

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

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	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

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	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

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	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

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	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.....	222	Q	Q	Q	988	Q	549	Q	0.22	Q	0.14	Q
49 to 84.....	421	Q	88	Q	2,379	825	1,385	550	0.18	Q	0.06	Q
85 to 168.....	350	16	48	Q	2,047	1,250	1,816	991	0.17	0.01	0.03	Q
Ownership and Occupancy												
Nongovernment Owned												
Owner Occupied	672	20	158	25	3,789	1,842	2,926	1,336	0.18	0.01	0.05	0.02
Nonowner Occupied	581	19	134	22	3,284	1,499	2,350	1,152	0.18	0.01	0.06	0.02
Unoccupied	91	Q	Q	Q	503	Q	576	Q	0.18	Q	Q	Q
Government Owned												
Federal	Q	N	Q	N	Q	N	Q	N	Q	N	Q	N
State	322	Q	Q	Q	1,625	581	823	363	0.20	Q	0.06	Q
Local	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				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.....	164	Q	Q	Q	0.74	Q	0.81	Q	0.17	Q	0.11	Q
49 to 84.....	312	Q	80	Q	0.74	0.79	0.91	0.65	0.13	Q	0.06	Q
85 to 168.....	228	12	40	Q	0.65	0.77	0.83	0.88	0.11	0.01	0.02	Q
Ownership and Occupancy												
Nongovernment Owned												
Owner Occupied	507	17	148	21	0.75	0.86	0.94	0.84	0.13	0.01	0.05	0.02
Nonowner Occupied	432	16	125	19	0.74	0.85	0.93	0.83	0.13	0.01	0.05	0.02
Unoccupied	75	Q	Q	Q	Q	Q	0.98	Q	0.15	Q	Q	Q
Government Owned	Q	N	Q	N	Q	N	Q	N	Q	N	Q	N
Federal												
State	198	Q	Q	Q	0.61	0.69	0.61	0.77	0.12	Q	0.04	0.07
Local	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Local	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				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				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.