Table C22. Fuel Oil Consumption and Expenditure Intensities, 1999

	Fue	l Oil Consump	tion	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	,	0.15	160.0	2.2	0.11	0.75
1946 to 1959		0.13	88.5	1.7	0.10	0.78
1960 to 1969	,	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		0.05 0.04	30.2 28.7	1.6 Q	0.04 0.03	0.75 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 0.03	Q	0.5	Q	0.79
West North Central	Q 4.505	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 0.01	Q	1.5	Q	0.87
West South Central	Q 4 007	0.01	4.0	Q	0.01	1.17
West	1,897	0.03	Q 15.4	1.5	0.03	0.80
Mountain	Q	0.03	15.4	Q	0.02	0.82

Table C22. Fuel Oil Consumption and Expenditure Intensities, 1999

	Fue	l Oil Consump	tion	Fuel	Oil Expenditure	es
	per Building	per Square Foot	per Worker	per Building (thousand	per Square Foot	per Gallon
	(gallons)	(gallons)	(gallons)	dollars)	(dollars)	(dollars)
Climate Zone: 45-Year Average						
Under 2,000 CDD and						
More than 7,000 HDD	-,	0.18	179.4	2.8	0.13	0.71
5,500-7,000 HDD		0.12	82.5	2.6	0.08	0.72
4,000-5,499 HDD		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
M. J						
Workers (main shift)	004	0.45	270.4	0.7	0.44	0.00
Fewer than 5		0.15	370.4	0.7	0.14	0.90
5 to 9		0.21	273.7	1.6	0.19	0.88
10 to 19	_,	0.21	212.3	2.1	0.17	0.82
20 to 49		0.16	130.5	2.9	0.12	0.74
50 to 99	,	0.15	220.7	9.1	0.10	0.63
100 to 249		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
Washing Danseting Harris						
Weekly Operating Hours	0	0	110.0	0	0.14	0.00
39 or Fewer	Q 0.457	Q	118.3	Q	0.14	0.86
40 to 48	,	0.16	123.0	1.8	0.12	0.73
49 to 60		0.12	81.7	2.2	0.09	0.80
61 to 84	,	0.09	65.7	2.6	0.07	0.73
85 to 167		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		0.09	59.5	1.9	0.07	0.78
Nonowner Occupied		0.09	45.0	1.3	0.06	0.76
Unoccupied	1,573 Q	0.07 Q	45.0 N	1.3 Q	0.00 Q	0.00 Q
Government Owned	8,739	0.12	98.7	5.5	0.08	0.63
Federal	,	0.12	14.2	4.4	0.08	0.03
State			60.2			
Local	-,	0.06 0.19	182.2	4.6 5.7	0.04 0.12	0.63 0.62
Lucai	9,290	0.19	102.2	5.7	0.12	0.02
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		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		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	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		0.12	133.0	Q	0.10	0.86

Table C22. Fuel Oil Consumption and Expenditure Intensities, 1999

Primary Space-Heating Energy Source		Fue	el Oil Consump	tion	Fuel Oil Expenditures		
Fuel Oil Main			Square Foot	•	(thousand	Square Foot	•
Fuel Oil Main	0						
Fuel Oil Main 1875 0.70 60.7 1.4 0.06 0.7		2 200	0.22	190.0	2.4	0.16	0.73
Fuel Oil Secondary							
Other Excluding Fuel OI		,					
Primary Space-Heating							
Primary Space-Heating Energy Source	_						U.os
Energy Source		_	_		_	_	
Electricity							
Natural Gas		4 400					
Fuel Dil	•						0.90
District Heat							0.74
Propane	Fuel Oil	3,649	0.30	259.6	2.7	0.22	0.73
Cooling Energy Source	District Heat	1,250	0.01	2.5	1.1	0.00	0.85
Cooling Energy Source	Propane	Q	Q	Q	Q	Q	C
Fuel Oil	Other	Q	Q	Q	Q	Q	C
Fuel Oil	Cooling Energy Source						
Buildings without Cooling		Q	Q	Q	Q	Q	C
Water-Heating Energy Source Fuel Oil	Other Excluding Fuel Oil	3,338	0.08	55.3	2.4	0.06	0.73
Fuel Oil	Buildings without Cooling	1,880	0.23	210.4	1.5	0.18	0.80
Other Excluding Fuel Oil 2,846 0.05 33.7 2.2 0.04 0.7 Buildings without Water Heating 831 0.08 73.3 0.7 0.07 0.8 Cooking Energy Source Fuel Oil Q <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>							
Buildings without Water Heating 831 0.08 73.3 0.7 0.07 0.8							0.68
Cooking Energy Source Fuel Oil	Other Excluding Fuel Oil	2,846	0.05	33.7	2.2	0.04	0.78
Fuel Oil Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	Buildings without Water Heating	831	0.08	73.3	0.7	0.07	0.88
Other Excluding Fuel Oil 6,578 0.08 53.8 4.4 0.05 0.6 Buildings without Cooking 1,981 0.12 82.3 1.6 0.10 0.8 Energy End Uses (more than one may apply) Suildings with Space Heating 2,991 0.10 66.7 2.2 0.07 0.7 Buildings with Cooking 3,465 0.09 56.9 2.5 0.06 0.7 Buildings with Water Heating 4,078 0.10 66.4 3.0 0.07 0.7 Buildings with Manufacturing 1,423 0.09 63.8 1.1 0.07 0.7 Buildings with Electricity 0.08 54.4 4.4 0.05 0.6 Buildings with Electricity 4,584 0.04 23.0 3.2 0.03 0.7 Percent of Floorspace Heated Not Heated Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q </td <td>Cooking Energy Source</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Cooking Energy Source						
Buildings without Cooking	Fuel Oil	Q	Q	Q	Q	Q	Q
Buildings without Cooking							0.66
Description Section Section	3	,					0.81
Buildings with Space Heating 2,991 0.10 66.7 2.2 0.07 0.7 Buildings with Cooling 3,465 0.09 56.9 2.5 0.06 0.7 Buildings with Water Heating 4,078 0.10 65.4 3.0 0.07 0.7 Buildings with Cooking 6,695 0.08 54.4 4.4 0.05 0.6 Buildings with Manufacturing 1,423 0.09 63.8 1.1 0.07 0.7 Buildings with Electricity Ceneration 4,584 0.04 23.0 3.2 0.03 0.7 Percent of Floorspace Heated Not Heated Q <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Buildings with Cooling							
Buildings with Water Heating 4,078 0.10 65.4 3.0 0.07 0.7 Buildings with Cooking 6,695 0.08 54.4 4.4 0.05 0.6 Buildings with Manufacturing 1,423 0.09 63.8 1.1 0.07 0.7 Buildings with Electricity Generation 4,584 0.04 23.0 3.2 0.03 0.7 Percent of Floorspace Heated Not Heated Q							0.74
Buildings with Cooking 6,695 0.08 54.4 4.4 0.05 0.6 Buildings with Manufacturing 1,423 0.09 63.8 1.1 0.07 0.7 Buildings with Electricity Generation 4,584 0.04 23.0 3.2 0.03 0.7 Percent of Floorspace Heated Not Heated Q<	Buildings with Cooling	3,465	0.09	56.9	2.5	0.06	0.72
Buildings with Manufacturing	Buildings with Water Heating	4,078	0.10	65.4	3.0	0.07	0.72
Buildings with Electricity Generation	Buildings with Cooking	6,695	0.08	54.4	4.4	0.05	0.66
Percent of Floorspace Heated Not Heated Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	Buildings with Manufacturing	1,423	0.09	63.8	1.1	0.07	0.78
Percent of Floorspace Heated Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	Buildings with Electricity						
Not Heated Q	Generation	4,584	0.04	23.0	3.2	0.03	0.71
Not Heated Q	Percent of Floorspace Heated						
1 to 50 1,054 0.06 79.0 0.8 0.04 0.7 51 to 99 2,504 0.06 35.1 2.1 0.05 0.8 100 3,469 0.12 75.2 2.5 0.08 0.7 Heating Equipment (more than one may apply) Heat Pumps 1,702 0.03 18.2 1.3 0.02 0.7 Furnaces 1,382 0.11 105.2 1.2 0.10 0.8 Individual Space Heaters 1,987 0.05 37.0 1.5 0.04 0.7 District Heat Q Q Q Q Q Q 0.6 Boillers 5,997 0.14 98.5 4.1 0.09 0.6 Packaged Heating Units 4,520 0.04 33.3 3.3 0.03 0.7 Other 1,634 0.04 20.2 1.2 0.03 0.7 Water Heating Equipment Centralized System 3,805 0.13 89.2 2.8 0.10 0.7 Combination of Centralized		O	O	O	O	Ω	C
51 to 99 2,504 0.06 35.1 2.1 0.05 0.8 100 3,469 0.12 75.2 2.5 0.08 0.7 Heating Equipment (more than one may apply) Heat Pumps 1,702 0.03 18.2 1.3 0.02 0.7 Furnaces 1,382 0.11 105.2 1.2 0.10 0.8 Individual Space Heaters 1,987 0.05 37.0 1.5 0.04 0.7 District Heat Q Q Q Q Q Q Q 0.6 Boilers 5,997 0.14 98.5 4.1 0.09 0.6 Packaged Heating Units 4,520 0.04 33.3 3.3 0.03 0.7 Other 1,634 0.04 20.2 1.2 0.03 0.7 Water Heating Equipment Centralized System 3,805 0.13 89.2 2.8 0.10 0.7 Combination of Centralized 0.08 53.3 3.0 0.06 0.7							0.76
100 3,469 0.12 75.2 2.5 0.08 0.7 Heating Equipment (more than one may apply) Heat Pumps 1,702 0.03 18.2 1.3 0.02 0.7 Furnaces 1,382 0.11 105.2 1.2 0.10 0.8 Individual Space Heaters 1,987 0.05 37.0 1.5 0.04 0.7 District Heat Q Q Q Q Q Q 0.6 Boilers 5,997 0.14 98.5 4.1 0.09 0.6 Packaged Heating Units 4,520 0.04 33.3 3.3 0.03 0.7 Other 1,634 0.04 20.2 1.2 0.03 0.7 Water Heating Equipment Centralized System 3,805 0.13 89.2 2.8 0.10 0.7 Distributed System 3,905 0.08 53.3 3.0 0.06 0.7 Combination of Centralized		,					
than one may apply) Heat Pumps 1,702 0.03 18.2 1.3 0.02 0.7 Furnaces 1,382 0.11 105.2 1.2 0.10 0.8 Individual Space Heaters 1,987 0.05 37.0 1.5 0.04 0.7 District Heat Q Q Q Q Q Q 0.6 Boilers 5,997 0.14 98.5 4.1 0.09 0.6 Packaged Heating Units 4,520 0.04 33.3 3.3 0.03 0.7 Other 1,634 0.04 20.2 1.2 0.03 0.7 Water Heating Equipment Centralized System 3,805 0.13 89.2 2.8 0.10 0.7 Distributed System 3,905 0.08 53.3 3.0 0.06 0.7 Combination of Centralized		,					0.72
than one may apply) Heat Pumps 1,702 0.03 18.2 1.3 0.02 0.7 Furnaces 1,382 0.11 105.2 1.2 0.10 0.8 Individual Space Heaters 1,987 0.05 37.0 1.5 0.04 0.7 District Heat Q Q Q Q Q Q 0.6 Boilers 5,997 0.14 98.5 4.1 0.09 0.6 Packaged Heating Units 4,520 0.04 33.3 3.3 0.03 0.7 Other 1,634 0.04 20.2 1.2 0.03 0.7 Water Heating Equipment Centralized System 3,805 0.13 89.2 2.8 0.10 0.7 Distributed System 3,905 0.08 53.3 3.0 0.06 0.7 Combination of Centralized	Harden E. Land (Const						
Heat Pumps 1,702 0.03 18.2 1.3 0.02 0.7 Furnaces 1,382 0.11 105.2 1.2 0.10 0.8 Individual Space Heaters 1,987 0.05 37.0 1.5 0.04 0.7 District Heat Q Q Q Q Q Q 0.6 Boilers 5,997 0.14 98.5 4.1 0.09 0.6 Packaged Heating Units 4,520 0.04 33.3 3.3 0.03 0.7 Other 1,634 0.04 20.2 1.2 0.03 0.7 Water Heating Equipment Centralized System 3,805 0.13 89.2 2.8 0.10 0.7 Distributed System 3,905 0.08 53.3 3.0 0.06 0.7 Combination of Centralized 0.03 0.7 0.06 0.7 0.06 0.7							
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Individual Space Heaters 1,987 0.05 37.0 1.5 0.04 0.7 District Heat Q Q Q Q Q Q 0.6 Boilers 5,997 0.14 98.5 4.1 0.09 0.6 Packaged Heating Units 4,520 0.04 33.3 3.3 0.03 0.7 Other 1,634 0.04 20.2 1.2 0.03 0.7 Water Heating Equipment Centralized System 3,805 0.13 89.2 2.8 0.10 0.7 Distributed System 3,905 0.08 53.3 3.0 0.06 0.7 Combination of Centralized	· · · · · · · · · · · · · · · · · · ·						
District Heat Q Q Q Q Q Q Q Q 0.6 Boilers 5,997 0.14 98.5 4.1 0.09 0.6 Packaged Heating Units 4,520 0.04 33.3 3.3 0.03 0.7 Other 1,634 0.04 20.2 1.2 0.03 0.7 Water Heating Equipment Centralized System 3,805 0.13 89.2 2.8 0.10 0.7 Distributed System 3,905 0.08 53.3 3.0 0.06 0.7 Combination of Centralized 0.00 0.7 0.00 0.7 0.00 0.7		,					
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Packaged Heating Units 4,520 0.04 33.3 3.3 0.03 0.7 Other 1,634 0.04 20.2 1.2 0.03 0.7 Water Heating Equipment Centralized System 3,805 0.13 89.2 2.8 0.10 0.7 Distributed System 3,905 0.08 53.3 3.0 0.06 0.7 Combination of Centralized 0.04 0.04 0.04 0.07 0.06 0.7							0.68
Other 1,634 0.04 20.2 1.2 0.03 0.7 Water Heating Equipment Centralized System 3,805 0.13 89.2 2.8 0.10 0.7 Distributed System 3,905 0.08 53.3 3.0 0.06 0.7 Combination of Centralized 0.00 0.7							0.69
Water Heating Equipment Centralized System 3,805 0.13 89.2 2.8 0.10 0.7 Distributed System 3,905 0.08 53.3 3.0 0.06 0.7 Combination of Centralized	Packaged Heating Units	4,520	0.04	33.3	3.3	0.03	0.73
Centralized System 3,805 0.13 89.2 2.8 0.10 0.7 Distributed System 3,905 0.08 53.3 3.0 0.06 0.7 Combination of Centralized 0.08	Other	1,634	0.04	20.2	1.2	0.03	0.74
Centralized System 3,805 0.13 89.2 2.8 0.10 0.7 Distributed System 3,905 0.08 53.3 3.0 0.06 0.7 Combination of Centralized 0.06 0.7	Water Heating Equipment						
Distributed System		3.805	0.13	89.2	2.8	0.10	0.73
Combination of Centralized	-						0.77
		0,000	0.50	00.0	0.0	0.00	0.11
	and Distributed System	7,014	0.05	29.6	4.6	0.03	0.66

Table C22. Fuel Oil Consumption and Expenditure Intensities, 1999

ŀ	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						
Annual Consumption (gallons)						
•	326	0.01	6.8	0.3	0.01	1.08
(gallons)		0.01 0.13	6.8 85.9	0.3 1.8	0.01 0.12	
(gallons) 1,000 or Less	2,106					0.87
(gallons) 1,000 or Less 1,001 to 5,000	2,106 6,574	0.13	85.9	1.8	0.12	1.05 0.87 0.79 0.67

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.