1999 Commercial Buildings Energy Consumption Survey Detailed Tables

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Table B1. Summary Table: Totals and Means of Floorspace, Number of Workers, and Hours of Operation, 1999

	All Buildings (thousand)	Total Floorspace (million square feet)	Total Workers in All Buildings (thousand)	Mean Square Feet per Building (thousand)	Mean Square Feet per Worker	Mean Hours per Week
All Buildings	4,657	67,338	81,852	14.5	823	60
Building Floorspace (Square Feet)						
1,001 to 5,000	2,348	6,774	11,125	2.9	609	57
5,001 to 10,000	1,110	8,238	10,968	7.4	751	53
10,001 to 25,000	708	11,153	11,378	15.7	980	65
25,001 to 50,000	257	9,311	9,243	36.2	1,007	78
50,001 to 100,000	145	10,112	12,777	69.9	791	80
100,001 to 200,000	59	8,271	8,856	139.4	934	90
200,001 to 500,000	23	6,851	8,798	296.3	779	101
Over 500,000	7	6,628	8,707	929.0	761	110
Principal Building Activity						
Education	327	8,651	8,927	26.4	969	50
Food Sales	174	994	980	5.7	1,014	118
Food Service	349	1,851	4,031	5.3	459	84
Health Care	127	2,918	6,219	22.9	469	66
Inpatient	11	1,865	3,350	168.2	557	165
Outpatient	116	1,053	2,869	9.1	367	56
Lodging	153	4,521	2,356	29.5	1,919	150
Mercantile	667	10,398	11,384	15.6	913	65
Retail (Other Than Mall)	534	4,766	4,668	8.9	1,021	62
Enclosed and Strip Malls	133	5,631	6,716	42.2	838	77
Office	739	12,044	28,969	16.3	416	53
Public Assembly	305	4,393	3,147	14.4	1,396	54
Public Order and Safety	72	1,168	1,702	16.2	686	95
Religious Worship	307	3,405	1,654	11.1	2,059	29
Service	478	3,388	4,554	7.1	744	63
Warehouse and Storage	603	10,477	6,216	17.4	1,685	49
Other	102	1,222	1,453	12.0	841	49
Vacant	253	1,908	261	7.6	Q	Q
Year Constructed						
1919 or Before	419	4,034	3,911	9.6	1,031	46
1920 to 1945	499	6,445	5,925	12.9	1,088	52
1946 to 1959	763	9,127	9,832	12.0	928	52
1960 to 1969	665	10,866	12,886	16.3	843	63
1970 to 1979	774	11,840	15,842	15.3	747	64
1980 to 1989	846	13,931	19,828	16.5	703	69
1990 to 1999	690	11,094	13,628	16.1	814	64
Floors						
One	2,879	26,800	29,908	9.3	896	58
Two	1,168	16,985	18,749	14.5	906	61
Three	420	8,928	9,545	21.3	935	60
Four to Nine	178	10,180	15,069	57.2	676	85
Ten or More	11	4,445	8,582	386.9	518	97
Census Region and Division						
Northeast	686	12,360	14,407	18.0	858	66
New England	208	3,735	3,889	18.0	960	59
Middle Atlantic	479	8,625	10,518	18.0	820	69
Midwest	1,188	16,761	18,279	14.1	917	56
East North Central	782	11,205	11,668	14.3	960	56
West North Central	406	5,556	6,611	13.7	840	56
South	1,762	23,485	29,186	13.3	805	58
South Atlantic	748	11,001	14,051	14.7	783	57
East South Central	396	5,220	5,908	13.2	884	65
West South Central	618	7,264	9,226	11.8	787	56
West	1,021	14,731	19,981	14.4	737	62
Mountain	315	4,579	5,201	14.5	880	54
Pacific	705	10,152	14,780	14.4	687	66

Table B1. Summary Table: Totals and Means of Floorspace, Number of Workers, and Hours of Operation, 1999

	All Buildings (thousand)	Total Floorspace (million square feet)	Total Workers in All Buildings (thousand)	Mean Square Feet per Building (thousand)	Mean Square Feet per Worker	Mean Hours per Week
Climate Zone: 45-Year Average						
Under 2,000 CDD and --						
More than 7000 HDD	525	5,890	5,857	11.2	1,006	62
5500-7000 HDD	986	17,083	18,323	17.3	932	60
4000-5499 HDD	1,085	16,243	22,136	15.0	734	60
Fewer than 4000 HDD	1,134	16,333	21,145	14.4	772	60
2,000 CDD or More and --						
Fewer than 4000 HDD	926	11,788	14,393	12.7	819	57
Workers (main shift)						
Fewer than 5	2,376	14,321	4,240	6.0	3,377	52
5 to 9	807	6,325	5,313	7.8	1,190	60
10 to 19	683	8,028	8,588	11.8	935	65
20 to 49	487	10,814	14,098	22.2	767	74
50 to 99	174	8,898	11,427	51.1	779	81
100 to 249	90	8,356	12,617	92.4	662	80
250 or More	39	10,595	25,569	270.0	414	96
Weekly Operating Hours						
39 or Fewer	978	6,596	3,517	6.7	1,876	11
40 to 48	1,156	13,105	15,619	11.3	839	43
49 to 60	986	14,200	20,714	14.4	686	55
61 to 84	664	12,458	16,147	18.7	772	74
85 to 167	474	9,116	10,796	19.2	844	104
Open Continuously	398	11,863	15,060	29.8	788	168
Ownership and Occupancy						
Nongovernment Owned	4,135	54,994	67,787	13.3	811	60
Owner Occupied	2,801	37,785	46,555	13.5	812	63
Nonowner Occupied	1,099	15,596	21,233	14.2	735	66
Unoccupied	236	1,613	0	6.8	0	0
Government Owned	521	12,343	14,065	23.7	878	57
Vacancy Status						
Completely Vacant	140	953	0	6.8	0	0
Mostly Vacant	113	956	261	8.5	Q	Q
Partially Vacant	697	15,520	20,518	22.3	756	53
Not At All Vacant	3,707	49,910	61,073	13.5	817	65
Number of Establishments						
One	3,528	43,343	48,677	12.3	890	63
2 to 5	688	10,582	12,379	15.4	855	61
6 to 10	114	3,574	6,580	31.4	543	73
11 to 20	48	3,260	5,965	68.0	547	76
More than 20	27	4,811	8,251	175.2	583	77
Currently Unoccupied	251	1,769	0	7.0	0	0
Energy Sources (more than one may apply)						
Electricity	4,395	65,716	81,768	15.0	804	62
Natural Gas	2,670	45,525	56,264	17.1	809	65
Fuel Oil	434	13,285	19,583	30.6	678	68
District Heat	117	5,891	8,654	50.2	681	83
District Chilled Water	50	2,750	4,637	55.4	593	81
Propane	451	6,290	6,349	14.0	991	59
Wood	79	570	578	7.2	986	69
Coal	Q	Q	Q	Q	Q	Q
Solar	Q	Q	Q	Q	Q	Q
Other	69	1,563	2,578	22.7	606	56

Table B1. Summary Table: Totals and Means of Floorspace, Number of Workers, and Hours of Operation, 1999

	All Buildings (thousand)	Total Floorspace (million square feet)	Total Workers in All Buildings (thousand)	Mean Square Feet per Building (thousand)	Mean Square Feet per Worker	Mean Hours per Week
Space-Heating Energy Sources (more than one may apply)						
Electricity	1,880	32,291	43,236	17.2	747	65
Natural Gas	2,380	37,902	45,992	15.9	824	63
Fuel Oil	377	5,611	6,542	14.9	858	61
District Heat	96	5,534	8,116	57.7	682	79
Propane	307	2,728	2,428	8.9	1,123	51
Wood	66	377	338	5.7	1,115	70
Coal	Q	Q	Q	Q	Q	Q
Solar	Q	Q	Q	Q	Q	Q
Other	26	409	760	15.8	538	50
Primary Space-Heating Energy Source						
Electricity	1,128	17,627	25,423	15.6	693	70
Natural Gas	2,189	32,729	39,164	15.0	836	62
Fuel Oil	302	3,719	4,247	12.3	875	60
District Heat	77	5,077	7,008	66.0	724	85
Propane	282	2,107	1,907	7.5	1,105	49
Wood	Q	Q	Q	Q	Q	Q
Coal	Q	Q	Q	Q	Q	Q
Solar	N	N	N	N	N	N
Other	Q	Q	Q	Q	Q	Q
Cooling Energy Sources (more than one may apply)						
Electricity	3,450	55,545	72,764	16.1	763	65
Natural Gas	142	1,914	2,846	13.5	672	75
District Chilled Water	50	2,750	4,637	55.4	593	81
Water-Heating Energy Sources (more than one may apply)						
Electricity	1,546	24,171	33,505	15.6	721	62
Natural Gas	1,520	29,196	35,930	19.2	813	72
Fuel Oil	110	2,218	2,905	20.2	763	75
District Heat	62	4,182	5,870	67.5	712	102
Propane	130	1,371	1,465	10.5	936	77
Cooking Energy Sources (more than one may apply)						
Electricity	437	13,733	18,369	31.4	748	89
Natural Gas	505	16,785	21,352	33.2	786	81
Propane	118	1,754	2,187	14.9	802	72
Energy End Uses (more than one may apply)						
Buildings with Space Heating	4,016	61,602	78,082	15.3	789	63
Buildings with Cooling	3,560	58,474	77,367	16.4	756	66
Buildings with Water Heating	3,239	56,115	73,385	17.3	765	68
Buildings with Cooking	857	24,681	31,603	28.8	781	81
Buildings with Manufacturing	151	3,126	4,351	20.7	718	56
Buildings with Electricity Generation	172	11,882	18,904	69.3	629	93
Percent of Floorspace Heated						
Not Heated	641	5,736	3,770	8.9	1,521	38
1 to 50	576	7,593	5,239	13.2	1,449	57
51 to 99	627	10,745	13,056	17.1	823	71
100	2,813	43,264	59,787	15.4	724	63

Table B1. Summary Table: Totals and Means of Floorspace, Number of Workers, and Hours of Operation, 1999

	All Buildings (thousand)	Total Floorspace (million square feet)	Total Workers in All Buildings (thousand)	Mean Square Feet per Building (thousand)	Mean Square Feet per Worker	Mean Hours per Week
Percent of Floorspace Cooled						
Not Cooled	1,097	8,864	4,485	8.1	1,976	41
1 to 50	1,012	16,846	14,146	16.6	1,191	61
51 to 99	751	16,966	23,833	22.6	712	73
100	1,796	24,662	39,388	13.7	626	65
Percent Lit When Open						
Zero	34	173	Q	5.1	3,151	92
1 to 50	835	9,187	4,917	11.0	1,868	58
51 to 99	1,228	20,665	28,668	16.8	721	67
100	2,096	34,233	47,951	16.3	714	67
Building Never Open/ Electricity Not Used	464	3,080	261	6.6	11,787	10
Percent Lit When Closed						
Zero	2,174	20,771	21,669	9.6	959	43
1 to 50	1,688	30,950	41,943	18.3	738	61
51 to 100	143	2,160	3,096	15.1	698	73
Building Never Closed/ Electricity Not Used	652	13,457	15,143	20.7	889	108
Heating Equipment (more than one may apply)						
Heat Pumps	492	8,923	12,616	18.1	707	63
Furnaces	1,460	14,449	15,845	9.9	912	54
Individual Space Heaters	894	17,349	19,140	19.4	906	61
District Heat	96	5,534	8,116	57.7	682	79
Boilers	581	19,522	24,374	33.6	801	72
Packaged Heating Units	1,347	25,743	32,224	19.1	799	70
Other	185	4,073	7,008	22.1	581	75
Cooling Equipment (more than one may apply)						
Residential-Type Central Air Conditioners	676	8,329	10,136	12.3	822	59
Heat Pumps	485	9,147	13,463	18.8	679	64
Individual Air Conditioners	799	14,276	16,652	17.9	857	66
District Chilled Water	50	2,750	4,637	55.4	593	81
Central Chillers	130	12,909	21,586	99.7	598	84
Packaged Air Conditioning Units	1,953	36,527	48,283	18.7	757	68
Swamp Coolers	136	2,219	2,425	16.3	915	63
Other	49	1,312	1,838	26.7	714	61
Main Equipment Replaced Since 1995 (more than one may apply)						
Heating	984	13,220	16,913	13.4	782	64
Cooling	1,085	17,390	23,164	16.0	751	67
Lighting Equipment Types (more than one may apply)						
Incandescent	2,193	38,156	49,616	17.4	769	67
Standard Fluorescent	3,778	60,344	77,862	16.0	775	65
Compact Fluorescent	607	20,666	30,075	34.1	687	76
High Intensity Discharge	430	19,223	21,658	44.8	888	73
Halogen	572	17,926	25,668	31.3	698	73
Other	58	1,004	1,393	17.5	720	73
Water Heating Equipment						
Centralized System	2,472	35,579	45,136	14.4	788	68
Distributed System	566	10,899	14,348	19.3	760	64
Combination of Centralized and Distributed System	200	9,637	13,902	48.1	693	84

Table B1. Summary Table: Totals and Means of Floorspace, Number of Workers, and Hours of Operation, 1999

	All Buildings (thousand)	Total Floorspace (million square feet)	Total Workers in All Buildings (thousand)	Mean Square Feet per Building (thousand)	Mean Square Feet per Worker	Mean Hours per Week
Personal Computers						
None	1,617	9,583	4,785	5.9	2,003	48
1 to 4	1,636	13,853	12,711	8.5	1,090	65
5 to 9	542	6,528	7,485	12.0	872	62
10 to 19	403	7,514	9,200	18.7	817	64
20 to 49	247	8,087	9,668	32.7	836	76
50 to 99	105	5,867	7,268	55.9	807	68
100 to 249	71	6,818	9,574	96.0	712	77
250 or More	36	9,088	21,162	252.4	429	89
Photocopiers						
None	2,825	21,631	18,897	7.7	1,145	57
One	1,114	12,928	12,963	11.6	997	62
2 to 4	540	15,620	16,785	28.9	931	68
5 to 9	102	5,384	8,217	52.6	655	68
10 or More	75	11,774	24,991	156.7	471	79
Other Electronic Equipment (more than one may apply)						
Laser Printers	1,949	46,567	66,979	23.9	695	66
FAX Machines	2,807	54,764	74,706	19.5	733	68
Medical Diagnostic Equipment	86	2,493	5,625	29.1	443	61
Energy-Related Space Functions (more than one may apply)						
Commercial Food Preparation	767	23,328	30,350	30.4	769	82
Activities with Large Amounts of Hot Water	698	21,793	25,850	31.2	843	91
Building Shell Conservation Features (more than one may apply)						
Multipaned Windows	2,130	38,193	49,935	17.9	765	64
Tinted, Reflective, or Shading Glass	1,283	29,915	43,137	23.3	694	65
HVAC Conservation Features (more than one may apply)						
Variable Air-Volume System	550	19,387	30,546	35.3	635	75
Economizer Cycle	567	21,256	32,923	37.5	646	77
HVAC Maintenance	2,786	53,395	71,290	19.2	749	68
Energy Management and Control System (EMCS)	460	21,613	31,767	47.0	680	76
Lighting Conservation Features (more than one may apply)						
Specular Reflectors	843	19,994	28,787	23.7	695	72
Electronic Ballasts	2,167	42,035	55,879	19.4	752	68
Skylights or Atriums	580	18,286	21,158	31.5	864	62
Off-Hour Equipment Reduction (more than one may apply)						
Heating	2,862	39,969	50,855	14.0	786	52
Cooling	2,622	39,161	52,130	14.9	751	55
Lighting	3,675	51,083	65,064	13.9	785	54
Office Equipment	184	9,063	12,473	49.2	727	56

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.
Note: 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.

Table B2. Summary Table: Totals and Medians of Floorspace, Number of Workers, Hours of Operation, and Age of Building, 1999

	All Buildings (thousand)	Total Floorspace (million square feet)	Total Workers in All Buildings (thousand)	Median Square Feet per Building (thousand)	Median Square Feet per Worker	Median Hours per Week	Median Age of Buildings (years)
All Buildings	4,657	67,338	81,852	5.0	909	50	30.5
Building Floorspace (Square Feet)							
1,001 to 5,000	2,348	6,774	11,125	2.5	667	50	30.5
5,001 to 10,000	1,110	8,238	10,968	7.0	1,000	50	34.5
10,001 to 25,000	708	11,153	11,378	15.0	1,354	55	28.5
25,001 to 50,000	257	9,311	9,243	35.0	1,500	60	29.5
50,001 to 100,000	145	10,112	12,777	65.0	1,214	60	24.5
100,001 to 200,000	59	8,271	8,856	130.0	1,400	75	22.5
200,001 to 500,000	23	6,851	8,798	275.0	1,500	80	27.5
Over 500,000	7	6,628	8,707	800.0	1,286	90	24.5
Principal Building Activity							
Education	327	8,651	8,927	8.0	1,000	45	35.5
Food Sales	174	994	980	2.5	833	112	19.5
Food Service	349	1,851	4,031	3.8	500	80	27.5
Health Care	127	2,918	6,219	5.0	501	50	23.5
Inpatient	11	1,865	3,350	65.0	563	168	36.5
Outpatient	116	1,053	2,869	4.5	501	45	22.5
Lodging	153	4,521	2,356	10.0	2,031	168	28.5
Mercantile	667	10,398	11,384	6.0	1,125	54	36.5
Retail (Other Than Mall)	534	4,766	4,668	4.0	1,250	53	40.5
Enclosed and Strip Malls	133	5,631	6,716	13.8	650	73	24.5
Office	739	12,044	28,969	4.5	500	45	24.5
Public Assembly	305	4,393	3,147	6.5	2,500	50	32.5
Public Order and Safety	72	1,168	1,702	10.0	425	20	24.5
Religious Worship	307	3,405	1,654	8.0	3,000	20	38.5
Service	478	3,388	4,554	4.3	1,111	50	31.5
Warehouse and Storage	603	10,477	6,216	6.0	1,417	48	24.5
Other	102	1,222	1,453	5.0	769	48	30.5
Vacant	253	1,908	261	4.5	1,583	70	49.5
Year Constructed							
1919 or Before	419	4,034	3,911	4.5	1,250	48	99.5
1920 to 1945	499	6,445	5,925	4.8	1,161	50	67.5
1946 to 1959	763	9,127	9,832	5.5	944	48	46.5
1960 to 1969	665	10,866	12,886	5.0	758	55	35.5
1970 to 1979	774	11,840	15,842	5.0	875	51	24.5
1980 to 1989	846	13,931	19,828	5.5	833	50	14.5
1990 to 1999	690	11,094	13,628	4.8	708	50	6.5
Floors							
One	2,879	26,800	29,908	4.0	833	50	25.5
Two	1,168	16,985	18,749	6.0	1,000	54	35.5
Three	420	8,928	9,545	9.5	1,250	53	59.5
Four to Nine	178	10,180	15,069	17.5	1,000	60	63.5
Ten or More	11	4,445	8,582	225.0	563	70	30.5
Census Region and Division							
Northeast	686	12,360	14,407	6.0	813	54	39.5
New England	208	3,735	3,889	5.5	750	54	35.5
Middle Atlantic	479	8,625	10,518	6.5	833	53	40.5
Midwest	1,188	16,761	18,279	5.0	1,125	50	37.5
East North Central	782	11,205	11,668	5.5	1,125	50	43.5
West North Central	406	5,556	6,611	4.5	1,125	49	29.5
South	1,762	23,485	29,186	5.0	875	50	24.5
South Atlantic	748	11,001	14,051	5.5	700	50	24.5
East South Central	396	5,220	5,908	6.5	813	55	24.5
West South Central	618	7,264	9,226	4.0	1,167	50	23.5
West	1,021	14,731	19,981	5.0	750	50	29.5
Mountain	315	4,579	5,201	5.0	950	50	33.5
Pacific	705	10,152	14,780	5.0	735	50	29.5

Table B2. Summary Table: Totals and Medians of Floorspace, Number of Workers, Hours of Operation, and Age of Building, 1999

	All Buildings (thousand)	Total Floorspace (million square feet)	Total Workers in All Buildings (thousand)	Median Square Feet per Building (thousand)	Median Square Feet per Worker	Median Hours per Week	Median Age of Buildings (years)
Climate Zone: 45-Year Average							
Under 2,000 CDD and --							
More than 7,000 HDD	525	5,890	5,857	4.3	900	50	34.5
5,500-7,000 HDD	986	17,083	18,323	5.5	1,000	50	39.5
4,000-5,499 HDD	1,085	16,243	22,136	5.5	944	50	32.5
Fewer than 4,000 HDD	1,134	16,333	21,145	5.0	750	50	27.5
2,000 CDD or More and --							
Fewer than 4,000 HDD	926	11,788	14,393	5.0	1,125	50	27.5
Workers (main shift)							
Fewer than 5	2,376	14,321	4,240	3.5	1,625	49	35.5
5 to 9	807	6,325	5,313	4.5	667	50	28.5
10 to 19	683	8,028	8,588	6.5	550	51	27.5
20 to 49	487	10,814	14,098	12.5	469	58	24.5
50 to 99	174	8,898	11,427	35.0	542	65	25.5
100 to 249	90	8,356	12,617	65.0	433	56	26.5
250 or More	39	10,595	25,569	150.0	333	72	21.5
Weekly Operating Hours							
39 or Fewer	978	6,596	3,517	4.0	1,500	38	38.5
40 to 48	1,156	13,105	15,619	5.5	875	45	34.5
49 to 60	986	14,200	20,714	5.5	800	50	29.5
61 to 84	664	12,458	16,147	6.0	833	65	30.5
85 to 167	474	9,116	10,796	5.0	792	98	21.5
Open Continuously	398	11,863	15,060	6.0	1,023	168	27.5
Ownership and Occupancy							
Nongovernment Owned	4,135	54,994	67,787	5.0	917	50	30.5
Owner Occupied	2,801	37,785	46,555	5.0	938	50	29.5
Nonowner Occupied	1,099	15,596	21,233	5.0	889	50	30.5
Unoccupied	236	1,613	0	3.8	0	70	35.5
Government Owned	521	12,343	14,065	6.5	750	45	31.5
Vacancy Status							
Completely Vacant	140	953	0	4.0	0	76	47.5
Mostly Vacant	113	956	261	4.8	1,583	40	54.5
Partially Vacant	697	15,520	20,518	6.0	1,053	50	25.5
Not At All Vacant	3,707	49,910	61,073	5.0	857	50	29.5
Number of Establishments							
One	3,528	43,343	48,677	5.0	1,000	50	30.5
2 to 5	688	10,582	12,379	6.5	694	50	28.5
6 to 10	114	3,574	6,580	15.0	600	64	19.5
11 to 20	48	3,260	5,965	35.0	476	60	21.5
More than 20	27	4,811	8,251	60.0	650	60	29.5
Currently Unoccupied	251	1,769	0	3.8	0	67	39.5
Energy Sources (more than one may apply)							
Electricity	4,395	65,716	81,768	5.0	889	50	29.5
Natural Gas	2,670	45,525	56,264	6.0	917	50	34.5
Fuel Oil	434	13,285	19,583	5.0	926	52	39.5
District Heat	117	5,891	8,654	15.0	1,375	80	35.5
District Chilled Water	50	2,750	4,637	18.7	1,375	84	27.5
Propane	451	6,290	6,349	6.0	1,000	55	26.5
Wood	79	570	578	4.5	1,500	60	29.5
Coal	Q	Q	Q	4.5	2,250	45	35.5
Solar	Q	Q	Q	6.0	385	53	23.5
Other	69	1,563	2,578	5.0	1,250	50	24.5

Table B2. Summary Table: Totals and Medians of Floorspace, Number of Workers, Hours of Operation, and Age of Building, 1999

	All Buildings (thousand)	Total Floorspace (million square feet)	Total Workers in All Buildings (thousand)	Median Square Feet per Building (thousand)	Median Square Feet per Worker	Median Hours per Week	Median Age of Buildings (years)
Space-Heating Energy Sources (more than one may apply)							
Electricity	1,880	32,291	43,236	5.0	750	50	25.5
Natural Gas	2,380	37,902	45,992	6.0	917	50	34.5
Fuel Oil	377	5,611	6,542	4.3	944	50	43.5
District Heat	96	5,534	8,116	18.7	1,500	70	40.5
Propane	307	2,728	2,428	5.0	1,333	49	21.5
Wood	66	377	338	3.8	1,500	60	28.5
Coal	Q	Q	Q	4.5	2,250	45	35.5
Solar	Q	Q	Q	42.5	390	45	31.5
Other	26	409	760	5.0	1,146	44	24.5
Primary Space-Heating Energy Source							
Electricity	1,128	17,627	25,423	5.0	677	50	21.5
Natural Gas	2,189	32,729	39,164	5.5	921	50	35.5
Fuel Oil	302	3,719	4,247	4.8	944	50	43.5
District Heat	77	5,077	7,008	25.0	1,900	90	42.5
Propane	282	2,107	1,907	5.0	1,250	48	20.5
Wood	Q	Q	Q	2.8	1,500	40	19.5
Coal	Q	Q	Q	37.5	938	40	40.5
Solar	N	N	N	N	N	N	N
Other	Q	Q	Q	12.5	1,250	44	24.5
Cooling Energy Sources (more than one may apply)							
Electricity	3,450	55,545	72,764	5.5	833	50	28.5
Natural Gas	142	1,914	2,846	8.0	769	60	25.5
District Chilled Water	50	2,750	4,637	18.7	1,375	84	27.5
Water-Heating Energy Sources (more than one may apply)							
Electricity	1,546	24,171	33,505	5.0	735	50	24.5
Natural Gas	1,520	29,196	35,930	7.0	938	60	32.5
Fuel Oil	110	2,218	2,905	4.8	531	75	43.5
District Heat	62	4,182	5,870	25.0	1,452	98	33.5
Propane	130	1,371	1,465	6.0	700	86	23.5
Cooking Energy Sources (more than one may apply)							
Electricity	437	13,733	18,369	6.5	833	84	24.5
Natural Gas	505	16,785	21,352	7.0	750	70	31.5
Propane	118	1,754	2,187	3.8	583	86	24.5
Energy End Uses (more than one may apply)							
Buildings with Space Heating	4,016	61,602	78,082	5.0	857	50	29.5
Buildings with Cooling	3,560	58,474	77,367	5.5	833	50	28.5
Buildings with Water Heating	3,239	56,115	73,385	6.0	813	54	29.5
Buildings with Cooking	857	24,681	31,603	6.5	803	75	28.5
Buildings with Manufacturing	151	3,126	4,351	8.0	1,111	45	29.5
Buildings with Electricity Generation	172	11,882	18,904	17.5	694	60	26.5
Percent of Floorspace Heated							
Not Heated	641	5,736	3,770	4.8	1,500	60	31.5
1 to 50	576	7,593	5,239	6.5	1,500	50	29.5
51 to 99	627	10,745	13,056	7.0	1,023	53	30.5
100	2,813	43,264	59,787	5.0	750	50	29.5

Table B2. Summary Table: Totals and Medians of Floorspace, Number of Workers, Hours of Operation, and Age of Building, 1999

	All Buildings (thousand)	Total Floorspace (million square feet)	Total Workers in All Buildings (thousand)	Median Square Feet per Building (thousand)	Median Square Feet per Worker	Median Hours per Week	Median Age of Buildings (years)
Percent of Floorspace Cooled							
Not Cooled	1,097	8,864	4,485	4.0	1,500	48	39.5
1 to 50	1,012	16,846	14,146	7.5	1,143	50	36.5
51 to 99	751	16,966	23,833	7.0	1,000	56	30.5
100	1,796	24,662	39,388	4.5	650	50	23.5
Percent Lit When Open							
Zero	34	173	Q	2.0	500	91	16.5
1 to 50	835	9,187	4,917	6.0	1,833	48	40.5
51 to 99	1,228	20,665	28,668	6.5	780	50	31.5
100	2,096	34,233	47,951	4.8	750	50	24.5
Building Never Open/ Electricity Not Used	464	3,080	261	4.0	1,250	50	39.5
Percent Lit When Closed							
Zero	2,174	20,771	21,669	4.8	1,000	45	31.5
1 to 50	1,688	30,950	41,943	6.5	769	55	30.5
51 to 100	143	2,160	3,096	4.5	833	68	23.5
Building Never Closed/ Electricity Not Used	652	13,457	15,143	5.0	1,063	168	30.5
Heating Equipment (more than one may apply)							
Heat Pumps	492	8,923	12,616	5.0	625	50	21.5
Furnaces	1,460	14,449	15,845	5.0	1,000	48	36.5
Individual Space Heaters	894	17,349	19,140	6.0	1,196	50	32.5
District Heat	96	5,534	8,116	18.7	1,500	70	40.5
Boilers	581	19,522	24,374	10.0	1,053	55	40.5
Packaged Heating Units	1,347	25,743	32,224	6.0	750	52	24.5
Other	185	4,073	7,008	4.5	1,000	52	28.5
Cooling Equipment (more than one may apply)							
Residential-Type Central Air Conditioners	676	8,329	10,136	5.5	1,125	50	28.5
Heat Pumps	485	9,147	13,463	5.0	648	50	23.5
Individual Air Conditioners	799	14,276	16,652	6.0	833	50	40.5
District Chilled Water	50	2,750	4,637	18.7	1,375	84	27.5
Central Chillers	130	12,909	21,586	40.0	938	56	27.5
Packaged Air Conditioning Units	1,953	36,527	48,283	6.0	750	53	26.5
Swamp Coolers	136	2,219	2,425	4.8	1,167	62	37.5
Other	49	1,312	1,838	7.0	1,250	55	21.5
Main Equipment Replaced Since 1995 (more than one may apply)							
Heating	984	13,220	16,913	5.5	800	50	33.5
Cooling	1,085	17,390	23,164	6.0	833	53	31.5
Lighting Equipment Types (more than one may apply)							
Incandescent	2,193	38,156	49,616	6.0	950	50	32.5
Standard Fluorescent	3,778	60,344	77,862	5.5	850	50	29.5
Compact Fluorescent	607	20,666	30,075	8.5	833	60	27.5
High Intensity Discharge	430	19,223	21,658	13.8	1,286	55	24.5
Halogen	572	17,926	25,668	8.0	813	56	27.5
Other	58	1,004	1,393	4.0	500	64	23.5
Water Heating Equipment							
Centralized System	2,472	35,579	45,136	5.5	857	54	30.5
Distributed System	566	10,899	14,348	6.0	667	50	26.5
Combination of Centralized and Distributed System	200	9,637	13,902	15.0	833	62	24.5

Table B2. Summary Table: Totals and Medians of Floorspace, Number of Workers, Hours of Operation, and Age of Building, 1999

	All Buildings (thousand)	Total Floorspace (million square feet)	Total Workers in All Buildings (thousand)	Median Square Feet per Building (thousand)	Median Square Feet per Worker	Median Hours per Week	Median Age of Buildings (years)
Personal Computers							
None	1,617	9,583	4,785	3.8	1,500	50	35.5
1 to 4	1,636	13,853	12,711	4.8	1,000	52	34.5
5 to 9	542	6,528	7,485	5.0	571	50	23.5
10 to 19	403	7,514	9,200	9.0	563	50	19.5
20 to 49	247	8,087	9,668	16.2	600	50	28.5
50 to 99	105	5,867	7,268	35.0	707	50	23.5
100 to 249	71	6,818	9,574	65.0	606	60	25.5
250 or More	36	9,088	21,162	150.0	389	72	25.5
Photocopiers							
None	2,825	21,631	18,897	4.0	1,143	50	34.5
One	1,114	12,928	12,963	6.0	818	50	28.5
2 to 4	540	15,620	16,785	12.5	650	50	25.5
5 to 9	102	5,384	8,217	23.7	432	52	15.5
10 or More	75	11,774	24,991	75.0	429	60	21.5
Other Electronic Equipment (more than one may apply)							
Laser Printers	1,949	46,567	66,979	7.5	667	50	27.5
FAX Machines	2,807	54,764	74,706	6.0	750	50	27.5
Medical Diagnostic Equipment	86	2,493	5,625	5.0	500	48	22.5
Energy-Related Space Functions (more than one may apply)							
Commercial Food Preparation	767	23,328	30,350	6.5	750	77	28.5
Activities with Large Amounts of Hot Water	698	21,793	25,850	9.5	921	77	29.5
Building Shell Conservation Features (more than one may apply)							
Multipaned Windows	2,130	38,193	49,935	6.0	833	50	26.5
Tinted, Reflective, or Shading Glass	1,283	29,915	43,137	6.5	800	50	24.5
HVAC Conservation Features (more than one may apply)							
Variable Air-Volume System	550	19,387	30,546	9.0	804	61	22.5
Economizer Cycle	567	21,256	32,923	8.5	667	60	23.5
HVAC Maintenance	2,786	53,395	71,290	6.0	833	52	28.5
Energy Management and Control System (EMCS)	460	21,613	31,767	13.8	846	56	28.5
Lighting Conservation Features (more than one may apply)							
Specular Reflectors	843	19,994	28,787	6.0	750	54	26.5
Electronic Ballasts	2,167	42,035	55,879	6.0	857	54	28.5
Skylights or Atriums	580	18,286	21,158	8.5	833	50	23.5
Off-Hour Equipment Reduction (more than one may apply)							
Heating	2,862	39,969	50,855	5.5	833	49	30.5
Cooling	2,622	39,161	52,130	5.5	792	50	29.5
Lighting	3,675	51,083	65,064	5.0	875	50	29.5
Office Equipment	184	9,063	12,473	27.5	667	50	30.5

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.
Note: 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.

Table B3. Census Region, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)					Total Floorspace (million square feet)				
	All Buildings	North-east	Midwest	South	West	All Buildings	North-east	Midwest	South	West
All Buildings	4,657	686	1,188	1,762	1,021	67,338	12,360	16,761	23,485	14,731
Building Floorspace (Square Feet)										
1,001 to 5,000	2,348	305	620	916	506	6,774	901	1,835	2,536	1,503
5,001 to 10,000	1,110	169	273	413	255	8,238	1,302	2,045	3,058	1,834
10,001 to 25,000	708	130	188	260	130	11,153	1,954	2,881	4,194	2,124
25,001 to 50,000	257	39	48	93	76	9,311	1,407	1,773	3,384	2,746
50,001 to 100,000	145	26	35	49	35	10,112	1,771	2,436	3,450	2,455
100,001 to 200,000	59	10	16	20	13	8,271	1,461	2,279	2,864	1,666
200,001 to 500,000	23	5	7	8	4	6,851	1,362	1,993	2,273	1,222
Over 500,000	7	2	2	2	1	6,628	2,202	1,519	1,726	1,180
Principal Building Activity										
Education	327	31	42	121	134	8,651	1,714	2,250	2,348	2,338
Food Sales	174	Q	Q	76	29	994	Q	Q	392	208
Food Service	349	Q	95	124	89	1,851	Q	558	676	396
Health Care	127	14	33	59	21	2,918	448	750	1,085	635
Inpatient	11	Q	1	3	3	1,865	377	512	630	346
Outpatient	116	Q	32	56	18	1,053	Q	239	454	289
Lodging	153	13	27	54	59	4,521	484	940	1,595	1,501
Mercantile	667	117	182	257	111	10,398	1,885	2,591	4,080	1,842
Retail (Other Than Mall)	534	100	157	205	71	4,766	974	1,600	1,566	627
Enclosed and Strip Malls	133	17	25	52	40	5,631	912	991	2,513	1,215
Office	739	102	172	315	150	12,044	2,389	2,820	4,162	2,672
Public Assembly	305	43	88	126	48	4,393	882	1,142	1,511	859
Public Order and Safety	72	31	13	17	Q	1,168	530	216	286	Q
Religious Worship	307	38	74	101	93	3,405	440	923	1,146	896
Service	478	73	140	198	68	3,388	740	818	1,387	443
Warehouse and Storage	603	84	192	215	113	10,477	1,743	2,764	3,957	2,012
Other	102	Q	Q	39	29	1,222	Q	283	305	338
Vacant	253	33	91	61	68	1,908	367	533	554	455
Year Constructed										
1919 or Before	419	126	172	69	52	4,034	1,392	1,576	549	518
1920 to 1945	499	65	206	155	73	6,445	1,619	2,423	1,704	699
1946 to 1959	763	138	174	289	162	9,127	2,030	2,152	2,910	2,035
1960 to 1969	665	97	155	199	215	10,866	2,050	2,602	3,318	2,896
1970 to 1979	774	77	141	338	219	11,840	1,823	2,347	4,278	3,391
1980 to 1989	846	122	165	408	151	13,931	2,070	2,828	6,263	2,771
1990 to 1999	690	62	175	304	149	11,094	1,376	2,834	4,464	2,420
Floors										
One	2,879	291	624	1,302	662	26,800	3,131	5,800	11,826	6,044
Two	1,168	230	331	346	262	16,985	2,944	4,405	5,687	3,948
Three	420	108	172	76	64	8,928	2,261	2,725	2,106	1,836
Four to Nine	178	54	60	33	30	10,180	2,598	3,080	2,540	1,962
Ten or More	11	3	2	4	2	4,445	1,426	752	1,327	940
Workers (main shift)										
Fewer than 5	2,376	271	668	970	468	14,321	1,906	4,033	5,579	2,802
5 to 9	807	163	224	220	199	6,325	1,372	1,689	1,730	1,533
10 to 19	683	114	136	273	160	8,028	1,472	1,930	2,935	1,690
20 to 49	487	87	95	204	101	10,814	1,574	2,575	4,174	2,492
50 to 99	174	30	32	51	61	8,898	1,814	1,876	2,876	2,332
100 to 249	90	16	24	32	19	8,356	1,702	2,228	2,856	1,570
250 or More	39	5	9	12	12	10,595	2,519	2,430	3,335	2,312
Weekly Operating Hours										
39 or Fewer	978	115	286	380	196	6,596	900	1,851	2,532	1,313
40 to 48	1,156	156	280	486	235	13,105	1,879	2,989	5,265	2,972
49 to 60	986	135	250	346	255	14,200	2,792	3,577	4,617	3,214
61 to 84	664	130	184	207	143	12,458	2,482	3,088	4,198	2,689
85 to 167	474	65	102	211	96	9,116	1,813	2,531	2,978	1,794
Open Continuously	398	86	86	132	95	11,863	2,494	2,725	3,896	2,748

Table B3. Census Region, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)					Total Floorspace (million square feet)				
	All Buildings	North-east	Midwest	South	West	All Buildings	North-east	Midwest	South	West
Ownership and Occupancy										
Nongovernment Owned	4,135	607	1,105	1,585	839	54,994	9,542	13,896	19,745	11,810
Owner Occupied	2,801	455	747	1,083	516	37,785	7,143	9,990	13,228	7,424
Nonowner Occupied	1,099	142	256	431	270	15,596	2,286	3,427	5,881	4,001
Unoccupied	236	Q	102	71	53	1,613	Q	479	636	385
Government Owned	521	80	83	177	182	12,343	2,818	2,865	3,740	2,921
Vacancy Status										
Completely Vacant	140	Q	57	Q	36	953	Q	298	Q	287
Mostly Vacant	113	Q	34	Q	Q	956	Q	235	Q	Q
Partially Vacant	697	78	189	266	165	15,520	2,693	4,031	5,548	3,248
Not At All Vacant	3,707	576	908	1,436	787	49,910	9,301	12,197	17,383	11,029
Number of Establishments										
One	3,528	531	860	1,392	745	43,343	7,665	11,299	14,723	9,655
2 to 5	688	113	190	231	154	10,582	2,186	2,900	3,421	2,075
6 to 10	114	15	22	41	36	3,574	494	571	1,440	1,068
11 to 20	48	8	7	17	16	3,260	705	579	1,239	738
More than 20	27	4	4	9	Q	4,811	1,159	864	2,000	788
Currently Unoccupied	251	Q	103	72	60	1,769	Q	548	662	407
Energy Sources (more than one may apply)										
Electricity	4,395	639	1,113	1,689	954	65,716	11,964	16,389	23,076	14,287
Natural Gas	2,670	311	874	820	665	45,525	7,305	13,506	14,199	10,515
Fuel Oil	434	218	48	138	30	13,285	5,414	2,423	3,749	1,699
District Heat	117	31	25	39	22	5,891	1,898	1,521	1,265	1,207
District Chilled Water	50	2	14	Q	13	2,750	326	746	939	739
Propane	451	112	109	167	62	6,290	1,706	1,405	2,389	790
Other	153	21	37	64	Q	2,322	580	606	579	557
Energy End Uses (more than one may apply)										
Buildings with Space Heating	4,016	601	1,049	1,503	863	61,602	11,667	15,916	20,598	13,421
Buildings with Cooling	3,560	473	861	1,506	720	58,474	10,311	14,371	21,549	12,243
Buildings with Water Heating	3,239	515	776	1,179	769	56,115	10,577	13,702	19,014	12,822
Buildings with Cooking	857	141	221	315	181	24,681	5,245	6,042	8,569	4,825
Buildings with Manufacturing	151	22	18	87	24	3,126	568	818	1,035	706
Buildings with Electricity Generation	172	46	39	64	22	11,882	3,108	2,782	4,062	1,930
Percent of Floorspace Heated										
Not Heated	641	86	138	259	158	5,736	693	846	2,887	1,310
1 to 50	576	83	151	182	160	7,593	1,053	1,571	2,538	2,432
51 to 99	627	82	175	254	117	10,745	1,688	2,323	4,335	2,399
100	2,813	436	724	1,067	586	43,264	8,927	12,022	13,725	8,590
Percent of Floorspace Cooled										
Not Cooled	1,097	213	327	256	301	8,864	2,049	2,390	1,936	2,489
1 to 50	1,012	226	330	289	167	16,846	3,914	5,068	4,618	3,246
51 to 99	751	80	207	320	144	16,966	3,196	4,741	5,801	3,229
100	1,796	168	324	896	409	24,662	3,202	4,562	11,130	5,768
Percent Lit When Open										
Zero	34	Q	Q	Q	Q	173	Q	Q	Q	Q
1 to 50	835	123	273	275	164	9,187	1,620	2,486	3,013	2,068
51 to 99	1,228	194	337	453	245	20,665	4,081	5,814	6,392	4,378
100	2,096	291	422	862	522	34,233	6,077	7,668	12,817	7,671
Building Never Open/ Electricity Not Used	464	67	154	154	89	3,080	555	780	1,162	582

Table B3. Census Region, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)					Total Floorspace (million square feet)				
	All Buildings	North-east	Midwest	South	West	All Buildings	North-east	Midwest	South	West
Heating Equipment (more than one may apply)										
Heat Pumps	492	24	28	338	102	8,923	1,193	1,015	4,580	2,135
Furnaces	1,460	222	632	369	237	14,449	2,257	5,767	3,949	2,476
Individual Space Heaters	894	119	205	370	200	17,349	3,555	4,667	5,471	3,657
District Heat	96	31	22	27	17	5,534	1,876	1,514	1,022	1,121
Boilers	581	189	175	123	93	19,522	5,469	5,961	4,209	3,883
Packaged Heating Units	1,347	135	201	645	366	25,743	4,033	5,081	10,455	6,175
Other	185	22	52	62	49	4,073	769	1,113	1,391	800
Cooling Equipment (more than one may apply)										
Residential-Type Central Air Conditioners	676	72	285	258	62	8,329	950	2,951	3,272	1,156
Heat Pumps	485	19	27	329	110	9,147	1,215	1,063	4,604	2,265
Individual Air Conditioners	799	172	214	312	100	14,276	3,897	3,724	4,526	2,130
District Chilled Water	50	2	14	Q	13	2,750	326	746	939	739
Central Chillers	130	17	25	57	31	12,909	2,782	3,149	4,328	2,651
Packaged Air Conditioning Units	1,953	265	403	841	443	36,527	6,641	8,198	13,915	7,773
Swamp Coolers	136	Q	Q	Q	109	2,219	Q	Q	339	1,624
Other	49	Q	Q	Q	Q	1,312	Q	328	343	324
Main Equipment Replaced Since 1995 (more than one may apply)										
Heating	984	134	266	371	213	13,220	1,829	3,244	5,080	3,068
Cooling	1,085	151	231	495	208	17,390	3,080	3,808	7,088	3,414
Building Shell Conservation Features (more than one may apply)										
Multipaned Windows	2,130	342	698	694	395	38,193	7,564	11,546	11,981	7,103
Tinted, Reflective, or Shading Glass	1,283	127	264	509	383	29,915	4,525	6,364	11,246	7,780
HVAC Conservation Features (more than one may apply)										
Variable Air-Volume System	550	93	129	194	133	19,387	3,643	4,858	6,121	4,765
Economizer Cycle	567	118	130	135	184	21,256	4,634	5,688	5,858	5,075
HVAC Maintenance	2,786	498	675	1,000	613	53,395	10,640	13,025	17,981	11,749
Energy Management and Control System (EMCS)	460	81	107	138	135	21,613	4,211	5,296	7,108	4,998
Lighting Conservation Features (more than one may apply)										
Specular Reflectors	843	148	155	317	224	19,994	4,874	4,296	6,400	4,424
Electronic Ballasts	2,167	370	482	802	514	42,035	8,480	10,287	13,745	9,523
Skylights or Atriums	580	89	130	203	158	18,286	3,697	4,491	6,116	3,982

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

Table B4. Census Region and Division, Number of Buildings, 1999

	Number of Buildings (thousand)									
		Northeast		Midwest		South			West	
	All Buildings	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
All Buildings	4,657	208	479	782	406	748	396	618	315	705
Building Floorspace (Square Feet)										
1,001 to 5,000	2,348	99	206	390	230	368	189	360	155	351
5,001 to 10,000	1,110	41	128	200	72	194	80	139	80	175
10,001 to 25,000	708	38	92	122	66	105	87	69	39	91
25,001 to 50,000	257	14	25	32	17	43	25	25	25	52
50,001 to 100,000	145	10	16	22	13	24	9	16	12	23
100,001 to 200,000	59	3	7	11	5	11	4	6	4	8
200,001 to 500,000	23	1	4	5	2	4	1	2	Q	3
Over 500,000	7	Q	2	1	1	1	Q	1	Q	1
Principal Building Activity										
Education	327	8	23	23	18	52	22	48	21	113
Food Sales	174	Q	Q	Q	Q	Q	Q	Q	Q	Q
Food Service	349	Q	Q	78	Q	41	Q	61	Q	65
Health Care	127	Q	11	25	Q	37	Q	21	4	16
Inpatient	11	Q	Q	1	Q	1	Q	2	Q	2
Outpatient	116	Q	Q	Q	Q	35	Q	Q	Q	15
Lodging	153	Q	10	15	12	22	20	12	19	41
Mercantile	667	Q	92	127	55	107	55	95	34	77
Retail (Other Than Mall)	534	Q	78	107	50	77	44	84	29	42
Enclosed and Strip Malls	133	Q	14	19	5	29	Q	12	Q	35
Office	739	47	55	117	56	163	77	75	43	107
Public Assembly	305	Q	33	50	39	52	36	38	Q	29
Public Order and Safety	72	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	307	Q	29	43	32	23	Q	49	Q	62
Service	478	Q	53	68	72	72	37	89	18	49
Warehouse and Storage	603	31	53	122	70	114	50	50	37	76
Other	102	Q	Q	Q	Q	Q	Q	Q	Q	Q
Vacant	253	Q	Q	75	Q	Q	Q	Q	Q	Q
Year Constructed										
1919 or Before	419	35	91	140	32	31	Q	32	Q	Q
1920 to 1945	499	28	37	147	59	58	45	51	35	38
1946 to 1959	763	24	114	123	51	123	65	102	52	110
1960 to 1969	665	33	64	97	57	85	38	76	66	149
1970 to 1979	774	38	39	95	46	117	65	156	45	173
1980 to 1989	846	34	88	73	92	152	120	136	61	90
1990 to 1999	690	Q	47	107	68	183	Q	65	36	113
Floors										
One	2,879	83	208	384	240	525	259	517	208	455
Two	1,168	86	143	214	117	159	110	77	74	188
Three	420	23	85	141	31	36	Q	18	23	41
Four to Nine	178	15	40	42	18	25	Q	4	11	19
Ten or More	11	Q	3	1	Q	3	Q	1	Q	2
Workers (main shift)										
Fewer than 5	2,376	81	189	440	228	380	193	397	172	295
5 to 9	807	52	111	144	80	92	54	75	48	151
10 to 19	683	40	74	90	45	151	68	54	43	117
20 to 49	487	18	68	68	27	78	65	61	27	74
50 to 99	174	9	21	16	15	26	10	15	14	47
100 to 249	90	6	10	18	6	15	5	12	7	12
250 or More	39	1	4	5	4	7	2	4	3	9

Table B4. Census Region and Division, Number of Buildings, 1999

	Number of Buildings (thousand)									
		Northeast		Midwest		South			West	
	All Buildings	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Weekly Operating Hours										
39 or Fewer	978	Q	72	193	93	161	85	135	90	106
40 to 48	1,156	45	111	168	112	203	108	174	85	150
49 to 60	986	52	82	167	83	164	55	128	54	202
61 to 84	664	35	95	123	61	95	44	69	22	121
85 to 167	474	13	52	80	22	76	60	75	35	61
Open Continuously	398	20	66	51	35	49	45	38	30	65
Ownership and Occupancy										
Nongovernment Owned	4,135	181	426	752	353	671	360	554	284	555
Owner Occupied	2,801	123	331	522	225	478	241	363	153	363
Nonowner Occupied	1,099	56	87	169	87	151	112	168	92	178
Unoccupied	236	Q	Q	61	Q	Q	Q	Q	Q	Q
Government Owned	521	27	52	30	52	77	36	64	31	150
Vacancy Status										
Completely Vacant	140	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	113	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	697	32	46	124	65	119	54	93	40	125
Not At All Vacant	3,707	165	411	583	325	599	336	501	233	555
Number of Establishments										
One	3,528	169	362	570	291	563	328	501	213	532
2 to 5	688	22	90	133	58	109	42	80	40	114
6 to 10	114	Q	12	11	Q	19	Q	6	6	30
11 to 20	48	4	3	3	4	10	Q	4	Q	13
More than 20	27	Q	Q	3	Q	6	Q	3	Q	3
Currently Unoccupied	251	Q	Q	61	Q	Q	Q	Q	Q	Q
Energy Sources (more than one may apply)										
Electricity	4,395	190	449	730	383	711	383	595	275	679
Natural Gas	2,670	45	266	611	263	231	224	365	230	435
Fuel Oil	434	90	128	28	20	98	12	28	Q	Q
District Heat	117	2	29	11	Q	Q	Q	21	9	13
District Chilled Water	50	Q	2	2	Q	3	Q	Q	Q	7
Propane	451	62	51	63	46	87	Q	30	Q	Q
Other	153	Q	20	23	Q	Q	Q	Q	Q	Q
Energy End Uses (more than one may apply)										
Buildings with Space Heating	4,016	170	431	688	361	612	366	524	271	592
Buildings with Cooling	3,560	136	337	563	298	631	353	522	239	481
Buildings with Water Heating	3,239	151	364	515	261	492	283	404	244	525
Buildings with Cooking	857	36	106	162	59	134	79	101	57	124
Buildings with Manufacturing	151	Q	Q	Q	Q	30	Q	37	Q	19
Buildings with Electricity Generation	172	8	38	27	13	44	6	14	11	11
Percent of Floorspace Heated										
Not Heated	641	Q	48	94	Q	136	29	94	44	114
1 to 50	576	Q	65	116	35	56	56	70	40	121
51 to 99	627	22	59	114	61	119	63	72	39	77
100	2,813	130	307	459	266	437	247	383	193	393
Percent of Floorspace Cooled										
Not Cooled	1,097	71	142	219	108	117	43	96	77	224
1 to 50	1,012	65	161	221	109	126	70	93	55	112
51 to 99	751	30	49	137	70	140	66	114	69	76
100	1,796	41	126	205	119	364	217	315	116	293

Table B4. Census Region and Division, Number of Buildings, 1999

	Number of Buildings (thousand)									
		Northeast		Midwest		South			West	
	All Buildings	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Percent Lit When Open										
Zero	34	Q	Q	Q	N	Q	Q	Q	Q	Q
1 to 50	835	35	89	200	73	132	56	88	53	110
51 to 99	1,228	51	143	201	136	180	75	198	93	152
100	2,096	93	198	278	144	331	247	284	118	404
Building Never Open/ Electricity Not Used	464	Q	Q	101	53	90	Q	47	50	Q
Heating Equipment (more than one may apply)										
Heat Pumps	492	6	18	10	18	190	104	44	15	86
Furnaces	1,460	66	156	429	203	115	105	149	116	121
Individual Space Heaters	894	33	86	130	75	132	109	129	81	119
District Heat	96	2	29	8	Q	5	Q	20	5	12
Boilers	581	80	109	123	52	76	18	29	30	63
Packaged Heating Units	1,347	29	107	129	72	229	149	267	96	270
Other	185	Q	20	35	Q	17	Q	27	15	34
Cooling Equipment (more than one may apply)										
Residential-Type Central Air Conditioners	676	Q	63	174	111	79	63	116	29	32
Heat Pumps	485	4	15	8	19	187	99	43	19	91
Individual Air Conditioners	799	61	111	147	68	140	89	83	27	74
District Chilled Water	50	Q	2	2	Q	3	Q	Q	Q	7
Central Chillers	130	5	12	15	10	34	5	18	13	18
Packaged Air Conditioning Units	1,953	76	189	284	119	318	200	323	142	301
Swamp Coolers	136	Q	Q	Q	Q	Q	Q	Q	73	36
Other	49	Q	Q	Q	Q	3	Q	Q	Q	Q
Main Equipment Replaced Since 1995 (more than one may apply)										
Heating	984	Q	98	192	74	164	62	146	54	159
Cooling	1,085	51	100	183	47	202	90	203	69	139
Building Shell Conservation Features (more than one may apply)										
Multipaned Windows	2,130	107	235	465	233	331	189	174	131	265
Tinted, Reflective, or Shading Glass	1,283	30	97	168	96	195	114	199	138	245
HVAC Conservation Features (more than one may apply)										
Variable Air-Volume System	550	11	82	94	36	106	26	63	44	89
Economizer Cycle	567	38	80	63	67	55	32	47	57	127
HVAC Maintenance	2,786	149	349	414	260	419	254	327	209	404
Energy Management and Control System (EMCS)	460	17	63	59	47	66	30	42	31	103
Lighting Conservation Features (more than one may apply)										
Specular Reflectors	843	48	100	107	48	148	60	108	48	175
Electronic Ballasts	2,167	109	262	333	149	328	189	284	129	385
Skylights or Atriums	580	17	72	87	43	90	43	70	55	103

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.
Note: 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.

Table B5. Census Region and Division, Floorspace, 1999

	Total Floorspace (million square feet)									
		Northeast		Midwest		South			West	
	All Buildings	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
All Buildings	67,338	3,735	8,625	11,205	5,556	11,001	5,220	7,264	4,579	10,152
Building Floorspace (Square Feet)										
1,001 to 5,000	6,774	287	614	1,186	648	1,006	514	1,015	493	1,009
5,001 to 10,000	8,238	287	1,015	1,480	566	1,430	644	983	612	1,222
10,001 to 25,000	11,153	569	1,384	1,855	1,026	1,707	1,343	1,145	632	1,492
25,001 to 50,000	9,311	506	902	1,181	592	1,597	875	912	865	1,881
50,001 to 100,000	10,112	709	1,062	1,544	892	1,679	654	1,116	817	1,638
100,001 to 200,000	8,271	506	956	1,549	730	1,621	508	735	552	1,114
200,001 to 500,000	6,851	176	1,187	1,434	560	1,261	342	670	Q	971
Over 500,000	6,628	Q	1,507	976	543	698	Q	687	358	823
Principal Building Activity										
Education	8,651	575	1,139	1,506	744	997	438	913	758	1,580
Food Sales	994	Q	Q	Q	Q	Q	Q	135	Q	Q
Food Service	1,851	Q	Q	463	Q	302	Q	207	Q	292
Health Care	2,918	Q	335	502	248	585	132	367	201	434
Inpatient	1,865	Q	291	336	Q	312	Q	215	Q	233
Outpatient	1,053	Q	Q	Q	Q	273	Q	Q	Q	201
Lodging	4,521	Q	315	725	215	825	467	303	545	956
Mercantile	10,398	612	1,273	1,780	811	2,007	937	1,135	418	1,423
Retail (Other Than Mall)	4,766	Q	725	1,158	442	625	430	512	169	458
Enclosed and Strip Malls	5,631	Q	548	622	369	1,383	507	623	Q	966
Office	12,044	849	1,540	1,777	1,043	2,311	696	1,155	760	1,913
Public Assembly	4,393	Q	574	635	507	539	431	541	373	486
Public Order and Safety	1,168	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	3,405	Q	370	566	357	309	Q	487	Q	588
Service	3,388	Q	527	403	415	604	351	433	168	275
Warehouse and Storage	10,477	429	1,314	1,983	782	1,909	963	1,085	520	1,493
Other	1,222	Q	Q	Q	Q	Q	Q	Q	Q	Q
Vacant	1,908	Q	Q	412	Q	Q	Q	Q	Q	198
Year Constructed										
1919 or Before	4,034	458	933	1,215	360	346	Q	159	267	251
1920 to 1945	6,445	423	1,196	1,849	574	603	335	765	287	412
1946 to 1959	9,127	434	1,596	1,417	735	1,106	659	1,146	713	1,322
1960 to 1969	10,866	670	1,380	1,605	997	1,613	639	1,065	807	2,089
1970 to 1979	11,840	746	1,078	1,564	784	2,060	754	1,464	676	2,715
1980 to 1989	13,931	570	1,500	1,673	1,155	2,966	1,739	1,557	1,126	1,645
1990 to 1999	11,094	433	943	1,882	952	2,306	1,050	1,107	704	1,716
Floors										
One	26,800	835	2,295	3,976	1,824	5,249	2,611	3,965	1,958	4,086
Two	16,985	1,018	1,926	2,658	1,748	2,485	1,639	1,564	1,167	2,781
Three	8,928	674	1,587	2,049	675	1,043	417	646	631	1,205
Four to Nine	10,180	867	1,732	1,931	1,149	1,491	Q	636	659	1,302
Ten or More	4,445	Q	1,085	591	Q	733	Q	452	Q	777
Workers (main shift)										
Fewer than 5	14,321	521	1,385	2,847	1,186	2,314	1,158	2,108	1,118	1,685
5 to 9	6,325	450	923	1,146	544	705	454	571	465	1,069
10 to 19	8,028	425	1,048	1,315	615	1,447	856	632	470	1,220
20 to 49	10,814	479	1,096	1,820	755	1,745	1,167	1,261	812	1,680
50 to 99	8,898	715	1,099	1,014	862	1,508	537	831	587	1,745
100 to 249	8,356	579	1,123	1,605	623	1,575	526	756	573	997
250 or More	10,595	567	1,952	1,459	971	1,708	522	1,105	555	1,757

Table B5. Census Region and Division, Floorspace, 1999

	Total Floorspace (million square feet)									
		Northeast		Midwest		South			West	
	All Buildings	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Weekly Operating Hours										
39 or Fewer	6,596	249	651	1,305	546	1,053	594	884	689	625
40 to 48	13,105	527	1,352	1,680	1,309	1,943	1,370	1,952	1,242	1,730
49 to 60	14,200	1,085	1,707	2,455	1,122	2,549	681	1,387	788	2,426
61 to 84	12,458	846	1,637	2,149	939	2,201	743	1,254	496	2,193
85 to 167	9,116	464	1,349	1,848	683	1,267	951	759	574	1,220
Open Continuously	11,863	565	1,930	1,768	957	1,987	882	1,027	790	1,958
Ownership and Occupancy										
Nongovernment Owned	54,994	2,976	6,567	9,640	4,257	9,162	4,486	6,097	3,443	8,367
Owner Occupied	37,785	2,129	5,014	6,933	3,057	6,072	3,019	4,136	2,064	5,360
Nonowner Occupied	15,596	810	1,476	2,373	1,054	2,716	1,389	1,776	1,124	2,877
Unoccupied	1,613	Q	Q	334	Q	Q	Q	Q	Q	Q
Government Owned	12,343	759	2,059	1,565	1,300	1,839	734	1,167	1,136	1,785
Vacancy Status										
Completely Vacant	953	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	956	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	15,520	1,003	1,689	2,890	1,141	2,656	992	1,900	1,022	2,226
Not At All Vacant	49,910	2,619	6,682	7,903	4,294	8,124	4,172	5,086	3,301	7,728
Number of Establishments										
One	43,343	2,225	5,440	7,546	3,753	6,407	3,558	4,758	3,066	6,588
2 to 5	10,582	610	1,575	2,042	858	1,659	751	1,012	538	1,537
6 to 10	3,574	Q	366	306	266	701	Q	353	262	806
11 to 20	3,260	376	329	319	260	826	Q	252	Q	499
More than 20	4,811	Q	830	606	Q	1,026	Q	686	Q	587
Currently Unoccupied	1,769	Q	Q	386	Q	Q	Q	Q	Q	Q
Energy Sources (more than one may apply)										
Electricity	65,716	3,615	8,349	10,940	5,449	10,817	5,149	7,110	4,292	9,995
Natural Gas	45,525	1,590	5,714	9,383	4,123	5,517	3,508	5,174	3,183	7,332
Fuel Oil	13,285	2,254	3,160	1,299	1,123	2,457	546	747	379	1,321
District Heat	5,891	180	1,718	799	722	504	Q	524	410	797
District Chilled Water	2,750	Q	252	282	464	359	Q	488	Q	494
Propane	6,290	858	848	752	653	1,455	694	239	Q	693
Other	2,322	Q	539	360	Q	268	Q	Q	Q	439
Energy End Uses (more than one may apply)										
Buildings with Space Heating	61,602	3,551	8,116	10,530	5,386	9,243	4,854	6,501	4,204	9,218
Buildings with Cooling	58,474	3,034	7,278	9,374	4,997	10,140	4,793	6,616	3,845	8,398
Buildings with Water Heating	56,115	3,187	7,390	9,131	4,571	8,900	4,247	5,867	3,993	8,828
Buildings with Cooking	24,681	1,487	3,758	4,088	1,953	4,531	1,552	2,486	1,533	3,292
Buildings with Manufacturing	3,126	Q	392	493	Q	388	Q	340	Q	568
Buildings with Electricity Generation	11,882	988	2,121	1,728	1,054	2,530	659	873	532	1,398
Percent of Floorspace Heated										
Not Heated	5,736	Q	510	675	Q	1,757	366	763	376	934
1 to 50	7,593	Q	810	1,177	393	981	697	860	471	1,960
51 to 99	10,745	446	1,242	1,665	657	2,030	1,123	1,182	465	1,935
100	43,264	2,863	6,064	7,687	4,335	6,232	3,034	4,460	3,268	5,322
Percent of Floorspace Cooled										
Not Cooled	8,864	701	1,348	1,831	559	861	427	648	735	1,754
1 to 50	16,846	1,105	2,808	3,490	1,578	2,070	1,136	1,412	871	2,375
51 to 99	16,966	917	2,279	3,015	1,726	2,970	1,220	1,610	1,028	2,200
100	24,662	1,012	2,190	2,869	1,693	5,099	2,438	3,593	1,945	3,823

Table B5. Census Region and Division, Floorspace, 1999

	Total Floorspace (million square feet)									
		Northeast		Midwest		South			West	
	All Buildings	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Percent Lit When Open										
Zero	173	Q	Q	Q	N	Q	Q	Q	Q	Q
1 to 50	9,187	479	1,140	1,866	620	1,436	728	849	572	1,497
51 to 99	20,665	1,259	2,822	3,830	1,983	2,973	1,248	2,171	1,373	3,005
100	34,233	1,832	4,245	4,927	2,741	5,916	3,080	3,821	2,273	5,398
Building Never Open/ Electricity Not Used	3,080	Q	Q	569	212	624	Q	410	337	245
Heating Equipment (more than one may apply)										
Heat Pumps	8,923	387	807	476	539	2,594	1,382	604	571	1,564
Furnaces	14,449	775	1,482	3,908	1,859	1,310	1,253	1,387	1,232	1,244
Individual Space Heaters	17,349	937	2,618	2,812	1,854	2,293	1,579	1,599	1,250	2,407
District Heat	5,534	180	1,696	792	722	423	Q	486	Q	758
Boilers	19,522	2,170	3,299	4,010	1,951	2,243	771	1,195	1,329	2,554
Packaged Heating Units	25,743	1,086	2,946	3,302	1,778	4,695	2,401	3,359	1,592	4,583
Other	4,073	Q	595	825	289	578	Q	576	311	488
Cooling Equipment (more than one may apply)										
Residential-Type Central Air Conditioners	8,329	Q	790	1,766	1,186	1,281	898	1,093	646	510
Heat Pumps	9,147	346	870	490	573	2,642	1,316	646	649	1,615
Individual Air Conditioners	14,276	1,316	2,581	2,525	1,200	1,940	1,386	1,200	642	1,487
District Chilled Water	2,750	Q	252	282	464	359	Q	488	Q	494
Central Chillers	12,909	719	2,063	2,013	1,136	2,269	591	1,468	753	1,897
Packaged Air Conditioning Units	36,527	1,796	4,844	5,463	2,735	6,575	3,147	4,193	2,206	5,568
Swamp Coolers	2,219	Q	Q	Q	Q	Q	Q	Q	986	638
Other	1,312	Q	Q	Q	Q	154	Q	Q	Q	Q
Main Equipment Replaced Since 1995 (more than one may apply)										
Heating	13,220	551	1,277	2,335	909	2,032	1,348	1,700	840	2,227
Cooling	17,390	972	2,108	2,891	917	3,237	1,576	2,276	1,009	2,405
Building Shell Conservation Features (more than one may apply)										
Multipaned Windows	38,193	2,534	5,029	7,421	4,125	5,989	2,820	3,171	2,478	4,624
Tinted, Reflective, or Shading Glass	29,915	1,347	3,178	4,234	2,130	5,279	2,330	3,637	2,337	5,443
HVAC Conservation Features (more than one may apply)										
Variable Air-Volume System	19,387	988	2,655	3,333	1,524	3,163	998	1,960	1,401	3,364
Economizer Cycle	21,256	1,419	3,215	3,305	2,384	3,025	1,015	1,818	1,586	3,489
HVAC Maintenance	53,395	3,266	7,374	8,461	4,564	8,699	4,107	5,176	3,772	7,977
Energy Management and Control System (EMCS)	21,613	1,404	2,806	3,591	1,705	3,694	1,036	2,378	1,564	3,434
Lighting Conservation Features (more than one may apply)										
Specular Reflectors	19,994	1,624	3,251	2,978	1,318	3,386	1,117	1,897	1,232	3,192
Electronic Ballasts	42,035	2,398	6,082	6,991	3,297	6,646	2,835	4,265	2,650	6,873
Skylights or Atriums	18,286	1,221	2,476	3,006	1,485	2,860	1,359	1,897	1,326	2,656

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.
Note: 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.

Table B6. Building Size, Number of Buildings, 1999

	Number of Buildings (thousand)								
		Building Size							
	All Buildings	1,001 to 5,000 Square Feet	5,001 to 10,000 Square Feet	10,001 to 25,000 Square Feet	25,001 to 50,000 Square Feet	50,001 to 100,000 Square Feet	100,001 to 200,000 Square Feet	200,001 to 500,000 Square Feet	Over 500,000 Square Feet
All Buildings	4,657	2,348	1,110	708	257	145	59	23	7
Principal Building Activity									
Education	327	119	61	52	49	30	10	5	Q
Food Sales	174	138	Q	Q	Q	Q	Q	N	N
Food Service	349	251	71	23	Q	Q	Q	N	N
Health Care	127	64	Q	10	8	4	2	2	1
Inpatient	11	N	N	Q	Q	Q	2	2	1
Outpatient	116	64	Q	Q	7	Q	Q	Q	Q
Lodging	153	Q	38	27	32	11	4	3	Q
Mercantile	667	316	146	141	28	20	13	2	1
Retail (Other Than Mall)	534	308	103	100	11	6	5	Q	Q
Enclosed and Strip Malls	133	Q	43	41	17	14	8	1	1
Office	739	422	141	95	33	29	13	5	2
Public Assembly	305	124	88	64	15	11	2	1	Q
Public Order and Safety	72	Q	Q	24	5	Q	Q	Q	Q
Religious Worship	307	92	102	92	15	Q	Q	N	Q
Service	478	291	131	41	11	Q	Q	Q	Q
Warehouse and Storage	603	266	157	97	46	22	11	4	1
Other	102	Q	Q	14	Q	Q	Q	Q	Q
Vacant	253	153	73	17	7	Q	Q	Q	Q
Year Constructed									
1919 or Before	419	227	107	63	13	7	Q	Q	Q
1920 to 1945	499	270	102	90	20	9	5	2	1
1946 to 1959	763	359	240	97	39	19	5	3	1
1960 to 1969	665	321	166	84	53	24	12	4	1
1970 to 1979	774	367	193	130	44	26	8	4	2
1980 to 1989	846	413	156	179	43	33	15	4	2
1990 to 1999	690	390	145	65	44	27	12	4	1
Floors									
One	2,879	1,751	633	311	109	48	22	5	1
Two	1,168	475	317	238	81	40	12	4	1
Three	420	101	121	119	41	26	8	3	Q
Four to Nine	178	Q	39	40	26	28	15	7	2
Ten or More	11	N	N	Q	Q	Q	3	4	3
Census Region									
Northeast	686	305	169	130	39	26	10	5	2
Midwest	1,188	620	273	188	48	35	16	7	2
South	1,762	916	413	260	93	49	20	8	2
West	1,021	506	255	130	76	35	13	4	1
Workers (main shift)									
Fewer than 5	2,376	1,567	511	250	37	7	2	Q	Q
5 to 9	807	482	180	105	32	6	3	Q	N
10 to 19	683	226	249	146	47	12	Q	Q	Q
20 to 49	487	66	144	157	75	36	7	2	Q
50 to 99	174	Q	Q	46	46	45	15	2	Q
100 to 249	90	Q	Q	Q	18	29	18	7	1
250 or More	39	N	N	Q	Q	10	12	10	5
Weekly Operating Hours									
39 or Fewer	978	605	244	105	17	4	Q	Q	Q
40 to 48	1,156	557	342	153	58	36	8	2	Q
49 to 60	986	471	225	177	63	34	11	4	1
61 to 84	664	292	163	121	45	26	12	4	2
85 to 167	474	240	76	91	27	21	13	4	1
Open Continuously	398	183	60	62	47	24	12	7	3

Table B6. Building Size, Number of Buildings, 1999

	Number of Buildings (thousand)								
		Building Size							
	All Buildings	1,001 to 5,000 Square Feet	5,001 to 10,000 Square Feet	10,001 to 25,000 Square Feet	25,001 to 50,000 Square Feet	50,001 to 100,000 Square Feet	100,001 to 200,000 Square Feet	200,001 to 500,000 Square Feet	Over 500,000 Square Feet
Ownership and Occupancy									
Nongovernment Owned	4,135	2,131	1,006	618	202	109	47	18	5
Owner Occupied	2,801	1,433	693	431	129	69	29	13	5
Nonowner Occupied	1,099	548	250	172	68	39	17	4	1
Unoccupied	236	151	Q	15	Q	Q	Q	Q	Q
Government Owned	521	216	104	91	55	36	13	5	2
Vacancy Status									
Completely Vacant	140	Q	Q	8	Q	Q	Q	Q	N
Mostly Vacant	113	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	697	282	200	107	51	33	15	6	3
Not At All Vacant	3,707	1,913	837	584	198	110	44	17	4
Number of Establishments									
One	3,528	1,897	802	506	184	88	34	14	3
2 to 5	688	272	222	121	33	26	10	3	1
6 to 10	114	Q	17	51	15	12	4	2	Q
11 to 20	48	Q	Q	12	15	12	6	2	Q
More than 20	27	Q	Q	Q	Q	6	5	2	3
Currently Unoccupied	251	164	Q	17	Q	Q	Q	Q	Q
Energy Sources (more than one may apply)									
Electricity	4,395	2,186	1,036	688	253	143	59	23	7
Natural Gas	2,670	1,193	684	448	176	103	42	18	5
Fuel Oil	434	220	74	65	28	22	13	9	4
District Heat	117	Q	Q	24	19	13	7	3	2
District Chilled Water	50	Q	Q	Q	7	7	5	2	1
Propane	451	215	124	74	17	13	6	2	1
Other	153	93	Q	19	7	5	Q	Q	Q
Energy End Uses (more than one may apply)									
Buildings with Space Heating	4,016	1,982	946	629	237	137	57	22	7
Buildings with Cooling	3,560	1,680	828	611	223	134	55	21	7
Buildings with Water Heating	3,239	1,456	778	574	222	127	54	21	7
Buildings with Cooking	857	357	176	150	72	54	29	14	5
Buildings with Manufacturing	151	Q	36	28	11	9	3	1	Q
Buildings with Electricity Generation	172	Q	Q	24	22	26	13	9	4
Percent of Floorspace Heated									
Not Heated	641	366	164	79	20	8	3	1	Q
1 to 50	576	230	194	102	29	12	5	2	1
51 to 99	627	272	149	128	45	20	7	4	2
100	2,813	1,479	603	399	162	105	45	16	5
Percent of Floorspace Cooled									
Not Cooled	1,097	668	282	98	34	10	4	2	Q
1 to 50	1,012	352	292	242	69	37	13	7	1
51 to 99	751	294	188	146	58	37	16	8	3
100	1,796	1,034	348	222	96	60	27	7	2
Percent Lit When Open									
Zero	34	Q	Q	Q	Q	N	Q	N	N
1 to 50	835	351	279	147	40	13	4	2	0
51 to 99	1,228	517	351	198	84	52	16	8	3
100	2,096	1,156	367	316	124	77	39	13	4
Building Never Open/ Electricity Not Used	464	294	113	45	8	Q	Q	Q	Q

Table B6. Building Size, Number of Buildings, 1999

	Number of Buildings (thousand)								
		Building Size							
	All Buildings	1,001 to 5,000 Square Feet	5,001 to 10,000 Square Feet	10,001 to 25,000 Square Feet	25,001 to 50,000 Square Feet	50,001 to 100,000 Square Feet	100,001 to 200,000 Square Feet	200,001 to 500,000 Square Feet	Over 500,000 Square Feet
Heating Equipment (more than one may apply)									
Heat Pumps	492	240	100	81	37	20	8	3	1
Furnaces	1,460	783	387	206	47	25	9	3	1
Individual Space Heaters	894	397	183	191	62	35	18	6	3
District Heat	96	Q	Q	19	17	13	7	3	2
Boilers	581	146	144	128	72	52	24	11	3
Packaged Heating Units	1,347	589	302	253	101	62	27	10	3
Other	185	98	Q	22	14	8	3	2	1
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	676	319	211	96	24	17	7	2	1
Heat Pumps	485	240	95	80	35	22	9	4	1
Individual Air Conditioners	799	356	184	149	60	29	13	7	1
District Chilled Water	50	Q	Q	Q	7	7	5	2	1
Central Chillers	130	Q	Q	17	25	28	16	9	4
Packaged Air Conditioning Units	1,953	857	423	387	141	89	37	14	4
Swamp Coolers	136	79	25	13	9	7	2	Q	Q
Other	49	Q	Q	Q	4	Q	Q	Q	Q
Main Equipment Replaced Since 1995 (more than one may apply)									
Heating	984	469	250	160	61	32	9	4	1
Cooling	1,085	490	239	224	73	38	13	7	2
Lighting Equipment Types (more than one may apply)									
Incandescent	2,193	980	548	391	138	83	33	14	5
Standard Fluorescent	3,778	1,795	904	628	230	136	56	22	7
Compact Fluorescent	607	198	149	109	62	48	24	12	4
High Intensity Discharge	430	80	94	111	60	43	25	11	5
Halogen	572	194	136	123	43	41	23	9	4
Other	58	Q	Q	Q	Q	Q	Q	Q	Q
Personal Computers									
None	1,617	1,056	413	117	23	5	2	1	Q
1 to 4	1,636	875	394	288	59	14	6	Q	Q
5 to 9	542	280	105	95	41	18	3	Q	Q
10 to 19	403	106	142	93	34	19	6	2	Q
20 to 49	247	Q	53	78	46	26	12	2	1
50 to 99	105	Q	Q	32	34	25	7	3	1
100 to 249	71	Q	Q	Q	17	30	12	4	1
250 or More	36	N	N	N	Q	9	11	9	4
Photocopiers									
None	2,825	1,706	691	309	81	29	7	3	Q
One	1,114	500	295	217	69	23	8	1	Q
2 to 4	540	136	99	148	75	55	19	7	1
5 to 9	102	Q	Q	23	18	17	9	4	1
10 or More	75	N	N	Q	14	21	17	9	5
Other Electronic Equipment (more than one may apply)									
Laser Printers	1,949	732	424	412	181	121	52	20	7
FAX Machines	2,807	1,203	661	509	213	136	56	22	7
Medical Diagnostic Equipment	86	Q	Q	Q	6	4	2	2	1

Table B6. Building Size, Number of Buildings, 1999

	Number of Buildings (thousand)								
		Building Size							
	All Buildings	1,001 to 5,000 Square Feet	5,001 to 10,000 Square Feet	10,001 to 25,000 Square Feet	25,001 to 50,000 Square Feet	50,001 to 100,000 Square Feet	100,001 to 200,000 Square Feet	200,001 to 500,000 Square Feet	Over 500,000 Square Feet
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	767	320	157	123	68	52	28	14	5
Activities with Large Amounts of Hot Water	698	232	142	149	87	47	25	12	4
Building Shell Conservation Features (more than one may apply)									
Multipaned Windows	2,130	1,005	497	344	138	89	36	15	5
Tinted, Reflective, or Shading Glass	1,283	507	329	214	110	69	35	13	5
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	550	188	136	81	57	49	23	10	5
Economizer Cycle	567	218	104	86	61	52	30	11	5
HVAC Maintenance	2,786	1,217	627	521	209	129	55	21	7
Energy Management and Control System (EMCS)	460	150	59	81	65	56	31	13	5
Lighting Conservation Features (more than one may apply)									
Specular Reflectors	843	389	186	123	64	46	20	10	4
Electronic Ballasts	2,167	952	545	354	149	98	45	17	6
Skylights or Atriums	580	200	128	116	62	39	20	9	4
Off-Hour Equipment Reduction (more than one may apply)									
Heating	2,862	1,387	743	432	160	89	36	11	4
Cooling	2,622	1,229	659	442	151	90	35	12	4
Lighting	3,675	1,794	913	592	197	115	45	15	4
Office Equipment	184	Q	Q	50	39	38	14	4	1

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.
Note: 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.

Table B7. Building Size, Floorspace, 1999

	Total Floorspace (million square feet)								
		Building Size							
	All Buildings	1,001 to 5,000 Square Feet	5,001 to 10,000 Square Feet	10,001 to 25,000 Square Feet	25,001 to 50,000 Square Feet	50,001 to 100,000 Square Feet	100,001 to 200,000 Square Feet	200,001 to 500,000 Square Feet	Over 500,000 Square Feet
All Buildings	67,338	6,774	8,238	11,153	9,311	10,112	8,271	6,851	6,628
Principal Building Activity									
Education	8,651	338	444	883	1,803	2,144	1,484	1,311	Q
Food Sales	994	302	Q	Q	Q	Q	Q	N	N
Food Service	1,851	754	541	352	Q	Q	Q	N	N
Health Care	2,918	189	Q	135	274	263	315	756	767
Inpatient	1,865	N	N	Q	Q	Q	243	681	760
Outpatient	1,053	189	Q	Q	235	Q	Q	Q	Q
Lodging	4,521	Q	283	436	1,142	758	530	794	Q
Mercantile	10,398	925	1,047	2,131	1,001	1,498	1,765	427	1,605
Retail (Other Than Mall)	4,766	901	749	1,511	400	464	662	Q	Q
Enclosed and Strip Malls	5,631	Q	298	619	601	1,034	1,103	359	1,593
Office	12,044	1,212	1,063	1,486	1,191	1,951	1,717	1,560	1,864
Public Assembly	4,393	337	646	968	559	740	285	347	Q
Public Order and Safety	1,168	Q	Q	365	155	Q	Q	Q	Q
Religious Worship	3,405	272	730	1,435	530	Q	Q	N	Q
Service	3,388	825	962	630	380	Q	Q	Q	Q
Warehouse and Storage	10,477	790	1,242	1,647	1,693	1,525	1,565	1,290	725
Other	1,222	Q	Q	205	Q	Q	Q	Q	Q
Vacant	1,908	497	527	278	246	Q	Q	Q	Q
Year Constructed									
1919 or Before	4,034	655	791	972	489	483	Q	Q	Q
1920 to 1945	6,445	798	776	1,504	673	637	727	705	624
1946 to 1959	9,127	1,025	1,777	1,488	1,343	1,343	789	796	565
1960 to 1969	10,866	928	1,165	1,267	1,987	1,698	1,593	1,243	987
1970 to 1979	11,840	1,056	1,392	2,045	1,587	1,816	1,147	1,206	1,593
1980 to 1989	13,931	1,153	1,150	2,767	1,594	2,273	2,088	1,307	1,599
1990 to 1999	11,094	1,159	1,188	1,110	1,638	1,862	1,662	1,344	1,131
Floors									
One	26,800	4,898	4,726	4,887	3,929	3,377	2,930	1,328	724
Two	16,985	1,528	2,263	3,689	2,922	2,799	1,645	1,059	1,081
Three	8,928	278	942	1,907	1,475	1,776	1,128	942	Q
Four to Nine	10,180	Q	308	666	979	2,015	2,112	2,325	1,704
Ten or More	4,445	N	N	Q	Q	Q	457	1,197	2,638
Census Region									
Northeast	12,360	901	1,302	1,954	1,407	1,771	1,461	1,362	2,202
Midwest	16,761	1,835	2,045	2,881	1,773	2,436	2,279	1,993	1,519
South	23,485	2,536	3,058	4,194	3,384	3,450	2,864	2,273	1,726
West	14,731	1,503	1,834	2,124	2,746	2,455	1,666	1,222	1,180
Workers (main shift)									
Fewer than 5	14,321	4,230	3,748	3,922	1,361	430	356	Q	Q
5 to 9	6,325	1,502	1,331	1,557	1,098	444	350	Q	N
10 to 19	8,028	791	1,792	2,263	1,647	799	Q	Q	Q
20 to 49	10,814	235	1,174	2,510	2,759	2,437	955	635	Q
50 to 99	8,898	Q	Q	819	1,690	3,172	2,000	598	Q
100 to 249	8,356	Q	Q	Q	692	2,067	2,552	1,927	979
250 or More	10,595	N	N	Q	Q	762	1,767	3,015	4,977
Weekly Operating Hours									
39 or Fewer	6,596	1,712	1,790	1,632	571	269	Q	Q	Q
40 to 48	13,105	1,621	2,595	2,437	2,049	2,483	1,151	656	Q
49 to 60	14,200	1,384	1,633	2,712	2,291	2,421	1,534	1,200	1,025
61 to 84	12,458	859	1,213	1,952	1,673	1,751	1,710	1,231	2,068
85 to 167	9,116	745	575	1,419	1,037	1,486	1,751	1,244	859
Open Continuously	11,863	454	432	1,001	1,689	1,702	1,787	2,271	2,528

Table B7. Building Size, Floorspace, 1999

	Total Floorspace (million square feet)								
		Building Size							
	All Buildings	1,001 to 5,000 Square Feet	5,001 to 10,000 Square Feet	10,001 to 25,000 Square Feet	25,001 to 50,000 Square Feet	50,001 to 100,000 Square Feet	100,001 to 200,000 Square Feet	200,001 to 500,000 Square Feet	Over 500,000 Square Feet
Ownership and Occupancy									
Nongovernment Owned	54,994	6,189	7,466	9,655	7,264	7,571	6,509	5,229	5,112
Owner Occupied	37,785	4,040	5,179	6,736	4,577	4,723	4,097	3,924	4,509
Nonowner Occupied	15,596	1,686	1,827	2,656	2,496	2,775	2,374	1,190	592
Unoccupied	1,613	463	Q	264	Q	Q	Q	Q	Q
Government Owned	12,343	585	772	1,498	2,047	2,541	1,762	1,622	1,516
Vacancy Status									
Completely Vacant	953	Q	Q	124	Q	Q	Q	Q	N
Mostly Vacant	956	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	15,520	784	1,430	1,824	1,868	2,291	2,067	1,769	3,487
Not At All Vacant	49,910	5,493	6,281	9,051	7,196	7,726	6,127	4,940	3,094
Number of Establishments									
One	43,343	5,358	5,952	7,812	6,720	6,063	4,798	4,126	2,514
2 to 5	10,582	857	1,630	1,982	1,220	1,833	1,453	931	676
6 to 10	3,574	Q	137	784	550	845	480	498	Q
11 to 20	3,260	Q	Q	Q	494	839	790	455	416
More than 20	4,811	Q	Q	Q	Q	432	690	702	2,771
Currently Unoccupied	1,769	512	Q	296	Q	Q	Q	Q	Q
Energy Sources (more than one may apply)									
Electricity	65,716	6,280	7,721	10,843	9,175	10,034	8,246	6,790	6,628
Natural Gas	45,525	3,566	5,088	7,001	6,405	7,165	5,915	5,282	5,104
Fuel Oil	13,285	620	583	983	983	1,612	1,875	2,984	3,645
District Heat	5,891	Q	Q	414	660	933	903	1,003	1,707
District Chilled Water	2,750	Q	Q	Q	294	525	630	470	630
Propane	6,290	635	986	1,203	568	865	854	616	562
Other	2,322	292	Q	290	250	350	Q	Q	Q
Energy End Uses (more than one may apply)									
Buildings with Space Heating	61,602	5,684	7,090	9,865	8,565	9,597	7,893	6,445	6,465
Buildings with Cooling	58,474	4,879	6,212	9,530	8,116	9,401	7,609	6,345	6,382
Buildings with Water Heating	56,115	4,280	5,748	9,000	8,088	8,887	7,527	6,258	6,327
Buildings with Cooking	24,681	1,095	1,272	2,415	2,630	3,901	4,092	4,254	5,020
Buildings with Manufacturing	3,126	Q	318	519	390	600	478	283	Q
Buildings with Electricity Generation	11,882	Q	Q	433	813	1,920	1,836	2,778	3,725
Percent of Floorspace Heated									
Not Heated	5,736	1,091	1,148	1,289	746	515	378	406	Q
1 to 50	7,593	707	1,504	1,611	1,078	877	739	589	487
51 to 99	10,745	750	1,177	1,936	1,690	1,407	946	1,341	1,498
100	43,264	4,227	4,409	6,317	5,796	7,313	6,207	4,515	4,480
Percent of Floorspace Cooled									
Not Cooled	8,864	1,895	2,026	1,623	1,195	711	662	506	Q
1 to 50	16,846	1,084	2,233	3,829	2,517	2,574	1,701	1,950	957
51 to 99	16,966	838	1,435	2,224	2,128	2,668	2,281	2,339	3,053
100	24,662	2,957	2,544	3,477	3,470	4,159	3,627	2,055	2,372
Percent Lit When Open									
Zero	173	Q	Q	Q	Q	N	Q	N	N
1 to 50	9,187	1,061	2,014	2,320	1,474	925	529	448	415
51 to 99	20,665	1,499	2,614	3,085	3,013	3,657	2,247	2,345	2,206
100	34,233	3,299	2,793	4,953	4,499	5,387	5,407	3,914	3,982
Building Never Open/ Electricity Not Used	3,080	849	811	762	278	Q	Q	Q	Q

Table B7. Building Size, Floorspace, 1999

	Total Floorspace (million square feet)								
		Building Size							
	All Buildings	1,001 to 5,000 Square Feet	5,001 to 10,000 Square Feet	10,001 to 25,000 Square Feet	25,001 to 50,000 Square Feet	50,001 to 100,000 Square Feet	100,001 to 200,000 Square Feet	200,001 to 500,000 Square Feet	Over 500,000 Square Feet
Heating Equipment (more than one may apply)									
Heat Pumps	8,923	679	745	1,288	1,376	1,493	1,095	996	1,250
Furnaces	14,449	2,271	2,848	3,047	1,674	1,718	1,283	807	802
Individual Space Heaters	17,349	1,183	1,350	3,021	2,218	2,492	2,467	1,974	2,643
District Heat	5,534	Q	Q	307	617	905	883	963	1,698
Boilers	19,522	463	1,040	2,047	2,591	3,698	3,334	3,268	3,081
Packaged Heating Units	25,743	1,779	2,301	3,994	3,695	4,262	3,811	2,943	2,959
Other	4,073	250	Q	401	510	511	450	782	903
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	8,329	890	1,606	1,420	860	1,221	905	715	712
Heat Pumps	9,147	700	707	1,270	1,304	1,593	1,229	1,126	1,219
Individual Air Conditioners	14,276	962	1,396	2,482	2,140	2,057	1,834	2,032	1,373
District Chilled Water	2,750	Q	Q	Q	294	525	630	470	630
Central Chillers	12,909	Q	Q	307	919	1,989	2,331	2,963	4,223
Packaged Air Conditioning Units	36,527	2,613	3,197	6,031	5,120	6,164	5,217	4,106	4,080
Swamp Coolers	2,219	253	181	207	325	477	307	Q	Q
Other	1,312	Q	Q	Q	153	Q	Q	Q	Q
Main Equipment Replaced Since 1995 (more than one may apply)									
Heating	13,220	1,325	1,757	2,472	2,145	2,214	1,359	1,141	807
Cooling	17,390	1,399	1,638	3,402	2,614	2,709	1,809	2,032	1,787
Lighting Equipment Types (more than one may apply)									
Incandescent	38,156	2,946	4,047	6,055	5,004	5,880	4,685	4,396	5,143
Standard Fluorescent	60,344	5,154	6,722	9,815	8,344	9,525	7,817	6,423	6,544
Compact Fluorescent	20,666	738	1,108	1,759	2,296	3,425	3,429	3,575	4,336
High Intensity Discharge	19,223	245	663	1,701	2,224	3,101	3,633	3,259	4,397
Halogen	17,926	600	991	1,996	1,611	2,929	3,241	2,677	3,882
Other	1,004	Q	Q	Q	Q	Q	Q	Q	Q
Personal Computers									
None	9,583	2,987	2,983	1,839	825	310	305	305	Q
1 to 4	13,853	2,351	2,964	4,383	2,133	947	807	Q	Q
5 to 9	6,528	936	752	1,520	1,439	1,240	396	Q	Q
10 to 19	7,514	387	1,147	1,432	1,259	1,393	830	730	Q
20 to 49	8,087	Q	366	1,303	1,662	1,757	1,657	692	540
50 to 99	5,867	Q	Q	578	1,227	1,708	957	813	557
100 to 249	6,818	Q	Q	Q	659	2,121	1,620	1,027	1,289
250 or More	9,088	N	N	N	Q	635	1,698	2,874	3,774
Photocopiers									
None	21,631	4,851	5,062	4,841	2,878	1,974	1,016	704	Q
One	12,928	1,487	2,237	3,430	2,495	1,613	1,090	378	Q
2 to 4	15,620	427	737	2,348	2,770	3,819	2,543	1,998	978
5 to 9	5,384	Q	Q	394	643	1,200	1,234	1,038	665
10 or More	11,774	N	N	Q	526	1,507	2,389	2,733	4,479
Other Electronic Equipment (more than one may apply)									
Laser Printers	46,567	2,190	3,206	6,508	6,550	8,540	7,183	6,109	6,281
FAX Machines	54,764	3,594	4,931	8,093	7,773	9,563	7,786	6,425	6,599
Medical Diagnostic Equipment	2,493	Q	Q	Q	193	245	296	732	673

Table B7. Building Size, Floorspace, 1999

	Total Floorspace (million square feet)								
		Building Size							
	All Buildings	1,001 to 5,000 Square Feet	5,001 to 10,000 Square Feet	10,001 to 25,000 Square Feet	25,001 to 50,000 Square Feet	50,001 to 100,000 Square Feet	100,001 to 200,000 Square Feet	200,001 to 500,000 Square Feet	Over 500,000 Square Feet
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	23,328	1,005	1,129	2,002	2,472	3,729	3,923	4,104	4,965
Activities with Large Amounts of Hot Water	21,793	760	1,063	2,331	3,158	3,346	3,547	3,666	3,922
Building Shell Conservation Features (more than one may apply)									
Multipaned Windows	38,193	3,052	3,806	5,506	5,027	6,209	5,064	4,499	5,030
Tinted, Reflective, or Shading Glass	29,915	1,530	2,423	3,385	3,993	4,866	4,938	4,032	4,746
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	19,387	634	1,058	1,309	2,115	3,430	3,350	3,077	4,414
Economizer Cycle	21,256	640	798	1,392	2,219	3,679	4,164	3,408	4,955
HVAC Maintenance	53,395	3,690	4,671	8,100	7,560	9,044	7,613	6,207	6,510
Energy Management and Control System (EMCS)	21,613	511	475	1,391	2,299	3,953	4,267	3,930	4,787
Lighting Conservation Features (more than one may apply)									
Specular Reflectors	19,994	1,171	1,389	1,970	2,384	3,285	2,837	3,087	3,870
Electronic Ballasts	42,035	2,736	4,044	5,620	5,468	6,903	6,366	5,248	5,650
Skylights or Atriums	18,286	556	977	1,949	2,251	2,745	2,765	2,898	4,144
Off-Hour Equipment Reduction (more than one may apply)									
Heating	39,969	4,018	5,522	6,731	5,788	6,269	5,007	3,315	3,318
Cooling	39,161	3,703	4,901	6,912	5,484	6,322	4,854	3,438	3,546
Lighting	51,083	5,227	6,819	9,236	7,153	8,069	6,268	4,265	4,046
Office Equipment	9,063	Q	Q	852	1,403	2,625	1,927	1,213	825

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.
Note: 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.

Table B8. Year Constructed, Number of Buildings, 1999

	Number of Buildings (thousand)							
		Year Constructed						
	All Buildings	1919 or Before	1920 to 1945	1946 to 1959	1960 to 1969	1970 to 1979	1980 to 1989	1990 to 1999
All Buildings	4,657	419	499	763	665	774	846	690
Building Floorspace (Square Feet)								
1,001 to 5,000	2,348	227	270	359	321	367	413	390
5,001 to 10,000	1,110	107	102	240	166	193	156	145
10,001 to 25,000	708	63	90	97	84	130	179	65
25,001 to 50,000	257	13	20	39	53	44	43	44
50,001 to 100,000	145	7	9	19	24	26	33	27
100,001 to 200,000	59	Q	5	5	12	8	15	12
200,001 to 500,000	23	Q	2	3	4	4	4	4
Over 500,000	7	Q	1	1	1	2	2	1
Principal Building Activity								
Education	327	18	32	71	69	53	37	47
Food Sales	174	Q	Q	Q	Q	Q	Q	50
Food Service	349	Q	48	Q	50	70	80	Q
Health Care	127	Q	Q	27	16	38	15	23
Inpatient	11	Q	Q	1	2	2	2	Q
Outpatient	116	Q	Q	Q	Q	36	14	23
Lodging	153	Q	Q	15	33	33	29	24
Mercantile	667	93	61	154	60	112	127	60
Retail (Other Than Mall)	534	92	46	140	44	78	88	46
Enclosed and Strip Malls	133	Q	Q	14	16	35	39	14
Office	739	72	55	96	96	115	169	135
Public Assembly	305	34	37	31	58	42	59	43
Public Order and Safety	72	Q	Q	Q	Q	Q	Q	5
Religious Worship	307	44	Q	76	47	58	27	33
Service	478	Q	78	89	66	89	88	Q
Warehouse and Storage	603	36	66	68	62	91	132	149
Other	102	Q	Q	Q	27	Q	Q	Q
Vacant	253	49	57	67	45	Q	Q	Q
Floors								
One	2,879	88	209	478	461	568	547	529
Two	1,168	141	166	202	155	155	221	127
Three	420	136	81	72	31	38	45	16
Four to Nine	178	52	41	10	17	11	30	17
Ten or More	11	Q	2	1	2	2	3	1
Census Region								
Northeast	686	126	65	138	97	77	122	62
Midwest	1,188	172	206	174	155	141	165	175
South	1,762	69	155	289	199	338	408	304
West	1,021	52	73	162	215	219	151	149
Workers (main shift)								
Fewer than 5	2,376	280	331	405	316	344	371	330
5 to 9	807	62	65	135	124	174	126	121
10 to 19	683	52	58	107	95	110	159	102
20 to 49	487	12	29	84	78	81	116	87
50 to 99	174	3	8	22	27	43	44	27
100 to 249	90	Q	5	7	21	15	19	16
250 or More	39	Q	3	3	5	8	11	7
Weekly Operating Hours								
39 or Fewer	978	132	140	189	130	152	124	111
40 to 48	1,156	116	145	213	154	147	222	158
49 to 60	986	95	75	152	145	185	150	185
61 to 84	664	39	68	122	109	111	118	96
85 to 167	474	20	42	41	50	111	128	82
Open Continuously	398	17	29	46	77	67	104	58

Table B8. Year Constructed, Number of Buildings, 1999

	Number of Buildings (thousand)							
		Year Constructed						
	All Buildings	1919 or Before	1920 to 1945	1946 to 1959	1960 to 1969	1970 to 1979	1980 to 1989	1990 to 1999
Ownership and Occupancy								
Nongovernment Owned	4,135	384	436	670	581	684	761	619
Owner Occupied	2,801	256	291	450	377	465	532	431
Nonowner Occupied	1,099	94	130	159	172	201	195	148
Unoccupied	236	Q	Q	62	Q	Q	Q	Q
Government Owned	521	35	63	93	85	90	85	71
Vacancy Status								
Completely Vacant	140	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	113	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	697	71	64	89	89	104	134	146
Not At All Vacant	3,707	298	379	606	531	652	704	537
Energy Sources (more than one may apply)								
Electricity	4,395	363	480	716	628	758	781	669
Natural Gas	2,670	291	329	426	406	481	389	349
Fuel Oil	434	53	55	109	65	37	70	45
District Heat	117	20	9	21	18	Q	16	15
District Chilled Water	50	Q	2	5	7	Q	Q	4
Propane	451	Q	45	65	72	66	89	94
Other	153	Q	Q	36	12	24	39	Q
Energy End Uses (more than one may apply)								
Buildings with Space Heating	4,016	350	430	666	557	691	713	608
Buildings with Cooling	3,560	260	313	589	496	649	702	549
Buildings with Water Heating	3,239	277	311	493	493	592	623	450
Buildings with Cooking	857	69	85	115	131	161	173	124
Buildings with Manufacturing	151	Q	Q	28	19	32	37	Q
Buildings with Electricity Generation	172	Q	4	41	25	23	26	44
Percent of Floorspace Heated								
Not Heated	641	69	69	97	108	83	133	82
1 to 50	576	48	79	93	58	107	113	78
51 to 99	627	56	103	86	75	86	111	109
100	2,813	246	248	487	424	498	490	421
Percent of Floorspace Cooled								
Not Cooled	1,097	159	186	174	169	125	144	141
1 to 50	1,012	105	133	205	126	163	148	131
51 to 99	751	65	94	102	123	118	128	122
100	1,796	90	86	282	247	368	426	296
Percent Lit When Open								
Zero	34	N	N	Q	Q	Q	Q	Q
1 to 50	835	122	152	159	91	113	108	91
51 to 99	1,228	121	107	202	218	237	199	144
100	2,096	99	175	315	283	374	464	387
Building Never Open/ Electricity Not Used	464	77	65	82	72	43	73	Q
Heating Equipment (more than one may apply)								
Heat Pumps	492	6	23	95	39	102	124	103
Furnaces	1,460	163	206	251	191	205	237	208
Individual Space Heaters	894	79	107	180	110	172	127	119
District Heat	96	19	9	21	16	Q	11	4
Boilers	581	100	83	121	98	63	65	52
Packaged Heating Units	1,347	40	110	157	213	304	289	235
Other	185	Q	Q	33	19	35	59	Q

Table B8. Year Constructed, Number of Buildings, 1999

	Number of Buildings (thousand)							
		Year Constructed						
	All Buildings	1919 or Before	1920 to 1945	1946 to 1959	1960 to 1969	1970 to 1979	1980 to 1989	1990 to 1999
Cooling Equipment (more than one may apply)								
Residential-Type Central Air Conditioners	676	78	75	129	39	105	143	107
Heat Pumps	485	Q	24	89	39	106	121	91
Individual Air Conditioners	799	101	124	178	102	112	96	86
District Chilled Water	50	Q	2	5	7	Q	Q	4
Central Chillers	130	Q	8	13	32	17	22	29
Packaged Air Conditioning Units	1,953	92	143	275	332	398	421	291
Swamp Coolers	136	Q	Q	29	25	33	19	6
Other	49	Q	Q	Q	Q	Q	Q	Q
Main Equipment Replaced Since 1995 (more than one may apply)								
Heating	984	83	116	201	128	211	138	107
Cooling	1,085	83	112	216	157	239	186	93
Lighting Equipment Types (more than one may apply)								
Incandescent	2,193	221	283	334	307	391	415	242
Standard Fluorescent	3,778	307	376	622	525	674	721	552
Compact Fluorescent	607	44	58	56	122	81	123	121
High Intensity Discharge	430	41	31	54	48	69	94	93
Halogen	572	55	33	79	86	112	131	77
Other	58	Q	Q	Q	Q	Q	Q	Q
Personal Computers								
None	1,617	187	222	297	209	243	253	206
1 to 4	1,636	156	194	274	245	297	272	198
5 to 9	542	33	28	80	68	117	100	117
10 to 19	403	27	12	43	66	53	108	94
20 to 49	247	10	23	49	35	32	57	40
50 to 99	105	Q	14	10	17	15	29	18
100 to 249	71	3	4	6	18	10	18	12
250 or More	36	Q	3	4	6	7	9	5
Photocopiers								
None	2,825	289	338	502	409	446	489	352
One	1,114	88	100	160	178	205	184	198
2 to 4	540	37	53	85	53	89	126	97
5 to 9	102	Q	Q	4	16	21	23	34
10 or More	75	3	5	Q	9	13	24	10
Other Electronic Equipment (more than one may apply)								
Laser Printers	1,949	163	153	290	305	300	412	327
FAX Machines	2,807	222	251	430	383	481	564	476
Medical Diagnostic Equipment	86	Q	Q	23	8	28	14	11
Energy-Related Space Functions (more than one may apply)								
Commercial Food Preparation	767	53	82	100	127	135	163	108
Activities with Large Amounts of Hot Water	698	46	92	84	120	154	131	70
Building Shell Conservation Features (more than one may apply)								
Multipaned Windows	2,130	206	182	283	282	301	446	428
Tinted, Reflective, or Shading Glass	1,283	82	71	163	174	283	302	210

Table B8. Year Constructed, Number of Buildings, 1999

	Number of Buildings (thousand)							
		Year Constructed						
	All Buildings	1919 or Before	1920 to 1945	1946 to 1959	1960 to 1969	1970 to 1979	1980 to 1989	1990 to 1999
HVAC Conservation Features (more than one may apply)								
Variable Air-Volume System	550	16	31	84	74	100	118	127
Economizer Cycle	567	23	18	40	121	98	138	129
HVAC Maintenance	2,786	233	250	440	405	461	577	420
Energy Management and Control System (EMCS)	460	17	35	52	110	55	102	90
Lighting Conservation Features (more than one may apply)								
Specular Reflectors	843	48	48	125	132	155	184	151
Electronic Ballasts	2,167	146	201	360	288	428	429	315
Skylights or Atriums	580	40	46	64	68	88	184	89

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.
Note: 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.

Table B9. Year Constructed, Floorspace, 1999

	Total Floorspace (million square feet)							
		Year Constructed						
	All Buildings	1919 or Before	1920 to 1945	1946 to 1959	1960 to 1969	1970 to 1979	1980 to 1989	1990 to 1999
All Buildings	67,338	4,034	6,445	9,127	10,866	11,840	13,931	11,094
Building Floorspace (Square Feet)								
1,001 to 5,000	6,774	655	798	1,025	928	1,056	1,153	1,159
5,001 to 10,000	8,238	791	776	1,777	1,165	1,392	1,150	1,188
10,001 to 25,000	11,153	972	1,504	1,488	1,267	2,045	2,767	1,110
25,001 to 50,000	9,311	489	673	1,343	1,987	1,587	1,594	1,638
50,001 to 100,000	10,112	483	637	1,343	1,698	1,816	2,273	1,862
100,001 to 200,000	8,271	Q	727	789	1,593	1,147	2,088	1,662
200,001 to 500,000	6,851	Q	705	796	1,243	1,206	1,307	1,344
Over 500,000	6,628	Q	624	565	987	1,593	1,599	1,131
Principal Building Activity								
Education	8,651	278	1,138	1,831	2,035	1,411	719	1,239
Food Sales	994	Q	Q	Q	Q	Q	Q	355
Food Service	1,851	Q	265	Q	310	295	347	Q
Health Care	2,918	Q	Q	322	487	852	558	473
Inpatient	1,865	Q	Q	232	377	613	287	Q
Outpatient	1,053	Q	Q	Q	Q	238	271	319
Lodging	4,521	Q	Q	351	870	838	1,289	716
Mercantile	10,398	818	381	1,384	1,305	1,951	2,529	2,030
Retail (Other Than Mall)	4,766	773	242	886	517	509	700	1,139
Enclosed and Strip Malls	5,631	Q	Q	497	788	1,442	1,829	891
Office	12,044	702	1,051	1,155	1,685	2,036	3,586	1,830
Public Assembly	4,393	292	569	534	868	717	678	736
Public Order and Safety	1,168	Q	Q	Q	Q	Q	Q	227
Religious Worship	3,405	385	Q	641	612	718	418	357
Service	3,388	Q	629	541	608	645	515	336
Warehouse and Storage	10,477	380	1,092	1,265	1,247	1,793	2,620	2,079
Other	1,222	Q	Q	Q	355	Q	Q	367
Vacant	1,908	385	468	501	257	Q	Q	Q
Floors								
One	26,800	464	1,455	3,683	4,466	5,156	5,946	5,632
Two	16,985	796	1,569	2,853	2,761	2,860	3,489	2,657
Three	8,928	1,439	1,376	1,328	1,163	1,339	1,309	974
Four to Nine	10,180	1,188	1,457	875	1,707	1,629	2,005	1,319
Ten or More	4,445	Q	589	388	770	857	1,183	512
Census Region								
Northeast	12,360	1,392	1,619	2,030	2,050	1,823	2,070	1,376
Midwest	16,761	1,576	2,423	2,152	2,602	2,347	2,828	2,834
South	23,485	549	1,704	2,910	3,318	4,278	6,263	4,464
West	14,731	518	699	2,035	2,896	3,391	2,771	2,420
Workers (main shift)								
Fewer than 5	14,321	1,863	2,443	2,264	2,015	2,012	2,013	1,712
5 to 9	6,325	506	508	1,012	1,181	1,337	952	829
10 to 19	8,028	637	729	1,415	1,128	1,233	1,731	1,153
20 to 49	10,814	316	691	1,947	1,707	1,682	2,383	2,089
50 to 99	8,898	219	586	833	1,696	1,803	2,161	1,601
100 to 249	8,356	235	658	688	1,561	1,515	1,915	1,786
250 or More	10,595	Q	830	968	1,579	2,259	2,776	1,925
Weekly Operating Hours								
39 or Fewer	6,596	803	1,182	1,292	967	1,035	807	511
40 to 48	13,105	951	1,896	2,095	2,027	1,853	2,511	1,771
49 to 60	14,200	967	1,209	2,083	2,171	2,586	2,892	2,292
61 to 84	12,458	565	672	1,613	2,092	2,482	2,847	2,186
85 to 167	9,116	274	611	934	1,482	1,812	2,021	1,981
Open Continuously	11,863	474	876	1,110	2,127	2,071	2,853	2,352

Table B9. Year Constructed, Floorspace, 1999

	Total Floorspace (million square feet)							
		Year Constructed						
	All Buildings	1919 or Before	1920 to 1945	1946 to 1959	1960 to 1969	1970 to 1979	1980 to 1989	1990 to 1999
Ownership and Occupancy								
Nongovernment Owned	54,994	3,456	4,812	7,053	8,122	9,907	12,507	9,138
Owner Occupied	37,785	2,479	3,575	4,879	5,495	6,795	8,364	6,198
Nonowner Occupied	15,596	728	1,081	1,737	2,419	2,960	3,855	2,817
Unoccupied	1,613	Q	Q	437	Q	Q	Q	Q
Government Owned	12,343	579	1,633	2,074	2,745	1,933	1,424	1,956
Vacancy Status								
Completely Vacant	953	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	956	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	15,520	932	1,360	1,583	2,382	2,646	3,802	2,817
Not At All Vacant	49,910	2,718	4,617	7,043	8,227	9,028	10,057	8,219
Energy Sources (more than one may apply)								
Electricity	65,716	3,714	6,281	8,794	10,686	11,750	13,485	11,007
Natural Gas	45,525	2,766	4,257	6,040	7,512	8,080	8,794	8,076
Fuel Oil	13,285	745	1,060	1,782	2,349	2,446	2,795	2,108
District Heat	5,891	486	764	1,088	1,406	788	682	677
District Chilled Water	2,750	Q	134	406	633	492	424	407
Propane	6,290	Q	473	748	1,220	1,033	1,333	1,295
Other	2,322	Q	Q	433	353	352	499	353
Energy End Uses (more than one may apply)								
Buildings with Space Heating	61,602	3,593	5,559	8,402	9,966	10,916	12,566	10,600
Buildings with Cooling	58,474	2,911	4,383	7,601	9,325	11,050	12,849	10,355
Buildings with Water Heating	56,115	3,130	4,644	7,154	9,421	10,182	12,137	9,446
Buildings with Cooking	24,681	1,091	2,232	3,195	4,178	4,551	5,030	4,403
Buildings with Manufacturing	3,126	Q	Q	535	409	555	744	485
Buildings with Electricity Generation	11,882	267	520	1,205	2,067	2,438	2,644	2,741
Percent of Floorspace Heated								
Not Heated	5,736	441	886	725	901	924	1,366	493
1 to 50	7,593	507	834	1,304	1,038	1,458	1,254	1,198
51 to 99	10,745	798	1,249	1,178	1,891	1,670	2,181	1,777
100	43,264	2,288	3,476	5,920	7,037	7,789	9,131	7,625
Percent of Floorspace Cooled								
Not Cooled	8,864	1,123	2,062	1,526	1,542	790	1,083	739
1 to 50	16,846	1,237	1,936	3,068	2,406	2,812	2,833	2,553
51 to 99	16,966	1,022	1,234	1,796	3,235	2,998	3,584	3,096
100	24,662	653	1,213	2,737	3,683	5,240	6,431	4,706
Percent Lit When Open								
Zero	173	N	N	Q	Q	Q	Q	Q
1 to 50	9,187	1,130	1,452	1,720	1,162	1,448	1,318	957
51 to 99	20,665	1,290	1,879	2,856	3,765	3,832	3,801	3,242
100	34,233	1,129	2,523	3,930	5,552	6,276	8,153	6,670
Building Never Open/ Electricity Not Used	3,080	486	590	605	371	240	609	Q
Heating Equipment (more than one may apply)								
Heat Pumps	8,923	251	449	1,064	1,129	1,651	2,583	1,796
Furnaces	14,449	1,214	1,552	2,082	2,053	2,235	2,927	2,387
Individual Space Heaters	17,349	1,042	1,772	2,551	2,496	3,345	3,428	2,715
District Heat	5,534	480	764	1,065	1,351	769	606	499
Boilers	19,522	1,397	2,264	2,762	4,231	3,275	3,114	2,479
Packaged Heating Units	25,743	428	1,476	2,917	3,961	4,899	6,379	5,684
Other	4,073	Q	Q	563	560	684	1,012	786

Table B9. Year Constructed, Floorspace, 1999

	Total Floorspace (million square feet)							
		Year Constructed						
	All Buildings	1919 or Before	1920 to 1945	1946 to 1959	1960 to 1969	1970 to 1979	1980 to 1989	1990 to 1999
Cooling Equipment (more than one may apply)								
Residential-Type Central Air Conditioners	8,329	677	657	1,239	957	1,621	1,904	1,274
Heat Pumps	9,147	284	551	984	1,119	1,793	2,711	1,705
Individual Air Conditioners	14,276	1,206	2,074	2,833	2,296	2,237	2,155	1,476
District Chilled Water	2,750	Q	134	406	633	492	424	407
Central Chillers	12,909	254	984	1,329	2,765	2,766	2,584	2,229
Packaged Air Conditioning Units	36,527	1,244	2,367	4,427	5,686	7,001	8,978	6,825
Swamp Coolers	2,219	Q	Q	261	527	499	345	339
Other	1,312	Q	Q	Q	Q	316	348	Q
Main Equipment Replaced Since 1995 (more than one may apply)								
Heating	13,220	756	1,212	2,191	2,164	3,100	3,002	794
Cooling	17,390	1,003	1,602	2,735	3,161	4,254	3,692	943
Lighting Equipment Types (more than one may apply)								
Incandescent	38,156	2,533	3,909	4,951	6,268	7,089	8,028	5,377
Standard Fluorescent	60,344	3,246	5,417	8,031	9,939	11,099	12,619	9,993
Compact Fluorescent	20,666	1,040	1,423	2,019	3,445	3,824	4,755	4,160
High Intensity Discharge	19,223	682	1,530	1,981	2,986	3,413	4,166	4,464
Halogen	17,926	871	921	1,861	2,916	3,511	4,272	3,574
Other	1,004	Q	Q	Q	Q	Q	Q	392
Personal Computers								
None	9,583	1,097	1,546	1,772	1,191	1,404	1,476	1,098
1 to 4	13,853	1,281	1,840	2,174	2,357	2,592	2,040	1,569
5 to 9	6,528	264	334	936	837	1,523	1,443	1,191
10 to 19	7,514	484	306	826	1,279	1,112	1,860	1,647
20 to 49	8,087	258	622	1,223	1,021	1,149	2,014	1,801
50 to 99	5,867	Q	549	640	1,012	890	1,341	1,276
100 to 249	6,818	245	405	566	1,480	1,260	1,616	1,245
250 or More	9,088	Q	843	990	1,690	1,910	2,142	1,267
Photocopiers								
None	21,631	1,907	2,625	3,747	3,396	3,578	3,689	2,690
One	12,928	918	1,349	1,660	2,163	2,240	2,240	2,358
2 to 4	15,620	741	1,116	2,176	2,389	2,707	3,571	2,921
5 to 9	5,384	Q	Q	319	1,119	921	1,350	1,373
10 or More	11,774	362	1,159	1,225	1,800	2,394	3,081	1,752
Other Electronic Equipment (more than one may apply)								
Laser Printers	46,567	2,181	3,288	5,675	7,867	8,341	10,449	8,765
FAX Machines	54,764	2,786	4,442	6,835	8,827	10,029	11,961	9,883
Medical Diagnostic Equipment	2,493	Q	Q	296	439	786	507	388
Energy-Related Space Functions (more than one may apply)								
Commercial Food Preparation	23,328	956	2,138	3,051	4,028	4,209	4,827	4,120
Activities with Large Amounts of Hot Water	21,793	802	1,858	2,614	4,123	4,123	4,530	3,743
Building Shell Conservation Features (more than one may apply)								
Multipaned Windows	38,193	2,294	3,049	4,225	5,155	6,395	9,060	8,016
Tinted, Reflective, or Shading Glass	29,915	931	1,467	2,854	4,322	6,087	7,919	6,335

Table B9. Year Constructed, Floorspace, 1999

	Total Floorspace (million square feet)							
		Year Constructed						
	All Buildings	1919 or Before	1920 to 1945	1946 to 1959	1960 to 1969	1970 to 1979	1980 to 1989	1990 to 1999
HVAC Conservation Features (more than one may apply)								
Variable Air-Volume System	19,387	540	960	1,593	3,238	3,718	4,666	4,672
Economizer Cycle	21,256	628	1,103	1,811	3,718	4,380	5,053	4,563
HVAC Maintenance	53,395	2,669	4,242	6,658	8,749	9,669	11,743	9,665
Energy Management and Control System (EMCS)	21,613	509	1,566	2,243	4,020	3,791	4,409	5,074
Lighting Conservation Features (more than one may apply)								
Specular Reflectors	19,994	728	1,380	2,339	2,825	3,887	4,724	4,111
Electronic Ballasts	42,035	1,828	3,472	5,236	6,649	8,174	8,862	7,815
Skylights or Atriums	18,286	803	1,211	1,744	2,549	3,062	5,254	3,664

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.
Note: 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.

Table B10. Employment Size Category, Number of Buildings, 1999

	Number of Buildings (thousand)							
		Number of Workers						
	All Buildings	Fewer than 5 Workers	5 to 9 Workers	10 to 19 Workers	20 to 49 Workers	50 to 99 Workers	100 to 249 Workers	250 or More Workers
All Buildings	4,657	2,376	807	683	487	174	90	39
Building Floorspace (Square Feet)								
1,001 to 5,000	2,348	1,567	482	226	66	Q	Q	N
5,001 to 10,000	1,110	511	180	249	144	Q	Q	N
10,001 to 25,000	708	250	105	146	157	46	Q	Q
25,001 to 50,000	257	37	32	47	75	46	18	Q
50,001 to 100,000	145	7	6	12	36	45	29	10
100,001 to 200,000	59	2	3	Q	7	15	18	12
200,001 to 500,000	23	Q	Q	Q	2	2	7	10
Over 500,000	7	Q	N	Q	Q	Q	1	5
Principal Building Activity								
Education	327	85	59	73	64	32	11	4
Food Sales	174	147	Q	Q	4	Q	Q	Q
Food Service	349	111	77	107	46	Q	Q	N
Health Care	127	Q	Q	Q	13	12	5	4
Inpatient	11	N	Q	Q	Q	Q	2	3
Outpatient	116	Q	Q	Q	10	Q	3	Q
Lodging	153	85	20	20	14	10	4	Q
Mercantile	667	321	124	99	70	32	18	3
Retail (Other Than Mall)	534	319	102	63	35	5	Q	Q
Enclosed and Strip Malls	133	Q	Q	36	35	26	9	3
Office	739	205	183	153	109	36	29	23
Public Assembly	305	198	48	23	22	6	Q	Q
Public Order and Safety	72	Q	Q	Q	28	Q	Q	Q
Religious Worship	307	222	46	19	17	Q	Q	Q
Service	478	271	107	38	51	9	Q	Q
Warehouse and Storage	603	389	81	73	32	21	6	2
Other	102	46	Q	Q	Q	Q	Q	Q
Vacant	253	244	Q	Q	Q	Q	N	Q
Year Constructed								
1919 or Before	419	280	62	52	12	3	Q	Q
1920 to 1945	499	331	65	58	29	8	5	3
1946 to 1959	763	405	135	107	84	22	7	3
1960 to 1969	665	316	124	95	78	27	21	5
1970 to 1979	774	344	174	110	81	43	15	8
1980 to 1989	846	371	126	159	116	44	19	11
1990 to 1999	690	330	121	102	87	27	16	7
Floors								
One	2,879	1,591	497	407	271	78	31	5
Two	1,168	538	220	189	147	50	18	6
Three	420	194	71	62	42	26	20	4
Four to Nine	178	52	19	26	27	18	19	16
Ten or More	11	Q	Q	Q	Q	Q	2	8
Census Region								
Northeast	686	271	163	114	87	30	16	5
Midwest	1,188	668	224	136	95	32	24	9
South	1,762	970	220	273	204	51	32	12
West	1,021	468	199	160	101	61	19	12
Weekly Operating Hours								
39 or Fewer	978	806	93	33	41	Q	Q	Q
40 to 48	1,156	550	219	205	123	36	18	4
49 to 60	986	377	229	202	98	43	26	11
61 to 84	664	251	152	113	87	36	17	8
85 to 167	474	183	78	86	75	34	13	5
Open Continuously	398	209	35	43	63	23	14	11

Table B10. Employment Size Category, Number of Buildings, 1999

	Number of Buildings (thousand)							
		Number of Workers						
	All Buildings	Fewer than 5 Workers	5 to 9 Workers	10 to 19 Workers	20 to 49 Workers	50 to 99 Workers	100 to 249 Workers	250 or More Workers
Ownership and Occupancy								
Nongovernment Owned	4,135	2,187	709	587	413	135	73	33
Owner Occupied	2,801	1,463	489	435	279	64	48	24
Nonowner Occupied	1,099	488	220	152	133	72	25	9
Unoccupied	236	236	N	N	N	N	N	N
Government Owned	521	189	99	96	75	39	18	6
Vacancy Status								
Completely Vacant	140	140	N	N	N	N	N	N
Mostly Vacant	113	104	Q	Q	Q	Q	N	Q
Partially Vacant	697	351	121	73	78	35	26	14
Not At All Vacant	3,707	1,781	686	609	404	138	64	26
Number of Establishments								
One	3,528	1,891	610	520	344	89	54	19
2 to 5	688	208	193	149	92	30	12	5
6 to 10	114	Q	Q	13	41	27	9	3
11 to 20	48	Q	Q	Q	10	22	10	4
More than 20	27	Q	Q	Q	Q	6	5	8
Currently Unoccupied	251	251	N	N	N	N	N	N
Energy Sources (more than one may apply)								
Electricity	4,395	2,121	800	683	487	174	90	39
Natural Gas	2,670	1,151	560	424	321	118	67	28
Fuel Oil	434	182	95	54	54	17	18	15
District Heat	117	38	18	15	12	19	9	7
District Chilled Water	50	Q	Q	Q	3	10	4	5
Propane	451	215	71	74	73	11	6	2
Other	153	83	Q	Q	23	5	Q	1
Energy End Uses (more than one may apply)								
Buildings with Space Heating	4,016	1,835	773	667	456	166	81	38
Buildings with Cooling	3,560	1,513	681	636	433	169	88	39
Buildings with Water Heating	3,239	1,312	643	586	417	159	85	36
Buildings with Cooking	857	287	131	172	154	65	30	18
Buildings with Manufacturing	151	Q	24	31	29	12	3	2
Buildings with Electricity Generation	172	Q	11	19	49	19	23	16
Percent of Floorspace Heated								
Not Heated	641	541	34	16	32	8	Q	Q
1 to 50	576	326	155	57	21	14	2	1
51 to 99	627	332	77	95	86	21	10	7
100	2,813	1,176	541	515	349	132	69	31
Percent of Floorspace Cooled								
Not Cooled	1,097	862	126	47	54	5	Q	Q
1 to 50	1,012	416	270	170	99	36	19	3
51 to 99	751	314	89	152	106	50	28	13
100	1,796	784	322	314	228	83	42	23
Percent Lit When Open								
Zero	34	Q	Q	Q	N	N	N	N
1 to 50	835	558	135	102	32	7	Q	Q
51 to 99	1,228	487	216	210	190	78	35	12
100	2,096	865	442	354	264	90	54	27
Building Never Open/ Electricity Not Used	464	441	Q	Q	N	N	N	N

Table B10. Employment Size Category, Number of Buildings, 1999

	Number of Buildings (thousand)							
		Number of Workers						
	All Buildings	Fewer than 5 Workers	5 to 9 Workers	10 to 19 Workers	20 to 49 Workers	50 to 99 Workers	100 to 249 Workers	250 or More Workers
Heating Equipment (more than one may apply)								
Heat Pumps	492	162	73	131	81	28	11	6
Furnaces	1,460	742	370	164	141	24	17	3
Individual Space Heaters	894	419	188	125	86	46	20	10
District Heat	96	30	14	10	12	15	8	7
Boilers	581	191	108	109	83	41	31	18
Packaged Heating Units	1,347	504	204	290	210	84	40	15
Other	185	105	25	12	18	14	5	5
Cooling Equipment (more than one may apply)								
Residential-Type Central Air Conditioners	676	339	133	101	69	18	14	3
Heat Pumps	485	169	68	122	79	29	10	8
Individual Air Conditioners	799	350	163	146	61	44	27	7
District Chilled Water	50	Q	Q	Q	3	10	4	5
Central Chillers	130	28	9	11	22	18	21	20
Packaged Air Conditioning Units	1,953	724	354	383	295	118	54	24
Swamp Coolers	136	69	26	Q	13	5	4	1
Other	49	Q	Q	Q	7	Q	3	1
Lighting Equipment Types (more than one may apply)								
Incandescent	2,193	986	391	373	258	102	56	26
Standard Fluorescent	3,778	1,681	737	627	442	165	88	39
Compact Fluorescent	607	159	105	112	133	43	32	23
High Intensity Discharge	430	153	57	61	76	45	22	14
Halogen	572	176	105	84	120	40	31	17
Other	58	Q	Q	Q	Q	Q	Q	Q
Personal Computers								
None	1,617	1,326	190	72	Q	Q	Q	Q
1 to 4	1,636	941	338	218	111	15	Q	Q
5 to 9	542	59	207	171	91	12	Q	Q
10 to 19	403	Q	63	174	89	36	6	Q
20 to 49	247	Q	Q	38	134	40	12	2
50 to 99	105	Q	Q	Q	33	42	16	2
100 to 249	71	Q	Q	Q	6	22	32	7
250 or More	36	Q	N	Q	Q	3	6	26
Photocopiers								
None	2,825	1,881	488	248	157	28	21	2
One	1,114	419	242	281	135	32	3	Q
2 to 4	540	69	76	149	152	66	25	4
5 to 9	102	Q	Q	Q	40	25	21	5
10 or More	75	Q	Q	Q	Q	23	21	28
Other Electronic Equipment (more than one may apply)								
Laser Printers	1,949	511	370	418	373	156	83	38
FAX Machines	2,807	926	591	573	422	166	89	39
Medical Diagnostic Equipment	86	Q	Q	Q	10	Q	5	4
Lighting Conservation Features (more than one may apply)								
Specular Reflectors	843	295	150	168	125	53	31	20
Electronic Ballasts	2,167	891	400	390	272	124	57	33
Skylights or Atriums	580	238	70	102	86	49	23	12

Table B10. Employment Size Category, Number of Buildings, 1999

	Number of Buildings (thousand)							
		Number of Workers						
	All Buildings	Fewer than 5 Workers	5 to 9 Workers	10 to 19 Workers	20 to 49 Workers	50 to 99 Workers	100 to 249 Workers	250 or More Workers
Off-Hour Equipment Reduction (more than one may apply)								
Heating	2,862	1,270	583	510	312	116	49	23
Cooling	2,622	1,055	556	507	301	117	62	23
Lighting	3,675	1,671	740	611	402	148	75	27
Office Equipment	184	Q	Q	30	73	45	20	8

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.
Note: 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.

Table B11. Employment Size Category, Floorspace, 1999

	Total Floorspace (million square feet)							
		Number of Workers						
	All Buildings	Fewer than 5 Workers	5 to 9 Workers	10 to 19 Workers	20 to 49 Workers	50 to 99 Workers	100 to 249 Workers	250 or More Workers
All Buildings	67,338	14,321	6,325	8,028	10,814	8,898	8,356	10,595
Building Floorspace (Square Feet)								
1,001 to 5,000	6,774	4,230	1,502	791	235	Q	Q	N
5,001 to 10,000	8,238	3,748	1,331	1,792	1,174	Q	Q	N
10,001 to 25,000	11,153	3,922	1,557	2,263	2,510	819	Q	Q
25,001 to 50,000	9,311	1,361	1,098	1,647	2,759	1,690	692	Q
50,001 to 100,000	10,112	430	444	799	2,437	3,172	2,067	762
100,001 to 200,000	8,271	356	350	Q	955	2,000	2,552	1,767
200,001 to 500,000	6,851	Q	Q	Q	635	598	1,927	3,015
Over 500,000	6,628	Q	N	Q	Q	Q	979	4,977
Principal Building Activity								
Education	8,651	420	516	983	2,161	2,258	1,603	710
Food Sales	994	482	Q	Q	159	Q	Q	Q
Food Service	1,851	326	285	718	346	Q	Q	N
Health Care	2,918	Q	Q	Q	212	280	521	1,529
Inpatient	1,865	N	Q	Q	Q	Q	334	1,371
Outpatient	1,053	Q	Q	Q	150	198	187	Q
Lodging	4,521	897	482	672	973	540	618	Q
Mercantile	10,398	1,572	1,035	1,199	1,734	1,666	1,518	1,673
Retail (Other Than Mall)	4,766	1,525	786	826	767	442	320	Q
Enclosed and Strip Malls	5,631	Q	Q	373	967	1,224	1,198	1,572
Office	12,044	744	790	959	1,505	1,312	1,955	4,778
Public Assembly	4,393	1,451	701	360	543	623	407	Q
Public Order and Safety	1,168	Q	Q	Q	329	Q	Q	Q
Religious Worship	3,405	1,962	561	499	279	Q	Q	Q
Service	3,388	1,058	483	415	728	313	Q	Q
Warehouse and Storage	10,477	3,177	1,089	1,485	1,694	1,336	1,004	692
Other	1,222	219	Q	Q	Q	Q	Q	Q
Vacant	1,908	1,723	Q	Q	Q	Q	N	Q
Year Constructed								
1919 or Before	4,034	1,863	506	637	316	219	235	Q
1920 to 1945	6,445	2,443	508	729	691	586	658	830
1946 to 1959	9,127	2,264	1,012	1,415	1,947	833	688	968
1960 to 1969	10,866	2,015	1,181	1,128	1,707	1,696	1,561	1,579
1970 to 1979	11,840	2,012	1,337	1,233	1,682	1,803	1,515	2,259
1980 to 1989	13,931	2,013	952	1,731	2,383	2,161	1,915	2,776
1990 to 1999	11,094	1,712	829	1,153	2,089	1,601	1,786	1,925
Floors								
One	26,800	7,746	3,164	3,867	4,996	3,639	2,481	908
Two	16,985	3,820	1,890	2,205	3,287	2,472	1,818	1,493
Three	8,928	1,798	953	1,200	1,369	1,265	1,430	912
Four to Nine	10,180	867	305	730	1,140	1,385	2,044	3,708
Ten or More	4,445	Q	Q	Q	Q	Q	583	3,575
Census Region								
Northeast	12,360	1,906	1,372	1,472	1,574	1,814	1,702	2,519
Midwest	16,761	4,033	1,689	1,930	2,575	1,876	2,228	2,430
South	23,485	5,579	1,730	2,935	4,174	2,876	2,856	3,335
West	14,731	2,802	1,533	1,690	2,492	2,332	1,570	2,312
Weekly Operating Hours								
39 or Fewer	6,596	5,132	367	215	511	Q	Q	Q
40 to 48	13,105	3,477	1,676	1,973	2,721	1,729	863	666
49 to 60	14,200	1,920	1,838	2,379	2,189	2,079	1,719	2,075
61 to 84	12,458	1,344	1,117	1,334	2,124	1,945	1,930	2,663
85 to 167	9,116	1,128	723	1,043	1,586	1,592	1,783	1,261
Open Continuously	11,863	1,319	604	1,084	1,684	1,334	1,920	3,918

Table B11. Employment Size Category, Floorspace, 1999

	Total Floorspace (million square feet)							
		Number of Workers						
	All Buildings	Fewer than 5 Workers	5 to 9 Workers	10 to 19 Workers	20 to 49 Workers	50 to 99 Workers	100 to 249 Workers	250 or More Workers
Ownership and Occupancy								
Nongovernment Owned	54,994	12,950	5,432	6,947	8,480	6,431	6,358	8,398
Owner Occupied	37,785	8,848	3,765	5,172	5,390	3,470	4,375	6,766
Nonowner Occupied	15,596	2,488	1,667	1,774	3,090	2,961	1,983	1,632
Unoccupied	1,613	1,613	N	N	N	N	N	N
Government Owned	12,343	1,371	893	1,081	2,334	2,467	1,998	2,198
Vacancy Status								
Completely Vacant	953	953	N	N	N	N	N	N
Mostly Vacant	956	770	Q	Q	Q	Q	N	Q
Partially Vacant	15,520	2,520	1,059	1,102	2,153	1,811	2,297	4,577
Not At All Vacant	49,910	10,078	5,233	6,858	8,605	7,064	6,060	6,012
Number of Establishments								
One	43,343	10,723	4,718	6,063	7,280	5,111	4,796	4,651
2 to 5	10,582	1,619	1,459	1,701	2,204	1,554	1,053	992
6 to 10	3,574	Q	Q	216	918	773	752	683
11 to 20	3,260	Q	Q	Q	389	1,021	992	789
More than 20	4,811	Q	Q	Q	Q	440	764	3,480
Currently Unoccupied	1,769	1,769	N	N	N	N	N	N
Energy Sources (more than one may apply)								
Electricity	65,716	12,750	6,274	8,028	10,814	8,898	8,356	10,595
Natural Gas	45,525	7,108	4,633	5,589	7,737	6,278	6,146	8,035
Fuel Oil	13,285	964	796	676	1,294	1,593	2,482	5,480
District Heat	5,891	390	304	475	544	696	1,052	2,431
District Chilled Water	2,750	Q	Q	Q	162	478	484	1,234
Propane	6,290	1,451	646	688	1,189	839	787	691
Other	2,322	345	Q	Q	317	364	417	527
Energy End Uses (more than one may apply)								
Buildings with Space Heating	61,602	10,552	6,020	7,762	10,347	8,536	8,053	10,333
Buildings with Cooling	58,474	8,704	5,291	7,409	9,930	8,519	8,129	10,491
Buildings with Water Heating	56,115	8,401	5,145	7,000	9,445	8,166	7,760	10,199
Buildings with Cooking	24,681	1,651	1,341	2,021	3,871	4,354	4,305	7,138
Buildings with Manufacturing	3,126	Q	230	477	645	544	436	544
Buildings with Electricity Generation	11,882	Q	237	487	1,299	1,559	2,386	5,659
Percent of Floorspace Heated								
Not Heated	5,736	3,769	305	265	468	362	Q	Q
1 to 50	7,593	2,323	1,426	1,249	958	776	357	504
51 to 99	10,745	2,174	732	1,304	1,848	1,137	1,206	2,344
100	43,264	6,055	3,862	5,209	7,541	6,622	6,490	7,485
Percent of Floorspace Cooled								
Not Cooled	8,864	5,617	1,034	618	884	379	Q	Q
1 to 50	16,846	3,288	2,477	2,799	3,152	2,173	1,910	1,048
51 to 99	16,966	1,843	734	1,977	2,714	2,510	2,639	4,550
100	24,662	3,573	2,080	2,634	4,065	3,837	3,580	4,893
Percent Lit When Open								
Zero	173	Q	Q	Q	N	N	N	N
1 to 50	9,187	3,999	1,649	1,679	996	405	Q	Q
51 to 99	20,665	2,822	1,733	2,336	3,974	3,562	2,485	3,752
100	34,233	4,404	2,869	3,930	5,844	4,931	5,526	6,729
Building Never Open/ Electricity Not Used	3,080	2,983	Q	Q	N	N	N	N

Table B11. Employment Size Category, Floorspace, 1999

	Total Floorspace (million square feet)							
		Number of Workers						
	All Buildings	Fewer than 5 Workers	5 to 9 Workers	10 to 19 Workers	20 to 49 Workers	50 to 99 Workers	100 to 249 Workers	250 or More Workers
Heating Equipment (more than one may apply)								
Heat Pumps	8,923	707	655	1,340	1,761	1,401	1,105	1,954
Furnaces	14,449	3,874	2,510	1,953	2,631	1,221	1,164	1,095
Individual Space Heaters	17,349	2,913	1,680	1,973	2,538	2,531	2,376	3,339
District Heat	5,534	289	292	372	534	645	1,031	2,371
Boilers	19,522	1,840	1,285	1,771	2,739	3,234	3,706	4,948
Packaged Heating Units	25,743	3,005	1,788	3,002	4,935	4,416	4,172	4,426
Other	4,073	673	178	219	451	300	608	1,644
Cooling Equipment (more than one may apply)								
Residential-Type Central Air Conditioners	8,329	2,041	921	1,187	1,341	791	868	1,180
Heat Pumps	9,147	753	677	1,267	1,688	1,493	1,027	2,243
Individual Air Conditioners	14,276	2,568	1,226	2,037	2,138	2,046	1,940	2,322
District Chilled Water	2,750	Q	Q	Q	162	478	484	1,234
Central Chillers	12,909	297	223	277	1,054	1,646	2,597	6,815
Packaged Air Conditioning Units	36,527	4,264	2,933	4,334	6,776	5,963	5,507	6,751
Swamp Coolers	2,219	315	317	Q	394	365	360	335
Other	1,312	Q	Q	Q	210	Q	341	381
Lighting Equipment Types (more than one may apply)								
Incandescent	38,156	6,532	3,289	4,437	5,841	5,330	5,082	7,644
Standard Fluorescent	60,344	9,890	5,796	7,439	10,106	8,474	8,164	10,475
Compact Fluorescent	20,666	1,388	1,118	1,682	3,032	2,781	3,573	7,093
High Intensity Discharge	19,223	1,348	990	1,233	2,984	3,306	3,551	5,812
Halogen	17,926	1,448	880	1,482	2,585	2,539	3,003	5,989
Other	1,004	Q	Q	Q	Q	Q	Q	Q
Personal Computers								
None	9,583	7,539	1,073	622	193	Q	Q	Q
1 to 4	13,853	5,870	2,877	2,418	1,842	609	Q	Q
5 to 9	6,528	329	1,662	1,850	1,811	639	Q	Q
10 to 19	7,514	Q	416	2,246	2,408	1,140	678	Q
20 to 49	8,087	Q	Q	584	2,949	2,408	1,541	281
50 to 99	5,867	Q	Q	Q	1,103	2,240	1,563	626
100 to 249	6,818	Q	Q	Q	370	1,434	3,130	1,733
250 or More	9,088	Q	N	Q	Q	321	1,034	7,554
Photocopiers								
None	21,631	10,918	3,493	2,574	2,309	1,176	844	316
One	12,928	2,797	2,060	3,138	2,987	1,407	347	Q
2 to 4	15,620	567	746	2,215	4,616	3,863	2,800	812
5 to 9	5,384	Q	Q	Q	782	1,352	1,940	1,187
10 or More	11,774	Q	Q	Q	Q	1,100	2,426	8,086
Other Electronic Equipment (more than one may apply)								
Laser Printers	46,567	3,246	3,323	5,128	8,881	8,004	7,714	10,271
FAX Machines	54,764	5,336	4,881	6,981	10,031	8,696	8,259	10,580
Medical Diagnostic Equipment	2,493	Q	Q	Q	148	220	412	1,502
Lighting Conservation Features (more than one may apply)								
Specular Reflectors	19,994	1,386	1,450	1,959	2,813	2,860	3,629	5,897
Electronic Ballasts	42,035	5,143	3,536	4,587	6,666	6,415	6,220	9,468
Skylights or Atriums	18,286	1,891	934	1,676	2,509	3,136	3,092	5,050

Table B11. Employment Size Category, Floorspace, 1999

	Total Floorspace (million square feet)							
		Number of Workers						
	All Buildings	Fewer than 5 Workers	5 to 9 Workers	10 to 19 Workers	20 to 49 Workers	50 to 99 Workers	100 to 249 Workers	250 or More Workers
Off-Hour Equipment Reduction (more than one may apply)								
Heating	39,969	7,086	4,313	5,451	7,017	5,890	4,819	5,394
Cooling	39,161	6,141	4,058	5,609	6,887	5,729	5,011	5,726
Lighting	51,083	9,745	5,555	6,640	8,834	7,390	6,343	6,576
Office Equipment	9,063	Q	Q	529	2,132	2,435	2,153	1,668

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.
Note: 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.

Table B12. Occupancy of Nongovernment-Owned and Government-Owned Buildings, Number of Buildings, 1999

	Number of Buildings (thousand)								
		Nongovernment-Owned Buildings				Government-Owned Buildings			
	All Buildings	All Nongovern-ment-Owned Buildings	Owner Occupied	Nonowner Occupied	Unoccupied	All Govern-ment-Owned Buildings	Federal	State	Local
All Buildings	4,657	4,135	2,801	1,099	236	521	63	83	375
Building Floorspace (Square Feet)									
1,001 to 5,000	2,348	2,131	1,433	548	151	216	Q	Q	175
5,001 to 10,000	1,110	1,006	693	250	Q	104	Q	Q	70
10,001 to 25,000	708	618	431	172	15	91	Q	14	64
25,001 to 50,000	257	202	129	68	Q	55	Q	19	33
50,001 to 100,000	145	109	69	39	Q	36	Q	11	21
100,001 to 200,000	59	47	29	17	Q	13	2	3	8
200,001 to 500,000	23	18	13	4	Q	5	Q	2	3
Over 500,000	7	5	5	1	Q	2	1	Q	Q
Principal Building Activity									
Education	327	133	107	25	N	195	Q	43	151
Food Sales	174	174	132	42	N	Q	N	N	Q
Food Service	349	336	242	94	N	Q	Q	Q	Q
Health Care	127	119	77	42	N	Q	Q	Q	Q
Inpatient	11	9	6	Q	N	2	Q	Q	Q
Outpatient	116	110	71	39	N	Q	Q	Q	Q
Lodging	153	142	125	17	N	Q	Q	Q	Q
Mercantile	667	667	377	283	Q	Q	N	Q	Q
Retail (Other Than Mall)	534	533	330	196	Q	Q	N	N	Q
Enclosed and Strip Malls	133	133	47	87	N	Q	N	Q	N
Office	739	685	476	209	N	54	Q	6	37
Public Assembly	305	240	203	31	Q	65	Q	5	52
Public Order and Safety	72	Q	Q	Q	N	49	Q	5	43
Religious Worship	307	307	294	Q	N	N	N	N	N
Service	478	421	275	146	N	57	6	Q	48
Warehouse and Storage	603	564	371	131	Q	40	Q	Q	Q
Other	102	89	63	25	N	Q	Q	Q	Q
Vacant	253	235	Q	Q	161	Q	Q	Q	Q
Year Constructed									
1919 or Before	419	384	256	94	Q	35	Q	Q	21
1920 to 1945	499	436	291	130	Q	63	Q	6	51
1946 to 1959	763	670	450	159	62	93	Q	24	54
1960 to 1969	665	581	377	172	Q	85	4	11	69
1970 to 1979	774	684	465	201	Q	90	Q	19	60
1980 to 1989	846	761	532	195	Q	85	Q	10	73
1990 to 1999	690	619	431	148	Q	71	Q	14	48
Floors									
One	2,879	2,530	1,598	760	171	349	41	50	258
Two	1,168	1,068	805	222	41	100	Q	16	70
Three	420	379	270	88	Q	41	4	9	28
Four to Nine	178	148	119	27	Q	30	4	8	19
Ten or More	11	10	8	2	Q	1	0	1	Q
Census Region									
Northeast	686	607	455	142	Q	80	Q	9	60
Midwest	1,188	1,105	747	256	102	83	Q	14	58
South	1,762	1,585	1,083	431	71	177	25	32	120
West	1,021	839	516	270	53	182	16	28	137

Table B12. Occupancy of Nongovernment-Owned and Government-Owned Buildings, Number of Buildings, 1999

	Number of Buildings (thousand)								
		Nongovernment-Owned Buildings				Government-Owned Buildings			
	All Buildings	All Nongovern-ment-Owned Buildings	Owner Occupied	Nonowner Occupied	Unoccupied	All Govern-ment-Owned Buildings	Federal	State	Local
Workers (main shift)									
Fewer than 5	2,376	2,187	1,463	488	236	189	Q	14	141
5 to 9	807	709	489	220	N	99	Q	11	86
10 to 19	683	587	435	152	N	96	Q	26	62
20 to 49	487	413	279	133	N	75	Q	13	51
50 to 99	174	135	64	72	N	39	Q	13	23
100 to 249	90	73	48	25	N	18	3	5	9
250 or More	39	33	24	9	N	6	2	2	3
Weekly Operating Hours									
39 or Fewer	978	863	527	100	236	115	Q	Q	97
40 to 48	1,156	967	662	305	N	189	Q	39	137
49 to 60	986	887	639	248	N	99	24	13	62
61 to 84	664	624	400	224	N	40	4	8	27
85 to 167	474	442	295	147	N	33	Q	7	24
Open Continuously	398	352	278	74	N	46	4	15	28
Vacancy Status									
Completely Vacant	140	139	N	N	139	Q	N	N	Q
Mostly Vacant	113	96	Q	Q	22	Q	Q	Q	Q
Partially Vacant	697	620	339	207	Q	77	Q	8	59
Not At All Vacant	3,707	3,280	2,428	852	N	427	45	75	308
Number of Establishments									
One	3,528	3,084	2,317	767	N	444	53	76	316
2 to 5	688	631	395	236	N	58	Q	6	42
6 to 10	114	111	58	54	N	3	Q	Q	Q
11 to 20	48	47	14	33	N	Q	Q	Q	Q
More than 20	27	27	18	9	N	Q	Q	Q	Q
Currently Unoccupied	251	236	N	N	236	Q	Q	Q	Q
Multibuilding Facility Activity									
Not Part of a Multibuilding Facility	3,295	3,097	2,050	854	193	198	7	24	167
College or University	70	53	48	Q	Q	17	Q	15	Q
Primary or Secondary School	224	54	47	Q	Q	170	Q	21	148
Office Complex	134	115	64	45	Q	19	Q	Q	Q
Retail Complex	181	175	74	95	Q	Q	N	Q	Q
Religious Campus or Complex	186	186	181	Q	N	N	N	N	N
Health Care Complex	72	50	35	Q	Q	22	Q	Q	Q
Government Complex	61	Q	Q	Q	N	61	27	Q	25
Other	434	405	301	74	Q	29	Q	6	14
Energy Sources (more than one may apply)									
Electricity	4,395	3,898	2,747	1,069	82	498	54	83	361
Natural Gas	2,670	2,366	1,605	719	43	304	24	52	228
Fuel Oil	434	386	311	75	Q	48	4	6	38
District Heat	117	67	53	Q	N	50	Q	20	19
District Chilled Water	50	21	13	Q	N	29	Q	6	Q
Propane	451	415	355	57	Q	36	Q	9	26
Other	153	144	126	17	Q	9	Q	Q	Q

Table B12. Occupancy of Nongovernment-Owned and Government-Owned Buildings, Number of Buildings, 1999

	Number of Buildings (thousand)								
		Nongovernment-Owned Buildings				Government-Owned Buildings			
	All Buildings	All Nongovern-ment-Owned Buildings	Owner Occupied	Nonowner Occupied	Unoccupied	All Govern-ment-Owned Buildings	Federal	State	Local
Energy End Uses (more than one may apply)									
Buildings with Space Heating	4,016	3,544	2,525	980	40	471	54	79	339
Buildings with Cooling	3,560	3,172	2,246	900	Q	387	46	65	277
Buildings with Water Heating	3,239	2,887	2,039	818	30	352	40	74	238
Buildings with Cooking	857	753	555	196	Q	105	5	19	81
Buildings with Manufacturing	151	141	97	44	N	Q	Q	Q	Q
Buildings with Electricity Generation	172	129	113	15	Q	42	4	13	26
Percent of Floorspace Heated									
Not Heated	641	591	276	119	196	50	Q	Q	36
1 to 50	576	543	385	149	Q	33	Q	Q	24
51 to 99	627	572	393	175	Q	55	Q	17	31
100	2,813	2,430	1,747	655	Q	383	40	60	284
Percent of Floorspace Cooled									
Not Cooled	1,097	963	555	199	209	134	Q	19	99
1 to 50	1,012	925	684	239	Q	87	Q	20	57
51 to 99	751	669	459	206	Q	82	Q	23	52
100	1,796	1,578	1,103	455	Q	218	28	22	167
Percent Lit When Open									
Zero	34	34	Q	Q	N	N	N	N	N
1 to 50	835	772	603	169	N	63	Q	Q	35
51 to 99	1,228	1,090	797	294	N	138	Q	34	92
100	2,096	1,820	1,227	593	N	275	15	40	220
Building Never Open/ Electricity Not Used	464	419	142	41	236	45	Q	Q	Q
Heating Equipment (more than one may apply)									
Heat Pumps	492	410	266	143	Q	82	Q	19	45
Furnaces	1,460	1,391	1,009	366	Q	69	Q	8	53
Individual Space Heaters	894	795	576	211	Q	99	16	14	69
District Heat	96	53	44	Q	N	43	Q	13	18
Boilers	581	444	380	63	Q	137	8	27	102
Packaged Heating Units	1,347	1,188	779	390	Q	159	5	18	136
Other	185	161	125	36	Q	24	Q	Q	Q
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	676	639	483	152	Q	38	Q	4	20
Heat Pumps	485	413	252	160	Q	73	Q	18	37
Individual Air Conditioners	799	682	533	140	Q	116	5	19	92
District Chilled Water	50	21	13	Q	N	29	Q	6	Q
Central Chillers	130	87	72	14	Q	42	5	12	26
Packaged Air Conditioning Units	1,953	1,739	1,206	508	Q	214	9	29	176
Swamp Coolers	136	127	64	63	N	9	Q	Q	Q
Other	49	45	41	4	N	4	Q	Q	Q
Main Equipment Replaced Since 1995 (more than one may apply)									
Heating	984	872	619	245	Q	112	Q	13	93
Cooling	1,085	983	651	324	Q	102	Q	17	78

Table B12. Occupancy of Nongovernment-Owned and Government-Owned Buildings, Number of Buildings, 1999

	Number of Buildings (thousand)								
		Nongovernment-Owned Buildings				Government-Owned Buildings			
	All Buildings	All Nongovern-ment-Owned Buildings	Owner Occupied	Nonowner Occupied	Unoccupied	All Govern-ment-Owned Buildings	Federal	State	Local
Lighting Equipment Types (more than one may apply)									
Incandescent	2,193	2,000	1,423	568	Q	193	20	33	140
Standard Fluorescent	3,778	3,335	2,355	970	Q	443	47	74	322
Compact Fluorescent	607	533	414	118	Q	74	6	19	49
High Intensity Discharge	430	342	258	84	N	87	5	18	64
Halogen	572	536	402	133	Q	36	2	9	25
Other	58	56	44	Q	N	Q	Q	Q	Q
Personal Computers									
None	1,617	1,503	981	304	218	114	Q	Q	92
1 to 4	1,636	1,506	1,076	428	Q	130	Q	18	93
5 to 9	542	466	300	163	Q	76	Q	Q	57
10 to 19	403	335	230	93	Q	67	Q	15	50
20 to 49	247	184	121	63	N	64	Q	11	43
50 to 99	105	74	44	30	N	31	Q	9	21
100 to 249	71	42	29	12	N	29	2	12	15
250 or More	36	26	20	6	N	10	2	3	5
Photocopiers									
None	2,825	2,548	1,661	656	231	277	40	31	206
One	1,114	996	725	267	Q	117	Q	23	81
2 to 4	540	443	328	115	Q	97	6	18	73
5 to 9	102	83	47	37	N	19	Q	8	10
10 or More	75	64	40	24	N	11	3	3	5
Other Electronic Equipment (more than one may apply)									
Laser Printers	1,949	1,670	1,193	466	Q	280	38	56	185
FAX Machines	2,807	2,533	1,748	774	Q	274	37	46	190
Medical Diagnostic Equipment	86	78	57	21	N	Q	Q	Q	Q
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	767	668	478	190	Q	99	5	19	75
Activities with Large Amounts of Hot Water	698	585	439	146	Q	113	Q	27	74
Building Shell Conservation Features (more than one may apply)									
Multipaned Windows	2,130	1,906	1,430	452	24	223	26	40	157
Tinted, Reflective, or Shading Glass	1,283	1,134	820	304	Q	149	19	20	110
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	550	463	330	129	Q	87	5	26	55
Economizer Cycle	567	441	314	124	Q	126	18	25	82
HVAC Maintenance	2,786	2,388	1,728	639	Q	398	46	66	285
Energy Management and Control System (EMCS)	460	330	244	86	Q	131	16	29	85
Lighting Conservation Features (more than one may apply)									
Specular Reflectors	843	726	489	237	Q	117	Q	16	88
Electronic Ballasts	2,167	1,880	1,288	591	Q	287	24	48	215
Skylights or Atriums	580	502	326	145	Q	77	3	21	53

Table B12. Occupancy of Nongovernment-Owned and Government-Owned Buildings, Number of Buildings, 1999

	Number of Buildings (thousand)								
		Nongovernment-Owned Buildings				Government-Owned Buildings			
	All Buildings	All Nongovern-ment-Owned Buildings	Owner Occupied	Nonowner Occupied	Unoccupied	All Govern-ment-Owned Buildings	Federal	State	Local
Off-Hour Equipment Reduction (more than one may apply)									
Heating	2,862	2,517	1,857	629	32	345	35	38	272
Cooling	2,622	2,339	1,654	660	Q	282	28	32	222
Lighting	3,675	3,255	2,309	946	N	420	43	67	310
Office Equipment	184	115	76	39	N	69	Q	21	47

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.
Note: 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.

Table B13. Occupancy of Nongovernment-Owned and Government Owned Buildings, Floorspace, 1999

	Total Floorspace (million square feet)								
		Nongovernment-Owned Buildings				Government-Owned Buildings			
	All Buildings	All Nongovern-ment-Owned Buildings	Owner Occupied	Nonowner Occupied	Unoccupied	All Govern-ment-Owned Buildings	Federal	State	Local
All Buildings	67,338	54,994	37,785	15,596	1,613	12,343	1,797	3,391	7,156
Building Floorspace (Square Feet)									
1,001 to 5,000	6,774	6,189	4,040	1,686	463	585	Q	Q	467
5,001 to 10,000	8,238	7,466	5,179	1,827	Q	772	Q	Q	509
10,001 to 25,000	11,153	9,655	6,736	2,656	264	1,498	177	233	1,088
25,001 to 50,000	9,311	7,264	4,577	2,496	Q	2,047	Q	732	1,200
50,001 to 100,000	10,112	7,571	4,723	2,775	Q	2,541	Q	732	1,487
100,001 to 200,000	8,271	6,509	4,097	2,374	Q	1,762	256	442	1,064
200,001 to 500,000	6,851	5,229	3,924	1,190	Q	1,622	Q	610	902
Over 500,000	6,628	5,112	4,509	592	Q	1,516	641	Q	Q
Principal Building Activity									
Education	8,651	3,207	2,833	373	N	5,444	Q	1,712	3,655
Food Sales	994	990	705	284	N	Q	N	N	Q
Food Service	1,851	1,763	1,362	401	N	Q	Q	Q	Q
Health Care	2,918	2,468	2,087	380	N	450	Q	Q	243
Inpatient	1,865	1,489	1,423	Q	N	376	Q	Q	Q
Outpatient	1,053	979	664	315	N	Q	Q	Q	Q
Lodging	4,521	4,100	3,614	486	N	421	Q	219	Q
Mercantile	10,398	10,380	5,308	5,031	Q	Q	N	Q	Q
Retail (Other Than Mall)	4,766	4,757	2,729	1,986	Q	Q	N	N	Q
Enclosed and Strip Malls	5,631	5,624	2,579	3,045	N	Q	N	Q	N
Office	12,044	10,482	7,435	3,047	N	1,562	600	380	582
Public Assembly	4,393	2,775	2,321	411	Q	1,618	Q	461	980
Public Order and Safety	1,168	Q	Q	Q	N	1,013	Q	226	779
Religious Worship	3,405	3,405	3,349	Q	N	N	N	N	N
Service	3,388	2,532	1,710	822	N	856	297	Q	384
Warehouse and Storage	10,477	9,901	5,821	3,693	Q	576	Q	Q	Q
Other	1,222	1,082	773	310	N	139	Q	Q	Q
Vacant	1,908	1,754	Q	Q	1,143	Q	Q	Q	Q
Year Constructed									
1919 or Before	4,034	3,456	2,479	728	Q	579	Q	Q	293
1920 to 1945	6,445	4,812	3,575	1,081	Q	1,633	Q	447	993
1946 to 1959	9,127	7,053	4,879	1,737	437	2,074	532	632	910
1960 to 1969	10,866	8,122	5,495	2,419	Q	2,745	364	742	1,639
1970 to 1979	11,840	9,907	6,795	2,960	Q	1,933	Q	599	1,174
1980 to 1989	13,931	12,507	8,364	3,855	Q	1,424	Q	315	990
1990 to 1999	11,094	9,138	6,198	2,817	Q	1,956	243	554	1,158
Floors									
One	26,800	22,775	12,499	9,308	969	4,025	376	995	2,654
Two	16,985	14,366	10,848	3,256	262	2,619	235	538	1,846
Three	8,928	6,902	5,387	1,274	Q	2,026	207	665	1,154
Four to Nine	10,180	7,201	5,979	1,134	Q	2,979	640	1,039	1,300
Ten or More	4,445	3,750	3,073	623	Q	695	339	153	Q
Census Region									
Northeast	12,360	9,542	7,143	2,286	Q	2,818	394	683	1,741
Midwest	16,761	13,896	9,990	3,427	479	2,865	318	961	1,586
South	23,485	19,745	13,228	5,881	636	3,740	549	919	2,273
West	14,731	11,810	7,424	4,001	385	2,921	537	828	1,556

Table B13. Occupancy of Nongovernment-Owned and Government Owned Buildings, Floorspace, 1999

	Total Floorspace (million square feet)								
		Nongovernment-Owned Buildings				Government-Owned Buildings			
	All Buildings	All Nongovern-ment-Owned Buildings	Owner Occupied	Nonowner Occupied	Unoccupied	All Govern-ment-Owned Buildings	Federal	State	Local
Workers (main shift)									
Fewer than 5	14,321	12,950	8,848	2,488	1,613	1,371	Q	263	946
5 to 9	6,325	5,432	3,765	1,667	N	893	Q	257	508
10 to 19	8,028	6,947	5,172	1,774	N	1,081	Q	300	683
20 to 49	10,814	8,480	5,390	3,090	N	2,334	288	573	1,473
50 to 99	8,898	6,431	3,470	2,961	N	2,467	Q	739	1,638
100 to 249	8,356	6,358	4,375	1,983	N	1,998	246	701	1,051
250 or More	10,595	8,398	6,766	1,632	N	2,198	783	556	858
Weekly Operating Hours									
39 or Fewer	6,596	5,563	3,438	512	1,613	1,033	Q	Q	849
40 to 48	13,105	9,889	6,718	3,171	N	3,216	302	863	2,050
49 to 60	14,200	11,920	8,103	3,818	N	2,280	372	671	1,236
61 to 84	12,458	10,671	7,204	3,467	N	1,786	210	538	1,039
85 to 167	9,116	7,381	4,533	2,849	N	1,734	Q	435	1,128
Open Continuously	11,863	9,569	7,789	1,780	N	2,294	631	808	855
Vacancy Status									
Completely Vacant	953	922	N	N	922	Q	N	N	Q
Mostly Vacant	956	832	Q	Q	221	Q	Q	Q	Q
Partially Vacant	15,520	13,410	8,450	4,490	Q	2,111	277	730	1,103
Not At All Vacant	49,910	39,831	29,012	10,819	N	10,078	1,444	2,652	5,983
Number of Establishments									
One	43,343	33,290	25,947	7,343	N	10,053	1,373	2,818	5,862
2 to 5	10,582	9,077	5,371	3,706	N	1,505	332	307	865
6 to 10	3,574	3,369	1,699	1,670	N	205	Q	Q	Q
11 to 20	3,260	3,097	1,336	1,761	N	Q	Q	Q	Q
More than 20	4,811	4,549	3,433	1,116	N	Q	Q	Q	Q
Currently Unoccupied	1,769	1,613	N	N	1,613	Q	Q	Q	Q
Multibuilding Facility Activity									
Not Part of a Multibuilding Facility	41,289	35,892	24,040	10,524	1,328	5,396	417	1,140	3,839
College or University	2,605	1,653	1,562	Q	Q	952	Q	835	Q
Primary or Secondary School	3,388	1,091	1,042	Q	Q	2,296	Q	650	1,637
Office Complex	3,353	3,014	2,035	958	Q	338	Q	Q	Q
Retail Complex	3,555	3,456	1,547	1,889	Q	Q	N	Q	Q
Religious Campus or Complex	1,907	1,907	1,817	Q	N	N	N	N	N
Health Care Complex	2,339	1,736	1,571	Q	Q	604	230	Q	235
Government Complex	1,513	Q	Q	Q	N	1,498	728	Q	630
Other	7,389	6,230	4,166	1,855	Q	1,160	220	424	515
Energy Sources (more than one may apply)									
Electricity	65,716	53,640	37,506	15,441	693	12,076	1,711	3,382	6,983
Natural Gas	45,525	37,026	25,597	10,968	461	8,500	997	2,253	5,250
Fuel Oil	13,285	9,893	8,284	1,605	Q	3,392	748	822	1,823
District Heat	5,891	3,333	2,907	426	N	2,559	827	1,187	546
District Chilled Water	2,750	1,560	1,325	Q	N	1,190	368	407	415
Propane	6,290	5,305	4,051	1,244	Q	985	Q	286	629
Other	2,322	1,864	1,486	358	Q	458	Q	Q	Q

Table B13. Occupancy of Nongovernment-Owned and Government Owned Buildings, Floorspace, 1999

	Total Floorspace (million square feet)								
		Nongovernment-Owned Buildings				Government-Owned Buildings			
	All Buildings	All Nongovern-ment-Owned Buildings	Owner Occupied	Nonowner Occupied	Unoccupied	All Govern-ment-Owned Buildings	Federal	State	Local
Energy End Uses (more than one may apply)									
Buildings with Space Heating	61,602	49,916	35,287	14,279	349	11,687	1,715	3,318	6,653
Buildings with Cooling	58,474	47,858	33,473	14,013	Q	10,616	1,525	2,962	6,129
Buildings with Water Heating	56,115	45,444	31,903	13,158	383	10,670	1,477	3,111	6,082
Buildings with Cooking	24,681	18,531	14,039	4,458	Q	6,150	838	1,535	3,778
Buildings with Manufacturing	3,126	2,708	1,619	1,089	N	Q	Q	Q	Q
Buildings with Electricity Generation	11,882	8,847	7,264	1,558	Q	3,035	758	907	1,370
Percent of Floorspace Heated									
Not Heated	5,736	5,079	2,498	1,317	1,264	657	Q	Q	504
1 to 50	7,593	7,105	4,711	2,314	Q	488	Q	Q	298
51 to 99	10,745	9,043	6,527	2,504	Q	1,702	317	584	802
100	43,264	33,768	24,049	9,461	Q	9,496	1,315	2,628	5,553
Percent of Floorspace Cooled									
Not Cooled	8,864	7,137	4,313	1,583	1,241	1,727	Q	428	1,027
1 to 50	16,846	13,844	9,562	4,198	Q	3,002	Q	894	1,847
51 to 99	16,966	13,579	9,718	3,828	Q	3,387	514	1,056	1,816
100	24,662	20,435	14,193	5,986	Q	4,227	749	1,012	2,466
Percent Lit When Open									
Zero	173	173	Q	Q	N	N	N	N	N
1 to 50	9,187	8,569	6,878	1,692	N	618	Q	Q	315
51 to 99	20,665	16,036	11,478	4,558	N	4,629	454	1,441	2,734
100	34,233	27,659	18,582	9,077	N	6,575	1,058	1,827	3,689
Building Never Open/ Electricity Not Used	3,080	2,558	708	237	1,613	522	Q	Q	Q
Heating Equipment (more than one may apply)									
Heat Pumps	8,923	7,187	5,195	1,974	Q	1,736	Q	435	1,125
Furnaces	14,449	13,202	9,424	3,681	Q	1,247	Q	244	844
Individual Space Heaters	17,349	14,235	10,218	3,933	Q	3,114	674	787	1,653
District Heat	5,534	3,072	2,695	377	N	2,462	827	1,102	534
Boilers	19,522	13,132	11,042	2,041	Q	6,390	588	1,561	4,242
Packaged Heating Units	25,743	22,108	13,998	7,945	Q	3,635	249	1,108	2,279
Other	4,073	3,607	2,828	735	Q	466	Q	202	Q
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	8,329	7,313	5,683	1,623	Q	1,016	Q	173	684
Heat Pumps	9,147	7,445	5,284	2,143	Q	1,702	Q	354	1,194
Individual Air Conditioners	14,276	10,593	8,343	2,046	Q	3,683	623	646	2,414
District Chilled Water	2,750	1,560	1,325	Q	N	1,190	368	407	415
Central Chillers	12,909	8,984	7,474	1,482	Q	3,926	804	1,260	1,861
Packaged Air Conditioning Units	36,527	30,779	20,641	9,842	Q	5,748	728	1,508	3,511
Swamp Coolers	2,219	1,610	945	665	N	609	Q	Q	Q
Other	1,312	1,145	989	156	N	167	Q	Q	Q
Main Equipment Replaced Since 1995 (more than one may apply)									
Heating	13,220	11,270	7,591	3,617	Q	1,950	Q	389	1,483
Cooling	17,390	14,186	9,617	4,491	Q	3,204	387	922	1,895

Table B13. Occupancy of Nongovernment-Owned and Government Owned Buildings, Floorspace, 1999

	Total Floorspace (million square feet)								
		Nongovernment-Owned Buildings				Government-Owned Buildings			
	All Buildings	All Nongovern-ment-Owned Buildings	Owner Occupied	Nonowner Occupied	Unoccupied	All Govern-ment-Owned Buildings	Federal	State	Local
Lighting Equipment Types (more than one may apply)									
Incandescent	38,156	31,544	23,612	7,849	Q	6,612	937	1,837	3,838
Standard Fluorescent	60,344	48,959	34,331	14,462	Q	11,385	1,653	3,186	6,547
Compact Fluorescent	20,666	16,731	13,325	3,377	Q	3,935	679	1,203	2,054
High Intensity Discharge	19,223	13,702	10,325	3,376	N	5,521	685	1,631	3,206
Halogen	17,926	15,034	11,336	3,668	Q	2,892	411	899	1,582
Other	1,004	823	665	Q	N	Q	Q	Q	Q
Personal Computers									
None	9,583	8,678	5,680	1,643	1,354	906	Q	Q	683
1 to 4	13,853	12,564	8,657	3,851	Q	1,288	Q	368	793
5 to 9	6,528	5,864	3,670	2,168	Q	664	Q	Q	415
10 to 19	7,514	6,527	4,232	2,118	Q	987	Q	333	607
20 to 49	8,087	6,394	4,173	2,221	N	1,693	Q	389	1,063
50 to 99	5,867	4,208	2,566	1,642	N	1,659	Q	531	1,058
100 to 249	6,818	4,346	3,342	1,004	N	2,472	211	780	1,481
250 or More	9,088	6,414	5,467	947	N	2,674	838	780	1,056
Photocopiers									
None	21,631	18,933	11,799	5,592	1,541	2,698	302	655	1,742
One	12,928	11,141	8,151	2,926	Q	1,787	Q	524	1,077
2 to 4	15,620	11,904	8,583	3,314	Q	3,716	362	948	2,406
5 to 9	5,384	3,812	2,341	1,471	N	1,572	Q	455	971
10 or More	11,774	9,204	6,912	2,292	N	2,570	802	808	960
Other Electronic Equipment (more than one may apply)									
Laser Printers	46,567	36,966	26,002	10,870	Q	9,601	1,588	2,708	5,305
FAX Machines	54,764	44,675	30,954	13,591	Q	10,088	1,578	2,706	5,805
Medical Diagnostic Equipment	2,493	2,099	1,845	254	N	394	Q	Q	215
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	23,328	17,300	13,104	4,179	Q	6,028	808	1,512	3,708
Activities with Large Amounts of Hot Water	21,793	16,229	12,862	3,350	Q	5,564	644	1,693	3,227
Building Shell Conservation Features (more than one may apply)									
Multipaned Windows	38,193	31,154	23,284	7,556	314	7,039	987	1,979	4,073
Tinted, Reflective, or Shading Glass	29,915	24,218	17,092	6,985	Q	5,698	860	1,547	3,291
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	19,387	14,961	11,395	3,560	Q	4,425	759	1,422	2,244
Economizer Cycle	21,256	15,806	11,650	4,140	Q	5,450	1,153	1,738	2,559
HVAC Maintenance	53,395	42,540	30,270	12,105	Q	10,855	1,636	3,135	6,084
Energy Management and Control System (EMCS)	21,613	15,140	11,878	3,252	Q	6,473	1,201	2,060	3,211
Lighting Conservation Features (more than one may apply)									
Specular Reflectors	19,994	15,640	11,384	4,247	Q	4,354	805	1,091	2,458
Electronic Ballasts	42,035	33,247	23,537	9,680	Q	8,789	1,332	2,501	4,957
Skylights or Atriums	18,286	14,429	10,683	3,537	Q	3,857	512	1,254	2,091

Table B13. Occupancy of Nongovernment-Owned and Government Owned Buildings, Floorspace, 1999

	Total Floorspace (million square feet)								
		Nongovernment-Owned Buildings				Government-Owned Buildings			
	All Buildings	All Nongovern-ment-Owned Buildings	Owner Occupied	Nonowner Occupied	Unoccupied	All Govern-ment-Owned Buildings	Federal	State	Local
Off-Hour Equipment Reduction (more than one may apply)									
Heating	39,969	31,903	22,534	9,112	258	8,066	978	2,012	5,076
Cooling	39,161	31,707	21,722	9,679	Q	7,454	871	1,825	4,758
Lighting	51,083	41,690	28,512	13,178	N	9,394	1,069	2,521	5,804
Office Equipment	9,063	5,637	4,010	1,627	N	3,426	Q	963	2,339

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.
Note: 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.

Table B14. Number of Establishments in Building, Number of Buildings, 1999

	Number of Buildings (thousand)						
		Number of Establishments in Building					
	All Buildings	One	Two to Five	Six to Ten	Eleven to Twenty	More than Twenty	Currently Unoccupied
All Buildings	4,657	3,528	688	114	48	27	251
Building Floorspace (Square Feet)							
1,001 to 5,000	2,348	1,897	272	Q	Q	Q	164
5,001 to 10,000	1,110	802	222	17	Q	Q	Q
10,001 to 25,000	708	506	121	51	12	Q	17
25,001 to 50,000	257	184	33	15	15	Q	Q
50,001 to 100,000	145	88	26	12	12	6	Q
100,001 to 200,000	59	34	10	4	6	5	Q
200,001 to 500,000	23	14	3	2	2	2	Q
Over 500,000	7	3	1	Q	Q	3	Q
Principal Building Activity							
Education	327	302	24	Q	Q	Q	N
Food Sales	174	161	Q	N	N	Q	N
Food Service	349	315	Q	Q	N	N	N
Health Care	127	94	27	Q	2	Q	N
Inpatient	11	10	Q	Q	Q	Q	N
Outpatient	116	84	26	Q	Q	Q	N
Lodging	153	143	10	Q	N	Q	N
Mercantile	667	450	131	53	17	8	Q
Retail (Other Than Mall)	534	449	69	Q	Q	Q	Q
Enclosed and Strip Malls	133	Q	62	46	17	8	N
Office	739	475	206	34	17	8	N
Public Assembly	305	262	27	Q	Q	Q	Q
Public Order and Safety	72	60	Q	Q	Q	N	N
Religious Worship	307	286	20	Q	N	N	N
Service	478	362	110	Q	Q	N	Q
Warehouse and Storage	603	452	69	7	Q	Q	Q
Other	102	89	Q	Q	Q	Q	N
Vacant	253	77	Q	Q	Q	N	169
Year Constructed							
1919 or Before	419	312	64	Q	Q	Q	36
1920 to 1945	499	384	84	Q	Q	1	22
1946 to 1959	763	581	100	Q	Q	Q	62
1960 to 1969	665	524	81	9	5	Q	Q
1970 to 1979	774	591	124	22	15	4	Q
1980 to 1989	846	605	138	47	15	7	Q
1990 to 1999	690	531	98	10	7	3	Q
Floors							
One	2,879	2,231	379	52	25	13	179
Two	1,168	873	191	41	10	6	48
Three	420	308	74	Q	3	Q	Q
Four to Nine	178	112	43	8	7	5	Q
Ten or More	11	4	1	1	2	3	Q
Census Region							
Northeast	686	531	113	15	8	4	Q
Midwest	1,188	860	190	22	7	4	103
South	1,762	1,392	231	41	17	9	72
West	1,021	745	154	36	16	Q	60
Climate Zone: 45-Year Average							
Under 2,000 CDD and --							
More than 7,000 HDD	525	414	82	Q	Q	Q	Q
5,500-7,000 HDD	986	727	158	14	8	6	73
4,000-5,499 HDD	1,085	793	180	32	7	7	66
Fewer than 4,000 HDD	1,134	868	146	48	18	4	Q
2,000 CDD or More and --							
Fewer than 4,000 HDD	926	725	123	16	11	Q	39

Table B14. Number of Establishments in Building, Number of Buildings, 1999

	Number of Buildings (thousand)						
		Number of Establishments in Building					
	All Buildings	One	Two to Five	Six to Ten	Eleven to Twenty	More than Twenty	Currently Unoccupied
Workers (main shift)							
Fewer than 5	2,376	1,891	208	Q	Q	Q	251
5 to 9	807	610	193	Q	Q	Q	N
10 to 19	683	520	149	13	Q	Q	N
20 to 49	487	344	92	41	10	Q	N
50 to 99	174	89	30	27	22	6	N
100 to 249	90	54	12	9	10	5	N
250 or More	39	19	5	3	4	8	N
Ownership and Occupancy							
Nongovernment Owned	4,135	3,084	631	111	47	27	236
Owner Occupied	2,801	2,317	395	58	14	18	N
Nonowner Occupied	1,099	767	236	54	33	9	N
Unoccupied	236	N	N	N	N	N	236
Government Owned	521	444	58	3	Q	Q	Q
Vacancy Status							
Completely Vacant	140	N	N	N	N	N	140
Mostly Vacant	113	77	Q	Q	Q	N	29
Partially Vacant	697	400	137	44	21	13	82
Not At All Vacant	3,707	3,051	549	66	26	15	N
Multibuilding Facility Activity							
Not Part of a Multibuilding Facility	3,295	2,446	532	58	33	19	207
College or University	70	66	3	Q	Q	Q	Q
Primary or Secondary School	224	221	Q	N	N	Q	Q
Office Complex	134	78	35	10	3	1	Q
Retail Complex	181	113	26	29	6	2	Q
Religious Campus or Complex	186	170	Q	N	Q	N	N
Health Care Complex	72	50	Q	Q	Q	Q	Q
Government Complex	61	49	Q	Q	Q	N	N
Other	434	335	47	Q	Q	Q	Q
Energy Sources (more than one may apply)							
Electricity	4,395	3,437	680	113	48	27	90
Natural Gas	2,670	2,038	459	79	23	19	50
Fuel Oil	434	346	71	5	5	6	Q
District Heat	117	101	7	Q	1	1	N
District Chilled Water	50	44	3	Q	Q	Q	N
Propane	451	397	43	Q	Q	Q	Q
Other	153	140	Q	Q	Q	Q	Q
Energy End Uses (more than one may apply)							
Buildings with Space Heating	4,016	3,138	661	103	43	24	48
Buildings with Cooling	3,560	2,711	637	106	46	25	34
Buildings with Water Heating	3,239	2,507	538	96	37	23	38
Buildings with Cooking	857	673	106	44	17	16	Q
Buildings with Manufacturing	151	125	12	Q	Q	Q	N
Buildings with Electricity Generation	172	141	16	5	5	4	Q
Heating Equipment (more than one may apply)							
Heat Pumps	492	355	109	17	7	3	Q
Furnaces	1,460	1,132	282	22	7	1	Q
Individual Space Heaters	894	713	144	14	Q	3	Q
District Heat	96	80	6	Q	Q	1	N
Boilers	581	479	71	10	7	Q	Q
Packaged Heating Units	1,347	1,012	224	59	23	10	Q
Other	185	149	22	Q	3	2	Q

Table B14. Number of Establishments in Building, Number of Buildings, 1999

	Number of Buildings (thousand)						
		Number of Establishments in Building					
	All Buildings	One	Two to Five	Six to Ten	Eleven to Twenty	More than Twenty	Currently Unoccupied
Cooling Equipment (more than one may apply)							
Residential-Type Central Air Conditioners	676	506	149	Q	4	2	Q
Heat Pumps	485	339	118	18	7	3	Q
Individual Air Conditioners	799	612	151	Q	Q	3	Q
District Chilled Water	50	44	3	Q	Q	Q	N
Central Chillers	130	92	16	4	5	11	Q
Packaged Air Conditioning Units	1,953	1,469	322	84	31	14	Q
Swamp Coolers	136	124	8	Q	Q	Q	N
Other	49	44	Q	Q	Q	Q	N
Lighting Equipment Types (more than one may apply)							
Incandescent	2,193	1,746	329	61	29	19	Q
Standard Fluorescent	3,778	2,965	628	105	44	25	Q
Compact Fluorescent	607	451	108	28	11	9	Q
High Intensity Discharge	430	322	74	18	5	Q	N
Halogen	572	425	98	31	9	8	Q
Other	58	41	Q	Q	Q	Q	N
Personal Computers							
None	1,617	1,248	120	Q	Q	Q	233
1 to 4	1,636	1,323	268	34	Q	Q	Q
5 to 9	542	385	136	14	Q	Q	Q
10 to 19	403	271	78	32	7	Q	Q
20 to 49	247	174	47	11	11	Q	N
50 to 99	105	59	24	8	10	3	Q
100 to 249	71	45	10	6	5	4	N
250 or More	36	23	4	2	3	5	N
Photocopiers							
None	2,825	2,231	295	30	14	Q	246
One	1,114	888	177	40	Q	Q	Q
2 to 4	540	346	167	13	9	5	Q
5 to 9	102	41	42	15	4	Q	N
10 or More	75	22	8	16	18	11	N
Other Electronic Equipment (more than one may apply)							
Laser Printers	1,949	1,421	377	81	41	18	Q
FAX Machines	2,807	2,076	552	101	47	20	Q
Medical Diagnostic Equipment	86	53	26	Q	2	Q	N

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.
Note: 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.

Table B15. Number of Establishments in Building, Floorspace, 1999

	Total Floorspace (million square feet)						
		Number of Establishments in Building					
	All Buildings	One	Two to Five	Six to Ten	Eleven to Twenty	More than Twenty	Currently Unoccupied
All Buildings	67,338	43,343	10,582	3,574	3,260	4,811	1,769
Building Floorspace (Square Feet)							
1,001 to 5,000	6,774	5,358	857	Q	Q	Q	512
5,001 to 10,000	8,238	5,952	1,630	137	Q	Q	Q
10,001 to 25,000	11,153	7,812	1,982	784	Q	Q	296
25,001 to 50,000	9,311	6,720	1,220	550	494	Q	Q
50,001 to 100,000	10,112	6,063	1,833	845	839	432	Q
100,001 to 200,000	8,271	4,798	1,453	480	790	690	Q
200,001 to 500,000	6,851	4,126	931	498	455	702	Q
Over 500,000	6,628	2,514	676	Q	416	2,771	Q
Principal Building Activity							
Education	8,651	7,947	657	Q	Q	Q	N
Food Sales	994	808	Q	N	N	Q	N
Food Service	1,851	1,638	Q	Q	N	N	N
Health Care	2,918	2,139	341	Q	157	Q	N
Inpatient	1,865	1,611	Q	Q	Q	Q	N
Outpatient	1,053	529	195	Q	Q	Q	N
Lodging	4,521	3,724	617	Q	N	Q	N
Mercantile	10,398	3,831	1,618	1,387	1,205	2,315	Q
Retail (Other Than Mall)	4,766	3,756	783	Q	Q	Q	Q
Enclosed and Strip Malls	5,631	Q	836	1,261	1,171	2,289	N
Office	12,044	5,073	2,502	1,369	1,395	1,705	N
Public Assembly	4,393	3,122	821	Q	Q	Q	Q
Public Order and Safety	1,168	773	320	Q	Q	N	N
Religious Worship	3,405	3,016	373	Q	N	N	N
Service	3,388	2,674	672	Q	Q	N	Q
Warehouse and Storage	10,477	7,097	2,104	313	Q	Q	Q
Other	1,222	913	Q	Q	Q	Q	N
Vacant	1,908	586	Q	Q	Q	N	1,217
Year Constructed							
1919 or Before	4,034	2,804	593	Q	Q	Q	261
1920 to 1945	6,445	4,327	1,236	Q	Q	255	234
1946 to 1959	9,127	6,244	1,543	Q	Q	Q	468
1960 to 1969	10,866	7,779	1,279	496	321	766	Q
1970 to 1979	11,840	7,185	1,798	663	947	1,091	Q
1980 to 1989	13,931	7,382	2,388	1,251	988	1,622	Q
1990 to 1999	11,094	7,622	1,745	485	498	621	Q
Floors							
One	26,800	17,636	4,381	1,480	1,351	918	1,035
Two	16,985	11,651	2,655	738	425	1,193	324
Three	8,928	6,346	1,517	301	189	Q	Q
Four to Nine	10,180	6,313	1,555	737	696	779	Q
Ten or More	4,445	1,398	475	317	599	1,603	Q
Census Region							
Northeast	12,360	7,665	2,186	494	705	1,159	Q
Midwest	16,761	11,299	2,900	571	579	864	548
South	23,485	14,723	3,421	1,440	1,239	2,000	662
West	14,731	9,655	2,075	1,068	738	788	407
Climate Zone: 45-Year Average							
Under 2,000 CDD and --							
More than 7,000 HDD	5,890	4,124	1,099	Q	Q	Q	Q
5,500-7,000 HDD	17,083	11,387	2,746	590	776	1,162	422
4,000-5,499 HDD	16,243	10,037	2,864	888	696	1,349	409
Fewer than 4,000 HDD	16,333	10,345	2,323	1,278	833	1,024	531
2,000 CDD or More and --							
Fewer than 4,000 HDD	11,788	7,449	1,549	617	753	1,134	285

Table B15. Number of Establishments in Building, Floorspace, 1999

	Total Floorspace (million square feet)						
		Number of Establishments in Building					
	All Buildings	One	Two to Five	Six to Ten	Eleven to Twenty	More than Twenty	Currently Unoccupied
Workers (main shift)							
Fewer than 5	14,321	10,723	1,619	Q	Q	Q	1,769
5 to 9	6,325	4,718	1,459	Q	Q	Q	N
10 to 19	8,028	6,063	1,701	216	Q	Q	N
20 to 49	10,814	7,280	2,204	918	389	Q	N
50 to 99	8,898	5,111	1,554	773	1,021	440	N
100 to 249	8,356	4,796	1,053	752	992	764	N
250 or More	10,595	4,651	992	683	789	3,480	N
Ownership and Occupancy							
Nongovernment Owned	54,994	33,290	9,077	3,369	3,097	4,549	1,613
Owner Occupied	37,785	25,947	5,371	1,699	1,336	3,433	N
Nonowner Occupied	15,596	7,343	3,706	1,670	1,761	1,116	N
Unoccupied	1,613	N	N	N	N	N	1,613
Government Owned	12,343	10,053	1,505	205	Q	Q	Q
Vacancy Status							
Completely Vacant	953	N	N	N	N	N	953
Mostly Vacant	956	586	Q	Q	Q	N	264
Partially Vacant	15,520	5,698	2,238	1,700	1,821	3,513	552
Not At All Vacant	49,910	37,058	8,276	1,850	1,427	1,298	N
Multibuilding Facility Activity							
Not Part of a Multibuilding Facility	41,289	26,162	6,621	1,770	2,047	3,271	1,419
College or University	2,605	2,336	186	Q	Q	Q	Q
Primary or Secondary School	3,388	3,229	Q	N	N	Q	Q
Office Complex	3,353	1,220	787	533	463	284	Q
Retail Complex	3,555	1,035	466	799	396	839	Q
Religious Campus or Complex	1,907	1,665	Q	N	Q	N	N
Health Care Complex	2,339	1,673	334	Q	Q	Q	Q
Government Complex	1,513	1,025	400	Q	Q	N	N
Other	7,389	4,998	1,439	263	Q	Q	Q
Energy Sources (more than one may apply)							
Electricity	65,716	42,839	10,442	3,568	3,260	4,809	797
Natural Gas	45,525	29,717	7,439	2,463	1,786	3,596	525
Fuel Oil	13,285	8,327	1,795	481	810	1,861	Q
District Heat	5,891	4,149	559	331	171	681	N
District Chilled Water	2,750	2,117	207	Q	Q	Q	N
Propane	6,290	4,921	728	Q	Q	Q	Q
Other	2,322	1,676	Q	Q	Q	Q	Q
Energy End Uses (more than one may apply)							
Buildings with Space Heating	61,602	40,297	10,038	3,289	2,993	4,563	422
Buildings with Cooling	58,474	37,062	9,632	3,453	3,168	4,741	417
Buildings with Water Heating	56,115	36,207	8,866	3,191	2,828	4,595	427
Buildings with Cooking	24,681	14,870	3,143	1,541	1,611	3,483	Q
Buildings with Manufacturing	3,126	2,094	524	Q	Q	Q	N
Buildings with Electricity Generation	11,882	7,109	1,523	537	761	1,927	Q
Heating Equipment (more than one may apply)							
Heat Pumps	8,923	5,009	1,741	529	559	1,067	Q
Furnaces	14,449	10,187	3,020	420	346	378	Q
Individual Space Heaters	17,349	11,358	3,263	652	690	1,294	Q
District Heat	5,534	3,847	517	331	Q	681	N
Boilers	19,522	13,385	2,861	787	821	1,592	Q
Packaged Heating Units	25,743	15,436	3,885	1,967	1,615	2,656	Q
Other	4,073	2,266	464	Q	280	830	Q

Table B15. Number of Establishments in Building, Floorspace, 1999

	Total Floorspace (million square feet)						
		Number of Establishments in Building					
	All Buildings	One	Two to Five	Six to Ten	Eleven to Twenty	More than Twenty	Currently Unoccupied
Cooling Equipment (more than one may apply)							
Residential-Type Central Air Conditioners	8,329	5,833	1,554	190	230	516	Q
Heat Pumps	9,147	5,058	1,869	584	556	1,062	Q
Individual Air Conditioners	14,276	10,302	2,282	427	398	656	Q
District Chilled Water	2,750	2,117	207	Q	Q	Q	N
Central Chillers	12,909	7,088	1,609	681	833	2,651	Q
Packaged Air Conditioning Units	36,527	22,190	5,848	2,742	2,154	3,260	Q
Swamp Coolers	2,219	1,662	223	Q	Q	Q	N
Other	1,312	820	Q	Q	Q	Q	N
Lighting Equipment Types (more than one may apply)							
Incandescent	38,156	24,358	5,930	2,026	2,219	3,540	Q
Standard Fluorescent	60,344	39,064	9,845	3,393	3,126	4,750	Q
Compact Fluorescent	20,666	11,751	3,131	1,386	1,205	3,165	Q
High Intensity Discharge	19,223	12,406	2,730	856	692	2,539	N
Halogen	17,926	10,103	2,625	1,168	1,026	2,974	Q
Other	1,004	499	Q	Q	Q	Q	N
Personal Computers							
None	9,583	6,911	951	Q	Q	Q	1,498
1 to 4	13,853	10,377	2,558	535	Q	Q	Q
5 to 9	6,528	4,408	1,497	329	Q	Q	Q
10 to 19	7,514	4,351	1,568	654	376	Q	Q
20 to 49	8,087	5,115	1,488	504	669	310	N
50 to 99	5,867	3,540	846	372	543	555	Q
100 to 249	6,818	3,795	859	522	563	1,079	N
250 or More	9,088	4,845	814	537	669	2,224	N
Photocopiers							
None	21,631	15,084	2,969	828	609	455	1,685
One	12,928	10,025	2,011	555	Q	Q	Q
2 to 4	15,620	10,518	3,419	536	473	656	Q
5 to 9	5,384	3,160	1,139	482	272	Q	N
10 or More	11,774	4,555	1,044	1,172	1,817	3,187	N
Other Electronic Equipment (more than one may apply)							
Laser Printers	46,567	28,624	7,497	2,882	2,963	4,495	Q
FAX Machines	54,764	33,961	9,305	3,398	3,233	4,725	Q
Medical Diagnostic Equipment	2,493	1,727	328	Q	157	Q	N

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.
Note: 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.

Table B16. Multibuilding Facilities, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)			Total Floorspace (million square feet)		
		Buildings on Multibuilding Facilities			Buildings on Multibuilding Facilities	
	All Buildings	All Buildings	With Central Physical Plant	All Buildings	All Buildings	With Central Physical Plant
All Buildings	4,657	1,362	142	67,338	26,049	7,101
Building Floorspace (Square Feet)						
1,001 to 5,000	2,348	604	Q	6,774	1,706	Q
5,001 to 10,000	1,110	297	Q	8,238	2,211	Q
10,001 to 25,000	708	253	26	11,153	3,965	464
25,001 to 50,000	257	104	26	9,311	3,728	901
50,001 to 100,000	145	63	17	10,112	4,498	1,274
100,001 to 200,000	59	27	8	8,271	3,799	1,159
200,001 to 500,000	23	10	5	6,851	3,107	1,538
Over 500,000	7	3	2	6,628	3,036	1,484
Principal Building Activity						
Education	327	229	38	8,651	4,574	1,812
Food Sales	174	Q	Q	994	Q	Q
Food Service	349	38	Q	1,851	271	Q
Health Care	127	29	8	2,918	1,823	1,100
Inpatient	11	5	3	1,865	1,401	963
Outpatient	116	24	Q	1,053	423	137
Lodging	153	88	23	4,521	1,751	735
Mercantile	667	112	Q	10,398	2,995	Q
Retail (Other Than Mall)	534	73	Q	4,766	861	Q
Enclosed and Strip Malls	133	39	Q	5,631	2,134	Q
Office	739	229	21	12,044	4,769	1,280
Public Assembly	305	121	18	4,393	2,093	904
Public Order and Safety	72	22	3	1,168	529	206
Religious Worship	307	108	Q	3,405	1,276	Q
Service	478	63	Q	3,388	818	Q
Warehouse and Storage	603	234	Q	10,477	3,987	Q
Other	102	22	Q	1,222	519	253
Vacant	253	53	Q	1,908	514	Q
Year Constructed						
1919 or Before	419	94	20	4,034	1,038	413
1920 to 1945	499	129	21	6,445	2,331	579
1946 to 1959	763	200	30	9,127	3,484	1,360
1960 to 1969	665	191	26	10,866	4,385	1,894
1970 to 1979	774	228	14	11,840	5,040	1,255
1980 to 1989	846	322	23	13,931	5,871	916
1990 to 1999	690	199	8	11,094	3,901	684
Census Region						
Northeast	686	150	33	12,360	4,037	1,418
Midwest	1,188	250	28	16,761	5,826	1,721
South	1,762	544	30	23,485	9,207	1,649
West	1,021	418	51	14,731	6,978	2,313
Workers (main shift)						
Fewer than 5	2,376	620	42	14,321	4,556	576
5 to 9	807	190	16	6,325	2,124	370
10 to 19	683	210	31	8,028	2,442	534
20 to 49	487	219	20	10,814	4,535	841
50 to 99	174	63	14	8,898	3,645	730
100 to 249	90	40	10	8,356	3,561	1,332
250 or More	39	21	9	10,595	5,185	2,718

Table B16. Multibuilding Facilities, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)			Total Floorspace (million square feet)		
		Buildings on Multibuilding Facilities			Buildings on Multibuilding Facilities	
	All Buildings	All Buildings	With Central Physical Plant	All Buildings	All Buildings	With Central Physical Plant
Weekly Operating Hours						
39 or Fewer	978	301	Q	6,596	2,207	Q
40 to 48	1,156	325	43	13,105	5,113	1,022
49 to 60	986	288	22	14,200	5,255	1,171
61 to 84	664	184	18	12,458	4,500	1,186
85 to 167	474	93	8	9,116	3,412	935
Open Continuously	398	171	42	11,863	5,562	2,657
Ownership and Occupancy						
Nongovernment Owned	4,135	1,038	79	54,994	19,102	3,929
Owner Occupied	2,801	751	65	37,785	13,745	3,395
Nonowner Occupied	1,099	244	13	15,596	5,072	495
Unoccupied	236	43	Q	1,613	285	Q
Government Owned	521	324	64	12,343	6,947	3,172
Vacancy Status						
Completely Vacant	140	Q	Q	953	Q	Q
Mostly Vacant	113	36	Q	956	361	Q
Partially Vacant	697	263	17	15,520	6,196	1,484
Not At All Vacant	3,707	1,047	124	49,910	19,339	5,546
Multibuilding Facility Activity						
Not Part of a Multibuilding Facility	3,295	N	N	41,289	N	N
College or University	70	70	53	2,605	2,605	2,064
Primary or Secondary School	224	224	25	3,388	3,388	899
Office Complex	134	134	3	3,353	3,353	583
Retail Complex	181	181	Q	3,555	3,555	Q
Religious Campus or Complex	186	186	Q	1,907	1,907	Q
Health Care Complex	72	72	16	2,339	2,339	1,303
Government Complex	61	61	19	1,513	1,513	731
Other	434	434	15	7,389	7,389	1,140
Central Plant that Produces						
District Hot Water	97	97	97	4,468	4,468	4,468
District Steam	91	91	91	4,409	4,409	4,409
District Chilled Water	88	88	88	4,951	4,951	4,951
Electricity	32	32	32	1,377	1,377	1,377
Energy Sources (more than one may apply)						
Electricity	4,395	1,262	141	65,716	25,399	7,075
Natural Gas	2,670	663	67	45,525	16,613	4,161
Fuel Oil	434	98	18	13,285	5,401	2,321
District Heat	117	85	69	5,891	4,318	3,617
District Chilled Water	50	47	35	2,750	2,441	2,066
Propane	451	112	4	6,290	2,041	396
Other	153	19	Q	2,322	681	Q
Energy End Uses (more than one may apply)						
Buildings with Space Heating	4,016	1,139	138	61,602	23,532	6,842
Buildings with Cooling	3,560	993	115	58,474	22,088	6,270
Buildings with Water Heating	3,239	878	126	56,115	21,410	6,378
Buildings with Cooking	857	187	32	24,681	9,202	3,171
Buildings with Manufacturing	151	25	Q	3,126	983	Q

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.
Note: 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.

Table B17. Energy Sources, Number of Buildings, 1999

	Number of Buildings (thousand)								
			Energy Sources Used (more than one may apply)						
	All Buildings	All Buildings Using Any Energy Source	Electricity	Natural Gas	Fuel Oil	District Heat	District Chilled Water	Propane	Other[a]
All Buildings	4,657	4,403	4,395	2,670	434	117	50	451	153
Building Floorspace (Square Feet)									
1,001 to 5,000	2,348	2,193	2,186	1,193	220	Q	Q	215	93
5,001 to 10,000	1,110	1,036	1,036	684	74	Q	Q	124	Q
10,001 to 25,000	708	689	688	448	65	24	Q	74	19
25,001 to 50,000	257	253	253	176	28	19	7	17	7
50,001 to 100,000	145	143	143	103	22	13	7	13	5
100,001 to 200,000	59	59	59	42	13	7	5	6	Q
200,001 to 500,000	23	23	23	18	9	3	2	2	Q
Over 500,000	7	7	7	5	4	2	1	1	Q
Principal Building Activity									
Education	327	327	327	225	19	37	Q	17	7
Food Sales	174	173	173	88	Q	Q	N	Q	Q
Food Service	349	349	349	246	Q	Q	Q	78	Q
Health Care	127	127	127	73	14	3	2	Q	Q
Inpatient	11	11	11	9	9	3	2	Q	Q
Outpatient	116	116	116	63	Q	Q	Q	Q	Q
Lodging	153	153	153	104	7	18	Q	20	Q
Mercantile	667	667	667	439	87	Q	Q	37	38
Retail (Other Than Mall)	534	534	534	350	76	Q	Q	30	Q
Enclosed and Strip Malls	133	133	133	89	Q	N	Q	7	Q
Office	739	738	738	452	88	20	6	30	4
Public Assembly	305	299	299	187	24	15	Q	52	Q
Public Order and Safety	72	64	64	31	20	3	Q	Q	Q
Religious Worship	307	307	307	214	22	Q	Q	62	Q
Service	478	472	472	277	80	Q	Q	43	Q
Warehouse and Storage	603	496	496	226	18	Q	Q	50	Q
Other	102	98	98	40	Q	Q	Q	Q	Q
Vacant	253	130	123	68	Q	Q	N	Q	Q
Year Constructed									
1919 or Before	419	364	363	291	53	20	Q	Q	Q
1920 to 1945	499	480	480	329	55	9	2	45	Q
1946 to 1959	763	724	716	426	109	21	5	65	36
1960 to 1969	665	628	628	406	65	18	7	72	12
1970 to 1979	774	758	758	481	37	Q	Q	66	24
1980 to 1989	846	781	781	389	70	16	Q	89	39
1990 to 1999	690	669	669	349	45	15	4	94	Q
Census Region									
Northeast	686	640	639	311	218	31	2	112	21
Midwest	1,188	1,113	1,113	874	48	25	14	109	37
South	1,762	1,689	1,689	820	138	39	Q	167	64
West	1,021	961	954	665	30	22	13	62	Q
Climate Zone: 45-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	525	491	491	329	73	3	Q	94	Q
5,500-7,000 HDD	986	924	924	652	123	22	6	91	29
4,000-5,499 HDD	1,085	1,029	1,029	551	185	46	Q	130	53
Fewer than 4,000 HDD	1,134	1,077	1,070	727	19	14	7	64	16
2,000 CDD or More and --									
Fewer than 4,000 HDD	926	882	882	410	34	33	23	72	48

Table B17. Energy Sources, Number of Buildings, 1999

	Number of Buildings (thousand)								
			Energy Sources Used (more than one may apply)						
	All Buildings	All Buildings Using Any Energy Source	Electricity	Natural Gas	Fuel Oil	District Heat	District Chilled Water	Propane	Other[a]
Workers (main shift)									
Fewer than 5	2,376	2,129	2,121	1,151	182	38	Q	215	83
5 to 9	807	800	800	560	95	18	Q	71	Q
10 to 19	683	683	683	424	54	15	Q	74	Q
20 to 49	487	487	487	321	54	12	3	73	23
50 to 99	174	174	174	118	17	19	10	11	5
100 to 249	90	90	90	67	18	9	4	6	Q
250 or More	39	39	39	28	15	7	5	2	1
Weekly Operating Hours									
39 or Fewer	978	777	770	376	65	Q	Q	135	Q
40 to 48	1,156	1,147	1,147	673	102	41	Q	98	36
49 to 60	986	980	980	651	110	18	13	55	42
61 to 84	664	649	649	447	63	17	6	56	29
85 to 167	474	459	459	285	29	14	4	69	Q
Open Continuously	398	390	390	238	65	26	11	39	Q
Ownership and Occupancy									
Nongovernment Owned	4,135	3,905	3,898	2,366	386	67	21	415	144
Owner Occupied	2,801	2,747	2,747	1,605	311	53	13	355	126
Nonowner Occupied	1,099	1,069	1,069	719	75	Q	Q	57	17
Unoccupied	236	89	82	43	Q	N	N	Q	Q
Government Owned	521	498	498	304	48	50	29	36	9
Vacancy Status									
Completely Vacant	140	51	44	Q	N	N	N	Q	N
Mostly Vacant	113	80	79	40	Q	Q	N	Q	Q
Partially Vacant	697	636	636	370	51	Q	Q	57	Q
Not At All Vacant	3,707	3,636	3,636	2,232	376	94	36	390	129
Energy Sources (more than one may apply)									
Electricity	4,395	4,395	4,395	2,663	434	117	50	451	153
Natural Gas	2,670	2,670	2,663	2,670	91	52	21	35	59
Fuel Oil	434	434	434	91	434	8	3	80	26
District Heat	117	117	117	52	8	117	43	Q	Q
District Chilled Water	50	50	50	21	3	43	50	Q	Q
Propane	451	451	451	35	80	Q	Q	451	36
Other	153	153	153	59	26	Q	Q	36	153
Energy End Uses (more than one may apply)									
Buildings with Space Heating	4,016	4,016	4,008	2,588	432	116	49	434	149
Buildings with Cooling	3,560	3,560	3,560	2,335	302	97	50	318	107
Buildings with Water Heating	3,239	3,239	3,239	2,191	288	101	37	334	89
Buildings with Cooking	857	857	857	615	92	28	6	158	47
Buildings with Manufacturing	151	151	151	77	35	Q	Q	Q	Q
Buildings with Electricity Generation	172	172	172	118	75	15	5	27	33
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	767	767	767	551	79	25	6	138	47
Activities with Large Amounts of Hot Water	698	698	698	542	77	47	20	108	29

[a] "Other" includes wood, coal, solar, and all other energy sources.
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.
Note: 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.

Table B18. Energy Sources, Floorspace, 1999

	Total Floorspace (million square feet)								
			Energy Sources Used (more than one may apply)						
	All Buildings	All Buildings Using Any Energy Source	Electricity	Natural Gas	Fuel Oil	District Heat	District Chilled Water	Propane	Other[a]
All Buildings	67,338	65,753	65,716	45,525	13,285	5,891	2,750	6,290	2,322
Building Floorspace (Square Feet)									
1,001 to 5,000	6,774	6,309	6,280	3,566	620	Q	Q	635	292
5,001 to 10,000	8,238	7,721	7,721	5,088	583	Q	Q	986	Q
10,001 to 25,000	11,153	10,851	10,843	7,001	983	414	Q	1,203	290
25,001 to 50,000	9,311	9,175	9,175	6,405	983	660	294	568	250
50,001 to 100,000	10,112	10,034	10,034	7,165	1,612	933	525	865	350
100,001 to 200,000	8,271	8,246	8,246	5,915	1,875	903	630	854	Q
200,001 to 500,000	6,851	6,790	6,790	5,282	2,984	1,003	470	616	Q
Over 500,000	6,628	6,628	6,628	5,104	3,645	1,707	630	562	Q
Principal Building Activity									
Education	8,651	8,651	8,651	6,570	1,635	1,159	676	757	325
Food Sales	994	993	993	659	Q	Q	N	Q	Q
Food Service	1,851	1,851	1,851	1,510	Q	Q	Q	298	Q
Health Care	2,918	2,918	2,918	2,285	1,754	744	433	Q	Q
Inpatient	1,865	1,865	1,865	1,677	1,605	649	356	Q	Q
Outpatient	1,053	1,053	1,053	609	Q	Q	Q	Q	Q
Lodging	4,521	4,521	4,521	3,548	789	629	219	587	Q
Mercantile	10,398	10,398	10,398	7,887	1,411	Q	Q	863	365
Retail (Other Than Mall)	4,766	4,766	4,766	3,518	553	Q	Q	276	Q
Enclosed and Strip Malls	5,631	5,631	5,631	4,369	858	N	Q	587	Q
Office	12,044	12,043	12,043	7,356	3,913	1,536	678	370	192
Public Assembly	4,393	4,340	4,340	2,989	850	848	436	469	Q
Public Order and Safety	1,168	1,030	1,030	627	398	297	Q	Q	Q
Religious Worship	3,405	3,405	3,405	2,457	187	Q	Q	714	Q
Service	3,388	3,358	3,358	2,093	641	Q	Q	272	Q
Warehouse and Storage	10,477	9,879	9,879	6,211	1,102	Q	Q	1,338	Q
Other	1,222	1,217	1,217	707	205	Q	Q	Q	Q
Vacant	1,908	1,149	1,112	626	Q	Q	N	Q	Q
Year Constructed									
1919 or Before	4,034	3,722	3,714	2,766	745	486	Q	Q	Q
1920 to 1945	6,445	6,281	6,281	4,257	1,060	764	134	473	Q
1946 to 1959	9,127	8,822	8,794	6,040	1,782	1,088	406	748	433
1960 to 1969	10,866	10,686	10,686	7,512	2,349	1,406	633	1,220	353
1970 to 1979	11,840	11,750	11,750	8,080	2,446	788	492	1,033	352
1980 to 1989	13,931	13,485	13,485	8,794	2,795	682	424	1,333	499
1990 to 1999	11,094	11,007	11,007	8,076	2,108	677	407	1,295	353
Census Region									
Northeast	12,360	11,972	11,964	7,305	5,414	1,898	326	1,706	580
Midwest	16,761	16,389	16,389	13,506	2,423	1,521	746	1,405	606
South	23,485	23,076	23,076	14,199	3,749	1,265	939	2,389	579
West	14,731	14,315	14,287	10,515	1,699	1,207	739	790	557
Climate Zone: 45-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	5,890	5,750	5,750	4,064	1,612	250	Q	1,166	Q
5,500-7,000 HDD	17,083	16,706	16,706	12,573	3,773	1,743	763	1,343	691
4,000-5,499 HDD	16,243	15,800	15,792	10,455	4,531	2,443	653	1,619	602
Fewer than 4,000 HDD	16,333	15,951	15,922	12,149	1,903	875	683	1,040	442
2,000 CDD or More and --									
Fewer than 4,000 HDD	11,788	11,546	11,546	6,285	1,466	581	589	1,122	383

Table B18. Energy Sources, Floorspace, 1999

	Total Floorspace (million square feet)								
			Energy Sources Used (more than one may apply)						
	All Buildings	All Buildings Using Any Energy Source	Electricity	Natural Gas	Fuel Oil	District Heat	District Chilled Water	Propane	Other[a]
Workers (main shift)									
Fewer than 5	14,321	12,788	12,750	7,108	964	390	Q	1,451	345
5 to 9	6,325	6,274	6,274	4,633	796	304	Q	646	Q
10 to 19	8,028	8,028	8,028	5,589	676	475	Q	688	Q
20 to 49	10,814	10,814	10,814	7,737	1,294	544	162	1,189	317
50 to 99	8,898	8,898	8,898	6,278	1,593	696	478	839	364
100 to 249	8,356	8,356	8,356	6,146	2,482	1,052	484	787	417
250 or More	10,595	10,595	10,595	8,035	5,480	2,431	1,234	691	527
Weekly Operating Hours									
39 or Fewer	6,596	5,351	5,314	2,825	504	Q	Q	944	Q
40 to 48	13,105	13,070	13,070	8,197	1,540	796	239	1,026	285
49 to 60	14,200	14,186	14,186	9,714	2,638	945	589	1,068	570
61 to 84	12,458	12,381	12,381	9,007	2,500	943	504	980	440
85 to 167	9,116	8,930	8,930	6,449	1,532	915	505	1,085	324
Open Continuously	11,863	11,835	11,835	9,334	4,571	2,254	893	1,187	582
Ownership and Occupancy									
Nongovernment Owned	54,994	53,668	53,640	37,026	9,893	3,333	1,560	5,305	1,864
Owner Occupied	37,785	37,506	37,506	25,597	8,284	2,907	1,325	4,051	1,486
Nonowner Occupied	15,596	15,441	15,441	10,968	1,605	426	Q	1,244	358
Unoccupied	1,613	721	693	461	Q	N	N	Q	Q
Government Owned	12,343	12,085	12,076	8,500	3,392	2,559	1,190	985	458
Vacancy Status									
Completely Vacant	953	385	356	Q	N	N	N	Q	N
Mostly Vacant	956	765	756	367	Q	Q	N	Q	Q
Partially Vacant	15,520	15,093	15,093	10,725	3,528	1,311	521	1,051	378
Not At All Vacant	49,910	49,511	49,511	34,174	9,639	4,570	2,229	5,213	1,891
Energy Sources (more than one may apply)									
Electricity	65,716	65,716	65,716	45,496	13,277	5,891	2,750	6,290	2,322
Natural Gas	45,525	45,525	45,496	45,525	8,088	2,683	1,316	1,887	1,572
Fuel Oil	13,285	13,285	13,277	8,088	13,285	1,839	749	2,296	554
District Heat	5,891	5,891	5,891	2,683	1,839	5,891	2,354	Q	Q
District Chilled Water	2,750	2,750	2,750	1,316	749	2,354	2,750	Q	Q
Propane	6,290	6,290	6,290	1,887	2,296	Q	Q	6,290	438
Other	2,322	2,322	2,322	1,572	554	Q	Q	438	2,322
Energy End Uses (more than one may apply)									
Buildings with Space Heating	61,602	61,602	61,565	44,385	13,074	5,862	2,739	6,076	2,276
Buildings with Cooling	58,474	58,474	58,474	42,147	12,185	5,165	2,750	5,415	2,069
Buildings with Water Heating	56,115	56,115	56,115	41,366	11,852	5,301	2,455	5,409	1,887
Buildings with Cooking	24,681	24,681	24,681	19,857	7,840	2,487	1,047	3,005	1,331
Buildings with Manufacturing	3,126	3,126	3,126	2,322	555	Q	Q	403	Q
Buildings with Electricity Generation	11,882	11,882	11,882	9,119	8,749	2,083	919	1,486	1,132
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	23,328	23,328	23,328	18,916	7,576	2,416	1,027	2,712	1,331
Activities with Large Amounts of Hot Water	21,793	21,793	21,793	17,601	6,856	2,735	1,158	2,643	1,165

[a] "Other" includes wood, coal, solar, and all other energy sources.
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.
Note: 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.

Table B19. Energy End Uses, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)						Total Floorspace (million square feet)					
		Energy Used For (more than one may apply)						Energy Used For (more than one may apply)				
	All Buildings	Space Heating	Cooling	Water Heating	Cooking	Manufact-uring	All Buildings	Space Heating	Cooling	Water Heating	Cooking	Manufact-uring
All Buildings	4,657	4,016	3,560	3,239	857	151	67,338	61,602	58,474	56,115	24,681	3,126
Building Floorspace (Square Feet)												
1,001 to 5,000	2,348	1,982	1,680	1,456	357	Q	6,774	5,684	4,879	4,280	1,095	Q
5,001 to 10,000	1,110	946	828	778	176	36	8,238	7,090	6,212	5,748	1,272	318
10,001 to 25,000	708	629	611	574	150	28	11,153	9,865	9,530	9,000	2,415	519
25,001 to 50,000	257	237	223	222	72	11	9,311	8,565	8,116	8,088	2,630	390
50,001 to 100,000	145	137	134	127	54	9	10,112	9,597	9,401	8,887	3,901	600
100,001 to 200,000	59	57	55	54	29	3	8,271	7,893	7,609	7,527	4,092	478
200,001 to 500,000	23	22	21	21	14	1	6,851	6,445	6,345	6,258	4,254	283
Over 500,000	7	7	7	7	5	Q	6,628	6,465	6,382	6,327	5,020	Q
Principal Building Activity												
Education	327	326	274	240	106	Q	8,651	8,612	7,973	8,059	5,670	Q
Food Sales	174	149	166	163	85	Q	994	880	978	951	676	Q
Food Service	349	321	324	349	316	Q	1,851	1,721	1,760	1,846	1,761	Q
Health Care	127	127	127	126	11	Q	2,918	2,918	2,815	2,903	1,812	Q
Inpatient	11	11	11	11	9	Q	1,865	1,865	1,762	1,862	1,738	Q
Outpatient	116	116	116	115	Q	N	1,053	1,053	1,053	1,040	Q	N
Lodging	153	150	126	149	41	Q	4,521	4,424	4,051	4,442	2,401	Q
Mercantile	667	626	632	439	96	Q	10,398	9,848	10,174	8,698	5,218	Q
Retail (Other Than Mall)	534	502	499	323	29	Q	4,766	4,615	4,573	3,453	811	Q
Enclosed and Strip Malls	133	123	132	116	68	Q	5,631	5,233	5,601	5,244	4,407	Q
Office	739	728	716	615	19	Q	12,044	11,810	11,782	10,872	3,149	441
Public Assembly	305	274	232	249	101	Q	4,393	4,015	3,859	3,893	2,027	Q
Public Order and Safety	72	61	32	41	12	Q	1,168	1,021	760	830	301	Q
Religious Worship	307	306	232	252	51	N	3,405	3,383	2,765	3,109	842	N
Service	478	421	289	280	Q	25	3,388	3,027	2,481	2,351	Q	325
Warehouse and Storage	603	357	308	227	Q	51	10,477	8,104	7,621	6,743	Q	1,634
Other	102	84	76	64	Q	Q	1,222	1,086	1,087	983	Q	Q
Vacant	253	84	27	44	Q	Q	1,908	754	368	436	Q	Q
Year Constructed												
1919 or Before	419	350	260	277	69	Q	4,034	3,593	2,911	3,130	1,091	Q
1920 to 1945	499	430	313	311	85	Q	6,445	5,559	4,383	4,644	2,232	Q
1946 to 1959	763	666	589	493	115	28	9,127	8,402	7,601	7,154	3,195	535
1960 to 1969	665	557	496	493	131	19	10,866	9,966	9,325	9,421	4,178	409
1970 to 1979	774	691	649	592	161	32	11,840	10,916	11,050	10,182	4,551	555
1980 to 1989	846	713	702	623	173	37	13,931	12,566	12,849	12,137	5,030	744
1990 to 1999	690	608	549	450	124	Q	11,094	10,600	10,355	9,446	4,403	485
Census Region												
Northeast	686	601	473	515	141	22	12,360	11,667	10,311	10,577	5,245	568
Midwest	1,188	1,049	861	776	221	18	16,761	15,916	14,371	13,702	6,042	818
South	1,762	1,503	1,506	1,179	315	87	23,485	20,598	21,549	19,014	8,569	1,035
West	1,021	863	720	769	181	24	14,731	13,421	12,243	12,822	4,825	706
Climate Zone: 45-Year Average												
Under 2,000 CDD and --												
More than 7,000 HDD	525	475	366	396	97	Q	5,890	5,669	4,804	5,090	2,213	319
5,500-7,000 HDD	986	870	711	674	189	9	17,083	16,206	14,289	14,123	6,319	571
4,000-5,499 HDD	1,085	950	766	751	200	43	16,243	15,292	13,999	13,800	6,558	869
Fewer than 4,000 HDD	1,134	997	913	836	211	34	16,333	14,923	14,535	14,128	5,519	827
2,000 CDD or More and --												
Fewer than 4,000 HDD	926	724	803	582	160	53	11,788	9,512	10,847	8,973	4,072	540

Table B19. Energy End Uses, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)						Total Floorspace (million square feet)					
		Energy Used For (more than one may apply)						Energy Used For (more than one may apply)				
	All Buildings	Space Heating	Cooling	Water Heating	Cooking	Manufact-uring	All Buildings	Space Heating	Cooling	Water Heating	Cooking	Manufact-uring
Workers (main shift)												
Fewer than 5	2,376	1,835	1,513	1,312	287	Q	14,321	10,552	8,704	8,401	1,651	Q
5 to 9	807	773	681	643	131	24	6,325	6,020	5,291	5,145	1,341	230
10 to 19	683	667	636	586	172	31	8,028	7,762	7,409	7,000	2,021	477
20 to 49	487	456	433	417	154	29	10,814	10,347	9,930	9,445	3,871	645
50 to 99	174	166	169	159	65	12	8,898	8,536	8,519	8,166	4,354	544
100 to 249	90	81	88	85	30	3	8,356	8,053	8,129	7,760	4,305	436
250 or More	39	38	39	36	18	2	10,595	10,333	10,491	10,199	7,138	544
Weekly Operating Hours												
39 or Fewer	978	638	439	427	93	Q	6,596	4,217	3,113	3,340	884	Q
40 to 48	1,156	1,068	968	779	97	47	13,105	12,090	11,041	10,049	2,492	753
49 to 60	986	943	850	746	131	43	14,200	13,677	13,225	12,280	4,159	717
61 to 84	664	598	563	521	188	24	12,458	11,787	11,701	11,334	6,052	607
85 to 167	474	407	436	436	264	5	9,116	8,399	8,528	8,041	4,659	423
Open Continuously	398	361	304	330	85	Q	11,863	11,432	10,866	11,070	6,435	474
Energy Sources (more than one may apply)												
Electricity	4,395	4,008	3,560	3,239	857	151	65,716	61,565	58,474	56,115	24,681	3,126
Natural Gas	2,670	2,588	2,335	2,191	615	77	45,525	44,385	42,147	41,366	19,857	2,322
Fuel Oil	434	432	302	288	92	35	13,285	13,074	12,185	11,852	7,840	555
District Heat	117	116	97	101	28	Q	5,891	5,862	5,165	5,301	2,487	Q
District Chilled Water	50	49	50	37	6	Q	2,750	2,739	2,750	2,455	1,047	Q
Propane	451	434	318	334	158	Q	6,290	6,076	5,415	5,409	3,005	403
Other	153	149	107	89	47	Q	2,322	2,276	2,069	1,887	1,331	Q
Energy End Uses (more than one may apply)												
Buildings with Space Heating	4,016	4,016	3,400	3,087	798	143	61,602	61,602	56,361	54,204	23,813	3,031
Buildings with Cooling	3,560	3,400	3,560	2,915	792	129	58,474	56,361	58,474	52,589	23,730	2,861
Buildings with Water Heating	3,239	3,087	2,915	3,239	818	89	56,115	54,204	52,589	56,115	23,830	2,364
Buildings with Cooking	857	798	792	818	857	Q	24,681	23,813	23,730	23,830	24,681	495
Buildings with Manufacturing	151	143	129	89	Q	151	3,126	3,031	2,861	2,364	495	3,126
Buildings with Electricity Generation	172	169	149	143	63	Q	11,882	11,643	11,538	11,079	7,823	330
Energy-Related Space Functions (more than one may apply)												
Commercial Food Preparation	767	711	716	733	767	Q	23,328	22,488	22,457	22,563	23,328	478
Activities with Large Amounts of Hot Water	698	674	635	698	422	Q	21,793	21,325	20,687	21,793	16,513	584

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.
Note: 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.

Table B20. Space-Heating Energy Sources, Number of Buildings, 1999

	Number of Buildings (thousand)							
			Space-Heating Energy Sources Used (more than one may apply)					
	All Buildings	All Buildings with Space Heating	Electricity	Natural Gas	Fuel Oil	District Heat	Propane	Other[a]
All Buildings	4,657	4,016	1,880	2,380	377	96	307	94
Building Floorspace (Square Feet)								
1,001 to 5,000	2,348	1,982	926	1,082	214	Q	162	Q
5,001 to 10,000	1,110	946	379	624	73	Q	88	Q
10,001 to 25,000	708	629	324	389	52	19	42	Q
25,001 to 50,000	257	237	129	143	20	17	7	Q
50,001 to 100,000	145	137	74	89	9	13	5	Q
100,001 to 200,000	59	57	34	35	6	7	Q	Q
200,001 to 500,000	23	22	11	13	3	3	Q	Q
Over 500,000	7	7	4	4	1	2	Q	Q
Principal Building Activity								
Education	327	326	166	196	17	30	10	Q
Food Sales	174	149	63	79	Q	Q	Q	Q
Food Service	349	321	143	192	Q	Q	Q	Q
Health Care	127	127	78	63	Q	3	Q	N
Inpatient	11	11	3	5	Q	3	Q	N
Outpatient	116	116	75	58	Q	Q	Q	N
Lodging	153	150	101	74	Q	13	Q	Q
Mercantile	667	626	273	392	86	Q	31	Q
Retail (Other Than Mall)	534	502	204	318	76	Q	Q	Q
Enclosed and Strip Malls	133	123	68	75	Q	N	Q	N
Office	739	728	430	419	65	19	Q	Q
Public Assembly	305	274	121	153	Q	15	Q	Q
Public Order and Safety	72	61	21	30	Q	3	Q	Q
Religious Worship	307	306	125	206	22	Q	62	Q
Service	478	421	135	260	71	Q	Q	Q
Warehouse and Storage	603	357	171	211	15	Q	39	Q
Other	102	84	Q	39	Q	Q	Q	Q
Vacant	253	84	18	67	Q	Q	Q	Q
Year Constructed								
1919 or Before	419	350	105	254	52	19	Q	Q
1920 to 1945	499	430	145	317	53	9	Q	Q
1946 to 1959	763	666	307	376	98	21	39	Q
1960 to 1969	665	557	224	361	56	16	48	Q
1970 to 1979	774	691	376	423	28	Q	39	Q
1980 to 1989	846	713	411	337	54	11	66	Q
1990 to 1999	690	608	312	311	36	4	78	Q
Census Region								
Northeast	686	601	186	273	210	31	63	Q
Midwest	1,188	1,049	331	834	33	22	93	26
South	1,762	1,503	945	677	114	27	120	45
West	1,021	863	418	595	Q	17	31	Q
Climate Zone: 45-Year Average								
Under 2,000 CDD and --								
More than 7,000 HDD	525	475	133	324	69	3	74	Q
5,500-7,000 HDD	986	870	312	619	111	22	66	Q
4,000-5,499 HDD	1,085	950	435	468	170	42	79	33
Fewer than 4,000 HDD	1,134	997	509	647	Q	8	Q	Q
2,000 CDD or More and --								
Fewer than 4,000 HDD	926	724	492	322	Q	21	Q	Q

Table B20. Space-Heating Energy Sources, Number of Buildings, 1999

	Number of Buildings (thousand)							
			Space-Heating Energy Sources Used (more than one may apply)					
	All Buildings	All Buildings with Space Heating	Electricity	Natural Gas	Fuel Oil	District Heat	Propane	Other[a]
Workers (main shift)								
Fewer than 5	2,376	1,835	773	1,047	174	30	183	55
5 to 9	807	773	363	502	91	14	37	Q
10 to 19	683	667	343	390	51	10	54	Q
20 to 49	487	456	233	262	39	12	28	Q
50 to 99	174	166	103	103	10	15	Q	Q
100 to 249	90	81	43	54	8	8	Q	Q
250 or More	39	38	22	22	2	7	Q	Q
Weekly Operating Hours								
39 or Fewer	978	638	259	355	64	Q	113	Q
40 to 48	1,156	1,068	516	616	90	35	72	Q
49 to 60	986	943	457	599	103	17	28	27
61 to 84	664	598	250	383	56	16	40	Q
85 to 167	474	407	208	232	25	7	35	Q
Open Continuously	398	362	189	195	38	20	18	Q
Energy Sources (more than one may apply)								
Electricity	4,395	4,008	1,880	2,373	376	96	307	94
Natural Gas	2,670	2,588	954	2,380	60	41	Q	19
Fuel Oil	434	432	163	62	377	7	Q	Q
District Heat	117	116	46	20	Q	96	Q	Q
District Chilled Water	50	49	23	4	Q	39	Q	Q
Propane	451	434	145	28	76	Q	307	Q
Other	153	149	57	52	Q	Q	Q	94
Primary Space-Heating Energy Source								
Electricity	1,128	1,128	1,128	174	37	Q	7	Q
Natural Gas	2,189	2,189	607	2,189	33	2	Q	Q
Fuel Oil	302	302	76	2	302	Q	Q	Q
District Heat	77	77	9	Q	Q	77	Q	Q
Propane	282	282	58	Q	Q	N	282	Q
Other	38	38	Q	Q	Q	N	Q	38
Cooling Energy Sources (more than one may apply)								
Electricity	3,450	3,297	1,674	1,992	246	54	211	60
Natural Gas	142	137	68	135	Q	Q	Q	N
District Chilled Water	50	49	23	4	Q	39	Q	Q
Water-Heating Energy Sources (more than one may apply)								
Electricity	1,546	1,465	927	667	90	23	106	43
Natural Gas	1,520	1,459	531	1,311	44	21	Q	Q
Fuel Oil	110	109	34	6	107	Q	Q	Q
District Heat	62	61	21	3	Q	46	Q	Q
Propane	130	116	29	Q	Q	N	81	Q
Cooking Energy Sources (more than one may apply)								
Electricity	437	398	216	205	36	11	43	Q
Natural Gas	505	475	208	390	24	Q	Q	Q
Propane	118	111	40	Q	24	Q	52	Q

Table B20. Space-Heating Energy Sources, Number of Buildings, 1999

	Number of Buildings (thousand)							
			Space-Heating Energy Sources Used (more than one may apply)					
	All Buildings	All Buildings with Space Heating	Electricity	Natural Gas	Fuel Oil	District Heat	Propane	Other[a]
Energy End Uses (more than one may apply)								
Buildings with Space Heating	4,016	4,016	1,880	2,380	377	96	307	94
Buildings with Cooling	3,560	3,400	1,701	2,070	246	77	212	61
Buildings with Water Heating	3,239	3,087	1,465	1,914	246	80	195	50
Buildings with Cooking	857	798	362	480	74	21	75	25
Buildings with Manufacturing	151	143	76	67	Q	Q	Q	Q
Buildings with Electricity Generation	172	169	89	97	23	9	4	Q
Percent of Floorspace Heated								
Not Heated	641	Q	N	Q	N	N	N	N
1 to 50	576	576	290	301	58	Q	61	Q
51 to 99	627	627	255	394	52	16	30	Q
100	2,813	2,813	1,335	1,685	266	80	216	42
Heating Equipment (more than one may apply)								
Heat Pumps	492	492	475	144	Q	4	12	Q
Furnaces	1,460	1,460	512	1,077	166	Q	128	Q
Individual Space Heaters	894	894	584	543	100	7	104	27
District Heat	96	96	26	Q	Q	96	Q	Q
Boilers	581	581	193	381	152	Q	41	12
Packaged Heating Units	1,347	1,347	744	865	17	Q	81	Q
Other	185	185	110	67	34	1	19	52

[a] "Other" includes wood, coal, solar, and all other energy sources.
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.
Note: 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.

Table B21. Space-Heating Energy Sources, Floorspace, 1999

	Total Floorspace (million square feet)							
			Space-Heating Energy Sources Used (more than one may apply)					
	All Buildings	All Buildings with Space Heating	Electricity	Natural Gas	Fuel Oil	District Heat	Propane	Other[a]
All Buildings	67,338	61,612	32,291	37,902	5,611	5,534	2,728	945
Building Floorspace (Square Feet)								
1,001 to 5,000	6,774	5,684	2,651	3,250	598	Q	469	Q
5,001 to 10,000	8,238	7,090	2,808	4,613	573	Q	688	Q
10,001 to 25,000	11,153	9,865	5,079	6,069	773	307	682	Q
25,001 to 50,000	9,311	8,574	4,752	5,225	687	617	247	Q
50,001 to 100,000	10,112	9,597	5,238	6,200	635	905	366	Q
100,001 to 200,000	8,271	7,893	4,719	4,917	791	883	Q	Q
200,001 to 500,000	6,851	6,445	3,234	3,949	847	963	Q	Q
Over 500,000	6,628	6,465	3,810	3,680	707	1,698	Q	Q
Principal Building Activity								
Education	8,651	8,612	3,613	5,317	1,375	1,086	200	Q
Food Sales	994	880	359	556	Q	Q	Q	Q
Food Service	1,851	1,721	836	1,210	Q	Q	Q	Q
Health Care	2,918	2,918	1,335	1,793	641	736	Q	N
Inpatient	1,865	1,865	693	1,257	615	641	Q	N
Outpatient	1,053	1,053	642	536	Q	Q	Q	N
Lodging	4,521	4,424	2,984	2,503	Q	527	Q	Q
Mercantile	10,398	9,848	6,148	6,423	649	Q	332	Q
Retail (Other Than Mall)	4,766	4,615	2,239	3,150	470	Q	Q	Q
Enclosed and Strip Malls	5,631	5,233	3,909	3,274	Q	N	Q	N
Office	12,044	11,819	7,221	6,060	812	1,487	Q	Q
Public Assembly	4,393	4,015	1,848	2,370	Q	841	Q	Q
Public Order and Safety	1,168	1,021	354	512	Q	297	Q	Q
Religious Worship	3,405	3,383	1,534	2,270	182	Q	706	Q
Service	3,388	3,027	1,145	1,981	405	Q	Q	Q
Warehouse and Storage	10,477	8,104	4,285	5,719	576	Q	483	Q
Other	1,222	1,086	401	612	Q	Q	Q	Q
Vacant	1,908	754	228	575	Q	Q	Q	Q
Year Constructed								
1919 or Before	4,034	3,593	1,267	2,399	593	480	Q	Q
1920 to 1945	6,445	5,559	2,223	3,808	651	764	Q	Q
1946 to 1959	9,127	8,402	3,822	5,091	1,065	1,065	319	Q
1960 to 1969	10,866	9,966	4,789	6,163	1,083	1,351	473	Q
1970 to 1979	11,840	10,916	6,116	6,558	1,015	769	415	Q
1980 to 1989	13,931	12,566	8,140	7,226	772	606	526	Q
1990 to 1999	11,094	10,610	5,933	6,658	432	499	608	Q
Census Region								
Northeast	12,360	11,667	4,625	5,703	3,612	1,876	761	Q
Midwest	16,761	15,916	6,429	12,467	619	1,514	733	281
South	23,485	20,608	13,862	10,904	1,128	1,022	1,013	260
West	14,731	13,421	7,375	8,828	252	1,121	221	Q
Climate Zone: 45-Year Average								
Under 2,000 CDD and --								
More than 7,000 HDD	5,890	5,669	1,920	3,949	1,065	250	616	Q
5,500-7,000 HDD	17,083	16,206	6,767	11,335	1,833	1,736	613	Q
4,000-5,499 HDD	16,243	15,292	8,030	8,234	2,267	2,405	766	305
Fewer than 4,000 HDD	16,333	14,923	8,670	10,109	281	677	Q	Q
2,000 CDD or More and --								
Fewer than 4,000 HDD	11,788	9,521	6,904	4,275	Q	466	Q	Q

Table B21. Space-Heating Energy Sources, Floorspace, 1999

	Total Floorspace (million square feet)							
			Space-Heating Energy Sources Used (more than one may apply)					
	All Buildings	All Buildings with Space Heating	Electricity	Natural Gas	Fuel Oil	District Heat	Propane	Other[a]
Workers (main shift)								
Fewer than 5	14,321	10,552	4,405	6,432	912	289	1,136	190
5 to 9	6,325	6,020	2,941	3,910	634	292	372	Q
10 to 19	8,028	7,772	3,981	4,784	518	372	378	Q
20 to 49	10,814	10,347	5,599	6,585	691	534	456	Q
50 to 99	8,898	8,536	4,817	5,229	925	645	Q	Q
100 to 249	8,356	8,053	4,500	5,126	900	1,031	Q	Q
250 or More	10,595	10,333	6,048	5,836	1,031	2,371	Q	Q
Weekly Operating Hours								
39 or Fewer	6,596	4,217	1,636	2,441	486	Q	809	Q
40 to 48	13,105	12,090	6,215	7,330	952	730	576	Q
49 to 60	14,200	13,677	7,065	8,499	1,403	910	416	388
61 to 84	12,458	11,787	6,632	7,120	896	911	368	Q
85 to 167	9,116	8,399	4,540	5,438	703	830	288	Q
Open Continuously	11,863	11,442	6,204	7,074	1,170	2,114	272	Q
Energy Sources (more than one may apply)								
Electricity	65,716	61,575	32,291	37,874	5,602	5,534	2,728	945
Natural Gas	45,525	44,394	21,230	37,902	2,447	2,431	250	524
Fuel Oil	13,285	13,083	6,470	5,793	5,611	1,787	398	Q
District Heat	5,891	5,862	1,903	844	Q	5,534	Q	Q
District Chilled Water	2,750	2,739	1,012	517	Q	2,279	Q	Q
Propane	6,290	6,076	2,809	1,645	1,510	Q	2,728	Q
Other	2,322	2,276	1,015	1,368	Q	Q	Q	945
Primary Space-Heating Energy Source								
Electricity	17,627	17,627	17,627	4,465	333	Q	288	Q
Natural Gas	32,729	32,729	11,902	32,729	1,422	211	Q	Q
Fuel Oil	3,719	3,719	799	149	3,719	Q	Q	Q
District Heat	5,077	5,077	1,277	378	Q	5,077	Q	Q
Propane	2,107	2,107	593	Q	Q	N	2,107	Q
Other	343	343	Q	Q	Q	N	Q	343
Cooling Energy Sources (more than one may apply)								
Electricity	55,545	53,468	30,329	33,933	4,590	3,173	2,169	768
Natural Gas	1,914	1,898	935	1,852	Q	Q	Q	N
District Chilled Water	2,750	2,739	1,012	517	Q	2,279	Q	Q
Water-Heating Energy Sources (more than one may apply)								
Electricity	24,171	23,070	16,403	11,446	1,636	906	1,129	496
Natural Gas	29,196	28,489	13,417	25,292	1,758	629	Q	Q
Fuel Oil	2,218	2,206	627	573	2,045	Q	Q	Q
District Heat	4,182	4,162	1,132	525	Q	3,968	Q	Q
Propane	1,371	1,227	493	Q	Q	N	770	Q
Cooking Energy Sources (more than one may apply)								
Electricity	13,733	13,193	8,107	7,676	1,530	1,327	455	Q
Natural Gas	16,785	16,256	8,646	12,403	1,621	1,522	Q	Q
Propane	1,754	1,683	991	Q	540	Q	461	Q

Table B21. Space-Heating Energy Sources, Floorspace, 1999

	Total Floorspace (million square feet)							
			Space-Heating Energy Sources Used (more than one may apply)					
	All Buildings	All Buildings with Space Heating	Electricity	Natural Gas	Fuel Oil	District Heat	Propane	Other[a]
Energy End Uses (more than one may apply)								
Buildings with Space Heating	61,602	61,602	32,291	37,893	5,611	5,534	2,728	945
Buildings with Cooling	58,474	56,370	30,961	35,080	4,638	4,844	2,191	779
Buildings with Water Heating	56,115	54,213	28,867	34,164	4,759	4,943	2,018	682
Buildings with Cooking	24,681	23,823	13,404	14,929	2,814	2,337	801	477
Buildings with Manufacturing	3,126	3,031	1,668	1,940	Q	Q	Q	Q
Buildings with Electricity Generation	11,882	11,652	6,951	6,847	1,510	1,986	253	Q
Percent of Floorspace Heated								
Not Heated	5,736	Q	N	Q	N	N	N	N
1 to 50	7,593	7,593	4,722	4,319	564	Q	461	Q
51 to 99	10,745	10,745	6,110	6,642	786	886	421	Q
100	43,264	43,264	21,459	26,932	4,260	4,575	1,845	593
Heating Equipment (more than one may apply)								
Heat Pumps	8,923	8,923	8,667	4,466	532	730	204	Q
Furnaces	14,449	14,449	6,822	11,524	1,295	Q	1,075	Q
Individual Space Heaters	17,349	17,349	12,350	11,488	1,444	1,210	1,051	534
District Heat	5,534	5,534	1,609	678	Q	5,534	Q	Q
Boilers	19,522	19,522	8,410	15,131	4,176	Q	672	420
Packaged Heating Units	25,743	25,743	16,861	17,324	1,040	767	937	Q
Other	4,073	4,073	2,972	1,982	341	249	272	315

[a] "Other" includes wood, coal, solar, and all other energy sources.
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.
Note: 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.

Table B22. Primary Space-Heating Energy Sources, Number of Buildings, 1999

	Number of Buildings (thousand)					
			Primary Space-Heating Energy Source Used[a]			
	All Buildings	All Buildings with Space Heating	Electricity	Natural Gas	Fuel Oil	District Heat
All Buildings	4,657	4,016	1,128	2,189	302	77
Building Floorspace (Square Feet)						
1,001 to 5,000	2,348	1,982	591	1,028	167	Q
5,001 to 10,000	1,110	946	200	582	70	Q
10,001 to 25,000	708	629	195	336	40	13
25,001 to 50,000	257	237	79	122	14	16
50,001 to 100,000	145	137	39	76	7	12
100,001 to 200,000	59	57	18	30	3	6
200,001 to 500,000	23	22	5	12	2	3
Over 500,000	7	7	2	3	Q	2
Principal Building Activity						
Education	327	326	111	172	14	20
Food Sales	174	149	53	77	Q	Q
Food Service	349	321	87	176	Q	Q
Health Care	127	127	55	62	Q	3
Inpatient	11	11	Q	5	Q	2
Outpatient	116	116	55	57	Q	Q
Lodging	153	150	80	55	Q	13
Mercantile	667	626	187	360	50	Q
Retail (Other Than Mall)	534	502	126	305	43	Q
Enclosed and Strip Malls	133	123	61	54	Q	N
Office	739	728	252	376	64	18
Public Assembly	305	274	58	144	Q	15
Public Order and Safety	72	61	Q	28	Q	3
Religious Worship	307	306	29	200	Q	Q
Service	478	421	83	235	Q	Q
Warehouse and Storage	603	357	100	201	Q	Q
Other	102	84	Q	38	Q	Q
Vacant	253	84	Q	66	Q	Q
Year Constructed						
1919 or Before	419	350	21	250	50	19
1920 to 1945	499	430	60	299	41	9
1946 to 1959	763	666	181	346	86	14
1960 to 1969	665	557	105	345	45	15
1970 to 1979	774	691	233	383	20	6
1980 to 1989	846	713	311	282	35	10
1990 to 1999	690	608	218	284	Q	4
Census Region						
Northeast	686	601	76	254	190	24
Midwest	1,188	1,049	128	792	Q	21
South	1,762	1,503	672	598	92	16
West	1,021	863	253	545	Q	16
Climate Zone: 45-Year Average						
Under 2,000 CDD and --						
More than 7,000 HDD	525	475	31	311	59	2
5,500-7,000 HDD	986	870	114	583	83	22
4,000-5,499 HDD	1,085	950	245	446	136	35
Fewer than 4,000 HDD	1,134	997	365	566	Q	7
2,000 CDD or More and --						
Fewer than 4,000 HDD	926	724	373	283	Q	11

Table B22. Primary Space-Heating Energy Sources, Number of Buildings, 1999

	Number of Buildings (thousand)					
			Primary Space-Heating Energy Source Used[a]			
	All Buildings	All Buildings with Space Heating	Electricity	Natural Gas	Fuel Oil	District Heat
Workers (main shift)						
Fewer than 5	2,376	1,835	480	1,004	134	21
5 to 9	807	773	174	469	77	13
10 to 19	683	667	221	339	41	10
20 to 49	487	456	148	234	37	11
50 to 99	174	166	72	77	7	8
100 to 249	90	81	21	47	5	7
250 or More	39	38	12	19	1	6
Weekly Operating Hours						
39 or Fewer	978	638	119	343	51	Q
40 to 48	1,156	1,068	315	576	74	24
49 to 60	986	943	263	544	92	16
61 to 84	664	598	162	351	39	9
85 to 167	474	407	136	207	19	7
Open Continuously	398	361	132	167	28	20
Energy Sources (more than one may apply)						
Electricity	4,395	4,008	1,128	2,182	302	77
Natural Gas	2,670	2,588	331	2,189	25	33
Fuel Oil	434	432	64	54	302	6
District Heat	117	116	35	4	Q	77
District Chilled Water	50	49	Q	3	Q	28
Propane	451	434	57	24	62	Q
Other	153	149	38	41	Q	Q
Energy End Uses (more than one may apply)						
Buildings with Space Heating	4,016	4,016	1,128	2,189	302	77
Buildings with Cooling	3,560	3,400	1,058	1,883	192	58
Buildings with Water Heating	3,239	3,087	867	1,759	205	70
Buildings with Cooking	857	798	210	438	58	13
Buildings with Manufacturing	151	143	51	58	Q	Q
Buildings with Electricity Generation	172	169	51	87	20	9
Percent of Floorspace Heated						
Not Heated	641	N	N	N	N	N
1 to 50	576	576	189	277	44	Q
51 to 99	627	627	165	365	45	15
100	2,813	2,813	774	1,547	213	61
Heating Equipment (more than one may apply)						
Heat Pumps	492	492	373	97	Q	3
Furnaces	1,460	1,460	192	1,017	119	Q
Individual Space Heaters	894	894	213	498	79	5
District Heat	96	96	Q	2	Q	77
Boilers	581	581	40	364	136	Q
Packaged Heating Units	1,347	1,347	494	758	Q	4
Other	185	185	62	60	Q	Q

[a] Additionally, 282,000 buildings used propane; 38,000 buildings used wood, coal, or some other energy source; and no buildings used solar as a primary space heating energy source.
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: 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.

Table B23. Primary Space-Heating Energy Sources, Floorspace, 1999

	Total Floorspace (million square feet)					
			Primary Space-Heating Energy Source Used[a]			
	All Buildings	All Buildings with Space Heating	Electricity	Natural Gas	Fuel Oil	District Heat
All Buildings	67,338	61,602	17,627	32,729	3,719	5,077
Building Floorspace (Square Feet)						
1,001 to 5,000	6,774	5,684	1,567	3,080	482	Q
5,001 to 10,000	8,238	7,090	1,496	4,292	557	Q
10,001 to 25,000	11,153	9,865	3,035	5,320	597	232
25,001 to 50,000	9,311	8,565	2,866	4,416	486	577
50,001 to 100,000	10,112	9,597	2,765	5,261	484	836
100,001 to 200,000	8,271	7,893	2,497	4,128	383	853
200,001 to 500,000	6,851	6,445	1,509	3,531	474	894
Over 500,000	6,628	6,465	1,892	2,701	Q	1,554
Principal Building Activity						
Education	8,651	8,612	1,502	4,873	1,024	1,017
Food Sales	994	880	244	490	Q	Q
Food Service	1,851	1,721	492	1,008	Q	Q
Health Care	2,918	2,918	461	1,679	Q	626
Inpatient	1,865	1,865	Q	1,174	Q	538
Outpatient	1,053	1,053	431	505	Q	Q
Lodging	4,521	4,424	2,112	1,727	Q	517
Mercantile	10,398	9,848	4,273	4,968	319	Q
Retail (Other Than Mall)	4,766	4,615	1,332	2,790	290	Q
Enclosed and Strip Malls	5,631	5,233	2,942	2,178	Q	N
Office	12,044	11,810	4,334	5,279	720	1,367
Public Assembly	4,393	4,015	639	2,065	Q	805
Public Order and Safety	1,168	1,021	Q	470	Q	279
Religious Worship	3,405	3,383	321	2,222	Q	Q
Service	3,388	3,027	710	1,657	Q	Q
Warehouse and Storage	10,477	8,104	2,208	5,160	301	Q
Other	1,222	1,086	174	583	Q	Q
Vacant	1,908	754	Q	549	Q	Q
Year Constructed						
1919 or Before	4,034	3,593	231	2,292	544	471
1920 to 1945	6,445	5,559	826	3,258	462	726
1946 to 1959	9,127	8,402	1,712	4,656	747	954
1960 to 1969	10,866	9,966	2,039	5,496	717	1,300
1970 to 1979	11,840	10,916	3,678	5,421	661	704
1980 to 1989	13,931	12,566	5,433	5,930	329	493
1990 to 1999	11,094	10,600	3,708	5,677	Q	428
Census Region						
Northeast	12,360	11,667	1,645	4,913	2,803	1,709
Midwest	16,761	15,916	2,355	11,348	Q	1,411
South	23,485	20,598	9,259	8,815	718	904
West	14,731	13,421	4,368	7,653	Q	1,053
Climate Zone: 45-Year Average						
Under 2,000 CDD and --						
More than 7,000 HDD	5,890	5,669	427	3,692	816	222
5,500-7,000 HDD	17,083	16,206	2,654	10,175	1,208	1,625
4,000-5,499 HDD	16,243	15,292	3,638	7,148	1,519	2,225
Fewer than 4,000 HDD	16,333	14,923	5,619	8,306	Q	576
2,000 CDD or More and --						
Fewer than 4,000 HDD	11,788	9,512	5,288	3,409	Q	429

Table B23. Primary Space-Heating Energy Sources, Floorspace, 1999

	Total Floorspace (million square feet)					
			Primary Space-Heating Energy Source Used[a]			
	All Buildings	All Buildings with Space Heating	Electricity	Natural Gas	Fuel Oil	District Heat
Workers (main shift)						
Fewer than 5	14,321	10,552	2,259	6,115	788	264
5 to 9	6,325	6,020	1,412	3,539	484	284
10 to 19	8,028	7,762	2,527	4,136	336	365
20 to 49	10,814	10,347	3,290	5,671	564	509
50 to 99	8,898	8,536	2,840	4,214	714	546
100 to 249	8,356	8,053	2,201	4,336	479	966
250 or More	10,595	10,333	3,099	4,719	355	2,143
Weekly Operating Hours						
39 or Fewer	6,596	4,217	564	2,349	444	Q
40 to 48	13,105	12,090	3,391	6,705	753	632
49 to 60	14,200	13,677	3,642	7,681	1,084	817
61 to 84	12,458	11,787	4,240	5,905	631	785
85 to 167	9,116	8,399	2,526	4,322	485	818
Open Continuously	11,863	11,432	3,263	5,768	323	1,991
Energy Sources (more than one may apply)						
Electricity	65,716	61,565	17,627	32,701	3,711	5,077
Natural Gas	45,525	44,385	8,437	32,729	888	2,107
Fuel Oil	13,285	13,074	2,710	4,852	3,719	1,578
District Heat	5,891	5,862	474	284	Q	5,077
District Chilled Water	2,750	2,739	310	334	Q	2,084
Propane	6,290	6,076	1,468	1,360	1,044	Q
Other	2,322	2,276	507	1,104	Q	Q
Energy End Uses (more than one may apply)						
Buildings with Space Heating	61,602	61,602	17,627	32,729	3,719	5,077
Buildings with Cooling	58,474	56,361	17,160	30,003	2,912	4,392
Buildings with Water Heating	56,115	54,204	15,562	29,379	3,085	4,519
Buildings with Cooking	24,681	23,813	7,203	12,286	1,549	2,035
Buildings with Manufacturing	3,126	3,031	894	1,708	Q	Q
Buildings with Electricity Generation	11,882	11,643	3,298	5,682	726	1,782
Percent of Floorspace Heated						
Not Heated	5,736	N	N	N	N	N
1 to 50	7,593	7,593	3,013	3,648	481	Q
51 to 99	10,745	10,745	3,275	5,829	409	837
100	43,264	43,264	11,339	23,252	2,829	4,176
Heating Equipment (more than one may apply)						
Heat Pumps	8,923	8,923	5,009	3,076	Q	588
Furnaces	14,449	14,449	2,281	10,311	821	Q
Individual Space Heaters	17,349	17,349	4,788	9,945	683	1,042
District Heat	5,534	5,534	Q	211	Q	5,077
Boilers	19,522	19,522	2,171	13,918	2,717	Q
Packaged Heating Units	25,743	25,743	10,090	13,958	333	602
Other	4,073	4,073	1,807	1,634	Q	Q

[a] Additionally, buildings comprising 2,107 million square feet used propane; buildings comprising 343 million square feet used wood, coal, or some other energy source; and no buildings used solar as a primary space heating energy source.
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: 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.

Table B24. Cooling Energy Sources, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)					Total Floorspace (million square feet)				
			Cooling Energy Sources (more than one may apply)					Cooling Energy Sources (more than one may apply)		
	All Buildings	All Buildings with Cooling	Electricity	Natural Gas	District Chilled Water	All Buildings	All Buildings with Cooling	Electricity	Natural Gas	District Chilled Water
All Buildings	4,657	3,560	3,450	142	50	67,338	58,474	55,545	1,914	2,750
Building Floorspace (Square Feet)										
1,001 to 5,000	2,348	1,680	1,640	Q	Q	6,774	4,879	4,784	Q	Q
5,001 to 10,000	1,110	828	796	Q	Q	8,238	6,212	5,938	Q	Q
10,001 to 25,000	708	611	596	23	Q	11,153	9,530	9,307	325	Q
25,001 to 50,000	257	223	214	8	7	9,311	8,116	7,753	268	294
50,001 to 100,000	145	134	127	4	7	10,112	9,401	8,870	315	525
100,001 to 200,000	59	55	51	2	5	8,271	7,609	7,011	282	630
200,001 to 500,000	23	21	20	Q	2	6,851	6,345	5,991	Q	470
Over 500,000	7	7	6	Q	1	6,628	6,382	5,890	Q	630
Principal Building Activity										
Education	327	274	265	Q	Q	8,651	7,973	7,305	Q	676
Food Sales	174	166	148	Q	N	994	978	947	Q	N
Food Service	349	324	312	Q	Q	1,851	1,760	1,687	Q	Q
Health Care	127	127	125	Q	2	2,918	2,815	2,537	Q	433
Inpatient	11	11	9	Q	2	1,865	1,762	1,554	Q	356
Outpatient	116	116	116	Q	Q	1,053	1,053	983	Q	Q
Lodging	153	126	123	Q	Q	4,521	4,051	3,880	Q	219
Mercantile	667	632	622	26	Q	10,398	10,174	9,914	462	Q
Retail (Other Than Mall)	534	499	491	Q	Q	4,766	4,573	4,423	Q	Q
Enclosed and Strip Malls	133	132	131	Q	Q	5,631	5,601	5,492	Q	Q
Office	739	716	695	31	6	12,044	11,782	11,024	319	678
Public Assembly	305	232	214	Q	Q	4,393	3,859	3,544	Q	436
Public Order and Safety	72	32	31	Q	Q	1,168	760	706	Q	Q
Religious Worship	307	232	231	Q	Q	3,405	2,765	2,763	Q	Q
Service	478	289	288	Q	Q	3,388	2,481	2,470	Q	Q
Warehouse and Storage	603	308	305	Q	Q	10,477	7,621	7,520	Q	Q
Other	102	76	64	Q	Q	1,222	1,087	880	Q	Q
Vacant	253	27	27	N	N	1,908	368	368	N	N
Year Constructed										
1919 or Before	419	260	245	Q	Q	4,034	2,911	2,632	Q	Q
1920 to 1945	499	313	312	Q	2	6,445	4,383	4,235	Q	134
1946 to 1959	763	589	578	Q	5	9,127	7,601	7,160	Q	406
1960 to 1969	665	496	472	26	7	10,866	9,325	8,676	353	633
1970 to 1979	774	649	636	35	Q	11,840	11,050	10,583	376	492
1980 to 1989	846	702	693	11	Q	13,931	12,849	12,490	300	424
1990 to 1999	690	549	514	Q	4	11,094	10,355	9,770	416	407
Census Region										
Northeast	686	473	459	13	2	12,360	10,311	9,766	446	326
Midwest	1,188	861	825	48	14	16,761	14,371	13,474	550	746
South	1,762	1,506	1,492	Q	Q	23,485	21,549	20,908	266	939
West	1,021	720	673	60	13	14,731	12,243	11,396	652	739
Climate Zone: 45-Year Average										
Under 2,000 CDD and --										
More than 7,000 HDD	525	366	347	Q	Q	5,890	4,804	4,631	249	Q
5,500-7,000 HDD	986	711	689	35	6	17,083	14,289	13,284	743	763
4,000-5,499 HDD	1,085	766	734	30	Q	16,243	13,999	13,213	423	653
Fewer than 4,000 HDD	1,134	913	885	42	7	16,333	14,535	13,972	405	683
2,000 CDD or More and --										
Fewer than 4,000 HDD	926	803	795	Q	23	11,788	10,847	10,444	Q	589

Table B24. Cooling Energy Sources, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)					Total Floorspace (million square feet)				
			Cooling Energy Sources (more than one may apply)					Cooling Energy Sources (more than one may apply)		
	All Buildings	All Buildings with Cooling	Electricity	Natural Gas	District Chilled Water	All Buildings	All Buildings with Cooling	Electricity	Natural Gas	District Chilled Water
Workers (main shift)										
Fewer than 5	2,376	1,513	1,466	63	Q	14,321	8,704	8,396	398	Q
5 to 9	807	681	667	Q	Q	6,325	5,291	5,146	Q	Q
10 to 19	683	636	617	Q	Q	8,028	7,409	7,086	Q	Q
20 to 49	487	433	420	Q	3	10,814	9,930	9,634	258	162
50 to 99	174	169	163	Q	10	8,898	8,519	8,208	287	478
100 to 249	90	88	82	5	4	8,356	8,129	7,505	361	484
250 or More	39	39	35	0	5	10,595	10,491	9,570	173	1,234
Weekly Operating Hours										
39 or Fewer	978	439	438	Q	Q	6,596	3,113	3,085	Q	Q
40 to 48	1,156	968	955	24	Q	13,105	11,041	10,724	321	239
49 to 60	986	850	808	40	13	14,200	13,225	12,456	418	589
61 to 84	664	563	547	20	6	12,458	11,701	11,074	344	504
85 to 167	474	436	419	29	4	9,116	8,528	7,964	380	505
Open Continuously	398	304	285	Q	11	11,863	10,866	10,242	281	893
Energy Sources (more than one may apply)										
Electricity	4,395	3,560	3,450	142	50	65,716	58,474	55,545	1,914	2,750
Natural Gas	2,670	2,335	2,237	142	21	45,525	42,147	40,387	1,914	1,316
Fuel Oil	434	302	299	2	3	13,285	12,185	11,591	218	749
District Heat	117	97	73	Q	43	5,891	5,165	3,459	Q	2,354
District Chilled Water	50	50	24	Q	50	2,750	2,750	1,093	Q	2,750
Propane	451	318	315	Q	Q	6,290	5,415	5,327	Q	Q
Other	153	107	106	Q	Q	2,322	2,069	1,975	Q	Q
Primary Space-Heating Energy Source										
Electricity	1,128	1,058	1,055	Q	Q	17,627	17,160	16,992	Q	310
Natural Gas	2,189	1,883	1,806	120	3	32,729	30,003	28,934	1,663	334
Fuel Oil	302	192	192	Q	Q	3,719	2,912	2,907	Q	Q
District Heat	77	58	35	Q	28	5,077	4,392	2,746	Q	2,084
Propane	282	197	197	N	N	2,107	1,631	1,627	N	N
Other	38	Q	Q	N	N	343	263	Q	N	N
Water-Heating Energy Sources (more than one may apply)										
Electricity	1,546	1,435	1,402	47	Q	24,171	23,177	22,748	573	447
Natural Gas	1,520	1,374	1,308	81	15	29,196	27,461	26,533	1,358	498
Fuel Oil	110	70	70	Q	Q	2,218	1,890	1,877	Q	Q
District Heat	62	50	38	Q	19	4,182	3,723	2,404	Q	1,729
Propane	130	109	109	N	Q	1,371	1,141	1,129	N	Q
Cooking Energy Sources (more than one may apply)										
Electricity	437	409	387	27	4	13,733	13,247	12,710	352	530
Natural Gas	505	479	464	22	4	16,785	16,268	15,695	615	701
Propane	118	95	95	N	Q	1,754	1,634	1,632	N	Q
Energy End Uses (more than one may apply)										
Buildings with Space Heating	4,016	3,400	3,297	137	49	61,602	56,361	53,459	1,898	2,739
Buildings with Cooling	3,560	3,560	3,450	142	50	58,474	58,474	55,545	1,914	2,750
Buildings with Water Heating	3,239	2,915	2,809	119	37	56,115	52,589	49,968	1,744	2,455
Buildings with Cooking	857	792	766	31	6	24,681	23,730	22,723	705	1,047
Buildings with Manufacturing	151	129	127	Q	Q	3,126	2,861	2,805	Q	Q
Buildings with Electricity Generation	172	149	138	Q	5	11,882	11,538	10,842	243	919

Table B24. Cooling Energy Sources, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)					Total Floorspace (million square feet)				
			Cooling Energy Sources (more than one may apply)					Cooling Energy Sources (more than one may apply)		
	All Buildings	All Buildings with Cooling	Electricity	Natural Gas	District Chilled Water	All Buildings	All Buildings with Cooling	Electricity	Natural Gas	District Chilled Water
Percent of Floorspace Cooled										
Not Cooled	1,097	N	N	N	N	8,864	N	N	N	N
1 to 50	1,012	1,012	1,005	20	Q	16,846	16,846	16,536	435	Q
51 to 99	751	751	720	32	8	16,966	16,966	16,117	609	772
100	1,796	1,796	1,725	90	40	24,662	24,662	22,893	870	1,805
Cooling Equipment (more than one may apply)										
Residential-Type Central Air Conditioners	676	676	676	Q	Q	8,329	8,329	8,329	Q	Q
Heat Pumps	485	485	485	17	4	9,147	9,147	9,120	187	336
Individual Air Conditioners	799	799	799	18	Q	14,276	14,276	14,276	376	359
District Chilled Water	50	50	24	Q	50	2,750	2,750	1,093	Q	2,750
Central Chillers	130	130	127	2	1	12,909	12,909	12,405	272	386
Packaged Air Conditioning Units	1,953	1,953	1,870	111	Q	36,527	36,527	35,387	1,595	721
Swamp Coolers	136	136	135	Q	Q	2,219	2,219	2,175	Q	Q
Other	49	49	48	Q	Q	1,312	1,312	1,244	Q	Q

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.
Note: 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.

Table B25. Water-Heating Energy Sources, Number of Buildings, 1999

	Number of Buildings (thousand)						
			Water-Heating Energy Sources Used (more than one may apply)				
	All Buildings	All Buildings with Water Heating	Electricity	Natural Gas	Fuel Oil	District Heat	Propane
All Buildings	4,657	3,239	1,546	1,520	110	62	130
Building Floorspace (Square Feet)							
1,001 to 5,000	2,348	1,456	795	574	Q	Q	Q
5,001 to 10,000	1,110	778	317	429	Q	Q	Q
10,001 to 25,000	708	574	265	274	14	9	31
25,001 to 50,000	257	222	87	127	9	14	Q
50,001 to 100,000	145	127	51	71	5	9	Q
100,001 to 200,000	59	54	21	31	Q	5	Q
200,001 to 500,000	23	21	7	12	2	2	Q
Over 500,000	7	7	4	3	Q	1	N
Principal Building Activity							
Education	327	240	95	132	9	19	Q
Food Sales	174	163	68	82	Q	Q	Q
Food Service	349	349	90	223	Q	Q	Q
Health Care	127	126	67	55	Q	3	Q
Inpatient	11	11	Q	8	1	3	N
Outpatient	116	115	66	47	Q	Q	Q
Lodging	153	149	46	86	Q	17	Q
Mercantile	667	439	263	181	Q	N	Q
Retail (Other Than Mall)	534	323	181	141	Q	N	Q
Enclosed and Strip Malls	133	116	82	40	Q	N	Q
Office	739	615	371	216	26	9	Q
Public Assembly	305	249	110	128	Q	6	Q
Public Order and Safety	72	41	Q	21	Q	Q	Q
Religious Worship	307	252	84	146	Q	Q	Q
Service	478	280	152	110	Q	Q	Q
Warehouse and Storage	603	227	148	84	Q	Q	N
Other	102	64	30	30	Q	Q	N
Vacant	253	44	Q	27	Q	N	Q
Year Constructed							
1919 or Before	419	277	93	174	12	5	Q
1920 to 1945	499	311	123	163	Q	8	Q
1946 to 1959	763	493	212	239	41	11	Q
1960 to 1969	665	493	213	244	18	11	Q
1970 to 1979	774	592	298	277	Q	7	Q
1980 to 1989	846	623	379	206	Q	11	Q
1990 to 1999	690	450	229	217	Q	Q	Q
Census Region							
Northeast	686	515	214	168	87	15	56
Midwest	1,188	776	307	452	Q	14	38
South	1,762	1,179	707	470	Q	16	Q
West	1,021	769	318	431	Q	17	Q
Workers (main shift)							
Fewer than 5	2,376	1,312	637	616	Q	15	46
5 to 9	807	643	286	308	Q	Q	Q
10 to 19	683	586	318	243	Q	9	Q
20 to 49	487	417	184	204	22	10	Q
50 to 99	174	159	75	79	6	9	Q
100 to 249	90	85	29	52	4	6	Q
250 or More	39	36	16	18	1	5	Q

Table B25. Water-Heating Energy Sources, Number of Buildings, 1999

	Number of Buildings (thousand)						
			Water-Heating Energy Sources Used (more than one may apply)				
	All Buildings	All Buildings with Water Heating	Electricity	Natural Gas	Fuel Oil	District Heat	Propane
Weekly Operating Hours							
39 or Fewer	978	427	195	192	Q	Q	Q
40 to 48	1,156	779	442	312	16	16	Q
49 to 60	986	746	415	309	22	7	25
61 to 84	664	521	210	292	15	8	Q
85 to 167	474	436	181	233	Q	9	Q
Open Continuously	398	330	103	182	19	23	18
Energy Sources (more than one may apply)							
Electricity	4,395	3,239	1,546	1,520	110	62	130
Natural Gas	2,670	2,191	748	1,520	9	17	Q
Fuel Oil	434	288	109	65	110	4	Q
District Heat	117	101	37	22	Q	62	Q
District Chilled Water	50	37	Q	15	Q	19	Q
Propane	451	334	165	21	44	Q	130
Other	153	89	54	33	Q	Q	Q
Primary Space Heating Energy Source							
Electricity	1,128	867	687	185	Q	Q	12
Natural Gas	2,189	1,759	583	1,232	Q	Q	N
Fuel Oil	302	205	74	Q	99	Q	Q
District Heat	77	70	15	20	Q	45	N
Propane	282	174	98	N	Q	N	76
Other	38	Q	Q	Q	Q	N	Q
Cooking Energy Sources (more than one may apply)							
Electricity	437	410	199	190	18	8	41
Natural Gas	505	497	111	412	6	4	Q
Propane	118	105	38	Q	17	Q	55
Energy End Uses (more than one may apply)							
Buildings with Space Heating	4,016	3,087	1,465	1,459	109	61	116
Buildings with Cooling	3,560	2,915	1,435	1,375	70	50	109
Buildings with Water Heating	3,239	3,239	1,546	1,520	110	62	130
Buildings with Cooking	857	818	283	481	35	11	74
Buildings with Manufacturing	151	89	55	36	Q	Q	Q
Buildings with Electricity Generation	172	143	63	68	Q	12	Q
Water Heating Equipment							
Centralized System	2,472	2,472	1,048	1,244	88	52	104
Distributed System	566	566	399	173	Q	5	Q
Combination of Centralized and Distributed System	200	200	99	103	Q	5	Q

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.
Note: 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.

Table B26. Water-Heating Energy Sources, Floorspace, 1999

	Total Floorspace (million square feet)						
			Water-Heating Energy Sources Used (more than one may apply)				
	All Buildings	All Buildings with Water Heating	Electricity	Natural Gas	Fuel Oil	District Heat	Propane
All Buildings	67,338	56,115	24,171	29,196	2,218	4,182	1,371
Building Floorspace (Square Feet)							
1,001 to 5,000	6,774	4,280	2,307	1,719	Q	Q	Q
5,001 to 10,000	8,238	5,748	2,287	3,204	Q	Q	Q
10,001 to 25,000	11,153	9,000	4,220	4,221	224	164	493
25,001 to 50,000	9,311	8,088	3,175	4,602	304	471	Q
50,001 to 100,000	10,112	8,887	3,590	4,924	351	613	Q
100,001 to 200,000	8,271	7,527	2,970	4,344	Q	732	Q
200,001 to 500,000	6,851	6,258	2,073	3,446	437	758	Q
Over 500,000	6,628	6,327	3,551	2,736	Q	1,295	N
Principal Building Activity							
Education	8,651	8,059	1,996	4,938	831	882	Q
Food Sales	994	951	284	592	Q	Q	Q
Food Service	1,851	1,846	509	1,277	Q	Q	Q
Health Care	2,918	2,903	619	1,649	219	713	Q
Inpatient	1,865	1,862	Q	1,165	206	628	N
Outpatient	1,053	1,040	478	484	Q	Q	Q
Lodging	4,521	4,442	745	3,152	Q	536	251
Mercantile	10,398	8,698	5,959	3,811	Q	N	Q
Retail (Other Than Mall)	4,766	3,453	1,937	1,519	Q	N	Q
Enclosed and Strip Malls	5,631	5,244	4,022	2,293	Q	N	Q
Office	12,044	10,872	5,771	4,460	284	953	Q
Public Assembly	4,393	3,893	1,295	2,061	Q	597	Q
Public Order and Safety	1,168	830	Q	454	Q	Q	Q
Religious Worship	3,405	3,109	1,109	1,812	Q	Q	Q
Service	3,388	2,351	1,353	978	Q	Q	Q
Warehouse and Storage	10,477	6,743	3,950	3,145	Q	Q	N
Other	1,222	983	269	569	Q	Q	N
Vacant	1,908	436	Q	298	Q	N	Q
Year Constructed							
1919 or Before	4,034	3,130	1,034	1,848	187	256	Q
1920 to 1945	6,445	4,644	1,551	2,516	Q	627	Q
1946 to 1959	9,127	7,154	2,235	4,047	578	813	Q
1960 to 1969	10,866	9,421	3,438	5,390	424	1,029	Q
1970 to 1979	11,840	10,182	4,981	4,701	322	574	Q
1980 to 1989	13,931	12,137	6,533	5,483	303	507	Q
1990 to 1999	11,094	9,446	4,399	5,211	Q	377	Q
Census Region							
Northeast	12,360	10,577	4,485	4,074	1,678	1,300	561
Midwest	16,761	13,702	4,633	8,323	Q	1,219	428
South	23,485	19,014	10,480	8,943	328	863	Q
West	14,731	12,822	4,574	7,856	Q	799	Q
Workers (main shift)							
Fewer than 5	14,321	8,401	3,332	4,426	Q	288	438
5 to 9	6,325	5,145	2,094	2,666	Q	Q	Q
10 to 19	8,028	7,000	3,354	3,435	Q	305	Q
20 to 49	10,814	9,445	3,905	5,161	365	370	Q
50 to 99	8,898	8,166	3,558	4,525	375	439	Q
100 to 249	8,356	7,760	3,056	4,239	422	803	Q
250 or More	10,595	10,199	4,874	4,743	546	1,810	Q

Table B26. Water-Heating Energy Sources, Floorspace, 1999

	Total Floorspace (million square feet)						
			Water-Heating Energy Sources Used (more than one may apply)				
	All Buildings	All Buildings with Water Heating	Electricity	Natural Gas	Fuel Oil	District Heat	Propane
Weekly Operating Hours							
39 or Fewer	6,596	3,340	1,148	1,851	Q	Q	Q
40 to 48	13,105	10,049	4,793	4,885	338	395	Q
49 to 60	14,200	12,280	6,003	5,728	369	523	282
61 to 84	12,458	11,334	5,919	5,481	403	685	Q
85 to 167	9,116	8,041	3,310	4,343	Q	690	Q
Open Continuously	11,863	11,070	2,998	6,907	504	1,876	268
Energy Sources (more than one may apply)							
Electricity	65,716	56,115	24,171	29,196	2,218	4,182	1,371
Natural Gas	45,525	41,366	13,914	29,196	959	1,829	Q
Fuel Oil	13,285	11,852	5,017	5,148	2,218	1,343	Q
District Heat	5,891	5,301	1,090	675	Q	4,182	Q
District Chilled Water	2,750	2,455	447	498	Q	1,729	Q
Propane	6,290	5,409	2,806	1,173	906	Q	1,371
Other	2,322	1,887	978	1,116	Q	Q	Q
Primary Space Heating Energy Source							
Electricity	17,627	15,562	11,461	4,830	Q	Q	288
Natural Gas	32,729	29,379	8,940	22,589	451	Q	N
Fuel Oil	3,719	3,085	1,021	437	1,639	Q	Q
District Heat	5,077	4,519	690	517	Q	3,776	N
Propane	2,107	1,454	824	N	Q	N	642
Other	343	Q	Q	Q	Q	N	Q
Cooking Energy Sources (more than one may apply)							
Electricity	13,733	13,136	6,559	6,875	811	979	554
Natural Gas	16,785	16,431	5,166	11,979	654	1,235	Q
Propane	1,754	1,635	857	Q	436	Q	373
Energy End Uses (more than one may apply)							
Buildings with Space Heating	61,602	54,204	23,070	28,479	2,206	4,162	1,227
Buildings with Cooling	58,474	52,589	23,177	27,461	1,890	3,723	1,141
Buildings with Water Heating	56,115	56,115	24,171	29,196	2,218	4,182	1,371
Buildings with Cooking	24,681	23,830	9,556	14,020	1,423	1,791	778
Buildings with Manufacturing	3,126	2,364	1,016	1,443	Q	Q	Q
Buildings with Electricity Generation	11,882	11,079	5,163	5,737	710	1,575	Q
Water Heating Equipment							
Centralized System	35,579	35,579	12,585	19,755	1,534	2,715	1,020
Distributed System	10,899	10,899	7,068	4,032	Q	566	Q
Combination of Centralized and Distributed System	9,637	9,637	4,519	5,409	498	901	Q

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.
Note: 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.

Table B27. Cooking Energy Sources, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)					Total Floorspace (million square feet)				
			Cooking Energy Sources (more than one may apply)					Cooking Energy Sources (more than one may apply)		
	All Buildings	All Buildings with Cooking	Electricity	Natural Gas	Propane	All Buildings	All Buildings with Cooking	Electricity	Natural Gas	Propane
All Buildings	4,657	857	437	505	118	67,338	24,681	13,733	16,785	1,754
Building Floorspace (Square Feet)										
1,001 to 5,000	2,348	357	189	189	70	6,774	1,095	574	602	205
5,001 to 10,000	1,110	176	76	121	Q	8,238	1,272	574	877	Q
10,001 to 25,000	708	150	76	80	Q	11,153	2,415	1,249	1,272	Q
25,001 to 50,000	257	72	39	46	5	9,311	2,630	1,432	1,637	184
50,001 to 100,000	145	54	30	35	4	10,112	3,901	2,157	2,503	336
100,001 to 200,000	59	29	16	19	2	8,271	4,092	2,260	2,705	348
200,001 to 500,000	23	14	8	11	Q	6,851	4,254	2,456	3,418	Q
Over 500,000	7	5	3	4	Q	6,628	5,020	3,031	3,770	Q
Principal Building Activity										
Education	327	106	49	70	6	8,651	5,670	2,913	3,986	444
Food Sales	174	85	69	27	Q	994	676	406	373	Q
Food Service	349	316	142	220	71	1,851	1,761	858	1,348	273
Health Care	127	11	5	8	Q	2,918	1,812	1,078	1,461	Q
Inpatient	11	9	4	8	Q	1,865	1,738	1,016	1,443	Q
Outpatient	116	Q	Q	Q	N	1,053	Q	Q	Q	N
Lodging	153	41	17	23	Q	4,521	2,401	920	2,020	Q
Mercantile	667	96	58	58	6	10,398	5,218	3,059	3,481	388
Retail (Other Than Mall)	534	29	21	Q	Q	4,766	811	630	333	Q
Enclosed and Strip Malls	133	68	37	44	6	5,631	4,407	2,428	3,149	384
Office	739	19	12	10	Q	12,044	3,149	2,119	1,794	Q
Public Assembly	305	101	50	44	Q	4,393	2,027	1,204	1,183	Q
Public Order and Safety	72	12	Q	Q	Q	1,168	301	Q	Q	Q
Religious Worship	307	51	19	36	Q	3,405	842	428	569	Q
Service	478	Q	Q	Q	N	3,388	Q	Q	Q	N
Warehouse and Storage	603	Q	Q	Q	N	10,477	Q	Q	Q	N
Other	102	Q	Q	Q	Q	1,222	Q	Q	Q	Q
Vacant	253	Q	Q	Q	N	1,908	Q	Q	Q	N
Year Constructed										
1919 or Before	419	69	12	50	Q	4,034	1,091	425	766	Q
1920 to 1945	499	85	45	53	Q	6,445	2,232	1,132	1,508	Q
1946 to 1959	763	115	47	84	Q	9,127	3,195	1,467	2,416	Q
1960 to 1969	665	131	69	75	Q	10,866	4,178	2,428	2,786	Q
1970 to 1979	774	161	85	95	23	11,840	4,551	2,726	3,071	395
1980 to 1989	846	173	108	69	45	13,931	5,030	3,097	3,173	502
1990 to 1999	690	124	71	78	5	11,094	4,403	2,458	3,065	330
Census Region										
Northeast	686	141	68	65	36	12,360	5,245	2,680	3,380	523
Midwest	1,188	221	92	153	Q	16,761	6,042	3,335	4,445	Q
South	1,762	315	206	160	35	23,485	8,569	5,166	5,345	789
West	1,021	181	71	127	Q	14,731	4,825	2,551	3,614	Q
Workers (main shift)										
Fewer than 5	2,376	287	146	145	Q	14,321	1,651	830	778	Q
5 to 9	807	131	43	75	Q	6,325	1,341	545	836	Q
10 to 19	683	172	92	113	Q	8,028	2,021	879	1,433	Q
20 to 49	487	154	95	99	20	10,814	3,871	2,169	2,595	341
50 to 99	174	65	33	42	5	8,898	4,354	2,354	2,969	338
100 to 249	90	30	16	19	3	8,356	4,305	2,349	2,970	445
250 or More	39	18	12	12	Q	10,595	7,138	4,608	5,204	Q

Table B27. Cooking Energy Sources, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)					Total Floorspace (million square feet)				
			Cooking Energy Sources (more than one may apply)					Cooking Energy Sources (more than one may apply)		
	All Buildings	All Buildings with Cooking	Electricity	Natural Gas	Propane	All Buildings	All Buildings with Cooking	Electricity	Natural Gas	Propane
Weekly Operating Hours										
39 or Fewer	978	93	32	42	Q	6,596	884	440	464	Q
40 to 48	1,156	97	34	57	Q	13,105	2,492	1,142	1,606	Q
49 to 60	986	131	55	80	12	14,200	4,159	2,298	2,646	266
61 to 84	664	188	84	140	19	12,458	6,052	3,464	4,443	284
85 to 167	474	264	182	134	40	9,116	4,659	2,917	2,618	472
Open Continuously	398	85	49	51	6	11,863	6,435	3,472	5,008	384
Energy Sources (more than one may apply)										
Electricity	4,395	857	437	505	118	65,716	24,681	13,733	16,785	1,754
Natural Gas	2,670	615	264	505	3	45,525	19,857	10,015	16,785	292
Fuel Oil	434	92	47	35	25	13,285	7,840	4,612	5,264	756
District Heat	117	28	18	Q	Q	5,891	2,487	1,445	1,563	Q
District Chilled Water	50	6	4	4	Q	2,750	1,047	530	701	Q
Propane	451	158	87	5	118	6,290	3,005	1,838	616	1,754
Other	153	47	24	15	Q	2,322	1,331	968	717	Q
Water Heating Energy Sources (more than one may apply)										
Electricity	1,546	283	199	111	38	24,171	9,556	6,559	5,166	857
Natural Gas	1,520	481	190	412	Q	29,185	14,020	6,875	11,979	Q
Fuel Oil	110	35	18	6	17	2,218	1,423	811	654	436
District Heat	62	11	8	4	Q	4,182	1,791	979	1,235	Q
Propane	130	74	41	Q	55	1,371	778	554	Q	373
Energy End Uses (more than one may apply)										
Buildings with Space Heating	4,016	798	397	475	111	61,602	23,813	13,184	16,256	1,683
Buildings with Cooling	3,560	792	409	479	95	58,474	23,730	13,247	16,268	1,634
Buildings with Water Heating	3,239	818	410	497	105	56,115	23,830	13,136	16,431	1,635
Buildings with Cooking	857	857	437	505	118	24,681	24,681	13,733	16,785	1,754
Buildings with Manufacturing	151	Q	Q	Q	Q	3,126	495	Q	Q	Q
Buildings with Electricity Generation	172	63	37	43	5	11,882	7,823	4,881	5,615	444

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.
Note: 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.

Table B28. Percent of Floorspace Heated, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)					Total Floorspace (million square feet)				
	All Buildings	Not Heated	1 to 50 Percent Heated	51 to 99 Percent Heated	100 Percent Heated	All Buildings	Not Heated	1 to 50 Percent Heated	51 to 99 Percent Heated	100 Percent Heated
All Buildings	4,657	641	576	627	2,813	67,338	5,736	7,593	10,745	43,264
Building Floorspace (Square Feet)										
1,001 to 5,000	2,348	366	230	272	1,479	6,774	1,091	707	750	4,227
5,001 to 10,000	1,110	164	194	149	603	8,238	1,148	1,504	1,177	4,409
10,001 to 25,000	708	79	102	128	399	11,153	1,289	1,611	1,936	6,317
25,001 to 50,000	257	20	29	45	162	9,311	746	1,078	1,690	5,796
50,001 to 100,000	145	8	12	20	105	10,112	515	877	1,407	7,313
100,001 to 200,000	59	3	5	7	45	8,271	378	739	946	6,207
200,001 to 500,000	23	1	2	4	16	6,851	406	589	1,341	4,515
Over 500,000	7	Q	1	2	5	6,628	Q	487	1,498	4,480
Principal Building Activity										
Education	327	Q	Q	43	269	8,651	Q	Q	1,184	7,253
Food Sales	174	Q	Q	58	84	994	Q	Q	151	623
Food Service	349	Q	Q	67	213	1,851	Q	Q	428	1,084
Health Care	127	N	Q	20	94	2,918	N	Q	496	2,272
Inpatient	11	N	Q	2	9	1,865	N	Q	295	1,477
Outpatient	116	N	Q	Q	85	1,053	N	Q	Q	795
Lodging	153	Q	12	22	117	4,521	Q	367	807	3,250
Mercantile	667	41	103	117	405	10,398	550	1,131	2,109	6,608
Retail (Other Than Mall)	534	Q	84	108	311	4,766	Q	711	1,211	2,693
Enclosed and Strip Malls	133	Q	Q	10	94	5,631	Q	420	898	3,915
Office	739	Q	22	98	608	12,044	234	486	2,570	8,754
Public Assembly	305	31	30	20	224	4,393	378	342	540	3,133
Public Order and Safety	72	Q	Q	Q	41	1,168	Q	Q	Q	819
Religious Worship	307	Q	Q	35	253	3,405	Q	Q	618	2,632
Service	478	57	72	94	255	3,388	362	406	628	1,993
Warehouse and Storage	603	247	205	29	123	10,477	2,373	3,749	850	3,505
Other	102	Q	Q	Q	70	1,222	Q	Q	Q	833
Vacant	253	168	Q	Q	58	1,908	1,154	Q	Q	505
Year Constructed										
1919 or Before	419	69	48	56	246	4,034	441	507	798	2,288
1920 to 1945	499	69	79	103	248	6,445	886	834	1,249	3,476
1946 to 1959	763	97	93	86	487	9,127	725	1,304	1,178	5,920
1960 to 1969	665	108	58	75	424	10,866	901	1,038	1,891	7,037
1970 to 1979	774	83	107	86	498	11,840	924	1,458	1,670	7,789
1980 to 1989	846	133	113	111	490	13,931	1,366	1,254	2,181	9,131
1990 to 1999	690	82	78	109	421	11,094	493	1,198	1,777	7,625
Floors										
One	2,879	500	329	322	1,728	26,800	3,722	3,850	2,913	16,315
Two	1,168	94	209	163	702	16,985	1,052	2,534	2,616	10,783
Three	420	34	18	113	255	8,928	440	362	2,253	5,873
Four to Nine	178	Q	20	25	120	10,180	427	577	1,842	7,334
Ten or More	11	Q	1	3	8	4,445	Q	270	1,121	2,960
Census Region										
Northeast	686	86	83	82	436	12,360	693	1,053	1,688	8,927
Midwest	1,188	138	151	175	724	16,761	846	1,571	2,323	12,022
South	1,762	259	182	254	1,067	23,485	2,887	2,538	4,335	13,725
West	1,021	158	160	117	586	14,731	1,310	2,432	2,399	8,590
Climate Zone: 45-Year Average										
Under 2,000 CDD and --										
More than 7,000 HDD	525	Q	64	64	347	5,890	Q	674	626	4,368
5,500-7,000 HDD	986	115	105	145	621	17,083	877	1,091	2,478	12,637
4,000-5,499 HDD	1,085	136	154	144	651	16,243	952	1,760	2,701	10,831
Fewer than 4,000 HDD	1,134	137	125	154	718	16,333	1,410	2,270	3,061	9,593
2,000 CDD or More and --										
Fewer than 4,000 HDD	926	203	129	119	476	11,788	2,276	1,797	1,879	5,836

Table B28. Percent of Floorspace Heated, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)					Total Floorspace (million square feet)				
	All Buildings	Not Heated	1 to 50 Percent Heated	51 to 99 Percent Heated	100 Percent Heated	All Buildings	Not Heated	1 to 50 Percent Heated	51 to 99 Percent Heated	100 Percent Heated
Workers (main shift)										
Fewer than 5	2,376	541	326	332	1,176	14,321	3,769	2,323	2,174	6,055
5 to 9	807	34	155	77	541	6,325	305	1,426	732	3,862
10 to 19	683	16	57	95	515	8,028	265	1,249	1,304	5,209
20 to 49	487	32	21	86	349	10,814	468	958	1,848	7,541
50 to 99	174	8	14	21	132	8,898	362	776	1,137	6,622
100 to 249	90	Q	2	10	69	8,356	Q	357	1,206	6,490
250 or More	39	Q	1	7	31	10,595	Q	504	2,344	7,485
Weekly Operating Hours										
39 or Fewer	978	340	100	41	497	6,596	2,379	657	368	3,191
40 to 48	1,156	87	186	202	680	13,105	1,015	2,258	2,290	7,541
49 to 60	986	43	118	137	689	14,200	523	1,753	2,538	9,386
61 to 84	664	66	94	97	408	12,458	670	1,224	2,100	8,463
85 to 167	474	68	42	74	290	9,116	717	925	1,366	6,108
Open Continuously	398	37	36	76	250	11,863	431	775	2,082	8,575
Vacancy Status										
Completely Vacant	140	110	Q	Q	Q	953	721	Q	Q	Q
Mostly Vacant	113	58	Q	Q	38	956	433	Q	Q	319
Partially Vacant	697	146	99	107	345	15,520	1,664	1,950	2,904	9,003
Not At All Vacant	3,707	327	454	515	2,410	49,910	2,918	5,438	7,797	33,757
Energy Sources (more than one may apply)										
Electricity	4,395	387	569	626	2,813	65,716	4,151	7,564	10,737	43,264
Natural Gas	2,670	82	322	441	1,825	45,525	1,141	4,873	8,052	31,460
Fuel Oil	434	Q	62	59	311	13,285	Q	1,113	2,584	9,377
District Heat	117	Q	Q	22	90	5,891	Q	Q	986	4,708
District Chilled Water	50	Q	Q	4	43	2,750	Q	Q	379	2,298
Propane	451	Q	87	50	298	6,290	Q	1,046	1,083	3,947
Other	153	Q	49	17	84	2,322	Q	261	473	1,541
Space-Heating Energy Sources (more than one may apply)										
Electricity	1,880	N	290	255	1,335	32,291	N	4,722	6,110	21,459
Natural Gas	2,380	Q	301	394	1,685	37,902	Q	4,319	6,642	26,932
Fuel Oil	377	N	58	52	266	5,611	N	564	786	4,260
District Heat	96	N	Q	16	80	5,534	N	Q	886	4,575
Propane	307	N	61	30	216	2,728	N	461	421	1,845
Other	94	N	Q	Q	42	945	N	Q	Q	593
Primary Space-Heating Energy Source										
Electricity	1,128	N	189	165	774	17,627	N	3,013	3,275	11,339
Natural Gas	2,189	N	277	365	1,547	32,729	N	3,648	5,829	23,252
Fuel Oil	302	N	44	45	213	3,719	N	481	409	2,829
District Heat	77	N	Q	15	61	5,077	N	Q	837	4,176
Propane	282	N	Q	28	205	2,107	N	Q	339	1,445
Other	38	N	Q	Q	Q	343	N	Q	Q	Q
Energy End Uses (more than one may apply)										
Buildings with Space Heating	4,016	N	576	627	2,813	61,602	N	7,593	10,745	43,264
Buildings with Cooling	3,560	159	461	524	2,415	58,474	2,113	6,619	9,939	39,802
Buildings with Water Heating	3,239	152	373	476	2,237	56,115	1,911	5,823	9,453	38,928
Buildings with Cooking	857	59	72	148	578	24,681	867	1,326	4,410	18,077
Buildings with Manufacturing	151	Q	37	14	92	3,126	Q	890	376	1,766
Buildings with Electricity Generation	172	Q	Q	25	129	11,882	Q	700	2,523	8,420

Table B28. Percent of Floorspace Heated, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)					Total Floorspace (million square feet)				
	All Buildings	Not Heated	1 to 50 Percent Heated	51 to 99 Percent Heated	100 Percent Heated	All Buildings	Not Heated	1 to 50 Percent Heated	51 to 99 Percent Heated	100 Percent Heated
Percent of Floorspace Cooled										
Not Cooled	1,097	482	115	102	398	8,864	3,622	974	806	3,462
1 to 50	1,012	47	400	113	452	16,846	653	5,549	2,146	8,498
51 to 99	751	26	24	364	337	16,966	329	628	6,831	9,178
100	1,796	87	36	48	1,625	24,662	1,131	441	963	22,126
Percent Lit When Open										
Zero	34	Q	Q	N	Q	173	Q	Q	N	Q
1 to 50	835	94	277	114	349	9,187	1,012	2,994	1,427	3,754
51 to 99	1,228	66	71	313	778	20,665	715	1,313	5,374	13,264
100	2,096	101	206	196	1,593	34,233	1,508	3,054	3,925	25,747
Building Never Open/ Electricity Not Used	464	354	Q	Q	86	3,080	2,400	Q	Q	445
Heating Equipment (more than one may apply)										
Heat Pumps	492	N	53	70	369	8,923	N	1,098	1,797	6,028
Furnaces	1,460	N	236	271	953	14,449	N	2,718	3,042	8,689
Individual Space Heaters	894	N	137	150	607	17,349	N	2,432	3,332	11,585
District Heat	96	N	Q	16	80	5,534	N	Q	886	4,575
Boilers	581	N	54	66	460	19,522	N	1,203	2,977	15,343
Packaged Heating Units	1,347	N	129	232	986	25,743	N	2,702	4,661	18,380
Other	185	N	53	13	118	4,073	N	607	774	2,692
Building Shell Conservation Features (more than one may apply)										
Multipaned Windows	2,130	82	233	293	1,521	38,193	1,232	3,380	6,378	27,204
Tinted, Reflective, or Shading Glass	1,283	58	161	197	868	29,915	1,138	2,841	5,318	20,619
HVAC Conservation Features (more than one may apply)										
Variable Air-Volume System	550	33	64	53	399	19,387	445	1,434	3,339	14,169
Economizer Cycle	567	Q	15	102	442	21,256	Q	902	3,565	16,640
HVAC Maintenance	2,786	81	302	419	1,983	53,395	1,412	5,057	8,836	38,090
Energy Management and Control System (EMCS)	460	8	24	41	387	21,613	360	989	3,492	16,771
Off-Hour Equipment Reduction (more than one may apply)										
Heating	2,862	N	409	435	2,018	39,969	N	5,198	6,853	27,918
Cooling	2,622	103	368	375	1,776	39,161	1,418	4,837	6,496	26,410
Lighting	3,675	227	515	517	2,415	51,083	2,783	6,498	8,362	33,440
Office Equipment	184	Q	7	25	148	9,063	Q	395	1,408	6,998

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.
Note: 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.

Table B29. Percent of Floorspace Cooled, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)					Total Floorspace (million square feet)				
	All Buildings	Not Cooled	1 to 50 Percent Cooled	51 to 99 Percent Cooled	100 Percent Cooled	All Buildings	Not Cooled	1 to 50 Percent Cooled	51 to 99 Percent Cooled	100 Percent Cooled
All Buildings	4,657	1,097	1,012	751	1,796	67,338	8,864	16,846	16,966	24,662
Building Floorspace (Square Feet)										
1,001 to 5,000	2,348	668	352	294	1,034	6,774	1,895	1,084	838	2,957
5,001 to 10,000	1,110	282	292	188	348	8,238	2,026	2,233	1,435	2,544
10,001 to 25,000	708	98	242	146	222	11,153	1,623	3,829	2,224	3,477
25,001 to 50,000	257	34	69	58	96	9,311	1,195	2,517	2,128	3,470
50,001 to 100,000	145	10	37	37	60	10,112	711	2,574	2,668	4,159
100,001 to 200,000	59	4	13	16	27	8,271	662	1,701	2,281	3,627
200,001 to 500,000	23	2	7	8	7	6,851	506	1,950	2,339	2,055
Over 500,000	7	Q	1	3	2	6,628	Q	957	3,053	2,372
Principal Building Activity										
Education	327	54	55	59	160	8,651	678	2,718	2,242	3,013
Food Sales	174	Q	Q	57	88	994	Q	Q	372	440
Food Service	349	Q	59	98	167	1,851	Q	274	752	734
Health Care	127	Q	Q	27	76	2,918	Q	Q	1,258	1,409
Inpatient	11	Q	Q	3	4	1,865	Q	Q	943	757
Outpatient	116	N	Q	23	72	1,053	N	Q	315	652
Lodging	153	27	12	35	80	4,521	470	368	1,542	2,141
Mercantile	667	35	210	152	270	10,398	224	1,982	3,227	4,965
Retail (Other Than Mall)	534	34	184	117	199	4,766	194	1,662	1,266	1,645
Enclosed and Strip Malls	133	Q	Q	35	71	5,631	Q	Q	1,961	3,320
Office	739	22	63	154	499	12,044	262	893	4,525	6,363
Public Assembly	305	73	20	54	157	4,393	535	602	1,059	2,198
Public Order and Safety	72	Q	16	9	6	1,168	Q	200	285	274
Religious Worship	307	76	55	41	136	3,405	640	746	688	1,331
Service	478	190	185	34	69	3,388	907	1,598	338	545
Warehouse and Storage	603	295	264	Q	26	10,477	2,855	6,721	299	601
Other	102	Q	24	6	45	1,222	Q	276	323	488
Vacant	253	226	Q	Q	Q	1,908	1,540	Q	Q	Q
Year Constructed										
1919 or Before	419	159	105	65	90	4,034	1,123	1,237	1,022	653
1920 to 1945	499	186	133	94	86	6,445	2,062	1,936	1,234	1,213
1946 to 1959	763	174	205	102	282	9,127	1,526	3,068	1,796	2,737
1960 to 1969	665	169	126	123	247	10,866	1,542	2,406	3,235	3,683
1970 to 1979	774	125	163	118	368	11,840	790	2,812	2,998	5,240
1980 to 1989	846	144	148	128	426	13,931	1,083	2,833	3,584	6,431
1990 to 1999	690	141	131	122	296	11,094	739	2,553	3,096	4,706
Floors										
One	2,879	781	481	363	1,255	26,800	4,944	7,123	4,299	10,434
Two	1,168	195	361	218	394	16,985	1,794	5,309	3,984	5,898
Three	420	88	138	114	80	8,928	969	2,717	2,647	2,594
Four to Nine	178	33	31	51	62	10,180	971	1,480	3,729	3,999
Ten or More	11	Q	1	5	5	4,445	Q	216	2,306	1,737
Census Region										
Northeast	686	213	226	80	168	12,360	2,049	3,914	3,196	3,202
Midwest	1,188	327	330	207	324	16,761	2,390	5,068	4,741	4,562
South	1,762	256	289	320	896	23,485	1,936	4,618	5,801	11,130
West	1,021	301	167	144	409	14,731	2,489	3,246	3,229	5,768
Climate Zone: 45-Year Average										
Under 2,000 CDD and --										
More than 7,000 HDD	525	159	169	101	96	5,890	1,086	2,218	1,442	1,144
5,500-7,000 HDD	986	275	266	167	278	17,083	2,794	4,601	4,744	4,944
4,000-5,499 HDD	1,085	319	263	153	350	16,243	2,245	4,435	4,416	5,148
Fewer than 4,000 HDD	1,134	221	141	173	599	16,333	1,798	3,068	3,826	7,641
2,000 CDD or More and --										
Fewer than 4,000 HDD	926	123	173	157	474	11,788	941	2,524	2,538	5,785

Table B29. Percent of Floorspace Cooled, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)					Total Floorspace (million square feet)				
	All Buildings	Not Cooled	1 to 50 Percent Cooled	51 to 99 Percent Cooled	100 Percent Cooled	All Buildings	Not Cooled	1 to 50 Percent Cooled	51 to 99 Percent Cooled	100 Percent Cooled
Workers (main shift)										
Fewer than 5	2,376	862	416	314	784	14,321	5,617	3,288	1,843	3,573
5 to 9	807	126	270	89	322	6,325	1,034	2,477	734	2,080
10 to 19	683	47	170	152	314	8,028	618	2,799	1,977	2,634
20 to 49	487	54	99	106	228	10,814	884	3,152	2,714	4,065
50 to 99	174	5	36	50	83	8,898	379	2,173	2,510	3,837
100 to 249	90	Q	19	28	42	8,356	Q	1,910	2,639	3,580
250 or More	39	Q	3	13	23	10,595	Q	1,048	4,550	4,893
Weekly Operating Hours										
39 or Fewer	978	539	88	66	285	6,596	3,483	815	596	1,702
40 to 48	1,156	188	309	170	489	13,105	2,064	4,305	2,311	4,426
49 to 60	986	136	292	184	375	14,200	974	4,595	3,580	5,050
61 to 84	664	102	198	124	242	12,458	757	2,797	3,634	5,270
85 to 167	474	38	71	127	238	9,116	588	2,561	2,645	3,322
Open Continuously	398	94	54	82	168	11,863	998	1,774	4,201	4,891
Vacancy Status										
Completely Vacant	140	128	Q	Q	Q	953	797	Q	Q	Q
Mostly Vacant	113	98	Q	Q	Q	956	743	Q	Q	Q
Partially Vacant	697	198	134	158	206	15,520	1,723	2,849	5,123	5,825
Not At All Vacant	3,707	673	874	585	1,575	49,910	5,601	13,844	11,788	18,677
Energy Sources (more than one may apply)										
Electricity	4,395	836	1,012	751	1,796	65,716	7,242	16,846	16,966	24,662
Natural Gas	2,670	335	679	544	1,112	45,525	3,378	12,068	12,694	17,386
Fuel Oil	434	132	149	63	90	13,285	1,100	3,354	4,780	4,051
District Heat	117	20	9	31	57	5,891	726	583	1,957	2,626
District Chilled Water	50	N	Q	8	40	2,750	N	Q	772	1,805
Propane	451	133	97	52	169	6,290	875	2,203	1,620	1,592
Other	153	46	34	19	54	2,322	253	574	756	739
Cooling Energy Sources (more than one may apply)										
Electricity	3,450	N	1,005	720	1,725	55,545	N	16,536	16,117	22,893
Natural Gas	142	N	20	32	90	1,914	N	435	609	870
District Chilled Water	50	N	Q	8	40	2,750	N	Q	772	1,805
Energy End Uses (more than one may apply)										
Buildings with Space Heating	4,016	616	965	725	1,709	61,602	5,242	16,193	16,637	23,531
Buildings with Cooling	3,560	N	1,012	751	1,796	58,474	N	16,846	16,966	24,662
Buildings with Water Heating	3,239	324	754	660	1,500	56,115	3,526	14,119	15,905	22,565
Buildings with Cooking	857	66	154	228	410	24,681	950	3,979	9,208	10,543
Buildings with Manufacturing	151	22	76	Q	42	3,126	265	1,765	517	580
Buildings with Electricity Generation	172	23	40	48	61	11,882	344	1,634	5,316	4,588
Percent of Floorspace Heated										
Not Heated	641	482	47	26	87	5,736	3,622	653	329	1,131
1 to 50	576	115	400	24	36	7,593	974	5,549	628	441
51 to 99	627	102	113	364	48	10,745	806	2,146	6,831	963
100	2,813	398	452	337	1,625	43,264	3,462	8,498	9,178	22,126
Percent Lit When Open										
Zero	34	Q	Q	N	Q	173	Q	Q	N	Q
1 to 50	835	177	397	76	186	9,187	1,808	4,383	1,280	1,716
51 to 99	1,228	132	240	414	442	20,665	1,317	4,310	9,032	6,005
100	2,096	348	365	258	1,125	34,233	3,024	8,000	6,617	16,593
Building Never Open/ Electricity Not Used	464	414	Q	Q	Q	3,080	2,608	Q	Q	Q

Table B29. Percent of Floorspace Cooled, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)					Total Floorspace (million square feet)				
	All Buildings	Not Cooled	1 to 50 Percent Cooled	51 to 99 Percent Cooled	100 Percent Cooled	All Buildings	Not Cooled	1 to 50 Percent Cooled	51 to 99 Percent Cooled	100 Percent Cooled
Cooling Equipment (more than one may apply)										
Residential-Type Central Air Conditioners	676	N	241	156	280	8,329	N	3,054	2,604	2,672
Heat Pumps	485	N	84	92	310	9,147	N	1,910	3,040	4,197
Individual Air Conditioners	799	N	414	161	224	14,276	N	6,855	3,647	3,774
District Chilled Water	50	N	Q	8	40	2,750	N	Q	772	1,805
Central Chillers	130	N	Q	45	66	12,909	N	903	6,368	5,639
Packaged Air Conditioning Units	1,953	N	390	445	1,118	36,527	N	9,465	10,695	16,368
Swamp Coolers	136	N	39	32	65	2,219	N	880	540	800
Other	49	N	Q	19	Q	1,312	N	233	591	488
Building Shell Conservation Features (more than one may apply)										
Multipaned Windows	2,130	295	524	392	919	38,193	2,717	9,607	11,157	14,713
Tinted, Reflective, or Shading Glass	1,283	103	273	266	641	29,915	1,195	6,143	9,377	13,201
HVAC Conservation Features (more than one may apply)										
Variable Air-Volume System	550	Q	91	116	328	19,387	378	2,436	7,098	9,475
Economizer Cycle	567	N	72	151	344	21,256	N	3,067	8,012	10,176
HVAC Maintenance	2,786	266	682	542	1,297	53,395	3,086	13,113	15,243	21,953
Energy Management and Control System (EMCS)	460	37	74	85	264	21,613	795	2,983	7,618	10,216
Off-Hour Equipment Reduction (more than one may apply)										
Heating	2,862	414	738	494	1,216	39,969	3,329	11,278	10,170	15,191
Cooling	2,622	N	806	533	1,283	39,161	N	12,168	10,686	16,307
Lighting	3,675	565	927	627	1,556	51,083	5,079	14,601	12,311	19,093
Office Equipment	184	9	41	41	93	9,063	315	2,614	2,454	3,679

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.
Note: 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.

Table B30. Percent of Floorspace Lit When Open, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)					Total Floorspace (million square feet)				
	All Buildings	Not Lit[a]	1 to 50 Percent Lit	51 to 99 Percent Lit	100 Percent Lit	All Buildings	Not Lit[a]	1 to 50 Percent Lit	51 to 99 Percent Lit	100 Percent Lit
All Buildings	4,657	498	835	1,228	2,096	67,338	3,253	9,187	20,665	34,233
Building Floorspace (Square Feet)										
1,001 to 5,000	2,348	323	351	517	1,156	6,774	915	1,061	1,499	3,299
5,001 to 10,000	1,110	114	279	351	367	8,238	818	2,014	2,614	2,793
10,001 to 25,000	708	47	147	198	316	11,153	796	2,320	3,085	4,953
25,001 to 50,000	257	10	40	84	124	9,311	325	1,474	3,013	4,499
50,001 to 100,000	145	Q	13	52	77	10,112	Q	925	3,657	5,387
100,001 to 200,000	59	Q	4	16	39	8,271	Q	529	2,247	5,407
200,001 to 500,000	23	Q	2	8	13	6,851	Q	448	2,345	3,914
Over 500,000	7	Q	0	3	4	6,628	Q	415	2,206	3,982
Principal Building Activity										
Education	327	Q	28	98	202	8,651	Q	503	3,492	4,644
Food Sales	174	Q	Q	46	95	994	Q	Q	160	621
Food Service	349	Q	68	109	171	1,851	Q	443	658	746
Health Care	127	N	Q	58	47	2,918	N	Q	1,475	1,383
Inpatient	11	N	N	6	5	1,865	N	N	1,022	843
Outpatient	116	N	Q	52	42	1,053	N	Q	453	540
Lodging	153	Q	29	50	70	4,521	Q	857	1,508	2,111
Mercantile	667	Q	101	206	352	10,398	Q	1,204	3,144	5,993
Retail (Other Than Mall)	534	Q	81	163	282	4,766	Q	638	1,459	2,616
Enclosed and Strip Malls	133	Q	Q	43	71	5,631	Q	567	1,685	3,376
Office	739	Q	93	264	381	12,044	Q	753	4,642	6,642
Public Assembly	305	Q	53	109	118	4,393	Q	616	1,862	1,811
Public Order and Safety	72	Q	Q	30	26	1,168	Q	Q	321	636
Religious Worship	307	N	78	89	141	3,405	N	1,056	993	1,357
Service	478	Q	104	111	250	3,388	Q	642	768	1,927
Warehouse and Storage	603	193	180	47	183	10,477	1,211	2,357	1,413	5,496
Other	102	Q	Q	Q	60	1,222	Q	Q	222	815
Vacant	253	222	31	Q	Q	1,908	1,553	297	Q	Q
Year Constructed										
1919 or Before	419	77	122	121	99	4,034	486	1,130	1,290	1,129
1920 to 1945	499	65	152	107	175	6,445	590	1,452	1,879	2,523
1946 to 1959	763	88	159	202	315	9,127	621	1,720	2,856	3,930
1960 to 1969	665	73	91	218	283	10,866	388	1,162	3,765	5,552
1970 to 1979	774	51	113	237	374	11,840	284	1,448	3,832	6,276
1980 to 1989	846	76	108	199	464	13,931	659	1,318	3,801	8,153
1990 to 1999	690	Q	91	144	387	11,094	Q	957	3,242	6,670
Floors										
One	2,879	367	391	614	1,507	26,800	1,938	3,498	6,059	15,305
Two	1,168	87	300	398	383	16,985	633	3,017	5,581	7,755
Three	420	27	111	136	147	8,928	309	1,589	3,339	3,691
Four to Nine	178	Q	32	75	53	10,180	Q	978	3,928	4,960
Ten or More	11	Q	Q	4	6	4,445	Q	Q	1,758	2,523
Census Region										
Northeast	686	79	123	194	291	12,360	582	1,620	4,081	6,077
Midwest	1,188	156	273	337	422	16,761	793	2,486	5,814	7,668
South	1,762	173	275	453	862	23,485	1,263	3,013	6,392	12,817
West	1,021	90	164	245	522	14,731	614	2,068	4,378	7,671

Table B30. Percent of Floorspace Lit When Open, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)					Total Floorspace (million square feet)				
	All Buildings	Not Lit[a]	1 to 50 Percent Lit	51 to 99 Percent Lit	100 Percent Lit	All Buildings	Not Lit[a]	1 to 50 Percent Lit	51 to 99 Percent Lit	100 Percent Lit
Workers (main shift)										
Fewer than 5	2,376	467	558	487	865	14,321	3,096	3,999	2,822	4,404
5 to 9	807	Q	135	216	442	6,325	Q	1,649	1,733	2,869
10 to 19	683	Q	102	210	354	8,028	Q	1,679	2,336	3,930
20 to 49	487	N	32	190	264	10,814	N	996	3,974	5,844
50 to 99	174	N	7	78	90	8,898	N	405	3,562	4,931
100 to 249	90	N	Q	35	54	8,356	N	Q	2,485	5,526
250 or More	39	N	Q	12	27	10,595	N	Q	3,752	6,729
Weekly Operating Hours										
39 or Fewer	978	411	146	135	286	6,596	2,741	920	1,003	1,932
40 to 48	1,156	Q	280	346	521	13,105	Q	2,851	4,172	6,037
49 to 60	986	Q	209	279	490	14,200	Q	2,080	4,882	7,208
61 to 84	664	Q	72	194	361	12,458	Q	1,300	4,041	6,970
85 to 167	474	Q	59	162	237	9,116	Q	918	2,603	5,384
Open Continuously	398	Q	69	112	201	11,863	Q	1,118	3,964	6,702
Vacancy Status										
Completely Vacant	140	140	N	N	N	953	953	N	N	N
Mostly Vacant	113	82	31	Q	Q	956	601	297	Q	Q
Partially Vacant	697	142	158	225	172	15,520	904	2,180	5,417	7,018
Not At All Vacant	3,707	134	646	1,003	1,923	49,910	795	6,710	15,241	27,163
Energy Sources (more than one may apply)										
Electricity	4,395	236	835	1,228	2,096	65,716	1,631	9,187	20,665	34,233
Natural Gas	2,670	70	500	884	1,216	45,525	648	5,855	15,751	23,271
Fuel Oil	434	Q	53	150	211	13,285	Q	1,150	4,771	7,271
District Heat	117	N	17	44	56	5,891	N	444	2,024	3,423
District Chilled Water	50	N	Q	Q	21	2,750	N	Q	880	1,655
Propane	451	Q	82	96	257	6,290	Q	1,019	1,523	3,713
Other	153	Q	Q	48	82	2,322	Q	Q	1,025	1,140
Energy End Uses (more than one may apply)										
Buildings with Space Heating	4,016	118	741	1,162	1,995	61,602	752	8,175	19,950	32,725
Buildings with Cooling	3,560	58	658	1,096	1,748	58,474	538	7,379	19,348	31,209
Buildings with Water Heating	3,239	52	584	999	1,603	56,115	528	7,073	18,484	30,029
Buildings with Cooking	857	Q	140	283	434	24,681	Q	2,273	9,115	13,259
Buildings with Manufacturing	151	Q	24	33	88	3,126	Q	263	765	2,041
Buildings with Electricity Generation	172	Q	Q	70	82	11,882	Q	646	4,636	6,576
Percent of Floorspace Heated										
Not Heated	641	380	94	66	101	5,736	2,500	1,012	715	1,508
1 to 50	576	21	277	71	206	7,593	232	2,994	1,313	3,054
51 to 99	627	Q	114	313	196	10,745	Q	1,427	5,374	3,925
100	2,813	93	349	778	1,593	43,264	500	3,754	13,264	25,747
Percent of Floorspace Cooled										
Not Cooled	1,097	440	177	132	348	8,864	2,715	1,808	1,317	3,024
1 to 50	1,012	Q	397	240	365	16,846	Q	4,383	4,310	8,000
51 to 99	751	Q	76	414	258	16,966	Q	1,280	9,032	6,617
100	1,796	Q	186	442	1,125	24,662	Q	1,716	6,005	16,593

Table B30. Percent of Floorspace Lit When Open, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)					Total Floorspace (million square feet)				
	All Buildings	Not Lit[a]	1 to 50 Percent Lit	51 to 99 Percent Lit	100 Percent Lit	All Buildings	Not Lit[a]	1 to 50 Percent Lit	51 to 99 Percent Lit	100 Percent Lit
Percent Lit When Closed										
Zero	2,174	215	490	515	954	20,771	1,343	4,479	4,962	9,987
1 to 50	1,688	Q	258	553	866	30,950	Q	3,488	11,140	16,095
51 to 100	143	Q	Q	49	76	2,160	Q	Q	599	1,449
Building Never Closed/ Electricity Not Used	652	270	69	112	201	13,457	1,673	1,118	3,964	6,702
Lighting Equipment Types (more than one may apply)										
Incandescent	2,193	Q	476	780	928	38,156	Q	5,551	14,573	17,940
Standard Fluorescent	3,778	Q	708	1,117	1,941	60,344	213	8,127	19,430	32,575
Compact Fluorescent	607	Q	112	223	271	20,666	Q	1,878	8,141	10,615
High Intensity Discharge	430	Q	94	120	215	19,223	Q	1,442	6,629	11,148
Halogen	572	Q	110	226	236	17,926	Q	1,784	6,977	9,135
Other	58	Q	Q	26	30	1,004	Q	Q	503	418
Building Shell Conservation Features (more than one may apply)										
Multipaned Windows	2,130	86	356	622	1,066	38,193	713	4,146	12,662	20,672
Tinted, Reflective, or Shading Glass	1,283	41	201	386	656	29,915	332	2,648	9,705	17,231
Lighting Conservation Features (more than one may apply)										
Specular Reflectors	843	Q	118	259	466	19,994	Q	1,936	6,993	11,053
Electronic Ballasts	2,167	Q	439	593	1,135	42,035	Q	5,299	13,311	23,392
Skylights or Atriums	580	50	101	174	256	18,286	445	1,891	6,320	9,630
Off-Hour Equipment Reduction (more than one may apply)										
Heating	2,862	81	519	878	1,384	39,969	493	5,573	13,152	20,750
Cooling	2,622	41	504	846	1,230	39,161	418	5,510	13,167	20,066
Lighting	3,675	N	742	1,077	1,855	51,083	N	7,736	16,402	26,945
Office Equipment	184	Q	7	79	98	9,063	Q	317	3,458	5,277

[a] "Not Lit" includes buildings that were zero percent lit when open, buildings that were never open, and buildings that did not use any electricity.
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.
Note: 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.

Table B31. Heated, Cooled, and Lit Buildings, Floorspace, 1999

	Total Floorspace (million square feet)						
		Heated Buildings		Cooled Buildings		Lit Buildings[c]	
	All Buildings	Total Floorspace[a]	Heated Floorspace[b]	Total Floorspace[a]	Cooled Floorspace[b]	Total Floorspace[a]	Lit Floorspace[b]
All Buildings	67,338	61,602	53,812	58,474	42,420	64,085	54,696
Building Floorspace (Square Feet)							
1,001 to 5,000	6,774	5,684	5,055	4,879	3,958	5,859	4,877
5,001 to 10,000	8,238	7,090	5,744	6,212	4,333	7,421	5,583
10,001 to 25,000	11,153	9,865	8,196	9,530	6,195	10,358	8,251
25,001 to 50,000	9,311	8,565	7,439	8,116	5,767	8,986	7,528
50,001 to 100,000	10,112	9,597	8,676	9,401	6,817	9,970	8,753
100,001 to 200,000	8,271	7,893	7,144	7,609	5,832	8,183	7,537
200,001 to 500,000	6,851	6,445	5,757	6,345	4,421	6,706	6,068
Over 500,000	6,628	6,465	5,803	6,382	5,098	6,603	6,100
Principal Building Activity							
Education	8,651	8,612	8,294	7,973	5,341	8,639	7,918
Food Sales	994	880	760	978	789	992	852
Food Service	1,851	1,721	1,520	1,760	1,431	1,848	1,450
Health Care	2,918	2,918	2,722	2,815	2,530	2,918	2,702
Inpatient	1,865	1,865	1,740	1,762	1,580	1,865	1,757
Outpatient	1,053	1,053	983	1,053	949	1,053	945
Lodging	4,521	4,424	4,028	4,051	3,520	4,476	3,610
Mercantile	10,398	9,848	8,629	10,174	8,247	10,341	9,038
Retail (Other Than Mall)	4,766	4,615	3,806	4,573	3,125	4,713	3,973
Enclosed and Strip Malls	5,631	5,233	4,823	5,601	5,122	5,628	5,065
Office	12,044	11,810	11,001	11,782	10,437	12,037	10,855
Public Assembly	4,393	4,015	3,667	3,859	3,183	4,290	3,518
Public Order and Safety	1,168	1,021	952	760	573	1,006	914
Religious Worship	3,405	3,383	3,154	2,765	2,127	3,405	2,543
Service	3,388	3,027	2,594	2,481	1,239	3,336	2,785
Warehouse and Storage	10,477	8,104	4,930	7,621	1,982	9,266	7,329
Other	1,222	1,086	981	1,087	791	1,176	1,052
Vacant	1,908	754	579	368	228	355	129
Year Constructed							
1919 or Before	4,034	3,593	3,045	2,911	1,762	3,548	2,571
1920 to 1945	6,445	5,559	4,714	4,383	2,622	5,855	4,543
1946 to 1959	9,127	8,402	7,157	7,601	4,872	8,506	6,918
1960 to 1969	10,866	9,966	8,851	9,325	6,913	10,479	9,050
1970 to 1979	11,840	10,916	9,441	11,050	8,364	11,556	10,057
1980 to 1989	13,931	12,566	11,254	12,849	10,085	13,272	11,871
1990 to 1999	11,094	10,600	9,349	10,355	7,802	10,869	9,686
Floors							
One	26,800	23,078	19,623	21,856	15,431	24,863	21,574
Two	16,985	15,933	13,569	15,192	10,486	16,352	13,418
Three	8,928	8,487	7,675	7,959	5,326	8,619	6,925
Four to Nine	10,180	9,753	9,001	9,208	7,416	9,866	8,671
Ten or More	4,445	4,351	3,943	4,259	3,761	4,386	4,108
Census Region							
Northeast	12,360	11,667	10,574	10,311	6,656	11,778	10,074
Midwest	16,761	15,916	14,321	14,371	9,447	15,968	13,380
South	23,485	20,598	17,868	21,549	17,183	22,222	19,254
West	14,731	13,421	11,049	12,243	9,133	14,117	11,989
Climate Zone: 45-Year Average							
Under 2,000 CDD and --							
More than 7,000 HDD	5,890	5,669	5,096	4,804	2,815	5,634	4,655
5,500-7,000 HDD	17,083	16,206	14,883	14,289	9,655	16,398	13,935
4,000-5,499 HDD	16,243	15,292	13,492	13,999	9,830	15,438	13,256
Fewer than 4,000 HDD	16,333	14,923	12,492	14,535	11,601	15,428	13,374
2,000 CDD or More and --							
Fewer than 4,000 HDD	11,788	9,512	7,850	10,847	8,519	11,187	9,476

Table B31. Heated, Cooled, and Lit Buildings, Floorspace, 1999

	Total Floorspace (million square feet)						
		Heated Buildings		Cooled Buildings		Lit Buildings[c]	
	All Buildings	Total Floorspace[a]	Heated Floorspace[b]	Total Floorspace[a]	Cooled Floorspace[b]	Total Floorspace[a]	Lit Floorspace[b]
Workers (main shift)							
Fewer than 5	14,321	10,552	8,307	8,704	5,791	11,225	7,855
5 to 9	6,325	6,020	4,829	5,291	3,322	6,251	4,825
10 to 19	8,028	7,762	6,543	7,409	4,791	7,945	6,454
20 to 49	10,814	10,347	9,297	9,930	6,988	10,814	9,549
50 to 99	8,898	8,536	7,711	8,519	6,345	8,898	8,128
100 to 249	8,356	8,053	7,597	8,129	6,158	8,356	7,789
250 or More	10,595	10,333	9,528	10,491	9,026	10,595	10,097
Weekly Operating Hours							
39 or Fewer	6,596	4,217	3,660	3,113	2,406	3,855	3,096
40 to 48	13,105	12,090	9,874	11,041	7,203	13,061	10,325
49 to 60	14,200	13,677	11,855	13,225	9,068	14,170	12,070
61 to 84	12,458	11,787	10,474	11,701	8,870	12,312	10,831
85 to 167	9,116	8,399	7,480	8,528	6,079	8,905	7,971
Open Continuously	11,863	11,432	10,469	10,866	8,794	11,784	10,402
Vacancy Status							
Completely Vacant	953	Q	Q	Q	Q	N	N
Mostly Vacant	956	522	375	212	95	355	129
Partially Vacant	15,520	13,856	11,851	13,797	10,745	14,616	12,297
Not At All Vacant	49,910	46,992	41,382	44,309	31,446	49,114	42,270
Energy Sources (more than one may apply)							
Electricity	65,716	61,565	53,800	58,474	42,420	64,085	54,696
Natural Gas	45,525	44,385	39,168	42,147	30,553	44,877	38,486
Fuel Oil	13,285	13,074	11,792	12,185	8,821	13,192	11,786
District Heat	5,891	5,862	5,571	5,165	4,370	5,891	5,348
District Chilled Water	2,750	2,739	2,646	2,750	2,522	2,750	2,523
Propane	6,290	6,076	5,068	5,415	3,359	6,255	5,288
Other	2,322	2,276	1,996	2,069	1,438	2,292	2,015
Space-Heating Energy Sources (more than one may apply)							
Electricity	32,291	32,291	27,585	30,961	23,462	31,953	27,516
Natural Gas	37,902	37,893	33,395	35,080	24,720	37,436	32,042
Fuel Oil	5,611	5,611	5,042	4,638	2,618	5,518	4,746
District Heat	5,534	5,534	5,330	4,844	4,119	5,534	5,074
Propane	2,728	2,728	2,284	2,191	1,542	2,692	2,193
Other	945	945	798	779	516	936	767
Primary Space-Heating Energy Source							
Electricity	17,627	17,627	14,742	17,160	13,699	17,444	14,990
Natural Gas	32,729	32,729	28,846	30,003	20,630	32,288	27,652
Fuel Oil	3,719	3,719	3,278	2,912	1,514	3,635	3,043
District Heat	5,077	5,077	4,887	4,392	3,733	5,077	4,661
Propane	2,107	2,107	1,772	1,631	1,183	2,072	1,698
Other	343	343	286	263	146	335	252
Cooling Energy Sources (more than one may apply)							
Electricity	55,545	53,459	46,741	55,545	39,881	55,007	47,392
Natural Gas	1,914	1,898	1,719	1,914	1,485	1,914	1,644
District Chilled Water	2,750	2,739	2,646	2,750	2,522	2,750	2,523

Table B31. Heated, Cooled, and Lit Buildings, Floorspace, 1999

	Total Floorspace (million square feet)						
		Heated Buildings		Cooled Buildings		Lit Buildings[c]	
	All Buildings	Total Floorspace[a]	Heated Floorspace[b]	Total Floorspace[a]	Cooled Floorspace[b]	Total Floorspace[a]	Lit Floorspace[b]
Energy End Uses (more than one may apply)							
Buildings with Space Heating	61,602	61,602	53,812	56,361	40,905	60,850	52,296
Buildings with Cooling	58,474	56,361	49,482	58,474	42,420	57,936	50,055
Buildings with Water Heating	56,115	54,204	48,070	52,589	38,844	55,586	48,125
Buildings with Cooking	24,681	23,813	22,090	23,730	19,070	24,647	21,920
Buildings with Manufacturing	3,126	3,031	2,250	2,861	1,338	3,069	2,750
Buildings with Electricity Generation	11,882	11,643	10,702	11,538	9,415	11,857	10,840
Percent of Floorspace Heated							
Not Heated	5,736	N	N	2,113	1,514	3,235	2,400
1 to 50	7,593	7,593	2,009	6,619	2,220	7,361	5,091
51 to 99	10,745	10,745	8,538	9,939	7,067	10,725	8,796
100	43,264	43,264	43,264	39,802	31,618	42,764	38,409
Percent of Floorspace Cooled							
Not Cooled	8,864	5,242	4,330	N	N	6,149	4,641
1 to 50	16,846	16,193	11,547	16,846	3,975	16,693	13,033
51 to 99	16,966	16,637	14,935	16,966	13,783	16,930	14,678
100	24,662	23,531	23,000	24,662	24,662	24,314	22,344
Percent Lit When Open							
Zero	173	Q	Q	Q	Q	N	N
1 to 50	9,187	8,175	5,728	7,379	3,853	9,187	3,267
51 to 99	20,665	19,950	17,807	19,348	14,402	20,665	17,195
100	34,233	32,725	29,701	31,209	23,763	34,233	34,233
Building Never Open/ Electricity Not Used	3,080	679	515	472	369	N	N
Percent Lit When Closed							
Zero	20,771	18,394	15,115	16,581	10,754	19,428	15,591
1 to 50	30,950	29,724	26,410	28,964	21,215	30,723	26,740
51 to 100	2,160	2,015	1,806	2,064	1,657	2,151	1,963
Building Never Closed/ Electricity Not Used	13,457	11,469	10,481	10,866	8,794	11,784	10,402
Heating Equipment (more than one may apply)							
Heat Pumps	8,923	8,923	7,819	8,766	7,104	8,870	7,803
Furnaces	14,449	14,449	11,825	12,819	7,866	14,304	11,385
Individual Space Heaters	17,349	17,349	14,759	15,708	10,273	17,129	14,722
District Heat	5,534	5,534	5,330	4,844	4,119	5,534	5,074
Boilers	19,522	19,522	18,039	17,947	12,574	19,431	17,008
Packaged Heating Units	25,743	25,743	22,846	25,134	19,505	25,512	22,714
Other	4,073	4,073	3,469	3,592	2,702	3,951	3,453
Cooling Equipment (more than one may apply)							
Residential-Type Central Air Conditioners	8,329	8,010	6,610	8,329	5,473	8,265	6,712
Heat Pumps	9,147	9,052	7,986	9,147	7,321	9,120	8,032
Individual Air Conditioners	14,276	13,754	11,898	14,276	8,142	14,055	11,626
District Chilled Water	2,750	2,739	2,646	2,750	2,522	2,750	2,523
Central Chillers	12,909	12,560	11,667	12,909	11,235	12,857	11,898
Packaged Air Conditioning Units	36,527	35,247	31,221	36,527	27,481	36,161	31,889
Swamp Coolers	2,219	2,190	1,877	2,219	1,495	2,218	1,955
Other	1,312	1,257	1,086	1,312	1,061	1,308	1,191

Table B31. Heated, Cooled, and Lit Buildings, Floorspace, 1999

	Total Floorspace (million square feet)						
		Heated Buildings		Cooled Buildings		Lit Buildings[c]	
	All Buildings	Total Floorspace[a]	Heated Floorspace[b]	Total Floorspace[a]	Cooled Floorspace[b]	Total Floorspace[a]	Lit Floorspace[b]
Lighting Equipment Types (more than one may apply)							
Incandescent	38,156	36,640	32,450	34,584	26,287	38,064	32,075
Standard Fluorescent	60,344	57,516	50,532	55,007	39,913	60,131	51,708
Compact Fluorescent	20,666	20,127	18,151	19,829	15,888	20,634	18,239
High Intensity Discharge	19,223	18,821	16,715	18,076	11,899	19,219	17,379
Halogen	17,926	17,373	15,378	17,093	13,013	17,896	15,671
Other	1,004	973	858	953	772	989	865
Building Shell Conservation Features (more than one may apply)							
Multipaned Windows	38,193	36,962	33,278	35,476	26,242	37,480	32,817
Tinted, Reflective, or Shading Glass	29,915	28,777	25,703	28,721	22,459	29,583	26,485
HVAC Conservation Features (more than one may apply)							
Variable Air-Volume System	19,387	18,942	17,271	19,009	15,881	19,331	17,477
Economizer Cycle	21,256	21,107	19,797	21,256	17,589	21,187	19,542
HVAC Maintenance	53,395	51,983	46,550	50,309	37,457	53,044	46,432
Energy Management and Control System (EMCS)	21,613	21,252	19,858	20,817	17,232	21,556	19,942
Lighting Conservation Features (more than one may apply)							
Specular Reflectors	19,994	19,222	17,451	19,014	14,249	19,982	17,737
Electronic Ballasts	42,035	40,417	35,695	39,347	29,192	42,003	36,594
Skylights or Atriums	18,286	17,062	14,656	16,646	11,530	17,841	15,652
Off-Hour Equipment Reduction (more than one may apply)							
Heating	39,969	39,969	34,786	36,639	26,172	39,476	33,799
Cooling	39,161	37,743	32,819	39,161	27,834	38,743	33,060
Lighting	51,083	48,300	41,790	46,004	32,484	51,083	43,394
Office Equipment	9,063	8,802	8,247	8,748	6,215	9,052	8,424

[a] "Total Floorspace" refers to all floorspace in heated, cooled, or lit buildings, including the floorspace that was not heated, cooled, or lit.
[b] "Heated Floorspace," "Cooled Floorspace," and "Lit Floorspace" refer only to the portion of floorspace in these buildings that was heated, cooled, or lit.
[c] Data in "Lit Buildings" are for only floorspace lit when the building was open.
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.
Note: 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.

Table B32. Heating Equipment, Number of Buildings, 1999

	Number of Buildings (thousand)								
			Heating Equipment (more than one may apply)						
	All Buildings	All Heated Buildings	Heat Pumps	Furnaces	Individual Space Heaters	District Heat	Boilers	Packaged Heating Units	Other
All Buildings	4,657	4,016	492	1,460	894	96	581	1,347	185
Building Floorspace (Square Feet)									
1,001 to 5,000	2,348	1,982	240	783	397	Q	146	589	98
5,001 to 10,000	1,110	946	100	387	183	Q	144	302	Q
10,001 to 25,000	708	629	81	206	191	19	128	253	22
25,001 to 50,000	257	237	37	47	62	17	72	101	14
50,001 to 100,000	145	137	20	25	35	13	52	62	8
100,001 to 200,000	59	57	8	9	18	7	24	27	3
200,001 to 500,000	23	22	3	3	6	3	11	10	2
Over 500,000	7	7	1	1	3	2	3	3	1
Principal Building Activity									
Education	327	326	47	48	46	30	106	139	Q
Food Sales	174	149	Q	47	Q	Q	Q	65	Q
Food Service	349	321	Q	95	48	Q	Q	156	Q
Health Care	127	127	26	53	8	3	16	39	Q
Inpatient	11	11	1	Q	2	3	8	3	Q
Outpatient	116	116	Q	52	Q	Q	8	36	Q
Lodging	153	150	28	26	53	13	39	34	Q
Mercantile	667	626	53	221	116	Q	65	255	36
Retail (Other Than Mall)	534	502	28	194	107	Q	60	173	Q
Enclosed and Strip Malls	133	123	25	27	9	N	5	81	Q
Office	739	728	139	236	135	19	105	275	13
Public Assembly	305	274	30	99	68	15	49	70	Q
Public Order and Safety	72	61	Q	Q	22	3	30	11	Q
Religious Worship	307	306	17	184	101	Q	51	78	Q
Service	478	421	37	189	122	Q	33	112	29
Warehouse and Storage	603	357	45	176	104	Q	41	76	Q
Other	102	84	Q	40	29	Q	6	24	Q
Vacant	253	84	Q	37	Q	Q	Q	Q	Q
Year Constructed									
1919 or Before	419	350	6	163	79	19	100	40	Q
1920 to 1945	499	430	23	206	107	9	83	110	Q
1946 to 1959	763	666	95	251	180	21	121	157	33
1960 to 1969	665	557	39	191	110	16	98	213	19
1970 to 1979	774	691	102	205	172	Q	63	304	35
1980 to 1989	846	713	124	237	127	11	65	289	59
1990 to 1999	690	608	103	208	119	4	52	235	Q
Census Region									
Northeast	686	601	24	222	119	31	189	135	22
Midwest	1,188	1,049	28	632	205	22	175	201	52
South	1,762	1,503	338	369	370	27	123	645	62
West	1,021	863	102	237	200	17	93	366	49
Climate Zone: 45-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	525	475	4	246	117	3	131	65	26
5,500-7,000 HDD	986	870	27	457	170	22	182	206	51
4,000-5,499 HDD	1,085	950	153	395	211	42	161	189	44
Fewer than 4,000 HDD	1,134	997	183	198	238	8	71	509	35
2,000 CDD or More and --									
Fewer than 4,000 HDD	926	724	124	164	157	21	36	378	29

Table B32. Heating Equipment, Number of Buildings, 1999

	Number of Buildings (thousand)								
			Heating Equipment (more than one may apply)						
	All Buildings	All Heated Buildings	Heat Pumps	Furnaces	Individual Space Heaters	District Heat	Boilers	Packaged Heating Units	Other
Workers (main shift)									
Fewer than 5	2,376	1,835	162	742	419	30	191	504	105
5 to 9	807	773	73	370	188	14	108	204	25
10 to 19	683	667	131	164	125	10	109	290	12
20 to 49	487	456	81	141	86	12	83	210	18
50 to 99	174	166	28	24	46	15	41	84	14
100 to 249	90	81	11	17	20	8	31	40	5
250 or More	39	38	6	3	10	7	18	15	5
Weekly Operating Hours									
39 or Fewer	978	638	51	304	163	Q	76	156	Q
40 to 48	1,156	1,068	171	420	256	35	122	329	30
49 to 60	986	943	126	336	213	17	146	314	54
61 to 84	664	598	46	234	96	16	104	212	16
85 to 167	474	407	64	104	77	7	42	197	27
Open Continuously	398	361	34	62	89	20	90	139	31
Multibuilding Facility Activity									
Not Part of a Multibuilding Facility	3,295	2,876	314	1,176	654	18	383	933	135
College or University	70	69	Q	Q	Q	35	15	6	Q
Primary or Secondary School	224	211	35	23	31	Q	48	110	Q
Office Complex	134	121	33	31	26	Q	Q	38	3
Retail Complex	181	156	20	45	20	Q	Q	82	Q
Religious Campus or Complex	186	184	Q	76	54	Q	27	64	Q
Health Care Complex	72	65	21	Q	Q	7	12	26	Q
Government Complex	61	50	Q	Q	15	Q	8	7	Q
Other	434	284	32	97	74	5	51	81	18
Energy Sources (more than one may apply)									
Electricity	4,395	4,008	492	1,460	886	96	581	1,347	185
Natural Gas	2,670	2,588	194	1,104	581	41	416	939	71
Fuel Oil	434	432	38	172	115	7	170	40	39
District Heat	117	116	Q	Q	12	96	Q	Q	1
District Chilled Water	50	49	3	Q	9	39	3	Q	1
Propane	451	434	36	161	117	Q	87	120	28
Other	153	149	Q	46	39	Q	29	31	53
Space-Heating Energy Sources (more than one may apply)									
Electricity	1,880	1,880	475	512	584	26	193	744	110
Natural Gas	2,380	2,380	144	1,077	543	Q	381	865	67
Fuel Oil	377	377	Q	166	100	Q	152	17	34
District Heat	96	96	4	Q	7	96	Q	Q	1
Propane	307	307	12	128	104	Q	41	81	19
Other	94	94	Q	Q	27	Q	12	Q	52
Primary Space-Heating Energy Source									
Electricity	1,128	1,128	373	192	213	Q	40	494	62
Natural Gas	2,189	2,189	97	1,017	498	2	364	758	60
Fuel Oil	302	302	Q	119	79	Q	136	Q	Q
District Heat	77	77	3	Q	5	77	Q	4	Q
Propane	282	282	Q	115	91	N	Q	74	Q
Other	38	38	Q	Q	Q	N	Q	Q	Q

Table B32. Heating Equipment, Number of Buildings, 1999

	Number of Buildings (thousand)								
			Heating Equipment (more than one may apply)						
	All Buildings	All Heated Buildings	Heat Pumps	Furnaces	Individual Space Heaters	District Heat	Boilers	Packaged Heating Units	Other
Energy End Uses (more than one may apply)									
Buildings with Space Heating	4,016	4,016	492	1,460	894	96	581	1,347	185
Buildings with Cooling	3,560	3,400	478	1,193	670	77	474	1,304	143
Buildings with Water Heating	3,239	3,087	383	1,094	637	80	517	1,118	126
Buildings with Cooking	857	798	101	214	172	21	182	340	33
Buildings with Manufacturing	151	143	Q	57	56	Q	8	46	Q
Buildings with Electricity Generation	172	169	30	27	45	9	77	57	9
Percent of Floorspace Heated									
Not Heated	641	N	N	N	N	N	N	N	N
1 to 50	576	576	53	236	137	Q	54	129	53
51 to 99	627	627	70	271	150	16	66	232	13
100	2,813	2,813	369	953	607	80	460	986	118
Heating Equipment (more than one may apply)									
Heat Pumps	492	492	492	76	78	4	38	78	19
Furnaces	1,460	1,460	76	1,460	271	Q	52	108	8
Individual Space Heaters	894	894	78	271	894	7	115	207	28
District Heat	96	96	4	Q	7	96	Q	Q	1
Boilers	581	581	38	52	115	Q	581	56	8
Packaged Heating Units	1,347	1,347	78	108	207	Q	56	1,347	15
Other	185	185	19	8	28	1	8	15	185
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	676	645	46	508	104	3	58	75	38
Heat Pumps	485	481	447	76	89	4	39	84	22
Individual Air Conditioners	799	771	84	262	294	16	211	167	47
District Chilled Water	50	49	3	Q	9	39	3	Q	1
Central Chillers	130	126	12	12	26	15	96	26	8
Packaged Air Conditioning Units	1,953	1,859	130	470	327	35	223	1,219	49
Swamp Coolers	136	126	9	72	47	Q	18	48	Q
Other	49	48	Q	12	4	Q	14	4	Q
Main Equipment Replaced Since 1995 (more than one may apply)									
Heating	984	984	130	347	231	Q	97	381	27
Cooling	1,085	1,014	172	374	215	10	128	397	18
Building Shell Conservation Features (more than one may apply)									
Multipaned Windows	2,130	2,047	295	830	404	45	354	602	95
Tinted, Reflective, or Shading Glass	1,283	1,225	167	364	227	35	176	576	54
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	550	516	77	129	76	24	125	221	19
Economizer Cycle	567	559	58	88	79	32	112	334	27
HVAC Maintenance	2,786	2,704	370	954	483	93	497	1,065	88
Energy Management and Control System (EMCS)	460	452	48	64	68	48	116	241	25

Table B32. Heating Equipment, Number of Buildings, 1999

	Number of Buildings (thousand)								
			Heating Equipment (more than one may apply)						
	All Buildings	All Heated Buildings	Heat Pumps	Furnaces	Individual Space Heaters	District Heat	Boilers	Packaged Heating Units	Other
Off-Hour Equipment Reduction (more than one may apply)									
Heating	2,862	2,862	367	1,104	622	70	410	954	96
Cooling	2,622	2,519	338	930	502	58	363	969	79
Lighting	3,675	3,448	435	1,333	748	72	478	1,154	133
Office Equipment	184	181	25	40	38	9	69	73	7

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.
Note: 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.

Table B33. Heating Equipment, Floorspace, 1999

	Total Floorspace (million square feet)								
			Heating Equipment (more than one may apply)						
	All Buildings	All Heated Buildings	Heat Pumps	Furnaces	Individual Space Heaters	District Heat	Boilers	Packaged Heating Units	Other
All Buildings	67,338	61,602	8,923	14,449	17,349	5,534	19,522	25,743	4,073
Building Floorspace (Square Feet)									
1,001 to 5,000	6,774	5,684	679	2,271	1,183	Q	463	1,779	250
5,001 to 10,000	8,238	7,090	745	2,848	1,350	Q	1,040	2,301	Q
10,001 to 25,000	11,153	9,865	1,288	3,047	3,021	307	2,047	3,994	401
25,001 to 50,000	9,311	8,565	1,376	1,674	2,218	617	2,591	3,695	510
50,001 to 100,000	10,112	9,597	1,493	1,718	2,492	905	3,698	4,262	511
100,001 to 200,000	8,271	7,893	1,095	1,283	2,467	883	3,334	3,811	450
200,001 to 500,000	6,851	6,445	996	807	1,974	963	3,268	2,943	782
Over 500,000	6,628	6,465	1,250	802	2,643	1,698	3,081	2,959	903
Principal Building Activity									
Education	8,651	8,612	1,184	1,040	1,869	1,086	5,048	2,710	Q
Food Sales	994	880	Q	263	Q	Q	Q	402	Q
Food Service	1,851	1,721	Q	583	261	Q	Q	895	Q
Health Care	2,918	2,918	648	368	676	736	1,494	1,159	335
Inpatient	1,865	1,865	486	Q	560	641	1,235	761	Q
Outpatient	1,053	1,053	Q	264	Q	Q	259	398	Q
Lodging	4,521	4,424	1,068	649	1,659	527	1,814	1,688	Q
Mercantile	10,398	9,848	1,340	2,234	2,448	Q	1,291	6,664	701
Retail (Other Than Mall)	4,766	4,615	218	1,620	1,199	Q	536	2,171	Q
Enclosed and Strip Malls	5,631	5,233	1,122	614	1,249	N	755	4,493	Q
Office	12,044	11,810	1,949	1,807	2,631	1,487	4,211	4,304	1,244
Public Assembly	4,393	4,015	582	787	1,163	841	1,409	1,368	Q
Public Order and Safety	1,168	1,021	Q	Q	232	297	541	251	Q
Religious Worship	3,405	3,383	327	1,701	1,021	Q	1,010	1,047	Q
Service	3,388	3,027	381	1,129	1,165	Q	532	1,184	224
Warehouse and Storage	10,477	8,104	888	3,270	3,560	Q	1,369	3,542	428
Other	1,222	1,086	Q	309	257	Q	247	383	Q
Vacant	1,908	754	Q	218	Q	Q	Q	Q	Q
Year Constructed									
1919 or Before	4,034	3,593	251	1,214	1,042	480	1,397	428	Q
1920 to 1945	6,445	5,559	449	1,552	1,772	764	2,264	1,476	Q
1946 to 1959	9,127	8,402	1,064	2,082	2,551	1,065	2,762	2,917	563
1960 to 1969	10,866	9,966	1,129	2,053	2,496	1,351	4,231	3,961	560
1970 to 1979	11,840	10,916	1,651	2,235	3,345	769	3,275	4,899	684
1980 to 1989	13,931	12,566	2,583	2,927	3,428	606	3,114	6,379	1,012
1990 to 1999	11,094	10,600	1,796	2,387	2,715	499	2,479	5,684	786
Census Region									
Northeast	12,360	11,667	1,193	2,257	3,555	1,876	5,469	4,033	769
Midwest	16,761	15,916	1,015	5,767	4,667	1,514	5,961	5,081	1,113
South	23,485	20,598	4,580	3,949	5,471	1,022	4,209	10,455	1,391
West	14,731	13,421	2,135	2,476	3,657	1,121	3,883	6,175	800
Climate Zone: 45-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	5,890	5,669	283	1,736	1,754	250	2,815	1,436	362
5,500-7,000 HDD	17,083	16,206	1,135	4,996	4,866	1,736	6,733	5,623	1,222
4,000-5,499 HDD	16,243	15,292	2,827	4,004	4,750	2,405	5,072	4,851	1,026
Fewer than 4,000 HDD	16,333	14,923	3,015	2,197	3,915	677	3,480	8,600	786
2,000 CDD or More and --									
Fewer than 4,000 HDD	11,788	9,512	1,663	1,516	2,064	466	1,422	5,233	676

Table B33. Heating Equipment, Floorspace, 1999

	Total Floorspace (million square feet)								
			Heating Equipment (more than one may apply)						
	All Buildings	All Heated Buildings	Heat Pumps	Furnaces	Individual Space Heaters	District Heat	Boilers	Packaged Heating Units	Other
Workers (main shift)									
Fewer than 5	14,321	10,552	707	3,874	2,913	289	1,840	3,005	673
5 to 9	6,325	6,020	655	2,510	1,680	292	1,285	1,788	178
10 to 19	8,028	7,762	1,340	1,953	1,973	372	1,771	3,002	219
20 to 49	10,814	10,347	1,761	2,631	2,538	534	2,739	4,935	451
50 to 99	8,898	8,536	1,401	1,221	2,531	645	3,234	4,416	300
100 to 249	8,356	8,053	1,105	1,164	2,376	1,031	3,706	4,172	608
250 or More	10,595	10,333	1,954	1,095	3,339	2,371	4,948	4,426	1,644
Weekly Operating Hours									
39 or Fewer	6,596	4,217	313	1,765	1,051	Q	1,140	1,200	Q
40 to 48	13,105	12,090	1,863	3,664	3,321	730	3,170	4,093	472
49 to 60	14,200	13,677	1,963	3,580	3,657	910	4,337	5,101	1,089
61 to 84	12,458	11,787	1,501	2,183	3,086	911	3,542	5,835	915
85 to 167	9,116	8,399	1,179	1,697	2,558	830	2,316	4,436	394
Open Continuously	11,863	11,432	2,105	1,560	3,677	2,114	5,018	5,077	1,025
Multibuilding Facility Activity									
Not Part of a Multibuilding Facility	41,289	38,071	5,574	10,209	11,297	1,366	11,936	15,861	2,689
College or University	2,605	2,585	Q	Q	319	1,757	566	266	Q
Primary or Secondary School	3,388	3,268	428	494	747	Q	1,724	1,515	Q
Office Complex	3,353	3,250	331	345	483	Q	1,392	1,333	309
Retail Complex	3,555	3,205	472	650	857	Q	Q	2,339	Q
Religious Campus or Complex	1,907	1,885	Q	832	584	Q	462	708	Q
Health Care Complex	2,339	2,302	604	Q	530	818	1,056	922	Q
Government Complex	1,513	1,348	Q	Q	437	740	429	200	Q
Other	7,389	5,690	862	1,655	2,096	491	1,677	2,599	346
Energy Sources (more than one may apply)									
Electricity	65,716	61,565	8,923	14,449	17,321	5,534	19,514	25,743	4,073
Natural Gas	45,525	44,385	5,627	11,960	13,561	2,431	16,588	20,043	2,680
Fuel Oil	13,285	13,074	2,263	2,090	4,351	1,787	7,485	4,237	1,463
District Heat	5,891	5,862	811	Q	1,314	5,534	301	847	285
District Chilled Water	2,750	2,739	376	Q	567	2,279	326	497	159
Propane	6,290	6,076	838	1,801	1,915	Q	2,153	2,562	451
Other	2,322	2,276	316	526	1,032	Q	1,044	1,018	483
Space-Heating Energy Sources (more than one may apply)									
Electricity	32,291	32,291	8,667	6,822	12,350	1,609	8,410	16,861	2,972
Natural Gas	37,902	37,893	4,466	11,524	11,488	678	15,131	17,324	1,982
Fuel Oil	5,611	5,611	532	1,295	1,444	Q	4,176	1,040	341
District Heat	5,534	5,534	730	Q	1,210	5,534	Q	767	249
Propane	2,728	2,728	204	1,075	1,051	Q	672	937	272
Other	945	945	Q	Q	534	Q	420	Q	315
Primary Space-Heating Energy Source									
Electricity	17,627	17,627	5,009	2,281	4,788	Q	2,171	10,090	1,807
Natural Gas	32,729	32,729	3,076	10,311	9,945	211	13,918	13,958	1,634
Fuel Oil	3,719	3,719	Q	821	683	Q	2,717	333	Q
District Heat	5,077	5,077	588	Q	1,042	5,077	Q	602	Q
Propane	2,107	2,107	Q	864	725	N	Q	623	Q
Other	343	343	Q	Q	Q	N	Q	Q	Q

Table B33. Heating Equipment, Floorspace, 1999

	Total Floorspace (million square feet)								
			Heating Equipment (more than one may apply)						
	All Buildings	All Heated Buildings	Heat Pumps	Furnaces	Individual Space Heaters	District Heat	Boilers	Packaged Heating Units	Other
Energy End Uses (more than one may apply)									
Buildings with Space Heating	61,602	61,602	8,923	14,449	17,349	5,534	19,522	25,743	4,073
Buildings with Cooling	58,474	56,361	8,766	12,819	15,708	4,844	17,947	25,134	3,592
Buildings with Water Heating	56,115	54,204	8,106	12,265	15,163	4,943	18,615	23,491	3,669
Buildings with Cooking	24,681	23,813	4,313	3,576	7,145	2,337	11,111	11,346	1,705
Buildings with Manufacturing	3,126	3,031	348	1,162	1,355	Q	730	1,349	Q
Buildings with Electricity Generation	11,882	11,643	2,396	1,437	4,275	1,986	5,704	5,016	1,444
Percent of Floorspace Heated									
Not Heated	5,736	N	N	N	N	N	N	N	N
1 to 50	7,593	7,593	1,098	2,718	2,432	Q	1,203	2,702	607
51 to 99	10,745	10,745	1,797	3,042	3,332	886	2,977	4,661	774
100	43,264	43,264	6,028	8,689	11,585	4,575	15,343	18,380	2,692
Heating Equipment (more than one may apply)									
Heat Pumps	8,923	8,923	8,923	1,585	2,644	730	2,634	3,828	444
Furnaces	14,449	14,449	1,585	14,449	4,460	Q	2,256	3,698	418
Individual Space Heaters	17,349	17,349	2,644	4,460	17,349	1,210	5,356	7,654	1,096
District Heat	5,534	5,534	730	Q	1,210	5,534	Q	767	249
Boilers	19,522	19,522	2,634	2,256	5,356	Q	19,522	5,277	795
Packaged Heating Units	25,743	25,743	3,828	3,698	7,654	767	5,277	25,743	1,193
Other	4,073	4,073	444	418	1,096	249	795	1,193	4,073
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	8,329	8,010	1,362	4,975	2,810	303	2,282	2,617	646
Heat Pumps	9,147	9,052	8,243	1,601	2,750	701	2,749	3,799	528
Individual Air Conditioners	14,276	13,754	2,378	3,655	6,603	1,140	6,406	5,127	887
District Chilled Water	2,750	2,739	376	Q	567	2,279	326	497	159
Central Chillers	12,909	12,560	2,109	1,259	3,863	2,069	8,549	4,425	1,679
Packaged Air Conditioning Units	36,527	35,247	4,709	7,240	10,774	1,884	10,047	23,495	2,138
Swamp Coolers	2,219	2,190	483	756	835	Q	823	1,253	Q
Other	1,312	1,257	285	225	285	Q	637	385	468
Main Equipment Replaced Since 1995 (more than one may apply)									
Heating	13,220	13,220	2,392	3,550	3,797	Q	2,857	6,833	623
Cooling	17,390	16,386	2,859	4,009	4,781	826	5,240	7,755	716
Building Shell Conservation Features (more than one may apply)									
Multipaned Windows	38,193	36,962	6,068	8,881	10,930	3,233	13,442	15,101	2,752
Tinted, Reflective, or Shading Glass	29,915	28,777	4,617	5,194	7,488	2,904	9,604	14,049	2,303
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	19,387	18,942	2,773	2,473	5,022	2,780	8,355	8,506	1,734
Economizer Cycle	21,256	21,107	3,302	2,986	6,237	3,275	9,342	10,599	1,847
HVAC Maintenance	53,395	51,983	8,055	11,148	13,715	5,296	18,379	23,294	3,356
Energy Management and Control System (EMCS)	21,613	21,252	3,198	2,290	5,762	3,865	9,514	9,418	2,235

Table B33. Heating Equipment, Floorspace, 1999

	Total Floorspace (million square feet)								
			Heating Equipment (more than one may apply)						
	All Buildings	All Heated Buildings	Heat Pumps	Furnaces	Individual Space Heaters	District Heat	Boilers	Packaged Heating Units	Other
Off-Hour Equipment Reduction (more than one may apply)									
Heating	39,969	39,969	5,710	10,360	10,497	2,906	12,118	16,602	2,364
Cooling	39,161	37,743	5,413	9,450	10,062	2,538	11,606	16,697	2,173
Lighting	51,083	48,300	6,650	12,514	13,135	3,377	14,096	19,932	2,883
Office Equipment	9,063	8,802	1,242	1,469	2,181	725	4,222	3,587	412

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.
Note: 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.

Table B34. Cooling Equipment, Number of Buildings, 1999

	Number of Buildings (thousand)									
			Cooling Equipment (more than one may apply)							
	All Buildings	All Cooled Buildings	Residential-Type Central Air Conditioners	Heat Pumps	Individual Air Conditioners	District Chilled Water	Central Chillers	Packaged Air Conditioning Units	Swamp Coolers	Other
All Buildings	4,657	3,560	676	485	799	50	130	1,953	136	49
Building Floorspace (Square Feet)										
1,001 to 5,000	2,348	1,680	319	240	356	Q	Q	857	79	Q
5,001 to 10,000	1,110	828	211	95	184	Q	Q	423	25	Q
10,001 to 25,000	708	611	96	80	149	Q	17	387	13	Q
25,001 to 50,000	257	223	24	35	60	7	25	141	9	4
50,001 to 100,000	145	134	17	22	29	7	28	89	7	Q
100,001 to 200,000	59	55	7	9	13	5	16	37	2	Q
200,001 to 500,000	23	21	2	4	7	2	9	14	Q	Q
Over 500,000	7	7	1	1	1	1	4	4	Q	Q
Principal Building Activity										
Education	327	274	23	39	79	Q	31	164	Q	Q
Food Sales	174	166	Q	Q	Q	N	Q	99	Q	Q
Food Service	349	324	66	Q	71	Q	Q	218	Q	Q
Health Care	127	127	Q	29	15	2	9	77	Q	Q
Inpatient	11	11	1	1	Q	2	6	4	Q	Q
Outpatient	116	116	Q	Q	Q	Q	4	73	Q	Q
Lodging	153	126	17	26	64	Q	10	47	Q	Q
Mercantile	667	632	87	54	164	Q	4	370	26	Q
Retail (Other Than Mall)	534	499	77	30	154	Q	Q	264	Q	Q
Enclosed and Strip Malls	133	132	Q	24	Q	Q	2	107	Q	Q
Office	739	716	137	141	90	6	31	385	5	14
Public Assembly	305	232	61	30	39	Q	16	126	Q	Q
Public Order and Safety	72	32	Q	Q	11	Q	6	14	Q	Q
Religious Worship	307	232	50	19	69	Q	Q	123	Q	Q
Service	478	289	70	33	70	Q	Q	139	Q	Q
Warehouse and Storage	603	308	82	42	85	Q	Q	140	Q	Q
Other	102	76	Q	Q	Q	Q	Q	28	Q	Q
Vacant	253	27	Q	Q	Q	N	Q	Q	Q	Q
Year Constructed										
1919 or Before	419	260	78	Q	101	Q	Q	92	Q	Q
1920 to 1945	499	313	75	24	124	2	8	143	Q	Q
1946 to 1959	763	589	129	89	178	5	13	275	29	Q
1960 to 1969	665	496	39	39	102	7	32	332	25	Q
1970 to 1979	774	649	105	106	112	Q	17	398	33	Q
1980 to 1989	846	702	143	121	96	Q	22	421	19	Q
1990 to 1999	690	549	107	91	86	4	29	291	6	Q
Census Region										
Northeast	686	473	72	19	172	2	17	265	Q	Q
Midwest	1,188	861	285	27	214	14	25	403	Q	Q
South	1,762	1,506	258	329	312	Q	57	841	Q	Q
West	1,021	720	62	110	100	13	31	443	109	Q
Climate Zone: 45-Year Average										
Under 2,000 CDD and --										
More than 7,000 HDD	525	366	82	4	137	Q	10	170	Q	Q
5,500-7,000 HDD	986	711	175	18	177	6	22	391	Q	Q
4,000-5,499 HDD	1,085	766	178	173	207	Q	38	306	Q	Q
Fewer than 4,000 HDD	1,134	913	97	174	141	7	27	596	50	Q
2,000 CDD or More and --										
Fewer than 4,000 HDD	926	803	144	116	137	23	32	490	Q	Q

Table B34. Cooling Equipment, Number of Buildings, 1999

	Number of Buildings (thousand)									
			Cooling Equipment (more than one may apply)							
	All Buildings	All Cooled Buildings	Residential-Type Central Air Conditioners	Heat Pumps	Individual Air Conditioners	District Chilled Water	Central Chillers	Packaged Air Conditioning Units	Swamp Coolers	Other
Workers (main shift)										
Fewer than 5	2,376	1,513	339	169	350	Q	28	724	69	Q
5 to 9	807	681	133	68	163	Q	9	354	26	Q
10 to 19	683	636	101	122	146	Q	11	383	Q	Q
20 to 49	487	433	69	79	61	3	22	295	13	7
50 to 99	174	169	18	29	44	10	18	118	5	Q
100 to 249	90	88	14	10	27	4	21	54	4	3
250 or More	39	39	3	8	7	5	20	24	1	1
Weekly Operating Hours										
39 or Fewer	978	439	112	42	109	Q	4	229	Q	Q
40 to 48	1,156	968	205	180	214	Q	27	482	22	6
49 to 60	986	850	114	113	185	13	42	458	25	Q
61 to 84	664	563	137	49	125	6	18	317	42	Q
85 to 167	474	436	72	67	78	4	9	292	15	Q
Open Continuously	398	304	36	34	88	11	30	174	8	4
Multibuilding Facility Activity										
Not Part of a Multibuilding Facility	3,295	2,567	510	310	574	3	60	1,435	95	24
College or University	70	46	Q	Q	9	13	9	12	Q	Q
Primary or Secondary School	224	171	4	23	50	Q	17	123	Q	Q
Office Complex	134	115	Q	33	8	Q	Q	43	Q	Q
Retail Complex	181	163	Q	27	34	Q	Q	117	Q	Q
Religious Campus or Complex	186	146	Q	Q	38	Q	Q	91	Q	Q
Health Care Complex	72	61	Q	21	5	3	6	35	Q	Q
Government Complex	61	46	Q	Q	Q	Q	6	6	Q	Q
Other	434	244	85	31	65	Q	10	91	Q	Q
Energy Sources (more than one may apply)										
Electricity	4,395	3,560	676	485	799	50	130	1,953	136	49
Natural Gas	2,670	2,335	503	195	507	21	103	1,356	121	20
Fuel Oil	434	302	37	49	163	3	29	102	4	3
District Heat	117	97	4	Q	21	43	16	43	Q	Q
District Chilled Water	50	50	Q	4	Q	50	1	Q	Q	Q
Propane	451	318	64	34	107	Q	6	165	12	Q
Other	153	107	45	Q	31	Q	3	51	Q	Q
Cooling Energy Sources (more than one may apply)										
Electricity	3,450	3,450	676	485	799	24	127	1,870	135	48
Natural Gas	142	142	Q	17	18	Q	2	111	Q	Q
District Chilled Water	50	50	Q	4	Q	50	1	Q	Q	Q
Energy End Uses (more than one may apply)										
Buildings with Space Heating	4,016	3,400	645	481	771	49	126	1,859	126	48
Buildings with Cooling	3,560	3,560	676	485	799	50	130	1,953	136	49
Buildings with Water Heating	3,239	2,915	532	401	650	37	124	1,646	120	34
Buildings with Cooking	857	792	114	97	216	6	49	519	44	5
Buildings with Manufacturing	151	129	28	Q	54	Q	3	57	Q	Q
Buildings with Electricity Generation	172	149	26	30	30	5	42	88	4	4
Percent of Floorspace Cooled										
Not Cooled	1,097	N	N	N	N	N	N	N	N	N
1 to 50	1,012	1,012	241	84	414	Q	Q	390	39	Q
51 to 99	751	751	156	92	161	8	45	445	32	19
100	1,796	1,796	280	310	224	40	66	1,118	65	Q

Table B34. Cooling Equipment, Number of Buildings, 1999

	Number of Buildings (thousand)									
			Cooling Equipment (more than one may apply)							
	All Buildings	All Cooled Buildings	Residential-Type Central Air Conditioners	Heat Pumps	Individual Air Conditioners	District Chilled Water	Central Chillers	Packaged Air Conditioning Units	Swamp Coolers	Other
Heating Equipment (more than one may apply)										
Heat Pumps	492	478	46	447	84	3	12	130	9	Q
Furnaces	1,460	1,193	508	76	262	Q	12	470	72	12
Individual Space Heaters	894	670	104	89	294	9	26	327	47	4
District Heat	96	77	3	4	16	39	15	35	Q	Q
Boilers	581	474	58	39	211	3	96	223	18	14
Packaged Heating Units	1,347	1,304	75	84	167	Q	26	1,219	48	4
Other	185	143	38	22	47	1	8	49	Q	Q
Cooling Equipment (more than one may apply)										
Residential-Type Central Air Conditioners	676	676	676	45	91	Q	8	85	Q	Q
Heat Pumps	485	485	45	485	94	4	14	112	6	Q
Individual Air Conditioners	799	799	91	94	799	Q	18	186	13	Q
District Chilled Water	50	50	Q	4	Q	50	1	Q	Q	Q
Central Chillers	130	130	8	14	18	1	130	39	2	Q
Packaged Air Conditioning Units	1,953	1,953	85	112	186	Q	39	1,953	56	12
Swamp Coolers	136	136	Q	6	13	Q	2	56	136	Q
Other	49	49	Q	Q	Q	Q	Q	12	Q	49
Main Equipment Replaced Since 1995 (more than one may apply)										
Heating	984	862	182	127	205	Q	17	490	39	Q
Cooling	1,085	1,085	208	173	308	Q	27	575	58	Q
Building Shell Conservation Features (more than one may apply)										
Multipaned Windows	2,130	1,835	386	291	425	24	86	931	38	35
Tinted, Reflective, or Shading Glass	1,283	1,180	208	169	158	26	74	770	61	11
HVAC Conservation Features (more than one may apply)										
Variable Air-Volume System	550	535	111	57	49	19	70	352	9	8
Economizer Cycle	567	567	49	52	51	21	63	444	33	15
HVAC Maintenance	2,786	2,520	451	372	445	48	126	1,524	101	30
Energy Management and Control System (EMCS)	460	423	37	45	71	26	60	288	15	11
Off-Hour Equipment Reduction (more than one may apply)										
Heating	2,862	2,449	489	357	506	37	85	1,346	95	31
Cooling	2,622	2,622	512	347	562	36	88	1,469	93	33
Lighting	3,675	3,110	605	435	694	39	93	1,692	119	45
Office Equipment	184	175	12	27	40	4	26	125	4	Q

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.
Note: 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.

Table B35. Cooling Equipment, Floorspace, 1999

	Total Floorspace (million square feet)									
			Cooling Equipment (more than one may apply)							
	All Buildings	All Cooled Buildings	Residential-Type Central Air Conditioners	Heat Pumps	Individual Air Conditioners	District Chilled Water	Central Chillers	Packaged Air Conditioning Units	Swamp Coolers	Other
All Buildings	67,338	58,474	8,329	9,147	14,276	2,750	12,909	36,527	2,219	1,312
Building Floorspace (Square Feet)										
1,001 to 5,000	6,774	4,879	890	700	962	Q	Q	2,613	253	Q
5,001 to 10,000	8,238	6,212	1,606	707	1,396	Q	Q	3,197	181	Q
10,001 to 25,000	11,153	9,530	1,420	1,270	2,482	Q	307	6,031	207	Q
25,001 to 50,000	9,311	8,116	860	1,304	2,140	294	919	5,120	325	153
50,001 to 100,000	10,112	9,401	1,221	1,593	2,057	525	1,989	6,164	477	Q
100,001 to 200,000	8,271	7,609	905	1,229	1,834	630	2,331	5,217	307	Q
200,001 to 500,000	6,851	6,345	715	1,126	2,032	470	2,963	4,106	Q	Q
Over 500,000	6,628	6,382	712	1,219	1,373	630	4,223	4,080	Q	Q
Principal Building Activity										
Education	8,651	7,973	625	1,220	2,974	676	2,108	4,331	508	Q
Food Sales	994	978	Q	Q	Q	N	Q	610	Q	Q
Food Service	1,851	1,760	357	Q	394	Q	Q	1,323	Q	Q
Health Care	2,918	2,815	572	684	696	433	1,609	1,783	Q	Q
Inpatient	1,865	1,762	455	503	602	356	1,413	1,109	Q	Q
Outpatient	1,053	1,053	Q	Q	Q	Q	196	673	Q	Q
Lodging	4,521	4,051	736	1,014	2,075	219	980	1,956	Q	Q
Mercantile	10,398	10,174	1,043	1,296	1,441	Q	1,278	8,019	387	Q
Retail (Other Than Mall)	4,766	4,573	551	225	1,111	Q	Q	3,003	Q	Q
Enclosed and Strip Malls	5,631	5,601	492	1,070	330	Q	1,115	5,017	Q	Q
Office	12,044	11,782	1,089	2,158	1,500	678	4,559	6,838	169	565
Public Assembly	4,393	3,859	579	533	742	436	920	2,152	Q	Q
Public Order and Safety	1,168	760	Q	Q	284	Q	302	383	Q	Q
Religious Worship	3,405	2,765	694	403	781	Q	Q	1,630	Q	Q
Service	3,388	2,481	491	399	716	Q	Q	1,575	Q	Q
Warehouse and Storage	10,477	7,621	1,658	858	2,155	Q	349	5,198	179	Q
Other	1,222	1,087	Q	Q	Q	Q	Q	482	Q	Q
Vacant	1,908	368	Q	Q	Q	N	Q	Q	Q	Q
Year Constructed										
1919 or Before	4,034	2,911	677	284	1,206	Q	254	1,244	Q	Q
1920 to 1945	6,445	4,383	657	551	2,074	134	984	2,367	Q	Q
1946 to 1959	9,127	7,601	1,239	984	2,833	406	1,329	4,427	261	Q
1960 to 1969	10,866	9,325	957	1,119	2,296	633	2,765	5,686	527	Q
1970 to 1979	11,840	11,050	1,621	1,793	2,237	492	2,766	7,001	499	316
1980 to 1989	13,931	12,849	1,904	2,711	2,155	424	2,584	8,978	345	348
1990 to 1999	11,094	10,355	1,274	1,705	1,476	407	2,229	6,825	339	Q
Census Region										
Northeast	12,360	10,311	950	1,215	3,897	326	2,782	6,641	Q	Q
Midwest	16,761	14,371	2,951	1,063	3,724	746	3,149	8,198	Q	328
South	23,485	21,549	3,272	4,604	4,526	939	4,328	13,915	339	343
West	14,731	12,243	1,156	2,265	2,130	739	2,651	7,773	1,624	324
Climate Zone: 45-Year Average										
Under 2,000 CDD and --										
More than 7,000 HDD	5,890	4,804	643	246	1,682	Q	971	2,753	Q	Q
5,500-7,000 HDD	17,083	14,289	2,433	1,069	4,070	763	3,309	8,340	540	420
4,000-5,499 HDD	16,243	13,999	2,085	3,144	3,945	653	3,555	8,301	Q	266
Fewer than 4,000 HDD	16,333	14,535	1,550	2,924	2,516	683	3,061	10,105	690	284
2,000 CDD or More and --										
Fewer than 4,000 HDD	11,788	10,847	1,617	1,765	2,063	589	2,014	7,028	646	228

Table B35. Cooling Equipment, Floorspace, 1999

	Total Floorspace (million square feet)									
			Cooling Equipment (more than one may apply)							
	All Buildings	All Cooled Buildings	Residential-Type Central Air Conditioners	Heat Pumps	Individual Air Conditioners	District Chilled Water	Central Chillers	Packaged Air Conditioning Units	Swamp Coolers	Other
Workers (main shift)										
Fewer than 5	14,321	8,704	2,041	753	2,568	Q	297	4,264	315	Q
5 to 9	6,325	5,291	921	677	1,226	Q	223	2,933	317	Q
10 to 19	8,028	7,409	1,187	1,267	2,037	Q	277	4,334	Q	Q
20 to 49	10,814	9,930	1,341	1,688	2,138	162	1,054	6,776	394	210
50 to 99	8,898	8,519	791	1,493	2,046	478	1,646	5,963	365	Q
100 to 249	8,356	8,129	868	1,027	1,940	484	2,597	5,507	360	341
250 or More	10,595	10,491	1,180	2,243	2,322	1,234	6,815	6,751	335	381
Weekly Operating Hours										
39 or Fewer	6,596	3,113	671	240	961	Q	218	1,820	Q	Q
40 to 48	13,105	11,041	1,882	1,985	2,573	239	1,402	6,164	399	165
49 to 60	14,200	13,225	1,477	2,009	2,746	589	2,569	7,890	350	350
61 to 84	12,458	11,701	1,648	1,619	2,334	504	3,182	7,950	432	Q
85 to 167	9,116	8,528	1,015	1,286	2,010	505	1,098	6,194	513	Q
Open Continuously	11,863	10,866	1,637	2,007	3,652	893	4,441	6,509	370	418
Multibuilding Facility Activity										
Not Part of a Multibuilding Facility	41,289	36,386	5,509	5,793	9,135	309	6,902	23,072	1,344	649
College or University	2,605	2,058	Q	Q	376	933	595	666	Q	Q
Primary or Secondary School	3,388	3,001	188	372	1,056	Q	831	1,945	Q	Q
Office Complex	3,353	3,191	Q	388	281	Q	1,325	1,875	Q	Q
Retail Complex	3,555	3,463	221	494	552	Q	Q	2,882	Q	Q
Religious Campus or Complex	1,907	1,702	Q	Q	430	Q	Q	1,115	Q	Q
Health Care Complex	2,339	2,201	446	592	522	454	1,229	1,351	Q	Q
Government Complex	1,513	1,218	Q	Q	367	464	503	400	Q	Q
Other	7,389	5,254	1,285	806	1,556	293	1,133	3,220	Q	Q
Energy Sources (more than one may apply)										
Electricity	65,716	58,474	8,329	9,147	14,276	2,750	12,909	36,527	2,219	1,312
Natural Gas	45,525	42,147	6,805	5,771	10,715	1,316	10,145	27,987	1,950	773
Fuel Oil	13,285	12,185	1,314	2,435	4,276	749	6,081	7,121	407	535
District Heat	5,891	5,165	335	782	1,240	2,354	2,114	2,054	Q	Q
District Chilled Water	2,750	2,750	Q	336	359	2,750	386	721	Q	Q
Propane	6,290	5,415	867	800	1,626	Q	828	3,460	222	Q
Other	2,322	2,069	338	326	593	Q	550	1,368	Q	Q
Cooling Energy Sources (more than one may apply)										
Electricity	55,545	55,545	8,329	9,120	14,276	1,093	12,405	35,387	2,175	1,244
Natural Gas	1,914	1,914	Q	187	376	Q	272	1,595	Q	Q
District Chilled Water	2,750	2,750	Q	336	359	2,750	386	721	Q	Q
Energy End Uses (more than one may apply)										
Buildings with Space Heating	61,602	56,361	8,010	9,052	13,754	2,739	12,560	35,247	2,190	1,257
Buildings with Cooling	58,474	58,474	8,329	9,147	14,276	2,750	12,909	36,527	2,219	1,312
Buildings with Water Heating	56,115	52,589	7,278	8,409	12,888	2,455	12,484	33,328	2,060	1,191
Buildings with Cooking	24,681	23,730	2,965	4,406	6,798	1,047	8,488	15,767	1,148	641
Buildings with Manufacturing	3,126	2,861	563	422	1,198	Q	445	1,889	212	Q
Buildings with Electricity Generation	11,882	11,538	1,358	2,544	2,860	919	6,234	7,328	511	583
Percent of Floorspace Cooled										
Not Cooled	8,864	N	N	N	N	N	N	N	N	N
1 to 50	16,846	16,846	3,054	1,910	6,855	Q	903	9,465	880	233
51 to 99	16,966	16,966	2,604	3,040	3,647	772	6,368	10,695	540	591
100	24,662	24,662	2,672	4,197	3,774	1,805	5,639	16,368	800	488

Table B35. Cooling Equipment, Floorspace, 1999

	Total Floorspace (million square feet)									
			Cooling Equipment (more than one may apply)							
	All Buildings	All Cooled Buildings	Residential-Type Central Air Conditioners	Heat Pumps	Individual Air Conditioners	District Chilled Water	Central Chillers	Packaged Air Conditioning Units	Swamp Coolers	Other
Heating Equipment (more than one may apply)										
Heat Pumps	8,923	8,766	1,362	8,243	2,378	376	2,109	4,709	483	285
Furnaces	14,449	12,819	4,975	1,601	3,655	Q	1,259	7,240	756	225
Individual Space Heaters	17,349	15,708	2,810	2,750	6,603	567	3,863	10,774	835	285
District Heat	5,534	4,844	303	701	1,140	2,279	2,069	1,884	Q	Q
Boilers	19,522	17,947	2,282	2,749	6,406	326	8,549	10,047	823	637
Packaged Heating Units	25,743	25,134	2,617	3,799	5,127	497	4,425	23,495	1,253	385
Other	4,073	3,592	646	528	887	159	1,679	2,138	Q	468
Cooling Equipment (more than one may apply)										
Residential-Type Central Air Conditioners	8,329	8,329	8,329	1,441	2,297	Q	1,489	3,365	Q	Q
Heat Pumps	9,147	9,147	1,441	9,147	2,443	336	2,272	4,895	549	293
Individual Air Conditioners	14,276	14,276	2,297	2,443	14,276	359	2,530	7,353	562	Q
District Chilled Water	2,750	2,750	Q	336	359	2,750	386	721	Q	Q
Central Chillers	12,909	12,909	1,489	2,272	2,530	386	12,909	6,282	312	Q
Packaged Air Conditioning Units	36,527	36,527	3,365	4,895	7,353	721	6,282	36,527	1,499	547
Swamp Coolers	2,219	2,219	Q	549	562	Q	312	1,499	2,219	Q
Other	1,312	1,312	Q	293	Q	Q	Q	547	Q	1,312
Main Equipment Replaced Since 1995 (more than one may apply)										
Heating	13,220	12,424	1,978	2,245	3,066	Q	1,672	8,991	730	230
Cooling	17,390	17,390	2,497	2,905	5,823	Q	3,380	11,357	910	358
Building Shell Conservation Features (more than one may apply)										
Multipaned Windows	38,193	35,476	5,424	6,148	9,049	1,705	9,288	21,728	959	903
Tinted, Reflective, or Shading Glass	29,915	28,721	3,465	4,682	5,298	1,827	8,534	19,291	1,201	759
HVAC Conservation Features (more than one may apply)										
Variable Air-Volume System	19,387	19,009	2,235	2,872	2,857	1,837	8,391	12,246	589	557
Economizer Cycle	21,256	21,256	2,448	3,516	4,117	1,911	9,218	14,637	966	720
HVAC Maintenance	53,395	50,309	6,780	8,272	11,204	2,670	12,705	32,576	2,040	1,220
Energy Management and Control System (EMCS)	21,613	20,817	2,049	3,343	4,116	2,186	9,343	12,958	626	843
Off-Hour Equipment Reduction (more than one may apply)										
Heating	39,969	36,639	5,217	5,804	7,866	1,631	6,968	23,102	1,560	702
Cooling	39,161	39,161	5,697	5,916	8,668	1,573	7,368	24,691	1,528	752
Lighting	51,083	46,004	6,512	7,018	10,240	1,855	8,214	28,904	1,800	890
Office Equipment	9,063	8,748	860	1,350	2,329	378	2,467	5,605	258	Q

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.
Note: 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.

Table B36. Refrigeration Equipment, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)					Total Floorspace (million square feet)				
			Type of Equipment (more than one may apply)					Type of Equipment (more than one may apply)		
	All Buildings	All Buildings with Refrigeration Equipment	Walk-In	Open Cases or Cabinets	Closed Cases or Cabinets	All Buildings	All Buildings with Refrigeration Equipment	Walk-In	Open Cases or Cabinets	Closed Cases or Cabinets
All Buildings	4,657	950	658	255	719	67,338	25,652	19,713	8,808	19,938
Building Floorspace (Square Feet)										
1,001 to 5,000	2,348	479	356	116	378	6,774	1,370	1,059	309	1,123
5,001 to 10,000	1,110	152	101	62	113	8,238	1,135	736	498	854
10,001 to 25,000	708	135	67	20	90	11,153	2,186	1,069	320	1,505
25,001 to 50,000	257	78	51	18	58	9,311	2,873	1,877	651	2,098
50,001 to 100,000	145	56	41	19	41	10,112	4,051	2,980	1,351	2,976
100,001 to 200,000	59	31	25	12	22	8,271	4,398	3,584	1,726	3,175
200,001 to 500,000	23	14	13	5	12	6,851	4,376	3,869	1,491	3,607
Over 500,000	7	6	5	2	5	6,628	5,262	4,539	2,462	4,599
Principal Building Activity										
Education	327	84	51	16	57	8,651	5,423	4,199	1,433	3,757
Food Sales	174	159	127	57	113	994	962	737	601	781
Food Service	349	334	261	90	273	1,851	1,783	1,576	514	1,287
Health Care	127	12	7	3	10	2,918	1,931	1,749	762	1,660
Inpatient	11	9	6	2	8	1,865	1,749	1,693	708	1,502
Outpatient	116	Q	Q	Q	Q	1,053	Q	Q	Q	Q
Lodging	153	30	20	6	23	4,521	2,360	1,973	458	2,022
Mercantile	667	178	127	68	136	10,398	5,600	4,424	3,020	4,788
Retail (Other Than Mall)	534	97	66	Q	70	4,766	1,090	609	414	864
Enclosed and Strip Malls	133	81	61	41	67	5,631	4,509	3,816	2,606	3,924
Office	739	26	17	5	15	12,044	3,331	2,350	1,370	2,742
Public Assembly	305	61	23	Q	44	4,393	1,664	959	378	1,398
Public Order and Safety	72	Q	3	Q	Q	1,168	221	163	Q	Q
Religious Worship	307	21	Q	Q	19	3,405	574	Q	Q	427
Service	478	Q	Q	Q	Q	3,388	Q	Q	Q	Q
Warehouse and Storage	603	20	10	Q	Q	10,477	1,177	948	Q	414
Other	102	Q	Q	Q	Q	1,222	Q	Q	Q	Q
Vacant	253	Q	Q	N	Q	1,908	Q	Q	N	Q
Year Constructed										
1919 or Before	419	61	32	Q	52	4,034	940	424	Q	854
1920 to 1945	499	104	70	Q	98	6,445	2,176	1,551	318	1,896
1946 to 1959	763	119	77	46	79	9,127	3,063	2,096	1,163	2,325
1960 to 1969	665	123	76	17	97	10,866	4,490	3,636	1,397	3,260
1970 to 1979	774	176	149	58	124	11,840	4,937	4,051	1,990	3,930
1980 to 1989	846	229	143	68	177	13,931	5,450	4,270	1,793	4,089
1990 to 1999	690	139	113	40	92	11,094	4,595	3,685	1,977	3,583
Census Region										
Northeast	686	143	101	33	94	12,360	5,536	4,335	1,917	4,489
Midwest	1,188	244	164	52	194	16,761	6,252	4,580	1,798	5,038
South	1,762	351	230	97	277	23,485	8,734	6,809	3,205	6,606
West	1,021	212	164	73	154	14,731	5,130	3,988	1,887	3,804
Workers (main shift)										
Fewer than 5	2,376	349	215	Q	266	14,321	1,586	789	Q	1,245
5 to 9	807	151	90	31	122	6,325	1,207	545	187	915
10 to 19	683	178	152	57	118	8,028	2,144	1,547	490	1,466
20 to 49	487	146	98	35	117	10,814	3,938	2,551	1,084	2,958
50 to 99	174	76	61	28	55	8,898	4,698	3,841	1,645	3,482
100 to 249	90	32	28	12	26	8,356	4,752	4,444	1,638	3,700
250 or More	39	18	14	8	15	10,595	7,328	5,996	3,466	6,172

Table B36. Refrigeration Equipment, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)					Total Floorspace (million square feet)				
			Type of Equipment (more than one may apply)					Type of Equipment (more than one may apply)		
	All Buildings	All Buildings with Refrigeration Equipment	Walk-In	Open Cases or Cabinets	Closed Cases or Cabinets	All Buildings	All Buildings with Refrigeration Equipment	Walk-In	Open Cases or Cabinets	Closed Cases or Cabinets
Weekly Operating Hours										
39 or Fewer	978	62	13	Q	58	6,596	743	340	Q	625
40 to 48	1,156	97	63	21	52	13,105	2,581	1,711	645	1,629
49 to 60	986	148	75	41	120	14,200	4,230	2,979	1,417	3,227
61 to 84	664	210	154	49	156	12,458	6,035	4,618	2,311	4,862
85 to 167	474	321	260	102	262	9,116	5,198	4,052	1,971	4,079
Open Continuously	398	113	93	31	71	11,863	6,865	6,013	2,371	5,515
Multibuilding Facility Activity										
Not Part of a Multibuilding Facility	3,295	778	543	206	589	41,289	16,109	12,270	5,051	12,320
College or University	70	5	3	Q	4	2,605	445	343	Q	362
Primary or Secondary School	224	37	27	9	23	3,388	1,797	1,591	685	1,059
Office Complex	134	6	4	2	5	3,353	1,131	783	508	972
Retail Complex	181	56	35	26	44	3,555	2,064	1,543	1,307	1,864
Religious Campus or Complex	186	9	Q	Q	8	1,907	408	Q	Q	346
Health Care Complex	72	10	8	2	6	2,339	1,482	1,396	598	1,228
Government Complex	61	4	Q	Q	3	1,513	535	Q	Q	476
Other	434	45	35	Q	38	7,389	1,680	1,374	433	1,312
Energy Sources (more than one may apply)										
Electricity	4,395	950	658	255	719	65,716	25,652	19,713	8,808	19,938
Natural Gas	2,670	652	466	182	492	45,525	20,198	16,098	7,308	15,642
Fuel Oil	434	97	46	13	85	13,285	8,214	6,849	2,917	6,781
District Heat	117	25	21	Q	13	5,891	2,541	1,990	801	2,179
District Chilled Water	50	7	5	1	6	2,750	1,170	804	382	1,026
Propane	451	134	83	26	111	6,290	2,819	2,252	914	2,242
Other	153	47	20	Q	41	2,322	1,256	1,051	460	1,004
Energy End Uses (more than one may apply)										
Buildings with Space Heating	4,016	859	594	238	639	61,602	24,514	18,993	8,459	19,004
Buildings with Cooling	3,560	896	640	252	671	58,474	24,720	19,288	8,670	19,118
Buildings with Water Heating	3,239	905	647	252	680	56,115	24,625	19,141	8,569	19,106
Buildings with Cooking	857	682	488	188	532	24,681	21,775	17,386	8,113	17,428
Buildings with Manufacturing	151	12	5	Q	Q	3,126	691	569	Q	474
Buildings with Electricity Generation	172	60	50	16	48	11,882	8,172	7,044	3,378	6,819
Energy-Related Space Functions (more than one may apply)										
Commercial Food Preparation	767	640	465	178	498	23,328	21,054	16,962	7,863	16,837
Activities with Large Amounts of Hot Water	698	408	299	114	311	21,793	16,721	13,876	6,103	13,362

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.
Note: 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.

Table B37. Water Heating Equipment, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)					Total Floorspace (million square feet)				
			Type of Water Heating Equipment					Type of Water Heating Equipment		
	All Buildings	All Buildings with Water Heating	Central-ized System	Distri-buted System	Combination Centralized and Distributed Systems	All Buildings	All Buildings with Water Heating	Central-ized System	Distri-buted System	Combination Centralized and Distributed Systems
All Buildings	4,657	3,239	2,472	566	200	67,338	56,115	35,579	10,899	9,637
Building Floorspace (Square Feet)										
1,001 to 5,000	2,348	1,456	1,175	244	Q	6,774	4,280	3,411	767	Q
5,001 to 10,000	1,110	778	606	141	31	8,238	5,748	4,479	1,014	255
10,001 to 25,000	708	574	416	103	55	11,153	9,000	6,505	1,679	816
25,001 to 50,000	257	222	151	37	34	9,311	8,088	5,464	1,373	1,250
50,001 to 100,000	145	127	79	23	25	10,112	8,887	5,534	1,615	1,739
100,001 to 200,000	59	54	31	12	10	8,271	7,527	4,317	1,703	1,507
200,001 to 500,000	23	21	12	4	5	6,851	6,258	3,365	1,179	1,714
Over 500,000	7	7	3	2	2	6,628	6,327	2,504	1,569	2,255
Principal Building Activity										
Education	327	240	141	55	45	8,651	8,059	5,049	1,088	1,922
Food Sales	174	163	139	Q	Q	994	951	635	Q	Q
Food Service	349	349	305	Q	Q	1,851	1,846	1,548	Q	Q
Health Care	127	126	103	Q	6	2,918	2,903	1,755	363	785
Inpatient	11	11	8	Q	3	1,865	1,862	961	Q	690
Outpatient	116	115	95	Q	Q	1,053	1,040	794	Q	Q
Lodging	153	149	124	Q	9	4,521	4,442	3,589	Q	552
Mercantile	667	439	326	98	15	10,398	8,698	4,306	3,088	1,303
Retail (Other Than Mall)	534	323	260	60	Q	4,766	3,453	2,479	881	Q
Enclosed and Strip Malls	133	116	66	38	12	5,631	5,244	1,828	2,207	1,209
Office	739	615	426	156	33	12,044	10,872	6,184	2,186	2,502
Public Assembly	305	249	191	45	13	4,393	3,893	2,722	655	516
Public Order and Safety	72	41	35	Q	Q	1,168	830	605	Q	Q
Religious Worship	307	252	222	16	14	3,405	3,109	2,495	266	347
Service	478	280	226	51	Q	3,388	2,351	1,742	429	Q
Warehouse and Storage	603	227	140	79	8	10,477	6,743	3,914	2,070	759
Other	102	64	53	Q	3	1,222	983	674	Q	171
Vacant	253	44	43	Q	Q	1,908	436	361	Q	Q
Year Constructed										
1919 or Before	419	277	254	12	11	4,034	3,130	2,524	242	364
1920 to 1945	499	311	238	52	21	6,445	4,644	2,935	819	889
1946 to 1959	763	493	385	83	25	9,127	7,154	4,824	1,208	1,122
1960 to 1969	665	493	383	76	33	10,866	9,421	6,525	1,540	1,356
1970 to 1979	774	592	450	118	24	11,840	10,182	6,384	2,040	1,757
1980 to 1989	846	623	440	130	54	13,931	12,137	6,822	2,924	2,390
1990 to 1999	690	450	323	95	33	11,094	9,446	5,564	2,125	1,758
Census Region										
Northeast	686	515	411	78	26	12,360	10,577	6,941	1,823	1,813
Midwest	1,188	776	609	117	50	16,761	13,702	9,037	2,328	2,336
South	1,762	1,179	874	218	87	23,485	19,014	11,500	4,120	3,395
West	1,021	769	578	153	38	14,731	12,822	8,102	2,628	2,093
Workers (main shift)										
Fewer than 5	2,376	1,312	1,124	149	39	14,321	8,401	7,108	866	427
5 to 9	807	643	475	146	22	6,325	5,145	3,739	1,105	301
10 to 19	683	586	413	143	30	8,028	7,000	5,204	1,403	393
20 to 49	487	417	295	68	54	10,814	9,445	6,000	1,921	1,524
50 to 99	174	159	88	40	31	8,898	8,166	4,468	1,935	1,763
100 to 249	90	85	57	14	14	8,356	7,760	4,140	1,685	1,935
250 or More	39	36	20	6	10	10,595	10,199	4,920	1,984	3,294

Table B37. Water Heating Equipment, Number of Buildings and Floorspace, 1999

	Number of Buildings (thousand)					Total Floorspace (million square feet)				
			Type of Water Heating Equipment					Type of Water Heating Equipment		
	All Buildings	All Buildings with Water Heating	Central-ized System	Distri-buted System	Combination Centralized and Distributed Systems	All Buildings	All Buildings with Water Heating	Central-ized System	Distri-buted System	Combination Centralized and Distributed Systems
Weekly Operating Hours										
39 or Fewer	978	427	362	47	18	6,596	3,340	2,748	336	255
40 to 48	1,156	779	577	175	27	13,105	10,049	7,001	1,931	1,117
49 to 60	986	746	553	149	44	14,200	12,280	7,321	3,039	1,921
61 to 84	664	521	386	102	34	12,458	11,334	6,440	2,493	2,401
85 to 167	474	436	336	55	45	9,116	8,041	4,985	1,535	1,521
Open Continuously	398	330	259	38	33	11,863	11,070	7,084	1,564	2,422
Multibuilding Facility Activity										
Not Part of a Multibuilding Facility	3,295	2,361	1,909	335	117	41,289	34,705	22,835	6,269	5,601
College or University	70	65	44	16	5	2,605	2,326	1,700	253	373
Primary or Secondary School	224	122	73	22	28	3,388	2,862	1,705	429	728
Office Complex	134	106	47	51	7	3,353	3,035	1,304	948	783
Retail Complex	181	141	81	57	3	3,555	3,108	1,491	1,310	307
Religious Campus or Complex	186	128	96	Q	Q	1,907	1,656	1,286	Q	Q
Health Care Complex	72	52	35	Q	Q	2,339	2,185	1,171	Q	709
Government Complex	61	42	27	Q	Q	1,513	1,177	783	Q	Q
Other	434	222	161	43	17	7,389	5,061	3,305	1,080	676
Energy Sources (more than one may apply)										
Electricity	4,395	3,239	2,472	566	200	65,716	56,115	35,579	10,899	9,637
Natural Gas	2,670	2,191	1,706	342	143	45,525	41,366	26,479	7,585	7,302
Fuel Oil	434	288	228	37	23	13,285	11,852	6,533	1,870	3,448
District Heat	117	101	84	7	11	5,891	5,301	3,464	695	1,142
District Chilled Water	50	37	29	3	6	2,750	2,455	1,556	254	644
Propane	451	334	247	50	36	6,290	5,409	3,504	958	947
Other	153	89	71	14	5	2,322	1,887	1,184	352	351
Water-Heating Energy Sources (more than one may apply)										
Electricity	1,546	1,546	1,048	399	99	24,171	24,171	12,585	7,068	4,519
Natural Gas	1,520	1,520	1,244	173	103	29,196	29,196	19,755	4,032	5,409
Fuel Oil	110	110	88	Q	Q	2,218	2,218	1,534	Q	498
District Heat	62	62	52	5	5	4,182	4,182	2,715	566	901
Propane	130	130	104	Q	Q	1,371	1,371	1,020	Q	Q
Energy End Uses (more than one may apply)										
Buildings with Space Heating	4,016	3,087	2,344	548	195	61,602	54,204	34,201	10,502	9,500
Buildings with Cooling	3,560	2,915	2,195	525	194	58,474	52,589	32,972	10,261	9,356
Buildings with Water Heating	3,239	3,239	2,472	566	200	56,115	56,115	35,579	10,899	9,637
Buildings with Cooking	857	818	608	98	112	24,681	23,830	13,553	4,346	5,932
Buildings with Manufacturing	151	89	64	20	5	3,126	2,364	1,385	601	378
Buildings with Electricity Generation	172	143	103	Q	18	11,882	11,079	5,974	1,828	3,277
Energy-Related Space Functions (more than one may apply)										
Commercial Food Preparation	767	733	542	91	99	23,328	22,563	12,730	4,141	5,692
Activities with Large Amounts of Hot Water	698	698	522	81	94	21,793	21,793	13,070	3,452	5,271

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

Table B38. Lighting Equipment, Number of Buildings, 1999

	Number of Buildings (thousand)						
			Lighting Equipment (more than one may apply)				
	All Buildings	All Lit Buildings	Incandescent	Standard Fluorescent	Compact Fluorescent	High-Intensity Discharge	Halogen
All Buildings	4,657	4,172	2,193	3,778	607	430	572
Building Floorspace (Square Feet)							
1,001 to 5,000	2,348	2,024	980	1,795	198	80	194
5,001 to 10,000	1,110	1,003	548	904	149	94	136
10,001 to 25,000	708	663	391	628	109	111	123
25,001 to 50,000	257	249	138	230	62	60	43
50,001 to 100,000	145	143	83	136	48	43	41
100,001 to 200,000	59	59	33	56	24	25	23
200,001 to 500,000	23	23	14	22	12	11	9
Over 500,000	7	7	5	7	4	5	4
Principal Building Activity							
Education	327	327	120	309	56	49	34
Food Sales	174	173	53	172	Q	Q	Q
Food Service	349	349	277	308	78	Q	84
Health Care	127	127	83	126	20	8	34
Inpatient	11	11	9	11	8	3	3
Outpatient	116	116	74	115	13	Q	31
Lodging	153	149	130	121	55	18	25
Mercantile	667	666	346	614	86	40	97
Retail (Other Than Mall)	534	532	269	483	69	27	75
Enclosed and Strip Malls	133	133	77	131	17	Q	22
Office	739	738	362	696	131	39	81
Public Assembly	305	280	164	234	56	41	40
Public Order and Safety	72	59	31	57	6	6	Q
Religious Worship	307	307	237	244	30	28	53
Service	478	465	163	436	37	82	54
Warehouse and Storage	603	411	172	340	30	92	45
Other	102	86	32	84	Q	5	Q
Vacant	253	35	Q	34	Q	Q	Q
Year Constructed							
1919 or Before	419	342	221	307	44	41	55
1920 to 1945	499	436	283	376	58	31	33
1946 to 1959	763	676	334	622	56	54	79
1960 to 1969	665	594	307	525	122	48	86
1970 to 1979	774	731	391	674	81	69	112
1980 to 1989	846	771	415	721	123	94	131
1990 to 1999	690	622	242	552	121	93	77
Census Region							
Northeast	686	608	273	565	111	63	92
Midwest	1,188	1,033	587	904	166	114	155
South	1,762	1,599	847	1,455	187	159	189
West	1,021	931	486	853	142	94	136
Workers (main shift)							
Fewer than 5	2,376	1,922	986	1,681	159	153	176
5 to 9	807	793	391	737	105	57	105
10 to 19	683	667	373	627	112	61	84
20 to 49	487	487	258	442	133	76	120
50 to 99	174	174	102	165	43	45	40
100 to 249	90	90	56	88	32	22	31
250 or More	39	39	26	39	23	14	17

Table B38. Lighting Equipment, Number of Buildings, 1999

	Number of Buildings (thousand)						
			Lighting Equipment (more than one may apply)				
	All Buildings	All Lit Buildings	Incandescent	Standard Fluorescent	Compact Fluorescent	High-Intensity Discharge	Halogen
Weekly Operating Hours							
39 or Fewer	978	579	341	465	37	20	51
40 to 48	1,156	1,147	532	1,052	166	116	105
49 to 60	986	978	499	895	135	110	138
61 to 84	664	628	322	604	95	71	125
85 to 167	474	458	256	434	79	65	96
Open Continuously	398	381	243	327	94	48	58
Space in Building Vacant for at Least Three Consecutive Months							
Completely Vacant	140	Q	Q	Q	Q	N	Q
Mostly Vacant	113	32	Q	31	Q	Q	Q
Partially Vacant	697	563	316	524	99	69	103
Not At All Vacant	3,707	3,573	1,855	3,219	506	360	469
Multibuilding Facility Activity							
Not Part of a Multibuilding Facility	3,295	3,000	1,598	2,710	408	287	412
College or University	70	70	43	68	18	11	10
Primary or Secondary School	224	218	70	206	27	24	10
Office Complex	134	121	38	119	18	Q	13
Retail Complex	181	167	98	162	27	17	40
Religious Campus or Complex	186	176	112	159	15	Q	30
Health Care Complex	72	65	33	64	12	4	Q
Government Complex	61	43	17	37	5	Q	Q
Other	434	313	184	252	76	49	50
Energy Sources (more than one may apply)							
Electricity	4,395	4,172	2,193	3,778	607	430	572
Natural Gas	2,670	2,610	1,463	2,349	390	287	406
Fuel Oil	434	415	202	383	74	57	64
District Heat	117	117	68	108	32	20	19
District Chilled Water	50	50	25	49	17	11	5
Propane	451	435	225	378	68	45	68
Other	153	152	104	143	Q	16	33
Energy End Uses (more than one may apply)							
Buildings with Space Heating	4,016	3,908	2,090	3,544	591	405	547
Buildings with Cooling	3,560	3,512	1,853	3,215	556	364	491
Buildings with Water Heating	3,239	3,197	1,794	2,925	516	339	487
Buildings with Cooking	857	857	550	787	179	96	207
Buildings with Manufacturing	151	145	74	141	32	22	30
Buildings with Electricity Generation	172	171	93	162	58	42	46
Percent Lit When Open							
Zero	34	Q	N	N	N	Q	N
1 to 50	835	835	476	708	112	94	110
51 to 99	1,228	1,228	780	1,117	223	120	226
100	2,096	2,096	928	1,941	271	215	236
Building Never Open/ Electricity Not Used	464	Q	Q	Q	Q	N	Q
Percent Lit When Closed							
Zero	2,174	1,959	960	1,738	220	173	187
1 to 50	1,688	1,688	938	1,589	253	187	296
51 to 100	143	143	51	123	39	22	31
Building Never Closed/ Electricity Not Used	652	381	243	327	94	48	58

Table B38. Lighting Equipment, Number of Buildings, 1999

	Number of Buildings (thousand)						
			Lighting Equipment (more than one may apply)				
	All Buildings	All Lit Buildings	Incandescent	Standard Fluorescent	Compact Fluorescent	High-Intensity Discharge	Halogen
Lighting Equipment Types (more than one may apply)							
Incandescent	2,193	2,193	2,193	1,904	366	233	421
Standard Fluorescent	3,778	3,778	1,904	3,778	490	398	520
Compact Fluorescent	607	607	366	490	607	141	171
High-Intensity Discharge	430	430	233	398	141	430	133
Halogen	572	572	421	520	171	133	572
Other	58	58	34	37	4	2	Q
Lighting Conservation Features (more than one may apply)							
Specular Reflectors	843	843	430	843	177	121	153
Electronic Ballasts	2,167	2,167	1,052	2,151	340	273	313
Skylights or Atriums	580	531	311	484	107	94	117
Off-Hour Equipment Reduction (more than one may apply)							
Heating	2,862	2,791	1,455	2,586	408	283	374
Cooling	2,622	2,589	1,367	2,392	391	263	369
Lighting	3,675	3,675	1,899	3,349	493	362	486
Office Equipment	184	184	91	177	54	37	36

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.
Note: 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.

Table B39. Lighting Equipment, Floorspace, 1999

	Total Floorspace (million square feet)						
			Lighting Equipment (more than one may apply)				
	All Buildings	All Lit Buildings	Incandescent	Standard Fluorescent	Compact Fluorescent	High-Intensity Discharge	Halogen
All Buildings	67,338	64,321	38,156	60,344	20,666	19,223	17,926
Building Floorspace (Square Feet)							
1,001 to 5,000	6,774	5,859	2,946	5,154	738	245	600
5,001 to 10,000	8,238	7,464	4,047	6,722	1,108	663	991
10,001 to 25,000	11,153	10,393	6,055	9,815	1,759	1,701	1,996
25,001 to 50,000	9,311	9,053	5,004	8,344	2,296	2,224	1,611
50,001 to 100,000	10,112	9,997	5,880	9,525	3,425	3,101	2,929
100,001 to 200,000	8,271	8,197	4,685	7,817	3,429	3,633	3,241
200,001 to 500,000	6,851	6,731	4,396	6,423	3,575	3,259	2,677
Over 500,000	6,628	6,628	5,143	6,544	4,336	4,397	3,882
Principal Building Activity							
Education	8,651	8,651	5,027	8,325	2,746	3,761	2,302
Food Sales	994	992	525	985	Q	Q	Q
Food Service	1,851	1,851	1,450	1,623	575	Q	558
Health Care	2,918	2,918	2,246	2,881	1,712	943	1,350
Inpatient	1,865	1,865	1,554	1,859	1,389	782	1,009
Outpatient	1,053	1,053	692	1,022	323	Q	341
Lodging	4,521	4,476	3,713	4,109	2,587	933	1,686
Mercantile	10,398	10,383	5,586	9,824	2,793	2,494	3,058
Retail (Other Than Mall)	4,766	4,754	2,240	4,286	724	767	790
Enclosed and Strip Malls	5,631	5,628	3,346	5,539	2,068	1,727	2,268
Office	12,044	12,037	7,598	11,608	5,844	2,946	4,034
Public Assembly	4,393	4,295	2,777	3,913	1,467	1,594	980
Public Order and Safety	1,168	1,006	513	984	304	319	Q
Religious Worship	3,405	3,405	2,775	3,048	633	490	965
Service	3,388	3,336	1,276	3,218	299	1,163	384
Warehouse and Storage	10,477	9,289	3,803	8,200	1,192	3,870	1,830
Other	1,222	1,176	644	1,142	300	382	Q
Vacant	1,908	506	Q	483	Q	Q	Q
Year Constructed							
1919 or Before	4,034	3,569	2,533	3,246	1,040	682	871
1920 to 1945	6,445	5,877	3,909	5,417	1,423	1,530	921
1946 to 1959	9,127	8,544	4,951	8,031	2,019	1,981	1,861
1960 to 1969	10,866	10,541	6,268	9,939	3,445	2,986	2,916
1970 to 1979	11,840	11,638	7,089	11,099	3,824	3,413	3,511
1980 to 1989	13,931	13,284	8,028	12,619	4,755	4,166	4,272
1990 to 1999	11,094	10,869	5,377	9,993	4,160	4,464	3,574
Census Region							
Northeast	12,360	11,804	7,047	11,348	3,939	4,382	3,625
Midwest	16,761	15,996	9,903	14,840	5,518	5,513	4,405
South	23,485	22,365	12,970	20,850	6,427	5,874	5,847
West	14,731	14,156	8,236	13,305	4,781	3,454	4,049
Workers (main shift)							
Fewer than 5	14,321	11,461	6,532	9,890	1,388	1,348	1,448
5 to 9	6,325	6,251	3,289	5,796	1,118	990	880
10 to 19	8,028	7,945	4,437	7,439	1,682	1,233	1,482
20 to 49	10,814	10,814	5,841	10,106	3,032	2,984	2,585
50 to 99	8,898	8,898	5,330	8,474	2,781	3,306	2,539
100 to 249	8,356	8,356	5,082	8,164	3,573	3,551	3,003
250 or More	10,595	10,595	7,644	10,475	7,093	5,812	5,989

Table B39. Lighting Equipment, Floorspace, 1999

	Total Floorspace (million square feet)						
			Lighting Equipment (more than one may apply)				
	All Buildings	All Lit Buildings	Incandescent	Standard Fluorescent	Compact Fluorescent	High-Intensity Discharge	Halogen
Weekly Operating Hours							
39 or Fewer	6,596	4,087	2,569	3,355	401	421	596
40 to 48	13,105	13,061	6,904	12,064	2,607	2,867	1,955
49 to 60	14,200	14,170	8,181	13,256	4,298	3,691	3,615
61 to 84	12,458	12,316	7,649	11,978	4,613	4,273	4,576
85 to 167	9,116	8,905	4,873	8,525	2,769	3,653	2,616
Open Continuously	11,863	11,784	7,980	11,166	5,978	4,319	4,568
Space in Building Vacant for at Least Three Consecutive Months							
Completely Vacant	953	Q	Q	Q	Q	N	Q
Mostly Vacant	956	409	Q	386	Q	Q	Q
Partially Vacant	15,520	14,697	9,454	14,140	6,349	4,888	5,590
Not At All Vacant	49,910	49,118	28,480	45,721	14,208	14,322	12,290
Multibuilding Facility Activity							
Not Part of a Multibuilding Facility	41,289	39,447	23,311	36,819	12,015	11,225	10,585
College or University	2,605	2,597	1,427	2,498	1,046	716	560
Primary or Secondary School	3,388	3,338	1,945	3,169	927	1,318	840
Office Complex	3,353	3,273	1,978	3,213	1,583	899	1,200
Retail Complex	3,555	3,487	2,068	3,381	1,083	994	1,383
Religious Campus or Complex	1,907	1,887	1,310	1,800	393	Q	557
Health Care Complex	2,339	2,309	1,635	2,273	1,311	823	919
Government Complex	1,513	1,341	683	1,319	507	484	Q
Other	7,389	6,643	3,798	5,872	1,801	2,501	1,655
Energy Sources (more than one may apply)							
Electricity	65,716	64,321	38,156	60,344	20,666	19,223	17,926
Natural Gas	45,525	45,043	27,997	42,436	15,294	14,854	14,031
Fuel Oil	13,285	13,192	9,076	12,874	6,857	6,227	5,840
District Heat	5,891	5,891	3,779	5,649	3,111	2,158	1,866
District Chilled Water	2,750	2,750	1,578	2,703	1,541	900	864
Propane	6,290	6,255	3,341	5,852	1,593	2,062	1,629
Other	2,322	2,318	1,638	2,212	860	1,001	916
Energy End Uses (more than one may apply)							
Buildings with Space Heating	61,602	61,017	36,640	57,516	20,127	18,821	17,373
Buildings with Cooling	58,474	58,077	34,584	55,007	19,829	18,076	17,093
Buildings with Water Heating	56,115	55,746	34,373	52,823	19,339	17,681	16,757
Buildings with Cooking	24,681	24,681	17,469	23,810	11,262	9,908	10,335
Buildings with Manufacturing	3,126	3,069	1,509	2,926	800	1,207	911
Buildings with Electricity Generation	11,882	11,877	8,413	11,585	7,132	6,086	6,201
Percent Lit When Open							
Zero	173	Q	N	N	N	Q	N
1 to 50	9,187	9,187	5,551	8,127	1,878	1,442	1,784
51 to 99	20,665	20,665	14,573	19,430	8,141	6,629	6,977
100	34,233	34,233	17,940	32,575	10,615	11,148	9,135
Building Never Open/ Electricity Not Used	3,080	232	Q	213	Q	N	Q
Percent Lit When Closed							
Zero	20,771	19,428	9,760	17,697	3,314	4,052	2,966
1 to 50	30,950	30,950	19,364	29,535	10,581	10,208	9,732
51 to 100	2,160	2,160	1,052	1,946	794	645	660
Building Never Closed/ Electricity Not Used	13,457	11,784	7,980	11,166	5,978	4,319	4,568

Table B39. Lighting Equipment, Floorspace, 1999

	Total Floorspace (million square feet)						
			Lighting Equipment (more than one may apply)				
	All Buildings	All Lit Buildings	Incandescent	Standard Fluorescent	Compact Fluorescent	High-Intensity Discharge	Halogen
Lighting Equipment Types (more than one may apply)							
Incandescent	38,156	38,156	38,156	35,707	15,682	12,726	14,037
Standard Fluorescent	60,344	60,344	35,707	60,344	19,242	18,465	17,171
Compact Fluorescent	20,666	20,666	15,682	19,242	20,666	9,386	10,517
High-Intensity Discharge	19,223	19,223	12,726	18,465	9,386	19,223	8,832
Halogen	17,926	17,926	14,037	17,171	10,517	8,832	17,926
Other	1,004	1,004	697	862	525	461	553
Lighting Conservation Features (more than one may apply)							
Specular Reflectors	19,994	19,994	12,721	19,994	8,935	8,144	7,855
Electronic Ballasts	42,035	42,035	24,967	41,473	16,117	15,009	13,717
Skylights or Atriums	18,286	17,885	11,615	16,957	7,793	8,306	7,398
Off-Hour Equipment Reduction (more than one may apply)							
Heating	39,969	39,632	23,293	37,533	11,971	11,677	10,516
Cooling	39,161	38,842	22,573	36,804	11,882	11,390	10,549
Lighting	51,083	51,083	29,489	47,891	14,346	14,631	13,044
Office Equipment	9,063	9,052	5,132	8,742	3,264	3,668	2,760

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.
Note: 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.

Table C1. Total Energy Consumption by Major Fuel, 1999

	All Buildings		Total Energy Consumption (trillion Btu)					
	Number of Buildings (thousand)	Floorspace (million square feet)	Total of Major Fuels	Site Electricity	Natural Gas	Fuel Oil	District Heat	Primary Electricity (trillion Btu)
All Buildings	4,657	67,338	5,733	3,098	2,023	179	433	9,352
Building Floorspace (Square Feet)								
1,001 to 5,000	2,348	6,774	772	415	312	29	Q	1,254
5,001 to 10,000	1,110	8,238	608	283	292	Q	Q	853
10,001 to 25,000	708	11,153	743	370	319	24	Q	1,118
25,001 to 50,000	257	9,311	692	371	234	25	61	1,121
50,001 to 100,000	145	10,112	865	494	250	24	97	1,491
100,001 to 200,000	59	8,271	772	451	230	19	72	1,361
200,001 to 500,000	23	6,851	660	340	237	25	57	1,028
Over 500,000	7	6,628	621	373	149	16	84	1,127
Principal Building Activity								
Education	327	8,651	649	257	227	48	117	777
Food Sales	174	994	201	165	31	Q	Q	498
Food Service	349	1,851	447	216	216	Q	Q	653
Health Care	127	2,918	515	232	217	19	46	701
Inpatient	11	1,865	427	172	195	18	Q	520
Outpatient	116	1,053	88	60	22	Q	Q	181
Lodging	153	4,521	450	196	181	Q	68	591
Mercantile	667	10,398	724	521	186	Q	Q	1,573
Retail (Other Than Mall)	534	4,766	344	221	110	Q	Q	666
Enclosed and Strip Malls	133	5,631	380	301	76	Q	N	907
Office	739	12,044	1,089	767	219	29	74	2,314
Public Assembly	305	4,393	359	191	96	Q	59	577
Public Order and Safety	72	1,168	102	40	33	7	Q	122
Religious Worship	307	3,405	110	42	62	Q	Q	126
Service	478	3,388	421	138	260	18	Q	417
Warehouse and Storage	603	10,477	461	220	230	8	Q	664
Other	102	1,222	176	101	45	Q	Q	306
Vacant	253	1,908	31	10	19	Q	Q	31
Year Constructed								
1919 or Before	419	4,034	275	91	120	26	Q	275
1920 to 1945	499	6,445	461	184	195	22	60	556
1946 to 1959	763	9,127	674	310	256	33	76	934
1960 to 1969	665	10,866	975	468	372	36	100	1,413
1970 to 1979	774	11,840	1,044	621	326	29	69	1,875
1980 to 1989	846	13,931	1,214	755	391	21	47	2,280
1990 to 1999	690	11,094	1,090	669	364	13	Q	2,020
Floors								
One	2,879	26,800	2,003	1,174	750	48	Q	3,545
Two	1,168	16,985	1,330	707	530	39	Q	2,136
Three	420	8,928	733	355	274	39	66	1,071
Four to Nine	178	10,180	1,217	599	377	43	198	1,810
Ten or More	11	4,445	449	262	92	10	86	790
Census Region and Division								
Northeast	686	12,360	1,116	543	299	138	136	1,638
New England	208	3,735	279	132	59	73	Q	399
Middle Atlantic	479	8,625	837	411	240	65	121	1,239
Midwest	1,188	16,761	1,509	662	709	5	132	2,000
East North Central	782	11,205	1,009	429	497	Q	80	1,296
West North Central	406	5,556	500	233	212	2	52	704
South	1,762	23,485	1,961	1,247	618	29	67	3,766
South Atlantic	748	11,001	916	613	249	26	Q	1,851
East South Central	396	5,220	473	271	186	Q	Q	817
West South Central	618	7,264	573	364	183	1	Q	1,098
West	1,021	14,731	1,147	645	396	8	98	1,948
Mountain	315	4,579	356	175	145	1	Q	530
Pacific	705	10,152	791	470	252	Q	Q	1,418

Table C1. Total Energy Consumption by Major Fuel, 1999

	All Buildings		Total Energy Consumption (trillion Btu)					
	Number of Buildings (thousand)	Floorspace (million square feet)	Total of Major Fuels	Site Electricity	Natural Gas	Fuel Oil	District Heat	Primary Electricity (trillion Btu)
Climate Zone: 45-Year Average								
Under 2,000 CDD and --								
More than 7,000 HDD	525	5,890	510	220	228	41	Q	665
5,500-7,000 HDD	986	17,083	1,535	671	642	62	160	2,027
4,000-5,499 HDD	1,085	16,243	1,545	790	520	69	166	2,385
Fewer than 4,000 HDD	1,134	16,333	1,291	827	425	Q	34	2,496
2,000 CDD or More and --								
Fewer than 4,000 HDD	926	11,788	853	589	208	2	Q	1,779
Workers (main shift)								
Fewer than 5	2,376	14,321	677	334	280	20	Q	1,009
5 to 9	807	6,325	465	217	194	23	Q	654
10 to 19	683	8,028	691	350	281	Q	Q	1,055
20 to 49	487	10,814	1,016	507	435	29	45	1,530
50 to 99	174	8,898	730	418	222	33	57	1,260
100 to 249	90	8,356	865	508	252	27	79	1,534
250 or More	39	10,595	1,289	765	359	28	138	2,309
Weekly Operating Hours								
39 or Fewer	978	6,596	164	68	82	11	Q	205
40 to 48	1,156	13,105	746	387	269	35	55	1,169
49 to 60	986	14,200	1,068	581	387	43	57	1,754
61 to 84	664	12,458	1,050	588	358	31	73	1,776
85 to 167	474	9,116	1,057	607	348	28	73	1,833
Open Continuously	398	11,863	1,648	866	577	32	173	2,614
Ownership and Occupancy								
Nongovernment Owned	4,135	54,994	4,565	2,534	1,659	121	250	7,651
Owner Occupied	2,801	37,785	3,340	1,807	1,202	105	226	5,455
Nonowner Occupied	1,099	15,596	1,207	720	447	16	Q	2,173
Unoccupied	236	1,613	17	Q	Q	Q	N	Q
Government Owned	521	12,343	1,169	563	364	58	184	1,701
Federal	63	1,797	218	123	37	3	55	370
State	83	3,391	376	160	114	6	96	484
Local	375	7,156	574	280	212	49	Q	846
Vacancy Status								
Completely Vacant	140	953	Q	Q	Q	N	N	Q
Mostly Vacant	113	956	Q	4	Q	Q	Q	13
Partially Vacant	697	15,520	1,049	648	306	24	71	1,955
Not At All Vacant	3,707	49,910	4,654	2,440	1,698	154	362	7,366
Number of Establishments								
One	3,528	43,343	4,047	2,021	1,542	136	347	6,102
2 to 5	688	10,582	761	429	273	26	33	1,294
6 to 10	114	3,574	304	202	86	Q	Q	611
11 to 20	48	3,260	251	184	50	10	Q	555
More than 20	27	4,811	350	253	60	4	33	764
Currently Unoccupied	251	1,769	21	9	12	Q	N	26
Energy Sources (more than one may apply)								
Electricity	4,395	65,716	5,733	3,098	2,023	179	433	9,352
Natural Gas	2,670	45,525	4,455	2,191	2,023	59	182	6,616
Fuel Oil	434	13,285	1,487	772	428	179	107	2,331
District Heat	117	5,891	905	359	108	Q	433	1,083
District Chilled Water	50	2,750	428	189	53	Q	185	571
Propane	451	6,290	430	262	Q	51	Q	791
Other	153	2,322	203	113	75	9	Q	341

Table C1. Total Energy Consumption by Major Fuel, 1999

	All Buildings		Total Energy Consumption (trillion Btu)					
	Number of Buildings (thousand)	Floorspace (million square feet)	Total of Major Fuels	Site Electricity	Natural Gas	Fuel Oil	District Heat	Primary Electricity (trillion Btu)
Space-Heating Energy Sources (more than one may apply)								
Electricity	1,880	32,291	2,634	1,701	780	43	109	5,135
Natural Gas	2,380	37,902	3,554	1,736	1,764	24	Q	5,241
Fuel Oil	377	5,611	521	204	140	172	Q	617
District Heat	96	5,534	834	339	80	Q	412	1,022
Propane	307	2,728	119	99	Q	9	Q	299
Other	94	945	63	43	Q	Q	Q	130
Primary Space-Heating Energy Source								
Electricity	1,128	17,627	1,346	1,031	282	10	Q	3,114
Natural Gas	2,189	32,729	3,063	1,442	1,602	13	Q	4,353
Fuel Oil	302	3,719	271	101	17	153	Q	305
District Heat	77	5,077	759	308	48	1	402	928
Propane	282	2,107	73	72	Q	Q	N	216
Other	38	343	Q	Q	Q	Q	N	Q
Cooling Energy Sources (more than one may apply)								
Electricity	3,450	55,545	4,938	2,816	1,756	144	222	8,503
Natural Gas	142	1,914	212	107	102	Q	Q	323
District Chilled Water	50	2,750	428	189	53	Q	185	571
Water-Heating Energy Sources (more than one may apply)								
Electricity	1,546	24,171	1,835	1,290	445	47	54	3,896
Natural Gas	1,520	29,196	2,961	1,444	1,451	32	Q	4,358
Fuel Oil	110	2,218	233	86	53	92	Q	259
District Heat	62	4,182	677	255	78	3	341	769
Propane	130	1,371	87	73	Q	Q	Q	220
Cooking Energy Sources (more than one may apply)								
Electricity	437	13,733	1,520	931	462	40	87	2,811
Natural Gas	505	16,785	1,928	982	823	39	84	2,963
Propane	118	1,754	162	123	Q	28	Q	370
Energy End Uses (more than one may apply)								
Buildings with Space Heating	4,016	61,602	5,529	2,965	1,954	179	431	8,950
Buildings with Cooling	3,560	58,474	5,344	2,996	1,834	145	369	9,046
Buildings with Water Heating	3,239	56,115	5,262	2,844	1,864	163	392	8,585
Buildings with Cooking	857	24,681	2,679	1,504	941	86	149	4,540
Buildings with Manufacturing	151	3,126	277	149	114	7	Q	449
Buildings with Electricity Generation	172	11,882	1,494	836	470	48	139	2,525
Percent of Floorspace Heated								
Not Heated	641	5,736	205	133	Q	Q	Q	402
1 to 50	576	7,593	333	191	130	9	Q	576
51 to 99	627	10,745	979	557	344	20	57	1,683
100	2,813	43,264	4,216	2,216	1,480	150	371	6,691
Percent of Floorspace Cooled								
Not Cooled	1,097	8,864	389	101	189	34	Q	306
1 to 50	1,012	16,846	1,122	436	561	76	50	1,315
51 to 99	751	16,966	1,743	1,002	589	40	112	3,026
100	1,796	24,662	2,479	1,559	684	29	207	4,705

Table C1. Total Energy Consumption by Major Fuel, 1999

	All Buildings		Total Energy Consumption (trillion Btu)					
	Number of Buildings (thousand)	Floorspace (million square feet)	Total of Major Fuels	Site Electricity	Natural Gas	Fuel Oil	District Heat	Primary Electricity (trillion Btu)
Percent Lit When Open								
Zero	34	173	Q	Q	Q	Q	N	Q
1 to 50	835	9,187	452	223	185	16	Q	672
51 to 99	1,228	20,665	1,993	1,005	760	69	159	3,034
100	2,096	34,233	3,255	1,853	1,062	94	246	5,594
Building Never Open/ Electricity Not Used	464	3,080	29	14	14	Q	N	41
Percent Lit When Closed								
Zero	2,174	20,771	1,170	587	458	47	78	1,772
1 to 50	1,688	30,950	2,604	1,462	879	96	167	4,413
51 to 100	143	2,160	310	183	108	Q	Q	553
Building Never Closed/ Electricity Not Used	652	13,457	1,649	866	578	32	173	2,614
Heating Equipment (more than one may apply)								
Heat Pumps	492	8,923	862	516	292	9	Q	1,557
Furnaces	1,460	14,449	1,082	475	566	33	Q	1,435
Individual Space Heaters	894	17,349	1,374	734	530	32	79	2,215
District Heat	96	5,534	834	339	80	Q	412	1,022
Boilers	581	19,522	1,911	912	841	142	Q	2,755
Packaged Heating Units	1,347	25,743	2,369	1,469	826	25	49	4,435
Other	185	4,073	387	229	134	9	Q	691
Cooling Equipment (more than one may apply)								
Residential-Type Central Air Conditioners	676	8,329	672	343	295	14	Q	1,037
Heat Pumps	485	9,147	871	521	291	16	Q	1,574
Individual Air Conditioners	799	14,276	1,196	544	486	82	84	1,642
District Chilled Water	50	2,750	428	189	53	Q	185	571
Central Chillers	130	12,909	1,598	902	522	40	135	2,723
Packaged Air Conditioning Units	1,953	36,527	3,390	1,995	1,193	71	131	6,024
Swamp Coolers	136	2,219	215	102	102	Q	Q	308
Other	49	1,312	130	82	40	Q	Q	247
Main Equipment Replaced Since 1995 (more than one may apply)								
Heating	984	13,220	1,085	623	431	17	Q	1,880
Cooling	1,085	17,390	1,535	864	557	49	65	2,609
Lighting Equipment Types (more than one may apply)								
Incandescent	2,193	38,156	3,441	1,852	1,214	97	278	5,591
Standard Fluorescent	3,778	60,344	5,400	2,939	1,874	169	418	8,872
Compact Fluorescent	607	20,666	2,162	1,197	677	62	227	3,613
High Intensity Discharge	430	19,223	1,903	1,023	676	57	148	3,088
Halogen	572	17,926	1,805	998	647	38	121	3,014
Other	58	1,004	117	59	Q	Q	Q	179
Water Heating Equipment								
Centralized System	2,472	35,579	3,368	1,710	1,258	120	279	5,164
Distributed System	566	10,899	872	533	278	20	Q	1,610
Combination of Centralized and Distributed System	200	9,637	1,023	600	328	23	72	1,811

Table C1. Total Energy Consumption by Major Fuel, 1999

	All Buildings		Total Energy Consumption (trillion Btu)					
	Number of Buildings (thousand)	Floorspace (million square feet)	Total of Major Fuels	Site Electricity	Natural Gas	Fuel Oil	District Heat	Primary Electricity (trillion Btu)
Commercial Refrigeration Equipment (more than one may apply)								
Any Equipment	950	25,652	2,874	1,655	980	91	148	4,997
Walk-In Units	658	19,713	2,407	1,386	839	66	115	4,186
Cases or Cabinets	820	22,001	2,481	1,448	821	77	136	4,370
None	3,707	41,686	2,859	1,442	1,043	89	285	4,355
Personal Computers								
None	1,617	9,583	458	193	214	18	Q	584
1 to 4	1,636	13,853	1,078	556	447	32	Q	1,678
5 to 9	542	6,528	584	307	254	11	Q	927
10 to 19	403	7,514	626	329	229	29	Q	992
20 to 49	247	8,087	655	382	209	23	41	1,153
50 to 99	105	5,867	532	266	200	19	46	803
100 to 249	71	6,818	688	411	184	25	69	1,240
250 or More	36	9,088	1,113	654	286	22	151	1,974
Photocopiers								
None	2,825	21,631	1,522	743	644	51	84	2,242
One	1,114	12,928	1,037	577	362	26	Q	1,741
2 to 4	540	15,620	1,304	682	483	48	90	2,059
5 to 9	102	5,384	530	284	184	24	38	857
10 or More	75	11,774	1,341	813	350	30	148	2,453
Other Electronic Equipment (more than one may apply)								
Laser Printers	1,949	46,567	4,356	2,450	1,432	130	345	7,396
FAX Machines	2,807	54,764	5,044	2,817	1,706	154	367	8,505
Medical Diagnostic Equipment	86	2,493	468	211	205	16	Q	637
Energy-Related Space Functions (more than one may apply)								
Commercial Food Preparation	767	23,328	2,548	1,425	899	81	142	4,302
Activities with Large Amounts of Hot Water	698	21,793	2,539	1,234	1,020	74	212	3,724
Building Shell Conservation Features (more than one may apply)								
Multipaned Windows	2,130	38,193	3,583	1,929	1,275	113	266	5,823
Tinted, Reflective, or Shading Glass	1,283	29,915	2,835	1,716	845	57	217	5,180
HVAC Conservation Features (more than one may apply)								
Variable Air-Volume System	550	19,387	2,115	1,245	619	47	203	3,759
Economizer Cycle	567	21,256	2,387	1,369	748	42	228	4,133
HVAC Maintenance	2,786	53,395	5,064	2,781	1,706	165	413	8,395
Energy Management and Control System (EMCS)	460	21,613	2,391	1,343	704	54	290	4,055

Table C1. Total Energy Consumption by Major Fuel, 1999

	All Buildings		Total Energy Consumption (trillion Btu)					
	Number of Buildings (thousand)	Floorspace (million square feet)	Total of Major Fuels	Site Electricity	Natural Gas	Fuel Oil	District Heat	Primary Electricity (trillion Btu)
Lighting Conservation Features (more than one may apply)								
Specular Reflectors	843	19,994	1,917	1,139	585	69	124	3,440
Electronic Ballasts	2,167	42,035	3,901	2,205	1,269	125	302	6,658
Skylights or Atriums	580	18,286	1,619	898	572	47	102	2,710

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: * Site electricity is the amount of electricity delivered to commercial buildings. 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. * 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. * HVAC=Heating, Ventilation, and Air Conditioning. * 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.

Table C2. Total Energy Expenditures by Major Fuel, 1999

	All Buildings		Total Energy Expenditures (million dollars)				
	Number of Buildings (thousand)	Floorspace (million square feet)	Total of Major Fuels	Electricity	Natural Gas	Fuel Oil	District Heat
All Buildings	4,657	67,338	81,552	66,424	10,609	956	3,564
Building Floorspace (Square Feet)							
1,001 to 5,000	2,348	6,774	12,355	10,262	1,802	197	Q
5,001 to 10,000	1,110	8,238	9,228	7,146	1,810	95	Q
10,001 to 25,000	708	11,153	10,873	8,663	1,813	145	Q
25,001 to 50,000	257	9,311	10,090	8,188	1,274	131	496
50,001 to 100,000	145	10,112	12,057	10,023	1,253	114	667
100,001 to 200,000	59	8,271	10,344	8,555	1,104	87	598
200,001 to 500,000	23	6,851	8,015	6,432	958	120	504
Over 500,000	7	6,628	8,592	7,155	594	68	775
Principal Building Activity							
Education	327	8,651	8,018	5,820	1,111	208	879
Food Sales	174	994	3,587	3,359	195	Q	Q
Food Service	349	1,851	6,380	5,082	1,185	Q	Q
Health Care	127	2,918	5,653	4,268	881	87	Q
Inpatient	11	1,865	4,151	2,948	757	79	Q
Outpatient	116	1,053	1,503	1,320	124	Q	Q
Lodging	153	4,521	5,716	4,266	943	26	482
Mercantile	667	10,398	13,085	11,851	1,126	Q	Q
Retail (Other Than Mall)	534	4,766	5,922	5,166	670	Q	Q
Enclosed and Strip Malls	133	5,631	7,164	6,685	456	Q	N
Office	739	12,044	17,775	15,683	1,215	168	709
Public Assembly	305	4,393	5,096	3,983	560	Q	487
Public Order and Safety	72	1,168	1,222	805	176	Q	Q
Religious Worship	307	3,405	1,494	1,041	409	Q	Q
Service	478	3,388	4,639	3,108	1,371	102	Q
Warehouse and Storage	603	10,477	6,029	4,829	1,124	55	Q
Other	102	1,222	2,498	2,063	224	Q	Q
Vacant	253	1,908	361	265	89	Q	Q
Year Constructed							
1919 or Before	419	4,034	3,271	2,170	684	149	268
1920 to 1945	499	6,445	5,797	4,174	968	119	535
1946 to 1959	763	9,127	9,216	6,989	1,390	184	652
1960 to 1969	665	10,866	13,237	10,250	1,986	185	815
1970 to 1979	774	11,840	15,858	13,461	1,726	132	538
1980 to 1989	846	13,931	18,342	15,777	2,033	113	Q
1990 to 1999	690	11,094	15,832	13,604	1,820	73	Q
Floors							
One	2,879	26,800	30,962	26,384	4,075	288	Q
Two	1,168	16,985	19,465	15,870	2,936	214	Q
Three	420	8,928	9,483	7,284	1,460	195	544
Four to Nine	178	10,180	14,974	11,438	1,766	216	1,553
Ten or More	11	4,445	6,670	5,448	372	43	806
Census Region and Division							
Northeast	686	12,360	18,996	15,133	1,895	704	1,264
New England	208	3,735	4,658	3,783	403	362	Q
Middle Atlantic	479	8,625	14,338	11,351	1,491	342	1,154
Midwest	1,188	16,761	17,258	12,933	3,277	27	1,021
East North Central	782	11,205	11,682	8,798	2,252	13	618
West North Central	406	5,556	5,577	4,135	1,024	14	Q
South	1,762	23,485	27,303	23,275	3,294	180	554
South Atlantic	748	11,001	13,771	11,968	1,397	157	Q
East South Central	396	5,220	5,943	4,830	999	Q	Q
West South Central	618	7,264	7,590	6,476	898	5	Q
West	1,021	14,731	17,995	15,083	2,144	45	724
Mountain	315	4,579	4,338	3,365	739	8	Q
Pacific	705	10,152	13,657	11,718	1,405	Q	Q

Table C2. Total Energy Expenditures by Major Fuel, 1999

	All Buildings		Total Energy Expenditures (million dollars)				
	Number of Buildings (thousand)	Floorspace (million square feet)	Total of Major Fuels	Electricity	Natural Gas	Fuel Oil	District Heat
Climate Zone: 45-Year Average							
Under 2,000 CDD and --							
More than 7,000 HDD	525	5,890	6,009	4,505	1,125	206	Q
5,500-7,000 HDD	986	17,083	19,809	15,163	3,108	319	1,219
4,000-5,499 HDD	1,085	16,243	21,900	17,164	2,874	369	1,492
Fewer than 4,000 HDD	1,134	16,333	20,548	17,847	2,341	Q	314
2,000 CDD or More and --							
Fewer than 4,000 HDD	926	11,788	13,286	11,745	1,160	15	Q
Workers (main shift)							
Fewer than 5	2,376	14,321	10,245	8,046	1,747	132	Q
5 to 9	807	6,325	6,930	5,462	1,111	147	Q
10 to 19	683	8,028	10,426	8,439	1,509	Q	Q
20 to 49	487	10,814	13,937	11,068	2,386	153	Q
50 to 99	174	8,898	10,937	9,122	1,177	153	485
100 to 249	90	8,356	11,684	9,683	1,210	120	671
250 or More	39	10,595	17,393	14,604	1,468	136	1,185
Weekly Operating Hours							
39 or Fewer	978	6,596	2,316	1,717	502	68	Q
40 to 48	1,156	13,105	10,960	8,799	1,480	183	Q
49 to 60	986	14,200	15,814	12,980	2,123	245	466
61 to 84	664	12,458	15,896	13,082	2,045	164	605
85 to 167	474	9,116	15,569	13,107	1,810	136	516
Open Continuously	398	11,863	20,997	16,739	2,650	160	1,449
Ownership and Occupancy							
Nongovernment Owned	4,135	54,994	66,801	55,086	8,913	693	2,110
Owner Occupied	2,801	37,785	47,362	38,540	6,383	591	1,848
Nonowner Occupied	1,099	15,596	19,195	16,358	2,474	101	Q
Unoccupied	236	1,613	244	Q	Q	Q	N
Government Owned	521	12,343	14,751	11,338	1,696	263	1,454
Federal	63	1,797	2,707	2,195	159	17	336
State	83	3,391	4,516	3,189	470	29	828
Local	375	7,156	7,529	5,955	1,067	217	Q
Vacancy Status							
Completely Vacant	140	953	Q	Q	Q	N	N
Mostly Vacant	113	956	191	121	Q	Q	Q
Partially Vacant	697	15,520	16,227	13,761	1,600	128	737
Not At All Vacant	3,707	49,910	64,965	52,397	8,920	823	2,824
Number of Establishments							
One	3,528	43,343	54,521	43,175	7,939	727	2,680
2 to 5	688	10,582	11,256	9,297	1,524	137	Q
6 to 10	114	3,574	5,148	4,492	511	18	Q
11 to 20	48	3,260	4,247	3,846	275	47	Q
More than 20	27	4,811	6,103	5,402	297	25	379
Currently Unoccupied	251	1,769	278	211	64	Q	N
Energy Sources (more than one may apply)							
Electricity	4,395	65,716	81,548	66,424	10,607	953	3,564
Natural Gas	2,670	45,525	58,798	46,431	10,609	297	1,461
Fuel Oil	434	13,285	18,854	15,165	1,786	956	948
District Heat	117	5,891	10,915	6,841	488	23	3,564
District Chilled Water	50	2,750	4,807	3,224	226	Q	1,349
Propane	451	6,290	7,054	6,286	433	272	Q
Other	153	2,322	3,001	2,512	381	55	Q

Table C2. Total Energy Expenditures by Major Fuel, 1999

	All Buildings		Total Energy Expenditures (million dollars)				
	Number of Buildings (thousand)	Floorspace (million square feet)	Total of Major Fuels	Electricity	Natural Gas	Fuel Oil	District Heat
Space-Heating Energy Sources (more than one may apply)							
Electricity	1,880	32,291	40,678	35,332	4,167	244	934
Natural Gas	2,380	37,902	46,471	36,918	9,122	130	Q
Fuel Oil	377	5,611	6,565	5,013	610	909	Q
District Heat	96	5,534	10,208	6,432	385	Q	3,371
Propane	307	2,728	2,690	2,583	Q	46	Q
Other	94	945	1,016	891	Q	Q	Q
Primary Space-Heating Energy Source							
Electricity	1,128	17,627	23,523	21,622	1,608	Q	Q
Natural Gas	2,189	32,729	38,998	30,654	8,225	71	Q
Fuel Oil	302	3,719	3,839	2,923	108	802	Q
District Heat	77	5,077	9,287	5,784	220	7	3,277
Propane	282	2,107	1,966	1,960	Q	Q	N
Other	38	343	Q	Q	Q	Q	N
Cooling Energy Sources (more than one may apply)							
Electricity	3,450	55,545	72,249	60,281	9,247	752	1,968
Natural Gas	142	1,914	3,034	2,487	518	Q	Q
District Chilled Water	50	2,750	4,807	3,224	226	Q	1,349
Water-Heating Energy Sources (more than one may apply)							
Electricity	1,546	24,171	30,746	27,581	2,441	262	462
Natural Gas	1,520	29,196	38,398	30,391	7,556	166	Q
Fuel Oil	110	2,218	2,747	2,089	188	454	Q
District Heat	62	4,182	7,911	4,710	319	14	2,868
Propane	130	1,371	2,147	2,075	Q	Q	Q
Cooking Energy Sources (more than one may apply)							
Electricity	437	13,733	21,428	18,252	2,274	183	719
Natural Gas	505	16,785	25,164	20,171	4,019	183	790
Propane	118	1,754	3,241	3,038	Q	140	Q
Energy End Uses (more than one may apply)							
Buildings with Space Heating	4,016	61,602	77,862	63,164	10,189	954	3,556
Buildings with Cooling	3,560	58,474	77,278	63,845	9,647	758	3,028
Buildings with Water Heating	3,239	56,115	74,711	60,875	9,705	849	3,283
Buildings with Cooking	857	24,681	37,233	30,873	4,672	409	1,279
Buildings with Manufacturing	151	3,126	3,811	3,060	634	39	Q
Buildings with Electricity Generation	172	11,882	18,991	15,509	2,080	243	1,159
Percent of Floorspace Heated							
Not Heated	641	5,736	3,690	3,261	Q	Q	Q
1 to 50	576	7,593	5,293	4,533	679	49	Q
51 to 99	627	10,745	13,939	11,384	1,896	125	534
100	2,813	43,264	58,630	47,247	7,614	779	2,990
Percent of Floorspace Cooled							
Not Cooled	1,097	8,864	4,275	2,579	962	198	Q
1 to 50	1,012	16,846	14,072	10,363	2,897	397	Q
51 to 99	751	16,966	24,422	20,141	3,056	195	1,031
100	1,796	24,662	38,784	33,342	3,694	166	1,582

Table C2. Total Energy Expenditures by Major Fuel, 1999

	All Buildings		Total Energy Expenditures (million dollars)				
	Number of Buildings (thousand)	Floorspace (million square feet)	Total of Major Fuels	Electricity	Natural Gas	Fuel Oil	District Heat
Percent Lit When Open							
Zero	34	173	Q	Q	Q	Q	N
1 to 50	835	9,187	6,822	5,396	1,081	93	Q
51 to 99	1,228	20,665	27,188	21,574	4,085	355	1,173
100	2,096	34,233	47,058	39,065	5,354	502	2,138
Building Never Open/ Electricity Not Used	464	3,080	403	319	79	Q	N
Percent Lit When Closed							
Zero	2,174	20,771	17,327	14,034	2,565	264	464
1 to 50	1,688	30,950	38,650	31,794	4,845	501	1,510
51 to 100	143	2,160	4,575	3,857	548	Q	Q
Building Never Closed/ Electricity Not Used	652	13,457	21,001	16,739	2,651	163	1,449
Heating Equipment (more than one may apply)							
Heat Pumps	492	8,923	12,150	10,243	1,481	51	Q
Furnaces	1,460	14,449	14,052	10,722	3,054	212	Q
Individual Space Heaters	894	17,349	18,689	15,110	2,712	170	697
District Heat	96	5,534	10,208	6,432	385	Q	3,371
Boilers	581	19,522	23,671	18,848	3,974	705	Q
Packaged Heating Units	1,347	25,743	35,951	31,069	4,291	132	459
Other	185	4,073	5,151	4,400	559	48	Q
Cooling Equipment (more than one may apply)							
Residential-Type Central Air Conditioners	676	8,329	8,891	7,113	1,538	82	Q
Heat Pumps	485	9,147	12,330	10,416	1,477	89	Q
Individual Air Conditioners	799	14,276	15,537	11,793	2,519	421	803
District Chilled Water	50	2,750	4,807	3,224	226	Q	1,349
Central Chillers	130	12,909	20,759	17,041	2,301	190	1,227
Packaged Air Conditioning Units	1,953	36,527	50,789	43,059	6,277	360	1,094
Swamp Coolers	136	2,219	2,832	2,238	518	Q	Q
Other	49	1,312	1,821	1,580	172	Q	Q
Main Equipment Replaced Since 1995 (more than one may apply)							
Heating	984	13,220	16,100	13,421	2,431	102	Q
Cooling	1,085	17,390	22,162	18,381	2,949	249	583
Lighting Equipment Types (more than one may apply)							
Incandescent	2,193	38,156	48,515	39,345	6,273	493	2,404
Standard Fluorescent	3,778	60,344	76,738	62,616	9,788	891	3,443
Compact Fluorescent	607	20,666	29,689	24,269	3,255	313	1,852
High Intensity Discharge	430	19,223	24,549	19,743	3,203	269	1,334
Halogen	572	17,926	25,096	20,656	3,246	190	1,005
Other	58	1,004	1,506	1,235	Q	Q	Q
Water Heating Equipment							
Centralized System	2,472	35,579	47,665	38,010	6,762	631	2,261
Distributed System	566	10,899	13,260	11,383	1,409	111	Q
Combination of Centralized and Distributed System	200	9,637	13,786	11,481	1,533	108	665

Table C2. Total Energy Expenditures by Major Fuel, 1999

	All Buildings		Total Energy Expenditures (million dollars)				
	Number of Buildings (thousand)	Floorspace (million square feet)	Total of Major Fuels	Electricity	Natural Gas	Fuel Oil	District Heat
Commercial Refrigeration Equipment (more than one may apply)							
Any Equipment	950	25,652	40,917	34,282	4,858	442	1,336
Walk-In Units	658	19,713	33,935	28,489	4,086	313	1,048
Cases or Cabinets	820	22,001	35,710	30,056	4,052	365	1,237
None	3,707	41,686	40,635	32,142	5,751	514	2,228
Personal Computers							
None	1,617	9,583	6,478	4,762	1,291	119	Q
1 to 4	1,636	13,853	16,059	13,009	2,502	198	Q
5 to 9	542	6,528	8,451	6,947	1,327	68	Q
10 to 19	403	7,514	9,636	7,747	1,374	158	Q
20 to 49	247	8,087	9,782	8,162	1,171	109	341
50 to 99	105	5,867	6,928	5,601	903	98	326
100 to 249	71	6,818	9,137	7,675	840	105	516
250 or More	36	9,088	15,083	12,521	1,202	101	1,260
Photocopiers							
None	2,825	21,631	22,207	17,615	3,624	321	647
One	1,114	12,928	15,654	12,840	2,079	144	Q
2 to 4	540	15,620	17,906	14,526	2,514	240	626
5 to 9	102	5,384	6,938	5,626	852	117	343
10 or More	75	11,774	18,847	15,816	1,540	134	1,357
Other Electronic Equipment (more than one may apply)							
Laser Printers	1,949	46,567	61,755	51,039	7,229	662	2,826
FAX Machines	2,807	54,764	72,276	59,661	8,864	798	2,954
Medical Diagnostic Equipment	86	2,493	4,977	3,775	813	69	Q
Energy-Related Space Functions (more than one may apply)							
Commercial Food Preparation	767	23,328	35,213	29,173	4,443	383	1,214
Activities with Large Amounts of Hot Water	698	21,793	32,545	25,383	4,972	353	1,838
Building Shell Conservation Features (more than one may apply)							
Multipaned Windows	2,130	38,193	49,189	39,911	6,557	585	2,136
Tinted, Reflective, or Shading Glass	1,283	29,915	41,475	35,125	4,359	272	1,718
HVAC Conservation Features (more than one may apply)							
Variable Air-Volume System	550	19,387	29,233	24,379	2,946	230	1,677
Economizer Cycle	567	21,256	33,194	27,641	3,563	194	1,795
HVAC Maintenance	2,786	53,395	71,785	58,705	8,812	861	3,406
Energy Management and Control System (EMCS)	460	21,613	31,814	26,143	3,177	246	2,248
Lighting Conservation Features (more than one may apply)							
Specular Reflectors	843	19,994	28,083	23,678	3,000	350	1,054
Electronic Ballasts	2,167	42,035	55,999	46,324	6,436	633	2,606
Skylights or Atriums	580	18,286	21,710	17,867	2,796	223	824

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. * HVAC=Heating, Ventilation, and Air Conditioning. * 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.

Table C3. Consumption and Gross Energy Intensity for Sum of Major Fuels, 1999

	All Buildings			Sum of Major Fuel Consumption			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)
All Buildings	4,657	67,338	14.5	5,733	1,231	85.1	70.0
Building Floorspace (Square Feet)							
1,001 to 5,000	2,348	6,774	2.9	772	329	114.0	69.4
5,001 to 10,000	1,110	8,238	7.4	608	548	73.8	55.4
10,001 to 25,000	708	11,153	15.7	743	1,049	66.6	65.3
25,001 to 50,000	257	9,311	36.2	692	2,693	74.3	74.9
50,001 to 100,000	145	10,112	69.9	865	5,985	85.6	67.7
100,001 to 200,000	59	8,271	139.4	772	13,008	93.3	87.1
200,001 to 500,000	23	6,851	296.3	660	28,531	96.3	75.0
Over 500,000	7	6,628	929.0	621	87,102	93.8	71.4
Principal Building Activity							
Education	327	8,651	26.4	649	1,982	75.0	72.7
Food Sales	174	994	5.7	201	1,156	202.2	205.1
Food Service	349	1,851	5.3	447	1,280	241.2	110.8
Health Care	127	2,918	22.9	515	4,047	176.4	82.8
Inpatient	11	1,865	168.2	427	38,499	228.9	127.4
Outpatient	116	1,053	9.1	88	755	83.3	30.6
Lodging	153	4,521	29.5	450	2,938	99.5	190.9
Mercantile	667	10,398	15.6	724	1,085	69.6	63.6
Retail (Other Than Mall)	534	4,766	8.9	344	644	72.1	73.7
Enclosed and Strip Malls	133	5,631	42.2	380	2,848	67.5	56.6
Office	739	12,044	16.3	1,089	1,475	90.5	37.6
Public Assembly	305	4,393	14.4	359	1,177	81.7	114.1
Public Order and Safety	72	1,168	16.2	102	1,407	86.9	59.6
Religious Worship	307	3,405	11.1	110	357	32.2	66.3
Service	478	3,388	7.1	421	881	124.4	92.5
Warehouse and Storage	603	10,477	17.4	461	764	44.0	74.2
Other	102	1,222	12.0	176	1,729	144.0	121.1
Vacant	253	1,908	7.6	31	121	16.0	Q
Year Constructed							
1919 or Before	419	4,034	9.6	275	656	68.1	70.3
1920 to 1945	499	6,445	12.9	461	923	71.5	77.8
1946 to 1959	763	9,127	12.0	674	884	73.9	68.6
1960 to 1969	665	10,866	16.3	975	1,465	89.7	75.7
1970 to 1979	774	11,840	15.3	1,044	1,349	88.2	65.9
1980 to 1989	846	13,931	16.5	1,214	1,435	87.2	61.2
1990 to 1999	690	11,094	16.1	1,090	1,579	98.3	80.0
Floors							
One	2,879	26,800	9.3	2,003	696	74.7	67.0
Two	1,168	16,985	14.5	1,330	1,139	78.3	71.0
Three	420	8,928	21.3	733	1,746	82.1	76.8
Four to Nine	178	10,180	57.2	1,217	6,845	119.6	80.8
Ten or More	11	4,445	386.9	449	39,120	101.1	52.4
Census Region and Division							
Northeast	686	12,360	18.0	1,116	1,626	90.3	77.5
New England	208	3,735	18.0	279	1,342	74.6	71.7
Middle Atlantic	479	8,625	18.0	837	1,749	97.1	79.6
Midwest	1,188	16,761	14.1	1,509	1,270	90.0	82.5
East North Central	782	11,205	14.3	1,009	1,291	90.1	86.5
West North Central	406	5,556	13.7	500	1,231	89.9	75.6
South	1,762	23,485	13.3	1,961	1,113	83.5	67.2
South Atlantic	748	11,001	14.7	916	1,225	83.3	65.2
East South Central	396	5,220	13.2	473	1,194	90.5	80.0
West South Central	618	7,264	11.8	573	927	78.9	62.1
West	1,021	14,731	14.4	1,147	1,124	77.9	57.4
Mountain	315	4,579	14.5	356	1,130	77.8	68.5
Pacific	705	10,152	14.4	791	1,122	77.9	53.5

Table C3. Consumption and Gross Energy Intensity for Sum of Major Fuels, 1999

	All Buildings			Sum of Major Fuel Consumption			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)
Climate Zone: 45-Year Average							
Under 2,000 CDD and --							
More than 7,000 HDD	525	5,890	11.2	510	971	86.6	87.1
5,500-7,000 HDD	986	17,083	17.3	1,535	1,557	89.8	83.8
4,000-5,499 HDD	1,085	16,243	15.0	1,545	1,423	95.1	69.8
Fewer than 4,000 HDD	1,134	16,333	14.4	1,291	1,139	79.1	61.1
2,000 CDD or More and --							
Fewer than 4,000 HDD	926	11,788	12.7	853	920	72.3	59.2
Workers (main shift)							
Fewer than 5	2,376	14,321	6.0	677	285	47.3	159.7
5 to 9	807	6,325	7.8	465	576	73.5	87.5
10 to 19	683	8,028	11.8	691	1,012	86.1	80.5
20 to 49	487	10,814	22.2	1,016	2,085	93.9	72.1
50 to 99	174	8,898	51.1	730	4,195	82.0	63.9
100 to 249	90	8,356	92.4	865	9,560	103.5	68.6
250 or More	39	10,595	270.0	1,289	32,847	121.7	50.4
Weekly Operating Hours							
39 or Fewer	978	6,596	6.7	164	168	24.9	46.7
40 to 48	1,156	13,105	11.3	746	646	57.0	47.8
49 to 60	986	14,200	14.4	1,068	1,083	75.2	51.6
61 to 84	664	12,458	18.7	1,050	1,581	84.3	65.0
85 to 167	474	9,116	19.2	1,057	2,229	115.9	97.9
Open Continuously	398	11,863	29.8	1,648	4,136	138.9	109.4
Ownership and Occupancy							
Nongovernment Owned	4,135	54,994	13.3	4,565	1,104	83.0	67.3
Owner Occupied	2,801	37,785	13.5	3,340	1,193	88.4	71.7
Nonowner Occupied	1,099	15,596	14.2	1,207	1,098	77.4	56.8
Unoccupied	236	1,613	6.8	17	74	10.8	.
Government Owned	521	12,343	23.7	1,169	2,242	94.7	83.1
Federal	63	1,797	28.5	218	3,457	121.3	75.7
State	83	3,391	40.7	376	4,522	111.0	105.5
Local	375	7,156	19.1	574	1,531	80.3	75.4
Vacancy Status							
Completely Vacant	140	953	6.8	Q	Q	Q	.
Mostly Vacant	113	956	8.5	Q	Q	Q	Q
Partially Vacant	697	15,520	22.3	1,049	1,505	67.6	51.1
Not At All Vacant	3,707	49,910	13.5	4,654	1,255	93.2	76.2
Number of Establishments							
One	3,528	43,343	12.3	4,047	1,147	93.4	83.1
2 to 5	688	10,582	15.4	761	1,105	71.9	61.5
6 to 10	114	3,574	31.4	304	2,669	85.0	46.1
11 to 20	48	3,260	68.0	251	5,240	77.1	42.1
More than 20	27	4,811	175.2	350	12,732	72.7	42.4
Currently Unoccupied	251	1,769	7.0	21	83	11.7	.
Energy Sources (more than one may apply)							
Electricity	4,395	65,716	15.0	5,733	1,304	87.2	70.1
Natural Gas	2,670	45,525	17.1	4,455	1,669	97.9	79.2
Fuel Oil	434	13,285	30.6	1,487	3,426	111.9	75.9
District Heat	117	5,891	50.2	905	7,707	153.6	104.5
District Chilled Water	50	2,750	55.4	428	8,630	155.7	92.4
Propane	451	6,290	14.0	430	953	68.3	67.7
Other	153	2,322	15.2	203	1,330	87.4	59.7

Table C3. Consumption and Gross Energy Intensity for Sum of Major Fuels, 1999

	All Buildings			Sum of Major Fuel Consumption			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)
Space-Heating Energy Sources (more than one may apply)							
Electricity	1,880	32,291	17.2	2,634	1,401	81.6	60.9
Natural Gas	2,380	37,902	15.9	3,554	1,493	93.8	77.3
Fuel Oil	377	5,611	14.9	521	1,383	92.8	79.6
District Heat	96	5,534	57.7	834	8,693	150.7	102.8
Propane	307	2,728	8.9	119	387	43.5	48.9
Other	94	945	10.0	63	667	66.5	49.4
Primary Space-Heating Energy Source							
Electricity	1,128	17,627	15.6	1,346	1,193	76.4	52.9
Natural Gas	2,189	32,729	15.0	3,063	1,399	93.6	78.2
Fuel Oil	302	3,719	12.3	271	898	73.0	63.9
District Heat	77	5,077	66.0	759	9,867	149.4	108.2
Propane	282	2,107	7.5	73	258	34.4	38.1
Other	38	343	9.1	Q	Q	Q	50.5
Cooling Energy Sources (more than one may apply)							
Electricity	3,450	55,545	16.1	4,938	1,431	88.9	67.9
Natural Gas	142	1,914	13.5	212	1,497	111.0	74.6
District Chilled Water	50	2,750	55.4	428	8,630	155.7	92.4
Water-Heating Energy Sources (more than one may apply)							
Electricity	1,546	24,171	15.6	1,835	1,187	75.9	54.8
Natural Gas	1,520	29,196	19.2	2,961	1,948	101.4	82.4
Fuel Oil	110	2,218	20.2	233	2,123	104.9	80.0
District Heat	62	4,182	67.5	677	10,918	161.9	115.3
Propane	130	1,371	10.5	87	670	63.7	59.7
Cooking Energy Sources (more than one may apply)							
Electricity	437	13,733	31.4	1,520	3,476	110.7	82.8
Natural Gas	505	16,785	33.2	1,928	3,817	114.8	90.3
Propane	118	1,754	14.9	162	1,381	92.6	74.3
Energy End Uses (more than one may apply)							
Buildings with Space Heating	4,016	61,602	15.3	5,529	1,377	89.7	70.8
Buildings with Cooling	3,560	58,474	16.4	5,344	1,501	91.4	69.1
Buildings with Water Heating	3,239	56,115	17.3	5,262	1,625	93.8	71.7
Buildings with Cooking	857	24,681	28.8	2,679	3,124	108.5	84.8
Buildings with Manufacturing	151	3,126	20.7	277	1,834	88.7	63.7
Buildings with Electricity Generation	172	11,882	69.3	1,494	8,706	125.7	79.0
Percent of Floorspace Heated							
Not Heated	641	5,736	8.9	205	319	35.7	54.3
1 to 50	576	7,593	13.2	333	578	43.8	63.5
51 to 99	627	10,745	17.1	979	1,563	91.1	75.0
100	2,813	43,264	15.4	4,216	1,499	97.5	70.5
Percent of Floorspace Cooled							
Not Cooled	1,097	8,864	8.1	389	355	43.9	86.8
1 to 50	1,012	16,846	16.6	1,122	1,108	66.6	79.3
51 to 99	751	16,966	22.6	1,743	2,320	102.7	73.1
100	1,796	24,662	13.7	2,479	1,381	100.5	62.9

Table C3. Consumption and Gross Energy Intensity for Sum of Major Fuels, 1999

	All Buildings			Sum of Major Fuel Consumption			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)
Percent Lit When Open							
Zero	34	173	5.1	Q	Q	Q	Q
1 to 50	835	9,187	11.0	452	541	49.2	91.9
51 to 99	1,228	20,665	16.8	1,993	1,622	96.4	69.5
100	2,096	34,233	16.3	3,255	1,553	95.1	67.9
Building Never Open/ Electricity Not Used	464	3,080	6.6	29	62	9.3	Q
Percent Lit When Closed							
Zero	2,174	20,771	9.6	1,170	538	56.3	54.0
1 to 50	1,688	30,950	18.3	2,604	1,543	84.1	62.1
51 to 100	143	2,160	15.1	310	2,163	143.7	100.2
Building Never Closed/ Electricity Not Used	652	13,457	20.7	1,649	2,530	122.5	108.9
Heating Equipment (more than one may apply)							
Heat Pumps	492	8,923	18.1	862	1,752	96.6	68.3
Furnaces	1,460	14,449	9.9	1,082	741	74.9	68.3
Individual Space Heaters	894	17,349	19.4	1,374	1,538	79.2	71.8
District Heat	96	5,534	57.7	834	8,693	150.7	102.8
Boilers	581	19,522	33.6	1,911	3,289	97.9	78.4
Packaged Heating Units	1,347	25,743	19.1	2,369	1,759	92.0	73.5
Other	185	4,073	22.1	387	2,094	94.9	55.2
Cooling Equipment (more than one may apply)							
Residential-Type Central Air Conditioners	676	8,329	12.3	672	993	80.6	66.3
Heat Pumps	485	9,147	18.8	871	1,794	95.2	64.7
Individual Air Conditioners	799	14,276	17.9	1,196	1,497	83.8	71.8
District Chilled Water	50	2,750	55.4	428	8,630	155.7	92.4
Central Chillers	130	12,909	99.7	1,598	12,341	123.8	74.0
Packaged Air Conditioning Units	1,953	36,527	18.7	3,390	1,736	92.8	70.2
Swamp Coolers	136	2,219	16.3	215	1,582	96.9	88.7
Other	49	1,312	26.7	130	2,640	99.0	70.6
Main Equipment Replaced Since 1995 (more than one may apply)							
Heating	984	13,220	13.4	1,085	1,102	82.0	64.1
Cooling	1,085	17,390	16.0	1,535	1,415	88.3	66.3
Lighting Equipment Types (more than one may apply)							
Incandescent	2,193	38,156	17.4	3,441	1,569	90.2	69.3
Standard Fluorescent	3,778	60,344	16.0	5,400	1,430	89.5	69.4
Compact Fluorescent	607	20,666	34.1	2,162	3,564	104.6	71.9
High Intensity Discharge	430	19,223	44.8	1,903	4,430	99.0	87.9
Halogen	572	17,926	31.3	1,805	3,153	100.7	70.3
Other	58	1,004	17.5	117	2,033	116.5	83.9
Water Heating Equipment							
Centralized System	2,472	35,579	14.4	3,368	1,362	94.6	74.6
Distributed System	566	10,899	19.3	872	1,540	80.0	60.8
Combination of Centralized and Distributed System	200	9,637	48.1	1,023	5,108	106.1	73.6

Table C3. Consumption and Gross Energy Intensity for Sum of Major Fuels, 1999

	All Buildings			Sum of Major Fuel Consumption			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)
Commercial Refrigeration Equipment (more than one may apply)							
Any Equipment	950	25,652	27.0	2,874	3,025	112.0	85.8
Walk-In Units	658	19,713	29.9	2,407	3,656	122.1	92.3
Cases or Cabinets	820	22,001	26.8	2,481	3,026	112.8	84.4
None	3,707	41,686	11.2	2,859	771	68.6	59.1
Personal Computers							
None	1,617	9,583	5.9	458	283	47.8	95.7
1 to 4	1,636	13,853	8.5	1,078	659	77.8	84.8
5 to 9	542	6,528	12.0	584	1,078	89.5	78.1
10 to 19	403	7,514	18.7	626	1,554	83.3	68.0
20 to 49	247	8,087	32.7	655	2,649	81.0	67.7
50 to 99	105	5,867	55.9	532	5,064	90.6	73.2
100 to 249	71	6,818	96.0	688	9,687	100.9	71.9
250 or More	36	9,088	252.4	1,113	30,907	122.5	52.6
Photocopiers							
None	2,825	21,631	7.7	1,522	539	70.3	80.5
One	1,114	12,928	11.6	1,037	932	80.2	80.0
2 to 4	540	15,620	28.9	1,304	2,413	83.5	77.7
5 to 9	102	5,384	52.6	530	5,180	98.5	64.5
10 or More	75	11,774	156.7	1,341	17,835	113.9	53.6
Other Electronic Equipment (more than one may apply)							
Laser Printers	1,949	46,567	23.9	4,356	2,235	93.5	65.0
FAX Machines	2,807	54,764	19.5	5,044	1,797	92.1	67.5
Medical Diagnostic Equipment	86	2,493	29.1	468	5,460	187.7	83.2
Energy-Related Space Functions (more than one may apply)							
Commercial Food Preparation	767	23,328	30.4	2,548	3,320	109.2	83.9
Activities with Large Amounts of Hot Water	698	21,793	31.2	2,539	3,638	116.5	98.2
Building Shell Conservation Features (more than one may apply)							
Multipaned Windows	2,130	38,193	17.9	3,583	1,683	93.8	71.8
Tinted, Reflective, or Shading Glass	1,283	29,915	23.3	2,835	2,209	94.8	65.7
HVAC Conservation Features (more than one may apply)							
Variable Air-Volume System	550	19,387	35.3	2,115	3,849	109.1	69.3
Economizer Cycle	567	21,256	37.5	2,387	4,210	112.3	72.5
HVAC Maintenance	2,786	53,395	19.2	5,064	1,818	94.8	71.0
Energy Management and Control System (EMCS)	460	21,613	47.0	2,391	5,196	110.7	75.3
Lighting Conservation Features (more than one may apply)							
Specular Reflectors	843	19,994	23.7	1,917	2,275	95.9	66.6
Electronic Ballasts	2,167	42,035	19.4	3,901	1,800	92.8	69.8
Skylights or Atriums	580	18,286	31.5	1,619	2,793	88.5	76.5

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
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. * HVAC=Heating, Ventilation, and Air Conditioning. * 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.

Table C4. Expenditures for Sum of Major Fuels, 1999

	All Buildings			Sum of Major Fuel Expenditures			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (million dollars)	per Building (thousand dollars)	per Square Foot (dollars)	per Million Btu (dollars)
All Buildings	4,657	67,338	14.5	81,552	17.5	1.21	14.22
Building Floorspace (Square Feet)							
1,001 to 5,000	2,348	6,774	2.9	12,355	5.3	1.82	15.99
5,001 to 10,000	1,110	8,238	7.4	9,228	8.3	1.12	15.17
10,001 to 25,000	708	11,153	15.7	10,873	15.4	0.97	14.64
25,001 to 50,000	257	9,311	36.2	10,090	39.3	1.08	14.58
50,001 to 100,000	145	10,112	69.9	12,057	83.4	1.19	13.93
100,001 to 200,000	59	8,271	139.4	10,344	174.3	1.25	13.40
200,001 to 500,000	23	6,851	296.3	8,015	346.6	1.17	12.15
Over 500,000	7	6,628	929.0	8,592	1204.3	1.30	13.83
Principal Building Activity							
Education	327	8,651	26.4	8,018	24.5	0.93	12.36
Food Sales	174	994	5.7	3,587	20.6	3.61	17.84
Food Service	349	1,851	5.3	6,380	18.3	3.45	14.29
Health Care	127	2,918	22.9	5,653	44.5	1.94	10.99
Inpatient	11	1,865	168.2	4,151	374.3	2.23	9.72
Outpatient	116	1,053	9.1	1,503	12.9	1.43	17.14
Lodging	153	4,521	29.5	5,716	37.3	1.26	12.71
Mercantile	667	10,398	15.6	13,085	19.6	1.26	18.08
Retail (Other Than Mall)	534	4,766	8.9	5,922	11.1	1.24	17.22
Enclosed and Strip Malls	133	5,631	42.2	7,164	53.7	1.27	18.85
Office	739	12,044	16.3	17,775	24.1	1.48	16.32
Public Assembly	305	4,393	14.4	5,096	16.7	1.16	14.19
Public Order and Safety	72	1,168	16.2	1,222	16.9	1.05	12.03
Religious Worship	307	3,405	11.1	1,494	4.9	0.44	13.61
Service	478	3,388	7.1	4,639	9.7	1.37	11.01
Warehouse and Storage	603	10,477	17.4	6,029	10.0	0.58	13.08
Other	102	1,222	12.0	2,498	24.5	2.05	14.20
Vacant	253	1,908	7.6	361	1.4	0.19	11.79
Year Constructed							
1919 or Before	419	4,034	9.6	3,271	7.8	0.81	11.90
1920 to 1945	499	6,445	12.9	5,797	11.6	0.90	12.58
1946 to 1959	763	9,127	12.0	9,216	12.1	1.01	13.67
1960 to 1969	665	10,866	16.3	13,237	19.9	1.22	13.58
1970 to 1979	774	11,840	15.3	15,858	20.5	1.34	15.18
1980 to 1989	846	13,931	16.5	18,342	21.7	1.32	15.11
1990 to 1999	690	11,094	16.1	15,832	22.9	1.43	14.52
Floors							
One	2,879	26,800	9.3	30,962	10.8	1.16	15.46
Two	1,168	16,985	14.5	19,465	16.7	1.15	14.63
Three	420	8,928	21.3	9,483	22.6	1.06	12.93
Four to Nine	178	10,180	57.2	14,974	84.2	1.47	12.30
Ten or More	11	4,445	386.9	6,670	580.5	1.50	14.84
Census Region and Division							
Northeast	686	12,360	18.0	18,996	27.7	1.54	17.02
New England	208	3,735	18.0	4,658	22.4	1.25	16.71
Middle Atlantic	479	8,625	18.0	14,338	30.0	1.66	17.13
Midwest	1,188	16,761	14.1	17,258	14.5	1.03	11.44
East North Central	782	11,205	14.3	11,682	14.9	1.04	11.58
West North Central	406	5,556	13.7	5,577	13.7	1.00	11.16
South	1,762	23,485	13.3	27,303	15.5	1.16	13.92
South Atlantic	748	11,001	14.7	13,771	18.4	1.25	15.03
East South Central	396	5,220	13.2	5,943	15.0	1.14	12.58
West South Central	618	7,264	11.8	7,590	12.3	1.04	13.25
West	1,021	14,731	14.4	17,995	17.6	1.22	15.69
Mountain	315	4,579	14.5	4,338	13.8	0.95	12.17
Pacific	705	10,152	14.4	13,657	19.4	1.35	17.27

Table C4. Expenditures for Sum of Major Fuels, 1999

	All Buildings			Sum of Major Fuel Expenditures			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (million dollars)	per Building (thousand dollars)	per Square Foot (dollars)	per Million Btu (dollars)
Climate Zone: 45-Year Average							
Under 2,000 CDD and --							
More than 7,000 HDD	525	5,890	11.2	6,009	11.4	1.02	11.78
5,500-7,000 HDD	986	17,083	17.3	19,809	20.1	1.16	12.91
4,000-5,499 HDD	1,085	16,243	15.0	21,900	20.2	1.35	14.18
Fewer than 4,000 HDD	1,134	16,333	14.4	20,548	18.1	1.26	15.91
2,000 CDD or More and --							
Fewer than 4,000 HDD	926	11,788	12.7	13,286	14.3	1.13	15.58
Workers (main shift)							
Fewer than 5	2,376	14,321	6.0	10,245	4.3	0.72	15.12
5 to 9	807	6,325	7.8	6,930	8.6	1.10	14.91
10 to 19	683	8,028	11.8	10,426	15.3	1.30	15.08
20 to 49	487	10,814	22.2	13,937	28.6	1.29	13.72
50 to 99	174	8,898	51.1	10,937	62.9	1.23	14.99
100 to 249	90	8,356	92.4	11,684	129.1	1.40	13.51
250 or More	39	10,595	270.0	17,393	443.2	1.64	13.49
Weekly Operating Hours							
39 or Fewer	978	6,596	6.7	2,316	2.4	0.35	14.12
40 to 48	1,156	13,105	11.3	10,960	9.5	0.84	14.68
49 to 60	986	14,200	14.4	15,814	16.0	1.11	14.81
61 to 84	664	12,458	18.7	15,896	23.9	1.28	15.14
85 to 167	474	9,116	19.2	15,569	32.8	1.71	14.73
Open Continuously	398	11,863	29.8	20,997	52.7	1.77	12.74
Ownership and Occupancy							
Nongovernment Owned	4,135	54,994	13.3	66,801	16.2	1.21	14.63
Owner Occupied	2,801	37,785	13.5	47,362	16.9	1.25	14.18
Nonowner Occupied	1,099	15,596	14.2	19,195	17.5	1.23	15.90
Unoccupied	236	1,613	6.8	244	1.0	0.15	14.01
Government Owned	521	12,343	23.7	14,751	28.3	1.20	12.62
Federal	63	1,797	28.5	2,707	42.9	1.51	12.42
State	83	3,391	40.7	4,516	54.3	1.33	12.00
Local	375	7,156	19.1	7,529	20.1	1.05	13.11
Vacancy Status							
Completely Vacant	140	953	6.8	170	1.2	0.18	Q
Mostly Vacant	113	956	8.5	191	1.7	0.20	Q
Partially Vacant	697	15,520	22.3	16,227	23.3	1.05	15.47
Not At All Vacant	3,707	49,910	13.5	64,965	17.5	1.30	13.96
Number of Establishments							
One	3,528	43,343	12.3	54,521	15.5	1.26	13.47
2 to 5	688	10,582	15.4	11,256	16.3	1.06	14.79
6 to 10	114	3,574	31.4	5,148	45.3	1.44	16.96
11 to 20	48	3,260	68.0	4,247	88.6	1.30	16.90
More than 20	27	4,811	175.2	6,103	222.2	1.27	17.45
Currently Unoccupied	251	1,769	7.0	278	1.1	0.16	13.39
Energy Sources (more than one may apply)							
Electricity	4,395	65,716	15.0	81,548	18.6	1.24	14.23
Natural Gas	2,670	45,525	17.1	58,798	22.0	1.29	13.20
Fuel Oil	434	13,285	30.6	18,854	43.5	1.42	12.68
District Heat	117	5,891	50.2	10,915	93.0	1.85	12.07
District Chilled Water	50	2,750	55.4	4,807	96.8	1.75	11.22
Propane	451	6,290	14.0	7,054	15.6	1.12	16.41
Other	153	2,322	15.2	3,001	19.7	1.29	14.79

Table C4. Expenditures for Sum of Major Fuels, 1999

	All Buildings			Sum of Major Fuel Expenditures			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (million dollars)	per Building (thousand dollars)	per Square Foot (dollars)	per Million Btu (dollars)
Space-Heating Energy Sources (more than one may apply)							
Electricity	1,880	32,291	17.2	40,678	21.6	1.26	15.44
Natural Gas	2,380	37,902	15.9	46,471	19.5	1.23	13.08
Fuel Oil	377	5,611	14.9	6,565	17.4	1.17	12.60
District Heat	96	5,534	57.7	10,208	106.4	1.84	12.24
Propane	307	2,728	8.9	2,690	8.8	0.99	22.67
Other	94	945	10.0	1,016	10.8	1.08	16.17
Primary Space-Heating Energy Source							
Electricity	1,128	17,627	15.6	23,523	20.8	1.33	17.48
Natural Gas	2,189	32,729	15.0	38,998	17.8	1.19	12.73
Fuel Oil	302	3,719	12.3	3,839	12.7	1.03	14.14
District Heat	77	5,077	66.0	9,287	120.8	1.83	12.24
Propane	282	2,107	7.5	1,966	7.0	0.93	27.09
Other	38	343	9.1	249	6.6	0.73	Q
Cooling Energy Sources (more than one may apply)							
Electricity	3,450	55,545	16.1	72,249	20.9	1.30	14.63
Natural Gas	142	1,914	13.5	3,034	21.4	1.59	14.29
District Chilled Water	50	2,750	55.4	4,807	96.8	1.75	11.22
Water-Heating Energy Sources (more than one may apply)							
Electricity	1,546	24,171	15.6	30,746	19.9	1.27	16.75
Natural Gas	1,520	29,196	19.2	38,398	25.3	1.32	12.97
Fuel Oil	110	2,218	20.2	2,747	25.1	1.24	11.82
District Heat	62	4,182	67.5	7,911	127.6	1.89	11.69
Propane	130	1,371	10.5	2,147	16.5	1.57	24.56
Cooking Energy Sources (more than one may apply)							
Electricity	437	13,733	31.4	21,428	49.0	1.56	14.10
Natural Gas	505	16,785	33.2	25,164	49.8	1.50	13.05
Propane	118	1,754	14.9	3,241	27.6	1.85	19.95
Energy End Uses (more than one may apply)							
Buildings with Space Heating	4,016	61,602	15.3	77,862	19.4	1.26	14.08
Buildings with Cooling	3,560	58,474	16.4	77,278	21.7	1.32	14.46
Buildings with Water Heating	3,239	56,115	17.3	74,711	23.1	1.33	14.20
Buildings with Cooking	857	24,681	28.8	37,233	43.4	1.51	13.90
Buildings with Manufacturing	151	3,126	20.7	3,811	25.2	1.22	13.74
Buildings with Electricity Generation	172	11,882	69.3	18,991	110.7	1.60	12.72
Percent of Floorspace Heated							
Not Heated	641	5,736	8.9	3,690	5.8	0.64	18.02
1 to 50	576	7,593	13.2	5,293	9.2	0.70	15.90
51 to 99	627	10,745	17.1	13,939	22.2	1.30	14.23
100	2,813	43,264	15.4	58,630	20.8	1.36	13.91
Percent of Floorspace Cooled							
Not Cooled	1,097	8,864	8.1	4,275	3.9	0.48	10.98
1 to 50	1,012	16,846	16.6	14,072	13.9	0.84	12.55
51 to 99	751	16,966	22.6	24,422	32.5	1.44	14.01
100	1,796	24,662	13.7	38,784	21.6	1.57	15.64

Table C4. Expenditures for Sum of Major Fuels, 1999

	All Buildings			Sum of Major Fuel Expenditures			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (million dollars)	per Building (thousand dollars)	per Square Foot (dollars)	per Million Btu (dollars)
Percent Lit When Open							
Zero	34	173	5.1	Q	Q	Q	Q
1 to 50	835	9,187	11.0	6,822	8.2	0.74	15.10
51 to 99	1,228	20,665	16.8	27,188	22.1	1.32	13.64
100	2,096	34,233	16.3	47,058	22.5	1.37	14.46
Building Never Open/ Electricity Not Used	464	3,080	6.6	403	0.9	0.13	14.04
Percent Lit When Closed							
Zero	2,174	20,771	9.6	17,327	8.0	0.83	14.81
1 to 50	1,688	30,950	18.3	38,650	22.9	1.25	14.84
51 to 100	143	2,160	15.1	4,575	31.9	2.12	14.74
Building Never Closed/ Electricity Not Used	652	13,457	20.7	21,001	32.2	1.56	12.74
Heating Equipment (more than one may apply)							
Heat Pumps	492	8,923	18.1	12,150	24.7	1.36	14.10
Furnaces	1,460	14,449	9.9	14,052	9.6	0.97	12.99
Individual Space Heaters	894	17,349	19.4	18,689	20.9	1.08	13.60
District Heat	96	5,534	57.7	10,208	106.4	1.84	12.24
Boilers	581	19,522	33.6	23,671	40.7	1.21	12.39
Packaged Heating Units	1,347	25,743	19.1	35,951	26.7	1.40	15.18
Other	185	4,073	22.1	5,151	27.9	1.26	13.32
Cooling Equipment (more than one may apply)							
Residential-Type Central Air Conditioners	676	8,329	12.3	8,891	13.1	1.07	13.24
Heat Pumps	485	9,147	18.8	12,330	25.4	1.35	14.16
Individual Air Conditioners	799	14,276	17.9	15,537	19.5	1.09	12.99
District Chilled Water	50	2,750	55.4	4,807	96.8	1.75	11.22
Central Chillers	130	12,909	99.7	20,759	160.3	1.61	12.99
Packaged Air Conditioning Units	1,953	36,527	18.7	50,789	26.0	1.39	14.98
Swamp Coolers	136	2,219	16.3	2,832	20.8	1.28	13.17
Other	49	1,312	26.7	1,821	37.0	1.39	14.03
Main Equipment Replaced Since 1995 (more than one may apply)							
Heating	984	13,220	13.4	16,100	16.4	1.22	14.84
Cooling	1,085	17,390	16.0	22,162	20.4	1.27	14.43
Lighting Equipment Types (more than one may apply)							
Incandescent	2,193	38,156	17.4	48,515	22.1	1.27	14.10
Standard Fluorescent	3,778	60,344	16.0	76,738	20.3	1.27	14.21
Compact Fluorescent	607	20,666	34.1	29,689	48.9	1.44	13.73
High Intensity Discharge	430	19,223	44.8	24,549	57.2	1.28	12.90
Halogen	572	17,926	31.3	25,096	43.9	1.40	13.91
Other	58	1,004	17.5	1,506	26.2	1.50	12.88
Water Heating Equipment							
Centralized System	2,472	35,579	14.4	47,665	19.3	1.34	14.15
Distributed System	566	10,899	19.3	13,260	23.4	1.22	15.21
Combination of Centralized and Distributed System	200	9,637	48.1	13,786	68.9	1.43	13.48

Table C4. Expenditures for Sum of Major Fuels, 1999

	All Buildings			Sum of Major Fuel Expenditures			
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (million dollars)	per Building (thousand dollars)	per Square Foot (dollars)	per Million Btu (dollars)
Commercial Refrigeration Equipment (more than one may apply)							
Any Equipment	950	25,652	27.0	40,917	43.1	1.60	14.24
Walk-In Units	658	19,713	29.9	33,935	51.5	1.72	14.10
Cases or Cabinets	820	22,001	26.8	35,710	43.6	1.62	14.39
None	3,707	41,686	11.2	40,635	11.0	0.97	14.21
Personal Computers							
None	1,617	9,583	5.9	6,478	4.0	0.68	14.14
1 to 4	1,636	13,853	8.5	16,059	9.8	1.16	14.90
5 to 9	542	6,528	12.0	8,451	15.6	1.29	14.46
10 to 19	403	7,514	18.7	9,636	23.9	1.28	15.40
20 to 49	247	8,087	32.7	9,782	39.6	1.21	14.94
50 to 99	105	5,867	55.9	6,928	66.0	1.18	13.03
100 to 249	71	6,818	96.0	9,137	128.6	1.34	13.28
250 or More	36	9,088	252.4	15,083	418.8	1.66	13.55
Photocopiers							
None	2,825	21,631	7.7	22,207	7.9	1.03	14.60
One	1,114	12,928	11.6	15,654	14.1	1.21	15.09
2 to 4	540	15,620	28.9	17,906	33.1	1.15	13.74
5 to 9	102	5,384	52.6	6,938	67.8	1.29	13.08
10 or More	75	11,774	156.7	18,847	250.8	1.60	14.06
Other Electronic Equipment (more than one may apply)							
Laser Printers	1,949	46,567	23.9	61,755	31.7	1.33	14.18
FAX Machines	2,807	54,764	19.5	72,276	25.8	1.32	14.33
Medical Diagnostic Equipment	86	2,493	29.1	4,977	58.1	2.00	10.64
Energy-Related Space Functions (more than one may apply)							
Commercial Food Preparation	767	23,328	30.4	35,213	45.9	1.51	13.82
Activities with Large Amounts of Hot Water	698	21,793	31.2	32,545	46.6	1.49	12.82
Building Shell Conservation Features (more than one may apply)							
Multipaned Windows	2,130	38,193	17.9	49,189	23.1	1.29	13.73
Tinted, Reflective, or Shading Glass	1,283	29,915	23.3	41,475	32.3	1.39	14.63
HVAC Conservation Features (more than one may apply)							
Variable Air-Volume System	550	19,387	35.3	29,233	53.2	1.51	13.82
Economizer Cycle	567	21,256	37.5	33,194	58.5	1.56	13.91
HVAC Maintenance	2,786	53,395	19.2	71,785	25.8	1.34	14.17
Energy Management and Control System (EMCS)	460	21,613	47.0	31,814	69.1	1.47	13.30
Lighting Conservation Features (more than one may apply)							
Specular Reflectors	843	19,994	23.7	28,083	33.3	1.40	14.65
Electronic Ballasts	2,167	42,035	19.4	55,999	25.8	1.33	14.36
Skylights or Atriums	580	18,286	31.5	21,710	37.5	1.19	13.41

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
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. * HVAC=Heating, Ventilation, and Air Conditioning. * 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.

Table C5. Consumption and Gross Energy Intensity by Census Region for Sum of Major Fuels, 1999

	Sum of Major Fuel Consumption (trillion Btu)				Total Floorspace of Buildings (million square feet)				Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings	1,116	1,509	1,961	1,147	12,360	16,761	23,485	14,731	90.3	90.0	83.5	77.9
Building Floorspace (Square Feet)												
1,001 to 5,000	123	197	296	156	901	1,835	2,536	1,503	137.0	107.2	116.9	103.8
5,001 to 10,000	96	142	227	143	1,302	2,045	3,058	1,834	74.0	69.3	74.1	78.2
10,001 to 25,000	151	177	304	111	1,954	2,881	4,194	2,124	77.2	61.3	72.6	52.3
25,001 to 50,000	117	139	255	181	1,407	1,773	3,384	2,746	83.2	78.2	75.3	66.0
50,001 to 100,000	150	216	270	229	1,771	2,436	3,450	2,455	84.7	88.9	78.3	93.1
100,001 to 200,000	124	255	263	131	1,461	2,279	2,864	1,666	84.6	111.7	91.9	78.3
200,001 to 500,000	127	217	207	108	1,362	1,993	2,273	1,222	93.1	109.0	91.1	88.8
Over 500,000	228	167	139	88	2,202	1,519	1,726	1,180	103.4	109.9	80.4	74.5
Principal Building Activity												
Education	154	178	159	157	1,714	2,250	2,348	2,338	90.0	79.1	67.8	67.3
Food Sales	Q	Q	80	Q	Q	Q	392	208	Q	Q	204.9	Q
Food Service	Q	113	Q	Q	Q	558	676	396	Q	202.7	Q	Q
Health Care	97	125	189	104	448	750	1,085	635	215.8	167.0	174.2	163.4
Inpatient	92	103	Q	Q	377	512	630	346	244.6	202.1	Q	Q
Outpatient	Q	Q	37	Q	Q	239	454	289	Q	Q	80.7	Q
Lodging	66	96	163	125	484	940	1,595	1,501	135.8	102.7	101.9	83.1
Mercantile	141	177	267	138	1,885	2,591	4,080	1,842	75.0	68.5	65.4	75.1
Retail (Other Than Mall)	82	106	111	44	974	1,600	1,566	627	84.2	66.4	71.1	70.7
Enclosed and Strip Malls	Q	71	155	94	912	991	2,513	1,215	Q	71.8	61.8	77.3
Office	217	270	378	225	2,389	2,820	4,162	2,672	90.7	95.7	90.7	84.3
Public Assembly	92	91	103	73	882	1,142	1,511	859	104.4	79.4	68.2	85.5
Public Order and Safety	Q	Q	Q	Q	530	216	286	Q	Q	Q	Q	Q
Religious Worship	18	31	33	27	440	923	1,146	896	41.2	34.0	28.9	30.2
Service	Q	99	218	33	740	818	1,387	443	Q	121.2	157.0	75.0
Warehouse and Storage	77	201	130	53	1,743	2,764	3,957	2,012	44.4	72.7	32.9	26.2
Other	Q	Q	32	Q	Q	283	305	338	Q	Q	105.3	Q
Vacant	Q	Q	Q	Q	367	533	554	455	Q	Q	Q	Q
Year Constructed												
1919 or Before	97	121	22	34	1,392	1,576	549	518	70.0	77.0	39.9	66.1
1920 to 1945	117	190	99	54	1,619	2,423	1,704	699	72.4	78.4	58.2	77.7
1946 to 1959	217	166	160	131	2,030	2,152	2,910	2,035	106.8	77.4	55.0	64.3
1960 to 1969	197	243	311	224	2,050	2,602	3,318	2,896	96.1	93.4	93.8	77.2
1970 to 1979	167	215	392	271	1,823	2,347	4,278	3,391	91.4	91.6	91.6	79.9
1980 to 1989	172	288	556	198	2,070	2,828	6,263	2,771	83.3	101.8	88.8	71.4
1990 to 1999	148	285	421	235	1,376	2,834	4,464	2,420	107.8	100.6	94.4	97.3
Floors												
One	239	482	888	394	3,131	5,800	11,826	6,044	76.5	83.1	75.1	65.2
Two	254	310	458	308	2,944	4,405	5,687	3,948	86.2	70.5	80.5	78.1
Three	191	244	160	139	2,261	2,725	2,106	1,836	84.4	89.6	75.8	75.5
Four to Nine	269	383	330	236	2,598	3,080	2,540	1,962	103.5	124.4	129.9	120.1
Ten or More	163	89	127	71	1,426	752	1,327	940	114.1	118.8	95.5	75.2
Climate Zone: 45-Year Average												
Under 2,000 CDD and --												
More than 7,000 HDD	80	379	N	51	1,184	4,185	N	522	67.5	90.5	N	98.1
5,500-7,000 HDD	494	843	N	198	5,806	8,932	N	2,345	85.1	94.3	N	84.3
4,000-5,499 HDD	542	287	518	198	5,370	3,645	4,759	2,470	100.9	78.8	108.8	80.2
Fewer than 4,000 HDD	N	N	760	532	N	N	8,859	7,474	N	N	85.7	71.2
2,000 CDD or More and --												
Fewer than 4,000 HDD	N	N	684	168	N	N	9,867	1,920	N	N	69.4	87.7

Table C5. Consumption and Gross Energy Intensity by Census Region for Sum of Major Fuels, 1999

	Sum of Major Fuel Consumption (trillion Btu)				Total Floorspace of Buildings (million square feet)				Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Workers (main shift)												
Fewer than 5	90	192	260	135	1,906	4,033	5,579	2,802	47.0	47.7	46.6	48.3
5 to 9	93	141	126	105	1,372	1,689	1,730	1,533	67.7	83.6	72.9	68.2
10 to 19	141	171	256	123	1,472	1,930	2,935	1,690	96.0	88.7	87.2	72.6
20 to 49	168	207	444	197	1,574	2,575	4,174	2,492	106.5	80.4	106.3	79.2
50 to 99	164	173	225	168	1,814	1,876	2,876	2,332	90.3	92.4	78.1	72.1
100 to 249	157	263	288	157	1,702	2,228	2,856	1,570	92.4	118.1	100.8	99.8
250 or More	303	360	363	262	2,519	2,430	3,335	2,312	120.3	148.3	108.9	113.6
Weekly Operating Hours												
39 or Fewer	25	48	55	36	900	1,851	2,532	1,313	28.3	25.8	21.8	27.2
40 to 48	125	176	269	177	1,879	2,989	5,265	2,972	66.4	59.0	51.0	59.4
49 to 60	189	268	400	211	2,792	3,577	4,617	3,214	67.8	74.8	86.7	65.6
61 to 84	227	286	337	200	2,482	3,088	4,198	2,689	91.5	92.5	80.3	74.4
85 to 167	176	305	367	209	1,813	2,531	2,978	1,794	96.9	120.7	123.2	116.5
Open Continuously	374	426	533	315	2,494	2,725	3,896	2,748	149.8	156.3	136.9	114.6
Ownership and Occupancy												
Nongovernment Owned	850	1,215	1,593	907	9,542	13,896	19,745	11,810	89.1	87.4	80.7	76.8
Owner Occupied	677	907	1,171	585	7,143	9,990	13,228	7,424	94.7	90.8	88.5	78.8
Nonowner Occupied	173	303	411	320	2,286	3,427	5,881	4,001	75.6	88.5	69.9	79.9
Unoccupied	Q	Q	Q	Q	Q	479	636	385	Q	Q	Q	Q
Government Owned	266	294	369	241	2,818	2,865	3,740	2,921	94.3	102.5	98.6	82.3
Federal	Q	Q	68	Q	394	318	549	537	Q	Q	124.2	114.7
State	78	113	117	68	683	961	919	828	114.6	117.7	127.3	82.4
Local	148	131	184	111	1,741	1,586	2,273	1,556	85.2	82.9	80.9	71.2
Vacancy Status												
Completely Vacant	N	Q	Q	Q	Q	298	Q	287	N	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	235	Q	Q	Q	Q	Q	Q
Partially Vacant	224	292	340	192	2,693	4,031	5,548	3,248	83.1	72.5	61.3	59.3
Not At All Vacant	889	1,201	1,615	949	9,301	12,197	17,383	11,029	95.6	98.4	92.9	86.0
Number of Establishments												
One	749	1,094	1,390	814	7,665	11,299	14,723	9,655	97.7	96.8	94.4	84.4
2 to 5	150	247	220	145	2,186	2,900	3,421	2,075	68.5	85.0	64.2	69.8
6 to 10	Q	39	127	88	494	571	1,440	1,068	Q	67.5	88.1	82.5
11 to 20	Q	53	100	43	705	579	1,239	738	Q	91.3	80.4	58.2
More than 20	111	71	115	53	1,159	864	2,000	788	95.5	82.2	57.5	67.4
Currently Unoccupied	Q	Q	Q	Q	Q	548	662	407	Q	Q	Q	Q
Energy Sources (more than one may apply)												
Electricity	1,116	1,509	1,961	1,147	11,964	16,389	23,076	14,287	93.2	92.1	85.0	80.3
Natural Gas	753	1,311	1,489	902	7,305	13,506	14,199	10,515	103.1	97.1	104.9	85.8
Fuel Oil	484	358	443	202	5,414	2,423	3,749	1,699	89.3	147.6	118.2	119.1
District Heat	289	235	210	171	1,898	1,521	1,265	1,207	152.1	154.4	166.3	141.5
District Chilled Water	Q	132	119	Q	326	746	939	739	Q	177.5	126.3	Q
Propane	124	Q	137	45	1,706	1,405	2,389	790	72.6	88.3	57.4	56.6
Other	Q	58	56	45	580	606	579	557	Q	95.9	97.1	81.3
Space-Heating Energy Sources (more than one may apply)												
Electricity	433	573	1,123	504	4,625	6,429	13,862	7,375	93.7	89.2	81.0	68.3
Natural Gas	563	1,163	1,082	747	5,703	12,467	10,904	8,828	98.7	93.3	99.2	84.6
Fuel Oil	283	99	114	Q	3,612	619	1,128	252	78.4	160.3	101.2	Q
District Heat	287	230	162	155	1,876	1,514	1,022	1,121	153.0	152.2	158.2	138.1
Propane	59	17	34	Q	761	733	1,013	221	77.6	22.7	33.5	Q
Other	Q	Q	Q	Q	Q	281	260	Q	Q	Q	Q	Q

Table C5. Consumption and Gross Energy Intensity by Census Region for Sum of Major Fuels, 1999

	Sum of Major Fuel Consumption (trillion Btu)				Total Floorspace of Buildings (million square feet)				Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Primary Space-Heating Energy Source												
Electricity	142	208	713	283	1,645	2,355	9,259	4,368	86.3	88.3	77.0	64.8
Natural Gas	473	1,056	897	638	4,913	11,348	8,815	7,653	96.3	93.0	101.8	83.3
Fuel Oil	205	Q	52	Q	2,803	Q	718	Q	73.0	Q	71.7	Q
District Heat	250	218	143	148	1,709	1,411	904	1,053	146.2	154.5	157.9	140.5
Propane	Q	8	22	Q	505	626	819	157	Q	12.9	27.2	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Sources (more than one may apply)												
Electricity	966	1,260	1,798	914	9,766	13,474	20,908	11,396	98.9	93.5	86.0	80.2
Natural Gas	Q	70	Q	65	446	550	266	652	Q	127.7	Q	99.2
District Chilled Water	Q	132	119	Q	326	746	939	739	Q	177.5	126.3	Q
Water-Heating Energy Sources (more than one may apply)												
Electricity	374	419	764	278	4,485	4,633	10,480	4,574	83.4	90.5	72.9	60.7
Natural Gas	421	823	1,010	707	4,074	8,323	8,943	7,856	103.4	98.8	113.0	90.0
Fuel Oil	151	Q	63	Q	1,678	Q	328	Q	90.2	Q	190.9	Q
District Heat	205	188	168	Q	1,300	1,219	863	799	157.4	154.2	194.8	145.2
Propane	Q	Q	Q	Q	561	428	Q	Q	Q	Q	Q	Q
Cooking Energy Sources (more than one may apply)												
Electricity	287	365	616	252	2,680	3,335	5,166	2,551	107.2	109.5	119.2	98.8
Natural Gas	388	495	665	379	3,380	4,445	5,345	3,614	114.9	111.4	124.3	105.0
Propane	63	Q	Q	Q	523	Q	789	Q	119.7	Q	76.6	Q
Energy End Uses (more than one may apply)												
Buildings with Space Heating	1,109	1,499	1,831	1,090	11,667	15,916	20,598	13,421	95.1	94.2	88.9	81.2
Buildings with Cooling	1,035	1,406	1,873	1,030	10,311	14,371	21,549	12,243	100.3	97.8	86.9	84.1
Buildings with Water Heating	1,055	1,339	1,804	1,063	10,577	13,702	19,014	12,822	99.8	97.7	94.9	82.9
Buildings with Cooking	583	660	974	461	5,245	6,042	8,569	4,825	111.2	109.3	113.7	95.6
Buildings with Manufacturing	Q	109	77	41	568	818	1,035	706	Q	132.8	74.5	57.6
Buildings with Electricity Generation	348	407	495	244	3,108	2,782	4,062	1,930	112.1	146.1	121.8	126.3
Percent of Floorspace Heated												
Not Heated	Q	Q	131	57	693	846	2,887	1,310	Q	Q	45.3	43.8
1 to 50	44	64	118	108	1,053	1,571	2,538	2,432	41.8	40.6	46.3	44.2
51 to 99	148	177	465	189	1,688	2,323	4,335	2,399	87.7	76.2	107.4	78.7
100	917	1,258	1,248	794	8,927	12,022	13,725	8,590	102.7	104.6	90.9	92.4
Percent of Floorspace Cooled												
Not Cooled	81	103	Q	117	2,049	2,390	1,936	2,489	39.7	43.0	Q	47.1
1 to 50	282	416	272	152	3,914	5,068	4,618	3,246	72.0	82.1	58.8	46.8
51 to 99	361	475	591	317	3,196	4,741	5,801	3,229	112.9	100.2	101.8	98.1
100	392	515	1,011	562	3,202	4,562	11,130	5,768	122.4	112.8	90.9	97.4
Percent Lit When Open												
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	70	144	148	90	1,620	2,486	3,013	2,068	43.4	57.9	49.1	43.4
51 to 99	440	571	635	347	4,081	5,814	6,392	4,378	107.8	98.2	99.4	79.2
100	604	785	1,160	706	6,077	7,668	12,817	7,671	99.5	102.4	90.5	92.0
Building Never Open/ Electricity Not Used	Q	Q	Q	Q	555	780	1,162	582	Q	Q	Q	Q

Table C5. Consumption and Gross Energy Intensity by Census Region for Sum of Major Fuels, 1999

	Sum of Major Fuel Consumption (trillion Btu)				Total Floorspace of Buildings (million square feet)				Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Percent Lit When Closed												
Zero	185	309	364	313	3,390	5,264	7,296	4,821	54.4	58.6	49.8	65.0
1 to 50	514	740	893	457	5,766	8,047	10,912	6,226	89.1	92.0	81.8	73.4
51 to 100	Q	Q	172	62	318	353	992	497	Q	Q	172.8	124.0
Building Never Closed/ Electricity Not Used	374	426	533	315	2,887	3,097	4,285	3,188	129.6	137.5	124.5	98.9
Heating Equipment (more than one may apply)												
Heat Pumps	124	109	477	152	1,193	1,015	4,580	2,135	104.1	107.1	104.2	71.0
Furnaces	170	464	300	148	2,257	5,767	3,949	2,476	75.3	80.4	76.0	59.8
Individual Space Heaters	295	416	406	257	3,555	4,667	5,471	3,657	82.9	89.2	74.2	70.3
District Heat	287	230	162	155	1,876	1,514	1,022	1,121	153.0	152.2	158.2	138.1
Boilers	467	584	487	372	5,469	5,961	4,209	3,883	85.4	98.0	115.8	95.8
Packaged Heating Units	401	568	911	488	4,033	5,081	10,455	6,175	99.4	111.8	87.1	79.1
Other	65	Q	111	66	769	1,113	1,391	800	84.9	129.5	79.8	82.8
Cooling Equipment (more than one may apply)												
Residential-Type Central Air Conditioners	87	231	274	79	950	2,951	3,272	1,156	91.8	78.3	83.7	68.8
Heat Pumps	111	112	481	167	1,215	1,063	4,604	2,265	91.6	105.5	104.4	73.6
Individual Air Conditioners	359	334	351	152	3,897	3,724	4,526	2,130	92.2	89.6	77.5	71.5
District Chilled Water	Q	132	119	Q	326	746	939	739	Q	177.5	126.3	Q
Central Chillers	342	424	523	310	2,782	3,149	4,328	2,651	122.8	134.6	120.9	116.8
Packaged Air Conditioning Units	695	877	1,173	645	6,641	8,198	13,915	7,773	104.7	106.9	84.3	83.0
Swamp Coolers	Q	Q	Q	139	Q	Q	339	1,624	Q	Q	Q	85.7
Other	Q	Q	Q	Q	Q	328	343	324	Q	Q	Q	Q
Main Equipment Replaced Since 1995 (more than one may apply)												
Heating	158	278	413	235	1,829	3,244	5,080	3,068	86.4	85.8	81.3	76.6
Cooling	294	376	597	268	3,080	3,808	7,088	3,414	95.4	98.8	84.2	78.5
Lighting Equipment Types (more than one may apply)												
Incandescent	691	858	1,155	736	7,047	9,903	12,970	8,236	98.1	86.7	89.1	89.3
Standard Fluorescent	1,058	1,422	1,828	1,092	11,348	14,840	20,850	13,305	93.3	95.8	87.7	82.1
Compact Fluorescent	443	623	645	451	3,939	5,518	6,427	4,781	112.6	112.9	100.3	94.3
High Intensity Discharge	390	617	625	271	4,382	5,513	5,874	3,454	89.1	111.8	106.4	78.4
Halogen	423	472	554	355	3,625	4,405	5,847	4,049	116.8	107.3	94.8	87.6
Other	Q	Q	Q	Q	Q	Q	441	180	Q	Q	Q	Q
Water Heating Equipment												
Centralized System	727	804	1,129	707	6,941	9,037	11,500	8,102	104.8	88.9	98.2	87.3
Distributed System	126	224	329	193	1,823	2,328	4,120	2,628	68.9	96.3	79.7	73.6
Combination of Centralized and Distributed System	203	311	346	162	1,813	2,336	3,395	2,093	111.7	133.3	102.0	77.6
Commercial Refrigeration Equipment (more than one may apply)												
Any Equipment	619	734	983	538	5,536	6,252	8,734	5,130	111.8	117.3	112.6	105.0
Walk-In Units	506	592	848	461	4,335	4,580	6,809	3,988	116.7	129.3	124.6	115.5
Cases or Cabinets	528	632	857	464	4,723	5,429	7,512	4,337	111.9	116.4	114.1	106.9
None	497	775	978	609	6,824	10,509	14,751	9,601	72.8	73.8	66.3	63.4

Table C5. Consumption and Gross Energy Intensity by Census Region for Sum of Major Fuels, 1999

	Sum of Major Fuel Consumption (trillion Btu)				Total Floorspace of Buildings (million square feet)				Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Personal Computers												
None	52	131	158	116	1,524	2,653	3,722	1,684	34.0	49.5	42.6	69.1
1 to 4	184	318	382	194	2,293	3,758	4,755	3,045	80.3	84.5	80.4	63.6
5 to 9	66	105	304	109	811	1,308	2,870	1,539	81.6	80.3	105.8	71.0
10 to 19	169	111	237	109	1,749	1,570	2,707	1,488	96.9	70.4	87.5	73.1
20 to 49	138	177	216	124	1,395	1,935	2,588	2,168	98.6	91.3	83.5	57.3
50 to 99	91	177	147	116	903	1,638	1,893	1,432	101.2	107.8	77.8	81.3
100 to 249	149	216	192	131	1,599	1,829	2,174	1,216	92.9	118.3	88.5	107.5
250 or More	267	275	324	247	2,085	2,069	2,776	2,158	127.9	132.7	116.8	114.7
Photocopiers												
None	237	375	572	338	3,696	5,185	8,044	4,706	64.2	72.2	71.1	71.7
One	166	262	402	207	1,633	3,164	5,040	3,091	101.6	82.7	79.9	67.1
2 to 4	256	343	458	246	2,976	4,227	5,109	3,308	86.0	81.2	89.7	74.4
5 to 9	87	208	131	104	986	1,577	1,586	1,234	87.9	132.2	82.5	84.5
10 or More	370	321	398	252	3,069	2,607	3,705	2,393	120.6	123.1	107.3	105.3
Other Electronic Equipment (more than one may apply)												
Laser Printers	907	1,126	1,467	855	9,112	11,161	15,628	10,666	99.6	100.9	93.9	80.2
FAX Machines	1,015	1,332	1,707	990	10,496	13,369	18,804	12,095	96.7	99.6	90.8	81.8
Medical Diagnostic Equipment	82	110	179	98	365	586	953	588	223.6	187.3	187.6	165.9
Energy-Related Space Functions (more than one may apply)												
Commercial Food Preparation	543	628	933	444	4,890	5,709	8,126	4,603	111.0	110.0	114.8	96.4
Activities with Large Amounts of Hot Water	504	632	899	504	4,268	5,335	7,199	4,990	118.1	118.5	124.8	101.0
Building Shell Conservation Features (more than one may apply)												
Multipaned Windows	757	1,067	1,154	605	7,564	11,546	11,981	7,103	100.1	92.4	96.3	85.2
Tinted, Reflective, or Shading Glass	477	686	1,006	666	4,525	6,364	11,246	7,780	105.5	107.7	89.4	85.6
HVAC Conservation Features (more than one may apply)												
Variable Air-Volume System	406	578	650	482	3,643	4,858	6,121	4,765	111.5	119.0	106.1	101.0
Economizer Cycle	498	734	614	541	4,634	5,688	5,858	5,075	107.4	129.0	104.9	106.6
HVAC Maintenance	1,050	1,294	1,699	1,022	10,640	13,025	17,981	11,749	98.6	99.3	94.5	87.0
Energy Management and Control System (EMCS)	466	698	718	510	4,211	5,296	7,108	4,998	110.8	131.8	101.0	101.9
Lighting Conservation Features (more than one may apply)												
Specular Reflectors	516	466	570	365	4,874	4,296	6,400	4,424	105.9	108.5	89.1	82.5
Electronic Ballasts	822	1,091	1,211	777	8,480	10,287	13,745	9,523	96.9	106.0	88.1	81.6
Skylights or Atriums	337	477	533	271	3,697	4,491	6,116	3,982	91.3	106.3	87.1	68.1

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. * HVAC=Heating, Ventilation, and Air Conditioning. * 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.

Table C6. Expenditures by Census Region for Sum of Major Fuels, 1999

	Sum of Major Fuel Expenditures (million dollars)				Sum of Major Fuel Expenditures (dollars) per Million Btu				Sum of Major Fuel Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings	18,996	17,258	27,303	17,995	17.02	11.44	13.92	15.69	1.54	1.03	1.16	1.22
Building Floorspace (Square Feet)												
1,001 to 5,000	2,753	2,312	4,637	2,654	22.31	11.75	15.64	17.01	3.06	1.26	1.83	1.77
5,001 to 10,000	1,634	1,883	3,193	2,517	16.96	13.29	14.09	17.56	1.26	0.92	1.04	1.37
10,001 to 25,000	2,500	2,145	4,187	2,041	16.57	12.15	13.76	18.37	1.28	0.74	1.00	0.96
25,001 to 50,000	1,990	1,580	3,589	2,931	16.98	11.40	14.08	16.18	1.41	0.89	1.06	1.07
50,001 to 100,000	2,430	2,594	3,755	3,277	16.20	11.98	13.90	14.33	1.37	1.06	1.09	1.33
100,001 to 200,000	2,090	2,670	3,639	1,945	16.92	10.49	13.83	14.90	1.43	1.17	1.27	1.17
200,001 to 500,000	1,805	2,133	2,609	1,468	14.23	9.82	12.60	13.53	1.32	1.07	1.15	1.20
Over 500,000	3,793	1,943	1,694	1,161	16.66	11.64	12.21	13.21	1.72	1.28	0.98	0.98
Principal Building Activity												
Education	2,045	1,802	2,098	2,073	13.25	10.13	13.17	13.18	1.19	0.80	0.89	0.89
Food Sales	Q	Q	1,409	704	Q	Q	17.57	Q	Q	Q	3.60	3.39
Food Service	Q	1,450	2,219	1,453	Q	12.83	Q	Q	Q	2.60	3.28	3.67
Health Care	1,029	1,243	2,152	1,229	10.65	9.92	11.39	11.85	2.30	1.66	1.98	1.94
Inpatient	944	913	1,490	Q	10.23	8.83	Q	Q	2.50	1.78	2.36	Q
Outpatient	Q	330	662	425	Q	Q	18.04	Q	Q	1.38	1.46	1.47
Lodging	818	1,053	2,029	1,817	12.44	10.91	12.47	14.56	1.69	1.12	1.27	1.21
Mercantile	3,138	2,421	4,370	3,156	22.20	13.64	16.38	22.82	1.66	0.93	1.07	1.71
Retail (Other Than Mall)	1,769	1,410	1,785	957	21.59	13.27	16.03	21.58	1.82	0.88	1.14	1.53
Enclosed and Strip Malls	1,369	1,011	2,584	2,199	Q	14.19	16.63	23.41	1.50	1.02	1.03	1.81
Office	4,338	3,674	5,962	3,801	20.02	13.62	15.79	16.87	1.82	1.30	1.43	1.42
Public Assembly	1,565	1,195	1,532	804	17.01	13.19	14.86	10.96	1.77	1.05	1.01	0.94
Public Order and Safety	Q	Q	324	Q	Q	Q	Q	Q	Q	Q	1.13	Q
Religious Worship	224	357	569	344	12.35	11.36	17.16	Q	0.51	0.39	0.50	0.38
Service	1,047	996	2,141	455	Q	10.04	9.83	13.70	1.42	1.22	1.54	1.03
Warehouse and Storage	1,370	1,747	1,911	1,001	17.71	8.69	14.69	19.00	0.79	0.63	0.48	0.50
Other	Q	Q	487	Q	Q	Q	15.14	Q	Q	Q	1.59	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed												
1919 or Before	1,319	1,245	330	377	13.55	10.26	15.05	10.99	0.95	0.79	0.60	0.73
1920 to 1945	1,680	2,109	1,318	689	14.32	11.10	13.30	12.68	1.04	0.87	0.77	0.99
1946 to 1959	3,195	1,794	2,397	1,830	14.73	10.78	14.98	13.99	1.57	0.83	0.82	0.90
1960 to 1969	3,418	2,658	3,883	3,278	17.34	10.94	12.48	14.65	1.67	1.02	1.17	1.13
1970 to 1979	3,027	2,611	5,613	4,606	18.16	12.14	14.32	17.01	1.66	1.11	1.31	1.36
1980 to 1989	3,566	3,660	7,525	3,592	20.69	12.71	13.53	18.15	1.72	1.29	1.20	1.30
1990 to 1999	2,791	3,181	6,236	3,624	18.82	11.15	14.81	15.39	2.03	1.12	1.40	1.50
Floors												
One	4,791	5,784	13,093	7,295	20.01	12.00	14.75	18.52	1.53	1.00	1.11	1.21
Two	4,762	3,605	6,165	4,932	18.75	11.62	13.47	16.00	1.62	0.82	1.08	1.25
Three	2,814	2,670	2,161	1,838	14.74	10.94	13.54	13.25	1.24	0.98	1.03	1.00
Four to Nine	3,950	4,139	4,035	2,850	14.69	10.81	12.23	12.10	1.52	1.34	1.59	1.45
Ten or More	2,680	1,060	1,850	1,080	16.48	11.86	14.60	15.26	1.88	1.41	1.39	1.15
Climate Zone: 45-Year Average												
Under 2,000 CDD and --												
More than 7,000 HDD	1,510	3,967	N	531	18.91	10.47	N	10.37	1.28	0.95	N	1.02
5,500-7,000 HDD	8,420	9,548	N	1,841	17.03	11.33	N	9.31	1.45	1.07	N	0.78
4,000-5,499 HDD	9,065	3,743	6,706	2,386	16.73	13.03	12.95	12.05	1.69	1.03	1.41	0.97
Fewer than 4,000 HDD	N	N	10,217	10,331	N	N	13.45	19.42	N	N	1.15	1.38
2,000 CDD or More and --												
Fewer than 4,000 HDD	N	N	10,380	2,906	N	N	15.17	17.26	N	N	1.05	1.51

Table C6. Expenditures by Census Region for Sum of Major Fuels, 1999

	Sum of Major Fuel Expenditures (million dollars)				Sum of Major Fuel Expenditures (dollars) per Million Btu				Sum of Major Fuel Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Workers (main shift)												
Fewer than 5	1,528	2,335	4,182	2,199	17.06	12.14	16.08	16.23	0.80	0.58	0.75	0.78
5 to 9	1,725	1,655	1,977	1,572	18.55	11.72	15.68	15.03	1.26	0.98	1.14	1.03
10 to 19	2,597	1,938	3,556	2,336	18.36	11.32	13.90	19.02	1.76	1.00	1.21	1.38
20 to 49	2,927	2,425	5,683	2,902	17.45	11.71	12.81	14.71	1.86	0.94	1.36	1.16
50 to 99	2,685	2,008	3,235	3,010	16.39	11.58	14.40	17.91	1.48	1.07	1.13	1.29
100 to 249	2,625	2,917	3,927	2,216	16.69	11.08	13.64	14.15	1.54	1.31	1.37	1.41
250 or More	4,909	3,980	4,742	3,761	16.20	11.04	13.06	14.33	1.95	1.64	1.42	1.63
Weekly Operating Hours												
39 or Fewer	298	577	908	532	11.71	12.08	16.46	14.92	0.33	0.31	0.36	0.41
40 to 48	2,060	2,070	4,127	2,703	16.52	11.73	15.36	15.30	1.10	0.69	0.78	0.91
49 to 60	3,574	2,983	5,633	3,624	18.89	11.14	14.08	17.18	1.28	0.83	1.22	1.13
61 to 84	3,853	3,786	4,786	3,471	16.96	13.26	14.19	17.34	1.55	1.23	1.14	1.29
85 to 167	3,272	3,676	5,198	3,422	18.64	12.03	14.17	16.38	1.81	1.45	1.75	1.91
Open Continuously	5,938	4,167	6,650	4,243	15.89	9.78	12.47	13.47	2.38	1.53	1.71	1.54
Ownership and Occupancy												
Nongovernment Owned	15,121	14,300	22,523	14,857	17.79	11.77	14.14	16.39	1.58	1.03	1.14	1.26
Owner Occupied	11,600	10,743	16,021	8,999	17.14	11.84	13.68	15.38	1.62	1.08	1.21	1.21
Nonowner Occupied	3,514	3,499	6,362	5,820	20.34	11.54	15.47	18.21	1.54	1.02	1.08	1.45
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	3,875	2,958	4,780	3,138	14.58	10.08	12.96	13.05	1.38	1.03	1.28	1.07
Federal	Q	Q	930	606	Q	Q	13.65	9.85	Q	Q	1.70	1.13
State	1,169	1,126	1,202	1,019	14.95	9.96	10.28	14.94	1.71	1.17	1.31	1.23
Local	1,987	1,381	2,649	1,512	13.39	10.50	14.41	13.66	1.14	0.87	1.17	0.97
Vacancy Status												
Completely Vacant	N	Q	Q	Q	N	Q	Q	Q	N	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	3,996	3,726	5,076	3,430	17.86	12.74	14.92	17.82	1.48	0.92	0.91	1.06
Not At All Vacant	14,957	13,402	22,126	14,480	16.82	11.16	13.70	15.26	1.61	1.10	1.27	1.31
Number of Establishments												
One	12,261	11,935	18,411	11,914	16.38	10.91	13.24	14.63	1.60	1.06	1.25	1.23
2 to 5	2,477	3,001	3,373	2,406	16.54	12.17	15.35	16.60	1.13	1.03	0.99	1.16
6 to 10	838	550	1,889	1,871	Q	14.25	14.90	21.22	1.70	0.96	1.31	1.75
11 to 20	1,141	679	1,585	841	Q	12.86	15.93	19.59	1.62	1.17	1.28	1.14
More than 20	2,268	1,019	1,905	911	20.50	14.34	16.58	17.15	1.96	1.18	0.95	1.16
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Energy Sources (more than one may apply)												
Electricity	18,993	17,258	27,303	17,993	17.03	11.44	13.92	15.69	1.59	1.05	1.18	1.26
Natural Gas	12,191	14,468	18,667	13,472	16.19	11.04	12.54	14.93	1.67	1.07	1.31	1.28
Fuel Oil	7,225	3,461	5,609	2,559	14.94	9.68	12.66	12.65	1.33	1.43	1.50	1.51
District Heat	4,421	2,543	2,097	1,855	15.32	10.83	9.96	10.86	2.33	1.67	1.66	1.54
District Chilled Water	Q	1,326	1,272	1,283	Q	10.01	10.72	Q	Q	1.78	1.35	1.74
Propane	2,584	1,332	2,182	956	20.86	10.74	15.90	21.38	1.51	0.95	0.91	1.21
Other	Q	595	888	861	Q	10.25	15.78	19.01	Q	0.98	1.53	1.55
Space-Heating Energy Sources (more than one may apply)												
Electricity	7,893	7,392	16,989	8,404	18.22	12.89	15.12	16.68	1.71	1.15	1.23	1.14
Natural Gas	9,294	12,745	13,556	10,876	16.51	10.96	12.53	14.57	1.63	1.02	1.24	1.23
Fuel Oil	3,994	816	1,505	Q	14.10	8.23	13.18	Q	1.11	1.32	1.33	Q
District Heat	4,390	2,478	1,711	1,629	15.30	10.76	10.58	Q	2.34	1.64	1.67	1.45
Propane	1,566	272	659	193	26.51	16.39	19.39	Q	2.06	0.37	0.65	0.88
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C6. Expenditures by Census Region for Sum of Major Fuels, 1999

	Sum of Major Fuel Expenditures (million dollars)				Sum of Major Fuel Expenditures (dollars) per Million Btu				Sum of Major Fuel Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Primary Space-Heating Energy Source												
Electricity	3,100	3,201	11,664	5,557	21.85	15.40	16.36	19.62	1.88	1.36	1.26	1.27
Natural Gas	7,717	11,274	10,903	9,103	16.32	10.68	12.15	14.28	1.57	0.99	1.24	1.19
Fuel Oil	2,894	Q	769	Q	14.15	Q	14.93	Q	1.03	Q	1.07	Q
District Heat	3,924	2,349	1,490	1,524	15.70	10.77	10.44	Q	2.30	1.66	1.65	1.45
Propane	1,161	184	465	Q	Q	22.90	20.89	Q	2.30	0.29	0.57	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Sources (more than one may apply)												
Electricity	16,860	14,750	25,718	14,921	17.46	11.71	14.30	16.32	1.73	1.09	1.23	1.31
Natural Gas	Q	769	Q	1,260	Q	10.95	Q	19.49	Q	1.40	Q	1.93
District Chilled Water	Q	1,326	1,272	1,283	Q	10.01	10.72	Q	Q	1.78	1.35	1.74
Water-Heating Energy Sources (more than one may apply)												
Electricity	7,522	5,197	12,655	5,371	20.10	12.40	16.56	19.35	1.68	1.12	1.21	1.17
Natural Gas	6,468	9,152	12,280	10,498	15.35	11.13	12.15	14.86	1.59	1.10	1.37	1.34
Fuel Oil	2,055	Q	527	Q	13.58	Q	8.43	Q	1.22	Q	1.61	Q
District Heat	3,042	2,070	1,529	1,270	14.87	11.01	9.09	10.94	2.34	1.70	1.77	1.59
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q	0.97	Q	Q
Cooking Energy Sources (more than one may apply)												
Electricity	4,974	4,410	8,483	3,561	17.31	12.07	13.78	14.14	1.86	1.32	1.64	1.40
Natural Gas	6,025	5,428	8,362	5,350	15.51	10.96	12.58	14.10	1.78	1.22	1.56	1.48
Propane	1,392	Q	994	Q	22.23	Q	16.44	Q	2.66	Q	1.26	Q
Energy End Uses (more than one may apply)												
Buildings with Space Heating	18,843	17,125	25,360	16,534	16.99	11.43	13.85	15.17	1.62	1.08	1.23	1.23
Buildings with Cooling	17,982	16,295	26,560	16,441	17.38	11.59	14.18	15.96	1.74	1.13	1.23	1.34
Buildings with Water Heating	17,894	15,455	24,625	16,737	16.95	11.54	13.65	15.74	1.69	1.13	1.30	1.31
Buildings with Cooking	9,590	7,627	13,249	6,766	16.44	11.55	13.60	14.67	1.83	1.26	1.55	1.40
Buildings with Manufacturing	Q	1,130	1,061	672	Q	10.40	13.77	16.51	1.67	1.38	1.03	0.95
Buildings with Electricity Generation	5,348	4,122	6,452	3,069	15.35	10.14	13.04	12.59	1.72	1.48	1.59	1.59
Percent of Floorspace Heated												
Not Heated	Q	Q	1,944	1,460	Q	Q	14.88	25.47	Q	Q	0.67	1.11
1 to 50	803	868	1,577	2,046	18.23	13.61	13.41	19.03	0.76	0.55	0.62	0.84
51 to 99	2,793	2,257	5,889	3,001	18.88	12.74	12.65	15.89	1.65	0.97	1.36	1.25
100	15,248	14,000	17,894	11,488	16.63	11.13	14.34	14.48	1.71	1.16	1.30	1.34
Percent of Floorspace Cooled												
Not Cooled	1,014	964	Q	1,554	12.48	9.38	8.44	13.26	0.49	0.40	Q	0.62
1 to 50	4,143	3,970	3,478	2,481	14.70	9.54	12.80	16.34	1.06	0.78	0.75	0.76
51 to 99	6,119	5,654	8,031	4,618	16.96	11.90	13.60	14.58	1.91	1.19	1.38	1.43
100	7,720	6,671	15,051	9,342	19.69	12.96	14.88	16.64	2.41	1.46	1.35	1.62
Percent Lit When Open												
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	1,294	1,693	2,148	1,687	18.42	11.76	14.51	18.82	0.80	0.68	0.71	0.82
51 to 99	6,917	6,559	8,402	5,311	15.73	11.49	13.23	15.32	1.69	1.13	1.31	1.21
100	10,762	8,905	16,463	10,927	17.81	11.34	14.19	15.49	1.77	1.16	1.28	1.42
Building Never Open/ Electricity Not Used	Q	100	Q	Q	Q	Q	Q	Q	Q	0.13	Q	Q

Table C6. Expenditures by Census Region for Sum of Major Fuels, 1999

	Sum of Major Fuel Expenditures (million dollars)				Sum of Major Fuel Expenditures (dollars) per Million Btu				Sum of Major Fuel Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Percent Lit When Closed												
Zero	3,138	3,684	5,509	4,997	17.00	11.93	15.15	15.94	0.93	0.70	0.76	1.04
1 to 50	9,116	8,965	12,891	7,678	17.74	12.11	14.44	16.80	1.58	1.11	1.18	1.23
51 to 100	Q	443	2,254	1,076	Q	Q	13.14	17.47	Q	1.25	2.27	2.17
Building Never Closed/ Electricity Not Used	5,941	4,167	6,650	4,244	15.88	9.78	12.47	13.46	2.06	1.35	1.55	1.33
Heating Equipment (more than one may apply)												
Heat Pumps	1,885	1,232	6,435	2,598	15.17	11.34	13.48	17.14	1.58	1.21	1.41	1.22
Furnaces	2,795	5,291	3,971	1,995	16.45	11.41	13.23	13.46	1.24	0.92	1.01	0.81
Individual Space Heaters	4,991	4,621	5,660	3,417	16.94	11.11	13.94	13.28	1.40	0.99	1.03	0.93
District Heat	4,390	2,478	1,711	1,629	15.30	10.76	10.58	Q	2.34	1.64	1.67	1.45
Boilers	6,983	5,972	6,009	4,707	14.94	10.23	12.33	12.65	1.28	1.00	1.43	1.21
Packaged Heating Units	7,873	6,708	12,999	8,371	19.63	11.81	14.27	17.14	1.95	1.32	1.24	1.36
Other	1,029	1,505	1,706	912	15.74	10.44	15.38	13.77	1.34	1.35	1.23	1.14
Cooling Equipment (more than one may apply)												
Residential-Type Central Air Conditioners	1,344	2,782	3,669	1,096	15.40	12.04	13.40	13.78	1.41	0.94	1.12	0.95
Heat Pumps	1,665	1,302	6,453	2,910	14.95	11.60	13.43	17.47	1.37	1.22	1.40	1.29
Individual Air Conditioners	5,188	3,475	4,730	2,144	14.44	10.41	13.48	14.09	1.33	0.93	1.05	1.01
District Chilled Water	Q	1,326	1,272	1,283	Q	10.01	10.72	Q	Q	1.78	1.35	1.74
Central Chillers	5,207	4,606	6,813	4,134	15.24	10.87	13.02	13.35	1.87	1.46	1.57	1.56
Packaged Air Conditioning Units	12,746	10,164	16,955	10,924	18.33	11.60	14.45	16.94	1.92	1.24	1.22	1.41
Swamp Coolers	Q	Q	Q	1,939	Q	Q	Q	13.94	Q	Q	Q	1.19
Other	Q	Q	447	529	Q	Q	Q	Q	Q	Q	1.30	1.63
Main Equipment Replaced Since 1995 (more than one may apply)												
Heating	2,861	3,300	6,060	3,879	18.11	11.85	14.67	16.51	1.56	1.02	1.19	1.26
Cooling	4,813	4,297	8,570	4,481	16.38	11.42	14.35	16.72	1.56	1.13	1.21	1.31
Lighting Equipment Types (more than one may apply)												
Incandescent	11,356	9,913	16,245	11,000	16.43	11.55	14.06	14.95	1.61	1.00	1.25	1.34
Standard Fluorescent	17,853	16,321	25,482	17,081	16.87	11.48	13.94	15.65	1.57	1.10	1.22	1.28
Compact Fluorescent	7,248	7,208	8,764	6,470	16.34	11.56	13.59	14.35	1.84	1.31	1.36	1.35
High Intensity Discharge	6,331	6,378	8,004	3,836	16.22	10.34	12.81	14.17	1.44	1.16	1.36	1.11
Halogen	6,980	5,483	7,462	5,170	16.49	11.61	13.46	14.57	1.93	1.24	1.28	1.28
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Water Heating Equipment												
Centralized System	12,168	9,309	15,136	11,052	16.73	11.58	13.40	15.62	1.75	1.03	1.32	1.36
Distributed System	2,500	2,431	4,831	3,499	19.90	10.85	14.70	18.09	1.37	1.04	1.17	1.33
Combination of Centralized and Distributed System	3,226	3,716	4,658	2,187	15.93	11.93	13.45	13.47	1.78	1.59	1.37	1.04
Commercial Refrigeration Equipment (more than one may apply)												
Any Equipment	10,666	8,607	13,348	8,296	17.23	11.73	13.58	15.41	1.93	1.38	1.53	1.62
Walk-In Units	8,783	6,839	11,272	7,041	17.37	11.55	13.29	15.29	2.03	1.49	1.66	1.77
Cases or Cabinets	9,262	7,415	11,661	7,372	17.53	11.74	13.60	15.90	1.96	1.37	1.55	1.70
None	8,330	8,651	13,956	9,698	16.76	11.16	14.26	15.93	1.22	0.82	0.95	1.01

Table C6. Expenditures by Census Region for Sum of Major Fuels, 1999

	Sum of Major Fuel Expenditures (million dollars)				Sum of Major Fuel Expenditures (dollars) per Million Btu				Sum of Major Fuel Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Personal Computers												
None	856	1,565	2,413	1,643	16.53	11.92	15.24	14.11	0.56	0.59	0.65	0.98
1 to 4	3,535	3,733	5,502	3,289	19.20	11.76	14.39	16.97	1.54	0.99	1.16	1.08
5 to 9	1,356	1,314	3,886	1,895	20.50	12.50	12.79	17.33	1.67	1.00	1.35	1.23
10 to 19	2,718	1,345	3,416	2,156	16.04	12.16	14.42	19.82	1.55	0.86	1.26	1.45
20 to 49	2,582	1,879	3,175	2,146	18.77	10.64	14.69	17.27	1.85	0.97	1.23	0.99
50 to 99	1,320	1,814	2,004	1,789	14.43	10.28	13.60	15.36	1.46	1.11	1.06	1.25
100 to 249	2,350	2,460	2,626	1,701	15.81	11.37	13.65	13.01	1.47	1.35	1.21	1.40
250 or More	4,278	3,147	4,280	3,376	16.04	11.46	13.20	13.64	2.05	1.52	1.54	1.56
Photocopiers												
None	4,046	4,401	8,070	5,690	17.04	11.75	14.11	16.85	1.09	0.85	1.00	1.21
One	3,005	3,132	6,056	3,461	18.12	11.97	15.05	16.70	1.84	0.99	1.20	1.12
2 to 4	4,441	3,775	6,114	3,577	17.35	11.00	13.34	14.53	1.49	0.89	1.20	1.08
5 to 9	1,341	2,230	1,773	1,594	15.46	10.70	13.54	15.29	1.36	1.41	1.12	1.29
10 or More	6,163	3,721	5,292	3,672	16.66	11.59	13.31	14.58	2.01	1.43	1.43	1.53
Other Electronic Equipment (more than one may apply)												
Laser Printers	15,295	12,789	20,181	13,489	16.86	11.36	13.75	15.77	1.68	1.15	1.29	1.26
FAX Machines	17,569	15,211	23,897	15,599	17.31	11.42	14.00	15.76	1.67	1.14	1.27	1.29
Medical Diagnostic Equipment	820	1,049	1,956	1,153	10.04	9.56	10.94	11.82	2.24	1.79	2.05	1.96
Energy-Related Space Functions (more than one may apply)												
Commercial Food Preparation	8,892	7,237	12,582	6,502	16.38	11.52	13.49	14.65	1.82	1.27	1.55	1.41
Activities with Large Amounts of Hot Water	7,911	6,853	10,845	6,937	15.69	10.84	12.07	13.76	1.85	1.28	1.51	1.39
Building Shell Conservation Features (more than one may apply)												
Multipaned Windows	12,913	12,226	15,592	8,458	17.05	11.46	13.51	13.99	1.71	1.06	1.30	1.19
Tinted, Reflective, or Shading Glass	8,146	8,147	14,504	10,678	17.06	11.88	14.42	16.03	1.80	1.28	1.29	1.37
HVAC Conservation Features (more than one may apply)												
Variable Air-Volume System	6,824	6,656	8,907	6,845	16.80	11.52	13.71	14.22	1.87	1.37	1.46	1.44
Economizer Cycle	9,135	8,151	8,203	7,705	18.35	11.11	13.35	14.24	1.97	1.43	1.40	1.52
HVAC Maintenance	17,995	14,748	23,580	15,463	17.14	11.40	13.88	15.13	1.69	1.13	1.31	1.32
Energy Management and Control System (EMCS)	7,522	7,446	9,836	7,010	16.12	10.67	13.71	13.76	1.79	1.41	1.38	1.40
Lighting Conservation Features (more than one may apply)												
Specular Reflectors	8,708	5,277	8,127	5,970	16.87	11.32	14.26	16.37	1.79	1.23	1.27	1.35
Electronic Ballasts	13,871	12,392	17,368	12,368	16.88	11.36	14.34	15.91	1.64	1.20	1.26	1.30
Skylights or Atriums	5,476	5,375	6,723	4,135	16.23	11.26	12.62	15.25	1.48	1.20	1.10	1.04

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. * HVAC=Heating, Ventilation, and Air Conditioning. * 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.

Table C7. Consumption and Gross Energy Intensity by Building Size for Sum of Major Fuels, 1999

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings	1,381	2,300	2,053	15,013	30,575	21,750	92.0	75.2	94.4
Principal Building Activity									
Education	53	366	230	782	4,831	3,038	68.0	75.7	75.8
Food Sales	Q	88	Q	441	485	Q	Q	180.6	Q
Food Service	364	Q	Q	1,296	483	Q	281.0	Q	Q
Health Care	24	92	398	407	672	1,838	59.8	136.6	216.8
Inpatient	N	Q	379	N	Q	1,683	N	Q	225.1
Outpatient	24	44	Q	407	490	155	59.8	89.2	Q
Lodging	Q	243	145	405	2,336	1,780	152.4	104.2	81.2
Mercantile	171	328	225	1,971	4,630	3,797	86.5	70.9	59.3
Retail (Other Than Mall)	134	137	73	1,649	2,375	742	81.4	57.5	98.4
Enclosed and Strip Malls	Q	191	152	322	2,255	3,055	Q	84.9	49.8
Office	170	384	535	2,276	4,628	5,140	74.7	83.1	104.1
Public Assembly	65	176	118	983	2,267	1,143	66.5	77.5	103.2
Public Order and Safety	Q	57	Q	220	695	Q	Q	81.5	Q
Religious Worship	33	75	Q	1,003	2,353	Q	32.7	31.8	Q
Service	206	Q	Q	1,786	1,265	Q	115.4	140.7	Q
Warehouse and Storage	76	150	235	2,032	4,865	3,579	37.4	30.9	65.6
Other	Q	79	Q	386	445	390	Q	178.2	Q
Vacant	Q	Q	Q	1,024	619	265	Q	Q	Q
Year Constructed									
1919 or Before	104	114	Q	1,446	1,944	645	71.6	58.5	Q
1920 to 1945	142	168	150	1,574	2,815	2,056	90.4	59.8	73.0
1946 to 1959	153	314	207	2,802	4,175	2,150	54.7	75.3	96.1
1960 to 1969	266	358	351	2,093	4,951	3,822	127.1	72.4	91.7
1970 to 1979	249	398	397	2,448	5,447	3,945	101.9	73.1	100.6
1980 to 1989	219	542	453	2,303	6,634	4,994	95.3	81.7	90.6
1990 to 1999	247	405	439	2,347	4,610	4,137	105.2	87.8	106.1
Floors									
One	913	781	309	9,624	12,194	4,982	94.8	64.0	62.1
Two	329	721	281	3,791	9,410	3,785	86.7	76.6	74.1
Three	94	391	248	1,220	5,157	2,551	77.2	75.9	97.2
Four to Nine	45	384	788	378	3,661	6,141	119.1	105.0	128.3
Ten or More	N	Q	427	N	Q	4,291	N	Q	99.5
Census Region and Division									
Northeast	220	418	478	2,203	5,132	5,026	99.8	81.5	95.1
New England	41	120	118	575	1,784	1,376	70.7	67.4	85.7
Middle Atlantic	179	298	360	1,628	3,348	3,649	110.0	89.0	98.7
Midwest	338	532	639	3,880	7,090	5,792	87.2	75.0	110.3
East North Central	253	342	414	2,666	4,580	3,959	95.1	74.6	104.6
West North Central	85	190	225	1,214	2,510	1,832	70.0	75.6	122.7
South	523	829	609	5,594	11,028	6,864	93.5	75.2	88.7
South Atlantic	236	347	333	2,436	4,983	3,581	96.7	69.6	93.1
East South Central	106	268	98	1,159	2,872	1,190	91.7	93.4	82.2
West South Central	181	214	178	1,999	3,173	2,093	90.7	67.5	84.9
West	299	521	327	3,337	7,326	4,069	89.7	71.1	80.3
Mountain	104	153	100	1,105	2,314	1,160	93.7	66.2	85.9
Pacific	196	368	227	2,231	5,012	2,908	87.8	73.4	78.1
Climate Zone: 45-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	147	194	168	1,643	2,819	1,428	89.5	69.0	117.9
5,500-7,000 HDD	291	571	673	2,955	7,433	6,695	98.3	76.8	100.5
4,000-5,499 HDD	392	567	585	3,826	6,365	6,053	102.5	89.1	96.7
Fewer than 4,000 HDD	290	599	402	3,377	8,355	4,601	85.9	71.7	87.5
2,000 CDD or More and --									
Fewer than 4,000 HDD	261	368	224	3,211	5,604	2,972	81.2	65.7	75.3

Table C7. Consumption and Gross Energy Intensity by Building Size for Sum of Major Fuels, 1999

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
Workers (main shift)									
Fewer than 5	495	174	Q	7,978	5,713	630	62.0	30.4	Q
5 to 9	278	170	Q	2,833	3,099	393	98.2	54.8	Q
10 to 19	302	362	Q	2,582	4,708	737	116.9	76.9	Q
20 to 49	269	657	90	1,409	7,706	1,699	190.8	85.3	52.8
50 to 99	Q	490	210	Q	5,681	3,074	Q	86.3	68.2
100 to 249	Q	335	523	Q	2,832	5,457	Q	118.2	95.9
250 or More	N	112	1,177	N	837	9,759	N	133.7	120.6
Weekly Operating Hours									
39 or Fewer	81	64	Q	3,502	2,472	622	23.1	26.0	Q
40 to 48	265	378	104	4,216	6,969	1,920	62.8	54.2	54.0
49 to 60	253	510	305	3,017	7,423	3,759	83.8	68.8	81.0
61 to 84	270	415	365	2,072	5,376	5,009	130.5	77.1	72.9
85 to 167	361	393	303	1,320	3,943	3,853	273.3	99.8	78.6
Open Continuously	151	539	958	886	4,392	6,586	170.5	122.8	145.4
Ownership and Occupancy									
Nongovernment Owned	1,252	1,780	1,533	13,655	24,490	16,850	91.7	72.7	91.0
Owner Occupied	864	1,253	1,223	9,219	16,036	12,531	93.7	78.1	97.6
Nonowner Occupied	382	515	309	3,513	7,926	4,156	108.8	65.0	74.4
Unoccupied	Q	Q	Q	923	527	Q	Q	Q	Q
Government Owned	129	520	520	1,357	6,086	4,900	95.0	85.5	106.1
Federal	Q	61	139	Q	614	1,007	Q	99.7	137.7
State	Q	186	164	Q	1,697	1,488	Q	109.5	110.2
Local	84	273	217	977	3,775	2,405	86.2	72.4	90.2
Vacancy Status									
Completely Vacant	Q	Q	Q	574	290	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	451	329	Q	Q	Q	Q
Partially Vacant	108	379	563	2,214	5,983	7,323	48.6	63.3	76.8
Not At All Vacant	1,259	1,911	1,484	11,775	23,974	14,161	106.9	79.7	104.8
Number of Establishments									
One	1,151	1,634	1,262	11,310	20,595	11,437	101.8	79.3	110.4
2 to 5	192	319	250	2,488	5,035	3,059	77.0	63.4	81.9
6 to 10	Q	185	97	176	2,179	1,219	Q	84.8	79.7
11 to 20	Q	108	141	Q	1,591	1,661	Q	67.9	85.1
More than 20	Q	42	301	Q	590	4,163	Q	71.0	72.2
Currently Unoccupied	Q	Q	Q	972	586	Q	Q	Q	Q
Energy Sources (more than one may apply)									
Electricity	1,380	2,300	2,053	14,001	30,052	21,663	98.6	76.5	94.8
Natural Gas	1,073	1,760	1,622	8,654	20,570	16,301	124.0	85.6	99.5
Fuel Oil	80	362	1,045	1,203	3,579	8,503	66.4	101.1	122.9
District Heat	Q	347	505	Q	2,007	3,613	Q	172.9	139.9
District Chilled Water	Q	150	259	Q	927	1,730	Q	162.0	149.6
Propane	105	134	191	1,621	2,637	2,032	64.7	50.9	93.8
Other	Q	65	98	469	890	963	Q	73.3	101.5
Space-Heating Energy Sources (more than one may apply)									
Electricity	542	1,074	1,018	5,459	15,069	11,763	99.3	71.3	86.5
Natural Gas	874	1,433	1,247	7,863	17,494	12,546	111.2	81.9	99.4
Fuel Oil	78	148	294	1,171	2,095	2,345	67.0	70.8	125.4
District Heat	Q	311	498	Q	1,828	3,545	Q	170.1	140.6
Propane	57	45	Q	1,157	1,295	Q	49.1	35.0	Q
Other	Q	26	Q	285	452	Q	Q	57.4	Q

Table C7. Consumption and Gross Energy Intensity by Building Size for Sum of Major Fuels, 1999

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
Primary Space-Heating Energy Source									
Electricity	312	627	407	3,062	8,667	5,898	101.7	72.3	69.1
Natural Gas	821	1,184	1,058	7,373	14,997	10,360	111.3	79.0	102.1
Fuel Oil	67	108	96	1,038	1,567	1,113	64.9	69.0	86.1
District Heat	Q	277	458	Q	1,645	3,301	Q	168.4	138.8
Propane	Q	20	Q	1,084	980	Q	Q	20.1	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Sources (more than one may apply)									
Electricity	1,136	1,997	1,805	10,723	25,930	18,893	106.0	77.0	95.5
Natural Gas	Q	61	68	537	907	469	Q	67.1	145.1
District Chilled Water	Q	150	259	Q	927	1,730	Q	162.0	149.6
Water-Heating Energy Sources (more than one may apply)									
Electricity	442	721	672	4,593	10,985	8,593	96.2	65.6	78.3
Natural Gas	729	1,180	1,052	4,923	13,747	10,526	148.1	85.9	99.9
Fuel Oil	Q	90	112	333	880	1,005	Q	102.6	111.1
District Heat	Q	239	404	Q	1,249	2,786	Q	191.3	144.9
Propane	Q	29	Q	436	777	Q	Q	37.6	Q
Cooking Energy Sources (more than one may apply)									
Electricity	280	434	806	1,148	4,838	7,747	244.1	89.7	104.0
Natural Gas	351	554	1,023	1,479	5,412	9,893	237.0	102.3	103.4
Propane	Q	54	50	371	735	648	Q	72.9	77.7
Energy End Uses (more than one may apply)									
Buildings with Space Heating	1,277	2,227	2,024	12,774	28,026	20,803	100.0	79.5	97.3
Buildings with Cooling	1,201	2,150	1,994	11,092	27,047	20,335	108.3	79.5	98.0
Buildings with Water Heating	1,214	2,088	1,960	10,028	25,974	20,112	121.0	80.4	97.5
Buildings with Cooking	499	834	1,346	2,367	8,947	13,367	210.6	93.2	100.7
Buildings with Manufacturing	26	100	151	553	1,509	1,064	46.8	66.5	142.1
Buildings with Electricity Generation	Q	401	1,021	378	3,166	8,339	Q	126.7	122.4
Percent of Floorspace Heated									
Not Heated	Q	73	28	2,239	2,550	947	Q	28.5	29.9
1 to 50	82	149	102	2,210	3,567	1,816	37.1	41.8	56.2
51 to 99	245	398	336	1,927	5,033	3,785	127.3	79.1	88.7
100	950	1,680	1,587	8,636	19,426	15,202	109.9	86.5	104.4
Percent of Floorspace Cooled									
Not Cooled	180	150	Q	3,921	3,528	1,415	45.8	42.6	41.9
1 to 50	243	522	356	3,318	8,920	4,608	73.3	58.6	77.3
51 to 99	312	606	825	2,273	7,021	7,673	137.3	86.3	107.6
100	646	1,022	812	5,501	11,106	8,054	117.4	92.0	100.8
Percent Lit When Open									
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	204	208	40	3,075	4,719	1,392	66.5	44.0	28.4
51 to 99	500	765	728	4,113	9,755	6,797	121.6	78.4	107.0
100	660	1,311	1,284	6,092	14,839	13,302	108.4	88.4	96.5
Building Never Open/ Electricity Not Used	Q	Q	Q	1,660	1,182	Q	Q	Q	Q

Table C7. Consumption and Gross Energy Intensity by Building Size for Sum of Major Fuels, 1999

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
Percent Lit When Closed									
Zero	451	563	156	7,199	10,435	3,137	62.6	53.9	49.8
1 to 50	641	1,100	863	5,406	14,482	11,062	118.6	76.0	78.0
51 to 100	Q	97	76	532	750	878	Q	130.0	86.4
Building Never Closed/ Electricity Not Used	151	540	958	1,876	4,909	6,672	80.7	109.9	143.5
Heating Equipment (more than one may apply)									
Heat Pumps	145	357	360	1,424	4,158	3,341	101.8	85.8	107.9
Furnaces	388	423	271	5,118	6,438	2,892	75.8	65.7	93.7
Individual Space Heaters	218	538	618	2,533	7,732	7,084	86.1	69.6	87.2
District Heat	Q	311	498	Q	1,828	3,545	Q	170.1	140.6
Boilers	175	702	1,033	1,504	8,336	9,683	116.1	84.3	106.7
Packaged Heating Units	529	927	913	4,080	11,951	9,713	129.6	77.5	94.0
Other	Q	105	246	515	1,422	2,135	Q	73.7	115.2
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	186	222	263	2,496	3,501	2,333	74.7	63.4	112.8
Heat Pumps	Q	358	367	1,406	4,167	3,574	103.6	85.9	102.8
Individual Air Conditioners	208	474	515	2,358	6,679	5,239	88.0	70.9	98.2
District Chilled Water	Q	150	259	Q	927	1,730	Q	162.0	149.6
Central Chillers	Q	385	1,176	Q	3,215	9,517	Q	119.7	123.5
Packaged Air Conditioning Units	739	1,356	1,295	5,810	17,315	13,402	127.2	78.3	96.6
Swamp Coolers	Q	80	77	435	1,009	775	Q	79.3	99.6
Other	Q	41	Q	Q	452	707	Q	90.8	Q
Main Equipment Replaced Since 1995 (more than one may apply)									
Heating	326	514	245	3,082	6,831	3,307	105.8	75.2	74.1
Cooling	351	659	525	3,037	8,726	5,628	115.6	75.5	93.3
Lighting Equipment Types (more than one may apply)									
Incandescent	752	1,305	1,384	6,993	16,939	14,223	107.5	77.1	97.3
Standard Fluorescent	1,195	2,201	2,005	11,876	27,684	20,784	100.6	79.5	96.5
Compact Fluorescent	262	699	1,201	1,846	7,480	11,340	141.9	93.4	105.9
High Intensity Discharge	113	632	1,158	908	7,026	11,290	124.5	89.9	102.6
Halogen	250	596	959	1,590	6,536	9,800	157.3	91.2	97.8
Other	Q	Q	Q	Q	394	464	Q	Q	Q
Water Heating Equipment									
Centralized System	980	1,414	974	7,891	17,503	10,186	124.2	80.8	95.6
Distributed System	153	329	390	1,781	4,667	4,450	86.1	70.4	87.6
Combination of Centralized and Distributed System	Q	345	597	356	3,805	5,476	Q	90.7	109.0
Commercial Refrigeration Equipment (more than one may apply)									
Any Equipment	544	867	1,463	2,505	9,110	14,036	217.0	95.2	104.2
Walk-In Units	486	643	1,278	1,794	5,926	11,992	270.6	108.4	106.6
Cases or Cabinets	506	715	1,260	2,290	7,409	12,302	221.0	96.5	102.4
None	837	1,433	590	12,507	21,465	7,714	66.9	66.7	76.4

Table C7. Consumption and Gross Energy Intensity by Building Size for Sum of Major Fuels, 1999

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
Personal Computers									
None	363	89	6	5,970	2,974	640	60.7	30.0	Q
1 to 4	580	446	52	5,315	7,464	1,074	109.1	59.7	48.5
5 to 9	198	345	41	1,688	4,200	641	117.5	82.1	64.3
10 to 19	182	347	96	1,534	4,084	1,896	118.9	85.0	50.7
20 to 49	Q	370	233	476	4,721	2,890	Q	78.3	80.6
50 to 99	Q	291	238	Q	3,514	2,327	Q	82.8	102.1
100 to 249	Q	309	377	Q	2,878	3,936	Q	107.2	95.8
250 or More	N	103	1,010	N	741	8,347	N	139.7	120.9
Photocopiers									
None	882	556	83	9,913	9,692	2,025	89.0	57.4	41.1
One	375	558	104	3,724	7,537	1,667	100.7	74.1	62.4
2 to 4	110	760	434	1,165	8,936	5,519	94.5	85.0	78.6
5 to 9	Q	206	311	Q	2,236	2,937	Q	92.0	105.9
10 or More	N	220	1,121	N	2,173	9,601	N	101.2	116.7
Other Electronic Equipment (more than one may apply)									
Laser Printers	595	1,797	1,964	5,396	21,598	19,573	110.2	83.2	100.3
FAX Machines	973	2,047	2,024	8,525	25,429	20,810	114.1	80.5	97.2
Medical Diagnostic Equipment	Q	70	384	265	527	1,700	Q	133.2	225.5
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	464	766	1,317	2,134	8,202	12,992	217.5	93.4	101.4
Activities with Large Amounts of Hot Water	456	898	1,185	1,823	8,834	11,136	250.3	101.6	106.4
Building Shell Conservation Features (more than one may apply)									
Multipaned Windows	741	1,364	1,479	6,858	16,743	14,593	108.0	81.5	101.3
Tinted, Reflective, or Shading Glass	467	1,023	1,346	3,954	12,244	13,717	118.1	83.5	98.1
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	211	699	1,205	1,691	6,854	10,841	124.8	102.0	111.2
Economizer Cycle	238	746	1,403	1,438	7,290	12,528	165.4	102.4	112.0
HVAC Maintenance	966	2,096	2,002	8,361	24,704	20,330	115.6	84.8	98.5
Energy Management and Control System (EMCS)	123	791	1,477	987	7,643	12,983	124.3	103.5	113.8
Lighting Conservation Features (more than one may apply)									
Specular Reflectors	298	657	963	2,560	7,640	9,794	116.4	85.9	98.3
Electronic Ballasts	696	1,451	1,754	6,780	17,991	17,264	102.7	80.6	101.6
Skylights or Atriums	133	537	948	1,533	6,945	9,808	86.8	77.4	96.7

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. * HVAC=Heating, Ventilation, and Air Conditioning. * 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.

Table C8. Consumption and Gross Energy Intensity by Year Constructed for Sum of Major Fuels, 1999

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)		
	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999
All Buildings	1,410	3,234	1,090	19,606	36,638	11,094	71.9	88.3	98.3
Building Floorspace (Square Feet)									
1,001 to 5,000	218	406	148	2,478	3,137	1,159	88.0	129.4	128.0
5,001 to 10,000	181	329	98	3,344	3,706	1,188	54.1	88.7	82.8
10,001 to 25,000	243	423	77	3,965	6,079	1,110	61.3	69.5	69.5
25,001 to 50,000	188	372	132	2,505	5,167	1,638	75.0	72.0	80.6
50,001 to 100,000	166	504	195	2,463	5,786	1,862	67.3	87.2	104.9
100,001 to 200,000	126	477	169	1,782	4,827	1,662	70.4	98.8	102.0
200,001 to 500,000	125	371	Q	1,751	3,756	1,344	71.6	98.8	121.5
Over 500,000	163	352	106	1,318	4,179	1,131	123.8	84.3	93.8
Principal Building Activity									
Education	250	307	92	3,247	4,165	1,239	77.0	73.7	74.1
Food Sales	Q	87	80	196	443	355	Q	196.9	224.3
Food Service	Q	229	Q	608	952	Q	Q	240.3	Q
Health Care	101	356	58	548	1,897	473	183.7	187.7	122.7
Inpatient	Q	307	Q	434	1,277	Q	Q	240.4	Q
Outpatient	Q	49	Q	Q	620	319	Q	79.0	Q
Lodging	85	300	65	808	2,996	716	104.9	100.2	90.3
Mercantile	165	391	169	2,582	5,786	2,030	63.8	67.5	83.1
Retail (Other Than Mall)	113	130	101	1,901	1,726	1,139	59.5	75.2	88.7
Enclosed and Strip Malls	52	261	68	681	4,060	891	75.7	64.2	76.0
Office	254	693	143	2,907	7,307	1,830	87.2	94.8	78.0
Public Assembly	108	180	72	1,395	2,262	736	77.4	79.4	97.2
Public Order and Safety	Q	38	Q	392	550	227	Q	68.5	Q
Religious Worship	42	57	Q	1,301	1,748	357	32.6	32.5	Q
Service	109	286	Q	1,283	1,768	336	84.8	161.9	Q
Warehouse and Storage	63	231	Q	2,738	5,660	2,079	22.9	40.8	Q
Other	Q	69	Q	247	607	367	Q	112.8	Q
Vacant	19	Q	Q	1,354	497	Q	14.2	Q	Q
Floors									
One	311	1,130	562	5,601	15,567	5,632	55.6	72.6	99.7
Two	335	763	233	5,218	9,110	2,657	64.2	83.7	87.6
Three	288	365	81	4,143	3,810	974	69.5	95.7	82.7
Four to Nine	335	706	176	3,520	5,341	1,319	95.2	132.3	133.4
Ten or More	140	270	39	1,124	2,809	512	124.8	96.1	76.7
Census Region and Division									
Northeast	432	536	148	5,041	5,944	1,376	85.6	90.2	107.8
New England	93	150	Q	1,316	1,986	433	71.0	75.4	Q
Middle Atlantic	338	386	113	3,725	3,957	943	90.8	97.6	119.5
Midwest	478	746	285	6,150	7,778	2,834	77.7	95.9	100.6
East North Central	338	456	215	4,481	4,842	1,882	75.4	94.3	114.1
West North Central	140	289	71	1,669	2,936	952	83.7	98.6	74.1
South	281	1,259	421	5,163	13,858	4,464	54.4	90.9	94.4
South Atlantic	113	581	222	2,055	6,639	2,306	55.1	87.5	96.1
East South Central	74	313	85	1,038	3,132	1,050	71.7	99.9	81.2
West South Central	93	365	114	2,070	4,087	1,107	45.1	89.4	103.3
West	219	692	235	3,252	9,059	2,420	67.5	76.4	97.3
Mountain	90	209	57	1,267	2,609	704	71.1	80.1	81.3
Pacific	129	483	178	1,986	6,450	1,716	65.1	74.9	103.8
Climate Zone: 45-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	135	283	93	1,936	3,007	948	69.5	94.1	97.6
5,500-7,000 HDD	508	736	291	6,196	8,277	2,610	82.0	88.9	111.3
4,000-5,499 HDD	458	839	248	5,491	8,220	2,532	83.3	102.1	97.8
Fewer than 4,000 HDD	180	807	304	3,303	9,822	3,209	54.5	82.2	94.8
2,000 CDD or More and --									
Fewer than 4,000 HDD	129	568	155	2,680	7,313	1,794	48.3	77.7	86.5

Table C8. Consumption and Gross Energy Intensity by Year Constructed for Sum of Major Fuels, 1999

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)		
	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999
Workers (main shift)									
Fewer than 5	246	331	100	6,570	6,039	1,712	37.5	54.8	58.5
5 to 9	148	256	61	2,027	3,470	829	72.9	73.8	73.8
10 to 19	231	343	117	2,781	4,093	1,153	83.2	83.7	101.5
20 to 49	233	584	200	2,953	5,772	2,089	78.7	101.1	95.6
50 to 99	141	444	145	1,638	5,660	1,601	86.2	78.5	90.3
100 to 249	157	502	205	1,580	4,990	1,786	99.6	100.6	115.0
250 or More	253	774	262	2,057	6,614	1,925	123.1	117.0	136.1
Weekly Operating Hours									
39 or Fewer	64	91	Q	3,277	2,809	511	19.7	32.4	Q
40 to 48	263	385	98	4,942	6,392	1,771	53.3	60.2	55.4
49 to 60	297	582	189	4,259	7,649	2,292	69.7	76.1	82.4
61 to 84	276	631	143	2,850	7,422	2,186	97.0	85.0	65.5
85 to 167	197	595	265	1,819	5,315	1,981	108.3	111.9	133.9
Open Continuously	312	950	386	2,460	7,051	2,352	126.7	134.8	164.1
Ownership and Occupancy									
Nongovernment Owned	1,026	2,655	884	15,321	30,535	9,138	67.0	86.9	96.7
Owner Occupied	795	1,936	609	10,934	20,654	6,198	72.7	93.8	98.3
Nonowner Occupied	225	707	275	3,546	9,233	2,817	63.5	76.6	97.5
Unoccupied	Q	Q	Q	842	649	Q	Q	Q	Q
Government Owned	384	579	206	4,285	6,102	1,956	89.6	94.8	105.4
Federal	102	86	Q	909	644	243	112.2	133.2	Q
State	123	190	64	1,181	1,655	554	103.8	114.5	116.0
Local	159	303	112	2,196	3,803	1,158	72.6	79.8	96.5
Vacancy Status									
Completely Vacant	Q	Q	Q	665	247	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	689	250	Q	Q	Q	Q
Partially Vacant	259	597	193	3,874	8,829	2,817	66.8	67.6	68.6
Not At All Vacant	1,132	2,626	896	14,378	27,312	8,219	78.7	96.1	109.0
Number of Establishments									
One	1,017	2,202	828	13,375	22,346	7,622	76.0	98.5	108.6
2 to 5	209	428	125	3,372	5,464	1,745	61.9	78.2	71.5
6 to 10	69	199	35	679	2,410	485	102.1	82.7	72.2
11 to 20	Q	166	46	506	2,256	498	Q	73.6	92.3
More than 20	68	225	Q	711	3,479	621	95.8	64.8	Q
Currently Unoccupied	Q	Q	Q	963	683	Q	Q	Q	Q
Energy Sources (more than one may apply)									
Electricity	1,409	3,234	1,090	18,788	35,920	11,007	75.0	90.0	99.0
Natural Gas	1,077	2,464	914	13,063	24,386	8,076	82.5	101.0	113.2
Fuel Oil	332	890	265	3,588	7,590	2,108	92.4	117.2	125.8
District Heat	320	467	Q	2,338	2,876	677	136.9	162.3	Q
District Chilled Water	107	246	Q	794	1,550	407	134.5	158.6	Q
Propane	63	246	Q	1,410	3,586	1,295	44.5	68.7	Q
Other	74	95	Q	765	1,204	353	96.6	78.7	Q
Space-Heating Energy Sources (more than one may apply)									
Electricity	550	1,531	552	7,313	19,045	5,933	75.2	80.4	93.1
Natural Gas	877	1,968	709	11,297	19,947	6,658	77.6	98.7	106.5
Fuel Oil	172	311	38	2,309	2,870	432	74.6	108.3	87.4
District Heat	317	420	Q	2,309	2,726	499	137.4	154.2	Q
Propane	24	75	Q	706	1,414	608	34.0	53.0	Q
Other	Q	Q	Q	382	474	Q	Q	Q	Q

Table C8. Consumption and Gross Energy Intensity by Year Constructed for Sum of Major Fuels, 1999

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)		
	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999
Primary Space-Heating Energy Source									
Electricity	187	809	350	2,769	11,150	3,708	67.4	72.6	94.5
Natural Gas	791	1,675	597	10,205	16,847	5,677	77.5	99.4	105.2
Fuel Oil	114	137	Q	1,753	1,707	Q	65.2	80.5	Q
District Heat	283	385	Q	2,151	2,497	428	131.3	154.4	Q
Propane	12	48	Q	519	1,074	514	23.4	44.7	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Sources (more than one may apply)									
Electricity	1,133	2,832	973	14,026	31,749	9,770	80.8	89.2	99.6
Natural Gas	Q	118	Q	470	1,028	416	Q	114.8	Q
District Chilled Water	107	246	Q	794	1,550	407	134.5	158.6	Q
Water-Heating Energy Sources (more than one may apply)									
Electricity	324	1,093	418	4,820	14,952	4,399	67.1	73.1	95.1
Natural Gas	713	1,657	591	8,411	15,573	5,211	84.7	106.4	113.4
Fuel Oil	77	135	Q	971	1,049	Q	79.3	128.3	Q
District Heat	229	366	Q	1,696	2,109	377	134.8	173.6	Q
Propane	Q	67	Q	Q	863	Q	Q	77.7	Q
Cooking Energy Sources (more than one may apply)									
Electricity	326	915	279	3,024	8,251	2,458	107.8	110.9	113.5
Natural Gas	499	1,035	394	4,690	9,030	3,065	106.3	114.6	128.6
Propane	Q	116	Q	287	1,137	330	Q	102.2	Q
Energy End Uses (more than one may apply)									
Buildings with Space Heating	1,393	3,065	1,070	17,554	33,448	10,600	79.4	91.6	101.0
Buildings with Cooling	1,230	3,053	1,061	14,895	33,224	10,355	82.6	91.9	102.5
Buildings with Water Heating	1,243	3,005	1,014	14,928	31,740	9,446	83.3	94.7	107.3
Buildings with Cooking	682	1,476	521	6,519	13,759	4,403	104.7	107.2	118.4
Buildings with Manufacturing	72	154	51	933	1,709	485	77.1	90.2	105.9
Buildings with Electricity Generation	254	890	349	1,992	7,149	2,741	127.7	124.4	127.5
Percent of Floorspace Heated									
Not Heated	17	168	Q	2,052	3,190	493	8.2	52.7	Q
1 to 50	95	184	55	2,645	3,749	1,198	35.8	48.9	45.6
51 to 99	235	547	197	3,226	5,742	1,777	72.9	95.3	110.8
100	1,063	2,335	819	11,683	23,957	7,625	91.0	97.5	107.4
Percent of Floorspace Cooled									
Not Cooled	179	181	Q	4,711	3,414	739	38.1	52.9	Q
1 to 50	379	528	215	6,241	8,052	2,553	60.7	65.6	84.2
51 to 99	429	978	336	4,052	9,818	3,096	105.9	99.7	108.4
100	423	1,547	510	4,603	15,354	4,706	91.8	100.7	108.4
Percent Lit When Open									
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	184	183	Q	4,301	3,928	957	42.8	46.7	Q
51 to 99	564	1,162	266	6,025	11,398	3,242	93.6	101.9	82.2
100	652	1,865	738	7,583	19,981	6,670	86.0	93.3	110.7
Building Never Open/ Electricity Not Used	9	Q	Q	1,681	1,220	Q	5.3	Q	Q

Table C8. Consumption and Gross Energy Intensity by Year Constructed for Sum of Major Fuels, 1999

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)		
	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999
Percent Lit When Closed									
Zero	319	642	209	6,811	10,503	3,458	46.8	61.1	60.6
1 to 50	727	1,512	365	9,247	17,259	4,444	78.6	87.6	82.2
51 to 100	Q	129	129	272	1,134	753	Q	114.0	171.7
Building Never Closed/ Electricity Not Used	312	950	386	3,277	7,742	2,438	95.3	122.8	158.3
Heating Equipment (more than one may apply)									
Heat Pumps	148	527	187	1,764	5,363	1,796	83.8	98.3	104.2
Furnaces	294	569	218	4,847	7,215	2,387	60.7	78.9	91.5
Individual Space Heaters	375	766	233	5,366	9,268	2,715	70.0	82.6	85.8
District Heat	317	420	Q	2,309	2,726	499	137.4	154.2	Q
Boilers	533	1,083	295	6,424	10,620	2,479	83.0	102.0	118.9
Packaged Heating Units	358	1,404	606	4,820	15,239	5,684	74.4	92.1	106.6
Other	88	189	Q	1,030	2,257	786	85.3	83.6	Q
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	188	381	103	2,573	4,483	1,274	72.9	85.1	80.5
Heat Pumps	153	544	174	1,818	5,624	1,705	84.3	96.7	101.8
Individual Air Conditioners	489	572	135	6,113	6,687	1,476	80.1	85.5	91.5
District Chilled Water	107	246	Q	794	1,550	407	134.5	158.6	Q
Central Chillers	326	951	322	2,567	8,114	2,229	127.0	117.2	144.3
Packaged Air Conditioning Units	679	2,009	702	8,037	21,665	6,825	84.5	92.7	102.9
Swamp Coolers	Q	141	Q	509	1,371	339	Q	102.5	Q
Other	Q	89	Q	254	951	Q	Q	93.4	Q
Main Equipment Replaced Since 1995 (more than one may apply)									
Heating	306	702	76	4,160	8,266	794	73.7	85.0	95.5
Cooling	464	970	101	5,340	11,107	943	86.9	87.4	106.9
Lighting Equipment Types (more than one may apply)									
Incandescent	938	1,975	528	11,393	21,385	5,377	82.3	92.3	98.2
Standard Fluorescent	1,319	3,094	988	16,693	33,658	9,993	79.0	91.9	98.9
Compact Fluorescent	449	1,292	421	4,483	12,023	4,160	100.2	107.5	101.2
High Intensity Discharge	405	1,025	473	4,193	10,566	4,464	96.6	97.0	105.9
Halogen	378	1,058	368	3,653	10,699	3,574	103.6	98.9	103.0
Other	Q	Q	Q	Q	460	392	Q	Q	Q
Water Heating Equipment									
Centralized System	831	1,930	606	10,284	19,732	5,564	80.8	97.8	108.9
Distributed System	160	492	Q	2,269	6,505	2,125	70.4	75.6	103.7
Combination of Centralized and Distributed System	252	583	187	2,376	5,503	1,758	106.2	105.9	106.6
Commercial Refrigeration Equipment (more than one may apply)									
Any Equipment	643	1,645	586	6,180	14,877	4,595	104.1	110.6	127.5
Walk-In Units	496	1,407	503	4,071	11,957	3,685	121.9	117.7	136.5
Cases or Cabinets	573	1,415	493	5,580	12,458	3,963	102.7	113.6	124.4
None	766	1,589	504	13,427	21,761	6,498	57.1	73.0	77.6

Table C8. Consumption and Gross Energy Intensity by Year Constructed for Sum of Major Fuels, 1999

	Sum of Major Fuel Consumption (trillion Btu)			Total Floorspace of Buildings (million square feet)			Energy Intensity for Sum of Major Fuels (thousand Btu/square foot)		
	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999
Personal Computers									
None	166	233	Q	4,415	4,071	1,098	37.6	57.4	Q
1 to 4	353	571	154	5,294	6,989	1,569	66.6	81.7	98.3
5 to 9	101	335	148	1,534	3,803	1,191	65.9	88.1	124.4
10 to 19	134	359	134	1,615	4,251	1,647	82.7	84.4	81.0
20 to 49	156	353	145	2,103	4,183	1,801	74.4	84.5	80.4
50 to 99	116	257	Q	1,349	3,243	1,276	86.0	79.2	124.7
100 to 249	121	430	138	1,216	4,356	1,245	99.3	98.7	110.5
250 or More	263	695	154	2,079	5,741	1,267	126.7	121.1	121.6
Photocopiers									
None	420	834	268	8,278	10,663	2,690	50.8	78.2	99.5
One	308	512	217	3,928	6,643	2,358	78.5	77.1	92.1
2 to 4	279	780	245	4,033	8,666	2,921	69.2	90.0	83.7
5 to 9	59	315	157	620	3,390	1,373	95.2	92.8	114.1
10 or More	343	793	204	2,747	7,275	1,752	124.9	109.1	116.5
Other Electronic Equipment (more than one may apply)									
Laser Printers	983	2,472	901	11,145	26,657	8,765	88.2	92.8	102.8
FAX Machines	1,169	2,850	1,024	14,063	30,817	9,883	83.1	92.5	103.7
Medical Diagnostic Equipment	76	340	Q	374	1,731	388	202.7	196.4	Q
Energy-Related Space Functions (more than one may apply)									
Commercial Food Preparation	642	1,413	492	6,145	13,063	4,120	104.5	108.2	119.5
Activities with Large Amounts of Hot Water	578	1,510	452	5,274	12,776	3,743	109.6	118.1	120.8
Building Shell Conservation Features (more than one may apply)									
Multipaned Windows	787	2,030	765	9,567	20,611	8,016	82.3	98.5	95.5
Tinted, Reflective, or Shading Glass	456	1,772	608	5,252	18,328	6,335	86.7	96.7	95.9
HVAC Conservation Features (more than one may apply)									
Variable Air-Volume System	344	1,234	538	3,092	11,623	4,672	111.1	106.1	115.2
Economizer Cycle	392	1,439	556	3,541	13,151	4,563	110.6	109.5	121.9
HVAC Maintenance	1,167	2,889	1,008	13,569	30,161	9,665	86.0	95.8	104.3
Energy Management and Control System (EMCS)	479	1,332	580	4,318	12,221	5,074	111.0	109.0	114.4
Lighting Conservation Features (more than one may apply)									
Specular Reflectors	412	1,120	385	4,447	11,436	4,111	92.7	98.0	93.6
Electronic Ballasts	904	2,190	807	10,536	23,685	7,815	85.8	92.4	103.3
Skylights or Atriums	294	956	369	3,758	10,865	3,664	78.1	88.0	100.8

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
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. * HVAC=Heating, Ventilation, and Air Conditioning. * 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.

Table C9. Total Electricity Consumption and Expenditures, 1999

	All Buildings Using Electricity			Electricity Consumption			Electricity Expenditures
				Primary	Site		
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (trillion Btu)	Total (billion kWh)	Total (million dollars)
All Buildings	4,395	65,716	15.0	9,352	3,098	908	66,424
Building Floorspace (Square Feet)							
1,001 to 5,000	2,186	6,280	2.9	1,254	415	122	10,262
5,001 to 10,000	1,036	7,721	7.5	853	283	83	7,146
10,001 to 25,000	688	10,843	15.8	1,118	370	109	8,663
25,001 to 50,000	253	9,175	36.3	1,121	371	109	8,188
50,001 to 100,000	143	10,034	70.0	1,491	494	145	10,023
100,001 to 200,000	59	8,246	139.5	1,361	451	132	8,555
200,001 to 500,000	23	6,790	296.0	1,028	340	100	6,432
Over 500,000	7	6,628	929.0	1,127	373	109	7,155
Principal Building Activity							
Education	327	8,651	26.4	777	257	75	5,820
Food Sales	173	993	5.7	498	165	48	3,359
Food Service	349	1,851	5.3	653	216	63	5,082
Health Care	127	2,918	22.9	701	232	68	4,268
Inpatient	11	1,865	168.2	520	172	51	2,948
Outpatient	116	1,053	9.1	181	60	18	1,320
Lodging	153	4,521	29.5	591	196	57	4,266
Mercantile	667	10,398	15.6	1,573	521	153	11,851
Retail (Other Than Mall)	534	4,766	8.9	666	221	65	5,166
Enclosed and Strip Malls	133	5,631	42.2	907	301	88	6,685
Office	738	12,043	16.3	2,314	767	225	15,683
Public Assembly	299	4,340	14.5	577	191	56	3,983
Public Order and Safety	64	1,030	16.0	122	40	12	805
Religious Worship	307	3,405	11.1	126	42	12	1,041
Service	472	3,358	7.1	417	138	41	3,108
Warehouse and Storage	496	9,879	19.9	664	220	64	4,829
Other	98	1,217	12.4	306	101	30	2,063
Vacant	123	1,112	9.0	31	10	3	265
Year Constructed							
1919 or Before	363	3,714	10.2	275	91	27	2,170
1920 to 1945	480	6,281	13.1	556	184	54	4,174
1946 to 1959	716	8,794	12.3	934	310	91	6,989
1960 to 1969	628	10,686	17.0	1,413	468	137	10,250
1970 to 1979	758	11,750	15.5	1,875	621	182	13,461
1980 to 1989	781	13,485	17.3	2,280	755	221	15,777
1990 to 1999	669	11,007	16.5	2,020	669	196	13,604
Census Region and Division							
Northeast	639	11,964	18.7	1,638	543	159	15,133
New England	190	3,615	19.0	399	132	39	3,783
Middle Atlantic	449	8,349	18.6	1,239	411	120	11,351
Midwest	1,113	16,389	14.7	2,000	662	194	12,933
East North Central	730	10,940	15.0	1,296	429	126	8,798
West North Central	383	5,449	14.2	704	233	68	4,135
South	1,689	23,076	13.7	3,766	1,247	366	23,275
South Atlantic	711	10,817	15.2	1,851	613	180	11,968
East South Central	383	5,149	13.4	817	271	79	4,830
West South Central	595	7,110	11.9	1,098	364	107	6,476
West	954	14,287	15.0	1,948	645	189	15,083
Mountain	275	4,292	15.6	530	175	51	3,365
Pacific	679	9,995	14.7	1,418	470	138	11,718

Table C9. Total Electricity Consumption and Expenditures, 1999

	All Buildings Using Electricity			Electricity Consumption			Electricity Expenditures
				Primary	Site		
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (trillion Btu)	Total (billion kWh)	Total (million dollars)
Climate Zone: 45-Year Average							
Under 2,000 CDD and --							
More than 7,000 HDD	491	5,750	11.7	665	220	65	4,505
5,500-7,000 HDD	924	16,706	18.1	2,027	671	197	15,163
4,000-5,499 HDD	1,029	15,792	15.4	2,385	790	232	17,164
Fewer than 4,000 HDD	1,070	15,922	14.9	2,496	827	242	17,847
2,000 CDD or More and --							
Fewer than 4,000 HDD	882	11,546	13.1	1,779	589	173	11,745
Workers (main shift)							
Fewer than 5	2,121	12,750	6.0	1,009	334	98	8,046
5 to 9	800	6,274	7.8	654	217	64	5,462
10 to 19	683	8,028	11.8	1,055	350	102	8,439
20 to 49	487	10,814	22.2	1,530	507	149	11,068
50 to 99	174	8,898	51.1	1,260	418	122	9,122
100 to 249	90	8,356	92.4	1,534	508	149	9,683
250 or More	39	10,595	270.0	2,309	765	224	14,604
Weekly Operating Hours							
39 or Fewer	770	5,314	6.9	205	68	20	1,717
40 to 48	1,147	13,070	11.4	1,169	387	114	8,799
49 to 60	980	14,186	14.5	1,754	581	170	12,980
61 to 84	649	12,381	19.1	1,776	588	172	13,082
85 to 167	459	8,930	19.5	1,833	607	178	13,107
Open Continuously	390	11,835	30.3	2,614	866	254	16,739
Ownership and Occupancy							
Nongovernment Owned	3,898	53,640	13.8	7,651	2,534	743	55,086
Owner Occupied	2,747	37,506	13.7	5,455	1,807	530	38,540
Nonowner Occupied	1,069	15,441	14.4	2,173	720	211	16,358
Unoccupied	Q	693	Q	Q	Q	Q	Q
Government Owned	498	12,076	24.3	1,701	563	165	11,338
Federal	54	1,711	31.9	370	123	36	2,195
State	83	3,382	40.8	484	160	47	3,189
Local	361	6,983	19.3	846	280	82	5,955
Vacancy Status							
Completely Vacant	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	79	756	9.5	13	4	1	121
Partially Vacant	636	15,093	23.7	1,955	648	190	13,761
Not At All Vacant	3,636	49,511	13.6	7,366	2,440	715	52,397
Number of Establishments							
One	3,437	42,839	12.5	6,102	2,021	592	43,175
2 to 5	680	10,442	15.3	1,294	429	126	9,297
6 to 10	113	3,568	31.5	611	202	59	4,492
11 to 20	48	3,260	68.0	555	184	54	3,846
More than 20	27	4,809	178.1	764	253	74	5,402
Currently Unoccupied	90	797	8.9	26	9	3	211
Energy Sources (more than one may apply)							
Electricity	4,395	65,716	15.0	9,352	3,098	908	66,424
Natural Gas	2,663	45,496	17.1	6,616	2,191	642	46,431
Fuel Oil	434	13,277	30.6	2,331	772	226	15,165
District Heat	117	5,891	50.2	1,083	359	105	6,841
District Chilled Water	50	2,750	55.4	571	189	55	3,224
Propane	451	6,290	14.0	791	262	77	6,286
Other	153	2,322	15.2	341	113	33	2,512

Table C9. Total Electricity Consumption and Expenditures, 1999

	All Buildings Using Electricity			Electricity Consumption			Electricity Expenditures
				Primary	Site		
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (trillion Btu)	Total (billion kWh)	Total (million dollars)
Space-Heating Energy Source							
Electricity	1,880	32,291	17.2	5,135	1,701	499	35,332
Electricity Main	1,128	17,627	15.6	3,114	1,031	302	21,622
Electricity Secondary	752	14,664	19.5	2,021	670	196	13,710
Other Excluding Electricity	2,128	29,274	13.8	3,815	1,264	370	27,832
Buildings without Heating	387	4,151	10.7	402	133	39	3,261
Primary Space-Heating Energy Source							
Electricity	1,128	17,627	15.6	3,114	1,031	302	21,622
Natural Gas	2,182	32,701	15.0	4,353	1,442	423	30,654
Fuel Oil	302	3,711	12.3	305	101	30	2,923
District Heat	77	5,077	66.0	928	308	90	5,784
Propane	282	2,107	7.5	216	72	21	1,960
Other	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Source							
Electricity	3,450	55,545	16.1	8,503	2,816	825	60,281
Other Excluding Electricity	109	2,929	26.8	543	180	53	3,564
Buildings without Cooling	836	7,242	8.7	306	101	30	2,579
Water-Heating Energy Source							
Electricity	1,546	24,171	15.6	3,896	1,290	378	27,581
Other Excluding Electricity	1,693	31,943	18.9	4,689	1,553	455	33,293
Buildings without Water Heating	1,157	9,601	8.3	767	254	74	5,550
Cooking Energy Source							
Electricity	437	13,733	31.4	2,811	931	273	18,252
Other Excluding Electricity	420	10,948	26.1	1,729	573	168	12,621
Buildings without Cooking	3,538	41,035	11.6	4,812	1,594	467	35,551
Energy End Uses (more than one may apply)							
Buildings with Space Heating	4,008	61,565	15.4	8,950	2,965	869	63,164
Buildings with Cooling	3,560	58,474	16.4	9,046	2,996	878	63,845
Buildings with Water Heating	3,239	56,115	17.3	8,585	2,844	833	60,875
Buildings with Cooking	857	24,681	28.8	4,540	1,504	441	30,873
Buildings with Manufacturing	151	3,126	20.7	449	149	44	3,060
Buildings with Electricity Generation	172	11,882	69.3	2,525	836	245	15,509
Percent of Floorspace Heated							
Not Heated	387	4,151	10.7	402	133	39	3,261
1 to 50	569	7,564	13.3	576	191	56	4,533
51 to 99	626	10,737	17.1	1,683	557	163	11,384
100	2,813	43,264	15.4	6,691	2,216	650	47,247
Percent of Floorspace Cooled							
Not Cooled	836	7,242	8.7	306	101	30	2,579
1 to 50	1,012	16,846	16.6	1,315	436	128	10,363
51 to 99	751	16,966	22.6	3,026	1,002	294	20,141
100	1,796	24,662	13.7	4,705	1,559	457	33,342
Percent Lit When Open							
Zero	Q	Q	Q	Q	Q	Q	Q
1 to 50	835	9,187	11.0	672	223	65	5,396
51 to 99	1,228	20,665	16.8	3,034	1,005	295	21,574
100	2,096	34,233	16.3	5,594	1,853	543	39,065
Building Never Open/ Electricity Not Used	202	1,458	7.2	41	14	4	319

Table C9. Total Electricity Consumption and Expenditures, 1999

	All Buildings Using Electricity			Electricity Consumption			Electricity Expenditures
				Primary	Site		
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (trillion Btu)	Total (billion kWh)	Total (million dollars)
Percent Lit When Closed							
Zero	2,174	20,771	9.6	1,772	587	172	14,034
1 to 50	1,688	30,950	18.3	4,413	1,462	428	31,794
51 to 100	143	2,160	15.1	553	183	54	3,857
Building Never Closed/ Electricity Not Used	390	11,835	30.3	2,614	866	254	16,739
Heating Equipment (more than one may apply)							
Heat Pumps	492	8,923	18.1	1,557	516	151	10,243
Furnaces	1,460	14,449	9.9	1,435	475	139	10,722
Individual Space Heaters	886	17,321	19.5	2,215	734	215	15,110
District Heat	96	5,534	57.7	1,022	339	99	6,432
Boilers	581	19,514	33.6	2,755	912	267	18,848
Packaged Heating Units	1,347	25,743	19.1	4,435	1,469	431	31,069
Other	185	4,073	22.1	691	229	67	4,400
Cooling Equipment (more than one may apply)							
Residential-Type Central Air Conditioners	676	8,329	12.3	1,037	343	101	7,113
Heat Pumps	485	9,147	18.8	1,574	521	153	10,416
Individual Air Conditioners	799	14,276	17.9	1,642	544	159	11,793
District Chilled Water	50	2,750	55.4	571	189	55	3,224
Central Chillers	130	12,909	99.7	2,723	902	264	17,041
Packaged Air Conditioning Units	1,953	36,527	18.7	6,024	1,995	585	43,059
Swamp Coolers	136	2,219	16.3	308	102	30	2,238
Other	49	1,312	26.7	247	82	24	1,580
Main Equipment Replaced Since 1995 (more than one may apply)							
Heating	984	13,220	13.4	1,880	623	182	13,421
Cooling	1,085	17,390	16.0	2,609	864	253	18,381
Lighting Equipment Types (more than one may apply)							
Incandescent	2,193	38,156	17.4	5,591	1,852	543	39,345
Standard Fluorescent	3,778	60,344	16.0	8,872	2,939	861	62,616
Compact Fluorescent	607	20,666	34.1	3,613	1,197	351	24,269
High Intensity Discharge	430	19,223	44.8	3,088	1,023	300	19,743
Halogen	572	17,926	31.3	3,014	998	293	20,656
Other	58	1,004	17.5	179	59	17	1,235
Water Heating Equipment							
Centralized System	2,472	35,579	14.4	5,164	1,710	501	38,010
Distributed System	566	10,899	19.3	1,610	533	156	11,383
Combination of Centralized and Distributed System	200	9,637	48.1	1,811	600	176	11,481
Commercial Refrigeration Equipment (more than one may apply)							
Any Equipment	950	25,652	27.0	4,997	1,655	485	34,282
Walk-In Units	658	19,713	29.9	4,186	1,386	406	28,489
Cases or Cabinets	820	22,001	26.8	4,370	1,448	424	30,056
None	3,445	40,064	11.6	4,355	1,442	423	32,142

Table C9. Total Electricity Consumption and Expenditures, 1999

	All Buildings Using Electricity			Electricity Consumption			Electricity Expenditures
				Primary	Site		
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (trillion Btu)	Total (billion kWh)	Total (million dollars)
Personal Computers							
None	1,355	7,961	5.9	584	193	57	4,762
1 to 4	1,636	13,853	8.5	1,678	556	163	13,009
5 to 9	542	6,528	12.0	927	307	90	6,947
10 to 19	403	7,514	18.7	992	329	96	7,747
20 to 49	247	8,087	32.7	1,153	382	112	8,162
50 to 99	105	5,867	55.9	803	266	78	5,601
100 to 249	71	6,818	96.0	1,240	411	120	7,675
250 or More	36	9,088	252.4	1,974	654	192	12,521
Photocopiers							
None	2,564	20,009	7.8	2,242	743	218	17,615
One	1,114	12,928	11.6	1,741	577	169	12,840
2 to 4	540	15,620	28.9	2,059	682	200	14,526
5 to 9	102	5,384	52.6	857	284	83	5,626
10 or More	75	11,774	156.7	2,453	813	238	15,816
Other Electronic Equipment (more than one may apply)							
Laser Printers	1,949	46,567	23.9	7,396	2,450	718	51,039
FAX Machines	2,807	54,764	19.5	8,505	2,817	826	59,661
Medical Diagnostic Equipment	86	2,493	29.1	637	211	62	3,775
Annual Consumption (kilowatthours)							
10,000 or Less	747	3,216	4.3	38	13	4	426
10,001 to 50,000	1,578	9,239	5.9	418	138	41	3,856
50,001 to 100,000	743	7,001	9.4	560	185	54	4,920
100,001 to 500,000	1,042	16,811	16.1	2,408	798	234	18,923
500,001 to 1,000,000	141	6,966	49.4	1,024	339	99	7,526
1,000,001 to 5,000,000	125	13,661	109.2	2,650	878	257	17,233
Over 5,000,000	19	8,823	475.8	2,254	747	219	13,542
Provider of Purchased Electricity (more than one may apply)							
Local Utility	4,224	62,043	14.7	8,687	2,877	843	61,536
Some Other Provider	140	3,101	22.1	525	174	51	4,024

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.
Notes: * Site electricity is the amount of electricity delivered to commercial buildings. 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. * 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.

Table C10. Electricity Consumption and Expenditure Intensities, 1999

	Electricity Consumption						Electricity Expenditures		
				Distribution of Building-Level Intensities (kWh/square foot)					
	per Building (thousand kWh)	per Square Foot (kWh)	per Worker (thousand kWh)	25th Percentile	Median	75th Percentile	per Building (thousand dollars)	per Square Foot (dollars)	per kWh (dollars)
All Buildings	207	13.8	11.1	3.5	7.8	16.9	15.1	1.01	0.073
Building Floorspace (Square Feet)									
1,001 to 5,000	56	19.4	11.0	4.1	8.6	22.0	4.7	1.63	0.084
5,001 to 10,000	80	10.7	7.6	2.3	6.5	13.2	6.9	0.93	0.086
10,001 to 25,000	158	10.0	9.5	3.1	6.3	13.3	12.6	0.80	0.080
25,001 to 50,000	430	11.9	11.8	3.6	8.3	16.1	32.4	0.89	0.075
50,001 to 100,000	1,009	14.4	11.3	4.9	9.9	18.9	69.9	1.00	0.069
100,001 to 200,000	2,234	16.0	14.9	6.0	12.6	22.2	144.7	1.04	0.065
200,001 to 500,000	4,349	14.7	11.3	5.1	10.0	20.4	280.4	0.95	0.064
Over 500,000	15,332	16.5	12.6	8.9	13.6	20.6	1,003.0	1.08	0.065
Principal Building Activity									
Education	230	8.7	8.5	4.1	6.6	9.3	17.8	0.67	0.077
Food Sales	279	48.7	49.5	39.2	58.9	122.1	19.4	3.38	0.069
Food Service	182	34.2	15.7	13.9	28.7	57.3	14.6	2.75	0.080
Health Care	535	23.3	10.9	5.8	11.3	15.5	33.6	1.46	0.063
Inpatient	4,556	27.1	15.1	15.5	21.5	29.3	265.8	1.58	0.058
Outpatient	151	16.7	6.1	5.4	9.7	15.0	11.4	1.25	0.075
Lodging	375	12.7	24.4	7.5	12.6	17.3	27.9	0.94	0.074
Mercantile	229	14.7	13.4	4.3	8.9	16.8	17.8	1.14	0.078
Retail (Other Than Mall)	121	13.6	13.9	4.1	8.0	15.3	9.7	1.08	0.080
Enclosed and Strip Malls	660	15.6	13.1	5.9	14.5	26.7	50.1	1.19	0.076
Office	304	18.7	7.8	6.0	11.7	17.9	21.2	1.30	0.070
Public Assembly	187	12.9	17.8	3.2	6.8	11.6	13.3	0.92	0.071
Public Order and Safety	184	11.5	7.0	1.8	4.1	9.6	12.5	0.78	0.068
Religious Worship	40	3.6	7.4	1.1	2.5	4.2	3.4	0.31	0.085
Service	86	12.1	8.9	3.3	6.1	11.9	6.6	0.93	0.077
Warehouse and Storage	130	6.5	10.5	1.3	3.0	7.0	9.7	0.49	0.075
Other	302	24.4	20.4	3.3	13.8	22.0	21.0	1.69	0.069
Vacant	25	2.7	Q	0.3	0.9	4.7	2.2	0.24	0.087
Year Constructed									
1919 or Before	73	7.2	6.8	2.1	4.2	9.6	6.0	0.58	0.081
1920 to 1945	112	8.6	9.1	2.0	5.0	11.3	8.7	0.66	0.077
1946 to 1959	127	10.3	9.2	2.3	5.8	12.6	9.8	0.79	0.077
1960 to 1969	218	12.8	10.6	3.9	9.3	20.9	16.3	0.96	0.075
1970 to 1979	240	15.5	11.5	4.3	9.1	19.9	17.7	1.15	0.074
1980 to 1989	283	16.4	11.2	4.9	11.2	21.0	20.2	1.17	0.071
1990 to 1999	293	17.8	14.4	3.7	8.6	21.8	20.3	1.24	0.069
Census Region and Division									
Northeast	249	13.3	11.1	2.5	6.5	14.8	23.7	1.26	0.095
New England	203	10.7	10.0	2.6	6.9	11.6	19.9	1.05	0.098
Middle Atlantic	268	14.4	11.5	2.5	6.5	16.6	25.3	1.36	0.094
Midwest	174	11.8	10.6	2.5	5.6	12.1	11.6	0.79	0.067
East North Central	172	11.5	10.8	2.6	5.9	11.6	12.1	0.80	0.070
West North Central	178	12.5	10.3	2.1	4.8	13.0	10.8	0.76	0.061
South	216	15.8	12.5	4.1	9.7	22.1	13.8	1.01	0.064
South Atlantic	253	16.6	12.8	3.7	9.1	19.6	16.8	1.11	0.067
East South Central	207	15.4	13.4	5.0	11.9	24.1	12.6	0.94	0.061
West South Central	179	15.0	11.6	3.3	8.7	24.1	10.9	0.91	0.061
West	198	13.2	9.5	3.9	7.7	16.4	15.8	1.06	0.080
Mountain	187	12.0	9.9	2.8	6.9	16.1	12.2	0.78	0.065
Pacific	203	13.8	9.4	4.1	8.1	16.4	17.3	1.17	0.085

Table C10. Electricity Consumption and Expenditure Intensities, 1999

	Electricity Consumption						Electricity Expenditures		
				Distribution of Building-Level Intensities (kWh/square foot)					
	per Building (thousand kWh)	per Square Foot (kWh)	per Worker (thousand kWh)	25th Percentile	Median	75th Percentile	per Building (thousand dollars)	per Square Foot (dollars)	per kWh (dollars)
Climate Zone: 45-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	132	11.2	11.0	3.0	6.2	13.4	9.2	0.78	0.070
5,500-7,000 HDD	213	11.8	10.7	2.5	5.7	13.0	16.4	0.91	0.077
4,000-5,499 HDD	225	14.7	10.5	3.2	7.2	15.8	16.7	1.09	0.074
Fewer than 4,000 HDD	226	15.2	11.5	4.6	9.3	20.4	16.7	1.12	0.074
2,000 CDD or More and --									
Fewer than 4,000 HDD	196	15.0	12.0	3.3	9.8	22.1	13.3	1.02	0.068
Workers (main shift)									
Fewer than 5	46	7.7	23.2	2.0	4.8	12.3	3.8	0.63	0.082
5 to 9	79	10.1	12.1	4.2	8.5	14.7	6.8	0.87	0.086
10 to 19	150	12.8	11.9	5.7	9.9	20.9	12.4	1.05	0.082
20 to 49	305	13.7	10.5	6.4	13.1	24.5	22.7	1.02	0.075
50 to 99	703	13.8	10.7	7.0	13.6	22.9	52.4	1.03	0.075
100 to 249	1,646	17.8	11.8	10.4	14.5	25.0	107.0	1.16	0.065
250 or More	5,712	21.2	8.8	13.8	20.7	29.4	372.1	1.38	0.065
Weekly Operating Hours									
39 or Fewer	26	3.8	5.7	0.8	2.4	5.1	2.2	0.32	0.086
40 to 48	99	8.7	7.3	2.7	6.4	13.0	7.7	0.67	0.078
49 to 60	174	12.0	8.2	4.0	7.7	14.7	13.2	0.91	0.076
61 to 84	266	13.9	10.7	6.2	11.6	23.7	20.1	1.06	0.076
85 to 167	388	19.9	16.5	11.6	29.6	56.7	28.6	1.47	0.074
Open Continuously	651	21.4	16.9	6.2	13.7	33.6	42.9	1.41	0.066
Ownership and Occupancy									
Nongovernment Owned	191	13.8	11.0	3.3	7.6	16.9	14.1	1.03	0.074
Owner Occupied	193	14.1	11.4	3.3	7.6	16.2	14.0	1.03	0.073
Nonowner Occupied	197	13.7	9.9	3.9	8.7	19.4	15.3	1.06	0.078
Unoccupied	Q	3.2	N	0.2	0.3	3.0	Q	0.27	0.085
Government Owned	332	13.7	11.7	4.8	8.4	16.7	22.8	0.94	0.069
Federal	669	21.0	12.5	8.3	18.1	42.8	40.9	1.28	0.061
State	568	13.9	13.2	6.4	12.9	17.9	38.5	0.94	0.068
Local	228	11.8	10.8	4.3	8.0	13.4	16.5	0.85	0.072
Vacancy Status									
Completely Vacant	Q	Q	N	0.2	0.9	4.7	Q	Q	Q
Mostly Vacant	16	1.7	Q	0.3	0.8	2.8	1.5	0.16	0.094
Partially Vacant	298	12.6	9.3	1.9	5.3	13.5	21.6	0.91	0.072
Not At All Vacant	197	14.4	11.7	3.9	8.4	18.3	14.4	1.06	0.073
Number of Establishments									
One	172	13.8	12.2	3.5	7.8	17.3	12.6	1.01	0.073
2 to 5	185	12.0	10.1	3.7	8.2	13.7	13.7	0.89	0.074
6 to 10	524	16.6	9.0	5.3	13.6	24.6	39.6	1.26	0.076
11 to 20	1,124	16.5	9.0	4.0	13.9	21.0	80.2	1.18	0.071
More than 20	2,746	15.4	9.0	3.2	10.5	18.9	200.1	1.12	0.073
Currently Unoccupied	Q	3.2	N	0.2	0.3	4.7	Q	0.26	0.083
Energy Sources (more than one may apply)									
Electricity	207	13.8	11.1	3.5	7.8	16.9	15.1	1.01	0.073
Natural Gas	241	14.1	11.4	3.8	8.2	16.6	17.4	1.02	0.072
Fuel Oil	522	17.0	11.6	2.7	5.7	12.6	35.0	1.14	0.067
District Heat	895	17.8	12.1	6.6	10.3	16.8	58.3	1.16	0.065
District Chilled Water	1,118	20.2	12.0	6.6	8.3	16.4	65.0	1.17	0.058
Propane	170	12.2	12.1	2.3	7.1	17.4	13.9	1.00	0.082
Other	217	14.3	9.7	4.2	8.0	24.5	16.5	1.08	0.076

Table C10. Electricity Consumption and Expenditure Intensities, 1999

	Electricity Consumption						Electricity Expenditures		
				Distribution of Building-Level Intensities (kWh/square foot)					
	per Building (thousand kWh)	per Square Foot (kWh)	per Worker (thousand kWh)	25th Percentile	Median	75th Percentile	per Building (thousand dollars)	per Square Foot (dollars)	per kWh (dollars)
Space-Heating Energy Source									
Electricity	265	15.4	11.5	4.9	9.7	19.9	18.8	1.09	0.071
Electricity Main	268	17.1	11.9	6.2	13.6	25.2	19.2	1.23	0.072
Electricity Secondary	261	13.4	11.0	3.4	6.8	12.6	18.2	0.93	0.070
Other Excluding Electricity	174	12.7	10.6	3.1	6.5	14.2	13.1	0.95	0.075
Buildings without Heating	101	9.4	10.6	0.8	3.6	13.8	8.4	0.79	0.084
Primary Space-Heating Energy Source									
Electricity	268	17.1	11.9	6.2	13.6	25.2	19.2	1.23	0.072
Natural Gas	194	12.9	10.8	3.6	7.1	14.2	14.1	0.94	0.073
Fuel Oil	98	8.0	7.0	2.0	4.8	9.6	9.7	0.79	0.099
District Heat	1,173	17.8	12.9	6.1	9.5	16.3	75.2	1.14	0.064
Propane	75	10.0	11.0	1.5	5.7	16.7	7.0	0.93	0.093
Other	Q	Q	Q	0.8	1.6	4.8	Q	Q	Q
Cooling Energy Source									
Electricity	239	14.9	11.3	4.3	9.3	19.0	17.5	1.09	0.073
Other Excluding Electricity	483	18.0	11.5	8.9	14.1	35.5	32.6	1.22	0.068
Buildings without Cooling	36	4.1	6.7	0.8	2.5	5.0	3.1	0.36	0.087
Water-Heating Energy Source									
Electricity	245	15.6	11.3	5.0	11.1	22.4	17.8	1.14	0.073
Other Excluding Electricity	269	14.3	11.4	3.8	9.3	20.1	19.7	1.04	0.073
Buildings without Water Heating	64	7.8	8.9	1.4	3.9	8.3	4.8	0.58	0.075
Cooking Energy Source									
Electricity	624	19.9	14.9	8.5	19.9	57.3	41.7	1.33	0.067
Other Excluding Electricity	400	15.3	12.7	5.3	13.8	26.8	30.0	1.15	0.075
Buildings without Cooking	132	11.4	9.3	3.0	6.5	14.1	10.0	0.87	0.076
Energy End Uses (more than one may apply)									
Buildings with Space Heating	217	14.1	11.1	3.7	8.2	17.2	15.8	1.03	0.073
Buildings with Cooling	247	15.0	11.4	4.4	9.6	19.5	17.9	1.09	0.073
Buildings with Water Heating	257	14.9	11.4	4.5	9.9	21.0	18.8	1.08	0.073
Buildings with Cooking	514	17.9	13.9	7.2	15.8	39.2	36.0	1.25	0.070
Buildings with Manufacturing	288	13.9	10.0	3.2	7.2	13.4	20.2	0.98	0.070
Buildings with Electricity Generation	1,429	20.6	13.0	7.3	12.6	29.3	90.4	1.31	0.063
Percent of Floorspace Heated									
Not Heated	101	9.4	10.6	0.8	3.6	13.8	8.4	0.79	0.084
1 to 50	98	7.4	10.7	1.9	4.1	8.5	8.0	0.60	0.081
51 to 99	261	15.2	12.5	3.5	8.8	23.8	18.2	1.06	0.070
100	231	15.0	10.9	4.3	8.9	18.4	16.8	1.09	0.073
Percent of Floorspace Cooled									
Not Cooled	36	4.1	6.7	0.8	2.5	5.0	3.1	0.36	0.087
1 to 50	126	7.6	9.0	2.4	5.3	10.0	10.2	0.62	0.081
51 to 99	391	17.3	12.3	5.0	12.5	25.2	26.8	1.19	0.069
100	254	18.5	11.6	5.9	12.8	24.1	18.6	1.35	0.073
Percent Lit When Open									
Zero	Q	Q	Q	0.8	3.5	8.4	Q	Q	Q
1 to 50	78	7.1	13.3	1.9	4.0	10.8	6.5	0.59	0.083
51 to 99	240	14.3	10.3	4.2	8.7	17.7	17.6	1.04	0.073
100	259	15.9	11.3	4.8	9.4	20.9	18.6	1.14	0.072
Building Never Open/ Electricity Not Used	20	2.8	Q	0.2	0.6	2.4	1.6	0.22	0.079

Table C10. Electricity Consumption and Expenditure Intensities, 1999

	Electricity Consumption						Electricity Expenditures		
				Distribution of Building-Level Intensities (kWh/square foot)					
	per Building (thousand kWh)	per Square Foot (kWh)	per Worker (thousand kWh)	25th Percentile	Median	75th Percentile	per Building (thousand dollars)	per Square Foot (dollars)	per kWh (dollars)
Percent Lit When Closed									
Zero	79	8.3	7.9	2.0	4.9	10.4	6.5	0.68	0.082
1 to 50	254	13.8	10.2	5.1	10.9	22.1	18.8	1.03	0.074
51 to 100	374	24.9	17.3	10.6	22.5	44.0	26.9	1.79	0.072
Building Never Closed/ Electricity Not Used	651	21.4	16.9	6.2	13.7	33.6	42.9	1.41	0.066
Heating Equipment (more than one may apply)									
Heat Pumps	307	16.9	12.0	7.3	13.7	24.7	20.8	1.15	0.068
Furnaces	95	9.6	8.8	2.7	5.6	12.8	7.3	0.74	0.077
Individual Space Heaters	243	12.4	11.2	2.6	5.7	12.9	17.0	0.87	0.070
District Heat	1,034	17.9	12.2	6.4	9.3	17.5	67.0	1.16	0.065
Boilers	461	13.7	11.0	3.5	7.2	12.6	32.5	0.97	0.070
Packaged Heating Units	320	16.7	13.4	5.7	11.7	24.1	23.1	1.21	0.072
Other	364	16.5	9.6	3.2	7.2	17.4	23.8	1.08	0.066
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	149	12.1	9.9	3.7	7.2	15.4	10.5	0.85	0.071
Heat Pumps	315	16.7	11.3	7.8	13.6	24.7	21.5	1.14	0.068
Individual Air Conditioners	200	11.2	9.6	3.5	6.9	13.0	14.8	0.83	0.074
District Chilled Water	1,118	20.2	12.0	6.6	8.3	16.4	65.0	1.17	0.058
Central Chillers	2,041	20.5	12.2	8.6	16.0	29.8	131.6	1.32	0.064
Packaged Air Conditioning Units	300	16.0	12.1	5.3	11.2	23.6	22.1	1.18	0.074
Swamp Coolers	220	13.5	12.3	2.6	7.7	22.5	16.5	1.01	0.075
Other	487	18.2	13.0	3.9	8.1	16.7	32.1	1.20	0.066
Main Equipment Replaced Since 1995 (more than one may apply)									
Heating	185	13.8	10.8	4.2	8.5	18.6	13.6	1.02	0.074
Cooling	233	14.6	10.9	4.7	9.9	21.2	16.9	1.06	0.073
Lighting Equipment Types (more than one may apply)									
Incandescent	248	14.2	10.9	3.5	8.4	16.9	17.9	1.03	0.072
Standard Fluorescent	228	14.3	11.1	3.9	8.4	18.0	16.6	1.04	0.073
Compact Fluorescent	578	17.0	11.7	5.7	11.4	20.7	40.0	1.17	0.069
High Intensity Discharge	698	15.6	13.8	3.9	8.6	18.8	46.0	1.03	0.066
Halogen	511	16.3	11.4	5.0	10.8	21.6	36.1	1.15	0.071
Other	303	17.4	12.5	7.1	11.2	32.2	21.5	1.23	0.071
Water Heating Equipment									
Centralized System	203	14.1	11.1	4.2	9.7	20.9	15.4	1.07	0.076
Distributed System	276	14.3	10.9	4.6	9.7	18.4	20.1	1.04	0.073
Combination of Centralized and Distributed System	878	18.2	12.6	6.3	16.1	34.9	57.3	1.19	0.065
Commercial Refrigeration Equipment (more than one may apply)									
Any Equipment	511	18.9	14.5	10.0	21.2	46.3	36.1	1.34	0.071
Walk-In Units	617	20.6	15.6	13.8	32.1	61.3	43.3	1.45	0.070
Cases or Cabinets	517	19.3	14.4	9.7	21.2	47.6	36.7	1.37	0.071
None	123	10.6	8.8	2.7	5.9	12.9	9.3	0.80	0.076

Table C10. Electricity Consumption and Expenditure Intensities, 1999

	Electricity Consumption						Electricity Expenditures		
				Distribution of Building-Level Intensities (kWh/square foot)					
	per Building (thousand kWh)	per Square Foot (kWh)	per Worker (thousand kWh)	25th Percentile	Median	75th Percentile	per Building (thousand dollars)	per Square Foot (dollars)	per kWh (dollars)
Personal Computers									
None	42	7.1	12.1	1.3	4.1	11.6	3.5	0.60	0.084
1 to 4	100	11.8	12.8	3.8	7.0	15.5	8.0	0.94	0.080
5 to 9	166	13.8	12.0	5.6	12.0	23.6	12.8	1.06	0.077
10 to 19	239	12.8	10.5	6.9	12.6	20.9	19.2	1.03	0.080
20 to 49	453	13.8	11.6	6.6	11.9	22.1	33.0	1.01	0.073
50 to 99	742	13.3	10.7	6.2	11.0	16.1	53.3	0.95	0.072
100 to 249	1,694	17.7	12.6	8.7	15.5	25.0	108.0	1.13	0.064
250 or More	5,321	21.1	9.1	12.2	19.8	29.2	347.7	1.38	0.065
Photocopiers									
None	85	10.9	11.6	2.3	5.9	15.6	6.9	0.88	0.081
One	152	13.1	13.0	4.8	8.9	17.9	11.5	0.99	0.076
2 to 4	370	12.8	11.9	5.0	9.9	16.7	26.9	0.93	0.073
5 to 9	813	15.5	10.1	7.6	10.6	17.6	54.9	1.05	0.068
10 or More	3,169	20.2	9.5	11.6	18.5	24.6	210.4	1.34	0.066
Other Electronic Equipment (more than one may apply)									
Laser Printers	368	15.4	10.7	5.0	10.0	18.4	26.2	1.10	0.071
FAX Machines	294	15.1	11.1	4.8	9.9	19.2	21.3	1.09	0.072
Medical Diagnostic Equipment	721	24.8	11.0	5.4	9.7	15.0	44.1	1.51	0.061
Annual Consumption (kilowatthours)									
10,000 or Less	5	1.1	2.1	0.6	1.4	3.1	0.6	0.13	0.115
10,001 to 50,000	26	4.4	4.3	3.4	5.7	9.7	2.4	0.42	0.095
50,001 to 100,000	73	7.8	7.3	6.5	10.6	18.8	6.6	0.70	0.091
100,001 to 500,000	224	13.9	10.9	10.3	19.9	42.8	18.2	1.13	0.081
500,001 to 1,000,000	705	14.3	12.3	11.8	18.6	31.7	53.4	1.08	0.076
1,000,001 to 5,000,000	2,057	18.8	13.9	14.9	22.4	33.2	137.8	1.26	0.067
Over 5,000,000	11,802	24.8	14.6	17.6	28.2	43.0	730.3	1.53	0.062
Provider of Purchased Electricity (more than one may apply)									
Local Utility	200	13.6	10.9	3.4	7.8	16.7	14.6	0.99	0.073
Some Other Provider	363	16.4	13.4	2.4	7.8	15.0	28.7	1.30	0.079

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.

Table C11. Electricity Consumption and Conditional Energy Intensity by Census Region, 1999

	Total Electricity Consumption (billion kWh)				Total Floorspace of Buildings Using Electricity (million square feet)				Electricity Energy Intensity (kWh/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings	159	194	366	189	11,964	16,389	23,076	14,287	13.3	11.8	15.8	13.2
Building Floorspace (Square Feet)												
1,001 to 5,000	Q	21	55	24	820	1,664	2,411	1,385	25.7	12.5	23.0	17.6
5,001 to 10,000	10	17	33	22	1,246	1,951	2,862	1,661	8.3	8.9	11.6	13.2
10,001 to 25,000	18	22	50	19	1,732	2,830	4,187	2,094	10.2	7.6	11.9	9.2
25,001 to 50,000	15	17	48	29	1,407	1,754	3,345	2,668	10.5	9.5	14.5	10.8
50,001 to 100,000	20	31	55	38	1,748	2,403	3,450	2,434	11.3	13.1	16.1	15.6
100,001 to 200,000	19	35	54	24	1,461	2,279	2,858	1,648	13.1	15.2	18.9	14.7
200,001 to 500,000	18	25	40	17	1,348	1,988	2,238	1,216	13.4	12.5	18.0	13.7
Over 500,000	38	27	29	16	2,202	1,519	1,726	1,180	17.4	17.7	16.6	13.2
Principal Building Activity												
Education	14	17	25	19	1,714	2,250	2,348	2,338	8.2	7.6	10.7	8.2
Food Sales	Q	Q	22	Q	Q	Q	391	Q	Q	Q	55.4	Q
Food Service	Q	14	27	Q	Q	558	676	Q	Q	25.3	39.7	Q
Health Care	9	15	31	13	448	750	1,085	635	20.2	19.6	28.5	21.2
Inpatient	8	11	22	9	377	512	630	346	22.5	22.0	34.8	25.6
Outpatient	Q	Q	9	5	Q	Q	454	289	Q	Q	19.7	15.9
Lodging	6	10	25	16	484	940	1,595	1,501	12.3	11.1	15.5	10.9
Mercantile	27	28	65	33	1,885	2,591	4,080	1,842	14.2	11.0	15.8	17.9
Retail (Other Than Mall)	14	16	25	10	974	1,600	1,566	627	14.0	9.8	16.0	16.5
Enclosed and Strip Malls	13	13	40	23	912	991	2,513	1,215	14.3	13.0	15.8	18.6
Office	40	50	88	47	2,389	2,820	4,162	2,672	16.7	17.8	21.1	17.6
Public Assembly	14	13	21	8	882	1,132	1,471	856	15.5	11.5	14.3	9.7
Public Order and Safety	Q	2	4	Q	Q	216	286	Q	Q	10.0	14.9	Q
Religious Worship	1	2	6	3	440	923	1,146	896	2.2	2.6	5.3	3.2
Service	Q	10	19	5	Q	818	1,387	443	Q	11.7	13.8	11.5
Warehouse and Storage	13	17	25	10	1,666	2,587	3,774	1,852	7.7	6.5	6.6	5.4
Other	Q	Q	8	Q	Q	Q	301	Q	Q	Q	25.6	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed												
1919 or Before	7	Q	3	4	1,216	1,477	536	485	6.1	8.2	6.2	7.9
1920 to 1945	12	19	16	7	1,552	2,371	1,665	693	7.9	8.1	9.6	9.4
1946 to 1959	26	18	29	17	2,030	2,152	2,770	1,842	12.9	8.3	10.5	9.5
1960 to 1969	26	30	48	33	2,050	2,481	3,301	2,854	12.7	12.1	14.6	11.5
1970 to 1979	28	30	77	46	1,823	2,320	4,268	3,338	15.6	13.0	18.0	13.9
1980 to 1989	31	46	105	40	1,917	2,800	6,098	2,671	16.2	16.6	17.1	14.8
1990 to 1999	28	38	87	42	1,376	2,788	4,439	2,404	20.2	13.7	19.7	17.7
Climate Zone: 45-Year Average												
Under 2,000 CDD and --												
More than 7,000 HDD	11	47	N	6	1,150	4,110	N	491	9.5	11.5	N	13.0
5,500-7,000 HDD	71	101	N	25	5,698	8,716	N	2,293	12.5	11.5	N	10.9
4,000-5,499 HDD	77	46	78	30	5,117	3,563	4,694	2,418	15.0	13.0	16.6	12.5
Fewer than 4,000 HDD	N	N	142	100	N	N	8,687	7,235	N	N	16.4	13.8
2,000 CDD or More and --												
Fewer than 4,000 HDD	N	N	145	27	N	N	9,696	1,850	N	N	15.0	14.9
Workers (main shift)												
Fewer than 5	10	21	47	20	1,510	3,661	5,171	2,409	6.5	5.6	9.1	8.4
5 to 9	12	15	23	13	1,372	1,689	1,730	1,482	8.6	9.0	13.6	8.8
10 to 19	21	17	45	20	1,472	1,930	2,935	1,690	14.1	8.8	15.2	11.9
20 to 49	21	27	69	32	1,574	2,575	4,174	2,492	13.6	10.3	16.5	12.7
50 to 99	22	24	46	31	1,814	1,876	2,876	2,332	11.9	12.9	16.0	13.1
100 to 249	23	37	61	28	1,702	2,228	2,856	1,570	13.3	16.8	21.4	17.6
250 or More	51	53	74	46	2,519	2,430	3,335	2,312	20.1	21.8	22.3	20.0

Table C11. Electricity Consumption and Conditional Energy Intensity by Census Region, 1999

	Total Electricity Consumption (billion kWh)				Total Floorspace of Buildings Using Electricity (million square feet)				Electricity Energy Intensity (kWh/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Weekly Operating Hours												
39 or Fewer	1	5	9	5	661	1,512	2,186	955	2.2	3.0	4.0	5.3
40 to 48	14	22	50	27	1,864	2,970	5,265	2,971	7.7	7.4	9.6	9.0
49 to 60	31	31	72	37	2,792	3,566	4,617	3,211	11.0	8.7	15.5	11.5
61 to 84	29	42	63	38	2,482	3,084	4,198	2,616	11.6	13.8	15.0	14.5
85 to 167	28	41	72	36	1,674	2,531	2,936	1,789	17.0	16.3	24.5	20.2
Open Continuously	55	53	100	46	2,491	2,725	3,876	2,743	22.1	19.3	25.7	16.9
Ownership and Occupancy												
Nongovernment Owned	126	160	301	155	9,398	13,529	19,340	11,372	13.4	11.9	15.6	13.6
Owner Occupied	95	125	217	93	7,124	9,931	13,151	7,300	13.4	12.5	16.5	12.7
Nonowner Occupied	30	35	83	62	2,235	3,398	5,818	3,990	13.6	10.4	14.3	15.5
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	33	34	64	34	2,566	2,860	3,736	2,914	12.9	11.8	17.2	11.7
Federal	Q	Q	14	9	Q	318	549	534	Q	20.9	25.6	16.8
State	10	12	16	10	683	956	915	828	14.0	12.6	17.1	11.8
Local	17	15	34	15	1,572	1,586	2,273	1,552	11.0	9.4	15.2	10.0
Vacancy Status												
Completely Vacant	N	Q	Q	Q	N	Q	Q	Q	N	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	38	42	73	37	2,662	3,892	5,428	3,111	14.1	10.8	13.4	12.0
Not At All Vacant	121	151	292	151	9,086	12,149	17,274	11,002	13.3	12.5	16.9	13.7
Number of Establishments												
One	100	130	239	123	7,520	11,211	14,584	9,524	13.3	11.6	16.4	12.9
2 to 5	21	35	45	25	2,047	2,900	3,420	2,075	10.1	12.1	13.0	12.2
6 to 10	6	6	27	20	494	571	1,440	1,063	12.9	11.3	18.7	18.4
11 to 20	11	9	24	10	Q	579	1,239	738	16.1	14.9	19.3	13.5
More than 20	21	13	29	10	1,159	864	2,000	786	18.0	15.5	14.7	13.3
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Energy Sources (more than one may apply)												
Electricity	159	194	366	189	11,964	16,389	23,076	14,287	13.3	11.8	15.8	13.2
Natural Gas	103	159	241	140	7,305	13,506	14,199	10,486	14.1	11.7	17.0	13.3
Fuel Oil	63	48	83	32	5,406	2,423	3,749	1,699	11.7	19.8	22.2	18.7
District Heat	36	26	26	17	1,898	1,521	1,265	1,207	18.8	17.4	20.2	14.4
District Chilled Water	9	16	18	12	326	746	939	739	29.0	21.9	18.9	16.1
Propane	22	15	31	9	1,706	1,405	2,389	790	12.9	10.6	12.9	11.5
Other	6	8	12	8	580	606	579	557	10.0	12.4	20.5	14.2
Space-Heating Energy Source												
Electricity	74	94	238	93	4,625	6,429	13,862	7,375	16.0	14.7	17.1	12.6
Electricity Main	30	45	165	62	1,645	2,355	9,259	4,368	18.5	19.1	17.8	14.1
Electricity Secondary	44	49	72	31	2,980	4,074	4,603	3,007	14.6	12.1	15.7	10.3
Other Excluding Electricity	84	98	104	84	7,034	9,486	6,736	6,017	11.9	10.4	15.4	13.9
Buildings without Heating	Q	Q	24	13	Q	Q	2,478	894	Q	Q	9.6	14.2
Primary Space-Heating Energy Source												
Electricity	30	45	165	62	1,645	2,355	9,259	4,368	18.5	19.1	17.8	14.1
Natural Gas	64	120	142	96	4,913	11,348	8,815	7,624	13.1	10.6	16.1	12.5
Fuel Oil	20	Q	8	Q	2,795	Q	718	Q	7.2	Q	10.5	Q
District Heat	32	24	19	15	1,709	1,411	904	1,053	18.8	16.9	20.9	14.5
Propane	Q	2	7	Q	Q	626	819	Q	Q	3.7	8.0	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C11. Electricity Consumption and Conditional Energy Intensity by Census Region, 1999

	Total Electricity Consumption (billion kWh)				Total Floorspace of Buildings Using Electricity (million square feet)				Electricity Energy Intensity (kWh/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Cooling Energy Source												
Electricity	145	170	350	160	9,766	13,474	20,908	11,396	14.9	12.6	16.7	14.1
Other Excluding Electricity	8	17	11	16	545	897	640	846	15.5	19.1	17.1	19.2
Buildings without Cooling	5	7	5	13	1,653	2,018	1,527	2,044	3.1	3.6	3.1	6.2
Water-Heating Energy Source												
Electricity	68	66	181	63	4,485	4,633	10,480	4,574	15.2	14.2	17.3	13.7
Other Excluding Electricity	83	109	149	114	6,092	9,069	8,534	8,248	13.7	12.0	17.5	13.8
Buildings without Water Heating	7	20	35	13	1,387	2,687	4,062	1,465	5.3	7.4	8.5	8.6
Cooking Energy Source												
Electricity	48	56	126	44	2,680	3,335	5,166	2,551	17.9	16.7	24.3	17.1
Other Excluding Electricity	39	36	62	31	2,565	2,706	3,403	2,274	15.2	13.2	18.3	13.5
Buildings without Cooking	72	103	178	115	6,719	10,347	14,507	9,462	10.7	9.9	12.2	12.1
Energy End Uses (more than one may apply)												
Buildings with Space Heating	158	193	342	176	11,659	15,916	20,598	13,392	13.6	12.1	16.6	13.2
Buildings with Cooling	154	187	361	176	10,311	14,371	21,549	12,243	14.9	13.0	16.7	14.4
Buildings with Water Heating	152	174	331	176	10,577	13,702	19,014	12,822	14.3	12.7	17.4	13.8
Buildings with Cooking	87	91	188	74	5,245	6,042	8,569	4,825	16.6	15.1	21.9	15.4
Buildings with Manufacturing	8	15	13	8	568	818	1,035	706	14.2	18.0	12.6	11.1
Buildings with Electricity Generation	51	57	99	37	3,108	2,782	4,062	1,930	16.6	20.5	24.5	19.3
Percent of Floorspace Heated												
Not Heated	Q	Q	24	13	Q	Q	2,478	894	Q	Q	9.6	14.2
1 to 50	7	9	20	21	1,053	1,571	2,538	2,403	6.4	5.7	7.7	8.6
51 to 99	24	27	77	35	1,679	2,323	4,335	2,399	14.6	11.8	17.7	14.4
100	127	156	245	121	8,927	12,022	13,725	8,590	14.2	13.0	17.9	14.1
Percent of Floorspace Cooled												
Not Cooled	5	7	5	13	1,653	2,018	1,527	2,044	3.1	3.6	3.1	6.2
1 to 50	29	35	40	24	3,914	5,068	4,618	3,246	7.4	6.9	8.6	7.4
51 to 99	55	71	113	54	3,196	4,741	5,801	3,229	17.3	15.0	19.4	16.9
100	70	81	209	98	3,202	4,562	11,130	5,768	21.7	17.7	18.7	17.0
Percent Lit When Open												
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	9	15	27	15	1,620	2,486	3,013	2,068	5.4	6.0	8.9	7.2
51 to 99	55	77	110	53	4,081	5,814	6,392	4,378	13.4	13.2	17.2	12.2
100	96	101	226	120	6,077	7,668	12,817	7,671	15.7	13.2	17.6	15.7
Building Never Open/ Electricity Not Used	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Percent Lit When Closed												
Zero	21	35	68	48	3,390	5,264	7,296	4,821	6.2	6.6	9.3	10.1
1 to 50	75	101	170	82	5,766	8,047	10,912	6,226	13.1	12.6	15.5	13.2
51 to 100	Q	5	29	12	Q	353	992	497	Q	15.4	28.8	24.1
Building Never Closed/ Electricity Not Used	55	53	100	46	2,491	2,725	3,876	2,743	22.1	19.3	25.7	16.9
Heating Equipment (more than one may apply)												
Heat Pumps	20	19	83	29	1,193	1,015	4,580	2,135	17.0	18.7	18.2	13.4
Furnaces	22	49	47	21	2,257	5,767	3,949	2,476	9.8	8.5	11.8	8.7
Individual Space Heaters	46	56	76	37	3,555	4,667	5,471	3,628	13.0	12.0	13.8	10.3
District Heat	35	25	22	16	1,876	1,514	1,022	1,121	18.8	16.8	21.7	14.6
Boilers	60	71	84	53	5,461	5,961	4,209	3,883	10.9	11.8	19.9	13.7
Packaged Heating Units	77	82	182	89	4,033	5,081	10,455	6,175	19.1	16.2	17.4	14.4
Other	11	16	27	12	769	1,113	1,391	800	14.6	14.8	19.5	15.3

Table C11. Electricity Consumption and Conditional Energy Intensity by Census Region, 1999

	Total Electricity Consumption (billion kWh)				Total Floorspace of Buildings Using Electricity (million square feet)				Electricity Energy Intensity (kWh/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Cooling Equipment (more than one may apply)												
Residential-Type Central Air Conditioners	11	28	49	12	950	2,951	3,272	1,156	11.7	9.5	15.1	10.5
Heat Pumps	17	20	83	32	1,215	1,063	4,604	2,265	14.1	18.9	18.1	14.2
Individual Air Conditioners	43	35	60	21	3,897	3,724	4,526	2,130	11.0	9.5	13.3	9.8
District Chilled Water	9	16	18	12	326	746	939	739	29.0	21.9	18.9	16.1
Central Chillers	50	61	103	51	2,782	3,149	4,328	2,651	17.9	19.3	23.9	19.1
Packaged Air Conditioning Units	113	118	237	117	6,641	8,198	13,915	7,773	17.0	14.3	17.0	15.0
Swamp Coolers	Q	Q	6	21	Q	Q	339	1,624	Q	Q	16.3	12.9
Other	Q	Q	7	Q	Q	Q	343	Q	Q	Q	21.2	Q
Main Equipment Replaced Since 1995 (more than one may apply)												
Heating	24	39	82	38	1,829	3,244	5,080	3,068	13.0	12.0	16.1	12.3
Cooling	40	50	118	45	3,080	3,808	7,088	3,414	13.0	13.2	16.6	13.2
Lighting Equipment Types (more than one may apply)												
Incandescent	95	111	223	113	7,047	9,903	12,970	8,236	13.5	11.2	17.2	13.8
Standard Fluorescent	150	185	346	180	11,348	14,840	20,850	13,305	13.2	12.5	16.6	13.6
Compact Fluorescent	64	89	126	72	3,939	5,518	6,427	4,781	16.2	16.0	19.7	15.0
High Intensity Discharge	58	80	119	43	4,382	5,513	5,874	3,454	13.3	14.5	20.3	12.3
Halogen	62	69	103	59	3,625	4,405	5,847	4,049	17.0	15.6	17.7	14.6
Other	Q	Q	11	Q	Q	Q	441	Q	Q	Q	25.1	Q
Water Heating Equipment												
Centralized System	98	98	192	113	6,941	9,037	11,500	8,102	14.1	10.9	16.7	13.9
Distributed System	23	26	69	38	1,823	2,328	4,120	2,628	12.4	11.3	16.8	14.6
Combination of Centralized and Distributed System	31	50	69	26	1,813	2,336	3,395	2,093	17.1	21.3	20.4	12.2
Commercial Refrigeration Equipment (more than one may apply)												
Any Equipment	98	104	192	90	5,536	6,252	8,734	5,130	17.8	16.7	22.0	17.6
Walk-In Units	83	83	163	77	4,335	4,580	6,809	3,988	19.1	18.1	24.0	19.4
Cases or Cabinets	86	90	169	79	4,723	5,429	7,512	4,337	18.2	16.6	22.5	18.2
None	61	90	173	99	6,428	10,137	14,342	9,156	9.5	8.9	12.1	10.8
Personal Computers												
None	5	13	26	13	1,128	2,281	3,313	1,239	4.3	5.7	7.9	10.3
1 to 4	28	36	68	31	2,293	3,758	4,755	3,045	12.1	9.6	14.4	10.1
5 to 9	10	14	47	19	811	1,308	2,870	1,539	12.8	10.5	16.4	12.2
10 to 19	19	14	42	22	1,749	1,570	2,707	1,488	10.7	8.8	15.5	14.6
20 to 49	21	22	45	23	1,395	1,935	2,588	2,168	15.0	11.5	17.6	10.7
50 to 99	10	19	30	19	903	1,638	1,893	1,432	11.4	11.7	15.8	13.0
100 to 249	23	34	41	23	1,599	1,829	2,174	1,216	14.6	18.4	18.7	18.8
250 or More	43	42	66	40	2,085	2,069	2,776	2,158	20.5	20.4	23.9	18.7
Photocopiers												
None	27	43	96	52	3,300	4,813	7,635	4,261	8.3	8.8	12.6	12.1
One	24	31	79	35	1,633	3,164	5,040	3,091	14.7	9.8	15.7	11.2
2 to 4	35	43	82	39	2,976	4,227	5,109	3,308	11.7	10.3	16.1	11.8
5 to 9	13	27	26	18	986	1,577	1,586	1,234	13.2	17.1	16.2	14.3
10 or More	60	50	82	46	3,069	2,607	3,705	2,393	19.5	19.2	22.2	19.3

Table C11. Electricity Consumption and Conditional Energy Intensity by Census Region, 1999

	Total Electricity Consumption (billion kWh)				Total Floorspace of Buildings Using Electricity (million square feet)				Electricity Energy Intensity (kWh/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Other Electronic Equipment (more than one may apply)												
Laser Printers	133	154	281	149	9,112	11,161	15,628	10,666	14.6	13.8	18.0	14.0
FAX Machines	151	177	327	170	10,496	13,369	18,804	12,095	14.4	13.3	17.4	14.1
Medical Diagnostic Equipment	8	13	28	13	365	586	953	588	21.1	22.8	29.5	21.4
Annual Consumption (kilowatthours)												
10,000 or Less	1	1	1	1	519	974	1,260	463	1.2	1.1	1.0	1.6
10,001 to 50,000	5	11	14	10	1,425	2,838	2,908	2,068	3.5	3.8	5.0	5.1
50,001 to 100,000	8	12	23	12	1,243	1,659	2,480	1,619	6.4	7.2	9.1	7.3
100,001 to 500,000	39	41	104	49	2,688	3,831	6,394	3,897	14.5	10.7	16.3	12.7
500,001 to 1,000,000	16	21	36	26	1,272	1,831	2,158	1,705	12.9	11.5	16.8	15.1
1,000,001 to 5,000,000	36	53	112	56	2,395	3,211	5,091	2,964	15.2	16.5	21.9	19.0
Over 5,000,000	54	55	75	34	2,421	2,045	2,785	1,571	22.2	27.0	27.1	21.9
Provider of Purchased Electricity (more than one may apply)												
Local Utility	136	184	352	172	10,535	15,611	22,263	13,634	12.9	11.8	15.8	12.6
Some Other Provider	24	6	5	Q	1,388	445	597	672	17.0	13.9	7.8	24.6

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.

Table C12. Electricity Expenditures by Census Region, 1999

	Total Electricity Expenditures (million dollars)				Electricity Expenditures (dollars) per kWh				Electricity Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings	15,133	12,933	23,275	15,083	0.10	0.07	0.06	0.08	1.26	0.79	1.01	1.06
Building Floorspace (Square Feet)												
1,001 to 5,000	Q	1,654	4,021	2,222	0.11	0.08	0.07	0.09	2.88	0.99	1.67	1.60
5,001 to 10,000	1,220	1,408	2,478	2,039	0.12	0.08	0.07	0.09	0.98	0.72	0.87	1.23
10,001 to 25,000	1,863	1,626	3,396	1,778	0.11	0.08	0.07	0.09	1.08	0.57	0.81	0.85
25,001 to 50,000	1,526	1,137	3,106	2,419	0.10	0.07	0.06	0.08	1.08	0.65	0.93	0.91
50,001 to 100,000	1,897	2,051	3,348	2,728	0.10	0.07	0.06	0.07	1.09	0.85	0.97	1.12
100,001 to 200,000	1,744	1,934	3,215	1,662	0.09	0.06	0.06	0.07	1.19	0.85	1.13	1.01
200,001 to 500,000	1,404	1,592	2,212	1,223	0.08	0.06	0.05	0.07	1.04	0.80	0.99	1.01
Over 500,000	3,116	1,530	1,498	1,011	0.08	0.06	0.05	0.06	1.41	1.01	0.87	0.86
Principal Building Activity												
Education	1,414	1,209	1,678	1,520	0.10	0.07	0.07	0.08	0.82	0.54	0.71	0.65
Food Sales	Q	Q	1,369	Q	Q	Q	0.06	Q	Q	Q	3.50	Q
Food Service	Q	1,102	1,768	Q	Q	0.08	0.07	Q	Q	1.98	2.62	Q
Health Care	716	870	1,735	946	0.08	0.06	0.06	0.07	1.60	1.16	1.60	1.49
Inpatient	648	612	1,111	577	0.08	0.05	0.05	0.07	1.72	1.20	1.76	1.67
Outpatient	Q	Q	624	369	Q	Q	0.07	0.08	Q	Q	1.37	1.28
Lodging	539	742	1,579	1,406	0.09	0.07	0.06	0.09	1.11	0.79	0.99	0.94
Mercantile	2,787	2,002	4,063	2,999	0.10	0.07	0.06	0.09	1.48	0.77	1.00	1.63
Retail (Other Than Mall)	1,519	1,136	1,610	902	0.11	0.07	0.06	0.09	1.56	0.71	1.03	1.44
Enclosed and Strip Malls	1,268	867	2,453	2,097	0.10	0.07	0.06	0.09	1.39	0.87	0.98	1.73
Office	3,681	3,091	5,493	3,418	0.09	0.06	0.06	0.07	1.54	1.10	1.32	1.28
Public Assembly	1,181	935	1,333	534	0.09	0.07	0.06	0.06	1.34	0.83	0.91	0.62
Public Order and Safety	Q	124	252	Q	Q	0.06	0.06	Q	Q	0.57	0.88	Q
Religious Worship	120	222	464	236	0.12	0.09	0.08	0.08	0.27	0.24	0.40	0.26
Service	Q	648	1,351	369	Q	0.07	0.07	0.07	Q	0.79	0.97	0.83
Warehouse and Storage	1,155	1,130	1,641	903	0.09	0.07	0.07	0.09	0.69	0.44	0.43	0.49
Other	Q	Q	458	Q	Q	Q	0.06	Q	Q	Q	1.52	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed												
1919 or Before	801	870	252	247	0.11	0.07	0.08	0.06	0.66	0.59	0.47	0.51
1920 to 1945	1,194	1,422	1,063	495	0.10	0.07	0.07	0.08	0.77	0.60	0.64	0.71
1946 to 1959	2,362	1,225	2,028	1,374	0.09	0.07	0.07	0.08	1.16	0.57	0.73	0.75
1960 to 1969	2,646	1,887	3,087	2,630	0.10	0.06	0.06	0.08	1.29	0.76	0.94	0.92
1970 to 1979	2,575	2,032	4,873	3,980	0.09	0.07	0.06	0.09	1.41	0.88	1.14	1.19
1980 to 1989	3,121	2,988	6,469	3,200	0.10	0.06	0.06	0.08	1.63	1.07	1.06	1.20
1990 to 1999	2,434	2,509	5,504	3,157	0.09	0.07	0.06	0.07	1.77	0.90	1.24	1.31
Climate Zone: 45-Year Average												
Under 2,000 CDD and --												
More than 7,000 HDD	1,279	2,835	N	390	0.12	0.06	N	0.06	1.11	0.69	N	0.80
5,500-7,000 HDD	6,756	7,063	N	1,343	0.09	0.07	N	0.05	1.19	0.81	N	0.59
4,000-5,499 HDD	7,098	3,035	5,294	1,738	0.09	0.07	0.07	0.06	1.39	0.85	1.13	0.72
Fewer than 4,000 HDD	N	N	8,666	9,180	N	N	0.06	0.09	N	N	1.00	1.27
2,000 CDD or More and --												
Fewer than 4,000 HDD	N	N	9,314	2,431	N	N	0.06	0.09	N	N	0.96	1.31
Workers (main shift)												
Fewer than 5	1,087	1,669	3,490	1,799	0.11	0.08	0.07	0.09	0.72	0.46	0.68	0.75
5 to 9	1,392	1,166	1,692	1,211	0.12	0.08	0.07	0.09	1.01	0.69	0.98	0.82
10 to 19	2,131	1,343	2,998	1,967	0.10	0.08	0.07	0.10	1.45	0.70	1.02	1.16
20 to 49	2,275	1,827	4,571	2,395	0.11	0.07	0.07	0.08	1.45	0.71	1.10	0.96
50 to 99	2,112	1,571	2,873	2,566	0.10	0.06	0.06	0.08	1.16	0.84	1.00	1.10
100 to 249	2,122	2,157	3,511	1,893	0.09	0.06	0.06	0.07	1.25	0.97	1.23	1.21
250 or More	4,014	3,199	4,138	3,252	0.08	0.06	0.06	0.07	1.59	1.32	1.24	1.41

Table C12. Electricity Expenditures by Census Region, 1999

	Total Electricity Expenditures (million dollars)				Electricity Expenditures (dollars) per kWh				Electricity Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Weekly Operating Hours												
39 or Fewer	168	399	722	429	0.12	0.09	0.08	0.08	0.25	0.26	0.33	0.45
40 to 48	1,552	1,550	3,550	2,147	0.11	0.07	0.07	0.08	0.83	0.52	0.67	0.72
49 to 60	2,967	2,163	4,728	3,122	0.10	0.07	0.07	0.08	1.06	0.61	1.02	0.97
61 to 84	2,963	2,960	4,120	3,039	0.10	0.07	0.07	0.08	1.19	0.96	0.98	1.16
85 to 167	2,776	2,805	4,560	2,967	0.10	0.07	0.06	0.08	1.66	1.11	1.55	1.66
Open Continuously	4,707	3,058	5,595	3,379	0.09	0.06	0.06	0.07	1.89	1.12	1.44	1.23
Ownership and Occupancy												
Nongovernment Owned	12,285	10,867	19,314	12,619	0.10	0.07	0.06	0.08	1.31	0.80	1.00	1.11
Owner Occupied	9,271	8,196	13,615	7,458	0.10	0.07	0.06	0.08	1.30	0.83	1.04	1.02
Nonowner Occupied	3,010	2,628	5,594	5,126	0.10	0.07	0.07	0.08	1.35	0.77	0.96	1.28
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	2,848	2,066	3,960	2,463	0.09	0.06	0.06	0.07	1.11	0.72	1.06	0.85
Federal	Q	Q	807	468	Q	0.05	0.06	0.05	Q	1.12	1.47	0.88
State	804	696	887	801	0.08	0.06	0.06	0.08	1.18	0.73	0.97	0.97
Local	1,481	1,014	2,266	1,194	0.09	0.07	0.07	0.08	0.94	0.64	1.00	0.77
Vacancy Status												
Completely Vacant	N	Q	Q	Q	N	Q	Q	Q	N	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	3,279	2,880	4,544	3,058	0.09	0.07	0.06	0.08	1.23	0.74	0.84	0.98
Not At All Vacant	11,821	9,979	18,640	11,957	0.10	0.07	0.06	0.08	1.30	0.82	1.08	1.09
Number of Establishments												
One	9,633	8,687	15,227	9,628	0.10	0.07	0.06	0.08	1.28	0.77	1.04	1.01
2 to 5	1,940	2,316	2,980	2,062	0.09	0.07	0.07	0.08	0.95	0.80	0.87	0.99
6 to 10	623	448	1,662	1,759	0.10	0.07	0.06	0.09	1.26	0.78	1.15	1.66
11 to 20	1,041	544	1,474	787	0.09	0.06	0.06	0.08	1.48	0.94	1.19	1.07
More than 20	1,892	881	1,827	803	0.09	0.07	0.06	0.08	1.63	1.02	0.91	1.02
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Energy Sources (more than one may apply)												
Electricity	15,133	12,933	23,275	15,083	0.10	0.07	0.06	0.08	1.26	0.79	1.01	1.06
Natural Gas	9,545	10,785	14,956	11,146	0.09	0.07	0.06	0.08	1.31	0.80	1.05	1.06
Fuel Oil	5,610	2,650	4,796	2,108	0.09	0.06	0.06	0.07	1.04	1.09	1.28	1.24
District Heat	2,980	1,476	1,319	1,066	0.08	0.06	0.05	0.06	1.57	0.97	1.04	0.88
District Chilled Water	653	856	894	821	0.07	0.05	0.05	0.07	2.00	1.15	0.95	1.11
Propane	2,334	1,063	2,004	885	0.11	0.07	0.06	0.10	1.37	0.76	0.84	1.12
Other	522	465	776	750	0.09	0.06	0.07	0.09	0.90	0.77	1.34	1.35
Space-Heating Energy Source												
Electricity	6,678	6,128	15,182	7,343	0.09	0.06	0.06	0.08	1.44	0.95	1.10	1.00
Electricity Main	2,841	2,905	10,772	5,104	0.09	0.06	0.07	0.08	1.73	1.23	1.16	1.17
Electricity Secondary	3,838	3,223	4,410	2,240	0.09	0.07	0.06	0.07	1.29	0.79	0.96	0.74
Other Excluding Electricity	8,329	6,694	6,443	6,366	0.10	0.07	0.06	0.08	1.18	0.71	0.96	1.06
Buildings without Heating	Q	Q	1,650	1,373	Q	Q	0.07	0.11	Q	Q	0.67	1.54
Primary Space-Heating Energy Source												
Electricity	2,841	2,905	10,772	5,104	0.09	0.06	0.07	0.08	1.73	1.23	1.16	1.17
Natural Gas	6,134	8,312	8,769	7,439	0.10	0.07	0.06	0.08	1.25	0.73	0.99	0.98
Fuel Oil	2,178	Q	613	Q	0.11	Q	0.08	Q	0.78	Q	0.85	Q
District Heat	2,655	1,329	940	860	0.08	0.06	0.05	0.06	1.55	0.94	1.04	0.82
Propane	Q	183	465	Q	Q	0.08	0.07	Q	Q	0.29	0.57	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C12. Electricity Expenditures by Census Region, 1999

	Total Electricity Expenditures (million dollars)				Electricity Expenditures (dollars) per kWh				Electricity Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Cooling Energy Source												
Electricity	13,789	11,372	22,316	12,804	0.09	0.07	0.06	0.08	1.41	0.84	1.07	1.12
Other Excluding Electricity	782	1,021	570	1,191	0.09	0.06	0.05	0.07	1.43	1.14	0.89	1.41
Buildings without Cooling	562	540	Q	1,087	0.11	0.08	0.08	0.09	0.34	0.27	0.25	0.53
Water-Heating Energy Source												
Electricity	6,548	4,334	11,684	5,015	0.10	0.07	0.06	0.08	1.46	0.94	1.11	1.10
Other Excluding Electricity	7,755	7,323	9,164	9,051	0.09	0.07	0.06	0.08	1.27	0.81	1.07	1.10
Buildings without Water Heating	830	1,276	2,427	1,017	0.11	0.06	0.07	0.08	0.60	0.47	0.60	0.69
Cooking Energy Source												
Electricity	4,202	3,539	7,441	3,070	0.09	0.06	0.06	0.07	1.57	1.06	1.44	1.20
Other Excluding Electricity	3,581	2,415	4,011	2,614	0.09	0.07	0.06	0.09	1.40	0.89	1.18	1.15
Buildings without Cooking	7,350	6,978	11,823	9,399	0.10	0.07	0.07	0.08	1.09	0.67	0.82	0.99
Energy End Uses (more than one may apply)												
Buildings with Space Heating	15,007	12,822	21,625	13,709	0.09	0.07	0.06	0.08	1.29	0.81	1.05	1.02
Buildings with Cooling	14,572	12,393	22,886	13,995	0.09	0.07	0.06	0.08	1.41	0.86	1.06	1.14
Buildings with Water Heating	14,304	11,657	20,848	14,066	0.09	0.07	0.06	0.08	1.35	0.85	1.10	1.10
Buildings with Cooking	7,783	5,955	11,451	5,683	0.09	0.07	0.06	0.08	1.48	0.99	1.34	1.18
Buildings with Manufacturing	768	830	872	589	0.10	0.06	0.07	0.08	1.35	1.01	0.84	0.83
Buildings with Electricity Generation	4,238	3,195	5,583	2,494	0.08	0.06	0.06	0.07	1.36	1.15	1.37	1.29
Percent of Floorspace Heated												
Not Heated	Q	Q	1,650	1,373	Q	Q	0.07	0.11	Q	Q	0.67	1.54
1 to 50	662	673	1,349	1,848	0.10	0.08	0.07	0.09	0.63	0.43	0.53	0.77
51 to 99	2,291	1,821	4,695	2,577	0.09	0.07	0.06	0.07	1.36	0.78	1.08	1.07
100	12,054	10,327	15,581	9,284	0.10	0.07	0.06	0.08	1.35	0.86	1.14	1.08
Percent of Floorspace Cooled												
Not Cooled	562	540	Q	1,087	0.11	0.08	0.08	0.09	0.34	0.27	0.25	0.53
1 to 50	3,024	2,551	2,682	2,106	0.10	0.07	0.07	0.09	0.77	0.50	0.58	0.65
51 to 99	4,962	4,452	6,828	3,898	0.09	0.06	0.06	0.07	1.55	0.94	1.18	1.21
100	6,586	5,390	13,375	7,991	0.09	0.07	0.06	0.08	2.06	1.18	1.20	1.39
Percent Lit When Open												
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	997	1,163	1,784	1,451	0.11	0.08	0.07	0.10	0.62	0.47	0.59	0.70
51 to 99	5,314	4,988	6,914	4,358	0.10	0.06	0.06	0.08	1.30	0.86	1.08	1.00
100	8,806	6,712	14,331	9,215	0.09	0.07	0.06	0.08	1.45	0.88	1.12	1.20
Building Never Open/ Electricity Not Used	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Percent Lit When Closed												
Zero	2,372	2,714	4,756	4,192	0.11	0.08	0.07	0.09	0.70	0.52	0.65	0.87
1 to 50	7,373	6,813	11,058	6,551	0.10	0.07	0.07	0.08	1.28	0.85	1.01	1.05
51 to 100	Q	348	1,866	961	Q	0.06	0.07	0.08	Q	0.99	1.88	1.94
Building Never Closed/ Electricity Not Used	4,707	3,058	5,595	3,379	0.09	0.06	0.06	0.07	1.89	1.12	1.44	1.23
Heating Equipment (more than one may apply)												
Heat Pumps	1,558	1,034	5,363	2,288	0.08	0.05	0.06	0.08	1.31	1.02	1.17	1.07
Furnaces	2,158	3,822	3,159	1,583	0.10	0.08	0.07	0.07	0.96	0.66	0.80	0.64
Individual Space Heaters	4,085	3,528	4,802	2,695	0.09	0.06	0.06	0.07	1.15	0.76	0.88	0.74
District Heat	2,950	1,420	1,117	944	0.08	0.06	0.05	0.06	1.57	0.94	1.09	0.84
Boilers	5,532	4,520	5,001	3,795	0.09	0.06	0.06	0.07	1.01	0.76	1.19	0.98
Packaged Heating Units	6,980	5,377	11,406	7,307	0.09	0.07	0.06	0.08	1.73	1.06	1.09	1.18
Other	855	1,131	1,604	811	0.08	0.07	0.06	0.07	1.11	1.02	1.15	1.01

Table C12. Electricity Expenditures by Census Region, 1999

	Total Electricity Expenditures (million dollars)				Electricity Expenditures (dollars) per kWh				Electricity Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Cooling Equipment (more than one may apply)												
Residential-Type Central Air Conditioners	1,040	2,091	3,055	927	0.09	0.07	0.06	0.08	1.09	0.71	0.93	0.80
Heat Pumps	1,370	1,104	5,364	2,578	0.08	0.05	0.06	0.08	1.13	1.04	1.17	1.14
Individual Air Conditioners	3,902	2,439	3,821	1,632	0.09	0.07	0.06	0.08	1.00	0.66	0.84	0.77
District Chilled Water	653	856	894	821	0.07	0.05	0.05	0.07	2.00	1.15	0.95	1.11
Central Chillers	4,057	3,607	5,909	3,469	0.08	0.06	0.06	0.07	1.46	1.15	1.37	1.31
Packaged Air Conditioning Units	10,699	7,922	14,911	9,527	0.09	0.07	0.06	0.08	1.61	0.97	1.07	1.23
Swamp Coolers	Q	Q	351	1,567	Q	Q	0.06	0.08	Q	Q	1.04	0.97
Other	Q	Q	408	Q	Q	Q	0.06	Q	Q	Q	1.19	Q
Main Equipment Replaced Since 1995 (more than one may apply)												
Heating	2,384	2,561	5,280	3,197	0.10	0.07	0.06	0.08	1.30	0.79	1.04	1.04
Cooling	3,849	3,322	7,427	3,783	0.10	0.07	0.06	0.08	1.25	0.87	1.05	1.11
Lighting Equipment Types (more than one may apply)												
Incandescent	8,951	7,438	14,012	8,944	0.09	0.07	0.06	0.08	1.27	0.75	1.08	1.09
Standard Fluorescent	14,183	12,290	21,826	14,317	0.09	0.07	0.06	0.08	1.25	0.83	1.05	1.08
Compact Fluorescent	5,795	5,621	7,541	5,313	0.09	0.06	0.06	0.07	1.47	1.02	1.17	1.11
High Intensity Discharge	5,051	4,796	6,844	3,052	0.09	0.06	0.06	0.07	1.15	0.87	1.17	0.88
Halogen	5,585	4,336	6,375	4,360	0.09	0.06	0.06	0.07	1.54	0.98	1.09	1.08
Other	Q	Q	733	Q	Q	Q	0.07	Q	Q	Q	1.66	Q
Water Heating Equipment												
Centralized System	9,545	6,801	12,508	9,157	0.10	0.07	0.06	0.08	1.38	0.75	1.09	1.13
Distributed System	2,153	1,839	4,269	3,121	0.10	0.07	0.06	0.08	1.18	0.79	1.04	1.19
Combination of Centralized and Distributed System	2,606	3,017	4,071	1,788	0.08	0.06	0.06	0.07	1.44	1.29	1.20	0.85
Commercial Refrigeration Equipment (more than one may apply)												
Any Equipment	8,851	6,722	11,620	7,089	0.09	0.06	0.06	0.08	1.60	1.08	1.33	1.38
Walk-In Units	7,395	5,300	9,768	6,026	0.09	0.06	0.06	0.08	1.71	1.16	1.43	1.51
Cases or Cabinets	7,748	5,784	10,188	6,336	0.09	0.06	0.06	0.08	1.64	1.07	1.36	1.46
None	6,282	6,211	11,655	7,994	0.10	0.07	0.07	0.08	0.98	0.61	0.81	0.87
Personal Computers												
None	584	1,076	1,925	1,178	0.12	0.08	0.07	0.09	0.52	0.47	0.58	0.95
1 to 4	2,920	2,729	4,670	2,690	0.10	0.08	0.07	0.09	1.27	0.73	0.98	0.88
5 to 9	1,144	1,016	3,163	1,625	0.11	0.07	0.07	0.09	1.41	0.78	1.10	1.06
10 to 19	1,985	986	2,839	1,938	0.11	0.07	0.07	0.09	1.13	0.63	1.05	1.30
20 to 49	2,129	1,324	2,826	1,884	0.10	0.06	0.06	0.08	1.53	0.68	1.09	0.87
50 to 99	987	1,348	1,765	1,501	0.10	0.07	0.06	0.08	1.09	0.82	0.93	1.05
100 to 249	1,928	1,972	2,338	1,438	0.08	0.06	0.06	0.06	1.21	1.08	1.08	1.18
250 or More	3,458	2,484	3,750	2,829	0.08	0.06	0.06	0.07	1.66	1.20	1.35	1.31
Photocopiers												
None	3,042	3,208	6,676	4,689	0.11	0.08	0.07	0.09	0.92	0.67	0.87	1.10
One	2,444	2,280	5,250	2,867	0.10	0.07	0.07	0.08	1.50	0.72	1.04	0.93
2 to 4	3,525	2,843	5,158	3,000	0.10	0.07	0.06	0.08	1.18	0.67	1.01	0.91
5 to 9	1,097	1,646	1,532	1,351	0.08	0.06	0.06	0.08	1.11	1.04	0.97	1.09
10 or More	5,026	2,957	4,659	3,175	0.08	0.06	0.06	0.07	1.64	1.13	1.26	1.33

Table C12. Electricity Expenditures by Census Region, 1999

	Total Electricity Expenditures (million dollars)				Electricity Expenditures (dollars) per kWh				Electricity Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Other Electronic Equipment (more than one may apply)												
Laser Printers	12,301	9,809	17,415	11,514	0.09	0.06	0.06	0.08	1.35	0.88	1.11	1.08
FAX Machines	14,227	11,562	20,602	13,270	0.09	0.07	0.06	0.08	1.36	0.86	1.10	1.10
Medical Diagnostic Equipment	577	768	1,544	885	0.07	0.06	0.05	0.07	1.58	1.31	1.62	1.51
Annual Consumption (kilowatthours)												
10,000 or Less	92	124	124	85	0.15	0.12	0.10	0.12	0.18	0.13	0.10	0.18
10,001 to 50,000	640	932	1,271	1,013	0.13	0.09	0.09	0.10	0.45	0.33	0.44	0.49
50,001 to 100,000	960	1,082	1,762	1,116	0.12	0.09	0.08	0.09	0.77	0.65	0.71	0.69
100,001 to 500,000	4,285	3,014	7,103	4,521	0.11	0.07	0.07	0.09	1.59	0.79	1.11	1.16
500,001 to 1,000,000	1,564	1,472	2,395	2,094	0.10	0.07	0.07	0.08	1.23	0.80	1.11	1.23
1,000,001 to 5,000,000	3,396	3,270	6,639	3,927	0.09	0.06	0.06	0.07	1.42	1.02	1.30	1.33
Over 5,000,000	4,196	3,039	3,981	2,325	0.08	0.06	0.05	0.07	1.73	1.49	1.43	1.48
Provider of Purchased Electricity (more than one may apply)												
Local Utility	13,028	12,305	22,365	13,838	0.10	0.07	0.06	0.08	1.24	0.79	1.00	1.01
Some Other Provider	2,053	406	324	Q	0.09	0.07	0.07	0.08	1.48	0.91	0.54	1.85

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.

Table C13. Electricity Consumption and Conditional Energy Intensity, 1999

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings	205	362	341	14,001	30,052	21,663	14.6	12.0	15.8
Principal Building Activity									
Education	6	44	25	782	4,831	3,038	8.1	9.1	8.3
Food Sales	27	19	Q	439	485	Q	60.4	39.8	Q
Food Service	52	Q	Q	1,296	Q	Q	40.5	Q	Q
Health Care	5	14	49	407	672	1,838	11.6	20.6	26.9
Inpatient	N	Q	46	N	Q	1,683	N	Q	27.3
Outpatient	5	9	Q	407	490	Q	11.6	18.7	Q
Lodging	7	31	20	405	2,336	1,780	17.5	13.1	11.1
Mercantile	29	68	56	1,971	4,630	3,797	14.8	14.6	14.7
Retail (Other Than Mall)	22	23	19	1,649	2,375	742	13.6	9.7	25.8
Enclosed and Strip Malls	Q	45	37	Q	2,255	3,055	Q	19.8	12.1
Office	31	79	114	2,275	4,628	5,140	13.8	17.1	22.2
Public Assembly	8	28	20	943	2,254	1,143	8.2	12.5	17.6
Public Order and Safety	Q	7	Q	Q	557	Q	Q	12.8	Q
Religious Worship	3	9	Q	1,003	2,353	Q	2.5	4.0	Q
Service	17	16	Q	1,756	1,265	Q	9.9	12.8	Q
Warehouse and Storage	Q	24	30	1,613	4,695	3,570	6.5	5.0	8.5
Other	Q	12	11	Q	445	390	Q	28.0	29.1
Vacant	Q	Q	Q	Q	416	Q	Q	2.3	Q
Year Constructed									
1919 or Before	8	10	Q	1,253	1,816	645	6.5	5.6	12.9
1920 to 1945	16	20	18	1,496	2,784	2,001	10.6	7.1	9.2
1946 to 1959	20	41	29	2,555	4,092	2,147	7.8	10.1	13.7
1960 to 1969	33	53	51	1,975	4,888	3,822	16.8	10.9	13.2
1970 to 1979	42	71	69	2,395	5,421	3,934	17.7	13.0	17.5
1980 to 1989	43	92	86	2,031	6,459	4,994	21.1	14.3	17.3
1990 to 1999	42	75	79	2,296	4,591	4,120	18.4	16.2	19.2
Census Region and Division									
Northeast	31	52	76	2,066	4,887	5,011	15.2	10.7	15.1
New England	7	14	18	489	1,750	1,376	13.6	8.1	13.0
Middle Atlantic	25	38	58	1,577	3,137	3,635	15.7	12.1	15.8
Midwest	38	70	86	3,615	6,987	5,786	10.6	10.0	14.9
East North Central	28	45	53	2,476	4,511	3,954	11.3	9.9	13.5
West North Central	10	25	33	1,140	2,477	1,832	8.9	10.1	18.0
South	89	154	123	5,273	10,981	6,822	16.8	14.0	18.0
South Atlantic	36	76	68	2,272	4,967	3,578	15.7	15.3	19.1
East South Central	22	38	20	1,094	2,865	1,190	20.0	13.2	16.6
West South Central	31	40	35	1,907	3,149	2,054	16.4	12.8	17.0
West	46	86	56	3,046	7,196	4,044	15.2	12.0	14.0
Mountain	12	24	16	916	2,216	1,160	13.0	10.8	13.5
Pacific	34	63	41	2,130	4,981	2,884	16.1	12.5	14.1
Climate Zone: 45-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	19	22	24	1,535	2,787	1,428	12.1	7.9	16.9
5,500-7,000 HDD	34	74	89	2,724	7,292	6,690	12.6	10.1	13.2
4,000-5,499 HDD	53	78	100	3,643	6,119	6,031	14.5	12.8	16.7
Fewer than 4,000 HDD	55	110	77	3,099	8,273	4,549	17.6	13.4	17.0
2,000 CDD or More and --									
Fewer than 4,000 HDD	44	78	51	3,000	5,580	2,966	14.8	13.9	17.1

Table C13. Electricity Consumption and Conditional Energy Intensity, 1999

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
Workers (main shift)									
Fewer than 5	73	24	1	7,017	5,189	544	10.4	4.5	2.0
5 to 9	40	22	2	2,782	3,099	393	14.2	7.2	4.4
10 to 19	48	51	4	2,582	4,708	737	18.5	10.8	5.5
20 to 49	37	98	13	1,409	7,706	1,699	26.6	12.7	7.6
50 to 99	Q	82	35	Q	5,681	3,074	Q	14.5	11.3
100 to 249	Q	64	84	Q	2,832	5,457	Q	22.5	15.4
250 or More	N	21	203	N	837	9,759	N	25.7	20.8
Weekly Operating Hours									
39 or Fewer	10	8	Q	2,658	2,120	Q	3.7	3.8	Q
40 to 48	38	58	18	4,191	6,959	1,920	9.0	8.4	9.1
49 to 60	39	71	60	3,004	7,423	3,759	12.9	9.6	16.1
61 to 84	34	68	70	2,003	5,368	5,009	17.1	12.7	14.0
85 to 167	58	71	49	1,280	3,797	3,853	45.0	18.7	12.8
Open Continuously	27	85	142	864	4,385	6,586	30.7	19.4	21.6
Ownership and Occupancy									
Nongovernment Owned	188	292	263	12,693	24,179	16,767	14.8	12.1	15.7
Owner Occupied	131	190	208	9,010	15,971	12,525	14.6	11.9	16.6
Nonowner Occupied	55	100	55	3,402	7,886	4,153	16.2	12.7	13.4
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	17	70	78	1,307	5,872	4,897	12.8	12.0	15.9
Federal	Q	10	23	Q	548	1,007	Q	18.7	22.5
State	Q	21	23	Q	1,692	1,484	Q	12.3	15.8
Local	11	39	32	946	3,632	2,405	11.7	10.8	13.2
Vacancy Status									
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	17	67	106	1,917	5,861	7,315	8.7	11.4	14.5
Not At All Vacant	186	294	234	11,575	23,775	14,161	16.1	12.4	16.6
Number of Establishments									
One	171	238	183	10,973	20,437	11,428	15.6	11.6	16.0
2 to 5	27	55	44	2,487	4,896	3,059	10.8	11.2	14.3
6 to 10	Q	36	19	Q	2,173	1,219	Q	16.5	15.6
11 to 20	Q	24	29	Q	1,591	1,661	Q	15.4	17.4
More than 20	Q	8	66	Q	590	4,163	Q	13.7	15.8
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q
Energy Sources (more than one may apply)									
Electricity	205	362	341	14,001	30,052	21,663	14.6	12.0	15.8
Natural Gas	132	253	258	8,625	20,570	16,301	15.3	12.3	15.8
Fuel Oil	9	53	165	1,203	3,570	8,503	7.4	14.7	19.4
District Heat	Q	30	71	Q	2,007	3,613	Q	15.1	19.7
District Chilled Water	Q	16	38	Q	927	1,730	Q	17.4	22.1
Propane	26	26	24	1,621	2,637	2,032	16.3	9.8	12.0
Other	Q	12	14	Q	890	963	Q	13.5	14.4
Space-Heating Energy Source									
Electricity	92	207	199	5,459	15,069	11,763	16.9	13.8	16.9
Electricity Main	64	139	100	3,062	8,667	5,898	20.9	16.0	16.9
Electricity Secondary	28	69	99	2,397	6,402	5,866	11.8	10.7	16.9
Other Excluding Electricity	97	139	135	7,286	12,949	9,040	13.3	10.7	14.9
Buildings without Heating	15	16	8	1,256	2,034	861	12.2	7.7	9.2

Table C13. Electricity Consumption and Conditional Energy Intensity, 1999

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
Primary Space-Heating Energy Source									
Electricity	64	139	100	3,062	8,667	5,898	20.9	16.0	16.9
Natural Gas	101	165	156	7,344	14,997	10,360	13.8	11.0	15.1
Fuel Oil	7	10	12	1,038	1,559	1,113	7.2	6.4	10.9
District Heat	Q	25	64	Q	1,645	3,301	Q	15.2	19.4
Propane	Q	6	Q	1,084	980	Q	14.1	5.6	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Source									
Electricity	183	334	309	10,723	25,930	18,893	17.1	12.9	16.3
Other Excluding Electricity	Q	17	27	Q	1,117	1,443	Q	15.0	18.9
Buildings without Cooling	13	11	5	2,909	3,004	1,328	4.4	3.8	4.1
Water-Heating Energy Source									
Electricity	85	151	142	4,593	10,985	8,593	18.6	13.7	16.5
Other Excluding Electricity	96	179	180	5,434	14,990	11,519	17.7	11.9	15.7
Buildings without Water Heating	23	33	19	3,973	4,077	1,551	5.8	8.0	12.3
Cooking Energy Source									
Electricity	51	78	144	1,148	4,838	7,747	44.7	16.1	18.5
Other Excluding Electricity	26	58	84	1,220	4,109	5,620	21.7	14.1	14.9
Buildings without Cooking	127	226	114	11,633	21,105	8,297	10.9	10.7	13.7
Energy End Uses (more than one may apply)									
Buildings with Space Heating	189	346	333	12,745	28,018	20,803	14.8	12.4	16.0
Buildings with Cooling	192	351	336	11,092	27,047	20,335	17.3	13.0	16.5
Buildings with Water Heating	182	330	322	10,028	25,974	20,112	18.1	12.7	16.0
Buildings with Cooking	78	136	227	2,367	8,947	13,367	32.8	15.2	17.0
Buildings with Manufacturing	4	15	24	553	1,509	1,064	7.9	10.1	22.5
Buildings with Electricity Generation	Q	69	169	Q	3,166	8,339	Q	21.7	20.3
Percent of Floorspace Heated									
Not Heated	15	16	8	1,256	2,034	861	12.2	7.7	9.2
1 to 50	12	24	20	2,182	3,567	1,816	5.6	6.7	11.0
51 to 99	39	61	64	1,927	5,025	3,785	20.0	12.1	16.9
100	138	262	249	8,636	19,426	15,202	16.0	13.5	16.4
Percent of Floorspace Cooled									
Not Cooled	13	11	5	2,909	3,004	1,328	4.4	3.8	4.1
1 to 50	29	58	41	3,318	8,920	4,608	8.8	6.5	8.8
51 to 99	46	107	141	2,273	7,021	7,673	20.4	15.2	18.3
100	116	186	154	5,501	11,106	8,054	21.2	16.8	19.2
Percent Lit When Open									
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	29	30	7	3,075	4,719	1,392	9.4	6.3	4.7
51 to 99	65	114	115	4,113	9,755	6,797	15.9	11.7	16.9
100	108	216	219	6,092	14,839	13,302	17.7	14.6	16.5
Building Never Open/ Electricity Not Used	Q	Q	Q	Q	Q	Q	Q	Q	Q
Percent Lit When Closed									
Zero	62	84	26	7,199	10,435	3,137	8.6	8.1	8.4
1 to 50	99	173	156	5,406	14,482	11,062	18.4	11.9	14.1
51 to 100	Q	20	17	Q	750	878	Q	27.0	18.8
Building Never Closed/ Electricity Not Used	27	85	142	864	4,385	6,586	30.7	19.4	21.6

Table C13. Electricity Consumption and Conditional Energy Intensity, 1999

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
Heating Equipment (more than one may apply)									
Heat Pumps	28	62	61	1,424	4,158	3,341	19.5	15.0	18.3
Furnaces	46	57	36	5,118	6,438	2,892	8.9	8.9	12.6
Individual Space Heaters	24	87	103	2,505	7,732	7,084	9.8	11.3	14.6
District Heat	Q	28	70	Q	1,828	3,545	Q	15.4	19.7
Boilers	18	91	158	1,504	8,327	9,683	12.1	11.0	16.3
Packaged Heating Units	95	177	159	4,080	11,951	9,713	23.2	14.8	16.4
Other	7	19	41	515	1,422	2,135	14.0	13.4	19.1
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	28	35	37	2,496	3,501	2,333	11.3	10.0	15.9
Heat Pumps	28	62	62	1,406	4,167	3,574	20.1	15.0	17.4
Individual Air Conditioners	25	62	72	2,358	6,679	5,239	10.7	9.3	13.8
District Chilled Water	Q	16	38	Q	927	1,730	Q	17.4	22.1
Central Chillers	Q	63	196	Q	3,215	9,517	Q	19.7	20.5
Packaged Air Conditioning Units	124	244	217	5,810	17,315	13,402	21.3	14.1	16.2
Swamp Coolers	Q	13	10	435	1,009	775	Q	12.6	13.3
Other	Q	7	15	Q	452	707	Q	16.4	20.5
Main Equipment Replaced Since 1995 (more than one may apply)									
Heating	47	89	47	3,082	6,831	3,307	15.4	13.0	14.1
Cooling	54	111	88	3,037	8,726	5,628	17.9	12.7	15.6
Lighting Equipment Types (more than one may apply)									
Incandescent	111	207	225	6,993	16,939	14,223	15.8	12.2	15.8
Standard Fluorescent	182	348	332	11,876	27,684	20,784	15.3	12.6	16.0
Compact Fluorescent	38	110	203	1,846	7,480	11,340	20.6	14.6	17.9
High Intensity Discharge	14	95	191	908	7,026	11,290	15.1	13.6	16.9
Halogen	34	89	170	1,590	6,536	9,800	21.6	13.5	17.3
Other	Q	4	7	Q	394	464	Q	10.4	15.3
Water Heating Equipment									
Centralized System	139	207	155	7,891	17,503	10,186	17.6	11.8	15.3
Distributed System	27	63	66	1,781	4,667	4,450	15.4	13.5	14.8
Combination of Centralized and Distributed System	15	59	101	356	3,805	5,476	43.3	15.6	18.4
Commercial Refrigeration Equipment (more than one may apply)									
Any Equipment	93	145	247	2,505	9,110	14,036	37.1	15.9	17.6
Walk-In Units	85	113	208	1,794	5,926	11,992	47.4	19.1	17.4
Cases or Cabinets	86	124	215	2,290	7,409	12,302	37.3	16.8	17.4
None	112	217	94	11,496	20,941	7,627	9.7	10.4	12.4
Personal Computers									
None	45	11	1	4,958	2,450	553	9.1	4.4	Q
1 to 4	86	69	8	5,315	7,464	1,074	16.2	9.2	7.5
5 to 9	36	48	7	1,688	4,200	641	21.2	11.3	10.3
10 to 19	26	52	18	1,534	4,084	1,896	17.2	12.7	9.4
20 to 49	10	62	40	476	4,721	2,890	21.5	13.1	13.8
50 to 99	Q	46	32	Q	3,514	2,327	Q	13.0	13.7
100 to 249	Q	56	63	Q	2,878	3,936	Q	19.6	16.1
250 or More	N	19	172	N	741	8,347	N	25.9	20.7

Table C13. Electricity Consumption and Conditional Energy Intensity, 1999

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
Photocopiers									
None	120	82	15	8,902	9,168	1,939	13.5	9.0	7.8
One	64	87	18	3,724	7,537	1,667	17.1	11.6	10.9
2 to 4	18	113	69	1,165	8,936	5,519	15.6	12.6	12.5
5 to 9	Q	39	42	Q	2,236	2,937	Q	17.2	14.4
10 or More	N	42	197	N	2,173	9,601	N	19.1	20.5
Other Electronic Equipment (more than one may apply)									
Laser Printers	94	296	328	5,396	21,598	19,573	17.4	13.7	16.8
FAX Machines	155	333	338	8,525	25,429	20,810	18.1	13.1	16.3
Medical Diagnostic Equipment	Q	11	48	Q	527	1,700	Q	21.0	28.2
Annual Consumption (kilowatthours)									
10,000 or Less	4	Q	Q	2,504	669	Q	1.4	0.3	Q
10,001 to 50,000	35	6	Q	5,798	3,247	Q	6.0	1.8	Q
50,001 to 100,000	40	15	Q	2,706	4,052	Q	14.6	3.6	Q
100,001 to 500,000	115	116	3	2,873	12,539	1,398	40.2	9.2	2.0
500,001 to 1,000,000	Q	79	9	Q	4,782	2,066	Q	16.6	4.4
1,000,001 to 5,000,000	Q	140	116	Q	4,707	8,951	Q	29.8	13.0
Over 5,000,000	N	Q	213	N	Q	8,767	N	Q	24.3
Provider of Purchased Electricity (more than one may apply)									
Local Utility	192	342	310	13,378	28,799	19,866	14.3	11.9	15.6
Some Other Provider	Q	15	28	Q	1,110	1,510	Q	13.8	18.9

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.

Table C14. Electricity Consumption and Conditional Energy Intensity by Year Constructed, 1999

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999
All Buildings	171	540	196	18,788	35,920	11,007	9.1	15.0	17.8
Building Floorspace (Square Feet)									
1,001 to 5,000	24	71	26	2,222	2,944	1,114	10.9	24.1	23.7
5,001 to 10,000	20	47	16	3,081	3,457	1,182	6.4	13.7	13.4
10,001 to 25,000	30	65	14	3,835	5,916	1,091	7.7	11.1	12.4
25,001 to 50,000	21	64	24	2,427	5,109	1,638	8.5	12.6	14.4
50,001 to 100,000	21	86	37	2,430	5,743	1,862	8.6	15.1	20.1
100,001 to 200,000	16	82	34	1,779	4,816	1,651	8.8	17.1	20.6
200,001 to 500,000	17	59	24	1,695	3,756	1,338	10.2	15.7	17.6
Over 500,000	23	65	22	1,318	4,179	1,131	17.5	15.5	19.2
Principal Building Activity									
Education	23	40	13	3,247	4,165	1,239	7.1	9.5	10.3
Food Sales	Q	22	19	Q	443	355	Q	50.6	53.9
Food Service	12	37	Q	608	952	Q	19.4	39.1	Q
Health Care	9	49	10	548	1,897	473	16.0	26.0	21.3
Inpatient	8	39	Q	434	1,277	Q	17.7	30.3	Q
Outpatient	Q	11	6	Q	620	319	Q	17.0	18.6
Lodging	8	40	10	808	2,996	716	10.1	13.3	13.3
Mercantile	23	89	41	2,582	5,786	2,030	8.9	15.4	20.1
Retail (Other Than Mall)	14	26	25	1,901	1,726	1,139	7.4	14.8	22.0
Enclosed and Strip Malls	9	63	16	681	4,060	891	13.3	15.6	17.6
Office	43	148	33	2,907	7,306	1,830	14.9	20.3	18.2
Public Assembly	13	30	13	1,395	2,209	736	9.7	13.4	17.5
Public Order and Safety	3	5	Q	392	411	Q	8.0	12.2	Q
Religious Worship	3	7	Q	1,301	1,748	Q	2.4	4.2	Q
Service	11	24	Q	1,253	1,768	Q	9.1	13.8	Q
Warehouse and Storage	9	36	19	2,509	5,342	2,028	3.7	6.7	9.6
Other	Q	12	Q	Q	603	Q	Q	19.9	Q
Vacant	Q	Q	Q	797	Q	Q	Q	Q	Q
Census Region and Division									
Northeast	46	85	28	4,798	5,790	1,376	9.6	14.7	20.2
New England	9	23	6	1,211	1,971	433	7.8	11.7	14.3
Middle Atlantic	36	62	22	3,587	3,819	943	10.2	16.3	22.9
Midwest	49	107	38	5,999	7,601	2,788	8.2	14.0	13.7
East North Central	32	68	26	4,377	4,697	1,866	7.3	14.4	14.1
West North Central	17	39	12	1,622	2,904	922	10.7	13.4	13.0
South	48	230	87	4,971	13,667	4,439	9.7	16.8	19.7
South Atlantic	18	115	46	1,989	6,525	2,303	9.3	17.7	19.9
East South Central	12	47	Q	1,038	3,067	1,044	11.8	15.4	19.1
West South Central	18	67	22	1,944	4,074	1,092	9.1	16.5	19.8
West	28	119	42	3,020	8,862	2,404	9.2	13.4	17.7
Mountain	10	31	11	1,074	2,519	698	8.9	12.3	15.5
Pacific	18	88	32	1,946	6,343	1,706	9.4	13.8	18.6
Climate Zone: 45-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	12	40	13	1,886	2,947	918	6.2	13.5	14.1
5,500-7,000 HDD	49	104	43	6,010	8,107	2,589	8.2	12.9	16.7
4,000-5,499 HDD	55	131	46	5,304	7,973	2,516	10.3	16.4	18.3
Fewer than 4,000 HDD	31	150	61	3,070	9,643	3,209	10.1	15.6	19.1
2,000 CDD or More and --									
Fewer than 4,000 HDD	25	115	33	2,519	7,251	1,776	9.8	15.9	18.3

Table C14. Electricity Consumption and Conditional Energy Intensity by Year Constructed, 1999

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999
Workers (main shift)									
Fewer than 5	26	53	19	5,752	5,372	1,626	4.5	9.8	11.9
5 to 9	15	40	9	2,026	3,419	829	7.4	11.7	10.4
10 to 19	25	57	21	2,781	4,093	1,153	9.0	13.9	17.9
20 to 49	29	86	34	2,953	5,772	2,089	9.8	14.8	16.4
50 to 99	16	77	29	1,638	5,660	1,601	10.0	13.7	17.9
100 to 249	19	90	40	1,580	4,990	1,786	12.3	17.9	22.4
250 or More	41	139	45	2,057	6,614	1,925	19.9	21.0	23.2
Weekly Operating Hours									
39 or Fewer	6	12	Q	2,499	2,384	Q	2.5	5.1	Q
40 to 48	30	66	17	4,927	6,373	1,771	6.2	10.4	9.5
49 to 60	40	97	34	4,248	7,646	2,292	9.3	12.6	14.8
61 to 84	32	110	30	2,837	7,363	2,180	11.3	14.9	13.9
85 to 167	27	104	48	1,819	5,129	1,981	14.6	20.2	24.0
Open Continuously	36	152	66	2,458	7,025	2,352	14.7	21.6	28.1
Ownership and Occupancy									
Nongovernment Owned	125	454	163	14,624	29,964	9,052	8.6	15.2	18.0
Owner Occupied	94	318	117	10,865	20,448	6,193	8.7	15.6	18.9
Nonowner Occupied	30	135	46	3,440	9,199	2,802	8.8	14.7	16.3
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	46	86	33	4,164	5,956	1,956	11.0	14.5	16.9
Federal	15	14	7	826	642	243	18.7	21.8	26.7
State	13	25	9	1,177	1,650	554	11.3	15.1	16.1
Local	17	47	18	2,161	3,664	1,158	7.9	12.9	15.3
Vacancy Status									
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	33	119	38	3,749	8,571	2,773	8.7	13.9	13.8
Not At All Vacant	137	420	158	14,242	27,055	8,213	9.6	15.5	19.2
Number of Establishments									
One	118	334	141	13,129	22,103	7,607	9.0	15.1	18.5
2 to 5	25	75	26	3,372	5,326	1,745	7.3	14.1	14.7
6 to 10	9	43	8	679	2,410	479	12.9	17.8	16.0
11 to 20	Q	37	9	Q	2,256	498	Q	16.5	18.9
More than 20	11	50	13	709	3,479	621	16.1	14.4	20.4
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q
Energy Sources (more than one may apply)									
Electricity	171	540	196	18,788	35,920	11,007	9.1	15.0	17.8
Natural Gas	123	369	151	13,034	24,386	8,076	9.4	15.1	18.7
Fuel Oil	42	142	43	3,579	7,590	2,108	11.7	18.7	20.2
District Heat	34	54	Q	2,338	2,876	677	14.3	18.7	26.3
District Chilled Water	14	29	13	794	1,550	407	17.1	18.4	32.8
Propane	10	49	17	1,410	3,586	1,295	7.4	13.8	13.1
Other	9	18	6	765	1,204	353	12.1	14.6	18.0
Space-Heating Energy Source									
Electricity	83	304	111	7,313	19,045	5,933	11.4	16.0	18.7
Electricity Main	35	190	77	2,769	11,150	3,708	12.6	17.0	20.9
Electricity Secondary	49	114	34	4,544	7,896	2,225	10.7	14.4	15.2
Other Excluding Electricity	85	206	79	10,205	14,403	4,667	8.3	14.3	17.0
Buildings without Heating	3	30	Q	1,271	2,473	Q	2.6	12.1	Q

Table C14. Electricity Consumption and Conditional Energy Intensity by Year Constructed, 1999

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999
Primary Space-Heating Energy Source									
Electricity	35	190	77	2,769	11,150	3,708	12.6	17.0	20.9
Natural Gas	89	241	93	10,176	16,847	5,677	8.7	14.3	16.3
Fuel Oil	10	18	Q	1,745	1,707	Q	5.6	10.3	Q
District Heat	30	45	15	2,151	2,497	428	14.0	18.2	34.1
Propane	4	14	Q	519	1,074	Q	6.8	13.0	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Source									
Electricity	148	501	177	14,026	31,749	9,770	10.5	15.8	18.1
Other Excluding Electricity	12	25	16	869	1,474	585	13.3	17.2	27.1
Buildings without Cooling	12	14	Q	3,893	2,697	Q	3.1	5.3	Q
Water-Heating Energy Source									
Electricity	49	242	87	4,820	14,952	4,399	10.2	16.2	19.7
Other Excluding Electricity	101	259	95	10,108	16,788	5,047	10.0	15.4	18.8
Buildings without Water Heating	21	39	15	3,859	4,180	1,561	5.4	9.3	9.4
Cooking Energy Source									
Electricity	47	171	56	3,024	8,251	2,458	15.4	20.7	22.6
Other Excluding Electricity	38	86	44	3,495	5,509	1,945	10.8	15.6	22.6
Buildings without Cooking	87	284	97	12,269	22,161	6,605	7.1	12.8	14.6
Energy End Uses (more than one may apply)									
Buildings with Space Heating	168	510	190	17,517	33,448	10,600	9.6	15.3	18.0
Buildings with Cooling	159	526	193	14,895	33,224	10,355	10.7	15.8	18.6
Buildings with Water Heating	150	501	181	14,928	31,740	9,446	10.1	15.8	19.2
Buildings with Cooking	84	257	100	6,519	13,759	4,403	13.0	18.7	22.6
Buildings with Manufacturing	10	25	9	933	1,709	485	10.5	14.6	18.3
Buildings with Electricity Generation	35	151	59	1,992	7,149	2,741	17.8	21.1	21.6
Percent of Floorspace Heated									
Not Heated	3	30	Q	1,271	2,473	Q	2.6	12.1	Q
1 to 50	14	32	9	2,617	3,749	1,198	5.5	8.6	7.7
51 to 99	33	94	37	3,218	5,742	1,777	10.3	16.3	20.6
100	121	384	145	11,683	23,957	7,625	10.3	16.0	19.0
Percent of Floorspace Cooled									
Not Cooled	12	14	Q	3,893	2,697	Q	3.1	5.3	Q
1 to 50	37	64	27	6,241	8,052	2,553	6.0	7.9	10.4
51 to 99	57	175	62	4,052	9,818	3,096	14.1	17.8	20.0
100	65	288	104	4,603	15,354	4,706	14.0	18.8	22.1
Percent Lit When Open									
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	19	31	15	4,301	3,928	957	4.5	7.8	15.7
51 to 99	66	183	46	6,025	11,398	3,242	10.9	16.1	14.0
100	85	323	135	7,583	19,981	6,670	11.2	16.2	20.3
Building Never Open/ Electricity Not Used	Q	Q	Q	863	Q	Q	Q	Q	Q
Percent Lit When Closed									
Zero	36	101	35	6,811	10,503	3,458	5.3	9.6	10.1
1 to 50	92	264	72	9,247	17,259	4,444	10.0	15.3	16.2
51 to 100	Q	23	23	Q	1,134	753	Q	20.6	31.1
Building Never Closed/ Electricity Not Used	36	152	66	2,458	7,025	2,352	14.7	21.6	28.1

Table C14. Electricity Consumption and Conditional Energy Intensity by Year Constructed, 1999

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999
Heating Equipment (more than one may apply)									
Heat Pumps	25	90	36	1,764	5,363	1,796	14.2	16.8	20.1
Furnaces	35	76	28	4,847	7,215	2,387	7.2	10.5	11.9
Individual Space Heaters	53	120	43	5,337	9,268	2,715	9.9	12.9	15.7
District Heat	33	51	16	2,309	2,726	499	14.2	18.5	31.9
Boilers	55	165	47	6,415	10,620	2,479	8.6	15.5	19.1
Packaged Heating Units	54	262	114	4,820	15,239	5,684	11.3	17.2	20.1
Other	14	38	14	1,030	2,257	786	14.0	17.0	18.2
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	27	58	16	2,573	4,483	1,274	10.3	13.0	12.2
Heat Pumps	25	95	33	1,818	5,624	1,705	14.0	16.8	19.1
Individual Air Conditioners	54	81	25	6,113	6,687	1,476	8.8	12.1	16.8
District Chilled Water	14	29	13	794	1,550	407	17.1	18.4	32.8
Central Chillers	48	167	49	2,567	8,114	2,229	18.8	20.6	21.9
Packaged Air Conditioning Units	92	362	131	8,037	21,665	6,825	11.5	16.7	19.2
Swamp Coolers	5	19	Q	509	1,371	339	10.4	13.9	16.3
Other	Q	17	Q	Q	951	Q	Q	17.9	Q
Main Equipment Replaced Since 1995 (more than one may apply)									
Heating	41	129	13	4,160	8,266	794	9.9	15.6	15.8
Cooling	59	177	18	5,340	11,107	943	11.0	15.9	18.8
Lighting Equipment Types (more than one may apply)									
Incandescent	112	333	97	11,393	21,385	5,377	9.9	15.6	18.1
Standard Fluorescent	162	517	182	16,693	33,658	9,993	9.7	15.4	18.2
Compact Fluorescent	55	220	76	4,483	12,023	4,160	12.3	18.3	18.3
High Intensity Discharge	51	167	81	4,193	10,566	4,464	12.3	15.8	18.2
Halogen	48	179	66	3,653	10,699	3,574	13.2	16.7	18.4
Other	Q	7	9	Q	460	392	Q	15.7	22.6
Water Heating Equipment									
Centralized System	93	302	107	10,284	19,732	5,564	9.0	15.3	19.3
Distributed System	22	97	38	2,269	6,505	2,125	9.5	14.9	17.8
Combination of Centralized and Distributed System	36	103	37	2,376	5,503	1,758	15.3	18.7	20.8
Commercial Refrigeration Equipment (more than one may apply)									
Any Equipment	84	290	111	6,180	14,877	4,595	13.6	19.5	24.2
Walk-In Units	65	248	94	4,071	11,957	3,685	15.9	20.7	25.4
Cases or Cabinets	77	251	97	5,580	12,458	3,963	13.7	20.1	24.4
None	88	250	85	12,608	21,043	6,412	6.9	11.9	13.2
Personal Computers									
None	17	30	10	3,596	3,353	1,012	4.7	8.9	9.9
1 to 4	38	98	28	5,294	6,989	1,569	7.1	14.0	17.5
5 to 9	14	50	26	1,534	3,803	1,191	8.9	13.1	22.2
10 to 19	14	57	25	1,615	4,251	1,647	8.9	13.3	15.4
20 to 49	21	61	31	2,103	4,183	1,801	9.8	14.5	17.1
50 to 99	13	45	21	1,349	3,243	1,276	9.5	13.7	16.1
100 to 249	17	79	24	1,216	4,356	1,245	14.2	18.2	19.1
250 or More	38	122	32	2,079	5,741	1,267	18.3	21.2	25.0

Table C14. Electricity Consumption and Conditional Energy Intensity by Year Constructed, 1999

	Total Electricity Consumption (billion kWh)			Total Floorspace of Buildings Using Electricity (million square feet)			Electricity Energy Intensity (kWh/square foot)		
	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999
Photocopiers									
None	47	125	45	7,460	9,945	2,604	6.3	12.6	17.3
One	32	93	44	3,928	6,643	2,358	8.2	14.0	18.6
2 to 4	34	119	47	4,033	8,666	2,921	8.4	13.7	16.0
5 to 9	8	55	21	620	3,390	1,373	13.0	16.1	14.9
10 or More	50	148	40	2,747	7,275	1,752	18.2	20.4	22.7
Other Electronic Equipment (more than one may apply)									
Laser Printers	125	426	167	11,145	26,657	8,765	11.2	16.0	19.1
FAX Machines	148	490	188	14,063	30,817	9,883	10.5	15.9	19.0
Medical Diagnostic Equipment	7	46	9	374	1,731	388	19.2	26.6	22.0
Annual Consumption (kilowatthours)									
10,000 or Less	2	1	Q	1,936	983	Q	1.0	1.4	Q
10,001 to 50,000	16	20	5	4,095	3,913	1,231	3.8	5.1	4.1
50,001 to 100,000	17	29	8	2,397	3,737	867	7.2	7.9	8.8
100,001 to 500,000	49	142	43	4,969	9,301	2,540	9.9	15.3	16.8
500,001 to 1,000,000	18	60	22	1,574	4,138	1,255	11.3	14.4	17.6
1,000,001 to 5,000,000	35	158	64	2,323	8,379	2,958	15.2	18.9	21.7
Over 5,000,000	34	130	54	1,494	5,469	1,860	22.9	23.8	29.2
Provider of Purchased Electricity (more than one may apply)									
Local Utility	157	510	176	17,640	34,242	10,161	8.9	14.9	17.3
Some Other Provider	12	27	12	880	1,620	601	13.8	16.7	19.6

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

Table C15. Total Natural Gas Consumption and Expenditures, 1999

	All Buildings Using Natural Gas			Natural Gas Consumption		Natural Gas Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (billion cubic feet)	Total (million dollars)
All Buildings	2,670	45,525	17.1	2,023	1,966	10,609
Building Floorspace (Square Feet)						
1,001 to 5,000	1,193	3,566	3.0	312	304	1,802
5,001 to 10,000	684	5,088	7.4	292	284	1,810
10,001 to 25,000	448	7,001	15.6	319	310	1,813
25,001 to 50,000	176	6,405	36.4	234	227	1,274
50,001 to 100,000	103	7,165	69.4	250	243	1,253
100,001 to 200,000	42	5,915	139.2	230	223	1,104
200,001 to 500,000	18	5,282	299.7	237	230	958
Over 500,000	5	5,104	952.9	149	144	594
Principal Building Activity						
Education	225	6,570	29.3	227	220	1,111
Food Sales	88	659	7.5	31	31	195
Food Service	246	1,510	6.1	216	210	1,185
Health Care	73	2,285	31.4	217	211	881
Inpatient	9	1,677	176.6	195	190	757
Outpatient	63	609	9.6	22	21	124
Lodging	104	3,548	34.0	181	176	943
Mercantile	439	7,887	18.0	186	180	1,126
Retail (Other Than Mall)	350	3,518	10.1	110	107	670
Enclosed and Strip Malls	89	4,369	48.9	76	74	456
Office	452	7,356	16.3	219	213	1,215
Public Assembly	187	2,989	16.0	96	94	560
Public Order and Safety	31	627	20.2	33	32	176
Religious Worship	214	2,457	11.5	62	60	409
Service	277	2,093	7.6	260	253	1,371
Warehouse and Storage	226	6,211	27.5	230	223	1,124
Other	40	707	17.7	45	44	224
Vacant	68	626	9.2	19	19	89
Year Constructed						
1919 or Before	291	2,766	9.5	120	117	684
1920 to 1945	329	4,257	12.9	195	189	968
1946 to 1959	426	6,040	14.2	256	248	1,390
1960 to 1969	406	7,512	18.5	372	361	1,986
1970 to 1979	481	8,080	16.8	326	317	1,726
1980 to 1989	389	8,794	22.6	391	380	2,033
1990 to 1999	349	8,076	23.2	364	354	1,820
Census Region and Division						
Northeast	311	7,305	23.5	299	291	1,895
New England	45	1,590	35.3	59	57	403
Middle Atlantic	266	5,714	21.5	240	234	1,491
Midwest	874	13,506	15.5	709	689	3,277
East North Central	611	9,383	15.4	497	483	2,252
West North Central	263	4,123	15.7	212	206	1,024
South	820	14,199	17.3	618	601	3,294
South Atlantic	231	5,517	23.9	249	242	1,397
East South Central	224	3,508	15.7	186	180	999
West South Central	365	5,174	14.2	183	178	898
West	665	10,515	15.8	396	385	2,144
Mountain	230	3,183	13.8	145	140	739
Pacific	435	7,332	16.9	252	245	1,405

Table C15. Total Natural Gas Consumption and Expenditures, 1999

	All Buildings Using Natural Gas			Natural Gas Consumption		Natural Gas Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (billion cubic feet)	Total (million dollars)
Climate Zone: 45-Year Average						
Under 2,000 CDD and --						
More than 7,000 HDD	329	4,064	12.4	228	222	1,125
5,500-7,000 HDD	652	12,573	19.3	642	624	3,108
4,000-5,499 HDD	551	10,455	19.0	520	505	2,874
Fewer than 4,000 HDD	727	12,149	16.7	425	413	2,341
2,000 CDD or More and --						
Fewer than 4,000 HDD	410	6,285	15.3	208	202	1,160
Workers (main shift)						
Fewer than 5	1,151	7,108	6.2	280	272	1,747
5 to 9	560	4,633	8.3	194	189	1,111
10 to 19	424	5,589	13.2	281	273	1,509
20 to 49	321	7,737	24.1	435	423	2,386
50 to 99	118	6,278	53.3	222	215	1,177
100 to 249	67	6,146	91.1	252	244	1,210
250 or More	28	8,035	287.1	359	349	1,468
Weekly Operating Hours						
39 or Fewer	376	2,825	7.5	82	80	502
40 to 48	673	8,197	12.2	269	262	1,480
49 to 60	651	9,714	14.9	387	377	2,123
61 to 84	447	9,007	20.2	358	348	2,045
85 to 167	285	6,449	22.6	348	339	1,810
Open Continuously	238	9,334	39.2	577	561	2,650
Ownership and Occupancy						
Nongovernment Owned	2,366	37,026	15.6	1,659	1,613	8,913
Owner Occupied	1,605	25,597	16.0	1,202	1,168	6,383
Nonowner Occupied	719	10,968	15.3	447	435	2,474
Unoccupied	Q	Q	Q	Q	Q	Q
Government Owned	304	8,500	28.0	364	353	1,696
Federal	24	997	41.3	37	36	159
State	52	2,253	43.5	114	111	470
Local	228	5,250	23.0	212	206	1,067
Vacancy Status						
Completely Vacant	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q
Partially Vacant	370	10,725	29.0	306	297	1,600
Not At All Vacant	2,232	34,174	15.3	1,698	1,650	8,920
Number of Establishments						
One	2,038	29,717	14.6	1,542	1,498	7,939
2 to 5	459	7,439	16.2	273	266	1,524
6 to 10	79	2,463	31.0	86	84	511
11 to 20	23	1,786	76.7	50	48	275
More than 20	19	3,596	186.8	60	58	297
Currently Unoccupied	50	525	10.5	12	11	64
Energy Sources (more than one may apply)						
Electricity	2,663	45,496	17.1	2,023	1,966	10,607
Natural Gas	2,670	45,525	17.1	2,023	1,966	10,609
Fuel Oil	91	8,088	89.1	428	416	1,786
District Heat	Q	2,683	51.2	108	105	488
District Chilled Water	21	1,316	62.9	53	51	226
Propane	35	1,887	53.5	Q	Q	433
Other	59	1,572	26.6	75	72	381

Table C15. Total Natural Gas Consumption and Expenditures, 1999

	All Buildings Using Natural Gas			Natural Gas Consumption		Natural Gas Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (billion cubic feet)	Total (million dollars)
Space-Heating Energy Source						
Natural Gas	2,380	37,902	15.9	1,764	1,714	9,122
Natural Gas Main	2,189	32,729	15.0	1,602	1,557	8,225
Natural Gas Secondary	191	5,173	27.1	162	157	897
Other Excluding Natural Gas	208	6,492	31.2	190	184	1,067
Buildings without Heating	82	1,141	13.9	Q	Q	Q
Primary Space-Heating Energy Source						
Electricity	331	8,437	25.5	282	274	1,608
Natural Gas	2,189	32,729	15.0	1,602	1,557	8,225
Fuel Oil	Q	888	Q	17	16	108
District Heat	33	2,107	64.8	48	46	220
Propane	1	10	16.8	0	0	1
Other	Q	Q	Q	Q	Q	Q
Cooling Energy Source						
Natural Gas	142	1,914	13.5	102	99	518
Other Excluding Natural Gas	2,193	40,233	18.3	1,732	1,684	9,129
Buildings without Cooling	335	3,378	10.1	189	184	962
Water-Heating Energy Source						
Natural Gas	1,520	29,196	19.2	1,451	1,410	7,556
Other Excluding Natural Gas	671	12,170	18.1	413	402	2,149
Buildings without Water Heating	479	4,160	8.7	159	154	904
Cooking Energy Source						
Natural Gas	505	16,785	33.2	823	800	4,019
Other Excluding Natural Gas	110	3,072	28.0	118	114	653
Buildings without Cooking	2,055	25,668	12.5	1,082	1,052	5,937
Energy End Uses (more than one may apply)						
Buildings with Space Heating	2,588	44,385	17.2	1,954	1,899	10,189
Buildings with Cooling	2,335	42,147	18.1	1,834	1,782	9,647
Buildings with Water Heating	2,191	41,366	18.9	1,864	1,811	9,705
Buildings with Cooking	615	19,857	32.3	941	914	4,672
Buildings with Manufacturing	77	2,322	30.2	114	110	634
Buildings with Electricity Generation	118	9,119	77.5	470	457	2,080
Percent of Floorspace Heated						
Not Heated	82	1,141	13.9	Q	Q	Q
1 to 50	322	4,873	15.1	130	126	679
51 to 99	441	8,052	18.3	344	335	1,896
100	1,825	31,460	17.2	1,480	1,438	7,614
Percent of Floorspace Cooled						
Not Cooled	335	3,378	10.1	189	184	962
1 to 50	679	12,068	17.8	561	545	2,897
51 to 99	544	12,694	23.3	589	573	3,056
100	1,112	17,386	15.6	684	665	3,694
Heating Equipment (more than one may apply)						
Heat Pumps	194	5,627	29.1	292	284	1,481
Furnaces	1,104	11,960	10.8	566	550	3,054
Individual Space Heaters	581	13,561	23.3	530	515	2,712
District Heat	41	2,431	59.7	80	77	385
Boilers	416	16,588	39.8	841	817	3,974
Packaged Heating Units	939	20,043	21.3	826	803	4,291
Other	71	2,680	37.5	134	130	559

Table C15. Total Natural Gas Consumption and Expenditures, 1999

	All Buildings Using Natural Gas			Natural Gas Consumption		Natural Gas Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (billion cubic feet)	Total (million dollars)
Cooling Equipment (more than one may apply)						
Residential-Type Central Air Conditioners	503	6,805	13.5	295	287	1,538
Heat Pumps	195	5,771	29.6	291	283	1,477
Individual Air Conditioners	507	10,715	21.1	486	472	2,519
District Chilled Water	21	1,316	62.9	53	51	226
Central Chillers	103	10,145	98.8	522	508	2,301
Packaged Air Conditioning Units	1,356	27,987	20.6	1,193	1,159	6,277
Swamp Coolers	121	1,950	16.1	102	99	518
Other	20	773	Q	40	39	172
Main Equipment Replaced Since 1995 (more than one may apply)						
Heating	656	10,327	15.8	431	419	2,431
Cooling	689	12,862	18.7	557	542	2,949
Water Heating Equipment						
Centralized System	1,706	26,479	15.5	1,258	1,222	6,762
Distributed System	342	7,585	22.2	278	270	1,409
Combination of Centralized and Distributed System	143	7,302	51.2	328	319	1,533
Annual Consumption (hundred cubic feet)						
1,000 or Less	742	4,596	6.2	39	38	310
1,001 to 5,000	1,194	11,194	9.4	309	301	2,048
5,001 to 10,000	344	6,839	19.9	246	239	1,419
10,001 to 25,000	271	9,173	33.9	427	415	2,387
25,001 to 50,000	65	4,914	76.1	222	216	1,101
50,001 to 100,000	36	3,477	95.5	253	245	1,280
Over 100,000	17	5,333	314.3	526	511	2,064
Provider of Natural Gas (more than one may apply)						
Local Utility	2,508	40,765	16.3	1,730	1,681	9,251
Some Other Provider	125	4,266	34.2	287	279	1,288

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

Table C16. Natural Gas Consumption and Expenditure Intensities, 1999

	Natural Gas Consumption						Natural Gas Expenditures		
				Distribution of Building-Level Intensities (cubic feet/square foot)					
	per Building (thousand cubic feet)	per Square Foot (cubic feet)	per Worker (thousand cubic feet)	25th Percentile	Median	75th Percentile	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
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	28.5	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

Table C16. Natural Gas Consumption and Expenditure Intensities, 1999

	Natural Gas Consumption						Natural Gas Expenditures		
				Distribution of Building-Level Intensities (cubic feet/square foot)					
	per Building (thousand cubic feet)	per Square Foot (cubic feet)	per Worker (thousand cubic feet)	25th Percentile	Median	75th Percentile	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
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	682	43.6	34.6	16.5	34.1	76.5	3.8	0.24	5.53
Owner Occupied	728	45.6	35.6	17.0	36.5	77.5	4.0	0.25	5.46
Nonowner Occupied	605	39.6	31.6	16.4	32.6	68.2	3.4	0.23	5.69
Unoccupied	Q	Q	N	11.5	12.0	17.2	Q	Q	Q
Government Owned	1,163	41.6	36.5	11.3	32.7	71.1	5.6	0.20	4.80
Federal	Q	36.4	22.6	2.8	8.3	23.9	Q	0.16	4.37
State	2,143	49.2	46.7	16.7	35.4	89.4	9.1	0.21	4.24
Local	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

Table C16. Natural Gas Consumption and Expenditure Intensities, 1999

	Natural Gas Consumption						Natural Gas Expenditures		
				Distribution of Building-Level Intensities (cubic feet/square foot)					
	per Building (thousand cubic feet)	per Square Foot (cubic feet)	per Worker (thousand cubic feet)	25th Percentile	Median	75th Percentile	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
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	312	18.6	17.4	4.1	4.1	4.1	2.2	0.13	6.95
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 Generation	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

Table C16. Natural Gas Consumption and Expenditure Intensities, 1999

	Natural Gas Consumption						Natural Gas Expenditures		
				Distribution of Building-Level Intensities (cubic feet/square foot)					
	per Building (thousand cubic feet)	per Square Foot (cubic feet)	per Worker (thousand cubic feet)	25th Percentile	Median	75th Percentile	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
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.

Table C17. Natural Gas Consumption and Conditional Energy Intensity by Census Region, 1999

	Total Natural Gas Consumption (billion cubic feet)				Total Floorspace of Buildings Using Natural Gas (million square feet)				Natural Gas Energy Intensity (cubic feet/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings	291	689	601	385	7,305	13,506	14,199	10,515	39.8	51.0	42.3	36.6
Building Floorspace (Square Feet)												
1,001 to 5,000	Q	115	91	68	Q	1,210	951	991	Q	94.8	95.7	68.9
5,001 to 10,000	Q	79	Q	57	564	1,676	1,674	1,175	80.3	47.1	Q	48.5
10,001 to 25,000	53	96	Q	39	918	2,218	2,338	1,526	58.0	43.2	Q	25.5
25,001 to 50,000	29	63	71	64	927	1,480	2,054	1,944	31.4	42.7	34.4	33.1
50,001 to 100,000	31	80	68	65	979	2,077	2,343	1,767	31.2	38.3	29.2	36.6
100,001 to 200,000	32	100	60	31	938	1,866	1,902	1,209	33.8	53.7	31.8	25.5
200,001 to 500,000	29	111	52	38	911	1,776	1,628	967	32.3	62.3	32.1	39.3
Over 500,000	42	46	33	23	1,653	1,203	1,310	937	25.1	38.2	25.6	24.9
Principal Building Activity												
Education	42	83	45	50	1,223	1,863	1,757	1,726	34.7	44.5	25.3	29.2
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Food Service	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Health Care	44	55	67	46	352	668	760	505	124.6	82.1	87.5	90.2
Inpatient	43	47	62	Q	330	488	567	Q	131.5	95.5	108.7	Q
Outpatient	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Lodging	18	43	67	49	306	758	1,258	1,225	57.4	56.2	53.5	39.8
Mercantile	35	78	43	24	1,322	2,471	2,686	1,408	26.7	31.5	16.0	17.4
Retail (Other Than Mall)	24	51	23	Q	602	1,507	995	Q	39.9	33.9	23.5	Q
Enclosed and Strip Malls	Q	27	20	16	Q	964	1,692	993	Q	27.6	11.6	16.4
Office	28	77	57	52	1,210	2,136	2,188	1,821	22.7	35.9	26.0	28.6
Public Assembly	14	29	24	Q	504	899	991	595	27.1	32.0	23.7	46.5
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	Q	22	12	16	Q	659	677	839	Q	32.8	17.5	19.7
Service	Q	64	145	Q	Q	753	738	297	Q	85.3	196.4	44.8
Warehouse and Storage	28	136	41	Q	1,166	2,001	1,948	1,096	23.6	68.0	21.3	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed												
1919 or Before	28	64	8	18	674	1,260	413	419	40.8	51.0	18.5	41.9
1920 to 1945	29	95	39	26	911	1,837	944	566	32.0	51.6	41.7	45.7
1946 to 1959	76	86	47	40	1,274	1,779	1,676	1,310	59.5	48.2	28.3	30.2
1960 to 1969	48	110	116	87	1,140	2,144	2,300	1,928	42.4	51.4	50.5	44.9
1970 to 1979	32	87	107	91	960	1,881	2,600	2,639	33.0	46.4	41.1	34.5
1980 to 1989	46	111	177	45	1,288	2,236	3,481	1,789	35.7	49.8	50.9	25.4
1990 to 1999	32	136	106	79	1,056	2,369	2,785	1,865	30.2	57.3	38.2	42.6
Climate Zone: 45-Year Average												
Under 2,000 CDD and --												
More than 7,000 HDD	Q	192	N	29	Q	3,579	N	458	Q	53.7	N	62.4
5,500-7,000 HDD	142	399	N	83	3,467	7,330	N	1,776	41.0	54.4	N	46.7
4,000-5,499 HDD	147	98	205	54	3,812	2,597	2,804	1,242	38.7	37.9	73.1	43.8
Fewer than 4,000 HDD	N	N	240	173	N	N	6,222	5,927	N	N	38.5	29.2
2,000 CDD or More and --												
Fewer than 4,000 HDD	N	N	156	46	N	N	5,173	1,112	N	N	30.2	41.6
Workers (main shift)												
Fewer than 5	30	107	79	57	614	2,576	2,180	1,738	48.2	41.4	36.3	32.7
5 to 9	19	80	35	55	701	1,542	1,083	1,307	27.0	51.9	32.5	42.0
10 to 19	46	96	90	41	950	1,766	1,726	1,147	48.6	54.3	52.4	35.6
20 to 49	53	103	193	74	885	2,110	2,883	1,858	59.6	48.6	67.0	39.9
50 to 99	45	70	59	41	1,062	1,671	1,990	1,555	42.2	42.1	29.6	26.5
100 to 249	38	94	63	50	1,102	1,854	2,009	1,182	34.7	50.5	31.3	42.1
250 or More	60	140	81	67	1,990	1,988	2,328	1,728	30.1	70.5	34.9	39.0

Table C17. Natural Gas Consumption and Conditional Energy Intensity by Census Region, 1999

	Total Natural Gas Consumption (billion cubic feet)				Total Floorspace of Buildings Using Natural Gas (million square feet)				Natural Gas Energy Intensity (cubic feet/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Weekly Operating Hours												
39 or Fewer	Q	30	21	16	Q	789	971	792	Q	38.1	21.9	20.6
40 to 48	38	92	70	62	934	2,460	2,837	1,966	41.2	37.4	24.5	31.4
49 to 60	37	131	133	75	1,394	3,146	2,771	2,403	26.9	41.7	Q	31.1
61 to 84	76	113	Q	55	1,805	2,622	2,656	1,924	42.1	43.0	Q	28.7
85 to 167	37	134	111	57	1,146	2,160	1,910	1,232	31.9	61.9	58.3	46.1
Open Continuously	90	189	161	120	1,754	2,329	3,054	2,198	51.2	81.3	52.9	54.8
Ownership and Occupancy												
Nongovernment Owned	242	571	494	305	5,622	11,152	11,727	8,525	43.1	51.2	42.2	35.7
Owner Occupied	193	396	369	211	4,056	7,868	7,959	5,714	47.5	50.4	46.3	36.9
Nonowner Occupied	49	172	120	94	1,537	3,200	3,501	2,730	32.1	53.7	34.3	34.3
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	48	118	107	81	1,683	2,354	2,473	1,990	28.7	50.1	43.1	40.5
Federal	Q	Q	9	11	Q	Q	275	239	Q	Q	34.3	45.5
State	Q	34	Q	21	Q	678	693	545	Q	50.5	Q	37.8
Local	36	71	50	49	1,093	1,447	1,504	1,206	33.0	49.3	33.0	40.7
Vacancy Status												
Completely Vacant	N	Q	Q	Q	N	Q	Q	Q	N	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	19.7	Q
Partially Vacant	39	123	80	55	1,798	3,253	3,333	2,341	21.8	37.9	23.9	23.6
Not At All Vacant	250	554	519	327	5,407	10,007	10,754	8,006	46.3	55.3	48.2	40.8
Number of Establishments												
One	210	518	480	291	4,482	9,194	9,096	6,945	46.8	56.4	52.8	41.8
2 to 5	43	115	58	50	1,237	2,533	2,008	1,661	35.1	45.3	28.7	30.1
6 to 10	Q	14	31	19	Q	470	897	726	Q	30.8	35.1	26.7
11 to 20	Q	19	13	8	Q	444	642	363	Q	43.8	20.2	23.1
More than 20	11	19	13	15	850	743	1,283	720	Q	25.6	10.3	21.0
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Energy Sources (more than one may apply)												
Electricity	291	689	601	385	7,305	13,506	14,199	10,486	39.8	51.0	42.3	36.7
Natural Gas	291	689	601	385	7,305	13,506	14,199	10,515	39.8	51.0	42.3	36.6
Fuel Oil	78	165	111	61	2,569	1,945	2,269	1,306	30.5	85.1	49.0	46.8
District Heat	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
District Chilled Water	Q	9	18	Q	Q	290	518	Q	Q	30.2	34.9	Q
Propane	Q	Q	17	Q	Q	628	701	Q	Q	Q	Q	Q
Other	Q	29	Q	Q	Q	507	Q	Q	Q	56.7	Q	Q
Space-Heating Energy Source												
Natural Gas	268	663	444	339	5,703	12,467	10,904	8,828	47.0	53.2	40.7	38.4
Natural Gas Main	239	624	394	300	4,913	11,348	8,815	7,653	48.7	55.0	44.7	39.2
Natural Gas Secondary	29	39	50	39	790	1,118	2,089	1,175	36.6	35.2	23.8	33.4
Other Excluding Natural Gas	19	21	110	34	1,545	986	2,616	1,345	12.5	21.4	42.0	25.4
Buildings without Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Primary Space-Heating Energy Source												
Electricity	27	50	135	62	693	1,497	4,037	2,210	38.4	33.6	33.5	28.0
Natural Gas	239	624	394	300	4,913	11,348	8,815	7,653	48.7	55.0	44.7	39.2
Fuel Oil	13	Q	Q	Q	664	Q	Q	Q	19.5	Q	Q	Q
District Heat	8	Q	22	Q	884	507	468	Q	Q	13.2	46.2	Q
Propane	0	0	N	N	6	5	N	N	30.4	4.1	N	N
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	12.9	Q

Table C17. Natural Gas Consumption and Conditional Energy Intensity by Census Region, 1999

	Total Natural Gas Consumption (billion cubic feet)				Total Floorspace of Buildings Using Natural Gas (million square feet)				Natural Gas Energy Intensity (cubic feet/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Cooling Energy Source												
Natural Gas	31	38	Q	20	446	550	Q	652	69.1	69.0	Q	30.5
Other Excluding Natural Gas	241	590	526	326	6,275	11,750	13,532	8,676	38.5	50.2	38.9	37.6
Buildings without Cooling	18	62	Q	39	583	1,206	402	1,187	31.5	51.0	Q	32.8
Water-Heating Energy Source												
Natural Gas	197	444	447	321	4,074	8,323	8,943	7,856	48.4	53.4	50.0	40.9
Other Excluding Natural Gas	81	153	121	46	2,827	3,350	3,973	2,020	28.8	45.7	30.4	23.0
Buildings without Water Heating	12	92	33	18	404	1,833	1,283	640	29.8	50.1	25.6	27.8
Cooking Energy Source												
Natural Gas	132	255	242	172	3,380	4,445	5,345	3,614	39.0	57.3	45.3	47.5
Other Excluding Natural Gas	25	40	35	14	537	913	1,213	409	46.5	44.2	28.9	33.9
Buildings without Cooking	134	394	324	200	3,388	8,148	7,641	6,492	39.5	48.4	42.4	30.8
Energy End Uses (more than one may apply)												
Buildings with Space Heating	287	684	554	374	7,248	13,452	13,511	10,173	39.6	50.9	41.0	36.7
Buildings with Cooling	272	628	536	346	6,721	12,300	13,798	9,328	40.5	51.0	38.9	37.1
Buildings with Water Heating	278	597	568	367	6,901	11,673	12,916	9,875	40.4	51.2	44.0	37.2
Buildings with Cooking	157	295	277	186	3,917	5,358	6,558	4,024	40.0	55.0	42.2	46.1
Buildings with Manufacturing	Q	Q	30	13	Q	777	675	458	Q	69.3	44.0	29.4
Buildings with Electricity Generation	76	172	123	86	2,132	2,355	2,997	1,635	35.5	73.1	41.1	52.6
Percent of Floorspace Heated												
Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	Q	32	Q	35	Q	1,305	1,373	1,638	Q	24.7	Q	21.4
51 to 99	29	70	Q	61	1,086	2,123	2,960	1,884	27.0	32.8	Q	32.6
100	245	582	333	277	5,606	10,024	9,178	6,652	43.7	58.1	36.3	41.7
Percent of Floorspace Cooled												
Not Cooled	18	62	Q	39	583	1,206	402	1,187	31.5	51.0	Q	32.8
1 to 50	99	258	Q	62	2,476	4,570	2,640	2,382	40.1	56.5	Q	26.1
51 to 99	99	193	166	115	2,161	4,147	3,889	2,496	45.6	46.5	42.6	46.2
100	74	176	245	169	2,084	3,583	7,269	4,449	35.6	49.2	33.7	38.0
Heating Equipment (more than one may apply)												
Heat Pumps	28	39	173	44	928	691	2,732	1,276	30.6	57.0	63.2	34.2
Furnaces	68	285	Q	69	1,480	5,153	3,101	2,226	46.0	55.3	41.5	31.0
Individual Space Heaters	91	200	124	99	2,550	4,207	3,847	2,956	35.6	47.6	32.3	33.6
District Heat	26	11	27	12	998	579	560	295	26.4	19.9	48.7	41.4
Boilers	137	329	171	181	3,552	5,701	3,641	3,694	38.5	57.6	47.0	49.0
Packaged Heating Units	101	266	266	171	3,039	4,717	7,108	5,179	33.1	56.4	37.4	33.0
Other	Q	Q	13	Q	Q	953	786	501	Q	Q	16.9	45.4
Cooling Equipment (more than one may apply)												
Residential-Type Central Air Conditioners	35	125	91	Q	800	2,626	2,376	1,004	44.3	47.5	38.3	35.4
Heat Pumps	26	38	174	45	962	742	2,753	1,313	26.9	51.4	63.1	34.6
Individual Air Conditioners	105	187	117	63	2,608	3,352	3,152	1,603	40.3	55.8	37.1	39.6
District Chilled Water	Q	9	18	Q	Q	290	518	Q	Q	30.2	34.9	Q
Central Chillers	71	175	139	122	1,967	2,621	3,338	2,220	36.1	67.0	41.7	54.9
Packaged Air Conditioning Units	198	435	316	210	4,777	7,564	9,287	6,359	41.5	57.5	34.0	33.0
Swamp Coolers	Q	Q	Q	65	Q	Q	Q	1,413	Q	Q	Q	45.9
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C17. Natural Gas Consumption and Conditional Energy Intensity by Census Region, 1999

	Total Natural Gas Consumption (billion cubic feet)				Total Floorspace of Buildings Using Natural Gas (million square feet)				Natural Gas Energy Intensity (cubic feet/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Main Equipment Replaced Since 1995 (more than one may apply)												
Heating	60	140	125	94	1,233	3,072	3,477	2,545	48.5	45.6	35.9	37.0
Cooling	80	188	173	101	1,979	3,505	4,651	2,728	40.3	53.6	37.2	37.1
Water Heating Equipment												
Centralized System	207	362	400	253	4,691	7,688	7,742	6,357	44.2	47.1	51.6	39.8
Distributed System	23	119	74	55	1,055	1,977	2,740	1,812	21.4	60.0	26.9	30.6
Combination of Centralized and Distributed System	48	116	95	59	1,154	2,007	2,435	1,706	41.9	58.0	38.9	34.7
Annual Consumption (hundred cubic feet)												
1,000 or Less	2	10	16	10	392	946	1,867	1,392	4.5	10.5	8.7	7.4
1,001 to 5,000	40	108	78	74	1,413	3,280	3,635	2,865	28.5	32.9	21.5	25.8
5,001 to 10,000	33	90	69	47	1,091	1,807	2,411	1,530	30.4	49.9	28.6	30.9
10,001 to 25,000	87	132	104	92	1,694	2,799	2,510	2,169	51.1	47.2	41.5	42.6
25,001 to 50,000	26	69	77	44	834	1,569	1,510	1,001	30.8	44.2	50.9	44.2
50,001 to 100,000	26	73	Q	32	779	1,308	842	547	33.7	56.0	134.7	59.3
Over 100,000	77	206	143	85	1,101	1,796	1,425	1,011	69.7	114.9	100.4	83.6
Provider of Natural Gas (more than one may apply)												
Local Utility	223	593	529	337	6,102	11,915	13,151	9,597	36.5	49.7	40.2	35.1
Some Other Provider	64	93	71	Q	954	1,534	917	861	67.3	60.5	77.5	59.1

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.

Table C18. Natural Gas Expenditures by Census Region, 1999

	Total Natural Gas Expenditures (million dollars)				Natural Gas Expenditures (dollars) per Thousand Cubic Feet				Natural Gas Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings	1,895	3,277	3,294	2,144	6.52	4.75	5.48	5.56	0.26	0.24	0.23	0.20
Building Floorspace (Square Feet)												
1,001 to 5,000	Q	643	507	416	Q	5.61	5.57	6.09	Q	0.53	0.53	0.42
5,001 to 10,000	320	461	Q	374	7.07	5.84	6.36	6.57	0.57	0.28	0.39	0.32
10,001 to 25,000	380	482	Q	232	7.13	5.03	5.92	5.96	0.41	0.22	Q	0.15
25,001 to 50,000	215	318	373	368	7.38	5.04	5.27	5.72	0.23	0.22	0.18	0.19
50,001 to 100,000	211	364	335	343	6.91	4.58	4.89	5.30	0.22	0.18	0.14	0.19
100,001 to 200,000	189	451	316	149	5.95	4.50	5.23	4.85	0.20	0.24	0.17	0.12
200,001 to 500,000	157	376	256	169	5.34	3.40	4.90	4.45	0.17	0.21	0.16	0.17
Over 500,000	187	181	133	92	4.51	3.93	3.98	3.97	0.11	0.15	0.10	0.10
Principal Building Activity												
Education	262	307	255	286	6.19	3.71	5.72	5.68	0.21	0.17	0.15	0.17
Food Sales	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Food Service	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Health Care	192	211	286	192	4.39	3.84	4.29	4.23	0.55	0.32	0.38	0.38
Inpatient	188	164	257	Q	4.33	3.51	4.17	Q	0.57	0.34	0.45	Q
Outpatient	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Lodging	107	196	368	272	6.06	4.60	5.47	5.59	0.35	0.26	0.29	0.22
Mercantile	265	416	292	153	7.51	5.36	6.79	6.27	0.20	0.17	0.11	0.11
Retail (Other Than Mall)	185	272	162	Q	7.72	5.32	6.91	Q	0.31	0.18	0.16	Q
Enclosed and Strip Malls	Q	144	130	102	Q	5.42	6.64	6.27	Q	0.15	0.08	0.10
Office	215	397	312	290	7.83	5.19	5.48	5.57	0.18	0.19	0.14	0.16
Public Assembly	110	158	140	Q	8.04	5.49	5.94	5.53	0.22	0.18	0.14	0.26
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	Q	124	Q	107	Q	5.72	8.59	6.50	Q	0.19	0.15	0.13
Service	Q	343	Q	72	Q	5.34	5.28	5.42	Q	0.46	1.04	0.24
Warehouse and Storage	187	594	245	Q	6.78	4.36	5.90	5.43	0.16	0.30	0.13	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed												
1919 or Before	202	328	55	98	7.32	5.11	7.23	5.61	0.30	0.26	0.13	0.24
1920 to 1945	166	430	220	153	5.70	4.53	5.59	5.90	0.18	0.23	0.23	0.27
1946 to 1959	459	417	281	234	6.05	4.86	5.93	5.91	0.36	0.23	0.17	0.18
1960 to 1969	336	542	Q	483	6.95	4.92	5.39	5.58	0.29	0.25	Q	0.25
1970 to 1979	201	424	576	525	6.35	4.86	5.40	5.77	0.21	0.23	0.22	0.20
1980 to 1989	324	536	926	247	7.06	4.82	5.23	5.44	0.25	0.24	0.27	0.14
1990 to 1999	206	600	610	404	6.45	4.42	5.73	5.09	0.20	0.25	0.22	0.22
Climate Zone: 45-Year Average												
Under 2,000 CDD and --												
More than 7,000 HDD	Q	976	N	140	Q	5.08	N	4.91	Q	0.27	N	0.31
5,500-7,000 HDD	960	1,777	N	370	6.76	4.46	N	4.46	0.28	0.24	N	0.21
4,000-5,499 HDD	925	523	1,127	298	6.28	5.32	5.50	5.49	0.24	0.20	0.40	0.24
Fewer than 4,000 HDD	N	N	1,298	1,043	N	N	5.41	6.02	N	N	0.21	0.18
2,000 CDD or More and --												
Fewer than 4,000 HDD	N	N	868	292	N	N	5.56	6.32	N	N	0.17	0.26
Workers (main shift)												
Fewer than 5	242	612	541	351	8.19	5.74	6.84	6.18	0.39	0.24	0.25	0.20
5 to 9	145	433	199	334	7.67	5.41	5.67	6.07	0.21	0.28	0.18	0.26
10 to 19	303	477	477	253	6.56	4.98	5.27	6.19	0.32	0.27	0.28	0.22
20 to 49	381	502	1,070	433	7.21	4.90	5.53	5.84	0.43	0.24	0.37	0.23
50 to 99	296	331	317	234	6.61	4.70	5.38	5.67	0.28	0.20	0.16	0.15
100 to 249	237	419	315	240	6.18	4.47	5.02	4.81	0.21	0.23	0.16	0.20
250 or More	290	503	375	300	4.85	3.59	4.62	4.44	0.15	0.25	0.16	0.17

Table C18. Natural Gas Expenditures by Census Region, 1999

	Total Natural Gas Expenditures (million dollars)				Natural Gas Expenditures (dollars) per Thousand Cubic Feet				Natural Gas Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Weekly Operating Hours												
39 or Fewer	Q	168	Q	91	Q	5.57	7.89	5.59	Q	0.21	0.17	0.11
40 to 48	256	460	404	361	6.65	4.99	5.80	5.84	0.27	0.19	0.14	0.18
49 to 60	286	637	749	452	7.63	4.85	5.62	6.05	0.21	0.20	Q	0.19
61 to 84	527	602	Q	337	6.93	5.35	5.56	6.10	0.29	0.23	Q	0.18
85 to 167	257	653	581	320	7.02	4.88	5.21	5.62	0.22	0.30	0.30	0.26
Open Continuously	494	758	815	583	5.50	4.00	5.05	4.84	0.28	0.33	0.27	0.27
Ownership and Occupancy												
Nongovernment Owned	1,613	2,773	2,805	1,722	6.66	4.85	5.67	5.65	0.29	0.25	0.24	0.20
Owner Occupied	1,251	1,944	2,035	1,153	6.49	4.91	5.52	5.47	0.31	0.25	0.26	0.20
Nonowner Occupied	360	813	Q	566	7.30	4.73	6.12	6.05	0.23	0.25	0.21	0.21
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	281	504	488	422	5.83	4.27	4.59	5.24	0.17	0.21	0.20	0.21
Federal	Q	Q	38	53	Q	Q	3.98	4.90	Q	Q	0.14	0.22
State	Q	130	186	98	Q	3.80	3.91	4.75	Q	0.19	0.27	0.18
Local	204	327	265	271	5.65	4.58	5.35	5.51	0.19	0.23	0.18	0.22
Vacancy Status												
Completely Vacant	N	Q	Q	Q	N	Q	Q	Q	N	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	0.10	Q
Partially Vacant	243	611	443	304	6.20	4.95	5.55	5.50	0.13	0.19	0.13	0.13
Not At All Vacant	1,646	2,609	2,840	1,824	6.58	4.71	5.47	5.58	0.30	0.26	0.26	0.23
Number of Establishments												
One	1,348	2,398	2,593	1,599	6.42	4.63	5.40	5.51	0.30	0.26	0.29	0.23
2 to 5	293	607	328	296	6.76	5.29	5.69	5.91	0.24	0.24	0.16	0.18
6 to 10	Q	80	198	100	Q	5.52	6.28	5.18	Q	0.17	0.22	0.14
11 to 20	Q	104	68	52	Q	5.34	5.27	6.18	Q	0.23	0.11	0.14
More than 20	Q	70	71	Q	Q	3.67	5.40	5.87	Q	0.09	0.06	0.12
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Energy Sources (more than one may apply)												
Electricity	1,895	3,277	3,294	2,142	6.52	4.75	5.48	5.57	0.26	0.24	0.23	0.20
Natural Gas	1,895	3,277	3,294	2,144	6.52	4.75	5.48	5.56	0.26	0.24	0.23	0.20
Fuel Oil	404	637	481	263	5.16	3.85	4.33	4.30	0.16	0.33	0.21	0.20
District Heat	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
District Chilled Water	Q	36	71	Q	Q	4.15	3.91	Q	Q	0.13	0.14	Q
Propane	Q	Q	81	Q	Q	3.67	4.64	Q	Q	Q	0.11	Q
Other	Q	116	Q	Q	Q	4.02	Q	Q	Q	0.23	Q	Q
Space-Heating Energy Source												
Natural Gas	1,731	3,146	2,388	1,857	6.46	4.75	5.38	5.47	0.30	0.25	0.22	0.21
Natural Gas Main	1,549	2,940	2,087	1,650	6.48	4.71	5.29	5.50	0.32	0.26	0.24	0.22
Natural Gas Secondary	182	206	302	207	6.30	5.23	6.06	5.28	0.23	0.18	0.14	0.18
Other Excluding Natural Gas	138	108	616	204	7.14	5.11	5.61	5.97	0.09	0.11	0.24	0.15
Buildings without Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Primary Space-Heating Energy Source												
Electricity	Q	270	804	354	Q	5.36	5.94	5.72	Q	0.18	0.20	0.16
Natural Gas	1,549	2,940	2,087	1,650	6.48	4.71	5.29	5.50	0.32	0.26	0.24	0.22
Fuel Oil	89	Q	Q	Q	6.91	Q	Q	Q	0.13	Q	Q	Q
District Heat	45	29	99	Q	5.72	4.27	4.57	Q	0.05	0.06	0.21	Q
Propane	1	0	N	N	6.97	6.75	N	N	0.21	0.03	N	N
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	0.12	Q

Table C18. Natural Gas Expenditures by Census Region, 1999

	Total Natural Gas Expenditures (million dollars)				Natural Gas Expenditures (dollars) per Thousand Cubic Feet				Natural Gas Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Cooling Energy Source												
Natural Gas	159	190	Q	117	5.16	5.01	Q	5.87	0.36	0.35	Q	0.18
Other Excluding Natural Gas	1,607	2,792	2,931	1,798	6.66	4.74	5.57	5.51	0.26	0.24	0.22	0.21
Buildings without Cooling	128	294	Q	229	6.98	4.78	4.80	5.87	0.22	0.24	Q	0.19
Water-Heating Energy Source												
Natural Gas	1,248	2,131	2,404	1,773	6.33	4.80	5.37	5.52	0.31	0.26	0.27	0.23
Other Excluding Natural Gas	555	658	677	259	6.82	4.30	5.60	5.58	0.20	0.20	0.17	0.13
Buildings without Water Heating	92	487	213	112	7.66	5.30	6.50	Q	0.23	0.27	0.17	0.17
Cooking Energy Source												
Natural Gas	782	1,096	1,216	925	5.93	4.31	5.03	5.38	0.23	0.25	0.23	0.26
Other Excluding Natural Gas	160	203	223	66	6.42	5.04	6.36	4.74	0.30	0.22	0.18	0.16
Buildings without Cooking	952	1,977	1,855	1,153	7.12	5.01	5.73	5.78	0.28	0.24	0.24	0.18
Energy End Uses (more than one may apply)												
Buildings with Space Heating	1,868	3,254	3,005	2,061	6.50	4.76	5.43	5.52	0.26	0.24	0.22	0.20
Buildings with Cooling	1,766	2,982	2,983	1,915	6.49	4.75	5.56	5.53	0.26	0.24	0.22	0.21
Buildings with Water Heating	1,802	2,790	3,081	2,032	6.47	4.67	5.42	5.53	0.26	0.24	0.24	0.21
Buildings with Cooking	942	1,300	1,439	990	6.01	4.41	5.20	5.34	0.24	0.24	0.22	0.25
Buildings with Manufacturing	Q	Q	178	81	Q	5.05	5.97	5.99	Q	0.35	0.26	0.18
Buildings with Electricity Generation	409	663	616	392	5.42	3.85	4.99	4.56	0.19	0.28	0.21	0.24
Percent of Floorspace Heated												
Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	Q	193	200	191	Q	5.98	Q	5.46	Q	0.15	0.15	0.12
51 to 99	194	355	Q	354	6.63	5.10	5.69	5.76	0.18	0.17	Q	0.19
100	1,579	2,706	1,812	1,516	6.44	4.65	5.44	5.47	0.28	0.27	0.20	0.23
Percent of Floorspace Cooled												
Not Cooled	128	294	Q	229	6.98	4.78	4.80	5.87	0.22	0.24	Q	0.19
1 to 50	653	1,168	Q	335	6.58	4.52	5.92	5.38	0.26	0.26	Q	0.14
51 to 99	603	926	924	603	6.11	4.80	5.57	5.23	0.28	0.22	0.24	0.24
100	511	888	1,318	978	6.88	5.03	5.37	5.79	0.25	0.25	0.18	0.22
Heating Equipment (more than one may apply)												
Heat Pumps	161	164	931	225	5.66	4.18	5.39	5.14	0.17	0.24	0.34	0.18
Furnaces	486	1,438	Q	390	7.14	5.05	5.76	5.66	0.33	0.28	0.24	0.18
Individual Space Heaters	567	943	683	519	6.24	4.70	5.50	5.22	0.22	0.22	0.18	0.18
District Heat	160	45	121	Q	6.09	3.90	4.44	Q	0.16	0.08	0.22	Q
Boilers	809	1,427	851	887	5.92	4.34	4.97	4.90	0.23	0.25	0.23	0.24
Packaged Heating Units	657	1,194	1,456	985	6.52	4.49	5.48	5.77	0.22	0.25	0.20	0.19
Other	Q	Q	71	Q	Q	3.80	5.37	4.04	Q	Q	0.09	0.18
Cooling Equipment (more than one may apply)												
Residential-Type Central Air Conditioners	219	641	514	165	6.17	5.15	5.64	4.63	0.27	0.24	0.22	0.16
Heat Pumps	151	156	933	237	5.86	4.08	5.37	5.22	0.16	0.21	0.34	0.18
Individual Air Conditioners	599	854	716	349	5.70	4.57	6.13	5.51	0.23	0.25	0.23	0.22
District Chilled Water	Q	36	71	Q	Q	4.15	3.91	Q	Q	0.13	0.14	Q
Central Chillers	361	690	681	570	5.07	3.93	4.89	4.67	0.18	0.26	0.20	0.26
Packaged Air Conditioning Units	1,291	2,019	1,763	1,204	6.52	4.64	5.58	5.74	0.27	0.27	0.19	0.19
Swamp Coolers	Q	Q	Q	360	Q	Q	Q	5.54	Q	Q	Q	0.25
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C18. Natural Gas Expenditures by Census Region, 1999

	Total Natural Gas Expenditures (million dollars)				Natural Gas Expenditures (dollars) per Thousand Cubic Feet				Natural Gas Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Main Equipment Replaced Since 1995 (more than one may apply)												
Heating	388	729	739	575	6.48	5.20	5.92	6.11	0.31	0.24	0.21	0.23
Cooling	484	868	1,007	589	6.08	4.62	5.83	5.83	0.24	0.25	0.22	0.22
Water Heating Equipment												
Centralized System	1,371	1,795	2,178	1,419	6.61	4.95	5.45	5.61	0.29	0.23	0.28	0.22
Distributed System	169	479	435	326	7.47	4.04	5.90	5.88	0.16	0.24	0.16	0.18
Combination of Centralized and Distributed System	262	516	468	287	5.42	4.43	4.94	4.85	0.23	0.26	0.19	0.17
Annual Consumption (hundred cubic feet)												
1,000 or Less	20	77	128	86	11.09	7.75	7.87	8.33	0.05	0.08	0.07	0.06
1,001 to 5,000	335	670	547	497	8.31	6.20	6.99	6.71	0.24	0.20	0.15	0.17
5,001 to 10,000	256	463	424	276	7.72	5.14	6.15	5.83	0.23	0.26	0.18	0.18
10,001 to 25,000	586	651	601	548	6.77	4.93	5.77	5.94	0.35	0.23	0.24	0.25
25,001 to 50,000	169	329	376	228	6.55	4.74	4.90	5.14	0.20	0.21	0.25	0.23
50,001 to 100,000	166	321	Q	160	6.32	4.39	5.58	4.92	0.21	0.25	0.75	0.29
Over 100,000	363	765	585	349	4.74	3.71	4.09	4.13	0.33	0.43	0.41	0.35
Provider of Natural Gas (more than one may apply)												
Local Utility	1,477	2,880	2,982	1,912	6.64	4.86	5.64	5.67	0.24	0.24	0.23	0.20
Some Other Provider	377	371	311	Q	5.87	4.00	4.38	4.50	0.40	0.24	0.34	0.27

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

Table C19. Natural Gas Consumption and Conditional Energy Intensity by Building Size, 1999

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
All Buildings	588	780	598	8,654	20,570	16,301	67.9	37.9	36.7
Principal Building Activity									
Education	22	122	76	566	3,620	2,385	38.7	33.8	31.9
Food Sales	Q	18	Q	Q	342	Q	Q	51.5	Q
Food Service	174	Q	Q	981	Q	Q	177.2	Q	Q
Health Care	Q	32	173	Q	453	1,624	Q	69.8	106.2
Inpatient	N	Q	169	N	Q	1,553	N	Q	109.0
Outpatient	Q	11	Q	Q	328	Q	Q	33.5	Q
Lodging	Q	93	59	Q	1,748	1,542	Q	53.1	38.5
Mercantile	60	88	32	1,315	3,395	3,178	45.5	26.0	10.1
Retail (Other Than Mall)	48	52	Q	1,070	1,886	Q	44.9	27.3	Q
Enclosed and Strip Malls	Q	37	25	Q	1,508	2,616	Q	24.4	9.6
Office	50	86	78	1,467	2,772	3,116	33.9	30.9	25.0
Public Assembly	31	47	16	638	1,622	728	47.9	29.1	21.7
Public Order and Safety	Q	20	Q	Q	423	Q	Q	46.8	Q
Religious Worship	21	38	Q	727	1,687	Q	28.8	22.8	Q
Service	132	Q	Q	1,081	714	Q	122.4	154.7	Q
Warehouse and Storage	Q	63	Q	643	2,810	2,758	60.4	22.4	44.1
Other	Q	Q	Q	Q	302	Q	Q	80.5	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Year Constructed									
1919 or Before	56	42	Q	946	1,453	Q	59.6	28.9	Q
1920 to 1945	73	70	46	1,065	1,755	1,437	68.7	40.0	31.8
1946 to 1959	69	113	66	1,406	2,899	1,735	49.2	39.1	38.0
1960 to 1969	140	120	101	1,305	3,249	2,958	107.5	36.9	34.1
1970 to 1979	100	114	103	1,650	3,520	2,910	60.5	32.5	35.3
1980 to 1989	54	198	128	970	4,247	3,576	55.7	46.7	35.7
1990 to 1999	95	122	136	1,312	3,448	3,316	72.5	35.4	41.1
Census Region and Division									
Northeast	75	113	103	978	2,824	3,503	76.5	40.0	29.3
New England	Q	27	23	Q	863	674	Q	31.5	34.8
Middle Atlantic	69	86	79	925	1,961	2,829	74.2	43.7	28.0
Midwest	194	239	257	2,886	5,775	4,846	67.1	41.3	53.0
East North Central	151	155	178	2,120	3,907	3,356	71.3	39.6	52.9
West North Central	43	84	79	766	1,868	1,490	55.6	45.0	53.3
South	194	261	146	2,625	6,735	4,840	73.9	38.7	30.2
South Atlantic	Q	71	73	778	2,500	2,239	Q	28.3	32.7
East South Central	29	126	25	604	1,885	1,019	48.3	Q	25.0
West South Central	66	64	48	1,243	2,349	1,582	53.4	27.4	30.1
West	125	168	92	2,165	5,237	3,113	57.8	32.1	29.6
Mountain	52	62	27	739	1,703	740	69.9	36.3	36.3
Pacific	74	106	65	1,426	3,533	2,373	51.5	30.0	27.5
Climate Zone: 45-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	74	88	59	979	1,943	1,142	76.0	45.2	52.1
5,500-7,000 HDD	147	224	253	1,956	5,609	5,008	75.3	39.9	50.5
4,000-5,499 HDD	178	199	128	2,039	3,876	4,539	87.3	51.5	28.1
Fewer than 4,000 HDD	99	198	115	2,240	6,061	3,849	44.4	32.7	30.0
2,000 CDD or More and --									
Fewer than 4,000 HDD	89	71	43	1,440	3,081	1,763	61.5	23.1	24.2

Table C19. Natural Gas Consumption and Conditional Energy Intensity by Building Size, 1999

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
Workers (main shift)									
Fewer than 5	205	65	Q	3,981	2,999	Q	51.5	21.5	Q
5 to 9	122	57	Q	2,038	2,275	Q	59.6	25.2	Q
10 to 19	124	142	Q	1,535	3,488	Q	81.0	40.6	Q
20 to 49	131	262	30	969	5,399	1,369	135.1	48.6	21.7
50 to 99	Q	151	61	Q	3,914	2,295	Q	38.5	26.8
100 to 249	Q	82	160	Q	1,879	4,205	Q	43.8	38.0
250 or More	N	22	327	N	616	7,419	N	35.2	44.1
Weekly Operating Hours									
39 or Fewer	40	30	Q	1,307	1,210	Q	30.8	24.5	Q
40 to 48	111	122	28	2,469	4,426	1,302	45.1	27.7	21.7
49 to 60	102	217	57	2,046	5,296	2,372	49.8	41.1	24.1
61 to 84	139	135	74	1,501	3,705	3,802	92.3	36.5	19.6
85 to 167	153	107	78	853	2,672	2,923	179.7	40.2	26.6
Open Continuously	43	168	350	479	3,261	5,594	88.8	51.6	62.6
Ownership and Occupancy									
Nongovernment Owned	539	595	478	7,886	16,446	12,694	68.3	36.2	37.7
Owner Occupied	363	432	373	5,429	10,741	9,427	66.9	40.2	39.6
Nonowner Occupied	174	156	Q	2,296	5,434	3,238	75.8	28.7	Q
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	49	185	119	768	4,124	3,607	63.8	44.8	33.1
Federal	Q	15	20	Q	379	555	Q	40.6	35.5
State	Q	62	36	Q	1,137	986	Q	54.8	36.3
Local	35	107	64	577	2,608	2,065	60.8	41.1	30.9
Vacancy Status									
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	45	123	130	1,263	3,938	5,524	35.5	31.1	23.5
Not At All Vacant	535	652	463	7,110	16,407	10,657	75.3	39.7	43.4
Number of Establishments									
One	480	588	430	6,630	14,200	8,887	72.4	41.4	48.4
2 to 5	92	99	74	1,651	3,436	2,352	55.9	28.9	31.6
6 to 10	Q	55	23	Q	1,480	845	Q	37.3	26.8
11 to 20	Q	18	30	Q	795	986	Q	22.8	30.6
More than 20	Q	Q	40	Q	Q	3,182	Q	Q	12.7
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q
Energy Sources (more than one may apply)									
Electricity	587	780	598	8,625	20,570	16,301	68.1	37.9	36.7
Natural Gas	588	780	598	8,654	20,570	16,301	67.9	37.9	36.7
Fuel Oil	Q	78	334	Q	1,594	6,386	Q	48.7	52.4
District Heat	Q	Q	46	Q	Q	1,758	Q	Q	Q
District Chilled Water	Q	17	33	Q	486	808	Q	35.8	41.4
Propane	Q	19	Q	Q	536	1,278	Q	35.4	Q
Other	Q	20	40	Q	603	814	Q	33.2	48.7
Space-Heating Energy Source									
Natural Gas	480	687	547	7,863	17,494	12,546	61.0	39.3	43.6
Natural Gas Main	462	596	499	7,373	14,997	10,360	62.6	39.7	48.2
Natural Gas Secondary	18	91	48	490	2,497	2,186	36.7	36.5	22.0
Other Excluding Natural Gas	Q	77	49	504	2,520	3,468	115.5	30.6	14.2
Buildings without Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C19. Natural Gas Consumption and Conditional Energy Intensity by Building Size, 1999

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
Primary Space-Heating Energy Source									
Electricity	74	138	63	862	4,030	3,545	85.6	34.2	17.7
Natural Gas	462	596	499	7,373	14,997	10,360	62.6	39.7	48.2
Fuel Oil	Q	Q	5	Q	355	500	Q	30.2	10.1
District Heat	Q	16	29	Q	502	1,520	Q	31.5	19.1
Propane	0	0	N	5	6	N	4.1	30.4	N
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Source									
Natural Gas	Q	29	33	Q	907	469	Q	31.4	71.2
Other Excluding Natural Gas	443	687	554	6,784	18,352	15,098	65.3	37.4	36.7
Buildings without Cooling	108	65	11	1,333	1,311	734	81.1	49.4	14.7
Water-Heating Energy Source									
Natural Gas	405	553	452	4,923	13,747	10,526	82.2	40.2	42.9
Other Excluding Natural Gas	104	163	134	2,035	5,177	4,958	51.2	31.6	27.1
Buildings without Water Heating	79	64	12	1,697	1,646	817	46.6	38.7	14.2
Cooking Energy Source									
Natural Gas	198	241	361	1,479	5,412	9,893	133.6	44.6	36.5
Other Excluding Natural Gas	Q	49	48	Q	1,461	1,375	Q	33.5	34.6
Buildings without Cooking	373	490	189	6,938	13,697	5,033	53.7	35.8	37.6
Energy End Uses (more than one may apply)									
Buildings with Space Heating	538	764	597	8,366	20,004	16,014	64.3	38.2	37.3
Buildings with Cooling	480	716	587	7,321	19,259	15,567	65.5	37.2	37.7
Buildings with Water Heating	509	717	586	6,957	18,924	15,484	73.1	37.9	37.9
Buildings with Cooking	215	290	409	1,716	6,873	11,268	125.4	42.3	36.3
Buildings with Manufacturing	Q	43	Q	Q	1,124	921	Q	38.6	62.5
Buildings with Electricity Generation	Q	104	315	Q	2,303	6,579	Q	45.2	47.9
Percent of Floorspace Heated									
Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	37	Q	Q	1,140	2,376	1,357	32.5	Q	22.0
51 to 99	96	163	75	1,417	3,705	2,929	67.7	44.1	25.7
100	405	542	491	5,809	13,923	11,727	69.7	38.9	41.9
Percent of Floorspace Cooled									
Not Cooled	108	65	11	1,333	1,311	734	81.1	49.4	14.7
1 to 50	126	255	164	2,082	6,321	3,665	60.5	40.4	44.7
51 to 99	135	192	245	1,687	5,068	5,939	80.2	38.0	41.2
100	218	268	178	3,553	7,870	5,963	61.5	34.1	29.9
Heating Equipment (more than one may apply)									
Heat Pumps	Q	Q	114	530	2,511	2,587	Q	Q	44.1
Furnaces	207	208	135	3,852	5,430	2,678	53.8	38.3	50.5
Individual Space Heaters	116	196	203	1,603	5,888	6,070	72.3	33.3	33.4
District Heat	Q	31	45	Q	657	1,690	Q	47.7	26.4
Boilers	79	321	417	903	6,918	8,767	87.4	46.4	47.6
Packaged Heating Units	198	296	309	2,911	8,851	8,281	67.8	33.5	37.3
Other	Q	32	Q	Q	1,001	1,483	Q	32.2	Q

Table C19. Natural Gas Consumption and Conditional Energy Intensity by Building Size, 1999

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet	1,001 to 10,000 Square Feet	10,001 to 100,000 Square Feet	Over 100,000 Square Feet
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	84	91	112	1,770	2,840	2,195	47.3	31.9	51.2
Heat Pumps	Q	Q	116	525	2,510	2,735	Q	Q	42.2
Individual Air Conditioners	87	195	190	1,395	4,833	4,487	62.4	40.3	42.4
District Chilled Water	Q	17	33	Q	486	808	Q	35.8	41.4
Central Chillers	Q	118	374	Q	2,366	7,611	Q	49.9	49.2
Packaged Air Conditioning Units	297	424	439	4,059	12,884	11,045	73.1	32.9	39.7
Swamp Coolers	Q	32	33	Q	838	708	Q	38.6	47.0
Other	Q	13	Q	Q	329	Q	Q	38.3	Q
Main Equipment Replaced Since 1995 (more than one may apply)									
Heating	146	192	81	2,125	5,264	2,938	68.6	36.4	27.7
Cooling	144	223	174	1,877	6,176	4,810	77.0	36.1	36.2
Water Heating Equipment									
Centralized System	433	512	278	5,536	12,911	8,032	78.2	39.6	34.6
Distributed System	53	90	Q	1,221	3,114	3,251	43.2	28.9	39.3
Combination of Centralized and Distributed System	Q	115	181	Q	2,900	4,200	Q	39.6	43.1
Annual Consumption (hundred cubic feet)									
1,000 or Less	35	3	0	2,581	1,578	438	13.5	2.2	0.2
1,001 to 5,000	223	76	2	4,485	5,573	1,135	49.7	13.6	1.4
5,001 to 10,000	117	118	4	875	4,750	1,214	133.5	24.9	3.5
10,001 to 25,000	146	247	22	574	5,732	2,867	254.3	43.1	7.7
25,001 to 50,000	Q	129	52	Q	1,900	2,930	Q	67.7	17.7
50,001 to 100,000	Q	138	76	Q	849	2,573	Q	162.5	29.5
Over 100,000	N	Q	442	N	Q	5,144	N	Q	85.9
Provider of Natural Gas (more than one may apply)									
Local Utility	545	698	438	8,199	18,998	13,567	66.5	36.8	32.3
Some Other Provider	Q	70	179	Q	1,248	2,735	Q	55.9	65.3

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.

Table C20. Natural Gas Consumption and Conditional Energy Intensity by Year Constructed, 1999

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999
All Buildings	555	1,058	354	13,063	24,386	8,076	42.5	43.4	43.8
Building Floorspace (Square Feet)									
1,001 to 5,000	101	147	Q	1,535	1,609	Q	65.5	91.1	Q
5,001 to 10,000	98	147	39	1,882	2,316	891	52.1	63.6	43.6
10,001 to 25,000	107	177	25	2,505	3,746	750	42.8	47.3	33.9
25,001 to 50,000	71	111	46	1,814	3,308	1,282	38.9	33.6	35.5
50,001 to 100,000	48	144	51	1,787	3,962	1,416	26.8	36.4	36.0
100,001 to 200,000	48	133	42	1,291	3,406	1,219	37.2	39.0	34.9
200,001 to 500,000	43	114	Q	1,280	2,896	1,106	33.8	39.5	Q
Over 500,000	39	84	21	970	3,143	991	40.2	26.8	21.3
Principal Building Activity									
Education	105	85	30	2,609	3,100	861	40.1	27.5	35.2
Food Sales	Q	Q	14	Q	Q	315	Q	Q	43.5
Food Service	Q	95	Q	Q	727	Q	Q	130.2	Q
Health Care	49	144	Q	479	1,460	Q	101.9	98.5	Q
Inpatient	Q	134	Q	Q	1,142	Q	Q	117.0	Q
Outpatient	Q	10	Q	Q	318	Q	Q	32.0	Q
Lodging	27	121	28	581	2,308	660	47.2	52.5	42.0
Mercantile	74	78	28	2,095	4,207	1,585	35.2	18.6	18.0
Retail (Other Than Mall)	55	37	15	1,491	1,218	809	36.7	30.6	18.3
Enclosed and Strip Malls	Q	41	14	Q	2,989	777	Q	13.7	17.7
Office	59	128	25	1,841	4,403	1,113	32.2	29.2	22.9
Public Assembly	30	45	19	980	1,380	628	30.4	32.4	30.4
Public Order and Safety	Q	Q	Q	Q	Q	Q	Q	Q	Q
Religious Worship	27	29	Q	929	1,335	Q	28.6	22.0	Q
Service	53	191	Q	743	1,156	Q	70.9	164.9	Q
Warehouse and Storage	27	100	Q	1,417	3,409	1,385	19.3	29.4	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Census Region and Division									
Northeast	133	126	32	2,860	3,389	1,056	46.4	37.2	30.2
New England	25	25	Q	535	818	Q	47.2	30.3	Q
Middle Atlantic	107	101	25	2,325	2,570	819	46.2	39.4	30.6
Midwest	245	309	136	4,876	6,261	2,369	50.2	49.3	57.3
East North Central	192	182	Q	3,811	3,954	1,618	50.4	46.1	67.4
West North Central	53	126	27	1,065	2,307	752	49.6	54.8	35.5
South	94	400	106	3,034	8,381	2,785	31.1	47.7	38.2
South Atlantic	39	149	Q	1,002	3,248	1,267	39.3	45.8	Q
East South Central	28	138	15	729	2,035	744	37.8	67.9	19.5
West South Central	27	113	Q	1,303	3,098	773	21.1	36.5	48.8
West	83	223	79	2,294	6,356	1,865	36.1	35.1	42.6
Mountain	44	78	19	903	1,698	582	48.4	46.0	32.1
Pacific	39	145	61	1,391	4,658	1,283	28.2	31.1	47.3
Climate Zone: 45-Year Average									
Under 2,000 CDD and --									
More than 7,000 HDD	69	108	44	1,191	2,150	723	58.3	50.3	61.2
5,500-7,000 HDD	234	274	Q	4,442	5,919	2,211	52.8	46.3	52.2
4,000-5,499 HDD	145	285	74	3,614	5,087	1,754	40.2	56.1	42.4
Fewer than 4,000 HDD	65	266	82	2,250	7,377	2,522	28.8	36.0	32.7
2,000 CDD or More and --									
Fewer than 4,000 HDD	40	125	Q	1,566	3,853	866	25.8	32.4	Q

Table C20. Natural Gas Consumption and Conditional Energy Intensity by Year Constructed, 1999

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999
Workers (main shift)									
Fewer than 5	119	124	28	3,293	3,012	803	36.2	41.3	35.5
5 to 9	64	97	Q	1,575	2,479	579	40.6	39.3	47.9
10 to 19	103	128	Q	2,119	2,647	822	48.5	48.2	52.4
20 to 49	94	255	73	2,039	4,040	1,658	46.3	63.2	44.0
50 to 99	53	126	36	1,193	3,865	1,219	44.3	32.7	29.5
100 to 249	51	137	57	1,234	3,452	1,461	41.0	39.6	39.1
250 or More	71	190	Q	1,610	4,890	1,534	43.9	38.8	Q
Weekly Operating Hours									
39 or Fewer	33	43	Q	1,088	1,534	Q	30.8	28.0	Q
40 to 48	112	117	33	3,182	3,973	1,042	35.2	29.6	31.2
49 to 60	116	200	61	3,366	4,848	1,500	34.3	41.3	40.5
61 to 84	115	199	35	2,217	5,133	1,658	51.7	38.7	20.9
85 to 167	73	173	93	1,379	3,406	1,664	53.2	50.7	55.6
Open Continuously	106	325	130	1,832	5,493	2,009	57.7	59.2	64.5
Ownership and Occupancy									
Nongovernment Owned	435	886	292	10,227	20,216	6,582	42.5	43.8	44.3
Owner Occupied	331	658	179	7,365	13,759	4,473	44.9	47.8	40.1
Nonowner Occupied	102	221	Q	2,673	6,191	2,104	38.2	35.6	53.3
Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q
Government Owned	120	172	62	2,836	4,170	1,494	42.2	41.2	41.5
Federal	15	15	Q	462	345	Q	Q	42.9	Q
State	29	61	21	658	1,192	403	43.7	51.0	53.0
Local	76	96	34	1,716	2,634	901	44.2	36.5	37.9
Vacancy Status									
Completely Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q	Q	Q	Q
Partially Vacant	102	146	49	2,948	5,749	2,029	34.5	25.5	24.4
Not At All Vacant	441	905	304	9,706	18,438	6,030	45.4	49.1	50.4
Number of Establishments									
One	399	805	295	8,812	15,253	5,652	45.2	52.8	52.2
2 to 5	95	140	31	2,476	3,698	1,265	38.5	37.8	24.2
6 to 10	31	44	Q	577	1,627	Q	54.5	27.3	Q
11 to 20	Q	27	Q	Q	1,112	Q	Q	24.6	Q
More than 20	18	32	Q	631	2,400	Q	27.9	13.4	Q
Currently Unoccupied	Q	Q	Q	Q	Q	Q	Q	Q	Q
Energy Sources (more than one may apply)									
Electricity	554	1,058	354	13,034	24,386	8,076	42.5	43.4	43.8
Natural Gas	555	1,058	354	13,063	24,386	8,076	42.5	43.4	43.8
Fuel Oil	74	250	Q	1,788	4,771	1,529	41.3	52.4	Q
District Heat	Q	Q	Q	Q	1,163	Q	Q	Q	Q
District Chilled Water	Q	33	Q	Q	725	Q	Q	46.2	Q
Propane	Q	41	Q	Q	1,107	Q	Q	37.4	Q
Other	35	28	Q	557	768	Q	62.2	36.8	Q
Space-Heating Energy Source									
Natural Gas	500	911	303	11,297	19,947	6,658	44.3	45.7	45.5
Natural Gas Main	470	817	270	10,205	16,847	5,677	46.0	48.5	47.6
Natural Gas Secondary	31	94	32	1,092	3,100	981	28.0	30.4	33.1
Other Excluding Natural Gas	49	85	Q	1,671	3,503	1,318	29.3	24.3	Q
Buildings without Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q

Table C20. Natural Gas Consumption and Conditional Energy Intensity by Year Constructed, 1999

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999
Primary Space-Heating Energy Source									
Electricity	59	138	77	1,334	5,109	1,993	43.9	27.1	38.8
Natural Gas	470	817	270	10,205	16,847	5,677	46.0	48.5	47.6
Fuel Oil	9	6	Q	418	429	Q	21.2	14.7	Q
District Heat	11	31	Q	885	967	Q	12.4	32.1	Q
Propane	N	0	N	N	10	N	N	18.6	N
Other	Q	Q	N	Q	Q	N	Q	Q	N
Cooling Energy Source									
Natural Gas	25	57	Q	470	1,028	Q	53.6	55.4	Q
Other Excluding Natural Gas	459	903	321	10,651	22,169	7,413	43.1	40.7	43.3
Buildings without Cooling	70	Q	Q	1,943	1,188	Q	36.1	82.3	Q
Water-Heating Energy Source									
Natural Gas	382	790	238	8,411	15,573	5,211	45.4	50.7	45.7
Other Excluding Natural Gas	105	206	Q	2,986	7,094	2,090	35.1	29.0	Q
Buildings without Water Heating	68	62	Q	1,666	1,719	775	41.0	36.1	31.1
Cooking Energy Source									
Natural Gas	246	419	135	4,690	9,030	3,065	52.4	46.4	44.0
Other Excluding Natural Gas	45	54	15	841	1,605	627	53.7	33.9	23.5
Buildings without Cooking	264	584	204	7,533	13,751	4,384	35.0	42.5	46.5
Energy End Uses (more than one may apply)									
Buildings with Space Heating	549	996	353	12,968	23,450	7,966	42.3	42.5	44.3
Buildings with Cooling	484	960	338	11,120	23,198	7,829	43.6	41.4	43.1
Buildings with Water Heating	486	996	329	11,398	22,667	7,301	42.7	43.9	45.1
Buildings with Cooking	291	474	150	5,530	10,635	3,692	52.6	44.5	40.6
Buildings with Manufacturing	31	Q	19	773	1,167	382	40.2	51.4	50.6
Buildings with Electricity Generation	78	261	Q	1,412	5,390	2,317	55.5	48.4	Q
Percent of Floorspace Heated									
Not Heated	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	39	67	21	1,889	2,230	754	20.5	30.0	27.3
51 to 99	91	185	59	2,540	4,024	1,487	35.8	45.9	39.7
100	420	745	274	8,539	17,196	5,725	49.1	43.3	47.8
Percent of Floorspace Cooled									
Not Cooled	70	Q	Q	1,943	1,188	Q	36.1	82.3	Q
1 to 50	174	260	Q	4,434	5,705	1,929	39.3	45.6	Q
51 to 99	181	295	96	3,321	6,839	2,534	54.6	43.1	38.0
100	129	405	131	3,366	10,653	3,366	38.3	38.0	38.8
Heating Equipment (more than one may apply)									
Heat Pumps	46	189	Q	1,239	3,131	1,256	37.2	60.4	Q
Furnaces	150	290	Q	4,114	5,887	1,959	36.5	49.2	Q
Individual Space Heaters	154	284	77	4,216	7,172	2,173	36.5	39.6	35.5
District Heat	29	43	Q	1,005	1,119	Q	28.7	38.6	Q
Boilers	275	430	113	5,438	8,936	2,214	50.5	48.1	51.0
Packaged Heating Units	150	460	193	3,778	11,828	4,437	39.8	38.9	43.4
Other	25	47	Q	768	1,378	534	33.1	34.2	Q

Table C20. Natural Gas Consumption and Conditional Energy Intensity by Year Constructed, 1999

	Total Natural Gas Consumption (billion cubic feet)			Total Floorspace of Buildings Using Natural Gas (million square feet)			Natural Gas Energy Intensity (cubic feet/square foot)		
	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999	1959 or Before	1960 to 1989	1990 to 1999
Cooling Equipment (more than one may apply)									
Residential-Type Central Air Conditioners	83	161	43	2,046	3,786	973	40.7	42.4	44.0
Heat Pumps	48	185	Q	1,318	3,242	1,211	36.6	57.2	Q
Individual Air Conditioners	216	218	38	4,707	4,873	1,136	45.9	44.8	33.4
District Chilled Water	Q	33	Q	Q	725	Q	Q	46.2	Q
Central Chillers	96	280	132	2,025	6,209	1,911	47.4	45.0	69.1
Packaged Air Conditioning Units	291	644	225	6,589	16,086	5,312	44.1	40.0	42.3
Swamp Coolers	Q	67	Q	Q	1,188	Q	Q	56.4	Q
Other	Q	Q	Q	Q	535	Q	Q	45.3	Q
Main Equipment Replaced Since 1995 (more than one may apply)									
Heating	151	239	Q	3,491	6,260	576	43.1	38.1	Q
Cooling	194	311	36	4,248	7,907	708	45.7	39.3	51.4
Water Heating Equipment									
Centralized System	335	696	192	7,725	14,543	4,211	43.3	47.8	45.5
Distributed System	60	125	Q	1,719	4,265	1,602	35.0	29.2	Q
Combination of Centralized and Distributed System	91	175	52	1,954	3,859	1,488	46.7	45.4	35.0
Annual Consumption (hundred cubic feet)									
1,000 or Less	16	20	2	1,748	2,404	444	9.4	8.1	5.1
1,001 to 5,000	116	141	43	3,847	5,519	1,827	30.2	25.6	23.7
5,001 to 10,000	86	110	43	2,055	3,418	1,366	42.0	32.1	31.7
10,001 to 25,000	131	228	57	2,435	5,130	1,608	53.7	44.4	35.4
25,001 to 50,000	60	98	58	1,249	2,566	1,099	48.4	38.2	52.6
50,001 to 100,000	37	173	36	687	1,976	814	53.9	87.5	43.8
Over 100,000	107	289	Q	1,042	3,373	918	103.1	85.7	124.6
Provider of Natural Gas (more than one may apply)									
Local Utility	462	935	284	11,629	21,888	7,248	39.8	42.7	39.2
Some Other Provider	94	137	Q	1,233	2,357	676	76.6	58.2	70.0

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.

Table C21. Total Fuel Oil Consumption and Expenditures, 1999

	All Buildings Using Fuel Oil			Fuel Oil Consumption		Fuel Oil Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (million gallons)	Total (million dollars)
All Buildings	434	13,285	31	179	1,294	956
Building Floorspace (Square Feet)						
1,001 to 5,000	220	620	3	29	210	197
5,001 to 10,000	74	583	8	Q	Q	95
10,001 to 25,000	65	983	15	24	177	145
25,001 to 50,000	28	983	35	25	183	131
50,001 to 100,000	22	1,612	75	24	175	114
100,001 to 200,000	13	1,875	144	19	140	87
200,001 to 500,000	9	2,984	315	25	180	120
Over 500,000	4	3,645	961	16	113	68
Principal Building Activity						
Education	19	1,635	86	48	347	208
Food Sales	Q	Q	Q	Q	Q	Q
Food Service	Q	Q	Q	Q	Q	Q
Health Care	14	1,754	128	19	139	87
Inpatient	9	1,605	Q	18	128	79
Outpatient	Q	Q	Q	Q	Q	Q
Lodging	7	789	109	Q	Q	26
Mercantile	87	1,411	16	Q	Q	Q
Retail (Other Than Mall)	76	553	7	Q	Q	Q
Enclosed and Strip Malls	11	858	79	Q	Q	Q
Office	88	3,913	44	29	213	168
Public Assembly	Q	850	36	Q	Q	Q
Public Order and Safety	Q	398	20	7	47	Q
Religious Worship	Q	Q	Q	Q	Q	Q
Service	80	641	8	18	128	102
Warehouse and Storage	18	1,102	Q	8	61	55
Other	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q
Year Constructed						
1919 or Before	53	745	14	26	190	149
1920 to 1945	55	1,060	19	22	159	119
1946 to 1959	109	1,782	16	33	236	184
1960 to 1969	65	2,349	36	36	258	185
1970 to 1979	37	2,446	66	29	207	132
1980 to 1989	70	2,795	40	21	151	113
1990 to 1999	Q	2,108	Q	13	93	73
Census Region and Division						
Northeast	218	5,414	25	138	994	704
New England	90	2,254	25	73	525	362
Middle Atlantic	128	3,160	25	65	469	342
Midwest	48	2,423	50	5	34	27
East North Central	28	1,299	46	Q	Q	13
West North Central	20	1,123	Q	2	18	14
South	138	3,749	27	29	210	180
South Atlantic	98	2,457	25	26	186	157
East South Central	Q	546	47	Q	Q	Q
West South Central	Q	747	Q	1	4	5
West	30	1,699	Q	8	56	45
Mountain	9	379	40	1	10	8
Pacific	Q	1,321	Q	Q	Q	Q

Table C21. Total Fuel Oil Consumption and Expenditures, 1999

	All Buildings Using Fuel Oil			Fuel Oil Consumption		Fuel Oil Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (million gallons)	Total (million dollars)
Climate Zone: 45-Year Average						
Under 2,000 CDD and --						
More than 7,000 HDD	73	1,612	22	41	293	206
5,500-7,000 HDD	123	3,773	31	62	444	319
4,000-5,499 HDD	185	4,531	24	69	499	369
Fewer than 4,000 HDD	19	1,903	103	Q	Q	Q
2,000 CDD or More and --						
Fewer than 4,000 HDD	34	1,466	Q	2	14	15
Workers (main shift)						
Fewer than 5	182	964	5	20	146	132
5 to 9	95	796	8	23	167	147
10 to 19	54	676	13	Q	Q	Q
20 to 49	54	1,294	24	29	206	153
50 to 99	17	1,593	94	33	241	153
100 to 249	18	2,482	137	27	194	120
250 or More	15	5,480	373	28	200	136
Weekly Operating Hours						
39 or Fewer	65	504	8	11	79	68
40 to 48	102	1,540	15	35	250	183
49 to 60	110	2,638	24	43	308	245
61 to 84	63	2,500	40	31	224	164
85 to 167	29	1,532	53	28	202	136
Open Continuously	65	4,571	70	32	230	160
Ownership and Occupancy						
Nongovernment Owned	386	9,893	26	121	875	693
Owner Occupied	311	8,284	27	105	757	591
Nonowner Occupied	75	1,605	21	16	118	101
Unoccupied	Q	Q	Q	Q	Q	Q
Government Owned	48	3,392	71	58	420	263
Federal	4	748	194	3	22	17
State	6	822	130	6	46	29
Local	38	1,823	48	49	352	217
Vacancy Status						
Completely Vacant	N	N	N	N	N	N
Mostly Vacant	Q	Q	Q	Q	Q	Q
Partially Vacant	51	3,528	69	24	175	128
Not At All Vacant	376	9,639	26	154	1,114	823
Number of Establishments						
One	346	8,327	24	136	984	727
2 to 5	71	1,795	25	26	185	137
6 to 10	5	481	91	Q	Q	18
11 to 20	5	810	156	10	71	47
More than 20	6	1,861	318	4	30	25
Currently Unoccupied	Q	Q	Q	Q	Q	Q
Energy Sources (more than one may apply)						
Electricity	434	13,277	31	179	1,292	953
Natural Gas	91	8,088	89	59	424	297
Fuel Oil	434	13,285	31	179	1,294	956
District Heat	8	1,839	Q	Q	Q	23
District Chilled Water	3	749	241	Q	Q	Q
Propane	80	2,296	29	51	365	272
Other	26	554	21	9	64	55

Table C21. Total Fuel Oil Consumption and Expenditures, 1999

	All Buildings Using Fuel Oil			Fuel Oil Consumption		Fuel Oil Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (million gallons)	Total (million dollars)
Space-Heating Energy Source						
Fuel Oil	377	5,611	15	172	1,242	909
Fuel Oil Main	302	3,719	12	153	1,103	802
Fuel Oil Secondary	74	1,892	25	19	139	108
Other Excluding Fuel Oil	55	7,463	135	7	50	44
Buildings without Heating	Q	Q	Q	Q	Q	Q
Primary Space-Heating Energy Source						
Electricity	64	2,710	43	10	74	Q
Natural Gas	54	4,852	89	13	96	71
Fuel Oil	302	3,719	12	153	1,103	802
District Heat	6	1,578	249	1	8	7
Propane	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q
Cooling Energy Source						
Fuel Oil	Q	Q	Q	Q	Q	Q
Other Excluding Fuel Oil	302	12,058	40	140	1,007	733
Buildings without Cooling	132	1,100	8	34	248	198
Water-Heating Energy Source						
Fuel Oil	110	2,218	20	92	666	454
Other Excluding Fuel Oil	178	9,634	54	70	507	395
Buildings without Water Heating	146	1,433	10	17	122	107
Cooking Energy Source						
Fuel Oil	Q	Q	Q	Q	Q	Q
Other Excluding Fuel Oil	92	7,756	84	84	605	402
Buildings without Cooking	342	5,445	16	94	677	547
Energy End Uses (more than one may apply)						
Buildings with Space Heating	432	13,074	30	179	1,292	954
Buildings with Cooling	302	12,185	40	145	1,046	758
Buildings with Water Heating	288	11,852	41	163	1,173	849
Buildings with Cooking	92	7,840	85	86	618	409
Buildings with Manufacturing	35	555	16	7	50	39
Buildings with Electricity Generation	75	8,749	117	48	344	243
Percent of Floorspace Heated						
Not Heated	Q	Q	Q	Q	Q	Q
1 to 50	62	1,113	18	9	65	49
51 to 99	59	2,584	44	20	148	125
100	311	9,377	30	150	1,079	779
Heating Equipment (more than one may apply)						
Heat Pumps	Q	2,263	59	9	66	51
Furnaces	172	2,090	12	33	238	212
Individual Space Heaters	115	4,351	38	32	228	170
District Heat	7	1,787	245	Q	Q	Q
Boilers	170	7,485	44	142	1,021	705
Packaged Heating Units	40	4,237	106	25	180	132
Other	39	1,463	37	9	64	48

Table C21. Total Fuel Oil Consumption and Expenditures, 1999

	All Buildings Using Fuel Oil			Fuel Oil Consumption		Fuel Oil Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (million gallons)	Total (million dollars)
Water Heating Equipment						
Centralized System	228	6,533	29	120	866	631
Distributed System	37	1,870	51	20	144	111
Combination of Centralized and Distributed System	23	3,448	148	23	164	108
Annual Consumption (gallons)						
1,000 or Less	233	7,380	32	10	76	80
1,001 to 5,000	152	2,419	16	44	321	281
5,001 to 10,000	29	907	32	26	188	148
10,001 to 25,000	12	944	77	27	195	131
Over 25,000	8	1,636	205	71	514	317

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.

Table C22. Fuel Oil Consumption and Expenditure Intensities, 1999

	Fuel Oil Consumption			Fuel Oil Expenditures		
	per Building (gallons)	per Square Foot (gallons)	per Worker (gallons)	per Building (thousand dollars)	per Square Foot (dollars)	per Gallon (dollars)
All Buildings	2,983	0.10	66.1	2.2	0.07	0.74
Building Floorspace (Square Feet)						
1,001 to 5,000	956	0.34	190.7	0.9	0.32	0.94
5,001 to 10,000	1,584	0.20	131.7	1.3	0.16	0.81
10,001 to 25,000	2,736	0.18	210.2	2.2	0.15	0.82
25,001 to 50,000	6,559	0.19	159.7	4.7	0.13	0.72
50,001 to 100,000	8,095	0.11	66.7	5.3	0.07	0.65
100,001 to 200,000	10,782	0.07	55.9	6.7	0.05	0.62
200,001 to 500,000	19,069	0.06	35.1	12.7	0.04	0.67
Over 500,000	29,742	0.03	21.1	17.8	0.02	0.60
Principal Building Activity						
Education	18,341	0.21	245.5	11.0	0.13	0.60
Food Sales	Q	Q	Q	Q	Q	Q
Food Service	Q	Q	Q	Q	Q	Q
Health Care	10,153	0.08	41.7	6.4	0.05	0.63
Inpatient	14,566	0.08	42.3	Q	0.05	0.62
Outpatient	Q	Q	Q	Q	Q	Q
Lodging	4,820	Q	73.5	3.6	0.03	0.75
Mercantile	1,398	0.09	Q	1.2	0.08	0.89
Retail (Other Than Mall)	1,258	0.17	184.5	1.1	0.15	0.88
Enclosed and Strip Malls	Q	Q	Q	2.1	Q	Q
Office	2,418	0.05	21.6	1.9	0.04	0.79
Public Assembly	3,730	0.10	Q	2.8	0.08	0.75
Public Order and Safety	2,335	Q	65.9	Q	Q	Q
Religious Worship	Q	Q	Q	Q	Q	Q
Service	1,610	0.20	Q	1.3	0.16	0.80
Warehouse and Storage	Q	0.06	Q	Q	0.05	0.91
Other	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q
Year Constructed						
1919 or Before	3,585	0.26	185.7	2.8	0.20	0.78
1920 to 1945	2,915	0.15	160.0	2.2	0.11	0.75
1946 to 1959	2,170	0.13	88.5	1.7	0.10	0.78
1960 to 1969	3,965	0.11	74.9	2.8	0.08	0.72
1970 to 1979	5,623	0.08	64.3	3.6	0.05	0.64
1980 to 1989	2,137	0.05	30.2	1.6	0.04	0.75
1990 to 1999	Q	0.04	28.7	Q	0.03	0.79
Census Region and Division						
Northeast	4,555	0.18	143.9	3.2	0.13	0.71
New England	5,823	0.23	236.5	4.0	0.16	0.69
Middle Atlantic	3,663	0.15	100.1	2.7	0.11	0.73
Midwest	713	0.01	8.9	0.6	0.01	0.79
East North Central	586	Q	Q	0.5	Q	0.79
West North Central	Q	0.02	Q	Q	0.01	0.79
South	1,525	0.06	34.4	1.3	0.05	0.86
South Atlantic	1,889	0.08	43.2	1.6	0.06	0.85
East South Central	1,719	Q	Q	1.5	Q	0.87
West South Central	Q	0.01	4.0	Q	0.01	1.17
West	1,897	0.03	Q	1.5	0.03	0.80
Mountain	Q	0.03	15.4	Q	0.02	0.82
Pacific	Q	Q	Q	1.8	Q	0.79

Table C22. Fuel Oil Consumption and Expenditure Intensities, 1999

	Fuel Oil Consumption			Fuel Oil Expenditures		
	per Building (gallons)	per Square Foot (gallons)	per Worker (gallons)	per Building (thousand dollars)	per Square Foot (dollars)	per Gallon (dollars)
Climate Zone: 45-Year Average						
Under 2,000 CDD and --						
More than 7,000 HDD	3,998	0.18	179.4	2.8	0.13	0.71
5,500-7,000 HDD	3,624	0.12	82.5	2.6	0.08	0.72
4,000-5,499 HDD	2,694	0.11	66.9	2.0	0.08	0.74
Fewer than 4,000 HDD	Q	Q	Q	Q	Q	1.04
2,000 CDD or More and --						
Fewer than 4,000 HDD	Q	0.01	6.5	Q	0.01	1.05
Workers (main shift)						
Fewer than 5	804	0.15	370.4	0.7	0.14	0.90
5 to 9	1,759	0.21	273.7	1.6	0.19	0.88
10 to 19	2,602	0.21	212.3	2.1	0.17	0.82
20 to 49	3,838	0.16	130.5	2.9	0.12	0.74
50 to 99	14,300	0.15	220.7	9.1	0.10	0.63
100 to 249	10,675	0.08	73.1	6.6	0.05	0.62
250 or More	13,580	0.04	15.9	9.2	0.02	0.68
Weekly Operating Hours						
39 or Fewer	Q	Q	118.3	Q	0.14	0.86
40 to 48	2,457	0.16	123.0	1.8	0.12	0.73
49 to 60	2,799	0.12	81.7	2.2	0.09	0.80
61 to 84	3,568	0.09	65.7	2.6	0.07	0.73
85 to 167	6,912	0.13	111.1	4.6	0.09	0.67
Open Continuously	3,537	0.05	29.3	2.5	0.03	0.69
Ownership and Occupancy						
Nongovernment Owned	2,267	0.09	57.1	1.8	0.07	0.79
Owner Occupied	2,435	0.09	59.5	1.9	0.07	0.78
Nonowner Occupied	1,573	0.07	45.0	1.3	0.06	0.86
Unoccupied	Q	Q	N	Q	Q	Q
Government Owned	8,739	0.12	98.7	5.5	0.08	0.63
Federal	5,740	0.03	14.2	4.4	0.02	0.76
State	7,232	0.06	60.2	4.6	0.04	0.63
Local	9,296	0.19	182.2	5.7	0.12	0.62
Vacancy Status						
Completely Vacant	N	N	N	N	N	N
Mostly Vacant	Q	Q	Q	Q	Q	Q
Partially Vacant	3,438	0.05	34.1	2.5	0.04	0.73
Not At All Vacant	2,963	0.12	77.3	2.2	0.09	0.74
Number of Establishments						
One	2,844	0.12	82.9	2.1	0.09	0.74
2 to 5	2,612	0.10	93.9	1.9	0.08	0.74
6 to 10	4,116	0.04	Q	3.3	0.04	0.81
11 to 20	13,591	0.09	47.7	9.0	0.06	0.66
More than 20	5,139	0.02	8.9	4.3	0.01	0.83
Currently Unoccupied	Q	Q	N	Q	Q	Q
Energy Sources (more than one may apply)						
Electricity	2,980	0.10	66.0	2.2	0.07	0.74
Natural Gas	4,675	0.05	35.0	3.3	0.04	0.70
Fuel Oil	2,983	0.10	66.1	2.2	0.07	0.74
District Heat	Q	Q	Q	3.0	0.01	0.68
District Chilled Water	Q	Q	Q	Q	Q	0.67
Propane	4,538	0.16	149.5	3.4	0.12	0.74
Other	Q	0.12	133.0	Q	0.10	0.86

Table C22. Fuel Oil Consumption and Expenditure Intensities, 1999

	Fuel Oil Consumption			Fuel Oil Expenditures		
	per Building (gallons)	per Square Foot (gallons)	per Worker (gallons)	per Building (thousand dollars)	per Square Foot (dollars)	per Gallon (dollars)
Space-Heating Energy Source						
Fuel Oil	3,299	0.22	189.9	2.4	0.16	0.73
Fuel Oil Main	3,649	0.30	259.6	2.7	0.22	0.73
Fuel Oil Secondary	1,875	0.07	60.7	1.4	0.06	0.77
Other Excluding Fuel Oil	899	0.01	3.9	0.8	0.01	0.89
Buildings without Heating	Q	Q	Q	Q	Q	Q
Primary Space-Heating Energy Source						
Electricity	1,163	0.03	14.9	1.0	0.02	0.90
Natural Gas	1,772	0.02	13.9	1.3	0.01	0.74
Fuel Oil	3,649	0.30	259.6	2.7	0.22	0.73
District Heat	1,250	0.01	2.5	1.1	0.00	0.85
Propane	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q
Cooling Energy Source						
Fuel Oil	Q	Q	Q	Q	Q	Q
Other Excluding Fuel Oil	3,338	0.08	55.3	2.4	0.06	0.73
Buildings without Cooling	1,880	0.23	210.4	1.5	0.18	0.80
Water-Heating Energy Source						
Fuel Oil	6,080	0.30	229.3	4.1	0.20	0.68
Other Excluding Fuel Oil	2,846	0.05	33.7	2.2	0.04	0.78
Buildings without Water Heating	831	0.08	73.3	0.7	0.07	0.88
Cooking Energy Source						
Fuel Oil	Q	Q	Q	Q	Q	Q
Other Excluding Fuel Oil	6,578	0.08	53.8	4.4	0.05	0.66
Buildings without Cooking	1,981	0.12	82.3	1.6	0.10	0.81
Energy End Uses (more than one may apply)						
Buildings with Space Heating	2,991	0.10	66.7	2.2	0.07	0.74
Buildings with Cooling	3,465	0.09	56.9	2.5	0.06	0.72
Buildings with Water Heating	4,078	0.10	65.4	3.0	0.07	0.72
Buildings with Cooking	6,695	0.08	54.4	4.4	0.05	0.66
Buildings with Manufacturing	1,423	0.09	63.8	1.1	0.07	0.78
Buildings with Electricity Generation	4,584	0.04	23.0	3.2	0.03	0.71
Percent of Floorspace Heated						
Not Heated	Q	Q	Q	Q	Q	Q
1 to 50	1,054	0.06	79.0	0.8	0.04	0.76
51 to 99	2,504	0.06	35.1	2.1	0.05	0.84
100	3,469	0.12	75.2	2.5	0.08	0.72
Heating Equipment (more than one may apply)						
Heat Pumps	1,702	0.03	18.2	1.3	0.02	0.77
Furnaces	1,382	0.11	105.2	1.2	0.10	0.89
Individual Space Heaters	1,987	0.05	37.0	1.5	0.04	0.74
District Heat	Q	Q	Q	Q	Q	0.68
Boilers	5,997	0.14	98.5	4.1	0.09	0.69
Packaged Heating Units	4,520	0.04	33.3	3.3	0.03	0.73
Other	1,634	0.04	20.2	1.2	0.03	0.74
Water Heating Equipment						
Centralized System	3,805	0.13	89.2	2.8	0.10	0.73
Distributed System	3,905	0.08	53.3	3.0	0.06	0.77
Combination of Centralized and Distributed System	7,014	0.05	29.6	4.6	0.03	0.66

Table C22. Fuel Oil Consumption and Expenditure Intensities, 1999

	Fuel Oil Consumption			Fuel Oil Expenditures		
	per Building (gallons)	per Square Foot (gallons)	per Worker (gallons)	per Building (thousand dollars)	per Square Foot (dollars)	per Gallon (dollars)
Annual Consumption (gallons)						
1,000 or Less	326	0.01	6.8	0.3	0.01	1.05
1,001 to 5,000	2,106	0.13	85.9	1.8	0.12	0.87
5,001 to 10,000	6,574	0.21	152.8	5.2	0.16	0.79
10,001 to 25,000	15,897	0.21	130.1	10.7	0.14	0.67
Over 25,000	64,440	0.31	260.5	39.7	0.19	0.62

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.

Table C23. Fuel Oil Consumption and Conditional Energy Intensity by Census Region, 1999

	Total Fuel Oil Consumption (million gallons)				Total Floorspace of Buildings Using Fuel Oil (million square feet)				Fuel Oil Energy Intensity (gallons/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings	994	34	210	56	5,414	2,423	3,749	1,699	0.18	0.01	0.06	0.03
Building Floorspace (Square Feet)												
1,001 to 10,000	229	Q	77	Q	693	Q	366	Q	0.33	Q	0.21	Q
10,001 to 100,000	430	Q	Q	Q	1,758	526	930	363	0.24	Q	0.07	Q
Over 100,000	335	15	68	Q	2,963	1,815	2,452	1,273	0.11	0.01	0.03	Q
Principal Building Activity												
Education	273	Q	Q	Q	923	Q	301	Q	0.30	Q	0.16	Q
Mercantile and Service	Q	Q	Q	Q	1,065	Q	556	Q	0.18	Q	Q	Q
Office	154	4	51	Q	1,271	749	1,310	584	0.12	0.00	0.04	0.01
Public Assembly	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Warehouse and Storage	38	Q	Q	Q	489	Q	Q	Q	0.08	Q	Q	Q
All Others	255	11	Q	Q	1,229	622	1,227	654	0.21	0.02	0.04	Q
Year Constructed												
1945 or Before	306	Q	Q	Q	1,404	Q	Q	Q	0.22	Q	Q	Q
1946 to 1959	173	Q	Q	Q	969	Q	Q	Q	0.18	Q	Q	Q
1960 to 1969	199	Q	47	Q	877	Q	723	343	0.23	Q	0.06	Q
1970 to 1979	155	Q	Q	4	835	393	795	422	0.19	Q	0.04	0.01
1980 to 1989	104	Q	Q	Q	790	619	1,068	318	0.13	Q	Q	Q
1990 to 1999	57	Q	Q	Q	538	427	763	380	0.11	Q	Q	Q
Climate Zone: 45-Year Average												
Under 2,000 CDD and --												
More than 7,000 HDD	280	Q	N	Q	843	714	N	Q	0.33	0.02	N	Q
5,500-7,000 HDD	418	Q	N	Q	2,289	1,228	N	256	0.18	Q	N	Q
4,000-5,499 HDD	296	Q	158	Q	2,282	480	1,357	412	0.13	Q	0.12	0.10
Fewer than 4,000 HDD	N	N	Q	5	N	N	1,139	764	N	N	Q	0.01
2,000 CDD or More and --												
Fewer than 4,000 HDD	N	N	12	Q	N	N	1,253	Q	N	N	0.01	Q
Workers (main shift)												
Less than 10	228	Q	59	Q	1,085	Q	387	Q	0.21	Q	0.15	Q
10 to 99	480	Q	Q	Q	1,736	567	935	326	0.28	Q	0.08	0.06
100 or More	286	17	75	16	2,593	1,663	2,428	1,278	0.11	0.01	0.03	0.01
Weekly Operating Hours												
48 or fewer	185	Q	59	Q	945	Q	580	Q	0.20	Q	0.10	Q
49 to 84	422	4	65	Q	1,777	723	1,200	520	0.24	0.01	0.05	Q
85 to 168	293	18	Q	Q	1,939	1,003	1,567	745	0.15	0.02	Q	Q
Ownership and Occupancy												
Nongovernment Owned	672	20	158	25	3,789	1,842	2,926	1,336	0.18	0.01	0.05	0.02
Owner Occupied	581	19	134	22	3,284	1,499	2,350	1,152	0.18	0.01	0.06	0.02
Nonowner Occupied	91	Q	Q	Q	503	Q	576	Q	0.18	Q	Q	Q
Unoccupied	Q	N	Q	N	Q	N	Q	N	Q	N	Q	N
Government Owned	322	Q	Q	Q	1,625	581	823	363	0.20	Q	0.06	Q
Federal	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
State	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Local	278	Q	Q	Q	954	Q	480	Q	0.29	Q	0.09	Q
Vacancy Status												
Completely Vacant	N	N	N	N	N	N	N	N	N	N	N	N
Mostly Vacant	Q	N	N	Q	Q	N	N	Q	Q	N	N	Q
Partially Vacant	150	3	15	Q	1,273	541	1,159	555	0.12	0.00	0.01	Q
Not At All Vacant	838	32	195	49	4,029	1,881	2,590	1,138	0.21	0.02	0.08	0.04

Table C23. Fuel Oil Consumption and Conditional Energy Intensity by Census Region, 1999

	Total Fuel Oil Consumption (million gallons)				Total Floorspace of Buildings Using Fuel Oil (million square feet)				Fuel Oil Energy Intensity (gallons/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Number of Establishments												
One	737	29	169	49	3,512	1,621	2,211	982	0.21	0.02	0.08	0.05
2 to 5	148	Q	Q	Q	715	Q	545	224	0.21	Q	Q	Q
6 to 10	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
11 to 20	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
More than 20	Q	Q	Q	1	691	Q	578	317	0.04	Q	Q	0.00
Currently Unoccupied	Q	N	Q	N	Q	N	Q	N	Q	N	Q	N
Energy Sources (more than one may apply)												
Electricity	991	34	210	56	5,406	2,423	3,749	1,699	0.18	0.01	0.06	0.03
Natural Gas	303	20	79	Q	2,569	1,945	2,269	1,306	0.12	0.01	0.03	Q
Fuel Oil	994	34	210	56	5,414	2,423	3,749	1,699	0.18	0.01	0.06	0.03
District Heat	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
District Chilled Water	Q	Q	1	Q	Q	Q	276	Q	Q	Q	0.00	Q
Propane	276	Q	Q	Q	1,076	Q	604	Q	0.26	Q	0.12	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Space-Heating Energy Source												
Fuel Oil	980	26	191	Q	3,612	619	1,128	252	0.27	0.04	0.17	0.18
Fuel Oil Main	882	Q	167	Q	2,803	Q	718	Q	0.31	Q	0.23	Q
Fuel Oil Secondary	98	15	23	Q	809	579	410	Q	0.12	0.03	0.06	Q
Other Excluding Fuel Oil	13	8	17	11	1,802	1,804	2,444	1,414	0.01	0.00	0.01	0.01
Buildings without Heating	N	N	Q	Q	N	N	Q	Q	N	N	Q	Q
Primary Space-Heating Energy Source												
Electricity	Q	Q	Q	Q	556	Q	1,368	335	Q	Q	0.01	Q
Natural Gas	50	19	20	7	1,111	1,611	1,180	949	0.04	0.01	0.02	0.01
Fuel Oil	882	Q	167	Q	2,803	Q	718	Q	0.31	Q	0.23	Q
District Heat	4	Q	2	Q	791	Q	278	Q	0.00	Q	0.01	Q
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	0.32
Other	Q	Q	N	N	Q	Q	N	N	Q	Q	N	N
Cooling Energy Source												
Fuel Oil	Q	Q	Q	N	Q	Q	Q	N	Q	Q	Q	N
Other Excluding Fuel Oil	766	30	187	Q	4,507	2,362	3,604	1,585	0.17	0.01	0.05	Q
Buildings without Cooling	188	Q	Q	Q	806	Q	Q	Q	0.23	Q	Q	Q
Water-Heating Energy Source												
Fuel Oil	569	Q	Q	Q	1,678	Q	Q	Q	0.34	Q	0.19	Q
Other Excluding Fuel Oil	336	20	117	33	3,065	2,061	3,060	1,448	0.11	0.01	0.04	0.02
Buildings without Water Heating	88	Q	Q	Q	671	Q	362	Q	0.13	Q	0.08	Q
Cooking Energy Source												
Fuel Oil	Q	Q	Q	N	Q	Q	Q	N	Q	Q	Q	N
Other Excluding Fuel Oil	453	20	Q	Q	2,974	1,330	2,353	1,100	0.15	0.02	0.04	0.02
Buildings without Cooking	529	14	104	30	2,412	1,076	1,357	600	0.22	0.01	0.08	0.05
Energy End Uses (more than one may apply)												
Buildings with Space Heating	994	34	208	56	5,414	2,423	3,572	1,665	0.18	0.01	0.06	0.03
Buildings with Cooling	805	30	188	Q	4,608	2,364	3,628	1,585	0.17	0.01	0.05	Q
Buildings with Water Heating	906	33	181	53	4,743	2,173	3,388	1,548	0.19	0.02	0.05	0.03
Buildings with Cooking	464	21	Q	Q	3,002	1,346	2,392	1,100	0.15	0.02	0.04	0.02
Buildings with Manufacturing	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Buildings with Electricity Generation	252	14	Q	Q	2,547	1,874	2,871	1,457	0.10	0.01	0.02	Q

Table C23. Fuel Oil Consumption and Conditional Energy Intensity by Census Region, 1999

	Total Fuel Oil Consumption (million gallons)				Total Floorspace of Buildings Using Fuel Oil (million square feet)				Fuel Oil Energy Intensity (gallons/square foot)			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Percent of Floorspace Heated												
Not Heated	N	N	Q	Q	N	N	Q	Q	N	N	Q	Q
1 to 50	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
51 to 99	90	Q	53	Q	776	Q	1,083	460	0.12	Q	0.05	Q
100	850	32	148	Q	4,194	2,055	2,292	835	0.20	0.02	0.06	Q
Heating Equipment (more than one may apply)												
Heat Pumps	37	Q	Q	Q	636	Q	893	359	0.06	Q	Q	0.01
Furnaces	165	Q	Q	Q	913	Q	578	Q	0.18	Q	Q	Q
Individual Space Heaters	166	Q	48	Q	1,630	1,019	1,234	468	0.10	0.01	0.04	Q
District Heat	Q	Q	2	Q	852	Q	341	253	Q	Q	0.01	Q
Boilers	818	28	142	Q	3,485	1,419	1,594	987	0.23	0.02	0.09	0.03
Packaged Heating Units	132	5	37	Q	1,351	869	1,405	612	0.10	0.01	0.03	Q
Other	34	Q	Q	Q	398	Q	535	Q	0.09	Q	Q	Q
Water Heating Equipment												
Centralized System	645	22	158	Q	2,609	1,131	2,013	780	0.25	0.02	0.08	Q
Distributed System	125	Q	Q	Q	874	Q	474	Q	0.14	Q	0.03	Q
Combination of Centralized and Distributed System	136	9	9	Q	1,259	723	900	565	0.11	0.01	0.01	0.02
Annual Consumption (gallons)												
1,000 or Less	43	6	21	Q	2,009	1,701	2,457	1,213	0.02	0.00	0.01	0.00
1,001 to 5,000	219	6	76	20	1,087	365	700	266	0.20	0.02	0.11	0.07
5,001 to 10,000	155	Q	Q	Q	481	Q	Q	Q	0.32	Q	Q	Q
10,001 to 25,000	138	Q	46	Q	502	Q	289	Q	0.27	Q	0.16	Q
Over 25,000	439	Q	Q	Q	1,334	Q	Q	Q	0.33	Q	Q	Q

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.

Table C24. Fuel Oil Expenditures by Census Region, 1999

	Total Fuel Oil Expenditures (million dollars)				Fuel Oil Expenditures (dollars) per Gallon				Fuel Oil Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
All Buildings	704	27	180	45	0.71	0.79	0.86	0.80	0.13	0.01	0.05	0.03
Building Floorspace (Square Feet)												
1,001 to 10,000	196	Q	75	Q	0.86	Q	0.98	Q	0.28	Q	0.20	Q
10,001 to 100,000	313	Q	Q	Q	0.73	0.76	0.74	0.75	0.18	Q	0.05	Q
Over 100,000	196	12	56	Q	0.59	0.75	0.82	0.72	0.07	0.01	0.02	0.01
Principal Building Activity												
Education	164	Q	Q	Q	0.60	Q	0.59	Q	0.18	Q	0.09	Q
Mercantile and Service	Q	Q	Q	Q	0.81	Q	0.93	Q	0.15	Q	Q	Q
Office	113	3	47	Q	0.74	0.94	0.93	0.88	0.09	0.00	0.04	0.01
Public Assembly	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Warehouse and Storage	28	Q	Q	Q	0.74	Q	Q	Q	0.06	Q	Q	Q
All Others	182	9	Q	Q	0.72	0.76	0.83	0.87	0.15	0.01	0.04	Q
Year Constructed												
1945 or Before	228	Q	Q	Q	0.74	Q	Q	Q	0.16	Q	Q	Q
1946 to 1959	130	Q	Q	Q	0.75	Q	Q	Q	0.13	Q	Q	Q
1960 to 1969	143	Q	34	Q	0.72	Q	0.73	Q	0.16	Q	0.05	Q
1970 to 1979	95	Q	Q	4	Q	0.66	0.71	0.93	0.11	Q	0.03	0.01
1980 to 1989	Q	Q	Q	Q	0.73	0.80	0.79	0.82	0.10	Q	Q	Q
1990 to 1999	34	Q	Q	Q	0.60	0.99	1.21	0.80	0.06	Q	Q	Q
Climate Zone: 45-Year Average												
Under 2,000 CDD and --												
More than 7,000 HDD	196	Q	N	Q	0.70	0.83	N	Q	0.23	Q	N	Q
5,500-7,000 HDD	299	13	N	Q	0.72	0.73	N	0.80	0.13	0.01	N	Q
4,000-5,499 HDD	209	Q	125	Q	0.71	Q	0.79	0.75	0.09	Q	0.09	Q
Fewer than 4,000 HDD	N	N	Q	5	N	N	1.05	0.99	N	N	Q	0.01
2,000 CDD or More and --												
Fewer than 4,000 HDD	N	N	13	Q	N	N	1.03	Q	N	N	0.01	Q
Workers (main shift)												
Less than 10	197	Q	58	Q	0.86	Q	0.99	Q	0.18	Q	0.15	Q
10 to 99	339	Q	Q	Q	0.71	0.73	0.81	0.61	0.20	0.02	0.07	0.03
100 or More	169	13	60	14	0.59	0.76	0.80	0.87	0.07	0.01	0.02	0.01
Weekly Operating Hours												
48 or fewer	136	Q	48	Q	0.74	Q	0.80	Q	0.14	Q	0.08	Q
49 to 84	311	4	51	Q	0.74	1.05	0.79	0.66	0.18	0.01	0.04	Q
85 to 168	193	14	Q	Q	0.66	0.74	0.79	0.79	0.10	0.01	Q	Q
Ownership and Occupancy												
Nongovernment Owned	507	17	148	21	0.75	0.86	0.94	0.84	0.13	0.01	0.05	0.02
Owner Occupied	432	16	125	19	0.74	0.85	0.93	0.83	0.13	0.01	0.05	0.02
Nonowner Occupied	75	Q	Q	Q	Q	Q	0.98	Q	0.15	Q	Q	Q
Unoccupied	Q	N	Q	N	Q	N	Q	N	Q	N	Q	N
Government Owned	198	Q	Q	Q	0.61	0.69	0.61	0.77	0.12	Q	0.04	0.07
Federal	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
State	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Local	169	Q	Q	Q	0.61	Q	0.58	Q	0.18	Q	0.05	Q
Vacancy Status												
Completely Vacant	N	N	N	N	N	N	N	N	N	N	N	N
Mostly Vacant	Q	N	N	Q	Q	N	N	Q	Q	N	N	Q
Partially Vacant	106	2	15	Q	0.71	0.88	0.96	0.66	0.08	0.00	0.01	Q
Not At All Vacant	594	25	165	Q	0.71	0.78	0.85	0.82	0.15	0.01	0.06	0.03

Table C24. Fuel Oil Expenditures by Census Region, 1999

	Total Fuel Oil Expenditures (million dollars)				Fuel Oil Expenditures (dollars) per Gallon				Fuel Oil Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Number of Establishments												
One	522	23	143	39	0.71	0.78	0.85	0.80	0.15	0.01	0.06	0.04
2 to 5	103	Q	Q	Q	0.70	Q	0.93	Q	0.14	Q	Q	Q
6 to 10	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
11 to 20	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
More than 20	Q	Q	Q	1	0.83	Q	0.84	0.96	0.03	Q	Q	0.00
Currently Unoccupied	Q	N	Q	N	Q	N	Q	N	Q	N	Q	N
Energy Sources (more than one may apply)												
Electricity	702	27	180	45	0.71	0.79	0.86	0.80	0.13	0.01	0.05	0.03
Natural Gas	194	17	70	Q	0.64	0.85	0.88	0.70	0.08	0.01	0.03	0.01
Fuel Oil	704	27	180	45	0.71	0.79	0.86	0.80	0.13	0.01	0.05	0.03
District Heat	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
District Chilled Water	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Propane	195	Q	Q	Q	0.71	Q	0.90	Q	0.18	Q	0.10	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Space-Heating Energy Source												
Fuel Oil	694	19	163	Q	0.71	0.73	0.85	0.75	0.19	0.03	0.14	0.13
Fuel Oil Main	621	Q	143	Q	0.70	Q	0.85	Q	0.22	Q	0.20	Q
Fuel Oil Secondary	73	12	20	Q	0.75	0.80	0.85	Q	0.09	0.02	0.05	Q
Other Excluding Fuel Oil	10	8	15	11	0.78	0.97	0.89	0.97	0.01	0.00	0.01	0.01
Buildings without Heating	N	N	Q	Q	N	N	Q	Q	N	N	Q	Q
Primary Space-Heating Energy Source												
Electricity	Q	Q	Q	Q	0.88	Q	0.95	0.90	Q	Q	0.01	Q
Natural Gas	31	16	16	7	0.63	0.85	0.81	1.02	0.03	0.01	0.01	0.01
Fuel Oil	621	Q	143	Q	0.70	Q	0.85	Q	0.22	Q	0.20	Q
District Heat	3	Q	Q	Q	0.89	Q	Q	Q	0.00	Q	Q	Q
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	0.26
Other	Q	Q	N	N	Q	Q	N	N	Q	Q	N	N
Cooling Energy Source												
Fuel Oil	Q	Q	Q	N	Q	Q	Q	N	Q	Q	Q	N
Other Excluding Fuel Oil	530	23	159	Q	0.69	0.78	0.85	0.88	0.12	0.01	0.04	Q
Buildings without Cooling	150	Q	Q	Q	0.80	Q	Q	Q	0.19	Q	Q	Q
Water-Heating Energy Source												
Fuel Oil	386	Q	Q	Q	0.68	Q	0.73	Q	0.23	Q	0.14	Q
Other Excluding Fuel Oil	244	17	105	28	0.73	0.86	0.90	0.86	0.08	0.01	0.03	0.02
Buildings without Water Heating	74	Q	Q	Q	0.84	Q	0.95	Q	0.11	Q	0.08	Q
Cooking Energy Source												
Fuel Oil	Q	Q	Q	N	Q	Q	Q	N	Q	Q	Q	N
Other Excluding Fuel Oil	294	14	Q	Q	0.65	0.72	0.71	0.70	0.10	0.01	0.03	0.02
Buildings without Cooking	405	12	104	26	0.76	0.89	1.00	0.88	0.17	0.01	0.08	0.04
Energy End Uses (more than one may apply)												
Buildings with Space Heating	704	27	178	44	0.71	0.79	0.86	0.80	0.13	0.01	0.05	0.03
Buildings with Cooling	555	23	159	Q	0.69	0.78	0.85	0.88	0.12	0.01	0.04	Q
Buildings with Water Heating	630	26	152	42	0.70	0.77	0.84	0.78	0.13	0.01	0.04	0.03
Buildings with Cooking	299	15	Q	Q	0.65	0.72	0.71	0.70	0.10	0.01	0.03	0.02
Buildings with Manufacturing	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Buildings with Electricity Generation	159	12	Q	Q	0.63	0.83	0.93	0.88	0.06	0.01	Q	Q

Table C24. Fuel Oil Expenditures by Census Region, 1999

	Total Fuel Oil Expenditures (million dollars)				Fuel Oil Expenditures (dollars) per Gallon				Fuel Oil Expenditures (dollars) per Square Foot			
	North-east	Mid-west	South	West	North-east	Mid-west	South	West	North-east	Mid-west	South	West
Percent of Floorspace Heated												
Not Heated	N	N	Q	Q	N	N	Q	Q	N	N	Q	Q
1 to 50	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
51 to 99	69	Q	Q	Q	0.77	Q	0.96	0.89	0.09	Q	Q	Q
100	597	24	122	Q	0.70	0.75	0.82	0.77	0.14	0.01	0.05	0.04
Heating Equipment (more than one may apply)												
Heat Pumps	23	Q	Q	Q	0.63	Q	0.94	1.21	0.04	Q	Q	Q
Furnaces	136	Q	Q	Q	0.82	Q	1.14	Q	0.15	Q	Q	Q
Individual Space Heaters	Q	7	Q	Q	0.70	0.86	0.86	0.79	0.07	0.01	0.03	Q
District Heat	Q	Q	2	Q	0.66	Q	0.74	Q	Q	Q	0.00	Q
Boilers	554	20	107	23	0.68	0.72	0.76	0.71	0.16	0.01	0.07	0.02
Packaged Heating Units	84	4	Q	6	0.64	0.88	1.02	0.97	0.06	0.00	Q	0.01
Other	23	Q	Q	Q	0.68	Q	0.75	Q	0.06	Q	Q	Q
Water Heating Equipment												
Centralized System	450	17	132	Q	0.70	0.77	0.84	0.78	0.17	0.02	0.07	Q
Distributed System	Q	Q	Q	Q	0.75	Q	0.90	Q	0.11	Q	Q	Q
Combination of Centralized and Distributed System	86	7	7	7	0.64	0.76	0.81	0.73	0.07	0.01	0.01	0.01
Annual Consumption (gallons)												
1,000 or Less	43	7	23	7	0.99	1.24	1.11	1.13	0.02	0.00	0.01	0.01
1,001 to 5,000	186	6	71	18	0.85	0.87	0.94	0.90	0.17	0.02	0.10	0.07
5,001 to 10,000	121	Q	Q	Q	0.78	Q	Q	Q	0.25	Q	Q	Q
10,001 to 25,000	95	Q	Q	Q	0.69	Q	Q	Q	0.19	Q	Q	Q
Over 25,000	260	Q	Q	Q	0.59	Q	Q	Q	0.19	Q	Q	Q

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.

Table C25. Total District Heat Consumption and Expenditures, 1999

	All Buildings Using District Heat			District Heat Consumption	District Heat Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (million dollars)
All Buildings	117	5891	50	433	3564
Building Floorspace (Square Feet)					
1,001 to 5,000	Q	Q	Q	Q	Q
5,001 to 10,000	Q	Q	Q	Q	Q
10,001 to 25,000	Q	Q	Q	Q	Q
25,001 to 50,000	19	660	35	61	496
50,001 to 100,000	13	933	72	97	667
100,001 to 200,000	7	903	133	72	598
200,001 to 500,000	3	1,003	314	57	504
Over 500,000	2	1,707	964	84	775
Principal Building Activity					
Education	37	1,159	31	117	879
Food Sales	0	12	25	2	19
Food Service	Q	Q	Q	Q	Q
Health Care	3	744	217	46	Q
Inpatient	Q	Q	Q	Q	Q
Outpatient	Q	Q	Q	Q	Q
Lodging	18	629	34	68	482
Mercantile	Q	Q	Q	Q	Q
Retail (Other Than Mall)	Q	Q	Q	Q	Q
Office	Q	1,536	76	74	709
Public Assembly	Q	848	55	59	487
Public Order and Safety	Q	Q	Q	Q	Q
Religious Worship	1	21	20	1	12
Service	Q	Q	Q	Q	Q
Warehouse and Storage	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q
Vacant	0	11	67	0	2
Year Constructed					
1919 or Before	Q	486	25	Q	268
1920 to 1945	9	764	82	60	535
1946 to 1959	21	1,088	52	76	652
1960 to 1969	18	1,406	78	100	815
1970 to 1979	19	788	41	69	538
1980 to 1989	Q	682	Q	47	Q
1990 to 1999	15	677	46	Q	Q
Census Region and Division					
Northeast	Q	1,898	61	136	1,264
New England	Q	Q	Q	Q	Q
Middle Atlantic	Q	1,718	59	121	1,154
Midwest	Q	1,521	61	132	1,021
East North Central	Q	799	71	80	618
West North Central	Q	722	53	52	Q
South	39	1,265	32	67	554
South Atlantic	Q	Q	Q	Q	Q
East South Central	Q	Q	Q	Q	Q
West South Central	Q	Q	Q	Q	Q
West	22	1,207	Q	98	724
Mountain	9	Q	Q	Q	Q
Pacific	Q	Q	Q	Q	Q

Table C25. Total District Heat Consumption and Expenditures, 1999

	All Buildings Using District Heat			District Heat Consumption	District Heat Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (million dollars)
Climate Zone: 45-Year Average					
Under 2,000 CDD and --					
More than 7,000 HDD	Q	Q	Q	Q	Q
5,500-7,000 HDD	22	1,743	78	160	1,219
4,000-5,499 HDD	Q	2,443	54	166	1,492
Fewer than 4,000 HDD	14	875	63	34	314
2,000 CDD or More and --					
Fewer than 4,000 HDD	Q	Q	Q	Q	Q
Workers (main shift)					
Fewer than 5	Q	Q	Q	Q	Q
5 to 9	Q	Q	Q	Q	Q
10 to 19	Q	Q	Q	Q	Q
20 to 49	12	544	Q	45	Q
50 to 99	19	696	37	57	485
100 to 249	9	1,052	123	79	671
250 or More	7	2,431	346	138	1,185
Weekly Operating Hours					
39 or Fewer	1	38	27	3	29
40 to 48	Q	796	20	55	Q
49 to 60	Q	945	52	57	466
61 to 84	17	943	54	73	605
85 to 167	14	915	66	73	516
Open Continuously	26	2,254	87	173	1,449
Ownership and Occupancy					
Nongovernment Owned	67	3,333	50	250	2,110
Owner Occupied	53	2,907	55	226	1,848
Nonowner Occupied	Q	Q	Q	Q	Q
Unoccupied	N	N	N	N	N
Government Owned	50	2,559	51	184	1,454
Federal	Q	827	73	55	336
State	20	1,187	60	96	828
Local	Q	Q	Q	Q	Q
Vacancy Status					
Completely Vacant	N	N	N	N	N
Mostly Vacant	0	11	67	0	2
Partially Vacant	Q	1,311	57	71	737
Not At All Vacant	94	4,570	48	362	2,824
Number of Establishments					
One	101	4,149	41	347	2,680
2 to 5	7	559	83	33	Q
6 to 10	Q	Q	Q	Q	Q
11 to 20	Q	Q	Q	Q	Q
More than 20	1	681	517	33	379
Energy Sources (more than one may apply)					
Electricity	117	5,891	50	433	3,564
Natural Gas	Q	2,683	51	182	1,461
Fuel Oil	8	1,839	Q	107	948
District Heat	117	5,891	50	433	3,564
District Chilled Water	43	2,354	54	185	1,349
Propane	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q

Table C25. Total District Heat Consumption and Expenditures, 1999

	All Buildings Using District Heat			District Heat Consumption	District Heat Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (million dollars)
Space-Heating Energy Source					
District Heat	96	5,534	58	412	3,371
District Heat Main	77	5,077	66	402	3,277
District Heat Secondary	Q	Q	Q	Q	Q
Other Excluding District Heat	Q	Q	Q	Q	Q
Buildings without Heating	Q	Q	Q	Q	Q
Primary Space-Heating Energy Source					
Electricity	Q	Q	Q	Q	Q
Natural Gas	Q	Q	Q	Q	Q
Fuel Oil	1	28	54	1	6
District Heat	77	5,077	66	402	3,277
Propane	N	N	N	N	N
Other	N	N	N	N	N
Cooling Energy Source					
District Heat	Q	Q	Q	Q	Q
Other Excluding District Heat	96	4,691	49	337	2,703
Buildings without Cooling	Q	726	36	Q	Q
Water-Heating Energy Source					
District Heat	32	3,195	99	253	2,186
Other Excluding District Heat	Q	1,119	28	50	Q
Buildings without Water Heating	Q	Q	Q	Q	Q
Cooking Energy Source					
District Heat	Q	Q	Q	Q	Q
Other Excluding District Heat	21	1,690	79	98	843
Buildings without Cooking	87	3,236	37	268	2,167
Energy End Uses (more than one may apply)					
Buildings with Space Heating	116	5,862	51	431	3,556
Buildings with Cooling	97	5,165	53	369	3,028
Buildings with Water Heating	101	5,301	52	392	3,283
Buildings with Cooking	28	2,487	88	149	1,279
Buildings with Manufacturing	Q	Q	Q	Q	Q
Buildings with Electricity Generation	15	2,083	137	139	1,159
Percent of Floorspace Heated					
Not Heated	Q	Q	Q	Q	Q
1 to 50	Q	Q	Q	Q	Q
51 to 99	Q	986	46	57	534
100	90	4,708	52	371	2,990
Heating Equipment (more than one may apply)					
Heat Pumps	Q	Q	Q	Q	Q
Furnaces	Q	Q	Q	Q	Q
Individual Space Heaters	12	1,314	112	79	697
District Heat	96	5,534	58	412	3,371
Boilers	Q	Q	Q	Q	Q
Packaged Heating Units	20	847	42	49	459
Other	Q	Q	Q	Q	Q

Table C25. Total District Heat Consumption and Expenditures, 1999

	All Buildings Using District Heat			District Heat Consumption	District Heat Expenditures
	Number of Buildings (thousand)	Floorspace (million square feet)	Floorspace per Building (thousand square feet)	Total (trillion Btu)	Total (million dollars)
Water Heating Equipment					
Centralized System	84	3,464	41	279	2,261
Distributed System	Q	Q	Q	Q	Q
Combination of Centralized and Distributed System	11	1,142	102	72	665

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.

Table C26. District Heat Consumption and Expenditure Intensities, 1999

	District Heat Consumption			District Heat Expenditures		
	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Pounds (dollars)
All Buildings	3,692	73.55	50.1	30.4	0.60	8.22
Building Floorspace (Square Feet)						
1,001 to 5,000	Q	Q	Q	Q	Q	Q
5,001 to 10,000	Q	Q	Q	Q	Q	Q
10,001 to 25,000	Q	Q	Q	Q	Q	Q
25,001 to 50,000	3,272	92.85	129.6	26.5	0.75	8.10
50,001 to 100,000	7,466	104.03	84.9	51.3	0.72	6.87
100,001 to 200,000	10,653	79.80	52.2	88.3	0.66	8.29
200,001 to 500,000	17,898	57.03	33.8	157.7	0.50	8.81
Over 500,000	47,449	49.20	30.8	437.9	0.45	9.23
Principal Building Activity						
Education	3,151	100.60	87.3	23.8	0.76	7.54
Food Sales	4,155	166.20	166.2	39.2	1.57	9.43
Food Service	Q	Q	Q	Q	Q	Q
Health Care	13,465	62.10	35.4	Q	Q	Q
Inpatient	Q	Q	Q	Q	Q	Q
Outpatient	Q	Q	Q	Q	Q	Q
Lodging	3,658	107.51	Q	26.0	0.77	7.12
Mercantile	Q	Q	Q	Q	Q	Q
Retail (Other Than Mall)	Q	Q	Q	Q	Q	Q
Office	3,655	48.15	18.6	35.1	0.46	9.59
Public Assembly	3,853	69.86	147.9	Q	0.57	8.21
Public Order and Safety	Q	Q	Q	Q	Q	Q
Religious Worship	1,106	55.82	226.8	11.1	0.56	10.06
Service	Q	Q	Q	Q	Q	Q
Warehouse and Storage	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q
Vacant	1,532	22.74	136.7	14.7	0.22	9.58
Year Constructed						
1919 or Before	1,899	76.33	51.1	13.7	0.55	7.22
1920 to 1945	6,475	Q	Q	57.8	0.70	8.92
1946 to 1959	3,653	70.06	45.0	31.3	0.60	8.55
1960 to 1969	5,547	70.90	49.3	45.4	0.58	8.18
1970 to 1979	3,619	87.44	49.1	28.3	0.68	7.81
1980 to 1989	Q	68.93	36.3	Q	Q	Q
1990 to 1999	Q	Q	Q	Q	Q	Q
Census Region and Division						
Northeast	4,371	71.91	44.8	40.5	0.67	9.26
New England	Q	Q	Q	Q	Q	Q
Middle Atlantic	4,127	70.49	43.0	39.3	0.67	9.53
Midwest	5,291	87.08	71.2	40.8	0.67	7.71
East North Central	Q	100.48	90.3	Q	0.77	7.70
West North Central	3,806	72.25	53.8	Q	0.56	7.74
South	1,708	52.66	38.4	14.2	0.44	8.32
South Atlantic	Q	Q	Q	Q	Q	Q
East South Central	Q	Q	Q	Q	Q	Q
West South Central	Q	Q	Q	Q	Q	Q
West	Q	80.99	48.6	Q	0.60	7.40
Mountain	Q	85.64	Q	Q	0.55	6.43
Pacific	Q	Q	Q	Q	Q	Q

Table C26. District Heat Consumption and Expenditure Intensities, 1999

	District Heat Consumption			District Heat Expenditures		
	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Pounds (dollars)
Climate Zone: 45-Year Average						
Under 2,000 CDD and --						
More than 7,000 HDD	Q	Q	Q	Q	Q	Q
5,500-7,000 HDD	7,163	91.65	85.0	54.7	0.70	7.63
4,000-5,499 HDD	3,641	67.90	40.0	32.8	0.61	9.00
Fewer than 4,000 HDD	2,412	38.49	26.6	22.5	0.36	9.33
2,000 CDD or More and --						
Fewer than 4,000 HDD	Q	Q	Q	Q	Q	Q
Workers (main shift)						
Fewer than 5	Q	Q	Q	Q	Q	Q
5 to 9	Q	Q	Q	Q	Q	Q
10 to 19	Q	Q	Q	Q	Q	Q
20 to 49	Q	83.09	Q	Q	Q	Q
50 to 99	3,023	82.51	49.9	25.5	0.70	8.44
100 to 249	9,155	74.70	64.3	78.2	0.64	8.54
250 or More	19,617	56.62	24.7	168.9	0.49	8.61
Weekly Operating Hours						
39 or Fewer	2,044	74.33	297.6	20.8	0.76	10.20
40 to 48	1,356	69.11	55.6	Q	Q	Q
49 to 60	3,114	59.93	25.6	25.6	0.49	8.23
61 to 84	4,179	77.06	44.8	34.8	0.64	8.33
85 to 167	5,264	80.08	67.6	37.0	0.56	7.04
Open Continuously	6,666	76.70	63.0	55.9	0.64	8.38
Ownership and Occupancy						
Nongovernment Owned	3,709	74.91	47.0	31.3	0.63	8.45
Owner Occupied	4,266	77.84	51.1	34.8	0.64	8.17
Nonowner Occupied	Q	Q	Q	Q	Q	Q
Unoccupied	N	N	N	N	N	N
Government Owned	3,668	71.78	54.9	29.0	0.57	7.92
Federal	4,826	66.48	35.1	29.5	0.41	6.12
State	4,813	80.51	90.4	41.7	0.70	8.67
Local	Q	Q	Q	Q	Q	Q
Vacancy Status						
Completely Vacant	N	N	N	N	N	N
Mostly Vacant	1,532	22.74	136.7	14.7	0.22	9.58
Partially Vacant	3,104	54.03	34.0	32.3	0.56	10.41
Not At All Vacant	3,837	79.27	55.1	29.9	0.62	7.80
Number of Establishments						
One	3,448	83.73	65.5	26.6	0.65	7.71
2 to 5	4,928	59.66	42.8	Q	Q	Q
6 to 10	Q	Q	Q	Q	Q	Q
11 to 20	Q	Q	Q	Q	Q	Q
More than 20	24,895	48.20	24.5	287.4	0.56	11.54
Energy Sources (more than one may apply)						
Electricity	3,692	73.55	50.1	30.4	0.60	8.22
Natural Gas	3,479	67.90	43.3	27.9	0.54	8.02
Fuel Oil	13,995	58.04	29.9	124.3	0.52	8.88
District Heat	3,692	73.55	50.1	30.4	0.60	8.22
District Chilled Water	4,272	78.43	47.3	31.2	0.57	7.30
Propane	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q

Table C26. District Heat Consumption and Expenditure Intensities, 1999

	District Heat Consumption			District Heat Expenditures		
	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Pounds (dollars)
Space-Heating Energy Source						
District Heat	4,294	74.45	50.8	35.1	0.61	8.18
District Heat Main	5,233	79.25	57.4	42.6	0.65	8.14
District Heat Secondary	Q	Q	Q	Q	Q	Q
Other Excluding District Heat	Q	Q	Q	Q	Q	Q
Buildings without Heating	Q	Q	Q	Q	Q	Q
Primary Space-Heating Energy Source						
Electricity	Q	Q	Q	Q	Q	Q
Natural Gas	Q	Q	Q	Q	Q	Q
Fuel Oil	1,282	23.55	25.1	12.1	0.22	9.47
District Heat	5,233	79.25	57.4	42.6	0.65	8.14
Propane	N	N	N	N	N	N
Other	N	N	N	N	N	N
Cooling Energy Source						
District Heat	Q	Q	Q	Q	Q	Q
Other Excluding District Heat	3,510	71.86	46.0	28.2	0.58	8.02
Buildings without Cooling	Q	88.92	258.7	Q	Q	Q
Water-Heating Energy Source						
District Heat	7,788	79.07	55.0	67.4	0.68	8.65
Other Excluding District Heat	1,279	44.98	27.0	10.6	0.37	8.25
Buildings without Water Heating	Q	Q	Q	Q	Q	Q
Cooking Energy Source						
District Heat	Q	Q	Q	Q	Q	Q
Other Excluding District Heat	4,577	58.01	43.5	39.4	0.50	8.60
Buildings without Cooking	3,090	82.70	56.9	25.0	0.67	8.10
Energy End Uses (more than one may apply)						
Buildings with Space Heating	3,718	73.53	50.2	30.7	0.61	8.25
Buildings with Cooling	3,789	71.39	43.9	31.1	0.59	8.21
Buildings with Water Heating	3,865	73.87	50.6	32.4	0.62	8.38
Buildings with Cooking	5,288	59.81	35.9	45.5	0.51	8.60
Buildings with Manufacturing	Q	Q	Q	Q	Q	Q
Buildings with Electricity Generation	9,187	66.82	36.6	76.5	0.56	8.33
Percent of Floorspace Heated						
Not Heated	Q	Q	Q	Q	Q	Q
1 to 50	Q	Q	Q	Q	Q	Q
51 to 99	2,639	57.77	38.4	24.8	0.54	9.38
100	4,130	78.77	53.1	33.3	0.64	8.06
Heating Equipment (more than one may apply)						
Heat Pumps	Q	Q	Q	Q	Q	Q
Furnaces	Q	Q	Q	Q	Q	Q
Individual Space Heaters	6,747	60.15	32.3	59.5	0.53	8.81
District Heat	4,294	74.45	50.8	35.1	0.61	8.18
Boilers	Q	Q	Q	Q	Q	Q
Packaged Heating Units	2,407	57.50	45.1	22.7	0.54	9.42
Other	Q	Q	Q	Q	Q	Q

Table C26. District Heat Consumption and Expenditure Intensities, 1999

	District Heat Consumption			District Heat Expenditures		
	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Pounds (dollars)
Water Heating Equipment						
Centralized System	3,343	80.61	58.3	27.1	0.65	8.10
Distributed System	Q	Q	Q	Q	Q	Q
Combination of Centralized and Distributed System	6,437	63.28	34.4	59.2	0.58	9.20

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.