Thank you for considering my written testimony. My name is Scott West with Jacobs Engineering. I work in building design of HVAC systems and consult on low-energy and sustainable design. I am project manager for our energy auditing group for the state of Texas and I'm well versed in building energy modeling and Energy Star Portfolio Manager. I depend heavily on CBECS data for benchmarking building energy performance and I was very disappointed to hear about the EIA's inability to publish 2007 and 2011 data due to statistical and funding issues. I find it more than a bit ironic that this should occur while at the same the Federal government has passed laws on increasingly aggressive goals for energy performance and sustainability of our existing buildings, especially those owned by the Federal government. EPAct 2005, EISA 2007, EO 13423 and EO 13514 all contribute to increased energy performance for new and existing Federal buildings. The new and existing building industry wants to see the Federal government succeed in these ambitious goals and providing adequate information is a crucial component to achieving this. Thank you to NIBS for taking up this issue on behalf of the industry.

If I may, I'd like to list some recommendations of things I would like to see in future versions of an existing building survey similar to CBECS.

- I realize there are constraints in funding, manpower and getting cooperation from building owners, but I would like to see the sample size of the data increase. The US is a relatively large country and energy performance can vary significantly by region. The sample size has a direct effect on how informative the data are.
- I think a big improvement would be to group building locations by climate zones as outlined in ASHRAE 90.1. The climate zone can be a large determining factor in overall energy performance in our geographically diverse country.
- I would like to see additional building types covered under the survey or further sub-categories. Airport facilities and higher education buildings and laboratories are some examples that stand out to me. Further distinction could be made even within a category such as with offices where high rise energy use could differ from a small office.
- I understand that NIBS is interested in surveying other high performance building data over just energy use. I think energy is the most crucial one but I would also like to see: potable water usage, municipal wastewater discharge (sewer and storm depending on utility arrangement), solid waste disposal to landfill and recycling. Perhaps some information on how many occupants use one travel mode versus another in getting to and from work. Are they driving, car-pooling, cycling, or using mass transit? These would be interesting figures to know.
- Another important industry problem is trying to reconcile actual building performance with predicted performance. More often than not, buildings do not save as much energy as intended in the design. This can be for a number of reasons, but the information feedback loop is critically important if we are to find a remedy to this. I would like to the tying in of energy use intensity (EUI) targets with new building design. What is an average small office building in climate zone 3A that complies with 90.1-2007 supposed to achieve in EUI? Setting energy targets in design and checking them with eventual metered performance is very important to this feedback loop.

In conclusion, I think the data currently provided by CBECS is crucial to advancing low-energy and sustainable design for existing buildings. It can even aide new building design to help compare operational energy use with predicted energy use. Federal buildings alone have ambitious targets to meet on building energy performance and the industry needs to be properly informed in order to find creative solutions to get us there and beyond. Thank you for your consideration.

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