Table HC7.7 Air-Conditioning Usage Indicators by Household Income, 2005
Million U.S. Housing Units

Air-Conditioning Usage Indicators	Housing Units (millions)	2005 Household Income					Below Poverty Line	Eligible for Federal Assistance[1]
		Less than $20,000	$20,000 to $39,999	$40,000 to $59,999	$60,000 to $79,999	$80,000 or More		
Total	111.1	26.7	28.8	20.6	13.1	22.0	16.6	38.6
Do Not Have Cooling Equipment	17.8	5.3	4.7	2.8	1.9	3.1	3.6	7.5
Have Cooling Equipment	93.3	21.5	24.1	17.8	11.2	18.8	13.0	31.1
Use Cooling Equipment	91.4	21.0	23.5	17.4	11.0	18.6	12.6	30.3
Have Equipment But Do Not Use it	1.9	0.5	0.6	0.4	Q	Q	0.5	0.8
Type of Air-Conditioning Equipment[1, 2]								
Central System	65.9	11.0	16.5	13.5	8.7	16.1	6.4	17.2
Without a Heat Pump	53.5	9.4	13.6	10.7	7.1	12.7	5.4	14.5
With a Heat Pump	12.3	1.7	2.8	2.8	1.6	3.4	1.0	2.7
Window/Wall Units	28.9	10.5	8.1	4.5	2.7	3.1	6.7	14.1
1 Unit	14.5	5.8	4.3	2.0	1.1	1.3	3.4	7.4
2 Units	9.1	3.2	2.4	1.5	0.9	1.1	2.3	4.4
3 or More Units	5.4	1.6	1.4	1.0	0.7	0.8	1.1	2.4
Central Air-Conditioning Usage								
Air-Conditioned Floorspace (Square Feet)								
None	45.2	15.7	12.3	7.0	4.4	5.8	10.2	21.4
1 to 499	3.9	1.2	1.3	0.7	0.5	Q	1.0	1.5
500 to 999	15.0	4.5	4.4	2.8	1.5	1.9	2.5	5.8
1,000 to 1,499	15.6	3.0	4.5	4.1	1.8	2.2	1.8	4.6
1,500 to 1,999	11.1	1.3	3.1	2.3	1.6	2.9	0.6	2.6
2,000 to 2,499	7.0	0.5	1.3	1.5	1.3	2.4	0.2	1.2
2,500 to 2,999	5.2	Q	0.9	0.9	0.9	2.2	Q	0.6
3,000 or 3,499	2.7	Q	0.3	0.6	0.4	1.2	Q	0.3
3,500 to 3,999	1.8	Q	0.3	Q	0.3	1.0	Q	0.2
4,000 or More	3.5	Q	0.3	0.5	0.4	2.2	Q	0.4
Number of Rooms Cooled by Central Air-Conditioning in Summer 2005								
None	1.4	0.4	0.4	0.3	Q	Q	0.5	0.6
1	0.7	Q	Q	Q	Q	Q	Q	Q
2	2.1	0.5	0.8	0.5	Q	Q	0.4	0.7
3	7.5	2.2	1.7	1.4	0.9	1.3	1.3	2.5
4	7.9	2.2	2.5	1.2	0.6	1.3	1.2	3.1
5 or More	46.3	5.5	11.0	9.9	6.8	13.2	2.9	10.1
Proportion of Rooms Air-Conditioned								
None	1.4	0.4	0.4	0.3	Q	Q	0.5	0.6
Some, But Not all of the Rooms	8.4	1.4	1.9	1.6	1.0	2.5	0.9	1.9
All of the Rooms	56.1	9.2	14.2	11.6	7.5	13.5	5.0	14.7
Frequency of Central Air-Conditioner Use								
Never	1.4	0.4	0.4	0.3	Q	Q	0.5	0.6
Only a Few Times When Needed	11.4	2.4	2.9	2.0	1.5	2.6	1.2	3.6
Quite a Bit	12.6	1.8	3.4	2.3	2.0	3.1	1.1	3.1
All Summer	40.5	6.5	9.8	8.9	5.0	10.3	3.6	9.9

Table HC7.7 Air-Conditioning Usage Indicators by Household Income, 2005
Million U.S. Housing Units

Air-Conditioning Usage Indicators	Housing Units (millions)	2005 Household Income					Below Poverty Line	Eligible for Federal Assistance[1]
		Less than $20,000	$20,000 to $39,999	$40,000 to $59,999	$60,000 to $79,999	$80,000 or More		
At Home Behavior								
Home Used for Business								
Yes	6.4	0.5	1.0	1.3	0.9	2.7	0.3	1.0
No	59.5	10.5	15.4	12.3	7.8	13.4	6.1	16.2
Someone Home All Day								
Yes	32.7	6.5	9.1	6.1	4.4	6.5	4.0	10.4
No	33.1	4.5	7.4	7.4	4.3	9.6	2.4	6.8
Housing Unit Characteristics Affecting Usage in Centrally Air-Conditioned Housing Units								
Large Tree(s) that Shade the Home								
Yes	31.6	4.8	7.8	6.8	4.2	8.0	2.8	7.7
No	34.3	6.2	8.7	6.7	4.5	8.1	3.7	9.5
Adequacy of Insulation								
Well Insulated	29.5	5.0	7.2	6.2	3.7	7.5	2.7	7.3
Adequately Insulated	27.9	4.3	6.5	5.8	4.0	7.3	2.4	6.7
Poorly Insulated	7.3	1.4	2.3	1.4	0.9	1.3	1.0	2.5
No Insulation	0.3	Q	Q	Q	Q	Q	Q	Q
Don't Know	0.9	0.3	0.4	Q	Q	Q	Q	0.5
Home Is Too Drafty During the Winter								
Never	42.6	7.4	10.7	8.8	5.2	10.6	4.1	11.0
Some of the Time	16.3	2.4	3.7	3.5	2.5	4.2	1.4	3.9
Most of the Time	2.5	0.5	0.7	0.4	0.4	0.6	0.4	0.8
All of the Time	2.2	0.4	0.8	0.3	0.3	0.3	0.3	0.8
Don't Know	2.2	0.3	0.6	0.5	0.3	0.5	0.3	0.7
Unusually High Ceilings								
Yes	20.3	1.2	3.2	3.8	3.5	8.6	0.7	2.4
No	41.9	8.7	11.7	9.1	5.0	7.4	5.0	13.2
Not Asked (Mobile Homes)	3.7	1.1	1.6	0.6	Q	Q	0.7	1.7
Cathedral Ceilings (In Housing Units with High Ceilings)								
Yes	13.5	0.7	2.0	2.3	2.3	6.3	0.4	1.4
No	6.7	0.6	1.2	1.5	1.2	2.3	0.3	1.0
Type of Glass in Windows								
Single-pane Glass	27.4	6.2	8.0	5.7	2.8	4.6	3.8	9.1
Double-pane Glass								
Without Low-e Coating	31.5	4.5	7.1	6.6	4.5	8.8	2.4	7.4
With Low-e Coating	5.8	Q	1.1	1.1	1.2	2.4	Q	0.5
Triple-pane Glass								
Without Low-e Coating	0.8	Q	Q	Q	Q	Q	Q	Q
With Low-e Coating	Q	N	Q	N	N	Q	N	Q
Proportion of Windows Replaced								
All	11.5	2.1	3.0	2.0	2.1	2.4	1.1	3.4
Some	11.1	1.5	2.4	2.4	1.3	3.5	0.8	2.4
None	40.9	6.8	10.4	8.7	5.1	9.9	4.2	10.5

Table HC7.7 Air-Conditioning Usage Indicators by Household Income, 2005
Million U.S. Housing Units

Air-Conditioning Usage Indicators	Housing Units (millions)	2005 Household Income					Below Poverty Line	Eligible for Federal Assistance[1]
		Less than $20,000	$20,000 to $39,999	$40,000 to $59,999	$60,000 to $79,999	$80,000 or More		
Thermostats								
Thermostat Available During Summer								
Yes	63.9	10.4	15.8	13.2	8.6	15.9	6.0	16.2
No	1.9	0.6	0.6	0.4	Q	Q	0.4	1.0
Do Not Use Central Air-Conditioning	45.2	15.7	12.3	7.0	4.4	5.8	10.2	21.4
Use a Programmable Thermostat								
Yes	25.0	2.6	4.8	5.1	4.0	8.5	1.5	4.4
No	38.9	7.8	11.0	8.1	4.6	7.4	4.5	11.8
Use of Programmable Thermostats								
Adjusts Temperature During Day								
Yes	15.1	1.2	3.0	3.0	2.6	5.3	0.7	2.4
No	9.9	1.3	1.9	2.1	1.4	3.2	0.8	2.1
Adjusts Temperature at Night								
Yes	15.4	1.2	3.1	3.2	2.4	5.5	0.7	2.4
No	9.6	1.4	1.7	1.9	1.6	3.0	0.8	2.0
Do Not Use Central Air-Conditioning	45.2	15.7	12.3	7.0	4.4	5.8	10.2	21.4
Summer 2005 Temperature Settings								
Higher Temperature Settings								
Daytime When No One is Home								
Yes	0.5	Q	Q	Q	Q	Q	Q	Q
No	50.8	7.7	12.5	10.8	6.7	13.1	4.3	12.2
Unknown	14.5	3.2	3.8	2.5	1.9	3.0	2.1	4.9
Do Not Use Central Air-Conditioning	45.2	15.7	12.3	7.0	4.4	5.8	10.2	21.4
At Night During Sleeping Hours								
Yes	7.3	0.7	1.8	1.5	0.8	2.5	0.3	1.2
No	44.3	7.3	10.9	9.6	5.9	10.6	4.2	11.4
Unknown	14.2	3.1	3.8	2.5	1.9	3.0	1.9	4.7
Do Not Use Central Air-Conditioning	45.2	15.7	12.3	7.0	4.4	5.8	10.2	21.4
Daytime Setting When Someone is Home								
Air Conditioner Turned On	52.0	8.0	12.9	11.1	6.8	13.2	4.5	12.6
69 Degrees or Less	4.8	0.9	1.2	1.0	0.5	1.1	0.7	1.5
70 Degrees	7.2	1.2	2.2	1.2	1.0	1.6	0.8	2.4
71 to 73 Degrees	8.8	0.9	1.8	1.8	1.1	3.1	0.5	1.5
74 to 76 Degrees	16.5	2.5	3.8	3.7	2.3	4.2	1.4	3.8
77 to 79 Degrees	11.1	2.0	2.6	2.6	1.4	2.4	1.0	2.7
80 Degrees or More	3.7	0.4	1.2	0.7	0.5	0.9	Q	0.7
Don't Know/No Answer	1.1	0.3	0.3	Q	Q	Q	0.3	0.4
Do Not Use Central Air Conditioning	45.2	15.7	12.3	7.0	4.4	5.8	10.2	21.4
Daytime Setting When No On is at Home								
Air Conditioner Turned On	49.5	7.5	12.2	10.6	6.4	12.7	4.1	11.9
69 Degrees or Less	3.6	0.8	1.0	0.7	0.4	0.7	0.6	1.3
70 Degrees	5.2	0.9	1.6	0.8	0.8	1.0	0.6	1.8
71 to 73 Degrees	6.0	0.8	1.3	1.3	0.8	1.9	0.4	1.3
74 to 76 Degrees	13.8	2.0	3.4	3.2	1.6	3.6	1.2	3.3
77 to 79 Degrees	10.7	1.8	2.4	2.0	1.5	3.0	0.7	2.4
80 Degrees or More	10.2	1.3	2.5	2.6	1.2	2.6	0.7	1.9
Don't Know/No Answer	1.6	0.4	0.5	Q	0.3	Q	0.4	0.6
Air-Conditioner Turned Off	2.0	0.3	0.5	0.4	0.3	0.4	0.3	0.6
Do Not Use Central Air Conditioning	45.2	15.7	12.3	7.0	4.4	5.8	10.2	21.4

Table HC7.7 Air-Conditioning Usage Indicators by Household Income, 2005
Million U.S. Housing Units

Air-Conditioning Usage Indicators	Housing Units (millions)	2005 Household Income					Below Poverty Line	Eligible for Federal Assistance[1]
		Less than $20,000	$20,000 to $39,999	$40,000 to $59,999	$60,000 to $79,999	$80,000 or More		
Setting During Seeping Hours								
Air Conditioner Turned On	51.0	8.0	12.6	10.8	6.6	13.0	4.4	12.6
69 Degrees or Less	5.7	1.0	1.5	1.2	0.6	1.5	0.7	1.5
70 Degrees	7.7	1.3	2.2	1.3	1.1	1.7	0.8	2.4
71 to 73 Degrees	8.3	1.0	1.7	1.7	0.9	2.9	0.5	1.7
74 to 76 Degrees	15.5	2.5	3.4	3.4	2.3	3.8	1.4	3.7
77 to 79 Degrees	9.7	1.6	2.5	2.4	1.3	2.0	0.8	2.3
80 Degrees or More	4.1	0.7	1.2	0.8	0.4	1.1	0.3	1.0
Don't Know/No Answer	1.3	0.2	0.5	Q	Q	Q	0.2	0.4
Air-Conditioner Turned Off	0.8	Q	Q	Q	Q	Q	Q	Q
Do Not Use Central Air Conditioning	45.2	15.7	12.3	7.0	4.4	5.8	10.2	21.4
Dehumidifier Use Each Year								
Use a Humidifier	13.3	1.6	2.9	2.4	2.1	4.3	0.7	3.0
1 to 3 Months Each Year	5.1	0.9	1.3	0.9	0.8	1.4	0.3	1.5
4 to 6 Months Each Year	4.4	0.4	0.9	0.9	0.7	1.5	Q	0.7
7 to 9 Months Each Year	0.9	Q	Q	Q	Q	0.4	Q	Q
10 to 11 Months	Q	N	Q	N	Q	Q	N	Q
Turned on All Year Long	2.6	0.2	0.5	0.5	0.4	1.0	Q	0.6
Do Not Use a Dehumidifier	97.8	25.1	25.9	18.2	11.0	17.7	16.0	35.6
Window/Wall Air Conditioners								
Frequency Most Used Unit Was Used								
Never	0.6	Q	Q	Q	Q	Q	Q	0.2
Only a Few Times When Needed	12.1	4.2	3.2	1.9	1.4	1.4	2.5	5.8
Quite a Bit	7.5	2.4	2.4	1.2	0.8	0.8	1.4	3.3
All Summer	8.6	3.7	2.3	1.2	0.6	0.8	2.7	4.8
***Energy Star* Wall/Window (Most-Used) Unit**								
Yes	4.6	1.3	1.2	0.9	0.7	0.5	0.8	1.9
No	2.7	1.1	0.9	0.4	Q	0.2	0.7	1.6
Don't Know	7.0	2.3	1.9	1.1	0.7	1.0	1.6	3.3
Unit is More Than 4 Years Old	14.6	5.8	4.1	2.1	1.2	1.4	3.6	7.4
Use a Swamp Cooler (Asked Only in Arid Areas)								
Yes	3.4	1.0	0.9	0.5	0.4	0.5	0.8	1.4
No	41.9	9.2	10.8	8.5	4.7	8.7	6.3	13.3
Not Asked	65.8	16.5	17.0	11.5	8.0	12.8	9.6	23.9

1. In the 2005 RECS 1.5 million housing units reported having both central and window/wall air conditioners.
2. The number of housing units using air-conditioning includes a small, undetermined number of housing units where the fuel for central air-conditioning was some fuel other than electricity; these housing units were treated as if the air-conditioning fuel was electricity.

Q = Data withheld either because the Relative Standard Error (RSE) was greater than 50 percent or fewer than 10 households were sampled.
N = No cases in reporting sample.
Notes: ● Because of rounding, data may not sum to totals. ● See Glossary for definition of terms used in these tables.
Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C of the 2005 Residential Energy Consumption Survey.