Panel on Confidentiality Protection and Facilitation of Research

For

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By

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Factors affecting privacy and confidentiality in EIA's energy consumption surveys

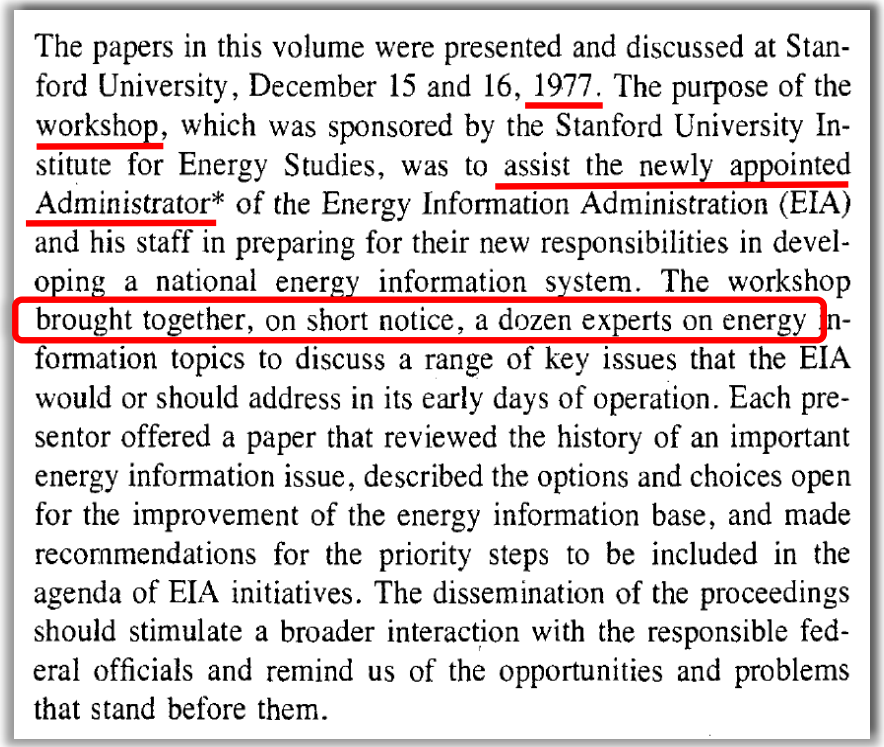
- Context in which EIA was formed
- Importance of CIPSEA to the energy consumption data program
- Accomplishments since CIPSEA and what those protections enable us to do going forward

EIA's timeline: key dates

- 1973-74 Arab Oil Embargo
- 1974 *Federal Energy Administration* (FEA) began gathering production & supply data from other government agencies
- *1976* *Energy Conservation and Production Act* established FEA Office of Energy Information & Analysis
- *Apr 18, 1977* President gives "moral equivalent of war" speech on energy
- *Aug 4, 1977* President signs the *Department of Energy Organization Act*, which establishes EIA as the federal authority on energy statistics and analysis

Six months later, December 1977, the first workshop in support of EIA's mission, led by Stanford's *Institute for Energy Studies*

- Purpose: to assist EIA's first Administrator, Dr. Lincoln Moses of Stanford, only statistician to ever lead EIA
- Laid broad groundwork for EIA in a federal statistical context
- In 1978, EIA conducted its first Residential Energy Consumption Survey(RECS); the commercial survey began a year later, 1979



The papers in this volume were presented and discussed at Stanford University, December 15 and 16, 1977. The purpose of the workshop, which was sponsored by the Stanford University Institute for Energy Studies, was to assist the newly appointed Administrator* of the Energy Information Administration (EIA) and his staff in preparing for their new responsibilities in developing a national energy information system. The workshop brought together, on short notice, a dozen experts on energy information topics to discuss a range of key issues that the EIA would or should address in its early days of operation. Each presentor offered a paper that reviewed the history of an important energy information issue, described the options and choices open for the improvement of the energy information base, and made recommendations for the priority steps to be included in the agenda of EIA initiatives. The dissemination of the proceedings should stimulate a broader interaction with the responsible federal officials and remind us of the opportunities and problems that stand before them.

Hogan, W.H. "Energy Information –description, diagnosis and design," Stanford. 1978

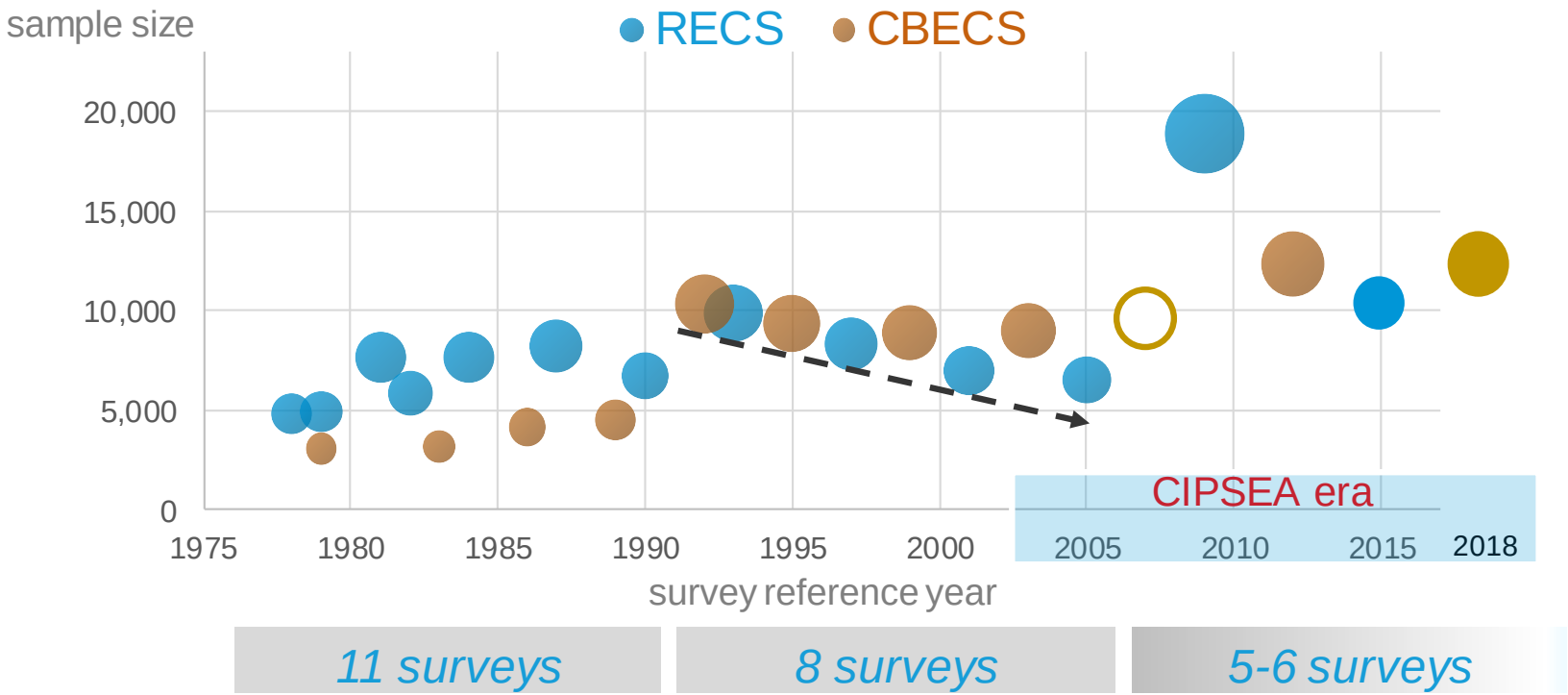
The DOE law included strong provisions for independence

"The Administrator shall not be required to obtain the approval of any other officer or employee of the Department in connection with the collection or analysis of any information; nor shall the Administrator be required, prior to publication, to obtain the approval of any other officer or employee of the United States with respect to the substance of any statistical or forecasting technical reports which he has prepared in accordance with law."[2]

[1]Department of Energy Organization Act, Public Law 95-91, August 4, 1977; Sec. 205(a)(2).

Hogan, 1978

EIA conducted 10 residential and 7 commercial building surveys of energy consumers prior to CIPSEA



Questions to the Panel

Subtitle A of CIPSEA provides strong statutory protection for data gathered for exclusively statistical purposes under a pledge of confidentiality.

1. What statutory authority did your agency have to protect the confidentiality of data that you collected or acquired prior to the passage of CIPSEA?

2. If you didn't have statutory authority, what did you do to try to protect the confidentiality of data that you collected?

3. How did your agency provide access to researchers for statistical purposes prior to being able to designate "agents" under CIPSEA?

4. How has implementing CIPSEA affected other aspects of your agency practices and culture, such as confidentiality training, disclosure review, interactions with external researchers, etc.

5. What enhancements, improvements, or changes to CIPSEA would you want to make if you could?

1. Statutory authority for EIA consumption surveys, RECS and CBECS, before CIPSEA

- EIA's mission was and is larger than a statistical agency. As such, the original statutory protections for the consumption surveys were weak

- Legislation gave EIA broad mandatory authority to collect energy information, but EIA was also required to provide individually identifiable data throughout DOE when needed

- This constraint was largely a legacy of the information collections inherited by EIA that were quasi regulatory in nature, and not suitable for surveys of energy consumers in voluntary surveys

2. Pre-CIPSEA confidentiality protections severely limited EIA's access to and uses of the data

- Without confidentiality protections, EIA protected the data by never taking possession of any of the unmasked information except the final data file, which had disclosure controls, dummy IDs and no geographic identifiers below the PSU level (for the purposes of variance estimation)

- Data collection contractors had control of the frame, sample, address records, energy supplier contact information, and the utility billing records

3. Data access prior to CIPSEA

- EIA could only access and review data at the contractor site, much like a Census researcher at a Regional Data Center

- Researchers only had as much access to the data as EIA did at that time, much like the microdata we provide to the public via web today

- We had no data sharing agreements in place, as we never took possession of the raw, unmasked data ourselves

4. CIPSEA opened the data up to much broader EIA quality assessment, program, policy and analysis uses

- Modeling of end uses of energy is much improved. For example, we have much finer linkage of weather data; we link the best, closest daily weather data to actual sampled addresses
- EIA is directly now involved in all stages of sample design
- With sample addresses and direct access to monthly energy bills, EIA is now a direct steward of data quality from design, editing to estimation and modeling phases
- Data sharing through strict confidentiality agreements is now possible

Three windfalls from CIPSEA

- More collaboration across agencies and the rise of data sharing agreements
  - HHS for ongoing RECS analysis for Low Income Home Energy Assistance program evaluation
  - DOE research labs to examine price elasticities, appliance standards, building envelope
  - Census/HUD uses for the American Housing Survey; BLS for energy expenditures
- Stronger long-term energy demand projections in a dynamic market
  - Direct use by EIA economists in developing a stronger reference case, cases for new technologies, energy standards, regulations and legislation
- Better stewardship of the overall program: more direct oversight, improved quality, timeliness and resilience, and by necessity, more innovation

5. Wish list for enhancements to CIPSEA

- Get away from Data Sharing Agreements. Create a CIPSEA clearinghouse across the federal system that preapproves users and uses.
- Bring on the technology to secure data irrespective of location of use.
- In addition, broaden sharing of disclosure protection methods and procedures across agencies.
- Add ability to share frames across statistical agencies. CIPSEA currently limits this to BEA-Census-BLS.