

1997 Consumption and Expenditures Tables

Appliances Expenditures Tables

(10 pages, 40 kb)

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These data are from the 1997 Residential Energy Consumption Survey (RECS) which provides information on the use of energy in residential housing units in the United States. The RECS is a national statistical survey that collects data for occupied primary housing units. RECS was first conducted in 1978; the sixth and most recent survey was conducted in 1997 RECS. The data were collected from a sample of 5,900 housing units statistically selected to represent the 101.5 million units in the United States. The 1997 data are available for the four Census regions, the nine Census divisions, and for the four most populous States--California, Florida, New York, and Texas.

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World Wide Web: <http://www.eia.doe.gov/emeu/consumption>

Table CE5-1e. Appliances¹ Energy Expenditures in U.S. Households by Climate Zone, 1997

	Climate Zone ²						RSE Row Factors
	Total	Fewer than 2,000 CDD and --				2,000 CDD or More and Fewer than 4,000 HDD	
		More than 7,000 HDD	5,500 to 7,000 HDD	4,000 to 5,499 HDD	Fewer than 4,000 HDD		
		0.4	1.8	1.0	1.1		
RSE Column Factor:							
Million Households							
Total U.S. Households	101.5	9.3	28.0	22.5	19.5	22.2	7.8
Number of Households With Appliances, Fuels Used (more than one may apply):							
Electricity for:							
Refrigerators	101.3	9.2	28.0	22.5	19.5	22.1	7.9
Other Appliances and Lighting	101.4	9.2	28.0	22.5	19.5	22.2	7.8
Natural Gas	40.4	2.5	13.2	8.9	8.4	7.3	8.6
LPG	4.8	0.9	1.1	1.0	0.8	0.9	24.1
Billion Dollars							
Appliances Expenditures, Fuels Used:							
Electricity for:							
Refrigerators	12.14	0.85	3.14	2.66	2.34	3.14	6.7
Other Appliances and Lighting	48.44	4.20	13.62	10.83	8.60	11.18	7.1
Natural Gas	2.86	0.13	0.86	0.74	0.55	0.58	10.9
LPG	0.36	0.07	0.09	0.07	0.07	0.07	25.3
Total	63.80	5.25	17.71	14.30	11.56	14.98	6.9
Dollars per Household³							
Appliances Expenditures per Household, Fuels Used:							
Electricity for:							
Refrigerators	120	92	112	118	121	142	2.9
Other Appliances and Lighting	477	455	486	481	441	504	2.7
Natural Gas	71	51	65	83	66	80	5.8
LPG	75	71	78	72	81	74	11.4
Total	629	567	632	636	593	675	2.7

¹ Includes energy expenditures for refrigeration and lighting.

² 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 zone according to the 30-year average annual degree-days for an appropriate nearby weather station.

³ Averages are for those households using each of the fuels for appliances.

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.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

Table CE5-2e. Appliances¹ Energy Expenditures in U.S. Households by Year of Construction, 1997

	Total	Year of Construction						RSE Row Factors
		1990 to 1997 ²	1980 to 1989	1970 to 1979	1960 to 1969	1950 to 1959	1949 or Before	
RSE Column Factor:	0.4	1.8	1.4	1.0	1.0	1.1	0.8	
Million Households								
Total U.S. Households	101.5	9.7	17.3	19.6	14.4	12.5	27.9	4.1
Number of Households With Appliances, Fuels Used (more than one may apply):								
Electricity for:								
Refrigerators	101.3	9.7	17.3	19.5	14.4	12.5	27.8	4.1
Other Appliances and Lighting	101.4	9.7	17.3	19.6	14.4	12.5	27.9	4.1
Natural Gas	40.4	2.9	4.4	5.2	5.3	6.5	16.1	7.5
LPG	4.8	0.5	0.8	0.9	0.8	0.2	1.6	17.1
Billion Dollars								
Appliances Expenditures, Fuels Used:								
Electricity for:								
Refrigerators	12.14	1.07	2.08	2.31	1.79	1.62	3.27	4.6
Other Appliances and Lighting	48.44	5.05	8.59	9.48	6.66	5.99	12.67	4.4
Natural Gas	2.86	0.27	0.36	0.34	0.35	0.44	1.11	10.6
LPG	0.36	0.05	0.06	0.07	0.05	0.01	0.12	21.4
Total	63.80	6.44	11.09	12.19	8.85	8.05	17.17	4.4
Dollars per Household³								
Appliances Expenditures per Household, Fuels Used:								
Electricity for:								
Refrigerators	120	111	121	118	124	129	117	2.6
Other Appliances and Lighting	477	521	496	485	461	477	454	2.5
Natural Gas	71	92	82	65	65	68	69	6.4
LPG	75	98	73	71	68	49	79	13.2
Total	629	664	641	623	613	642	615	2.4

¹ Includes energy expenditures for refrigeration and lighting.

² New construction for 1997 includes only those housing units built and occupied between January and the April-August period when the household interviews were conducted.

³ Averages are for those households using each of the fuels for appliances.

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.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

Table CE5-3e. Appliances¹ Energy Expenditures in U.S. Households by Household Income, 1997

	Total	1997 Household Income				Below Poverty Line	Eligible for Federal Assistance ²	RSE Row Factors
		Less than \$10,000	\$10,000 to \$24,999	\$25,000 to \$49,999	\$50,000 or More			
RSE Column Factor:	0.6	1.5	1.0	0.9	1.0	1.3	1.0	
Million Households								
Total U.S. Households	101.5	13.3	29.1	31.1	27.9	14.6	34.1	2.7
Number of Households With Appliances, Fuels Used (more than one may apply):								
Electricity for:								
Refrigerators	101.3	13.2	29.1	31.1	27.9	14.6	34.0	2.7
Other Appliances and Lighting	101.4	13.3	29.1	31.1	27.9	14.6	34.0	2.7
Natural Gas	40.4	5.8	11.3	11.7	11.7	6.8	14.7	4.8
LPG	4.8	0.7	1.6	1.4	1.1	0.8	1.9	14.7
Billion Dollars								
Appliances Expenditures, Fuels Used:								
Electricity for:								
Refrigerators	12.14	1.36	3.15	3.55	4.07	1.52	3.61	3.2
Other Appliances and Lighting	48.44	4.12	11.36	14.92	18.04	5.42	13.02	3.2
Natural Gas	2.86	0.41	0.62	0.88	0.95	0.52	1.01	6.8
LPG	0.36	0.05	0.11	0.09	0.11	0.05	0.14	18.1
Total	63.80	5.94	15.25	19.44	23.17	7.51	17.78	3.1
Dollars per Household³								
Appliances Expenditures per Household, Fuels Used:								
Electricity for:								
Refrigerators	120	103	108	114	146	104	106	2.0
Other Appliances and Lighting	477	310	390	479	646	370	382	2.0
Natural Gas	71	71	55	75	81	76	69	4.6
LPG	75	65	70	67	100	60	77	11.0
Total	629	446	523	624	830	512	522	1.9

¹ Includes energy expenditures for refrigeration and lighting.

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

³ Averages are for those households using each of the fuels for appliances.

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.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

**Table CE5-4e. Appliances¹ Energy Expenditures in U.S. Households
by Type of Housing Unit, 1997**

	Total	Type of Housing Unit				RSE Row Factors
		Single-Family	Multifamily		Mobile Home	
			Two to Four Units	Five or More Units		
RSE Column Factor:	0.5	0.5	1.9	1.2	1.6	
Million Households						
Total U.S. Households	101.5	73.7	5.6	15.8	6.3	4.0
Number of Households With Appliances, Fuels Used (more than one may apply):						
Electricity for:						
Refrigerators	101.3	73.7	5.6	15.7	6.3	4.0
Other Appliances and Lighting	101.4	73.7	5.6	15.8	6.3	4.0
Natural Gas	40.4	30.4	2.7	5.4	1.8	6.9
LPG	4.8	3.4	Q	Q	1.3	16.2
Billion Dollars						
Appliances Expenditures, Fuels Used:						
Electricity for:						
Refrigerators	12.14	9.55	0.57	1.43	0.59	4.2
Other Appliances and Lighting	48.44	39.93	1.79	4.17	2.54	4.0
Natural Gas	2.86	2.25	0.15	0.37	0.09	8.8
LPG	0.36	0.26	Q	Q	0.10	19.4
Total	63.80	51.98	2.52	5.97	3.32	3.9
Dollars per Household²						
Appliances Expenditures per Household, Fuels Used:						
Electricity for:						
Refrigerators	120	130	102	91	93	2.5
Other Appliances and Lighting	477	542	319	264	402	2.3
Natural Gas	71	74	56	68	47	5.1
LPG	75	75	Q	Q	76	8.7
Total	629	705	449	378	525	2.1

¹ Includes energy expenditures for refrigeration and lighting.

² Averages are for those households using each of the fuels for appliances.

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.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

Table CE5-7e. Appliances¹ Energy Expenditures in U.S. Households by Four Most Populated States, 1997

	Total U.S.	Four Most Populated States				RSE Row Factors
		New York	California	Texas	Florida	
RSE Column Factor:	0.4	0.9	1.0	1.7	1.7	
Million Households						
Total U.S. Households	101.5	6.8	11.5	7.0	5.9	NF
Number of Households With Appliances, Fuels Used (more than one may apply):						
Electricity for:						
Refrigerators	101.3	6.8	11.4	7.0	5.9	NF
Other Appliances and Lighting	101.4	6.8	11.5	7.0	5.9	NF
Natural Gas	40.4	4.2	7.3	3.1	0.6	7.1
LPG	4.8	0.5	0.3	0.3	0.3	23.2
Billion Dollars						
Appliances Expenditures, Fuels Used:						
Electricity for:						
Refrigerators	12.14	1.00	1.54	1.01	0.84	3.5
Other Appliances and Lighting	48.44	3.85	5.04	3.61	3.06	4.1
Natural Gas	2.86	0.44	0.48	0.23	Q	8.3
LPG	0.36	0.04	0.02	0.02	0.02	30.4
Total	63.80	5.33	7.08	4.88	4.05	3.9
Dollars per Household²						
Appliances Expenditures per Household, Fuels Used:						
Electricity for:						
Refrigerators	120	147	134	146	141	3.5
Other Appliances and Lighting	477	564	440	518	516	4.1
Natural Gas	71	104	66	75	201	8.1
LPG	75	78	60	73	85	13.7
Total	629	781	616	700	683	3.9

¹ Includes energy expenditures for refrigeration and lighting.

² Averages are for those households using each of the fuels for appliances.

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.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

Table CE5-8e. Appliances¹ Energy Expenditures in U.S. Households by Urban/Rural Location, 1997

	Urban/Rural Location ²					RSE Row Factors
	Total	City	Town	Suburbs	Rural	
	0.5	0.8	1.4	1.4	1.3	
Million Households						
Total U.S. Households	101.5	48.2	18.2	18.6	16.5	4.0
Number of Households With Appliances, Fuels Used (more than one may apply):						
Electricity for:						
Refrigerators	101.3	48.1	18.2	18.6	16.4	4.0
Other Appliances and Lighting	101.4	48.2	18.2	18.6	16.4	4.0
Natural Gas	40.4	23.9	6.1	8.0	2.4	6.4
LPG	4.8	0.5	0.8	0.3	3.2	16.8
Billion Dollars						
Appliances Expenditures, Fuels Used:						
Electricity for:						
Refrigerators	12.14	5.61	2.05	2.54	1.94	4.0
Other Appliances and Lighting	48.44	20.08	8.54	10.52	9.30	3.8
Natural Gas	2.86	1.61	0.39	0.68	0.18	9.2
LPG	0.36	0.04	0.06	0.03	0.23	20.8
Total	63.80	27.34	11.05	13.76	11.65	3.8
Dollars per Household³						
Appliances Expenditures per Household, Fuels Used:						
Electricity for:						
Refrigerators	120	117	113	137	118	2.2
Other Appliances and Lighting	477	416	469	566	566	2.0
Natural Gas	71	67	64	85	74	5.5
LPG	75	81	70	104	73	12.3
Total	629	567	607	741	708	2.0

¹ Includes energy expenditures for refrigeration and lighting.

² Based on the household respondent's description rather than the Federal Government definition.

³ Averages are for those households using each of the fuels for appliances.

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.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

Table CE5-9e. Appliances¹ Energy Expenditures in U.S. Households by Northeast Census Region, 1997

	Northeast Census Region				RSE Row Factors
	Total U.S.	Total	Census Division		
			Middle Atlantic	New England	
RSE Column Factor:	0.6	0.9	1.1	1.8	
Million Households					
Total U.S. Households	101.5	19.7	14.4	5.3	NF
Number of Households With Appliances, Fuels Used (more than one may apply):					
Electricity for:					
Refrigerators	101.3	19.7	14.4	5.3	NF
Other Appliances and Lighting	101.4	19.7	14.4	5.3	NF
Natural Gas	40.4	9.6	8.1	1.5	7.7
LPG	4.8	1.2	0.7	0.5	18.8
Billion Dollars					
Appliances Expenditures, Fuels Used:					
Electricity for:					
Refrigerators	12.14	2.62	1.96	0.66	2.5
Other Appliances and Lighting	48.44	10.57	7.74	2.83	2.4
Natural Gas	2.86	0.86	0.73	0.12	9.0
LPG	0.36	0.10	0.05	0.05	17.2
Total	63.80	14.15	10.49	3.66	2.2
Dollars per Household²					
Appliances Expenditures per Household, Fuels Used:					
Electricity for:					
Refrigerators	120	133	136	124	2.5
Other Appliances and Lighting	477	536	537	533	2.4
Natural Gas	71	89	90	85	2.8
LPG	75	87	74	107	8.8
Total	629	717	727	690	2.2

¹ Includes energy expenditures for refrigeration and lighting.

² Averages are for those households using each of the fuels for appliances.

NF = No applicable RSE row factor.

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.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

Table CE5-10e. Appliances¹ Energy Expenditures in U.S. Households by Midwest Census Region, 1997

	Midwest Census Region				RSE Row Factors
	Total U.S.	Total	Census Division		
			East North Central	West North Central	
	0.5	1.0	1.2	1.6	
RSE Column Factor:					
Million Households					
Total U.S. Households	101.5	24.1	16.9	7.2	NF
Number of Households With Appliances, Fuels Used (more than one may apply):					
Electricity for:					
Refrigerators	101.3	24.0	16.9	7.1	NF
Other Appliances and Lighting	101.4	24.1	16.9	7.2	NF
Natural Gas	40.4	11.7	9.1	2.5	5.5
LPG	4.8	1.3	0.6	0.6	22.3
Billion Dollars					
Appliances Expenditures, Fuels Used:					
Electricity for:					
Refrigerators	12.14	2.61	1.87	0.74	2.6
Other Appliances and Lighting	48.44	11.42	8.20	3.23	2.8
Natural Gas	2.86	0.65	0.53	0.13	8.3
LPG	0.36	0.09	0.05	Q	24.0
Total	63.80	14.77	10.64	4.13	2.6
Dollars per Household²					
Appliances Expenditures per Household, Fuels Used:					
Electricity for:					
Refrigerators	120	109	111	103	2.6
Other Appliances and Lighting	477	475	485	451	2.8
Natural Gas	71	56	58	50	5.3
LPG	75	69	75	62	12.2
Total	629	614	629	577	2.6

¹ Includes energy expenditures for refrigeration and lighting.

² Averages are for those households using each of the fuels for appliances.

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.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

**Table CE5-11e. Appliances¹ Energy Expenditures in U.S. Households
by South Census Region, 1997**

	South Census Region					RSE Row Factors
	Total U.S.	Census Division				
		Total	South Atlantic	East South Central		
RSE Column Factor:	0.4	0.9	1.4	1.2	1.4	
Million Households						
Total U.S. Households	101.5	35.9	18.7	6.3	10.8	NF
Number of Households With Appliances, Fuels Used (more than one may apply):						
Electricity for:						
Refrigerators	101.3	35.8	18.7	6.3	10.8	NF
Other Appliances and Lighting	101.4	35.9	18.7	6.3	10.8	NF
Natural Gas	40.4	9.6	3.5	1.2	4.9	8.7
LPG	4.8	1.7	0.8	0.5	0.4	20.2
Billion Dollars						
Appliances Expenditures, Fuels Used:						
Electricity for:						
Refrigerators	12.14	4.41	2.21	0.67	1.53	2.9
Other Appliances and Lighting	48.44	17.32	9.03	2.72	5.57	2.7
Natural Gas	2.86	0.76	0.33	0.09	0.34	14.2
LPG	0.36	0.13	0.07	0.04	0.02	24.3
Total	63.80	22.62	11.65	3.51	7.46	2.6
Dollars per Household²						
Appliances Expenditures per Household, Fuels Used:						
Electricity for:						
Refrigerators	120	123	118	105	141	2.9
Other Appliances and Lighting	477	483	483	428	514	2.7
Natural Gas	71	79	94	72	70	8.4
LPG	75	77	87	72	63	12.9
Total	629	631	623	553	689	2.6

¹ Includes energy expenditures for refrigeration and lighting.

² Averages are for those households using each of the fuels for appliances.

NF = No applicable RSE row factor.

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.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.

Table CE5-12e. Appliances¹ Energy Expenditures in U.S. Households by West Census Region, 1997

	West Census Region				RSE Row Factors
	Total U.S.	Total	Census Division		
			Mountain	Pacific	
RSE Column Factor:	0.5	1.0	1.9	1.1	
Million Households					
Total U.S. Households	101.5	21.8	6.2	15.6	NF
Number of Households With Appliances, Fuels Used (more than one may apply):					
Electricity for:					
Refrigerators	101.3	21.7	6.2	15.6	NF
Other Appliances and Lighting	101.4	21.8	6.2	15.6	NF
Natural Gas	40.4	9.5	1.9	7.5	5.1
LPG	4.8	0.7	0.2	0.4	22.2
Billion Dollars					
Appliances Expenditures, Fuels Used:					
Electricity for:					
Refrigerators	12.14	2.50	0.63	1.87	3.0
Other Appliances and Lighting	48.44	9.12	2.57	6.56	3.2
Natural Gas	2.86	0.59	0.09	0.50	9.0
LPG	0.36	0.04	0.02	0.02	24.8
Total	63.80	12.25	3.30	8.96	3.0
Dollars per Household²					
Appliances Expenditures per Household, Fuels Used:					
Electricity for:					
Refrigerators	120	115	102	120	3.0
Other Appliances and Lighting	477	419	416	420	3.2
Natural Gas	71	62	45	67	6.0
LPG	75	61	68	57	11.5
Total	629	562	534	573	3.0

¹ Includes energy expenditures for refrigeration and lighting.

² Averages are for those households using each of the fuels for appliances.

NF = No applicable RSE row factor.

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.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1997 Residential Energy Consumption Survey.