Table WH11. Expenditures Intensity by Main Water Heating Fuel Used, 2005 Water Heating Intensity

	U.S. Households (millions)	Total U.S. Using a Major		Main Water Hea (Dollars/number of ho		
		Water Heating Fuel <sup>5</sup> as Main (millions)	Electricity	Natural Gas	Fuel Oil	LPG
Total	111.1	109.8	105	100	172	193
Census Region and Division						
Northeast	20.6	19.9	139	103	171	233
New England	5.5	5.3	165	123	180	196
Middle Atlantic	15.1	14.5	127	99	167	248
Midwest	25.6	25.4	105	95	N	215
East North Central	17.7	17.6	107	93	N	256
West North Central	7.9	7.8	101	100	N	174
South	40.7	40.5	101	113	Q	164
South Atlantic	21.7	21.7	101	117	Q	180
East South Central	6.9	6.9	94	140	N	Q
West South Central	12.1	12.0	106	102	N	131
West	24.2	24.0	103	94	N	184
Mountain	7.6	7.5	100	92	N	193
Pacific	16.6	16.5	104	94	N	178
Four Most Populated States						
New York	7.1	6.7	159	93	164	251
Florida	7.0	7.0	101	120	N	Q
Texas	8.0	7.9	110	104	N	Q
California	12.1	12.1	120	94	N N	206
All Other States	76.9	76.1	103	102	179	191
Urban/Rural Location (as Self-Reported)						
City	47.1	46.5	102	96	172	237
Town	19.0	18.8	105	96	169	206
Suburbs	22.7	22.5	108	108	167	151
Rural	22.3	22.0	107	111	180	190
ou 1						
Climate Zone <sup>1</sup>						
Less than 2,000 CDD and	10.0	40.0	40.4		100	
Greater than 7,000 HDD	10.9	10.6	121	93	180	196
5,500 to 7,000 HDD	26.1	25.8	109	95	172	175
4,000 to 5,499 HDD	27.3	26.8	100	101	168	209
Fewer than 4,000 HDD	24.0	23.9	104	104	N	201
2000 CDD or More and	25.5	25 -				,
Less than 4,000 HDD	22.8	22.6	104	109	N	167

Table WH11. Expenditures Intensity by Main Water Heating Fuel Used, 2005 Water Heating Intensity

	U.S. Households (millions)	Total U.S. Using a Major		Main Water Heat (Dollars/number of ho	•	
		Water Heating Fuel <sup>5</sup> as Main (millions)	Electricity	Natural Gas	Fuel Oil	LPG
Type of Housing Unit						
Single-Family Detached	72.1	71.7	104	107	172	190
Single-Family Attached	7.6	7.5	112	98	Q	Q
Apartments in 2-4 Unit Buildings	7.8	7.7	106	85	159	Q
Apartments in 5 or More Unit Buildings	16.7	16.1	109	71	187	Q
Mobile Homes	6.9	6.8	101	76	Q	180
Ownership of Housing Unit						
Owned	78.1	77.6	105	110	165	186
Single-Family Detached	64.1	63.7	105	111	169	189
Single-Family Attached	4.2	4.1	115	103	Q	Q
Apartments in 2-4 Unit Buildings	1.8	1.8	116	123	Q	N
Apartments in 5 or More Unit Buildings	2.3	2.3	103	105	Q	N
Mobile Homes	5.7	5.6	103	77	N	170
Rented	33.0	32.2	106	77	190	231
Single-Family Detached	8.0	8.0	103	82	Q	Q
Single-Family Attached	3.4	3.4	110	92	Q	Q
Apartments in 2-4 Unit Buildings	5.9	5.8	104	74	199	Q
Apartments in 5 or More Unit Buildings	14.4	13.8	110	67	184	Q
Mobile Homes	1.2	1.1	95	71	Q	Q
Year of Construction						
Before 1940	14.7	14.5	123	97	195	213
1940 to 1949	7.4	7.3	105	102	176	265
1950 to 1959	12.5	12.4	107	102	196	222
1960 to 1969	12.5	12.2	102	92	177	185
1970 to 1979	18.9	18.6	107	98	164	178
1980 to 1989	18.6	18.4	107	99	146	189
1990 to 1999	17.3	17.2	98	107	137	173
2000 to 2005	9.2	9.1	98	111	Q	185

Table WH11. Expenditures Intensity by Main Water Heating Fuel Used, 2005 Water Heating Intensity

	U.S. Households (millions)	Total U.S. Using a Major		Main Water Heat (Dollars/number of ho		
		Water Heating Fuel <sup>5</sup> as Main (millions)	Electricity	Natural Gas	Fuel Oil	LPG
Household Size						
1 Person	30.0	29.5	153	171	311	402
2 Persons	34.8	34.4	124	134	230	227
3 Persons	18.4	18.2	104	100	168	179
4 Persons	15.9	15.8	86	78	138	168
5 Persons	7.9	7.9	75	69	109	134
6 or More Persons	4.1	4.1	70	59	Q	Q
2005 Household Income Category						
Less than \$10,000	9.9	9.5	113	100	216	232
\$10,000 to \$14,999	8.5	8.3	113	87	148	281
\$15,000 to \$19,999	8.4	8.3	101	92	199	242
\$20,000 to \$29,999	15.1	14.9	108	90	177	155
\$30,000 to \$39,999	13.6	13.4	99	98	149	165
\$40,000 to \$49,999	11.0	11.0	101	93	147	133
\$50,000 to \$74,999	19.8	19.7	103	99	162	211
\$75,000 to \$99,999	10.6	10.5	109	106	190	200
\$100,000 or More	14.2	14.1	105	118	177	215
Income Relative to Poverty Line						
Below 100 Percent	16.6	16.2	95	78	155	170
100 to 150 Percent	12.9	12.8	105	76	176	198
Above 150 Percent	81.5	80.8	108	108	176	199
Eligible for Federal Assistance <sup>2</sup>						
Yes	38.6	37.8	101	81	161	189
No	72.5	72.0	108	110	179	195
Payment Method for Utilities						
All Paid by Household	97.5	96.8	103	104	168	190
Some Paid, Some in Rent	7.6	7.4	111	70	174	216
All Included in Rent	4.7	4.3	155	59	233	Q
Other Method	1.3	1.3	138	91	Q	Q

Table WH11. Expenditures Intensity by Main Water Heating Fuel Used, 2005 Water Heating Intensity

	U.S. Households (millions)	Total U.S. Using a Major		Main Water Heati (Dollars/number of ho		
		Water Heating Fuel <sup>5</sup> as Main (millions)	Electricity	Natural Gas	Fuel Oil	LPG
Ethnic Origin of Householder						
Hispanic Descent	14.8	14.5	95	70	148	164
Non-Hispanic Descent	96.3	95.3	107	107	178	200
Race of Householder <sup>3</sup>						
White	79.1	78.4	107	110	184	202
Hispanic	5.0	5.0	90	72	Q	185
Non-Hispanic	74.1	73.4	109	113	186	204
Black	13.4	13.3	105	101	182	Q
Hispanic	0.3	0.3	Q	Q	Q	N
Non-Hispanic	13.1	13.0	103	101	191	Q
Asian	3.3	3.3	102	74	Q	Q
Multi-Racial	1.3	1.3	101	92	Q	N
Other	7.1	6.9	99	78	134	176
Undetermined (Race Reported as Hispanic)	6.9	6.6	94	68	134	Q
Age of Householder						
Under 25 Years	5.5	5.2	97	67	Q	Q
25 to 34 Years	18.2	18.0	97	81	121	157
35 to 44 Years	22.2	22.0	97	86	126	144
45 to 54 Years	23.3	23.2	109	106	175	193
55 to 64 Years	18.0	17.8	125	129	193	246
65 to 74 Years	12.3	12.1	111	132	208	252
75 Years or More	11.7	11.5	114	139	239	218
Adults Age 65 or Older in Household						
Yes	26.9	26.4	110	124	212	239
No	84.2	83.4	104	96	162	184
Children Under Age 5 in Household						
Yes	15.0	14.9	84	70	121	135
No	96.1	94.9	111	110	181	210
Children Age 5 to 16 in Household						
Yes	28.1	28.0	86	77	128	153
No	83.0	81.8	117	118	201	222

Table WH11. Expenditures Intensity by Main Water Heating Fuel Used, 2005 Water Heating Intensity

	U.S. Households (millions)	Total U.S. Using a Major		Main Water Heat (Dollars/number of ho		
		Water Heating Fuel <sup>5</sup> as Main (millions)	Electricity	Natural Gas	Fuel Oil	LPG
Number of Water Heaters						
1	106.3	106.1	105	99	172	190
2 or More	3.7	3.6	104	137	Q	Q
Do Not Use Hot Water	1.1	N	N	N	N	N
Age of Main Water Heater						
Used by One Housing Unit						
Less than 2 Years	14.7	14.6	106	112	189	236
2 to 4 Years	18.6	18.6	107	105	149	167
5 to 9 Years	25.5	25.5	98	104	152	203
10 to 19 Years	20.1	20.1	108	112	188	158
20 Years or More	6.8	6.8	108	99	180	Q
Don't Know	12.0	12.0	97	83	141	Q
No Separate Water Heater	1.9	1.9	111	57	172	Q
Used by Two or More Housing Units						
Less than 2 Years	0.3	0.3	Q	Q	Q	N
2 to 4 Years	0.5	0.5	Q	Q	Q	Q
5 to 9 Years	0.5	0.5	Q	78	Q	N
10 to 19 Years	0.6	0.6	Q	59	Q	N
20 Years or More	0.6	0.6	Q	49	Q	Q
Don't Know	4.4	4.4	137	65	231	Q
No Separate Water Heater	3.4	3.4	128	69	165	Q
Size of Main Water Heater Used by One Housing Unit						
Small (30 gallons or less)	17.1	17.1	99	99	158	212
Medium (31 to 49 gallons)	52.4	52.4	94	104	164	192
Large (50 gallons or more)	27.1	27.0	123	106	192	173
Tankless water heater	1.1	1.1	Q	99	161	Q
No Separate Water Heater	1.9	1.9	111	57	172	Q
Used by Two or More Housing Units						
Small (30 gallons or less)	1.4	1.4	112	80	Q	Q
Medium (31 to 49 gallons)	2.4	2.4	128	59	Q	Q
Large (50 gallons or more)	2.8	2.8	159	58	Q	Q
Tankless water heater	0.2	0.2	N	Q	Q	N
No Separate Water Heater	3.4	3.4	128	69	165	Q

Table WH11. Expenditures Intensity by Main Water Heating Fuel Used, 2005 Water Heating Intensity

	U.S. Households (millions)	Total U.S. Using a Major		Main Water Heati (Dollars/number of hou		
		Water Heating Fuel <sup>5</sup> as Main (millions)	Electricity	Natural Gas	Fuel Oil	LPG
Clothes Washer						
Do Not Use a Clothes Washer	19.3	18.6	114	52	183	245
Use a Clothes Washer	91.8	91.2	104	108	169	184
Top Loading	84.1	83.6	103	107	175	191
Front Loading	7.7	7.7	111	116	131	138
Age of Clothes Washer						
Less than 2 Years	15.7	15.6	98	104	193	210
2 to 4 Years	21.1	21.0	104	102	157	179
5 to 9 Years	28.9	28.6	103	110	153	178
10 to 19 Years	19.9	19.8	109	117	201	176
20 Years or More	4.1	4.0	117	119	Q	Q
Don't Know	2.2	2.2	97	84	Q	N
Frequency of Clothes Washer Use						
Use a Clothes Washer in the Home	91.8	91.2	104	108	169	184
1 Load Each Week	7.3	7.1	117	152	Q	Q
2 to 5 Loads Each Week	39.0	38.8	114	121	181	218
6 to 9 Loads Each Week	33.8	33.6	101	100	160	185
10 to 15 Loads Each Week	9.3	9.3	89	93	163	158
More than 15 Loads Each Week	2.4	2.4	80	77	Q	Q
Do Not Use a Clothes Washer in the Home	19.3	18.6	114	52	183	245
Usual Water Temperature Setting Wash Cycle						
Hot	6.7	6.7	109	120	146	Q
Warm	50.5	50.2	106	110	174	199
Cold	34.6	34.3	100	102	167	172
Rinse Cycle						
Hot	1.6	1.6	96	123	N	Q
Warm	18.2	18.1	102	105	159	184
Cold	72.0	71.6	104	108	172	183
Energy Star Clothes Washer <sup>4</sup>						
Yes	21.7	21.7	105	104	174	213
No	10.4	10.4	98	96	151	141
Don't Know	4.5	4.5	94	107	Q	Q
Unit is More Than 4 Years Old	55.1	54.6	105	112	171	178

Table WH11. Expenditures Intensity by Main Water Heating Fuel Used, 2005 Water Heating Intensity

	U.S. Households (millions)	Total U.S. Using a Major		Main Water Heat (Dollars/number of ho		
		Water Heating Fuel <sup>5</sup> as Main (millions)	Electricity	Natural Gas	Fuel Oil	LPG
Dishwasher						
Do Not Use a Dishwasher	64.7	64.4	105	110	169	191
Use a Dishwasher	46.4	45.4	105	85	176	196
Age of Dishwasher						
Less than 2 Years	11.5	11.4	103	111	148	291
2 to 4 Years	14.6	14.5	106	112	164	154
5 to 9 Years	19.2	19.1	104	112	159	193
10 to 19 Years	12.8	12.8	108	112	175	201
20 Years or More	3.3	3.3	109	107	234	Q
Don't Know	3.3	3.3	103	91	Q	Q
Frequency of Dishwasher Use						
Use a Dishwasher	64.7	64.4	105	110	169	191
At Least Once Each Day	11.3	11.3	96	101	167	164
4 to 6 Times a Week	11.7	11.7	101	102	173	229
2 to 3 Times a Week	21.8	21.6	113	124	163	192
Once each Week	9.0	8.9	110	136	171	Q
Less than Once Each Week	10.9	10.9	105	96	186	192
Do Not Use a Dishwasher	46.4	45.4	105	85	176	196
Energy Star Dishwasher <sup>4</sup>						
Yes	16.4	16.2	107	112	160	226
No	6.6	6.6	95	109	Q	121
Don't Know	3.1	3.1	117	110	Q	Q
Unit is More Than 4 Years Old	38.6	38.5	106	110	176	191

Table WH11. Expenditures Intensity by Main Water Heating Fuel Used, 2005 Water Heating Intensity

	U.S. Households (millions)	Total U.S. Using a Major				
		Water Heating Fuel <sup>5</sup> as Main (millions)	Electricity	Natural Gas	Fuel Oil	LPG
Other Water Heating						
Hot Tubs or Spas	6.7	6.6	110	112	Q	167
Electricity	5.3	5.2	112	114	Q	(
Natural Gas	1.2	1.2	Q	108	N	1
Swimming Pools	1.9	1.9	122	147	Q	(
Natural Gas	1.2	1.2	Q	129	Q	(
Electricity	0.4	0.4	Q	Q	Q	
Propane/LPG	0.3	0.3	Q	Q	Q	(
Some Other Fuel	Q	Q	Q	N	N	1
Electric Water Beds	2.2	2.1	109	95	Q	(
1	1.9	1.8	107	101	Q	(
2 or More	0.3	0.3	Q	Q	N	(
Heaters Used all Year	1.7	1.7	113	99	Q	(
1	1.5	1.5	110	108	Q	(
2 or More	0.3	0.3	Q	Q	N	(

<sup>1</sup> 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.

<sup>2</sup> Below 150 percent of poverty line or 60 percent of median state income.

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

<sup>4</sup> 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.

<sup>5</sup> 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.

<sup>(\*)</sup> 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.