Table C10. Electricity Consumption and Expenditure Intensities, 1999

	Electricity Consumption								
	per Building (thousand kWh)			Buildin	istribution g-Level Into Vh/square fo	ensities	Electricity Expenditures		
		per Square Foot (kWh)	per Worker (thousand kWh)	25th Percentile	Median	75th Percentile	per Building (thousand dollars)	per Square Foot (dollars)	per kWh (dollars)
All Buildings	207	13.8	11.1	3.5	7.8	16.9	15.1	1.01	0.073
Building Floorspace									
(Square Feet)									
1,001 to 5,000	56	19.4	11.0	4.1	8.6	22.0	4.7		0.084
5,001 to 10,000	80	10.7	7.6	2.3	6.5	13.2			0.086
10,001 to 25,000	158	10.0	9.5	3.1	6.3		12.6		0.080
25,001 to 50,000	430	11.9	11.8	3.6	8.3	16.1	32.4	0.89	0.075
50,001 to 100,000	1,009	14.4	11.3	4.9	9.9	18.9	69.9	1.00	0.069
100,001 to 200,000	2,234	16.0	14.9	6.0	12.6	22.2			0.065
200,001 to 500,000	4,349	14.7	11.3	5.1	10.0	20.4	280.4		0.064
Over 500,000	15,332	16.5	12.6	8.9	13.6	20.6	1,003.0	1.08	0.065
Principal Building Activity	000	0.7	0.5	4.4	2.0	0.0	47.0	0.07	0.077
Education	230	8.7	8.5	4.1	6.6	9.3	17.8		0.077
Food Sales	279	48.7	49.5	39.2	58.9	122.1	19.4		0.069
Food Service	182	34.2	15.7	13.9	28.7	57.3	14.6		0.080
Health Care	535	23.3	10.9	5.8	11.3	15.5	33.6		0.063
Inpatient		27.1	15.1	15.5	21.5	29.3	265.8		0.058
Outpatient		16.7	6.1	5.4	9.7	15.0	11.4		0.075
Lodging		12.7	24.4	7.5	12.6	17.3	27.9		0.074
Mercantile		14.7	13.4	4.3	8.9	16.8	17.8		0.078
Retail (Other Than Mall)		13.6	13.9	4.1	8.0	15.3	9.7		0.080
Enclosed and Strip Malls		15.6	13.1	5.9	14.5	26.7	50.1	1.19	0.076
Office		18.7	7.8	6.0	11.7		21.2		0.070
Public Assembly		12.9	17.8	3.2	6.8	11.6	13.3		0.071
Public Order and Safety		11.5	7.0	1.8	4.1	9.6	12.5		0.068
Religious Worship	40	3.6	7.4	1.1	2.5	4.2	3.4		0.085
Service	86	12.1	8.9	3.3	6.1	11.9	6.6		0.077
Warehouse and Storage	130	6.5	10.5	1.3	3.0	7.0	9.7		0.075
Other	302	24.4	20.4	3.3	13.8	22.0	21.0		0.069
Vacant	25	2.7	Q	0.3	0.9	4.7	2.2	0.24	0.087
Year Constructed 1919 or Before	73	7.2	6.8	2.1	4.2	9.6	6.0	0.58	0.081
1920 to 1945	112	8.6	9.1	2.0	5.0	11.3	8.7		0.001
1946 to 1959	127	10.3	9.2	2.3	5.8	12.6	9.8		0.077
1960 to 1969	218	12.8	10.6	3.9	9.3	20.9	16.3		0.077
1970 to 1979	240	15.5	11.5	4.3	9.1	19.9	17.7		0.073
1980 to 1989		16.4	11.2	4.9	11.2		20.2		0.074
1990 to 1999	293	17.8	14.4	3.7	8.6	21.8	20.3		0.069
Census Region and Division									
Northeast	249	13.3	11.1	2.5	6.5	14.8	23.7	1.26	0.095
New England		10.7	10.0	2.6	6.9	11.6	19.9		0.098
Middle Atlantic		14.4	11.5	2.5	6.5		25.3		0.094
Midwest		11.8	10.6	2.5	5.6	12.1	11.6		0.067
East North Central		11.5	10.8	2.6	5.9	11.6	12.1	0.80	0.070
West North Central		12.5	10.3	2.1	4.8	13.0	10.8		0.061
South		15.8	12.5	4.1	9.7	22.1	13.8		0.064
South Atlantic		16.6	12.8	3.7	9.1	19.6	16.8		0.067
East South Central		15.4	13.4	5.0	11.9	24.1	12.6		0.061
West South Central		15.0	11.6	3.3	8.7	24.1	10.9		0.061
West		13.2	9.5	3.9	7.7		15.8		0.080
Mountain		12.0	9.9	2.8	6.9	16.1	12.2		0.065
Pacific		13.8	9.4	4.1	8.1	16.4	17.3		0.085

Table C10. Electricity Consumption and Expenditure Intensities, 1999

	Electricity Consumption								
				Distribution of Building-Level Intensities (kWh/square foot)			Electricity Expenditures		
	per Building (thousand kWh)	per Square Foot (kWh)	per Worker (thousand kWh)	25th Percentile	Median	75th Percentile	per Building (thousand dollars)	per Square Foot (dollars)	per kWh (dollars)
Climate Zone: 45-Year Average									
Under 2,000 CDD and									
More than 7,000 HDD	132	11.2	11.0	3.0	6.2	13.4	9.2	0.78	0.070
5,500-7,000 HDD	213	11.8	10.7	2.5	5.7	13.0	16.4	0.91	0.077
4,000-5,499 HDD	225	14.7	10.5	3.2	7.2	15.8	16.7	1.09	0.074
Fewer than 4,000 HDD	. 226	15.2	11.5	4.6	9.3	20.4	16.7	1.12	0.074
2,000 CDD or More and									
Fewer than 4,000 HDD	. 196	15.0	12.0	3.3	9.8	22.1	13.3	1.02	0.068
Workers (main shift)									
Fewer than 5	. 46	7.7	23.2	2.0	4.8	12.3	3.8	0.63	0.082
5 to 9	79	10.1	12.1	4.2	8.5	14.7	6.8	0.87	0.086
10 to 19	150	12.8	11.9	5.7	9.9	20.9	12.4	1.05	0.082
20 to 49	305	13.7	10.5	6.4	13.1	24.5	22.7		0.075
50 to 99	703	13.8	10.7	7.0	13.6	22.9			0.075
100 to 249		17.8	11.8	10.4	14.5	25.0			0.065
250 or More	,	21.2	8.8	13.8	20.7	29.4	372.1	1.38	0.065
Weekly Operating Hours									
39 or Fewer	26	3.8	5.7	0.8	2.4	5.1	2.2	0.32	0.086
40 to 48		8.7	7.3	2.7	6.4	13.0	7.7		0.078
49 to 60		12.0	8.2	4.0	7.7	14.7	13.2		0.076
61 to 84			10.7	6.2	11.6	23.7		1.06	0.076
		13.9							
85 to 167 Open Continuously		19.9 21.4	16.5 16.9	11.6 6.2	29.6 13.7	56.7 33.6	28.6 42.9		0.074 0.066
Ownership and Occurrence									
Ownership and Occupancy	404	40.0	44.0	0.0	7.0	40.0	444	4.00	0.074
Nongovernment Owned		13.8	11.0	3.3	7.6	16.9	14.1	1.03	0.074
Owner Occupied		14.1	11.4	3.3	7.6	16.2			0.073
Nonowner Occupied		13.7	9.9	3.9	8.7	19.4	15.3		0.078
Unoccupied	Q	3.2	N	0.2	0.3	3.0	Q	0.27	0.085
Government Owned	332	13.7	11.7	4.8	8.4	16.7	22.8	0.94	0.069
Federal	669	21.0	12.5	8.3	18.1	42.8	40.9	1.28	0.061
State	568	13.9	13.2	6.4	12.9	17.9	38.5	0.94	0.068
Local	228	11.8	10.8	4.3	8.0	13.4	16.5	0.85	0.072
Vacancy Status									
Completely Vacant	Q	Q	N	0.2	0.9	4.7	Q	Q	Q
Mostly Vacant	. 16	1.7	Q	0.3	0.8	2.8	1.5	0.16	0.094
Partially Vacant	298	12.6	9.3	1.9	5.3	13.5	21.6	0.91	0.072
Not At All Vacant	197	14.4	11.7	3.9	8.4	18.3	14.4	1.06	0.073
Number of Establishments									
One	. 172	13.8	12.2	3.5	7.8	17.3	12.6	1.01	0.073
2 to 5	185	12.0	10.1	3.7	8.2	13.7	13.7	0.89	0.074
6 to 10		16.6	9.0	5.3	13.6				0.076
11 to 20		16.5	9.0	4.0	13.9	21.0			0.071
More than 20	,	15.4	9.0	3.2	10.5				0.071
Currently Unoccupied		3.2	N.O	0.2	0.3				0.083
Energy Sources (more than									
one may apply)									
	207	13.8	11.1	2.5	7.8	16.9	15.1	1.04	0.073
Electricity				3.5					
Natural Gas		14.1	11.4	3.8	8.2				0.072
Fuel Oil		17.0	11.6	2.7	5.7				0.067
District Heat		17.8	12.1	6.6	10.3				0.065
District Chilled Water	,	20.2	12.0	6.6	8.3				0.058
Propane	170	12.2	12.1	2.3	7.1	17.4	13.9	1.00	0.082
Other	217	14.3	9.7	4.2	8.0	24.5	16.5	1.08	0.076

Table C10. Electricity Consumption and Expenditure Intensities, 1999

	Electricity Consumption								
			per Worker (thousand kWh)	Distribution of Building-Level Intensities (kWh/square foot)			Electricity Expenditures		
	per Building (thousand kWh)	per Square Foot (kWh)		25th Percentile	Median	75th Percentile	per Building (thousand dollars)	per Square Foot (dollars)	per kWh (dollars)
Space-Heating Energy Source									
Electricity	265	15.4	11.5	4.9	9.7	19.9	18.8	1.09	0.071
Electricity Main	268	17.1	11.9	6.2	13.6	25.2	19.2	1.23	0.072
Electricity Secondary	261	13.4	11.0	3.4	6.8	12.6	18.2	0.93	0.070
Other Excluding Electricity	174	12.7	10.6	3.1	6.5	14.2	13.1	0.95	0.075
Buildings without Heating		9.4	10.6	0.8	3.6	13.8	8.4	0.79	0.084
Primary Space-Heating									
Energy Source									
Electricity	268	17.1	11.9	6.2	13.6	25.2	19.2	1.23	0.072
Natural Gas	194	12.9	10.8	3.6	7.1	14.2	14.1	0.94	0.073
Fuel Oil	98	8.0	7.0	2.0	4.8	9.6	9.7	0.79	0.099
District Heat	1,173	17.8	12.9	6.1	9.5	16.3	75.2	1.14	0.064
Propane	,		11.0	1.5	5.7		7.0		0.093
Other		Q	Q	0.8	1.6		Q		Q
Cooling Energy Source									
Electricity	239	14.9	11.3	4.3	9.3	19.0	17.5	1.09	0.073
Other Excluding Electricity			11.5		14.1		32.6		0.068
Buildings without Cooling			6.7	0.8	2.5		3.1		0.087
Water-Heating Energy Source									
Electricity	245	15.6	11.3	5.0	11.1	22.4	17.8	1.14	0.073
Other Excluding Electricity			11.4	3.8	9.3		19.7		0.073
Buildings without Water Heating			8.9	1.4	3.9	8.3	4.8		0.075
Cooking Energy Source									
Electricity	624	19.9	14.9	8.5	19.9	57.3	41.7	1.33	0.067
Other Excluding Electricity		15.3	12.7	5.3	13.8	26.8	30.0	1.15	0.075
Buildings without Cooking		11.4	9.3	3.0	6.5	14.1	10.0	0.87	0.076
Energy End Uses (more than									
one may apply)									
Buildings with Space Heating	217	14.1	11.1	3.7	8.2	17.2	15.8	1.03	0.073
Buildings with Cooling	247	15.0	11.4	4.4	9.6	19.5	17.9	1.09	0.073
Buildings with Water Heating		14.9	11.4	4.5	9.9		18.8		0.073
Buildings with Cooking		17.9	13.9	7.2	15.8	39.2	36.0		0.070
Buildings with Manufacturing			10.0	3.2	7.2		20.2		0.070
Buildings with Electricity									
Generation	1,429	20.6	13.0	7.3	12.6	29.3	90.4	1.31	0.063
Percent of Floorspace Heated									
Not Heated	101	9.4	10.6	0.8	3.6	13.8	8.4	0.79	0.084
1 to 50	98	7.4	10.7	1.9	4.1	8.5	8.0	0.60	0.081
51 to 99		15.2			8.8		18.2		0.070
100		15.0	10.9	4.3	8.9		16.8		0.073
Percent of Floorspace Cooled									
Not Cooled	36	4.1	6.7	0.8	2.5	5.0	3.1	0.36	0.087
1 to 50		7.6	9.0	2.4	5.3		10.2		0.081
51 to 99		17.3			12.5				0.069
100	254	18.5	11.6	5.9	12.8	24.1	18.6	1.35	0.073
Percent Lit When Open	_	_	-		^ =	•	-	_	_
Zero			Q	0.8	3.5		Q		0.000
1 to 50			13.3		4.0		6.5		0.083
51 to 99			10.3	4.2	8.7		17.6		0.073
100	259	15.9	11.3	4.8	9.4	20.9	18.6	1.14	0.072
Building Never Open/ Electricity Not Used	20	2.8	Q	0.2	0.6	2.4	1.6	0.22	0.079

Table C10. Electricity Consumption and Expenditure Intensities, 1999

		Electricity Co							
	per Building (thousand kWh)		-	Distribution of Building-Level Intensities (kWh/square foot)			Electricity Expenditures		
		per Square Foot (kWh)	per Worker (thousand kWh)	25th Percentile	Median	75th Percentile	per Building (thousand dollars)	per Square Foot (dollars)	per kWh (dollars)
Percent Lit When Closed									
Zero	79	8.3	7.9	2.0	4.9	10.4	6.5	0.68	0.082
1 to 50	254	13.8	10.2	5.1	10.9	22.1	18.8	1.03	0.074
51 to 100	374	24.9	17.3	10.6	22.5	44.0	26.9	1.79	0.072
Building Never Closed/									
Electricity Not Used	651	21.4	16.9	6.2	13.7	33.6	42.9	1.41	0.066
Heating Equipment (more									
than one may apply)									
Heat Pumps	307	16.9	12.0	7.3	13.7	24.7	20.8	1.15	0.068
Furnaces	95	9.6	8.8	2.7	5.6	12.8	7.3	0.74	0.07
Individual Space Heaters		12.4	11.2		5.7				0.070
District Heat		17.9	12.2		9.3				0.06
Boilers	,	13.7	11.0		9.3 7.2				0.00
Packaged Heating Units		16.7	13.4		11.7		23.1		0.072
Other	364	16.5	9.6	3.2	7.2	17.4	23.8	1.08	0.066
Cooling Equipment (more than one may apply) Residential-Type Central									
Air Conditioners	149	12.1	9.9	3.7	7.2	15.4	10.5	0.85	0.07
Heat Pumps		16.7	11.3		13.6				0.068
Individual Air Conditioners		11.2	9.6		6.9				0.074
District Chilled Water	1,118	20.2	12.0	6.6	8.3	16.4	65.0	1.17	0.058
Central Chillers Packaged Air Conditioning	2,041	20.5	12.2	8.6	16.0	29.8	131.6	1.32	0.064
Units	300	16.0	12.1	5.3	11.2	23.6	22.1	1.18	0.074
Swamp Coolers	220	13.5	12.3	2.6	7.7	22.5	16.5	1.01	0.07
Other		18.2	13.0		8.1				0.06
Main Equipment Replaced Since									
1995 (more than one may apply)									
Heating	185	13.8	10.8	4.2	8.5	18.6	13.6	1.02	0.074
Cooling	233	14.6	10.9	4.7	9.9	21.2	16.9	1.06	0.073
Lighting Equipment Types									
(more than one may apply)									
Incandescent		14.2	10.9	3.5	8.4		17.9		0.072
Standard Fluorescent	228	14.3	11.1	3.9	8.4	18.0	16.6	1.04	0.073
Compact Fluorescent	578	17.0	11.7	5.7	11.4	20.7	40.0	1.17	0.069
High Intensity Discharge	. 698	15.6	13.8	3.9	8.6	18.8	46.0	1.03	0.066
Halogen		16.3	11.4	5.0	10.8				0.07
Other		17.4	12.5	7.1	11.2			1.23	0.07
Water Heating Equipment									
Centralized System	203	14.1	11.1	4.2	9.7	20.9	15.4	1.07	0.076
Distributed System		14.3	10.9		9.7				0.073
Combination of Centralized	2.0		10.0	1.0	0.7	10.4	20.1	1.01	0.07
and Distributed System	878	18.2	12.6	6.3	16.1	34.9	57.3	1.19	0.06
Commercial Refrigeration									
Equipment (more than									
one may apply)									
Any Equipment	511	18.9	14.5	10.0	21.2	46.3	36.1	1.34	0.07
Walk-In Units		20.6	15.6		32.1				0.070
						20	. 5.0		2.3.
Cases or Cabinets	517	19.3	14.4	9.7	21.2	47.6	36.7	1.37	0.07

Table C10. Electricity Consumption and Expenditure Intensities, 1999

			Electricity Co	nsumption					
	per Building (thousand kWh)		per Worker (thousand kWh)	Distribution of Building-Level Intensities (kWh/square foot)			Electricity Expenditures		
		per Square Foot (kWh)		25th Percentile	Median	75th Percentile	per Building (thousand dollars)	per Square Foot (dollars)	per kWh (dollars)
Personal Computers									
None	42	7.1	12.1	1.3	4.1	11.6	3.5	0.60	0.084
1 to 4	100	11.8	12.8	3.8	7.0	15.5	8.0	0.94	0.080
5 to 9	166	13.8	12.0	5.6	12.0	23.6	12.8	1.06	0.000
10 to 19	239	12.8	10.5	6.9	12.6	20.9	19.2	1.03	0.080
20 to 49	453	13.8	11.6	6.6	11.9	20.9	33.0	1.03	0.000
50 to 99	742	13.3	10.7	6.2	11.9	16.1	53.3	0.95	0.073
100 to 249	1,694	17.7	12.6	8.7	15.5	25.0	108.0	1.13	0.072
	5,321		9.1	12.2	19.8		347.7		
250 or More	5,321	21.1	9.1	12.2	19.0	29.2	347.7	1.38	0.065
Photocopiers									
None	85	10.9	11.6	2.3	5.9	15.6	6.9	0.88	0.081
One	152	13.1	13.0	4.8	8.9	17.9	11.5	0.99	0.076
2 to 4	370	12.8	11.9	5.0	9.9	16.7	26.9	0.93	0.073
5 to 9	813	15.5	10.1	7.6	10.6	17.6	54.9	1.05	0.068
10 or More	3,169	20.2	9.5	11.6	18.5	24.6	210.4	1.34	0.066
Other Electronic Equipment									
(more than one may apply)									
Laser Printers	368	15.4	10.7	5.0	10.0	18.4	26.2	1.10	0.071
FAX Machines	294	15.1	11.1	4.8	9.9	19.2	21.3	1.09	0.072
Medical Diagnostic Equipment	721	24.8	11.0	5.4	9.7	15.0	44.1	1.51	0.061
Annual Consumption									
(kilowatthours)									
10,000 or Less	5	1.1	2.1	0.6	1.4	3.1	0.6	0.13	0.115
10,001 to 50,000	26	4.4	4.3	3.4	5.7	9.7	2.4	0.42	0.095
50.001 to 100.000	73	7.8	7.3	6.5	10.6	18.8	6.6	0.70	0.091
100,001 to 500,000	224	13.9	10.9	10.3	19.9	42.8	18.2	1.13	0.081
500,001 to 1,000,000	705	14.3	12.3	11.8	18.6	31.7	53.4	1.08	0.076
1,000,001 to 5,000,000	2,057	18.8	13.9	14.9	22.4	33.2	137.8	1.26	0.067
Over 5,000,000	,	24.8	14.6	17.6	28.2	43.0	730.3	1.53	0.062
Provider of Purchased									
Electricity (more than									
one may apply)									
Local Utility	200	13.6	10.9	3.4	7.8	16.7	14.6	0.99	0.073
Some Other Provider		16.4	13.4	2.4	7.8	15.0	28.7	1.30	0.079

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

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

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.