

**Table 3.49. Natural Gas Consumption and Expenditure Intensities in
FBSS Buildings in Federal Region 3, 1993**

Building Characteristics	Natural Gas Consumption							Natural Gas Expenditures		
	Total (million cubic feet)	per Building (thousand cubic feet)	per Square Foot (cubic feet)	per Worker (thousand cubic feet)	Distribution of Building-Level Intensities (cubic feet/square foot)			per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
					25th Percentile	Median	75th Percentile			
All Buildings	1,906	13,709	32.5	8.2	4.5	23.0	65.5	60.7	0.14	4.43
Building Floorspace (square feet)										
10,000 to 50,000	61	1,635	59.1	24.6	25.3	54.7	100.6	8.9	.32	5.45
50,001 to 200,000	295	6,403	54.7	22.1	13.3	31.7	88.0	28.2	.24	4.40
Over 200,000	1,550	27,687	29.7	7.2	.5	5.8	31.4	121.7	.13	4.40
Principal Building Activity										
Education	6	1,894	26.9	10.1	10.4	13.7	159.5	10.0	.14	5.27
Health Care	580	23,192	49.6	29.2	7.0	103.8	134.9	91.6	.20	3.95
Laboratory	56	6,960	24.2	11.5	3.1	27.4	87.3	39.4	.14	5.66
Lodging	34	3,730	16.5	34.7	20.6	48.6	71.0	19.6	.09	5.26
Mercantile and Service	615	22,767	99.9	12.6	3.9	18.0	36.0	114.6	.50	5.03
Office	579	10,339	18.0	4.0	1.1	16.0	41.3	41.9	.07	4.06
All Others	37	3,374	9.2	2.8	6.3	41.4	100.6	17.3	.05	5.14
Year Constructed										
1959 or Before	919	14,580	37.4	6.2	4.1	40.3	103.8	60.8	.16	4.17
1960 to 1969	157	6,533	12.1	5.1	2.3	14.2	38.4	27.3	.05	4.17
1970 to 1979	100	3,865	7.8	3.0	3.5	17.2	41.7	18.5	.04	4.79
1980 to 1989	694	38,580	126.0	44.5	4.8	24.1	53.4	183.0	.60	4.74
1990 to 1993	35	4,411	13.2	9.1	5.0	40.9	76.4	23.0	.07	5.22
Federal Agency										
Department of Defense	434	48,224	34.8	10.6	10.4	20.6	48.5	180.6	.13	3.75
General Services Administration	178	4,458	7.2	1.6	.4	10.9	31.3	20.6	.03	4.62
United States Postal Service	629	17,962	87.4	12.4	4.5	19.9	36.0	90.7	.44	5.05
Veterans Administration	573	18,497	56.8	34.6	6.6	103.8	132.3	73.8	.23	3.99
All Others	91	3,797	21.7	7.7	13.2	58.3	96.8	22.1	.13	5.83
Energy Sources (more than one may apply)										
Electricity	1,887	13,671	32.6	8.2	4.5	22.3	65.5	60.6	.14	4.43
Natural Gas	1,906	13,709	32.5	8.2	4.5	23.0	65.5	60.7	.14	4.43
Fuel Oil	955	18,722	27.6	11.0	3.9	20.1	103.8	73.4	.11	3.92
District Heat	411	10,548	11.7	2.3	.3	1.8	6.3	41.6	.05	3.94
District Chilled Water	372	74,370	30.0	8.6	.3	.5	53.5	275.1	.11	3.70
Propane	3	3,118	6.0	6.2	6.0	6.0	6.0	3.2	.01	1.03
Any Other	19	4,837	6.4	2.5	3.4	13.0	27.4	26.0	.03	5.37
Energy End Uses (more than one may apply)										
Heating	1,906	13,709	32.5	8.2	4.5	23.0	65.5	60.7	.14	4.43
Air Conditioning	1,884	13,755	32.5	8.2	4.5	21.6	61.9	60.9	.14	4.43
Water Heating	1,901	13,874	32.5	8.3	4.5	21.6	65.5	61.5	.14	4.43
Cooking	1,583	25,531	32.3	7.7	.6	10.4	48.6	113.4	.14	4.44
Manufacturing	564	20,147	26.6	6.3	3.8	11.5	26.3	84.9	.11	4.21
Workers (main shift)										
Less than 50	59	2,583	68.1	120.0	20.6	61.9	103.8	12.5	.33	4.85
50 to 99	51	3,634	78.7	55.8	19.9	51.6	85.3	9.9	.21	2.73
100 to 499	347	7,538	61.1	28.7	9.1	29.5	99.1	35.5	.29	4.71
500 or More	1,449	25,866	28.1	6.6	.5	5.9	32.8	114.0	.12	4.41
Weekly Operating Hours										
48 or Fewer	39	2,963	12.9	6.8	6.3	21.6	99.1	15.8	.07	5.33
49 to 60	73	2,616	6.3	2.1	2.2	13.0	39.0	14.1	.03	5.41
61 to 167	127	4,544	17.7	7.8	2.3	20.0	40.1	14.8	.06	3.25
Open Continuously	1,667	23,808	45.2	9.5	6.3	38.4	103.8	106.1	.20	4.46

See footnotes at end of table.

**Table 3.49. Natural Gas Consumption and Expenditure Intensities in
FBSS Buildings in Federal Region 3, 1993 (Continued)**

Building Characteristics	Natural Gas Consumption							Natural Gas Expenditures		
	Total (million cubic feet)	per Building (thousand cubic feet)	per Square Foot (cubic feet)	per Worker (thousand cubic feet)	Distribution of Building-Level Intensities (cubic feet/square foot)			per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
					25th Percentile	Median	75th Percentile			
Multibuilding Facility										
Yes	761	10,431	31.5	9.0	10.4	41.7	103.8	46.4	0.14	4.45
No	1,144	17,335	33.1	7.8	.9	13.0	36.0	76.6	.15	4.42
Space-Heating Energy Source										
Natural Gas	1,480	15,421	66.9	29.6	15.5	40.8	103.1	70.4	.31	4.57
Natural Gas Main	1,456	16,172	72.4	32.5	16.9	41.0	103.8	73.7	.33	4.56
Natural Gas Secondary	25	4,154	12.3	4.7	6.3	23.8	41.7	21.0	.06	5.05
Other Excluding Natural Gas	425	9,887	11.6	2.3	.3	1.8	7.1	39.1	.05	3.96
Building Not Heated	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Cooling Energy Source										
Natural Gas	1	563	25.3	6.3	25.3	25.3	25.3	4.4	.20	7.76
Other Excluding Natural Gas	1,884	13,852	32.5	8.2	4.2	21.3	64.6	61.3	.14	4.43
A/C Not Performed	21	10,538	28.2	11.7	26.4	48.7	71.0	48.6	.13	4.61
Water-Heating Energy Source										
Natural Gas	1,428	18,310	78.9	29.2	20.0	44.1	103.8	82.7	.36	4.51
Other Excluding Natural Gas	472	8,008	11.7	2.6	.5	5.3	19.2	33.4	.05	4.17
Water Heating Not Performed	5	2,434	42.9	3.7	40.3	51.1	61.9	12.2	.21	5.01
Cooking Energy Source										
Natural Gas	1,393	30,286	35.6	7.7	.6	6.8	53.5	138.2	.16	4.56
Other Excluding Natural Gas	190	11,860	19.0	7.4	.5	22.3	46.4	42.0	.07	3.54
Cooking Not Performed	323	4,190	33.6	12.7	10.4	35.1	81.2	18.4	.15	4.38
Manufacturing Energy Source										
Natural Gas	47	9,346	8.8	3.6	3.8	12.7	12.8	51.6	.05	5.52
Other Excluding Natural Gas	517	22,495	32.5	6.8	3.9	10.3	26.4	92.1	.13	4.09
Manufacturing Not Performed	1,341	12,085	35.8	9.4	4.8	33.0	81.2	54.7	.16	4.52
Percent of Floorspace Heated										
Not Heated	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
1 to 50	16	3,292	3.7	2.5	.5	31.4	41.4	16.4	.02	4.98
51 to 100	1,889	14,098	34.8	8.4	4.5	22.3	65.5	62.4	.15	4.43
Heating Equipment (more than one may apply)										
Heat Pumps	33	2,722	6.1	2.2	1.6	17.8	46.8	14.6	.03	5.36
Furnaces	33	4,681	92.7	56.0	16.8	39.7	100.6	6.6	.13	1.41
Individual Space Heaters	1,127	32,207	54.0	18.1	3.9	26.4	88.0	145.2	.24	4.51
District Heat	725	12,952	18.5	4.0	.7	6.8	86.3	52.3	.07	4.04
Boilers	1,076	15,587	60.0	24.0	12.7	26.4	57.9	73.7	.28	4.73
Packaged-Heating Units	638	39,857	158.8	50.0	2.5	19.9	78.1	205.3	.82	5.15
Retrofit or Purchase of any Equipment Within Last Ten Years (more than one may apply)										
Retrofit and/or Purchase	1,784	16,076	34.4	8.3	3.5	20.1	61.9	70.8	.15	4.40
Retrofit	695	15,794	27.1	9.0	2.2	13.5	42.0	65.6	.11	4.15
Purchase	1,667	18,732	40.8	9.1	4.8	26.0	77.3	82.4	.18	4.40
No Retrofit or Purchase	121	4,327	17.8	7.8	11.0	35.6	95.0	21.1	.09	4.87
HVAC Conservation Features (more than one may apply)										
VAV System	1,094	22,331	48.0	10.7	3.2	12.7	42.0	105.8	.23	4.74
Economizer Cycle	1,531	19,634	38.3	8.2	3.4	14.2	47.0	88.1	.17	4.49
HVAC Maintenance	1,888	13,988	32.3	8.2	4.5	23.0	61.9	62.0	.14	4.43

See footnotes at end of table.

Table 3.49. Natural Gas Consumption and Expenditure Intensities in FBSS Buildings in Federal Region 3, 1993 (Continued)

Building Characteristics	Natural Gas Consumption							Natural Gas Expenditures		
	Total (million cubic feet)	per Building (thousand cubic feet)	per Square Foot (cubic feet)	per Worker (thousand cubic feet)	Distribution of Building-Level Intensities (cubic feet/square foot)			per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
					25th Percentile	Median	75th Percentile			
Energy Management Practices (more than one may apply)										
Energy Management and Control System	1,638	24,081	36.5	8.5	3.2	18.6	89.6	107.6	0.16	4.47
Energy Conservation Programs ¹	1,331	27,171	34.9	8.4	1.2	13.7	41.7	122.3	.16	4.50
Energy Audit	566	14,152	27.5	9.7	5.8	34.0	66.9	58.4	.11	4.13
HVAC Maintenance Staff ²	900	17,312	27.8	5.5	1.9	13.0	47.7	70.2	.11	4.06
Off-Hours Reduction in Equipment (more than one may apply)										
Heating	192	3,496	9.2	3.6	1.8	13.3	41.7	16.3	.04	4.66
Cooling	191	3,480	9.3	3.6	1.8	16.9	41.7	16.2	.04	4.66
Hot Water	111	3,181	8.0	3.0	1.1	7.1	26.4	14.5	.04	4.55
Lighting	223	3,772	10.6	4.2	1.7	18.0	40.2	15.6	.04	4.13
Natural Gas Transported for the Account of Others										
Used in Building	138	12,502	32.2	20.9	4.5	19.9	81.2	47.7	.12	3.82
Not Used in Building	1,748	14,095	33.2	8.0	4.0	25.7	67.8	63.0	.15	4.47
Don't Know/										
Not Ascertained	20	5,066	11.5	3.2	5.1	9.3	23.9	26.9	.06	5.30

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

² 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.

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. • 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 3.50. Natural Gas Consumption and Expenditure Intensities in
FBSS Buildings in Federal Region 6, 1993**

Building Characteristics	Natural Gas Consumption							Natural Gas Expenditures		
	Total (million cubic feet)	per Building (thousand cubic feet)	per Square Foot (cubic feet)	per Worker (thousand cubic feet)	Distribution of Building-Level Intensities (cubic feet/square foot)			per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
					25th Percentile	Median	75th Percentile			
All Buildings	970	5,775	39.1	17.2	7.8	28.1	67.9	19.6	0.13	3.39
Building Floorspace (square feet)										
10,000 to 50,000	145	1,887	78.6	34.0	16.2	38.4	80.4	6.3	.26	3.33
50,001 to 200,000	343	6,017	56.4	30.2	7.6	28.0	59.4	19.6	.18	3.27
Over 200,000	482	14,172	28.5	11.8	2.9	9.9	23.7	49.6	.10	3.50
Principal Building Activity										
Education	7	1,826	55.1	34.9	38.1	74.3	76.6	7.9	.24	4.35
Health Care	615	24,619	64.4	35.7	47.7	68.0	111.1	79.0	.21	3.21
Laboratory	56	4,014	38.3	38.7	5.8	53.6	101.7	13.8	.13	3.44
Lodging	32	2,928	48.4	86.8	19.0	54.7	105.4	8.4	.14	2.86
Mercantile and Service	28	727	6.6	2.2	2.2	8.4	27.1	3.6	.03	4.96
Office	154	2,851	20.3	7.1	7.6	20.8	39.8	10.9	.08	3.81
All Others	77	3,649	67.4	34.7	14.2	42.9	96.4	12.8	.24	3.50
Year Constructed										
1959 or Before	437	6,937	51.9	26.8	11.8	37.2	74.5	21.6	.16	3.11
1960 to 1969	126	4,184	25.7	6.7	3.3	16.0	44.1	16.8	.10	4.01
1970 to 1979	174	6,707	36.0	17.8	8.5	24.1	65.9	23.9	.13	3.56
1980 to 1989	191	4,670	51.9	23.4	6.3	31.0	76.7	16.0	.18	3.42
1990 to 1993	42	5,212	14.0	12.7	2.8	15.2	61.0	18.4	.05	3.54
Federal Agency										
Department of Defense	143	7,943	100.9	55.7	26.0	68.1	117.8	26.1	.33	3.29
General Services Administration ..	91	3,131	14.4	4.8	4.6	16.3	23.7	12.7	.06	4.06
United States Postal Service	32	660	6.4	2.3	1.5	6.4	25.7	3.5	.03	5.28
Veterans Administration	485	20,207	55.6	31.8	38.7	67.3	101.6	62.7	.17	3.10
All Others	219	4,563	64.9	39.9	28.5	60.2	102.2	16.2	.23	3.54
Energy Sources (more than one may apply)										
Electricity	970	5,775	39.1	17.2	7.8	28.1	67.9	19.6	.13	3.39
Natural Gas	970	5,775	39.1	17.2	7.8	28.1	67.9	19.6	.13	3.39
Fuel Oil	150	12,474	40.8	13.0	6.5	24.5	55.4	44.7	.15	3.58
District Heat	90	6,020	16.9	9.9	5.7	11.2	47.7	21.1	.06	3.51
District Chilled Water	92	7,071	17.7	9.4	5.8	16.3	44.1	24.5	.06	3.46
Propane	28	27,978	207.2	68.6	207.2	207.2	207.2	96.5	.71	3.45
Any Other	123	30,715	105.7	42.7	28.7	169.4	292.7	106.2	.37	3.46
Energy End Uses (more than one may apply)										
Heating	970	5,775	39.1	17.2	7.8	28.1	67.9	19.6	.13	3.39
Air Conditioning	970	5,775	39.1	17.2	7.8	28.1	67.9	19.6	.13	3.39
Water Heating	969	5,839	39.1	17.2	7.6	28.4	68.0	19.8	.13	3.39
Cooking	614	12,793	38.9	16.2	9.6	29.5	75.8	45.8	.14	3.58
Manufacturing	70	3,198	16.3	5.2	2.2	8.4	17.5	11.7	.06	3.65
Workers (main shift)										
Less than 50	90	1,962	58.0	94.6	16.3	33.3	86.6	6.5	.19	3.32
50 to 99	70	2,012	40.4	27.4	3.5	29.3	65.9	7.7	.15	3.81
100 to 499	325	5,799	56.4	29.4	5.8	31.1	65.2	18.1	.18	3.13
500 or More	485	15,636	30.7	11.6	5.4	12.3	44.1	55.0	.11	3.52
Weekly Operating Hours										
48 or Fewer	78	2,615	51.0	28.7	26.2	41.3	86.6	9.3	.18	3.54
49 to 60	85	3,259	22.2	9.3	5.6	19.8	37.2	11.7	.08	3.60
61 to 167	110	2,030	23.2	10.0	6.3	18.9	42.4	8.3	.10	4.10
Open Continuously	697	12,022	47.3	20.8	5.8	43.4	86.6	38.9	.15	3.24

See footnotes at end of table.

Table 3.50. Natural Gas Consumption and Expenditure Intensities in FBSS Buildings in Federal Region 6, 1993 (Continued)

Building Characteristics	Natural Gas Consumption							Natural Gas Expenditures		
	Total (million cubic feet)	per Building (thousand cubic feet)	per Square Foot (cubic feet)	per Worker (thousand cubic feet)	Distribution of Building-Level Intensities (cubic feet/square foot)			per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
					25th Percentile	Median	75th Percentile			
Multibuilding Facility										
Yes	655	7,446	42.0	18.9	11.4	51.2	94.0	23.9	0.13	3.21
No	315	3,936	34.2	14.5	5.4	18.9	37.0	14.9	.13	3.77
Space-Heating Energy Source										
Natural Gas	891	5,822	45.0	18.3	8.5	30.1	72.2	19.7	.15	3.38
Natural Gas Main	881	6,116	48.9	20.0	9.9	31.5	74.4	20.6	.16	3.36
Natural Gas Secondary	10	1,103	5.6	2.2	1.5	8.6	10.4	5.2	.03	4.71
Other Excluding Natural Gas	79	5,295	15.8	10.1	3.3	11.2	57.7	18.7	.06	3.53
Building Not Heated	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Cooling Energy Source										
Natural Gas	(*)	147	3.1	2.0	3.1	3.1	3.1	.8	.02	5.64
Other Excluding Natural Gas	970	5,808	39.1	17.2	8.4	28.2	68.0	19.7	.13	3.39
A/C Not Performed	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Water-Heating Energy Source										
Natural Gas	817	6,539	52.2	20.8	12.3	38.4	76.4	22.0	.18	3.37
Other Excluding Natural Gas	152	3,706	16.6	8.9	3.5	8.5	25.8	12.9	.06	3.49
Water Heating Not Performed	1	399	20.2	36.3	14.2	20.1	26.0	3.7	.19	9.29
Cooking Energy Source										
Natural Gas	538	17,343	48.9	23.2	11.2	47.7	101.4	60.6	.17	3.50
Other Excluding Natural Gas	76	4,496	15.9	5.2	8.5	16.3	40.1	18.8	.07	4.18
Cooking Not Performed	356	2,967	39.5	19.2	6.0	27.6	67.5	9.1	.12	3.06
Manufacturing Energy Source										
Natural Gas	7	6,927	187.5	164.9	187.5	187.5	187.5	22.2	.60	3.20
Other Excluding Natural Gas	63	3,020	14.8	4.7	2.2	7.5	16.3	11.2	.05	3.70
Manufacturing Not Performed	900	6,163	43.9	21.0	9.4	31.2	71.0	20.8	.15	3.37
Percent of Floorspace Heated										
Not Heated	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
1 to 50	23	2,923	26.0	11.3	4.7	19.8	84.1	11.8	.11	4.04
51 to 100	947	5,917	39.6	17.4	8.4	28.4	67.9	20.0	.13	3.37
Heating Equipment (more than one may apply)										
Heat Pumps	32	5,290	36.7	10.3	3.4	31.1	59.4	16.7	.12	3.15
Furnaces	51	3,402	68.6	39.3	4.7	37.5	128.2	10.2	.21	2.99
Individual Space Heaters	160	6,650	39.5	11.4	9.4	16.1	55.7	24.1	.14	3.62
District Heat	283	9,771	39.9	21.7	15.1	54.7	74.3	27.2	.11	2.79
Boilers	623	6,424	38.7	15.8	8.4	27.1	61.7	23.4	.14	3.65
Packaged-Heating Units	327	7,119	58.1	23.8	6.3	16.8	71.0	25.4	.21	3.57
Retrofit or Purchase of any Equipment Within Last Ten Years (more than one may apply)										
Retrofit and/or Purchase	805	6,655	37.8	16.0	7.5	25.7	65.8	22.5	.13	3.38
Retrofit	297	6,598	25.9	11.4	12.4	26.0	72.2	25.1	.10	3.81
Purchase	701	6,944	41.6	16.0	5.6	22.2	58.8	23.1	.14	3.32
No Retrofit or Purchase	165	3,508	46.4	27.0	10.4	31.0	83.5	12.0	.16	3.42
HVAC Conservation Features (more than one may apply)										
VAV System	484	10,084	34.5	16.3	5.6	19.6	69.7	35.4	.12	3.52
Economizer Cycle	681	7,828	39.9	17.1	11.8	31.0	59.4	28.3	.14	3.61
HVAC Maintenance	960	5,963	39.3	17.3	7.6	28.2	71.0	20.2	.13	3.38

See footnotes at end of table.

Table 3.50. Natural Gas Consumption and Expenditure Intensities in FBSS Buildings in Federal Region 6, 1993 (Continued)

Building Characteristics	Natural Gas Consumption							Natural Gas Expenditures		
	Total (million cubic feet)	per Building (thousand cubic feet)	per Square Foot (cubic feet)	per Worker (thousand cubic feet)	Distribution of Building-Level Intensities (cubic feet/square foot)			per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
					25th Percentile	Median	75th Percentile			
Energy Management Practices (more than one may apply)										
Energy Management and Control System	686	10,549	39.9	18.8	4.6	19.0	65.8	34.7	0.13	3.29
Energy Conservation Programs ¹	388	11,405	34.4	13.4	8.4	22.5	57.7	37.4	.11	3.28
Energy Audit	272	4,945	25.5	8.9	5.7	15.6	49.9	18.6	.10	3.77
HVAC Maintenance Staff ²	340	7,552	28.5	13.7	3.5	11.8	31.8	27.2	.10	3.60
Off-Hours Reduction in Equipment (more than one may apply)										
Heating	191	2,171	22.4	9.1	5.9	19.5	38.3	8.3	.09	3.81
Cooling	191	2,194	22.4	9.1	5.7	19.8	38.4	8.4	.09	3.81
Hot Water	39	1,768	13.4	6.2	8.4	18.2	31.0	7.9	.06	4.45
Lighting	220	2,591	25.8	10.4	5.7	18.5	40.1	9.5	.09	3.67
Natural Gas Transported for the Account of Others										
Used in Building	66	13,266	105.1	29.7	57.7	157.4	187.5	40.2	.32	3.03
Not Used in Building	826	5,901	37.2	15.9	5.9	25.8	59.3	20.1	.13	3.41
Don't Know/Not Ascertained	78	3,377	38.9	34.9	10.8	52.6	101.7	11.9	.14	3.52

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

² HVAC maintenance staff means at least one person spends at least half their working hours maintaining the heating/cooling equipment.

(*) = Value rounds to zero in the units displayed.

NC = No cases in responding sample.

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. • 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 3.51. Natural Gas Consumption and Expenditure Intensities in
FBSS Buildings in Federal Region 9, 1993**

Building Characteristics	Natural Gas Consumption							Natural Gas Expenditures		
	Total (million cubic feet)	per Building (thousand cubic feet)	per Square Foot (cubic feet)	per Worker (thousand cubic feet)	Distribution of Building-Level Intensities (cubic feet/square foot)			per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
					25th Percentile	Median	75th Percentile			
All Buildings	1,047	4,655	30.2	14.0	11.4	26.6	57.2	20.6	0.13	4.42
Building Floorspace (square feet)										
10,000 to 50,000	109	1,177	47.5	18.4	12.5	31.6	82.9	5.9	.24	4.97
50,001 to 200,000	409	4,705	44.4	21.3	16.7	30.4	51.8	21.8	.21	4.64
Over 200,000	529	11,747	22.8	10.6	5.9	12.0	24.4	48.6	.09	4.14
Principal Building Activity										
Education	18	2,573	66.3	67.0	30.4	52.3	63.1	8.3	.21	3.22
Health Care	399	15,353	58.4	26.9	19.8	57.2	111.6	65.6	.25	4.27
Laboratory	96	3,306	37.6	25.3	29.2	42.4	67.9	16.4	.19	4.95
Lodging	23	2,519	43.6	87.2	24.4	54.5	69.6	12.0	.21	4.77
Mercantile and Service	54	1,156	8.2	3.3	6.0	11.2	18.0	6.9	.05	5.94
Office	298	4,197	20.4	8.8	7.1	20.4	39.5	17.5	.09	4.17
All Others	159	4,425	48.0	29.3	20.7	48.7	96.5	19.9	.22	4.50
Year Constructed										
1959 or Before	382	4,897	41.7	24.0	20.0	38.4	60.8	18.3	.16	3.74
1960 to 1969	272	5,672	33.2	14.1	13.0	28.9	53.9	25.3	.15	4.46
1970 to 1979	217	4,812	22.0	9.9	7.5	16.1	30.0	25.7	.12	5.34
1980 to 1989	155	3,693	26.0	10.7	8.6	21.4	69.9	16.0	.11	4.34
1990 to 1993	22	1,796	14.1	6.9	4.5	10.9	43.3	13.2	.10	7.35
Federal Agency										
Department of Defense	162	4,371	34.0	20.4	18.5	40.2	62.0	18.6	.14	4.25
General Services Administration	224	5,884	18.3	8.0	6.6	16.6	26.5	23.1	.07	3.93
United States Postal Service	58	1,088	8.2	3.3	5.2	9.2	16.1	6.5	.05	5.98
Veterans Administration	344	11,861	64.0	28.8	19.1	57.2	111.6	50.2	.27	4.23
All Others	260	3,830	49.5	26.9	26.7	45.2	80.4	18.6	.24	4.86
Energy Sources (more than one may apply)										
Electricity	1,047	4,655	30.2	14.0	11.4	26.6	57.2	20.6	.13	4.42
Natural Gas	1,047	4,655	30.2	14.0	11.4	26.6	57.2	20.6	.13	4.42
Fuel Oil	496	12,409	47.1	23.1	24.0	43.8	98.3	54.3	.21	4.37
District Heat	238	8,814	35.7	18.3	9.7	22.8	83.2	37.8	.15	4.29
District Chilled Water	146	18,262	38.2	20.3	12.9	41.8	157.0	70.9	.15	3.88
Propane	72	71,563	95.2	47.7	95.2	95.2	95.2	392.3	.52	5.48
Any Other	72	24,129	42.7	21.3	11.4	121.6	161.0	83.8	.15	3.47
Energy End Uses (more than one may apply)										
Heating	1,044	4,683	30.7	14.4	11.6	26.7	57.3	20.7	.14	4.42
Air Conditioning	1,012	4,844	30.2	13.8	11.2	26.3	54.2	21.1	.13	4.36
Water Heating	1,044	4,683	30.4	14.0	11.4	26.7	57.3	20.6	.13	4.40
Cooking	465	9,126	29.4	12.5	11.4	29.6	83.2	42.5	.14	4.66
Manufacturing	95	4,531	17.5	7.9	7.6	9.7	22.6	18.5	.07	4.08
Workers (main shift)										
Less than 50	77	1,408	38.2	69.8	14.3	48.2	83.6	7.7	.21	5.45
50 to 99	72	1,997	45.7	26.4	13.3	27.9	42.2	7.9	.18	3.98
100 to 499	436	4,637	39.9	23.0	12.5	26.6	51.8	21.6	.19	4.66
500 or More	462	11,556	22.9	8.9	4.8	14.1	31.0	47.3	.09	4.09
Weekly Operating Hours										
48 or Fewer	149	3,465	49.6	34.9	20.0	32.8	82.9	14.1	.20	4.07
49 to 60	260	4,640	20.5	8.6	7.2	17.3	38.3	18.3	.08	3.95
61 to 167	149	2,608	27.9	15.3	9.3	18.5	42.4	12.4	.13	4.76
Open Continuously	490	7,100	35.8	16.0	17.7	39.0	83.6	33.2	.17	4.67

See footnotes at end of table.

**Table 3.51. Natural Gas Consumption and Expenditure Intensities in
FBSS Buildings in Federal Region 9, 1993 (Continued)**

Building Characteristics	Natural Gas Consumption							Natural Gas Expenditures		
	Total (million cubic feet)	per Building (thousand cubic feet)	per Square Foot (cubic feet)	per Worker (thousand cubic feet)	Distribution of Building-Level Intensities (cubic feet/square foot)			per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
					25th Percentile	Median	75th Percentile			
Multibuilding Facility										
Yes	720	6,053	38.1	17.6	19.8	40.9	69.6	27.4	0.17	4.52
No	327	3,086	20.7	9.7	7.1	16.8	30.0	13.0	.09	4.20
Space-Heating Energy Source										
Natural Gas	904	4,611	31.3	14.4	13.2	28.9	60.4	20.4	.14	4.43
Natural Gas Main	836	4,521	30.8	14.5	14.3	28.6	59.3	20.1	.14	4.45
Natural Gas Secondary	67	6,131	40.6	14.0	5.2	31.0	60.8	25.3	.17	4.13
Other Excluding Natural Gas	141	5,205	26.9	14.0	7.2	12.4	32.8	22.6	.12	4.34
Building Not Heated	3	1,558	4.7	1.5	2.0	4.6	7.1	9.1	.03	5.87
Cooling Energy Source										
Natural Gas	2	309	9.6	3.2	5.2	11.2	15.7	2.3	.07	7.51
Other Excluding Natural Gas	1,011	4,978	30.3	13.9	11.4	26.6	57.2	21.7	.13	4.36
A/C Not Performed	35	2,189	30.7	20.4	21.4	53.4	61.8	13.3	.19	6.07
Water-Heating Energy Source										
Natural Gas	813	4,566	30.0	13.9	15.7	30.0	60.8	20.5	.13	4.48
Other Excluding Natural Gas	231	5,144	31.7	14.5	6.9	12.9	39.5	21.2	.13	4.13
Water Heating Not Performed	3	1,572	9.7	9.1	9.0	14.6	20.2	15.6	.10	9.94
Cooking Energy Source										
Natural Gas	329	9,690	33.4	13.0	7.1	26.3	67.8	45.8	.16	4.73
Other Excluding Natural Gas	136	7,997	22.8	11.4	12.2	30.8	83.2	35.8	.10	4.48
Cooking Not Performed	582	3,345	30.8	15.5	11.4	26.5	52.3	14.1	.13	4.23
Manufacturing Energy Source										
Natural Gas	27	3,355	14.6	7.0	8.0	10.8	20.4	16.1	.07	4.81
Other Excluding Natural Gas	68	5,256	19.0	8.4	7.1	9.3	46.7	20.0	.07	3.80
Manufacturing Not Performed	952	4,668	32.5	15.2	12.5	28.4	57.6	20.8	.14	4.45
Percent of Floorspace Heated										
Not Heated	3	1,558	4.7	1.5	2.0	4.6	7.1	9.1	.03	5.87
1 to 50	76	6,321	46.1	73.9	5.7	35.3	57.9	25.3	.18	4.00
51 to 100	968	4,590	29.9	13.5	11.6	26.6	57.3	20.4	.13	4.45
Heating Equipment (more than one may apply)										
Heat Pumps	76	2,613	29.6	12.4	7.2	36.2	49.1	10.8	.12	4.12
Furnaces	22	1,018	19.3	8.4	8.6	18.2	49.1	6.0	.11	5.94
Individual Space Heaters	132	5,753	28.9	12.7	9.2	30.4	67.8	24.7	.12	4.30
District Heat	257	7,550	34.7	18.5	12.0	31.2	101.3	32.4	.15	4.29
Boilers	617	4,639	26.5	11.6	14.1	27.0	51.8	22.6	.13	4.87
Packaged-Heating Units	264	4,549	47.6	22.5	12.9	26.6	63.1	16.3	.17	3.58
Retrofit or Purchase of any Equipment Within Last Ten Years (more than one may apply)										
Retrofit and/or Purchase	876	5,409	29.4	13.4	11.2	27.6	57.2	24.2	.13	4.47
Retrofit	643	8,464	33.2	14.5	15.9	31.5	70.0	35.5	.14	4.19
Purchase	495	4,340	29.9	13.6	9.6	26.4	54.2	21.4	.15	4.94
No Retrofit or Purchase	171	2,717	34.8	18.4	12.0	26.5	60.8	11.3	.14	4.16
HVAC Conservation Features (more than one may apply)										
VAV System	390	6,614	29.8	13.9	11.2	22.5	50.9	29.8	.13	4.51
Economizer Cycle	674	5,911	29.6	13.5	9.7	22.0	51.8	24.9	.12	4.21
HVAC Maintenance	1,028	4,780	30.1	13.9	11.2	26.5	57.1	21.1	.13	4.40

See footnotes at end of table.

Table 3.51. Natural Gas Consumption and Expenditure Intensities in FBSS Buildings in Federal Region 9, 1993 (Continued)

Building Characteristics	Natural Gas Consumption							Natural Gas Expenditures		
	Total (million cubic feet)	per Building (thousand cubic feet)	per Square Foot (cubic feet)	per Worker (thousand cubic feet)	Distribution of Building-Level Intensities (cubic feet/square foot)			per Building (thousand dollars)	per Square Foot (dollars)	per Thousand Cubic Feet (dollars)
					25th Percentile	Median	75th Percentile			
Energy Management Practices (more than one may apply)										
Energy Management and Control System	360	6,319	24.9	10.9	8.2	24.4	59.3	29.1	0.11	4.61
Energy Conservation Programs ¹	655	6,684	29.9	13.3	11.6	26.6	57.3	28.2	.13	4.22
Energy Audit	344	5,139	25.8	11.0	9.7	22.6	58.2	23.9	.12	4.65
HVAC Maintenance Staff ²	371	9,509	29.5	12.3	6.5	21.5	57.3	41.1	.13	4.33
Off-Hours Reduction in Equipment (more than one may apply)										
Heating	453	3,571	24.6	11.5	9.6	20.9	39.7	15.0	.10	4.19
Cooling	432	3,515	24.6	11.5	9.2	20.0	39.3	14.5	.10	4.11
Hot Water	270	4,580	20.7	9.2	9.6	20.9	30.8	17.9	.08	3.91
Lighting	511	3,902	26.8	12.5	10.5	22.5	47.6	16.1	.11	4.14
Natural Gas Transported for the Account of Others										
Used in Building	223	9,286	42.8	17.4	12.9	42.8	57.3	39.1	.18	4.21
Not Used in Building	736	4,231	27.5	13.2	10.6	22.9	51.8	18.7	.12	4.43
Don't Know/										
Not Ascertained	85	3,397	32.3	13.7	20.2	37.6	69.9	16.4	.16	4.82

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

² 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.

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. • 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.