

**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			
<b>All Buildings</b> .....	<b>1,906</b>	<b>13,709</b>	<b>32.5</b>	<b>8.2</b>	<b>4.5</b>	<b>23.0</b>	<b>65.5</b>	<b>60.7</b>	<b>0.14</b>	<b>4.43</b>
<b>Building Floorspace (square feet)</b>										
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
<b>Principal Building Activity</b>										
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
<b>Year Constructed</b>										
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
<b>Federal Agency</b>										
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
<b>Energy Sources (more than one may apply)</b>										
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
<b>Energy End Uses (more than one may apply)</b>										
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
<b>Workers (main shift)</b>										
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
<b>Weekly Operating Hours</b>										
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 <sup>1</sup> .....	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 <sup>2</sup> .....	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

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

<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.

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			
<b>All Buildings</b> .....	<b>970</b>	<b>5,775</b>	<b>39.1</b>	<b>17.2</b>	<b>7.8</b>	<b>28.1</b>	<b>67.9</b>	<b>19.6</b>	<b>0.13</b>	<b>3.39</b>
<b>Building Floorspace (square feet)</b>										
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
<b>Principal Building Activity</b>										
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
<b>Year Constructed</b>										
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
<b>Federal Agency</b>										
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
<b>Energy Sources (more than one may apply)</b>										
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
<b>Energy End Uses (more than one may apply)</b>										
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
<b>Workers (main shift)</b>										
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
<b>Weekly Operating Hours</b>										
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 <sup>1</sup> .....	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 <sup>2</sup> .....	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

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

<sup>2</sup> 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			
<b>All Buildings</b> .....	<b>1,047</b>	<b>4,655</b>	<b>30.2</b>	<b>14.0</b>	<b>11.4</b>	<b>26.6</b>	<b>57.2</b>	<b>20.6</b>	<b>0.13</b>	<b>4.42</b>
<b>Building Floorspace (square feet)</b>										
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
<b>Principal Building Activity</b>										
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
<b>Year Constructed</b>										
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
<b>Federal Agency</b>										
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
<b>Energy Sources (more than one may apply)</b>										
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
<b>Energy End Uses (more than one may apply)</b>										
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
<b>Workers (main shift)</b>										
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
<b>Weekly Operating Hours</b>										
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 <sup>1</sup> .....	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 <sup>2</sup> .....	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

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

<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.

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.