Table C26. District Heat Consumption and Expenditure Intensities, 1999

	District Heat Consumption			District Heat Expenditures		
	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Pounds (dollars)
All Buildings	3,692	73.55	50.1	30.4	0.60	8.22
Building Floorspace						
(Square Feet)	_	_	_	_	_	_
1,001 to 5,000		Q	Q	Q	Q	G
5,001 to 10,000		Q	Q	Q	Q	G
10,001 to 25,000		Q	Q	Q	Q	C
25,001 to 50,000		92.85	129.6	26.5	0.75	8.10
50,001 to 100,000	7,466	104.03	84.9	51.3	0.72	6.87
100,001 to 200,000	10,653	79.80	52.2	88.3	0.66	8.29
200,001 to 500,000	17,898	57.03	33.8	157.7	0.50	8.81
Over 500,000	47,449	49.20	30.8	437.9	0.45	9.23
Principal Building Activity						
Education	3,151	100.60	87.3	23.8	0.76	7.54
Food Sales	Q	Q	Q	Q	Q	C
Food Service	Q	Q	Q	Q	Q	C
Health Care	13,465	62.10	35.4	Q	Q	C
Inpatient	Q	Q	Q	Q	Q	C
Outpatient	Q	Q	Q	Q	Q	C
Lodging	3,658	107.51	Q	26.0	0.77	7.12
Mercantile	Q	Q	Q	Q	Q	C
Retail (Other Than Mall)	Q	Q	Q	Q	Q	C
Office	3,655	48.15	18.6	35.1	0.46	9.59
Public Assembly	3,853	69.86	147.9	Q	0.57	8.21
Public Order and Safety	Q	Q	Q	Q	Q	C
Religious Worship	Q	Q	Q	Q	Q	C
Service	Q	Q	Q	Q	Q	C
Warehouse and Storage	Q	Q	Q	Q	Q	C
Other		Q	Q	Q	Q	G
Vacant	Q	Q	Q	Q	Q	C
Year Constructed						
1919 or Before	1,899	76.33	51.1	13.7	0.55	7.22
1920 to 1945	•	Q Q	Q	57.8	0.70	8.92
1946 to 1959	,	70.06	45.0	31.3	0.60	8.55
1960 to 1969	•	70.90	49.3	45.4	0.58	8.18
1970 to 1979		87.44	49.1	28.3	0.68	7.81
1980 to 1989	-,	68.93	36.3	Q Q	Q.00	, .o
1990 to 1999		Q	Q	Q	Q	C
Census Region and Division						
Northeast	4,371	71.91	44.8	40.5	0.67	9.26
New England	•	Q	Q	Q	Q	C.20
Middle Atlantic	4,127	70.49	43.0	39.3	0.67	9.53
Midwest	5,291	87.08	71.2	40.8	0.67	7.71
East North Central		100.48	90.3	40.0 Q	0.77	7.70
West North Central		72.25	53.8	Q	0.77	7.74
South	,	52.66	38.4	14.2	0.44	8.32
South Atlantic	1,708 Q	52.66 Q	30.4 Q	14.2 Q	0.44 Q	0.32 C
East South Central	Q	Q	Q	Q	Q	
West South Central					Q	G
West	Q Q	Q 80.99	Q 48.6	Q Q	0.60	7.40
Mountain				Q Q		
IVIOUI I(all I	Q	85.64	Q	Q	0.55	6.43

Table C26. District Heat Consumption and Expenditure Intensities, 1999

per per per Building per Thou Building Square Foot Worker (thousand Square Foot Pour		· · · · · · · · · · · · · · · · · · ·						
Per Suliding Square Foot Worker Chousand Study Chousand Study		District Heat Consumption		District Heat Expenditures				
Under 2,000 CDD and		Building	Square Foot	Worker	Building (thousand	Square Foot	per Thousand Pounds (dollars)	
Under 2,000 CDD and More than 7,000 HDD.	Climate Zone: 45-Year Average							
5,500-7,000 HDD 7,183 91.65 85.0 54.7 0.70 4,000-5,499 HDD 3,641 67.90 40.0 32.8 0.61 Fewer than 4,000 HDD 2,412 38.49 26.6 22.5 0.36 2,000 CDD or More and	Under 2,000 CDD and							
4,000-5,499 HDD	More than 7,000 HDD	Q	Q	Q	Q	Q	Q	
Fewer than 4,000 HDD	5,500-7,000 HDD	7,163	91.65	85.0	54.7	0.70	7.63	
Fewer than 4,000 HDD	4,000-5,499 HDD	3,641	67.90	40.0	32.8	0.61	9.00	
Fewer than 4,000 HDD	Fewer than 4,000 HDD	2,412	38.49	26.6	22.5	0.36	9.33	
Workers (main shift) C Q	2,000 CDD or More and							
Fewer than 5	Fewer than 4,000 HDD	Q	Q	Q	Q	Q	Q	
Fewer than 5	Workers (main shift)							
5 to 9 Q <td></td> <td>Q</td> <td>Q</td> <td>Q</td> <td>Q</td> <td>Q</td> <td>Q</td>		Q	Q	Q	Q	Q	Q	
10 to 19							Q	
20 to 49	10 to 19						Q	
50 to 99							Q	
100 to 249							8.44	
Veekly Operating Hours							8.54	
39 or Fewer		-,					8.61	
39 or Fewer	Weekly Operating Hours							
40 to 48	,	O	Q	O	Q	O	Q	
49 to 60 3,114 59.93 25.6 25.6 0.49 61 to 84 4,179 77.06 44.8 34.8 0.64 85 to 167 5,264 80.08 67.6 37.0 0.56 Open Continuously 6,666 76.70 63.0 55.9 0.64 Ownership and Occupancy Nongovermment Owned 3,709 74.91 47.0 31.3 0.63 Owner Occupied 4,266 77.84 51.1 34.8 0.64 Nonower Occupied Q Q Q Q Q Q Q Unoccupied N							Q	
61 to 84 4,179 77.06 44.8 34.8 0.64 85 to 167 5,264 80.08 67.6 37.0 0.56 Open Continuously 6,666 76.70 63.0 55.9 0.64 Owner Continuously Compension of Couples Nongovernment Owned 3,709 74.91 47.0 31.3 0.63 Owner Occupied 4,266 77.84 51.1 34.8 0.64 Nonowner Occupied Q <		,					8.23	
85 to 167 5,264 80.08 67.6 37.0 0.56 Open Continuously 6,666 76.70 63.0 55.9 0.64 Owner Continuously Nongovernment Owned 3,709 74.91 47.0 31.3 0.63 Owner Occupied 4,266 77.84 51.1 34.8 0.64 Nonowner Occupied Q		- /					8.33	
Open Continuously 6,666 76.70 63.0 55.9 0.64 Ownership and Occupancy Nongovernment Owned 3,709 74.91 47.0 31.3 0.63 Owner Occupied 4,266 77.84 51.1 34.8 0.64 Nonowner Occupied Q							7.04	
Nongovernment Owned 3,709 74.91 47.0 31.3 0.63		-, -					8.38	
Nongovernment Owned 3,709 74.91 47.0 31.3 0.63	Ownership and Occupancy							
Owner Occupied 4,266 77.84 51.1 34.8 0.64 Nonowner Occupied Q D 0.57 Federal 3,668 71.78 54.9 29.0 0.57 Federal 4,826 66.48 35.1 29.5 0.41 35 35.1 29.5 0.41 31 36.2 29.0 Q		3 709	74 91	47 N	31 3	0.63	8.45	
Nonowner Occupied	5						8.17	
Unoccupied N N N N N N N N SA N N N SA SA <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.17 Q</td>							0.17 Q	
Government Owned 3,668 71.78 54.9 29.0 0.57	•						N N	
Federal	•						7.92	
State		-,					6.12	
Local Q Q Q Q Q Vacancy Status Completely Vacant N							8.67	
Completely Vacant N 2 2 2							0.07 Q	
Completely Vacant N 2 2 2	Vacancy Status							
Mostly Vacant Q Q Q Q Q Q Q Q Q Q Q Q Q Q Partially Vacant 3,104 54.03 34.0 32.3 0.56 No.56 Not At All Vacant 3,837 79.27 55.1 29.9 0.62 Number of Establishments One 3,448 83.73 65.5 26.6 0.65 2 to 5 4,928 59.66 42.8 Q		N	NI.	NI.	N	N	NI.	
Partially Vacant 3,104 54.03 34.0 32.3 0.56 Not At All Vacant 3,837 79.27 55.1 29.9 0.62 Number of Establishments One 3,448 83.73 65.5 26.6 0.65 2 to 5 4,928 59.66 42.8 Q Q 6 to 10 Q Q Q Q Q 11 to 20 Q Q Q Q Q More than 20 24,895 48.20 24.5 287.4 0.56 Energy Sources (more than one may apply) Electricity 3,692 73.55 50.1 30.4 0.60 Natural Gas 3,479 67.90 43.3 27.9 0.54 Fuel Oil 13,995 58.04 29.9 124.3 0.52 District Heat 3,692 73.55 50.1 30.4 0.60							N Q	
Not At All Vacant 3,837 79.27 55.1 29.9 0.62 Number of Establishments Support of Establishments One 3,448 83.73 65.5 26.6 0.65 2 to 5 4,928 59.66 42.8 Q Q 6 to 10 Q Q Q Q Q 11 to 20 Q Q Q Q Q More than 20 24,895 48.20 24.5 287.4 0.56 Energy Sources (more than one may apply) Electricity 3,692 73.55 50.1 30.4 0.60 Natural Gas 3,479 67.90 43.3 27.9 0.54 Fuel Oil 13,995 58.04 29.9 124.3 0.52 District Heat 3,692 73.55 50.1 30.4 0.60							10.41	
One 3,448 83.73 65.5 26.6 0.65 2 to 5 4,928 59.66 42.8 Q Q 6 to 10 Q Q Q Q Q 11 to 20 Q Q Q Q Q More than 20 24,895 48.20 24.5 287.4 0.56 Energy Sources (more than one may apply) Electricity 3,692 73.55 50.1 30.4 0.60 Natural Gas 3,479 67.90 43.3 27.9 0.54 Fuel Oil 13,995 58.04 29.9 124.3 0.52 District Heat 3,692 73.55 50.1 30.4 0.60	•	,					7.80	
One 3,448 83.73 65.5 26.6 0.65 2 to 5 4,928 59.66 42.8 Q Q 6 to 10 Q Q Q Q Q 11 to 20 Q Q Q Q Q More than 20 24,895 48.20 24.5 287.4 0.56 Energy Sources (more than one may apply) Electricity 3,692 73.55 50.1 30.4 0.60 Natural Gas 3,479 67.90 43.3 27.9 0.54 Fuel Oil 13,995 58.04 29.9 124.3 0.52 District Heat 3,692 73.55 50.1 30.4 0.60	Number of Establishments							
2 to 5 4,928 59.66 42.8 Q Q 6 to 10 Q Q Q Q Q 11 to 20 Q Q Q Q Q More than 20 24,895 48.20 24.5 287.4 0.56 Energy Sources (more than one may apply) Electricity 3,692 73.55 50.1 30.4 0.60 Natural Gas 3,479 67.90 43.3 27.9 0.54 Fuel Oil 13,995 58.04 29.9 124.3 0.52 District Heat 3,692 73.55 50.1 30.4 0.60		3,448	83.73	65.5	26.6	0.65	7.71	
6 to 10 Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q							Q	
11 to 20 Q<		,					Q	
More than 20 24,895 48.20 24.5 287.4 0.56 Energy Sources (more than one may apply) Electricity 3,692 73.55 50.1 30.4 0.60 Natural Gas 3,479 67.90 43.3 27.9 0.54 Fuel Oil 13,995 58.04 29.9 124.3 0.52 District Heat 3,692 73.55 50.1 30.4 0.60							Q	
one may apply) Electricity 3,692 73.55 50.1 30.4 0.60 Natural Gas 3,479 67.90 43.3 27.9 0.54 Fuel Oil 13,995 58.04 29.9 124.3 0.52 District Heat 3,692 73.55 50.1 30.4 0.60	More than 20						11.54	
one may apply) Electricity 3,692 73.55 50.1 30.4 0.60 Natural Gas 3,479 67.90 43.3 27.9 0.54 Fuel Oil 13,995 58.04 29.9 124.3 0.52 District Heat 3,692 73.55 50.1 30.4 0.60	Energy Sources (more than							
Electricity 3,692 73.55 50.1 30.4 0.60 Natural Gas 3,479 67.90 43.3 27.9 0.54 Fuel Oil 13,995 58.04 29.9 124.3 0.52 District Heat 3,692 73.55 50.1 30.4 0.60								
Natural Gas 3,479 67.90 43.3 27.9 0.54 Fuel Oil 13,995 58.04 29.9 124.3 0.52 District Heat 3,692 73.55 50.1 30.4 0.60		3 602	73.55	50.1	30.4	0.60	8.22	
Fuel Oil 13,995 58.04 29.9 124.3 0.52 District Heat 3,692 73.55 50.1 30.4 0.60							8.02	
District Heat							8.88	
·							8.22	
							7.30	
Propane							7.30 Q	
Other	•						Q	

Table C26. District Heat Consumption and Expenditure Intensities, 1999

	District Heat Consumption			District Heat Expenditures		
	per Building (million Btu)	per Square Foot (thousand Btu)	per Worker (million Btu)	per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Pounds (dollars)
Space-Heating Energy Source						
District Heat	4,294	74.45	50.8	35.1	0.61	8.18
District Heat Main	5,233	79.25	57.4	42.6	0.65	8.14
District Heat Secondary		Q	Q	Q	Q	Q
Other Excluding District Heat	Q	Q	Q	Q	Q	Q
Buildings without Heating	Q	Q	Q	Q	Q	Q
Primary Space-Heating						
Energy Source						
Electricity	Q	Q	Q	Q	Q	Q
Natural Gas	Q	Q	Q	Q	Q	Q
Fuel Oil	Q	Q 70.05	Q	Q	Q	Q
District Heat		79.25	57.4	42.6	0.65	8.14
Propane		N	N	N	N	N
Other	N	N	N	N	N	N
Cooling Energy Source						_
District Heat		Q	Q	Q	Q	Q
Other Excluding District Heat	3,510	71.86	46.0	28.2		8.02
Buildings without Cooling	Q	88.92	258.7	Q	Q	Q
Water-Heating Energy Source						
District Heat		81.60	58.1	46.3	0.69	8.40
Other Excluding District Heat	1,279	44.98	27.0	10.6	0.37	8.25
Buildings without Water Heating	Q	Q	Q	Q	Q	Q
Cooking Energy Source						
District Heat	5,736	65.34	41.4	Q	Q	Q
Other Excluding District Heat	5,068	57.12	33.4	43.2	0.49	8.52
Buildings without Cooking	3,188	83.59	63.2	25.6	0.67	8.03
Energy End Uses (more than						
one may apply)						
Buildings with Space Heating	3,718	73.53	50.2	30.7	0.61	8.25
Buildings with Cooling	3,789	71.39	43.9	31.1	0.59	8.21
Buildings with Water Heating	3,865	73.87	50.6	32.4	0.62	8.38
Buildings with Cooking	5,288	59.81	35.9	45.5	0.51	8.60
Buildings with Manufacturing	Q	Q	Q	Q	Q	Q
Buildings with Electricity Generation	9,187	66.82	36.6	76.5	0.56	8.33
	2,121					
Percent of Floorspace Heated Not Heated	Q	Q	Q	Q	0	0
1 to 50		Q	Q	Q		Q
51 to 99		57.77	38.4	24.8		9.38
100	,	78.77	53.1	33.3		9.36 8.06
Heating Equipment (more than one may apply)						
Heat Pumps	Q	Q	Q	Q	Q	Q
Furnaces		Q	Q	Q	Q	Q
Individual Space Heaters		60.15	32.3	59.5		8.81
District Heat		74.45	50.8	35.1	0.61	8.18
Boilers	4,294 Q	74.43 Q	30.6 Q	33.1 Q		0.10 Q
Packaged Heating Units		57.50	45.1	22.7	0.54	9.42
Other		Q Q	Q	Q	Q.54	Q.42

Table C26. District Heat Consumption and Expenditure Intensities, 1999

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

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled. N=No responding cases in sample.

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

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