## A Vision for the 2020 Residential Energy Consumption Survey (RECS)















For

**NASEO** 

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By

Chip Berry, EIA



## Topics for today

- RECS: History, Purpose, Uses
- Highlights from the 2015 RECS: Setting the stage for the program's future
- 2020 RECS and state-level estimates



# RECS is the only nationwide, benchmark study of household energy use

- Initiated in 1978
- Draws responses from a national, representative sample of housing units
- Each RECS includes multiple data collections and estimation phases
  - Household Survey
  - Customer energy bill collection (Energy Supplier Surveys)
  - Energy end-use modeling
- 2020 RECS will be the 15<sup>th</sup> study

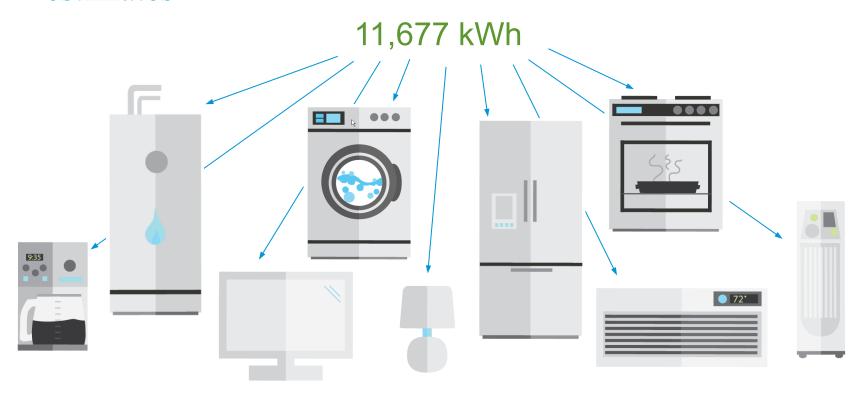
# Household Survey includes over 200 items in a 30-minute questionnaire

LIGHTING YOUR HOME **APPLIANCES ENERGY PROGRAMS ELECTRONICS ENERGY BILLS** HOUSEHOLD CHARACTERISTICS SPACE HEATING AIR CONDITIONING **ENERGY ASSISTANCE** 

WATER HEATING

**ENERGY SUPPLIERS AND USE** 

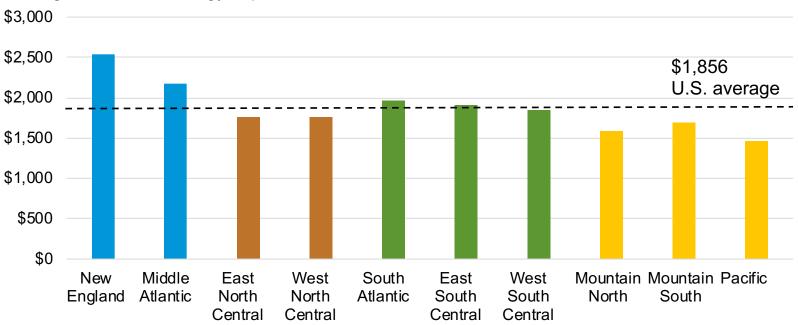
# Disaggregate annual fuel totals into energy end-use estimates



## 2015 RECS Results

# Household energy costs were highest in New England, lowest along the West coast

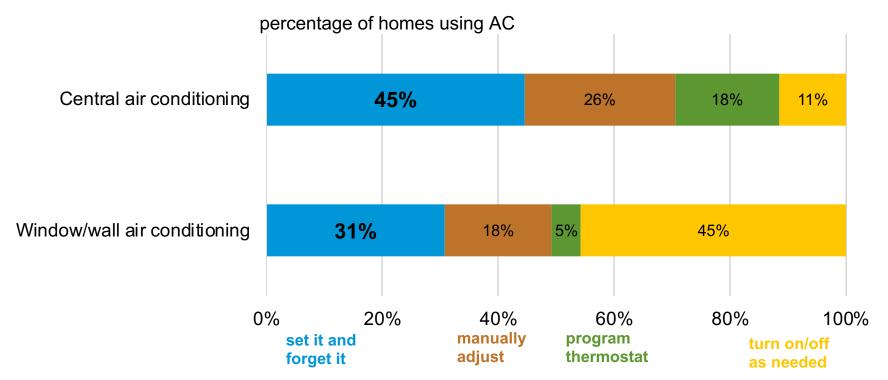
Average household energy expenditures, 2015



Source: EIA, 2015 Residential Energy Consumption Survey



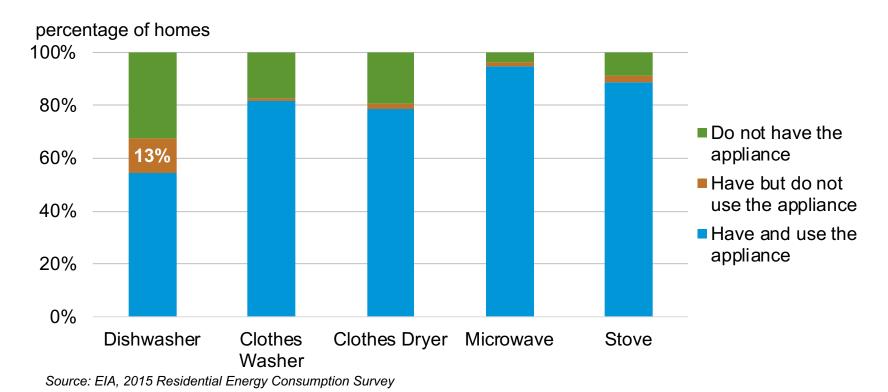
# "Set it and forget it" was most common method for controlling central AC systems





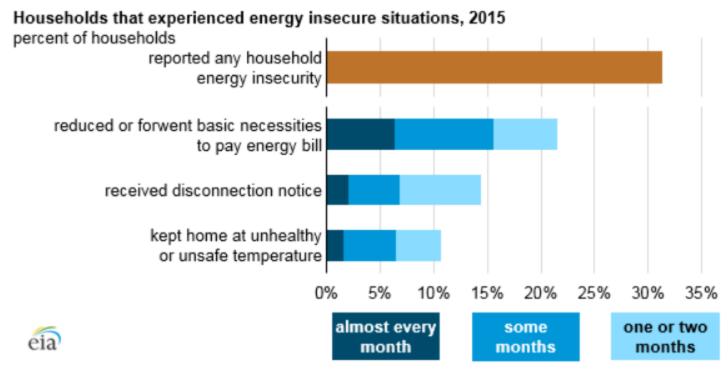


### Dishwashers were the most frequently unused appliance

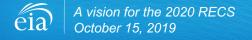




### One in three households faces a challenge in meeting energy needs

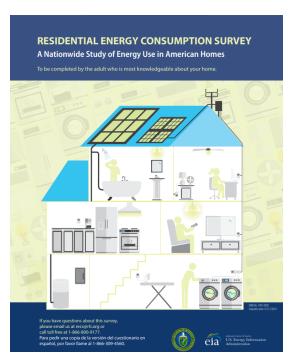




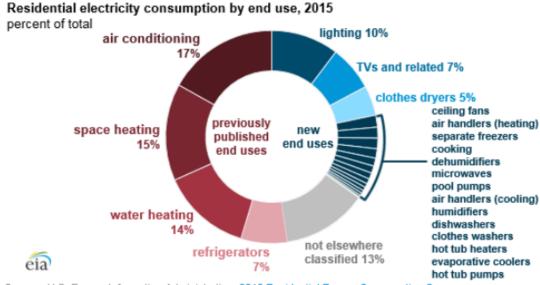


### 2015 RECS featured two key innovations

#### Web/mail modes



#### **Expanded end-use estimation program**



Source: U.S. Energy Information Administration, 2015 Residential Energy Consumption Survey

### 2020 RECS to include largest sample ever

- Key household energy metrics for all 50 states and DC
- Targeting responses from about 20,000 households
- Greater precision for ALL estimates
- Analysis of emerging topics
  - Electric vehicles
  - Electrification
  - Smart devices



## Discussion Topic: Reviving RECS state-level estimates

- How could expanded state-level estimates benefit you?
- What topics are most important to states? How does that vary by state?
- What opportunities exist for partnerships and to leverage related data sources?

#### For more info or to comment on the 2020 RECS:

Chip Berry

james.berry@eia.gov