

# Management Challenges

**Co-Chairs: Karen Davis, RTI and Jane Shepherd, Westat**

This panel provides a venue for presenting and discussing the management and administrative challenges in today's CAI environment.

There are two sessions and within each of these topics, the panelists and a moderator address current issues, approaches taken, and lessons learned.

The approach is to discuss the techniques used in different organizations to address key management issues, participate in a discussion of these issues, and have an opportunity to ask the panelists about effective approaches to common situations

# Management Challenges

- Panel 1 – Management challenges associated with the changing landscape of data collection
- Panel 2 – Management challenges associated with staffing the survey lifecycle

## **Panel 1: Management challenges associated with the changing landscape of data collection**

This panel will discuss current challenges for survey organizations and project managers related to managing the changing methodology, design, technology, and execution of survey data collection.

Today's research studies are largely multi-mode and many employ individual customization through adaptive design.

Technology advances have enabled data collection to involve multiple phases and frequently the collection of biomedical, environmental, or other data using equipment carried by the data collector.

## **Panel 1: Management challenges associated with the changing landscape of data collection**

Interviewers may be equipped with GPS, recording or camera equipment needed to complete the interview. As many surveys report results in real time or close to real time, what challenges does this create for interviewer training and management.

The panel will discuss the challenges they are encountering, how they are handling changing research designs, and creative ways to effectively manage survey data collection.

## **Panel 1: Management challenges associated with the changing landscape of data collection**

Moderator: Karen Davis, Vice President, Research Computing at RTI International

Panelists:

- Chip Berry, Project Manager, Residential Energy Consumption Survey Study
- Kyle Fennell – Associate Director of Field Operations, NORC
- Howard Hogan – Chief Demographer, US Census Bureau
- Patty Maher – Director of Survey Research Operations at the Survey Research Center, University of Michigan

# Managing the Fast-Track Transformation of a 35-Year Old Federal Survey: Part 2



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*For:*

*FedCASIC*

*April 11, 2016 / Washington, D.C.*

*By:*

*Chip Berry, U.S. Energy Information Administration*

# The Residential Energy Consumption Survey (RECS) originated in 1978 as an annual collection using in-person interviews

- Resource constraints shifted RECS to a quad-year cycle by 1997; six-year
- Interviewers utilize manuals, letters, show cards, and worksheets, → the personal skills
- Multi-phase, → process

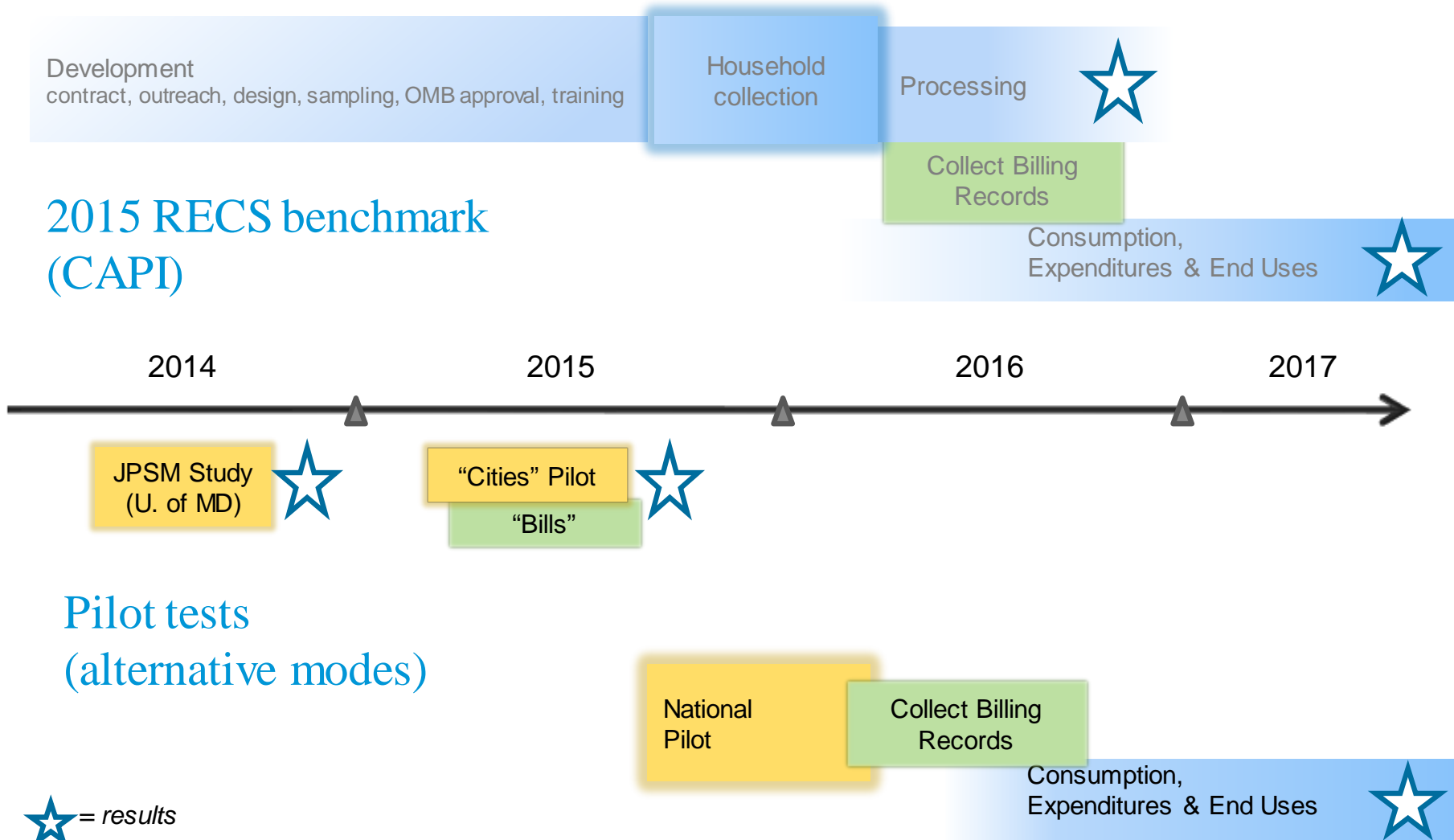
**Sustainable?**  
**Flexible?**  
**Relevant?**

## Since 2011...a systematic approach to transform the Residential Energy Consumption Survey Study using Web and Mail

- Build the constituency for change: CNSTAT study
- Get started: Cities Pilot → National Pilot
- Explore innovation (the “Idea Hub” mentality): submetering, multi-family and mixed-use building data
- PM-driven approach: communication strategy, risk management, project control, continuous quality assessment
- Be flexible: JPSM Practicum and 2015 RECS remediation



# Pilot tests of alternative modes surfaced from the CNSTAT recommendations



## Where are we now?

- Cities and National Pilot tests completed; research results coming soon
- 2015 RECS Household Survey completed using multi-mode approach; results released
- “Request for Information”: Residential submetering
- Planning for next RECS(s) begins later this year

## With rapid changes in energy sector, what management challenges confront the future of RECS?

- What will be expected of the program? How should we measure home energy use at this rapid pace of change?
- If we were starting RECS today what tools would we use?
- What staff skills will be needed?

# **Management challenges associated with the changing landscape of data collection**

Kyle Fennell  
NORC

# Changing data collection landscape

- Multimode studies
- Adaptive design
- SCA
- Local/state laws
- Diversity of projects
- Other

# Training for the entire range of data collection activities

- Topics which need to be covered during training
  - Working cases to secure participation
  - Basic questionnaire administration
  - Other data collection activities
  - Administrative tasks
- Never enough time to cover everything, especially during in person training.
- Choices to make:
  - Self-study or group training
  - in person or remote
  - Before or after the launch or data collection
  - Formal training or provided through memos, mentoring,...

# Technology

- Better or just flashier?
- What to do when you have a partial solution?
- Do you incorporate new tech into existing frameworks or use the new software to transform how things are currently done?

# **Management challenges associated with the changing landscape of data collection**

Dr. Howard Hogan  
Chief Demographer  
US Census Bureau

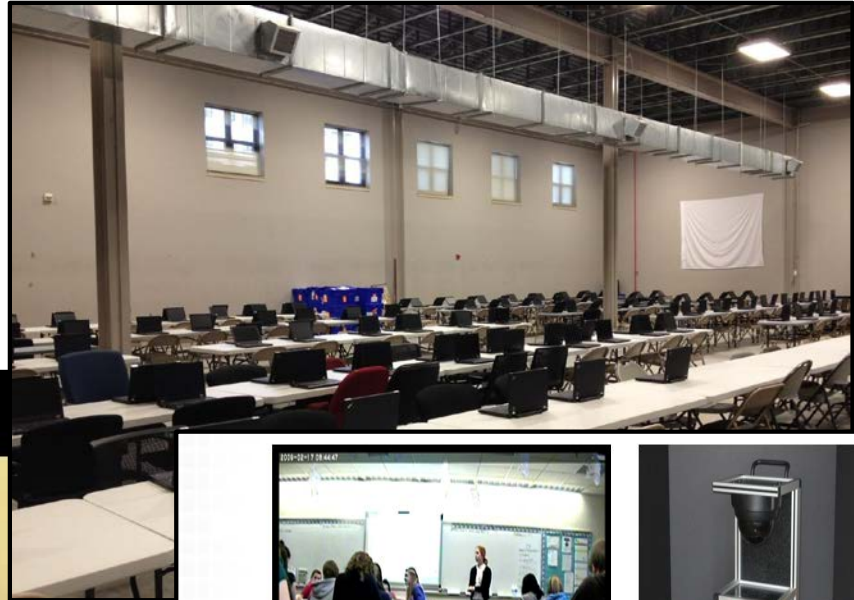
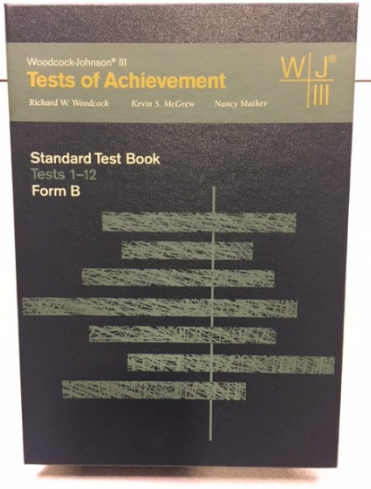


# **Management challenges associated with the changing landscape of data collection**

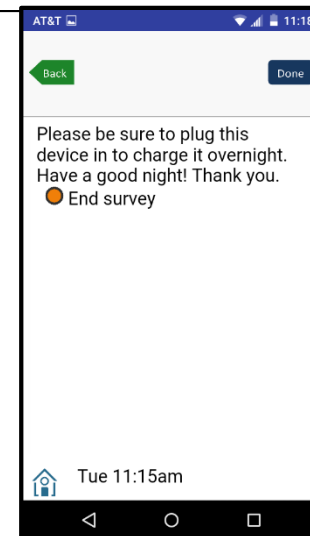
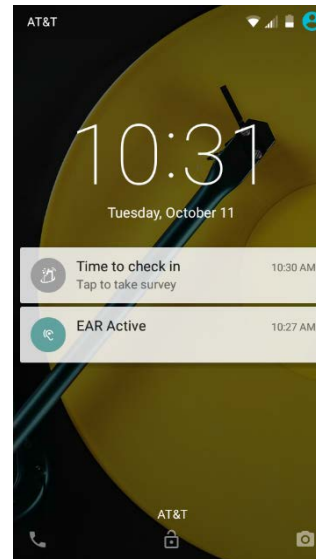
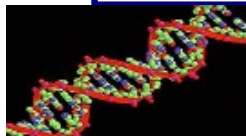
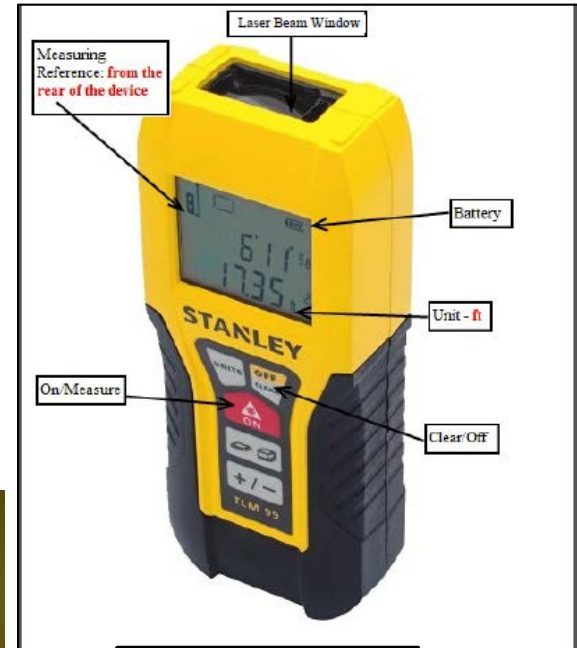
Patricia Maher  
University of Michigan  
Survey Research Center



# And More ...



# New Devices and Measurements





# Wearable Biometric Device(s)

## ■ Ring

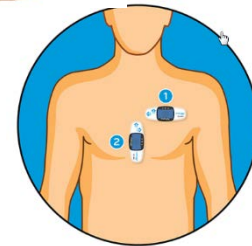
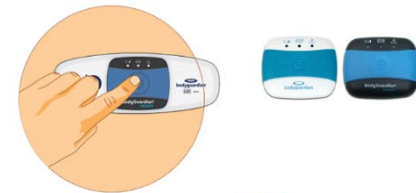
- Galvanic skin response
- Developed at UM
- Unreliable with non-stationary subjects



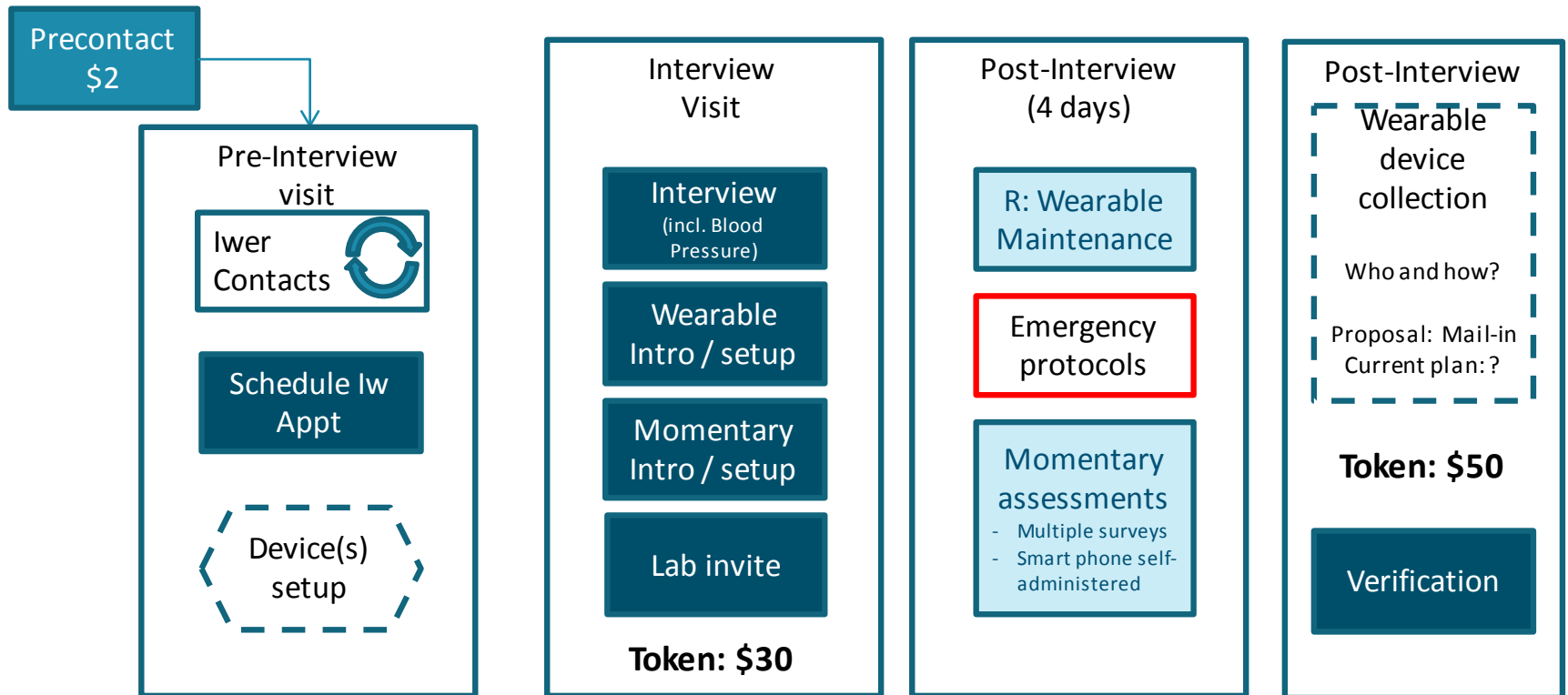
## ■ Wristband



## ■ BodyGuardia



# Data Collection Protocol



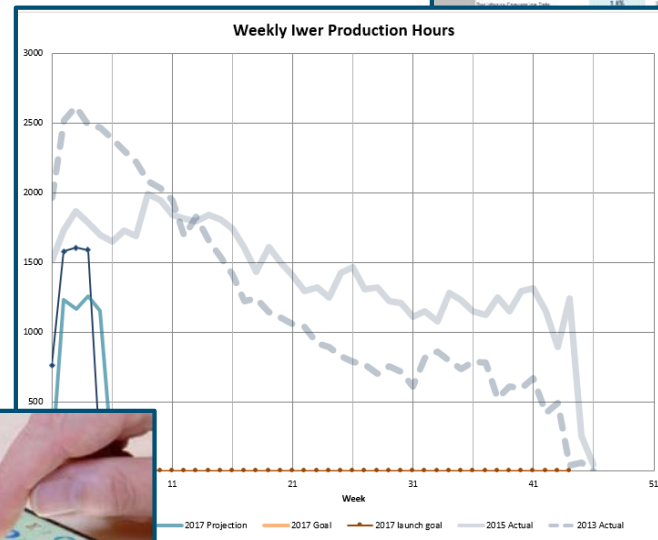
# Main Considerations/Challenges

- Data Security
  - Black box; API access for external applications
- Organizational Capacity
  - Technical staff and systems integration
  - Interviewers
- Training and support
  - Interviewer and Respondent
- Burden/Risk
  - Interviewer and Respondent
- QA/QC

# Approaches to Management

- Managing and Reporting
- Complexity
  - By interviewer
  - By household
  - By respondent
  - By component
  - By device(s)

| Cumulative                 |       |      |       | Week4 |         |     |      |
|----------------------------|-------|------|-------|-------|---------|-----|------|
|                            | #     | %    | 2013  | 2015  | #       | %   | 2013 |
| <b>Productivity</b>        |       |      |       |       |         |     |      |
| Completed hrs              | 1,832 | 2.00 | 1,541 |       | 301     | +1% | +12% |
| Field                      | 964   | 2.08 | 1,943 |       | 906     |     |      |
| ISL                        | 868   | 12   | 3     |       | 55      | +2% | +1%  |
| <b>WPH</b>                 |       |      |       |       |         |     |      |
| Total WPH                  | 4,92  | 4.02 | 4.68  |       | 4.77    | +7% | +1%  |
| Field                      | 5.14  | 4.03 | 4.03  |       | 4.85    |     |      |
| ISL                        | 5.76  | 0.78 |       |       | 3.76    | +4% | +8%  |
| Production WPH             | 4.88  | 4.08 | 4.40  |       | 4.40    | +3% | +2%  |
| Field                      | 5.08  | 4.11 | 4.40  |       | 4.52    |     |      |
| ISL                        | 3.75  | 7.10 |       |       | 3.75    | +8% | +8%  |
| <b>Notes</b>               |       |      |       |       |         |     |      |
| Completion Rate            | 12.2% | 12%  | 10%   |       | +1.83pp | +1% | +1%  |
| Response Rate              | 13.0% | 12%  | 12%   |       | +1.73pp | +0% | +1%  |
| Production Completion Rate | 1.8%  | 1%   | 1%    |       | 4.5%    |     |      |
|                            |       |      |       |       | +1.46pp | +2% | +1%  |
|                            |       |      |       |       | 10.5%   | +2% | +2%  |
|                            |       |      |       |       | 12.3%   | +1% | +1%  |
|                            |       |      |       |       | 1.8%    |     |      |
|                            |       |      |       |       | 1.732   | +1% | +1%  |
|                            |       |      |       |       | 1.515   | +8% | +2%  |
|                            |       |      |       |       | 207     | -2% | +10% |
|                            |       |      |       |       | 1.548   | +1% | +1%  |
|                            |       |      |       |       | 1.382   | +5% | +1%  |
|                            |       |      |       |       | 206     | +2% | +1%  |





# Thank You ...

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# Discussion