Release date: May 2016

Table C6. Expenditures by Census region for sum of major fuels, 2012

	Sum of major fuel expenditures			_	Sum of m	ajor fuel						
	(million do	ollars)			per millio	n Btu		p				
	North- east	Mid- west	South	West	North- east	Mid- west	South	West	North- east	Mid- west	South	West
All buildings	34,917	27,379	54,780	31,983	23.93	17.49	21.35	23.31	2.25	1.45	1.60	1.74
Building floorspace (square feet)												
1,001 to 5,000	2,672	3,026	7,166	3,478	25.18	19.54	22.38	24.58	2.53	1.63	2.12	1.99
5,001 to 10,000	2,251	2,490	5,336	4,154	25.29	17.04	21.31	25.86	1.80	1.33	1.51	1.85
10,001 to 25,000	4,259	3,578	7,083	5,001	26.62	18.46	22.16	24.63	1.77	1.24	1.36	1.39
25,001 to 50,000	2,846	3,804	6,772	3,876	23.09	17.25	21.35	23.98	1.73	1.26	1.50	1.43
50,001 to 100,000	5,547	4,382	9,138	3,456	22.10	17.28	22.20	22.87	2.07	1.61	1.49	1.46
100,001 to 200,000	6,448	3,488	7,317	4,654	21.37	18.12	21.30	23.60	2.54	1.45	1.42	2.00
200,001 to 500,000	6,007	4,029	6,640	4,204	24.53	16.27	20.07	20.71	2.69	1.48	1.80	2.02
Over 500,000	4,886	2,583	5,327	3,160	26.63	16.48	19.51	20.55	2.83	1.82	2.01	2.47
Principal building activity												
Education	3,432	3,825	6,955	2,606	20.35	16.25	21.63	22.44	1.67	1.21	1.35	1.41
Food sales	1,684	803	2,053	1,626	23.37	21.59	23.68	24.57	5.32	4.62	5.15	4.49
Food service	1,735	1,701	4,186	2,334	23.85	16.29	17.71	23.15	5.94	4.60	5.43	6.04
Health care	3,760	2,262	4,503	2,548	21.36	14.70	17.84	18.84	3.53	2.63	3.12	3.24
Inpatient	2,542	1,549	3,376	1,906	20.52	13.63	16.41	18.07	4.73	3.12	3.78	4.27
Outpatient	1,218	713		641	23.37	17.70	24.12	21.56	2.30	1.95	2.06	1.89
Lodging	2,143	1,800	1,126 3,950	3,104	21.74	16.77	19.48	19.92	2.30	1.70	1.72	2.13
Mercantile	3,919	3,864	9,228	5,694	25.55	18.40	23.21	23.09	2.13	1.81	1.95	2.02
Retail (other than mall)			3,224	2,402		19.65	24.21	26.93	2.01	1.47		
	1,675	1,682			30.01				2.74		1.52	1.80
Enclosed and strip malls	2,244	2,182	6,004	3,292	23.00	17.54	22.70	20.92		2.20	2.31	2.23
Office	9,791	5,289	9,276	6,426	26.49	19.82	25.19	27.19	2.64	1.59	1.69	1.88
Public assembly	2,276	2,457	3,674	1,810	24.60	17.77	20.85	24.80	2.39	1.55	1.83	1.78
Public order and safety	1,021	412	959	Q	27.29	14.01	19.30	Q	2.96	1.23	1.67	Q
Religious worship	717	599	1,451	571	19.26	14.18	21.58	21.49	0.80	0.65	0.72	0.79
Service	1,133	1,523	2,039	918	23.23	17.35	20.03	27.38	1.38	1.03	1.24	1.32
Warehouse and storage	1,426	1,729	4,040	2,500	22.60	18.57	22.95	25.86	0.81	0.68	0.77	0.71
Other	1,741	924	2,149	1,145	26.99	18.83	18.46	20.40	6.38	2.13	2.60	2.45
Vacant	Q	191	316	327	Q	17.88	24.03	25.69	Q	0.36	0.19	0.49
Year constructed												
Before 1920	2,438	875	1,528	353	25.24	16.35	21.06	22.80	1.49	0.84	1.56	1.07
1920 to 1945	4,349	1,804	2,137	1,409	26.21	16.29	24.33	26.20	2.22	1.02	1.42	1.77
1946 to 1959	3,279	2,421	3,205	2,111	23.45	16.69	20.53	21.99	2.07	1.46	1.22	1.40
1960 to 1969	5,029	3,509	5,716	4,133	25.03	16.27	18.82	22.76	2.25	1.31	1.63	2.13
1970 to 1979	5,685	4,814	6,342	3,760	21.59	18.54	19.82	22.30	2.91	1.84	1.72	1.46
1980 to 1989	3,784	4,056	11,967	6,367	25.84	17.40	21.91	26.71	2.17	1.55	1.72	1.62
1990 to 1999	5,175	3,893	9,559	5,136	23.15	18.45	22.03	21.98	2.53	1.39	1.55	1.84
2000 to 2003	2,301	2,626	5,381	2,292	23.25	19.57	21.86	23.04	2.35	1.76	1.62	1.61
2004 to 2007	1,170	1,847	4,379	3,913	22.03	18.27	22.01	22.39	2.34	1.49	1.54	2.01
2008 to 2012	1,707	1,535	4,567	Q	24.09	15.08	22.73	22.78	1.89	1.54	1.69	2.24
Climate region ¹												
Very cold/Cold	21,580	23,441	N	7,558	23.12	17.24	N	16.68	2.05	1.45	N	1.45
Mixed-humid	13,338	3,938	32,164	N	25.35	19.13	20.92	N	2.65	1.43	1.60	N
Mixed-dry/Hot-dry	N	N	Q	19,168	N	N	14.97	26.77	N	N	0.85	1.83
Hot-humid	N	N	21,303	Q	N	N	22.63	Q	N	N	1.69	Q
Marine	N	N	N	4,677	N	N	N	23.78	N	N	N	1.91

Table C6. Expenditures by Census region for sum of major fuels, 2012

	Sum of major fuel expenditures				Sum of major fuel expenditures (dollars)								
	(million do				per million Btu			per square foot					
	North-	Mid-			North-	Mid-			North-	Mid-			
	east	west	South	West		west	South	West	east	west	South	West	
All buildings	34,917	27,379	54,780	31,983	23.93	17.49	21.35	23.31	2.25	1.45	1.60	1.74	
Number of floors													
One	8,192	11,047	27,601	15,597	24.00	17.93	22.23	24.66	2.12	1.44	1.49	1.60	
Two	8,272	6,187	10,113	6,493	22.42	18.06	21.78	22.84	2.02	1.27	1.45	1.52	
Three	5,026	3,606	3,512	1,906	25.23	16.77	20.13	24.02	2.08	1.38	1.73	1.76	
Four to nine	7,691	4,865	10,290	5,464	21.61	16.50	19.38	21.84	2.26	1.67	2.05	2.49	
Ten or more	5,737	1,674	3,264	2,524	29.57	17.22	21.07	20.12	3.29	1.90	1.88	2.41	
Elevators and escalators													
(more than one may apply)													
Any elevators	20,602	12,112	20,854	12,501	23.66	16.86	20.45	21.77	2.60	1.60	1.89	2.22	
Number of elevators													
One	5,303	4,389	5,636	2,530	20.57	16.83	22.34	22.42	2.06	1.36	1.54	1.49	
Two to five	7,860	4,397	8,714	5,135	23.77	17.31	20.22	22.69	2.50	1.58	1.89	2.25	
Six or more	7,439	3,326	6,504	4,836	26.35	16.33	19.34	20.57	3.40	2.14	2.37	2.92	
Any escalators	2,347	1,400	2,354	2,013	27.38	18.91	20.87	19.30	2.94	1.59	2.20	2.22	
Number of workers (main shift)													
Fewer than 5	3,134	3,768	6,484	3,497	24.84	18.46	22.48	25.46	1.16	0.88	0.88	1.02	
5 to 9	2,271	2,699	5,415	3,246	25.36	20.15	22.22	24.86	1.77	1.41	1.52	1.46	
10 to 19	2,335	3,101	6,646	4,273	24.58	16.62	20.65	25.30	1.68	1.65	1.74	1.68	
20 to 49	4,600	4,834	9,576	6,405	24.41	17.21	21.51	23.42	2.42	1.43	1.71	1.77	
50 to 99	5,256	4,490	10,322	3,910	21.36	17.24	21.48	24.01	2.20	1.63	1.70	1.73	
100 to 249	6,020	3,753	7,567	4,402	22.56	17.02	20.65	21.51	2.38	1.62	1.82	2.28	
250 or more	11,301	4,735	8,771	6,250	25.26	16.95	20.87	21.25	3.37	1.98	2.35	2.67	
Weekly operating hours													
Fewer than 40	862	1,395	1,477	1,065	23.28	17.96	20.75	24.80	0.73	0.69	0.42	0.70	
40 to 48	3,398	3,135	7,539	5,101	24.56	17.91	23.08	26.58	1.44	1.03	1.11	1.41	
49 to 60	6,534	5,529	11,032	5,823	26.63	18.32	23.10	24.99	1.95	1.26	1.30	1.35	
61 to 84	6,892	5,968	10,313	6,898	23.27	17.80	22.33	24.96	2.08	1.64	1.96	1.89	
85 to 167	5,804	4,660	8,010	4,399	22.69	17.34	20.57	23.88	3.09	1.92	2.55	2.26	
Open continuously	11,427	6,693	16,408	8,696	23.48	16.44	19.54	19.61	3.30	1.96	2.32	2.64	
Ownership and occupancy													
Nongovernment owned	26,501	20,825	43,065	26,257	24.55	17.73	21.49	23.50	2.22	1.47	1.63	1.75	
Owner occupied	11,366	10,409	20,496	11,012	22.80	16.92	20.72	21.49	2.08	1.42	1.69	1.92	
Leased to tenant(s)	11,241	7,427	17,302	11,490	26.93	19.31	22.30	24.82	2.54	1.57	1.71	1.67	
Owner occupied and leased	3,870	2,932	5,205	3,665	23.79	17.12	22.00	26.48	2.17	1.66	1.61	1.76	
Unoccupied	Q	Q	63	Q		Q	31.67	Q	Q	Q	0.06	Q	
Government owned	8,416	6,554	11,714	5,726		16.76	20.83	22.50	2.32	1.38	1.49	1.71	
Federal	Q	507	1,769	387	Q	19.56	23.69	17.91	Q	1.84	2.12	1.90	
State	3,592	1,952	3,037	2,069	20.38	16.46	18.46	21.69	3.13	1.69	1.44	1.84	
Local	4,389	4,096	6,909	3,270		16.61	21.37	23.79	1.98	1.24	1.41	1.62	
Party responsible for operation and maintenance of energy				<u></u>									
systems Building owner	29,004	23,922	44,731	25,531	23.87	17.35	21.28	22.95	2.18	1.42	1.55	1.72	
									2.18			1.72	
Business owner or tenant	5,061	2,905	8,290	5,670		18.36	21.53	24.14		1.69	1.83		
Property management Other	Q Q	Q Q	1,149 610	Q Q		Q Q	21.93	Q Q	Q Q	Q Q	1.76 1.94	Q Q	
Ouiei	Q	Q	010	Q	<u>u</u>	Q		Q	<u>u</u>	Q	1.54	u	

Table C6. Expenditures by Census region for sum of major fuels, 2012

Sum of major fuel Sum of major fuel expenditures (dollars) expenditures (million dollars) per million Btu per square foot North-North-Mid-Mid-North-Mid-West east west South West east west South east west South West All buildings 31,983 17.49 23.31 1.45 34,917 27,379 54,780 23.93 21.35 2.25 1.60 1.74 Provider of direct input on energyrelated equipment purchases 17.39 29,498 27,211 23.08 1.73 **Building** owner 24,412 46,177 23.88 21.32 2.17 1.42 1.55 Business owner or tenant 4,179 2,249 6,424 4,049 24.97 18.46 21.08 23.50 3.00 1.77 1.93 1.79 Property management Q 451 Q Q Q 25.46 Q Q Q 1.31 Q Q 841 1,728 326 22.13 18.36 22.08 29.27 2.68 1.35 Other 466 2.14 1.48 **Number of establishments** 35,174 22.71 17.38 22.71 2.18 1.80 20,732 17,381 20,179 20.89 1.39 1.62 One 2 to 5 7,592 6,776 9,996 6,167 24.44 17.67 21.60 25.36 2.30 1.61 1.54 1.65 1,275 6 to 10 1,904 27.97 17.65 22.82 22.30 2.46 1.60 1,909 3,144 1.80 1.73 11 to 20 2,092 991 3,464 1,534 26.16 17.78 23.14 22.01 2.51 2.01 2.22 1.88 3.09 More than 20 2,569 899 2,928 2,087 29.55 17.70 22.59 26.30 1.69 2.06 2.01 Currently unoccupied Q Q 74 111 Q Q 29.34 19.39 Q Q 0.06 0.25 Predominant exterior wall material 1.72 Brick, stone, or stucco 17,155 13,732 28,689 12.703 23.79 16.88 20.88 23.15 2.24 1.52 1.79 Concrete (block or poured) 8,553 5,937 14,369 8,913 23.33 18.06 22.03 23.96 2.37 1.48 1.76 1.80 Concrete panels 2,102 2,838 4,900 20.81 16.68 21.80 24.23 2.61 1.68 4.164 1.32 1.61 19.47 Siding or shingles 2,930 2,007 1,923 2,527 29.37 21.20 23.74 1.84 1.44 1.38 1.84 1,906 Metal panels 1.770 4,114 1.413 25.18 19.17 21.17 22.19 1.73 0.89 0.97 1.12 Window glass 1,588 21.74 24.09 20.45 2.31 2.65 Q 831 856 Q 3.67 Q Other Q No one major type **Predominant roof material** 2,468 3,313 9,994 3,603 26.54 19.79 22.08 23.76 1.52 1.02 1.20 1.32 Metal surfacing Synthetic or rubber 11,798 15,054 9,388 23.66 17.55 20.94 20.00 2.34 1.57 1.94 2.00 13,751 9,105 24.87 1.49 Built-up 9,955 5,961 14,968 23.22 16.34 21.30 2.63 1.68 1.76 Slate or tile shingles 1,450 526 3,253 2,898 18.25 19.50 27.62 1.72 1.35 1.74 2.40 20.60 Wooden materials (including shingles) 344 Q 637 695 20.43 Q 17.84 24.51 2.13 Q 1.66 1.48 Asphalt, fiberglass, or 5,893 4,998 8,540 4,936 26.55 17.19 21.88 2.21 1.53 1.46 1.48 other shingles 24.42 692 Q 1,586 820 23.02 Q 24.25 29.82 2.32 Q 1.84 2.03 Concrete Other Q No one major type **Roof characteristics** Roof tilt Flat 25,449 16,979 32,186 20,022 23 99 17.15 20.80 22.82 2.53 1.61 1.78 1.84 Shallow pitch 4,424 6,471 15,728 8,641 22.75 18.75 22.44 24.26 1.74 1.29 1.43 1.63 5,044 3,929 3,319 24.72 17.06 21.59 24.03 1.72 1.18 1.33 1.51 Steeper pitch 6,866 Cool roof 8,725 6,243 13,650 10,017 22.91 16.85 21.60 22.07 2.58 1.70 1.81 1.98

Table C6. Expenditures by Census region for sum of major fuels, 2012

	Sum of ma			Sum of major fuel expenditures (dollars)								
	(million do			per millio	n Btu		per square foot					
	North- east	Mid- west	South	West	North- east	Mid- west	South	West	North- east	Mid- west	South	West
All buildings	34,917	27,379	54,780	31,983	23.93	17.49	21.35	23.31	2.25	1.45	1.60	1.74
Renovations in buildings												
constructed before 2008 (more than one may apply)												
Any type of renovation	22,854	15,440	26,780	14,055	24.16	17.42	20.97	21.54	2.47	1.53	1.74	1.88
Addition or annex	6,240	6,652	8,247	3,685	22.61	17.07	19.54	18.07	2.42	1.63	1.79	2.10
Reduction in floorspace	Q	571	1,382	451	21.06	18.02	21.13	23.50	3.95	2.09	2.21	1.67
Roof replacement	13,598	8,848	12,903	5,463	23.82	17.26	20.51	19.97	2.49	1.64	1.85	1.76
Exterior wall replacement	2,005	1,696	2,873	1,570	26.18	17.24	19.56	20.43	2.20	1.58	1.99	1.95
Interior wall reconfiguration	12,953	8,393	13,656	8,348	25.82	17.44	20.42	20.65	2.58	1.61	1.99	1.96
Window replacement	7,436	3,979	7,475	3,758		16.57	20.52	19.36	2.18	1.31	1.98	1.83
HVAC equipment upgrade	17,132	10,009	17,039	9,117	24.71	17.29	20.56	20.54	2.64	1.53	1.82	2.07
Lighting upgrade	14,813	9,633	16,446	9,132		16.89	20.32	20.22	2.46	1.58	1.86	2.00
Electrical upgrade	10,553	6,239	10,478	5,821	25.19	16.73	20.50	19.08	2.66	1.56	1.91	2.15
Plumbing system upgrade	9,028	5,534	8,687	5,297	24.77	17.21	20.16	18.94	2.67	1.61	1.88	2.23
Insulation upgrade	4,229	3,381	4,646	2,987	23.85	17.41	19.43	18.60	2.42	1.54	1.97	2.29
Fire, safety, or security upgrade	11,588	6,592	11,039	5,806	25.08	16.90	20.05	20.57	2.52	1.73	1.88	2.00
Structural upgrade	1,557	1,429	2,695	2,577	26.90	17.58	18.87	18.14	2.13	1.61	2.24	2.36
Other	Q	Q	Q	_,,,,,		Q	Q	Q	Q	Q	Q	Q
No renovations	10,357	10,404	23,432	15,418		18.02	21.53	25.31	1.93	1.33	1.45	1.58
Buildings constructed 2008 or later	1,707	1,535	4,567	Q		15.08	22.73	22.78	1.89	1.54	1.69	2.24
						13.00					1.05	
Energy sources (more than one may apply)												
Electricity	34,917	27,379	54,780	31,983	23.93	17.49	21.35	23.31	2.28	1.48	1.66	1.78
Natural gas	25,958	22,937	35,494	25,276	22.13	16.73	19.46	21.49	2.35	1.53	1.78	1.99
Fuel oil	15,850	7,572	15,906	8,026	25.51	16.86	20.50	20.84	2.61	1.92	2.26	2.56
District heat	7,626	2,029	5,026	2,646	26.84	17.69	19.48	17.50	3.85	2.24	2.29	2.99
District chilled water	4,046	1,293	5,102	2,284	21.49	17.59	19.14	16.66	5.09	2.21	2.06	3.05
Propane	3,604	2,549	4,194	2,831	27.04	18.68	22.20	22.76	2.06	1.34	1.63	1.91
Other	1,913	931	1,781	1,827	21.86	19.42	23.26	20.49	1.76	1.17	1.96	1.77
Space-heating energy sources (more than one may apply)												
Electricity	16,438	13,180	38,609	18,123	24.52	17.88	22.41	23.61	2.26	1.53	1.71	1.72
Natural gas	20,071	21,095	25,059	19,719		16.58	19.01	21.50	2.20			
Fuel oil						18.45				1.50	1.62	1.84
	5,651 7,636	1,223	1,419	2 606			22.07	Q 17.41	1.98	1.83	1.86	Q 2 00
District heat	7,626	2,029	4,972	2,606		17.69	19.47	17.41	3.85	2.24	2.29	3.00
Propane Other	943	1,027 Q	1,085 Q	549 Q		21.61	21.40	30.04	1.44 0.98	1.02	1.17 Q	1.13 0.89
Ouiei	203	Q	u	Q	31.1/	20.74	Q	24.90	0.98	1.03	u	0.89
Primary space-heating energy source												
Electricity	4,684	4,367	26,130	9,826	27.91	21.33	23.64	26.73	2.14	1.46	1.73	1.66
Natural gas	17,788	19,608	19,591	17,286		16.44	18.75	21.81	2.13	1.50	1.59	1.87
Fuel oil	3,919	Q	515	Q		Q	24.66	Q	1.97	Q	1.72	Q
District heat	7,577	1,953	4,920	2,606		17.69	19.45	17.41	3.88	2.26	2.33	3.00
Propane	379	543	566	176		23.41	24.05	31.78	1.01	0.75	0.92	0.75
Other	Q	Q	Q	Q		Q	Q Q	25.43	Q	Q.,,3	Q.32	0.84

Table C6. Expenditures by Census region for sum of major fuels, 2012

	Sum of ma	fuel Sum of major fuel expenditures (dollars)										
	(million do				per millio	n Btu			per square			
	North- east	Mid- west	South	West	North- east	Mid- west	South	West	North- east	Mid- west	South	West
All buildings	34,917	27,379	54,780	31,983	23.93	17.49	21.35	23.31	2.25	1.45	1.60	1.74
Cooling energy sources												
(more than one may apply)												
Electricity	30,489	25,967	50,808	29,054	24.31	17.46	21.53	23.81	2.29	1.54	1.70	1.82
Natural gas	804	Q	Q	Q	18.71	Q	Q	Q	2.64	Q	Q	Q
District chilled water	4,046	1,293	5,102	2,284	21.49	17.59	19.14	16.66	5.09	2.21	2.06	3.05
Water-heating energy sources (more than one may apply)												
Electricity	14,322	11,529	31,705	14,868	26.25	18.94	23.34	25.25	2.18	1.45	1.63	1.69
Natural gas	18,423	16,919	23,536	18,629	20.76	16.16	18.90	21.94	2.45	1.59	1.92	2.04
Fuel oil	3,242	Q Q	23,330 Q	Q	26.39	Q	Q	Q	2.31	Q	Q	Q
District heat	6,289	1,784	3,741	1,940	26.15	17.19	19.71	16.40	3.83	2.33	2.39	3.37
Propane	604	403	993	562	31.31	22.81	24.98	55.66	1.55	1.03	1.86	2.16
Cooking energy sources												
(more than one may apply)	14 562	40.207	40.056	40.500	24.22	16.02	24.22	24.04	2.47	4.60	2.02	2 22
Electricity	11,563	10,387	19,856	10,500	24.23	16.82	21.22	21.84	2.47	1.69	2.02	2.33
Natural gas	14,479	10,138	19,452	13,943	21.19	15.78	19.11	20.78	2.70	1.80	2.27	2.68
Propane	2,069	505	1,187	751	27.77	21.50	25.30	34.16	2.65	1.54	1.79	3.26
Energy end uses (more than one may apply)												
Buildings with space heating	34,520	27,191	51,760	30,134	23.85	17.43	21.13	22.73	2.29	1.51	1.70	1.83
Buildings with cooling	33,503	26,565	54,100	30,600	23.90	17.45	21.30	23.36	2.40	1.55	1.70	1.86
Buildings with water heating	34,325	26,811	52,765	30,736	23.84	17.39	21.21	23.13	2.35	1.52	1.74	1.86
Buildings with cooking	21,012	14,617	30,012	17,853	22.92	16.48	20.63	21.74	2.57	1.68	2.09	2.46
Buildings with manufacturing	2,274	1,322	2,698	1,598	23.06	19.26	19.97	27.49	2.15	1.13	1.58	1.40
Buildings with electricity												
generation	16,878	9,161	20,738	11,115	23.41	16.64	20.69	21.02	2.71	1.71	2.21	2.37
Percent of floorspace heated												
Not heated	Q	189	3,019	1,849	32.71	31.43	25.82	40.10	Q	0.22	0.80	0.98
1 to 50	1,446	1,126	4,322	4,678	27.11	20.64	23.45	26.65	1.28	0.86	1.09	1.26
51 to 99	7,052	3,302	11,049	6,955	25.39	16.90	20.25	24.90	2.45	1.47	1.78	2.09
100	26,021	22,763	36,390	18,502	23.31	17.38	21.16	21.24	2.36	1.57	1.79	1.96
Percent of floorspace cooled												
Not cooled	1,415	814	680	1,383	24.62	18.77	25.35	22.41	0.89	0.46	0.27	0.73
1 to 50	4,719	5,485	5,314	4,880	20.82	17.10	22.20	24.14	1.33	1.16	0.86	1.11
51 to 99	14,145	7,802	15,319	9,254	24.77	17.09	20.75	24.52	2.78	1.66	1.81	2.06
100	14,638	13,279	33,467	16,466	24.22	17.82	21.43	22.54	2.76	1.72	1.96	2.17
Percent lit when open												
Zero	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
1 to 50	2,355	3,367	5,306	2,864	21.69	18.13	22.59	25.29	1.12	1.17	1.12	0.99
51 to 99	14,670	12,565	22,914	13,611	24.25	16.82	20.72	23.03	2.33	1.58	1.72	1.86
100	17,772	11,282	26,400	15,338	23.98	18.05	21.63	23.33	2.66	1.55	1.83	2.08
Building never open/electricity not used	Q	156	92	142	Q	20.27	29.36	15.06	Q	0.20	0.05	0.21

Table C6. Expenditures by Census region for sum of major fuels, 2012

Sum of major fuel Sum of major fuel expenditures (dollars) expenditures (million dollars) per million Btu per square foot North-Mid-North-Mid-North-Mid-West east west South east west South West east west South West 17.49 All buildings 34,917 27,379 54,780 31,983 23.93 21.35 23.31 2.25 1.45 1.60 1.74 Percent lit during off hours 10,095 18.30 28.02 1.03 Zero 6,128 5,756 8,454 25.54 23.09 1.58 1.11 1.37 1 to 50 20,582 18,231 35,614 17,571 23.65 17.38 21.51 22.80 2.21 1.59 1.76 1.79 51 to 100 6,790 2,020 6,219 4,893 22.80 15.31 18.82 19.01 3.77 2.12 2.42 3.05 Building always open with no "off hours" 1,417 1,373 2,851 1,064 27.65 19.56 19.96 25.36 4.51 2.50 2.46 2.52 Electricity not used N N N Ν Ν N N Ν N N Ν Ν **Heating equipment** (more than one may apply) Heat pumps 3,172 1,617 11,467 4,132 23.56 18.06 23.48 22.16 2.27 1.51 1.66 1.68 3,254 2.370 17.45 20.83 21.90 1.79 1.30 **Furnaces** 2,229 4,764 24.21 1.42 1.54 Individual space heaters 10,617 7,527 9,543 5,335 25.04 17.15 21.05 20.89 2.16 1.31 1.46 1.48 District heat 7,626 2,029 4,972 2,606 26.84 17.69 19.47 17.41 3.85 2.24 2.29 3.00 **Boilers** 16.10 20.76 14,024 10,391 11,036 7,952 21.48 19.01 2.18 1.56 1.91 2.24 2.20 Packaged heating units 15,823 16,609 34,215 20,199 23.78 17.46 21.30 23.50 1.52 1.71 1.83 Other Q 688 1,548 693 Q 17.67 23.54 18.05 Q 1.86 2.82 2.04 **Cooling equipment** (more than one may apply) Residential-type central air conditioners 3,836 5.480 8.640 5,207 22.74 17.85 22.25 23.44 2.26 1.26 1.47 1.84 1.60 Heat pumps 3,161 1,643 11,930 4,587 23 18 18.22 23.25 23.00 2 12 1.68 1.57 Individual air conditioners 8,437 3,973 6,387 2,755 22.79 17.30 21.54 23.63 2.19 1.54 1.50 1.59 District chilled water 4.046 1.293 5,102 2.284 21.49 17.59 19.14 16.66 5.09 2.21 2.06 3.05 10,124 16.46 19.96 2.09 Central chillers 8,049 13,508 6,392 25.10 22.54 2.90 1.80 2.44 Packaged air conditioning units 20,561 15,779 30,543 17,999 24.49 17.19 21.03 23.62 2.36 1.61 1.78 1.90 Swamp coolers 845 2,384 Q 22.32 20.13 1.80 1.78 Q Q Q Q Q Q Q Q Other Q Q Q Q Q Q Q Q Q Main equipment replaced since 1990 (more than one may apply) 17.71 Heating 10,893 9,887 16,448 8,316 23.95 20.65 23.47 2.03 1.44 1.64 1.58 Cooling 14,667 10,663 19,529 9,369 25.33 17.14 21.04 23.94 2.32 1.48 1.67 1.70 Water-heating equipment 21,778 17,482 17.29 20.76 2.39 Centralized system 17,713 31,193 23.35 23.29 1.57 1.79 1.82 Distributed system 2,943 6,983 4,943 25.03 17.87 23.83 25.32 1.88 4,487 1.26 1.41 1.63 Combination of centralized and 14,589 distributed system 8,060 6,155 8,311 24.56 17.48 21.08 21.69 2.58 1.56 1.86 2.15 Lighting equipment types (more than one may apply) Incandescent 18,504 14,965 25,547 13,856 23.68 16.99 20.61 21.70 2.45 1.66 1.75 1.92 Standard fluorescent 33,841 26,555 52,482 30,366 23.89 17.41 21.30 23.24 2.34 1.52 1.67 1.81 Compact fluorescent 27,281 19,596 37,395 22,279 23.58 17.21 20.82 22.22 2.53 1.65 1.87 2.00 High-intensity discharge (HID) 11,620 9,446 16,170 8,123 23.09 17.20 21.33 21.61 2.58 1.76 1.73 1.94 21.79 Halogen 10,716 21,298 11,799 24.90 16.91 20.94 2.37 1.74 1.94 2.09 12,510 LED 13,782 9,172 16,463 10,109 24.31 17.13 20.73 21.67 2.90 1.78 2.18 2.19 Q Q Other Q Q Q Q Q Q Q Q Q Q

Table C6. Expenditures by Census region for sum of major fuels, 2012

Sum of major fuel Sum of major fuel expenditures (dollars) expenditures (million dollars) per million Btu per square foot North-Mid-North-Mid-North-Mid-West east west South east west South West east west South West All buildings 34,917 27,379 54,780 31,983 23.93 17.49 21.35 23.31 2.25 1.45 1.60 1.74 Refrigeration equipment (more than one may apply) 17.47 Any refrigeration 32,390 25,598 50,508 28,573 23.68 21.07 23.02 2.38 1.54 1.76 1.94 Walk-in units 18,443 12,272 25,895 14,686 22.70 16.59 20.25 21.14 3.14 1.94 2.40 2.73 Cases or cabinets 18,176 12,889 23,097 14,698 23.22 17.34 20.88 21.51 3.00 1.89 2.22 2.69 Large cold storage areas 2,103 1,786 4,296 2,551 22.69 17.37 20.78 20.01 3.70 1.84 2.53 2.74 Commercial ice makers 17,584 13,369 29,748 15,147 23.36 16.66 20.56 20.77 3.16 2.03 2.05 2.50 Residential-type or compact units 26,692 21,418 38,946 22,480 23.56 17.33 21.12 23.18 2.33 1.50 1.61 1.80 2.06 Vending machines 21,930 16,104 16,846 23.63 17 24 20.89 21.68 2.60 1.66 1.82 32.146 No refrigeration 2,527 1,781 4,271 3,410 27.63 17.70 25.21 26.13 1.31 0.76 0.77 0.93 Office equipment (more than one may apply) 25.974 51.408 30.151 23.77 17.41 21.31 23.39 2.35 1.73 1.84 Desktop computers 33,110 1.54 With flat screen monitors 32,902 25,740 50,780 29,902 23.83 17.40 21.32 23.33 2.36 1.55 1.73 1.84 With multiple monitors 15,056 10,854 22,226 14,360 24.83 17.05 20.99 22.44 2.85 1.69 1.84 2.01 21.21 22.81 Laptop computers 28,574 21,473 42,208 23,783 23.93 17.32 2.43 1.55 1.69 1.84 Dedicated servers 25.221 18.192 36.651 22.324 24.28 17.41 21.27 22.84 2.50 1.61 1.78 1.95 Laser printers 25,076 18,907 37,028 20,931 23.63 17.18 21.35 23.27 2.43 1.56 1.81 1.85 Inkjet printers 14,432 11,365 23,087 14,316 24.94 17.58 21.35 23.99 2.20 1.48 1.61 1.86 FAX machines 29,878 22,411 45,085 24,914 23.97 17.48 21.34 23.40 2.35 1.55 1.75 1.82 **Photocopiers** 28,038 20,013 38,203 22,731 23.79 17.37 21.44 22.81 2.41 1.53 1.73 1.82 **Number of desktop computers** 1,405 27.08 19.06 1,807 3,371 1,832 21.91 22.20 1.27 0.68 0.73 0.93 None 4,882 10,190 24.49 1.36 1 to 4 4,491 5,719 24.85 18.39 20.19 1.83 1.62 1.70 6,404 2,652 3,443 24.57 1.90 5 to 9 3,150 23.11 16.06 22.32 1.49 1.82 1.45 3,590 3,967 23.78 17.86 23.66 25.90 2.18 1.43 10 to 19 2,617 5,333 1.51 1.66 20 to 49 4,835 4,430 9,476 5,023 21.20 17.91 21.89 23.64 2.08 1.71 1.77 1.78 50 to 99 2,843 3,063 4,778 3,302 22.32 18.41 21.98 24.57 2.08 1.54 1.47 1.95 6,420 3,322 100 to 249 6,030 3,988 23.66 16.83 20.86 19.63 2.79 1.51 1.78 2.18 16.54 250 or more 8,280 4,510 9,197 4,710 25.92 20.15 22.15 3.15 1.76 2.10 2.45 **Number of laptop computers** 6,343 5.906 12.572 8.200 23.89 18.14 21.81 24.90 1.69 1.34 1.50 None 1.18 1 to 4 6,528 6,916 12,053 7,060 23.93 17.95 21.12 24.55 1.95 1.37 1.49 1.51 5 to 9 3,913 2,524 5,673 2,787 21.97 17.24 22.30 23.50 2.78 1.71 1.59 1.47 10 to 19 3,160 2,263 5,737 4,292 21.97 18.18 21.90 22.79 2.11 1.54 1.69 2.16 20 to 49 3,800 3,459 6,469 4,912 24.28 16.59 21.36 20.53 2.58 1.58 1.71 2.25 50 to 99 2,796 2.293 3,573 2,031 23.96 17.42 20.29 24.87 2.30 1.75 1.96 2.32 19.13 20.83 100 to 249 3,663 1,595 4,025 1,350 24.24 16.16 2.59 1.56 1.91 2.01 250 or more 4,715 2,423 4,677 1,350 26.96 16.69 21.94 21.71 3.33 1.77 2.17 2.26 Number of dedicated servers None 9,697 9,187 18,128 9,659 23.05 17.65 21.49 24.48 1.78 1.20 1.32 1.40 22,304 12,310 23.35 17.83 21.82 23.44 1 to 4 12.981 10.962 2.10 1.52 1.65 1.71 5 to 9 2,592 2,550 3,699 2,852 22.04 17.90 20.84 22.45 2.37 1.78 1.92 1.66 25.66 10 to 19 3,926 1,590 4,297 3,273 16.76 22.11 21.71 3.51 1.58 1.85 2.59 20 to 49 1,786 1,695 3,060 1,532 28.82 15.84 19.24 22.39 2.59 1.73 2.34 1.97 50 or more 3,936 1,395 3,290 2,356 26.18 16.23 19.41 22.27 3.95 2.15 2.73 3.30

Table C6. Expenditures by Census region for sum of major fuels, 2012

Sum of major fuel Sum of major fuel expenditures (dollars) expenditures (million dollars) per million Btu per square foot North-Mid-North-Mid-North-Mid-West east west South east west South West east west South West All buildings 34,917 27,379 54,780 31,983 23.93 17.49 21.35 23.31 2.25 1.45 1.60 1.74 Number of photocopiers None 6,879 7,366 16,577 9,252 24.51 17.82 21.13 24.65 1.77 1.26 1.36 1.57 One 4,817 5,447 9,162 6,193 23.16 17.26 21.78 24.04 1.85 1.38 1.49 1.41 2 to 4 6,976 6,678 13,408 7,143 21.80 17.71 22.53 23.49 1.95 1.46 1.66 1.75 5 to 9 5,104 3,313 5,187 2,966 22.36 17.52 21.56 23.49 2.62 1.53 1.62 1.92 11,141 6,429 16.91 19.88 20.82 3.16 1.94 2.22 2.64 10 or more 4,575 10,447 26.37 Number of TVs or video displays None 6,209 5,399 9,394 6,734 23.97 18.77 23.38 25.35 1.53 1.06 0.99 1.18 One 2,765 2,923 5,896 3,092 22.69 17.86 20.77 24.21 1.95 1.28 1.38 1.54 2 to 4 5,937 6,064 11,378 5,230 23.68 17.83 22.54 24.31 2.03 1.50 1.80 1.65 4,894 5,953 3,935 17.05 20.65 24.39 2.68 2.30 5 to 9 2,233 24.95 1.54 1.88 10 to 19 4,943 3,509 5,636 2,901 22.39 17.58 22.01 21.74 2.75 1.85 1.85 2.04 20 to 49 3,551 2,431 6,306 3,735 24.68 17.66 22.92 23.31 2.46 1.46 1.98 2.12 50 to 99 1,504 1,557 3,844 2,061 31.19 16.57 19.16 23.21 3.94 1.68 1.89 2.00 100 or more 5,113 3,263 6,372 4,296 23.38 15.38 17.91 19.55 3.04 2.12 2.30 2.77 Food preparation or serving areas in non-food service buildings (more than one may apply) Snack bar or concession stand 5,277 3,906 8,255 5,230 23.28 16.31 20.91 20.84 2.74 1.73 2.19 2.70 Fast food or small restaurant 5,271 3,861 9,846 6,411 24.01 17.01 21.14 21.82 3.01 2.18 2.59 2.60 5,421 Cafeteria or large restaurant 9,717 11.116 5,847 22.35 15.71 20.11 20.05 2.71 1.57 1.87 2.62 Commercial kitchen/ 9,009 6,400 7,291 15.60 20.52 20.32 2.77 1.62 2.04 food preparation area 12.418 21.24 2.56 Small kitchen area 8,668 4,901 23.30 16.48 21.72 21.50 2.06 1.38 1.69 2.03 6,394 4,712 Separate computer areas (more than one may apply) 4,798 8,449 Data center or server farm 6,818 26.39 16.79 19.93 20.69 3.51 1.93 2.88 8,354 2.18 Computer-based training room 7,991 6,713 13,382 6,983 24.24 16.82 21.00 21.13 2.39 1.70 1.88 2.11 Student or public computer center 5,357 10,127 21.51 15.60 20.52 19.12 1.98 1.35 1.69 2.03 4,501 4,664 **HVAC** conservation features (more than one may apply) Economizer cycle 18,929 13,346 18,194 14,473 23.37 17.10 20.66 21.56 2.74 1.69 2.01 2.11 Regular HVAC maintenance 31.704 24,112 48,123 27,793 23.90 17.21 21.26 22.94 2.44 1.59 1.81 1.91 Building automation system (BAS)² 18,998 13,979 28,291 17,036 24.30 17.34 20.94 22.11 2.74 1.75 1.94 2.26

Table C6. Expenditures by Census region for sum of major fuels, 2012

	Sum of ma	jor fuel		Sum of major fuel expenditures (dollars)								
	expenditure (million do		per millio	n Btu		per square foot						
	North- east	Mid- west	South	West	North- east	Mid- west	South	West	North- east	Mid- west	South	West
All buildings	34,917	27,379	54,780	31,983	23.93	17.49	21.35	23.31	2.25	1.45	1.60	1.74
Window and interior lighting features (more than one may apply)												
Multipaned windows	26,342	23,177	39,409	20,216	24.07	17.38	20.97	21.44	2.30	1.52	1.75	1.83
Tinted window glass	16,385	14,754	32,566	19,703	22.92	17.26	21.09	22.93	2.60	1.63	1.72	1.85
Reflective window glass	6,662	6,754	11,674	9,237	24.18	17.29	20.76	21.79	2.84	1.77	2.14	2.15
External overhangs or awnings	12,223	11,032	26,075	15,084	22.77	17.20	21.43	21.74	2.85	1.70	1.88	2.00
Skylights or atriums	10,257	6,146	14,564	10,053	22.62	16.55	20.63	20.96	2.53	1.50	1.80	1.67
Light scheduling	16,000	11,299	20,844	15,227	24.79	17.24	21.72	22.74	2.74	1.70	1.94	2.16
Occupancy sensors	19,764	13,021	23,819	16,074	24.13	17.08	21.10	22.19	2.56	1.64	2.00	1.94
Multi-level lighting or dimming	6,908	5,813	11,576	8,613	23.89	16.52	20.86	20.40	2.96	1.83	2.13	2.39
Daylight harvesting	3,061	2,735	3,644	3,596	23.18	17.92	21.68	21.61	2.97	1.80	1.83	2.30
Demand responsive lighting	1,513	1,599	3,669	2,854	24.45	18.38	23.56	27.11	2.34	1.75	2.17	1.92
Building automation system (BAS) for												
lighting ²	6,195	4,480	9,148	6,747	23.20	17.81	23.14	23.52	2.87	1.83	2.03	2.29
Equipment usage reduced when building not in full use (more than one may apply)												
Heating	27,106	20,535	37,368	23,431	24.03	17.36	21.67	23.74	2.21	1.45	1.60	1.74
Cooling	26,151	19,934	39,233	23,560	23.77	17.50	21.82	24.28	2.28	1.48	1.60	1.79
Lighting	32,127	25,370	50,260	29,677	23.84	17.38	21.45	23.26	2.25	1.47	1.65	1.80

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.

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/

[•] 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.

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