Table C24. Fuel Oil Expenditures by Census Region, 1999

| | | | | | Fuel Oil Expenditures (dollars) | | | | | | | | |
|---------------------------------------|----------------|----------------------|-------------------|---------|---------------------------------|--------------|--------------|--------------|-----------------|--------------|--------------|--------------|--|
| | Total | Fuel Oil (million | Expendit dollars) | ures | per Gallon | | | | per Square Foot | | | | |
| | North- east | Mid- west | South | West | North- east | Mid- west | South | West | North- east | Mid- west | South | West | |
| All Buildings | 704 | 27 | 180 | 45 | 0.71 | 0.79 | 0.86 | 0.80 | 0.13 | 0.01 | 0.05 | 0.03 | |
| Building Floorspace | | | | | | | | | | | | | |
| (Square Feet) | | | | | | | | | | | | | |
| 1,001 to 10,000 | | Q | 75 | Q | 0.86 | Q | 0.98 | Q | 0.28 | Q | 0.20 | Q | |
| 10,001 to 100,000 | 313 | Q | Q | Q | 0.73 | 0.76 | 0.74 | 0.75 | 0.18 | Q | 0.05 | Q | |
| Over 100,000 | 196 | 12 | 56 | Q | 0.59 | 0.75 | 0.82 | 0.72 | 0.07 | 0.01 | 0.02 | 0.01 | |
| Principal Building Activity Education | 164 | Q | Q | Q | 0.60 | Q | 0.59 | Q | 0.18 | Q | 0.09 | Q | |
| Mercantile and Service | Q | Q | Q | Q | 0.81 | Q | 0.93 | Q | 0.15 | Q | 0.09 Q | Q | |
| Office | 113 | 3 | 47 | Q | 0.74 | 0.94 | 0.93 | 0.88 | 0.13 | 0.00 | 0.04 | 0.01 | |
| Public Assembly | Q Q | Q | Q | Q | 0.74 Q | 0.94 Q | 0.93 Q | 0.88 Q | 0.09 Q | 0.00 Q | 0.04 Q | 0.01 Q | |
| Warehouse and Storage | 28 | Q | Q | Q | 0.74 | Q | Q | Q | 0.06 | Q | Q | Q | |
| All Others | 182 | 9 | Q | Q | 0.72 | 0.76 | 0.83 | 0.87 | 0.15 | 0.01 | 0.04 | Q | |
| Year Constructed | | | | | | | | | | | | | |
| 1945 or Before | 228 | Q | Q | Q | 0.74 | Q | Q | Q | 0.16 | Q | Q | Q | |
| 1946 to 1959 | 130 | Q | Q | Q | 0.75 | Q | Q | Q | 0.13 | Q | Q | Q | |
| 1960 to 1969 | 143 | Q | 34 | Q | 0.72 | Q | 0.73 | Q | 0.16 | Q | 0.05 | Q | |
| 1970 to 1979 | 95 | Q | Q | 4 | Q | 0.66 | 0.71 | 0.93 | 0.11 | Q | 0.03 | 0.01 | |
| 1980 to 1989 | Q | Q | Q | Q | 0.73 | 0.80 | 0.79 | 0.82 | 0.10 | Q | Q | Q | |
| 1990 to 1999 | 34 | Q | Q | Q | 0.60 | 0.99 | 1.21 | 0.80 | 0.06 | Q | Q | Q | |
| Climate Zone: 45-Year Average | | | | | | | | | | | | | |
| Under 2,000 CDD and | | | | | | | | | | | | | |
| More than 7,000 HDD | 196 | Q | N | Q | 0.70 | 0.83 | N | Q | 0.23 | Q | N | Q | |
| 5,500-7,000 HDD | 299 | 13 | N | Q | 0.72 | 0.73 | N | 0.80 | 0.13 | 0.01 | N | Q | |
| 4,000-5,499 HDD | 209 | Q | 125 | Q | 0.71 | Q | 0.79 | 0.75 | 0.09 | Q | 0.09 | Q | |
| Fewer than 4,000 HDD | N | N | Q | 5 | N | N | 1.05 | 0.99 | N | N | Q | 0.01 | |
| 2,000 CDD or More and | | | | _ | | | | _ | | | | _ | |
| Fewer than 4,000 HDD | N | N | 13 | Q | N | N | 1.03 | Q | N | N | 0.01 | Q | |
| Workers (main shift) | | | | | | | | | | | | | |
| Less than 10 | 197 | Q | 58 | Q | 0.86 | Q | 0.99 | Q | 0.18 | Q | 0.15 | Q | |
| 10 to 99 | 339 169 | Q 13 | Q 60 | Q 14 | 0.71 0.59 | 0.73 0.76 | 0.81 0.80 | 0.61 0.87 | 0.20 0.07 | 0.02 0.01 | 0.07 0.02 | 0.03 0.01 | |
| | 103 | 13 | 00 | 14 | 0.55 | 0.70 | 0.00 | 0.07 | 0.07 | 0.01 | 0.02 | 0.01 | |
| Weekly Operating Hours | 40: | _ | ^ | _ | ^ - 7 · | _ | ٥٥. | _ | 0.4= | ^ | 0.44 | _ | |
| 48 or fewer | | Q | Q | Q | 0.74 | Q 0.70 | 0.81 | Q | 0.17 | Q | 0.11 | Q | |
| 49 to 84 85 to 168 | | Q 12 | 80 40 | Q Q | 0.74 0.65 | 0.79 0.77 | 0.91 0.83 | 0.65 0.88 | 0.13 0.11 | Q 0.01 | 0.06 0.02 | Q Q | |
| Ownership and Occupancy | | | | | | | | | | | | | |
| Nongovernment Owned | 507 | 17 | 148 | 21 | 0.75 | 0.86 | 0.94 | 0.84 | 0.13 | 0.01 | 0.05 | 0.02 | |
| Owner Occupied | | 16 | 125 | 19 | 0.74 | 0.85 | 0.93 | 0.83 | 0.13 | 0.01 | 0.05 | 0.02 | |
| Nonowner Occupied | | Q | Q | Q | Q | Q | 0.98 | Q | 0.15 | Q | Q | Q | |
| Unoccupied | Q | N | Q | N | Q | N | Q | N | Q | N | Q | N | |
| Government Owned | 198 | Q | Q | Q | 0.61 | 0.69 | 0.61 | 0.77 | 0.12 | Q | 0.04 | 0.07 | |
| Federal | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | |
| State | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | |
| Local | 169 | Q | Q | Q | 0.61 | Q | 0.58 | Q | 0.18 | Q | 0.05 | Q | |
| Vacancy Status | | | | | | | | | | | | | |
| Completely Vacant | N | N | N | N | N | N | N | N | N | N | N | N | |
| Mostly Vacant | Q | N | N | Q | Q | N | N | Q | Q | N | N | Q | |
| Partially Vacant | 106 | 2 | 15 | Q | 0.71 | 0.88 | 0.96 | 0.66 | 0.08 | 0.00 | 0.01 | Q | |
| Not At All Vacant | 594 | 25 | 165 | Q | 0.71 | 0.78 | 0.85 | 0.82 | 0.15 | 0.01 | 0.06 | 0.03 | |

Table C24. Fuel Oil Expenditures by Census Region, 1999

| | | | | | Fuel Oil Expanditures (dollars) | | | | | | | | |
|---|--|--------------|-----------|---------|---------------------------------|--------------|--------------|--------------|-----------------|--------------|--------------|-----------|--|
| | T-4- | 0:1 | | | Fuel Oil Expenditures (dollars) | | | | | | | | |
| | Total Fuel Oil Expenditures (million dollars) | | | | | per G | allon | | per Square Foot | | | | |
| | North- east | Mid- west | South | West | North- east | Mid- west | South | West | North- east | Mid- west | South | West | |
| Number of Establishments | | | | | | | | | | | | | |
| One | 522 | 23 | 143 | 39 | 0.71 | 0.78 | 0.85 | 0.80 | 0.15 | 0.01 | 0.06 | 0.04 | |
| 2 to 5 | 103 | Q | Q | Q | 0.70 | Q | 0.93 | Q | 0.14 | Q | Q | Q | |
| 6 to 10 | | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | |
| 11 to 20 | | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | |
| More than 20 | | Q | Q | 1 | 0.83 | Q | 0.84 | 0.96 | 0.03 | Q | Q | 0.00 | |
| Currently Unoccupied | Q | N | Q | N | Q | N | Q | N | Q | N | Q | N | |
| Energy Sources (more than | | | | | | | | | | | | | |
| one may apply) | 700 | 07 | 400 | 45 | 0.74 | 0.70 | 0.00 | 0.00 | 0.40 | 0.04 | 0.05 | 0.00 | |
| Electricity | | 27 | 180 | 45 | 0.71 | 0.79 | 0.86 | 0.80 | 0.13 | 0.01 | 0.05 | 0.03 | |
| Natural Gas | | 17 27 | 70 180 | Q 45 | 0.64 0.71 | 0.85 0.79 | 0.88 0.86 | 0.70 0.80 | 0.08 0.13 | 0.01 0.01 | 0.03 0.05 | 0.01 | |
| District Heat | | 27 Q | 180 Q | 45 Q | 0.71 Q | 0.79 Q | 0.86 Q | 0.80 Q | 0.13 Q | 0.01 Q | 0.05 Q | 0.03 Q | |
| District Chilled Water | | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | |
| Propane | | Q | Q | Q | 0.71 | Q | 0.90 | Q | 0.18 | Q | 0.10 | Q | |
| Other | | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | |
| Space-Heating Energy Source | | | | | | | | | | | | | |
| Fuel Oil | 694 | 19 | 163 | Q | 0.71 | 0.73 | 0.85 | 0.75 | 0.19 | 0.03 | 0.14 | 0.13 | |
| Fuel Oil Main | 621 | Q | 143 | Q | 0.70 | Q | 0.85 | Q | 0.22 | Q | 0.20 | Q | |
| Fuel Oil Secondary | 73 | 12 | 20 | Q | 0.75 | 0.80 | 0.85 | Q | 0.09 | 0.02 | 0.05 | Q | |
| Other Excluding Fuel Oil | 10 | 8 | 15 | 11 | 0.78 | 0.97 | 0.89 | 0.97 | 0.01 | 0.00 | 0.01 | 0.01 | |
| Buildings without Heating | N | N | Q | Q | N | N | Q | Q | N | N | Q | Q | |
| Primary Space-Heating | | | | | | | | | | | | | |
| Energy Source | 0 | 0 | 0 | 0 | 0.00 | 0 | 0.05 | 0.00 | 0 | 0 | 0.04 | _ | |
| Electricity Natural Gas | | Q 16 | Q 16 | Q 7 | 0.88 | Q 0.85 | 0.95 0.81 | 0.90 1.02 | Q 0.03 | Q 0.01 | 0.01 0.01 | Q 0.01 | |
| Fuel Oil | | Q | 143 | Q | 0.63 | 0.85 Q | 0.85 | 1.02 Q | 0.03 | 0.01 Q | 0.01 | 0.01 Q | |
| District Heat | | Q | 143 Q | Q | 0.70 | Q | 0.83 Q | Q | 0.00 | Q | 0.20 Q | Q | |
| Propane | | Q | Q | Q | 0.03 Q | Q | Q | Q | 0.00 Q | Q | Q | 0.26 | |
| Other | | Q | N | N | Q | Q | N | N | Q | Q | N | N | |
| Cooling Energy Source | | | | | | | | | | | | | |
| Fuel Oil | Q | Q | Q | N | Q | Q | Q | N | Q | Q | Q | N | |
| Other Excluding Fuel Oil | | 23 | 159 | Q | 0.69 | 0.78 | 0.85 | 0.88 | 0.12 | 0.01 | 0.04 | Q | |
| Buildings without Cooling | 150 | Q | Q | Q | 0.80 | Q | Q | Q | 0.19 | Q | Q | Q | |
| Water-Heating Energy Source | | | | | | | | | | | | | |
| Fuel Oil | | Q | Q | Q | 0.68 | Q | 0.73 | Q | 0.23 | Q | 0.14 | Q | |
| Other Excluding Fuel Oil Buildings without Water Heating | | 17 Q | 105 Q | 28 Q | 0.73 0.84 | 0.86 Q | 0.90 0.95 | 0.86 Q | 0.08 0.11 | 0.01 Q | 0.03 | 0.02 Q | |
| - | | • | ~ | • | 0.01 | • | 0.00 | • | J | • | 0.00 | • | |
| Cooking Energy Source | ^ | ^ | ^ | | ^ | ^ | ^ | | ^ | ^ | ^ | | |
| Fuel Oil | | Q 14 | Q Q | N | | Q 0.73 | Q 0.71 | N 0.70 | Q 0.10 | Q 0.01 | Q | N 0.02 | |
| Other Excluding Fuel Oil | | 14 12 | 104 | Q 26 | 0.65 0.76 | 0.72 0.89 | 0.71 1.00 | 0.70 | 0.10 0.17 | 0.01 0.01 | 0.03 0.08 | 0.02 | |
| Energy End Uses (more than | | | | | | | | | | | | | |
| one may apply) | | | | | | | | | | | | | |
| Buildings with Space Heating | 704 | 27 | 178 | 44 | 0.71 | 0.79 | 0.86 | 0.80 | 0.13 | 0.01 | 0.05 | 0.03 | |
| Buildings with Cooling | | 23 | 159 | Q | 0.69 | 0.78 | 0.85 | 0.88 | 0.12 | 0.01 | 0.04 | Q | |
| Buildings with Water Heating | | 26 | 152 | 42 | 0.70 | 0.77 | 0.84 | 0.78 | 0.13 | 0.01 | 0.04 | 0.03 | |
| Buildings with Cooking | | 15 | Q | Q | 0.65 | 0.72 | 0.71 | 0.70 | 0.10 | 0.01 | 0.03 | 0.02 | |
| Buildings with Manufacturing | | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | |
| Buildings with Electricity | | | | | | | | | | | | | |
| Generation | 159 | 12 | Q | Q | 0.63 | 0.83 | 0.93 | 0.88 | 0.06 | 0.01 | Q | Q | |

Table C24. Fuel Oil Expenditures by Census Region, 1999

| | | | | | Fuel Oil Expenditures (dollars) | | | | | | | | |
|------------------------------|-------------------|------------|----------|------|---------------------------------|------|-------|------|-----------------|------|-------|------|--|
| | Tota | l Fuel Oil | Expendit | ures | | | | | | | | | |
| | (million dollars) | | | | per Gallon | | | | per Square Foot | | | | |
| | North- | Mid- | | | North- | Mid- | | | North- | Mid- | | | |
| | east | west | South | West | east | west | South | West | east | west | South | West | |
| Percent of Floorspace Heated | | | | | | | | | | | | | |
| Not Heated | N | N | Q | Q | N | N | Q | Q | N | N | Q | Q | |
| 1 to 50 | . Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | Q | |
| 51 to 99 | . 69 | Q | Q | Q | 0.77 | Q | 0.96 | 0.89 | 0.09 | Q | Q | Q | |
| 100 | . 597 | 24 | 122 | Q | 0.70 | 0.75 | 0.82 | 0.77 | 0.14 | 0.01 | 0.05 | 0.04 | |
| Heating Equipment (more | | | | | | | | | | | | | |
| than one may apply) | | | | | | | | | | | | | |
| Heat Pumps | . 23 | Q | Q | Q | 0.63 | Q | 0.94 | 1.21 | 0.04 | Q | Q | Q | |
| Furnaces | . 136 | Q | Q | Q | 0.82 | Q | 1.14 | Q | 0.15 | Q | Q | Q | |
| Individual Space Heaters | Q | 7 | Q | Q | 0.70 | 0.86 | 0.86 | 0.79 | 0.07 | 0.01 | 0.03 | Q | |
| District Heat | . Q | Q | 2 | Q | 0.66 | Q | 0.74 | Q | Q | Q | 0.00 | Q | |
| Boilers | 554 | 20 | 107 | 23 | 0.68 | 0.72 | 0.76 | 0.71 | 0.16 | 0.01 | 0.07 | 0.02 | |
| Packaged Heating Units | . 84 | 4 | Q | 6 | 0.64 | 0.88 | 1.02 | 0.97 | 0.06 | 0.00 | Q | 0.01 | |
| Other | . 23 | Q | Q | Q | 0.68 | Q | 0.75 | Q | 0.06 | Q | Q | Q | |
| Water Heating Equipment | | | | | | | | | | | | | |
| Centralized System | 450 | 17 | 132 | Q | 0.70 | 0.77 | 0.84 | 0.78 | 0.17 | 0.02 | 0.07 | Q | |
| Distributed System | Q | Q | Q | Q | 0.75 | Q | 0.90 | Q | 0.11 | Q | Q | Q | |
| Combination of Centralized | | | | | | | | | | | | | |
| and Distributed System | 86 | 7 | 7 | 7 | 0.64 | 0.76 | 0.81 | 0.73 | 0.07 | 0.01 | 0.01 | 0.01 | |
| Annual Consumption | | | | | | | | | | | | | |
| (gallons) | | | | | | | | | | | | | |
| 1,000 or Less | . 43 | 7 | 23 | 7 | 0.99 | 1.24 | 1.11 | 1.13 | 0.02 | 0.00 | 0.01 | 0.01 | |
| 1,001 to 5,000 | . 186 | 6 | 71 | 18 | 0.85 | 0.87 | 0.94 | 0.90 | 0.17 | 0.02 | 0.10 | 0.07 | |
| 5,001 to 10,000 | . 121 | Q | Q | Q | 0.78 | Q | Q | Q | 0.25 | Q | Q | Q | |
| 10,001 to 25,000 | | Q | Q | Q | 0.69 | Q | Q | Q | 0.19 | Q | Q | Q | |
| Over 25.000 | | Q | Q | Q | 0.59 | Q | Q | Q | 0.19 | Q | Q | Q | |

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled.

N=No responding cases in sample.

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

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