


Residential Energy Consumption Survey - Latest Developments

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RECS Overview

- Conducted every 4 years – currently in redesign
- 4,000+ sample households out of 100 million +
- Area-based representative, multistage sample
- Excludes vacant and seasonal households
- Household respondents provide characteristics data
- Energy suppliers provide consumption and expenditures data

Characteristics of Household Interview

- Personal interview; computer-assisted
- Average length 30-40 minutes
- Blaise questionnaire/case management system
- Household respondent provides all information except floorspace, which is measured
- Shorter mail questionnaire for personal interview nonrespondents

Contents of Household Interview

- Physical structure; e.g., number of rooms, ownership status, and age of housing unit
- Kitchen appliances; characteristics and amount of use
- Other appliances (emphasis on electronics; includes swimming pool)
- Characteristics of household members
- Space heating equipment/fuels/use

Contents of Household Interview (Cont.)

- Water heating equipment
- Air conditioning equipment/use
- Other equipment
(lighting/doors/windows/insulation)
- Uses of energy sources/how obtained
- Energy assistance questions
- Energy supplier names/billing information
- Householder waiver for supplier data

Characteristics of Supplier Survey

- Suppliers provide data from individual bills
- Mail questionnaires; mail/fax responses
- Suppliers allowed to submit in their own billing or database format
- Data desired for a calendar year +
- Data cover all uses of energy – no end uses
- Billing dates used to annualize consumption and impute for missing data

Estimates of End Use Consumption

- End use categories: Space heating, Air conditioning (electricity only), Water heating, Refrigerators, and other appliances/lighting
- Energy sources covered; electricity, natural gas, LPG, fuel oil, kerosene
- Estimates derived using nonlinear regression
- Values estimated for each sample household, fuel, and applicable end use
- Values normalized to sum to total reported energy use

Preparations for 2005 RECS Underway

- Sample being completely redesigned to reflect post-2000 population distribution
- Design will be basis for surveys for next 10-20 years
- Questionnaire currently under development
- New contract vehicle
- New survey manager – Stephanie Battles

Characteristics of New Design

- Selection at first stage on county rather than metropolitan basis
- Finer geographic stratification, which will allow for greater geographic detail If States/State groups are interested in paying for supplemental samples in their area
- Design to be finished by June, 2005

Characteristics of 2005 Household Survey

- Square footage will still be measured
- Questionnaire largely the same as previously; perhaps new questions on appliances and their usage
- If you have comments on the questionnaire content, please contact EIA by the end of October, 2004.
- Survey fielded beginning August, 2005

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