

Table C33. Total Fuel Oil Consumption and Expenditures for Non-Mall Buildings, 2003

	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*	451	15,157	34	222	1,602	1,776
Building Floorspace (Square Feet)						
1,001 to 5,000	209	600	3	34	249	292
5,001 to 10,000	99	716	7	36	261	307
10,001 to 25,000	61	966	16	27	196	232
25,001 to 50,000	22	825	38	16	117	127
50,001 to 100,000	23	1,740	76	26	188	203
100,001 to 200,000	21	2,927	141	37	263	272
200,001 to 500,000	12	3,400	294	36	258	272
Over 500,000	4	3,981	927	10	69	71
Principal Building Activity						
Education	26	1,864	70	47	342	362
Food Sales	Q	Q	Q	Q	Q	Q
Food Service	Q	Q	Q	Q	Q	Q
Health Care	13	1,882	143	11	76	79
Inpatient	7	1,683	240	9	65	67
Outpatient	Q	Q	Q	Q	Q	Q
Lodging	28	2,193	78	35	255	272
Retail (Other Than Mall).....	37	501	14	Q	Q	117
Office	65	4,075	62	18	126	149
Public Assembly	42	939	23	29	208	230
Public Order and Safety	23	620	27	8	57	Q
Religious Worship	38	453	12	18	130	Q
Service	93	626	7	Q	Q	Q
Warehouse and Storage	37	1,268	34	9	66	74
Other	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q
Year Constructed						
Before 1920	75	961	13	38	273	304
1920 to 1945	52	1,986	38	54	390	417
1946 to 1959	75	2,048	27	48	347	392
1960 to 1969	61	1,685	28	Q	Q	Q
1970 to 1979	59	2,187	37	22	161	182
1980 to 1989	63	3,079	49	9	66	78
1990 to 1999	49	2,086	43	9	65	72
2000 to 2003	17	1,125	67	Q	Q	Q
Census Region and Division						
Northeast	254	6,080	24	175	1,265	1,393
New England	122	1,577	13	69	501	557
Middle Atlantic	132	4,502	34	106	764	836
Midwest	76	2,832	37	24	170	176
East North Central	35	1,871	53	Q	Q	Q
West North Central	41	961	23	Q	Q	Q
South	84	4,122	49	14	104	125
South Atlantic	59	2,639	45	13	93	112
East South Central	15	341	23	1	7	Q
West South Central	11	1,141	108	1	4	5
West	37	2,123	58	9	63	81
Mountain	10	626	Q	Q	Q	Q
Pacific	27	1,497	56	4	29	Q

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Table C33. Total Fuel Oil Consumption and Expenditures for Non-Mall Buildings, 2003

	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*	451	15,157	34	222	1,602	1,776
Climate Zone: 30-Year Average						
Under 2,000 CDD and --						
More than 7,000 HDD	145	2,499	17	63	451	471
5,500-7,000 HDD	148	4,052	27	63	455	530
4,000-5,499 HDD	97	4,628	48	90	648	713
Fewer than 4,000 HDD	49	2,337	48	6	42	54
2,000 CDD or More and --						
Fewer than 4,000 HDD	13	1,642	130	1	6	8
Number of Floors						
One	209	2,518	12	47	335	397
Two	142	2,724	19	69	496	550
Three	57	1,914	34	39	279	304
Four to Nine	34	4,101	120	55	400	428
Ten or More	9	3,899	452	13	93	97
Number of Workers (main shift)						
Fewer than 5	252	1,459	6	69	498	578
5 to 9	67	625	9	17	120	151
10 to 19	38	1,024	27	33	239	254
20 to 49	36	1,602	44	36	257	274
50 to 99	22	2,131	99	27	195	204
100 to 249	20	2,149	109	19	138	146
250 or More	16	6,168	393	22	156	169
Weekly Operating Hours						
Fewer than 40	83	576	7	15	110	133
40 to 48	107	1,994	19	58	416	457
49 to 60	100	3,015	30	32	228	260
61 to 84	55	2,089	38	40	288	309
85 to 167	35	1,508	43	18	132	151
Open Continuously	69	5,976	86	59	428	466
Ownership and Occupancy						
Nongovernment Owned	371	11,374	31	154	1,107	1,249
Owner Occupied	209	6,092	29	81	588	671
Nonowner Occupied	161	5,215	32	72	520	578
Unoccupied	Q	Q	Q	Q	Q	Q
Government Owned	80	3,783	47	69	495	526
Federal	4	381	Q	Q	Q	Q
State	24	962	40	23	166	170
Local	52	2,441	47	39	284	299
Vacancy Status						
Completely Vacant	Q	Q	Q	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q
Partially Vacant	49	4,346	88	30	213	231
Not At All Vacant	399	10,718	27	191	1,380	1,536

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Table C33. Total Fuel Oil Consumption and Expenditures for Non-Mall Buildings, 2003

	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*	451	15,157	34	222	1,602	1,776
Number of Establishments						
One	373	9,213	25	183	1,318	1,466
2 to 5	65	2,657	41	28	198	224
6 to 10	6	524	94	Q	Q	Q
11 to 20	3	1,119	384	Q	Q	Q
More than 20	3	1,567	527	Q	Q	Q
Currently Unoccupied	Q	Q	Q	Q	Q	Q
Predominant Exterior						
Wall Material						
Brick, Stone or Stucco	158	7,735	49	144	1,041	1,135
Concrete (Block or Poured)	83	2,526	31	24	175	206
Concrete Panels	10	1,943	189	Q	Q	Q
Siding or Shingles	128	753	6	41	295	323
Metal Panels	63	1,171	19	8	60	77
Window Glass	2	486	198	0	1	Q
Other	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q
Predominant Roof Material						
Built-Up	81	5,565	69	37	264	302
Shingles (Not Wood)	167	1,814	11	63	453	529
Metal Surfacing	114	1,309	11	21	153	165
Synthetic or Rubber	65	4,687	72	46	335	367
Slate or Tile	12	454	37	12	83	94
Wooden Materials	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)						
Any Type of Renovation						
Since 1980	149	5,651	38	105	757	806
Addition or Annex	41	2,507	61	Q	Q	Q
Reduction In Floorspace	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	107	4,201	39	77	555	593
Wall or Roof Replacement	66	3,081	46	54	386	422
Interior Wall						
Re-Configuration	66	3,087	47	44	321	352
HVAC Equipment Upgrade	65	3,505	54	34	244	277
Lighting Upgrade	72	3,529	49	53	386	417
Window Replacement	62	2,332	38	50	362	391
Plumbing System Upgrade	48	2,785	58	45	321	343
Insulation Upgrade	48	1,386	29	21	151	170
Other Renovation	Q	Q	Q	Q	Q	Q
No Renovations Since 1980	172	3,216	19	94	677	778
Building Newer than 1980	129	6,289	49	23	168	192

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Table C33. Total Fuel Oil Consumption and Expenditures for Non-Mall Buildings, 2003

	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*	451	15,157	34	222	1,602	1,776
Energy Sources (more than one may apply)						
Electricity	448	15,142	34	222	1,601	1,774
Natural Gas	129	10,383	80	99	712	775
Fuel Oil	451	15,157	34	222	1,602	1,776
District Heat	4	1,731	393	1	10	10
District Chilled Water	3	986	284	2	12	13
Propane	77	2,139	28	54	387	410
Other	29	359	12	Q	Q	26
Space-Heating Energy Sources						
Fuel Oil	360	5,988	17	212	1,527	1,676
Fuel Oil Main	282	3,818	14	197	1,423	1,555
Fuel Oil Secondary	80	2,191	27	16	112	130
Other Excluding Fuel Oil	83	8,954	108	7	51	68
Buildings without Heating	Q	Q	Q	Q	Q	Q
Primary Space-Heating Energy Source						
Electricity	51	3,079	60	3	23	29
Natural Gas	77	6,258	81	15	109	132
Fuel Oil	282	3,818	14	197	1,423	1,555
District Heat	4	1,490	388	1	7	8
Propane	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q
Cooling Energy Sources						
Fuel Oil	Q	Q	Q	Q	Q	Q
Other Excluding Fuel Oil	298	13,860	46	175	1,258	1,376
Buildings without Cooling	152	1,267	8	46	334	389
Water-Heating Energy Sources						
Fuel Oil	94	1,880	20	109	786	849
Other Excluding Fuel Oil	282	12,680	45	104	748	833
Buildings without Water Heating	74	597	8	10	69	94
Cooking Energy Sources						
Fuel Oil	Q	Q	Q	Q	Q	Q
Other Excluding Fuel Oil	114	8,858	78	114	821	888
Buildings without Cooking	335	6,170	18	103	742	847
Energy End Uses (more than one may apply)						
Buildings with Space Heating	443	14,942	34	219	1,577	1,744
Buildings with Cooling	298	13,890	47	176	1,268	1,387
Buildings with Water Heating	376	14,560	39	213	1,533	1,682
Buildings with Cooking	115	8,987	78	119	860	929
Buildings with Manufacturing	25	1,008	40	7	49	56
Buildings with Electricity Generation	92	9,867	107	31	227	253

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Table C33. Total Fuel Oil Consumption and Expenditures for Non-Mall Buildings, 2003

	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*	451	15,157	34	222	1,602	1,776
Percent of Floorspace Heated						
Not Heated	Q	Q	Q	Q	Q	Q
1 to 50	62	1,253	20	13	94	109
51 to 99	56	2,480	44	26	187	206
100	325	11,209	35	180	1,297	1,428
Heating Equipment (more than one may apply)						
Heat Pumps	21	2,417	114	6	44	50
Packaged Heat Pumps	12	1,635	137	3	22	Q
Split-System Heat Pumps	Q	533	92	Q	Q	Q
Individual Room Heat Pumps	7	983	145	Q	Q	Q
Furnaces	211	3,330	16	50	360	417
Individual Space Heaters	94	3,236	34	31	225	253
District Heat	4	1,592	395	1	8	8
Boilers	178	8,930	50	171	1,236	1,337
Packaged Heating Units	54	3,862	72	17	122	139
Other	40	1,095	27	5	36	46
Water Heating Equipment						
Centralized System	290	8,411	29	161	1,162	1,286
Distributed System	61	2,183	36	31	224	244
Combination of Centralized and Distributed System	26	3,965	154	20	147	153
Energy-Related Space Functions (more than one may apply)						
Commercial Food Preparation	115	8,987	78	119	860	929
Activities with Large Amounts of Hot Water	82	7,690	94	95	685	724
Separate Computer Area	80	10,251	129	96	695	732
HVAC Conservation Features (more than one may apply)						
Variable Air-Volume System	61	7,827	128	35	254	273
Economizer Cycle	67	7,865	118	42	303	331
HVAC Maintenance	325	14,152	43	196	1,413	1,565
Energy Management and Control System (EMCS)	32	6,362	196	31	222	241
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)^a						
Heating	328	10,861	33	162	1,166	1,305
Cooling	219	10,489	48	135	975	1,074
Lighting	360	8,742	24	156	1,127	1,257
Office Equipment	147	3,311	22	92	663	714

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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)
All Buildings*	451	15,157	34	222	1,602	1,776
Annual Consumption (gallons)						
1,000 or Less	251	8,625	34	13	94	124
1,001 to 5,000	140	2,592	18	44	320	395
5,001 to 10,000	30	913	30	28	204	242
10,001 to 25,000	15	911	61	30	219	232
Over 25,000	14	2,116	153	106	765	782

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - <http://www.eia.doe.gov/emeu/cbecs>.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, total fuel oil consumption in malls was not statistically significant.

^a The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates.

See "Guide to the Tables" for discussion of the differences.

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 that use fuel oil.

Notes: • Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that 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, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C34. Fuel Oil Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	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*	3,555	0.11	81.6	3.9	0.12	1.11
Building Floorspace (Square Feet)						
1,001 to 5,000	1,187	0.41	315.2	1.4	0.49	1.18
5,001 to 10,000	2,639	0.37	456.4	3.1	0.43	1.17
10,001 to 25,000	3,238	0.20	218.5	3.8	0.24	1.18
25,001 to 50,000	5,383	0.14	109.4	5.8	0.15	1.08
50,001 to 100,000	8,163	0.11	78.4	8.8	0.12	1.08
100,001 to 200,000	12,681	0.09	80.6	13.1	0.09	1.03
200,001 to 500,000	22,353	0.08	62.1	23.6	0.08	1.05
Over 500,000	16,057	0.02	10.7	16.4	0.02	1.02
Principal Building Activity						
Education	12,911	0.18	199.2	13.7	0.19	1.06
Food Sales	Q	Q	Q	Q	Q	Q
Food Service	Q	Q	Q	Q	Q	Q
Health Care	5,755	0.04	21.0	6.0	0.04	1.05
Inpatient	9,252	0.04	20.4	9.6	0.04	1.04
Outpatient	Q	Q	Q	Q	Q	Q
Lodging	9,024	0.12	215.5	9.6	0.12	1.07
Retail (Other Than Mall).....	3,084	Q	Q	3.2	Q	1.04
Office	1,932	0.03	13.3	2.3	0.04	1.18
Public Assembly	4,990	0.22	437.8	5.5	0.24	1.10
Public Order and Safety	2,489	Q	Q	Q	Q	Q
Religious Worship	3,431	0.29	Q	Q	Q	Q
Service	Q	Q	Q	1.8	0.27	1.17
Warehouse and Storage	1,779	0.05	Q	2.0	0.06	1.12
Other	Q	Q	Q	Q	Q	Q
Vacant	Q	Q	Q	Q	Q	Q
Year Constructed						
Before 1920	3,647	0.28	441.9	4.1	0.32	1.11
1920 to 1945	7,541	0.20	195.8	8.1	0.21	1.07
1946 to 1959	4,599	0.17	168.5	5.2	0.19	1.13
1960 to 1969	4,354	0.16	104.9	4.8	0.17	1.10
1970 to 1979	2,730	0.07	46.8	3.1	0.08	1.13
1980 to 1989	1,040	0.02	13.0	1.2	0.03	1.18
1990 to 1999	1,321	0.03	24.3	1.5	0.03	1.11
2000 to 2003	2,247	Q	Q	2.6	Q	1.14
Census Region and Division						
Northeast	4,985	0.21	176.2	5.5	0.23	1.10
New England	4,123	0.32	310.1	4.6	0.35	1.11
Middle Atlantic	5,777	0.17	137.3	6.3	0.19	1.09
Midwest	2,237	0.06	47.0	2.3	0.06	1.03
East North Central	Q	Q	Q	1.9	0.03	0.92
West North Central	2,418	0.10	106.9	2.7	Q	1.12
South	1,235	0.03	19.4	1.5	0.03	1.21
South Atlantic	1,582	0.04	27.4	1.9	0.04	1.21
East South Central	449	0.02	15.4	Q	Q	Q
West South Central	398	0.00	2.8	0.5	0.00	1.25
West	1,722	Q	18.2	Q	Q	1.28
Mountain	Q	Q	Q	Q	Q	1.32
Pacific	Q	0.02	Q	Q	Q	1.25

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Table C34. Fuel Oil Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	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*	3,555	0.11	81.6	3.9	0.12	1.11
Climate Zone: 30-Year Average						
Under 2,000 CDD and --						
More than 7,000 HDD	3,115	0.18	178.7	3.3	0.19	1.04
5,500-7,000 HDD	3,074	0.11	88.5	3.6	0.13	1.16
4,000-5,499 HDD	6,710	0.14	104.9	7.4	0.15	1.10
Fewer than 4,000 HDD	861	0.02	11.5	1.1	0.02	1.28
2,000 CDD or More and --						
Fewer than 4,000 HDD	500	0.00	3.0	0.6	0.00	1.27
Number of Floors						
One	1,606	0.13	131.3	1.9	0.16	1.18
Two	3,496	0.18	186.7	3.9	0.20	1.11
Three	4,879	0.15	138.9	5.3	0.16	1.09
Four to Nine	11,666	0.10	79.5	12.5	0.10	1.07
Ten or More	10,736	0.02	12.5	11.3	0.02	1.05
Number of Workers (main shift)						
Fewer than 5	1,978	0.34	977.0	2.3	0.40	1.16
5 to 9	1,785	0.19	264.2	2.2	0.24	1.26
10 to 19	6,297	0.23	482.2	6.7	0.25	1.06
20 to 49	7,044	0.16	233.2	7.5	0.17	1.07
50 to 99	9,017	0.09	132.7	9.4	0.10	1.05
100 to 249	6,958	0.06	46.3	7.4	0.07	1.06
250 or More	9,949	0.03	12.4	10.8	0.03	1.08
Weekly Operating Hours						
Fewer than 40	1,323	0.19	285.7	1.6	0.23	1.20
40 to 48	3,879	0.21	179.3	4.3	0.23	1.10
49 to 60	2,275	0.08	51.5	2.6	0.09	1.14
61 to 84	5,213	0.14	103.8	5.6	0.15	1.07
85 to 167	3,729	0.09	86.8	4.3	0.10	1.15
Open Continuously	6,188	0.07	52.2	6.7	0.08	1.09
Ownership and Occupancy						
Nongovernment Owned	2,987	0.10	72.2	3.4	0.11	1.13
Owner Occupied	2,810	0.10	72.2	3.2	0.11	1.14
Nonowner Occupied	3,225	0.10	72.1	3.6	0.11	1.11
Unoccupied	Q	Q	N	Q	Q	Q
Government Owned	6,192	0.13	115.5	6.6	0.14	1.06
Federal	11,801	Q	Q	15.2	Q	1.29
State	6,949	0.17	219.4	7.1	0.18	1.02
Local	5,442	0.12	100.6	5.7	0.12	1.05
Vacancy Status						
Completely Vacant	Q	Q	N	Q	Q	Q
Mostly Vacant	Q	Q	Q	Q	Q	Q
Partially Vacant	4,303	0.05	29.1	4.7	0.05	1.08
Not At All Vacant	3,455	0.13	112.2	3.8	0.14	1.11
Number of Establishments						
One	3,537	0.14	127.8	3.9	0.16	1.11
2 to 5	3,039	0.07	67.5	3.4	0.08	1.13
6 to 10	Q	Q	46.0	Q	Q	1.03
11 to 20	Q	0.02	Q	Q	0.02	0.93
More than 20	Q	Q	Q	Q	Q	1.06
Currently Unoccupied	Q	Q	N	Q	Q	Q

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Table C34. Fuel Oil Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	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*	3,555	0.11	81.6	3.9	0.12	1.11
Predominant Exterior Wall Material						
Brick, Stone or Stucco	6,580	0.13	111.0	7.2	0.15	1.09
Concrete (Block or Poured)	2,121	0.07	61.5	2.5	0.08	1.17
Concrete Panels	Q	Q	Q	Q	Q	1.15
Siding or Shingles	2,309	0.39	430.0	2.5	0.43	1.09
Metal Panels	948	0.05	38.4	1.2	0.07	1.28
Window Glass	463	0.00	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q
Predominant Roof Material						
Built-Up	3,277	0.05	34.9	3.7	0.05	1.14
Shingles (Not Wood)	2,712	0.25	211.4	3.2	0.29	1.17
Metal Surfacing	1,342	0.12	Q	1.4	0.13	1.08
Synthetic or Rubber	5,154	0.07	47.4	5.6	0.08	1.10
Slate or Tile	6,873	0.18	141.2	7.7	0.21	1.13
Wooden Materials	Q	Q	Q	Q	Q	Q
Concrete	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q
No One Major Type	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)						
Any Type of Renovation						
Since 1980	5,073	0.13	96.9	5.4	0.14	1.07
Addition or Annex	8,530	0.14	Q	8.7	0.14	1.02
Reduction In Floorspace	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	5,198	0.13	93.7	5.5	0.14	1.07
Wall or Roof Replacement	5,810	0.13	88.0	6.3	0.14	1.09
Interior Wall						
Re-Configuration	4,856	0.10	72.3	5.3	0.11	1.10
HVAC Equipment Upgrade	3,777	0.07	41.2	4.3	0.08	1.13
Lighting Upgrade	5,329	0.11	79.4	5.8	0.12	1.08
Window Replacement	5,876	0.16	111.4	6.3	0.17	1.08
Plumbing System Upgrade	6,673	0.12	82.6	7.1	0.12	1.07
Insulation Upgrade	3,116	0.11	71.1	3.5	0.12	1.13
Other Renovation	Q	Q	Q	Q	Q	Q
No Renovations Since 1980	3,930	0.21	241.0	4.5	0.24	1.15
Building Newer than 1980	1,303	0.03	18.7	1.5	0.03	1.14
Energy Sources (more than one may apply)						
Electricity	3,569	0.11	81.6	4.0	0.12	1.11
Natural Gas	5,516	0.07	50.8	6.0	0.07	1.09
Fuel Oil	3,555	0.11	81.6	3.9	0.12	1.11
District Heat	2,198	0.01	3.3	2.3	0.01	1.03
District Chilled Water	3,458	0.01	9.3	3.6	0.01	1.05
Propane	5,037	0.18	193.1	5.3	0.19	1.06
Other	Q	0.06	43.7	0.9	0.07	1.19
Space-Heating Energy Sources						
Fuel Oil	4,241	0.25	283.4	4.7	0.28	1.10
Fuel Oil Main	5,046	0.37	533.0	5.5	0.41	1.09
Fuel Oil Secondary	1,399	0.05	41.2	1.6	0.06	1.17
Other Excluding Fuel Oil	609	0.01	3.6	0.8	0.01	1.34
Buildings without Heating	Q	Q	Q	Q	Q	Q

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Table C34. Fuel Oil Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	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*	3,555	0.11	81.6	3.9	0.12	1.11
Primary Space-Heating Energy Source						
Electricity	456	0.01	5.3	0.6	0.01	1.24
Natural Gas	1,411	0.02	11.5	1.7	0.02	1.21
Fuel Oil	5,046	0.37	533.0	5.5	0.41	1.09
District Heat	1,896	0.00	2.8	2.0	0.01	1.07
Propane	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q
Cooling Energy Sources						
Fuel Oil	Q	Q	Q	Q	Q	Q
Other Excluding Fuel Oil	4,218	0.09	66.5	4.6	0.10	1.09
Buildings without Cooling	2,194	0.26	481.2	2.6	0.31	1.16
Water-Heating Energy Sources						
Fuel Oil	8,332	0.42	385.8	9.0	0.45	1.08
Other Excluding Fuel Oil	2,651	0.06	43.5	3.0	0.07	1.11
Buildings without Water Heating	926	0.12	Q	1.3	0.16	1.36
Cooking Energy Sources						
Fuel Oil	Q	Q	Q	Q	Q	Q
Other Excluding Fuel Oil	7,232	0.09	69.9	7.8	0.10	1.08
Buildings without Cooking	2,215	0.12	96.5	2.5	0.14	1.14
Energy End Uses (more than one may apply)						
Buildings with Space Heating	3,560	0.11	81.3	3.9	0.12	1.11
Buildings with Cooling	4,250	0.09	67.0	4.6	0.10	1.09
Buildings with Water Heating	4,075	0.11	79.8	4.5	0.12	1.10
Buildings with Cooking	7,447	0.10	72.0	8.0	0.10	1.08
Buildings with Manufacturing	1,944	0.05	Q	2.2	0.06	1.14
Buildings with Electricity Generation	2,466	0.02	14.6	2.7	0.03	1.11
Percent of Floorspace Heated						
Not Heated	Q	Q	Q	Q	Q	Q
1 to 50	1,508	0.07	106.9	1.8	0.09	1.16
51 to 99	3,305	0.08	52.9	3.7	0.08	1.11
100	3,996	0.12	86.6	4.4	0.13	1.10
Heating Equipment (more than one may apply)						
Heat Pumps	2,093	0.02	11.1	2.4	0.02	1.13
Packaged Heat Pumps	Q	Q	7.0	Q	Q	1.19
Split-System Heat Pumps	Q	Q	Q	0.5	Q	1.28
Individual Room Heat Pumps	Q	Q	Q	Q	Q	1.08
Furnaces	1,708	0.11	122.5	2.0	0.13	1.16
Individual Space Heaters	2,397	0.07	55.9	2.7	0.08	1.12
District Heat	1,935	0.00	3.0	2.0	0.01	1.04
Boilers	6,937	0.14	108.4	7.5	0.15	1.08
Packaged Heating Units	2,277	0.03	21.1	2.6	0.04	1.14
Other	894	0.03	23.9	1.1	0.04	1.28

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Table C34. Fuel Oil Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

	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*	3,555	0.11	81.6	3.9	0.12	1.11
Water Heating Equipment						
Centralized System	4,010	0.14	111.2	4.4	0.15	1.11
Distributed System	3,686	0.10	103.8	4.0	0.11	1.09
Combination of Centralized and Distributed System	5,722	0.04	22.2	5.9	0.04	1.04
Energy-Related Space Functions (more than one may apply)						
Commercial Food Preparation	7,447	0.10	72.0	8.0	0.10	1.08
Activities with Large Amounts of Hot Water	8,391	0.09	71.2	8.9	0.09	1.06
Separate Computer Area	8,742	0.07	43.7	9.2	0.07	1.05
HVAC Conservation Features (more than one may apply)						
Variable Air-Volume System	4,153	0.03	20.1	4.5	0.03	1.08
Economizer Cycle	4,554	0.04	24.3	5.0	0.04	1.09
HVAC Maintenance	4,342	0.10	74.7	4.8	0.11	1.11
Energy Management and Control System (EMCS)	6,819	0.03	21.4	7.4	0.04	1.09
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)^a						
Heating	3,555	0.11	82.3	4.0	0.12	1.12
Cooling	4,443	0.09	69.2	4.9	0.10	1.10
Lighting	3,128	0.13	102.2	3.5	0.14	1.12
Office Equipment	4,498	0.20	196.0	4.8	0.22	1.08
Annual Consumption (gallons)						
1,000 or Less	375	0.01	7.5	0.5	0.01	1.32
1,001 to 5,000	2,276	0.12	101.3	2.8	0.15	1.24
5,001 to 10,000	6,744	0.22	200.6	8.0	0.27	1.19
10,001 to 25,000	14,793	0.24	187.1	15.7	0.25	1.06
Over 25,000	55,257	0.36	434.8	56.5	0.37	1.02

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - <http://www.eia.doe.gov/emeu/cbeecs>.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, total fuel oil consumption in malls was not statistically significant.

^a The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

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 that use fuel oil.

Notes: • Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that 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, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C35. Fuel Oil Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	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*	1,265	170	104	63	6,080	2,832	4,122	2,123	0.21	0.06	0.03	Q
Building Floorspace (Square Feet)												
1,001 to 10,000	381	Q	Q	Q	757	Q	255	Q	0.50	Q	0.10	Q
10,001 to 100,000	375	63	Q	Q	1,704	643	833	351	0.22	0.10	Q	Q
Over 100,000	509	20	44	Q	3,618	1,983	3,034	1,673	0.14	0.01	0.01	Q
Principal Building Activity												
Education	282	Q	Q	Q	933	Q	Q	Q	0.30	Q	Q	Q
Health Care.....	Q	Q	17	7	Q	492	786	262	Q	Q	0.02	0.03
Office	105	6	14	1	1,379	714	1,235	748	0.08	0.01	0.01	0.00
All Others	837	Q	44	40	3,426	1,281	1,644	984	0.24	Q	0.03	Q
Year Constructed												
1945 or Before	555	Q	Q	Q	2,126	Q	Q	Q	0.26	Q	Q	Q
1946 to 1959	277	Q	Q	Q	1,233	343	Q	Q	0.22	Q	Q	Q
1960 to 1969	Q	Q	Q	Q	579	398	443	Q	0.34	Q	Q	Q
1970 to 1979	121	Q	25	Q	626	562	693	Q	0.19	Q	0.04	Q
1980 to 1989	45	Q	Q	5	620	Q	1,064	980	0.07	Q	Q	0.01
1990 to 2003	Q	18	Q	6	896	806	1,184	325	0.08	0.02	Q	Q
Climate Zone: 30-Year Average												
Under 2,000 CDD and --												
More than 7,000 HDD	295	Q	N	Q	1,009	1,158	N	331	0.29	0.13	N	Q
5,500-7,000 HDD	398	20	N	Q	2,207	1,461	N	Q	0.18	0.01	N	Q
4,000-5,499 HDD	Q	Q	Q	Q	2,863	Q	1,392	Q	0.20	Q	Q	Q
Fewer than 4,000 HDD	N	N	29	Q	N	N	1,245	1,092	N	N	0.02	Q
2,000 CDD or More and --												
Fewer than 4,000 HDD	N	N	6	Q	N	N	1,486	Q	N	N	0.00	Q
Number of Floors												
One	230	35	Q	Q	987	420	800	311	0.23	0.08	Q	Q
Two	390	Q	Q	Q	1,249	603	618	Q	0.31	Q	Q	Q
Three	234	Q	Q	Q	916	Q	Q	Q	0.26	Q	Q	Q
Four to Nine	328	Q	41	Q	1,704	1,007	887	503	0.19	Q	0.05	Q
Ten or More	Q	Q	6	1	1,224	Q	1,349	900	Q	Q	0.00	0.00
Number of Workers (main shift)												
Less than 10	436	Q	33	Q	1,221	374	376	Q	0.36	Q	0.09	Q
10 to 99	606	27	Q	Q	2,501	939	988	Q	0.24	0.03	Q	Q
100 or More	222	16	39	Q	2,358	1,520	2,758	1,681	0.09	0.01	0.01	Q
Weekly Operating Hours												
48 or fewer	441	Q	Q	Q	1,426	475	559	Q	0.31	Q	0.05	Q
49 to 84	374	Q	Q	10	1,859	915	1,526	805	0.20	Q	Q	0.01
85 to 168	450	33	45	31	2,795	1,442	2,037	1,209	0.16	0.02	0.02	Q
Ownership and Occupancy												
Nongovernment Owned	865	Q	71	34	4,568	1,938	3,132	1,736	0.19	Q	0.02	0.02
Owner Occupied	517	24	39	7	2,790	1,010	1,641	650	0.19	0.02	0.02	0.01
Nonowner Occupied	348	Q	32	Q	1,711	927	1,491	1,085	0.20	Q	0.02	Q
Unoccupied	Q	N	N	Q	N	N	N	Q	N	N	N	N
Government Owned	400	33	Q	Q	1,512	894	990	387	0.26	0.04	Q	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	245	Q	Q	Q	1,102	574	Q	Q	0.22	Q	Q	Q

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Table C35. Fuel Oil Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	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*	1,265	170	104	63	6,080	2,832	4,122	2,123	0.21	0.06	0.03	Q
Vacancy Status												
Completely Vacant	Q	N	N	N	Q	N	N	N	Q	N	N	N
Mostly Vacant	Q	N	N	N	Q	N	N	N	Q	N	N	N
Partially Vacant	179	Q	16	Q	1,704	756	1,203	684	0.11	Q	0.01	Q
Not At All Vacant	1,076	156	88	60	4,283	2,077	2,919	1,439	0.25	0.08	0.03	Q
Number of Establishments												
One	1,041	Q	76	Q	3,679	1,652	2,654	1,227	0.28	0.09	0.03	Q
2 to 5	151	Q	21	Q	1,119	651	615	Q	0.13	Q	0.03	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	Q	Q	Q	487	Q	Q	Q	Q	Q
Currently Unoccupied	Q	N	N	N	Q	N	N	N	Q	N	N	N
Predominant Exterior Wall Material												
Brick, Stone or Stucco	855	93	74	Q	3,688	1,425	2,035	587	0.23	0.07	0.04	Q
Concrete (Block or Poured)	Q	17	Q	Q	Q	471	814	449	Q	0.04	Q	Q
Concrete Panels	Q	Q	4	Q	Q	Q	843	Q	Q	Q	0.00	Q
Siding or Shingles	230	Q	Q	Q	496	Q	Q	Q	0.46	Q	Q	0.18
Metal Panels	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Window Glass	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	N	Q	Q	Q	N	Q	Q	Q	N	Q	Q	Q
Predominant Roof Material												
Built-Up	196	17	36	Q	1,936	914	1,727	988	0.10	0.02	0.02	Q
Shingles (Not Wood)	375	Q	Q	Q	892	Q	Q	Q	0.42	Q	Q	Q
Metal Surfacing	74	Q	Q	Q	512	Q	Q	Q	0.14	Q	Q	Q
Synthetic or Rubber	240	38	Q	Q	1,745	1,068	1,172	701	0.14	0.04	Q	Q
Slate or Tile	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Wooden Materials	Q	Q	Q	N	Q	Q	Q	N	Q	0.00	Q	N
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	0.00	0.00
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)												
Any Type of Renovation												
Since 1980	598	Q	52	29	2,711	1,013	1,361	567	0.22	Q	0.04	0.05
Addition or Annex	Q	Q	25	Q	Q	540	760	Q	0.30	0.04	0.03	Q
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	432	Q	39	Q	2,089	832	850	430	0.21	Q	0.05	Q
Wall or Roof Replacement	333	11	22	Q	1,581	541	665	Q	0.21	0.02	0.03	Q
Interior Wall												
Re-Configuration	277	Q	Q	Q	1,305	651	740	392	0.21	Q	0.03	Q
HVAC Equipment Upgrade	197	Q	33	Q	1,482	709	909	405	0.13	Q	0.04	Q
Lighting Upgrade	347	Q	22	Q	1,750	694	653	432	0.20	Q	0.03	Q
Window Replacement	337	6	Q	Q	1,520	360	Q	Q	0.22	0.02	Q	Q
Plumbing System Upgrade	293	Q	20	Q	1,517	449	497	Q	0.19	Q	0.04	Q
Insulation Upgrade	137	Q	Q	Q	758	Q	Q	Q	0.18	Q	Q	Q
Other Renovation	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	0.05	Q
No Renovations Since 1980	553	Q	Q	Q	1,853	598	514	Q	0.30	Q	Q	Q
Building Newer than 1980	114	20	23	12	1,516	1,221	2,248	1,305	0.08	0.02	0.01	0.01

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Table C35. Fuel Oil Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	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*	1,265	170	104	63	6,080	2,832	4,122	2,123	0.21	0.06	0.03	Q
Energy Sources (more than one may apply)												
Electricity	1,265	169	104	63	6,080	2,817	4,122	2,123	0.21	0.06	0.03	0.03
Natural Gas	629	26	47	Q	3,714	2,123	2,962	1,584	0.17	0.01	0.02	Q
Fuel Oil	1,265	170	104	63	6,080	2,832	4,122	2,123	0.21	0.06	0.03	Q
District Heat	Q	Q	2	Q	731	314	476	Q	Q	Q	Q	Q
District Chilled Water	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Propane	304	Q	Q	Q	1,014	Q	Q	Q	0.30	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Space-Heating Energy Sources												
Fuel Oil	1,237	162	79	Q	3,927	916	897	Q	0.31	Q	0.09	Q
Fuel Oil Main	1,195	Q	Q	Q	3,250	Q	Q	Q	0.37	Q	Q	Q
Fuel Oil Secondary	50	31	25	Q	699	687	665	Q	0.07	0.04	0.04	Q
Other Excluding Fuel Oil	Q	8	21	6	2,103	1,916	3,137	1,798	Q	0.00	0.01	0.00
Buildings without Heating	Q	N	Q	Q	Q	N	Q	Q	Q	N	Q	Q
Primary Space-Heating Energy Source												
Electricity	Q	Q	8	Q	Q	563	1,688	531	Q	Q	0.00	0.01
Natural Gas	49	22	31	Q	1,730	1,671	1,630	1,226	0.03	0.01	0.02	0.01
Fuel Oil	1,195	Q	Q	Q	3,250	Q	Q	Q	0.37	Q	Q	Q
District Heat	Q	Q	1	Q	Q	Q	433	Q	Q	Q	Q	Q
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Sources												
Fuel Oil	Q	N	N	N	Q	N	N	N	Q	N	N	N
Other Excluding Fuel Oil	996	127	101	35	5,070	2,670	4,093	2,027	0.20	0.05	0.02	0.02
Buildings without Cooling	259	Q	Q	Q	979	Q	Q	Q	0.26	Q	Q	Q
Water-Heating Energy Sources												
Fuel Oil	721	Q	Q	Q	1,542	Q	Q	Q	0.47	Q	Q	Q
Other Excluding Fuel Oil	508	Q	70	31	4,216	2,607	3,826	2,030	0.12	Q	0.02	0.02
Buildings without Water Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooking Energy Sources												
Fuel Oil	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	0.00
Other Excluding Fuel Oil	682	64	52	Q	3,244	1,699	2,777	1,138	0.21	0.04	0.02	Q
Buildings without Cooking	558	Q	43	Q	2,776	1,111	1,315	968	0.20	Q	0.03	Q
Energy End Uses (more than one may apply)												
Buildings with Space Heating	1,253	170	100	Q	6,030	2,832	4,034	2,045	0.21	0.06	0.02	Q
Buildings with Cooling	1,005	127	101	35	5,101	2,670	4,093	2,027	0.20	0.05	0.02	0.02
Buildings with Water Heating	1,228	Q	98	49	5,758	2,699	4,030	2,072	0.21	0.06	0.02	0.02
Buildings with Cooking	707	69	60	Q	3,304	1,721	2,807	1,155	0.21	0.04	0.02	Q
Buildings with Manufacturing	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Buildings with Electricity Generation	160	Q	38	8	2,590	2,129	3,368	1,780	0.06	Q	0.01	0.00

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Table C35. Fuel Oil Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	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*	1,265	170	104	63	6,080	2,832	4,122	2,123	0.21	0.06	0.03	Q
Percent of Floorspace Heated												
Not Heated	Q	N	Q	Q	Q	N	Q	Q	Q	N	Q	Q
1 to 50	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
51 to 99	150	Q	23	Q	644	Q	830	748	0.23	Q	0.03	Q
100	1,019	Q	75	Q	4,671	2,422	2,987	1,129	0.22	0.06	0.02	Q
Heating Equipment (more than one may apply)												
Heat Pumps	Q	Q	9	Q	Q	Q	1,100	510	Q	Q	0.01	Q
Packaged Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Split-System Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Individual Room Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Furnaces	300	24	Q	Q	1,352	747	973	Q	0.22	0.03	Q	Q
Individual Space Heaters	174	Q	23	Q	1,245	876	846	Q	0.14	Q	0.03	Q
District Heat	Q	Q	2	Q	624	Q	451	Q	Q	Q	Q	Q
Boilers	981	Q	74	Q	3,833	1,775	1,904	1,418	0.26	Q	0.04	Q
Packaged Heating Units	87	10	Q	Q	945	740	1,563	614	0.09	0.01	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Water Heating Equipment												
Centralized System	916	Q	Q	Q	3,627	1,724	2,222	838	0.25	Q	Q	Q
Distributed System	208	Q	Q	Q	1,182	Q	588	Q	0.18	Q	0.02	Q
Combination of Centralized and Distributed System	105	Q	17	8	949	755	1,220	1,041	0.11	Q	0.01	0.01
Energy-Related Space Functions (more than one may apply)												
Commercial Food Preparation	707	69	60	Q	3,304	1,721	2,807	1,155	0.21	0.04	0.02	Q
Activities with Large Amounts of Hot Water	574	40	47	Q	2,577	1,652	2,380	1,081	0.22	0.02	0.02	Q
Separate Computer Area	560	41	59	35	3,623	1,957	2,916	1,756	0.15	0.02	0.02	Q
HVAC Conservation Features (more than one may apply)												
Variable Air-Volume System	174	27	45	7	2,243	1,823	2,394	1,367	0.08	0.02	0.02	0.01
Economizer Cycle	232	19	48	4	2,238	1,794	2,378	1,454	0.10	0.01	0.02	0.00
HVAC Maintenance	1,156	110	98	49	5,602	2,638	3,898	2,015	0.21	0.04	0.03	Q
Energy Management and Control System (EMCS)	156	13	39	Q	1,798	1,395	1,996	1,173	0.09	0.01	0.02	Q
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)^a												
Heating	952	91	82	Q	4,569	1,898	2,827	1,568	0.21	0.05	0.03	Q
Cooling	828	44	84	Q	4,138	1,758	2,968	1,625	0.20	0.03	0.03	Q
Lighting	871	Q	Q	Q	3,560	1,683	2,393	1,106	0.24	Q	Q	Q
Office Equipment	564	Q	Q	Q	1,828	617	578	Q	0.31	Q	Q	Q

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Table C35. Fuel Oil Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

	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*	1,265	170	104	63	6,080	2,832	4,122	2,123	0.21	0.06	0.03	Q
Annual Consumption (gallons)												
1,000 or Less	56	15	16	7	2,097	1,955	3,017	1,556	0.03	0.01	0.01	0.00
1,001 to 5,000	252	Q	Q	Q	1,310	450	433	Q	0.19	0.07	Q	Q
5,001 to 10,000	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
10,001 to 25,000	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Over 25,000	691	Q	Q	Q	1,763	Q	Q	Q	0.39	Q	Q	Q

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - <http://www.eia.doe.gov/emeu/cbecs>.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, total fuel oil consumption in malls was not statistically significant.

a The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

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 that use fuel oil.

Notes: • Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that 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, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

Table C36. Fuel Oil Expenditures by Census Region for Non-Mall Buildings, 2003

	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*	1,393	176	125	81	1.10	1.03	1.21	1.28	0.23	0.06	0.03	Q
Building Floorspace (Square Feet)												
1,001 to 10,000	460	Q	Q	Q	1.21	Q	Q	Q	0.61	Q	Q	Q
10,001 to 100,000	408	70	Q	Q	1.09	1.12	1.29	1.31	0.24	0.11	Q	Q
Over 100,000	524	21	47	Q	1.03	1.05	1.07	1.26	0.14	0.01	0.02	Q
Principal Building Activity												
Education	293	Q	Q	Q	1.04	Q	Q	Q	0.31	Q	Q	Q
Health Care.....	Q	Q	19	8	Q	1.06	1.08	1.16	Q	Q	0.02	0.03
Office	122	8	18	Q	1.16	1.32	1.26	1.44	0.09	0.01	0.01	0.00
All Others	936	Q	59	50	1.12	1.01	1.34	1.26	0.27	0.11	0.04	Q
Year Constructed												
1945 or Before	612	Q	Q	Q	1.10	Q	Q	Q	0.29	Q	Q	Q
1946 to 1959	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1960 to 1969	Q	Q	Q	Q	1.06	Q	Q	Q	0.36	Q	Q	Q
1970 to 1979	133	Q	31	Q	1.10	1.19	1.23	Q	0.21	Q	0.04	Q
1980 to 1989	53	Q	Q	7	1.18	Q	1.16	1.23	0.08	Q	Q	0.01
1990 to 2003	Q	21	Q	Q	1.09	1.16	1.18	Q	0.08	0.03	Q	Q
Climate Zone: 30-Year Average												
Under 2,000 CDD and --												
More than 7,000 HDD	312	Q	N	Q	1.06	1.00	N	1.23	0.31	0.13	N	Q
5,500-7,000 HDD	459	24	N	Q	1.15	1.23	N	Q	0.21	0.02	N	Q
4,000-5,499 HDD	Q	Q	Q	Q	1.09	Q	1.19	Q	0.22	Q	Q	Q
Fewer than 4,000 HDD	N	N	36	Q	N	N	1.24	1.38	N	N	0.03	Q
2,000 CDD or More and --												
Fewer than 4,000 HDD	N	N	7	Q	N	N	1.27	Q	N	N	0.00	Q
Number of Floors												
One	267	40	Q	Q	1.16	1.11	1.28	Q	0.27	0.09	Q	Q
Two	442	Q	Q	Q	1.13	0.96	Q	Q	0.35	Q	Q	Q
Three	252	Q	Q	Q	1.08	Q	Q	Q	0.28	Q	Q	Q
Four to Nine	347	Q	47	Q	1.06	0.97	1.14	1.23	0.20	Q	0.05	Q
Ten or More	Q	Q	7	2	1.03	Q	1.16	1.33	Q	Q	0.01	0.00
Number of Workers (main shift)												
Less than 10	525	Q	46	Q	1.20	1.02	1.38	Q	0.43	Q	0.12	Q
10 to 99	635	Q	Q	Q	1.05	1.03	1.17	Q	0.25	Q	Q	Q
100 or More	233	18	43	Q	1.05	1.13	1.10	1.30	0.10	0.01	0.02	Q
Weekly Operating Hours												
48 or fewer	481	Q	34	Q	1.09	Q	1.30	Q	0.34	Q	0.06	Q
49 to 84	422	Q	Q	11	1.13	0.96	1.26	1.13	0.23	Q	Q	0.01
85 to 168	490	36	51	40	1.09	1.09	1.12	1.29	0.18	0.02	0.03	Q
Ownership and Occupancy												
Nongovernment Owned	976	140	90	Q	1.13	1.02	1.27	1.27	0.21	Q	0.03	Q
Owner Occupied	583	27	52	9	1.13	1.13	1.32	1.16	0.21	0.03	0.03	0.01
Nonowner Occupied	392	Q	38	Q	1.13	1.00	1.20	1.30	0.23	Q	0.03	Q
Unoccupied	Q	N	N	Q	N	Q	N	N	Q	N	N	N
Government Owned	417	36	Q	Q	1.04	1.09	1.08	1.31	0.28	Q	Q	Q
Federal	Q	Q	Q	Q	Q	Q	1.09	Q	Q	Q	0.00	Q
State	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Local	256	Q	Q	Q	1.04	Q	Q	Q	0.23	Q	Q	Q

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Table C36. Fuel Oil Expenditures by Census Region for Non-Mall Buildings, 2003

	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*	1,393	176	125	81	1.10	1.03	1.21	1.28	0.23	0.06	0.03	Q
Vacancy Status												
Completely Vacant	Q	N	N	N	Q	N	N	N	Q	N	N	N
Mostly Vacant	Q	N	N	N	Q	N	N	N	Q	N	N	N
Partially Vacant	191	Q	19	Q	1.06	1.18	1.19	1.30	0.11	Q	0.02	Q
Not At All Vacant	1,194	159	106	Q	1.11	1.02	1.21	1.28	0.28	0.08	0.04	Q
Number of Establishments												
One	1,152	160	96	Q	1.11	1.03	1.25	1.30	0.31	0.10	0.04	Q
2 to 5	169	Q	23	Q	1.12	1.07	1.08	Q	0.15	Q	0.04	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	Q	Q	Q	1.28	Q	Q	Q	Q	Q
Currently Unoccupied	Q	N	N	N	Q	N	N	N	Q	N	N	N
Predominant Exterior Wall Material												
Brick, Stone or Stucco	921	103	86	Q	1.08	1.12	1.17	1.25	0.25	0.07	0.04	Q
Concrete (Block or Poured)	Q	20	Q	Q	Q	1.13	1.30	1.33	Q	Q	Q	Q
Concrete Panels	Q	Q	4	Q	Q	Q	1.25	Q	Q	Q	Q	Q
Siding or Shingles	264	Q	Q	Q	1.14	Q	Q	Q	0.53	Q	Q	0.21
Metal Panels	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Window Glass	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No One Major Type	N	Q	Q	Q	N	Q	Q	Q	N	Q	Q	Q
Predominant Roof Material												
Built-Up	222	19	42	Q	1.13	1.10	1.16	1.32	0.11	0.02	0.02	Q
Shingles (Not Wood)	437	Q	Q	Q	1.16	Q	Q	Q	0.49	Q	Q	Q
Metal Surfacing	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Synthetic or Rubber	253	43	Q	Q	1.05	1.12	1.16	1.32	0.14	0.04	Q	Q
Slate or Tile	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Wooden Materials	Q	Q	Q	N	Q	Q	Q	N	Q	0.00	Q	N
Concrete	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	0.00	0.00
No One Major Type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Renovations in Buildings Constructed Before 1980 (more than one may apply)												
Any Type of Renovation	638	Q	62	Q	1.07	0.90	1.18	1.26	0.24	Q	0.05	Q
Addition or Annex	Q	Q	30	Q	1.01	1.06	1.20	Q	0.30	0.04	0.04	Q
Reduction In Floorspace	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cosmetic Improvements	468	Q	45	Q	1.08	0.87	1.14	1.22	0.22	Q	0.05	Q
Wall or Roof Replacement	358	13	25	Q	1.07	1.11	1.16	Q	0.23	0.02	0.04	Q
Interior Wall												
Re-Configuration	302	Q	Q	Q	1.09	1.12	1.16	1.03	0.23	Q	0.04	Q
HVAC Equipment Upgrade	223	13	37	Q	1.14	1.10	1.13	1.04	0.15	Q	0.04	0.01
Lighting Upgrade	372	Q	26	Q	1.07	1.11	1.17	1.06	0.21	Q	Q	0.01
Window Replacement	362	8	Q	Q	1.08	1.23	Q	Q	0.24	0.02	Q	Q
Plumbing System Upgrade	311	Q	23	Q	1.06	1.03	1.13	Q	0.21	Q	0.05	Q
Insulation Upgrade	154	Q	Q	Q	1.12	Q	Q	Q	0.20	Q	Q	Q
Other Renovation	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	0.07	Q
No Renovations Since 1980	627	Q	Q	Q	1.13	1.15	1.29	Q	0.34	Q	Q	Q
Building Newer than 1980	128	23	27	14	1.13	1.15	1.17	1.21	0.08	0.02	0.01	0.01

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Table C36. Fuel Oil Expenditures by Census Region for Non-Mall Buildings, 2003

	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*	1,393	176	125	81	1.10	1.03	1.21	1.28	0.23	0.06	0.03	Q
Energy Sources (more than one may apply)												
Electricity	1,393	174	125	81	1.10	1.03	1.21	1.28	0.23	0.06	0.03	0.04
Natural Gas	681	29	53	Q	1.08	1.11	1.13	1.18	0.18	0.01	0.02	Q
Fuel Oil	1,393	176	125	81	1.10	1.03	1.21	1.28	0.23	0.06	0.03	Q
District Heat	Q	Q	2	Q	Q	Q	1.23	Q	Q	Q	0.01	Q
District Chilled Water	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Propane	313	Q	Q	Q	1.03	Q	Q	Q	0.31	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Space-Heating Energy Sources												
Fuel Oil	1,353	167	95	Q	1.09	1.03	1.20	Q	0.34	0.18	0.11	Q
Fuel Oil Main	1,304	Q	Q	Q	1.09	Q	Q	Q	0.40	Q	Q	Q
Fuel Oil Secondary	59	35	29	Q	1.19	1.15	1.16	Q	0.08	0.05	0.04	Q
Other Excluding Fuel Oil	Q	9	26	8	1.56	1.16	1.25	1.30	Q	0.00	0.01	0.00
Buildings without Heating	Q	N	Q	Q	Q	N	Q	Q	Q	N	Q	Q
Primary Space-Heating Energy Source												
Electricity	Q	Q	11	Q	Q	1.19	1.32	Q	Q	Q	0.01	Q
Natural Gas	63	24	36	Q	1.29	1.13	1.14	1.20	0.04	0.01	0.02	0.01
Fuel Oil	1,304	Q	Q	Q	1.09	Q	Q	Q	0.40	Q	Q	Q
District Heat	Q	Q	2	Q	Q	Q	1.25	Q	Q	Q	0.00	Q
Propane	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooling Energy Sources												
Fuel Oil	Q	N	N	N	Q	N	N	N	Q	N	N	N
Other Excluding Fuel Oil	1,086	125	122	43	1.09	0.99	1.21	1.23	0.21	0.05	0.03	0.02
Buildings without Cooling	296	Q	Q	Q	1.14	Q	Q	Q	0.30	Q	Q	Q
Water-Heating Energy Sources												
Fuel Oil	773	Q	Q	Q	1.07	Q	Q	Q	0.50	Q	Q	Q
Other Excluding Fuel Oil	572	Q	85	36	1.13	1.01	1.20	1.18	0.14	0.05	0.02	0.02
Buildings without Water Heating	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Cooking Energy Sources												
Fuel Oil	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	0.00
Other Excluding Fuel Oil	729	70	59	Q	1.07	1.10	1.14	1.26	0.22	0.04	0.02	Q
Buildings without Cooking	639	Q	57	Q	1.14	0.99	1.31	1.30	0.23	Q	0.04	Q
Energy End Uses (more than one may apply)												
Buildings with Space Heating	1,378	176	121	Q	1.10	1.03	1.21	1.27	0.23	0.06	0.03	Q
Buildings with Cooling	1,097	125	122	43	1.09	0.99	1.21	1.23	0.21	0.05	0.03	0.02
Buildings with Water Heating	1,344	162	115	61	1.09	1.02	1.18	1.25	0.23	0.06	0.03	0.03
Buildings with Cooking	754	76	68	Q	1.07	1.10	1.14	1.26	0.23	0.04	0.02	Q
Buildings with Manufacturing	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Buildings with Electricity Generation	174	Q	45	10	1.09	1.12	1.19	1.20	0.07	0.01	0.01	0.01
Percent of Floorspace Heated												
Not Heated	Q	N	Q	Q	Q	N	Q	Q	Q	N	Q	Q
1 to 50	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
51 to 99	167	Q	25	Q	1.11	Q	1.09	1.06	0.26	Q	0.03	Q
100	1,116	160	93	Q	1.09	1.02	1.24	1.30	0.24	0.07	0.03	Q

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Table C36. Fuel Oil Expenditures by Census Region for Non-Mall Buildings, 2003

	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*	1,393	176	125	81	1.10	1.03	1.21	1.28	0.23	0.06	0.03	Q
Heating Equipment (more than one may apply)												
Heat Pumps	Q	Q	11	Q	Q	Q	1.26	1.04	Q	Q	Q	Q
Packaged Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Split-System Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Individual Room Heat Pumps	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Furnaces	345	28	Q	Q	1.15	1.16	1.25	Q	0.26	0.04	Q	Q
Individual Space Heaters	192	Q	29	Q	1.10	1.15	1.25	Q	0.15	0.02	0.03	Q
District Heat	Q	Q	2	Q	Q	Q	1.24	Q	Q	Q	0.00	Q
Boilers	1,060	Q	86	Q	1.08	1.01	1.15	1.28	0.28	Q	0.04	Q
Packaged Heating Units	Q	10	25	Q	Q	1.00	1.23	1.20	Q	0.01	Q	Q
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Water Heating Equipment												
Centralized System	1,014	Q	Q	Q	1.11	1.01	1.18	1.31	0.28	0.08	Q	Q
Distributed System		Q	Q	Q	Q	Q	1.26	Q	Q	Q	0.02	Q
Combination of Centralized and Distributed System	106	Q	19	9	1.01	1.08	1.14	1.08	0.11	Q	0.02	0.01
Energy-Related Space Functions (more than one may apply)												
Commercial Food Preparation	754	76	68	Q	1.07	1.10	1.14	1.26	0.23	0.04	0.02	Q
Activities with Large Amounts of Hot Water	595	42	Q	Q	1.04	1.07	1.15	1.30	0.23	0.03	0.02	Q
Separate Computer Area	576	45	66	Q	1.03	1.08	1.11	1.30	0.16	0.02	0.02	Q
HVAC Conservation Features (more than one may apply)												
Variable Air-Volume System	184	30	50	9	1.05	1.11	1.12	1.25	0.08	0.02	0.02	0.01
Economizer Cycle	253	21	51	5	1.09	1.08	1.08	1.26	0.11	0.01	0.02	0.00
HVAC Maintenance	1,261	123	117	Q	1.09	1.12	1.20	1.30	0.23	0.05	0.03	Q
Energy Management and Control System (EMCS)	166	14	42	Q	1.06	1.12	1.08	1.31	0.09	0.01	0.02	Q
Equipment Usage Reduced When Building Not In Full Use (more than one may apply)^a												
Heating	1,051	103	100	Q	1.10	1.13	1.22	1.27	0.23	0.05	0.04	Q
Cooling	897	51	102	Q	1.08	1.15	1.22	1.29	0.22	0.03	0.03	Q
Lighting	969	142	88	Q	1.11	1.02	1.24	1.28	0.27	0.08	0.04	Q
Office Equipment	613	Q	Q	Q	1.09	0.90	1.23	Q	0.34	Q	Q	Q

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Table C36. Fuel Oil Expenditures by Census Region for Non-Mall Buildings, 2003

	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*	1,393	176	125	81	1.10	1.03	1.21	1.28	0.23	0.06	0.03	Q
Annual Consumption (gallons)												
1,000 or Less	73	19	23	10	1.29	1.28	1.46	1.31	0.03	0.01	0.01	0.01
1,001 to 5,000	313	Q	Q	Q	1.24	1.18	1.23	Q	0.24	Q	Q	Q
5,001 to 10,000	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
10,001 to 25,000	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Over 25,000	699	Q	Q	Q	1.01	Q	Q	Q	0.40	Q	Q	Q

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - <http://www.eia.doe.gov/emeu/cbecs>.

* Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, total fuel oil consumption in malls was not statistically significant.

^a The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

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 that use fuel oil.

Notes: • Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that 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, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.