Table WH8. Average Expenditures for Water Heating by Major Fuels Used, 2005 Dollars per Household

	U.S. Households (millions)					d <sup>5</sup> ng the fuel)		
		Water Heating Fuel <sup>5</sup> (millions)	Any Major Fuel <sup>5</sup>	Electricity	Natural Gas	Fuel Oil	LPG	
Total	111.1	109.8	291	257	267	464	517	
Census Region and Division								
Northeast	20.6	19.9	335	315	275	462	607	
New England	5.5	5.3	367	343	297	460	548	
Middle Atlantic	15.1	14.5	323	301	270	463	628	
Midwest	25.6	25.4	270	241	245	N	468	
East North Central	17.7	17.6	269	246	242	N	495	
West North Central	7.9	7.8	271	230	250	N	432	
South	40.7	40.5	283	247	295	Q	489	
South Atlantic	21.7	21.7	273	246	313	Q	486	
East South Central	6.9	6.9	284	226	335	Ñ	Q	
West South Central	12.1	12.0	300	273	268	N	435	
West	24.2	24.0	293	276	259	N	544	
Mountain	7.6	7.5	291	270	246	N	487	
Pacific	16.6	16.5	293	278	265	N	600	
Four Most Populated States								
New York	7.1	6.7	354	367	260	481	607	
Florida	7.0	7.0	263	249	349	N	Q	
Texas	8.0	7.9	325	307	282	N	õ	
California	12.1	12.1	295	259	264	N	636	
All Other States	76.9	76.2	284	250	265	452	497	
Urban/Rural Location (as Self-Reported)								
City	47.1	46.5	269	248	251	437	666	
Town	19.0	18.8	281	249	258	466	573	
Suburbs	22.7	22.5	317	262	301	506	458	
Rural	22.3	22.0	321	270	273	461	497	
Climate Zone <sup>1</sup>								
Less than 2,000 CDD and	40.0	40.0	222	222	2:2	45-		
Greater than 7,000 HDD	10.9	10.6	300	290	243	457	468	
5,500 to 7,000 HDD	26.1	25.8	277	248	248	463	406	
4,000 to 5,499 HDD	27.3	26.8	293	250	267	467	630	
Fewer than 4,000 HDD	24.0	23.9	299	247	284	N	575	
2000 CDD or More and	±							
Less than 4,000 HDD	22.8	22.6	294	264	290	N	478	

Table WH8. Average Expenditures for Water Heating by Major Fuels Used, 2005 Dollars per Household

	U.S.	Total U.S. Using a Major			Major Fuels Used <sup>5</sup> per household using			
	Households (millions)	Water Heating Fuel <sup>5</sup> (millions)	Any Major Fuel <sup>5</sup>	Electricity	Natural Gas	Fuel Oil	LPG	
Type of Housing Unit							_	
Single-Family Detached	72.1	71.8	320	271	301	472	507	
Single-Family Attached		7.5	269	257	251	Q	Q	
Apartments in 2-4 Unit Buildings		7.7	241	250	208	402	Q	
Apartments in 5 or More Unit Buildings		16.1	206	215	146	481	580	
Mobile Homes	6.9	6.8	267	249	185	Q	518	
Ownership of Housing Unit								
Owned	78.1	77.6	310	259	292	463	498	
Single-Family Detached	64.1	63.8	323	269	303	464	500	
Single-Family Attached		4.1	272	229	256	Q	Q	
Apartments in 2-4 Unit Buildings		1.8	287	228	264	Q	N	
Apartments in 5 or More Unit Buildings		2.3	183	163	178	Q	N	
Mobile Homes	5.7	5.6	260	243	177	N	488	
Rented	33.0	32.2	245	253	202	467	632	
Single-Family Detached	8.0	8.0	304	287	288	Q	Q	
Single-Family Attached	3.4	3.4	266	280	243	Q	Q	
Apartments in 2-4 Unit Buildings	5.9	5.8	226	255	188	368	Q	
Apartments in 5 or More Unit Buildings		13.8	210	226	142	477	580	
Mobile Homes	1.2	1.1	303	280	217	Q	Q	
Year of Construction								
Before 1940	14.7	14.5	298	284	251	478	418	
1940 to 1949	7.4	7.3	296	242	260	399	538	
1950 to 1959		12.4	271	244	253	447	759	
1960 to 1969		12.2	278	250	253	522	483	
1970 to 1979		18.6	272	255	251	505	495	
1980 to 1989	18.6	18.4	282	253	263	426	497	
1990 to 1999		17.2	317	260	315	473	509	
2000 to 2005	9.2	9.1	332	259	310	Q	579	

Table WH8. Average Expenditures for Water Heating by Major Fuels Used, 2005 Dollars per Household

	U.S. Households (millions)	Total U.S. Using a Major		l (Dollars p	Major Fuels Used <sup>5</sup> per household using	the fuel)	
		Water Heating Fuel <sup>5</sup> (millions)	Any Major Fuel <sup>5</sup>	Electricity	Natural Gas	Fuel Oil	LPG
Household Size							
1 Person	30.0	29.5	183	153	171	311	402
2 Persons	34.8	34.4	285	247	269	460	454
3 Persons	18.4	18.2	332	311	299	505	538
4 Persons	15.9	15.8	361	346	311	553	673
5 Persons	7.9	7.9	399	377	347	544	671
6 or More Persons	4.1	4.1	474	469	400	Q	Q
2005 Household Income Category							
Less than \$10,000	9.9	9.5	226	223	190	441	589
\$10,000 to \$14,999	8.5	8.3	226	225	184	377	496
\$15,000 to \$19,999	8.4	8.3	240	221	204	423	568
\$20,000 to \$29,999	15.1	14.9	255	255	222	404	532
\$30,000 to \$39,999	13.6	13.4	273	262	256	381	428
\$40,000 to \$49,999	11.0	11.0	275	247	257	438	389
\$50,000 to \$74,999	19.8	19.7	312	272	284	465	498
\$75,000 to \$99,999	10.6	10.5	332	294	321	536	466
\$100,000 or More	14.2	14.1	414	303	363	624	675
Income Relative to Poverty Line							
Below 100 Percent	16.6	16.2	259	255	215	438	589
100 to 150 Percent	12.9	12.8	260	275	215	418	539
Above 150 Percent	81.5	80.9	303	254	283	475	500
Eligible for Federal Assistance <sup>2</sup>							
Yes	38.6	37.8	263	262	222	416	567
No	72.5	72.0	306	254	288	496	496
Payment Method for Utilities							
All Paid by Household	97.5	96.8	299	255	284	469	509
Some Paid, Some in Rent	7.6	7.4	238	258	151	446	560
All Included in Rent	4.7	4.3	218	293	127	467	Q
Other Method	1.3	1.3	284	294	218	Q	Q

Table WH8. Average Expenditures for Water Heating by Major Fuels Used, 2005 Dollars per Household

	U.S. Households (millions)	Total U.S. Using a Major		<b>l</b> (Dollars p	Major Fuels Used <sup>5</sup> er household using t	he fuel)	
		Water Heating Fuel <sup>5</sup> (millions)	Any Major Fuel <sup>5</sup>	Electricity	Natural Gas	Fuel Oil	LPG
Ethnic Origin of Householder							
Hispanic Descent	14.8	14.5	309	318	255	467	535
Non-Hispanic Descent	96.3	95.3	289	249	269	463	514
Race of Householder <sup>3</sup>							
White	79.1	78.4	293	246	272	464	506
Hispanic	5.0	5.0	309	300	246	Q	507
Non-Hispanic	74.1	73.4	292	242	273	459	506
Black	13.4	13.3	279	271	261	471	Q
Hispanic	0.3	0.3	355	Q	Q	Q	N
Non-Hispanic	13.1	13.0	277	264	263	501	Q
Asian	3.3	3.3	286	282	261	Q	Q
Multi-Racial	1.3	1.3	272	230	267	Q	N
Other	7.1	7.0	279	298	239	443	589
Undetermined (Race Reported as Hispanic)	6.9	6.6	311	322	259	470	Q
Age of Householder							
Under 25 Years	5.5	5.2	241	245	189	Q	Q
25 to 34 Years	18.2	18.0	296	296	267	438	557
35 to 44 Years	22.2	22.0	335	305	305	426	542
45 to 54 Years	23.3	23.2	318	272	280	552	567
55 to 64 Years	18.0	17.8	301	246	277	476	533
65 to 74 Years	12.3	12.1	246	201	234	413	435
75 Years or More	11.7	11.5	203	163	203	405	359
Adults Age 65 or Older in Household							
Yes	26.9	26.4	243	196	239	411	436
No	84.2	83.4	307	277	275	485	542
Children Under Age 5 in Household							
Yes	15.0	14.9	360	360	310	496	591
No	96.1	94.9	281	242	260	460	505
Children Age 5 to 16 in Household							
Yes	28.1	28.0	378	350	329	537	635
No	83.0	81.8	262	229	243	439	473

Table WH8. Average Expenditures for Water Heating by Major Fuels Used, 2005 Dollars per Household

	U.S. Households (millions)	Total U.S. Using a Major		<b>!</b> (Dollars p	<b>Major Fuels Used<sup>5</sup></b> er household using t	he fuel)	
		Water Heating Fuel <sup>5</sup> (millions)	Any Major Fuel <sup>5</sup>	Electricity	Natural Gas	Fuel Oil	LPG
Number of Water Heaters							
1	106.3	106.1	276	255	263	461	506
2 or More	3.7	3.7	742	309	396	Q	Q
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	335	283	308	496	594
2 to 4 Years	18.6	18.6	306	286	282	468	497
5 to 9 Years	25.5	25.5	302	253	294	493	528
10 to 19 Years	20.1	20.1	288	234	282	501	429
20 Years or More	6.8	6.8	275	241	251	420	Q
Don't Know	12.0	12.0	264	245	239	421	Q
No Separate Water Heater	1.9	1.9	272	197	138	460	Q
Used by Two or More Housing Units							
Less than 2 Years	0.3	0.3	173	Q	Q	Q	N
2 to 4 Years	0.5	0.5	237	Q	Q	Q	Q
5 to 9 Years	0.5	0.5	293	Q	239	Q	N
10 to 19 Years	0.6	0.6	217	Q	145	Q	N
20 Years or More	0.6	0.6	253	Q	102	Q	Q
Don't Know	4.4	4.4	235	316	143	477	Q
No Separate Water Heater	3.4	3.4	218	215	138	472	Q
Size of Main Water Heater Used by One Housing Unit							
Small (30 gallons or less)	17.1	17.1	240	218	221	403	556
Medium (31 to 49 gallons)	52.4	52.4	286	236	277	469	494
Large (50 gallons or more)	27.1	27.0	355	328	321	620	529
Tankless water heater	1.1	1.1	395	Q	350	404	Q
No Separate Water Heater	1.9	1.9	272	197	138	460	Q
Used by Two or More Housing Units							
Small (30 gallons or less)	1.4	1.4	273	212	190	Q	Q
Medium (31 to 49 gallons)	2.4	2.4	213	316	135	Q	Q
Large (50 gallons or more)	2.8	2.8	225	322	134	Q	Q
Tankless water heater	0.2	0.2	469	N	Q	Q	N
No Separate Water Heater	3.4	3.4	218	215	138	472	Q

Table WH8. Average Expenditures for Water Heating by Major Fuels Used, 2005 Dollars per Household

	U.S. Households (millions)	Total U.S. Using a Major			<b>Major Fuels Used<sup>5</sup></b> er household using tl	he fuel)	
		Water Heating Fuel <sup>5</sup> (millions)	Any Major Fuel <sup>5</sup>	Electricity	Natural Gas	Fuel Oil	LPG
Clothes Washer							
Do Not Use a Clothes Washer	19.3	18.6	199	239	114	443	585
Use a Clothes Washer	91.8	91.2	310	261	297	470	504
Top Loading	84.1	83.6	305	258	292	480	504
Front Loading	7.7	7.7	364	296	349	401	506
Age of Clothes Washer							
Less than 2 Years	15.7	15.6	334	291	311	547	632
2 to 4 Years	21.1	21.0	334	280	301	523	545
5 to 9 Years	28.9	28.6	305	263	295	434	465
10 to 19 Years	19.9	19.8	288	224	293	449	387
20 Years or More	4.1	4.0	262	218	254	Q	Q
Don't Know	2.2	2.2	271	247	283	Q	N
Frequency of Clothes Washer Use							
Use a Clothes Washer in the Home	91.8	91.2	310	261	297	470	504
1 Load Each Week	7.3	7.1	219	175	234	Q	Q
2 to 5 Loads Each Week	39.0	38.8	280	231	273	432	419
6 to 9 Loads Each Week	33.8	33.6	337	288	315	483	570
10 to 15 Loads Each Week	9.3	9.3	388	328	366	691	547
More than 15 Loads Each Week	2.4	2.4	395	364	357	Q	Q
Do Not Use a Clothes Washer in the Home	19.3	18.6	199	239	114	443	585
Usual Water Temperature Setting Wash Cycle							
Hot	6.7	6.7	298	258	305	383	Q
Warm	50.5	50.2	315	261	295	501	492
Cold	34.6	34.3	305	260	298	450	528
Rinse Cycle							
Hot	1.6	1.6	326	286	342	N	Q
Warm	18.2	18.1	309	255	302	443	491
Cold	72.0	71.6	310	261	294	479	511
Energy Star Clothes Washer <sup>4</sup>							
Yes	21.7	21.7	351	298	317	565	573
No	10.4	10.4	306	285	282	469	548
Don't Know	4.5	4.5	315	236	284	Q	Q
Unit is More Than 4 Years Old	55.1	54.7	294	245	291	439	441

Table WH8. Average Expenditures for Water Heating by Major Fuels Used, 2005 Dollars per Household

	U.S.						
	Households (millions)	Water Heating Fuel <sup>5</sup> (millions)	Any Major Fuel <sup>5</sup>	Electricity	Natural Gas	Fuel Oil	LPG
Dishwasher							
Do Not Use a Dishwasher	64.7	64.4	320	264	305	496	510
Use a Dishwasher	46.4	45.4	251	246	213	426	529
Age of Dishwasher							
Less than 2 Years	11.5	11.4	345	282	330	441	774
2 to 4 Years	14.6	14.5	336	279	311	508	523
5 to 9 Years	19.2	19.1	313	261	306	515	462
10 to 19 Years	12.8	12.8	317	260	298	466	386
20 Years or More	3.3	3.3	297	225	264	586	Q
Don't Know	3.3	3.3	233	222	236	Q	Q
Frequency of Dishwasher Use							
Use a Dishwasher	64.7	64.4	320	264	305	496	510
At Least Once Each Day	11.3	11.3	395	334	381	564	566
4 to 6 Times a Week	11.7	11.7	363	291	334	519	585
2 to 3 Times a Week	21.8	21.6	308	253	296	463	458
Once each Week	9.0	8.9	270	233	249	464	Q
Less than Once Each Week	10.9	10.9	258	228	246	453	470
Do Not Use a Dishwasher	46.4	45.4	251	246	213	426	529
Energy Star Dishwasher <sup>4</sup>							
Yes	16.4	16.2	361	296	329	479	650
No	6.6	6.6	290	243	290	Q	506
Don't Know	3.1	3.1	335	307	318	Q	Q
Unit is More Than 4 Years Old	38.6	38.5	306	254	294	504	448

Table WH8. Average Expenditures for Water Heating by Major Fuels Used, 2005 Dollars per Household

	U.S. Households (millions)	Total U.S. Using a Major	he fuel)				
		Water Heating Fuel <sup>5</sup> (millions)	Any Major Fuel <sup>5</sup>	Electricity	Natural Gas	Fuel Oil	LPG
Other Water Heating							
Hot Tubs or Spas	6.7	6.6	359	295	330	Q	397
Electricity	5.3	5.2	347	295	332	Q	Q
Natural Gas	1.2	1.2	411	Q	325	N	N
Swimming Pools	1.9	1.9	571	358	438	Q	Q
Natural Gas	1.2	1.2	538	Q	394	Q	Q
Electricity	0.4	0.4	654	Q	Q	Q	N
Propane/LPG	0.3	0.3	566	Q	Q	Q	Q
Some Other Fuel	Q	Q	Q	Q	N	N	N
Electric Water Beds	2.2	2.1	320	328	285	Q	Q
1	1.9	1.8	317	325	284	Q	Q
2 or More	0.3	0.3	337	Q	Q	N	Q
Heaters Used all Year	1.7	1.7	316	317	289	Q	Q
1	1.5	1.5	312	312	290	Q	Q
2 or More	0.3	0.3	338	Q	Q	N	Q

<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.