

**Table CE2.8 Annual household fuel expenditures in the Midwest—totals and averages, 2020**

	Number of housing units (million)	Total energy expenditures <sup>a</sup> (billion dollars)					Average energy expenditures <sup>b</sup> (dollars per household using the fuel)				
		Total Midwest <sup>b</sup>	Total	Electricity	Natural gas	Propane	Fuel oil or kerosene	Total	Electricity	Natural gas	Propane
<b>All homes</b>	27.04	51.18	34.97	13.06	2.69	0.46	1,892	1,293	653	991	1,107
<b>Census division</b>											
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
<b>Census urban/rural classification<sup>c</sup></b>											
Urban	20.77	36.39	24.72	11.41	0.16	0.10	1,752	1,191	656	738	645
Urbanized area	17.20	30.32	20.39	9.72	0.11	0.09	1,763	1,186	662	1,016	660
Urban cluster	3.57	6.07	4.33	1.69	0.04	Q	1,702	1,214	622	430	Q
Rural	6.28	14.79	10.25	1.65	2.53	0.36	2,356	1,633	634	1,013	1,389
<b>Climate region<sup>d</sup></b>											
Very cold/Cold	22.09	41.44	27.88	10.82	2.30	0.44	1,876	1,262	647	1,041	1,110
Mixed-humid	4.96	9.74	7.10	2.24	0.39	Q	1,966	1,432	685	770	Q
Mixed-dry/Hot-dry	N	N	N	N	N	N	N	N	N	N	N
Hot-humid	N	N	N	N	N	N	N	N	N	N	N
Marine	N	N	N	N	N	N	N	N	N	N	N
<b>Housing unit type</b>											
Single-family detached	18.58	40.61	27.26	10.46	2.47	0.42	2,186	1,467	723	1,038	1,259
Single-family attached	1.33	2.18	1.47	0.67	Q	Q	1,636	1,100	598	988	Q
Apartments in buildings with 2–4 units	1.95	2.55	1.71	0.82	N	Q	1,308	876	610	N	Q
Apartments in buildings with 5 or more units	4.20	4.09	3.23	0.83	0.02	Q	974	768	325	225	Q
Mobile homes	0.97	1.74	1.30	0.28	0.15	Q	1,784	1,339	546	795	Q
<b>Ownership of housing unit</b>											
Owned	19.48	41.29	27.76	10.67	2.48	0.38	2,119	1,425	708	1,033	1,210
Single-family	17.73	38.60	25.86	10.02	2.33	0.38	2,177	1,459	720	1,057	1,235
Apartments	0.94	1.23	0.80	0.43	Q	N	1,317	852	583	Q	N
Mobile homes	0.81	1.46	1.10	0.22	0.14	Q	1,790	1,345	536	772	Q
Rented <sup>e</sup>	7.56	9.89	7.21	2.39	0.22	0.08	1,308	954	486	675	773
Single-family	2.19	4.20	2.87	1.11	0.18	Q	1,921	1,311	669	830	Q
Apartments	5.22	5.41	4.14	1.22	0.02	Q	1,038	794	386	221	Q
Mobile homes	0.16	0.28	0.21	0.06	Q	N	1,751	1,305	587	Q	N
<b>Year of construction</b>											
Before 1950	6.11	12.16	7.72	3.59	0.68	0.16	1,989	1,263	732	1,016	1,376
1950 to 1959	3.18	6.13	3.94	1.79	0.28	Q	1,930	1,241	692	1,310	Q
1960 to 1969	2.90	5.08	3.36	1.51	0.18	Q	1,754	1,159	654	992	Q
1970 to 1979	4.05	7.68	5.37	1.69	0.55	0.07	1,898	1,327	605	1,244	945
1980 to 1989	2.71	4.50	3.32	1.01	0.13	Q	1,662	1,225	578	824	Q
1990 to 1999	3.56	7.22	5.07	1.66	0.49	Q	2,028	1,423	645	982	Q
2000 to 2009	2.95	5.68	4.11	1.29	0.27	Q	1,926	1,393	620	795	Q
2010 to 2015	0.86	1.56	1.22	0.27	0.07	Q	1,804	1,409	542	624	Q
2016 to 2020	0.73	1.17	0.87	0.25	0.05	Q	1,605	1,195	496	431	Q
<b>Total square footage<sup>f</sup></b>											
Less than 1,000	5.29	6.13	4.48	1.47	0.15	Q	1,159	846	442	652	Q
1,000 to 1,499	5.28	8.46	5.81	2.27	0.33	Q	1,601	1,100	582	767	Q
1,500 to 1,999	4.73	9.00	6.12	2.47	0.35	0.07	1,905	1,294	663	826	856
2,000 to 2,499	3.79	8.04	5.39	2.00	0.55	0.10	2,122	1,423	700	1,049	1,105
2,500 to 2,999	2.92	6.35	4.17	1.66	0.40	Q	2,175	1,427	734	1,061	Q
3,000 or more	5.03	13.19	9.01	3.17	0.92	Q	2,621	1,791	815	1,247	Q
<b>Number of household members</b>											
1 member	7.74	10.76	6.98	3.04	0.54	0.20	1,390	902	557	910	1,227
2 members	10.41	20.32	13.75	5.20	1.19	0.18	1,952	1,321	669	944	1,259
3 members	3.62	7.86	5.53	1.83	0.44	Q	2,173	1,528	695	1,168	Q
4 members	3.08	6.94	4.85	1.76	0.31	Q	2,252	1,575	729	1,168	Q
5 members	1.36	3.14	2.31	0.71	0.12	Q	2,309	1,699	682	951	Q
6 or more members	0.83	2.16	1.54	0.52	0.09	Q	2,595	1,851	763	969	Q
<b>2020 annual household income</b>											
Less than \$5,000	1.01	1.60	1.16	0.35	Q	Q	1,575	1,143	550	Q	Q

**Table CE2.8 Annual household fuel expenditures in the Midwest—totals and averages, 2020**

	Number of housing units (million)	Total energy expenditures <sup>a</sup> (billion dollars)					Average energy expenditures <sup>a</sup> (dollars per household using the fuel)				
		Total Midwest <sup>b</sup>	Total	Electricity	Natural gas	Propane	Fuel oil or kerosene	Total	Electricity	Natural gas	Propane
<b>All homes</b>	27.04	51.18	34.97	13.06	2.69	0.46	1,892	1,293	653	991	1,107
\$5,000 to \$9,999	0.92	1.31	0.92	0.32	0.03	Q	1,430	1,001	581	391	Q
\$10,000 to \$19,999	2.31	3.25	2.24	0.80	0.17	Q	1,411	973	571	846	Q
\$20,000 to \$39,999	5.27	8.87	5.99	2.27	0.49	0.11	1,684	1,138	602	972	1,289
\$40,000 to \$59,999	4.28	7.47	5.05	2.04	0.35	Q	1,745	1,179	615	909	Q
\$60,000 to \$99,999	6.42	12.56	8.55	3.16	0.71	0.13	1,957	1,333	648	1,009	1,518
\$100,000 to \$149,999	3.71	8.07	5.57	1.99	0.46	Q	2,178	1,503	708	1,001	Q
\$150,000 or more	3.14	8.05	5.49	2.12	0.41	Q	2,568	1,751	811	1,227	Q
<b>Payment method for energy bills</b>											
All paid by household	24.66	48.65	33.23	12.34	2.65	0.43	1,973	1,348	681	1,007	1,188
Some paid by household, some included in rent or condo fee	1.50	1.61	1.11	0.45	Q	Q	1,078	740	357	Q	Q
All included in rent or condo fee	0.84	0.84	0.61	0.22	Q	Q	1,003	727	390	Q	Q
Some other method	Q	Q	Q	Q	N	N	Q	Q	Q	N	N
<b>Main heating fuel</b>											
Natural gas	18.81	35.43	22.54	12.86	0.02	Q	1,884	1,198	684	285	Q
Electricity	5.20	8.24	7.98	0.16	0.10	Q	1,586	1,535	169	335	Q
Fuel oil or kerosene	0.28	0.76	0.34	Q	Q	0.40	2,707	1,223	Q	Q	1,407
Propane	2.12	5.69	3.22	*	2.46	Q	2,687	1,523	16	1,163	Q
Wood	0.51	0.90	0.75	Q	0.09	Q	1,746	1,464	Q	459	Q
Some other fuel <sup>g</sup>	Q	Q	Q	N	N	N	Q	Q	N	N	N
Does not use heating equipment	0.12	0.15	0.13	Q	N	N	1,218	1,095	Q	N	N

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.

<sup>a</sup> Consumption and expenditures for biomass (wood), coal, district steam, and solar thermal are excluded.

<sup>b</sup> Total Midwest includes all primary occupied housing units in the Midwest Census Region. Vacant housing units, seasonal units, second homes, military houses, and group quarters are excluded.

<sup>c</sup> 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.

<sup>d</sup> 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.

<sup>e</sup> Rented includes households that occupy their primary housing units without paying rent.

<sup>f</sup> 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 range and/or characteristics of the home. See 2020 RECS Square Footage Methodology for full details about data collection and processing.

<sup>g</sup> 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.

\* = Estimate is less than 0.005 and rounds to zero.

**Relative standard errors (RSEs) for Table CE2.8 Annual household fuel expenditures in the Midwest—totals and averages, 2020**

	RSEs for number of housing units										
	Total Midwest <sup>b</sup>	RSEs for total energy expenditures <sup>a</sup>					RSEs for average energy expenditures <sup>a</sup>				
		Total	Electricity	Natural gas	Propane	Fuel oil or kerosene	Total	Electricity	Natural gas	Propane	Fuel oil or kerosene
<b>All homes</b>	0.00	0.75	0.90	1.62	6.56	19.79	0.75	0.90	1.10	4.08	11.36
<b>Census division</b>											
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
<b>Census urban/rural classification<sup>c</sup></b>											
Urban	0.97	1.38	1.42	1.87	34.32	27.51	0.91	0.98	1.14	29.58	15.22
Urbanized area	1.23	1.68	1.69	2.13	44.58	30.55	1.09	1.15	1.33	39.49	15.95
Urban cluster	4.97	5.60	5.68	6.98	39.65	68.90	2.12	2.77	2.71	31.49	162.59
Rural	3.21	3.35	3.48	6.51	6.27	24.48	1.48	1.97	3.64	3.72	10.86
<b>Climate region<sup>d</sup></b>											
Very cold/Cold	0.49	1.00	1.21	1.87	7.02	20.25	0.88	1.13	1.27	4.13	11.82
Mixed-humid	2.18	3.01	2.89	4.51	19.22	14.03	1.95	2.10	2.27	12.58	0.00
Mixed-dry/Hot-dry	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hot-humid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Marine	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Housing unit type</b>											
Single-family detached	0.00	0.79	1.02	1.59	7.22	21.91	0.79	1.02	1.03	4.10	10.51
Single-family attached	0.00	2.51	2.89	2.67	52.91	96.53	2.51	2.89	1.64	36.41	135.19
Apartments in buildings with 2–4 units	0.00	2.92	3.75	6.92	0.00	74.28	2.92	3.75	5.26	0.00	66.50
Apartments in buildings with 5 or more units	0.00	2.87	3.44	7.45	35.22	60.10	2.87	3.44	5.56	17.19	14.28
Mobile homes	0.00	3.34	4.66	11.91	25.96	78.76	3.34	4.66	5.85	13.67	182.83
<b>Ownership of housing unit</b>											
Owned	0.87	1.11	1.24	1.89	7.13	23.14	0.88	1.06	1.08	4.23	12.08
Single-family	0.60	1.04	1.23	1.76	7.65	23.34	0.90	1.11	1.07	4.40	12.02
Apartments	11.27	12.88	14.20	14.55	15.97	0.00	5.14	6.74	8.38	0.00	0.00
Mobile homes	4.59	5.32	6.50	13.70	27.50	78.76	3.68	5.40	6.25	14.85	182.83
Rented <sup>e</sup>	2.25	3.11	3.38	4.67	21.74	34.57	1.65	2.19	2.85	12.16	26.37
Single-family	4.85	5.45	5.81	6.85	23.50	52.64	2.24	2.81	2.70	12.33	41.21
Apartments	2.02	2.90	3.29	6.87	39.00	49.32	2.18	2.88	4.50	19.17	27.48
Mobile homes	23.49	24.10	23.53	31.82	15.73	0.00	11.49	10.70	14.57	0.00	0.00
<b>Year of construction</b>											
Before 1950	0.00	1.80	2.25	3.57	15.55	30.08	1.80	2.25	2.74	8.27	13.37
1950 to 1959	0.00	2.90	2.89	3.60	22.76	42.86	2.90	2.89	2.19	15.98	24.34
1960 to 1969	0.00	2.76	3.54	4.14	22.89	56.63	2.76	3.54	2.66	11.08	33.24
1970 to 1979	0.00	2.31	2.71	4.26	14.89	46.59	2.31	2.71	2.61	6.86	41.59
1980 to 1989	0.00	2.65	3.01	6.50	24.42	45.07	2.65	3.01	4.12	13.27	34.72
1990 to 1999	0.00	2.46	3.07	4.23	16.50	78.61	2.46	3.07	2.32	10.42	58.89
2000 to 2009	0.00	2.73	3.01	4.58	17.15	71.08	2.73	3.01	3.29	10.80	52.48
2010 to 2015	5.76	7.54	8.09	9.84	24.44	15.91	4.72	5.18	5.98	13.21	0.00
2016 to 2020	6.83	9.22	9.27	13.57	31.17	18.35	5.39	5.58	9.24	15.71	0.00
<b>Total square footage<sup>f</sup></b>											
Less than 1,000	3.29	3.58	3.57	5.52	28.54	51.87	2.12	2.85	3.13	21.91	40.75
1,000 to 1,499	4.29	4.67	4.80	5.91	14.63	44.98	1.54	1.99	2.56	8.71	33.65
1,500 to 1,999	3.84	3.83	3.84	5.06	14.27	40.64	1.50	1.90	2.06	5.80	17.00
2,000 to 2,499	3.93	3.82	3.96	5.56	15.04	41.71	1.91	2.15	2.21	7.35	31.16
2,500 to 2,999	4.68	5.32	5.53	6.51	18.20	40.70	2.18	2.58	2.37	9.53	20.76
3,000 or more	3.47	3.95	4.19	4.65	13.68	47.53	1.80	2.34	1.92	7.09	31.50
<b>Number of household members</b>											
1 member	3.09	3.80	4.11	5.03	13.30	29.45	1.79	2.30	2.30	8.57	21.10
2 members	2.28	2.56	2.73	3.15	9.89	34.72	1.35	1.61	1.73	5.39	16.67
3 members	4.59	5.19	5.24	6.24	26.58	45.16	2.62	2.61	2.92	14.59	24.45
4 members	5.39	5.81	5.68	7.00	19.39	65.36	1.96	2.48	2.75	8.43	47.98
5 members	7.66	8.50	8.25	9.60	32.82	18.89	3.31	3.81	3.82	15.35	0.00
6 or more members	12.00	11.73	12.00	14.67	33.43	15.50	3.70	5.42	4.98	20.08	0.00
<b>2020 annual household income</b>											
Less than \$5,000	10.86	12.15	12.75	14.16	49.70	96.27	6.01	6.25	5.69	22.73	79.08

Relative standard errors (RSEs) for Table CE2.8 Annual household fuel expenditures in the Midwest—totals and averages, 2020

	RSEs for number of housing units	RSEs for total energy expenditures <sup>a</sup>					RSEs for average energy expenditures <sup>a</sup>				
		Total Midwest <sup>b</sup>	Total	Electricity	Natural gas	Propane	Fuel oil or kerosene	Total	Electricity	Natural gas	Propane
<b>All homes</b>	0.00	0.75	0.90	1.62	6.56	19.79	0.75	0.90	1.10	4.08	11.36
\$5,000 to \$9,999	11.72	11.27	12.02	16.60	39.79	56.96	5.49	6.70	7.69	31.23	52.61
\$10,000 to \$19,999	6.55	6.83	7.68	8.41	28.25	76.50	3.69	4.69	3.42	20.13	74.12
\$20,000 to \$39,999	3.87	4.67	4.90	4.96	15.87	38.47	2.06	2.44	2.69	9.58	22.38
\$40,000 to \$59,999	4.29	4.09	4.15	5.73	18.05	52.07	1.97	2.11	3.05	9.75	28.46
\$60,000 to \$99,999	3.08	3.09	3.28	3.84	13.35	38.22	1.46	1.76	1.89	6.45	19.11
\$100,000 to \$149,999	4.72	4.88	5.38	6.33	13.83	41.67	2.25	2.84	3.05	7.72	27.60
\$150,000 or more	5.18	5.69	5.62	6.16	22.28	99.05	2.19	2.52	2.20	15.19	114.78
<b>Payment method for energy bills</b>											
All paid by household	0.58	0.84	1.00	1.72	6.64	20.98	0.83	0.97	1.06	3.99	10.99
Some paid by household, some included in rent or condo fee	8.20	9.26	9.87	12.76	45.00	50.31	4.35	5.52	8.10	43.28	42.36
All included in rent or condo fee	10.71	13.10	13.41	17.43	69.08	15.49	5.80	7.41	10.30	36.62	0.00
Some other method	59.10	63.90	64.13	65.52	0.00	0.00	46.01	70.78	37.74	0.00	0.00
<b>Main heating fuel</b>											
Natural gas	1.34	1.64	1.79	1.66	42.07	56.92	0.88	1.11	0.99	30.05	31.04
Electricity	4.18	4.90	4.97	14.02	21.06	95.33	2.68	2.66	10.90	15.52	105.44
Fuel oil or kerosene	20.23	21.86	21.60	87.89	67.52	22.48	8.76	9.21	61.86	29.23	10.48
Propane	6.23	7.10	7.37	42.40	7.27	13.81	2.65	2.92	34.05	3.56	0.00
Wood	13.66	14.65	14.76	50.77	25.63	48.23	5.64	5.49	41.08	15.65	24.14
Some other fuel <sup>e</sup>	14.87	14.87	14.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Does not use heating equipment	32.69	38.51	39.88	63.83	0.00	0.00	22.15	28.11	33.90	0.00	0.00

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.

<sup>a</sup> Consumption and expenditures for biomass (wood), coal, district steam, and solar thermal are excluded.

<sup>b</sup> Total Midwest includes all primary occupied housing units in the Midwest Census Region. Vacant housing units, seasonal units, second homes, military houses, and group quarters are excluded.

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<sup>f</sup> 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 range and/or characteristics of the home. See 2020 RECS Square Footage Methodology for full details about data collection and processing.

<sup>g</sup> Some other fuel includes coal and district steam.