Table 28. Consumption and Expenditures in Midwest Region Households, 1993

						Average	e of Major	Energy S	ources ¹			
			lential dings		Consu	mption			Expend (dol	ditures ars)		
Characteristics	Total House- holds (mil- lion)	Total Number (mil- lion)	Total Floor- space (billion sq. ft.)	per Building (million Btu)	per Square Foot (thou- sand Btu)	per House- hold (million Btu)	per House- hold Member (million Btu)	per Build- ing	per Square Foot	per House- hold	per House- hold Member	RSE
RSE Column Factor:	1.5	1.6	1.6	0.9	0.8	0.9	1.0	0.8	0.9	0.7	0.7	Row Fac- tors
				1		Midwest	Region					
Total Region	23.3	19.0	50.6	165	62	134.3	52	1,640	0.62	1,336	521	2.3
Climate Zone ² Under 2,000 CDD and Over 5,500 HDD	19.5	15.5	41.7	168	62	134.0	52	1,640	0.61	1,310	510	3.6
Under 5,500 HDD2,000 CDD or More and Under 4,000 HDD	3.8 Q	3.4 Q	8.9 Q	152 Q	59 Q	136.0 Q	54 Q	1,639 Q	0.64 Q	1,467 Q	578 Q	10.3 NF
Type of Housing Unit Single-Family	16.6	16.6	43.9	150	57	150.1	55	1,481	0.56	1,481	541	2.4
Mobile HomeMultifamily (2 or more units)	1.4 5.3	1.4 1.0	1.4 5.3	105 496	107 93	105.3 92.7	41 46	1,268 4,808	1.29 0.90	1,268 899	489 446	8.1 6.0
Heated Floorspace (square feet) Fewer than 1,000	5.9	3.0	5.2	176	100	88.6	47	1,827	1.03	918	484	5.2
1,000 to 1,999 2,000 or More	8.2 9.2	6.9 9.1	15.0 30.3	158 167	72 50	132.8 164.8	52 55	1,572 1,630	0.72 0.49	1,324 1,612	516 539	3.1 2.9
Ownership of Unit Owned Rented	16.2 7.1	15.8 3.2	41.3 9.3	151 231	58 81	147.1 105.1	55 46	1,514 2,253	0.58 0.79	1,472 1,024	546 452	2.5 5.1
Year of Construction 1939 or Before 1940 to 1979	7.4 11.7	6.3 9.5	16.9 24.1	184 161	69 63	156.2 129.5	60 51	1,664 1,642	0.62 0.64	1,412 1,323	543 525	4.1 3.2
1980 or After ³	4.2	3.2	9.6	140	47	109.0	42	1,586	0.53	1,234	470	5.9
Less than \$10,000 \$10,000 to \$19,999 \$20,000 to \$34,999 \$35,000 to \$49,999 \$50,000 or More	3.0 5.3 6.0 4.4 4.6	1.7 4.2 5.1 3.7 4.2	4.0 10.1 12.3 10.7 13.5	184 162 156 166 170	80 67 65 57 53	107.9 126.8 132.8 138.6 158.1	55 58 53 47 51	1,827 1,556 1,559 1,689 1,700	0.79 0.65 0.65 0.58 0.53	1,070 1,221 1,325 1,410 1,583	550 555 532 479 508	7.1 4.7 3.6 3.9 4.0
Below Poverty Line 100 Percent	2.6	1.6	3.7	200	86	120.5	45	1,969	0.84	1,185	445	7.6
125 Percent	4.0 5.3	2.7 3.7	6.2 8.5	179 174	77 75	120.2 119.8	44 45	1,780 1,743	0.77 0.76	1,197 1,203	440 450	6.2 4.7
Age of Householder Under 35 Years	6.6 9.9 6.8	4.5 8.7 5.8	11.5 23.6 15.5	176 163 159	68 60 60	120.0 142.7 135.8	42 49 78	1,755 1,666 1,512	0.68 0.61 0.57	1,195 1,457 1,294	414 501 739	4.3 3.2 3.8
Household Size 1 Person	6.1	4.0	9.5	157	66	102.0	102	1,498	0.62	972	972	4.9
2 to 4 Persons	14.9	13.0	35.5 5.5	164 183	60 67	143.1 163.1	52 30	1,646 1,873	0.60 0.69	1,434 1,671	520 303	2.4 4.4

Table 28. Consumption and Expenditures in Midwest Region Households, 1993 (Continued)

						Average	e of Major	Energy S	ources ¹			
			lential lings		Consu	mption			Expend (doll			
Characteristics	Total House- holds (mil- lion)	Total Number (mil- lion)	Total Floor- space (billion sq. ft.)	per Building (million Btu)	per Square Foot (thou- sand Btu)	per House- hold (million Btu)	per House- hold Member (million Btu)	per Build- ing	per Square Foot	per House- hold	per House- hold Member	RSE Row
RSE Column Factor:	1.5	1.6	1.6	0.9	0.8	0.9	1.0	0.8	0.9	0.7	0.7	Fac- tors
East North Central Division	16.4	13.1	35.3	173	64	138.8	54	1,697	0.63	1,358	526	2.6
Climate Zone ² Under 2,000 CDD and Over 5,500 HDD	14.4	11.3	31.0	176	64	138.0	53	1,697	0.62	1,333	513	4.1
Under 5,500 HDD2,000 CDD or More and	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Under 4,000 HDD Type of Housing Unit	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Single-Family Mobile Home Multifamily (2 or more units)	11.4 0.9 4.0	11.4 0.9 0.7	30.3 0.9 4.0	156 106 529	58 105 98	155.6 105.7 98.8	56 41 48	1,520 1,275 4,921	0.57 1.27 0.91	1,520 1,275 918	549 492 450	2.8 9.6 6.4
Heated Floorspace (square feet)												
Fewer than 1,000	4.0 5.8 6.6	1.8 4.8 6.5	3.5 10.5 21.3	196 170 170	103 77 52	89.0 141.0 167.4	49 54 55	1,984 1,666 1,638	1.05 0.76 0.50	901 1,384 1,618	493 531 536	6.4 3.7 3.3
Ownership of Unit Owned Rented	11.2 5.1	10.9 2.2	28.8 6.5	157 253	59 85	152.1 109.4	56 49	1,559 2,376	0.59 0.80	1,509 1,027	552 458	2.9 6.0
Year of Construction 1939 or Before	4.9	4.1	11.2	197	72	164.5	63	1,769	0.65	1,475	566	4.8
1940 to 1979 1980 or After ³	8.8 2.7	6.9 2.1	17.9 6.2	167 147	64 49	131.6 115.0	53 41	1,690 1,576	0.65 0.53	1,330 1,237	534 438	3.8 6.3
1993 Family Income Less than \$10,000\$ \$10,000 to \$19,999\$ \$20,000 to \$34,999	2.0 3.8 4.0	1.1 2.8 3.3	2.6 6.9 8.4	198 176 166	86 72 66	111.3 132.6 138.9	55 63 55	1,904 1,640 1,637	0.83 0.67 0.65	1,072 1,239 1,370	534 590 543	7.8 5.8 4.7
\$35,000 to \$49,999 \$50,000 or More	3.0 3.5	2.5 3.3	7.2 10.3	173 171	61 54	143.0 157.1	49 50	1,717 1,720	0.60 0.55	1,418 1,584	482 500	4.7 4.7
Below Poverty Line 100 Percent	1.8 2.7	1.0 1.7	2.4 3.9	217 194	93 86	128.0 127.4	45 45	2,061 1,854	0.89 0.82	1,214 1,219	431 429	8.5 7.2
150 Percent Age of Householder	3.5	2.3	5.3	188	83	125.1	46	1,818	0.80	1,209	443	5.2
Under 35 Years	4.3 7.2 4.9	2.8 6.2 4.0	7.6 16.9 10.7	192 169 168	71 62 63	127.0 145.3 139.5	43 50 79	1,878 1,692 1,577	0.70 0.62 0.59	1,243 1,458 1,313	425 498 747	5.4 4.0 4.3
Household Size 1 Person	4.4	2.7	6.7	169	69 63	104.3	104	1,583	0.64	979	979 525	6.2
2 to 4 Persons 5 or More Persons	10.4 1.6	9.0 1.4	24.9 3.7	172 193	62 71	148.8 169.5	53 30	1,699 1,911	0.61 0.70	1,472 1,682	525 302	2.7 5.2

Table 28. Consumption and Expenditures in Midwest Region Households, 1993 (Continued)

						Average	e of Major	Energy S	ources ¹			
		1	lential lings		Consu	mption			Expend (doll			
Characteristics	Total House- holds (mil- lion)	Total Number (mil- lion)	Total Floor- space (billion sq. ft.)	per Building (million Btu)	per Square Foot (thou- sand Btu)	per House- hold (million Btu)	per House- hold Member (million Btu)	per Build- ing	per Square Foot	per House- hold	per House- hold Member	RSE
RSE Column Factor:	1.5	1.6	1.6	0.9	0.8	0.9	1.0	0.8	0.9	0.7	0.7	Row Fac- tors
West North Central Division	6.9	5.9	15.2	146	56	123.8	49	1,512	0.58	1,282	508	4.6
Climate Zone ²												
Under 2,000 CDD and												_
Over 5,500 HDD	5.0	4.2	10.7	146	57	122.4	49	1,485	0.58	1,242	501	7.1
Under 5,500 HDD2,000 CDD or More and	1.9	1.7	4.6	145	54	127.4	48	1,580	0.59	1,386	524	10.1
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit												
Single-Family	5.2	5.2	13.5	138	53	138.1	52	1,396	0.53	1,396	523	4.3
Mobile Home	0.5	0.5	0.4	105	112	104.6	40	1,254	1.34	1,254	482	10.7
Multifamily (2 or more units)	1.3	0.2	1.3	393	76	74.0	38	4,462	0.87	840	433	13.2
Heated Floorspace (square feet)												
Fewer than 1,000	1.8	1.1	1.7	144	93	87.7	43	1,569	1.01	955	467	8.3
1,000 to 1,999	2.5	2.1	4.5	131	62	113.4	46	1,361	0.64	1,182	480	5.4
2,000 or More	2.7	2.6	9.0	159	47	158.4	54	1,610	0.47	1,600	548	5.3
Ownership of Unit												
Owned	5.0 2.0	4.9 1.0	12.5 2.7	138 184	54 69	135.8 93.9	52 40	1,413 1,987	0.55 0.75	1,389 1,016	533 436	4.7 9.3
Year of Construction												
1939 or Before	2.5	2.2	5.7	159	62	139.9	54	1,468	0.57	1,289	499	7.4
1940 to 1979	3.0	2.5	6.2	143	59	123.0	47	1,510	0.62	1,303	501	5.4
1980 or After ³	1.5	1.1	3.4	128	43	98.4	43	1,602	0.54	1,228	539	10.6
1993 Family Income												
Less than \$10,000	0.9	0.6	1.4	159	68	100.7	55	1,683	0.72	1,068		13.7
\$10,000 to \$19,999	1.6	1.4	3.2	132	57	112.9	46	1,381	0.59	1,180	484	7.5
\$20,000 to \$34,999	2.0	1.8	3.9	138	62	120.7	50	1,410	0.64	1,235	510	5.3
\$35,000 to \$49,999 \$50,000 or More	1.4 1.0	1.2 1.0	3.5 3.3	151 167	51 50	129.1 161.6	44 55	1,630 1,634	0.55 0.49	1,394 1,582	472 538	6.3 7.1
Below Poverty Line												
100 Percent	0.8	0.5	1.2	166	70	104.6	45	1,786	0.75	1,123	481	14.1
125 Percent	1.4	1.0	2.3	151	63	106.1	42	1,645	0.69	1,156	463	10.1
150 Percent	1.8	1.4	3.2	149	63	109.8	43	1,615	0.69	1,191	464	8.3
Age of Householder												
Under 35 Years	2.3	1.6	3.8	149	63	106.6	38	1,538	0.65	1,103	393	6.5
35 to 59 Years	2.7	2.5	6.7	150	55	135.9	47	1,603	0.59	1,454	508	5.5
60 Years and Over	2.0	1.8	4.7	139	53	126.7	73	1,364	0.52	1,247	720	7.3

Table 28. Consumption and Expenditures in Midwest Region Households, 1993 (Continued)

						Average	e of Major	Energy S	ources ¹			
		Resid Build	lential lings		Consu	mption			Expend (dol	ditures lars)		
Characteristics	Total House- holds (mil- lion)	Total Number (mil- lion)	Total Floor- space (billion sq. ft.)	per Building (million Btu)	per Square Foot (thou- sand Btu)	per House- hold (million Btu)	per House- hold Member (million Btu)	per Build- ing	per Square Foot	per House- hold	per House- hold Member	RSE
RSE Column Factor:	1.5	1.6	1.6	0.9	0.8	0.9	1.0	0.8	0.9	0.7	0.7	Row Fac- tors
Household Size 1 Person 2 to 4 Persons 5 or More Persons	1.7 4.5 0.7	1.2 4.0 0.7	2.8 10.6 1.8	132 148 163	58 55 60	96.2 130.1 149.5	96 49 28	1,311 1,527 1,795	0.58 0.57 0.66	954 1,346 1,649	954 510 306	7.5 4.4 7.8

Major Energy Sources include: electricity, natural gas, fuel oil, kerosene, and liquefied petroleum gas.
Climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

• See "Glossary" in Household Energy Consumption and Expenditures 1993 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 1993 Residential Energy Consumption Survey.

Does not include all new construction for 1993.

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.

Table 29. Total Consumption in Midwest Region Households, 1993

			Electricity		Nati G	ural as	Fuel	Oil	Kero	sene	Lique Petrole		
	Major	Primary	Si	te									
	Energy Sources ¹ (tril- lion Btu)	(tril- lion Btu)	(tril- lion Btu)	(bil- lion kWh)	(tril- lion Btu)	(bil- lion cubic feet)	(tril- lion Btu)	(bil- lion gal- lons)	(tril- lion Btu)	(bil- lion gal- lons)	(tril- lion Btu)	(bil- lion gal- lons)	RSE
Characteristics RSE Column Factor:	0.4	0.5	0.5	0.5	0.6	0.6	1.6	1.6	2.6	2.6	1.6	1.6	Row Fac- tors
- KSE Column Factor.													
						Midw	est Regio	n					
Total Region	3,129.4	2,234.3	741.5	217.3	2,069.0	2,013	126.7	0.92	Q	Q	186.4	2.04	9.8
Climate Zone ² Under 2,000 CDD and Over 5,500 HDD Under 5,500 HDD		1,797.3 437.0	596.5 145.0	174.8 42.5	1,748.1 320.9	1,700 312	118.7 Q	0.86 Q	Q Q	Q Q	138.1 Q	1.51 Q	17.1 71.2
2,000 CDD or More and Under 4,000 HDD		437.0 Q	Q	Q Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit Single-Family Mobile Home	149.0	1,780.7 138.8	591.0 46.1	173.2 13.5	1,613.1 70.8	1,569 69	123.9 Q	0.90 Q	Q Q	Q Q	154.6 31.7	1.69 0.35	11.1 36.2
Multifamily (2 or more units) Heated Floorspace	492.6	314.8	104.5	30.6	385.0	375	Q	Q	Q	Q	Q	Q	20.5
(square feet) Fewer than 1,000	1,089.5	380.1 768.0 1,086.1	126.2 254.9 360.5	37.0 74.7 105.6	353.1 744.3 971.6	344 724 945	Q 38.6 84.0	Q 0.28 0.61	Q 1.8 Q	Q 0.01 Q	37.1 49.9 99.4	0.41 0.55 1.09	17.1 14.4 10.4
Ownership of Unit													
OwnedRented	,	1,740.1 494.2	577.5 164.0	169.3 48.1	1,529.3 539.7	1,488 525	110.1 16.6	0.80 0.12	Q Q	Q Q	160.9 25.5	1.76 0.28	11.3 17.6
Year of Construction 1939 or Before 1940 to 1979 1980 or After ³	1,519.1	621.6 1,148.3 464.3	206.3 381.1 154.1	60.5 111.7 45.2	783.9 1,015.5 269.6	763 988 262	73.5 52.7 Q	0.53 0.38 Q	Q 0.6 Q	Q (*) Q	88.5 69.1 28.7	0.97 0.76 0.31	13.3 14.3 26.7
1993 Family Income Less than \$10,000\$10,000 to \$19,999	319.1 678.0	220.1 432.1	73.1 143.4	21.4 42.0	212.7 472.1	207 459	Q 26.8	Q 0.19	Q Q	Q Q	24.2 32.4	0.26 0.35	25.0 14.2
\$20,000 to \$34,999 \$35,000 to \$49,999 \$50,000 or More	799.6 612.7	559.4 460.5 562.2	185.6 152.8 186.6	54.4 44.8 54.7	511.5 386.3 486.4	498 376 473	42.6 34.2 14.8	0.13 0.31 0.25 0.11	0.6 0.4 Q	(*) (*) Q	59.2 39.0 31.7	0.65 0.43 0.35	14.3 15.4 17.6
Below Poverty Line 100 Percent 125 Percent		212.3 335.4	70.5 111.3	20.7 32.6	213.7 314.7	208 306	Q 14.0	Q 0.10	Q Q	Q Q	23.5 40.6	0.26 0.44	28.2 21.0
150 Percent	639.4	452.4	150.2	44.0	420.2	409	22.2	0.16	1.4	0.01	45.4	0.50	16.9
Age of Householder Under 35 Years35 to 59 Years	1,417.0	551.0 1,109.5 573.9	182.9 368.2 190.5	53.6 107.9 55.8	546.2 912.7 610.1	531 888 593	22.3 41.4 63.0	0.16 0.30 0.46	0.8 1.8 Q	0.01 0.01 Q	34.0 92.9 59.4	0.37 1.02 0.65	16.3 13.6 15.3
Household Size 1 Person 2 to 4 Persons		367.2 1,580.6	121.9 524.6	35.7 153.7	447.3 1,388.1	435 1,350	24.4 88.4	0.18 0.64	Q Q	Q Q	30.7 125.5	0.34 1.37	16.1 11.8
5 or More Persons		286.5	95.1	27.9	233.6	227	13.9	0.10	Q	Q	30.3	0.33	19.3

Table 29. Total Consumption in Midwest Region Households, 1993 (Continued)

			Electricity			ural as	Fue	l Oil	Kero	sene	Lique Petrole		
	Major	Primary	Si	te									
	Energy Sources ¹ (tril- lion Btu)	(tril- lion Btu)	(tril- lion Btu)	(bil- lion kWh)	(tril- lion Btu)	(bil- lion cubic feet)	(tril- lion Btu)	(bil- lion gal- lons)	(tril- lion Btu)	(bil- lion gal- lons)	(tril- lion Btu)	(bil- lion gal- lons)	RSE
Characteristics													Row
RSE Column Factor:	0.4	0.5	0.5	0.5	0.6	0.6	1.6	1.6	2.6	2.6	1.6	1.6	Fac- tors
East North Central Division	2,269.2	1,497.1	496.9	145.6	1,592.8	1,549	70.7	0.51	Q	Q	103.6	1.13	11.4
Climate Zone ²													
Under 2,000 CDD and Over 5,500 HDD Under 5,500 HDD	1,991.4 Q	1,301.2 Q	431.9 Q	126.6 Q	1,406.3 Q	1,368 Q	65.2 Q	0.47 Q	Q Q	Q Q	83.8 Q	0.92 Q	21.9 NF
2,000 CDD or More and Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit													
Single-Family	1,773.2	1,197.4	397.4	116.5	1,215.3	1,182	67.9	0.49	Q	Q	87.6	0.96	14.0
Mobile Home	99.9 396.0	92.0 207.7	30.5 68.9	8.9 20.2	53.4 324.1	52 315	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	55.0 18.8
Heated Floorspace													
(square feet)	050.4	000.4	77.0	00.7	200.0	050	0	•	0	•	0	0	40.4
Fewer than 1,0001,000 to 1,999	359.4 811.6	233.1 528.0	77.3 175.3	22.7 51.4	260.2 587.2	253 571	Q 21.1	Q 0.15	Q 1.4	Q 0.01	Q 26.7	Q 0.29	13.4 15.8
2,000 or More	1,098.1	736.0	244.3	71.6	745.5	725	48.0	0.35	Q	Q	56.9	0.62	12.9
Ownership of Unit	1,710.2	1 101 2	202.0	114.0	1 161 0	1 120	64.1	0.46	0	Q	88.5	0.97	13.0
Owned Rented	559.0	1,181.2 316.0	392.0 104.9	114.9 30.7	1,161.2 431.6	1,130 420	Q Q	Q.46	Q Q	Q	15.0	0.97	14.3
Year of Construction													
1939 or Before	806.9	406.2	134.8	39.5	577.9	562	39.2	0.28	Q	Q (*)	50.4	0.55	14.0
1940 to 1979 1980 or After ³	1,155.9 306.4	830.9 260.0	275.8 86.3	80.8 25.3	814.5 200.5	792 195	Q Q	Q Q	0.6 Q	(*) Q	33.7 19.6	0.37 0.21	16.1 30.7
1993 Family Income													
Less than \$10,000	223.6	136.0	45.2	13.2	163.2	159	Q	Q	Q	Q	Q	Q	24.6
\$10,000 to \$19,999 \$20,000 to \$34,999	498.4 555.8	281.9 359.7	93.6 119.4	27.4 35.0	371.7 387.4	362 377	Q 19.7	Q 0.14	Q Q	Q Q	15.6 28.7	0.17 0.31	18.8 19.6
\$35,000 to \$49,999	433.9	294.0	97.6	28.6	291.6	284	Q	Q	Q	Q	23.7	0.26	19.0
\$50,000 or More	557.4	425.4	141.2	41.4	378.9	369	Q	Q	Q	Q	25.5	0.28	20.0
Below Poverty Line	200.7	404.5	44.0	40.4	100 5	405	0	0	0	0	0	0	04.0
100 Percent	226.7 337.7	134.5 206.6	44.6 68.6	13.1 20.1	169.5 244.4	165 238	Q Q	Q Q	Q Q	Q Q	Q 16.8	Q 0.18	31.6 26.2
150 Percent	437.5	270.3	89.7	26.3	318.3	310	Q	Q	Q	Q	18.5	0.10	19.3
Age of Householder													
Under 35 Years	545.8	337.1	111.9	32.8	408.0	397	Q 04.5	Q	Q	Q	Q	Q	15.4
35 to 59 Years 60 Years and Over	1,045.6 677.8	761.2 398.8	252.6 132.4	74.0 38.8	711.1 473.7	692 461	24.5 36.1	0.18 0.26	Q Q	Q Q	56.0 32.5	0.61 0.36	16.8 14.6
Household Size													
1 Person	460.9	251.2	83.4	24.4	349.5	340	Q	Q	Q	Q	Q	Q	15.6
2 to 4 Persons 5 or More Persons	1,543.9 264.4	1,062.8	352.7	103.4	1,059.4	1,031 179	57.4 Q	0.42 Q	Q Q	Q Q	70.2 14.8	0.77	14.7
2 01 MINIE LEI20112	204.4	183.1	60.8	17.8	183.8	119	Q	Q	Q	Q	14.0	0.16	22.4

Table 29. Total Consumption in Midwest Region Households, 1993 (Continued)

			Electricity			ural as	Fue	l Oil	Kero	sene	Lique Petrole		
	Major	Primary	Si	te									
Oh averstavistisa	Energy Sources ¹ (tril- lion Btu)	(tril- lion Btu)	(tril- lion Btu)	(bil- lion kWh)	(tril- lion Btu)	(bil- lion cubic feet)	(tril- lion Btu)	(bil- lion gal- lons)	(tril- lion Btu)	(bil- lion gal- lons)	(tril- lion Btu)	(bil- lion gal- lons)	RSE
Characteristics													Row Fac-
RSE Column Factor:	0.4	0.5	0.5	0.5	0.6	0.6	1.6	1.6	2.6	2.6	1.6	1.6	tors
West North Central Division	860.2	737.2	244.7	71.7	476.2	463	56.0	0.41	Q	Q	82.8	0.91	16.5
Climate Zone ² Under 2,000 CDD and													
Over 5,500 HDD	614.5 245.8	496.1 241.1	164.6 80.0	48.3 23.5	341.8 134.4	333 131	53.5 Q	0.39 Q	Q Q	Q Q	54.3 Q	0.59 Q	24.7 45.8
2,000 CDD or More and Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit Single-Family	714.6	583.3	193.6	56.7	397.9	387	56.0	0.41	Q	Q	67.0	0.73	14.6
Mobile Home	49.0 96.6	46.8 107.1	15.5 35.6	4.5 10.4	Q 60.9	Q 59	Q Q	Q Q	Q Q	Q Q	15.7 Q	0.17 Q	42.7 54.5
Heated Floorspace (square feet)													
Fewer than 1,000	161.3 277.9	147.1 240.0	48.8 79.7	14.3 23.3	93.0 157.2	90 153	Q 17.5	Q 0.13	Q Q	Q Q	17.1 Q	0.19 Q	33.4 24.8
2,000 or More	421.1	350.1	116.2	34.1	226.1	220	36.1	0.26	Q	Q	42.5	0.47	17.7
Owned	672.5	558.9	185.5	54.4	368.1	358	46.0	0.33	Q	Q	72.3	0.79	17.8
Rented	187.7	178.2	59.2	17.3	108.1	105	Q	Q	Q	Q	10.5	0.12	35.3
Year of Construction 1939 or Before	350.0	215.4	71.5	21.0	206.1	200	34.3	0.25	Q	Q	38.2	0.42	27.1
1940 to 1979 1980 or After ³	363.2 147.0	317.5 204.3	105.4 67.8	30.9 19.9	201.1 69.1	196 67	21.2 Q	0.15 Q	Q Q	Q Q	35.5 Q	0.39 Q	17.0 37.9
1993 Family Income	147.0	204.5	07.0	13.3	09.1	07	Q	Q	Q	Q	Q	Q	37.9
Less than \$10,000	95.4	84.1	27.9	8.2	49.5	48	Q	Q	Q	Q	Q	Q	48.3
\$10,000 to \$19,999	179.6	150.2	49.8	14.6	100.4	98	12.6	0.09	Q	Q	16.8	0.18	15.3
\$20,000 to \$34,999 \$35,000 to \$49,999	243.8 178.8	199.7 166.4	66.3 55.2	19.4 16.2	124.0 94.7	121 92	22.9 13.5	0.17 0.10	Q Q	Q Q	30.4 15.3	0.33 0.17	18.3 24.3
\$50,000 or More	162.6	136.8	45.4	13.3	107.6	105	Q	Q	Q	Q	Q	Q	34.1
Below Poverty Line 100 Percent	86.2	77.9	25.8	7.6	44.2	43	Q	Q	Q	Q	Q	Q	51.3
125 Percent	144.1	128.8	42.7	12.5	70.3	68	Q	Q	Q	Q	23.8	0.26	37.1
150 Percent	201.9	182.1	60.5	17.7	101.9	99	Q	Q	Q	Q	26.9	0.29	31.6
Age of Householder Under 35 Years	240.4	213.9	71.0	20.8	138.2	134	12.2	0.09	Q	Q	18.9	0.21	25.5
35 to 59 Years	371.4	348.2	115.6	33.9	201.6	196	16.9	0.09	Q	Q	36.9	0.40	17.8
60 Years and Over	248.3	175.1	58.1	17.0	136.4	133	26.9	0.20	Q	Q	Q	Q	26.6
Household Size 1 Person	164.2	116.0	38.5	11.3	97.8	95	15.8	0.12	Q	Q	12.1	0.13	29.8
2 to 4 Persons	587.3	517.8	171.9	50.4	328.7	320	31.0	0.22	Q	Q	55.3	0.61	17.8
5 or More Persons	108.8	103.4	34.3	10.1	49.8	48	Q	Q	Q	Q	15.5	0.17	33.4

¹ Major Energy Sources include: electricity, natural gas, fuel oil, kerosene, and liquefied petroleum gas.

² Climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

Does not include all new construction for 1993.

^{(*) =} Value rounds to zero in the units displayed.

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. • Site electricity is the amount of electricity delivered to households. Primary electricity, which is not included in the "Total of Major Fuels" category, is site electricity plus the conversion losses in the electric generation process at the utility plant. • Because of rounding, data may not sum to totals. • See "Glossary" in Household Energy Consumption and Expenditures 1993 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 1993 Residential Energy Consumption Survey.

Table 30. Total Expenditures in Midwest Region Households, 1993

(Billion Dollars)

Characteristics	Major Energy Sources ¹	Electricity	Natural Gas	Fuel Oil	Kerosene	Liquefied Petroleum Gas	
RSE Column Factor:	0.4	0.5	0.6	1.6	2.8	1.6	RSE Row Factors
			Mid	west Region	I	ı	
Total Region	31.12	17.55	11.13	0.79	0.05	1.59	10.1
Climate Zone ²							
Under 2,000 CDD and							
Over 5,500 HDD	25.47	14.13	9.40	0.74	Q	1.17	16.8
Under 5,500 HDD	5.65	3.42	1.73	Q	Q	Q	78.0
2,000 CDD or More and							
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	NF
Time of Henrica Hait							
Type of Housing Unit	24.55	13.79	8.64	0.77	Q	1.31	11.0
Single-Family Mobile Home	1.79	1.13	0.38	0.77 Q	Q	0.29	36.0
Multifamily (2 or more units)	4.78	2.64	2.12	Q	Q	Q Q	19.1
,							
Heated Floorspace							
(square feet)	5.00	0.00	4.04	•	0	0.04	47.0
Fewer than 1,000	5.39 10.86	3.09 6.15	1.94 4.02	Q 0.25	Q 0.02	0.34 0.43	17.0 13.5
2,000 or More	14.86	8.32	5.18	0.23	Q.02	0.43	10.4
2,000 01 11010 1111111111111111111111111		0.02	0.10	0.0.	~	0.00	
Ownership of Unit							
Owned	23.84	13.53	8.22	0.68	Q	1.36	10.8
Rented	7.28	4.02	2.91	0.10	Q	0.23	17.0
Year of Construction							
1939 or Before	10.46	4.94	4.27	0.46	Q	0.75	13.0
1940 to 1979	15.53	9.22	5.39	0.33	0.01	0.59	14.1
1980 or After ³	5.13	3.39	1.48	Q	Q	0.25	26.2
1993 Family Income							
Less than \$10,000	3.16	1.74	1.15	Q	Q	0.21	23.1
\$10,000 to \$19,999	6.53	3.50	2.55	0.17	Q	0.28	14.7
\$20,000 to \$34,999	7.98	4.41	2.79	0.26	0.01	0.51	14.9
\$35,000 to \$49,999	6.23	3.60	2.09	0.21	(*)	0.33	14.4
\$50,000 or More	7.21	4.30	2.56	0.09	Q	0.27	15.4
Below Poverty Line							
100 Percent	3.08	1.69	1.14	Q	Q	0.21	25.8
125 Percent	4.80	2.65	1.70	0.09	Q	0.35	20.2
150 Percent	6.42	3.59	2.27	0.14	0.01	0.40	16.6
Age of Householder							
Under 35 Years	7.83	4.47	2.91	0.14	0.01	0.30	16.0
35 to 59 Years	14.47	8.46	4.93	0.26	0.02	0.80	12.8
60 Years and Over	8.82	4.62	3.29	0.39	Q	0.49	15.7
Household Size							
1 Person	5.95	3.08	2.45	0.16	Q	0.26	16.3
2 to 4 Persons	21.34	12.26	7.43	0.54	Q	1.07	11.4
5 or More Persons	3.82	2.21	1.26	0.08	Q	0.26	19.1

Table 30. Total Expenditures in Midwest Region Households, 1993 (Continued) (Billion Dollars)

Characteristics	Major Energy Sources ¹	Electricity	Natural Gas	Fuel Oil	Kerosene	Liquefied Petroleum Gas	
RSE Column Factor:	0.4	0.5	0.6	1.6	2.8	1.6	RSE Row Factors
East North Central Division	22.21	12.21	8.62	0.44	Q	0.90	11.2
Climate Zone ²							
Under 2,000 CDD and							
Over 5.500 HDD	19.24	10.47	7.59	0.41	Q	0.73	21.8
Under 5,500 HDD	Q	Q	Q	Q	Q	Q	NF
2,000 CDD or More and	Q	· ·	Q	Q	Q	Q	141
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	NF
,							
Type of Housing Unit					_		
Single-Family	17.33	9.57	6.54	0.43	Q	0.75	13.8
Mobile Home	1.21	0.77	0.29	Q	Q	Q	55.6
Multifamily (2 or more units)	3.68	1.87	1.79	Q	Q	Q	19.1
Heated Floorspace							
(square feet)							
Fewer than 1,000	3.64	2.00	1.44	Q	Q	Q	14.8
1,000 to 1,999	7.97	4.39	3.18	0.14	0.01	0.23	14.9
2,000 or More	10.61	5.81	4.00	0.29	Q	0.48	12.4
Ownership of Unit	40.07	0.40	0.07	0.40	0	0.77	40.5
Owned	16.97 5.24	9.49 2.72	6.27 2.34	0.40 Q	Q Q	0.77	12.5 17.2
Rented	5.24	2.12	2.34	Q	Q	0.13	17.2
Year of Construction							
1939 or Before	7.24	3.32	3.19	0.25	Q	0.44	14.2
1940 to 1979	11.68	6.87	4.32	Q	0.01	0.29	16.1
1980 or After ³	3.30	2.02	1.11	Q	Q	0.17	30.0
1993 Family Income							
Less than \$10,000	2.15	1.13	0.89	Q	Q	Q	23.1
\$10,000 to \$19,999	4.66	2.39	2.01	Q	Q	Q 0.13	19.1
\$20,000 to \$34,999	5.48	2.39	2.01	0.12	Q	0.13	21.4
\$35,000 to \$49,999	4.30	2.39	1.58	Q Q	Q	0.20	17.6
\$50,000 to \$49,999	5.62	3.35	1.99	Q	Q	0.20	17.0
. ,							
Below Poverty Line							
100 Percent	2.15	1.13	0.91	Q	Q	Q	28.9
125 Percent	3.23	1.70	1.33	Q	Q	0.15	25.3
150 Percent	4.23	2.25	1.74	Q	Q	0.17	19.7
Age of Householder							
Under 35 Years	5.34	2.94	2.19	Q	Q	Q	16.9
35 to 59 Years	10.49	5.97	3.86	0.15	Q	0.49	15.7
60 Years and Over	6.38	3.30	2.56	0.23	ã	0.27	15.9
Household Size		c :=		6	_	_	40.5
1 Person	4.33	2.17	1.92	Q	Q	Q	18.6
2 to 4 Persons	15.26	8.59	5.69	0.35	Q	0.60	14.8
5 or More Persons	2.62	1.45	1.01	Q	Q	0.13	21.8

Table 30. Total Expenditures in Midwest Region Households, 1993 (Continued)

(Billion Dollars)

Characteristics	Major Energy Sources ¹	Electricity	Natural Gas	Fuel Oil	Kerosene	Liquefied Petroleum Gas	
RSE Column Factor:	0.4	0.5	0.6	1.6	2.8	1.6	RSE Row Factors
West North Central Division	8.91	5.34	2.52	0.34	Q	0.70	14.1
Climate Zone ²							
Under 2,000 CDD and							
Over 5,500 HDD	6.23	3.65	1.81	0.33	Q	0.44	22.5
Under 5,500 HDD	2.67	1.69	0.71	Q	Q	Q	48.6
2,000 CDD or More and							
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit							
Single-Family	7.22	4.22	2.10	0.34	Q	0.56	15.7
Mobile Home	0.59	0.36	Q	Q	Q	0.14	39.4
Multifamily (2 or more units)	1.10	0.77	0.33	Q	Q	Q	54.1
Heated Floorspace							
(square feet)							
Fewer than 1,000	1.76	1.09	0.50	Q	Q	0.15	33.1
1,000 to 1,999	2.90	1.75	0.84	0.11	Q	Q	22.8
2,000 or More	4.25	2.50	1.18	0.22	Q	0.35	19.3
Ownership of Unit							
Owned	6.88	4.04	1.95	0.28	Q	0.60	19.5
Rented	2.03	1.30	0.57	Q	Q	0.10	35.3
Year of Construction							
1939 or Before	3.23	1.62	1.08	0.21	Q	0.31	26.9
1940 to 1979	3.85	2.34	1.07	0.13	Q	0.30	16.5
1980 or After ³	1.83	1.38	0.37	Q	Q	Q	39.7
1993 Family Income							
Less than \$10,000	1.01	0.60	0.26	Q	Q	Q	49.0
\$10.000 to \$19.999	1.88	1.11	0.54	0.08	ã	0.15	16.8
\$20,000 to \$34,999	2.49	1.47	0.64	0.14	Q	0.25	18.4
\$35,000 to \$49,999	1.93	1.21	0.51	0.08	Q	0.13	23.9
\$50,000 or More	1.59	0.95	0.56	Q	Q	Q	32.7
Below Poverty Line							
100 Percent	0.93	0.56	0.23	Q	Q	Q	51.9
125 Percent	1.57	0.95	0.37	Q	Q	0.21	36.0
150 Percent	2.19	1.34	0.54	Q	Q	0.24	30.8
Age of Householder							
Under 35 Years	2.49	1.53	0.72	0.07	Q	0.16	23.5
35 to 59 Years	3.98	2.49	1.07	0.10	Q	0.31	18.2
60 Years and Over	2.44	1.33	0.73	0.17	Q	Q	27.7
Household Size							
1 Person	1.63	0.91	0.52	0.10	Q	0.10	25.8
2 to 4 Persons	6.08	3.67	1.74	0.19	Q	0.47	14.7
5 or More Persons	1.20	0.76	0.25	Q Q	Q	0.13	34.9

¹ Major Energy Sources include: electricity, natural gas, fuel oil, kerosene, and liquefied petroleum gas.

Major Energy Sources include: electricity, natural gas, ruer oir, neroserie, and inquened perforcing gas.
 Climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.
 Does not include all new construction for 1993.

^{(*) =} Value rounds to zero in the units displayed. 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" in Household Energy Consumption and Expenditures 1993 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 1993 Residential Energy Consumption Survey.

Table 31. Electricity Consumption and Expenditures in Midwest Region Households, 1993

			Avera	age per Hous	sehold			
			Consumption					
	Households	Primary	Sit	e				
Characteristics	Using Electricity (million)	(million Btu)	(million Btu)	(kWh)	Expenditures (dollars)	Floorspace (square feet)	Expenditures (cents per kWh)	
RSE Column Factor:	1.3	1.2	1.2	1.2	1.1	0.7	0.6	RSE Row Factors
				Midwes	t Region			
Total Region	23.3	95.9	31.8	9,327	753	2,170	8.1	3.7
Climate Zone ¹ Under 2,000 CDD and		-		.,		, -	-	<i>2</i>
Over 5,500 HDD	19.5 3.8	92.4 113.5	30.7 37.7	8,988 11,043	726 890	2,144 2,302	8.1 8.1	4.8 7.5
2,000 CDD or More and Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit Single-Family	16.6	107.5	35.7	10,452	832	2,649	8.0	3.4
Mobile Home		98.1 59.2	32.6 19.7	9,544 5,763	797 496	981 995	8.3 8.6	9.6 7.4
Heated Floorspace (square feet)								
Fewer than 1,000	5.9 8.2	64.7 93.6	21.5 31.1	6,292 9,104	526 749	888 1,832	8.4 8.2	5.3 4.3
2,000 or More	9.2	117.8	39.1	11,462	902	3,289	7.9	3.6
Ownership of Unit Owned	16.2	107.5	35.7	10,452	836	2,551	8.0	3.4
Year of Construction	7.1	69.5	23.1	6,764	566	1,302	8.4	5.7
1939 or Before	7.4 11.7	83.9 97.9	27.9 32.5	8,163 9,519	667 785	2,276 2.054	8.2 8.3	4.9 4.2
1980 or After ²		111.7	37.1	10,861	816	2,309	7.5	6.1
1993 Family Income Less than \$10,000	3.0	74.5	24.7	7,243	588	1,354	8.1	8.5
\$10,000 to \$19,999	5.3	80.8	26.8	7,858	655	1,883	8.3	4.7
\$20,000 to \$34,999 \$35,000 to \$49,999	6.0 4.4	92.9 104.2	30.8 34.6	9,038 10,136	732 815	2,040 2,412	8.1 8.0	3.4 4.9
\$50,000 or More	4.6	123.4	41.0	12,005	944	2,974	7.9	4.7
Below Poverty Line 100 Percent	2.6	81.8	27.1	7,954	651	1,408	8.2	9.1
125 Percent	4.0	83.7	27.8	8,137	661	1,551	8.1	6.6
150 Percent	5.3	84.8	28.1	8,247	673	1,590	8.2	5.5
Age of Householder Under 35 Years	6.6	84.1	27.9	8,178	682	1,752	8.3	4.5
35 to 59 Years60 Years and Over	9.9 6.8	111.7 84.2	37.1 27.9	10,870 8,187	852 678	2,380 2,267	7.8 8.3	4.1 4.5
Household Size								
1 Person 2 to 4 Persons	6.1 14.9	59.9 106.2	19.9 35.2	5,831 10,327	503 823	1,556 2,384	8.6 8.0	5.8 3.4
5 or More Persons	2.3	125.3	41.6	12,184	966	2,423	7.9	4.6

Table 31. Electricity Consumption and Expenditures in Midwest Region Households, 1993 (Continued)

			Aver	age per Hous	sehold			
			Consumption					
	Households	Primary	Sit	е				
Characteristics	Using Electricity (million)	(million Btu)	(million Btu)	(kWh)	Expenditures (dollars)	Floorspace (square feet)	Expenditures (cents per kWh)	205
RSE Column Factor:	1.3	1.2	1.2	1.2	1.1	0.7	0.6	RSE Row Factors
East North Central Division	16.4	91.6	30.4	8,906	747	2,160	8.4	4.6
Climate Zone ¹								
Under 2,000 CDD and Over 5,500 HDD Under 5,500 HDD	14.4 Q	90.2 Q	29.9 Q	8,771 Q	726 Q	2,149 Q	8.3 Q	5.7 NF
2,000 CDD or More and Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit								
Single-Family	11.4	105.1	34.9	10,220	839	2,663	8.2	4.5
Mobile Home	0.9	97.3	32.3	9,466	815	1,004	8.6	12.7
Multifamily (2 or more units)	4.0	51.8	17.2	5,040	466	1,004	9.3	5.8
Heated Floorspace (square feet)								
Fewer than 1,000	4.0	57.7	19.2	5,615	496	862	8.8	5.9
1,000 to 1,999	5.8	91.7	30.4	8,924	763	1,828	8.6	5.2
2,000 or More	6.6	112.2	37.2	10,917	886	3,250	8.1	4.6
Ownership of Unit								
OwnedRented	11.2 5.1	105.1 61.9	34.9 20.5	10,219 6,017	844 532	2,560 1,280	8.3 8.8	4.3 4.6
	0	00	20.0	0,0	332	.,200	0.0	
Year of Construction 1939 or Before	4.9	82.8	27.5	8,055	677	2,280	8.4	6.4
1940 to 1979	8.8	94.6	31.4	9,204	783	2,042	8.5	5.3
1980 or After ²	2.7	97.6	32.4	9,492	757	2,327	8.0	7.5
1993 Family Income								
Less than \$10,000	2.0	67.7	22.5	6,587	565	1,292	8.6	8.9
\$10,000 to \$19,999	3.8	75.0	24.9	7,296	637	1,836	8.7	5.9
\$20,000 to \$34,999	4.0	89.9	29.8	8,744	736	2,092	8.4	4.6
\$35,000 to \$49,999 \$50,000 or More	3.0 3.5	96.9 119.9	32.2 39.8	9,428 11,660	788 943	2,360 2,900	8.4 8.1	6.2 5.8
	0.0		55.5	,000	0.0	2,000	0	0.0
Below Poverty Line 100 Percent	1.8	75.9	25.2	7,382	639	1,369	8.7	9.6
125 Percent	2.7	73.9 77.9	25.9	7,582	641	1,484	8.5	7.7
150 Percent	3.5	77.3	25.6	7,518	644	1,513	8.6	6.7
Age of Householder								
Under 35 Years	4.3	78.4	26.0	7,628	683	1,779	9.0	5.3
35 to 59 Years	7.2 4.9	105.8 82.1	35.1 27.2	10,292 7,985	830 679	2,354 2,211	8.1 8.5	5.4 4.8
	7.0	QZ.1	-1	,,500	0/0	<u>-,-11</u>	5.5	7.0
1 Person	4.4	56.9	18.9	5,531	492	1,521	8.9	7.1
2 to 4 Persons	10.4	102.4	34.0	9,965	828	2,398	8.3	4.4
5 or More Persons	1.6	117.4	39.0	11,423	929	2,390	8.1	6.0

Table 31. Electricity Consumption and Expenditures in Midwest Region Households, 1993 (Continued)

			Aver	age per Hous	sehold			
			Consumption					
	Households	Primary	Sit	Site				
Characteristics	Using Electricity (million)	(million Btu)	(million Btu)	(kWh)	Expenditures (dollars)	Floorspace (square feet)	Expenditures (cents per kWh)	
RSE Column Factor:	1.3	1.2	1.2	1.2	1.1	0.7	0.6	RSE Row Factors
West North Central Division	6.9	106.1	35.2	10,319	769	2,194	7.5	5.5
Climate Zone ¹								
Under 2,000 CDD and Over 5,500 HDD	5.0	98.8	32.8	9,611	728	2,130	7.6	8.2
Under 5,500 HDD		125.0	32.6 41.5	12,161	876	2,363	7.0 7.2	6.6
2,000 CDD or More and								
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit								
Single-Family	5.2	112.7	37.4	10,963	816	2,617	7.4	4.5
Mobile Home	0.5	99.7	33.1	9,702	760 507	937	7.8	12.3
Multifamily (2 or more units)	1.3	82.1	27.2	7,986	587	969	7.4	15.2
Heated Floorspace								
(square feet) Fewer than 1,000	1.8	80.0	26.5	7,778	592	945	7.6	8.3
1,000 to 1,999		97.9	32.5	9,526	715	1,842	7.5 7.5	7.0
2,000 or More		131.7	43.7	12,808	942	3,384	7.4	5.6
Ownership of Unit								
Owned	5.0	112.9	37.5	10,983	817	2,532	7.4	5.0
Rented	2.0	89.2	29.6	8,675	650	1,358	7.5	11.0
Year of Construction								
1939 or Before	2.5	86.1	28.6	8,375	648	2,268	7.7	6.5
1940 to 1979	3.0	107.5	35.7	10,457	794	2,091	7.6	5.7
1980 or After ²	1.5	136.7	45.4	13,301	923	2,277	6.9	7.9
1993 Family Income								
Less than \$10,000	0.9	88.7	29.5	8,632	637	1,486	7.4	16.3
\$10,000 to \$19,999	1.6	94.4	31.3	9,184	699	1,995	7.6	5.1
\$20,000 to \$34,999	2.0	98.9	32.8	9,621	726	1,937	7.5	4.5
\$35,000 to \$49,999 \$50,000 or More	1.4 1.0	120.1 135.9	39.9 45.1	11,684 13,222	874 945	2,526 3,238	7.5 7.1	7.0 8.5
	1.0	100.0	10.1	10,222	5-10	0,200		0.0
Below Poverty Line	0.0	04.4	24.0	0.404	077	4 404	7.4	47.4
100 Percent	0.8 1.4	94.4 94.8	31.3 31.5	9,184 9,221	677 699	1,491 1,681	7.4 7.6	17.4 11.1
150 Percent	1.8	99.0	32.9	9,634	728	1,735	7.6	8.5
Ago of Householder								
Age of Householder Under 35 Years	2.3	94.8	31.5	9,225	678	1,700	7.4	7.1
35 to 59 Years	2.7	127.4	42.3	12,390	909	2,450	7.3	5.7
60 Years and Over	2.0	89.3	29.6	8,688	678	2,407	7.8	9.0
Household Size								
1 Person	1.7	67.9	22.5	6,608	533	1,648	8.1	9.2
2 to 4 Persons	4.5	114.7	38.1	11,158	813	2,353	7.3	4.8
5 or More Persons	0.7	142.0	47.1	13,815	1,047	2,493	7.6	6.3

¹ Climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

² Does not include all new construction for 1993.

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. • Site electricity is the amount of electricity delivered to households. Primary electricity is site electricity plus the conversion losses in the electric generation process at the utility plant. • Because of rounding, data may not sum to totals. • See "Glossary" in *Household Energy Consumption and Expenditures 1993* for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C, and E of the 1993 Residential Energy Consumption

Survey.

Table 32. Natural Gas Consumption and Expenditures in Midwest Region Households, 1993

			Average pe	r Household			
	Households	Consu	mption				
Characteristics	Using Natural Gas (million)	(million Btu)	(thousand cf)	Expenditures (dollars)	Floorspace (square feet)	Expenditures (dollars per thousand cf)	
RSE Column Factor:	2.6	1.0	1.0	1.0	1.1	0.4	RSE Row Factors
			Mid	west Region			•
Total Region	17.5	118.4	115.1	637	2,152	5.53	1.9
Climate Zone:1							
Under 2,000 CDD and	44.0				0.400		
Over 5,500 HDD Under 5,500 HDD	14.8 2.6	117.8 121.6	114.6 118.3	633 657	2,120 2,334	5.53 5.56	2.4 6.3
2,000 CDD or More and	2.0	121.0	110.5	007	2,334	5.50	0.5
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit							
Single-Family	12.4	130.0	126.5	696	2,618	5.51	2.1
Mobile Home	0.8	92.7	90.2	493	1,028	5.47	8.3
Multifamily (2 or more units)	4.3	89.4	86.9	491	1,009	5.65	4.3
Heated Floorspace (square feet)							
Fewer than 1,000	4.4	79.7	77.6	437	871	5.64	4.6
1,000 to 1,999	6.2	120.3	117.0	650	1,818	5.56	2.6
2,000 or More	6.9	141.6	137.7	754	3,280	5.48	2.7
Ownership of Unit							
Owned	12.0	127.8	124.4	687	2,551	5.53	2.4
Rented	5.5	97.8	95.1	528	1,288	5.55	4.3
Year of Construction							
1939 or Before	5.7	137.6	133.9	749	2,167	5.60	4.1
1940 to 1979 1980 or After ²	9.0 2.8	112.7 97.0	109.7 94.4	598 531	2,011	5.46	2.4 5.5
1960 Of Alter	2.0	97.0	94.4	531	2,580	5.63	5.5
1993 Family Income							
Less than \$10,000	2.1	101.8	99.0	549	1,376	5.55	5.7
\$10,000 to \$19,999 \$20,000 to \$34,999	4.1 4.4	116.5 115.5	113.3 112.3	628 630	1,864 1,952	5.54 5.61	3.5 3.9
\$35,000 to \$49,999	3.2	121.8	118.5	659	2,389	5.57	3.6
\$50,000 or More	3.7	130.1	126.6	684	2,934	5.41	3.1
Below Poverty Line							
100 Percent	1.9	115.5	112.4	616	1,435	5.48	5.5
125 Percent	2.8	113.7	110.6	614	1,550	5.55	4.6
150 Percent	3.7	112.6	109.5	609	1,593	5.56	3.5
Age of Householder							
Under 35 Years	5.0	109.5	106.5	584	1,825	5.48	3.4
35 to 59 Years	7.5	122.1	118.8	660	2,356	5.56	2.3
60 Years and Over	5.0	121.6	118.3	655	2,173	5.54	3.3
Household Size							
1 Person	4.8	93.9	91.3	513	1,492	5.62	4.5
2 to 4 Persons 5 or More Persons	11.1	125.1	121.7	669 778	2,404	5.50 5.56	2.3
J OI WOLF FEISONS	1.6	143.8	139.9	778	2,368	5.56	3.9

Table 32. Natural Gas Consumption and Expenditures in Midwest Region Households, 1993 (Continued)

			Average pe	r Household			
	Households	Consu	mption				
Characteristics	Using Natural Gas (million)	(million Btu)	(thousand cf)	Expenditures (dollars)	Floorspace (square feet)	Expenditures (dollars per thousand cf)	
RSE Column Factor:	2.6	1.0	1.0	1.0	1.1	0.4	RSE Row Factors
East North Central Division	13.3	119.3	116.1	646	2,114	5.56	2.0
Climate Zone: ¹							
Under 2,000 CDD and							
Over 5,500 HDD	11.9	118.6	115.4	640	2,104	5.55	2.4
Under 5,500 HDD 2,000 CDD or More and	Q	Q	Q	Q	Q	Q	NF
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit							
Single-Family	9.1	132.8	129.2	715	2,618	5.53	2.2
Mobile Home	0.6	88.6	86.2	474	1,057	5.51	9.1
Multifamily (2 or more units)	3.6	90.2	87.7	498	1,009	5.68	4.7
Heated Floorspace							
(square feet) Fewer than 1.000	3.4	77.2	75.1	426	850	5.67	5.5
1,000 to 1,999	4.7	124.0	120.7	672	1,787	5.57	3.1
2,000 or More	5.2	142.2	138.4	763	3,224	5.51	3.1
Ownership of Unit							
Owned	8.9	130.5	126.9	705	2,534	5.55	2.6
Rented	4.4	97.1	94.5	527	1,274	5.58	4.7
Year of Construction							
1939 or Before	4.0	144.7	140.8	798	2,168	5.67	4.8
1940 to 1979	7.2	112.5	109.4	596	1,988	5.45	2.7
1980 or After ²	2.1	95.0	92.4	526	2,445	5.69	6.9
1993 Family Income							
Less than \$10,000 \$10.000 to \$19.999	1.6	101.6	98.8	552	1,282	5.59	6.4
\$20,000 to \$34,999	3.1 3.3	118.7 118.8	115.4 115.6	641 658	1,796 2,020	5.55 5.69	3.8 4.6
\$35,000 to \$49,999	2.4	123.3	120.0	669	2,324	5.58	4.3
\$50,000 or More	3.0	127.0	123.5	669	2,833	5.41	3.4
Below Poverty Line							
100 Percent	1.4	118.2	115.0	634	1,357	5.52	5.7
125 Percent	2.1 2.8	116.5 113.5	113.3 110.4	633 619	1,453 1,488	5.58 5.61	4.9 3.5
130 Fercent	2.0	113.3	110.4	019	1,400	3.01	3.3
Age of Householder	0.0	440.0	400.0	007	4.044	5.50	4.0
Under 35 Years35 to 59 Years	3.6 5.8	112.9 121.8	109.8 118.5	607 661	1,841 2,303	5.53 5.58	4.2 2.6
60 Years and Over	3.9	121.7	118.4	658	2,303 2,085	5.56 5.56	3.7
Household Size							
1 Person	3.8	93.0	90.4	511	1,439	5.65	5.3
2 to 4 Persons	8.3	127.2	123.8	683	2,389	5.52	2.5
5 or More Persons	1.3	145.8	141.8	802	2,312	5.65	4.3

Table 32. Natural Gas Consumption and Expenditures in Midwest Region Households, 1993 (Continued)

			Average pe	r Household				
	Households	Consu	ımption					
Characteristics	Using Natural Gas (million)	(million Btu)	(thousand cf)	Expenditures (dollars)	Floorspace (square feet)	Expenditures (dollars per thousand cf)		
RSE Column Factor:	2.6	2.6	1.0	1.0	1.0	1.1	0.4	RSE Row Factors
West North Central Division	4.1	115.2	112.0	609	2,274	5.44	5.1	
Climate Zone:1								
Under 2,000 CDD and								
Over 5,500 HDD	3.0	114.3	111.2	605	2,181	5.44	7.4	
Under 5,500 HDD 2,000 CDD or More and	1.1	117.3	114.1	618	2,516	5.42	5.6	
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	NF	
Type of Housing Unit								
Single-Family	3.3	122.1	118.8	644	2,618	5.43	5.2	
Mobile Home	Q	Q	Q	Q	Q	Q	NF	
Multifamily (2 or more units)	0.7	85.2	82.9	458	1,008	5.52	10.4	
Heated Floorspace								
(square feet)								
Fewer than 1,000	1.1	87.9	85.5	474	939	5.54	7.5	
1,000 to 1,999 2,000 or More	1.5 1.6	108.0 139.4	105.0 135.6	577 725	1,918 3,462	5.50 5.35	4.8 5.7	
0								
Ownership of Unit Owned	3.1	120.2	117.0	637	2,598	5.44	5.4	
Rented	1.1	100.7	97.9	529	1,349	5.40	7.0	
Year of Construction								
1939 or Before	1.7	121.0	117.7	635	2,163	5.39	8.2	
1940 to 1979	1.8	113.9	110.8	607	2,103	5.47	5.0	
1980 or After ²	0.7	103.6	100.7	549	3,008	5.44	6.6	
1993 Family Income								
Less than \$10,000	0.5	102.5	99.7	539	1,688	5.41	12.3	
\$10,000 to \$19,999	0.9	109.1	106.2	586	2,096	5.52	7.0	
\$20,000 to \$34,999 \$35,000 to \$49,999	1.2 0.8	106.1 117.2	103.2 114.0	552 630	1,761 2,579	5.34 5.53	5.5 6.0	
\$50,000 or More	0.8	142.5	138.6	747	3,332	5.39	7.3	
Below Poverty Line								
100 Percent	0.4	106.2	103.3	554	1,703	5.36	13.2	
125 Percent	0.7	105.0	102.2	554	1,854	5.42	11.5	
150 Percent	0.9	109.8	106.8	579	1,908	5.42	8.7	
Age of Householder								
Under 35 Years	1.4	100.4	97.7	522	1,782	5.35	5.6	
35 to 59 Years60 Years and Over	1.6 1.1	123.4 121.2	120.0 117.9	656 646	2,546 2,480	5.47 5.48	5.4 7.4	
	1.1	121.2	117.3	040	2,400	J. 4 0	7.4	
Household Size	1.0	07.2	04.6	F22	1 607	E E2	0.0	
1 Person 2 to 4 Persons	1.0 2.8	97.2 118.8	94.6 115.6	522 629	1,687 2,448	5.52 5.44	8.0 5.3	
5 or More Persons	0.4	136.9	133.1	694	2,565	5.22	7.9	

¹ Climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

² Does not include all new construction for 1993.

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" in Household Energy Consumption and Expenditures 1993 for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C, and F of the 1993 Residential Energy Consumption

Table 33. Fuel Oil Consumption and Expenditures in Midwest Region Households, 1993

			Average pe	er Household			
	Households	Consu	mption				
Characteristics	Using Fuel Oil (million)	(million Btu)	(gallons)	Expenditures (dollars)	Floorspace (square feet)	Expenditures (dollars per gallon)	
RSE Column Factor:	3.3	1.1	1.1	1.0	0.9	0.3	RSE Row Factors
							•
Total Region	1.4	91.6	664	570	2,663	0.86	4.7
East North Central Division	0.7	94.3	682	592	2,675	0.87	7.7
West North Central Division	0.6	88.4	642	544	2,648	0.85	6.0
Climate Zone:1							
Under 2,000 CDD and							
Over 5,500 HDD	1.3	91.6	664	571	2,677	0.86	5.3
			_		,		
Under 5,500 HDD	Q	Q	Q	Q	Q	Q	NF
2,000 CDD or More and							
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit							
Single-Family	1.3	92.9	673	577	2,716	0.86	4.9
Mobile Home	Q	Q Q	Q	Q	Q Q	Q	NF
Multifamily (2 or more units)	Q	Q	Q	Q	Q	Q	NF
Heated Floorspace (square feet)							
	0	^	0	0	^	0	NE
Fewer than 1,000	Q	Q	Q	Q	Q	Q	NF
1,000 to 1,999	0.5	80.4	582	520	2,046	0.89	8.2
2,000 or More	0.8	101.7	737	620	3,182	0.84	4.9
Ownership of Unit							
Owned	1.2	92.3	669	574	2,670	0.86	5.2
Rented	0.2	87.2	631	547	2,615	0.87	11.1
Year of Construction							
1939 or Before	0.7	101.9	738	635	2,672	0.86	5.4
1940 to 1979	0.6	81.3	590	505	2,661	0.86	5.9
1980 or After ²	Q	Q	Q	Q	Q Q	Q	NF
1993 Family Income							
Less than \$10,000	Q	Q	Q	Q	Q	Q	NF
\$10,000 to \$19,999	0.2	109.8	800	708	2,293	0.89	8.1
\$20,000 to \$34,999	0.5	91.5	662	559	2,798	0.84	6.7
					,		
\$35,000 to \$49,999	0.4	79.9	577	492	2,669	0.85	8.3
\$50,000 or More	0.2	94.8	686	554	3,347	0.81	16.6
Below Poverty Line							
100 Percent	Q	Q	Q	Q	Q	Q	NF
125 Percent	0.1	101.8	742	638	2,329	0.86	13.2
150 Percent	0.2	102.3	745	664	2,233	0.89	11.0
Age of Householder							
Under 35 Years	0.2	92.0	666	576	2,105	0.87	12.4
35 to 59 Years	0.5	80.0	580	496	2,792	0.86	7.5
60 Years and Over	0.6	101.1	733	629	2,772	0.86	8.0
Household Size							
1 Person	0.3	82.8	602	539	2,260	0.89	8.9
2 to 4 Persons	0.9	95.5	691	588	2,811	0.85	6.1
5 or More Persons	0.9						
J UI WILLE FEISUIS	U.Z	85.6	618	522	2,546	0.85	13.4

Climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.
Does not include all new construction for 1993.

percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals. • See "Glossary" in Household Energy Consumption and Expenditures 1993 for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C, and G of the 1993 Residential Energy Consumption Survey.

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: • Data in the East North Central and West North Central Divisions are not presented separately due to a scarcity of data. • To obtain the RSE

Table 34. Kerosene Consumption and Expenditures in Midwest Region Households, 1993

			Average pe	er Household			
	Households	Consu	mption				
Characteristics	Using Kerosene (million)	(million Btu)	(gallons)	Expenditures (dollars)	Floorspace (square feet)	Expenditures (dollars per gallon)	RSE
RSE Column Factor:	1.5	1.6	1.6	1.6	0.5	0.3	Row Factors
Total Pagion	1.0	6.0	4E	E 4	2.640	1 20	10.2
Total Region East North Central Division	1.0 0.9	6.0 6.1	45 45	54 54	2,640 2,608	1.20 1.19	19.3 21.7
West North Central Division	0.9	5.3	39	48	2,899	1.19	32.4
West North Central Division	0.1	0.0	00	40	2,000	1.21	02.4
Climate Zone: ¹							
Under 2,000 CDD and							
Over 5,500 HDD	0.7	6.5	48	57	2,896	1.19	24.2
Under 5,500 HDD	Q	Q	Q	44	Q	1.21	22.4
2,000 CDD or More and Under 4,000 HDD	Q	0	0	0	Q	0	NF
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	INF
Type of Housing Unit							
Single-Family	0.9	6.1	45	54	2,836	1.21	22.1
Mobile Home	Q	Q	Q	Q	Q	Q	NF
Multifamily (2 or more units)	Q	Q	Q	Q	Q	Q	NF
Heated Floorspace							
(square feet)	_	_	_		_	_	
Fewer than 1,000	Q	Q	Q	Q	Q	Q	NF
1,000 to 1,999 2,000 or More	0.4 0.5	5.1 Q	38 Q	47 Q	2,030 3,364	1.25 1.17	23.8 22.6
2,000 of More	0.5	Q	Q	Q	3,304	1.17	22.0
Ownership of Unit							
Owned	0.8	6.0	44	52	2,725	1.17	22.3
Rented	Q	Q	Q	Q	Q	Q	NF
Year of Construction						4.40	
1939 or Before	0.5	9.7	72	84	2,492	1.18	23.0
1940 to 1979 1980 or After ²	0.4	1.5	11 58	15	2,856	1.32	23.3
1980 Of Aller2	Q	7.9	36	69	Q	1.19	31.8
1993 Family Income							
Less than \$10,000	Q	Q	Q	Q	Q	Q	NF
\$10,000 to \$19,999	0.2	Q	Q	Q	2,400	1.17	51.2
\$20,000 to \$34,999	Q	Q	Q	Q	1,842	1.28	21.7
\$35,000 to \$49,999	0.2	2.0	15	19	2,724	1.23	13.8
\$50,000 or More	0.3	1.6	12	16	3,652	1.36	27.3
Below Poverty Line	•	•	_	•		•	
100 Percent	Q	Q	Q	Q	Q 4 705	Q	NF
125 Percent	0.2 0.2	Q Q	Q Q	Q Q	1,765 1,733	1.19 1.16	22.8 23.2
100 T Clouit	0.2	Q.	Q	· ·	1,700	1.10	20.2
Age of Householder							
Under 35 Years	0.2	3.9	29	Q	2,185	1.31	31.1
35 to 59 Years	0.6	3.3	24	31	2,704	1.27	20.0
60 Years and Over	0.2	Q	Q	Q	2,956	1.12	32.3
Household Size							
1 Person	Q	Q	Q	Q	Q	Q	NF
2 to 4 Persons	0.7	7.0	52	61	2,847	1.19	24.5
5 or More Persons	Q.	Q.	Q Q	Q	2,047 Q	Q	NF
	•	•	•	•	•	•	. •••

 $^{^1\,}$ Climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990. $^2\,$ Does not include all new construction for 1993. NF = No applicable RSE row factor.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C, and G of the 1993 Residential Energy Consumption Survey.

Q = Data withheld either because the Relative Standard Error (RSE) was greater than 50 percent or fewer than 10 households were sampled. Notes: • Data in the East North Central and West North Central Divisions are not presented separately due to a scarcity of data. • 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" in Household Energy Consumption and Expenditures 1993 for definition of terms used in this report.

Table 35. Liquefied Petroleum Gas Consumption and Expenditures in Midwest Region Households, 1993

			Average p	er Household			
	Households	Consu	mption				
Characteristics	Using LPG (million)	(million Btu)	(gallons)	Expenditures (dollars)	Floorspace (square feet)	Expenditures (dollars per gallon)	
RSE Column Factor:	3.1	1.0 1.0	0.9	1.1	0.3	RSE Row Factors	
			Mi	dwest Region			
Total Region	2.2	86.0	942	736	2,424	0.78	5.0
Climate Zone:1							
Under 2,000 CDD and							
Over 5,500 HDD	1.6	85.3	934	721	2,435	0.77	7.7
Under 5,500 HDD	Q	88.1	965	782	2,394	0.81	22.2
2,000 CDD or More and Under 4,000 HDD	Q	Q	Q	Q	Q	Q	NF
Olidei 4,000 HDD	Q	Q	Q	Q	Q	Q	INF
Type of Housing Unit							
Single-Family	1.7	91.6	1002	774	2,866	0.77	5.3
Mobile Home	0.5	68.6	751	619	872	0.82	7.7
Multifamily (2 or more units)	Q	Q	Q	Q	Q	Q	NF
Heated Floorspace							
(square feet)							
Fewer than 1,000	0.5	70.9	777	648	927	0.83	10.6
1,000 to 1,999	0.6	82.7	906	712	1,944	0.79	6.5
2,000 or More	1.0	95.5	1046	794	3,454	0.76	5.7
Ownership of Unit							
Owned	1.8	87.5	958	742	2,533	0.77	5.1
Rented	0.3	77.8	851	705	1,818	0.83	12.3
Year of Construction	4.0	01.0	007	774	2.760	0.70	6.5
1939 or Before	1.0 0.8	91.0 82.6	997 904	774 703	2,769 2,081	0.78 0.78	6.5 8.1
1980 or After ²	0.4	80.5	881	710	2,292	0.78	13.4
					_,		
1993 Family Income							
Less than \$10,000	0.2	103.6	1135	915	1,460	0.81	12.7
\$10,000 to \$19,999	0.5	64.1	702	557	1,813	0.79	8.5
\$20,000 to \$34,999	0.7	82.4	903	709 705	2,386	0.79	8.1
\$35,000 to \$49,999 \$50,000 or More	0.4 0.3	95.3 105.1	1043 1151	795 880	2,973 3,544	0.76 0.76	7.7 10.8
•					-,		
Below Poverty Line		a			4		,
100 Percent	0.3	87.5	958	783	1,332	0.82	15.3
125 Percent	0.5 0.6	81.6 78.9	893 864	711 696	1,420 1,509	0.80 0.81	8.8 8.9
100 i Giodit	0.0	10.3	504	030	1,503	0.01	0.3
Age of Householder							
Under 35 Years	0.5	65.1	712	577	1,613	0.81	7.5
35 to 59 Years	1.0	93.5	1024	805	2,605	0.79	8.0
60 Years and Over	0.7	91.4	1001	758	2,803	0.76	8.2
Household Size							
1 Person	0.3	94.3	1033	794	1,825	0.77	8.9
2 to 4 Persons	1.5	86.3	945	740	2,517	0.78	7.0
5 or More Persons	0.4	77.9	853	674	2,581	0.79	9.6

Table 35. Liquefied Petroleum Gas Consumption and Expenditures in Midwest Region Households, 1993 (Continued)

			Average pe	er Household			
	Households	Consu	mption			Fdit	
Characteristics	Using LPG (million)	(million Btu)	(gallons)	Expenditures (dollars)	Floorspace (square feet)	Expenditures (dollars per gallon)	505
RSE Column Factor:	3.1	1.0	1.0	0.9	1.1	0.3	RSE Row Factors
East North Central Division	1.1	96.2	1053	834	2,648	0.79	8.0
Climate Zone:1							
Under 2,000 CDD and							
Over 5,500 HDD	0.9	92.9	1018	805	2,571	0.79	11.3
Under 5,500 HDD 2,000 CDD or More and	Q	Q	Q	Q	Q	Q	NF
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit							
Single-Family	0.8	106.4	1165	910	3,203	0.78	7.4
Mobile Home	Q.0	63.0	690	586	837	0.85	7.7
Multifamily (2 or more units)	ã	Q	Q	Q	Q	Q	NF
Heated Floorspace (square feet)							
Fewer than 1,000	0.3	76.5	838	716	918	0.86	18.2
1,000 to 1,999	0.3	100.6	1101	884	2,166	0.80	8.6
2,000 or More	0.6	103.5	1133	865	3,701	0.76	7.8
Ownership of Unit	0.0	07.0	4000	0.40	0.047	0.70	
Owned	0.9 0.2	97.3 90.2	1066 987	842 788	2,817 1,721	0.79 0.80	7.7 12.6
Noned	0.2	30.2	307	700	1,721	0.00	12.0
Year of Construction							
1939 or Before	0.5	100.7	1102	875	3,089	0.79	10.4
1940 to 1979 1980 or After ²	0.4 0.2	94.2 89.3	1032 977	811 777	2,084 2,559	0.79 0.80	13.1 18.7
					,		
1993 Family Income	Q	Q	Q	Q	Q	0	NF
Less than \$10,000 \$10.000 to \$19.999	0.2	65.7	720	562	1,985	Q 0.78	14.0
\$20,000 to \$34,999	0.2	87.7	961	804	2,483	0.78	16.2
\$35,000 to \$49,999	0.2	118.3	1295	998	3,252	0.77	7.7
\$50,000 or More	0.2	122.8	1344	1011	3,846	0.75	9.4
Below Poverty Line							
100 Percent	Q	Q	Q	Q	Q	Q	NF
125 Percent	0.2	77.5	849	686	1,309	0.81	13.9
150 Percent	0.2	80.5	882	720	1,288	0.82	12.7
Age of Householder							
Under 35 Years	Q	67.6	740	616	1,405	0.83	14.0
35 to 59 Years	0.5	111.1	1217	972	2,804	0.80	11.2
60 Years and Over	0.3	93.0	1018	774	3,217	0.76	8.4
Household Size							
1 Person	Q	Q	Q	Q	Q	Q	NF
2 to 4 Persons	0.7	94.1	1030	810	2,690	0.79	11.5
5 or More Persons	0.2	83.3	912	737	2,799	0.81	15.9

Table 35. Liquefied Petroleum Gas Consumption and Expenditures in Midwest Region Households, 1993 (Continued)

			Average po	er Household			
	Households	Consu	mption				
Characteristics	Using LPG (million)	(million Btu)	(gallons)	Expenditures (dollars)	Floorspace (square feet)	Expenditures (dollars per gallon)	
RSE Column Factor:	3.1	1.0	1.0	0.9	1.1	0.3	RSE Row Factors
West North Central Division	1.1	76.0	832	639	2,204	0.77	6.6
Climate Zone: ¹							
Under 2,000 CDD and							
Over 5,500 HDD	0.7	75.7	829	614	2,264	0.74	7.0
Under 5,500 HDD 2,000 CDD or More and	Q	76.5	837	688	Q	0.82	23.1
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit							
Single-Family	0.9	77.4	848	644	2,544	0.76	7.6
Mobile Home	0.2	75.2	824	659	915	0.80	11.7
Multifamily (2 or more units)	Q	Q	Q	Q	Q	Q	NF
Heated Floorspace (square feet)							
Fewer than 1,000	0.3	65.4	716	580	936	0.81	10.9
1,000 to 1,999	0.3	68.7	752	576	1,771	0.77	14.4
2,000 or More	0.5	86.6	949	714	3,177	0.75	7.0
Ownership of Unit							
Owned	0.9	77.9	853	643	2,254	0.75	6.6
Rented	0.2	65.0	711	619	1,918	0.87	20.6
Year of Construction							
1939 or Before	0.5	80.8	885	667	2,430	0.75	7.1
1940 to 1979	0.5	73.9	809	623	2,079	0.77	7.9
1980 or After ²	Q	66.6	729	604	1,867	0.83	19.1
1993 Family Income							
Less than \$10,000	Q	109.0	1193	944	Q	0.79	16.6
\$10,000 to \$19,999	0.3	62.7	686	553	1,660	0.81	10.4
\$20,000 to \$34,999 \$35,000 to \$49,999	0.4 0.2	78.0 73.1	854 801	629 601	2,304 2,704	0.74 0.75	7.4 12.9
\$50,000 to \$49,999 \$50,000 or More	Q.2	73.1 Q	Q	Q	2,704 Q	0.73 Q	NF
Polosy Posycrty Line							
Below Poverty Line 100 Percent	Q	101.5	1111	882	Q	0.79	12.7
125 Percent	0.3	84.7	927	731	1,505	0.79	11.5
150 Percent	0.3	77.9	853	680	1,656	0.80	12.7
Age of Householder							
Under 35 Years	0.3	63.2	692	549	1,767	0.79	8.8
35 to 59 Years	0.5	75.4	826	633	2,400	0.77	8.7
60 Years and Over	Q	89.6	981	740	2,322	0.75	16.7
Household Size				_			
1 Person	0.2	70.0	767	555	1,441	0.72	14.0
2 to 4 Persons 5 or More Persons	0.7	78.2	856 804	666 620	2,333	0.78	7.2
O OI WILLE LEISONS	0.2	73.5	804	620	2,397	0.77	9.3

¹ Climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

² Does not include all new construction for 1993.

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" in Household Energy Consumption and Expenditures 1993 for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C, and D of the 1993 Residential Energy

Consumption Survey.

Table 36. Wood Consumption in Midwest Region Households, December 1992 Through November 1993

		House	holds Using	g Wood		Wo	od Used as	Main Spac	e-Heating	Fuel	
			Consu	mption				Consu	mption		
		To	otal		ge per ehold		To	otal		ige per sehold	
Characteristics	House- holds (mil- lions)	(quad- rillion Btu	(million cords)	(million Btu)	(cords)	House- holds (mil- lions)	(quad- rillion Btu	(million cords)	(million Btu)	(cords)	RSE
RSE Column Factor:	0.7	1.0	1.0	0.7	0.7	1.4	1.7	1.7	0.8	0.8	Row Fac- tors
Total Region	4.1 2.6 1.5	0.11 0.07 0.04	5.5 3.4 2.1	27.2 26.2 28.9	1.4 1.3 1.4	0.4 0.2 Q	0.05 0.03 Q	2.5 1.5 Q	129.0 136.9 118.7	6.4 6.8 5.9	21.4 27.5 31.4
Climate Zone ¹ Under 2,000 CDD and Over 5,500 HDD	3.1	0.08	4.1	26.3	1.3	0.2	0.03	1.7	148.3	7.4	24.3
Under 5,500 HDD2,000 CDD or More and Under 4,000 HDD	1.0 Q	Q Q	Q Q	30.0 Q	1.5 Q	Q Q	Q Q	Q Q	102.0 Q	5.1 Q	59.2 NF
	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	INF
Type of Housing Unit Single-Family Mobile Home Multifamily (2 or more units)	3.8 0.2 Q	0.10 Q Q	5.1 Q Q	26.4 Q Q	1.3 Q Q	0.3 Q Q	0.04 Q Q	2.2 Q Q	125.6 Q Q	6.3 Q Q	19.2 53.6 NF
Heated Floorspace											
(square feet) Fewer than 1,000	0.2 1.1 2.8	Q 0.02 0.08	Q 1.0 3.8	Q 19.3 26.7	Q 1.0 1.3	Q Q 0.2	Q Q 0.03	Q Q 1.5	Q Q 143.5	Q Q 7.2	59.2 24.7 24.0
	2.0	0.00	3.0	20.7	1.5	0.2	0.03	1.5	143.3	7.2	24.0
Ownership of Unit Owned Rented	3.9 0.2	0.11 (*)	5.3 0.2	27.4 23.2	1.4 1.2	0.4 Q	0.05 Q	2.4 Q	132.5 Q	6.6 Q	22.1 47.6
Year of Construction 1939 or Before	0.7	0.04	2.0	53.4	2.7	0.2	0.03	1.3	147.7	7.4	28.1
1940 to 1979 1980 or After ²	2.3 1.0	0.05 0.02	2.6 1.0	22.6 18.6	1.1 0.9	0.1 Q	Q Q	Q Q	117.7 Q	5.9 Q	30.3 20.5
1993 Family Income	•										
Less than \$10,000	Q 0.5 0.7 1.0	Q 0.02 0.02 0.03	Q 1.0 1.2 1.3	Q 39.2 34.5 27.3	Q 2.0 1.7 1.4	Q Q Q 0.1	Q Q Q	Q Q Q	Q Q Q 123.2	Q Q Q 6.2	NF 50.2 32.3 39.3
\$50,000 or More	1.9	0.04	1.8	18.9	0.9	Q	Q	Q	Q	Q	25.8
Below Poverty Line 100 Percent	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	NF NF
150 Percent	0.4	Q	Q	Q	Q	Q	Q	Q	Q	Q	62.9
Age of Householder Under 35 Years	0.7 2.5 0.9	Q 0.07 0.03	Q 3.4 1.4	21.1 27.4 31.2	1.1 1.4 1.6	Q 0.2 Q	Q 0.03 Q	Q 1.4 Q	Q 119.7 Q	Q 6.0 Q	43.8 20.4 45.6
Household Size	0.8	0.03	1.4	J1.Z	1.0	Ų	Q	Q	Q	Q	40.0
1 Person	0.3 3.2 0.6	Q 0.08 0.02	Q 4.2 1.1	Q 26.4 39.9	Q 1.3 2.0	Q 0.3 0.1	Q 0.03 0.01	Q 1.7 0.7	Q 132.1 117.2	Q 6.6 5.9	33.3 19.2 39.4

Table 36. Wood Consumption in Midwest Region Households, December 1992 Through November 1993 (Continued)

		House	holds Using	g Wood		Wo	od Used as	Main Spac	e-Heating I	Fuel	
			Consu	mption				Consu	mption		
		Total		Average per Household			To	otal	Average per Household		
	House- holds (mil- lions)	(quad- rillion Btu	(million cords)	(million Btu)	(cords)	House- holds (mil- lions)	(quad- rillion Btu	(million cords)	(million Btu)	(cords)	
Characteristics											RSE Row
RSE Column Factor:	0.7	1.0	1.0	0.7	0.7	1.4	1.7	1.7	0.8	0.8	Fac- tors
	1					1					
Main Heating Fuel											
Main Heating Fuel Natural Gas	2.5	0.03	1.7	13.9	0.7						23.7
Natural GasElectricity	0.6	0.03 0.01	1.7 0.5	13.9 15.2	0.7 0.8	 	 	 	 	 	23.7 34.6
Natural Gas	0.6										
Natural GasElectricity	0.6 0.2	0.01	0.5	15.2	0.8						34.6
Natural Gas Electricity Fuel Oil or Kerosene	0.6 0.2 0.4	0.01 Q	0.5 Q	15.2 38.0	0.8 1.9			 	 	 	34.6 55.3
Natural Gas	0.6 0.2 0.4 0.2 Q	0.01 Q 0.05	0.5 Q 2.5	15.2 38.0 129.0	0.8 1.9 6.4	 0.4	 0.05	 2.5	 129.0	 6.4	34.6 55.3 26.2
Natural Gas Electricity Fuel Oil or Kerosene Wood Heating Stove	0.6 0.2 0.4 0.2 Q	0.01 Q 0.05 0.02	0.5 Q 2.5 1.2	15.2 38.0 129.0 103.6	0.8 1.9 6.4 5.2	 0.4 0.2	 0.05 0.02	 2.5 1.2	 129.0 103.6	 6.4 5.2	34.6 55.3 26.2 38.1
Natural Gas Electricity Fuel Oil or Kerosene Wood Heating Stove Fireplace	0.6 0.2 0.4 0.2 Q 0.1	0.01 Q 0.05 0.02 Q	0.5 Q 2.5 1.2 Q	15.2 38.0 129.0 103.6 Q	0.8 1.9 6.4 5.2 Q	 0.4 0.2 Q	 0.05 0.02 Q	 2.5 1.2 Q	 129.0 103.6 Q	 6.4 5.2 Q	34.6 55.3 26.2 38.1 NF
Natural Gas	0.6 0.2 0.4 0.2 Q 0.1 0.3	0.01 Q 0.05 0.02 Q 0.02	0.5 Q 2.5 1.2 Q 1.1	15.2 38.0 129.0 103.6 Q 193.8	0.8 1.9 6.4 5.2 Q 9.7	 0.4 0.2 Q 0.1	 0.05 0.02 Q 0.02	 2.5 1.2 Q 1.1	 129.0 103.6 Q 193.8	 6.4 5.2 Q 9.7	34.6 55.3 26.2 38.1 NF 24.5
Natural Gas	0.6 0.2 0.4 0.2 Q 0.1 0.3	0.01 Q 0.05 0.02 Q 0.02 Q	0.5 Q 2.5 1.2 Q 1.1 Q	15.2 38.0 129.0 103.6 Q 193.8 23.7	0.8 1.9 6.4 5.2 Q 9.7 1.2	0.4 0.2 Q 0.1	 0.05 0.02 Q 0.02	 2.5 1.2 Q 1.1	129.0 103.6 Q 193.8	 6.4 5.2 Q 9.7	34.6 55.3 26.2 38.1 NF 24.5 56.0
Natural Gas	0.6 0.2 0.4 0.2 Q 0.1 0.3 Q	0.01 Q 0.05 0.02 Q 0.02 Q	0.5 Q 2.5 1.2 Q 1.1 Q	15.2 38.0 129.0 103.6 Q 193.8 23.7	0.8 1.9 6.4 5.2 Q 9.7 1.2	0.4 0.2 Q 0.1	 0.05 0.02 Q 0.02	 2.5 1.2 Q 1.1	129.0 103.6 Q 193.8	 6.4 5.2 Q 9.7	34.6 55.3 26.2 38.1 NF 24.5 56.0
Natural Gas	0.6 0.2 0.4 0.2 Q 0.1 0.3 Q	0.01 Q 0.05 0.02 Q 0.02 Q	0.5 Q 2.5 1.2 Q 1.1 Q	15.2 38.0 129.0 103.6 Q 193.8 23.7 Q	0.8 1.9 6.4 5.2 Q 9.7 1.2 Q	 0.4 0.2 Q 0.1	 0.05 0.02 Q 0.02	 2.5 1.2 Q 1.1 	129.0 103.6 Q 193.8	 6.4 5.2 Q 9.7	34.6 55.3 26.2 38.1 NF 24.5 56.0 NF
Natural Gas Electricity Fuel Oil or Kerosene Wood Heating Stove Fireplace Furnace/Other LPG Other Secondary Heating Equipment Used Amount of Wood Burned in Past	0.6 0.2 0.4 0.2 Q 0.1 0.3 Q	0.01 Q 0.05 0.02 Q 0.02 Q	0.5 Q 2.5 1.2 Q 1.1 Q	15.2 38.0 129.0 103.6 Q 193.8 23.7 Q	0.8 1.9 6.4 5.2 Q 9.7 1.2 Q	 0.4 0.2 Q 0.1	 0.05 0.02 Q 0.02	 2.5 1.2 Q 1.1 	129.0 103.6 Q 193.8	 6.4 5.2 Q 9.7	34.6 55.3 26.2 38.1 NF 24.5 56.0 NF
Natural Gas	0.6 0.2 0.4 0.2 Q 0.1 0.3 Q	0.01 Q 0.05 0.02 Q 0.02 Q Q	0.5 Q 2.5 1.2 Q 1.1 Q	15.2 38.0 129.0 103.6 Q 193.8 23.7 Q	0.8 1.9 6.4 5.2 Q 9.7 1.2 Q	0.4 0.2 Q 0.1	 0.05 0.02 Q 0.02 	2.5 1.2 Q 1.1 	129.0 103.6 Q 193.8 	 6.4 5.2 Q 9.7 	34.6 55.3 26.2 38.1 NF 24.5 56.0 NF
Natural Gas Electricity Fuel Oil or Kerosene Wood Heating Stove Fireplace Furnace/Other LPG Other Secondary Heating Equipment Used Amount of Wood Burned in Past 12 Months Less than one-half Cord	0.6 0.2 0.4 0.2 Q 0.1 0.3 Q	0.01 Q 0.05 0.02 Q 0.02 Q 0.02	0.5 Q 2.5 1.2 Q 1.1 Q 0.8	15.2 38.0 129.0 103.6 Q 193.8 23.7 Q 78.0	0.8 1.9 6.4 5.2 Q 9.7 1.2 Q	0.4 0.2 Q 0.1 	 0.05 0.02 Q 0.02 Q	2.5 1.2 Q 1.1 	129.0 103.6 Q 193.8 Q	 6.4 5.2 Q 9.7 	34.6 55.3 26.2 38.1 NF 24.5 56.0 NF
Natural Gas	0.6 0.2 0.4 0.2 Q 0.1 0.3 Q	0.01 Q 0.05 0.02 Q 0.02 Q 0.02 Q	0.5 Q 2.5 1.2 Q 1.1 Q 0.8	15.2 38.0 129.0 103.6 Q 193.8 23.7 Q 78.0	0.8 1.9 6.4 5.2 Q 9.7 1.2 Q	0.4 0.2 Q 0.1 	 0.05 0.02 Q 0.02 Q	2.5 1.2 Q 1.1 	129.0 103.6 Q 193.8 Q	 6.4 5.2 Q 9.7 Q	34.6 55.3 26.2 38.1 NF 24.5 56.0 NF 38.2
Natural Gas Electricity Fuel Oil or Kerosene Wood Heating Stove Fireplace Furnace/Other LPG Other Secondary Heating Equipment Used Amount of Wood Burned in Past 12 Months Less than one-half Cord One-half to Less than 1 1 to Less than 2	0.6 0.2 0.4 0.2 Q 0.1 0.3 Q 0.2	0.01 Q 0.05 0.02 Q 0.02 Q 0.02 Q 0.02	0.5 Q 2.5 1.2 Q 1.1 Q 0.8	15.2 38.0 129.0 103.6 Q 193.8 23.7 Q 78.0	0.8 1.9 6.4 5.2 Q 9.7 1.2 Q 3.9	0.4 0.2 Q 0.1 Q	 0.05 0.02 Q 0.02 Q	2.5 1.2 Q 1.1 Q	129.0 103.6 Q 193.8 Q	 6.4 5.2 Q 9.7 Q	34.6 55.3 26.2 38.1 NF 24.5 56.0 NF 38.2
Natural Gas Electricity Fuel Oil or Kerosene Wood Heating Stove Fireplace Furnace/Other LPG Other Secondary Heating Equipment Used Amount of Wood Burned in Past 12 Months Less than one-half Cord One-half to Less than 1 1 to Less than 2 2 to 4 Cords More than 4 Cords	0.6 0.2 0.4 0.2 Q 0.1 0.3 Q 0.2	0.01 Q 0.05 0.02 Q 0.02 Q 0.02 O.01 0.01 (*) 0.02	0.5 Q 2.5 1.2 Q 1.1 Q 0.8	15.2 38.0 129.0 103.6 Q 193.8 23.7 Q 78.0 3.4 11.5 20.9 53.6	0.8 1.9 6.4 5.2 Q 9.7 1.2 Q 3.9	 0.4 0.2 Q 0.1 Q	 0.05 0.02 Q 0.02 Q	2.5 1.2 Q 1.1 	129.0 103.6 Q 193.8 Q	 6.4 5.2 Q 9.7 Q	34.6 55.3 26.2 38.1 NF 24.5 56.0 NF 38.2
Natural Gas Electricity Fuel Oil or Kerosene Wood Heating Stove Fireplace Furnace/Other LPG Other Secondary Heating Equipment Used Amount of Wood Burned in Past 12 Months Less than one-half Cord One-half to Less than 1 1 to Less than 2 2 to 4 Cords	0.6 0.2 0.4 0.2 Q 0.1 0.3 Q 0.2 2.0 1.0 0.2 0.4 0.4	0.01 Q 0.05 0.02 Q 0.02 Q 0.02 O.01 0.01 (*) 0.02	0.5 Q 2.5 1.2 Q 1.1 Q 0.8	15.2 38.0 129.0 103.6 Q 193.8 23.7 Q 78.0 3.4 11.5 20.9 53.6	0.8 1.9 6.4 5.2 Q 9.7 1.2 Q 3.9	 0.4 0.2 Q 0.1 Q	 0.05 0.02 Q 0.02 Q	2.5 1.2 Q 1.1 	129.0 103.6 Q 193.8 Q	 6.4 5.2 Q 9.7 Q	34.6 55.3 26.2 38.1 NF 24.5 56.0 NF 38.2

¹ Climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, and C of the 1993 Residential Energy Consumption Survey.

² Does not include all new construction for 1993.

^{(*) =} Value rounds to zero in the units displayed. -- = Data not applicable.

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: • Data in the East North Central and West North Central Divisions are not presented separately due to a scarcity of data. • 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" in Household Energy Consumption and Expenditures 1993 for definition of terms used in this report.

Table 37. Average Expenditures for Major Energy Sources in Midwest Region Households, 1993

(Dollars per Million Btu)

Characteristics	Major Energy Sources ¹	Electricity	Natural Gas	Fuel Oil	Kerosene	Liquefied Petroleum Gas	505
RSE Column Factor:	1.4	1.0	0.5	0.7	2.6	0.9	RSE Row Factors
			Mid	west Region			•
otal Region	9.9	23.7	5.4	6.2	8.9	8.6	2.3
limate Zone ²							
Under 2,000 CDD and							
Over 5,500 HDD	9.8	23.7	5.4	6.2	8.8	8.4	2.8
Under 5,500 HDD	10.8	23.6	5.4	Q Q	8.9	8.9	3.9
2,000 CDD or More and	. 5.0	_5.0	J. 1	•	0.0	0.0	0.0
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	NF
011d01 1,000 11DD	•	•	•	•	•	•	
pe of Housing Unit							
ingle-Family	9.9	23.3	5.4	6.2	8.9	8.5	2.5
Nobile Home	12.0	24.5	5.3	Q	Q	9.0	5.3
fultifamily (2 or more units)	9.7	25.2	5.5	Q	Q	9.0 Q	3.9
iditilarilly (2 or filore drifts)	9.7	23.2	5.5	Q	Q	Q	3.9
eated Floorspace							
quare feet)							
ewer than 1,000	10.4	24.5	5.5	Q	Q	9.1	3.2
,000 to 1,999	10.0	24.1	5.4	6.5	9.3	8.6	2.3
,000 or More	9.8	23.1	5.3	6.1	8.7	8.3	2.9
vnership of Unit							
whership of onit	10.0	23.4	5.4	6.2	8.7	8.5	2.3
lented	9.7	24.5	5.4	6.3	0.7 Q	9.1	3.7
terited	5.1	24.5	3.4	0.3	Q	9.1	3.7
ar of Construction							
939 or Before	9.0	23.9	5.4	6.2	8.7	8.5	2.8
940 to 1979	10.2	24.2	5.3	6.2	9.7	8.5	2.6
980 or After ³	11.3	22.0	5.5 5.5	0.2 Q	9.7 8.8	8.8	3.6
900 Of Aiters	11.3	22.0	3.3	Q	0.0	0.0	3.0
93 Family Income							
ess than \$10,000	9.9	23.8	5.4	Q	Q	8.8	3.9
10,000 to \$19,999	9.6	24.4	5.4	6.5	8.7	8.7	3.9
		23.8	5.4 5.5		9.5	8.6	3.9
20,000 to \$34,999	10.0			6.1			
35,000 to \$49,999	10.2	23.6	5.4	6.2	9.1	8.3	2.6
50,000 or More	10.0	23.0	5.3	5.8	10.0	8.4	4.1
New Poverty Line							
elow Poverty Line	0.0	24.0	F O	0	^	0.0	4.0
00 Percent	9.8	24.0	5.3	Q	Q	8.9	4.2
25 Percent	10.0	23.8	5.4	6.3	8.8	8.7	2.9
50 Percent	10.0	23.9	5.4	6.5	8.6	8.8	2.9
a of Householder							
ge of Householder Inder 35 Years	10.0	24.4	F 2	6.2	9.7	٥ ٥	2.8
		24.4	5.3	6.3		8.9	
5 to 59 Years 0 Years and Over	10.2 9.5	23.0 24.3	5.4 5.4	6.2 6.2	9.4 8.3	8.6 8.3	2.7 3.0
7 I EaiS allu Ovel	9.5	∠4.3	ა.4	0.2	0.3	0.3	3.0
usehold Size							
Person	9.5	2F 2	5.5	6.5	Q	8.4	2.2
		25.3					3.3
to 4 Persons	10.0	23.4	5.3	6.2	8.8	8.6	2.7 2.9
or More Persons	10.2	23.2	5.4	6.1	Q	8.6	

Table 37. Average Expenditures for Major Energy Sources in Midwest Region Households, 1993 (Continued)

(Dollars per Million Btu)

Characteristics	Major Energy Sources ¹	Electricity	Natural Gas	Fuel Oil	Kerosene	Liquefied Petroleum Gas	
RSE Column Factor:	1.4	1.0	0.5	0.7	2.6	0.9	RSE Row Factors
East North Central Division	9.8	24.6	5.4	6.3	8.8	8.7	2.9
2							
Climate Zone ² Under 2,000 CDD and							
	9.7	24.3	E 1	6.3	8.8	8.7	2.0
Over 5,500 HDD			5.4				3.6
Under 5,500 HDD	Q	Q	Q	Q	Q	Q	NF
2,000 CDD or More and	0	0	0	0	0	0	NIE
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit							
Single-Family	9.8	24.1	5.4	6.3	8.9	8.6	3.1
Mobile Home	12.1	25.2	5.4	Q	Q	9.3	6.5
Multifamily (2 or more units)	9.3	27.1	5.5	Q	Q	Q	2.7
Hart IEL							
Heated Floorspace							
(square feet)	40.4	05.0		•	•	0.4	0.4
Fewer than 1,000	10.1	25.9	5.5	Q	Q	9.4	3.4
1,000 to 1,999	9.8	25.1	5.4	6.7	9.5	8.8	2.8
2,000 or More	9.7	23.8	5.4	6.1	8.6	8.4	3.6
Ownership of Unit							
Owned	9.9	24.2	5.4	6.3	8.6	8.7	3.1
Rented	9.4	25.9	5.4	Q	Q	8.7	3.1
Year of Construction							
1939 or Before	9.0	24.6	5.5	6.4	8.7	8.7	3.5
1940 to 1979	10.1	24.9	5.3	6.2	9.8	8.6	3.3 4.4
1980 or After ³	10.8	23.4	5.5	Q	Q	8.7	4.4
1993 Family Income							
Less than \$10,000	9.6	25.1	5.4	Q	Q	Q	4.5
\$10,000 to \$19,999	9.3	25.6	5.4	Q	Q	8.6	3.9
\$20,000 to \$34,999	9.9	24.7	5.5	6.3	Q	9.2	3.4
\$35,000 to \$49,999	9.9	24.5	5.4	6.1	Q	8.4	3.8
\$50,000 or More	10.1	23.7	5.3	Q	10.1	8.2	5.0
Below Poverty Line							
100 Percent	9.5	25.4	5.4	Q	Q	Q	4.9
125 Percent	9.6	24.8	5.4	Q	Q	8.8	3.5
150 Percent	9.7	25.1	5.5	Q	8.8	8.9	3.1
Age of Householder	2.2	00.0	<i></i>	6	•	2.4	
Under 35 Years	9.8	26.3	5.4	Q	Q	9.1	3.3
35 to 59 Years60 Years and Over	10.0 9.4	23.6 24.9	5.4 5.4	6.2 6.3	9.7 Q	8.7 8.3	3.5 3.6
00 1 Gai 3 ailu Ovel	J. 4	∠+.3	J. 4	0.5	Q	0.3	3.0
Household Size							
1 Person	9.4	26.1	5.5	Q	Q	Q	3.4
2 to 4 Persons	9.9	24.3	5.4	6.2	8.8	8.6	3.4
5 or More Persons	9.9	23.8	5.5	Q	Q	8.9	3.7

Table 37. Average Expenditures for Major Energy Sources in Midwest Region Households, 1993 (Continued)

(Dollars per Million Btu)

Characteristics	Major Energy Sources ¹	Electricity	Natural Gas	Fuel Oil	Kerosene	Liquefied Petroleum Gas	
RSE Column Factor:	1.4	1.0	0.5	0.7	2.6	0.9	RSE Row Factors
West North Central Division	10.4	21.8	5.3	6.1	9.0	8.4	3.4
Climate Zone ²							
Under 2,000 CDD and							
Over 5,500 HDD	10.1	22.2	5.3	6.1	Q	8.1	4.1
Under 5,500 HDD	10.9	21.1	5.3	Q	Q	9.0	4.5
2,000 CDD or More and			0.0	~	~	0.0	
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	NF
Towns of Housing Hold							
Type of Housing Unit	10.1	21.8	5.3	6.1	10.4	8.3	3.1
Single-Family Mobile Home	12.0	23.0	5.3 Q	0.1 Q		8.8	3.1 8.4
Multifamily (2 or more units)	12.0	23.0 21.6	5.4	Q Q	Q Q	0.0 Q	7.3
Multilatrilly (2 of more units)	11.3	21.0	3.4	Q	Q	Q	7.3
Heated Floorspace							
(square feet)							
Fewer than 1,000	10.9	22.3	5.4	Q	Q	8.9	6.1
1,000 to 1,999	10.4	22.0	5.3	6.1	Q	8.4	3.5
2,000 or More	10.1	21.5	5.2	6.1	Q	8.2	3.7
Ownership of Unit							
Owned	10.2	21.8	5.3	6.1	9.0	8.3	3.3
Rented	10.8	22.0	5.3	Q	Q	9.5	4.7
Year of Construction							
1939 or Before	9.2	22.7	5.2	6.1	Q	8.2	4.3
1940 to 1979	10.6	22.2	5.3	6.3	Q	8.4	3.7
1980 or After ³	12.5	20.3	5.3	Q	Q	9.1	3.7
4002 Family language							
1993 Family Income Less than \$10,000	10.6	21.6	5.3	Q	Q	8.7	6.6
\$10,000 to \$19,999	10.5	22.3	5.3 5.4	6.2	Q	8.8	4.7
\$20,000 to \$34,999	10.3	22.1	5.2	6.0	Q	8.1	3.2
\$35,000 to \$49,999	10.2	21.9	5.4	6.3	Q	8.2	4.1
\$50,000 or More	9.8	20.9	5.2	Q	Q	Q	5.2
Bullon Brook I Lan							
Below Poverty Line	40.7	04.0	F 0	0	^	0.7	
100 Percent	10.7	21.6	5.2	Q	Q	8.7	6.3
125 Percent	10.9	22.2 22.2	5.3	Q Q	Q Q	8.6	5.3 4.2
150 Percent	10.8	22.2	5.3	Q	Q	8.7	4.2
Age of Householder							
Under 35 Years	10.3	21.6	5.2	6.1	Q	8.7	3.7
35 to 59 Years	10.7	21.5	5.3	6.2	Q	8.4	3.4
60 Years and Over	9.8	22.9	5.3	6.2	Q	8.3	5.0
Household Size							
1 Person	9.9	23.6	5.4	6.3	Q	7.9	4.9
2 to 4 Persons	10.4	21.4	5.3	6.2	8.8	8.5	4.2
5 or More Persons	11.0	22.2	5.1	Q	Q	8.4	3.4

¹ Major Energy Sources include: electricity, natural gas, fuel oil, kerosene, and liquefied petroleum gas.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1993 Residential Energy Consumption Survey.

² Climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

Does not include all new construction for 1993.

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" in *Household Energy Consumption and Expenditures 1993* for definition of terms used in this report.

Table 38. Total Consumption and Expenditures by End Uses in Midwest Region Households, 1993

	Space	Heating		Air tioning	Water	Heating	Refrig	erators	Appl	iances	
Characteristics	Con- sump- tion (tril- lion Btu)	Expend- itures (billion dollars)									
RSE Column Factor:	1.0 ¹	0.91	1.3 ¹	1.31	0.91	1.0 ¹	0.9 ¹	1.0 ¹	0.91	0.91	RSE Row Factors
				1	Mid	lwest Regi	on	1		1	1
Total Region	1,923.4	12.09	79.8	1.90	522.6	4.06	105.1	2.59	498.5	10.48	3.3
Climate Zone ² Under 2,000 CDD and											
Over 5,500 HDD	312.3	9.98 2.12	57.9 21.9	1.38 0.51	437.7 84.9	3.37 0.69	85.6 19.6	2.11 0.48	413.6 84.9	8.63 1.85	9.0 37.0
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit Single-Family	1,560.5	9.68	62.8	1.47	380.9	2.94	82.6	1.99	401.1	8.46	5.0
Mobile Home	83.6	0.63	6.3	0.16	25.3	0.29	4.9	0.12	28.9	0.60	19.2
Multifamily (2 or more units)	279.3	1.79	10.7	0.27	116.4	0.83	17.6	0.48	68.5	1.42	9.8
Heated Floorspace											
(square feet)											
Fewer than 1,000	301.7	2.04	13.0	0.31	107.3	0.91	20.6	0.53	78.1	1.59	7.8
1,000 to 1,999 2,000 or More	666.8 954.9	4.23 5.82	25.7 41.1	0.63 0.95	187.3 228.0	1.41 1.74	36.0 48.5	0.91 1.15	173.7 246.7	3.68 5.20	5.9 5.4
Ownership of Unit Owned	1,484.3	9.32	64.2	1.53	366.5	2.90	79.4	1.92	388.3	8.18	4.6
Rented	439.1	2.77	15.6	0.37	156.1	1.16	25.8	0.67	110.2	2.30	8.6
Year of Construction											
1939 or Before	780.3	4.69	15.6	0.37	169.7	1.31	32.8	0.81	158.5	3.28	7.8
1940 to 1979	910.8	5.72	42.9	1.06	260.8	2.00	54.3	1.37	250.3	5.39	6.1
1980 or After ³	232.3	1.68	21.3	0.48	92.1	0.75	17.9	0.41	89.7	1.81	12.5
1993 Family Income											
Less than \$10,000	203.3	1.42	5.1	0.12	55.3	0.44	11.2	0.28	44.1	0.90	10.6
\$10,000 to \$19,999 \$20,000 to \$34,999	446.0 490.4	2.77 3.06	11.4 19.9	0.27 0.48	100.4 131.6	0.84 1.04	23.0 27.0	0.59 0.65	97.3 130.7	2.06 2.74	6.7 6.9
\$35,000 to \$49,999	364.6	2.29	17.2	0.40	108.7	0.86	19.8	0.48	102.4	2.19	7.2
\$50,000 or More	419.1	2.56	26.2	0.61	126.5	0.88	24.1	0.58	124.0	2.59	8.3
Below Poverty Line											
100 Percent	190.3	1.26	4.5	0.11	59.0	0.48	10.3	0.26	48.9	0.98	12.9
125 Percent	296.6	1.98	7.1	0.17	86.3	0.71	16.2	0.40	75.5	1.53	10.3
150 Percent	393.8	2.63	10.0	0.23	113.4	0.95	21.8	0.55	100.3	2.05	7.7
Age of Householder				:	.=- :		a = -				
Under 35 Years35 to 59 Years	449.6 828.4	2.76 5.26	20.5 39.7	0.51 0.91	159.4 252.2	1.22 1.98	25.3 47.5	0.64 1.14	131.5 249.2	2.70 5.18	7.1 5.9
60 Years and Over	645.4	4.07	39.7 19.6	0.91	252.2 111.0	0.86	32.3	0.81	117.8	2.60	7.2
Household Size											
1 Person	434.6	2.83	13.0	0.32	85.1	0.64	22.7	0.60	69.6	1.56	7.6
2 to 4 Persons	1,282.9	7.99	58.5	1.39	361.8	2.80	72.0	1.74	356.0	7.43	4.4
5 or More Persons	205.9	1.28	8.3	0.19	75.6	0.62	10.4	0.25	72.9	1.49	9.6

Table 38. Total Consumption and Expenditures by End Uses in Midwest Region Households, 1993 (Continued)

	Space	Heating		Air tioning	Water	Heating	Refrig	erators	Appli	iances	
Characteristics	Con- sump- tion (tril- lion Btu)	Expend- itures (billion dollars)									
RSE Column Factor:	1.0 ¹	0.9 ¹	1.3 ¹	1.3 ¹	0.9 ¹	1.0 ¹	0.9 ¹	1.0 ¹	0.91	0.91	RSE Row Factors
East North Central Division	1,408.4	8.69	50.4	1.26	385.9	2.84	73.5	1.88	351.0	7.55	4.0
Climate Zone ²											
Under 2,000 CDD and											
Over 5,500 HDD	1,228.9	7.51	42.4	1.04	344.8	2.50	64.3	1.63	310.9	6.55	10.7
Under 5,500 HDD 2,000 CDD or More and	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit											
Single-Family	1,122.5	6.88	39.6	0.97	275.6	2.03	56.8	1.42	278.7	6.02	6.6
Mobile Home	56.3	0.41	4.0	0.10	16.8	0.19	3.4	0.09	19.4	0.41	26.3
Multifamily (2 or more units)	229.5	1.40	6.8	0.18	93.6	0.61	13.3	0.38	52.9	1.11	10.3
Heated Floorspace											
(square feet)											
Fewer than 1,000	212.1	1.39	7.8	0.19	74.9	0.60	14.2	0.39	50.5	1.07	8.4
1,000 to 1,999	502.9	3.14	17.3	0.45	141.0	1.01	25.2	0.66	125.3	2.71	7.3
2,000 or More	693.4	4.16	25.3	0.62	170.1	1.23	34.0	0.83	175.3	3.77	5.9
Ownership of Unit											
Owned	1,073.0	6.67	41.1	1.02	268.4	2.04	54.9	1.37	272.9	5.87	5.1
Rented	335.4	2.02	9.3	0.24	117.5	0.80	18.6	0.51	78.2	1.68	7.9
Year of Construction											
1939 or Before	550.7	3.32	9.3	0.23	119.0	0.89	22.2	0.56	105.7	2.23	8.2
1940 to 1979	697.2	4.30	29.7	0.76	201.9	1.47	40.1	1.05	187.0	4.11	8.0
1980 or After ³	160.4	1.07	11.5	0.27	65.0	0.48	11.1	0.27	58.3	1.20	14.7
1993 Family Income											
Less than \$10,000	142.2	0.95	2.6	0.07	41.0	0.29	7.5	0.20	30.3	0.64	11.7
\$10,000 to \$19,999	336.3	2.03	6.7	0.17	72.9	0.58	16.3	0.44	66.2	1.44	9.2
\$20,000 to \$34,999 \$35,000 to \$49,999	344.9 262.0	2.13 1.61	12.2 9.9	0.32 0.25	92.1 79.6	0.68 0.59	18.4 13.0	0.46 0.33	88.3 69.4	1.89 1.52	8.8 9.1
\$50,000 to \$49,999	323.0	1.01	19.1	0.23	100.3	0.59	18.3	0.33	96.8	2.06	9.9
Below Poverty Line 100 Percent	137.4	0.86	2.2	0.06	44.9	0.33	7.0	0.18	35.2	0.72	14.4
125 Percent	209.1	1.33	3.5	0.00	62.8	0.33	10.9	0.18	51.4	1.06	11.9
150 Percent	272.6	1.75	4.9	0.12	80.4	0.62	14.4	0.38	65.2	1.35	9.2
Age of Households											
Age of Householder Under 35 Years	318.2	1.91	12.1	0.33	112.2	0.81	16.9	0.46	86.4	1.84	8.4
35 to 59 Years	616.6	3.84	25.4	0.53	189.7	1.41	33.5	0.40	180.3	3.81	7.5
60 Years and Over	473.6	2.95	13.0	0.33	84.0	0.62	23.0	0.59	84.3	1.89	8.5
Household Size											
1 Person	322.2	2.06	8.3	0.21	64.1	0.46	16.4	0.45	50.0	1.15	10.3
2 to 4 Persons	938.6	5.72	37.3	0.93	266.2	1.96	50.3	1.26	251.6	5.38	5.8
5 or More Persons	147.6	0.90	4.9	0.11	55.7	0.42	6.8	0.17	49.5	1.02	11.2

Table 38. Total Consumption and Expenditures by End Uses in Midwest Region Households, 1993 (Continued)

Characteristics RSE Column Factor:	Con- sump- tion (tril- lion Btu)	Expend- itures (billion dollars)									
RSE Column Factor:	1.0 ¹	0.9 ¹	1.3 ¹	1.3 ¹	0.9 ¹	1.0 ¹	0.9 ¹	1.0 ¹	0.9 ¹	0.91	RSE Row Factors
West North Central Division	515.0	3.40	29.4	0.64	136.7	1.22	31.7	0.71	147.5	2.93	4.7
Climate Zone ² Under 2,000 CDD and											
Over 5,500 HDD	382.2	2.47	15.5	0.34	92.9	0.87	21.2	0.48	102.7	2.08	15.5
Under 5.500 HDD	132.9	0.94	13.8	0.34	43.8	0.87	10.5	0.46	44.8	0.85	29.7
2,000 CDD or More and	102.3	0.34	13.0	0.50	45.0	0.55	10.5	0.25	44.0	0.03	23.1
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
		_	_	_	_	-	_	-		_	
Type of Housing Unit											
Single-Family	438.0	2.80	23.1	0.50	105.3	0.91	25.8	0.58	122.3	2.44	6.7
Mobile Home	27.2	0.22	2.3	0.05	8.5	0.09	1.5	0.04	9.5	0.19	21.4
Multifamily (2 or more units)	49.8	0.39	3.9	0.09	22.9	0.22	4.3	0.10	15.6	0.30	24.0
Heated Flagrances											
Heated Floorspace											
(square feet) Fewer than 1,000	89.6	0.66	5.2	0.12	32.4	0.31	6.4	0.15	27.6	0.53	16.1
1,000 to 1,999	164.0	1.09	8.4	0.12	46.3	0.31	10.8	0.13	48.4	0.53	9.0
2,000 or More	261.5	1.66	15.7	0.13	57.9	0.51	14.5	0.32	71.4	1.43	12.0
<u> </u>	20110			0.0 .	00	0.0.		0.02			
Ownership of Unit											
Owned	411.3	2.65	23.1	0.50	98.1	0.86	24.5	0.55	115.5	2.31	9.4
Rented	103.7	0.75	6.3	0.14	38.6	0.36	7.2	0.16	32.0	0.62	20.5
Year of Construction	000.0	4.07	0.4	0.44	50.0	0.40	40.0	0.04	50.0	4.05	47.0
1939 or Before	229.6 213.5	1.37 1.42	6.4	0.14 0.30	50.6 58.9	0.43 0.52	10.6 14.2	0.24 0.32	52.8 63.3	1.05 1.28	17.0 7.0
1980 or After ³	71.9	0.61	13.3 9.7	0.30	27.2	0.32	6.8	0.32	31.3	0.61	20.5
1000 01 7 (101	71.5	0.01	5.1	0.20	21.2	0.27	0.0	0.10	01.0	0.01	20.0
1993 Family Income											
Less than \$10,000	61.1	0.46	2.5	0.05	14.3	0.14	3.7	0.08	13.8	0.27	19.2
\$10,000 to \$19,999	109.7	0.75	4.7	0.10	27.4	0.26	6.7	0.15	31.1	0.62	7.6
\$20,000 to \$34,999	145.6	0.93	7.7	0.17	39.6	0.36	8.6	0.19	42.4	0.84	10.3
\$35,000 to \$49,999	102.6	0.68	7.4	0.16	29.1	0.26	6.8	0.16	32.9	0.67	11.2
\$50,000 or More	96.1	0.59	7.1	0.15	26.2	0.19	5.9	0.13	27.2	0.53	16.7
Below Poverty Line											
100 Percent	52.9	0.40	2.3	0.05	14.1	0.14	3.2	0.07	13.6	0.26	21.5
125 Percent	87.6	0.65	3.7	0.08	23.5	0.24	5.3	0.12	24.0	0.47	16.3
150 Percent	121.2	0.88	5.1	0.11	33.1	0.33	7.4	0.17	35.1	0.69	12.9
Age of Householder											
Under 35 Years	131.3	0.86	8.5	0.19	47.2	0.41	8.4	0.19	45.1	0.85	11.5
35 to 59 Years60 Years and Over	211.8	1.42	14.3	0.31	62.5	0.57	13.9	0.31	68.9	1.37	9.3
ou rears and Over	171.9	1.13	6.6	0.15	27.0	0.24	9.3	0.22	33.5	0.71	13.2
Household Size											
1 Person	112.4	0.76	4.7	0.11	21.1	0.18	6.3	0.15	19.6	0.42	11.0
2 to 4 Persons	344.3	2.26	21.2	0.45	95.6	0.84	21.7	0.48	104.4	2.05	5.6
5 or More Persons	58.3	0.38	3.4	0.07	20.0	0.20	3.7	0.08	23.4	0.47	18.4

¹ This factor is underestimated because it contains no error for estimating this end use.

"Glossary" in Household Energy Consumption and Expenditures 1993 for definition of terms used in this report.

² Climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

³ Does not include all new construction for 1993.

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. • Consumption and Expenditures data are for major energy sources which include: electricity, natural gas, fuel oil, kerosene, and liquefied petroleum gas. • See

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1993 Residential Energy Consumption Survey.

Table 39. Consumption by End Uses, per Midwest Region Households, 1993

	All U	Jses	Space I	Heating		ir ioning	Water I	Heating	Refrig	erator	Appli	ances	
Characteristics	House- holds (mil- lion)	Con- sump- tion (mil- lion Btu)	House- holds (mil- lion)	Con- sump- tion (mil- lion Btu)	House- holds (mil- lion)	Con- sump- tion (mil- lion Btu)	House- holds (mil- lion)	Con- sump- tion (mil lion Btu)	House- holds (mil- lion)	Con- sump- tion (mil- lion Btu)	House- holds (mil- lion)	Con- sump- tion (mil- lion Btu)	
RSE Column Factor:	1.2	0.7	1.2	1.0 ¹	1.5	1.2 ¹	1.2	0.81	1.2	0.6 ¹	1.2	0.71	RSE Row Factors
						Mid	west Reg	jion					1
Total Region	23.3	134.3	23.2	82.8	16.4	4.9	23.3	22.4	23.3	4.5	23.3	21.4	3.3
Climate Zone ² Under 2,000 CDD and													
Over 5,500 HDD Under 5,500 HDD	19.5 3.8	134.0 136.0	19.4 3.8	83.1 81.5	13.2 3.2	4.4 6.9	19.4 3.8	22.5 22.1	19.5 3.8	4.4 5.1	19.5 3.8	21.3 22.1	5.3 16.6
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit Single-Family	16.6	150.1	16.5	94.3	11.6	5.4	16.6	23.0	16.6	5.0	16.6	24.2	3.0
Mobile Home	1.4 5.3	105.3 92.7	1.4 5.3	59.7 52.9	1.1 3.7	6.0 2.9	1.4 5.3	17.9 21.9	1.4 5.3	3.5 3.3	1.4 5.3	20.4 12.9	11.2 7.4
Heated Floorspace													
(square feet) Fewer than 1,000	5.9	88.6	5.8	51.7	3.9	3.3	5.9	18.3	5.9	3.5	5.9	13.3	6.5
1,000 to 1,999 2,000 or More	8.2 9.2	132.8 164.8	8.2 9.2	81.4 103.8	5.7 6.8	4.5 6.0	8.2 9.2	22.8 24.8	8.2 9.2	4.4 5.3	8.2 9.2	21.2 26.8	3.9 3.6
Ownership of Unit													
Owned Rented	16.2 7.1	147.1 105.1	16.1 7.1	91.9 62.1	11.8 4.6	5.4 3.4	16.2 7.1	22.6 22.0	16.2 7.1	4.9 3.6	16.2 7.1	24.0 15.5	3.2 6.9
Year of Construction	7.4	156.0	7.4	106.1	4.1	3.9	7.4	22.0	7.4	4.4	7.4	21.4	5.4
1939 or Before	11.7	156.2 129.5	11.7	77.8	8.7	4.9	11.7	22.9 22.2	11.7	4.6	11.7	21.3	3.9
1980 or After ³	4.2	109.0	4.2	55.9	3.7	5.8	4.2	22.2	4.2	4.3	4.2	21.6	9.6
1993 Family Income Less than \$10,000	3.0	107.9	2.9	69.1	1.7	3.0	3.0	18.7	3.0	3.8	3.0	14.9	7.8
\$10,000 to \$19,999 \$20,000 to \$34,999	5.3 6.0	126.8 132.8	5.3 6.0	83.6 82.0	3.3 4.3	3.5 4.6	5.3 6.0	18.8 21.9	5.3 6.0	4.3 4.5	5.3 6.0	18.2 21.7	5.0 4.2
\$35,000 to \$49,999 \$50,000 or More	4.4 4.6	138.6 158.1	4.4 4.5	82.5 92.2	3.4 3.7	5.1 7.0	4.4 4.6	24.7 27.8	4.4 4.6	4.5 5.3	4.4 4.6	23.2 27.2	5.0 5.3
Below Poverty Line													
100 Percent	2.6	120.5	2.6	73.7	1.3	3.4	2.6	22.7	2.6	3.9	2.6	18.8	8.2
125 Percent 150 Percent	4.0 5.3	120.2 119.8	4.0 5.3	74.3 74.2	2.2 3.0	3.2 3.3	4.0 5.3	21.5 21.3	4.0 5.3	4.0 4.1	4.0 5.3	18.8 18.8	6.8 5.0
Age of Householder	6.6	120.0	6.5	60.0	4.6	<i>A</i> E	6.5	24.4	6.6	2.0	6.6	20.4	<i></i>
Under 35 Years35 to 59 Years	6.6 9.9	120.0 142.7	6.5 9.9	68.9 83.8	4.6 6.9	4.5 5.7	6.5 9.9	24.4 25.4	6.6 9.9	3.9 4.8	6.6 9.9	20.1 25.1	5.5 3.8
60 Years and Over	6.8	135.8	6.8	94.8	5.0	3.9	6.8	16.3	6.8	4.7	6.8	17.3	4.4
Household Size 1 Person	6.1	102.0	6.1	71.3	4.2	3.1	6.1	13.9	6.1	3.7	6.1	11.4	5.7
2 to 4 Persons	14.9	143.1	14.9	86.3	10.8	5.4	14.9	24.3	14.9	4.8	14.9	23.9	2.7
5 or More Persons	2.3	163.1	2.3	90.8	1.4	5.8	2.3	33.1	2.3	4.6	2.3	31.9	6.2

Table 39. Consumption by End Uses, per Midwest Region Households, 1993 (Continued)

	All U	Jses	Space I	Heating	A Condit	ir ioning	Water I	Heating	Refrig	erator	Appli	ances	
Characteristics	House- holds (mil- lion)	Con- sump- tion (mil- lion Btu)	House- holds (mil- lion)	Con- sump- tion (mil- lion Btu)	House- holds (mil- lion)	Con- sump- tion (mil- lion Btu)	House- holds (mil- lion)	Con- sump- tion (mil lion Btu)	House- holds (mil- lion)	Con- sump- tion (mil- lion Btu)	House- holds (mil- lion)	Con- sump- tion (mil- lion Btu)	
RSE Column Factor:	1.2	0.7	1.2	1.0 ¹	1.5	1.2 ¹	1.2	0.81	1.2	0.6 ¹	1.2	0.71	RSE Row Factors
East North Central Division	16.4	138.8	16.3	86.3	10.8	4.7	16.4	23.6	16.4	4.5	16.4	21.5	3.8
Climate Zone ² Under 2,000 CDD and													
Over 5,500 HDD Under 5,500 HDD	14.4 Q	138.0 Q	14.4 Q	85.4 Q	9.4 Q	4.5 Q	14.4 Q	23.9 Q	14.4 Q	4.5 Q	14.4 Q	21.5 Q	5.8 NF
2,000 CDD or More and Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit Single-Family Mobile Home Multifamily (2 or more units)	11.4 0.9 4.0	155.6 105.7 98.8	11.4 0.9 4.0	98.6 59.6 57.7	7.5 0.6 2.6	5.3 6.5 2.6	11.4 0.9 4.0	24.2 17.7 23.3	11.4 0.9 4.0	5.0 3.6 3.3	11.4 0.9 4.0	24.5 20.6 13.2	3.8 14.6 7.7
Heated Floorspace (square feet)													
Fewer than 1,000	4.0 5.8 6.6	89.0 141.0 167.4	4.0 5.8 6.5	53.0 87.4 105.9	2.5 3.7 4.6	3.1 4.7 5.5	4.0 5.8 6.6	18.5 24.5 25.9	4.0 5.8 6.6	3.5 4.4 5.2	4.0 5.8 6.6	12.5 21.8 26.7	8.2 4.9 4.1
Ownership of Unit	11.2	152.1	11.2	95.5	7.7	5.3	11.2	23.9	11.2	4.9	11.2	24.3	3.6
Rented	5.1	109.4	5.1	66.1	3.1	3.0	5.1	23.0	5.1	3.6	5.1	15.3	7.1
Year of Construction 1939 or Before 1940 to 1979 1980 or After ³	4.9 8.8 2.7	164.5 131.6 115.0	4.9 8.8 2.7	113.1 79.4 60.3	2.4 6.2 2.2	3.8 4.8 5.2	4.9 8.8 2.7	24.3 23.0 24.4	4.9 8.8 2.7	4.5 4.6 4.2	4.9 8.8 2.7	21.5 21.3 21.9	6.4 5.0 9.1
1993 Family Income Less than \$10,000\$10,000 to \$19,999	2.0 3.8	111.3 132.6	2.0 3.8	71.4 89.5	1.0 2.0	2.5 3.3	2.0 3.8	20.4 19.4	2.0 3.8	3.8 4.3	2.0 3.8	15.1 17.6	9.4 6.3
\$20,000 to \$34,999 \$35,000 to \$49,999 \$50,000 or More	4.0 3.0 3.5	138.9 143.0 157.1	4.0 3.0 3.5	86.5 86.4 91.2	2.7 2.2 2.8	4.5 4.4 6.7	4.0 3.0 3.5	23.0 26.2 28.3	4.0 3.0 3.5	4.6 4.3 5.1	4.0 3.0 3.5	22.1 22.9 27.3	5.3 6.0 6.2
Below Poverty Line 100 Percent 125 Percent 150 Percent	1.8 2.7 3.5	128.0 127.4 125.1	1.8 2.7 3.5	77.5 78.9 78.3	0.7 1.2 1.7	3.1 2.9 3.0	1.8 2.7 3.5	25.3 23.7 23.0	1.8 2.7 3.5	4.0 4.1 4.1	1.8 2.7 3.5	19.9 19.4 18.6	8.8 8.0 5.4
Age of Householder Under 35 Years	4.3	127.0	4.3	74.3	2.8	4.4	4.3	26.1	4.3	3.9	4.3	20.1	6.1
35 to 59 Years 60 Years and Over	7.2 4.9	145.3 139.5	7.2 4.9	86.0 97.5	4.7 3.3	5.4 3.9	7.2 4.9	26.4 17.3	7.2 4.9	4.7 4.7	7.2 4.9	25.1 17.3	4.8 5.0
Household Size 1 Person	4.4	104.3	4.4	73.5	2.9	2.9	4.4	14.5	4.4	3.7	4.4	11.3	7.6
2 to 4 Persons 5 or More Persons	10.4 1.6	148.8 169.5	10.4 1.6	90.5 95.0	7.1 0.8	5.3 5.8	10.4 1.6	25.7 35.7	10.4 1.6	4.8 4.3	10.4 1.6	24.2 31.7	3.3 7.5

Table 39. Consumption by End Uses, per Midwest Region Households, 1993 (Continued)

	All U	Jses	Space I	Heating		ir tioning	Water I	Heating	Refrig	erator	Appli	ances	
Characteristics	House- holds (mil- lion)	Con- sump- tion (mil- lion Btu)	House- holds (mil- lion)	Con- sump- tion (mil- lion Btu)	House- holds (mil- lion)	Con- sump- tion (mil- lion Btu)	House- holds (mil- lion)	Con- sump- tion (mil lion Btu)	House- holds (mil- lion)	Con- sump- tion (mil- lion Btu)	House- holds (mil- lion)	Con- sump- tion (mil- lion Btu)	
RSE Column Factor:	1.2	0.7	1.2	1.0 ¹	1.5	1.21	1.2	0.81	1.2	0.6 ¹	1.2	0.7 ¹	RSE Row Factors
West North Central Division	6.9	123.8	6.9	74.5	5.6	5.2	6.9	19.7	6.9	4.6	6.9	21.2	5.6
Olimata 7-11-2													
Climate Zone ² Under 2,000 CDD and													
Over 5,500 HDD	5.0	122.4	5.0	76.5	3.8	4.0	5.0	18.5	5.0	4.2	5.0	20.5	10.6
Under 5,500 HDD	1.9	127.4	1.9	69.4	1.8	7.7	1.9	22.7	1.9	5.4	1.9	23.2	15.6
2,000 CDD or More and													
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit	5 0	400.4	5 0	05.0		- 0	5 0	00.4	5 0	5 0		00.0	4.0
Single-Family	5.2	138.1	5.2	85.0	4.1	5.6	5.2	20.4	5.2	5.0	5.2	23.6	4.8
Mobile Home Multifamily (2 or more units)	0.5 1.3	104.6 74.0	0.5 1.3	60.0 38.2	0.4 1.1	5.3 3.6	0.5 1.3	18.1 17.5	0.5 1.3	3.3 3.3	0.5 1.3	20.2 12.0	13.4 17.3
Multilarilly (2 of more units)	1.3	74.0	1.3	30.2	1.1	3.0	1.3	17.5	1.3	3.3	1.3	12.0	17.3
Heated Floorspace													
(square feet)													
Fewer than 1,000	1.8	87.7	1.8	49.1	1.4	3.8	1.8	17.6	1.8	3.5	1.8	15.0	11.0
1,000 to 1,999	2.5	113.4	2.4	67.3	2.0	4.2	2.5	18.9	2.5	4.4	2.5	19.8	5.7
2,000 or More	2.7	158.4	2.7	98.6	2.3	7.0	2.6	21.9	2.7	5.4	2.7	26.9	7.8
Ownership of Unit													
Ownership of Unit Owned	5.0	135.8	4.9	83.7	4.1	5.6	4.9	19.9	5.0	4.9	5.0	23.3	6.4
Rented	2.0	93.9	2.0	51.9	1.5	4.2	2.0	19.3	2.0	3.6	2.0	16.0	15.5
Nemed	2.0	33.3	2.0	31.3	1.5	7.2	2.0	13.5	2.0	3.0	2.0	10.0	10.0
Year of Construction													
1939 or Before	2.5	139.9	2.5	92.3	1.6	3.9	2.5	20.2	2.5	4.3	2.5	21.1	10.5
1940 to 1979	3.0	123.0	2.9	72.9	2.5	5.2	2.9	20.0	3.0	4.8	3.0	21.4	5.1
1980 or After ³	1.5	98.4	1.5	48.2	1.5	6.7	1.5	18.2	1.5	4.6	1.5	21.0	21.2
1002 Family Income													
1993 Family Income Less than \$10,000	0.9	100.7	0.9	64.4	0.7	3.5	0.9	15.1	0.9	3.9	0.9	14.6	14.3
\$10,000 to \$19,999	1.6	112.9	1.6	69.6	1.2	3.8	1.6	17.2	1.6	4.2	1.6	19.5	7.2
\$20,000 to \$34,999	2.0	120.7	2.0	72.9	1.6	4.7	2.0	19.6	2.0	4.3	2.0	21.0	6.8
\$35,000 to \$49,999	1.4	129.1	1.4	74.0	1.2	6.4	1.4	21.1	1.4	4.9	1.4	23.8	8.4
\$50,000 or More	1.0	161.6	1.0	95.5	0.9	7.9	1.0	26.1	1.0	5.8	1.0	27.1	10.8
Below Poverty Line													
100 Percent	0.8	104.6	0.8	65.4	0.6	3.7	0.8	17.1	0.8	3.9	0.8	16.5	17.0
125 Percent	1.4 1.8	106.1 109.8	1.3 1.8	65.2 66.4	1.0 1.3	3.6 3.8	1.4 1.8	17.3 18.0	1.4 1.8	3.9 4.0	1.4 1.8	17.7 19.1	12.2 10.1
100 1 0100111	1.0	100.0	1.0	JU. 4	1.5	5.0	1.0	10.0	1.0	7.0	1.0	19.1	10.1
Age of Householder													
Under 35 Years	2.3	106.6	2.2	58.6	1.8	4.7	2.2	21.0	2.3	3.7	2.3	20.0	10.0
35 to 59 Years	2.7	135.9	2.7	77.9	2.2	6.4	2.7	22.8	2.7	5.1	2.7	25.2	6.6
60 Years and Over	2.0	126.7	2.0	88.0	1.6	4.1	2.0	13.8	2.0	4.8	2.0	17.1	8.4
Harrack and City													
Household Size	4 7	06.0	4 7	GE O	4.0	2.6	4 7	10.0	4 7	2.7	4 7	11 5	0.0
1 Person 2 to 4 Persons	1.7 4.5	96.2 130.1	1.7 4.5	65.9 76.7	1.3 3.8	3.6 5.6	1.7 4.5	12.3 21.2	1.7 4.5	3.7 4.8	1.7 4.5	11.5 23.1	8.0 4.0
5 or More Persons	0.7	149.5	0.7	81.8	0.6	5.9	0.7	27.4	0.7	5.0	0.7	32.1	11.0
more r 0.00110	5.1		0.7	01.0	0.0	0.0	0.7	_1	0.7	0.0	0.7	52.1	11.0

This factor is underestimated because it contains no error for estimating this end use.
 Climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.
 Does not include all new construction for 1993.

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.
• Consumption and Expenditures data are for major energy sources which include: electricity, natural gas, fuel oil, kerosene, and liquefied petroleum gas. • See "Glossary" in Household Energy Consumption and Expenditures 1993 for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms ElA-457 A-G of the 1993 Residential Energy Consumption Survey.

Table 40. Expenditures by End Uses, per Midwest Region Households, 1993

	All Uses Space Heating					ir tioning	Water	Heating	Refrig	erators	Appli	ances	
Characteristics	House- holds (mil- lion)	Expend- itures (dol- lars)											
RSE Column Factor:	1.2	0.6	1.2	0.71	1.6	1.2 ¹	1.2	0.81	1.2	0.81	1.2	0.81	RSE Row Factors
						Nort	heast Re	gion					
Total Region	23.3	1,336	23.2	521	16.4	116	23.3	174	23.3	111	23.3	450	3.3
Climate Zone ²													
Under 2,000 CDD and Over 5,500 HDD Under 5,500 HDD	19.5 3.8	1,310 1,467	19.4 3.8	514 552	13.2 3.2	105 161	19.4 3.8	173 178	19.5 3.8	109 125	19.5 3.8	444 480	5.3 14.1
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit Single-Family Mobile Home Multifamily (2 or more units)	16.6 1.4 5.3	1,481 1,268 899	16.5 1.4 5.3	585 447 339	11.6 1.1 3.7	127 151 71	16.6 1.4 5.3	178 202 156	16.6 1.4 5.3	120 87 90	16.6 1.4 5.3	511 425 266	3.0 11.7 6.8
Heated Floorspace													
(square feet) Fewer than 1,000	5.9	918	5.8	351	3.9	80	5.9	155	5.9	91	5.9	271	6.6
1,000 to 1,999 2,000 or More	8.2 9.2	1,324 1,612	8.2 9.2	517 632	5.7 6.8	111 140	8.2 9.2	172 189	8.2 9.2	111 125	8.2 9.2	449 564	3.7 3.8
Ownership of Unit	40.0	4 470	40.4	-77	44.0	400	40.0	470	40.0	440	40.0	505	2.0
Owned Rented	16.2 7.1	1,472 1,024	16.1 7.1	577 392	11.8 4.6	129 81	16.2 7.1	179 163	16.2 7.1	119 95	16.2 7.1	505 323	3.2 6.5
Year of Construction	7.4	1 110	7.4	620	4.4	01	7.4	477	7.4	100	7.4	440	6.4
1939 or Before 1940 to 1979 1980 or After ³	7.4 11.7 4.2	1,412 1,323 1,234	7.4 11.7 4.2	638 488 405	4.1 8.7 3.7	91 121 130	7.4 11.7 4.2	177 170 180	7.4 11.7 4.2	109 117 99	7.4 11.7 4.2	443 459 435	6.1 3.8 8.3
1993 Family Income	2.0	1.070	2.0	400	4.7	70	2.0	4.40	2.0	06	2.0	206	0.4
Less than \$10,000 \$10,000 to \$19,999	3.0 5.3	1,070 1,221	2.9 5.3	482 520	1.7 3.3	70 83	3.0 5.3	148 156	3.0 5.3	96 111	3.0 5.3	306 385	8.1 4.9
\$20,000 to \$34,999 \$35,000 to \$49,999	6.0 4.4	1,325 1,410	6.0 4.4	511 518	4.3 3.4	112 122	6.0 4.4	173 195	6.0 4.4	109 109	6.0 4.4	455 495	4.2 5.1
\$50,000 or More	4.6	1,583	4.5	563	3.7	164	4.6	193	4.6	127	4.6	568	4.8
Below Poverty Line	0.0	4.405	0.0	400	4.0	00	0.0	400	0.0	00	0.0	077	0.0
100 Percent	2.6 4.0	1,185 1,197	2.6 4.0	488 496	1.3 2.2	80 76	2.6 4.0	183 178	2.6 4.0	99 101	2.6 4.0	377 383	8.2 6.8
150 Percent	5.3	1,203	5.3	496	3.0	78	5.3	179	5.3	104	5.3	384	5.0
Age of Householder Under 35 Years	6.6	1,195	6.5	423	4.6	113	6.5	186	6.6	98	6.6	411	5.4
35 to 59 Years 60 Years and Over	9.9 6.8	1,457 1,294	9.9 6.8	532 598	6.9 5.0	132 95	9.9 6.8	199 127	9.9 6.8	115 119	9.9 6.8	522 381	3.7 4.5
Household Size													
1 Person 2 to 4 Persons	6.1 14.9	972 1,434	6.1 14.9	464 537	4.2 10.8	77 128	6.1 14.9	105 188	6.1 14.9	98 117	6.1 14.9	255 499	5.9 2.7
5 or More Persons	2.3	1,671	2.3	564	1.4	132	2.3	270	2.3	110	2.3	651	5.5

Table 40. Expenditures by End Uses, per Midwest Region Households, 1993 (Continued)

							I		1				
	All (Uses	Space	Heating		Air tioning	Water	Heating	Refrig	erators	Appli	iances	
	House- holds (mil- lion)	Expend- itures (dol- lars)											
Characteristics													RSE
RSE Column Factor:	1.2	0.6	1.2	0.7 ¹	1.6	1.21	1.2	0.81	1.2	0.81	1.2	0.81	Row Factors
New England Division	16.4	1,358	16.3	533	10.8	117	16.4	174	16.4	115	16.4	461	4.4
Climate Zone ²													
Under 2,000 CDD and													
Over 5,500 HDD Under 5,500 HDD	14.4 Q	1,333 Q	14.4 Q	522 Q	9.4 Q	111 Q	14.4 Q	173 Q	14.4 Q	113 Q	14.4 Q	454 Q	6.4 NF
2,000 CDD or More and	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	INI
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit													
Single-Family	11.4	1,520	11.4	604	7.5	129	11.4	178	11.4	124	11.4	528	4.0
Mobile Home Multifamily (2 or more units)	0.9 4.0	1,275 918	0.9 4.0	432 352	0.6 2.6	170 68	0.9 4.0	204 153	0.9 4.0	90 94	0.9 4.0	438 277	16.4 7.7
,	1.0	010	1.0	002	2.0	00	1.0	100	1.0	01	1.0	2	• • •
Heated Floorspace (square feet)													
Fewer than 1,000	4.0	901	4.0	346	2.5	78	4.0	149	4.0	96	4.0	264	8.7
1,000 to 1,999 2,000 or More	5.8 6.6	1,384 1,618	5.8 6.5	546 635	3.7 4.6	120 135	5.8 6.6	175 188	5.8 6.6	115 127	5.8 6.6	471 575	4.7 4.4
2,000 of More	0.0	1,010	0.5	033	4.0	133	0.0	100	0.0	121	0.0	373	4.4
Ownership of Unit Owned	11.2	1,509	11.2	593	7.7	133	11.2	181	11.2	122	11.2	522	3.7
Rented	5.1	1,027	5.1	398	3.1	76	5.1	156	5.1	100	5.1	329	7.3
Voor of Comptunation													
Year of Construction 1939 or Before	4.9	1,475	4.9	682	2.4	95	4.9	181	4.9	115	4.9	456	7.5
1940 to 1979	8.8	1,330	8.8	490	6.2	122	8.8	168	8.8	119	8.8	468	5.0
1980 or After ³	2.7	1,237	2.7	402	2.2	124	2.7	180	2.7	100	2.7	452	8.8
1993 Family Income													
Less than \$10,000	2.0	1,072	2.0	479	1.0	65	2.0	146	2.0	100	2.0	318	10.4
\$10,000 to \$19,999 \$20,000 to \$34,999	3.8 4.0	1,239 1,370	3.8 4.0	540 534	2.0 2.7	83 116	3.8 4.0	154 171	3.8 4.0	117 115	3.8 4.0	383 473	6.6 5.6
\$35,000 to \$49,999	3.0	1,418	3.0	531	2.2	112	3.0	196	3.0	108	3.0	500	6.3
\$50,000 or More	3.5	1,584	3.5	556	2.8	162	3.5	193	3.5	127	3.5	580	5.8
Below Poverty Line													
100 Percent	1.8	1,214	1.8	486	0.7	80	1.8	187	1.8	104	1.8	404	10.1
125 Percent 150 Percent	2.7 3.5	1,219 1,209	2.7 3.5	501 503	1.2 1.7	73 73	2.7 3.5	179 177	2.7 3.5	106 109	2.7 3.5	399 387	8.9 6.1
Age of Householder													
Under 35 Years	4.3	1,243	4.3	445	2.8	119	4.3	188	4.3	106	4.3	429	6.7
35 to 59 Years	7.2	1,458	7.2	535	4.7	129	7.2	196	7.2	115	7.2	530	4.8
60 Years and Over	4.9	1,313	4.9	607	3.3	97	4.9	128	4.9	122	4.9	389	5.2
Household Size													
1 Person 2 to 4 Persons	4.4 10.4	979 1,472	4.4 10.4	471 552	2.9 7.1	73 132	4.4 10.4	104 189	4.4 10.4	101 122	4.4 10.4	259 519	8.2 3.6
5 or More Persons	1.6	1,472	1.6	582	0.8	134	1.6	268	1.6	108	1.6	653	6.9

Table 40. Expenditures by End Uses, per Midwest Region Households, 1993 (Continued)

	All	Uses	Space	Heating		Air tioning	Water	Heating	Refrig	erators	Appl	iances	
Characteristics	House- holds (mil- lion)	Expend- itures (dol- lars)											
Characteristics													RSE
RSE Column Factor:	1.2	0.6	1.2	0.71	1.6	1.21	1.2	0.81	1.2	0.81	1.2	0.81	Row Factors
Middle Atlantic Division	6.9	1,282	6.9	492	5.6	114	6.9	176	6.9	103	6.9	422	4.3
Climate Zone ² Under 2,000 CDD and	5.0	4.040	5.0	400	2.0	00	5.0	470	5.0	00	5.0	44.4	7.0
Over 5,500 HDD Under 5,500 HDD	5.0 1.9	1,242 1,386	5.0 1.9	493 490	3.8 1.8	89 168	5.0 1.9	173 182	5.0 1.9	96 120	5.0 1.9	414 441	7.9 12.1
2,000 CDD or More and Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit	5.2	1 206	5 2	E40	4.1	122	5 2	176	5 0	111	5.2	472	4.1
Single-Family Mobile Home Multifamily (2 or more units)	0.5	1,396 1,254	5.2 0.5	542 480 299	0.4	124	5.2 0.5	197	5.2 0.5	80	0.5	472 397	12.7
Heated Floorspace	1.3	840	1.3	299	1.1	78	1.3	166	1.3	76	1.3	233	15.1
(square feet)	4.0	055	4.0	200	4.4	0.5	4.0	400	4.0	0.4	4.0	000	0.0
Fewer than 1,000	1.8 2.5	955 1,182	1.8 2.4	360 448	1.4 2.0	85 94	1.8 2.5	166 164	1.8 2.5	81 100	1.8 2.5	286 397	9.2 5.0
2,000 or More	2.7	1,600	2.7	625	2.3	149	2.6	192	2.7	120	2.7	539	6.8
Ownership of Unit Owned	5.0	1,389	4.9	540	4.1	122	4.9	174	5.0	111	5.0	467	5.1
Rented	2.0	1,016	2.0	376	1.5	91	2.0	179	2.0	82	2.0	310	12.9
Year of Construction 1939 or Before	2.5	1,289	2.5	551	1.6	85	2.5	171	2.5	96	2.5	418	9.5
1940 to 1979 1980 or After ³	3.0 1.5	1,303 1,228	2.9 1.5	484 410	2.5 1.5	118 139	2.9 1.5	178 179	3.0 1.5	110 98	3.0 1.5	433 405	4.1 17.3
1993 Family Income													
Less than \$10,000 \$10,000 to \$19,999	0.9 1.6	1,068 1,180	0.9 1.6	488 473	0.7 1.2	76 83	0.9 1.6	153 161	0.9 1.6	89 97	0.9 1.6	280 390	13.0 5.8
\$20,000 to \$34,999	2.0	1,180	2.0	464	1.6	103	2.0	178	2.0	96	2.0	418	5.3
\$35,000 to \$49,999 \$50,000 or More	1.4 1.0	1,394 1,582	1.4 1.0	489 587	1.2 0.9	141 169	1.4 1.0	192 192	1.4 1.0	112 125	1.4 1.0	484 527	8.6 7.8
Below Poverty Line		.,002		00.	0.0	.00		.02		.20		02.	
100 Percent	0.8	1,123	0.8	492	0.6	79	0.8	174	0.8	89	0.8	317	14.3
125 Percent 150 Percent	1.4 1.8	1,156 1,191	1.3 1.8	486 483	1.0 1.3	79 83	1.4 1.8	176 182	1.4 1.8	91 93	1.4 1.8	349 376	10.3 8.6
Age of Householder													
Under 35 Years35 to 59 Years	2.3 2.7	1,103 1,454	2.2 2.7	382 523	1.8 2.2	103 139	2.2 2.7	182 208	2.3 2.7	83	2.3 2.7	378 501	8.6 5.3
60 Years and Over	2.7	1,454	2.7	523 577	1.6	91	2.7	124	2.7	112 112	2.7	362	8.0
Household Size	47	054	4 7	A A 7	4.0	07	4 7	407	4 7	00	47	044	6.0
1 Person 2 to 4 Persons	1.7 4.5	954 1,346	1.7 4.5	447 504	1.3 3.8	87 121	1.7 4.5	107 186	1.7 4.5	90 105	1.7 4.5	244 453	6.9 3.3
5 or More Persons	0.7	1,649	0.7	526	0.6	129	0.7	273	0.7	113	0.7	645	9.1

¹ This factor is underestimated because it contains no error for estimating this end use.

in Household Energy Consumption and Expenditures 1993 for definition of terms used in this report.

² Climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

³ Does not include all new construction for 1993.

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.
• Consumption and Expenditures data are for major energy sources which include: electricity, natural gas, fuel oil, kerosene, and liquefied petroleum gas. • See "Glossary"

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 1993 Residential Energy Consumption Survey.

Table 41. Total Electricity and Natural Gas Consumption and Expenditures for Space Heating in Midwest Region Households, 1993

		Ele	ectricity			Nat	ural Gas		
		Total Co	onsumed			Total Co	onsumed		
	House- holds (million)	(tril- lion Btu)	(billion kWh)	Total Expenditures (billion dollars)	House- holds (million)	(tril- lion Btu)	(billion cubic feet)	Total Expenditures (billion dollars)	
Characteristics RSE Column Factor:	1.1	1.8 ¹	1.8 ¹	1.81	0.6	0.71	0.71	0.6 ¹	RSE Row Factors
			ı	Mid	west Regio	n			
Total Region	5.8	73.9	21.7	1.54	17.0	1,561.0	1,519	8.40	11.1
Climate Zone ²						,	,-		
Under 2,000 CDD and Over 5,500 HDD Under 5,500 HDD	4.4 1.4	55.7 18.2	16.3 5.3	1.16 0.38	14.4 2.6	1,317.5 243.6	1,282 237	7.08 1.32	15.4 41.1
2,000 CDD or More and Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit Single-Family Mobile Home Multifamily (2 or more units)	4.0 0.3 1.5	53.9 Q 14.8	15.8 Q 4.4	1.09 Q 0.33	12.2 0.7 4.1	1,246.6 52.8 261.7	1,213 51 255	6.67 0.28 1.44	12.0 47.3 17.1
Heated Floorspace (square feet)									
Fewer than 1,000	1.6 2.1 2.2	16.6 29.4 27.9	4.9 8.6 8.2	0.37 0.61 0.56	4.2 6.1 6.7	250.8 557.9 752.4	244 543 732	1.38 3.02 4.00	14.0 14.1 11.8
Ownership of Unit				4.40					40.0
Owned	3.9 1.9	55.1 18.8	16.2 5.5	1.13 0.41	11.7 5.3	1,178.9 382.2	1,147 372	6.33 2.06	12.0 16.9
Year of Construction 1939 or Before	1.5 2.8	8.7 41.6	2.5 12.2	0.20 0.87	5.6 8.9	617.2 757.2	600 737	3.36 4.02	17.2 11.3
1980 or After ³ 1993 Family Income	1.5	23.7	6.9	0.47	2.6	186.7	182	1.02	21.6
Less than \$10,000	0.9 1.2 1.3 1.2 1.2	14.6 15.4 12.2 13.7 18.0	4.3 4.5 3.6 4.0 5.3	0.32 0.33 0.26 0.27 0.36	1.9 4.0 4.4 3.2 3.5	159.7 374.1 385.3 284.1 357.7	155 364 375 276 348	0.86 2.01 2.11 1.54 1.88	19.2 18.1 15.4 13.3 15.4
Below Poverty Line 100 Percent 125 Percent	0.7 1.0	10.1 15.9	3.0 4.7	0.22 0.34	1.8 2.7	155.8 233.4	152 227	0.83 1.26	23.9 18.5
150 Percent	1.5	21.5	6.3	0.47	3.6	313.3	305	1.70	15.2
Age of Householder Under 35 Years35 to 59 Years	1.7 2.4 1.7	15.2 34.4 24.3	4.5 10.1 7.1	0.32 0.69 0.53	4.9 7.3 4.8	384.6 673.8 502.7	374 655 489	2.05 3.64 2.70	15.3 13.4 13.8
Household Size 1 Person	1.5 3.7 0.5	20.0 47.8 6.2	5.9 14.0 1.8	0.46 0.96 0.12	4.5 10.9 1.6	362.6 1,037.2 161.3	353 1,009 157	1.98 5.55 0.87	14.4 11.9 18.0

Table 41. Total Electricity and Natural Gas Consumption and Expenditures for Space Heating in Midwest Region Households, 1993 (Continued)

	House-	Total Co	nsumed						
	House-					Total Co	onsumed		
	holds (million)	(tril- lion Btu)	(billion kWh)	Total Expenditures (billion dollars)	House- holds (million)	(tril- lion Btu)	(billion cubic feet)	Total Expenditures (billion dollars)	
Characteristics									RSE
RSE Column Factor:	1.1	1.8 ¹	1.8 ¹	1.81	0.6	0.7 ¹	0.71	0.61	Row Factors
East North Central Division	3.5	44.2	13.0	0.95	13.0	1,199.8	1,167	6.49	10.9
Climate Zone ²									
Under 2,000 CDD and Over 5,500 HDD	2.9	37.4	11.0	0.78	11.5	1,052.4	1,024	5.68	16.1
Under 5,500 HDD 2,000 CDD or More and	Q	Q	Q	Q	Q	Q	Q	Q	NF
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit									
Single-Family	2.5	34.4	10.1	0.72	9.0	940.0	914	5.06	13.6
Mobile Home	0.2 0.8	Q 6.8	Q 2.0	Q 0.16	0.6 3.4	39.9 219.9	39 214	0.21 1.22	56.3 17.6
Heated Floorspace									
(square feet) Fewer than 1,000	1.0	8.6	2.5	0.20	3.2	184.2	179	1.02	13.8
1,000 to 1,999	1.0	19.5	5.7	0.42	4.6	440.1	428	2.39	14.8
2,000 or More	1.3	16.2	4.7	0.34	5.1	575.4	560	3.08	14.2
Ownership of Unit									
OwnedRented	2.5 1.0	35.7 8.5	10.5 2.5	0.76 0.19	8.7 4.3	893.1 306.6	869 298	4.82 1.67	12.7 16.5
Year of Construction									
1939 or Before	0.9	5.9	1.7	0.14	3.9	456.7	444	2.52	20.6
1940 to 1979 1980 or After ³	1.9 0.7	29.8 8.5	8.7 2.5	0.63 0.18	7.1 2.0	606.0 137.1	589 133	3.22 0.76	12.4 24.9
	0	0.0	2.0	00	2.0		.00	00	
1993 Family Income Less than \$10,000	0.5	8.3	2.4	0.18	1.5	120.3	117	0.66	20.5
\$10,000 to \$19,999	0.7	Q	Q	0.20	3.1	296.4	288	1.60	20.3
\$20,000 to \$34,999	0.7	6.3	1.9	0.14	3.2	293.3	285	1.63	17.3
\$35,000 to \$49,999 \$50,000 or More	0.7 0.9	7.7 12.8	2.3 3.8	0.16 0.26	2.4 2.8	214.2 275.5	208 268	1.16 1.45	16.2 17.7
Below Poverty Line									
100 Percent	0.4	4.9	1.4	0.11	1.4	121.4	118	0.65	27.6
125 Percent	0.5 0.8	8.1 11.4	2.4 3.3	0.18 0.25	2.1 2.7	179.7 235.5	175 229	0.98 1.29	21.2 15.3
Age of Householder									
Under 35 Years	0.9	7.1	2.1	0.17	3.6	287.8	280	1.55	14.9
35 to 59 Years	1.5 1.1	21.0 16.1	6.1 4.7	0.43 0.35	5.7 3.7	523.5 388.5	509 378	2.85 2.09	15.9 13.0
Household Size									
1 Person	1.0	12.7	3.7	0.30	3.5	283.4	276	1.55	14.8
2 to 4 Persons	2.1 0.4	27.9 3.6	8.2 1.1	0.58 0.07	8.2 1.2	788.9 127.5	767 124	4.24 0.70	12.4 21.0

Table 41. Total Electricity and Natural Gas Consumption and Expenditures for Space Heating in Midwest Region Households, 1993 (Continued)

		Ele	ectricity			Nat	ural Gas		
		Total Co	onsumed			Total Co	onsumed		
	House- holds (million)	(tril- lion Btu)	(billion kWh)	Total Expenditures (billion dollars)	House- holds (million)	(tril- lion Btu)	(billion cubic feet)	Total Expenditures (billion dollars)	
Characteristics									RSE
RSE Column Factor:	1.1	1.8 ¹	1.8 ¹	1.8 ¹	0.6	0.71	0.71	0.61	Row Factors
West North Central Division	2.4	29.8	8.7	0.59	4.1	361.3	351	1.91	26.0
Climate Zone ²									
Under 2,000 CDD and Over 5,500 HDD Under 5,500 HDD	1.5 0.8	Q Q	Q Q	Q Q	3.0 1.1	265.1 96.2	258 94	1.40 0.51	40.2 24.0
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit		40.5						4.00	
Single-Family Mobile Home Multifamily (2 or more units)	1.6 Q 0.7	19.5 Q Q	5.7 Q Q	0.38 Q Q	3.2 Q 0.7	306.6 Q 41.8	298 Q 41	1.62 Q 0.22	23.8 NF 43.0
Heated Floorspace									
(square feet) Fewer than 1,000	0.7 0.8	8.1 Q	2.4 Q	0.17 Q	1.1 1.5	66.6 117.7	65 115	0.36 0.63	29.4 34.0
2,000 or More	0.9	11.7	3.4	0.22	1.6	177.0	172	0.92	21.8
Ownership of Unit Owned	1.5	19.5	5.7	0.37	3.0	285.8	278	1.51	24.6
Rented	0.9	Q	Q	Q	1.1	75.5	73	0.39	31.8
Year of Construction 1939 or Before 1940 to 1979	0.5 1.0	2.8 11.8	0.8 3.5	0.06 0.24	1.7 1.7	160.5 151.2	156 147	0.84 0.80	28.6 24.2
1980 or After ³	0.9	15.2	4.4	0.29	0.7	49.6	48	0.26	24.8
1993 Family Income Less than \$10,000 \$10,000 to \$19,999 \$20,000 to \$34,999	0.4 0.5 0.6	Q 6.4 5.8	Q 1.9 1.7	Q 0.14 0.12	0.5 0.9 1.2	39.4 77.7 92.0	38 76 89	0.21 0.42 0.48	46.9 31.9 29.5
\$35,000 to \$49,999 \$50,000 or More	0.5 0.4	6.0 Q	1.8 Q	0.11 Q	0.8 0.7	70.0 82.2	68 80	0.38 0.43	23.7 31.2
Below Poverty Line 100 Percent	Q	Q	Q	Q	0.4	34.4	33	0.18	44.5
125 Percent	0.5 0.7	7.9 10.2	2.3 3.0	0.17 0.22	0.7 0.9	53.7 77.8	52 76	0.28 0.41	36.3 33.3
Age of Householder									
Under 35 Years	0.8 0.9 0.7	8.1 13.4 Q	2.4 3.9 Q	0.16 0.26 Q	1.4 1.6 1.1	96.8 150.2 114.2	94 146 111	0.50 0.80 0.61	30.1 24.8 36.6
Household Size				_					
1 Person 2 to 4 Persons 5 or More Persons	0.6 1.6 0.2	7.3 19.9 Q	2.1 5.8 Q	Q 0.38 Q	1.0 2.7 0.4	79.1 248.3 33.8	77 242 33	0.43 1.31 0.17	32.8 25.9 34.4

¹ This factor is underestimated because it contains no error for estimating this end use.

NF = No applicable RSE row factor.

² Climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

³ Does not include all new construction for 1993.

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" in Household Energy Consumption and Expenditures 1993 for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C, E, and F of the 1993 Residential Energy Consumption Survey.

Table 42. Total Fuel Oil, Kerosene, and LPG Consumption and Expenditures for Space Heating in Midwest Region Households, 1993

	Fuel Oil Total			Ker	osene		Lic	quefied P	etroleun	n Gas			
		To Cons				To Cons				To Cons			
Characteristics	House- holds (mil- lion)	(tril- lion Btu)	(bil- lion gal- lons)	Total Expend- itures (billion dollars)	House- holds (mil- lion)	(tril- lion Btu)	(bil- lion gal- lons)	Total Expend- itures (billion dollars)	House- holds (mil- lion)	(tril- lion Btu)	(bil- lion gal- lons)	Total Expend- itures (billion dollars)	RSE
RSE Column Factor:	0.9	0.9 ¹	0.91	0.9 ¹	1.2	1.3 ¹	1.3 ¹	1.3 ¹	0.9	0.9 ¹	0.91	0.9 ¹	Row Factors
						Mic	dwest R	Region					
Total Region	1.4	125.7	0.91	0.78	1.0	Q	Q	0.05	1.9	157.0	1.72	1.33	23.6
Climate Zone ² Under 2,000 CDD and		447.7	0.05	0.70	0.7	0	0	0		445.0	4.07	0.00	00.0
Over 5,500 HDD Under 5,500 HDD 2,000 CDD or More and		117.7 Q	0.85 Q	0.73 Q	0.7 Q	Q Q	Q Q	Q	1.4 Q	115.8 Q	1.27 Q	0.96 Q	29.8 NF
Under 4,000 HDD Type of Housing Unit		Q	Q	Q 0.70	Q	Q	Q	Q	Q	Q	Q	Q	NF
Single-Family Mobile Home Multifamily (2 or more units)	Q	123.1 Q Q	0.89 Q Q	0.76 Q Q	0.9 Q Q	Q Q Q	Q Q Q	Q Q Q	1.5 0.4 Q	131.8 25.2 Q	1.44 0.28 Q	1.10 0.23 Q	22.8 39.1 NF
Heated Floorspace (square feet)	0	0	0	0	0	0	0	0	0.5	20.0	0.33	0.07	38.5
Fewer than 1,000		Q 38.1 83.6	Q 0.28 0.61	Q 0.25 0.51	Q 0.4 0.5	Q 1.8 Q	Q 0.01 Q	Q 0.02 Q	0.5 0.5 0.9	29.9 39.6 87.5	0.43 0.96	0.27 0.34 0.72	29.2 20.6
Ownership of Unit Owned Rented		109.1 16.6	0.79 0.12	0.68 0.10	0.8 Q	Q Q	Q Q	Q Q	1.6 0.3	136.3 20.7	1.49 0.23	1.14 0.19	23.1 30.3
Year of Construction 1939 or Before		73.2	0.53	0.46	0.5	Q	Q	Q	0.8	76.6	0.84	0.64	19.4
1940 to 1979 1980 or After ³	0.6 Q	52.0 Q	0.38 Q	0.32 Q	0.4 Q	0.6 Q	(*) Q	0.01 Q	0.8 0.3	59.3 21.0	0.65 0.23	0.50 0.18	31.6 42.9
1993 Family Income Less than \$10,000 \$10,000 to \$19,999 \$20,000 to \$34,999 \$35,000 to \$49,999 \$50,000 or More	0.4	Q 26.8 42.2 34.2 14.5	Q 0.19 0.31 0.25 0.10	Q 0.17 0.26 0.21 0.08	Q 0.2 Q 0.2 Q	Q Q 0.6 0.4 Q	Q Q (*) (*) Q	Q Q 0.01 (*) Q	0.2 0.4 0.7 0.4 0.3	19.9 26.3 50.1 32.2 28.5	0.22 0.29 0.55 0.35 0.31	0.17 0.23 0.43 0.26 0.24	50.7 28.5 28.8 31.3 30.3
Below Poverty Line 100 Percent		Q 13.8 22.0	Q 0.10 0.16	Q 0.09 0.14	Q 0.2 0.2	Q Q 1.4	Q Q 0.01	Q Q 0.01	0.2 0.4 0.5	19.2 32.3 35.6	0.21 0.35 0.39	0.17 0.28 0.31	46.6 34.9 33.6
Age of Householder Under 35 Years 35 to 59 Years 60 Years and Over		22.3 41.0 62.3	0.16 0.30 0.45	0.14 0.25 0.39	0.2 0.6 Q	0.8 1.8 Q	0.01 0.01 Q	0.01 0.02 Q	0.4 0.9 0.6	26.6 77.4 52.9	0.29 0.85 0.58	0.24 0.66 0.43	33.1 26.8 30.8
Household Size 1 Person 2 to 4 Persons 5 or More Persons	0.9	24.1 87.7 13.9	0.18 0.63 0.10	0.16 0.54 0.08	Q 0.7 Q	Q Q Q	Q Q Q	Q Q Q	0.3 1.3 0.3	27.1 105.6 24.3	0.30 1.16 0.27	0.23 0.89 0.20	33.8 28.1 35.5

Table 42. Total Fuel Oil, Kerosene, and LPG Consumption and Expenditures for Space Heating in Midwest Region Households, 1993 (Continued)

		Fu	el Oil			Ker	osene		Lie	quefied P	etroleun	n Gas	
		To Cons				To Cons				To Cons			
Characteristics	House- holds (mil- lion)	(tril- lion Btu)	(bil- lion gal- lons)	Total Expend- itures (billion dollars)	House- holds (mil- lion)	(tril- lion Btu)	(bil- lion gal- lons)	Total Expend- itures (billion dollars)	House- holds (mil- lion)	(tril- lion Btu)	(bil- lion gal- lons)	Total Expend- itures (billion dollars)	RSE
RSE Column Factor:	0.9	0.9 ¹	0.9 ¹	0.91	1.2	1.3 ¹	1.3 ¹	1.3 ¹	0.9	0.9 ¹	0.9 ¹	0.91	Row Factors
East North Central Division	0.7	69.9	0.51	0.44	0.9	Q	Q	Q	1.0	89.3	0.98	0.76	30.3
Climate Zone ² Under 2,000 CDD and Over 5,500 HDD	0.7	64.3	0.47	0.41	0.6	Q	Q	Q	0.8	Q	Q	0.60	42.6
Under 5,500 HDD 2,000 CDD or More and Under 4,000 HDD	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	NF NF
Type of Housing Unit Single-Family	0.7	67.3	0.49	0.42	0.8	Q	Q	Q	0.7	75.9	0.83	0.64	29.0
Mobile HomeMultifamily (2 or more units)	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	NF NF
Heated Floorspace (square feet) Fewer than 1,000	Q 0.2	Q 20.6	Q 0.15	Q 0.14	Q 0.3	Q 1.4	Q 0.01	Q 0.01	0.2 0.2	17.4 21.2	0.19 0.23	Q 0.19	54.9 31.8
2,000 or More	0.5	47.6	0.34	0.29	0.5	Q	Q	Q	0.5	50.7	0.56	0.42	28.5
Ownership of Unit Owned Rented	0.7 Q	63.2 Q	0.46 Q	0.40 Q	0.7 Q	Q Q	Q Q	Q Q	0.8 0.2	76.6 12.8	0.84 0.14	0.65 0.11	30.0 42.4
Year of Construction 1939 or Before 1940 to 1979 1980 or After ³	0.4 Q Q	39.1 Q Q	0.28 Q Q	0.25 Q Q	0.4 0.4 Q	Q 0.6 Q	Q (*) Q	Q 0.01 Q	0.4 0.3 0.2	44.5 30.1 14.8	0.49 0.33 0.16	0.38 0.26 0.13	24.1 34.7 53.5
1993 Family Income Less than \$10,000	Q Q 0.2 0.3 Q	Q Q 19.4 Q Q	Q Q 0.14 Q Q	Q Q 0.12 Q Q	Q Q Q Q	Q Q Q Q Q	a a a a a	Q Q Q Q	Q 0.2 0.3 0.2 0.2	Q 13.3 25.3 19.1 23.2	Q 0.15 0.28 0.21 0.25	Q 0.11 0.23 0.16 0.19	NF 43.5 48.0 47.0 32.3
Below Poverty Line 100 Percent	Q Q Q	Q Q Q	Q Q Q	Q Q Q	Q Q Q	Q Q Q	Q Q Q	Q Q Q	Q 0.2 0.2	Q 13.6 15.0	Q 0.15 0.16	Q 0.12 0.13	NF 52.5 53.3
Age of Householder Under 35 Years	Q 0.3 0.3	Q 24.1 35.6	Q 0.17 0.26	Q 0.15 0.22	Q 0.5 Q	Q Q Q	Q Q Q	Q Q Q	Q 0.4 0.3	Q 46.6 30.3	Q 0.51 0.33	Q 0.40 0.25	NF 34.0 28.0
Household Size 1 Person 2 to 4 Persons 5 or More Persons	Q 0.6 Q	Q 56.7 Q	Q 0.41 Q	Q 0.35 Q	Q 0.6 Q	Q Q Q	Q Q Q	Q Q Q	Q 0.7 0.1	Q 61.0 11.6	Q 0.67 0.13	Q 0.52 0.10	NF 39.2 38.2

Table 42. Total Fuel Oil, Kerosene, and LPG Consumption and Expenditures for Space Heating in Midwest Region Households, 1993 (Continued)

	Fuel Oil Total				Ker	osene		Lic	quefied P	etroleun	n Gas		
		To Cons				-	tal umed			To Cons			
Characteristics	House- holds (mil- lion)	(tril- lion Btu)	(bil- lion gal- lons)	Total Expend- itures (billion dollars)	House- holds (mil- lion)	(tril- lion Btu)	(bil- lion gal- lons)	Total Expend- itures (billion dollars)	House- holds (mil- lion)	(tril- lion Btu)	(bil- lion gal- lons)	Total Expend- itures (billion dollars)	RSE
RSE Column Factor:	0.9	0.91	0.9 ¹	0.9 ¹	1.2	1.3 ¹	1.3 ¹	1.3 ¹	0.9	0.9 ¹	0.9 ¹	0.91	Row Factors
West North Central Division	0.6	55.8	0.41	0.34	0.1	Q	Q	Q	0.9	67.6	0.74	0.56	28.1
Climate Zone ² Under 2,000 CDD and													
Over 5,500 HDD Under 5,500 HDD	0.6 Q	53.4 Q	0.39 Q	0.33 Q	Q Q	Q Q	Q Q	Q Q	0.6 Q	45.1 Q	0.49 Q	0.36 Q	25.4 NF
2,000 CDD or More and Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit Single-Family Mobile Home	0.6 Q	55.8 Q	0.41 Q	0.34 Q	0.1 Q	Q Q	Q Q	Q Q	0.7 0.2	55.9 11.7	0.61 0.13	0.46 0.10	29.4 49.7
Multifamily (2 or more units) Heated Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
(square feet) Fewer than 1,000	Q 0.2	Q 17.5	Q 0.13	Q 0.11	Q Q	Q Q	Q Q	Q Q	0.2 Q	12.5 Q	0.14 Q	0.11 Q	45.8 30.8
2,000 or More Ownership of Unit	0.4	35.9	0.26	0.22	Q	Q	Q	Q	0.4	36.8	0.40	0.30	23.5
Owned	0.5 Q	45.9 Q	0.33 Q	0.28 Q	0.1 Q	Q Q	Q Q	Q Q	0.8 0.1	59.7 7.9	0.65 0.09	0.49 0.07	31.5 38.3
Year of Construction 1939 or Before	0.4 0.3	34.1 21.2	0.25 0.15	0.21 0.13	QQ	QQ	QQ	Q Q	0.4 0.4	32.1 29.3	0.35 0.32	0.26 0.25	26.1 26.5
1980 or After ³ 1993 Family Income	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Less than \$10,000 \$10,000 to \$19,999 \$20,000 to \$34,999 \$35,000 to \$49,999	Q 0.1 0.2 0.2	Q 12.6 22.8 13.5	Q 0.09 0.17 0.10	Q 0.08 0.14 0.08	9 9 9	Q Q Q	9 9 9	Q Q Q	Q 0.2 0.4 0.2	Q 13.0 24.8 13.1	Q 0.14 0.27 0.14	Q 0.12 0.20 0.11	NF 22.4 20.5 42.7
\$50,000 or More Below Poverty Line	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
100 Percent	Q Q Q	Q Q Q	Q Q Q	Q Q Q	Q Q Q	Q Q Q	Q Q Q	Q Q Q	Q 0.2 0.3	Q 18.7 20.6	Q 0.20 0.23	Q 0.16 0.18	NF 49.1 48.1
Age of Householder Under 35 Years35 to 59 Years60 Years and Over	0.1 0.2 0.3	12.2 16.9 26.8	0.09 0.12 0.19	0.07 0.10 0.16	Q Q Q	Q Q Q	Q Q Q	Q Q Q	0.2 0.4 Q	14.2 30.8 Q	0.16 0.34 Q	0.12 0.25 Q	33.2 28.3 25.6
Household Size 1 Person	0.2 0.3	15.6 31.0	0.11 0.22	0.10 0.19	Q Q	Q Q	Q Q	Q Q Q	0.1 0.6	10.3 44.6	0.11 0.49	0.08 0.38	41.1 31.0

¹ This factor is underestimated because it contains no error for estimating this end use.

² Climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

³ Does not include all new construction for 1993.

^{(*) =} Value rounds to zero in the units displayed.

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" in Household Energy Consumption and Expenditures 1993 for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C, D, and G of the 1993 Residential Energy Consumption Survey.

Table 43. Electricity Consumption and Expenditures for Main Space Heating, per Midwest Region Households, 1993

		Consu	mption			Hea	nual ating ee-Days	Space-	tricity Heating nsity	
Characteristics	House- holds (million)	(million Btu)	(kWh)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average ²	Consumption (kWh/HDD* 1000 square feet)	Expenditures (cents/HDD* 1000 square feet)	RSE
RSE Column Factor:	3.0	1.1 ¹	1.1 ¹	1.2 ¹	1.0	0.4	0.5	1.0 ¹	1.0 ¹	Row Factors
					Mid	wast Reg	ion			
Total Region	2.9	24.2	7,097	499	1,573	6,254	6,066	0.72	5.1	7.3
Climate Zone ²										
Under 2,000 CDD and Over 5,500 HDD	2.2	23.8	6,980	491	1,504	6,450	6,281	0.72	5.1	10.1
Under 5,500 HDD	0.7	25.5	7,482	526	1,800	5,612	5,360	0.74	5.2	9.0
2,000 CDD or More and		_		_		_		_	_	
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit										
Single-Family	1.5	32.5	9,518	651	2,137	6,193	6,024	0.72	4.9	6.2
Mobile HomeMultifamily (2 or more units)	0.2 1.1	24.2 12.8	7,081 3,764	532 283	1,029 899	6,458 6,300	6,256 6,088	1.07 0.66	8.0 5.0	23.4 11.2
Waltinariiiy (2 or more ariite)	•••	12.0	0,701	200	000	0,000	0,000	0.00	0.0	
Heated Floorspace (square feet)										
Fewer than 1,000	1.0	15.4	4,522	339	783	6,394	6,224	0.90	6.8	9.9
1,000 to 1,999	1.1	25.1	7,360	520	1,388	6,268	6,061	0.85	6.0	7.7
2,000 or More	0.7	35.2	10,326	693	2,971	6,037	5,851	0.58	3.9	5.7
Ownership of Unit										
Owned	1.6	32.0	9,371	646	2,080	6,254	6,083	0.72	5.0	6.5
Rented	1.3	14.3	4,177	311	923	6,254	6,043	0.72	5.4	11.2
Year of Construction										
1939 or Before	0.2	32.9	9,654	748 566	1,647	6,671	6,393	0.88 0.73	6.8 5.2	18.0 6.2
1940 to 1979 1980 or After ³	1.5 1.2	27.3 19.0	8,009 5,571	376	1,702 1,407	6,413 5,994	6,259 5,778	0.73	5.2 4.5	10.4
		10.0	0,01	0.0	.,	0,00	0,	0.00	0	
1993 Family Income	0.7	10.0	E 004	400	054	6 407	6.064	0.04	6.0	11.1
Less than \$10,000 \$10,000 to \$19,999	0.7 0.6	19.8 24.4	5,801 7,141	428 524	951 1,702	6,487 6,337	6,264 6,136	0.94 0.66	6.9 4.9	11.1 11.4
\$20,000 to \$34,999	0.5	23.2	6,809	488	1,412	6,009	5,770	0.80	5.8	8.9
\$35,000 to \$49,999	0.5	26.6	7,798	514	1,603	6,207	6,051	0.78	5.2	11.7
\$50,000 or More	0.6	28.3	8,295	558	2,304	6,123	6,003	0.59	4.0	10.5
Below Poverty Line										
100 Percent	0.5	21.2	6,208	463	1,054	6,460	6,109	0.91	6.8	15.5
125 Percent	0.7	22.1	6,488	475	1,156	6,467	6,181	0.87	6.4	11.2
150 Percent	1.0	21.2	6,205	460	1,152	6,439	6,199	0.84	6.2	10.0
Age of Householder										
Under 35 Years	0.9	16.3	4,768	343	1,186	6,161	5,870	0.65	4.7	11.7
35 to 59 Years60 Years and Over	1.2 0.9	28.3 26.8	8,281 7,843	559 575	1,909 1,514	6,249 6,354	6,093 6,223	0.69 0.82	4.7 6.0	8.2 9.3
	0.0	_0.0	. , 5 . 5	3.0	.,	3,001	0,220	3.02	0.0	0.0
Household Size	4.0	10.4	E 007	440	4.000	6.400	0.005	0.70	5.0	40.0
1 Person 2 to 4 Persons	1.0 1.7	19.4 25.9	5,697 7,591	443 517	1,226 1,711	6,420 6,155	6,305 5,919	0.72 0.72	5.6 4.9	10.6 7.7
5 or More Persons	0.2	36.1	10,572	663	2,264	6,298	6,168	0.74	4.6	13.0
			-,		,	-,	2,.30			

Table 43. Electricity Consumption and Expenditures for Main Space Heating, per Midwest Region Households, 1993 (Continued)

		Consu	mption			He	nnual ating ee-Days	Space-	ricity Heating nsity	
Characteristics	House- holds (million)	(million Btu)	(kWh)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average ²	Consumption (kWh/HDD* 1000 square feet)	Expenditures (cents/HDD* 1000 square feet)	RSE
RSE Column Factor:	3.0	1.1 ¹	1.1 ¹	1.2 ¹	1.0	0.4	0.5	1.0 ¹	1.0 ¹	Row Factors

Midwast Region

_										
Main Heating Equipment Using Electricity										
Central Warm-Air										
Furnace Built-In Electric	1.0	20.3	5,947	415	1,331	6,056	5,805	0.74	5.1	16.3
Units	1.3	24.1	7,053	524	1,455	6,506	6,354	0.75	5.5	7.7
Heat Pump	0.4	34.3	10,063	620	2,596	5,793	5,603	0.67	4.1	8.5
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Age of Main Heating										
Equipment										
Less than 5 Years	0.5	20.1	5,893	384	1,664	5,793	5,532	0.61	4.0	17.6
5 to 9 Years	0.3	24.4	7,158	489	1,773	6,306	6,125	0.64	4.4	12.9
10 to 19 Years	1.0	26.6	7,808	537	1,660	6,425	6,323	0.73	5.0	8.4
20 Years or More	0.6	31.3	9,161	687	1,799	6,622	6,476	0.77	5.8	7.4
Don't Know	0.5	16.3	4,779	351	999	5,959	5,633	0.80	5.9	12.9
Secondary Heating Fuel										
(more than one may apply)										
No	1.8	20.4	5,984	440	1,222	6,336	6,135	0.77	5.7	8.9
Yes	1.1	30.8	9,031	601	2,185	6,111	5,945	0.68	4.5	7.1
Wood	0.7	35.7	10,470	686	2,519	6,130	5,937	0.68	4.4	7.1
Electricity	0.3	28.9	8,460	554	1,979	6,052	5,925	0.71	4.6	12.7
Natural Gas	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Kerosene	Q	33.6	9,849	599	2,646	6,025	5,879	0.62	3.8	23.2
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Average Electricity Expenditures for Main Space Heat (cents per kWh)										
Less than 6	0.4	36.6	10,716	577	2,234	5,821	5,623	0.82	4.4	7.6
6 to Less than 9	2.1	23.0	6,751	482	1,464	6,259	6,075	0.74	5.3	9.6
9 or More	0.4	17.4	5,108	511	1,466	6.697	6,494	0.52	5.2	16.4
	0.4	17.4	3,100	311	1,400	0,037	0,434	0.52	5.2	10.4
Adequacy of Insulation Well Insulated	1.4	25.8	7,575	529	1,791	6,285	6,101	0.67	4.7	7.2
Adequately Insulated	1.0	24.0	7,042	483	1,751	6,236	6,052	0.72	5.0	8.2
Poorly Insulated	0.5	19.6	5,753	441	942	6,199	5,986	0.72	7.6	18.1

Table 43. Electricity Consumption and Expenditures for Main Space Heating, per Midwest Region Households, 1993 (Continued)

— per iniuwe	- Trong			 	TOO!		и ,			I
		Consu	mption			He	nual ating ee-Days	Space-	ricity Heating nsity	
Characteristics	House- holds (million)	(million Btu)	(kWh)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average ²	Consumption (kWh/HDD* 1000 square feet)	Expenditures (cents/HDD* 1000 square feet)	RSE
RSE Column Factor:	3.0	1.1 ¹	1.1 ¹	1.2 ¹	1.0	0.4	0.5	1.0 ¹	1.0 ¹	Row Factors
			<u> </u>							
East North Central Division	1.6	25.9	7,590	551	1,628	6,416	6,332	0.73	5.3	8.1
Climate Zone ² Under 2,000 CDD and										
Over 5,500 HDD Under 5,500 HDD	1.4 Q	25.9 Q	7,586 Q	537 Q	1,621 Q	6,513 Q	6,437 Q	0.72 Q	5.1 Q	9.4 NF
2,000 CDD or More and										
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit Single-Family	1.0	33.1	9,698	682	2,098	6,314	6,234	0.73	5.1	7.3
Mobile Home		Q 12.5	Q 3,661	Q 294	Q 873	Q 6,502	Q 6,400	Q 0.64	Q 5.2	NF 16.8
Heated Floorspace										
(square feet) Fewer than 1,000	0.5	15.5	4,548	351	748	6,453	6,422	0.94	7.3	13.8
1,000 to 1,999 2,000 or More	0.7	28.2 35.1	8,263 10,277	596 725	1,500 2,912	6,505 6,232	6,387 6,134	0.85 0.57	6.1 4.0	7.1 8.0
Ownership of Unit						0.400		. =-		
Owned Rented	1.0 0.6	32.5 13.9	9,527 4,085	681 315	2,026 909	6,400 6,445	6,323 6,347	0.73 0.70	5.3 5.4	7.8 14.9
Year of Construction										
1939 or Before	Q 1.0	Q 29.3	Q 8,589	Q 614	Q 1,804	Q 6,340	Q 6,257	Q 0.75	Q 5.4	NF 6.9
1980 or After ³		17.2	5,052	370	1,243	6,595	6,556	0.62	4.5	13.2
1993 Family Income Less than \$10,000	0.4	21.4	6,267	471	958	6,565	6,423	1.00	7.5	14.0
\$10,000 to \$19,999		25.8	7,551	563	1,840	6,510	6,430	0.63	4.7	13.5
\$20,000 to \$34,999		27.4	8,026	614	1,542	6,174	6,044	0.84	6.5	12.8
\$35,000 to \$49,999 \$50,000 or More		30.3 26.9	8,894 7,869	608 551	1,493 2,150	6,409 6,336	6,398 6,280	0.93 0.58	6.4 4.0	10.6 12.6
Below Poverty Line										
100 Percent	0.2	23.8	6,964	544	1,263	6,559	6,146	0.84	6.6	20.7
125 Percent	0.3 0.5	24.4 22.9	7,160 6,711	530 508	1,176 1,175	6,593 6,579	6,351 6,417	0.92 0.87	6.8 6.6	15.0 13.5
Age of Householder	0.4	47.4	E 040	000	4.000	0.500	0.077	0.04	<i>- 1</i>	44.0
Under 35 Years	0.4 0.7	17.1 29.2	5,019 8,547	399 585	1,208 1,956	6,528 6,447	6,277 6,399	0.64 0.68	5.1 4.6	14.2 9.1
60 Years and Over		27.9	8,174	612	1,516	6,302	6,287	0.86	6.4	11.1
Household Size	0.6	20 F	6 000	477	1 076	6 070	6 202	0.60	E 1	10.4
1 Person 2 to 4 Persons	0.6 0.9	20.5 28.6	6,002 8,375	477 589	1,376 1,723	6,378 6,450	6,393 6,293	0.68 0.75	5.4 5.3	12.4 8.5
5 or More Persons		Q	Q	Q	Q	Q	Q	Q	Q	NF

Table 43. Electricity Consumption and Expenditures for Main Space Heating, per Midwest Region Households, 1993 (Continued)

		Consu	mption			He	nual ating ee-Days	Space-	tricity Heating nsity	
Characteristics	House- holds (million)	(million Btu)	(kWh)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average ²	Consumption (kWh/HDD* 1000 square feet)	Expenditures (cents/HDD* 1000 square feet)	RSE
RSE Column Factor:	3.0	1.1 ¹	1.1 ¹	1.2 ¹	1.0	0.4	0.5	1.0 ¹	1.0 ¹	Row
West North Central Division	1.3	22.1	6,481	435	1,505	6,052	5,733	0.71	4.8	12.1
Climate Zone ² Under 2,000 CDD and										
Over 5,500 HDD Under 5,500 HDD 2,000 CDD or More and	Q Q	20.5 25.3	6,012 7,409	417 470	1,318 1,875	6,350 5,463	6,032 5,141	0.72 0.72	5.0 4.6	18.2 8.5
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit Single-Family Mobile Home Multifamily (2 or more units)	0.6 Q Q	31.4 22.8 13.1	9,214 6,669 3,852	600 Q 274	2,203 1,010 921	5,989 5,952 6,128	5,669 5,562 5,822	0.70 1.11 0.68	4.5 7.6 4.9	11.1 48.2 10.1
Heated Floorspace (square feet)										
Fewer than 1,000	0.5 Q 0.3	15.3 20.7 35.5	4,496 6,061 10,394	327 410 650	819 1,229 3,051	6,334 5,927 5,770	6,023 5,591 5,464	0.87 0.83 0.59	6.3 5.6 3.7	12.5 15.0 8.4
Ownership of Unit OwnedRented	0.6 Q	31.0 14.5	9,098 4,253	584 307	2,174 935	5,998 6,098	5,664 5,792	0.70 0.75	4.5 5.4	10.9 14.8
Year of Construction	Q	0	Q	Q	Q	Q	Q	Q	Q	NF
1939 or Before 1940 to 1979 1980 or After ³	0.5 Q	Q 23.3 20.1	6,829 5,903	469 380	1,494 1,512	6,561 5,609	6,265 5,281	0.70 0.70	4.8 4.5	15.8 15.9
1993 Family Income Less than \$10,000 \$10,000 to \$19,999	Q 0.3	18.0 22.6	5,285 6,637	381 476	943 1,533	6,400 6,124	6,088 5,777	0.88 0.71	6.3 5.1	15.6 18.7
\$20,000 to \$34,999 \$35,000 to \$49,999 \$50,000 or More	0.3 0.2 Q	20.1 23.1 32.7	5,888 6,766 9,586	393 425 578	1,314 1,707 2,771	5,885 6,016 5,478	5,562 5,723 5,162	0.76 0.66 0.63	5.1 4.1 3.8	14.5 19.7 11.4
Below Poverty Line	0	40.0	E 0E4	404	000	0.000	0.000	0.00	7.0	40.0
100 Percent	Q 0.4 0.5	19.3 20.2 19.5	5,651 5,933 5,726	404 430 414	900 1,139 1,130	6,388 6,363 6,307	6,083 6,042 5,993	0.98 0.82 0.80	7.0 5.9 5.8	19.0 12.0 9.4
Age of Householder Under 35 Years	Q	15.6	4,576	300	1,169	5,877	5,556	0.67	4.4	17.8
35 to 59 Years	0.5 0.3	27.0 24.8	7,909 7,261	522 510	1,843 1,510	5,971 6,444	5,664 6,112	0.72 0.75	4.7 5.2	16.7 20.0
Household Size										
1 Person 2 to 4 Persons	Q 0.8	17.9 22.9	5,237 6,716	392 436	998 1,699	6,482 5,827	6,173 5,501	0.81 0.68	6.1 4.4	14.7 10.2
2 to 4 Persons 5 or More Persons	0.8 Q	22.9 Q	6,716 Q	436 Q	1,699 Q	5,827 Q	5,501 Q	0.68 Q	4.4 Q	1

¹ This factor is underestimated because it contains no error for estimating this end use.

The 30-year average and climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

³ Does not include all new construction for 1993.

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" in *Household Energy Consumption and Expenditures 1993* for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C, and E of the 1993 Residential Energy Consumption Survey.

Table 44. Natural Gas Consumption and Expenditures for Main Space Heating, per Midwest Region Households, 1993

No. No.			Consu	mption			He	nual ating ee-Days	Space-	al Gas Heating nsity	
Note		holds		cubic	itures	Floorspace (square	1993		(kWh/HDD* 1000 square	(cents/HDD* 1000 square	
Nidwest Region 16.9 92.3 89.8 496 1,880 6,601 6,460 7.2 4.0 2	Characteristics		4.41	4 41	4.01	4.0		0.5	4.41	4.01	RSE Row
Total Region 16.9 92.3 89.8 496 1.880 6.601 6.460 7.2 4.0 2 Climate Zone² Under 2.000 CDD and Over 5.500 HDD 14.4 91.5 89.0 492 1.865 6.785 6.657 7.0 3.9 2 Under 5.500 HDD 2.2 5 96.8 94.1 522 1.964 5.535 5.324 8.7 4.8 6.8 3.7 4.8 6.8 3.7 4.8 6.8 3.7 4.8 6.8 3.7 4.8 6.8 3.7 4.8 6.8 3.7 4.8 6.8 3.7 4.8 6.8 3.7 4.8 6.8 3.7 4.8 6.8 3.7 4.8 6.8 6.8 6.8 3.7 4.8 6.8 6.8 6.8 3.7 4.8 6.8 6.8 6.8 3.7 4.8 6.8 6.8 6.8 3.7 4.8 6.8 6.8 6.8 3.7 4.8 6.8 6.8 6.8 3.7 4.8 6.8 6.8 6.8 3.7 4.8 6.8 6.8 6.8 6.8 3.7 4.8 6.8 6.8 6.8 6.8 3.7 4.8 6.8 6.8 6.8 6.8 3.7 4.8 6.8 6.8 6.8 6.8 6.8 6.8 6.8 6.8 6.8 6	RSE Column Factor:	2.4	1.1'	1.1'	1.0	1.0	0.5	0.5	1.1 '	1.2	Factors
Climate Zone						Mid	vest Reg	ion			
Under 2,000 CDD and Under 5,000 HDD	Total Region	16.9	92.3	89.8	496	1,880	6,601	6,460	7.2	4.0	2.6
Court 5,500 HDD											
Under 6,500 HDD		44.4	04.5	00.0	400	4.005	0.705	0.057	7.0	2.0	0.0
2,000 CDD or More and Under 4,000 HDD						,		,			2.8 6.6
Type of Housing Unit Single-Family 12.1 103.2 100.4 552 2.243 6.629 6.470 6.8 3.7 2.5 6.6 6.8 Multifamily (2 or more units) 4.1 63.9 62.2 352 972 6.474 6.407 9.9 5.6 6.8 Multifamily (2 or more units) 4.1 63.9 62.2 352 972 6.474 6.407 9.9 5.6 6.8 Multifamily (2 or more units) 4.1 63.9 62.2 352 972 6.474 6.407 9.9 5.6 6.8 Multifamily (2 or more units) 4.1 63.9 62.2 352 972 6.474 6.407 9.9 5.6 6.8 4.8 4.8 4.000 to 1.999 6.0 92.2 83.7 8.9 8.1 5.1 6.536 6.390 9.1 5.0 3.2 5.000 or More 6.6 113.2 110.1 602 2.924 6.697 6.539 5.6 3.1 3.3 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.3		2.5	30.0	34.1	322	1,304	3,333	3,324	0.7	4.0	0.0
Single-Family	Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Mobile Home											
Multifamily (2 or more units)						,	,	,			2.8
Heated Floorspace Square feet Fewer than 1,000											6.7
	Multiramily (2 or more units)	4.1	63.9	62.2	352	972	6,474	6,407	9.9	5.6	4.3
Fewer than 1,000											
1,000 to 1,999 6.0 92.2 89.7 499 1,511 6,536 6,390 9.1 5.0 3 2,000 or More 6.6 113.2 110.1 602 2,924 6,697 6,539 5.6 3.1 3 **Ownership of Unit** **Owned 11.6 101.5 98.8 545 2,197 6,656 6,495 6.8 3.7 2 **Rented 5.3 72.1 70.1 389 1,186 6,479 6,384 9.1 5.1 4 **Year of Construction** 1939 or Before 5.5 111.5 108.5 606 1,886 6,663 6,517 8.6 4.8 4 1940 to 1979 8.8 885.8 83.4 455 1,759 6,538 6,399 7.3 4.0 2 1980 or After³ 2.5 72.9 70.9 398 2,287 6,684 6,548 4.6 2.6 4 **1993 Family Income** Less than \$10,000 1.9 82.1 79.8 443 1,259 6,617 6,490 9.6 5.3 4 \$20,000 to \$19,999 4.0 93.3 90.8 502 1,597 6,584 6,466 8.6 4.8 4 \$20,000 to \$34,999 4.4 88.5 86.1 483 1,733 6,744 6,571 7.4 4.1 3 \$35,000 to \$34,999 3.1 19.1 3 88.8 495 2,046 6,513 6,362 6,7 3.7 3 \$50,000 to More 3.5 102.3 99.5 536 2,584 6,510 6,885 5.9 3.2 3 **Below Poverty Line** 100 Percent 1.8 84.7 82.4 453 1,284 6,584 6,453 9.8 5.4 5 125 Percent 2.7 85.7 83.4 463 1,392 6,656 6,521 9.0 5.0 4 150 Percent 3.6 87.4 85.0 473 1,408 6,621 6,487 9.1 5.1 3.9 **Age of Householder** Under 35 Years 4.9 78.4 76.2 418 1,639 6,569 6,424 7.1 3.9 3 35 to 59 Years 4.9 78.4 76.2 418 1,639 6,569 6,424 7.1 3.9 3 35 to 59 Years 4.9 78.4 76.2 418 1,639 6,569 6,651 8.8 2 4.5 3 **Household Size** 1 Person 4.5 79.9 77.7 436 1,299 6,576 6,457 9.1 5.1 4 2 to 4 Persons 10.8 96.0 93.4 513 2,098 6,590 6,442 6.8 3.7 3.3		4.2	59.4	57.8	326	764	6.543	6.437	11.6	6.5	4.2
Ownership of Unit		6.0	92.2	89.7	499	1,511	,	,	9.1	5.0	3.2
Owned 11.6 101.5 98.8 545 2,197 6,656 6,495 6.8 3.7 2 Rented 5.3 72.1 70.1 389 1,186 6,479 6,384 9.1 5.1 4 Year of Construction 1939 or Before 5.5 111.5 108.5 606 1,886 6,663 6,517 8.6 4.8 4 940 to 1979 8.8 85.8 83.4 455 1,759 6,538 6,399 7.3 4.0 2 1993 Family Income Less than \$10,000 1.9 82.1 79.8 443 1,259 6,617 6,490 9.6 5.3 4 \$20,000 to \$19,999 4.0 93.3 9.8 502 1,597 6,584 6,466 8.6 4.8 4 220,000 to \$34,999 3.1 91.3 88.8 495 2,046 6,513 6,362 6,7 3.7 3.7 3.7 3.3 3.6 74 4.1 3	2,000 or More	6.6	113.2	110.1	602	2,924	6,697	6,539	5.6	3.1	3.3
Rented											
Year of Construction 1939 or Before 5.5 111.5 108.5 606 1,886 6,663 6,517 8.6 4.8 4 1940 to 1979 8.8 85.8 83.4 455 1,759 6,538 6,399 7.3 4.0 2 1993 Family Income Less than \$10,000 1.9 82.1 79.8 443 1,259 6,617 6,490 9.6 5.3 4 \$10,000 to \$19,999 4.0 93.3 90.8 502 1,597 6,584 6,466 8.6 4.8 4 \$20,000 to \$34,999 4.4 88.5 86.1 483 1,733 6,744 6,571 7.4 4.1 3 \$25,000 to \$49,999 3.1 91.3 88.8 495 2,584 6,510 6,385 5.9 3.2 3 \$20,000 to \$49,999 3.1 91.3 88.8 495 2,584 6,510 6,385 5.9 3.2 3 \$20,000 to \$40,999						,	,	,			2.9
1939 or Before 5.5 111.5 108.5 606 1,886 6,663 6,517 8.6 4.8 4.8 1940 to 1979 8.8 85.8 83.4 455 1,759 6,538 6,399 7.3 4.0 2 1980 or After ³ 2.5 72.9 70.9 398 2,287 6,684 6,548 4.6 2.6 4 1993 Family Income Less than \$10,000 1.9 82.1 79.8 443 1,259 6,617 6,490 9.6 5.3 4.8 \$10,000 to \$19,999 4.0 93.3 90.8 502 1,597 6,584 6,466 8.6 4.8 4.8 4.8 \$20,000 to \$34,999 4.4 88.5 86.1 483 1,733 6,744 6,571 7.4 4.1 3.3 \$35,000 to \$49,999 3.1 91.3 88.8 495 2,046 6,513 6,362 6.7 3.7 3.8 \$50,000 or More 3.5 102.3 99.5 536 2,584 6,510 6,385 5.9 3.2 3. Below Poverty Line 100 Percent 1.8 84.7 82.4 453 1,284 6,584 6,453 9.8 5.4 5.125 Percent 2.7 85.7 83.4 463 1,392 6,656 6,521 9.0 5.0 4.150 Percent 3.6 87.4 85.0 473 1,408 6,621 6,487 9.1 5.1 3. Age of Householder Under 35 Years 4.9 78.4 76.2 418 1,639 6,569 6,424 7.1 3.9 3.3 5 to 59 Years 7.2 93.0 90.5 503 2,038 6,585 6,446 6.7 3.7 3.5 60 Years and Over 4.7 105.5 102.6 567 1,887 6,658 6,518 8.2 4.5 3.5 4.5 1.2 1 Person 4.5 79.9 77.7 436 1,299 6,576 6,457 9.1 5.1 4.2 10 4 Persons 10.8 96.0 93.4 513 2,098 6,590 6,442 6.8 3.7 3.7 3.5 1.2 10 4 Persons 10.8 96.0 93.4 513 2,098 6,590 6,442 6.8 3.7 3.7 3.5 1.2 10 4 Persons 10.8 96.0 93.4 513 2,098 6,590 6,442 6.8 3.7 3.7 3.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1	Rented	5.3	72.1	70.1	389	1,186	6,479	6,384	9.1	5.1	4.0
1940 to 1979 8.8 85.8 83.4 455 1,759 6,538 6,399 7.3 4.0 2 1980 or After ³ 2.5 72.9 70.9 398 2,287 6,684 6,548 4.6 2.6 4 1993 Family Income Less than \$10,000 12,1999 4.0 93.3 90.8 502 1,597 6,584 6,466 8.6 4.8 4 \$20,000 to \$19,999 4.4 88.5 86.1 483 1,733 6,744 6,571 7.4 4.1 3 \$35,000 to \$49,999 3.1 91.3 88.8 495 2,046 6,513 6,362 6.7 3.7 3. \$50,000 or More 3.5 102.3 99.5 536 2,584 6,510 6,385 5.9 3.2 3 Below Poverty Line 100 Percent 1.8 84.7 82.4 453 1,284 6,584 6,453 9.8 5.4 5.0 473 1,408 6,621 6,487 9.1 5.1 3. Age of Householder Under 35 Years 4.9 78.4 76.2 418 1,639 6,569 6,424 7.1 3.9 3 55 to 99 Years 7.2 93.0 90.5 503 2,038 6,585 6,446 6.7 3.7 3 50 Years and Over 4.7 105.5 102.6 567 1,887 6,658 6,518 8.2 4.5 3 Household Size 1 Person 4.5 79.9 77.7 436 1,299 6,576 6,442 6.8 3.7 3.7 3 1 Person 4.5 79.9 77.7 436 1,299 6,576 6,442 6.8 3.7 3.7 3 1 Person 4.5 79.9 77.7 436 1,299 6,576 6,442 6.8 3.7 3.7 3											
1980 or After ³											4.2 2.6
1993 Family Income Less than \$10,000											4.7
Less than \$10,000		2.0	72.5	70.5	000	2,207	0,004	0,040	4.0	2.0	4.7
\$10,000 to \$19,999		4.0	00.4	70.0	442	1.050	6 647	6 400	0.6	F 2	4.0
\$20,000 to \$34,999						,	,	,			4.9 4.3
\$35,000 to \$49,999											3.9
\$50,000 or More											3.8
100 Percent 1.8 84.7 82.4 453 1,284 6,584 6,453 9.8 5.4 5 125 Percent 2.7 85.7 83.4 463 1,392 6,656 6,521 9.0 5.0 4 150 Percent 3.6 87.4 85.0 473 1,408 6,621 6,487 9.1 5.1 3 Age of Householder Under 35 Years 4.9 78.4 76.2 418 1,639 6,569 6,424 7.1 3.9 3 35 to 59 Years 7.2 93.0 90.5 503 2,038 6,585 6,446 6.7 3.7 3 60 Years and Over 4.7 105.5 102.6 567 1,887 6,658 6,518 8.2 4.5 3 Household Size 1 Person 4.5 79.9 77.7 436 1,299 6,576 6,457 9.1 5.1 4 2 to 4 Persons 10.8 96.0 93.4 513 2,098 6,590 6,442 6.8	\$50,000 or More	3.5	102.3	99.5	536	2,584	6,510	6,385	5.9	3.2	3.7
125 Percent							_				
150 Percent											5.1
Under 35 Years 4.9 78.4 76.2 418 1,639 6,569 6,424 7.1 3.9 3.35 to 59 Years 7.2 93.0 90.5 503 2,038 6,585 6,446 6.7 3.7 3.60 Years and Over 4.7 105.5 102.6 567 1,887 6,658 6,518 8.2 4.5 3 Household Size 1 Person 4.5 79.9 77.7 436 1,299 6,576 6,457 9.1 5.1 4.2 2 to 4 Persons 10.8 96.0 93.4 513 2,098 6,590 6,442 6.8 3.7 3											4.8 3.4
Under 35 Years 4.9 78.4 76.2 418 1,639 6,569 6,424 7.1 3.9 3.35 to 59 Years 7.2 93.0 90.5 503 2,038 6,585 6,446 6.7 3.7 3.60 Years and Over 4.7 105.5 102.6 567 1,887 6,658 6,518 8.2 4.5 3 Household Size 1 Person 4.5 79.9 77.7 436 1,299 6,576 6,457 9.1 5.1 4.2 2 to 4 Persons 10.8 96.0 93.4 513 2,098 6,590 6,442 6.8 3.7 3	Age of Householder										
35 to 59 Years		4.9	78.4	76.2	418	1,639	6,569	6,424	7.1	3.9	3.9
Household Size 1 Person	35 to 59 Years	7.2	93.0	90.5	503	2,038	6,585	6,446	6.7	3.7	3.0
1 Person 4.5 79.9 77.7 436 1,299 6,576 6,457 9.1 5.1 4 2 to 4 Persons 10.8 96.0 93.4 513 2,098 6,590 6,442 6.8 3.7 3	60 Years and Over	4.7	105.5	102.6	567	1,887	6,658	6,518	8.2	4.5	3.8
2 to 4 Persons			70.0		400	4.000	0.570	0.45=	2.4	- 1	4.0
											4.3 3.0
5 OF WORLE PERSONS	5 or More Persons	1.6	102.6	93.4 99.8	513 554	2,098	6,747	6,598	7.2	4.0	3.0 4.4

Table 44. Natural Gas Consumption and Expenditures for Main Space Heating, per Midwest Region Households, 1993 (Continued)

		Consu	mption			He	nnual ating ee-Days	Space-	al Gas Heating nsity	
Characteristics	House- holds (million)	(million Btu)	(1000 cubic feet)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average ²	Consumption (kWh/HDD* 1000 square feet)	Expenditures (cents/HDD* 1000 square feet)	
Characteristics RSE Column Factor:	2.4	1.11	1.1 ¹	1.0 ¹	1.0	0.5	0.5	1.1 ¹	1.2 ¹	RSE Row Factors

Midwest Region

-										
Main Heating Equipment										
Using Natural Gas Central Warm-Air										
Furnace	13.5	91.6	89.1	495	1,984	6,582	6,431	6.8	3.8	2.6
Steam or Hot-Water	10.0	31.0	03.1	433	1,304	0,502	0,431	0.0	5.0	2.0
System	2.9	99.2	96.5	521	1,535	6,712	6,623	9.4	5.1	6.5
Floor, Wall, or Pipeless					,	- /	-,-			
Furnace	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Room Heater/Other	0.4	69.8	67.9	398	982	6,481	6,371	10.7	6.2	9.6
Age of Main Heating										
Equipment										
Less than 5 Years	3.3	83.6	81.4	461	2,179	6,796	6,631	5.5	3.1	3.9
5 to 9 Years	3.1	95.2	92.6	517	2,207	6,496	6,362	6.5	3.6	4.1
10 to 19 Years	3.5	98.8	96.1	536	1,911	6,619	6,468	7.6	4.2	4.5
20 Years or More Don't Know	4.3 2.7	105.2 70.8	102.4 68.9	553 377	1,901 1,080	6,624 6,425	6,477 6,329	8.1 9.9	4.4 5.4	3.8 5.6
DOLL KHOW	2.1	70.8	00.9	3//	1,080	6,425	6,329	9.9	5.4	5.6
Secondary Heating Fuel										
(more than one may apply)				- 40						
No	4.8	102.9	100.1	548	2,383	6,587	6,444	6.4	3.5	3.4
Yes	12.0	88.0	85.6	475	1,677	6,606	6,467	7.7	4.3	3.2
Wood Electricity	2.6 2.1	102.7 100.9	99.9 98.2	538 554	2,644 2,078	6,685 6,488	6,513 6,346	5.7 7.3	3.0 4.1	4.7 5.5
Kerosene	0.5	106.6	103.7	561	2,076	6,259	6,346	7.3 7.8	4.1	9.7
Other	0.5	100.0	97.6	537	2,455	6,837	6.730	7.8 5.8	3.2	9.4
	0.0	100.1	07.0	001	2,100	0,001	0,700	0.0	0.2	0.1
Average Natural Gas										
Expenditures										
for Main Space Heat										
(dollars per 1000 cf) Less than 4.50	Q	0	Q	0	Q	0	Q	0	0	NF
4.50 to Less than 6	12.0	Q 97.5	94.9	Q 498	ر 1,908	Q 6,524	6.382	Q 7.6	Q 4.0	3.3
6 or More	4.8	78.2	76.1	490	1,799	6,785	6,649	6.2	4.0	6.1
O OF MORE	4.0	70.2	70.1	450	1,700	0,700	0,043	0.2	4.0	0.1
Adequacy of Insulation										
Well Insulated	6.0 7.1	91.7 88.3	89.2 85.9	494 475	2,113	6,709	6,569	6.3	3.5	3.1 3.4
Adequately Insulated	7.1 3.8	88.3 100.6	85.9 97.9	475 539	1,816 1,627	6,585 6,459	6,424 6,354	7.2 9.3	4.0 5.1	3.4 4.4
Poorly Insulated	3.0	100.0	91.9	ออฮ	1,027	0,409	0,334	შ.ა	J. I	4.4

Table 44. Natural Gas Consumption and Expenditures for Main Space Heating, per Midwest Region Households, 1993 (Continued)

							nual ating		al Gas Heating	
		Consu	mption				e-Days		nsity	
Characteristics	House- holds (million)	(million Btu)	(1000 cubic feet)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average ²	Consumption (kWh/HDD* 1000 square feet)	Expenditures (cents/HDD* 1000 square feet)	
RSE Column Factor:	2.4	1.1 ¹	1.1 ¹	1.0 ¹	1.0	0.5	0.5	1.1 ¹	1.2 ¹	RSE Row Factors
East North Central Division	12.9	93.1	90.5	504	1,879	6,519	6,438	7.4	4.1	2.8
	12.0	55.1	30.0	304	1,070	0,010	0,400	7	7.1	2.0
Climate Zone ² Under 2,000 CDD and										
Over 5,500 HDD	11.5	91.9	89.4	496	1,878	6,625	6,551	7.2	4.0	2.9
Under 5,500 HDD	Q	Q	Q	Q	Q ,,,,,,	Q	Q	Q	Q	NF
2,000 CDD or More and										
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit										
Single-Family	8.9	105.4	102.6	567	2,282	6,545	6,450	6.9	3.8	3.1
Mobile Home	0.6	68.8	66.9	370	1,012	6,770	6,531	9.8	5.4	7.1
Multifamily (2 or more units)	3.4	64.8	63.0	359	969	6,410	6,391	10.1	5.8	4.5
Heated Flaggers										
Heated Floorspace (square feet)										
Fewer than 1,000	3.2	58.0	56.5	321	758	6,499	6,460	11.5	6.5	4.6
1,000 to 1,999	4.6	95.5	92.9	518	1,509	6,412	6,332	9.6	5.4	3.6
2,000 or More	5.1	112.7	109.6	604	2,910	6,629	6,521	5.7	3.1	3.8
Ownership of Unit										
Owned	8.6	103.3	100.5	558	2,220	6.559	6,455	6.9	3.8	3.2
Rented	4.2	72.2	70.3	393	1,185	6,439	6,405	9.2	5.2	4.4
Voca of Construction										
Year of Construction 1939 or Before	3.9	117.9	114.7	649	1,945	6,451	6,384	9.1	5.2	4.9
1940 to 1979	7.1	85.4	83.0	453	1,755	6,499	6,411	7.3	4.0	2.8
1980 or After ³	1.9	71.4	69.4	395	2,204	6,732	6,649	4.7	2.7	5.6
1993 Family Income										
Less than \$10,000	1.5	82.2	80.0	448	1,252	6,541	6,479	9.8	5.5	5.4
\$10,000 to \$19,999	3.1	96.0	93.3	517	1,548	6,447	6,398	9.4	5.2	4.6
\$20,000 to \$34,999	3.2	91.2	88.7	506	1,813	6,606	6,496	7.4	4.2	4.4
\$35,000 to \$49,999	2.3	91.4	89.0	497	2,038	6,485	6,394	6.7	3.8	4.3
\$50,000 or More	2.8	99.2	96.5	520	2,521	6,517	6,432	5.9	3.2	4.0
Below Poverty Line										
100 Percent	1.4	85.3	83.0	460	1,274	6,524	6,453	10.0	5.5	5.4
125 Percent	2.1	87.4	85.1	477	1,369	6,557	6,492	9.5	5.3	4.7
150 Percent	2.7	88.5	86.1	484	1,372	6,515	6,450	9.6	5.4	3.0
Age of Householder										
Under 35 Years	3.5	81.0	78.8	437	1,709	6,485	6,414	7.1	3.9	4.6
35 to 59 Years	5.7	92.2	89.7	501	1,993	6,520	6,432	6.9	3.9	3.4
60 Years and Over	3.7	106.1	103.2	572	1,867	6,552	6,472	8.4	4.7	4.2
Household Size										
1 Person	3.5	80.1	77.9	439	1,298	6,512	6,443	9.2	5.2	4.8
2 to 4 Persons	8.1	97.1	94.4	521	2,111	6,503	6,417	6.9	3.8	3.3

Table 44. Natural Gas Consumption and Expenditures for Main Space Heating, per Midwest Region Households, 1993 (Continued)

		Consu	mption			Hea	nual ating ee-Days	Space-	al Gas Heating nsity	
Characteristics	House- holds (million)	(million Btu)	(1000 cubic feet)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average ²	Consumption (kWh/HDD* 1000 square feet)	Expenditures (cents/HDD* 1000 square feet)	
Characteristics RSE Column Factor:	2.4	1.1 ¹	1.1 ¹	1.0 ¹	1.0	0.5	0.5	1.1 ¹	1.2 ¹	RSE Row Factors
West North Central Division	4.0	89.7	87.2	473	1,882	6,863	6,531	6.8	3.7	5.8
Climate Zone ² Under 2,000 CDD and										
Over 5,500 HDD Under 5,500 HDD 2,000 CDD or More and	2.9 1.1	89.9 89.0	87.5 86.5	475 466	1,817 2,063	7,407 5,350	7,066 5,041	6.5 7.8	3.5 4.2	7.7 6.0
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit Single-Family Mobile Home Multifamily (2 or more units)	3.1 Q 0.7	96.8 Q 59.7	94.2 Q 58.0	510 Q 317	2,131 Q 985	6,869 Q 6,789	6,528 Q 6,485	6.4 Q 8.7	3.5 Q 4.7	6.1 NF 11.6
Heated Floorspace (square feet)										
1,000 to 1,999	1.0 1.4 1.5	63.6 81.8 114.8	61.9 79.6 111.7	343 437 595	785 1,519 2,970	6,676 6,937 6,922	6,369 6,578 6,596	11.8 7.6 5.4	6.5 4.1 2.9	8.1 4.1 6.3
Ownership of Unit Owned	2.9 1.1	96.2 71.4	93.6 69.4	508 373	2,130 1,192	6,943 6,642	6,613 6,301	6.3 8.8	3.4 4.7	5.6 8.6
Year of Construction	1.1	71.4	09.4	3/3	1,192	0,042	0,301	0.0	4.7	0.0
1939 or Before 1940 to 1979 1980 or After ³	1.7 1.7 0.6	96.5 87.4 77.5	93.9 85.0 75.4	506 463 410	1,749 1,774 2,542	7,160 6,695 6,535	6,828 6,350 6,236	7.5 7.2 4.5	4.0 3.9 2.5	7.7 6.3 8.1
1993 Family Income Less than \$10,000 \$10,000 to \$19,999	0.5 0.9	81.7 84.5	79.5 82.2	428 452	1,280 1,763	6,853 7,045	6,526 6,696	9.1 6.6	4.9 3.6	12.7 9.8
\$20,000 to \$34,999 \$35,000 to \$49,999 \$50,000 or More	1.1 0.8 0.7	80.8 90.9 114.3	78.6 88.4 111.2	420 487 597	1,505 2,073 2,829	7,134 6,600 6,485	6,784 6,261 6,206	7.3 6.5 6.1	3.9 3.6 3.3	6.7 7.5 7.3
Below Poverty Line										
100 Percent	0.4 0.7 0.9	82.7 80.3 83.9	80.4 78.1 81.6	428 420 441	1,319 1,463 1,514	6,790 6,961 6,927	6,452 6,609 6,593	9.0 7.7 7.8	4.8 4.1 4.2	13.6 14.1 10.3
Age of Householder Under 35 Years	1.4	71.3	69.4	369	1,454	6,791	6,453	7.0	3.7	7.2
35 to 59 Years 60 Years and Over	1.6 1.1	95.7 103.7	93.1 100.9	508 551	2,203 1,952	6,822 7,013	6,498 6,674	6.2 7.4	3.4 4.0	6.5 7.1
Household Size	4.0	70.0	70.0	40.4	4.00-	0.00=	0.500	2.7	4.0	o .
1 Person 2 to 4 Persons 5 or More Persons	1.0 2.7 0.3	79.0 92.6 97.2	76.8 90.1 94.5	424 488 487	1,305 2,058 2,179	6,807 6,855 7,088	6,506 6,517 6,707	8.7 6.4 6.1	4.8 3.5 3.2	9.4 6.2 9.1

¹ This factor is underestimated because it contains no error for estimating this end use.

The 30-year average and climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

³ Does not include all new construction for 1993.

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" in Household Energy Consumption and Expenditures 1993 for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C, and F of the 1993 Residential Energy Consumption Survey.

Table 45. Fuel Oil Consumption and Expenditures for Main Space Heating, per Midwest Region Households, 1993

		Consu	mption			He	nual ating ee-Days	Space-	l Oil Heating nsity	
Characteristics	House- holds (million)	(million Btu)	(gallons)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average ²	Consumption (kWh/HDD* 1000 square feet)	Expenditures (cents/HDD* 1000 square feet)	
RSE Column Factor:	3.4	1.1 ¹	1.1 ¹	1.1 ¹	1.0	0.4	0.4	1.2 ¹	1.3 ¹	RSE Row Factors
Total Region East North Central Division West North Central Division	1.3 0.7 0.6	94.6 100.2 88.6	685 725 643	588 628 545	2,234 2,240 2,228	7,743 7,348 8,162	7,521 7,203 7,858	0.040 0.044 0.035	3.4 3.8 3.0	4.4 8.7 5.4
Climate Zone ²										
Under 2,000 CDD and Over 5,500 HDD Under 5,500 HDD	1.2 Q	94.6 Q	685 Q	589 Q	2,267 Q	7,888 Q	7,663 Q	0.038 Q	3.3 Q	4.6 NF
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit Single-Family	1.2	96.2	697	596	2,275	7,734	7,511	0.040	3.4	4.5
Mobile Home Multifamily (2 or more units)	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	NF NF
Heated Floorspace										
(square feet) Fewer than 1,000	Q 0.5	Q 79.4	Q 575	Q 513	Q 1,506	Q 7,503	Q 7,306	Q 0.051	Q 4.5	NF 8.1
2,000 or More	0.8	107.1	775	650	2,813	7,857	7,617	0.035	2.9	3.8
Ownership of Unit Owned	1.1	95.5	692	593	2,251	7,736	7,524	0.040	3.4	4.7
Rented	0.2	89.0	644	558	2,135	7,783	7,502	0.039	3.4	11.4
Year of Construction 1939 or Before 1940 to 1979 1980 or After ³	0.7 0.6 Q	102.0 86.6 Q	738 628 Q	635 536 Q	2,302 2,175 Q	7,560 7,984 Q	7,311 7,792 Q	0.042 0.036 Q	3.7 3.1 Q	5.5 5.6 NF
1993 Family Income	Q	Q	Q	Q	Q	Q	Q	Q	Q	INI
Less than \$10,000	Q 0.2 0.5	Q 109.8 90.5	Q 800 655	Q 708 553 523	Q 2,064 2,464 2,130	Q 7,962 7,902	Q 7,724 7,650	Q 0.049 0.034 0.038	Q 4.3 2.8	NF 8.5 6.5
\$50,000 or More	0.4 Q	85.4 Q	616 Q	Q	2,130 Q	7,575 Q	7,401 Q	0.038 0.041	3.2 3.3	20.6
Below Poverty Line 100 Percent	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
125 Percent	0.1 0.2	100.6 101.6	733 739	630 659	2,111 1,956	7,822 7,580	7,650 7,375	0.044 0.050	3.8 4.4	15.3 12.0
Age of Householder Under 35 Years	0.2	92.0	666	576	1,803	7,744	7,515	0.048	4.1	10.8
35 to 59 Years	0.2 0.5 0.6	83.4 104.9	604 760	517 651	2,267 2,388	7,744 7,587 7,871	7,515 7,401 7,622	0.048 0.035 0.040	3.0 3.5	7.9 6.7
Household Size	0.0		. 50		2,000	.,0. 1	.,522	2.0.0	0.0	· · ·
1 Person 2 to 4 Persons	0.3 0.9	84.9 99.0	618 717	553 609	2,023 2,329	7,934 7,657	7,637 7,448	0.038 0.040	3.4 3.4	7.7 6.1
5 or More Persons	0.2	87.7	633	535	2,089	7,870	7,709	0.038	3.3	13.7

Table 45. Fuel Oil Consumption and Expenditures for Main Space Heating, per Midwest Region Households, 1993 (Continued)

		Consu	mption			Hea	nual ating e-Days	Space-	l Oil Heating nsity	
Characteristics	House- holds (million)	(million Btu)	(gallons)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average ²	Consumption (kWh/HDD* 1000 square feet)	Expenditures (cents/HDD* 1000 square feet)	
RSE Column Factor:	3.4	1.1 ¹	1.1 ¹	1.1 ¹	1.0	0.4	0.4	1.2 ¹	1.3 ¹	RSE Row Factors
			l						l	
Main Heating Equipment Using Fuel Oil Central Warm-Air										
FurnaceSteam or Hot-Water	1.0	89.9	650	564	2,134	7,722	7,493	0.039	3.4	4.7
SystemOther	0.2 Q	112.7 Q	817 Q	662 Q	2,797 Q	7,808 Q	7,594 Q	0.037 Q	3.0 Q	11.7 NF
Age of Main Heating										
Equipment Less than 5 Years	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
5 to 9 Years	0.2	100.3	725	620	2.068	8,482	8,161	0.041	3.5	7.9
10 to 19 Years	0.4	88.2	639	541	2.100	7.972	7,783	0.038	3.2	7.1
20 Years or More	0.5	101.0	733	637	2,331	7,414	7,229	0.042	3.7	8.1
Don't Know	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Secondary Heating Fuel (more than one may apply)										
No	0.4	87.1	630	536	2.384	7.399	7.177	0.036	3.0	8.0
Yes	0.8	98.6	714	615	2.155	7.925	7.703	0.042	3.6	4.8
Wood	0.2	90.6	655	561	2.518	7,399	7.123	0.035	3.0	13.0
Electricity	0.3	87.6	635	536	2,346	7,493	7,282	0.036	3.1	10.4
Kerosene	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Average Fuel Oil Expenditures										
or Main Space Heat										
dollars per gallon) Less than .95	1.2	93.1	674	569	2,255	7,808	7,580	0.038	3.2	4.2
.95 to Less than 1.10	Q.	Q	Q	Q	Q	7,000 Q	7,500 Q	Q	Q.2	NF
1.10 or More	ã	Q	Q	Q	Q	Q	Q	Q	Q	NF
Adequacy of Insulation										
Well Insulated	0.6	89.1	646	555	2,464	7,912	7,674	0.033	2.8	5.1
Adequately Insulated Poorly Insulated	0.5 0.2	99.9 99.5	723 718	619 613	1,956 2,209	7,623 7,469	7,398 7,320	0.049 0.044	4.2 3.7	7.9 16.8

¹ This factor is underestimated because it contains no error for estimating this end use.

The 30-year average and climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

³ Does not include all new construction for 1993.

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: • Data in the East North Central and West North Central Divisions are not presented separately due to a scarcity of data. • 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" in *Household Energy Consumption and Expenditures 1993* for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C, and G of the 1993 Residential Energy Consumption

Survey.

Table 46. Liquefied Petroleum Gas Consumption and Expenditures for Main Space Heating, per Midwest Region Households, 1993

		Consu	mption			He	nual ating ee-Days	Space-	etroleum Gas Heating nsity	
Characteristics	House- holds (million)	(million Btu)	(gallons)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average ²	Consumption (kWh/HDD* 1000 square feet)	Expenditures (cents/HDD* 1000 square feet)	
RSE Column Factor:	2.8	0.9 ¹	0.9 ¹	0.9 ¹	1.0	0.5	0.5	1.4 ¹	1.5 ¹	RSE Row Factors
TOE COMMITTAGE										
					Mid	west Reg	ion			
Total Region	1.8	86.5	947	726	2,098	6,929	6,642	0.068	5.0	5.8
Climate Zone ² Under 2,000 CDD and										
Over 5,500 HDD	1.3 Q	85.5 89.6	936 981	709 778	2,135 1,987	7,355 5,639	7,084 5,305	0.062 0.093	4.5 6.9	9.3 15.1
2,000 CDD or More and Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit Single-Family	1.4	94.7	1,037	784	2,474	6,868	6,602	0.063	4.6	6.3
Mobile HomeMultifamily (2 or more units)	0.4 Q	59.8 Q	655 Q	536 Q	875 Q	7,127 Q	6,773 Q	0.110 Q	8.6 Q	7.1 NF
Heated Floorspace (square feet)										
Fewer than 1,0001,000 to 1,999	0.4 0.5	68.8 80.1	754 877	619 681	812 1,507	6,883 6,938	6,569 6,677	0.141 0.087	11.1 6.5	8.8 8.2
2,000 or More	0.9	98.5	1,079	802	3,044	6,946	6,658	0.053	3.8	5.6
Ownership of Unit Owned	1.5	88.5	970	737	2,210	6,969	6,690	0.066	4.8	6.0
Rented	0.3	74.8	819	661	1,461	6,702	6,366	0.088	6.8	10.8
Year of Construction 1939 or Before	0.7	105.6	1,156	872	2,306	6,981	6,695	0.075	5.4	5.7
1940 to 1979 1980 or After ³	0.7 0.3	78.0 64.5	854 707	658 564	1,972 1,938	6,900 6,884	6,609 6,601	0.066 0.055	4.8 4.2	10.5 12.9
1993 Family Income										
Less than \$10,000 \$10,000 to \$19,999	0.2 0.4	116.8 64.8	1,279 710	1,010 558	1,187 1,398	6,724 7,220	6,496 6,767	0.166 0.075	12.7 5.5	16.9 9.1
\$20,000 to \$34,999	0.6	77.8	852	662	2,066	6,782	6,535	0.063	4.7	9.3
\$35,000 to \$49,999 \$50,000 or More	0.3 0.2	95.3 112.9	1,044 1,236	769 921	2,826 2,998	7,174 6,642	7,000 6,333	0.053 0.065	3.8 4.6	8.3 9.3
Below Poverty Line 100 Percent	0.2	95.9	1,050	840	1,133	6,883	6,546	0.141	10.8	13.6
125 Percent	0.4 0.4	84.2 83.0	922 909	725 721	1,265 1,294	7,174 7,296	6,721 6,840	0.108 0.103	8.0 7.6	13.1 12.7
Age of Householder	0.4	04.0	075	E 40	4 447	0.047	0.555	0.070	5.0	0.4
Under 35 Years35 to 59 Years	0.4 0.8	61.6 93.7	675 1,026	548 786	1,417 2,309	6,917 6,978	6,555 6,714	0.073 0.066	5.6 4.9	9.4 8.3
60 Years and Over	0.5	95.5	1,045	778	2,324	6,866	6,604	0.068	4.9	10.0
Household Size 1 Person	0.3	99.6	1,090	831	1,466	6,841	6,586	0.113	8.3	10.8
2 to 4 Persons	1.2	85.1	932	716	2,134	6,895	6,598	0.066	4.9	8.1
5 or More Persons	0.3	80.1	877	668	2,528	7,153	6,875	0.050	3.7	9.0

Table 46. Liquefied Petroleum Gas Consumption and Expenditures for Main Space Heating, per Midwest Region Households, 1993 (Continued)

		Consu	mption			He	nual ating ee-Days	Space-	etroleum Gas Heating nsity	
	House- holds (million)	(million Btu)	(gallons)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average ²	Consumption (kWh/HDD* 1000 square feet)	Expenditures (cents/HDD* 1000 square feet)	
Characteristics RSE Column Factor:	2.8	0.91	0.91	0.9 ¹	1.0	0.5	0.5	1.41	1.5 ¹	RSE Row Factors

Midwest Region

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Main Heating Equipment										
Using LPG Central Warm-Air										
Furnace	1.5	81.9	896	694	2,112	6.957	6.645	0.064	4.7	6.1
Room Heater/Other	0.3	113.0	1,237	906	2,112	6,772	6,625	0.093	4.7 6.6	17.1
Noom ricatel/other	0.0	110.0	1,207	300	2,010	0,112	0,020	0.000	0.0	17.1
Age of Main Heating										
Equipment										
Less than 5 Years	0.7	87.7	960	726	2,420	7,130	6,809	0.058	4.2	6.2
5 to 9 Years	0.5	73.8	808	622	1,889	7,069	6,838	0.063	4.7	9.9
10 to 19 Years	0.3	117.3	1,285	982	1,900	6,685	6,362	0.106	7.7	7.3
20 Years or More	0.3	86.3	945	743	2,044	6,671	6,419	0.072	5.4	14.3
Don't Know	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Secondary Heating Fuel										
(more than one may apply)										
No	0.8	86.9	951	753	2,256	6.792	6.493	0.065	4.9	8.5
Yes	1.0	86.2	944	705	1,978	7.034	6.756	0.071	5.1	7.8
Wood	0.3	83.7	916	737	2,799	6.584	6.234	0.052	4.0	11.5
Electricity	0.4	79.9	874	708	2,144	6,562	6,298	0.065	5.0	10.4
Kerosene	0.2	92.0	1,007	740	2.035	7,056	6.754	0.073	5.2	12.5
Other	Q.	Q	Q	Q	Q 2,000	Q	Q,751	Q	Q	NF
Average LPG Expenditures										
for Main Space Heat										
(dollars per gallon)										
Less than .75	0.6	92.3	1,011	652	2,351	7,539	7,168	0.060	3.7	9.8
.75 to Less than 1.00	1.1	83.9	919	764	1,969	6,638	6,388	0.073	5.8	6.3
1.00 or More	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Adequacy of Insulation										
Well Insulated	0.6	85.3	934	683	2,374	6,999	6,772	0.058	4.1	11.3
Adequately Insulated	8.0	79.4	869	668	2,187	7,064	6,767	0.059	4.3	8.2
Poorly Insulated	0.4	100.9	1,105	888	1,565	6,592	6,241	0.113	8.6	9.4
•										

Table 46. Liquefied Petroleum Gas Consumption and Expenditures for Main Space Heating, per Midwest Region Households, 1993 (Continued)

		Consu	mption			He	nual ating ee-Days	Space-	etroleum Gas Heating nsity	
Characteristics	House- holds (million)	(million Btu)	(gallons)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average ²	Consumption (kWh/HDD* 1000 square feet)	Expenditures (cents/HDD* 1000 square feet)	
RSE Column Factor:	2.8	0.9 ¹	0.9 ¹	0.9 ¹	1.0	0.5	0.5	1.4 ¹	1.5 ¹	RSE Row Factors
East North Central Division	0.9	95.9	1,051	817	2,155	6,761	6,512	0.075	5.6	7.8
Climate Zone ²										
Under 2,000 CDD and										
Over 5,500 HDD	8.0	91.7	1,004	779	2,117	6,997	6,746	0.070	5.3	13.0
Under 5,500 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
2,000 CDD or More and Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Olidei 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	INF
Type of Housing Unit										
Single-Family	0.7	109.4	1,197	919	2,609	6,617	6,405	0.072	5.3	6.9
Mobile Home	Q	57.3	627	524	849	7,175	6,821	0.108	8.6	9.5
Multifamily (2 or more units)	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Heated Floorspace										
(square feet)										
Fewer than 1,000	0.2	72.9	799	670	810	7,010	6,741	0.146	11.8	13.4
1,000 to 1,999	0.2	89.7	983	786	1,508	6,562	6,395	0.102	7.9	11.7
2,000 or More	0.4	111.2	1,217	911	3,191	6,732	6,453	0.059	4.2	7.0
Ownership of Unit										
Owned	0.7	100.0	1,095	850	2,302	6,757	6,523	0.073	5.5	7.5
Rented	0.2	77.4	847	668	1,480	6,777	6,462	0.089	6.7	12.5
Year of Construction										
1939 or Before	0.4	114.1	1,249	968	2,306	6,430	6,194	0.087	6.5	7.6
1940 to 1979	0.4	92.6	1,014	787	1,932	6,972	6,731	0.078	5.8	16.4
1980 or After ³	0.2	68.8	753	595	2,219	7,033	6,751	0.050	3.8	16.5
4000 5 11 - 1										
1993 Family Income Less than \$10,000	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
\$10,000 to \$19,999	0.2	70.0	766	586	1,285	7,503	6,949	0.086	6.1	13.4
\$20,000 to \$34,999	0.3	83.1	910	757	1,909	6,404	6,257	0.076	6.2	14.1
\$35,000 to \$49,999	0.2	110.8	1,213	905	3,040	6,892	6,774	0.059	4.3	9.9
\$50,000 or More	0.2	123.8	1,356	1,001	3,138	6,586	6,297	0.069	4.8	10.7
Balan Banantu Lina										
Below Poverty Line 100 Percent	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
125 Percent	Q	80.5	881	704	1,099	7,637	7,087	0.113	8.4	25.1
150 Percent	Q	82.3	901	729	1,087	7,753	7,192	0.115	8.6	23.9
Ago of Households										
Age of Householder Under 35 Years	Q	61.2	670	559	1,177	7,239	6,888	0.083	6.6	18.1
35 to 59 Years	0.4	110.1	1,205	938	2,384	6,636	6,401	0.079	5.9	10.5
60 Years and Over	0.3	100.2	1,097	827	2,510	6,605	6,407	0.068	5.0	11.3
Household Size										
1 Person	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
2 to 4 Persons	0.6	93.5	1,024	788	2,164	6,946	6,693	0.071	5.2	11.3
5 or More Persons	0.1	83.5	914	721	2,669	6,687	6,380	0.054	4.0	14.0

Table 46. Liquefied Petroleum Gas Consumption and Expenditures for Main Space Heating, per Midwest Region Households, 1993 (Continued)

<u> </u>							•		<u> </u>	
		Consu	mption			Hea	nual ating ee-Days	Space-	etroleum Gas Heating nsity	
Characteristics	House- holds (million)	(million Btu)	(gallons)	Expend- itures (dollars)	Heated Floorspace (square feet)	1993	30-Year Average ²	Consumption (kWh/HDD* 1000 square feet)	Expenditures (cents/HDD* 1000 square feet)	
RSE Column Factor:	2.8	0.9 ¹	0.9 ¹	0.9 ¹	1.0	0.5	0.5	1.4 ¹	1.5 ¹	RSE Row Factors
West North Central Division	0.9	76.4	836	628	2,037	7,109	6,781	0.061	4.3	8.5
Climate Zone ²										
Under 2,000 CDD and Over 5,500 HDD Under 5,500 HDD	0.6 Q	77.3 74.4	847 815	618 650	2,158 1,784	7,822 5,624	7,523 5,233	0.052 0.087	3.7 6.5	9.5 18.0
2,000 CDD or More and Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit										
Single-Family Mobile Home Multifamily (2 or more units)	0.7 0.2 Q	79.9 63.1 Q	875 691 Q	649 550 Q	2,339 910 Q	7,121 7,064 Q	6,799 6,710 Q	0.055 0.113 Q	3.9 8.6 Q	9.8 10.8 NF
Heated Floorspace										
(square feet) Fewer than 1,000	0.2 Q 0.4	63.7 71.3 85.0	697 780 931	554 584 687	815 1,506 2,888	6,723 7,286 7,174	6,352 6,937 6,876	0.135 0.075 0.047	10.1 5.3 3.3	10.2 16.6 8.0
Ownership of Unit					_,	.,	2,212			
OwnedRented	0.8 Q	77.2 Q	845 Q	625 Q	2,118 Q	7,180 Q	6,857 Q	0.058 Q	4.1 Q	8.6 NF
Year of Construction	2.0	05.5	1.040	750	0.005	7.000	7.000	0.000	4.0	0.5
1939 or Before	0.3 0.4 Q	95.5 67.1 56.1	1,046 734 614	759 561 503	2,305 2,001 1,377	7,633 6,846 6,586	7,288 6,518 6,303	0.062 0.056 0.071	4.3 4.1 5.5	8.5 11.8 15.7
1993 Family Income	•					•				
Less than \$10,000 \$10,000 to \$19,999	Q 0.2	Q 60.2	Q 659	Q 534	Q 1,499	Q 6,967	Q 6,604	Q 0.067	Q 5.1	NF 11.8
\$20,000 to \$34,999	0.3 0.2	72.9 78.3	799 857	574 619	2,211 2,591	7,131 7,484	6,792	0.053 0.046	3.6 3.2	10.8 9.2
\$35,000 to \$49,999 \$50,000 or More	Q.2 Q	76.3 Q	Q 857	Q	2,591 Q	7,464 Q	7,248 Q	0.046 Q	3.2 Q	9.2 NF
Below Poverty Line										
100 Percent	Q	104.3 87.1	1,142	890 741	1,303	6,835	6,464	0.136	10.0	19.7
150 Percent	0.2 0.2	83.6	953 915	716	1,394 1,448	6,815 6,956	6,437 6,578	0.106 0.096	7.8 7.1	15.0 15.2
Age of Householder										
Under 35 Years35 to 59 Years	0.2 0.4	62.0 76.4	679 837	537 625	1,637 2,229	6,622 7,340	6,250 7,044	0.066 0.053	5.0 3.8	12.2 9.3
60 Years and Over	Q.4 Q	89.7	982	716	2,095	7,187	6,845	0.068	4.8	19.6
Household Size				.						
1 Person 2 to 4 Persons	0.1 0.6	78.6 75.7	861 828	603 636	1,331 2,100	7,755 6,837	7,409 6,491	0.087 0.061	5.8 4.4	14.9 9.0
5 or More Persons	0.6	77.2	845	622	2,100	7,567	7,315	0.048	3.4	11.8

¹ This factor is underestimated because it contains no error for estimating this end use.

The 30-year average and climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

³ Does not include all new construction for 1993.

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" in Household Energy Consumption and Expenditures 1993 for definition of terms used in this report.

Table 47. Electricity Consumption and Expenditures for All Air Conditioning and Central Air Conditioning, Midwest Region Households, 1993

		icity Used Conditio					EI	ectricity Us Air Cond					
								р	er Hous	ehold			
					Consu	mption			Co	nnual poling ee-Days	Condi	ic Air- tioning nsity	
Characteristics	House- holds (mil- lion)	Total Con- sump- tion (tril- lion Btu)	Total Ex- pend- itures (bil- lion dol- lars)	House- holds (mil- lion)	(mil- lion Btu)	(kWh)	Ex- pend- itures (dol- lars)	Cooled Floor- space (square feet)	1993	30-Year Average ³	Con- sump- tion (kWh/ CDD*1000 square feet)	Ex- pend- itures (cents/ CDD*1000 square feet)	RSE
RSE Column Factor:	1.1	1.4 ¹	1.4 ¹	1.6	0.8 ¹	0.8 ¹	0.8 ¹	0.8	0.8	0.8	0.81	0.9 ¹	Row Fac- tors
							Midwe	st Region				I	
Total Region	16.4	79.4	1.90	10.5	6.0	1,772	143	2,372	851	873	0.88	7.1	4.4
Climate Zone ³ Under 2,000 CDD and Over 5,500 HDD	13.2	57.5	1.38	8.5	5.5	1,606	131	2,328	765	788	0.90	7.4	6.8
Under 5,500 HDD 2,000 CDD or More and Under 4,000 HDD	3.2 Q	21.8 Q	0.51 Q	2.1 Q	8.4 Q	2,454 Q	194 Q	2,554 Q	1,205 Q	1,224 Q	0.80 Q	6.3 Q	12.6 NF
Type of Housing Unit		Q	Q	Q	Q	Q	Q	Q	Q			Q	INF
Single-Family Mobile Home Multifamily (2 or more units)	11.6 1.1 3.7	62.6 6.3 10.5	1.47 0.16 0.26	8.1 0.7 1.7	6.4 6.9 3.9	1,884 2,028 1,138	151 174 94	2,793 1,052 931	841 719 953	871 782 924	0.80 2.68 1.28	6.4 23.0 10.6	5.0 11.3 10.8
Heated Floorspace (square feet)													
Fewer than 1,000	3.9 5.7 6.8	12.7 25.7 40.9	0.31 0.63 0.95	2.0 3.5 5.0	4.3 5.7 7.0	1,254 1,656 2,059	103 139 162	926 1,817 3,337	873 899 809	858 926 843	1.55 1.01 0.76	12.8 8.5 6.0	9.2 6.2 4.9
Ownership of Unit Owned Rented	11.8 4.6	64.0 15.3	1.52 0.37	8.2 2.3	6.5 4.6	1,893 1,335	153 108	2,694 1,214	828 934	858 928	0.85 1.18	6.9 9.5	4.8 10.3
Year of Construction 1939 or Before 1940 to 1979	4.0 8.7	15.5 42.9	0.37	1.3 6.1	5.9 6.0	1,715 1,753	139 145	2,572 2,277	768 854	841 876	0.87 0.90	7.0 7.5	9.6 5.7
1980 or After ⁴ 1993 Family Income	3.6	20.9	0.47	3.1	6.3	1,833	141	2,472	882	882	0.84	6.5	9.1
Less than \$10,000 \$10,000 to \$19,999 \$20,000 to \$34,999 \$35,000 to \$49,999 \$50,000 or More	1.7 3.2 4.3 3.4 3.7	5.1 11.1 19.9 17.2 26.0	0.12 0.27 0.48 0.41 0.61	0.6 1.7 2.9 2.2 3.0	4.5 4.4 5.4 6.1 7.9	1,322 1,296 1,574 1,793 2,303	105 106 131 144 183	1,402 1,976 1,945 2,558 3,070	968 822 806 873 871	956 854 850 903 868	0.97 0.80 1.00 0.80 0.86	7.7 6.6 8.4 6.4 6.8	15.2 6.8 5.5 7.0 6.7
Below Poverty Line 100 Percent	1.3 2.2 3.0	4.5 7.1 10.0	0.11 0.17 0.23	0.4 0.8 1.2	5.1 4.7 4.8	1,496 1,384 1,418	121 110 113	1,364 1,552 1,642	984 898 896	1,003 912 910	1.11 0.99 0.96	9.0 7.9 7.7	17.9 12.3 10.6
Age of Householder Under 35 Years 35 to 59 Years 60 Years and Over	4.5 6.9 5.0	20.3 39.6 19.5	0.51 0.91 0.47	2.7 4.6 3.2	5.6 7.0	1,651 2,054 1,471	142 160 121	1,958 2,569 2,446	895 835 837	902 855 876	0.94 0.96 0.72	8.1 7.4 5.9	6.9 5.6 8.2

Table 47. Electricity Consumption and Expenditures for All Air Conditioning and Central Air Conditioning, Midwest Region Households, 1993 (Continued)

	Electricity Used for All Air Conditioning				El	ectricity Us Air Cond	sed for C ditioning	entral 2					
								р	er House	ehold			
	House-holds (tril-lion) Btu) Total Ex-pend-itures (bil-lion dol-lars)	Total		Consu	mption			Co	nnual poling ee-Days	Condi	ric Air- tioning nsity		
Characteristics		Total Ex- Con- sump- ition (bil- (tril- lion dol- Total Ex- pend- sump- itures iture	(mil- lion Btu)	(kWh)	Ex- pend- itures (dol- lars)	Cooled Floor- space (square feet)	1993	30-Year Average ³	Con- sump- tion (kWh/ CDD*1000 square feet)	Ex- pend- itures (cents/ CDD*1000 square feet)			
RSE Column Factor:	1.1	1.4 ¹	1.4 ¹	1 1.6	0.8 ¹	0.81	0.8 ¹	0.8	0.8	0.8	0.8 ¹	0.9 ¹	

Midwest Region

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Household Size													
1 Person	4.2	12.7	0.32	2.4	3.9	1,136	97	1,606	849	858	0.83	7.1	8.0
2 to 4 Persons	10.8	58.3	1.39	7.3	6.6	1,941	157	2,560	863	887	0.88	7.1	4.5
5 or More Persons	1.4	8.3	0.19	0.9	7.1	2,087	157	2,888	763	808	0.95	7.1	8.2
Cooling Degree-Days (CDD)-1993													
2,000 or More	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
1,000 to 1,999	5.2	35.9	0.79	4.1	7.7	2,249	166	2,231	1,156	1,143	0.87	6.4	9.0
500 to 999	8.4	36.5	0.94	4.8	5.6	1,629	146	2,348	748	748	0.93	8.3	7.0
Fewer than 500	2.7	6.9	0.16	1.6	3.5	1,012	79	2,793	401	575	0.90	7.0	8.8
Average Electricity Expenditures (cents per kWh)													
Less than 6	1.2	9.2	0.15	0.9	9.4	2,757	148	2,638	945	969	1.11	5.9	14.4
6 to Less than 9	9.6	48.2	1.07	6.3	6.1	1,795	135	2,432	857	874	0.86	6.5	6.3
9 or More	5.6	21.9	0.68	3.4	5.1	1,483	157	2,197	817	848	0.83	8.7	7.0
Number of Rooms Usually Air Conditioned													
1 to 3	4.3	10.2	0.24	0.8	3.5	1,014	77	758	904	868	1.48	11.2	12.1
4 to 6	8.1	38.3	0.95	6.1	5.3	1,546	130	2,000	862	888	0.90	7.5	5.5
7 or More	4.0	30.8	0.70	3.6	7.9	2,313	180	3,343	822	851	0.84	6.6	6.3
Frequency of Use of Air Conditioning ⁵													
Only a Few Times	8.6	23.3	0.57	4.8	3.6	1,045	87	2,361	735	787	0.60	5.0	4.6
Quite a Bit	4.1	24.2	0.59	2.7	6.9	2,031	169	2,478	900	894	0.91	7.6	6.8
All Summer	3.7	31.8	0.73	3.0	9.2	2,705	211	2,297	994	993	1.18	9.2	6.2
Age of Air Conditioning Equipment ⁵													
Less than 5 Years	4.3	21.0	0.50	3.0	5.6	1,654	132	2,680	830	851	0.74	5.9	6.1
5 to 9 Years	4.2	20.9	0.49	2.3	6.7	1,973	158	2,631	834	851	0.90	7.2	6.1
10 or More Years	5.7	29.3	0.70	3.9	6.3	1,860	152	2,371	852	895	0.92	7.5	6.5
Don't Know	1.8	7.1	0.17	1.0	5.4	1,594	129	1,192	972	946	1.38	11.2	14.2

Table 47. Electricity Consumption and Expenditures for All Air Conditioning and Central Air Conditioning, Midwest Region Households, 1993 (Continued)

		icity Used Conditio					EI	ectricity Us Air Con	sed for C ditioning				
								p	er Hous	ehold			
					Consu	mption			Co	nnual poling ee-Days	Condi	ic Air- tioning nsity	
Characteristics	House- holds (mil- lion)	Total Con- sump- tion (tril- lion Btu)	Total Ex- pend- itures (bil- lion dol- lars)	House- holds (mil- lion)	(mil- lion Btu)	(kWh)	Ex- pend- itures (dol- lars)	Cooled Floor- space (square feet)	1993	30-Year Average ³	Con- sump- tion (kWh/ CDD*1000 square feet)	Ex- pend- itures (cents/ CDD*1000 square feet)	RSE
RSE Column Factor:	1.1	1.4 ¹	1.4 ¹	1.6	0.8 ¹	0.8 ¹	0.81	0.8	0.8	0.8	0.8 ¹	0.9 ¹	Row Fac- tors
East North Central Division	10.8	50.0	1.25	6.7	5.8	1,713	146	2,379	817	800	0.88	7.5	5.6
Climate Zone ³ Under 2,000 CDD and Over 5,500 HDD	9.4	42.0	1.04	5.9	5.7	1,668	141	2,390	781	762	0.89	7.5	7.0
Under 5,500 HDD	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	Q Q	NF NF
Type of Housing Unit Single-Family	7.5	39.4	0.97	5.2	6.2	1,825	154	2,803	815	808	0.80	6.7	7.0
Mobile Home	0.6 2.6	4.0 6.6	0.10 0.18	0.4 1.1	7.5 3.4	2,209 993	200 89	1,095 880	735 862	759 778	2.74 1.31	24.8 11.7	15.4 10.5
Heated Floorspace (square feet)													
Fewer than 1,000	2.5 3.7	7.4 17.3	0.19 0.45	1.2 2.3	4.0 5.8	1,159 1,709	100 150	892 1,853	814 867	748 854	1.60 1.06	13.8 9.3	10.0 8.3
2,000 or More	4.6	25.2	0.62	3.2	6.6	1,934	161	3,350	782	781	0.74	6.1	6.4
Ownership of Unit Owned	7.7	40.9	1.02	5.3	6.3	1,845	157	2,684	804	798	0.85	7.3	6.4
Rented	3.1	9.1	0.23	1.4	4.1	1,192	103	1,186	869	805	1.16	10.0	10.3
Year of Construction 1939 or Before	2.4	9.2	0.23	0.7	6.2	1,811	153	2,478	848	867	0.86	7.3	16.4
1940 to 1979 1980 or After ⁴	6.2 2.2	29.7 11.1	0.76 0.27	4.3 1.8	5.9 5.6	1,722 1,652	148 137	2,290 2,555	836 763	821 725	0.90 0.85	7.8 7.0	7.4 9.9
1993 Family Income	1.0	2.6	0.07	0.2	2.0	1 120	102	1,440	054	790	0.02	0.4	15.0
Less than \$10,000 \$10,000 to \$19,999	2.0	6.4	0.07 0.16	0.3 1.0	3.9 4.0	1,138 1,177	103 105	1,887	851 842	823	0.93 0.74	8.4 6.6	15.9 9.3
\$20,000 to \$34,999 \$35,000 to \$49,999	2.7 2.2	12.2 9.9	0.32 0.25	1.8	5.4 5.4	1,581 1,592	139	1,884 2,531	816 797	812 792	1.03 0.79	9.1 6.7	7.8 8.3
\$50,000 or More	2.8	18.9	0.46	1.3 2.3	5.4 7.5	2,200	136 181	3,039	814	786	0.79	7.3	8.3
Below Poverty Line 100 Percent	0.7	2.2	0.06	0.2	E 1	1 101	1.15	1 500	868	823	1 1 1	11.2	20.2
125 Percent	1.2	3.5	0.08	0.2	5.1 4.2	1,481 1,234	145 108	1,500 1,580	820	771	1.14 0.95	8.4	13.4
150 Percent	1.7	4.9	0.12	0.6	4.3	1,255	111	1,541	851	799	0.96	8.4	12.0
Age of Householder Under 35 Years	2.7	11.8	0.32	1.5	5.6	1,653	157	2,048	846	789	0.95	9.1	7.5
35 to 59 Years 60 Years and Over	4.7 3.3	25.3 12.9	0.60 0.32	3.0 2.2	6.6 5.0	1,926 1,455	156 124	2,563 2,352	790 837	775 842	0.95 0.74	7.7 6.3	7.6 10.9
Household Size	2.2	2.0	0.04	4.0	2.2	4.050	22	4.500	000	000	0.00	7.0	40.4
1 Person 2 to 4 Persons	2.9 7.0	8.0 37.1	0.21 0.93	1.6 4.6	3.6 6.5	1,052 1,903	93 163	1,538 2,621	832 819	809 804	0.82 0.89	7.3 7.6	10.1 5.9
5 or More Persons	0.8	4.9	0.11	0.5		2,151	164	2,939	754	725	0.97	7.4	12.0

Table 47. Electricity Consumption and Expenditures for All Air Conditioning and Central Air Conditioning, Midwest Region Households, 1993 (Continued)

		icity Used Conditio			ı		EI	ectricity Us Air Con	sed for C ditioning				
								р	er Hous	ehold			
			Tatal		Consu	mption			Co	nnual poling ree-Days	Condi	ric Air- tioning nsity	
Characteristics	House- holds (mil- lion)	Total Con- sump- tion (tril- lion Btu)	Total Ex- pend- itures (bil- lion dol- lars)	House- holds (mil- lion)	(mil- lion Btu)	(kWh)	Ex- pend- itures (dol- lars)	Cooled Floor- space (square feet)	1993	30-Year Average ³	Con- sump- tion (kWh/ CDD*1000 square feet)	Ex- pend- itures (cents/ CDD*1000 square feet)	RSE
RSE Column Factor:	1.1	1.4 ¹	1.4 ¹	1.6	0.81	0.8 ¹	0.8 ¹	0.8	0.8	0.8	0.8 ¹	0.9 ¹	Row Fac- tors
West North Central Division	5.6	29.4	0.64	3.8	6.4	1,875	139	2,360	910	1,002	0.87	6.5	6.3
Climate Zone ³													
Under 2,000 CDD and Over 5,500 HDD	3.8	15.5	0.34	2.5	5.0	1,461	108	2,184	728	851	0.92	6.8	14.3
Under 5,500 HDD	1.8	13.8	0.30	1.3	9.1	2,675	198	2,701	1,262	1,294	0.78	5.8	11.2
2,000 CDD or More and Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit													
Single-Family	4.1	23.1	0.50	2.9	6.8	1,989	147	2,775	887	981	0.81	6.0	6.3
Mobile Home Multifamily (2 or more units)	0.4 1.1	2.3 3.9	0.05 0.09	0.3 Q	6.0 4.8	1,750 1,394	135 103	986 1,019	696 1,115	817 1,182	2.55 1.23	19.7 9.0	13.7 20.0
Heated Floorspace													
(square feet)													
Fewer than 1,000	1.4	5.2	0.12	0.8	4.8	1,410	108	982	970	1,040	1.48	11.4	15.0
1,000 to 1,999 2,000 or More	2.0 2.3	8.4 15.7	0.19 0.34	1.2 1.9	5.3 7.7	1,557 2,270	117 165	1,750 3,315	959 854	1,062 948	0.93 0.80	7.0 5.8	8.2 7.7
Ownership of Unit													
Owned	4.1	23.1	0.50	2.9	6.8	1,980	146	2,712	872	968	0.84	6.2	6.8
Rented	1.5	6.3	0.14	Q	5.3	1,544	115	1,255	1,029	1,109	1.20	8.9	19.5
Year of Construction 1939 or Before	1.6	6.4	0.14	0.7	5.5	1,620	124	2,664	690	816	0.88	6.8	10.1
1940 to 1979	2.5	13.3	0.14	1.8	6.2	1,824	138	2,004	897	1,005	0.88	6.9	8.0
1980 or After ⁴	1.5	9.7	0.20	1.3	7.1	2,075	147	2,361	1,041	1,092	0.84	6.0	14.7
1993 Family Income													
Less than \$10,000 \$10,000 to \$19,999	0.7 1.2	2.5 4.7	0.05 0.10	0.3 0.7	5.2 5.0	1,514 1,469	107 108	1,362 2,105	1,089 792	1,131 900	1.02 0.88	7.2 6.5	23.7 7.6
\$20,000 to \$34,999	1.6	7.7	0.10	1.1	5.3	1,564	118	2,105	792 788	912	0.88	7.3	6.2
\$35,000 to \$49,999	1.2	7.4	0.16	1.0	7.0	2,058	154	2,594	973	1,049	0.82	6.1	10.1
\$50,000 or More	0.9	7.1	0.15	0.8	8.9	2,612	190	3,166	1,042	1,114	0.79	5.8	11.4
Below Poverty Line 100 Percent	0.6	2.3	0.05	Q	5.1	1,506	106	1,277	1,058	1,118	1.11	7.8	24.7
125 Percent	1.0	3.7	0.03	0.4	5.2	1,523	112	1,526	970	1,116	1.03	7.6 7.6	18.7
150 Percent	1.3	5.1	0.11	0.6	5.3	1,565	115	1,733	936	1,011	0.96	7.1	15.8
Age of Householder							,						
Under 35 Years35 to 59 Years	1.8 2.2	8.5 14.3	0.19 0.31	1.2 1.6	5.6 7.9	1,649 2,305	123 167	1,849 2,581	953 925	1,040 1,010	0.94 0.97	7.0 7.0	11.0 6.4
60 Years and Over	1.6	6.6	0.15	1.0	5.1		115	2,640	525	946	0.68	5.2	12.1

Table 47. Electricity Consumption and Expenditures for All Air Conditioning and Central Air Conditioning, Midwest Region Households, 1993 (Continued)

		city Used Condition					El	lectricity Us Air Cond							
								p	er Hous	ehold					
							Consu	mption			Cooling Cor		Condit	ic Air- tioning nsity	
Characteristics	House- holds (tril- (mil- lion		Total Ex- pend- itures (bil- lion dol- lars)	(mil- lio	(mil- lion Btu)	(kWh)	Ex- pend- itures (dol- lars)	Cooled Floor- space (square feet)	1993	30-Year Average ³	Con- sump- tion (kWh/ CDD*1000 square feet)	Ex- pend- itures (cents/ CDD*1000 square feet)	RSE		
RSE Column Factor:	1.1	1.4 ¹	1.4 ¹	1.6	0.8 ¹	0.8 ¹	0.8 ¹	0.8	0.8	0.8	0.8 ¹	0.9 ¹	Row Fac- tors		
Household Size 1 Person	1.3 3.8 0.6	4.7 21.2 3.4	0.11 0.45 0.07	0.7 2.7 0.4	4.5 6.8 6.8	1,324 2,006 2,007	106 146 150	1,756 2,457 2,825	887 937 775	967 1,025 910	0.85 0.87 0.92	6.8 6.3 6.8	13.7 6.2 10.6		

¹ This factor is underestimated because it contains no error for estimating this end use.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C, and E of the 1993 Residential Energy Consumption Survey.

² Some households have a central air conditioner and one or more room air conditioners. These households are included only under central air conditioners and not included under room air conditioners.

³ The 30-year average and climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

⁴ Does not include all new construction for 1993.

⁵ If a household has both a central and room air conditioner then the usage and age of the equipment is presented only for the central unit.

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. • This table reflects only those households that used their air conditioning equipment. See Appendix B, "Quality of the Data," in *Household Energy Consumption and Expenditures* 1993 for a discussion of households that had air-conditioning equipment but did not use it. • See "Glossary" in *Household Energy Consumption and Expenditures* 1993 for definition of terms used in this report.

Table 48. Electricity Consumption and Expenditures for Room Air Conditioning, per Midwest Region Households, 1993

		Consu	mption			Annual Cooling Degree-Days			ric Air- ng Intensity	
Characteristics	House- holds (mil- lion)	(million Btu)	(kWh)	Expenditures (dollars)	Cooled Floorspace (square feet)	1993	30-Year Average ²	Consumption (kWh/ CDD*1000 square feet)	Expenditures (cents/ CDD*1000 square feet)	
RSE Column Factor:	1.7	1.1 ¹	1.1 ¹	1.2 ¹	0.9	0.8	0.7	0.9 ¹	1.0 ¹	RSE Row Factors
					Midwe	st Regio	1			
						- Trogio	•			
Total Region	5.9	2.7	783	66	1,092	775	783	0.93	7.8	5.1
Climate Zone ² Under 2,000 CDD and										
Over 5,500 HDD Under 5,500 HDD	4.7 1.1	2.3 4.0	688 1,184	57 101	1,070 1,181	683 1,163	699 1,138	0.94 0.86	7.8 7.4	6.7 16.8
2,000 CDD or More and	1.1	4.0	,		,	*	•			
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit	0.5	2.0	007	70	4.040	77.4	700	0.00	0.7	5.0
Single-Family Mobile Home	3.5 0.4	3.0 4.2	867 1,221	70 105	1,349 669	774 767	793 789	0.83 2.38	6.7 20.5	5.9 14.0
Multifamily (2 or more units)	2.0	1.9	557	51	709	779	766	1.01	9.3	7.5
Heated Floorspace										
(square feet) Fewer than 1,000	1.9	2.2	648	55	625	809	806	1.28	10.8	8.2
1,000 to 1,999	2.2	2.7	786	67	1,083	766	781	0.95	8.1	7.9
2,000 or More	1.8	3.1	920	76	1,585	751	764	0.77	6.4	8.6
Ownership of Unit Owned	3.6	3.0	883	73	1,324	759	778	0.88	7.3	5.7
Rented	2.3	2.1	629	54	731	800	793	1.08	9.3	7.0
Year of Construction										
1939 or Before	2.7	2.8	832	67	1,236	788	816	0.85	6.8	6.5
1940 to 1979 1980 or After ³	2.6 0.5	2.5 2.7	731 803	65 64	992 852	761 780	753 772	0.97 1.21	8.6 9.7	7.0 12.9
1993 Family Income										
Less than \$10,000	1.1	2.1	602	50	821	765	804	0.96	7.9	10.2
\$10,000 to \$19,999	1.6	2.4	698	57	1,106	785	779	0.80	6.6	7.2
\$20,000 to \$34,999 \$35,000 to \$49,999	1.4 1.1	2.9 3.1	849 914	70 80	1,105 1,133	771 789	789 786	1.00	8.2 9.0	9.9 11.2
\$50,000 to \$49,999 \$50,000 or More	0.7	3.1	918	79	1,398	754	743	1.02 0.87	7.5	13.0
Below Poverty Line										
100 Percent	0.9	2.5	733	59	732	778	832	1.29	10.4	10.7
125 Percent	1.4 1.8	2.3 2.3	680 688	55 55	905 904	756 763	808 802	0.99 1.00	8.1 7.9	7.8 6.6
Age of Householder										
Under 35 Years	1.8	2.7	793	68	837	787	826	1.20	10.3	7.8
35 to 59 Years	2.3	3.2	938	78	1,222	811	796	0.95	7.9	6.6
60 Years and Over	1.7	1.9	567	48	1,179	715	723	0.67	5.6	7.6
Household Size	4.0	0.0	E70	50	00.4	040	700	0.00	0.0	0.0
1 Person 2 to 4 Persons	1.8 3.6	2.0 2.9	576 846	50 71	884 1,183	818 754	799 769	0.80 0.95	6.9 7.9	9.6 5.9
5 or More Persons	0.5	3.6	1,069	87	1,176	774	830	1.17	9.5	10.2

Table 48. Electricity Consumption and Expenditures for Room Air Conditioning, per Midwest Region Households, 1993 (Continued)

		Consu	mption			Co	nnual poling ee-Days		ric Air- ng Intensity	
Characteristics	House- holds (mil- lion)	(million Btu)	(kWh)	Expenditures (dollars)	Cooled Floorspace (square feet)	1993	30-Year Average ²	Consumption (kWh/ CDD*1000 square feet)	Expenditures (cents/ CDD*1000 square feet)	
RSE Column Factor:	1.7	1.1 ¹	1.1 ¹	1.2 ¹	0.9	0.8	0.7	0.9 ¹	1.0 ¹	RSE Row Factors

Midwest Region

_										
Cooling Degree-Days (CDD)-1993										
2.000 or More	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
1,000 to 1,999	1.2	4.0	1.186	100	1.118	1,185	1.170	0.90	7.5	13.3
500 to 999	3.6	2.7	786	66	1,104	754	721	0.95	8.0	6.7
Fewer than 500	1.1	1.1	337	27	1,024	400	570	0.82	6.7	7.0
Average Electricity Expenditures										
(cents per kWh)	Q	2.0	880	49	897	883	981	1.11	6.2	NF
Less than 6 6 to Less than 9	3.3	3.0 3.0	866	49 67	1.213	742	764	0.96	6.2 7.4	6.9
	3.3 2.1	2.2	635	68	936	808	764 778	0.96	7.4 9.0	8.0
9 or More	2.1	2.2	030	00	936	808	776	0.64	9.0	8.0
Number of Rooms Usually Air Conditioned										
1 Room	1.0	1.3	385	31	336	775	768	1.48	11.9	12.2
2 Rooms	1.2	2.2	636	53	687	814	803	1.14	9.5	8.0
3 or More	3.7	3.2	934	79	1,416	763	781	0.86	7.3	5.4
Frequency of Use of Air Conditioning										
Only a Few Times	3.8	1.6	472	40	1,057	727	747	0.61	5.3	5.4
Quite a Bit	1.4	4.0	1,165	97	1,071	846	839	1.29	10.7	7.7
All Summer	0.7	5.8	1,702	141	1,319	893	869	1.44	11.9	7.9
Age of Air Conditioning Equipment										
Less than 5 Years	1.3	2.9	863	73	1.215	763	760	0.93	7.9	9.1
5 to 9 Years	1.9	2.8	807	66	1,124	805	819	0.89	7.3	6.9
10 or More Years	1.9	2.6	753	64	1,092	760	773	0.91	7.8	8.9
Don't Know	0.8	2.3	669	57	811	759	764	1.09	9.3	10.5
Number of Room Air Conditioners										
1	4.0	2.3	673	56	919	756	768	0.97	8.0	5.9
2	1.5	3.4	992	85	1,339	814	824	0.91	7.8	7.7
3 or More	0.3	3.9	1,153	99	2,042	826	782	0.68	5.9	18.1

Table 48. Electricity Consumption and Expenditures for Room Air Conditioning, per Midwest Region Households, 1993 (Continued)

per mawe	-St iteg	1011 110		Jid3, 1333	(0011111	idea)				
		Consu	mption			Co	inual oling ee-Days		ric Air- ng Intensity	
Characteristics	House- holds (mil- lion)	(million Btu)	(kWh)	Expenditures (dollars)	Cooled Floorspace (square feet)	1993	30-Year Average ²	Consumption (kWh/ CDD*1000 square feet)	Expenditures (cents/ CDD*1000 square feet)	
RSE Column Factor:	1.7	1.11	1.1 ¹	1.2 ¹	0.9	0.8	0.7	0.9 ¹	1.0 ¹	RSE Row Factors
East North Central Division	4.1	2.7	783	68	1,132	768	729	0.90	7.8	6.7
Climate Zone ²										
Under 2,000 CDD and										
Over 5,500 HDD	3.4	2.4	699	60	1,074	710	669	0.92	7.8	7.4
Under 5,500 HDD 2,000 CDD or More and	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit	2.4	2.1	896	75	1,438	774	743	0.80	6.7	8.0
Single-Family Mobile Home	0.2	3.1 4.2	1,239	75 105	713	637	644	2.72	23.1	15.3
Multifamily (2 or more units)	1.5	1.9	548	53	707	774	719	1.00	9.7	8.4
Heated Floorspace (square feet)										
Fewer than 1,000	1.2	2.1	601	53	621	769	709	1.26	11.1	10.7
1,000 to 1,999	1.4	2.8	812	72	1,132	782	744	0.92	8.1	10.6
2,000 or More	1.4	3.1	910	77	1,572	752	732	0.77	6.5	10.4
Ownership of Unit										
Owned	2.4	3.1	914	78	1,430	767	733	0.83	7.1	7.8
Rented	1.7	2.1	603	54	724	769	724	1.08	9.8	8.1
Year of Construction										
1939 or Before	1.7	2.9	849	72	1,313	797	774	0.81	6.9	8.2
1940 to 1979	1.9	2.4	713	65	1,022	747	689	0.93	8.5	8.5
1980 or After ³	0.4	2.8	827	68	871	741	727	1.28	10.5	13.4
1993 Family Income										
Less than \$10,000	0.7	1.9	561	47	796	742	726	0.95	8.0	12.3
\$10,000 to \$19,999	1.0	2.4	703	60	1,156	758	701	0.80	6.8	9.0
\$20,000 to \$34,999	0.9	2.7	790	69	1,213	753	712	0.86	7.6	12.2
\$35,000 to \$49,999 \$50,000 or More	0.9 0.5	3.1 3.3	912 974	81 86	1,127 1,386	808 770	773 739	1.00 0.91	8.9 8.1	12.8 15.1
φοσ,σσο σι ινισιο	0.0	0.0	07.1	00	1,000	770	700	0.01	0.1	10.1
Below Poverty Line	0.5	0.4	740	50	740	700	754	4.05	44.0	440
100 Percent	0.5 0.8	2.4 2.3	710 671	59 56	710 844	738 718	751 716	1.35 1.11	11.3 9.2	14.0 10.6
150 Percent	1.1	2.3	664	54	889	716	712	1.04	8.5	7.9
Age of Householder Under 35 Years	1.2	2.7	794	72	859	758	766	1.22	11.1	9.9
35 to 59 Years	1.7	3.2	946	80	1,269	811	751	0.92	7.7	8.3
60 Years and Over	1.2	1.8	539	47	1,224	716	659	0.61	5.4	10.2
Haveak ald Cine										
Household Size 1 Person	1.2	1.7	508	45	892	796	720	0.72	6.4	12.5
2 to 4 Persons	2.5	3.0	881	76	1,229	756	729	0.72	8.2	7.3
5 or More Persons	0.3	3.6	1,055	90	1,282	750		1.10	9.4	13.6

Table 48. Electricity Consumption and Expenditures for Room Air Conditioning, per Midwest Region Households, 1993 (Continued)

		Consu	mption			Co	inual oling ee-Days		ric Air- ng Intensity	
Characteristics	House- holds (mil- lion)	(million Btu)	(kWh)	Expenditures (dollars)	Cooled Floorspace (square feet)	1993	30-Year Average ²	Consumption (kWh/ CDD*1000 square feet)	Expenditures (cents/ CDD*1000 square feet)	
RSE Column Factor:	1.7	1.1 ¹	1.1 ¹	1.21	0.9	0.8	0.7	0.9 ¹	1.0 ¹	RSE Row Factors
West North Central Division	1.8	2.7	785	60	1,001	792	906	0.99	7.6	5.2
Climate Zone ²										
Under 2,000 CDD and Over 5,500 HDD Under 5,500 HDD	1.3 Q	2.2 3.9	658 1,129	51 86	1,062 837	612 1,281	778 1,255	1.01 1.05	7.8 8.0	11.9 20.4
2,000 CDD or More and Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit										
Single-Family	1.2 0.2 0.5	2.8 4.1 2.0	809 1,200 587	60 105 46	1,170 615 713	772 926 797	894 967 917	0.90 2.11 1.03	6.7 18.4 8.1	7.0 21.8 15.8
Heated Floorspace										
(square feet) Fewer than 1,000	0.6 0.8 0.4	2.5 2.5 3.3	737 738 955	58 57 70	631 991 1,630	886 737 745	989 850 880	1.32 1.01 0.79	10.4 7.9 5.8	11.1 10.1 14.4
	0.4	3.3	955	70	1,030	743	000	0.73	5.0	14.4
Ownership of Unit Owned Rented	1.2 0.6	2.8 2.4	823 705	64 54	1,119 754	745 891	864 996	0.99 1.05	7.6 8.0	6.7 11.1
Year of Construction										
1939 or Before	1.0 0.7 Q	2.7 2.7 2.5	799 777 725	57 66 53	1,096 911 790	772 800 908	892 923 919	0.94 1.07 1.01	6.8 9.0 7.4	9.6 11.6 23.2
1993 Family Income										
Less than \$10,000 \$10,000 to \$19,999	0.4 0.5	2.3 2.4	671 690	53 52	863 1,014	804 836	936 925	0.97 0.81	7.7 6.2	16.4 11.6
\$20,000 to \$34,999	0.5	3.2	949	71	917	801	923	1.29	9.6	15.3
\$35,000 to \$49,999 \$50,000 or More	0.2 0.1	3.1 2.4	920 691	77 51	1,158 1,448	697 690	851 762	1.14 0.69	9.6 5.1	21.3 23.1
Below Poverty Line										
100 Percent	0.4	2.6	768	60	763	837	952	1.20	9.3	17.1
125 Percent	0.6 0.7	2.4 2.5	693 723	55 56	986 927	807 835		0.87 0.93	6.9 7.2	11.5 10.5
Age of Householder										
Under 35 Years	0.6	2.7	790	58	788	853	957	1.18	8.6	11.3
35 to 59 Years60 Years and Over	0.7 0.6	3.1 2.1	917 625	73 48	1,105 1,087	810 713		1.02 0.81	8.2 6.2	11.2 9.2
Household Size										
1 Person	0.6	2.5	726	60	865	868		0.97	8.0	13.4
2 to 4 Persons 5 or More Persons	1.1 0.2	2.6 3.7	764 1,097	57 80	1,077 968	748 822		0.95 1.38	7.1 10.1	7.6 13.5
	0.2	3.1	1,031	00	300	022	902	1.30	10.1	13.5

¹ This factor is underestimated because it contains no error for estimating this end use.

NF = No applicable RSE row factor.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C, and E of the 1993 Residential Energy Consumption Survey.

The 30-year average and climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

³ Does not include all new construction for 1993.

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. • This table reflects only those households that used their air conditioning equipment. See Appendix B, "Quality of the Data," in Household Energy Consumption and Expenditures 1993 for a discussion of households that had air-conditioning equipment but did not use it. • See "Glossary" in Household Energy Consumption and Expenditures 1993 for definition of terms used in this report.

Table 49. Total Electricity and Natural Gas Consumption and Expenditures for Water Heating in Midwest Region Households, 1993

		Ele	ectricity			Nat	ural Gas		
		Total Co	nsumed			Total Co	onsumed		
Characteristics	House- holds (million)	(tril- lion Btu)	(billion kWh)	Total Expenditures (billion dollars)	House- holds (million)	(tril- lion Btu)	(billion cubic feet)	Total Expenditures (billion dollars)	
RSE Column Factor:	1.2	1.4 ¹	1.4 ¹	1.4 ¹	0.7	0.71	0.71	0.71	RSE Row Factors
				Mid	west Regio	n			
- Total Region	6.9	70.2	20.6	1.54	15.4	429.4	418	2.31	7.8
Climate Zone ²									
Under 2,000 CDD and			4						
Over 5,500 HDD Under 5,500 HDD	5.6 1.3	58.0 12.2	17.0 3.6	1.27 0.27	13.1 2.3	361.6 67.8	352 66	1.94 0.37	11.5 40.2
2,000 CDD or More and	1.5	12.2	3.0	0.27	2.3	07.0	00	0.37	40.2
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	NF
Гуре of Housing Unit									
Single-Family	4.8	51.1	15.0	1.11	10.9	311.5	303	1.67	9.0
Mobile Home	0.7 1.3	7.3 11.8	2.1 3.5	0.18 0.26	0.5 3.9	13.6 104.3	13 101	0.07 0.57	31.5 14.4
Multifarmly (2 of more units)	1.3	11.0	3.3	0.26	3.9	104.3	101	0.57	14.4
leated Floorspace									
square feet) Fewer than 1,000	2.0	17.5	5.1	0.40	3.6	85.0	83	0.46	10.9
1,000 to 1,999	2.3	22.4	6.6	0.49	5.5	156.3	152	0.84	11.0
2,000 or More	2.5	30.3	8.9	0.65	6.2	188.1	183	1.01	10.2
Ownership of Unit									
Owned	5.0	52.1	15.3	1.14	10.3	294.9	287	1.59	9.4
Rented	1.9	18.2	5.3	0.40	5.0	134.5	131	0.72	11.5
ear of Construction									
1939 or Before	2.0	20.5	6.0	0.47	5.0	140.2	136	0.76	13.1
1940 to 1979 1980 or After ³	3.4	34.6	10.1	0.77	7.9	218.3	212	1.16	9.3
1980 Of Alter	1.5	15.1	4.4	0.30	2.4	70.9	69	0.39	21.3
1993 Family Income									
Less than \$10,000	0.9	7.9	2.3	0.17	1.8	43.8	43	0.23	17.9
\$10,000 to \$19,999 \$20,000 to \$34,999	1.8 1.7	16.1 17.5	4.7 5.1	0.36 0.40	3.3 3.9	80.2 107.4	78 105	0.44 0.58	11.9 12.9
\$35,000 to \$49,999	1.3	15.4	4.5	0.33	2.9	87.9	85	0.47	12.0
\$50,000 or More	1.0	13.3	3.9	0.27	3.4	110.1	107	0.58	12.1
Below Poverty Line									
100 Percent	0.8	9.0	2.6	0.20	1.6	46.8	46	0.25	20.1
125 Percent	1.3	13.5	4.0	0.30	2.4	66.7	65	0.36	15.6
150 Percent	1.9	18.7	5.5	0.42	3.1	87.5	85	0.47	11.6
Age of Householder									
Under 35 Years	1.9	20.4	6.0	0.46	4.4	134.2	130	0.72	9.8
35 to 59 Years 60 Years and Over	2.8 2.1	36.1 13.7	10.6 4.0	0.76 0.32	6.6 4.4	203.4 91.9	198 89	1.10 0.50	9.9 13.0
Household Size 1 Person	1.8	9.0	2.6	0.21	4.1	72.8	71	0.40	11.7
2 to 4 Persons	1.8 4.4	9.0 49.7	2.6 14.6	1.07	4.1 9.8	72.8 296.5	288	0.40 1.59	9.1
5 or More Persons	0.7	11.4	3.4	0.25	1.4	60.0	58	0.33	13.2

Table 49. Total Electricity and Natural Gas Consumption and Expenditures for Water Heating in Midwest Region Households, 1993 (Continued)

		Ele	ectricity			Nat	ural Gas		
,		Total Co	onsumed			Total Co	onsumed		
Characteristics	House- holds (million)	(tril- lion Btu)	(billion kWh)	Total Expenditures (billion dollars)	House- holds (million)	(tril- lion Btu)	(billion cubic feet)	Total Expenditures (billion dollars)	
RSE Column Factor:	1.2	1.4 ¹	1.4 ¹	1.4 ¹	0.7	0.71	0.71	0.71	RSE Row Factors
East North Central Division	4.2	42.1	12.3	0.94	11.7	331.8	323	1.79	8.3
Climate Zone ² Under 2,000 CDD and	4.2	42.1	12.3	0.94	11.7	331.0	323	1.79	0.3
Over 5,500 HDD Under 5,500 HDD 2,000 CDD or More and	3.5 Q	37.1 Q	10.9 Q	0.80 Q	10.5 Q	296.4 Q	288 Q	1.60 Q	13.3 NF
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit	2.0	24.0	0.0	0.00	0.4	000.0	000	4.00	44.0
Single-Family Mobile Home	3.0 0.5	31.2 5.1	9.2 1.5	0.68 0.13	8.1 0.4	233.9 10.2	228 10	1.26 0.05	11.0 38.4
Multifamily (2 or more units)	0.7	5.8	1.7	0.13	3.3	87.6	85	0.48	13.5
Heated Floorspace (square feet)									
Fewer than 1,000	1.2 1.4	10.0 13.5	2.9 4.0	0.24 0.30	2.8 4.2	63.2 122.4	61 119	0.35 0.66	11.3 11.5
2,000 or More	1.6	18.5	5.4	0.40	4.7	146.2	142	0.79	13.0
Ownership of Unit									
OwnedRented	3.2 1.0	32.9 9.2	9.6 2.7	0.73 0.21	7.7 4.0	225.0 106.8	219 104	1.22 0.58	10.5 9.3
Year of Construction									
1939 or Before	1.2	12.3	3.6	0.28	3.5	101.7	99	0.56	15.3
1940 to 1979 1980 or After ³	2.3 0.7	23.0 6.8	6.7 2.0	0.52 0.14	6.4 1.9	175.8 54.3	171 53	0.93 0.30	11.2 21.5
1993 Family Income Less than \$10,000	0.5	4.1	1.2	0.09	1.4	35.6	35	0.19	18.4
\$10,000 to \$19,999	1.2	10.1	3.0	0.23	2.5	61.4	60	0.33	14.8
\$20,000 to \$34,999	1.0 0.8	9.3 9.1	2.7 2.7	0.22 0.20	2.9 2.1	80.1 66.4	78 65	0.44 0.36	17.2 15.5
\$35,000 to \$49,999 \$50,000 or More	0.8	9.1	2.8	0.20	2.7	88.3	86	0.47	14.0
Below Poverty Line									
100 Percent	0.4	5.1	1.5	0.12	1.3	38.9	38	0.21	22.2
125 Percent	0.7 1.0	7.4 10.0	2.2 2.9	0.17 0.23	1.9 2.4	53.2 67.8	52 66	0.28 0.36	18.1 12.3
Age of Householder									
Under 35 Years	1.1	10.7	3.1	0.26	3.2	99.9	97	0.54	11.0
35 to 59 Years60 Years and Over	1.8 1.3	22.3 9.0	6.5 2.6	0.47 0.21	5.1 3.4	159.0 72.9	155 71	0.86 0.40	11.8 14.8
	1.3	9.0	2.0	0.21	3.4	12.9	/ 1	0.40	14.0
Household Size 1 Person	1.1	5.5	1.6	0.13	3.2	57.0	55	0.31	13.8
2 to 4 Persons	2.7	30.1	8.8	0.67	7.4	228.0	222	1.22	10.5
5 or More Persons	0.4	6.5	1.9	0.14	1.1	46.9	46	0.26	15.1

Table 49. Total Electricity and Natural Gas Consumption and Expenditures for Water Heating in Midwest Region Households, 1993 (Continued)

		Ele	ectricity			Nat	ural Gas		
		Total Co	onsumed			Total Co	onsumed		
Characteristics	House- holds (million)	(tril- lion Btu)	(billion kWh)	Total Expenditures (billion dollars)	House- holds (million)	(tril- lion Btu)	(billion cubic feet)	Total Expenditures (billion dollars)	
RSE Column Factor:	1.2	1.4 ¹	1.4 ¹	1.41	0.7	0.71	0.71	0.71	RSE Row Factors
West North Central Division	2.7	28.1	8.2	0.60	3.7	97.6	95	0.52	15.6
Climate Zone ²									
Under 2,000 CDD and Over 5,500 HDD Under 5,500 HDD	2.1 Q	20.9 Q	6.1 Q	0.46 Q	2.6 1.1	65.2 32.4	63 31	0.35 0.17	23.1 18.9
2,000 CDD or More and Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit									
Single-Family	1.8 0.2 0.6	19.8 2.2 Q	5.8 0.7 Q	0.43 0.05 Q	2.9 Q 0.6	77.5 Q 16.7	75 Q 16	0.41 Q 0.09	14.9 32.8 32.3
Heated Floorspace									
(square feet) Fewer than 1,000	0.8 0.9 1.0	7.5 8.9 11.8	2.2 2.6 3.5	0.16 0.19 0.25	0.9 1.3 1.5	21.8 33.9 41.9	21 33 41	0.12 0.18 0.22	21.4 23.0 14.6
Ownership of Unit									
Owned	1.8 0.9	19.2 9.0	5.6 2.6	0.41 0.19	2.7 1.0	69.9 27.7	68 27	0.37 0.15	17.9 25.5
Year of Construction	2.0	0.0	0.4	2.40	4.5	20.5	0.7	2.00	24.4
1939 or Before 1940 to 1979 1980 or After ³	0.8 1.1 Q	8.2 11.6 8.3	2.4 3.4 2.4	0.19 0.25 Q	1.5 1.6 0.6	38.5 42.5 16.6	37 41 16	0.20 0.23 0.09	24.4 15.5 18.9
1993 Family Income		_	_	_					
Less than \$10,000 \$10,000 to \$19,999	0.5 0.7	Q 6.0	Q 1.8	Q 0.13	0.4 0.8	8.2 18.8	8 18	0.04 0.10	30.0 17.7
\$20,000 to \$34,999	0.8	8.2	2.4	0.18	1.0	27.3	27	0.14	19.9
\$35,000 to \$49,999 \$50,000 or More	0.5 0.3	6.3 3.7	1.8 1.1	0.14 0.07	0.8 0.7	21.4 21.9	21 21	0.12 0.12	17.6 24.6
Below Poverty Line									
100 Percent	0.4 0.6	Q 6.2	Q 1.8	Q 0.13	0.3 0.6	7.9 13.5	8 13	0.04 0.07	27.7 30.6
150 Percent	0.6	8.7	2.5	0.13	0.6	19.7	13	0.07	23.8
Age of Householder				- 00		24.0		- 40	
Under 35 Years35 to 59 Years	0.9 1.0	9.7 13.8	2.8 4.0	0.20 0.29	1.2 1.5	34.3 44.3	33 43	0.18 0.24	16.1 17.3
60 Years and Over	0.8	4.7	1.4	0.29	1.0	19.0	18	0.10	25.2
Household Size									
1 Person 2 to 4 Persons	0.7 1.7	3.5 19.6	1.0 5.7	0.08 0.41	0.9 2.4	15.9 68.6	15 67	0.08 0.37	21.4 17.0
5 or More Persons	0.3	5.0	1.5	0.41	0.3	13.2	13	0.07	24.1

¹ This factor is underestimated because it contains no error for estimating this end use.

² Climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

³ Does not include all new construction for 1993.

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" in Household Energy Consumption and Expenditures 1993 for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C, E, and F of the 1993 Residential Energy Consumption Survey.

Table 50. Total LPG Consumption and Expenditures for Water Heating in Midwest Region Households, 1993

	Liquefied Petroleum Gas										
Characteristics		Total Co	onsumed								
	House- holds (million)	(quad- rillion Btu)	(billion gallons)	Total Expenditures (billion dollars)	Dec						
RSE Column Factor:	1.0	1.0 ¹	1.01	1.0 ¹	RSE Row Factors						
Total Danier	4.0	20.0	0.04	0.00	00.0						
Total Region	1.0	22.0	0.24	0.20	22.3						
East North Central Division West North Central Division	0.4 0.6	11.2 10.8	0.12	0.10 0.10	24.3						
West North Central Division	0.6	10.8	0.12	0.10	35.5						
Climate Zone ²											
Under 2,000 CDD and											
Over 5,500 HDD	0.7	17.1	0.19	0.15	22.2						
Under 5,500 HDD	Q	Q	Q	Q	NF						
2,000 CDD or More and											
Under 4,000 HDD	Q	Q	Q	Q	NF						
Town of Housing Hole											
Type of Housing Unit Single-Family	0.8	17.5	0.19	0.16	26.5						
Mobile Home	0.8	4.3	0.05	0.04	35.4						
Multifamily (2 or more units)	Q.2	Q Q	Q.03	Q	NF						
Waltharing (2 of more arms)	u	Q	•	Q							
Heated Floorspace											
(square feet)											
Fewer than 1,000	0.2	4.8	0.05	0.04	33.0						
1,000 to 1,999	0.4	8.1	0.09	0.07	35.1						
2,000 or More	0.4	9.1	0.10	0.08	22.6						
Ownership of Unit											
Owned	0.8	18.6	0.20	0.17	21.5						
Rented	0.2	3.4	0.04	0.03	36.4						
Year of Construction											
1939 or Before	0.4	8.7	0.10	0.08	35.4						
1940 to 1979 1980 or After ³	0.4 0.3	7.2 6.1	0.08 0.07	0.06 0.05	21.3 40.3						
1900 Of Aiters	0.3	0.1	0.07	0.00	40.5						
1993 Family Income											
Less than \$10,000	0.2	3.4	0.04	0.03	42.4						
\$10,000 to \$19,999	0.2	4.0	0.04	0.04	16.6						
\$20,000 to \$34,999	0.4	6.3	0.07	0.06	31.6						
\$35,000 to \$49,999	0.2	5.4	0.06	0.05	35.7						
\$50,000 or More	0.1	2.8	0.03	0.02	26.2						
Below Poverty Line											
100 Percent	0.1	3.2	0.03	0.03	36.4						
125 Percent	0.3	5.9	0.06	0.05	25.7						
150 Percent	0.3	7.1	0.08	0.06	29.9						
Age of Householder											
Under 35 Years	0.2	4.8	0.05	0.04	31.1						
35 to 59 Years	0.5	12.4	0.14	0.11	18.3						
60 Years and Over	0.3	Q	Q	Q	48.4						
Household Size											
1 Person	0.2	3.0	0.03	0.03	31.8						
2 to 4 Persons	0.7	14.8	0.16	0.13	23.6						
5 or More Persons	0.1	4.1	0.05	0.04	41.8						

¹ This factor is underestimated because it contains no error for estimating this end use.

NF = No applicable RSE row factor.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C, and D of the 1993 Residential Energy Consumption Survey.

² Climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

³ Does not include all new construction for 1993.

Q = Data withheld either because the Relative Standard Error (RSE) was greater than 50 percent or fewer than 10 households were sampled.

Notes: • Data in the East North Central and West North Central Divisions are not presented separately due to a scarcity of data. • 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" in Household Energy Consumption and Expenditures 1993 for definition of terms used in this report.

Table 51. Electricity and Natural Gas Consumption and Expenditures for Main Water Heating, per Midwest Region Households, 1993

			Natural Gas								
		Consu	mption		Electricity		Consu	mption		Natural Gas	
	House- holds (million)	(mil- lion Btu)	(kWh)	Ex- pend- itures (dol- lars)	Water- Heating Intensity (kWh per household member)	House- holds (million)	(mil- lion Btu)	(1000 cubic feet)	Ex- pend- itures (dol- lars)	Water- Heating Intensity (1000 cubic feet per household member)	
Characteristics RSE Column Factor:	3.1	1.1 ¹	1.1 ¹	1.2 ¹	1.0 ¹	1.8	0.6 ¹	0.6 ¹	0.6 ¹	0.6 ¹	RSE Row Factors
_					Mic	dwest Regio	on				
Total Region	6.9	10.2	2,988	224	1,202	15.4	28.0	27.2	151	10.5	3.0
Climate Zone ² Under 2,000 CDD and											
Over 5,500 HDD	5.6	10.4	3,040	226	1,204	13.1	27.7	26.9	149	10.5	3.4
Under 5,500 HDD 2,000 CDD or More and	1.3	9.4	2,764	212	1,190	2.3	29.5	28.7	160	10.8	7.9
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit	4.8	10.6	2 120	221	1 105	10.9	28.5	27.7	153	10.0	3.2
Single-Family Mobile Home	4.6 0.7	9.9	3,120 2,888	231 236	1,185 1,128	0.5	28.3	27.7	148	10.8	12.6
Multifamily (2 or more units)	1.3	8.8	2,573	190	1,338	3.9	26.5	25.8	145	12.6	7.7
Heated Floorspace (square feet)											
Fewer than 1,000	2.0	8.6	2,519	197	1,263	3.6	23.5	22.8	128	12.7	6.4
1,000 to 1,999	2.3	9.7	2,837	212	1,161	5.5	28.3	27.6	153	10.4	4.2
2,000 or More	2.5	11.9	3,501	256	1,200	6.2	30.2	29.4	162	9.8	4.0
Ownership of Unit Owned	5.0	10.5	3,071	229	1,182	10.3	28.5	27.8	154	10.1	3.4
Rented	1.9	9.5	2,773	209	1,263	5.0	26.8	26.0	144	11.5	6.1
Year of Construction	0.0	40.0	0.007	000	4.450	5.0	00.0	07.4	450	40.5	7.0
1939 or Before	2.0 3.4	10.2 10.1	2,997 2,963	232 225	1,150 1,237	5.0 7.9	28.2 27.5	27.4 26.7	153 146	10.5 10.4	7.2 3.8
1980 or After ³	1.5	10.3	3,032	208	1,197	2.4	29.1	28.3	160	10.9	7.0
1993 Family Income											40.0
Less than \$10,000 \$10,000 to \$19,999	0.9 1.8	8.4 8.7	2,463 2,562	183 197	1,259 1,149	1.8 3.3	24.0 24.2	23.3 23.5	127 132	11.8 11.0	10.2 5.2
\$20,000 to \$34,999	1.7	10.1	2,953	231	1,248	3.9	27.6	26.8	150	10.6	5.0
\$35,000 to \$49,999 \$50,000 or More	1.3 1.0	11.6 12.8	3,398 3,758	252 259	1,174 1,212	2.9 3.4	30.2 32.3	29.3 31.4	163 171	9.9 10.2	5.4 4.7
Below Poverty Line			-,		,						
100 Percent	0.8	11.1	3,267	246	1,194	1.6	28.4	27.6	150	10.5	9.8
125 Percent	1.3 1.9	10.4 10.0	3,041 2,939	231 226	1,102 1,095	2.4 3.1	27.6 27.9	26.9 27.1	148 150	9.9 10.2	7.8 6.8
Age of Householder											
Under 35 Years	1.9	10.5	3,081	236	1,134	4.4	30.7	29.8	164	10.2	4.4
35 to 59 Years60 Years and Over	2.8 2.1	12.8 6.5	3,741 1,896	270 150	1,279 1,124	6.6 4.4	30.8 21.0	30.0 20.4	166 114	10.3 11.6	3.4 5.9
Household Size											
1 Person 2 to 4 Persons	1.8 4.4	5.1 11.3	1,486 3,317	120 244	1,486 1,274	4.1 9.8	17.7 30.2	17.2 29.4	97 162	17.2 10.4	4.7 2.6
5 or More Persons	0.7	16.1	4,713	358	861	1.4	41.9	40.8	227	7.4	5.5

Table 51. Electricity and Natural Gas Consumption and Expenditures for Main Water Heating, per Midwest Region Households, 1993 (Continued)

			Natural Gas								
		Consumption			Electricity		Consumption			Natural Gas	
	House- holds (million)	(mil- lion Btu)	(kWh)	Ex- pend- itures (dol- lars)	Water- Heating Intensity (kWh per household member)	House- holds (million)	(mil- lion Btu)	(1000 cubic feet)	Ex- pend- itures (dol- lars)	Water- Heating Intensity (1000 cubic feet per household member)	
Characteristics											RSE
RSE Column Factor:	3.1	1.1 ¹	1.1 ¹	1.2 ¹	1.0 ¹	1.8	0.6 ¹	0.6 ¹	0.6 ¹	0.6 ¹	Facto

Midwest Region

Average Electricity											
Expenditures											
(cents per kWh)											
Less than 6	0.8	12.7	3,731	199	1,412						4.8
6 to Less than 9	4.7	10.4	3,063	226	1,216						4.0
9 or More	1.3	7.6	2,242	232	989						5.1
Average Natural Gas											
Expenditures											
(dollars per 1000 cf)											
Less than 4.50						Q	Q	Q	Q	Q	NF
4.50 to Less than 6						11.2	28.8	28.0	146	10.9	3.8
6 or More						4.1	25.6	24.9	162	9.5	6.8
Water Heater Used											
For One Housing Unit	6.5	10.3	3,032	227	1,199	13.1	28.3	27.5	153	10.2	2.9
For Two or More Units	0.3	7.3	2,149	163	1,275	2.3	26.2	25.4	138	13.3	9.4
Age of Water Heater											
(for one housing unit)											
Less than 5 Years	1.7	10.0	2.928	213	1.213	3.9	28.6	27.8	155	9.9	4.3
5 to 9 Years	1.5	10.5	3,075	240	1,136	3.3	29.5	28.7	161	9.9	5.2
10 to 19 Years	1.8	10.9	3,181	230	1,211	3.2	28.2	27.4	149	10.2	4.8
20 Years or More	0.8	8.7	2,545	201	1,162	1.2	24.0	23.4	130	11.0	8.4
Don't Know/No Separate			_,		.,						
Unit	0.7	11.6	3,388	253	1,318	1.5	28.3	27.6	153	11.2	9.0
Size of Water Heater											
(for one housing unit)											
30 gallons or less	1.1	9.1	2,670	205	1,181	2.4	24.4	23.7	134	10.4	5.9
31 to 49 gallons	2.9	9.7	2,829	217	1,107	8.1	28.7	27.9	154	10.0	3.4
50 gallons or more	2.2	12.1	3,557	257	1,322	1.9	31.2	30.4	169	10.2	5.3
Don't Know/No Separate											
Unit	0.3	8.8	2,580	190	1,213	0.7	28.2	27.5	157	11.4	11.4
Clothes Washer											
Yes	5.6	10.7	3,150	234	1,184	11.9	28.7	27.9	154	10.1	3.0
No	1.3	7.9	2,305	180	1,319	3.5	25.4	24.7	139	12.6	6.6
Dishwasher											
Yes	2.5	11.3	3,299	238	1,211	6.6	29.5	28.7	157	10.1	4.7
No	4.4	9.6	2,809	215	1,196	8.8	26.8	26.1	146	10.8	4.3
Children Present in Household											
No	4.5	8.2	2,396	182	1,379	9.7	23.6	23.0	128	13.0	3.6
Yes	2.3	14.1	4,136	305	1,050	5.7	35.4	34.4	190	8.6	2.9
(more than one											
may apply)											
Under 13 Years	1.6	14.0	4,093	306	965	4.4	35.5	34.6	191	8.4	3.1
13 to 18 Years	1.1	15.1	4,430	324	1,173	2.6	37.3	36.3	200	8.6	3.8

Table 51. Electricity and Natural Gas Consumption and Expenditures for Main Water Heating, per Midwest Region Households, 1993 (Continued)

	Electricity					Natural Gas						
	House- holds (million)	Consu	mption		Electricity		Consu	mption		Natural Gas		
		(mil- lion Btu)	(kWh)	Ex- pend- itures (dol- lars)	Water- Heating Intensity (kWh per household member)	House- holds (million)	(mil- lion Btu)	(1000 cubic feet)	Ex- pend- itures (dol- lars)	Water- Heating Intensity (1000 cubic feet per household member)		
Characteristics											RSE Row	
RSE Column Factor:	3.1	1.11	1.1 ¹	1.2 ¹	1.0 ¹	1.8	0.6 ¹	0.6 ¹	0.61	0.6 ¹	Factors	
East North Central Division	4.2	10.1	2,957	225	1,188	11.7	28.4	27.6	153	10.6	3.8	
Climate Zone ² Under 2,000 CDD and												
Over 5,500 HDD Under 5,500 HDD	3.5 Q	10.5 Q	3,089 Q	228 Q	1,191 Q	10.5 Q	28.3 Q	27.5 Q	153 Q	10.6 Q	4.3 NF	
2,000 CDD or More and Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF	
Type of Housing Unit Single-Family	2.9	10.6	3,100	230	1,178	8.1	29.0	28.3	156	10.0	4.0	
Mobile Home	0.5	9.8	2,874	241	1,214	0.4	28.7	27.9	151	10.4	16.4	
Multifamily (2 or more units)	0.7	8.2	2,415	189	1,219	3.3	26.6	25.9	146	12.6	8.3	
Heated Floorspace (square feet)												
Fewer than 1,000	1.2	8.3	2,447	201	1,218	2.8	22.9	22.3	125	13.0	7.5	
1,000 to 1,999 2,000 or More	1.4 1.6	9.8 11.7	2,872 3,416	217 249	1,161 1,192	4.2 4.7	29.1 30.9	28.3 30.0	157 166	10.6 9.9	4.5 5.3	
Ownership of Unit												
Owned	3.2 1.0	10.3 9.3	3,033 2,715	229 211	1,185 1,197	7.7 4.0	29.4 26.4	28.6 25.7	159 142	10.2 11.6	4.2 6.4	
Year of Construction												
1939 or Before 1940 to 1979	1.2 2.3	10.0 10.0	2,941 2,943	226 226	1,175 1,264	3.5 6.4	29.3 27.6	28.5 26.8	161 146	10.8 10.5	9.8 4.5	
1980 or After ³	0.7	10.4	3,036	219	1,004	1.9	29.3	28.5	162	10.6	7.6	
1993 Family Income	0.5	0.0	0.407	400	4.400	4.4	04.0	04.0	404	44.0	44.4	
Less than \$10,000 \$10.000 to \$19.999	0.5 1.2	8.2 8.7	2,407 2,554	189 200	1,123 1,195	1.4 2.5	24.6 24.3	24.0 23.6	131 132	11.9 11.5	11.1 6.7	
\$20,000 to \$34,999	1.0	9.5	2,776	222	1,232	2.9	28.0	27.3	155	10.5	7.1	
\$35,000 to \$49,999 \$50,000 or More	0.8 0.8	11.6 12.6	3,407 3,702	254 259	1,218 1,141	2.1 2.7	31.0 32.4	30.1 31.6	167 172	10.1 10.1	5.9 5.8	
Below Poverty Line												
100 Percent	0.4	12.0	3,515	278	1,133	1.3	29.6	28.8	156	10.7	10.6	
125 Percent	0.7 1.0	10.7 10.1	3,147 2,956	249 235	1,075 1,055	1.9 2.4	28.7 28.5	27.9 27.7	154 153	9.9 10.3	8.7 7.4	
Age of Householder												
Under 35 Years	1.1	10.1	2,974	246	1,134	3.2	31.6	30.7	169	10.2	5.9	
35 to 59 Years60 Years and Over	1.8 1.3	12.4 6.8	3,648 2,005	262 157	1,223 1,172	5.1 3.4	30.9 21.5	30.1 20.9	168 116	10.4 11.8	4.2 6.9	
Household Size					,						_	
1 Person 2 to 4 Persons	1.1 2.7	5.1 11.2	1,484 3,276	121 247	1,484 1,244	3.2 7.4	17.6 31.0	17.1 30.1	97 166	17.1 10.5	5.8 3.2	
5 or More Persons	0.4	16.5	4,845	361	860	1.1	42.9	41.7	235	7.5	7.7	

Table 51. Electricity and Natural Gas Consumption and Expenditures for Main Water Heating, per Midwest Region Households, 1993 (Continued)

	House- holds (million)	Consu (mil- lion Btu)	imption	Ex- pend-	Electricity Water- Heating		Consu	mption		Natural Gas	
	holds	Ìion		1 1					4 l	Natural Gas Water- Heating Intensity (1000 cubic feet per household member)	1
			(kWh)	itures (dol- lars)	Heating Intensity (kWh per household member)	House- holds (million)	(mil- lion Btu)	(1000 cubic feet)	Ex- pend- itures (dol- lars)		
Characteristics											RSE
RSE Column Factor:	3.1	1.1 ¹	1.11	1.21	1.0 ¹	1.8	0.6 ¹	0.6 ¹	0.6 ¹	0.6 ¹	Row Factors
West North Central Division	2.7	10.4	3,035	222	1,224	3.7	26.7	26.0	142	10.2	3.9
Climate Zone ²	2	10.1	0,000		1,44	U. ,	20.1	20.0		10.2	0.0
Under 2,000 CDD and	2.1	40.1	2.057	222	4 220	2.6	25.2	24.6	125	0.7	16
Over 5,500 HDD Under 5,500 HDD	2.1 Q	10.1 11.2	2,957 3,285	223 218	1,229 1,209	2.6 1.1	25.3 30.1	24.6 29.3	135 160	9.7 11.3	4.6 7.5
2,000 CDD or More and	Q.	11.4	0,200	210	1,200	1.1	30.1	20.0	100	11.0	7.0
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit											
Single-Family	1.8	10.8	3,151	233	1,197	2.9	26.8	26.1	142	9.8	5.0
Mobile Home	0.2	10.0	2,922	222	971	Q	Q	Q	Q T	Q.0	8.7
Multifamily (2 or more units)	0.6	9.4	2,743	191	1,474	0.6	26.0	25.3	143	12.4	17.1
Heated Floorspace											
(square feet)											
Fewer than 1,000	0.8	8.9	2,622	191	1,328	0.9	25.4	24.7	137	12.0	9.9
1,000 to 1,999	0.9	9.5	2,785	203	1,160	1.3	25.8	25.1	139	9.9	8.7
2,000 or More	1.0	12.4	3,643	267	1,214	1.5	28.2	27.5	148	9.7	5.8
Ownership of Unit											
Owned	1.8	10.7	3,139	230	1,177	2.7	26.1	25.4	139	9.9	5.7
Rented	0.9	9.7	2,834	207	1,338	1.0	28.3	27.5	151	11.1	11.6
Year of Construction											
1939 or Before	0.8	10.5	3,085	243	1,114	1.5	25.5	24.9	135	9.9	6.5
1940 to 1979	1.1	10.3	3,005	223	1,188	1.6	27.1	26.3	146	10.0	6.1
1980 or After ³	Q	10.3	3,029	199	1,421	0.6	28.7	27.9	152	11.7	8.5
1993 Family Income											
Less than \$10,000	0.5	8.6	2,525	176	1,441	0.4	21.5	20.9	115	11.1	19.2
\$10,000 to \$19,999	0.7	8.8	2,575	193	1,079	0.8	24.0	23.3	131	9.7	7.6
\$20,000 to \$34,999	8.0	10.9	3,183	242	1,267	1.0	26.4	25.6	138	10.8	7.5
\$35,000 to \$49,999	0.5	11.6	3,385	250	1,115	0.8	27.9	27.1	151	9.4 10.5	8.2
\$50,000 or More	0.3	13.3	3,909	258	1,439	0.7	31.9	31.0	168	10.5	7.8
Below Poverty Line											
100 Percent	0.4	10.2	2,987	210	1,284	0.3	23.5	22.9	125	9.8	21.0
125 Percent	0.6 0.9	10.0 10.0	2,925 2,919	213 215	1,137 1,144	0.6 0.8	24.0 26.0	23.3 25.3	129 139	10.0 10.0	15.1 12.3
150 r Groent	0.0	10.0	2,010	210	1,177	0.0	20.0	20.0	100	10.0	12.0
Age of Householder	2.0	40.0	2 200	225	4 404	4.0	20.2	07 F	1.10	10.0	6.0
Under 35 Years35 to 59 Years	0.9	10.9	3,209	225	1,134	1.2	28.3	27.5 29.5	149	10.0	6.3
60 Years and Over	1.0 0.8	13.3 5.9	3,903 1,715	283 139	1,383 1,041	1.5 1.0	30.3 19.4	18.8	161 105	10.1 10.9	5.9 10.4

Table 51. Electricity and Natural Gas Consumption and Expenditures for Main Water Heating, per Midwest Region Households, 1993 (Continued)

			Electric	ity				Natural	Gas		
		Consu	mption		Electricity		Consu	mption		Natural Gas	
	House- holds (million)	(mil- lion Btu)	(kWh)	Ex- pend- itures (dol- lars)	Water- Heating Intensity (kWh per household member)	House- holds (million)	(mil- lion Btu)	(1000 cubic feet)	Ex- pend- itures (dol- lars)	Water- Heating Intensity (1000 cubic feet per household member)	
Characteristics RSE Column Factor:	3.1	1.1 ¹	1.11	1.2 ¹	1.0 ¹	1.8	0.6 ¹	0.6 ¹	0.6 ¹	0.6 ¹	RSE Row Factors
Household Size 1 Person	0.7 1.7 0.3	5.1 11.5 15.5	1,490 3,383 4,552	120 239 354	1,490 1,322 863	0.9 2.4 0.3	18.1 28.1 38.8	17.6 27.3 37.7	96 150 202	17.6 10.2 6.8	7.9 4.5 5.3

¹ This factor is underestimated because it contains no error for estimating this end use.

² Climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

³ Does not include all new construction for 1993.

^{-- =} Data not applicable.

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" in Household Energy Consumption and Expenditures 1993 for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C, E, and F of the 1993 Residential Energy Consumption Survey.

Table 52. LPG Consumption and Expenditures for Main Water Heating, per Midwest Region Households, 1993

		I	Liquefied Petroleum Gas			
	Households (million)	Const (million Btu)	umption (gallons)	Expenditures (dollars)	LPG Water- Heating Intensity (gallons per household member)	
Characteristics RSE Column Factor:	2.0	0.8 ¹	0.81	0.81	1.01	RSE Row Factors
Total Region East North Central Division West North Central Division	1.0 0.4 0.6	22.1 25.6 19.3	242 281 211	199 237 170	86 94 79	10.5 18.6 7.9
Climate Zone ² Under 2,000 CDD and Over 5,500 HDD	0.7	23.0	252	206	86	13.2
Under 5,500 HDD 2,000 CDD or More and Under 4,000 HDD	Q Q	19.3 Q	212 Q	179 Q	86 Q	51.1 NF
Type of Housing Unit	2.2	20.0	0.40	400	0.5	40.0
Single-Family Mobile Home Multifamily (2 or more units)	0.8 0.2 Q	22.2 22.7 Q	243 249 Q	199 203 Q	85 89 Q	13.6 17.0 NF
Heated Floorspace (square feet)						
Fewer than 1,000	0.2	22.1	242	204	90	13.0
1,000 to 1,999 2,000 or More	0.4 0.4	22.8 21.5	249 235	201 195	114 69	26.8 10.6
Ownership of Unit						
OwnedRented	0.8 0.2	22.3 20.9	244 229	199 200	90 68	12.6 16.6
Year of Construction						
1939 or Before	0.4	22.9	250	216	93	24.7
1940 to 1979	0.4	20.3	222	176	87	9.2
1980 or After ³	0.3	23.3	255	206	77	16.7
1993 Family Income Less than \$10,000	0.2	21.1	231	195	143	12.2
\$10,000 to \$19,999	0.2	21.1	232	186	75	9.8
\$20,000 to \$34,999	0.4	17.6	193	159	72	10.4
\$35,000 to \$49,999	0.2	31.5	345	288	114	35.5
\$50,000 or More	0.1	24.7	270	219	67	20.2
Below Poverty Line	0.4	00.0	050	200	00	40.0
100 Percent	0.1 0.3	22.9 22.0	250 241	209 194	93 85	13.0 11.3
150 Percent	0.3	22.6	241 247	202	86	10.3
Age of Householder						
Under 35 Years	0.2	20.5	224	178	68	10.1
35 to 59 Years	0.5 0.3	26.3 16.5	288 181	240 149	100 80	17.0 25.3
Household Size						
1 Person	0.2	15.8	173	141	173	12.4
2 to 4 Persons	0.7	22.4	245	203	89	15.5
5 or More Persons	0.1	29.0	318	259	59	18.1

Table 52. LPG Consumption and Expenditures for Main Water Heating, per Midwest Region Households, 1993 (Continued)

			Liquefied Petroleum	ı Gas			
	_	Cons	umption			LPG Water- Heating Intensity	
Characteristics	Households (million)	(million Btu)	(gallons)		ditures lars)	(gallons per household member)	RSE
RSE Column Factor:	2.0	0.8 ¹	0.8 ¹	0.	81	1.0 ¹	Row Factors
Average Fuel Oil Expenditures							
(dollars per gallon)							
Less than 0.95	1.0	22.1	2	242	199	86	10.5
0.95 to Less than 1.10	Q	Q	Q		Ω	Q	NF
1.10 or More	Q	Q	Q	(2	Q	NF
Average LBC Expanditures							
Average LPG Expenditures (dollars per gallon)							
Less than 0.75	0.2	15.9		174	115	66	13.9
0.75 to Less than 1.00	0.7	24.9		273	227	93	13.8
1.00 or More	Q	Q	Q		2	Q	NF
Water Heater Used							
For One Housing Unit	1.0	22.3		244	200	86	10.6
For Two or More Units	Q	Q	Q ¹		2	Q	NF
Age of Water Heater							
(for one housing unit)	0.4	00.4	,	200	477	70	44.0
Less than 5 Years 5 to 9 Years	0.4 0.3	20.4 19.5		223 214	177 188	76 71	11.0 12.6
10 to 19 Years	0.3	33.2		364	301	141	45.7
20 Years or More	0.1	24.5		268	207	102	14.7
Don't Know/No Separate	0.1	24.5	4	200	201	102	14.7
Unit	Q	Q	Q	(Q	Q	NF
Cinc of Mater Heaten							
Size of Water Heater (for one housing unit)							
30 gallons of less	0.2	24.2	,	265	229	86	14.9
31 to 49 gallons	0.5	19.2		211	168	78	11.8
50 gallons or more	0.2	19.8		217	173	76	16.2
Don't Know/No Separate							
Unit	Q	Q	Q	(2	Q	NF
Clothes Washer Present							
in Household							
Yes	0.9	22.7	2	248	203	87	11.2
No	Q	Q	Q	(2	Q	NF
Dishwasher Present							
in Household							
Yes	0.3	29.2	3	320	263	91	22.0
No	0.7	19.0	2	208	172	83	8.2
Children Present in Household							
No	0.6	15.8		173	142	100	7.2
Yes	0.4	30.4		333	275	79	16.3
(more than one may apply)							
Under 13 Years	0.3	26.2		287	232	66	10.1
13 to 18 Years	0.2	39.0	4	427	359	99	20.1

¹ This factor is underestimated because it contains no error for estimating this end use.

² Climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

³ Does not include all new construction for 1993.

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" in *Household Energy Consumption and Expenditures 1993* for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C, and D of the 1993 Residential Energy Consumption Survey.

Table 53. Total Consumption and Expenditures for Appliances in Midwest Region Households, 1993

		Elec	tricity			Natu	ral Gas		Lic	quefied P	etroleun	n Gas	
		Cons	umed	Ex-		Cons	umed	Ex-		Cons	umed	Ex-	
Characteristics	House- holds (million)	(tril- lion Btu)	(bil- lion kWh)	pend- itures (bil- lion dol- lars)	House- holds (million)	(tril- lion Btu)	(bil- lion cubic feet)	pend- itures (bil- lion dol- lars)	House- holds (million)	(tril- lion Btu)	(bil- lion gal- lons)	pend- itures (bil- lion dol- lars)	
RSE Column Factor:	0.5	0.5 ¹	0.5 ¹	0.5 ¹	0.8	0.91	0.9 ¹	0.9 ¹	2.1	2.21	2.21	2.3 ¹	RSE Row Factors
						Mi	dwest R	egion					
Total Region	23.3	412.8	121.0	9.98	10.4	78.2	76	0.42	1.1	7.5	0.08	0.07	8.7
Climate Zone ² Under 2,000 CDD and Over 5,500 HDD	19.5 3.8	339.6 73.2	99.5 21.5	8.21 1.78	9.2 1.2	68.7 9.5	67 9	0.37 0.05	0.8 Q	5.2 Q	0.06 Q	0.05 Q	13.7 56.9
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit Single-Family Mobile Home Multifamily (2 or more units)	16.6 1.4 5.3	340.8 22.3 49.7	99.9 6.5 14.6	8.12 0.55 1.31	7.3 0.6 2.5	54.9 4.5 18.8	53 4 18	0.29 0.02 0.10	0.7 0.4 Q	5.3 2.1 Q	0.06 0.02 Q	0.05 0.02 Q	10.8 26.6 14.5
Heated Floorspace (square feet)													
Fewer than 1,000 1,000 to 1,999 2,000 or More	5.9 8.2 9.2	58.7 141.3 212.8	17.2 41.4 62.4	1.48 3.50 5.01	2.5 3.8 4.0	17.1 30.1 31.0	17 29 30	0.09 0.16 0.17	0.4 0.3 0.4	2.3 2.2 2.9	0.03 0.02 0.03	0.02 0.02 0.03	14.1 9.9 11.1
Ownership of Unit Owned Rented	16.2 7.1	326.9 85.9	95.8 25.2	7.82 2.16	7.3 3.1	55.4 22.8	54 22	0.30 0.12	0.9 0.2	6.0 1.5	0.07 0.02	0.06 0.01	9.4 14.2
Year of Construction 1930 or Before	7.4	128.8	37.7	3.10	3.8	26.5	26	0.15	0.4	3.2	0.04	0.03	13.5
1940 to 1979 1980 or After ³	11.7 4.2	207.6 76.4	60.9 22.4	5.15 1.73	5.1 1.4	40.1 11.6	39 11	0.21 0.06	0.4 0.2	2.6 1.6	0.03 0.02	0.03 0.02	11.4 19.2
1993 Family Income Less than \$10,000	3.0 5.3 6.0 4.4 4.6	34.1 77.7 109.2 86.7 105.1	10.0 22.8 32.0 25.4 30.8	0.84 1.95 2.61 2.10 2.48	1.4 2.5 2.6 1.6 2.2	9.2 17.5 18.7 14.3 18.5	9 17 18 14 18	0.05 0.09 0.10 0.08 0.10	Q 0.4 0.4 0.1 0.1	Q 2.1 2.8 1.4 0.4	Q 0.02 0.03 0.01 (*)	Q 0.02 0.02 0.01 (*)	18.9 11.3 13.5 14.2 15.2
Below Poverty Line	2.6	36.6	10.7	0.91	1.4	11.2	11	0.06	0.2	1.2	0.01	Q	19.5
125 Percent 150 Percent	4.0 5.3	58.5 78.1	17.1 22.9	1.43 1.91	2.0 2.6	14.7 19.4	14 19	0.08 0.11	0.3 0.4	2.3 2.8	0.03 0.03	0.02 0.03	16.3 13.9
Age of Householder Under 35 Years	6.6 9.9 6.8	101.6 210.6 100.6	29.8 61.7 29.5	2.53 4.96 2.50	3.3 4.3 2.8	27.3 35.5 15.5	27 35 15	0.14 0.19 0.09	0.4 0.4 0.3	2.6 3.1 Q	0.03 0.03 Q	0.02 0.03 Q	12.8 11.4 12.1
Household Size													
1 Person 2 to 4 Persons 5 or More Persons	6.1 14.9 2.3	57.3 296.8 58.7	16.8 87.0 17.2	1.49 7.09 1.40	2.6 6.6 1.1	11.7 54.2 12.3	11 53 12	0.07 0.29 0.07	0.1 0.7 0.2	0.6 5.0 1.9	0.01 0.05 0.02	0.01 0.05 0.02	14.9 9.4 15.6

Table 53. Total Consumption and Expenditures for Appliances in Midwest Region Households, 1993 (Continued)

		Elec	ctricity			Natu	ral Gas		Lic	quefied P	etroleum	Gas	
		Cons	umed	Ex- pend-		Cons	umed	Ex- pend-		Cons	umed	Ex- pend-	
Characteristics	House- holds (million)	(tril- lion Btu)	(bil- lion kWh)	itures (bil- lion dol- lars)	House- holds (million)	(tril- lion Btu)	(bil- lion cubic feet)	itures (bil- lion dol- lars)	House- holds (million)	(tril- lion Btu)	(bil- lion gal- lons)	itures (bil- lion dol- lars)	
RSE Column Factor:	0.5	0.5 ¹	0.5 ¹	0.5 ¹	0.8	0.9 ¹	0.9 ¹	0.9 ¹	2.1	2.2 ¹	2.21	2.3 ¹	RSE Row Factors
Fact North Control Division	16.4	207.1	0/1	7 10	7.0	60.0	5 0	0.33	0.5	2.1	0.03	0.03	10.7
East North Central Division Climate Zone ²	16.4	287.1	84.1	7.18	7.9	60.9	59	0.33	0.5	3.1	0.03	0.03	10.7
Under 2,000 CDD and													
Over 5,500 HDD	14.4	251.0	73.6	6.21	7.4	57.2	56	0.31	0.4	2.7	0.03	0.03	17.2
Under 5,500 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
2,000 CDD or More and Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Universe Unit													
Type of Housing Unit Single-Family	11.4	235.5	69.0	5.78	5.4	41.2	40	0.22	0.3	2.0	0.02	0.02	12.1
Mobile Home	0.9	15.1	4.4	0.38	0.5	3.3	3	0.02	0.3	Q 2.0	Q.02	Q Q	42.0
Multifamily (2 or more units)	4.0	36.5	10.7	1.02	2.0	16.4	16	0.09	Q	Q	ã	Q	15.6
Heated Floorspace													
(square feet) Fewer than 1,000	4.0	37.0	10.9	0.99	1.8	12.5	12	0.07	Q	Q	Q	Q	14.2
1,000 to 1,999	5.8	99.7	29.2	2.57	3.0	24.6	24	0.07	0.1	0.9	0.01	0.01	13.1
2,000 or More	6.6	150.3	44.1	3.63	3.1	23.8	23	0.13	0.2	1.2	0.01	0.01	11.3
Ownership of Unit													
Owned	11.2	227.6	66.7	5.61	5.5	42.9	42	0.23	0.4	2.3	0.03	0.02	10.4
Rented	5.1	59.5	17.4	1.57	2.4	18.0	17	0.10	Q	Q	Q	Q	13.4
Year of Construction													
1939 or Before	4.9	85.3	25.0	2.11	2.6	19.4	19	0.11	0.2	1.0	0.01	0.01	14.4
1940 to 1979	8.8	153.2	44.9	3.92	4.2	32.7	32	0.17	0.2	1.2	0.01	Q	14.7
1980 or After ³	2.7	48.6	14.3	1.15	1.1	8.8	9	0.05	Q	Q	Q	Q	21.7
1993 Family Income													
Less than \$10,000	2.0	22.7	6.6	0.59	1.1	7.3	7	0.04	Q	Q	Q	Q	22.5
\$10,000 to \$19,999	3.8	51.7	15.2	1.36	1.9	13.6	13	0.07	0.2	0.9	0.01	0.01	15.5
\$20,000 to \$34,999	4.0	73.2	21.5	1.81	1.9	14.0	14	0.08	Q	1.1	0.01	Q	17.6
\$35,000 to \$49,999 \$50,000 or More	3.0 3.5	57.9 81.6	17.0 23.9	1.45 1.98	1.2 1.8	11.0 15.0	11 15	0.06 0.08	Q Q	Q Q	Q Q	Q Q	15.4 16.0
Below Poverty Line 100 Percent	1.8	25.4	7.4	0.66	1.2	9.3	9	0.05	Q	Q	Q	Q	22.3
125 Percent	2.7	38.7	11.4	0.98	1.5	11.6	11	0.06	Q	Q	Q	Q	21.1
150 Percent	3.5	49.1	14.4	1.26	1.9	15.0	15	0.08	Q	Q	Q	Q	15.7
Age of Householder													
Under 35 Years	4.3	65.3	19.1	1.73	2.5	20.1	20	0.11	Q	Q	Q	Q	13.7
35 to 59 Years	7.2	150.5	44.1	3.64	3.3	28.5	28	0.15	0.2	1.4	0.02	0.01	14.2
60 Years and Over	4.9	71.4	20.9	1.82	2.1	12.3	12	0.07	Q	Q	Q	Q	12.3
Household Size													
1 Person	4.4	40.7	11.9	1.09	2.0	8.9	9	0.05	Q	Q	Q	Q	18.3
2 to 4 Persons	10.4	207.3	60.7	5.14	5.1	42.5	41	0.23	0.3	1.8	0.02	0.02	13.0
5 or More Persons	1.6	39.1	11.4	0.96	0.9	9.5	9	0.05	0.1	0.9	0.01	0.01	17.2

Table 53. Total Consumption and Expenditures for Appliances in Midwest Region Households, 1993 (Continued)

		Elec	ctricity			Natu	ral Gas		Lic	quefied P	etroleum	ı Gas	
		Cons	umed	Ex- pend-		Cons	umed	Ex- pend-		Cons	umed	Ex- pend-	
Characteristics	House- holds (million)	(tril- lion Btu)	(bil- lion kWh)	itures (bil- lion dol- lars)	House- holds (million)	(tril- lion Btu)	(bil- lion cubic feet)	itures (bil- lion dol- lars)	House- holds (million)	(tril- lion Btu)	(bil- lion gal- lons)	itures (bil- lion dol- lars)	
RSE Column Factor:	0.5	0.5 ¹	0.5 ¹	0.5 ¹	0.8	0.9 ¹	0.9 ¹	0.9 ¹	2.1	2.2 ¹	2.2 ¹	2.3 ¹	RSE Row Factors
West North Central Division	6.9	125.7	36.9	2.80	2.4	17.3	17	0.09	0.6	4.4	0.05	0.04	13.4
Climate Zone ² Under 2,000 CDD and	0.5	123.7	50.5	2.00	2.4	17.3	17	0.03	0.0	4.4	0.00	0.04	13.4
Over 5,500 HDD Under 5,500 HDD	5.0 1.9	88.7 37.1	26.0 10.9	2.00 0.80	1.8 0.6	11.5 5.9	11 6	0.06 0.03	0.3 Q	2.6 Q	0.03 Q	0.02 Q	23.8 49.1
2,000 CDD or More and Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit													
Single-Family Mobile Home	5.2 0.5	105.3 7.2	30.9 2.1	2.34 0.17	1.8 Q	13.7 Q	13 Q	0.07 Q	0.4 0.2	3.3 1.1	0.04 0.01	0.03 0.01	17.2 26.0
Multifamily (2 or more units)	1.3	13.2	3.9	0.17	0.4	2.5	2	0.01	Q.2	Q I.I	Q.01	Q.01	31.6
Heated Floorspace (square feet)													
Fewer than 1,000	1.8	21.7	6.3	0.49	0.7	4.6	4	0.02	0.2	1.4	0.02	Q	24.7
1,000 to 1,999 2,000 or More	2.5 2.7	41.6 62.5	12.2 18.3	0.93 1.38	0.9 0.9	5.5 7.2	5 7	0.03 0.04	0.2 0.2	1.3 Q	0.01 Q	0.01 Q	14.3 25.2
Ownership of Unit													
Owned	5.0 2.0	99.3 26.4	29.1 7.7	2.21 0.59	1.8 0.7	12.5 4.9	12 5	0.07 0.03	0.5 Q	3.7 Q	0.04 Q	0.03 Q	19.1 29.8
Year of Construction													
1939 or Before	2.5	43.5	12.7	0.99	1.1	7.1	7	0.04	0.2	2.2	0.02	0.02	26.8
1940 to 1979 1980 or After ³	3.0 1.5	54.5 27.8	16.0 8.1	1.23 0.58	1.0 0.3	7.4 2.8	7 3	0.04 0.01	0.2 Q	1.4 Q	0.02 Q	0.01 Q	14.7 37.8
1993 Family Income													
Less than \$10,000	0.9	11.5	3.4	0.25	0.3	1.9	2	0.01	Q	Q	Q	Q	32.6
\$10,000 to \$19,999	1.6	26.0	7.6	0.59	0.6	3.9	4	0.02	0.2	1.2	0.01	0.01	15.9
\$20,000 to \$34,999 \$35,000 to \$49,999	2.0 1.4	35.9 28.8	10.5 8.4	0.81 0.65	0.7 0.4	4.7 3.3	5 3	0.02 0.02	0.2 Q	1.7 Q	0.02 Q	0.01 Q	21.4 20.4
\$50,000 or More	1.0	23.5	6.9	0.51	0.4	3.5	3	0.02	Q	Q	Q	Q	32.4
Below Poverty Line							_		_	-	-	_	
100 Percent	0.8	11.2	3.3	0.25	0.3	1.9	2	0.01	Q	Q	Q 0.01	Q 0.01	33.4
125 Percent	1.4 1.8	19.7 29.1	5.8 8.5	0.45 0.65	0.5 0.6	3.1 4.4	3 4	0.02 0.02	0.2 0.2	1.2 1.7	0.01 0.02	0.01 Q	22.5 21.7
Age of Householder			45 -	0			_						
Under 35 Years	2.3	36.3	10.6	0.80	0.9	7.1	7	0.04	0.2	1.6	0.02	0.01	18.7
35 to 59 Years 60 Years and Over	2.7 2.0	60.1 29.3	17.6 8.6	1.32 0.68	0.9 0.6	7.0 3.2	7 3	0.04 0.02	0.2 Q	1.7 Q	0.02 Q	0.02 Q	18.8 24.7
Household Size													
1 Person	1.7	16.6	4.9	0.40	0.6	2.8	3	0.02	Q 0.4	Q	Q	Q	23.0
2 to 4 Persons 5 or More Persons	4.5 0.7	89.5 19.7	26.2 5.8	1.95 0.45	1.6 0.2	11.7 2.8	11 3	0.06 0.01	0.4 Q	3.2 Q	0.03 Q	0.03 Q	12.6 29.6
3 0. WOLC 0.30113	0.1	19.7	5.0	0.40	0.2	2.0	J	0.01	Q	×.	×.	Q	23.0

¹ This factor is underestimated because it contains no error for estimating this end use.

² Climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

Does not include all new construction for 1993.

^{(*) =} Value rounds to zero in the units displayed.

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.

Appliances do not include refrigerators.
 See "Glossary" in Household Energy Consumption and Expenditures 1993 for definition of terms used in this report.
 Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-F of the 1993 Residential Energy Consumption Survey.

Table 54. Electricity Consumption and Expenditures for Appliances and Refrigerators, per Midwest Region Households, 1993

	Elect	ricity Used	d for Appli	ances		Electricity Us	sed for Re	frigerators	s	
		Cons	sumed				Cons	sumed		
Characteristics	House- holds (mil- lion)	(mil- lion Btu)	(kWh)	Expend- itures (dollars)	House- holds (mil- lion)	Average Number of Refrig- erators	(mil- lion Btu)	(kWh)	Expend- itures (dollars)	
Gharacteristics	1.7	0.9 ¹	0.9 ¹	1.1 ¹	1.7	0.5	0.9 ¹	0.91	1.1 ¹	RSE Row Factors
RSE Column Factor:	1.7	0.3	0.5	1.1	1.7	0.5	0.3	0.3		1 actors
					Midwest	Region				
Total Region	23.3	17.7	5,193	428	23.3	1.2	4.5	1,322	111	2.9
Climate Zone ² Under 2,000 CDD and										
Over 5,500 HDD Under 5,500 HDD 2,000 CDD or More and	19.5 3.8	17.5 19.0	5,117 5,573	422 461	19.5 3.8	1.2 1.2	4.4 5.1	1,289 1,489	109 125	
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit	16.6	20.6	6 020	490	16.6	1.2	5 0	1 461	120	2.4
Single-Family Mobile Home	16.6 1.4	20.6 15.7	6,028 4,614	392	1.4	1.3 1.0	5.0 3.5	1,461 1,021	120 87	
Multifamily (2 or more units)	5.3	9.4	2,742	247	5.3	1.0	3.3	970	90	
Heated Floorspace (square feet)										
Fewer than 1,000	5.9	10.0	2,926	251	5.9	1.0	3.5	1,028	91	
1,000 to 1,999 2,000 or More	8.2 9.2	17.2 23.1	5,048 6,767	426 543	8.2 9.2	1.2 1.3	4.4 5.3	1,287 1,541	111 125	2.9 3.1
Ownership of Unit	40.0	00.0	5.047	400	10.0	4.0	4.0	4 400	440	0.0
Owned Rented	16.2 7.1	20.2 12.1	5,917 3,542	483 304	16.2 7.1	1.3 1.0	4.9 3.6	1,436 1,063	119 95	
Year of Construction 1939 or Before	7.4	17.4	5,094	419	7.4	1.2	4.4	1,299	109	3.9
1940 to 1979	11.7	17.7	5,186	439	11.7	1.2	4.6	1,357	117	3.6
1980 or After ³	4.2	18.4	5,386	416	4.2	1.2	4.3	1,265	99	5.6
1993 Family Income Less than \$10,000	3.0	11.5	3,383	285	3.0	1.1	3.8	1,112	96	5.6
\$10,000 to \$19,999	5.3	14.5	4,260	364	5.3	1.2	4.3	1,112	111	3.8
\$20,000 to \$34,999	6.0	18.1	5,314	434	6.0	1.2	4.5	1,313	109	
\$35,000 to \$49,999 \$50,000 or More	4.4 4.6	19.6 23.1	5,747 6,763	475 545	4.4 4.6	1.2 1.3	4.5 5.3	1,312 1,553	109 127	
Below Poverty Line	0.6	111	4 407	240	0.6	4.4	2.0	1 457	00	F.C.
100 Percent	2.6 4.0	14.1 14.6	4,127 4,275	349 357	2.6 4.0	1.1 1.1	3.9 4.0	1,157 1,185	99 101	
150 Percent	5.3	14.6	4,290	359	5.3	1.1	4.1	1,198	104	
Age of Householder Under 35 Years	6.6	15.5	4,543	386	6.6	1.1	3.9	1,132	98	4.0
35 to 59 Years	9.9	21.2	6,217	499	9.9	1.2	4.8	1,401	115	3.1
60 Years and Over	6.8	14.8	4,324	366	6.8	1.3	4.7	1,390	119	3.6
Household Size 1 Person	6.1	9.4	2,743	243	6.1	1.1	3.7	1,087	98	4.9
2 to 4 Persons	14.9	19.9	5,842	476	14.9	1.2	4.8	1,417	117	2.5
5 or More Persons	2.3	25.7	7,523	612	2.3	1.2	4.6	1,338	110	4.1

Table 54. Electricity Consumption and Expenditures for Appliances and Refrigerators, per Midwest Region Households, 1993 (Continued)

	Elect	ricity Used	l for Applia	ances		Electricity Us	sed for Re	frigerators	;	
		Cons	umed				Cons	umed		
	House- holds (mil- lion)	(mil- lion Btu)	(kWh)	Expend- itures (dollars)	House- holds (mil- lion)	Average Number of Refrig- erators	(mil- lion Btu)	(kWh)	Expend- itures (dollars)	
Characteristics										RSE
RSE Column Factor:	1.7	0.9 ¹	0.9 ¹	1.1 ¹	1.7	0.5	0.9 ¹	0.9 ¹	1.1 ¹	Row Factors

Midwest Region

-										
Average Electricity Expenditures (cents per kWh)										
Less than 6	1.5	25.3	7.407	402						12.6
6 to Less than 9	13.2	19.3	5,647	426						3.9
9 or More	8.5	14.0	4,090	436						5.1
3 Of Wore	0.5	14.0	4,030	430						5.1
Average Electric Refrigerator Expenditures (cents per kWh)										
Less than 6					1.5	1.3	6.1	1,802	99	12.5
6 to Less than 9					13.1	1.2	4.7	1,382	105	3.9
9 or More					8.6	1.1	3.9	1,147	124	5.1
Electric Appliances Used by Household (more than one										
may apply)										
Separate Freezer	10.2	22.6	6,638	532	10.2	1.3	4.9	1,422	114	3.0
Dishwasher	9.4	21.2	6,210	503	9.4	1.3	4.9	1,431	116	3.4
Clothes Washer	18.4	20.1	5,904	482	18.4	1.2	4.8	1,396	115	2.2
Clothes Dryer	13.2	20.9	6,135	490	13.2	1.2	4.7	1,381	112	2.6
Waterbed Heater	4.1	24.7	7,238	570	4.1	1.3	4.7	1,387	110	4.7
Swimming-Pool Pump	0.5	31.9	9,341	690	0.5	1.5	6.0	1,759	128	11.2
Hot-Tub or Spa Pump	0.4	34.9	10,241	784	0.4	1.5	6.3	1,852	143	12.2
Hot-Tub or Spa Heater	0.4	37.5	10.990	827	0.4	1.6	6.7	1.977	150	13.6
Well Pump	4.0	25.3	7,413	574	4.0	1.4	5.7	1,681	131	5.1
·										
Appliance Combination Usage Dishwasher, Clothes Washer, and										
Clothes Dryer										
All	6.0	23.5	6,884	542	6.0	1.3	5.0	1,468	116	3.4
Some	13.6	17.8	5.217	437	13.6	1.2	4.6	1.336	114	2.7
None	3.7	8.1	2,374	213	3.7	1.1	3.5	1,038	96	6.5
Well Pump and Separate Freezer										
All	2.9	27.4	8,045	613	2.9	1.4	5.9	1,719	130	6.5
Some	8.4	20.6	6,045	496	8.4	1.2	4.6	1,342	111	3.0
None	12.0	13.3	3,907	336	12.0	1.1	4.1	1,213	107	3.5
Main Heating Fuel										
Natural Gas	16.9	16.8	4,933	421	16.9	1.2	4.5	1,313	114	3.5
Electricity	2.9	18.0	5,269	362	2.9	1.1	4.4	1,280	90	7.4
Fuel Oil or Kerosene	1.3	20.7	6,072	490	1.3	1.3	4.7	1,373	110	7.4
Wood	0.4	25.5	7,467	573	0.4	1.5	5.6	1,648	126	12.9
LPG	1.8	22.1	6.463	535	1.8	1.3	4.7	1,379	115	7.3
Other	1.0 Q	Q Q	0,403 Q	Q 535	1.0 Q	1.3 Q	4.7 Q	1,379 Q	Q	7.5 NF
	· ·	•	u,	•	· ·	•	· ·	· ·	•	. •••
Number of Refrigerators	18.8	16.5	4,826	404	18.8	1.0	3.8	1.125	97	2.2
2 or More	4.5	22.9	4,826 6,707	528	4.5	2.0	3.6 7.3	2,137	170	3.8
2 01 WOIE	4.0	22.3	0,707	J20	4.0	2.0	1.3	2,131	170	J.0

Table 54. Electricity Consumption and Expenditures for Appliances and Refrigerators, per Midwest Region Households, 1993 (Continued)

	Elect	ricity Used	d for Appli	ances		Electricity Us	sed for Re	frigerators	.	
		Cons	sumed				Cons	sumed		
Characteristics	House- holds (mil- lion)	(mil- lion Btu)	(kWh)	Expend- itures (dollars)	House- holds (mil- lion)	Average Number of Refrig- erators	(mil- lion Btu)	(kWh)	Expend- itures (dollars)	
Characteristics										RSE Row
RSE Column Factor:	1.7	0.91	0.91	1.11	1.7	0.5	0.9 ¹	0.91	1.1 ¹	Factors
East North Central Division	16.4	17.6	5,146	439	16.4	1.2	4.5	1,317	115	4.2
Climate Zone ²										
Under 2,000 CDD and Over 5,500 HDD	14.4	17.4	5,097	430	14.4	1.2	4.5	1,307	113	4.8
Under 5,500 HDD 2.000 CDD or More and	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit										
Single-Family	11.4	20.7	6,056	507	11.4	1.3	5.0	1,461	124	3.4
Mobile HomeMultifamily (2 or more units)	0.9 4.0	15.9 9.1	4,668 2,669	407 255	0.9 4.0	1.0 1.0	3.6 3.3	1,050 969	90 94	10.5 4.8
,	1.0	0.1	2,000	200	1.0	1.0	0.0	000	01	1.0
Heated Floorspace (square feet)										
Fewer than 1,000	4.0	9.2	2,687	245	4.0	1.0	3.5	1,032	96	6.9
1,000 to 1,999	5.8	17.3	5,077	446	5.8	1.1	4.4	1,284	115	3.8
2,000 or More	6.6	22.9	6,719	554	6.6	1.3	5.2	1,520	127	3.9
Ownership of Unit										
Owned	11.2	20.2	5,933	499	11.2	1.3	4.9	1,430	122	3.4
Rented	5.1	11.6	3,411	308	5.1	1.0	3.6	1,066	100	5.3
Year of Construction				404						
1939 or Before	4.9	17.4	5,095	431	4.9	1.2	4.5	1,326	115	5.1
1940 to 1979 1980 or After ³	8.8 2.7	17.4 18.3	5,112 5,351	447 431	8.8 2.7	1.2 1.2	4.6 4.2	1,340 1,222	119 100	4.8 5.5
1993 Family Income										
Less than \$10,000	2.0	11.3	3,305	294	2.0	1.0	3.8	1,100	100	7.5
\$10,000 to \$19,999	3.8	13.8	4,034	361	3.8	1.2	4.3	1,271	117	5.1
\$20,000 to \$34,999	4.0	18.3	5,363	452	4.0	1.2	4.6	1,345	115	4.4
\$35,000 to \$49,999	3.0	19.1	5,590	479	3.0	1.2	4.3	1,254	108	5.2
\$50,000 or More	3.5	23.0	6,739	557	3.5	1.3	5.1	1,509	127	5.1
Below Poverty Line				.=-					404	
100 Percent	1.8	14.3	4,197	372	1.8	1.1	4.0	1,161	104	7.1
125 Percent	2.7 3.5	14.6 14.0	4,284 4,112	371 360	2.7 3.5	1.1 1.1	4.1 4.1	1,204 1,205	106 109	7.0 6.0
Age of Householder										
Under 35 Years	4.3	15.2	4,449	402	4.3	1.1	3.9	1,154	106	5.3
35 to 59 Years	7.2	20.9	6,130	506	7.2	1.2	4.7	1,367	115	4.1
60 Years and Over	4.9	14.7	4,304	374	4.9	1.2	4.7	1,386	122	4.4
Household Size										
1 Person	4.4	9.2	2,703	247	4.4	1.1	3.7	1,086	101	6.8
2 to 4 Persons	10.4	20.0	5,856	495	10.4	1.2	4.8	1,421	122	3.5

Table 54. Electricity Consumption and Expenditures for Appliances and Refrigerators, per Midwest Region Households, 1993 (Continued)

	Elect	ricity Used	d for Appli	ances		Electricity Us	sed for Re	frigerators	s	
		Cons	sumed				Cons	sumed		
Characteristics	House- holds (mil- lion)	(mil- lion Btu)	(kWh)	Expend- itures (dollars)	House- holds (mil- lion)	Average Number of Refrig- erators	(mil- lion Btu)	(kWh)	Expend- itures (dollars)	
RSE Column Factor:	1.7	0.9 ¹	0.91	1.1 ¹	1.7	0.5	0.91	0.91	1.1 ¹	RSE Row Factors
West North Central Division	6.9	18.1	5,303	403	6.9	1.2	4.6	1 226	103	2.6
West North Central Division	0.9	10.1	5,303	403	0.9	1.2	4.0	1,336	103	2.0
Climate Zone ²										
Under 2,000 CDD and										
Over 5,500 HDD	5.0	17.7	5,175	398	5.0	1.2	4.2	1,239	96	
Under 5,500 HDD	1.9	19.2	5,637	416	1.9	1.3	5.4	1,589	120	5.2
2,000 CDD or More and	_	_	•		_	•	_	•	•	
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit										
Single-Family	5.2	20.4	5,965	452	5.2	1.3	5.0	1,461	111	2.9
Mobile Home	0.5	15.4	4,505	363	0.5	1.0	3.3	964	80	
Multifamily (2 or more units)	1.3	10.1	2,964	222	1.3	1.0	3.3	974	76	
,										
Heated Floorspace										
(square feet)										
Fewer than 1,000	1.8	11.8	3,450	265	1.8	1.0	3.5	1,018	81	
1,000 to 1,999	2.5	17.0	4,978	380	2.5	1.2	4.4	1,295	100	
2,000 or More	2.7	23.5	6,885	518	2.7	1.4	5.4	1,594	120	4.9
Ownership of Unit										
Owned	5.0	20.1	5,880	447	5.0	1.3	4.9	1,450	111	2.8
Rented	2.0	13.2	3,875	294	2.0	1.1	3.6	1,054	82	
Year of Construction										
1939 or Before	2.5	17.4	5,093	395	2.5	1.2	4.3	1,246	96	
1940 to 1979 1980 or After ³	3.0 1.5	18.4	5,407	416	3.0 1.5	1.2 1.2	4.8	1,409	110 98	
1960 Of Allers	1.5	18.6	5,450	390	1.5	1.2	4.6	1,341	90	13.4
1993 Family Income										
Less than \$10,000	0.9	12.1	3,548	265	0.9	1.1	3.9	1,138	89	8.2
\$10,000 to \$19,999	1.6	16.4	4,792	369	1.6	1.2	4.2	1,236	97	
\$20,000 to \$34,999	2.0	17.8	5,218	399	2.0	1.2	4.3	1,252	96	5.1
\$35,000 to \$49,999	1.4	20.8	6,091	466	1.4	1.3	4.9	1,439	112	7.0
\$50,000 or More	1.0	23.4	6,848	505	1.0	1.3	5.8	1,708	125	5.7
Bully Burnet 11th										
Below Poverty Line 100 Percent	0.8	13.6	3,978	298	0.8	1.1	3.9	1,150	89	9.8
125 Percent	1.4	14.5	4,258	329	1.4	1.1	3.9	1,130	91	6.6
150 Percent	1.8	15.8	4,630	355	1.8	1.1	4.0	1,185	93	
			.,			***		, . 50	50	2
Age of Householder										
Under 35 Years	2.3	16.1	4,722	355	2.3	1.1	3.7	1,091	83	
35 to 59 Years	2.7	22.0	6,448	481	2.7	1.3	5.1	1,493	112	
60 Years and Over	2.0	14.9	4,374	347	2.0	1.3	4.8	1,398	112	6.0
Household Size										
1 Person	1.7	9.7	2,847	233	1.7	1.1	3.7	1,087	90	4.0
2 to 4 Persons	4.5	19.8	5,811	433	4.5	1.3	4.8	1,407	105	
5 or More Persons	0.7	27.0	7,914	612	0.7	1.3	5.0	1,476	113	

¹ This factor is underestimated because it contains no error for estimating this end use.
2 Climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.

³ Does not include all new construction for 1993.

^{-- =} Data not applicable.

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" in Household Energy Consumption and Expenditures 1993 for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C, and E of the 1993 Residential Energy

Consumption Survey.

Table 55. Natural Gas and LPG Consumption and Expenditures for Appliances, per Midwest Region Households, 1993

		Natura	al Gas		Li	iquefied Pe	etroleum G	as	
		Cons	umed			Cons	umed		
Characteristics	House- holds (million)	(million Btu)	(1000 cubic feet)	Expend- itures (dollars)	House- holds (million)	(million Btu)	(gallons)	Expend- itures (dollars)	
RSE Column Factor:	1.1	0.5 ¹	0.5 ¹	0.6 ¹	2.9	1.2 ¹	1.2 ¹	1.3 ¹	RSE Row Factors
				Mid	west Regio	n			
Total Region	10.4	7.5	7.3	41	1.1	7.0	76	66	6.3
Climate Zone ² Under 2,000 CDD and									
Over 5,500 HDD Under 5,500 HDD	9.2 1.2	7.5 7.9	7.3 7.7	41 43	0.8 Q	6.9 7.0	76 77	65 69	7.7 23.7
2,000 CDD or More and Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit									
Single-Family Mobile Home	7.3 0.6	7.5 7.0	7.3 6.8	40 37	0.7 0.4	7.5 5.8	83 64	70 58	7.8 12.1
Multifamily (2 or more units)	2.5	7.7	7.5	43	Q	Q	Q	Q	8.5
Heated Floorspace (square feet)									
Fewer than 1,000	2.5 3.8	6.7 7.8	6.5 7.6	37 42	0.4 0.3	6.3 7.0	69 77	63 61	10.1 10.1
2,000 or More	4.0	7.8	7.6	42	0.3	7.5	82	73	9.9
Ownership of Unit									
OwnedRented	7.3 3.1	7.6 7.3	7.4 7.1	41 40	0.9 0.2	7.0 6.6	77 73	67 63	7.2 10.1
Year of Construction									
1939 or Before	3.8	7.0	6.8	39	0.4	8.2	90	77	10.3
1940 to 1979	5.1	7.8	7.6	41	0.4	6.0	65	57	8.2
1980 or After ³	1.4	8.0	7.8	43	0.2	6.7	73	63	12.8
1993 Family Income	4.4	0.5	0.0	07	0	0	0	0	44.4
Less than \$10,000 \$10,000 to \$19,999	1.4 2.5	6.5 6.9	6.3 6.7	37 37	Q 0.4	Q 5.8	Q 63	Q 54	11.4 9.6
\$20,000 to \$34,999	2.6	7.1	6.9	38	0.4	7.3	80	65	11.2
\$35,000 to \$49,999	1.6	8.9	8.7	48	0.1	9.1	100	84	13.2
\$50,000 or More	2.2	8.5	8.3	46	0.1	7.4	81	78	15.8
Below Poverty Line 100 Percent	1.4	7.7	7.5	41	0.2	6.7	74	77	11.3
125 Percent	2.0	7.7 7.4	7.5 7.2	40	0.2	6.7	74 74	66	8.7
150 Percent	2.6	7.5	7.3	41	0.4	7.0	77	69	9.1
Age of Householder									
Under 35 Years	3.3	8.2	8.0	43	0.4	6.7	73	60 75	8.8
35 to 59 Years60 Years and Over	4.3 2.8	8.3 5.6	8.1 5.4	45 31	0.4 0.3	7.7 6.3	84 69	75 62	9.3 12.2
Household Size									
1 Person	2.6	4.5	4.3	26	0.1	4.1	45	37	11.4
2 to 4 Persons	6.6	8.2	7.9	44	0.7	7.2	79 97	65	6.7
5 or More Persons	1.1	11.0	10.7	60	0.2	8.0	87	88	11.3

Table 55. Natural Gas and LPG Consumption and Expenditures for Appliances, per Midwest Region Households, 1993 (Continued)

	Natural Gas				Liquefied Petroleum Gas				
	House- holds (million)	Consumed				Consumed			
		(million Btu)	(1000 cubic feet)	Expend- itures (dollars)	House- holds (million)	(million Btu)	(gallons)	Expend- itures (dollars)	RSE
Characteristics									
RSE Column Factor:	1.1	0.51	0.5 ¹	0.6 ¹	2.9	1.21	1.21	1.3 ¹	Row Factors
East North Central Division	7.9	7.7	7.5	42	0.5	6.2	68	61	8.3
Climate Zone ²									
Under 2,000 CDD and									
Over 5,500 HDD	7.4	7.7	7.5	42	0.4	6.4	70	63	8.9
Under 5,500 HDD	Q	Q	Q	Q	Q	Q	Q	Q	NF
2,000 CDD or More and	0	0	0	0	0	0	0	0	NE
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit									
Single-Family	5.4	7.6	7.4	41	0.3	6.4	70	59	8.9
Mobile Home	0.5	6.9	6.7	37	0.2	5.7	63	64	23.6
Multifamily (2 or more units)	2.0	8.1	7.8	45	Q	Q	Q	Q	9.6
Heated Floorenses									
Heated Floorspace (square feet)									
Fewer than 1,000	1.8	6.8	6.6	38	Q	Q	Q	Q	12.8
1,000 to 1,999	3.0	8.3	8.0	45	0.1	7.6	83	6 7	10.8
2,000 or More	3.1	7.6	7.4	41	0.2	5.5	60	52	10.4
Ownership of Unit	<i>E E</i>	7.0	7.0	42	0.4	6.4	66	60	0.4
Owned Rented	5.5 2.4	7.8 7.3	7.6 7.1	42 40	0.4 Q	6.1 Q	66 Q	60 Q	9.1 10.5
Kented	2.4	7.5	7.1	40	Q	Q	Q	Q	10.5
Year of Construction									
1939 or Before	2.6	7.3	7.1	42	0.2	6.2	68	60	12.5
1940 to 1979	4.2	7.9	7.7	41	0.2	5.9	64	63	11.6
1980 or After ³	1.1	7.7	7.5	42	Q	6.5	72	58	11.6
1993 Family Income									
Less than \$10,000	1.1	6.7	6.5	39	Q	Q	Q	Q	12.5
\$10,000 to \$19,999	1.9	7.0	6.8	38	0.2	5.0	55	47	12.8
\$20,000 to \$34,999	1.9	7.3	7.1	40	Q	6.5	71	60	20.2
\$35,000 to \$49,999	1.2	9.0	8.8	49	Q	Q	Q	Q	8.2
\$50,000 or More	1.8	8.5	8.2	45	Q	Q	Q	Q	11.2
Below Poverty Line									
100 Percent	1.2	8.1	7.8	43	Q	Q	Q	Q	9.3
125 Percent	1.5	7.6	7.4	41	Q	6.6	72	71	10.3
150 Percent	1.9	7.7	7.5	43	Q	6.6	72	71	11.1
Are of Households									
Age of Householder Under 35 Years	2.5	8.2	7.9	43	Q	6.2	68	57	12.8
35 to 59 Years	3.3	8.5	8.3	45 46	0.2	7.9	86	83	8.8
60 Years and Over	2.1	5.8	5.6	33	Q.2	7.9 Q	Q	Q	8.4
		0.0	0.0	50	~	~	~	~	· · ·
Household Size									
1 Person	2.0	4.5	4.3	26	Q	Q	Q	Q	12.7
2 to 4 Persons	5.1	8.4	8.2	45	0.3	6.0	66	55	10.5
5 or More Persons	0.9	10.7	10.5	59	0.1	7.0	77	80	13.9

Table 55. Natural Gas and LPG Consumption and Expenditures for Appliances, per Midwest Region Households, 1993 (Continued)

	Natural Gas				Liquefied Petroleum Gas				
	House- holds (million)	Consumed				Consumed			
		(million Btu)	(1000 cubic feet)	Expend- itures (dollars)	House- holds (million)	(million Btu)	(gallons)	Expend- itures (dollars)	
Characteristics									RSE
RSE Column Factor:	1.1	0.51	0.5 ¹	0.6 ¹	2.9	1.2 ¹	1.2 ¹	1.3 ¹	Row Factors
West North Central Division	2.4	7.1	6.9	38	0.6	7.6	84	71	9.8
Climate Zone ²									
Under 2,000 CDD and									
Over 5,500 HDD	1.8	6.4	6.2	35	0.3	7.6	84	67	13.2
Under 5,500 HDD	0.6	9.1	8.8	48	Q	Q	Q	Q	11.9
2,000 CDD or More and									
Under 4,000 HDD	Q	Q	Q	Q	Q	Q	Q	Q	NF
Type of Housing Unit									
Single-Family	1.8	7.4	7.2	40	0.4	8.4	92	79	14.1
Mobile Home	Q	Q	Q	Q	0.2	5.9	65	53	9.2
Multifamily (2 or more units)	0.4	5.8	5.6	32	Q	Q	Q	Q	20.6
Heated Floorspace									
(square feet) Fewer than 1,000	0.7	6.5	6.4	35	0.2	6.6	72	61	14.6
1,000 to 1,999	0.7	6.3	6.2	35 34	0.2	6.6 6.7	72 73	57	19.0
2,000 or More	0.9	8.4	8.1	45	0.2	9.9	109	99	18.4
•									
Ownership of Unit									
Owned	1.8	7.0	6.8	38	0.5	7.8	86	72	14.0
Rented	0.7	7.3	7.1	39	Q	Q	Q	Q	21.0
Year of Construction									
1939 or Before	1.1	6.2	6.1	34	0.2	9.7	106	90	15.6
1940 to 1979	1.0	7.4	7.2	40	0.2	6.0	66	53	12.1
1980 or After ³	0.3	9.5	9.2	49	Q	6.9	75	Q	34.3
1993 Family Income									
Less than \$10,000	0.3	5.7	5.5	31	Q	Q	Q	Q	27.7
\$10,000 to \$19,999	0.6	6.4	6.2	35	0.2	6.5	71	61	16.4
\$20,000 to \$34,999	0.7	6.7	6.5	34	0.2	7.9	86	68	10.9
\$35,000 to \$49,999	0.4	8.7	8.4	47	Q	Q	Q	Q	22.5
\$50,000 or More	0.4	8.7	8.5	48	Q	Q	Q	Q	33.0
Polow Powerty Line									
Below Poverty Line 100 Percent	0.3	6.3	6.1	34	Q	Q	Q	Q	35.4
125 Percent	0.5	6.6	6.4	36	0.2	6.9	76	62	16.4
150 Percent	0.6	6.9	6.7	37	0.2	7.3	80	68	15.3
Association and all									
Age of Householder		0.0	0.0	40	0.0	7.0	70	00	40.0
Under 35 Years35 to 59 Years	0.9 0.9	8.3 7.6	8.0 7.4	43 42	0.2 0.2	7.0 7.6	76 83	62 69	13.0 16.3
60 Years and Over	0.9	4.9	4.8	27	Q.2	9.0	99	91	15.3
	0.0		5	<u>-</u> .	~	0.0		٠.	.0.0
Household Size									
1 Person	0.6	4.4	4.3	24	Q	Q	Q	Q	9.7
2 to 4 Persons	1.6	7.5	7.3	40	0.4	8.1	89	72 07	9.2
5 or More Persons	0.2	12.2	11.9	63	Q	9.2	100	97	19.7

Energy Consumption Survey.

This factor is underestimated because it contains no error for estimating this end use.
 Climate zones are based on annual degree-days that are averaged over 30 years from 1961 to 1990.
 Does not include all new construction for 1993.

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" in *Household Energy Consumption and Expenditures 1993* for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C, D, and F of the 1993 Residential