

## Comparisons across surveys from the 1992 *Commercial Buildings Energy Consumption Survey (CBECS)* through the 2018 CBECS

**Table 1. Survey design and methodology**

	1992	1995	1999	2003	2012	2018
<b>Target population: building size</b>	Buildings larger than 1,000 square feet	Same as 1992	Same as 1992	Same as 1992	Same as 1992	Same as 1992
<b>Target population: location</b>	50 states and the District of Columbia	Same as 1992	Same as 1992	Same as 1992	Same as 1992	Same as 1992
<b>Target population: building use</b>	Buildings used primarily for commercial purposes; <b>excludes</b> residential, agricultural, and industrial buildings; <b>includes</b> commercial buildings on industrial facilities	Same as 1992, except <b>excludes</b> commercial buildings on industrial facilities and parking garages	Same as 1995	Same as 1995	Same as 1995	Same as 1995
<b>Data collection mode</b>	In person	In person	Telephone	In person	In person and telephone	In person, telephone, and self administered
<b>Survey frame and sample</b>	Longitudinal revisit of the buildings from the 1986 sample	1986 sample design with procedures to update the 1986 CBECS building frame to include new construction	To accommodate telephone mode, a revisit of buildings from the 1995 sample using phone numbers collected in 1995, supplemented with a list frame of new construction	First CBECS since 1986 to use a new sample design, starting with the selection of all new primary sampling units (PSUs)	2003 sample design with listing updates in some randomly selected carryover secondary sampling units (SSUs), plus some new additional primary sampling units (PSUs)	Same PSUs as 2012 but new SSUs chosen and newly listed using Virtual Listing System (VLS)
<b>Number of buildings on final file</b>	6,734	5,766	5,430	5,215	6,720	6,436
<b>Response rate</b>	91%	87%	86%	82%	70%	55% ( <i>partially weighted</i> response rate that accounts for second-phase subsampling procedures)
<b>Target respondent: Buildings Survey</b>	Building owners, managers, or tenants	Same as 1992	Same as 1992	Same as 1992	Same as 1992	Same as 1992
<b>Target respondent: Energy Supplier Survey (ESS)</b>	Suppliers of electricity, natural gas, fuel oil (fuel oil, kerosene, and diesel), district heat, and district chilled water	Suppliers of electricity, natural gas, fuel oil (fuel oil, kerosene, and diesel), and district heat	Same as 1995	Suppliers of electricity and natural gas	Same as 1995	Same as 1995
<b>Data collection instrument</b>	Paper-and-pencil personal interview	Computer-Assisted Personal Interview (CAPI) programmed by contractor (Westat)	Computer-Assisted Telephone Interview (CATI) programmed in-house using Blaise 4	CAPI programmed in-house using Blaise 4	CAPI and CATI programmed in-house using Blaise 4	CAPI, CATI, and self-administered interviews programmed using Blaise 5 (both in-house and by Westat)

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<b>Data collection period: <i>Buildings Survey</i></b>	August 1992 through December 1992	August 1995 through December 1995	January 2000 through September 2000	August 2003 through January 2004	April 2013 through November 2013	April 2019 through January 2020
<b>Data collection period: <i>ESS</i></b>	February 1993 through September 1993	February 1996 through September 1996	July 2000 through February 2001	April 2004 through September 2004	March 2014 through October 2014	April 2020 through October 2020
<b>Supplemental collections</b>	Data on building maintenance and repairs for the U.S. Census Bureau	None	None	Supplemental sample of drugstores, hardware stores, convenience stores, other retail stores, movie theaters, libraries, and fire stations collected for the U.S. Environmental Protection Agency (EPA)	<ul style="list-style-type: none"> <li>Collected data on water usage (collaboration with EPA's WaterSense program)</li> <li>Subsample received follow-up <i>energy assessments</i> to gauge data quality differences using energy professionals to collect data</li> </ul>	Data center pilot test
<b>Data collection for enclosed malls</b>	No special procedures; respondent asked to report for entire mall	Same as 1992	Same as 1992	Rostered all establishments and selected a sample plus a common area interview; used estimation to build mall-level case	Same as 1992	Same as 1992
<b>Data collection for strip shopping centers</b>	No special procedures; respondent asked to report for entire strip center	Same as 1992	Same as 1992	Rostered all establishments and selected a sample to interview; used estimation to build strip shopping center-level case	Same as 2003, with the addition of a <i>mall manager</i> survey to collect some information about the entire strip shopping center	Same as 2012