

Appendix K 2018 CBECS Pretesting Showcards

SHOW CARD A

Respondent Function

- 1) Operations, maintenance, or engineering
- 2) Property management
- 3) Store management
- 4) Mall management
- 5) Administration or company management
- 6) Energy or environmental management
- 7) Building owner
- 8) Business owner
- 9) Accounting, finances, or payroll
- 10) Executive official
- 11) School official
- 12) Religious official
- 13) Support staff
- 14) Other

SHOW CARD B
Year of Construction
Category

- 1) Before 1920
- 2) 1920 to 1945
- 3) 1946 to 1959
- 4) 1960 to 1969
- 5) 1970 to 1979
- 6) 1980 to 1989
- 7) 1990 to 1999
- 8) 2000 to 2003
- 9) 2004 to 2007
- 10) 2008 to 2012
- 11) 2013 to 2017

SHOW CARD C

Office Type

- 1) Administrative or professional office building
(Examples: consulting, insurance, law, utility / telephone company, publishing, or college administration)
- 2) Government office
- 3) Mixed-use office
- 4) Bank or other financial institution
- 5) Doctor's or dentist's office
- 6) Sales or leasing office
(Examples: vehicles or real estate)
- 7) Contractor's office
(Examples: construction, plumbing, or HVAC)
- 8) Non-profit or social services office
- 9) Research and development office
- 10) City hall or city center
- 11) Religious office
- 12) Call center
- 13) Other type of office

SHOW CARD D

Lodging Type

- 1) Motel or inn
- 2) Hotel
- 3) Dormitory, fraternity, or sorority
- 4) Retirement home
- 5) Other type of lodging

SHOW CARD E

Education Type

- 1) Elementary or middle school
(Includes junior high school)
- 2) High school
- 3) College or university
- 4) Preschool or daycare
- 5) Adult education
- 6) Career or vocational training
- 7) Religious education
- 8) Other type of classroom education

SHOW CARD F

Food Service Type

- 1) Restaurant or cafeteria
- 2) Fast food
- 3) Bar, pub, or lounge
- 4) Coffee, doughnut, or bagel shop
- 5) Ice cream or frozen yogurt shop
- 6) Bakery
- 7) Other type of food sales or service

SHOW CARD G

Warehouse Type

- 1) Non-refrigerated warehouse or storage building
- 2) Refrigerated warehouse
- 3) Distribution or shipping center
- 4) Public rental storage units
- 5) Other type of warehouse

SHOW CARD H

Type of Complex

- 1) College, university, or junior college
- 2) Primary or secondary school [GRADES K-12]
- 3) Other type of school
- 4) Office complex
- 5) Retail complex
- 6) Storage complex
- 7) Religious campus or complex
- 8) Hospital or other health care complex
- 9) Lodging or resort complex
- 10) Post office complex
- 11) Prison or correctional facility
- 12) Other type of government complex
- 13) Industrial complex
- 14) Transportation complex such as a terminal, depot, or airport
- 15) Other type of campus or complex

SHOW CARD I

Building Owner

- 1) Real estate investment trust (REIT)
- 2) Other public or private corporation, partnership, LLC, or LLP
- 3) Individual owner(s)
- 4) Religious organization
- 5) Non-profit organization (other than religious or government)
- 6) Private academic institution
- 7) Other non-government
- 8) Federal government
- 9) State government
- 10) Local government

SHOW CARD J

Square Footage Category

- a) **1,000 square feet or less**
(1,000 square feet is approximately 2 times the size of a two car garage)
- b) **1,001 to 5,000 square feet**
(Example: fast food restaurant)
- c) **5,001 to 10,000 square feet**
(Example: sit-down style chain restaurant)
- d) **10,001 to 25,000 square feet**
(Example: one or two screen movie theater)
- e) **25,001 to 50,000 square feet**
(Example: supermarket)
- f) **50,001 to 100,000 square feet**
(Example: large discount or home improvement store)
- g) **100,001 to 200,000 square feet**
(Example: 3-level department store)
- h) **200,001 to 500,000 square feet**
(Example: professional basketball arena)
- i) **500,001 to 1 million square feet**
(Example: convention center)
- j) **Over 1 million square feet**
(Example: skyscraper)

SHOW CARD K

Energy Sources Used

- a) Electricity
- b) Natural gas
- c) Fuel oil, diesel, or kerosene
- d) Bottled gas, also known as LPG or propane
- e) District steam piped in from a separate building or utility
- f) District hot water piped in from a separate building or utility
- g) District chilled water piped in from a separate building or utility
- h) Other energy source or sources

SHOW CARD L

Heating Energy Sources Used

- a) Electricity
- b) Natural gas
- c) Fuel oil, diesel, or kerosene
- d) Bottled gas, also known as LPG or propane
- e) District steam piped in from a separate building or utility
- f) District hot water piped in from a separate building or utility
- g) Other source or sources

SHOW CARD M

Heating Equipment Types

Choose All That Apply

- a) **Furnaces that heat air directly, without using steam or hot water**
(Installed inside the building, similar to a residential furnace)
- b) **Packaged central unit (roof mounted)**
(Self-contained unit, either unitary or built-up, that contains heating equipment and may include air conditioning equipment)
- c) **Boilers inside (or directly adjacent to) the building that produce steam or hot water**
(Does not include boiler in central plant in separate building)
- d) **Heat pumps (other than components of a packaged unit)**
- e) **Individual space heaters (other than heat pumps)**
(Can be freestanding or mounted in walls, ceilings, or windows. Include heating elements in room space conditioning equipment such as Packaged Terminal Air Conditioners or PTACs.)
- f) **Duct reheat (hydronic/steam coils)**
(Heating coils located within ducts; common in variable air volume, or VAV, systems)
- g) **Fan coil units in rooms (or areas)**
(Units with heating coil and fan to circulate air)
- h) **Central air handling system (hydronic/steam coils)**
(Heating coils located in air handler)
- i) **Radiators**
(Heat by convection and radiation without fans; typically located along baseboards)
- j) **Other heating equipment**

SHOW CARD N
Type of Heat Pump

Choose All That Apply

- a) Air source heat pump
(Extracts heat from outside air)
- b) Ground source or ground water heat pump (geothermal)
(Extracts heat from fluid circulated through tubing buried in ground)
- c) Dual source heat pump (combination air source and geothermal)
- d) Water loop heat pump
(Connected to water-filled tubing connected to cooling tower/chiller or boiler)

SHOW CARD O
Cooling Energy Sources
Used

Choose All That Apply

- a) Electricity
- b) Natural gas
- c) Fuel oil, diesel, or kerosene
- d) Bottled gas, also known as LPG or propane
- e) District steam piped in from a separate building or utility
- f) District chilled water piped in from a separate building or utility
- g) Other source or sources

SHOW CARD P

Cooling Equipment Types

Choose All That Apply

- a) Residential-type central air conditioners (other than heat pumps) that cool air directly and circulate it without using chilled water
(Split systems that consist of an outside unit typically mounted on a slab beside the building and a separate inside cooling unit)
- b) Packaged air conditioning units (other than heat pumps)
(Contain air conditioning equipment as well as fans, are typically mounted on the roof or on a slab next to the building, and may include heating equipment. Includes unitary units and built-up units.)
- c) Central chillers inside (or directly adjacent to) the building that chill water for air conditioning
(Does not include central chiller in central plant in separate building)
- d) Heat pumps for cooling
- e) Individual room air conditioners (other than heat pumps)
(Installed in either walls or windows, includes what are commonly termed Packaged Terminal Air Conditioners (PTACs))
- f) "Swamp" coolers or evaporative coolers
- g) Fan coil units in rooms (or areas)
(Units with cooling coil and circulation fan)
- h) Central air handler (hydronic coils)
(Cooling coils located in air handler)
- i) Chilled beam
(Located in ceiling, contains pipes that circulate chilled water)
- j) Other cooling equipment

SHOW CARD Q

Server Definitions

DEFINITION 1:

Server: A server is usually just the CPU, or “case” portion of a computer that manages network resources such as computer files, printers, databases, or network traffic; servers do not require much human operation, so most do not have keyboards or monitors.

DEFINITION 2:

Dedicated: Dedicated means that the server performs no other tasks besides server tasks.

SHOW CARD R

Servers Category

- a) Zero
- b) 1 to 4
- c) 5 to 9
- d) 10 to 19
- e) 20 to 49
- f) 50 to 99
- g) 100 to 249
- h) 250 to 499
- i) 500 or more

SHOW CARD S

Separate Computer Areas

Choose All That Apply

- 1) **Data center or server farm**
(Areas specifically designed and equipped to meet the needs of high density computing equipment such as server racks, used for data storage and processing. Typically, data centers require additional equipment to provide uninterruptible power and to maintain proper working conditions (cooling and humidity control) for the equipment. When a data center is located within a larger building, it will usually have its own power and cooling systems.

Do not include server closets as data centers.)
- 2) **Computer-based training room**
(Room used for hands-on computer training, where every person or every two people have their own computer)
- 3) **Student or public computer center**
(Such as at a school, library, hotel, or community center)
- 4) **Trading floor**
(Large, open area with computers and electronic equipment that is used for trading stocks or other securities in financial markets)
- 5) **None of these types of areas**