Table CE2.6 Annual household fuel expenditures in the United States—totals and averages, 2020

Number of housing

units Total energy expenditures^a (million) (billion dollars)

Average energy expenditures^a (dollars per household using the fuel)

	(million)	(billion dollars)				(c	dollars per ho	usehold usin	g the fuel)		
	Total U.S. ^b	Total	Electricity	Natural gas	Propane	Fuel oil or kerosene	Total	Electricity	Natural gas	Propane	Fuel oil or kerosene
All homes	123.53	232.76	170.47	47.21	8.12	6.95	1,884	1,380	630	735	1,224
Census region and division											
Northeast	21.92	49.60	29.43	12.40	2.02	5.75	2,263	1,343	855	781	1,288
New England	5.88	14.92	8.69	2.65	0.77	2.82	2,539	1,478	883	830	1,370
Middle Atlantic	16.04	34.68	20.74	9.76	1.25	2.93	2,162	1,293	847	754	1,217
Midwest	27.04	51.18	34.97	13.06	2.69	0.46	1,892	1,293	653	991	1,107
East North Central	18.55	35.51	23.81	9.48	1.84	0.38	1,915	1,284	671	1,136	1,058
West North Central	8.50	15.66	11.17	3.57	0.85	0.08	1,844	1,314	610	775	1,429
South	46.84	86.14	72.50	10.99	2.10	0.56	1,839	1,548	552	511	873
South Atlantic	24.84	45.96	38.65	5.64	1.16	0.51	1,850	1,556	629	513	933
East South Central	7.38	13.89	11.67	1.73	0.45	0.05	1,882	1,581	547	518	576
West South Central	14.62	26.30	22.18	3.62	0.49	Q	1,799	1,517	465	499	Q
West	27.72	45.84	33.57	10.76	1.32	0.18	1,653	1,211	526	797	1,176
Mountain	9.22	15.24	11.42	3.30	0.51	Q	1,653	1,238	503	850	Q
Mountain North	4.62	6.80	4.55	1.97	0.27	Q	1,474	987	535	941	Q
Mountain South	4.60	8.43	6.86	1.33	0.24	Q	1,833	1,491	463	768	Q
Pacific	18.51	30.60	22.16	7.47	0.81	0.16	1,653	1,197	536	766	1,344
Census urban/rural classification ^c											
Urban	100.44	180.76	131.38	43.18	1.98	4.21	1,800	1,308	634	596	1,178
Urbanized area	89.24	161.24	116.88	39.11	1.53	3.72	1,807	1,310	638	619	1,186
Urban cluster	11.20	19.52	14.51	4.08	0.45	0.49	1,743	1,295	599	531	1,117
Rural	23.09	51.99	39.09	4.03	6.14	2.74	2,252	1,693	598	794	1,303
atd											
Climate region ^d	42.50	02.02	52.52	40.00	4.40	4.04	4.040	4.250		007	4 200
Very cold/Cold	42.50	82.82	53.52	19.98	4.48	4.84	1,948	1,259	680	897	1,306
Mixed-humid	36.79	73.72	53.91	15.56	2.20	2.05	2,004	1,465	728	609	1,088
Mixed-dry/Hot-dry	15.06		19.74	5.75	0.58	Q	1,732	1,311	476	826	Q
Hot-humid Marine	22.31 6.87	39.57 10.57	35.73 7.57	3.21 2.72	0.62 0.25	Q Q	1,774 1,540	1,602 1,102	422 610	430 783	Q Q
iviai ii e		10.37	7.37				1,340	1,102			Q
Housing unit type		450.00						4.500			
Single-family detached	77.07	169.90	121.97	35.06	7.03	5.84	2,205	1,583	705	795	1,381
Single-family attached	7.45	12.32	8.82	3.19	0.13	0.18	1,653	1,184	607	641	958
Apartments in buildings with 2–4 units	9.34	13.14	9.25	3.51	0.08	0.30	1,406	990	598	341	868
Apartments in buildings with 5 or											
more units	22.84	25.28	20.16	4.58	0.14	0.40	1,107	883	388	271	635
Mobile homes	6.83	12.12	10.27	0.86	0.76	0.23	1,773	1,503	389	584	807
Ownership of housing unit											
Owned	82.92	177.03	127.14	36.67	7.31	5.91	2,135	1,533	699	765	1,346
Single-family	73.22	161.09	114.76	34.15	6.64	5.54	2,200	1,567	714	792	1,402
Apartments	4.32	6.37	4.34	1.82	Q	0.20	1,474	1,004	636	Q	844
Mobile homes	5.38	9.57	8.04	0.70	0.65	0.17	1,779	1,494	400	587	853
Rented ^e	40.61	55.72	43.33	10.54	0.82	1.04	1,372	1,067	470	541	808
Single-family	11.30		16.03	4.10	0.51	0.48	1,869	1,419	573	793	1,034
Apartments	27.86		25.07	6.28	0.20	0.50	1,151	900	424	295	679
Mobile homes	1.45	2.54	2.22	0.16	0.10	0.05	1,752	1,533	348	566	688
Year of construction											
Before 1950	20.26	40.63	25.38	11.56	1.43	2.27	2,006	1,253	757	831	1,218
1950 to 1959	12.48	24.31	16.06	6.24	0.58	1.43	1,948	1,287	681	824	1,325
1960 to 1969	12.76	23.64	16.64	5.56	0.63	0.82	1,854	1,304	638	692	1,170
1970 to 1979	18.34		25.58	5.62	1.20	0.87	1,814	1,395	571	780	1,171
1980 to 1989	16.30	29.38	23.15	4.54	1.00	0.68	1,802	1,421	556	756	1,294
1990 to 1999	17.16	33.38	25.63	5.79	1.53	0.42	1,946	1,494	621	758	990
2000 to 2009	16.16		24.25	5.26	1.20	0.43	1,927	1,501	584	648	1,422
2010 to 2015	5.53		7.82	1.43	0.29	Q	1,730	1,414	482	552	775
2016 to 2020	4.56	7.44	5.96	1.21	0.27	Q	1,633	1,308	495	566	Q
Total square footage ^f											
Less than 1,000	30.01	36.94	28.47	7.16	0.60	0.71	1,231	949	434	424	727
1,000 to 1,499	28.08	45.60	34.83	8.83	1.20	0.74	1,624	1,241	555	639	930
1 500 += 1 000	22.22	43.49	31.87	8.88	1.36	1.38	1,957	1,434	641	647	1,158
1,500 to 1,999											

Table CE2.6 Annual household fuel expenditures in the United States—totals and averages, 2020

Number of

housing

units Total energy expenditures^a (million)

Average energy expenditures^a (billion dollars) (dollars per household using the fuel)

						Fuel oil or					Fuel oil or
	Total U.S.b	Total	Electricity	Natural gas	Propane	kerosene	Total	Electricity	Natural gas	Propane	kerosene
All homes	123.53	232.76	170.47	47.21	8.12	6.95	1,884	1,380	630	735	1,224
2,500 to 2,999	10.31	24.22	17.04	5.41	0.95	0.82	2,349	1,652	764	844	1,344
3,000 or more	17.29	48.59	33.73	10.19	2.60	2.07	2,809	1,950	871	962	1,826
Number of household members											
1 member	33.59	45.57	32.26	10.04	1.75	1.51	1,357	961	520	674	1,043
2 members	45.31	86.16	62.68	17.22	3.56	2.70	1,901	1,383	639	725	1,263
3 members	18.27	39.46	29.11	7.92	1.20	1.23	2,160	1,594	693	797	1,269
4 members	15.56	35.24	26.33	7.07	0.94	0.90	2,265	1,692	696	808	1,266
5 members	6.44	15.25	11.73	2.81	0.38	0.34	2,368	1,821	680	729	1,424
6 or more members	4.37	11.07	8.35	2.15	0.29	0.28	2,535	1,913	738	818	1,565
2020 annual household income											
Less than \$5,000	4.48	6.77	5.32	1.15	0.19	0.11	1,512	1,188	479	636	966
\$5,000 to \$9,999	4.01	5.53	4.23	0.98	0.14	0.17	1,379	1,056	471	441	1,012
\$10,000 to \$19,999	10.25	14.98	11.16	2.81	0.63	0.38	1,462	1,089	513	611	867
\$20,000 to \$39,999	24.07	38.84	29.11	7.27	1.37	1.09	1,614	1,209	545	656	1,048
\$40,000 to \$59,999	19.61	33.80	25.19	6.66	1.13	0.82	1,724	1,285	583	701	1,028
\$60,000 to \$99,999	27.71	53.34	38.92	10.75	1.89	1.78	1,925	1,404	641	736	1,330
\$100,000 to \$149,999	16.54	35.51	25.67	7.54	1.24	1.06	2,147	1,552	679	829	1,242
\$150,000 or more	16.86	43.98	30.86	10.05	1.52	1.55	2,608	1,830	817	934	1,656
Payment method for energy bills											
All paid by household	112.70	218.40	160.62	43.55	7.86	6.38	1,938	1,425	652	750	1,324
Some paid by household, some											
included in rent or condo fee	6.32	8.73	5.63	2.42	0.19	0.48	1,380	890	448	472	716
All included in rent or condo fee	4.34	5.36	4.07	1.15	0.07	0.07	1,235	936	452	419	466
Some other method	0.16	0.26	0.15	0.09	Q	Q	1,646	943	721	Q	Q
Main heating fuel											
Natural gas	62.71	122.40	77.94	44.23	0.09	0.13	1,952	1,243	705	247	652
Electricity	42.57	70.13	66.99	1.99	1.06	0.09	1,647	1,574	237	308	399
Fuel oil or kerosene	4.93	14.51	7.39	0.26	0.32	6.55	2,941	1,497	283	340	1,327
Propane	5.21	13.94	7.74	0.02	6.18	Q	2,675	1,485	83	1,185	Q
Wood	2.25	3.77	3.16	0.07	0.39	0.16	1,676	1,404	245	466	672
Some other fuel ^g	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Does not use heating equipment	5.79	7.94	7.19	0.64	0.08	Q	1,371	1,242	274	352	Q

Data source: U.S. Energy Information Administration, Office of Energy Demand and Integrated Statistics, Forms EIA-457A, D, E, F, & G of the 2020 Residential Energy Consumption Survey Notes: Because of rounding, data may not sum to totals. See RECS Terminology for definition of terms used in these tables.

^a Consumption and expenditures for biomass (wood), coal, district steam, and solar thermal are excluded.

b Total U.S. includes all primary occupied housing units in the 50 states and the District of Columbia. Vacant housing units, seasonal units, second homes, military houses, and group quarters are excluded.

^c Housing units are classified using criteria created by the U.S. Census Bureau based on 2010 Census data. Urbanized areas are densely settled groupings of blocks or tracts with 50,000 or more people, while urban clusters have at least 2,500 but less than 50,000 people. All other areas are rural.

d The Building America program, sponsored by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE), created these climate regions. We combined climate regions for this publication. The subarctic region is included with data for Very-cold/Cold.

Rented includes households that occupy their primary housing units without paying rent.

fotal square footage includes all basements, finished or conditioned (heated or cooled) areas of attics, and conditioned garage space that is attached to the home. Unconditioned and unfinished areas in attics and attached garages are excluded. The square footage of the home is based on respondent reports. Previous RECS cycles calculated square footage based on interviewer measurements. For households that did not report an exact square footage estimate, the square footage of the home was imputed based on a reported square footage range and/or characteristics of the home. See 2020 RECS Square Footage Methodology for full details about data collection and processing.

^g Some other fuel includes coal and district steam.

Q = Data withheld because either the relative standard error (RSE) was greater than 50% or fewer than 10 households in reporting sample.

N = No households in reporting sample.

Relative standard errors (RSEs) for Table CE2.6 Annual household fuel expenditures in the United States—totals and averages, 2020

RSEs for number of housing

units

RSEs for total energy expenditures^a

RSEs for average energy expenditures^a

	units RSEs for total energy expenditures					RSEs for average energy expenditures						
	Total U.S. ^b	Total	Electricity	Natural gas	Propane	Fuel oil or kerosene	Total	Electricity	Natural gas	Propane	Fuel oil or kerosene	
All homes	0.00	0.35	0.39	0.89	3.62	3.55	0.35	0.39	0.74	2.63	2.29	
Census region and division												
Northeast	0.00	0.88	1.09	1.86	7.64	4.20	0.88	1.09	1.85	6.07	2.51	
New England	0.00	1.25	1.60	3.58	8.84	3.88	1.25	1.60	2.28	6.16	2.16	
Middle Atlantic	0.00	1.26	1.49	2.38	10.05	6.94	1.26	1.49	2.23	8.35	4.45	
Midwest	0.00	0.75	0.90	1.62	6.56	19.79	0.75	0.90	1.10	4.08	11.36	
East North Central	0.00	1.00	1.19	1.92	8.44	22.51	1.00	1.19	1.49	5.75	13.33	
West North Central	0.00	0.94	1.18	2.40	7.61	34.06	0.94	1.18	1.39	4.74	16.07	
South	0.00	0.59	0.66	1.69	5.29	13.93	0.59	0.66	1.40	4.51	7.52	
South Atlantic	0.00	0.89	0.95	2.73	8.35	15.21	0.89	0.95	2.03	6.78	8.41	
East South Central	0.00	1.11	1.25	4.25	12.01	32.86	1.11	1.25	2.62	9.03	24.29	
West South Central	0.00	1.04	1.20	2.96	11.70	79.06	1.04	1.20	1.90	9.17	14.83	
West	0.00	0.86	0.99	1.46	9.49	12.48	0.86	0.99	1.35	6.91	10.04	
Mountain	0.00	1.12	1.38	1.59	12.37	41.96	1.12	1.38	1.32	7.60	26.38	
Mountain North	0.00	1.53	1.90	2.02	19.04	42.22	1.53	1.90	1.56	10.76	43.77	
Mountain South	0.00	1.65	1.85	2.88	18.54	20.25	1.65	1.85	2.14	13.14	0.00	
Pacific	0.00	1.13	1.42	2.09	13.53	13.26	1.13	1.42	1.87	10.46	9.72	
Census urban/rural classification ^c												
Urban	0.28	0.53	0.54	1.00	7.65	4.14	0.43	0.46	0.74	5.65	2.90	
Urbanized area	0.42	0.61	0.64	1.07	9.23	4.67	0.45	0.50	0.81	6.88	3.17	
Urban cluster	2.74	2.99	2.98	4.37	13.51	13.88	1.24	1.34	2.07	8.04	7.79	
Rural	1.23	1.37	1.36	3.78	4.01	5.44	0.75	0.82	2.72	2.67	3.62	
Climate region ^d												
Very cold/Cold	0.54	0.69	0.87	1.42	4.91	3.40	0.54	0.77	0.95	3.16	2.15	
Mixed-humid	0.77	1.12	1.04	2.07	7.54	8.41	0.74	0.75	1.68	5.47	5.00	
Mixed-dry/Hot-dry	1.23	1.70	1.77	2.28	14.58	20.25	1.40	1.50	2.12	11.83	0.00	
Hot-humid	0.69	1.35	1.42	3.47	9.61	79.06	1.04	1.12	2.27	7.56	14.83	
Marine	2.39	2.81	3.00	4.10	25.23	39.60	1.96	2.34	2.94	20.36	23.47	
Housing unit type												
Single-family detached	0.00	0.42	0.47	0.88	4.20	3.77	0.42	0.47	0.66	2.75	2.12	
Single-family attached	0.00	1.35	1.52	2.55	22.60	19.10	1.35	1.52	1.67	17.17	9.03	
Apartments in buildings with 2–4 units	0.00	1.72	1.87	3.48	20.53	21.26	1.72	1.87	2.95	17.59	16.22	
Apartments in buildings with 5 or												
more units	0.00	1.24	1.41	4.29	19.88	17.84	1.24	1.41	4.08	15.77	8.10	
Mobile homes	0.00	1.48	1.76	6.11	10.04	15.88	1.48	1.76	3.95	6.58	7.53	
Ownership of housing unit												
Owned	0.42	0.58	0.65	1.03	3.86	4.04	0.44	0.51	0.68	2.64	2.23	
Single-family	0.36	0.53	0.60	0.95	4.29	4.05	0.46	0.52	0.65	2.84	2.12	
Apartments	4.13	6.12	5.21	9.24	42.93	33.31	4.10	3.19	7.18	35.56	25.17	
Mobile homes	2.05	2.82	3.16	7.75	10.91	19.59	1.57	1.91	4.70	7.19	8.66	
Rented ^e	0.86	1.35	1.31	2.63	9.03	8.92	0.87	0.90	2.15	7.45	5.10	
Single-family	2.35	2.83	2.93	4.10	13.62	11.56	1.19	1.47	2.19	8.14	8.78	
Apartments	0.64	1.26	1.29	3.61	14.37	14.54	1.07	1.21	3.17	12.37	6.41	
Mobile homes	7.62	7.76	7.66	16.04	26.55	33.04	3.89	4.15	10.63	16.00	16.77	
Year of construction												
Before 1950	0.00	1.12	1.27	2.12	9.45	7.04	1.12	1.27	1.94	7.18	4.87	
1950 to 1959	0.00	1.53	1.77	2.46	14.53	9.23	1.53	1.77	2.43	12.45	4.55	
1960 to 1969	0.00	1.52	1.77	3.10	15.08	10.84	1.52	1.77	2.48	8.34	6.12	
1970 to 1979	0.00	1.13	1.27	2.51	8.47	8.55	1.13	1.27	1.78	6.77	5.93	
1980 to 1989	0.00	1.29	1.34	3.42	8.63	10.73	1.29	1.34	2.62	7.38	6.27	
1990 to 1999	0.00	1.22	1.30	2.84	8.72	9.93	1.22	1.30	1.91	6.67	9.21	
2000 to 2009	0.00	1.14	1.24	2.37	8.65	14.54	1.14	1.24	2.00	7.15	10.30	
2010 to 2015 2016 to 2020	2.84 3.44	3.68 4.17	3.83 3.97	5.07 7.24	12.77 14.75	51.67 86.29	1.99 2.40	2.10	3.14 4.75	7.36 9.26	46.74 51.35	
	J.74	7.1/	3.37	7.24	14./3		2.40	2.20	4.73	5.20	31.33	
Total square footage [†] Less than 1,000	1 20	1 71	1 70	2 00	11.60	11 77	1.07	1 10	2 54	0.46	0.50	
1,000 to 1,499	1.20 1.54	1.71 1.72	1.70	3.00	11.60 6.87	11.73 10.41	1.07 0.77	1.19 0.89	2.54 1.97	9.46 6.01	8.56	
			1.71	3.02							6.54	
1,500 to 1,999	1.59	1.72	1.91	2.01	6.97	9.09	0.80	1.02	1.26	6.39	3.72	
2,000 to 2,499	2.32	2.52	2.47	3.09	9.54	8.91	0.83	1.04	1.18	5.56	4.05	

Relative standard errors (RSEs) for Table CE2.6 Annual household fuel expenditures in the United States—totals and averages, 2020

RSEs for number of housing

units RSEs for total energy expenditures^a

RSEs for average energy expenditures^a

	Total U.S. ^b	Total	Electricity	Natural gas	Propane	Fuel oil or kerosene	Total	Electricity	Natural gas	Propane	Fuel oil or kerosene
All homes	0.00	0.35	0.39	0.89	3.62	3.55	0.35	0.39	0.74	2.63	2.29
2,500 to 2,999	2.55	2.59	2.65	3.59	10.98	10.84	1.00	1.13	1.75	7.02	5.38
3,000 or more	1.93	2.05	2.19	2.89	7.96	8.10	0.96	1.18	1.54	5.20	4.34
Number of household members											
1 member	1.25	1.56	1.51	2.62	9.23	7.46	0.84	0.89	1.82	5.84	5.17
2 members	1.15	1.23	1.24	1.92	5.07	7.51	0.70	0.70	1.20	3.79	3.82
3 members	1.87	1.82	1.83	3.44	11.56	8.29	0.98	0.96	2.44	7.92	5.13
4 members	2.08	2.27	2.33	3.09	10.10	10.80	1.16	1.30	1.76	6.33	5.73
5 members	4.12	4.32	4.58	5.13	17.43	16.39	1.80	1.92	2.80	11.61	8.62
6 or more members	4.58	4.58	4.49	6.57	20.33	23.97	2.16	2.45	3.28	12.74	14.77
2020 annual household income											
Less than \$5,000	4.63	5.23	5.20	8.24	23.43	28.81	2.78	2.86	4.93	14.30	17.74
\$5,000 to \$9,999	5.53	5.74	5.84	10.61	17.44	24.50	2.45	2.85	6.84	14.06	13.00
\$10,000 to \$19,999	3.21	3.25	3.43	5.34	12.58	14.18	1.61	1.84	3.62	11.53	8.65
\$20,000 to \$39,999	1.98	2.04	2.04	3.18	8.63	9.97	1.04	1.04	1.90	6.26	5.16
\$40,000 to \$59,999	1.83	1.95	2.14	3.03	8.76	11.33	1.18	1.37	2.30	6.83	6.13
\$60,000 to \$99,999	1.58	1.60	1.68	2.63	7.02	7.31	0.72	0.91	1.54	4.78	4.07
\$100,000 to \$149,999	1.83	2.12	2.33	3.09	9.89	9.95	1.16	1.28	2.11	5.86	5.89
\$150,000 or more	1.93	2.17	2.33	2.74	9.48	7.60	1.04	1.13	1.61	7.24	4.50
Payment method for energy bills											
All paid by household	0.27	0.40	0.43	0.88	3.65	3.57	0.36	0.40	0.67	2.58	2.03
Some paid by household, some											
included in rent or condo fee	3.90	4.38	4.35	7.91	22.36	15.72	2.66	2.72	6.66	20.18	8.07
All included in rent or condo fee	4.78	5.45	5.69	9.84	37.09	26.42	2.47	2.66	7.93	31.14	10.25
Some other method	25.04	29.01	26.71	46.46	69.57	42.22	14.65	16.95	30.23	52.37	38.79
Main heating fuel											
Natural gas	0.77	0.89	0.95	0.98	21.37	25.77	0.56	0.60	0.76	16.55	19.48
Electricity	0.92	1.11	1.10	4.71	5.50	25.58	0.78	0.77	3.11	4.12	17.42
Fuel oil or kerosene	3.50	3.26	3.32	14.77	11.13	3.69	1.42	1.89	9.73	9.14	2.22
Propane	3.76	4.22	4.22	35.76	4.56	61.43	1.54	1.77	33.98	2.13	17.52
Wood	4.88	6.04	6.12	24.89	13.49	21.47	2.39	2.65	17.70	9.81	11.59
Some other fuel ^g	35.67	35.97	34.88	16.20	64.79	84.02	13.54	10.92	0.00	50.82	88.70
Does not use heating equipment	4.41	4.58	4.68	8.89	27.32	53.25	2.27	2.49	5.20	23.67	10.07

Data source: U.S. Energy Information Administration, Office of Energy Demand and Integrated Statistics, Forms EIA-457A, D, E, F, & G of the 2020 Residential Energy Consumption Survey Notes: See RECS Terminology for definition of terms used in these tables.

^a Consumption and expenditures for biomass (wood), coal, district steam, and solar thermal are excluded.

^b Total U.S. includes all primary occupied housing units in the 50 states and the District of Columbia. Vacant housing units, seasonal units, second homes, military houses, and group quarters are excluded.

^c Housing units are classified using criteria created by the U.S. Census Bureau based on 2010 Census data. Urbanized areas are densely settled groupings of blocks or tracts with 50,000 or more people, while urban clusters have at least 2,500 but less than 50,000 people. All other areas are rural.

^d The Building America program, sponsored by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE), created these climate regions. We combined climate regions for this publication. The subarctic region is included with data for Very-cold/Cold.

 $^{^{\}rm e}$ $\textit{Rented}\,$ includes households that occupy their primary housing units without paying rent.

¹ Total square footage includes all basements, finished or conditioned (heated or cooled) areas of attics, and conditioned garage space that is attached to the home. Unconditioned and unfinished areas in attics and attached garages are excluded. The square footage of the home is based on respondent reports. Previous RECS cycles calculated square footage based on interviewer measurements. For households that did not report an exact square footage estimate, the square footage of the home was imputed based on a reported square footage and/or characteristics of the home. See 2020 RECS Square Footage Methodology for full details about data collection and processing.

 $^{^{\}rm g}$ Some other fuel $\,$ includes coal and district steam.