Release date: May 2016

Table C16. Electricity expenditures by Census region, 2012

				Electricity expenditures (dollars)									
	Total electr (million dol		enditures		per kWh			per square foot					
	North- east	Mid- west	South	West	North- east	Mid- west	South	West	North- east	Mid- west	South	West	
All buildings	25,123	21,717	47,473	27,563	0.11	0.09	0.09	0.11	1.64	1.17	1.44	1.53	
Building floorspace (square feet)													
1,001 to 5,000	1,901	2,425	6,304	3,003	0.13	0.10	0.10	0.12	1.91	1.41	1.99	1.86	
5,001 to 10,000	1,688	1,967	4,610	3,712		0.09	0.10	0.12	1.43	1.08	1.40	1.69	
10,001 to 25,000	3,214	2,811	6,313	4,343		0.09	0.09	0.12	1.38	0.99	1.27	1.27	
25,001 to 50,000	2,110	2,999	6,083	3,357		0.09	0.09	0.12	1.30	1.00	1.40	1.24	
50,001 to 100,000	3,969	3,449	8,064	2,991	0.11	0.09	0.09	0.11	1.48	1.28	1.37	1.27	
100,001 to 200,000	4,249	2,907	6,272	4,079		0.09	0.09	0.11	1.69	1.21	1.22	1.76	
200,001 to 500,000	4,328	3,167	5,671	3,541		0.08	0.08	0.11	1.94	1.18	1.55	1.70	
Over 500,000	3,665	1,991	4,156	2,537		0.08	0.08	0.11	2.12	1.40	1.59	1.99	
Principal building activity													
Education	2,038	2,824	5,914	2,116	0.11	0.09	0.09	0.12	0.99	0.89	1.15	1.15	
Food sales	1,477	756	1,970	1,516		0.09	0.09	0.10	4.67	4.34	4.94	4.18	
Food service	1,341	1,363	3,396	1,970		0.09	0.09	0.12	4.59	3.69	4.40	5.10	
Health care	2,495	1,607	3,491	1,992		0.07	0.08	0.10	2.34	1.86	2.42	2.53	
Inpatient	1,541	1,007	2,421	1,466		0.07	0.08	0.10	2.87	2.03	2.71	3.28	
Outpatient	954	600	1,070	526		0.08	0.09	0.11	1.80	1.64	1.95	1.55	
Lodging	1,424	1,324	3,344	2,407	0.10	0.08	0.09	0.12	1.41	1.25	1.45	1.65	
Mercantile	3,140	3,263	8,507	5,106		0.09	0.09	0.10	1.91	1.53	1.80	1.81	
Retail (other than mall)	1,333	1,461	3,094	2,257		0.09	0.09	0.11	1.61	1.28	1.46	1.69	
Enclosed and strip malls	1,807	1,802	5,413	2,850		0.03	0.09	0.10	2.21	1.82	2.08	1.93	
Office	7,357	4,592	8,459	5,833		0.00	0.10	0.10	1.99	1.38	1.54	1.71	
Public assembly	1,530	1,908	2,872	1,578		0.09	0.10	0.11	1.61	1.20	1.43	1.55	
Public order and safety	660	275	798	1,578 Q		0.03	0.03	0.12 Q	1.91	0.82	1.43	1.55 Q	
												0.62	
Religious worship	430	393	1,245	446		0.09	0.10	0.13	0.48	0.42	0.62		
Service	665	1,078	1,559	819		0.10	0.10	0.13	0.82	0.74	1.00	1.18	
Warehouse and storage	1,059	1,429	3,727	2,228		0.09	0.09	0.14	0.62	0.60	0.74	0.65	
Other	1,416	752	1,917	957		0.09	0.07	0.11	5.19	1.74	2.32	2.18	
Vacant	Q	153	276	290	Q	0.09	0.10	0.11	Q	0.46	0.40	0.64	
Year constructed													
Before 1920	1,561	594	1,097	263	0.13	0.10	0.10	0.10	0.99	0.62	1.16	0.85	
1920 to 1945	2,856	1,388	1,787	1,248	0.14	0.09	0.10	0.13	1.48	0.81	1.25	1.60	
1946 to 1959	2,173	1,759	2,734	1,789	0.13	0.09	0.09	0.11	1.37	1.07	1.10	1.21	
1960 to 1969	3,500	2,627	4,730	3,469	0.12	0.08	0.08	0.12	1.57	0.98	1.39	1.82	
1970 to 1979	3,657	3,931	5,207	3,226	0.10	0.09	0.09	0.11	1.93	1.53	1.46	1.27	
1980 to 1989	3,066	3,264	10,821	5,692	0.12	0.09	0.09	0.12	1.79	1.27	1.61	1.50	
1990 to 1999	4,227	3,200	8,594	4,458	0.11	0.09	0.09	0.11	2.10	1.18	1.51	1.65	
2000 to 2003	1,860	2,153	4,650	2,010	0.11	0.09	0.09	0.11	1.91	1.44	1.41	1.41	
2004 to 2007	873	1,558	3,821	3,309	0.11	0.09	0.09	0.11	1.84	1.26	1.35	1.70	
2008 to 2012	1,349	1,243	4,032	Q	0.11	0.07	0.10	0.12	1.50	1.27	1.51	1.89	
Climate region ¹													
Very cold/Cold	15,980	18,390	N	5,702	0.11	0.09	N	0.09	1.55	1.16	N	1.11	
Mixed-humid	9,142	3,327	26,907	N	0.12	0.09	0.09	N	1.83	1.24	1.36	N	
Mixed-dry/Hot-dry	N	N	Q	17,386	N	N	0.07	0.12	N	N	0.64	1.70	
Hot-humid	N	N	19,604	Q	N	N	0.09	Q	N	N	1.66	Q	
Marine	N	N	N	3,910	N	N	N	0.11	N	N	N	1.62	

Table C16. Electricity expenditures by Census region, 2012

Tuble C10. Electricity experior	•	Electricity expenditures (dollars)											
	Total electronic (million do		nditures	<u>r</u>	er kWh			per square foot					
	North- east	Mid- west	South	West	North- east	Mid- west	South	West	North- east	Mid- west	South	West	
All buildings	25,123	21,717	47,473	27,563	0.11	0.09	0.09	0.11	1.64	1.17	1.44	1.53	
Number of floors													
One	6,488	8,881	24,763	13,850	0.11	0.09	0.09	0.12	1.76	1.19	1.42	1.47	
Two	5,648	5,103	9,009	5,624	0.11	0.09	0.09	0.11	1.39	1.07	1.32	1.32	
Three	3,715	2,740	2,999	1,560	0.12	0.09	0.09	0.12	1.54	1.06	1.48	1.45	
Four to nine	5,262	3,680	7,937	4,547	0.11	0.08	0.08	0.11	1.56	1.29	1.59	2.08	
Ten or more	4,011	1,313	2,766	1,982	0.13	0.08	0.09	0.10	2.30	1.49	1.63	1.89	
Elevators and escalators													
(more than one may apply)													
Any elevators	14,315	9,452	17,324	10,337	0.11	0.08	0.09	0.11	1.81	1.26	1.58	1.84	
Number of elevators													
One	3,286	3,384	4,972	2,083	0.10	0.09	0.09	0.11	1.28	1.06	1.36	1.23	
Two to five	5,821	3,526	7,349	4,347	0.11	0.08	0.08	0.11	1.85	1.29	1.61	1.92	
Six or more	5,207	2,542	5,003	3,907	0.12	0.08	0.09	0.11	2.38	1.64	1.85	2.36	
Any escalators	1,752	1,206	1,779	1,558	0.12	0.08	0.08	0.10	2.20	1.37	1.68	1.72	
Number of workers (main shift)													
Fewer than 5	2,129	2,832	5,768	3,083	0.13	0.09	0.09	0.12	0.87	0.72	0.95	1.00	
5 to 9	1,683	2,248	4,822	2,866	0.12	0.10	0.09	0.12	1.31	1.18	1.36	1.29	
10 to 19	1,693	2,339	5,789	3,734	0.12	0.09	0.09	0.12	1.22	1.24	1.52	1.47	
20 to 49	3,549	3,805	8,419	5,466	0.11	0.09	0.09	0.11	1.86	1.13	1.50	1.51	
50 to 99	3,737	3,678	9,163	3,492	0.11	0.09	0.09	0.11	1.57	1.33	1.51	1.55	
100 to 249	4,430	3,090	6,366	3,743	0.11	0.08	0.09	0.11	1.75	1.34	1.53	1.94	
250 or more	7,901	3,725	7,147	5,178	0.11	0.08	0.09	0.11	2.36	1.55	1.92	2.21	
Weekly operating hours													
Fewer than 40	515	1,052	1,258	915	0.12	0.10	0.10	0.13	0.53	0.59	0.50	0.71	
40 to 48	2,452	2,462	6,602	4,535	0.12	0.10	0.09	0.12	1.05	0.81	0.98	1.25	
49 to 60	5,100	4,500	9,782	5,103	0.12	0.09	0.10	0.12	1.53	1.03	1.15	1.20	
61 to 84	5,164	4,859	9,150	6,066	0.11	0.09	0.09	0.12	1.56	1.34	1.74	1.68	
85 to 167	4,201	3,776	7,007	3,921	0.12	0.08	0.09	0.11	2.23	1.57	2.24	2.02	
Open continuously	7,690	5,068	13,674	7,023	0.11	0.08	0.08	0.11	2.23	1.51	1.98	2.15	
Ownership and occupancy													
Nongovernment owned	20,111	16,836	37,870	22,879	0.12	0.09	0.09	0.11	1.72	1.22	1.49	1.56	
Owner occupied	7,979	8,183	17,896	9,226	0.11	0.09	0.09	0.11	1.48	1.13	1.49	1.63	
Leased to tenant(s)	9,213	6,307	15,265	10,277	0.12	0.09	0.09	0.12	2.09	1.35	1.54	1.51	
Owner occupied and leased	2,904	2,309	4,650	3,299	0.11	0.08	0.09	0.12	1.63	1.33	1.43	1.61	
Unoccupied	Q	Q	59	Q	Q	Q	0.13	Q	Q	Q	0.28	Q	
Government owned	5,012	4,880	9,603	4,683	0.11	0.08	0.09	0.11	1.38	1.04	1.26	1.42	
Federal	Q	Q	1,285	266	Q	0.09	0.10	0.10	Q	1.45	1.54	1.30	
State	1,964	1,327	2,382	1,570	0.10	0.08	0.08	0.11	1.71	1.16	1.13	1.40	
Local	2,753	3,153	5,937	2,848	0.12	0.09	0.09	0.11	1.24	0.96	1.27	1.45	
Party responsible for operation and maintenance of energy systems													
Building owner	20,516	18,864	38,721	21,811	0.11	0.09	0.09	0.11	1.57	1.15	1.40	1.51	
Business owner or tenant	3,952	2,392	7,239	5,051	0.12	0.09	0.09	0.12	2.18	1.40	1.65	1.57	
Property management	Q	Q	973	Q	Q	Q	0.09	Q	Q	Q	1.49	Q	
Other	Q	Q	539	Q	Q	Q	0.09	Q	Q	Q	1.74	Q	

Table C16. Electricity expenditures by Census region, 2012

				Electricity expenditures (dollars)										
	Total electi (million do		nditures		per kWh				per square foot					
	North- east	Mid- west	South	West	North- east	Mid- west	South	West	North- east	Mid- west	South	West		
All buildings	25,123	21,717	47,473	27,563	0.11	0.09	0.09	0.11	1.64	1.17	1.44	1.53		
Provider of direct input on energy-														
related equipment purchases														
Building owner	20,885	19,231	40,015	23,321	0.11	0.09	0.09	0.11	1.57	1.14	1.40	1.52		
Business owner or tenant	3,269	1,885	5,613	3,589	0.12	0.09	0.09	0.11	2.35	1.48	1.74	1.59		
Property management	Q	Q	413	Q	Q	Q	0.10	Q	Q	Q	1.20	Q		
Other	650	392	1,433	287	0.11	0.09	0.09	0.13	2.07	1.14	1.79	1.30		
Number of establishments														
One	14,459	13,761	30,239	17,114	0.11	0.09	0.09	0.11	1.53	1.11	1.40	1.54		
2 to 5	5,376	5,323	8,529	5,422	0.12	0.09	0.09	0.12	1.63	1.27	1.31	1.45		
6 to 10	1,480	1,025	2,808	1,651	0.13	0.08	0.09	0.10	1.91	1.32	1.69	1.50		
11 to 20	1,689	814	3,132	1,347	0.12	0.09	0.10	0.10	2.03	1.65	2.01	1.71		
More than 20	2,104	757	2,696	1,942	0.12	0.08	0.08	0.11	2.53	1.42	1.90	1.92		
Currently unoccupied	Q	Q	69	Q	Q	Q	0.12	0.11	Q	Q	0.21	0.40		
Predominant exterior wall material														
Brick, stone, or stucco	12,393	10,613	24,453	10,910	0.12	0.09	0.09	0.12	1.64	1.19	1.51	1.58		
Concrete (block or poured)	5,942	4,880	12,737	7,863	0.10	0.09	0.09	0.11	1.66	1.24	1.60	1.60		
Concrete panels	1,560	2,311	3,601	4,202	0.10	0.08	0.09	0.12	1.94	1.39	1.20	1.41		
Siding or shingles	2,220	1,659	1,667	2,201	0.13	0.09	0.10	0.12	1.45	1.23	1.22	1.67		
Metal panels	1,242	1,453	3,664	1,150	0.12	0.09	0.09	0.11	1.30	0.70	0.96	0.94		
Window glass	1,248	Q	759	691	0.11	Q	0.09	0.10	2.89	Q	2.11	2.14		
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q		
No one major type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q		
Predominant roof material														
Metal surfacing	1,831	2,691	8,689	3,202	0.11	0.09	0.09	0.11	1.19	0.86	1.11	1.26		
Synthetic or rubber	10,349	9,429	13,047	7,616	0.12	0.09	0.09	0.10	1.77	1.27	1.70	1.63		
Built-up	6,724	4,678	13,130	8,050	0.11	0.08	0.09	0.12	1.81	1.19	1.53	1.58		
Slate or tile shingles	878	401	2,501	2,555	0.12	0.09	0.09	0.14	1.06	1.03	1.37	2.16		
Wooden materials (including														
shingles)	222	Q	534	589	0.11	Q	0.09	0.13	1.49	Q	1.42	1.26		
Asphalt, fiberglass, or	4 227	2.004	7 400	4 200	0.40	0.00	0.00	0.40	4.65	4.24	4.04	4 22		
other shingles	4,327	3,904	7,490	4,306	0.13	0.09	0.09	0.12	1.65	1.21	1.34	1.33		
Concrete	552	Q	1,498	774	0.10	Q	0.09	0.12	1.85	Q	1.87	1.92		
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q		
No one major type	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q		
Roof characteristics														
Roof tilt	10.467	12.540	20.000	17 202	0.44	0.00	0.00	0.44	1.05	1 20	1.50	1.00		
Flat	18,467	13,519	28,006	17,298	0.11	0.09	0.09	0.11	1.85	1.29	1.59	1.62		
Shallow pitch	3,243	5,290	13,555	7,485	0.11	0.09	0.09	0.12	1.34	1.08	1.28	1.46		
Steeper pitch	3,414	2,907	5,912	2,780	0.12	0.09	0.09	0.12	1.19	0.90	1.23	1.27		
Cool roof	5,780	4,927	11,910	8,533	0.10	0.08	0.09	0.11	1.71	1.34	1.60	1.74		

Table C16. Electricity expenditures by Census region, 2012

		Electricity expenditures (dollars)										
	Total electi (million do		nditures		per kWh			per square foot				
	North- east	Mid- west	South	West	North- east	Mid- west	South	West	North- east	Mid- west	South	West
All buildings	25,123	21,717	47,473	27,563	0.11	0.09	0.09	0.11	1.64	1.17	1.44	1.53
Renovations in buildings constructed before 2008												
(more than one may apply)												
Any type of renovation	16,223	12,161	22,853	11,646	0.11	0.09	0.09	0.11	1.75	1.21	1.51	1.56
Addition or annex	4,249	5,060	6,833	2,786	0.11	0.08	0.09	0.10	1.65	1.24	1.50	1.59
Reduction in floorspace	1,091	447	1,224	402	Q	0.09	0.09	0.11	1.87	1.76	1.95	1.49
Roof replacement	9,276	6,776	10,987	4,429	0.11	0.08	0.09	0.11	1.70	1.26	1.61	1.43
Exterior wall replacement	1,357	1,379	2,483	1,290	0.13	0.08	0.08	0.11	1.49	1.29	1.73	1.60
Interior wall reconfiguration	9,660	6,656	11,384	6,804	0.12	0.09	0.09	0.10	1.92	1.28	1.68	1.60
Window replacement	5,138	3,095	6,288	2,895	0.12	0.08	0.09	0.11	1.51	1.02	1.67	1.41
HVAC equipment upgrade	12,150	7,886	14,436	7,399	0.11	0.08	0.09	0.11	1.88	1.21	1.56	1.68
Lighting upgrade	10,851	7,524	13,780	7,339	0.12	0.08	0.09	0.10	1.81	1.23	1.57	1.61
Electrical upgrade	7,666	4,765	8,714	4,535	0.12	0.08	0.09	0.10	1.93	1.19	1.61	1.68
Plumbing system upgrade	6,548	4,235	7,146	4,097	0.12	0.08	0.09	0.11	1.94	1.23	1.55	1.72
Insulation upgrade	3,030	2,601	3,867	2,256	0.12	0.08	0.08	0.10	1.73	1.19	1.68	1.73
Fire, safety, or security upgrade	8,557	5,155	9,157	4,703	0.12	0.08	0.09	0.11	1.86	1.35	1.57	1.62
Structural upgrade	1,161	1,181	2,194	1,898	0.13	0.08	0.08	0.10	1.59	1.33	1.83	1.73
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
No renovations	7,550	8,313	20,588	13,818	0.11	0.09	0.09	0.12	1.47	1.10	1.35	1.47
Buildings constructed 2008 or later	1,349	1,243	4,032	Q	0.11	0.07	0.10	0.12	1.50	1.27	1.51	1.89
Energy sources (more than one may apply) Electricity	25,123	21,717	47,473	27,563	0.11	0.09	0.09	0.11	1.64	1.17	1.44	1.53
Natural gas	19,110	18,019	29,542	21,172	0.11	0.09	0.09	0.11	1.73	1.20	1.48	1.66
Fuel oil	11,045	5,849	12,953	6,501	0.12	0.08	0.08	0.11	1.82	1.49	1.84	2.07
District heat	4,224	1,056	2,903	1,562	0.11	0.07	0.08	0.10	2.13	1.17	1.32	1.76
District chilled water	1,959	750	3,203	1,366		0.07	0.08	0.10	2.47	1.28	1.29	1.82
Propane	2,637	2,148	3,736	2,302	0.11	0.08	0.09	0.12	1.51	1.13	1.46	1.55
Other	1,388	769	1,542	1,472	0.12	0.10	0.10	0.10	1.29	0.98	1.70	1.42
Space-heating energy sources												
Electricity	12,909	10,944	34,700	16,121	0.11	0.08	0.09	0.11	1.77	1.27	1.54	1.53
Electricity main	4,372	4,066	24,469	9,155	0.11	0.08	0.09	0.11	2.00	1.36	1.62	1.55
Electricity secondary	8,537	6,878	10,232	6,966	0.12	0.08	0.09	0.11	1.68	1.22	1.38	1.50
Other excluding electricity	11,856	10,586	9,872	9,695	0.12	0.09	0.09	0.11	1.53	1.13	1.24	1.64
Buildings without heating	Q	186	2,901	1,746	0.12	0.11	0.09	0.18	Q	0.36	1.15	1.15
Primary space-heating energy source												
Electricity	4,372	4,066	24,469	9,155	0.11	0.08	0.09	0.11	2.00	1.36	1.62	1.55
Natural gas	13,707	15,425	16,424	14,766	0.11	0.09	0.09	0.11	1.64	1.18	1.33	1.60
Fuel oil	2,001	Q	246	Q	0.12	Q	0.09	Q	1.01	Q	0.82	Q
District heat	4,191	1,010	2,837	1,531	0.11	0.07	0.08	0.10	2.15	1.17	1.34	1.77
Propane	358	534	562	174		0.08	0.08	0.11	0.95	0.74	0.92	0.74
Other	Q	Q	Q	Q		Q	Q	0.10	Q	Q	Q	0.79
Cooling energy sources						-						
Electricity	22,836	20,841	44,836	25,544	0.12	0.09	0.09	0.11	1.72	1.24	1.50	1.60
Other excluding electricity	1,470	319	2,031	23,344 Q		0.03	0.03	0.11	2.28	1.01	1.14	1.76
Buildings without cooling	816	556	606	1,118		0.10	0.08	0.10	0.61	0.39	0.47	0.73
Dandings without coullig	010	330	000	1,110	0.13	0.10	0.10	0.12	0.01	0.53	0.47	0.73

Table C16. Electricity expenditures by Census region, 2012

,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,	Electricity expenditures (dollars)									
	Total electi (million do		nditures		per kWh			per square foot					
	North- east	Mid- west	South	West	North- east	Mid- west	South	West	North- east	Mid- west	South	West	
All buildings	25,123	21,717	47,473	27,563	0.11	0.09	0.09	0.11	1.64	1.17	1.44	1.53	
Water-heating energy sources													
Electricity	11,198	9,629	29,001	13,375	0.12	0.09	0.09	0.11	1.71	1.21	1.49	1.52	
Other excluding electricity	13,598	11,638	16,602	13,043	0.11	0.09	0.09	0.11	1.68	1.20	1.54	1.69	
Buildings without water heating	327	450	1,871	1,145	0.14	0.10	0.10	0.13	0.50	0.47	0.68	0.78	
Cooking energy sources													
Electricity	8,865	8,226	17,002	9,103	0.11	0.08	0.09	0.11	1.90	1.34	1.73	2.02	
Other excluding electricity	6,216	3,209	8,577	6,053	0.11	0.08	0.09	0.12	1.78	1.25	1.88	2.19	
Buildings without cooking	10,041	10,282	21,894	12,407	0.12	0.09	0.09	0.12	1.41	1.05	1.17	1.16	
Energy end uses (more than one may apply)													
Buildings with space heating	24,765	21,530	44,572	25,816	0.11	0.09	0.09	0.11	1.65	1.19	1.46	1.57	
Buildings with cooling	24,307	21,160	46,867	26,444	0.11	0.09	0.09	0.11	1.74	1.23	1.48	1.61	
Buildings with water heating	24,796	21,267	45,603	26,418	0.11	0.09	0.09	0.11	1.69	1.21	1.51	1.60	
Buildings with cooking	15,081	11,435	25,580	15,156	0.11	0.08	0.09	0.11	1.84	1.31	1.78	2.09	
Buildings with manufacturing	1,777	1,095	2,362	1,427	0.12	0.10	0.08	0.13	1.68	0.93	1.38	1.25	
Buildings with electricity generation	12,432	7,191	17,294	9,209	0.11	0.08	0.09	0.11	2.00	1.34	1.84	1.97	
Percent of floorspace heated													
Not heated	Q	186	2,901	1,746	0.12	0.11	0.09	0.18	Q	0.36	1.15	1.15	
1 to 50	1,142	975	3,995	4,249	0.13	0.09	0.09	0.12	1.01	0.75	1.00	1.15	
51 to 99	5,296	2,622	9,591	6,077	0.12	0.09	0.09	0.12	1.85	1.17	1.54	1.83	
100	18,326	17,933	30,987	15,491	0.11	0.09	0.09	0.11	1.66	1.24	1.53	1.64	
Percent of floorspace cooled													
Not cooled	816	556	606	1,118	0.13	0.10	0.10	0.12	0.61	0.39	0.47	0.73	
1 to 50	3,061	4,148	4,629	4,239	0.12	0.09	0.10	0.12	0.86	0.87	0.75	0.96	
51 to 99	10,553	6,062	13,118	8,026	0.12	0.08	0.09	0.12	2.08	1.29	1.55	1.79	
100	10,693	10,951	29,120	14,179	0.11	0.09	0.09	0.11	2.01	1.42	1.70	1.87	
Percent lit when open													
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	
1 to 50	1,602	2,567	4,692	2,462	0.12	0.09	0.09	0.12	0.76	0.89	0.99	0.85	
51 to 99	10,682	9,883	19,438	11,665	0.12	0.09	0.09	0.11	1.70	1.25	1.46	1.60	
100	12,794	9,134	23,194	13,303	0.11	0.09	0.09	0.11	1.92	1.26	1.61	1.80	
Building never open/electricity not used	Q	123	85	104	Q	0.09	0.12	0.11	Q	0.30	0.19	0.33	
Percent lit during off hours	_												
Zero Zero	4,487	4,518	8,736	7,609	0.12	0.10	0.10	0.13	1.16	0.81	0.96	1.24	
1 to 50	15,097	14,519	31,165	15,142	0.12	0.09	0.09	0.13	1.62	1.27	1.54	1.54	
51 to 100	4,398	1,511	5,095	3,830	0.10	0.08	0.08	0.11	2.44	1.59	1.98	2.39	
Building always open with no "off hours"	1,141	1,168	2,477	983	0.10	0.08	0.08	0.11	3.63	2.13	2.14	2.32	
Electricity not used	N	N	2,477 N	963 N	N.12	0.08 N	0.08 N	N	 N	N	2.14 N	2.32 N	
	IN	114	IN		IN	IN			IN		IN	IN	

Table C16. Electricity expenditures by Census region, 2012

	_					Electricity expenditures (dollars)								
	Total electi (million do		nditures		per kWh		per square foot							
	North- east	Mid- west	South	West	North- east	Mid- west	South	West	North- east	Mid- west	South	West		
All buildings	25,123	21,717	47,473	27,563	0.11	0.09	0.09	0.11	1.64	1.17	1.44	1.53		
Heating equipment														
(more than one may apply)														
Heat pumps	2,344	1,324	10,311	3,599	0.11	0.08	0.09	0.11	1.68	1.24	1.49	1.47		
Furnaces	1,712	2,614	4,090	2,009	0.12	0.09	0.09	0.11	1.38	1.04	1.22	1.31		
Individual space heaters	8,257	5,992	7,927	4,519	0.12	0.08	0.09	0.10	1.68	1.05	1.22	1.26		
District heat	4,224	1,056	2,867	1,531	0.11	0.07	0.08	0.10	2.13	1.17	1.32	1.77		
Boilers	9,853	8,268	9,247	6,709	0.11	0.09	0.09	0.11	1.53	1.24	1.60	1.89		
Packaged heating units	12,453	13,505	30,543	17,868	0.11	0.09	0.09	0.11	1.73	1.24	1.52	1.62		
Other	Q	580	1,380	595	Q	0.08	0.09	0.08	Q	1.57	2.51	1.76		
Cooling equipment														
(more than one may apply)														
Residential-type central air														
conditioners	2,784	4,281	7,639	4,533	0.12	0.10	0.09	0.12	1.64	0.98	1.30	1.60		
Heat pumps	2,333	1,378	10,678	4,042	0.11	0.08	0.10	0.11	1.57	1.35	1.50	1.39		
Individual air conditioners	5,548	3,181	5,347	2,378	0.12	0.09	0.09	0.12	1.44	1.23	1.25	1.38		
District chilled water	1,959	750	3,203	1,366	0.09	0.07	0.08	0.10	2.47	1.28	1.29	1.82		
Central chillers	7,482	6,346	11,497	5,508	0.12	0.08	0.08	0.11	2.14	1.42	1.78	2.11		
Packaged air conditioning units	15,404	12,764	27,008	15,841	0.12	0.09	0.09	0.11	1.77	1.30	1.57	1.68		
Swamp coolers	Q	Q	704	1,946	Q	Q	0.09	0.11	Q	Q	1.50	1.45		
Other	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q		
Main equipment replaced since 1990 (more than one may apply)														
Heating	8,264	8,171	14,491	7,277	0.12	0.09	0.09	0.11	1.54	1.19	1.44	1.38		
Cooling	10,765	8,474	17,177	8,195	0.12	0.09	0.09	0.12	1.70	1.18	1.47	1.49		
Water-heating equipment														
Centralized system	15,322	13,861	26,676	15,044	0.11	0.09	0.09	0.11	1.68	1.22	1.53	1.56		
Distributed system	3,426	2,348	6,451	4,256		0.09	0.09	0.11	1.44	1.01	1.33	1.40		
Combination of centralized and	3,420	2,346	0,431	4,230	0.12	0.03	0.03	0.13	1.44		1.31	1.40		
distributed system	6,048	5,058	12,475	7,118	0.12	0.08	0.09	0.10	1.94	1.28	1.59	1.84		
Lighting equipment types														
(more than one may apply)														
Incandescent	12,883	11,798	21,693	11,693	0.11	0.09	0.09	0.11	1.70	1.31	1.49	1.62		
Standard fluorescent	24,408	21,031	45,395	26,150		0.09	0.09	0.11	1.69	1.20	1.45	1.56		
Compact fluorescent	19,492	15,452	32,029	18,764		0.09	0.09	0.11	1.81	1.30	1.60	1.68		
High-intensity discharge (HID)	8,102	7,419	13,901	6,795		0.09	0.09	0.11	1.80	1.38	1.49	1.62		
Halogen	9,156	8,540	18,249	10,038		0.03	0.09	0.11	1.74	1.38	1.66	1.78		
LED	10,313	7,349	13,896	8,459		0.08	0.09	0.11	2.17	1.43	1.84	1.83		
Other	10,313 Q	7,545 Q	13,830 Q	0,433 Q		0.00 Q	0.03 Q	Q.11	Q	Q.	Q	1.03 Q		
		<u>Q</u>	Q	Q	Q	u	Q	Q	<u>u</u>	u	u			
Refrigeration equipment (more than one may apply)														
Any refrigeration	23,403	20,272	43,597	24,533	0.11	0.09	0.09	0.11	1.72	1.22	1.52	1.67		
Walk-in units	13,442	9,709	21,978	12,325		0.03	0.09	0.11	2.29	1.53	2.04	2.29		
Cases or cabinets	13,268	10,299	19,871	12,519		0.08	0.09	0.11	2.19	1.51	1.91	2.29		
Large cold storage areas	1,570	1,469	3,811	2,206		0.08	0.09	0.11	2.19	1.51	2.24	2.23		
Commercial ice makers	12,602	10,447	25,335	12,651		0.08	0.09	0.10	2.76	1.51	1.75	2.09		
Residential-type or compact units Vending machines	19,085	16,863	33,453	19,331		0.09	0.09	0.11	1.67	1.18	1.38	1.55		
	15,877	12,704	27,423	14,209		0.09	0.09	0.11	1.88	1.31	1.56	1.74		
No refrigeration	1,720	1,444	3,877	3,030	0.13	0.09	0.10	0.13	1.02	0.73	0.91	0.92		

Table C16. Electricity expenditures by Census region, 2012

						Electricity expenditures (dollars)								
	Total electr (million dol		nditures		per kWh		e foot							
	North-	Mid-			North-	Mid-			North-	Mid-				
	east	west	South	West	east	west	South	West	east	west	South	West		
All buildings	25,123	21,717	47,473	27,563	0.11	0.09	0.09	0.11	1.64	1.17	1.44	1.53		
Office equipment (more than one may apply)														
Desktop computers	23,786	20,602	44,541	26,005	0.11	0.09	0.09	0.11	1.68	1.22	1.50	1.59		
With flat screen monitors	23,666	20,416	43,975	25,774	0.11	0.09	0.09	0.11	1.70	1.23	1.50	1.59		
With multiple monitors	10,777	8,692	18,749	12,193	0.11	0.03	0.09	0.11	2.04	1.36	1.55	1.70		
Laptop computers	20,436	16,982	36,369	20,301	0.12	0.08	0.09	0.11	1.74	1.22	1.46	1.57		
Dedicated servers	18,350	14,693	31,745	19,231	0.11	0.03	0.09	0.11	1.82	1.30	1.54	1.68		
Laser printers	18,187	14,876	31,895	18,106	0.11	0.09	0.09	0.11	1.76	1.22	1.56	1.60		
Inkjet printers	10,488	9,118	20,175	12,433	0.11	0.09	0.09	0.11	1.60	1.19	1.41	1.62		
FAX machines	21,581	17,892	39,289	21,444	0.12	0.09	0.09	0.11	1.69	1.24	1.52	1.56		
Photocopiers	20,039	15,852	32,979	19,418	0.11	0.09	0.09	0.11	1.72	1.21	1.49	1.56		
Number of desktop computers														
None	1,337	1,115	2,933	1,558	0.13	0.10	0.10	0.12	1.14	0.66	0.88	0.98		
1 to 4	3,291	3,783	8,808	4,967	0.13	0.09	0.09	0.12	1.34	1.06	1.40	1.48		
5 to 9	2,037	2,424	5,670	3,022	0.10	0.09	0.10	0.11	1.46	1.14	1.61	1.27		
10 to 19	2,607	2,105	4,894	3,598	0.12	0.09	0.09	0.11	1.59	1.15	1.39	1.51		
20 to 49	3,454	3,627	8,514	4,467	0.11	0.09	0.09	0.11	1.48	1.40	1.59	1.58		
50 to 99	2,195	2,496	4,183	2,873	0.11	0.09	0.09	0.13	1.61	1.26	1.29	1.70		
100 to 249	4,028	2,637	4,979	3,032	0.10	0.09	0.08	0.10	1.75	1.20	1.47	1.65		
250 or more	6,174	3,530	7,493	4,047	0.12	0.08	0.09	0.11	2.35	1.38	1.71	2.11		
Number of laptop computers														
None	4,686	4,735	11,105	7,261	0.11	0.09	0.09	0.12	1.33	1.02	1.37	1.42		
1 to 4	4,647	5,473	10,706	6,199	0.12	0.09	0.09	0.12	1.39	1.08	1.33	1.32		
5 to 9	2,468	2,020	5,096	2,460	0.10	0.09	0.09	0.11	1.76	1.37	1.43	1.30		
10 to 19	2,269	1,819	5,109	3,686	0.11	0.09	0.09	0.11	1.51	1.23	1.51	1.86		
20 to 49	2,617	2,789	5,386	3,941	0.12	0.09	0.09	0.10	1.78	1.27	1.42	1.80		
50 to 99	1,902	1,807	2,966	1,754	0.11	0.09	0.09	0.12	1.56	1.38	1.62	2.00		
100 to 249	2,779	1,219	3,136	1,127	0.11	0.08	0.08	0.10	1.97	1.19	1.49	1.67		
250 or more	3,754	1,855	3,968	1,133	0.12	0.08	0.09	0.11	2.65	1.35	1.84	1.90		
Number of dedicated servers														
None	6,772	7,024	15,729	8,331	0.12	0.09	0.09	0.12	1.30	0.96	1.26	1.27		
1 to 4	9,144	8,888	19,734	10,746	0.11	0.09	0.09	0.11	1.48	1.23	1.46	1.49		
5 to 9	1,905	2,027	3,200	2,443	0.11	0.09	0.09	0.11	1.74	1.41	1.44	1.64		
10 to 19	2,943	1,275	3,757	2,618	0.12	0.08	0.09	0.11	2.63	1.27	1.62	2.07		
20 to 49	1,399	1,354	2,456	1,329	0.12	0.08	0.08	0.10	2.03	1.38	1.88	1.71		
50 or more	2,960	1,150	2,597	2,096	0.12	0.08	0.08	0.10	2.97	1.77	2.16	2.94		
Number of photocopiers														
None	5,083	5,865	14,494	8,145	0.12	0.09	0.09	0.12	1.40	1.07	1.33	1.48		
One	3,421	4,178	8,148	5,451	0.11	0.09	0.09	0.11	1.31	1.06	1.33	1.24		
2 to 4	4,972	5,381	12,020	6,206	0.11	0.09	0.09	0.11	1.39	1.17	1.49	1.52		
5 to 9	3,581	2,666	4,636	2,572	0.10	0.09	0.08	0.11	1.84	1.23	1.45	1.66		
10 or more	8,065	3,626	8,175	5,189	0.12	0.08	0.09	0.11	2.29	1.54	1.74	2.13		

Table C16. Electricity expenditures by Census region, 2012

				Electricity expenditures (dollars)									
	Total electi (million do		nditures		per kWh		per square foot						
	North-	Mid-			North-	Mid-			North-	Mid-			
	east	west	South	West	east	west	South	West	east	west	South	West	
All buildings	25,123	21,717	47,473	27,563	0.11	0.09	0.09	0.11	1.64	1.17	1.44	1.53	
Number of TVs or video displays													
None	4,554	4,292	8,491	5,920	0.11	0.09	0.10	0.12	1.19	0.91	1.03	1.11	
One	1,928	2,297	5,021	2,652	0.11	0.09	0.09	0.12	1.36	1.00	1.17	1.32	
2 to 4	4,421	4,850	10,282	4,543	0.12	0.09	0.09	0.12	1.51	1.20	1.63	1.44	
5 to 9	3,793	1,817	5,296	3,561	0.12	0.09	0.08	0.11	2.08	1.25	1.67	2.08	
10 to 19	3,212	2,873	4,982	2,363	0.10	0.08	0.09	0.11	1.79	1.52	1.63	1.66	
20 to 49	2,676	2,033	5,501	3,310	0.11	0.08	0.09	0.11	1.85	1.22	1.73	1.88	
50 to 99	964	1,227	3,042	1,837	0.14	0.08	0.08	0.11	2.52	1.32	1.49	1.78	
100 or more	3,574	2,327	4,859	3,376	0.12	0.08	0.08	0.11	2.12	1.51	1.75	2.18	
Food preparation or serving areas in non-food service buildings (more than one may apply)													
Snack bar or concession stand	3,977	3,013	6,868	4,279	0.11	0.08	0.09	0.11	2.07	1.33	1.82	2.21	
Fast food or small restaurant	4,109	3,137	8,522	5,467	0.11	0.08	0.09	0.11	2.35	1.77	2.24	2.22	
Cafeteria or large restaurant	6,602	4,099	9,201	4,722	0.11	0.08	0.09	0.11	1.84	1.19	1.55	2.11	
Commercial kitchen/													
food preparation area	5,919	4,830	10,479	5,993	0.10	0.08	0.09	0.11	1.82	1.22	1.72	2.10	
Small kitchen area	4,593	3,646	7,446	4,054	0.11	0.09	0.09	0.11	1.48	1.07	1.45	1.68	
Separate computer areas (more than one may apply)													
Data center or server farm	6,341	3,888	6,923	5,551	0.12	0.08	0.08	0.10	2.67	1.56	1.79	2.35	
Computer-based training room	5,838	5,306	11,327	5,854	0.11	0.08	0.09	0.10	1.75	1.34	1.59	1.77	
Student or public computer center	3,588	3,286	8,178	3,727	0.11	0.08	0.09	0.10	1.32	0.98	1.36	1.62	
HVAC conservation features (more than one may apply)													
Economizer cycle	13,579	10,647	15,027	12,054	0.11	0.08	0.09	0.11	1.96	1.34	1.66	1.75	
Regular HVAC maintenance	22,862	19,137	41,713	23,832	0.11	0.09	0.09	0.11	1.76	1.26	1.57	1.64	
Building automation system (BAS) ²	14,307	11,063	24,125	14,319	0.11	0.08	0.09	0.11	2.06	1.38	1.65	1.90	
Window and interior lighting features (more than one may													
apply)													
Multipaned windows	19,735	18,467	34,017	16,989	0.12	0.09	0.09	0.11	1.73	1.22	1.53	1.55	
Tinted window glass	11,902	11,880	28,409	16,771	0.11	0.08	0.09	0.11	1.89	1.32	1.53	1.59	
Reflective window glass	5,101	5,437	10,278	7,778	0.12	0.08	0.08	0.11	2.18	1.44	1.89	1.81	
External overhangs or awnings	8,741	8,794	22,584	12,723	0.11	0.09	0.09	0.11	2.04	1.36	1.64	1.69	
Skylights or atriums	6,978	4,713	12,063	8,181	0.11	0.08	0.09	0.11	1.73	1.15	1.50	1.39	
Light scheduling	12,409	9,072	18,369	13,168	0.12	0.08	0.09	0.11	2.13	1.36	1.71	1.87	
Occupancy sensors	14,504	10,398	20,393	13,548	0.12	0.08	0.09	0.11	1.88	1.31	1.71	1.63	
Multi-level lighting or dimming	5,034	4,467	9,798	7,032	0.11	0.08	0.09	0.11	2.16	1.41	1.81	1.95	
Daylight harvesting	2,185	2,249	3,154	2,975	0.12	0.08	0.09	0.11	2.12	1.48	1.58	1.90	
Demand responsive lighting	1,158	1,328	3,284	2,595	0.12	0.09	0.10	0.12	1.79	1.46	1.94	1.75	
Building automation system (BAS) for				_,555			0.10						
lighting ²	5,032	3,758	8,269	5,975	0.11	0.08	0.09	0.10	2.33	1.54	1.83	2.02	

Table C16. Electricity expenditures by Census region, 2012

		Electricity expenditures (dollars)										
	Total electr (million dol	per kWh				per square foot						
	North- east	Mid- west	South	West	North- east	Mid- west	South	West	North- east	Mid- west	South	West
All buildings	25,123	21,717	47,473	27,563	0.11	0.09	0.09	0.11	1.64	1.17	1.44	1.53
Equipment usage reduced when building not in full use (more than one may apply)												
Heating	19,541	16,336	32,430	20,398	0.11	0.09	0.09	0.11	1.59	1.16	1.39	1.52
Cooling	18,871	15,979	34,323	20,653	0.11	0.09	0.09	0.12	1.65	1.19	1.40	1.57
Lighting	22,913	20,056	43,475	25,526	0.11	0.09	0.09	0.11	1.61	1.16	1.42	1.54
Annual consumption (kilowatthours)												
10,000 or less	103	153	183	136	0.16	0.13	0.14	0.15	0.18	0.18	0.19	0.20
10,001 to 50,000	993	1,194	2,034	1,840	0.14	0.11	0.11	0.14	0.55	0.48	0.57	0.70
50,001 to 100,000	999	1,355	2,703	1,875	0.12	0.10	0.10	0.13	1.04	0.81	0.86	1.01
100,001 to 500,000	4,932	4,929	11,728	7,730	0.12	0.09	0.09	0.12	1.47	1.15	1.38	1.48
500,001 to 1,000,000	2,852	3,160	7,043	2,974	0.12	0.09	0.09	0.11	1.58	1.43	1.68	1.62
1,000,001 to 5,000,000	7,445	7,040	14,055	7,324	0.11	0.08	0.09	0.11	1.83	1.46	1.71	2.00
Over 5,000,000	7,800	3,886	9,728	5,685	0.11	0.08	0.08	0.10	2.85	1.73	2.16	2.70

Electricity expanditures (dellars)

Notes: • Because of rounding, data may not sum to totals. • See the *Guide to the 2012 CBECS Detailed Tables* or *CBECS Terminology* for definitions of terms used in these tables and/or comparison of differences with prior CBECS tables. Both references can be accessed from http://www.eia.gov/consumption/commercial/data/2012/

Source: U.S. Energy Information Administration, Office of Energy Consumption and Efficiency Statistics, Forms EIA-871A and E of the 2012 Commercial Buildings Energy Consumption Survey.

¹These climate regions were created by the Building America program, sponsored by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE).

²In earlier CBECS publications, BAS was referred to as *Energy Management and Control System (EMCS)*.

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

N = No cases in reporting sample.

[•] Site electricity is the amount of electricity delivered to commercial buildings. Primary electricity, which is not included in the *Total of major fuels* category, is site electricity plus the conversion losses in the generation, transmission, and distribution processes. • Statistics for the *Energy end uses* category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. • HVAC = Heating, ventilation, and air conditioning.