

Table C32. Natural gas consumption totals and conditional intensities by building activity subcategories, 2018

	Natural gas consumption								
	All buildings using natural gas			Distribution of building-level intensities (cubic feet/square foot)					
	Number of buildings (thousand)	Total floorspace (million square feet)	Floorspace per building (thousand square feet)	Total (billion cubic feet)	Per building (thousand cubic feet)	Per square foot (cubic feet)	25th percentile	Median	75th percentile
All buildings	2,974	67,722	22.8	2,216	745	32.7	14.3	28.1	51.7
Principal building activity (expanded)									
Education	216	10,254	47.4	316	1,461	30.8	10.9	23.0	44.1
College or university	31	1,156	37.8	29	937	24.8	4.2	10.9	26.3
K–12	133	8,251	62.0	257	1,932	31.2	10.4	20.5	35.8
Elementary school	60	2,741	45.3	76	1,257	27.8	8.4	16.1	33.5
Middle/junior high school	15	1,511	100.7	51	3,366	33.4	16.7	31.2	51.7
High school	36	2,805	78.3	90	2,501	31.9	10.4	16.7	34.2
Multi-grade school (any K–12)	22	1,194	54.8	41	1,883	34.4	17.3	26.7	35.8
Preschool or daycare	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other classroom education	18	565	31.1	18	968	31.2	21.0	30.3	35.3
Food sales	90	662	7.4	46	511	69.2	24.8	67.2	113.8
Convenience store (with or without gas station)	66	232	3.5	17	256	72.6	27.4	77.1	129.2
Grocery store or food market	20	422	21.2	28	1,425	67.2	30.5	49.3	86.4
Other food sales	Q	Q	Q	Q	Q	Q	Q	Q	Q
Food service	203	987	4.9	146	719	147.6	64.5	152.1	245.8
Fast food	47	170	3.6	31	658	183.3	90.6	173.8	297.0
Restaurant or cafeteria	137	732	5.3	107	779	146.2	65.1	126.3	237.8
Other food service	Q	Q	Q	Q	Q	Q	Q	Q	Q
Health care	77	3,370	43.6	199	2,577	59.1	17.4	28.1	45.4
Inpatient	7	2,105	305.9	164	23,840	77.9	29.5	82.7	129.2
Outpatient	70	1,265	18.0	35	499	27.8	15.5	27.2	37.1
Office (diagnostic)	33	379	11.5	7	220	19.2	13.8	23.8	28.1
Clinic or other outpatient	37	886	23.7	28	745	31.4	18.5	32.3	46.7
Lodging	138	5,842	42.3	216	1,564	37.0	16.4	34.3	62.5
Hotel	42	3,024	72.2	104	2,484	34.4	13.0	21.1	46.7
Motel or inn	29	469	16.1	16	543	33.8	13.4	27.4	56.9
Dormitory, fraternity, or sorority	14	485	34.6	18	1,256	36.3	10.5	33.6	59.6
Nursing home or assisted living	36	1,456	40.0	66	1,816	45.4	32.8	40.8	74.8
Other lodging	Q	408	Q	12	Q	30.4	16.4	41.1	95.7
Mercantile	328	8,992	27.4	321	980	35.7	13.3	26.5	51.0
Retail (other than mall)	172	3,585	20.8	83	485	23.3	9.0	16.7	29.8
Retail store	156	3,260	21.0	77	494	23.6	9.0	19.2	30.2
Other retail	Q	Q	Q	Q	Q	Q	Q	Q	Q
Enclosed and strip malls	156	5,407	34.7	238	1,528	44.0	23.9	45.0	62.0
Strip shopping center	155	4,753	30.7	231	1,495	48.7	25.1	45.0	62.0
Enclosed mall	1	655	761.7	6	7,531	9.9	3.2	5.2	13.4

Table C32. Natural gas consumption totals and conditional intensities by building activity subcategories, 2018

	Natural gas consumption						Distribution of building-level intensities (cubic feet/square foot)		
	All buildings using natural gas			Total (billion cubic feet)	Per building (thousand cubic feet)	Per square foot (cubic feet)	25th percentile	Median	75th percentile
	Number of buildings (thousand)	Total floorspace (million square feet)	Floorspace per building (thousand square feet)						
All buildings	2,974	67,722	22.8	2,216	745	32.7	14.3	28.1	51.7
Office	549	11,283	20.5	241	438	21.3	13.7	24.0	36.8
Administrative or professional	296	6,010	20.3	122	411	20.2	12.5	21.3	36.0
Bank or other financial	23	439	19.0	12	526	27.6	18.2	27.6	28.5
Government	70	1,815	25.8	40	567	22.0	16.0	26.9	34.3
Medical (non-diagnostic)	29	269	9.3	7	244	26.3	7.1	22.6	33.1
Mixed-use	86	2,386	27.6	52	602	21.8	14.7	25.1	52.2
Other office	45	364	8.1	8	182	22.3	16.2	25.1	51.6
Public assembly	275	5,233	19.1	208	758	39.8	14.9	34.1	60.2
Library	17	297	17.7	10	569	32.1	28.1	39.5	72.5
Entertainment or culture	35	873	25.2	33	958	38.0	13.7	21.9	38.3
Recreation	92	1,747	19.1	85	929	48.7	14.9	29.8	80.8
Social or meeting	117	1,713	14.7	63	536	36.5	15.5	35.6	54.5
Other assembly	15	603	39.9	18	1,176	29.5	34.1	45.8	50.2
Public order and safety	54	1,271	23.4	45	829	35.5	29.7	46.2	53.0
Fire or police station	42	445	10.6	17	406	38.1	32.0	48.4	53.0
Courthouse or probation office	5	344	63.7	9	1,717	27.0	14.8	29.8	37.2
Other public order	7	481	67.7	19	2,646	39.1	8.5	47.8	53.9
Religious worship	259	4,083	15.8	91	350	22.2	14.4	22.1	32.2
Service	382	3,343	8.8	140	366	41.9	11.8	32.0	53.6
Post office or postal center	Q	Q	Q	Q	Q	Q	Q	Q	Q
Vehicle service or repair	150	1,182	7.9	35	236	29.8	10.8	25.3	49.5
Vehicle storage or maintenance	125	1,234	9.9	46	373	37.7	18.2	36.7	56.9
Other service	95	706	7.4	50	525	71.0	17.5	31.9	43.3
Warehouse and storage	320	10,309	32.2	192	600	18.6	9.0	22.0	38.1
Nonrefrigerated	318	10,113	31.8	190	598	18.8	9.0	22.0	38.7
Warehouse	193	3,579	18.5	73	379	20.4	12.1	22.0	41.9
Distribution or shipping center	100	6,009	60.2	107	1,067	17.7	6.3	23.1	33.8
Self storage units	Q	Q	Q	Q	Q	Q	Q	Q	Q
Refrigerated	Q	Q	Q	Q	Q	Q	Q	Q	Q
Other	53	1,596	30.1	47	879	29.2	7.0	21.3	22.0
Laboratory	4	519	133.2	18	4,546	34.1	1.1	26.8	49.4
Other	49	1,077	21.9	29	589	26.9	7.0	21.3	21.9
Vacant	30	497	16.5	10	317	19.2	17.4	27.0	49.7

Data source: U.S. Energy Information Administration, Forms EIA-871A and C of the 2018 Commercial Buildings Energy Consumption Survey

Notes: Because of rounding, data may not sum to totals. The *Guide to the 2018 CBECS Tables* and *CBECS Terminology* contain definitions of terms used in these tables and comparisons between previous CBECS tables. You can access both references from <http://www.eia.gov/consumption/commercial/data/2018/>.

Data are sample survey estimates with relative standard errors published in a tab on the Excel worksheet for this table.

Estimates in the *energy end uses* category represent total consumption in buildings that have the end use but not the consumption specifically for that end use.

Q = Data withheld either because the relative standard error was greater than 50% or the reporting sample had fewer than 20 buildings.

N = No buildings in reporting sample.

Relative standard errors (RSEs) for Table C32. Natural gas consumption totals and conditional intensities by building activity subcategories, 2018

	RSEs for natural gas consumption								
	All buildings using natural gas			RSEs not available for quartiles					
	RSEs for number of buildings	RSEs for total floorspace	RSEs for floorspace per building	Total	Per building	Per square foot	25th percentile	Median	75th percentile
All buildings	4.8	3.4	3.2	3.7	3.9	2.1	—	—	—
Principal building activity (expanded)									
Education	10.9	6.6	8.7	6.9	8.9	3.7	—	—	—
College or university	25.8	16.1	24.2	18.9	28.2	14.7	—	—	—
K–12	11.3	7.2	8.0	7.5	9.4	3.9	—	—	—
Elementary school	14.5	11.8	8.9	11.3	11.3	6.1	—	—	—
Middle/junior high school	15.4	12.0	8.2	14.9	9.8	7.6	—	—	—
High school	22.7	7.8	20.3	9.7	22.4	6.7	—	—	—
Multi-grade school (any K–12)	33.1	18.6	24.5	18.4	27.3	6.1	—	—	—
Preschool or daycare	46.0	45.0	22.7	54.0	25.8	16.1	—	—	—
Other classroom education	17.9	19.3	15.6	22.4	21.6	17.7	—	—	—
Food sales	19.6	17.1	16.1	19.1	18.2	11.6	—	—	—
Convenience store (with or without gas station)	23.8	27.4	13.9	29.0	19.6	14.1	—	—	—
Grocery store or food market	32.1	21.4	27.3	23.6	30.8	16.2	—	—	—
Other food sales	64.5	64.8	15.2	105.6	119.1	122.3	—	—	—
Food service	8.9	10.4	7.3	10.6	8.6	7.2	—	—	—
Fast food	16.6	18.2	9.9	18.0	10.9	11.5	—	—	—
Restaurant or cafeteria	12.0	14.0	9.3	13.4	10.9	8.9	—	—	—
Other food service	26.6	25.6	26.6	30.2	31.0	24.0	—	—	—
Health care	14.3	6.3	12.4	6.6	13.6	4.6	—	—	—
Inpatient	14.9	7.5	14.0	7.2	14.5	4.7	—	—	—
Outpatient	15.3	10.3	11.8	11.3	12.2	8.5	—	—	—
Office (diagnostic)	18.6	17.2	14.7	18.2	14.4	10.5	—	—	—
Clinic or other outpatient	20.6	12.4	17.9	13.1	16.7	10.6	—	—	—
Lodging	11.9	8.7	12.4	12.5	15.2	7.0	—	—	—
Hotel	17.7	14.9	19.6	24.3	28.0	13.6	—	—	—
Motel or inn	29.8	28.3	31.2	28.8	33.4	18.7	—	—	—
Dormitory, fraternity, or sorority	38.4	24.5	27.5	29.1	29.1	13.8	—	—	—
Nursing home or assisted living	18.1	15.0	9.6	14.3	11.5	8.8	—	—	—
Other lodging	53.5	27.1	66.8	27.1	55.8	16.2	—	—	—
Mercantile	8.7	6.3	7.3	8.1	9.4	4.3	—	—	—
Retail (other than mall)	14.1	10.9	9.9	13.0	12.4	6.2	—	—	—
Retail store	15.1	11.8	10.4	13.8	12.7	6.4	—	—	—
Other retail	37.8	29.8	28.7	33.6	38.3	18.0	—	—	—
Enclosed and strip malls	8.7	7.7	9.2	9.9	11.0	5.3	—	—	—
Strip shopping center	8.7	8.6	9.7	10.2	11.2	4.8	—	—	—
Enclosed mall	20.2	20.2	9.4	26.4	19.8	14.2	—	—	—

Relative standard errors (RSEs) for Table C32. Natural gas consumption totals and conditional intensities by building activity subcategories, 2018

	RSEs for natural gas consumption								
	All buildings using natural gas			RSEs not available for quartiles					
	RSEs for number of buildings	RSEs for total floorspace	RSEs for floorspace per building	Total	Per building	Per square foot	25th percentile	Median	75th percentile
All buildings	4.8	3.4	3.2	3.7	3.9	2.1	—	—	—
Office	8.0	6.3	7.8	7.2	6.9	4.7	—	—	—
Administrative or professional	9.7	6.9	9.7	9.5	10.1	6.0	—	—	—
Bank or other financial	38.5	32.6	23.3	37.2	29.5	18.5	—	—	—
Government	23.1	19.6	19.4	18.5	17.9	11.3	—	—	—
Medical (non-diagnostic)	28.4	26.0	20.9	36.6	28.0	21.7	—	—	—
Mixed-use	21.6	15.9	15.3	21.1	15.3	12.5	—	—	—
Other office	31.7	26.5	31.8	24.5	22.4	16.4	—	—	—
Public assembly	10.6	6.9	7.9	8.5	9.9	5.5	—	—	—
Library	39.6	33.9	30.1	33.4	28.6	20.4	—	—	—
Entertainment or culture	33.5	17.4	36.2	22.5	42.6	18.0	—	—	—
Recreation	14.7	10.5	9.5	13.6	11.7	8.5	—	—	—
Social or meeting	17.7	13.8	14.9	15.7	17.1	10.4	—	—	—
Other assembly	31.0	19.0	32.4	20.2	28.0	17.7	—	—	—
Public order and safety	22.0	16.9	21.5	20.8	21.6	9.7	—	—	—
Fire or police station	28.3	20.2	19.2	24.6	16.4	12.3	—	—	—
Courthouse or probation office	39.6	21.6	41.0	28.6	43.9	15.1	—	—	—
Other public order	43.8	36.8	39.4	42.6	35.2	21.2	—	—	—
Religious worship	12.1	11.7	7.1	12.9	8.9	5.9	—	—	—
Service	9.8	10.5	7.0	13.7	13.7	11.4	—	—	—
Post office or postal center	33.8	37.2	27.6	35.3	22.4	10.0	—	—	—
Vehicle service or repair	16.1	19.5	11.6	19.5	17.9	17.1	—	—	—
Vehicle storage or maintenance	17.4	16.8	10.3	21.0	18.0	13.1	—	—	—
Other service	17.4	21.3	17.6	29.9	30.5	27.3	—	—	—
Warehouse and storage	9.3	8.6	9.0	10.2	9.1	6.0	—	—	—
Nonrefrigerated	9.4	8.7	9.0	10.3	9.2	5.9	—	—	—
Warehouse	13.7	11.6	13.1	15.1	14.5	9.5	—	—	—
Distribution or shipping center	16.0	10.8	14.5	13.7	15.4	7.4	—	—	—
Self storage units	41.5	41.5	33.5	45.5	49.1	18.0	—	—	—
Refrigerated	49.5	25.5	47.7	35.0	52.5	20.3	—	—	—
Other	28.2	19.3	26.6	22.7	26.3	13.8	—	—	—
Laboratory	31.5	25.2	24.4	39.5	40.2	33.1	—	—	—
Other	30.2	25.3	31.4	26.4	34.7	11.2	—	—	—
Vacant	25.8	19.7	26.0	24.5	27.0	12.7	—	—	—

Data source: U.S. Energy Information Administration, Forms EIA-871A and C of the 2018 Commercial Buildings Energy Consumption Survey

Note: RSE is a measure of the reliability or precision of a survey statistic. Variability occurs in survey statistics because the different samples that could be drawn would each produce different values for the survey statistics. *Estimation of Standard Errors* and *What is a Relative Standard Error (RSE)?* contain more information on how RSEs are estimated and used. Both references can be accessed from <https://www.eia.gov/consumption/commercial/survey-background-technical-information.php>.