Table WH4. Total Consumption for Water Heating by Major Fuels Used, 2005

Quadrillion British Thermal Units (Btu)

	U.S. Households (millions)	Total U.S. Using a Major		Major Fu	uels Used ⁵ (quadrill	drillion Btu)		
		Water Heating Fuel ⁵ (millions)	Total	Electricity	Natural Gas	Fuel Oil	LPG	
Total	111.1	109.8	2.11	0.42	1.41	0.14	0.15	
Census Region and Division								
Northeast	20.6	19.9	0.43	0.04	0.25	0.12	0.02	
New England	5.5	5.3	0.11	0.01	0.05	0.05	0.01	
Middle Atlantic	15.1	14.5	0.32	0.03	0.20	0.08	0.01	
Midwest	25.6	25.4	0.52	0.07	0.40	Q	0.05	
East North Central	17.7	17.6	0.37	0.05	0.29	N	0.03	
West North Central	7.9	7.8	0.15	0.02	0.11	Q	0.02	
South	40.7	40.5	0.64	0.24	0.35	Q	0.04	
South Atlantic	21.7	21.7	0.30	0.14	0.14	Q	0.01	
East South Central	6.9	6.9	0.11	0.05	0.05	Q	0.01	
West South Central	12.1	12.0	0.23	0.05	0.16	N	0.02	
West	24.2	24.0	0.51	0.06	0.40	Q	0.04	
Mountain	7.6	7.5	0.15	0.02	0.11	Q	0.02	
Pacific	16.6	16.5	0.36	0.04	0.29	Q	0.02	
Four Most Populated States								
New York	7.1	6.7	0.15	0.01	0.08	0.05	0.01	
Florida	7.0	7.0	0.07	0.05	0.02	N	Q	
Texas	8.0	7.9	0.16	0.03	0.11	N	0.01	
California	12.1	12.1	0.28	0.01	0.25	N	0.02	
All Other States	76.9	76.2	1.45	0.31	0.95	0.08	0.10	
Urban/Rural Location (as Self-Reported)								
City	47.1	46.5	0.85	0.15	0.63	0.04	0.03	
Town	19.0	18.8	0.36	0.06	0.27	0.02	0.02	
Suburbs	22.7	22.5	0.53	0.06	0.42	0.03	0.02	
Rural	22.3	22.0	0.37	0.15	0.10	0.04	0.08	
Climate Zone ¹								
Less than 2,000 CDD and								
Greater than 7,000 HDD	10.9	10.6	0.22	0.04	0.13	Q	0.02	
5,500 to 7,000 HDD	26.1	25.8	0.52	0.07	0.38	0.05	0.03	
4,000 to 5,499 HDD	27.3	26.8	0.53	0.10	0.33	0.05	0.03	
Fewer than 4,000 HDD	24.0	23.9	0.48	0.08	0.36	Q	0.04	
2000 CDD or More and	_ 1.0	_3.0	3.10	3.50	5.00	•	5.01	

Table WH4. Total Consumption for Water Heating by Major Fuels Used, 2005

Quadrillion British Thermal Units (Btu)

	U.S. Households (millions)	Total U.S. Using a Major		Major Fu	uels Used ⁵ (quadrilli		
		Water Heating Fuel ⁵ (millions)	Total	Electricity	Natural Gas	Fuel Oil	LPG
Type of Housing Unit							
Single-Family Detached	72.1	71.8	1.56	0.27	1.08	0.09	0.12
Single-Family Attached	7.6	7.5	0.14	0.02	0.11	Q.00	Q.12
Apartments in 2-4 Unit Buildings	7.8	7.7	0.12	0.02	0.08	0.01	Q
Apartments in 5 or More Unit Buildings	16.7	16.1	0.20	0.06	0.11	0.03	0.01
Mobile Homes	6.9	6.8	0.09	0.05	0.03	Q	0.01
Ownership of Housing Unit							
Owned	78.1	77.6	1.61	0.29	1.09	0.10	0.13
Single-Family Detached	64.1	63.8	1.40	0.23	0.97	0.09	0.11
Single-Family Attached	4.2	4.1	0.08	0.01	0.07	Q	Q
Apartments in 2-4 Unit Buildings	1.8	1.8	0.03	(*)	0.03	Q	Q
Apartments in 5 or More Unit Buildings	2.3	2.3	0.02	0.01	0.02	Q	Q
Mobile Homes	5.7	5.6	0.07	0.04	0.02	Q	0.01
Rented	33.0	32.2	0.50	0.13	0.31	0.04	0.02
Single-Family Detached	8.0	8.0	0.16	0.04	0.11	Q	Q
Single-Family Attached	3.4	3.4	0.06	0.01	0.05	Q	Q
Apartments in 2-4 Unit Buildings	5.9	5.8	0.09	0.02	0.06	0.01	Q
Apartments in 5 or More Unit Buildings	14.4	13.8	0.17	0.05	0.09	0.02	0.01
Mobile Homes	1.2	1.1	0.02	0.01	0.01	Q	Q
Year of Construction							
Before 1940	14.7	14.5	0.29	0.04	0.20	0.04	0.02
1940 to 1949	7.4	7.3	0.16	0.01	0.12	0.02	0.01
1950 to 1959	12.5	12.4	0.24	0.03	0.18	0.02	0.01
1960 to 1969	12.5	12.2	0.23	0.04	0.16	0.02	0.01
1970 to 1979	18.9	18.6	0.31	0.08	0.20	0.02	0.02
1980 to 1989	18.6	18.4	0.33	0.08	0.21	0.01	0.03
1990 to 1999	17.3	17.2	0.35	0.09	0.22	0.01	0.03
2000 to 2005	9.2	9.1	0.20	0.04	0.12	0.01	0.03

Table WH4. Total Consumption for Water Heating by Major Fuels Used, 2005

Quadrillion British Thermal Units (Btu)

	U.S. Households (millions)	Total U.S. Using a Major	_	Major Fu	uels Used ⁵ (quadrillio	on Btu)	
		Water Heating Fuel ⁵ (millions)	Total	Electricity	Natural Gas	Fuel Oil	LPG
Household Size							
1 Person	30.0	29.5	0.35	0.07	0.24	0.02	0.02
2 Persons	34.8	34.4	0.64	0.13	0.42	0.04	0.05
3 Persons	18.4	18.2	0.39	0.08	0.26	0.03	0.02
4 Persons	15.9	15.8	0.38	0.07	0.26	0.02	0.03
5 Persons	7.9	7.9	0.21	0.04	0.14	0.01	0.02
6 or More Persons	4.1	4.1	0.14	0.02	0.10	Q	0.01
2005 Household Income Category							
Less than \$10,000	9.9	9.5	0.13	0.03	0.08	0.01	0.01
\$10,000 to \$14,999	8.5	8.3	0.12	0.03	0.07	0.01	0.01
\$15,000 to \$19,999	8.4	8.3	0.13	0.03	0.07	0.01	0.01
\$20,000 to \$29,999	15.1	14.9	0.24	0.06	0.16	0.01	0.01
\$30,000 to \$39,999	13.6	13.4	0.23	0.06	0.15	0.01	0.01
\$40,000 to \$49,999	11.0	11.0	0.20	0.04	0.14	0.01	0.01
\$50,000 to \$74,999	19.8	19.7	0.41	0.07	0.28	0.02	0.03
\$75,000 to \$99,999	10.6	10.5	0.23	0.05	0.16	0.02	0.01
\$100,000 or More	14.2	14.1	0.41	0.04	0.30	0.03	0.05
Income Relative to Poverty Line							
Below 100 Percent	16.6	16.2	0.26	0.06	0.16	0.02	0.02
100 to 150 Percent	12.9	12.8	0.21	0.06	0.13	0.01	0.01
Above 150 Percent	81.5	80.9	1.64	0.29	1.12	0.10	0.12
Eligible for Federal Assistance ²							
Yes	38.6	37.8	0.63	0.15	0.39	0.05	0.04
No	72.5	72.0	1.48	0.26	1.02	0.09	0.11
Payment Method for Utilities							
All Paid by Household	97.5	96.8	1.91	0.38	1.29	0.10	0.13
Some Paid, Some in Rent	7.6	7.4	0.11	0.02	0.06	0.02	0.01
All Included in Rent	4.7	4.3	0.07	0.01	0.04	0.01	Q
Other Method	1.3	1.3	0.02	0.01	0.01	Q	Q

Table WH4. Total Consumption for Water Heating by Major Fuels Used, 2005 Quadrillion British Thermal Units (Btu)

	U.S. Households (millions)	Total U.S. Using a Major		Major Fu	iels Used ⁵ (quadrillic	on Btu)		
		Water Heating Fuel ⁵ (millions)	Total	Electricity	Natural Gas	Fuel Oil	LPG	
Ethnic Origin of Householder								
Hispanic Descent	14.8	14.5	0.28	0.05	0.18	0.03	0.02	
Non-Hispanic Descent	96.3	95.3	1.83	0.36	1.23	0.11	0.13	
Race of Householder ³								
White	79.1	78.4	1.51	0.30	0.99	0.10	0.12	
Hispanic	5.0	5.0	0.09	0.02	0.06	0.10	0.12	
Non-Hispanic	74.1	73.4	1.42	0.28	0.93	0.09	0.12	
Black	13.4	13.3	0.25	0.06	0.17	0.01	0.01	
Hispanic	0.3	0.3	0.01	Q	Q	Q	N	
Non-Hispanic	13.1	13.0	0.24	0.05	0.17	0.01	0.01	
Asian	3.3	3.3	0.07	0.01	0.05	Q	Q	
Multi-Racial	1.3	1.3	0.02	(*)	0.02	Q	Q	
Other	7.1	7.0	0.14	0.02	0.10	0.01	0.01	
Undetermined (Race Reported as Hispanic)	6.9	6.6	0.13	0.03	0.08	0.01	Q	
Age of Householder								
Under 25 Years	5.5	5.2	0.07	0.03	0.04	Q	Q	
25 to 34 Years	18.2	18.0	0.35	0.08	0.24	0.01	0.02	
35 to 44 Years	22.2	22.0	0.49	0.10	0.34	0.02	0.03	
45 to 54 Years	23.3	23.2	0.50	0.08	0.33	0.04	0.04	
55 to 64 Years	18.0	17.8	0.34	0.06	0.22	0.03	0.03	
65 to 74 Years	12.3	12.1	0.20	0.04	0.13	0.01	0.02	
75 Years or More	11.7	11.5	0.16	0.03	0.11	0.02	0.01	
Adults Age 65 or Older in Household								
Yes	26.9	26.4	0.43	0.08	0.30	0.03	0.03	
No	84.2	83.4	1.68	0.34	1.11	0.10	0.12	
Children Under Age 5 in Household								
Yes	15.0	14.9	0.35	0.07	0.24	0.02	0.02	
No	96.1	94.9	1.76	0.34	1.17	0.12	0.13	
Children Age 5 to 16 in Household								
Yes	28.1	28.0	0.72	0.13	0.48	0.04	0.06	
No	83.0	81.8	1.39	0.28	0.92	0.09	0.09	

Table WH4. Total Consumption for Water Heating by Major Fuels Used, 2005

Quadrillion British Thermal Units (Btu)

	U.S. Households (millions)	Total U.S. Using a Major		Major Fu	uels Used ⁵ (quadrill	ion Btu)	
		Water Heating Fuel ⁵ (millions)	Total	Electricity	Natural Gas	Fuel Oil	LPG
Number of Water Heaters							
1	106.3	106.1	1.96	0.40	1.34	0.13	0.09
2 or More	3.7	3.7	0.15	0.02	0.07	0.01	0.06
Do Not Use Hot Water	1.1	N	N	N	N	N	N
Age of Main Water Heater							
Used by One Housing Unit							
Less than 2 Years	14.7	14.6	0.32	0.06	0.23	0.01	0.03
2 to 4 Years	18.6	18.6	0.38	0.08	0.26	0.01	0.03
5 to 9 Years	25.5	25.5	0.51	0.11	0.34	0.02	0.04
10 to 19 Years	20.1	20.1	0.39	0.07	0.27	0.02	0.02
20 Years or More	6.8	6.8	0.12	0.03	0.07	0.02	Q
Don't Know	12.0	12.0	0.21	0.05	0.14	0.01	0.01
No Separate Water Heater	1.9	1.9	0.03	(*)	0.01	Q	Q
Used by Two or More Housing Units	2.2	0.0	0.04			•	
Less than 2 Years	0.3	0.3	0.01	Q	Q	Q	N
2 to 4 Years	0.5	0.5	0.01	Q	Q	Q	Q
5 to 9 Years	0.5	0.5	0.01	Q	0.01	Q	Q
10 to 19 Years	0.6	0.6	0.01	Q	(*)	Q	N
20 Years or More	0.6	0.6	0.01	Q	(*)	Q 0.04	Q
Don't Know No Separate Water Heater	4.4 3.4	4.4 3.4	0.06 0.05	0.01 0.01	0.04 0.02	0.01 0.01	Q Q
Size of Main Water Heater							
Used by One Housing Unit							
Small (30 gallons or less)	17.1	17.1	0.24	0.07	0.14	0.01	0.02
Medium (31 to 49 gallons)	52.4	52.4	1.03	0.17	0.75	0.04	0.07
Large (50 gallons or more)	27.1	27.0	0.63	0.14	0.42	0.02	0.05
Tankless water heater	1.1	1.1	0.03	Q	0.01	0.02	Q
No Separate Water Heater	1.9	1.9	0.03	(*)	0.01	Q	Q
Used by Two or More Housing Units				()			
Small (30 gallons or less)	1.4	1.4	0.03	(*)	0.01	Q	Q
Medium (31 to 49 gallons)	2.4	2.4	0.03	0.01	0.02	Q	Q
Large (50 gallons or more)	2.8	2.8	0.04	0.01	0.02	Q	Q
Tankless water heater	0.2	0.2	0.01	N	Q	Q	N
No Separate Water Heater	3.4	3.4	0.05	0.01	0.02	0.01	Q

Table WH4. Total Consumption for Water Heating by Major Fuels Used, 2005 Quadrillion British Thermal Units (Btu)

	U.S. Households (millions)	Total U.S. Using a Major		Major Fu	uels Used ⁵ (quadrillio	on Btu)	n Btu)	
		Water Heating Fuel ⁵ (millions)	Total	Electricity	Natural Gas	Fuel Oil	LPG	
Clothes Washer								
Do Not Use a Clothes Washer	19.3	18.6	0.21	0.06	0.10	0.03	0.02	
Use a Clothes Washer	91.8	91.2	1.90	0.36	1.30	0.11	0.13	
Top Loading	84.1	83.6	1.71	0.33	1.17	0.10	0.12	
Front Loading	7.7	7.7	0.19	0.03	0.13	0.01	0.02	
Age of Clothes Washer								
Less than 2 Years	15.7	15.6	0.35	0.07	0.25	0.01	0.03	
2 to 4 Years	21.1	21.0	0.46	0.08	0.30	0.03	0.04	
5 to 9 Years	28.9	28.6	0.58	0.12	0.39	0.03	0.04	
10 to 19 Years	19.9	19.8	0.40	0.06	0.29	0.03	0.02	
20 Years or More	4.1	4.0	0.07	0.01	0.05	Q	Q	
Don't Know	2.2	2.2	0.04	0.01	0.03	Q	N	
Frequency of Clothes Washer Use								
Use a Clothes Washer in the Home	91.8	91.2	1.90	0.36	1.30	0.11	0.13	
1 Load Each Week	7.3	7.1	0.11	0.02	0.08	Q	Q	
2 to 5 Loads Each Week	39.0	38.8	0.73	0.13	0.52	0.04	0.04	
6 to 9 Loads Each Week	33.8	33.6	0.75	0.15	0.50	0.04	0.06	
10 to 15 Loads Each Week	9.3	9.3	0.24	0.05	0.16	0.02	0.02	
More than 15 Loads Each Week	2.4	2.4	0.07	0.01	0.05	Q	Q	
Do Not Use a Clothes Washer in the Home	19.3	18.6	0.21	0.06	0.10	0.03	0.02	
Usual Water Temperature Setting Wash Cycle								
Hot	6.7	6.7	0.14	0.02	0.10	0.01	Q	
Warm	50.5	50.2	1.09	0.18	0.77	0.06	0.08	
Cold	34.6	34.3	0.67	0.15	0.43	0.04	0.05	
Rinse Cycle								
Hot	1.6	1.6	0.04	0.01	0.03	N	Q	
Warm	18.2	18.1	0.38	0.06	0.27	0.02	0.03	
Cold	72.0	71.6	1.48	0.29	1.00	0.08	0.11	
Energy Star Clothes Washer ⁴								
Yes	21.7	21.7	0.52	0.08	0.36	0.03	0.04	
No	10.4	10.4	0.21	0.05	0.13	0.01	0.01	
Don't Know	4.5	4.5	0.09	0.02	0.06	Q	0.01	
Unit is More Than 4 Years Old	55.1	54.7	1.09	0.21	0.76	0.06	0.06	

Table WH4. Total Consumption for Water Heating by Major Fuels Used, 2005 Quadrillion British Thermal Units (Btu)

	U.S. Households (millions)	Total U.S. Using a Major		Major F	uels Used ⁵ (quadril	lion Btu)	
		Water Heating Fuel ⁵ (millions)	Total	Electricity	Natural Gas	Fuel Oil	LPG
Dishwasher							
Do Not Use a Dishwasher	64.7	64.4	1.38	0.26	0.93	0.08	0.10
Use a Dishwasher	46.4	45.4	0.73	0.16	0.47	0.06	0.05
Age of Dishwasher							
Less than 2 Years	11.5	11.4	0.27	0.05	0.19	0.01	0.02
2 to 4 Years	14.6	14.5	0.33	0.06	0.22	0.02	0.03
5 to 9 Years	19.2	19.1	0.40	0.08	0.28	0.02	0.03
10 to 19 Years	12.8	12.8	0.26	0.05	0.18	0.02	0.02
20 Years or More	3.3	3.3	0.07	0.01	0.04	Q	Q
Don't Know	3.3	3.3	0.05	0.01	0.03	Q	Q
Frequency of Dishwasher Use							
Use a Dishwasher	64.7	64.4	1.38	0.26	0.93	0.08	0.10
At Least Once Each Day	11.3	11.3	0.31	0.05	0.22	0.02	0.02
4 to 6 Times a Week	11.7	11.7	0.28	0.05	0.19	0.02	0.03
2 to 3 Times a Week	21.8	21.6	0.45	0.08	0.31	0.03	0.03
Once each Week	9.0	8.9	0.15	0.04	0.10	0.01	0.01
Less than Once Each Week	10.9	10.9	0.18	0.04	0.12	0.01	0.01
Do Not Use a Dishwasher	46.4	45.4	0.73	0.16	0.47	0.06	0.05
Energy Star Dishwasher ⁴							
Yes	16.4	16.2	0.40	0.06	0.28	0.02	0.04
No	6.6	6.6	0.12	0.03	0.08	Q.02	0.01
Don't Know	3.1	3.1	0.07	0.02	0.05	Q	Q
Unit is More Than 4 Years Old	38.6	38.5	0.79	0.15	0.53	0.05	0.05

Table WH4. Total Consumption for Water Heating by Major Fuels Used, 2005

Quadrillion British Thermal Units (Btu)

	U.S. Households (millions)						
		Water Heating Fuel ⁵ (millions)	Total	Electricity	Natural Gas	Fuel Oil	LPG
Other Water Heating							
Hot Tubs or Spas	6.7	6.6	0.16	0.03	0.12	Q	0.02
Electricity	5.3	5.2	0.12	0.03	0.08	Q	0.01
Natural Gas	1.2	1.2	0.04	Q	0.03	N	Q
Swimming Pools	1.9	1.9	0.07	0.01	0.05	Q	0.01
Natural Gas	1.2	1.2	0.05	Q	0.03	Q	Q
Electricity	0.4	0.4	0.02	Q	Q	Q	Q
Propane/LPG	0.3	0.3	0.01	Q	Q	Q	Q
Some Other Fuel	Q	Q	Q	Q	N	N	N
Electric Water Beds	2.2	2.1	0.04	0.01	0.02	Q	Q
1	1.9	1.8	0.03	0.01	0.02	Q	Q
2 or More	0.3	0.3	0.01	Q	Q	N	Q
Heaters Used all Year	1.7	1.7	0.04	0.01	0.02	Q	Q
1	1.5	1.5	0.03	0.01	0.02	Q	Q
2 or More	0.3	0.3	0.01	Q	Q	N	Q

¹ One of five climatically distinct areas, determined according to the 30-year average (1971-2000) of the annual heating and cooling degree-days. A household is assigned to a climate zone 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-G of the 2005 Residential Energy Consumption Survey.

² Below 150 percent of poverty line or 60 percent of median state income.

³ Respondents were permitted to select more than one racial category to describe themselves. The "Other" category includes Native Americans, Native Alaskans, and Pacific Islanders.

⁴ The question of whether the appliance was an Energy Star appliance was asked only of those households having an appliance that was four years old or less.

⁵ The major water heating fuels are electricity, natural gas, fuel oil, and liquefied petroleum gas (LPG).

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 the reporting sample.

^(*) Number less than 0.5, 0.05, or 0.005 depending on the number of significant digits in the column, rounded to zero.

Notes: • Because of rounding, data may not sum to totals. • See "Glossary" for definition of terms used in this report.