.4	18.9	16.5	13.1	14.4	7.5
Satellite Dish Antenna Both	12.0 1.9	1.5 0.3	3.2 0.5	2.3 0.3	2.5 0.3	2.5 0.6	13.7 26.4
Both	1.9	0.5	0.5	0.3	0.5	0.0	20.4
Video Cassette Recorders (VCRs) and DVD Players	96.1	8.1	25.8	22.1	18.8	21.3	7.9
1	52.3	4.7	13.2	12.2	10.4	11.9	8.1
2	29.0	2.4	8.1	6.6	5.9	6.0	9.5
3 or More	14.7	0.9	4.6	3.3	2.6	3.4	12.2
Stereo Equipment	80.3	7.0	22.0	17.4	16.2	17.7	6.5
Portable/Boom Box	26.1	3.3	7.6	5.4	4.9	4.9	10.3
Compact Stereo System Component Stereo System	36.5 36.3	3.5 2.9	9.5 10.3	8.0 8.4	7.1 7.3	8.5 7.4	7.7 8.5
Other System	3.1	0.4	1.2	0.5	0.5	0.6	19.3
Clothes Washers and Dryers							
Clothes Washer	84.1	7.9	22.6	17.9	16.3	19.4	7.4
Top loading	81.6	7.6	21.8	17.2	15.9	19.1	7.6
Front loading	2.5	0.2	0.8	0.7	0.4	0.3	20.8

Table HC5-1a. Appliances by Climate Zone, Million U.S. Households, 2001 (Continued)

Appliance Types and Characteristics	Total		2,000 CDD				
		More than 7,000 HDD	5,500 to 7,000 HDD	4,000 to 5,499 HDD	Fewer than 4,000 HDD	or More and Fewer than 4,000 HDD	RSE
RSE Column Factor:	0.4	1.9	1.1	1.1	1.2	1.1	Row Factors
Clothes Dryer	78.8	7.6	21.5	16.7	15.0	18.0	7.7
Electric Natural Gas LPG	61.1 16.9 0.8	6.2 1.2 0.2	15.3 6.1 0.2	13.5 3.0 Q	11.1 3.8 Q	15.0 2.9 Q	9.6 12.8 33.0
Water Heater Equipment							
Water Heaters	107.0 40.8	9.2 4.0	28.6 7.3	24.0 8.5	21.0 8.1	24.1 12.8	7.8 10.4
For One Housing Unit For Two or More Units Natural Gas	37.7 3.1 58.0	3.7 Q 3.7	6.6 0.7 19.1	7.7 0.8 12.4	7.8 0.3 12.2	12.0 0.9 10.6	11.5 25.7 8.9
For One Housing Unit For Two or More Units Fuel Oil	50.9 7.1 4.6	3.3 0.4 0.8	17.1 2.1 1.4	9.6 2.8 2.4	10.7 1.4 Q	10.2 0.4 Q	9.5 20.2 21.1
For One Housing Unit For Two or More Units	3.0 1.6	0.7 Q	1.2 0.2	1.2 1.2	Q Q	Q Q 0.4	25.6 33.9
LPG Other No Water Heater	2.9 0.5 Q	0.6 Q Q	0.8 Q Q	0.6 Q Q	0.5 Q Q	Q Q Q	27.7 86.5 NF
Water Heater (for one housing unit)	95.0	8.4	25.6	19.2	19.1	22.8	8.5
Less than 2 Years 2 to 4 Years	11.4 17.3	0.9 1.6	3.3 4.9	2.3 3.5	2.2 3.6	2.7 3.8	12.3 11.6
5 to 9 Years	25.3 21.7 7.4	2.4 1.7 0.9	7.0 5.5 1.8	4.7 4.7 1.3	5.0 4.3 1.4	6.1 5.5 2.1	10.1 11.3 15.8
Don't Know No Separate Heater	9.4 2.5	0.4 0.6	2.4 0.7	2.0 0.8	2.3 0.3	2.3 0.3	14.3 22.8
No Water Heater Water Heaters for Two or More Units	Q 11.9	Q 0.9	Q 3.0	Q 4.9	Q 1.9	Q 1.3	NF 15.5
Size							
Small Medium Large	12.2 49.4 25.6	0.9 4.2 2.2	3.5 12.8 7.2	1.9 9.5 6.0	2.2 10.8 5.0	3.7 12.2 5.2	14.9 8.5 11.6
Don't Know No Separate Heater	3.8 2.5	0.4 0.6	1.3 0.7	0.8 0.8	0.4 0.3	0.9 0.3	24.8 22.8
No Water Heater Water Heaters for Two or More Units	Q 11.9	Q 0.9	Q 3.0	Q 4.9	Q 1.9	Q 1.3	NF 15.5
Heaters (other)	4.4	0.3	1.0	0.8		1.2	17.9
Hot Tub or Spa (heaters) Electric Natural Gas	3.3 0.9	0.3 Q	0.9 Q	0.6 Q	1.1 0.6 0.4	0.8 0.3	20.6 33.5
LPG/Other Portable Space (heaters) Electric	Q 13.4 11.9	Q 1.3 1.2	Q 3.7 3.4	Q 3.0 2.5	Q 2.8 2.5	Q 2.5 2.3	NF 11.4 12.1
Kerosene	1.8	0.2	0.4	0.6	0.3	Q	22.9

Table HC5-1a. Appliances by Climate Zone, Million U.S. Households, 2001 (Continued)

Appliance Types and Characteristics RSE Column Factor:		Climate Zone ¹						
	Total		2,000 CDD					
		More than 7,000 HDD	5,500 to 7,000 HDD	4,000 to 5,499 HDD	Fewer than 4,000 HDD	or More and Fewer than 4,000 HDD	RSE Row Factors	
		1.9						
Swimming Pool (heaters)	1.2	Q	0.3	0.3	0.3	0.3	38.1	
Natural Gas	0.8	Q	Q	Q	Q	Q	63.9	
Electric/LPG/Other	0.4	Q	Q	Q	Q	Q	78.6	
Waterbed Heaters	5.5	0.7	1.8	1.3	0.6	1.2	18.4	
1		0.7	1.6	1.0	0.5	1.1	20.2	
2 or More	0.8	Q	0.3	Q	Q	Q	45.1	
Used All Year	5.0	0.6	1.7	1.2	0.5	1.0	19.3	
1		0.5	1.4	1.0	0.4	1.0	20.9	
2 or More	0.6	Q	0.2	Q	Q	Q	49.3	
Other Appliances								
Automobile Block/Engine/								
Battery Heater	2.3	1.0	0.9	Q	Q	Q	24.7	
Ceiling Fans	69.6	5.9	18.1	14.2	12.3	19.1	8.0	
1	22.0	2.5	6.9	4.9	3.5	4.1	10.7	
2	15.1	1.5	4.5	3.0	2.8	3.4	12.1	
3 or more	32.6	2.0	6.7	6.3	6.0	11.6	10.6	
Electrtic Dehumidifier	12.1	2.6	5.4	3.1	0.6	0.4	16.0	
Electrtic Humidifier	15.6	2.6	6.9	3.7	1.4	1.0	14.6	
Evaporative/Swamp Cooler		Q	0.3	Q	0.6	1.5	26.6	
Heated Aquarium	4.5	0.3	1.5	1.0	0.8	0.8	16.6	
Outdoor Gas Light ⁴	0.5	Q	Q	0.2	Q	Q_	30.6	
Pumps (Electric)	21.2	2.6	6.4	4.0	3.4	4.7	13.4	
Rechargeable Tools/Appliances		5.0	13.9	10.3	8.6	9.9	8.9	
Swimming Pool (with filters)	6.5	0.3	1.6	1.4	1.2	2.0	16.1	
Well Water	13.8	2.3	4.8	2.6	1.7	2.4	18.6	

¹ One of five climatically distinct areas, determined according to the 30-year average (1961-1990) of the annual heating and cooling degree-days. For this report, the heating or cooling degree-days are a measure of how cold or how hot a location is over a period of one year, relative to a base temperature of 65 degrees Fahrenheit. A household is assigned to a climate some according to the 30-year average annual degree-days for an appropriate nearby weather station.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C of the 2001 Residential Energy Consumption Survey.

The number of households, where the end use is electric air-conditioning, does not include households that did not use their equipment (2.1 million). It does include the small number of households where the fuel for central air-conditioning equipment was something other than electricity; those households were treated

as if the fuel was electricity.

The 2001 RECS reported 800,000 households having both central air-conditioning and room/wall air-conditioners, with 600,000 households using both central air-conditioning and 200,000 households using only room/wall air-conditioners. These room/wall air-conditioners are not included in the count of 23.3 million households using room/wall air-conditioners. Note: This applies to all occurrences of central air-conditioning.

⁴ Includes LPG and natural gas.

cf = Cubic feet.

NF = No applicable RSE row factor.

Q = Data withheld either because the Relative Standard Error (RSE) was greater than 50 percent or fewer than 10 households were sampled.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals. See "Glossary" for definition of terms used in this report.