

Table C16. Natural Gas Consumption and Expenditure Intensities, 1999

	Natural Gas Consumption						Natural Gas Expenditures		
	per Building (thousand cubic feet)	per Square Foot (cubic feet)	per Worker (thousand cubic feet)	Distribution of Building-Level Intensities (cubic feet/square foot)			per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
				25th Percentile	Median	75th Percentile			
All Buildings	736	43.2	34.9	15.7	34.1	75.4	4.0	0.23	5.40
Building Floorspace (Square Feet)									
1,001 to 5,000	254	85.1	44.2	19.8	50.2	101.5	1.5	0.51	5.94
5,001 to 10,000	415	55.9	39.7	14.4	31.7	57.1	2.6	0.36	6.37
10,001 to 25,000	691	44.2	42.1	11.6	25.8	44.4	4.0	0.26	5.85
25,001 to 50,000	1,293	35.5	34.6	12.4	25.0	43.8	7.2	0.20	5.60
50,001 to 100,000	2,356	33.9	26.3	9.5	20.7	41.1	12.1	0.17	5.15
100,001 to 200,000	5,251	37.7	38.2	7.8	22.0	43.5	26.0	0.19	4.95
200,001 to 500,000	13,068	43.6	35.3	5.2	16.7	45.5	54.4	0.18	4.16
Over 500,000	26,952	28.3	21.6	2.2	10.4	28.7	110.9	0.12	4.11
Principal Building Activity									
Education	981	33.5	31.8	11.2	25.0	49.0	4.9	0.17	5.04
Food Sales	346	46.4	45.6	9.2	71.2	92.4	2.2	0.30	6.36
Food Service	854	139.1	65.4	76.7	141.1	258.5	4.8	0.78	5.64
Health Care	2,898	92.2	49.4	14.4	22.5	57.2	12.1	0.39	4.18
Inpatient	19,993	113.2	63.2	97.7	163.0	163.0	79.8	0.45	3.99
Outpatient	Q	34.5	16.6	13.8	19.2	47.0	Q	0.20	5.88
Lodging	1,688	49.6	95.9	31.6	55.8	94.9	9.0	0.27	5.35
Mercantile	411	22.9	20.6	12.4	29.8	55.6	2.6	0.14	6.24
Retail (Other Than Mall)	305	30.3	30.9	12.4	34.1	56.7	1.9	0.19	6.28
Enclosed and Strip Malls	826	16.9	13.9	12.6	24.7	45.6	5.1	0.10	6.18
Office	472	29.0	11.7	14.4	28.5	50.2	2.7	0.17	5.70
Public Assembly	501	31.3	45.8	8.3	21.5	48.9	3.0	0.19	5.99
Public Order and Safety	1,020	50.5	40.8	29.2	48.8	77.4	5.7	0.28	5.57
Religious Worship	280	24.4	47.3	14.1	24.8	34.0	1.9	0.17	6.82
Service	914	121.0	79.8	33.5	55.5	130.8	4.9	0.66	5.42
Warehouse and Storage	989	36.0	54.5	10.3	26.5	62.6	5.0	0.18	5.03
Other	1,097	62.0	56.2	29.5	32.5	37.4	5.6	0.32	5.12
Vacant	275	29.9	Q	7.1	12.1	34.3	1.3	0.14	4.75
Year Constructed									
1919 or Before	403	42.3	Q	15.8	35.4	79.1	2.4	0.25	5.84
1920 to 1945	574	44.4	38.8	23.9	44.1	81.5	2.9	0.23	5.12
1946 to 1959	584	41.1	37.3	12.9	33.6	72.0	3.3	0.23	5.60
1960 to 1969	890	48.1	39.0	19.7	41.0	83.2	4.9	0.26	5.50
1970 to 1979	659	39.2	29.7	14.4	34.1	60.0	3.6	0.21	5.45
1980 to 1989	977	43.2	30.6	13.7	25.1	55.0	5.2	0.23	5.35
1990 to 1999	1,014	43.8	36.5	14.1	32.5	81.8	5.2	0.23	5.15
Census Region and Division									
Northeast	933	39.8	32.1	20.1	48.9	91.4	6.1	0.26	6.52
New England	1,262	35.8	29.4	16.3	42.7	60.8	9.0	0.25	7.09
Middle Atlantic	878	40.9	32.8	20.8	49.4	92.4	5.6	0.26	6.38
Midwest	789	51.0	45.8	20.3	44.6	81.1	3.7	0.24	4.75
East North Central	791	51.5	48.5	20.5	47.0	81.5	3.7	0.24	4.66
West North Central	782	49.9	40.5	19.7	41.9	80.9	3.9	0.25	4.97
South	733	42.3	32.8	13.7	26.5	64.6	4.0	0.23	5.48
South Atlantic	1,050	43.9	34.9	14.2	30.3	86.2	6.1	0.25	5.76
East South Central	806	51.4	41.2	15.1	32.4	65.4	4.5	0.28	5.54
West South Central	488	34.5	25.5	12.0	20.8	45.9	2.5	0.17	5.04
West	579	36.6	27.8	11.3	28.6	60.6	3.2	0.20	5.56
Mountain	609	44.1	42.6	18.8	34.8	71.1	3.2	0.23	5.26
Pacific	563	33.4	23.2	9.9	24.7	56.0	3.2	0.19	5.74

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				25th Percentile	Median	75th Percentile			
Climate Zone: 45-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	674	54.6	52.6	30.3	54.6	89.8	3.4	0.28	5.08
5,500-7,000 HDD	957	49.6	45.0	22.3	44.6	78.3	4.8	0.25	4.98
4,000-5,499 HDD	916	48.3	36.4	19.7	37.9	89.4	5.2	0.27	5.69
Fewer than 4,000 HDD	568	34.0	25.1	10.7	24.0	45.1	3.2	0.19	5.67
2,000 CDD or More and --									
Fewer than 4,000 HDD	493	32.2	25.7	10.8	19.8	65.4	2.8	0.18	5.73
Workers (main shift)									
Fewer than 5	236	38.3	107.6	13.8	33.3	71.2	1.5	0.25	6.42
5 to 9	338	40.8	51.5	15.4	35.1	76.5	2.0	0.24	5.88
10 to 19	645	48.9	50.4	18.5	35.2	77.4	3.6	0.27	5.52
20 to 49	1,316	54.7	45.9	18.1	40.9	88.4	7.4	0.31	5.64
50 to 99	1,828	34.3	28.1	15.6	29.1	48.8	10.0	0.19	5.47
100 to 249	3,625	39.8	26.7	14.8	24.4	64.5	17.9	0.20	4.95
250 or More	12,461	43.4	18.7	8.7	21.0	51.9	52.5	0.18	4.21
Weekly Operating Hours									
39 or Fewer	212	28.3	41.1	11.2	20.1	38.2	1.3	0.18	6.28
40 to 48	389	31.9	26.9	12.8	28.5	55.7	2.2	0.18	5.65
49 to 60	579	38.8	27.8	18.0	33.5	62.6	3.3	0.22	5.64
61 to 84	779	38.6	30.3	16.6	35.8	86.2	4.6	0.23	5.88
85 to 167	1,187	52.5	42.6	31.8	68.2	243.9	6.3	0.28	5.35
Open Continuously	2,358	60.1	48.4	30.4	61.0	92.9	11.1	0.28	4.72
Ownership and Occupancy									
Nongovernment Owned									
Owner Occupied	682	43.6	34.6	16.5	34.1	76.5	3.8	0.24	5.53
Nonowner Occupied	728	45.6	35.6	17.0	36.5	77.5	4.0	0.25	5.46
Unoccupied	605	39.6	31.6	16.4	32.6	68.2	3.4	0.23	5.69
Government Owned	Q	Q	N	11.5	12.0	17.2	Q	Q	Q
Government Owned									
Federal	1,163	41.6	36.5	11.3	32.7	71.1	5.6	0.20	4.80
State	Q	36.4	22.6	2.8	8.3	23.9	Q	0.16	4.37
Local	2,143	49.2	46.7	16.7	35.4	89.4	9.1	0.21	4.24
	905	39.3	36.1	13.0	34.8	71.1	4.7	0.20	5.18
Vacancy Status									
Completely Vacant	Q	Q	N	2.0	11.5	17.2	Q	Q	Q
Mostly Vacant	Q	Q	Q	7.1	23.3	71.1	Q	Q	Q
Partially Vacant	804	27.7	20.8	9.9	21.1	46.8	4.3	0.15	5.38
Not At All Vacant	739	48.3	39.5	17.8	36.8	79.3	4.0	0.26	5.41
Number of Establishments									
One	735	50.4	43.8	16.6	36.1	77.4	3.9	0.27	5.30
2 to 5	579	35.7	32.1	13.7	31.3	67.3	3.3	0.20	5.73
6 to 10	1,057	34.0	18.0	14.2	33.6	86.2	6.4	0.21	6.09
11 to 20	2,079	27.1	15.4	10.6	20.6	32.3	11.8	0.15	5.68
More than 20	3,015	16.1	9.7	7.5	27.3	123.9	15.4	0.08	5.11
Currently Unoccupied	226	21.6	N	11.5	15.5	25.8	1.3	0.12	5.65
Energy Sources (more than one may apply)									
Electricity	738	43.2	34.9	15.8	34.1	75.4	4.0	0.23	5.40
Natural Gas	736	43.2	34.9	15.7	34.1	75.4	4.0	0.23	5.40
Fuel Oil	4,584	51.5	34.3	10.7	23.2	61.3	19.7	0.22	4.29
District Heat	Q	39.1	25.0	4.9	16.7	89.4	9.3	0.18	Q
District Chilled Water	2,447	38.9	26.9	8.3	15.2	42.0	10.8	0.17	4.40
Propane	Q	Q	62.5	13.3	36.3	78.3	Q	0.23	4.13
Other	1,226	46.1	Q	34.0	57.0	64.9	6.4	0.24	5.25

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				25th Percentile	Median	75th Percentile			
Space-Heating Energy Source									
Natural Gas	720	45.2	37.3	16.5	34.0	72.0	3.8	0.24	5.32
Natural Gas Main	711	47.6	39.8	16.8	34.2	75.4	3.8	0.25	5.28
Natural Gas Secondary	823	30.4	23.0	9.4	24.7	53.2	4.7	0.17	5.70
Other Excluding Natural Gas	885	28.4	21.9	9.7	40.7	115.9	5.1	0.16	5.78
Buildings without Heating	Q	Q	Q	6.1	16.9	160.3	Q	Q	6.25
Primary Space-Heating Energy Source									
Electricity	827	32.5	25.5	11.7	39.0	86.2	4.9	0.19	5.86
Natural Gas	711	47.6	39.8	16.8	34.2	75.4	3.8	0.25	5.28
Fuel Oil	Q	18.5	13.2	4.2	17.8	17.8	Q	0.12	6.59
District Heat	1,422	21.9	14.9	1.5	8.3	56.9	6.8	0.10	4.75
Propane	Q	Q	Q	4.1	4.1	4.1	Q	Q	Q
Other	Q	Q	Q	12.9	44.1	44.1	Q	Q	Q
Cooling Energy Source									
Natural Gas	696	51.6	34.7	15.2	34.0	81.1	3.7	0.27	5.25
Other Excluding Natural Gas	768	41.8	32.7	16.0	33.6	71.5	4.2	0.23	5.42
Buildings without Cooling	548	54.4	93.3	11.5	36.8	80.9	2.9	0.28	5.24
Water-Heating Energy Source									
Natural Gas	927	48.3	39.2	16.8	38.0	81.8	5.0	0.26	5.36
Other Excluding Natural Gas	599	33.0	24.7	15.6	32.6	60.8	3.2	0.18	5.35
Buildings without Water Heating	323	37.1	38.1	13.1	26.7	69.2	1.9	0.22	5.85
Cooking Energy Source									
Natural Gas	1,584	47.7	37.5	26.2	66.5	161.8	8.0	0.24	5.02
Other Excluding Natural Gas	1,043	37.2	31.3	18.8	43.0	91.6	6.0	0.21	5.71
Buildings without Cooking	512	41.0	33.6	14.1	29.8	60.6	2.9	0.23	5.65
Energy End Uses (more than one may apply)									
Buildings with Space Heating	734	42.8	34.9	16.0	34.2	75.4	3.9	0.23	5.37
Buildings with Cooling	763	42.3	32.8	15.9	33.6	72.0	4.1	0.23	5.41
Buildings with Water Heating	827	43.8	34.7	16.0	35.1	76.7	4.4	0.23	5.36
Buildings with Cooking	1,488	46.0	36.6	25.5	64.2	128.1	7.6	0.24	5.11
Buildings with Manufacturing	1,434	47.5	35.5	18.0	30.1	58.3	8.2	0.27	5.74
Buildings with Electricity	3,885	50.1	33.5	25.5	57.0	95.7	17.7	0.23	4.55
Percent of Floorspace Heated									
Not Heated	Q	Q	Q	6.1	16.9	160.3	Q	Q	6.25
1 to 50	391	25.9	41.2	9.3	17.3	47.0	2.1	0.14	5.39
51 to 99	759	41.6	35.8	16.0	35.3	81.8	4.3	0.24	5.66
100	788	45.7	34.2	18.3	37.2	77.5	4.2	0.24	5.30
Percent of Floorspace Cooled									
Not Cooled	548	54.4	93.3	11.5	36.8	80.9	2.9	0.28	5.24
1 to 50	802	45.2	54.2	13.8	36.1	70.5	4.3	0.24	5.32
51 to 99	1,052	45.1	33.3	16.9	35.8	89.8	5.6	0.24	5.34
100	598	38.2	24.6	15.8	32.5	67.0	3.3	0.21	5.56

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				25th Percentile	Median	75th Percentile			
Heating Equipment (more than one may apply)									
Heat Pumps	1,467	50.5	41.1	11.5	27.7	84.4	7.6	0.26	5.21
Furnaces	499	46.0	42.1	16.8	32.4	66.5	2.8	0.26	5.55
Individual Space Heaters	886	38.0	37.9	14.8	30.4	63.5	4.7	0.20	5.27
District Heat	1,897	31.8	19.4	3.2	16.3	114.5	9.4	0.16	4.98
Boilers	1,963	49.3	38.7	24.7	45.7	84.1	9.5	0.24	4.86
Packaged Heating Units	854	40.1	32.8	14.4	32.1	68.2	4.6	0.21	5.35
Other	Q	48.4	34.5	12.9	28.5	71.1	7.8	0.21	4.31
Cooling Equipment (more than one may apply)									
Residential-Type Central									
Air Conditioners	570	42.1	36.8	17.4	29.8	63.1	3.1	0.23	5.37
Heat Pumps	1,451	49.1	37.7	15.1	27.7	64.2	7.6	0.26	5.22
Individual Air Conditioners	932	44.1	39.2	17.8	41.0	84.1	5.0	0.24	5.33
District Chilled Water	2,447	38.9	26.9	8.3	15.2	42.0	10.8	0.17	4.40
Central Chillers	4,942	50.0	30.7	21.5	42.9	86.2	22.4	0.23	4.53
Packaged Air Conditioning									
Units	855	41.4	32.1	14.4	35.8	72.0	4.6	0.22	5.41
Swamp Coolers	817	50.8	47.8	18.5	32.9	111.3	4.3	0.27	5.23
Other	Q	50.4	38.4	25.0	31.7	34.0	Q	0.22	4.42
Main Equipment Replaced Since 1995 (more than one may apply)									
Heating	639	40.6	32.7	18.3	37.6	77.5	3.7	0.24	5.80
Cooling	786	42.1	31.4	15.9	39.3	84.1	4.3	0.23	5.45
Water Heating Equipment									
Centralized System	716	46.2	37.6	16.9	36.6	81.8	4.0	0.26	5.53
Distributed System	791	35.6	29.0	10.3	22.1	49.6	4.1	0.19	5.21
Combination of Centralized and Distributed System	2,236	43.6	30.7	20.5	42.5	76.7	10.8	0.21	4.81
Annual Consumption (hundred cubic feet)									
1,000 or Less	52	8.3	7.9	6.5	11.5	21.8	0.4	0.07	8.11
1,001 to 5,000	252	26.8	21.7	23.2	42.2	72.0	1.7	0.18	6.81
5,001 to 10,000	696	35.0	26.5	29.3	56.4	147.8	4.1	0.21	5.93
10,001 to 25,000	1,533	45.3	37.6	37.3	85.6	247.8	8.8	0.26	5.75
25,001 to 50,000	3,347	44.0	35.5	37.9	67.1	144.0	17.1	0.22	5.09
50,001 to 100,000	6,742	70.6	61.5	56.8	115.0	577.2	35.2	0.37	5.21
Over 100,000	30,101	95.8	68.5	60.5	102.5	171.1	121.6	0.39	4.04
Provider of Natural Gas (more than one may apply)									
Local Utility	670	41.2	33.7	14.8	33.1	73.1	3.7	0.23	5.50
Some Other Provider	2,237	65.4	48.5	30.4	46.5	86.2	10.3	0.30	4.62

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.

N=No responding cases in sample.

Notes: * Statistics for the "energy end uses" represent consumption in buildings that have the end use, not consumption for a particular fuel for a particular end use. * Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A of the 1999 Commercial Buildings Energy Consumption Survey.

Source: Energy Information Administration, Office of Energy Markets and End Use, Form EIA-871A of the 1999 Commercial Buildings Energy Consumption Survey.