Table 3.46. Electricity Consumption and Expenditure Intensities in FBSS Buildings in Federal Region 3, 1993

	•			-						
			Ele	ctricity Cons	sumption			Electr	icity Expend	ditures
Building	Total	per Building	per Square	per Worker	Buildir	Distribution ng-Level Int Wh/square f	ensities	per Building	per Square	
Characteristics	(million kWh)	(thousand kWh)	Foot (kWh)	(thousand kWh)	25th Percentile	Median	75th Percentile	(thousand dollars)	Foot (dollars)	per kWh (dollars)
All Buildings	1,985	6,382	21.1	6.4	11.8	17.3	27.4	387.5	1.28	0.06
<b>Building Floorspace (square</b>										
<b>feet</b> ) 10,000 to 50,000	59	625	22.9	9.5	12.0	17.1	25.5	37.0	1.36	.06
10,000 to 50,000 50,001 to 200,000	337	2,879	25.6	11.3	11.4	18.1	31.7	156.5	1.30	.05
Over 200,000	1,589	15,892	20.3	5.8	12.4	17.0	23.4	987.3	1.26	.06
Principal Building Activity				- 0						
Education Health Care	8 215	1,026 5,255	13.7 14.8	7.8 9.2	6.7 11.8	12.2 13.2	28.3 18.1	51.8 280.4	.69 .79	.05 .05
Laboratory	218	5,255 5,897	42.2	22.5	31.7	39.2	18.1 49.7	321.5	2.30	.05
Lodging	38	2,933	14.9	31.4	12.0	18.5	22.0	152.7	.78	.05
Mercantile and Service		2,889	17.9	2.5	7.7	12.8	18.3	174.7	1.08	.06
OfficeAll Others	1,169 206	9,429 4,781	20.6 28.7	5.7 12.0	12.1 13.2	16.9 18.8	25.7 28.0	608.0 267.0	1.33 1.61	.06 .06
		.,								
Year Constructed 1959 or Before	849	5,981	19.4	4.4	11.4	14.4	20.9	403.7	1.31	.07
1960 to 1969	454	6,483	23.2	10.0	17.3	24.2	38.4	383.8	1.37	.06
1970 to 1979	438	9,532	25.8	10.0	12.0	19.1	28.0	497.2	1.34	.05
1980 to 1989	168 75	4,425 5,003	18.7 15.7	7.0 11.2	13.1 12.5	18.1 14.3	23.4 18.5	241.8 284.4	1.02	.05 .06
Federal Agency		-,								
Department of Defense	282	12,797	20.1	6.5	11.2	13.9	22.0	636.9	1.00	.05
General Services Administration .	979	11,792	21.2	5.9	10.5	15.8	23.2	803.6	1.44	.07
United States Postal Service	166	2,970	19.2	3.0	7.8	14.5	21.5	176.0	1.14	.06
Veterans Administration	202 357	3,600 3,793	15.2 29.7	10.4 14.2	11.5 16.9	13.4 31.1	18.6 40.2	190.9 205.0	.80 1.61	.05 .05
Energy Sources (more than one										
may apply)										
Electricity	1,985	6,382	21.1	6.4	11.8	17.3	27.4	387.5	1.28	.06
Natural GasFuel Oil	1,205 885	8,732	20.8 22.5	5.2 9.1	11.2 11.7	16.5 18.2	22.9 23.9	544.3 521.7	1.30 1.18	.06
District Heat	1,361	9,938 8,840	21.3	5.6	12.5	18.3	31.7	564.8	1.16	.05 .06
District Chilled Water	480	8,413	20.9	7.4	13.2	22.4	38.4	447.9	1.11	.05
Propane	17	3,483	18.5	19.1	12.7	21.0	22.3	298.3	1.58	.09
Any Other	75	9,346	16.7	6.3	11.7	16.3	24.8	539.9	.97	.06
Energy End Uses (more than										
one may apply) Heating	1,979	6,469	21.2	6.4	12.0	17.5	27.5	392.5	1.29	.06
Air Conditioning	1,981	6,495	21.2	6.4	12.3	17.5	27.5	394.3	1.29	.06
Water Heating	1,965	6,508	21.3	6.4	12.0	17.6	27.5	394.6	1.29	.06
Cooking	1,498 651	13,870 13,010	21.4 24.1	5.9 6.5	12.8 12.7	17.9 18.9	27.1 28.5	857.7 686.3	1.32 1.27	.06 .05
o .	031	15,010	27.1	0.5	12./	10.9	20.3	300.3	1.2/	.03
Workers (main shift) Less than 50	53	749	13.0	33.6	10.0	13.2	19.6	44.7	.77	.06
50 to 99	33	837	17.2	12.4	11.4	18.0	31.7	48.3	.99	.06
100 to 499 500 or More	336 1,563	3,140 16,628	24.6 21.0	12.8 5.6	12.3 13.1	19.8 17.7	34.7 26.2	171.7 1,033.0	1.35 1.30	.05 .06
Weekly Operating Hours	,	,						,		
48 or Fewer	127	2,493	13.1	6.2	11.3	14.3	21.0	323.4	1.70	.13
49 to 60	479	6,304	18.8	7.1	12.3	16.4	27.5	391.8	1.17	.06
61 to 167 Open Continuously	257 1,121	4,287 9,043	21.4 23.9	9.3 5.7	9.4 12.6	17.4 18.5	25.2 34.0	244.6 480.5	1.22 1.27	.06 .05
Open Continuously	1,141	2,043	23.9	5.1	12.0	10.3	34.0	+60.3	1.27	.03

Table 3.46. Electricity Consumption and Expenditure Intensities in FBSS Buildings in Federal Region 3, 1993 (Continued)

No	on (thousand kWh)  10 5,203 74 7,899  10 5,757 58 4,380 15 7,214 17 6,680 1,063 18 6,788	per Square Foot (kWh)  21.1 21.8 23.2 21.0 21.1 6.5	per Worker (thousand kWh)  7.5 5.7	Buildin	istribution of g-Level Int Vh/square for Median	75th Percentile	per Building (thousand dollars)	per Square Foot (dollars)	per kWh (dollars)
Multibuilding Facility Yes 9 No 1,0  Space-Heating Energy Source Electricity 44 Electricity Main 1:Electricity Secondary 2:Other Excluding Electricity 1,5 Building Not Heated  Cooling Energy Source Electricity 2:Coher Excluding Electricity 2:Coher Excluding Electricity 3:Coher Excluding Electricity 4:Coher Excluding Electricity 2:Coher Excluding Electricity 3:Coher Excluding Electricity 4:Coher Excluding Electricity 4:Coher Excluding Electricity 4:Coher Excluding Electricity 5:Cooking Energy Source Electricity 9:Cooking Energy Source Electricity 5:Cooking Not Performed 4:Cooking Not Performed 4:Cooking Not Performed 5:Cooking Not Performed 5:Cooking Not Performed 5:Cooking Not Performed 5:Cooking Energy Source 5:Electricity 5:Cooking Energy Source 5:Electricity 5:Cooking Energy Source 5:	10 5,203 7,899 10 5,203 7,899 10 5,757 10 6,680 10 1,063 10 1,063	21.1 21.1 21.8 23.2 21.0 21.1	7.5 5.7 7.5 7.1	Percentile	18.6	Percentile 33.4	dollars)		
Yes 9 No 1,0*  Space-Heating Energy Source  Electricity 44 Electricity Main 1: Electricity Secondary 2, Other Excluding Electricity 1,5* Building Not Heated  Cooling Energy Source Electricity 1,7* Other Excluding Electricity 2,4/C Not Performed  Water-Heating Energy Source Electricity 44 Other Excluding Electricity 45 Other Excluding Electricity 5,5* Water Heating Not Performed  Cooking Energy Source Electricity 9 Other Excluding Electricity 5,5* Cooking Not Performed 45  Manufacturing Energy Source Electricity 5 Cooking Not Performed 5  Manufacturing Energy Source Electricity 55	7,899 7,899 7,899 7,899 7,88 7,214 7,6,680 7,013 7,013 7,013 7,014 7,013	21.8 23.2 21.0 21.1	7.5 7.1						
No	7,899 7,899 7,899 7,899 7,88 7,214 7,6,680 7,013 7,013 7,013 7,014 7,013	21.8 23.2 21.0 21.1	7.5 7.1						
Space-Heating Energy Source  Electricity 44 Electricity Main 11 Electricity Secondary 22 Other Excluding Electricity 1,5' Building Not Heated  Cooling Energy Source Electricity 1,7' Other Excluding Electricity 2 A/C Not Performed  Water-Heating Energy Source Electricity 4 Other Excluding Electricity 1,5' Water Heating Not Performed  Cooking Energy Source Electricity 9 Other Excluding Electricity 1,5' Water Heating Not Performed 5  Cooking Energy Source Electricity 9 Other Excluding Electricity 55' Cooking Not Performed 44'  Manufacturing Energy Source Electricity 55'	03 5,757 88 4,380 45 7,214 77 6,680 5 1,063	21.8 23.2 21.0 21.1	7.5 7.1	10.1	15.8		283.5	1.15	0.05
Electricity 44 Electricity Main 12: Electricity Secondary 22 Other Excluding Electricity 15: Building Not Heated 25: Cooling Energy Source Electricity 17: Other Excluding Electricity 17: A/C Not Performed 26: Water-Heating Energy Source Electricity 44: Other Excluding Electricity 17: Other Excluding Electricity 18: Cooking Energy Source Electricity 18: Cooking Energy Source Electricity 19: Cooking Energy Source Electricity 19: Cooking Energy Source Electricity 19: Cooking Not Performed 14: Manufacturing Energy Source Electricity 55: Cooking Not Performed 55: Electricity 55: Cooking Not Performed 55: Cooking Not Performed 55: Cooking Energy Source Electricity 55: Cooking Source 55: Electricity 55: Elec	58 4,380 45 7,214 77 6,680 5 1,063 88 6,788	23.2 21.0 21.1	7.1			22.0	521.4	1.39	.07
Electricity Main 1: Electricity Secondary 2: Other Excluding Electricity 1,5' Building Not Heated  Cooling Energy Source Electricity 1,7' Other Excluding Electricity 2: A/C Not Performed  Water-Heating Energy Source Electricity 4: Other Excluding Electricity 1,5' Water Heating Not Performed  Cooking Energy Source Electricity 9: Other Excluding Electricity 9: Other Excluding Electricity 9: Other Excluding Electricity 9: Cooking Not Performed 4:  Manufacturing Energy Source Electricity 5: Cooking Not Performed 5:	58 4,380 45 7,214 77 6,680 5 1,063 88 6,788	23.2 21.0 21.1	7.1						
Electricity Secondary 2. Other Excluding Electricity 1,5' Building Not Heated	7,214 77 6,680 5 1,063	21.0 21.1		13.4	17.8	25.4	351.1	1.33	.06
Other Excluding Electricity Building Not Heated  Cooling Energy Source Electricity 1,7: Other Excluding Electricity 2: A/C Not Performed  Water-Heating Energy Source Electricity 4: Other Excluding Electricity 1,5: Water Heating Not Performed  Cooking Energy Source Electricity 9 Other Excluding Electricity 5: Cooking Not Performed 4:  Manufacturing Energy Source Electricity 5: Cooking Not Performed 4:  Manufacturing Energy Source Electricity 5:	77 6,680 5 1,063 88 6,788	21.1		13.8	19.1	29.2	262.3	1.39	.06
Building Not Heated  Cooling Energy Source Electricity	5 1,063 38 6,788		7.8	11.5	17.0	22.0	445.1	1.30	.06
Electricity 1,7 Other Excluding Electricity 2 A/C Not Performed 2  Water-Heating Energy Source Electricity 4 Other Excluding Electricity 1,5 Water Heating Not Performed 3  Cooking Energy Source Electricity 9 Other Excluding Electricity 55 Cooking Not Performed 45  Manufacturing Energy Source Electricity 55		0.5	6.1 13.9	11.8 1.2	17.3 3.6	28.0 10.2	404.7 86.9	1.28 .53	.06 .08
Other Excluding Electricity         2-           A/C Not Performed         2-           Water-Heating Energy Source         4-           Electricity         4-           Other Excluding Electricity         1,5-           Water Heating Not Performed         2-           Cooking Energy Source         Electricity         9-           Other Excluding Electricity         5-           Cooking Not Performed         4-           Manufacturing Energy Source         Electricity         5-									
A/C Not Performed  Water-Heating Energy Source Electricity	13 4 969	21.5	6.2	11.9	17.2	24.5	415.3	1.31	.06
Electricity	4 618	19.3 5.2	8.0 18.6	13.1 1.2	22.4 5.8	38.9 10.2	284.8 41.7	1.11 .35	.06 .07
Other Excluding Electricity 1,50 Water Heating Not Performed 2  Cooking Energy Source Electricity 9 Other Excluding Electricity 55 Cooking Not Performed 45  Manufacturing Energy Source Electricity 55									
Water Heating Not Performed  Cooking Energy Source Electricity	3 4,287	21.2	9.1	13.3	18.2	28.0	238.3	1.18	.06
Electricity 9 Other Excluding Electricity 55 Cooking Not Performed 45  Manufacturing Energy Source Electricity 55	52 7,512 19 2,150	21.3 11.1	5.9 6.8	11.4 3.6	17.0 10.2	27.1 13.4	465.2 152.0	1.32 .79	.06 .07
Electricity 9 Other Excluding Electricity 55 Cooking Not Performed 45  Manufacturing Energy Source Electricity 55									
Cooking Not Performed 44  Manufacturing Energy Source Electricity 55	14 13,440	22.1	5.2	12.9	17.5	27.5	862.9	1.42	.06
Manufacturing Energy Source Electricity	34 14,600 37 2,398	20.5 20.1	7.6 8.6	12.8 11.4	18.8 16.8	26.0 28.0	848.9 137.4	1.19 1.15	.06 .06
Electricity	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
	13 11,933	25.0	5.8	12.7	19.0	28.5	643.7	1.35	.05
Other Excluding Electricity 13	37 19,627	21.1	11.8	12.5	15.8	31.7	947.7	1.02	.05
Manufacturing Not Performed 1,33	5,112	19.9	6.3	11.5	16.9	26.1	330.3	1.28	.06
Percent of Floorspace Heated  Not Heated	5 1,063	6.5	13.9	1.2	3.6	10.2	86.9	.53	.08
	70 5,845	12.1	9.0	3.1	13.0	16.8	324.4	.67	.06
51 to 100	,	21.8	6.3	12.2	17.9	27.9	395.2	1.33	.06
Percent of Floorspace Cooled	22 2 702	11.2	10.4	4.7	11.5	10.7	154.6	65	0.0
	32 2,702 57 5,234	11.3 15.9	19.4 9.7	4.7 11.3	11.5 13.6	19.7 24.4	154.6 308.5	.65 .94	.06 .06
51 to 100		22.0	6.1	12.4	18.0	27.5	406.8	1.34	.06
Percent Lit When Open									
1 to 50	7 680	11.3	12.7	5.2	13.2	21.0	50.4	.84	.07
51 to 100	75 6,604 3 2,739	21.2 18.6	6.4 6.8	11.9 18.6	17.3 18.6	27.9 18.6	400.8 135.9	1.28	.06 .05
Don't Know NC		NC	NC	NC	NC	NC	NC	NC	NC
Percent Lit When Closed	2.100	1.5.5	2.1	10.6	147	22.2	125.5	1.02	0.5
	35 2,188	16.6 19.7	2.1 6.0	10.6	14.4	23.3	135.5 401.5	1.03 1.34	.06 .07
1 to 50		24.0	8.2	11.8 12.8	17.5 18.5	28.3 28.5	497.4	1.34	.07
	56 9,609	24.0	11.6	12.8	17.5	22.4	458.5	1.18	.05
Don't Know NO	,	NC	NC	NC	NC	NC	NC	NC	NC
Heating Equipment (more than one may apply)									
	10 6,378	20.6	7.9	13.2	16.3	23.0	337.2	1.09	.05
Furnaces	12 779	7.4	6.3	5.6	11.2	17.1	49.2	.46	.06
	71 9,065	19.6	6.9	13.4	18.6	23.0	521.7	1.13	.06
District Heat	46 8,661 33 4,168	21.4 19.8	5.9 7.7	12.5 9.9	18.5 13.7	31.7 21.7	546.7 216.9	1.35 1.03	.06 .05
Packaged-Heating Units		19.8	6.8	14.8	16.9	21.7	287.1	1.03	.06

Table 3.46. Electricity Consumption and Expenditure Intensities in FBSS Buildings in Federal Region 3, 1993 (Continued)

Cooling Equipment (more than one may apply)   Resident   Residen			1	Elec	ctricity Cons	umption			Electr	icity Expen	ditures
Characteristics   Chillian   Characteristics   Chillian   Chilli	Building	Total				Buildir	ng-Level Int	ensities			
New paper   New		(million	(thousand	Foot	(thousand	1	Median		(thousand	Foot	per kWh (dollars)
Residential-Type Central AC											
Hear Pumps		417	12.000	21.0	2.2	10.5	15.1	17.6	1.021.4	1.60	0.07
Individual AC	Heat Pumps										
District Chilled Water											.06
Central Chillers											.05
Swamp Coolers   19   6,319   50.2   22.2   41.0   49.7   51.8   431.9   3.43   0.0											.06
Lighting Equipment (more than one may apply)		1,099		19.4	4.9					1.27	.07
	Swamp Coolers	19	6,319	50.2	22.2	41.0	49.7	51.8	431.9	3.43	.07
Incandescent   1,400   7,607   21,5   6.7   11,8   17,2   31,6   460,6   1.30   0.0											
Standard Fluorescent   1,928   6,448   21,1   6.9   11.8   16.9   27.5   389.7   1.28   0.0   Compact Fluorescent   1,000   12,501   20.2   5.5   11.5   16.5   23.2   787.1   1.27   0.0   High-Intensity Discharge   1,135   10,321   21.9   5.2   13.4   18.6   28.3   564.6   1.20   0.0   Electronic Ballast   1,288   9,610   19.9   5.9   12.4   16.8   23.4   61.27   1.27   0.0   Water-Heating Equipment (more than one may apply) Centralized System   1,389   6,230   21.9   6.0   11.7   16.9   27.4   35.67   1.25   0.0   Doi't System   452   6,453   18.8   6.9   12.8   18.7   27.5   491.9   1.44   0.0   Doi't Snow   0.15   13,834   25.1   12.0   12.8   21.8   42.7   576.2   1.04   0.0    Commercial Refrigeration Equipment (more than one may apply) Any Equipment   1,370   12,689   22.5   5.8   12.9   19.4   33.0   780.3   1.38   0.0   Walk-in Units   1,195   15,526   22.3   5.6   13.5   20.4   32.0   969.7   1.40   0.0   Cases and Cabinets   1,217   14,149   23.1   8.9   13.1   20.3   33.4   885.4   1.44   0.0   None   614   3,027   18.5   8.2   11.4   16.3   24.4   178.6   10.9   0.0    Retrofit or Purchase of any Equipment Within Last Ter Years (more than one may apply) Retrofit   820   10,516   19.3   6.8   11.9   16.7   24.1   447.9   1.27   0.0   0.0   Retrofit   820   10,516   19.3   6.8   11.9   16.6   26.1   61.5   11.2   0.0   0.0   Retrofit or Purchase   1,270   6,791   20.4   5.5   11.4   16.8   23.3   434.0   1.30   0.0   0.0   Retrofit or Purchase   1,270   6,791   20.4   5.5   11.4   18.8   23.3   434.0   1.30   0.0   0		1,400	7,607	21.5	6.7	11.8	17.2	31.6	460.6	1.30	.06
High-Intensity Discharge		,	,								.06
Electronic Ballast											.06
Water-Heating Equipment (more than one may apply)   Centralized System											.05
than one may apply) Centralized System	Electronic Ballast	1,288	9,610	19.9	5.9	12.4	16.8	23.4	612.7	1.27	.06
Distributed System   452   6,453   18.8   6.9   12.8   18.7   27.5   491.9   1.44   .0											
Don't Know  Not Ascertained   125   13,834   25.1   12.0   12.8   21.8   42.7   576.2   1.04   .0.	-	1,389	6,230	21.9			16.9	27.4		1.25	.06
Not Ascertained		452	6,453	18.8	6.9	12.8	18.7	27.5	491.9	1.44	.08
Equipment (more than one may apply)  Any Equipment		125	13,834	25.1	12.0	12.8	21.8	42.7	576.2	1.04	.04
Any Equipment 1,370 12,689 22.5 5.8 12.9 19.4 33.0 780.3 1.38 .0 Walk-in Units 1,195 15,526 22.3 5.6 13.5 20.4 32.0 969.7 1.40 .0 .0											
Walk-in Units         1,195         15,526         22.3         5.6         13.5         20.4         32.0         969.7         1.40         .0           Cases and Cabinets         1,217         14,149         23.1         8.9         13.1         20.3         33.4         885.4         1.44         .0           None         614         3,027         18.5         8.2         11.4         16.3         24.4         178.6         1.09         .0           Retrofit and/or Purchase of any Equipment Within Last Ten           Years (more than one may apply)         8         2         1.67         24.1         447.9         1.27         .0           Retrofit and/or Purchase         1,613         7,074         20.0         5.6         11.9         16.7         24.1         447.9         1.27         .0           Retrofit and/or Purchase         1,270         6,791         20.4         5.5         11.4         16.8         23.3         434.0         1.30         .0           Purchase         1,270         6,791         20.4         5.5         11.4         16.8         23.3         434.0         1.30         .0           HVAC Conservation Features         791											
Cases and Cabinets		,	,								.06
None											
Equipment Within Last Ten Years (more than one may apply)  Retrofit and/or Purchase											.06
Retrofit and/or Purchase	Equipment Within Last Ten Years (more than one may										
Purchase		1,613	7,074	20.0	5.6	11.9	16.7	24.1	447.9	1.27	.06
No Retrofit or Purchase	Retrofit	820	10,516	19.3	6.8	11.9	16.6	26.1	610.5	1.12	.06
HVAC Conservation Features (more than one may apply)  VAV System											.06
(more than one may apply)  VAV System	No Retrofit or Purchase	372	4,482	27.4	14.5	11.5	18.8	38.2	221.8	1.35	.05
Economizer Cycle											
HVAC Maintenance			9,536					28.3		1.17	.05
Lighting Conservation Features       (more than one may apply)       Specular Reflectors     919     7,470     20.9     5.6     11.4     14.8     22.0     413.2     1.15     .0       Natural Lighting Control     Sensors     322     11,087     18.1     6.6     10.6     15.8     18.8     882.7     1.44     .0       Occupancy Sensors     1,236     13,145     20.1     5.9     10.8     15.3     22.5     836.2     1.28     .0       Time Clock     947     12,791     20.3     5.7     11.9     16.3     23.4     808.3     1.28     .0	,										.06
(more than one may apply)           Specular Reflectors         919         7,470         20.9         5.6         11.4         14.8         22.0         413.2         1.15         .00           Natural Lighting Control         Sensors         322         11,087         18.1         6.6         10.6         15.8         18.8         882.7         1.44         .00           Occupancy Sensors         1,236         13,145         20.1         5.9         10.8         15.3         22.5         836.2         1.28         .00           Time Clock         947         12,791         20.3         5.7         11.9         16.3         23.4         808.3         1.28         .00	HVAC Maintenance	1,972	6,574	21.3	6.4	12.2	17.5	27.8	399.6	1.29	.06
Natural Lighting Control           Sensors         322         11,087         18.1         6.6         10.6         15.8         18.8         882.7         1.44         .00           Occupancy Sensors         1,236         13,145         20.1         5.9         10.8         15.3         22.5         836.2         1.28         .00           Time Clock         947         12,791         20.3         5.7         11.9         16.3         23.4         808.3         1.28         .00											
Occupancy Sensors         1,236         13,145         20.1         5.9         10.8         15.3         22.5         836.2         1.28         .0           Time Clock         947         12,791         20.3         5.7         11.9         16.3         23.4         808.3         1.28         .0	Natural Lighting Control										.06
Time Clock											.08
											.06
											.06
	Tanda Diminor Switches		10,700	17.3	J. <del>-</del>	12.0	10.7	27.0	3/1.3	1.20	.00

Table 3.46. Electricity Consumption and Expenditure Intensities in FBSS Buildings in Federal Region 3, 1993 (Continued)

			Elec	ctricity Cons	umption			Electr	icity Expend	litures
Building	Total	per Building	per Square	per Worker	Buildin	istribution ng-Level Int Vh/square f	ensities	per Building	per Square	
Characteristics	(million kWh)	(thousand kWh)	Foot (kWh)	(thousand kWh)	25th Percentile	Median	75th Percentile	(thousand dollars)	Foot (dollars)	per kWh (dollars)
Energy Management Practices										
(more than one may apply)										
Energy Management and Control										
System	1,325	10,112	21.7	5.6	12.2	17.6	26.2	615.5	1.32	0.00
Energy Conservation										
Programs 1	1,177	12,015	20.1	5.6	11.8	15.7	21.7	790.7	1.32	.0.
Energy Audit	776	7,835	20.6	8.4	11.4	15.1	23.4	439.4	1.16	.00
HVAC Maintenance Staff <sup>2</sup>	1,092	11,262	20.6	5.0	13.5	18.8	28.6	741.3	1.36	.0
Off-Hours Reduction in										
Equipment (more than one may apply)										
Heating	785	5,451	17.9	7.2	11.3	15.8	22.4	390.8	1.28	.0.
Cooling	785	5,412	17.9	7.2	11.4	15.9	22.7	389.1	1.29	.0:
Hot Water	442	5,738	17.0	7.1	10.1	14.8	22.9	459.0	1.36	.08
Lighting	806	4,975	18.0	7.5	11.3	15.6	23.1	356.2	1.29	.0
Building Generates Electricity										
Yes	724	13,170	22.6	5.8	11.3	16.4	22.4	677.7	1.17	.03
No	1,260	4,924	20.3	6.8	11.9	17.9	27.8	325.2	1.34	.0.

<sup>1</sup> Building participates in any programs sponsored by the Federal Energy Management Program, in-house, utility, or third party.

<sup>&</sup>lt;sup>2</sup> HVAC maintenance staff means at least one person spends at least half their working hours maintaining the heating/cooling equipment. Notes: • Total workers are the number of workers during the main shift. • See Glossary for explanation of abbreviations and definitions of terms used in this report. • These data are from 881 federally owned buildings having the following criteria: (1) located in Federal Regions 3, 6, or 9; (2) larger than 10,000 square feet; and (3) used for a commercial purpose, other than warehouse and storage. In addition, 9 out of 10 selected buildings were from agencies other than the Department of Defense. • Statistics for the "energy end uses" represent consumption in buildings that have end use, not consumption for a particular fuel for a particular end use. • A/C = Air Conditioning. • FBSS = Federal Buildings Supplemental Survey. • HVAC = Heating, Ventilation, and Air Conditioning. • VAV = Variable-Air Volume. • KWH = Kilowatthour. • Data are for Fiscal Year 1993 (October 1, 1992 through September 30, 1993). • Because of rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, 1993 Federal Buildings Supplemental Survey.

Table 3.47. Electricity Consumption and Expenditure Intensities in FBSS Buildings in Federal Region 6, 1993

	•			-	,					
			Elec	ctricity Cons	umption			Electr	icity Expen	ditures
Building	Total	per Building	per Square	per Worker	Buildir	Distribution ng-Level Int Wh/square f	ensities	per Building	per Square	
Characteristics	(million kWh)	(thousand kWh)	Foot (kWh)	(thousand kWh)	25th Percentile	Median	75th Percentile	(thousand dollars)	Foot (dollars)	per kWh (dollars)
All Buildings	975	4,013	27.2	12.0	11.1	16.8	35.3	210.4	1.43	0.05
Building Floorspace (square										
feet)	79	729	20.5	12.2	11.0	15.2	21.0	26.6	1.51	05
10,000 to 50,000 50,001 to 200,000	302	738 3,509	30.5 31.6	13.3 16.4	11.0 10.9	15.3 18.7	31.9 38.9	36.6 186.9	1.51 1.68	.05 .05
Over 200,000	594	11,889	25.1	10.4	11.2	18.1	29.4	622.7	1.32	.05
Principal Building Activity										
Education	2	386	13.8	9.1	11.0	13.6	14.8	17.6	.63	.05
Health CareLaboratory	219 240	6,255 8,273	18.1 72.0	10.5 55.6	13.0 38.9	17.7 52.0	25.0 112.6	346.2 450.5	1.00 3.92	.06 .05
Lodging	15	941	16.0	24.2	11.3	16.4	19.5	61.0	1.04	.06
Mercantile and Service		2,729	21.4	6.8	9.7	13.4	15.8	144.1	1.13	.05
Office	263	3,464	24.4	8.1	10.2	18.2	31.9	184.7	1.30	.05
All Others	102	3,189	45.4	32.4	9.3	20.4	98.9	117.5	1.67	.04
Year Constructed										
1959 or Before	391	3,801	29.5	15.6	10.9	15.4	31.5	170.2	1.32	.04
1960 to 1969	180	4,731	28.2	7.6	9.5	20.9	40.2	275.2	1.64	.06
1970 to 1979	188 179	5,542 3,147	30.5 26.0	12.7 12.5	12.8 11.4	18.8 15.2	42.8 25.1	252.5 223.4	1.39 1.84	.05 .07
1990 to 1993	36	3,295	11.7	9.6	9.6	13.4	34.6	165.0	.59	.05
Federal Agency										
Department of Defense	41	1,859	24.5	12.6	7.7	15.0	23.6	108.6	1.43	.06
General Services Administration .		3,484	15.5	5.1	8.5	12.6	19.1	226.0	1.00	.06
United States Postal Service	145	2,377	20.6	6.9	9.7	13.5	16.3	127.4	1.11	.05
Veterans Administration	186 481	5,175 5,406	16.4 61.2	9.9 33.3	12.4 19.1	14.6 36.8	23.9 110.8	287.7 255.0	.91 2.89	.06 .05
Energy Sources (more than one										
may apply)										
Electricity	975	4,013	27.2	12.0	11.1	16.8	35.3	210.4	1.43	.05
Natural Gas	582	3,462	23.4	10.3	10.2	15.0	24.2	182.6	1.24	.05
Fuel Oil	90 435	5,009 6,399	19.0 32.4	6.0 17.7	13.0 12.8	20.5 29.4	32.5 42.4	311.4 337.2	1.18 1.71	.06 .05
District Tieat		4,603	17.3	8.1	7.7	13.0	23.3	261.1	.98	.06
Propane	6	1,209	30.2	11.9	3.7	32.5	37.2	74.1	1.85	.06
Any Other	77	9,606	27.0	13.0	24.0	34.1	58.3	470.6	1.32	.05
Energy End Uses (more than										
one may apply)										
Heating	975	4,030	27.3	11.9	11.2	16.9	35.3	211.2	1.43	.05
Air Conditioning Water Heating	957 957	3,972 4,021	27.1 27.2	11.9 11.9	11.2 11.2	16.8 17.2	34.9 35.3	208.9 211.4	1.43 1.43	.05 .05
Cooking		6,072	19.9	8.3	11.3	19.1	29.4	345.0	1.13	.06
Manufacturing	99	3,552	18.6	6.2	10.5	14.0	24.0	213.0	1.12	.06
Workers (main shift)										
Less than 50	111	1,585	43.5	75.9	9.7	15.7	36.2	65.6	1.80	.04
50 to 99	46	1,047	22.7	14.2	11.1	13.9	23.6	47.2	1.03	.05
100 to 499 500 or More	316 503	3,945 10,257	35.0 22.6	19.2 8.3	10.7 12.5	20.0 18.9	36.6 34.9	216.2 554.2	1.92 1.22	.05 .05
Weekly Operating Hours										
48 or Fewer	58	1,484	21.1	12.3	11.0	17.7	27.5	78.5	1.12	.05
49 to 60		2,019	14.4	6.5	8.6	15.2	30.5	124.9	.89	.06
61 to 167 Open Continuously	390 434	5,006 5,426	48.5	20.0	10.6	16.8	110.8	232.1	2.25	.05
Open Continuously	434	5,426	23.4	10.1	12.4	17.7	29.4	302.7	1.30	.06

Table 3.47. Electricity Consumption and Expenditure Intensities in FBSS Buildings in Federal Region 6, 1993 (Continued)

			Elec	ctricity Cons	umption			Electr	icity Expend	litures
Building	Total	per Building	per Square	per Worker	Buildir (kV	pistribution ng-Level Int Vh/square f	ensities oot)	per Building	per Square	
Characteristics	(million kWh)	(thousand kWh)	Foot (kWh)	(thousand kWh)	25th Percentile	Median	75th Percentile	(thousand dollars)	Foot (dollars)	per kWh (dollars)
Multibuilding Facility								1		
Yes	731	4,937	29.9	13.9	13.1	23.0	41.8	252.9	1.53	0.05
No	245	2,574	21.5	8.5	9.6	13.2	20.1	144.2	1.20	.06
Space-Heating Energy Source										
Electricity	360	5,450	36.5	13.6	12.5	16.8	38.8	227.9	1.53	.04
Electricity Main	121	3,896	26.0	8.6	13.3	16.8	32.4	202.3	1.35	.05
Electricity Secondary	239	6,826	45.8	19.2	9.7	16.9	108.5	250.6	1.68	.04
Other Excluding Electricity	615	3,497	23.8	11.2	10.8	17.6	33.1	205.0	1.39	.06
Building Not Heated	(*)	81	1.0	(1)	1.0	1.0	1.0	5.9	.07	.07
Cooling Energy Source										
Electricity	850	3,880	30.3	12.7	11.4	17.4	35.8	202.0	1.58	.05
Other Excluding Electricity	108	4,893	14.9	8.1	7.7	12.8	20.4	276.9	.84	.06
A/C Not Performed	18	8,987	33.1	15.0	1.0	19.9	38.8	395.2	1.46	.04
Water-Heating Energy Source										
Electricity	285	4,595	23.2	9.2	9.5	14.5	31.9	244.7	1.24	.05
Other Excluding Electricity	672	3,819	29.3	13.6	12.4	19.0	35.6	199.7	1.53	.05
Water Heating Not Performed	18	3,659	30.7	14.3	1.9	5.0	13.9	162.7	1.37	.04
Cooking Energy Source										
Electricity	182	4,916	17.9	6.5	11.2	16.7	25.1	279.4	1.02	.06
Other Excluding Electricity	201	7,718	22.2	11.0	17.7	23.6	32.5	438.2	1.26	.06
Cooking Not Performed	593	3,293	35.7	16.8	10.3	15.2	36.7	163.3	1.77	.05
Manufacturing Energy Source										
Electricity	80	3,096	16.6	5.4	10.3	13.6	20.8	197.1	1.06	.06
Other Excluding Electricity	19	9,489	38.1	15.3	29.4	34.1	38.8	419.3	1.69	.04
Manufacturing Not Performed	876	4,073	28.7	13.4	11.2	17.4	35.8	210.0	1.48	.05
Percent of Floorspace Heated										
Not Heated	(*)	81	1.0	(1)	1.0	1.0	1.0	5.9	.07	.07
1 to 50	22	2,013	17.2	10.1	8.2	13.5	21.0	119.9	1.02	.06
51 to 100	953	4,126	27.7	12.0	11.2	17.6	35.3	215.6	1.45	.05
Percent of Floorspace Cooled										
Not Cooled	18	6,021	32.6	13.4	1.0	8.2	38.8	265.6	1.44	.04
1 to 50	75	2,870	38.3	22.9	10.9	22.3	111.0	110.4	1.47	.04
51 to 100	883	4,124	26.5	11.5	11.2	16.1	32.4	221.8	1.42	.05
Percent Lit When Open										
1 to 50	18	1,228	17.4	14.4	8.7	11.4	21.0	71.4	1.01	.06
51 to 100	957	4,215	27.6	11.9	11.4	17.6	35.7	220.5	1.44	.05
No Operating Hours	(*)	81 NG	1.0	(1) NG	1.0	1.0	1.0	5.9	.07	.07
Don't Know	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Percent Lit When Closed										
Not Lit	34	1,025	12.6	5.6	7.5	13.9	16.9	64.8	.79	.06
1 to 50	693	4,202	33.8	15.5	12.0	19.1	38.9	218.1	1.76	.05
51 to 100 No Off Hours	136 112	5,435 5,611	16.9 24.4	6.8 10.3	11.4 11.6	15.4 19.4	23.9 30.4	288.6 289.2	.90 1.26	.05 .05
Don't Know	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Heating Equipment (more than										
one may apply)	22	2 205	22.2	0.0	14.2	25.5	22.4	1642	1.70	05
Heat PumpsFurnaces	32 11	3,205 610	33.2 13.9	8.8 7.9	14.2 6.8	25.5 14.9	32.4 19.1	164.3 35.0	1.70 .80	.05 .06
Individual Space Heaters	124	4,121	22.9	6.9	8.7	12.8	29.4	349.3	1.94	.08
District Heat	457	5,572	30.1	16.0	13.0	21.0	38.9	295.2	1.59	.05
Boilers Packaged-Heating Units	420 199	4,120 3,371	25.1 26.3	10.0 10.1	10.8 9.8	18.2 14.8	36.1 25.0	213.7 194.3	1.30 1.51	.05 .06

Table 3.47. Electricity Consumption and Expenditure Intensities in FBSS Buildings in Federal Region 6, 1993 (Continued)

		I	Elec	ctricity Cons	umption			Electr	icity Expend	litures
Building	Total	per Building	per Square	per Worker	Buildir	pistribution ng-Level Int Vh/square f	ensities	per Building	per Square	
Characteristics	(million kWh)	(thousand kWh)	Foot (kWh)	(thousand kWh)	25th Percentile	Median	75th Percentile	(thousand dollars)	Foot (dollars)	per kWh (dollars)
Cooling Equipment (more than		'			-	'		'	'	
one may apply)	0.5	2 20 4	20.2		0.7	12.0	20.2	100.4	1.10	0.05
Residential-Type Central A/C	96	3,294	20.3	6.4	9.7	13.0	20.3	193.4	1.19	0.06
Heat Pumps	39	3,588	25.5	8.2	13.0	23.6	32.5	187.3	1.33	.05
Individual A/C	241 191	4,819 4,349	34.7 17.6	15.4	12.5	20.2 14.6	57.3 28.6	206.5	1.49 1.28	.04 .07
Central Chillers	608	4,349	28.2	8.7 11.0	9.7 12.4	18.8	38.9	315.8 247.2	1.40	.07
Packaged-A/C Units	338	3,481	23.9	9.0	10.9	15.2	24.2	191.6	1.40	.06
Swamp Coolers	336	3,481	19.2	10.6	10.9	16.1	31.0	162.6	.97	.05
•	39	3,221	17.2	10.0	11.2	10.1	51.0	102.0	.91	.03
Lighting Equipment (more than one may apply)										
Incandescent	686	5,083	33.9	13.3	11.4	20.1	42.8	255.5	1.70	.05
Standard Fluorescent	967	4,117	27.6	11.9	11.4	17.6	35.7	215.6	1.45	.05
Compact Fluorescent	142	4,910	17.9	7.2	10.6	14.8	20.4	320.5	1.17	.07
High-Intensity Discharge	518	8,088	32.0	12.6	12.3	20.3	107.6	356.5	1.41	.04
Electronic Ballast	279	4,727	17.6	7.1	9.9	15.0	23.9	272.3	1.01	.06
Water-Heating Equipment (more han one may apply)										
Centralized System	575	3,528	24.8	12.0	11.1	17.4	31.5	192.9	1.35	.05
Distributed System  Don't Know/	375	5,283	31.7	11.8	11.9	16.8	46.4	261.0	1.57	.05
Not Ascertained	7	1,687	35.9	9.7	9.4	22.9	93.0	86.1	1.83	.05
Commercial Refrigeration										
Equipment (more than one may apply)										
Any Equipment	408	5,821	22.7	10.2	13.0	23.9	36.1	372.7	1.46	.06
Walk-in Units	273	6,815	22.0	11.2	13.5	23.9	35.9	370.3	1.20	.05
Cases and Cabinets	275	6,240	19.4	8.8	12.6	19.7	29.4	345.7	1.08	.06
None	568	3,282	31.7	13.6	10.3	15.0	33.3	144.7	1.40	.04
Retrofit or Purchase of any Equipment Within Last Ten										
Years (more than one may										
apply)	607	2.072	21.6	0.0	10.0	15.0	24.0	211.2	1.10	0.5
Retrofit and/or Purchase	627	3,872	21.6	9.0	10.8	15.2	24.0	211.3	1.18	.05
Retrofit	269 489	4,271 3,883	17.9 22.9	7.5 9.1	10.4 11.1	15.2 15.1	23.8 24.0	247.0 213.0	1.04 1.25	.06 .05
No Retrofit or Purchase	348	4,295	51.2	29.0	11.9	26.7	108.5	208.6	2.48	.05
HVAC Conservation Features										
(more than one may apply)	417	6.410	22.5	10.5	12.2	17.7	22.5	252.2	1.24	06
VAV System	417 644	6,410	22.5 27.3	10.5 12.0	12.2 12.3	17.7 18.9	32.5 38.1	353.2 243.6	1.24 1.27	.06 .05
Economizer Cycle	966	5,232 4,130	27.3	12.0	11.2	16.9	35.7	217.0	1.44	.05
Lighting Conservation Features										
(more than one may apply)										
Specular Reflectors Natural Lighting Control	395	4,289	21.9	8.6	10.0	18.4	33.1	247.9	1.27	.06
Sensors	104	3,865	15.5	9.2	10.6	16.7	21.7	223.6	.90	.06
Occupancy Sensors	315	5,433	19.2	7.2	10.1	14.5	23.9	306.1	1.08	.06
Time Clock Manual Dimmer Switches	151 246	4,204 5,586	16.7 18.3	8.2 8.2	10.2 10.0	15.1 15.7	21.5 29.1	245.8 340.3	.98 1.11	.06 .06

Table 3.47. Electricity Consumption and Expenditure Intensities in FBSS Buildings in Federal Region 6, 1993 (Continued)

		1	Elec	ctricity Cons	umption			Electr	icity Expend	litures
Building	Total	per Building	per Square	per Worker	Buildin	istribution ig-Level Int Vh/square f	ensities	per Building	per Square	
Characteristics	(million kWh)	(thousand kWh)	Foot (kWh)	(thousand kWh)	25th Percentile	Median	75th Percentile	(thousand dollars)	Foot (dollars)	per kWh (dollars)
Energy Management Practices										
(more than one may apply)										
Energy Management and Control	450	4.500	10.0	0.2	10.4		25.0	252.0		0.0
System	459	4,780	19.9	9.2	10.4	15.1	25.0	273.9	1.14	0.06
Energy Conservation Programs 1	259	5,399	19.2	7.1	12.7	17.9	28.9	307.7	1.09	.00
Energy Audit	259	3,785	20.7	7.1	11.2	17.9	28.9	232.6	1.09	.00
HVAC Maintenance Staff <sup>2</sup>	291	5,112	18.8	8.5	9.5	13.3	21.7	298.3	1.09	.00
HVAC Maintenance Starr	291	3,112	10.0	8.3	9.3	13.3	21.7	296.3	1.09	.00
Off-Hours Reduction in										
Equipment (more than one may apply)										
Heating	226	1,836	17.2	7.3	9.5	13.7	23.6	138.5	1.29	.08
Cooling	236	1,907	17.1	7.1	9.5	13.8	23.4	142.0	1.27	.0.
Hot Water	83	2,518	18.2	7.2	9.5	12.8	30.5	152.9	1.11	.00
Lighting	232	1,934	18.1	7.2	9.6	14.7	23.4	144.3	1.35	.07
Building Generates Electricity										
Yes	162	5,061	15.7	7.6	10.9	17.5	25.9	281.5	.87	.00
No	813	3,855	31.9	13.5	11.2	16.8	35.8	199.6	1.65	.03

Data or computation error.

Notes: • Total workers are the number of workers during the main shift. • See Glossary for explanation of abbreviations and definitions of terms used in this report. • These data are from 881 federally owned buildings having the following criteria: (1) located in Federal Regions 3, 6, or 9; (2) larger than 10,000 square feet; and (3) used for a commercial purpose, other than warehouse and storage. In addition, 9 out of 10 selected buildings were from agencies other than the Department of Defense. • Statistics for the "energy end uses" represent consumption in buildings that have end use, not consumption for a particular fuel for a particular end use. • A/C = Air Conditioning. • FBSS = Federal Buildings Supplemental Survey. • HVAC = Heating, Ventilation, and Air Conditioning. • VAV = Variable-Air Volume. • KWH = Kilowatthour. • Data are for Fiscal Year 1993 (October 1, 1992 through September 30, 1993). • Because of rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, 1993 Federal Buildings Supplemental Survey.

<sup>&</sup>lt;sup>1</sup> Building participates in any programs sponsored by the Federal Energy Management Program, in-house, utility, or third party.

<sup>&</sup>lt;sup>2</sup> HVAC maintenance staff means at least one person spends at least half their working hours maintaining the heating/cooling equipment. NC = No cases in responding sample.

Table 3.48. Electricity Consumption and Expenditure Intensities in FBSS Buildings in Federal Region 9, 1993

			Elec	ctricity Cons	umption			Electri	icity Expen	ditures
Building	Total	per Building	per Square	per Worker	Buildir	distribution ng-Level Int Vh/square f	ensities	per Building	per Square	
Characteristics	(million kWh)	(thousand kWh)	Foot (kWh)	(thousand kWh)	25th Percentile	Median	75th Percentile	(thousand dollars)	Foot (dollars)	per kWh (dollars)
All Buildings	804	2,474	18.1	8.2	9.5	15.9	23.0	190.9	1.40	0.08
<b>Building Floorspace (square</b>										
feet) 10,000 to 50,000	78	533	20.4	8.5	9.2	15.3	22.9	42.7	1.63	.08
50,001 to 200,000	269	2,190	21.2	10.4	9.8	19.1	24.4	165.7	1.61	.08
Over 200,000	456	8,296	16.4	7.3	8.5	13.0	18.0	643.1	1.27	.08
Principal Building Activity										
Education	6	512	9.8	9.6	1.4	3.8	8.8	31.0	.59	.06
Health CareLaboratory	167 94	3,484 3,041	16.9 36.2	7.7 24.8	12.3 20.2	17.1 26.6	20.8 47.6	243.5 229.5	1.18 2.74	.07 .08
Lodging	14	640	11.5	21.6	2.9	13.7	18.7	53.6	.97	.08
Mercantile and Service	128	2,027	15.6	5.2	9.4	13.9	19.3	153.3	1.18	.08
Office	250	2,716	15.3	6.4	8.7	15.1	21.9	246.0	1.38	.09
All Others	145	2,538	26.9	19.5	10.1	18.5	25.3	164.7	1.75	.06
Year Constructed										
1959 or Before	280	2,173	20.7	11.6	8.3	17.1	24.4	167.8	1.60	.08
1960 to 1969	143 201	2,597 3,240	15.7 16.7	7.0 6.9	8.3 9.5	15.9 15.0	23.9 20.4	197.7 268.7	1.20 1.38	.08 .08
1970 to 1979	155	2,384	19.5	7.5	10.8	16.2	22.9	166.1	1.36	.08
1990 to 1993	25	1,784	14.8	8.0	13.7	17.0	24.1	147.1	1.22	.08
Federal Agency										
Department of Defense	187	2,426	22.1	13.5	6.6	13.0	18.7	186.2	1.69	.08
General Services Administration .	144	3,698	11.5	5.0	7.2	10.6	16.2	339.5	1.06	.09
United States Postal Service Veterans Administration	139 150	2,203 2,682	16.5 17.0	5.7 7.7	9.2 14.4	15.2 18.3	19.6 21.8	168.6 193.7	1.27 1.23	.08 .07
Veterans Administration	184	2,045	30.1	17.0	12.7	23.6	32.1	144.3	2.12	.07
Energy Sources (more than one										
may apply)										
Electricity	804	2,474	18.1	8.2	9.5	15.9	23.0	190.9	1.40	.08
Natural GasFuel Oil	594 222	2,639	17.1 19.9	7.9 9.7	9.6 12.0	15.9 17.1	23.9 31.4	203.9 321.5	1.32 1.56	.08 .08
District Heat	194	4,103 2,657	16.5	8.4	12.3	17.1	20.7	198.0	1.23	.08
District Chilled Water	106	3,929	16.7	8.3	15.3	20.3	25.0	262.4	1.11	.07
Propane	26	2,633	23.6	12.2	.7	4.8	16.3	212.5	1.90	.08
Any Other	37	7,350	14.1	6.8	.8	14.2	14.4	526.8	1.01	.07
Energy End Uses (more than										
one may apply)	750	2 401	17.0	0.5	0.5	16.0	22.4	102.0	1.40	00
Heating Air Conditioning	752 773	2,481 2,647	17.9 18.4	8.5 8.3	9.5 10.7	16.0 16.8	23.4 23.9	193.9 201.7	1.40 1.41	.08 .08
Water Heating	778	2,478	18.1	8.3	9.4	16.0	23.4	189.3	1.38	.08
Cooking	348	4,967	17.3	7.5	9.1	14.6	19.8	349.3	1.22	.07
Manufacturing	157	5,245	20.5	8.9	12.3	15.8	23.0	372.5	1.45	.07
Workers (main shift)										
Less than 50	57	624	15.7	37.2	5.2	13.3	23.0	50.1	1.26	.08
50 to 99	51 261	1,051 1,950	23.8 18.6	14.1 9.8	9.5 11.1	16.2 16.9	24.3 23.4	80.9 148.5	1.83 1.42	.08 .08
500 or More	434	8,676	17.7	6.6	10.4	15.8	20.7	671.1	1.42	.08
Weekly Operating Hours										
48 or Fewer	74	927	15.4	9.8	7.8	14.8	24.4	66.5	1.10	.07
49 to 60	179	2,760	13.4	5.6	7.7	13.0	18.7	246.0	1.19	.09
61 to 167	102	1,504	17.9	9.6	9.3	15.7	23.4	123.8	1.48	.08
Open Continuously	448	4,001	22.0	9.5	12.0	18.5	24.3	288.4	1.59	.07

Table 3.48. Electricity Consumption and Expenditure Intensities in FBSS Buildings in Federal Region 9, 1993 (Continued)

										litures
Building	Total	per Building	per Square	per Worker	Buildir (kV	istribution ng-Level Int Vh/square f	ensities oot)	per Building	per Square	
Characteristics	(million kWh)	(thousand kWh)	Foot (kWh)	(thousand kWh)	25th Percentile	Median	75th Percentile	(thousand dollars)	Foot (dollars)	per kWh (dollars)
Multibuilding Facility		1								
Yes	486	2,440	18.1	8.6	9.7	15.9	22.9	179.2	1.33	0.07
No	318	2,527	18.2	7.8	9.1	16.0	24.2	209.2	1.51	.08
Space-Heating Energy Source										
Electricity	212	2,824	22.5	10.6	9.6	16.6	24.1	232.6	1.85	.08
Electricity Main	141	3,208	32.6	14.9	10.3	19.7	25.1	246.2	2.50	.08
Electricity Secondary	71	2,279	13.8	6.7	7.5	13.8	20.1	213.3	1.30	.09
Other Excluding Electricity	540	2,368	16.6	7.9	9.4	16.0	23.0	181.2	1.27	.08
Building Not Heated	52	2,373	21.8	5.9	8.3	12.7	19.5	148.3	1.36	.06
Cooling Energy Source										
Electricity	683	2,578	18.7	8.2	10.6	16.5	23.6	199.0	1.44	.08
Other Excluding Electricity	90	3,333	16.8	8.5	12.3	20.3	25.0	227.7	1.15	.07
A/C Not Performed	31	937	12.9	7.9	2.0	9.0	10.2	95.1	1.31	.10
Water-Heating Energy Source										
Electricity	189	2,911	26.2	10.3	8.0	13.1	21.1	214.5	1.93	.07
Other Excluding Electricity	589	2,365	16.5	7.8	10.1	16.5	23.8	182.7	1.27	.08
Water Heating Not Performed	26	2,345	19.4	7.6	9.7	10.6	20.8	235.3	1.94	.10
Cooking Energy Source										
Electricity	239	5,569	17.6	8.0	10.1	15.3	19.5	390.2	1.23	.07
Other Excluding Electricity	108	4,008	16.8	6.5	7.6	12.3	21.5	284.1	1.19	.07
Cooking Not Performed	456	1,789	18.8	8.9	9.6	16.6	23.9	147.4	1.55	.08
Manufacturing Energy Source										
Electricity	136	5,433	21.9	9.5	12.7	18.0	23.0	386.8	1.56	.07
Other Excluding Electricity	22	4,307	14.5	6.2	12.3	15.6	16.0	301.0	1.01	.07
Manufacturing Not Performed	647	2,192	17.7	8.1	9.2	15.9	23.2	172.4	1.39	.08
Donasant of Electrones Heated										
Percent of Floorspace Heated Not Heated	52	2,373	21.8	5.9	8.3	12.7	19.5	148.3	1.36	.06
1 to 50	109	3,879	29.0	20.9	3.8	19.8	25.6	295.1	2.20	.08
51 to 100	643	2,339	16.9	7.7	9.6	15.9	22.9	183.6	1.32	.08
D ( 47)										
Percent of Floorspace Cooled Not Cooled	40	1,032	13.7	9.7	2.0	9.0	13.5	96.2	1.28	.09
1 to 50	136	2,464	18.6	9.7	10.2	15.3	19.2	168.2	1.28	.07
51 to 100	628	2,719	18.4	8.0	11.1	17.6	24.3	212.2	1.44	.08
Percent Lit When Open	21	1.072	11.6	11.7	1.1	11.0	17.2	70.0	0.4	07
1 to 50	21 782	1,072 2,579	11.6 18.5	11.7 8.2	1.1 9.8	11.2 16.2	17.2 23.4	78.0 199.3	.84 1.43	.07 .08
No Operating Hours	(*)	2,379	.1	NC	.1	.1	.1	.1	(*)	.03
Don't Know	í	982	15.3	31.7	15.3	15.3	15.3	83.7	1.30	.09
Percent Lit When Closed	22	025	10.7	150	6.6	12.4	24.2	72.2	1.50	06
Not Lit	33 374	935 1,834	19.7 14.8	15.8 6.9	6.6 9.2	13.4 15.2	24.3 20.9	72.3 149.7	1.52 1.21	.08 .08
51 to 100	160	3,645	19.8	9.0	12.6	21.6	41.6	275.3	1.49	.08
No Off Hours	236	5,751	25.7	10.2	10.6	17.3	22.1	408.8	1.82	.07
Don't Know	1	982	15.3	31.7	15.3	15.3	15.3	83.7	1.30	.09
Heating Equipment (more than one may apply)										
Heat Pumps	68	1,705	22.1	9.4	11.4	19.4	24.1	134.2	1.74	.08
Furnaces	16	624	13.0	5.6	8.2	12.7	17.8	51.8	1.07	.08
Individual Space Heaters	82	2,480	16.6	7.5	9.1	13.0	19.8	203.5	1.36	.08
District Heat Boilers	237 421	3,380 2,884	18.6 17.5	9.8 7.8	12.0 10.1	16.3 17.5	20.3 24.4	227.5 232.8	1.25 1.42	.07 .08
Packaged-Heating Units	102	1,528	17.3	7.6	9.5	15.3	24.4	108.5	1.42	.07

Table 3.48. Electricity Consumption and Expenditure Intensities in FBSS Buildings in Federal Region 9, 1993 (Continued)

			Elec	ctricity Cons	umption			Electr	icity Expend	ditures
Building	Total	per Building	per Square	per Worker	Buildir	distribution ng-Level Int Vh/square f	ensities	per Building	per Square	
Characteristics	(million kWh)	(thousand kWh)	Foot (kWh)	(thousand kWh)	25th Percentile	Median	75th Percentile	(thousand dollars)	Foot (dollars)	per kWh (dollars)
Cooling Equipment (more than					I					
one may apply)										
Residential-Type Central A/C	34	1,404	17.7	6.9	9.1	14.3	20.6	104.4	1.32	0.07
Heat Pumps	63	1,958	23.0	11.1	12.9	20.5	30.2	156.5	1.84	.08
Individual A/C	100	1,932	17.6	8.4	10.1	17.0	19.7	153.7	1.40	.08
District Chilled Water	170	5,484	22.2	11.6	15.3	19.5	22.5	332.5	1.35	.06
Central Chillers	499	3,589	18.0	7.4	11.5	17.8	24.4	278.4	1.40	.08
Packaged-A/C Units Swamp Coolers	416 43	2,756 1,430	17.3 13.6	6.9 5.0	11.4 6.6	17.0 11.4	24.4 18.7	214.3 111.0	1.35 1.05	.08 .08
Swamp Coolers	43	1,430	13.0	3.0	0.0	11.4	10./	111.0	1.05	.08
ighting Equipment (more than ne may apply)										
Incandescent	354	2,201	17.3	8.4	9.0	16.9	24.4	170.1	1.34	.08
Standard Fluorescent	763	2,478	17.8	8.0	9.4	15.9	22.9	187.1	1.35	.08
Compact Fluorescent	296	4,118	17.1	8.1	9.4	17.5	23.9	344.1	1.43	.08
High-Intensity Discharge	329	4,390	17.6	7.6	8.5	14.4	21.5	312.0	1.25	.07
Electronic Ballast	392	3,736	16.8	7.2	10.6	16.2	23.4	291.0	1.31	.08
Water-Heating Equipment (more han one may apply)										
Centralized System	507	2,262	16.3	7.6	9.1	15.9	22.8	178.1	1.28	.08
Distributed System	240	2,994	22.3	9.7	9.9	15.2	24.4	217.4	1.62	.07
Not Ascertained	32	3,182	27.3	11.2	16.6	22.2	32.3	216.0	1.85	.07
Commercial Refrigeration										
Equipment (more than one may apply)										
Any Equipment	346	5,494	18.4	7.9	10.5	16.2	21.8	381.7	1.28	.07
Walk-in Units	233	5,289	18.6	8.2	12.4	17.2	24.2	367.5	1.29	.07
Cases and Cabinets	248	4,967	16.6	7.1	12.0	16.2	22.0	385.0	1.29	.08
None	458	1,747	17.9	8.5	9.2	15.9	23.4	145.0	1.49	.08
Retrofit or Purchase of any Equipment Within Last Ten										
Years (more than one may										
apply)	611	2.001	17.7	7.6	0.0	161	22.4	220.7	1 41	00
Retrofit and/or Purchase	611	2,881	17.7	7.6	9.9	16.1	22.4	229.7	1.41	.08
Retrofit	346 415	3,356 2,824	15.3 21.2	6.3 9.3	9.7 11.4	14.4 16.5	20.9 23.4	267.9 224.1	1.22 1.68	.08 .08
No Retrofit or Purchase	193	1,710	19.8	11.1	8.3	15.9	24.4	117.9	1.36	.07
HVAC Conservation Features										
(more than one may apply)	292	3,900	18.8	8.6	12.6	17.3	24.4	296.9	1.43	.08
VAV System Economizer Cycle	431	3,900	16.3	7.2	10.4	17.3	23.9	241.0	1.43	.08
HVAC Maintenance	787	2,581	18.3	8.2	9.7	16.3	23.4	198.9	1.41	.08
Lighting Conservation Features										
(more than one may apply)	222	2 607	15.0	<i>c c</i>	10.6	16.2	22.0	210.2	1 10	00
Specular Reflectors  Natural Lighting Control  Sensors	332	2,697	15.2	6.6 5.4	10.6	16.2	23.0	210.3	1.19	.08
Sensors Occupancy Sensors	186 446	3,213 4,092	13.5 17.7	5.4 7.6	9.8 11.1	15.6 17.8	19.8 24.0	268.1 316.8	1.13 1.37	.08 .08
Occupancy ocnsors	440				11.1		24.0		1.37	
Time Clock	141	3,433	13.4	5.8	8.6	14.4	17.8	261.0	1.02	.08

Table 3.48. Electricity Consumption and Expenditure Intensities in FBSS Buildings in Federal Region 9, 1993 (Continued)

		1	Elec	ctricity Cons	umption			Electr	icity Expend	litures
Building	Total	per Building	per Square	per Worker	Buildir	sistribution ng-Level Int Vh/square f	ensities	per Building	per Square	
Characteristics	(million kWh)	(thousand kWh)	Foot (kWh)	(thousand kWh)	25th Percentile	Median	75th Percentile	(thousand dollars)	Foot (dollars)	per kWh (dollars)
Energy Management Practices										
(more than one may apply)										
Energy Management and Control										
System	372	5,232	20.4	8.9	12.6	19.6	29.9	359.1	1.40	0.0
Energy Conservation	440	2 (42	10.2	0.1	10.4	16.2	22.0	272.1	1.36	.0.
Programs <sup>1</sup>	448 328	3,643 3,345	18.2 18.8	8.1 8.6	9.8	16.2 15.6	23.9 25.0	2/2.1	1.30	.0.
HVAC Maintenance Staff <sup>2</sup>	244	4,685	16.7	6.9	9.8	17.7	23.3	348.6	1.24	.0:
Off-Hours Reduction in										
Equipment (more than one may apply)										
Heating	270	1,785	13.7	6.5	8.2	13.8	20.9	148.3	1.14	.08
Cooling	262	1,668	13.6	6.3	8.3	14.4	20.8	137.6	1.12	.08
Hot Water	174	2,564	12.8	5.6	7.4	13.3	24.1	223.9	1.12	.09
Lighting	293	1,706	13.9	6.5	8.2	14.4	22.5	141.8	1.15	.08
<b>Building Generates Electricity</b>										
Yes	351	6,745	24.6	12.7	13.4	20.4	39.8	511.7	1.86	.08
No	453	1,660	15.1	6.5	9.0	15.3	22.1	129.7	1.18	.08

<sup>1</sup> Building participates in any programs sponsored by the Federal Energy Management Program, in-house, utility, or third party.

Notes: • Total workers are the number of workers during the main shift. • See Glossary for explanation of abbreviations and definitions of terms used in this report. • These data are from 881 federally owned buildings having the following criteria: (1) located in Federal Regions 3, 6, or 9; (2) larger than 10,000 square feet; and (3) used for a commercial purpose, other than warehouse and storage. In addition, 9 out of 10 selected buildings were from agencies other than the Department of Defense. • Statistics for the "energy end uses" represent consumption in buildings that have end use, not consumption for a particular fuel for a particular end use. • A/C = Air Conditioning. • FBSS = Federal Buildings Supplemental Survey. • HVAC = Heating, Ventilation, and Air Conditioning. • VAV = Variable-Air Volume. • KWH = Kilowatthour. • Data are for Fiscal Year 1993 (October 1, 1992 through September 30, 1993). • Because of rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, 1993 Federal Buildings Supplemental Survey.

<sup>&</sup>lt;sup>2</sup> HVAC maintenance staff means at least one person spends at least half their working hours maintaining the heating/cooling equipment.

<sup>(\*) =</sup> Value rounds to zero in the units displayed.

NC = No cases in responding sample.