Innovative Uses of Paradata in the SIPP

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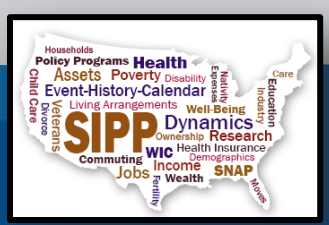
Outline

- SIPP Overview
- Types and Uses of Paradata
  - Certification Test
  - Debriefing Instrument
  - Audit Trails (Keystroke files)
  - CARI
  - Contact History Instrument (CHI)
  - Unified Tracking System (UTS)

The Survey of Income and Program Participation (SIPP)

Longitudinal survey collecting data and measuring change for topics such as:

- Economic Well-being
- Family Dynamics
- Education
- Assets
- Health Insurance
- Childcare
- Food Security



2014 SIPP Survey Design

- Sample is multi-stage, stratified sample of the noninstitutionalized, civilian U.S. population
- Sample size 53,000 households
- 4-year panel
- Conducted in waves, each 1 year long
- 3-4-month interview period

Interviewers

- Used 1,345 field representatives (FRs)
  - ~300 new hires
  - Remainder experienced interviewers
- Sample size was ~53,000 households
- Approximately 40 cases per FR
- Interviews all done in-person
- Yielded just under 30,000 completed cases

Interviewer Training

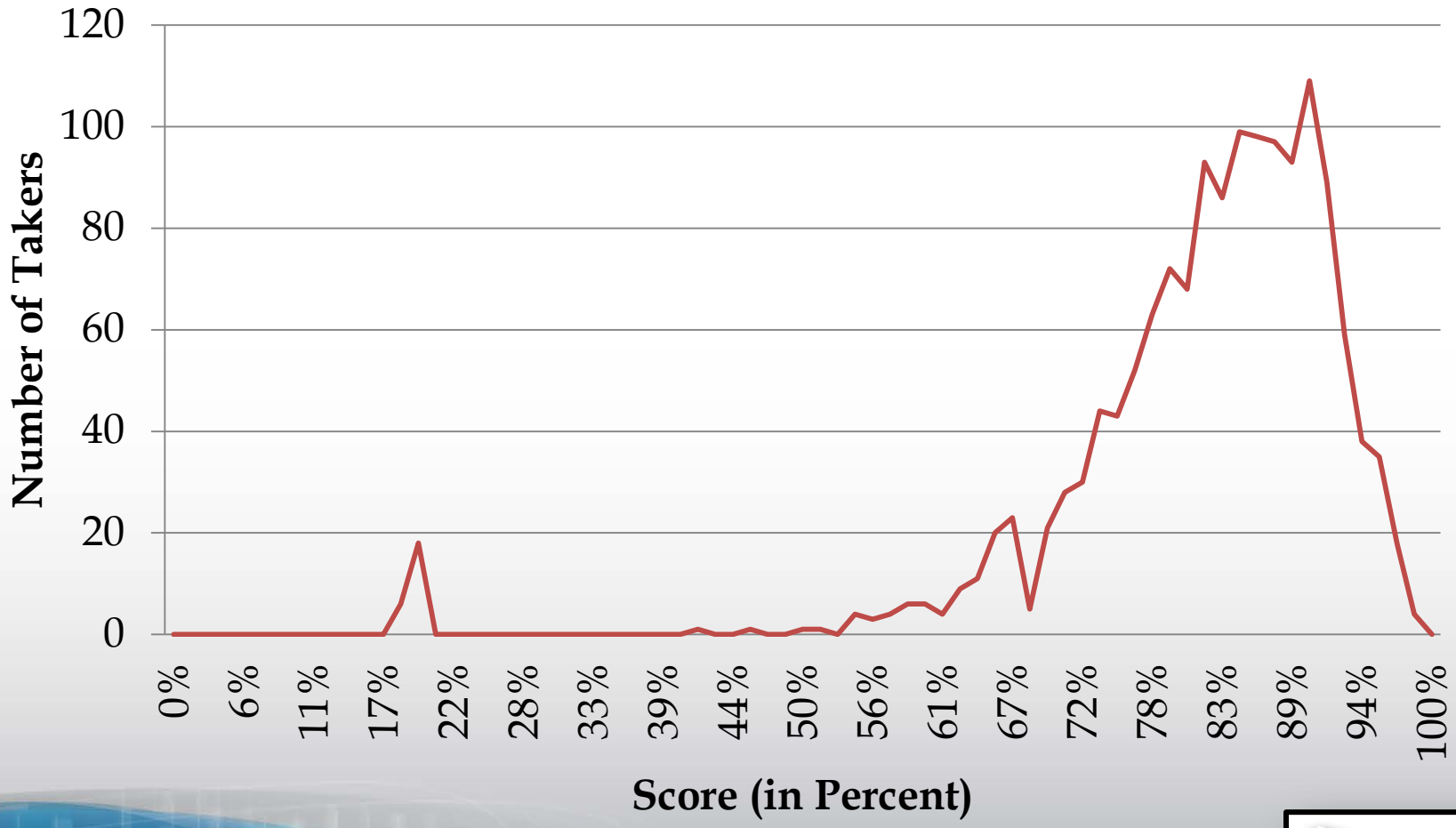
- Two-day generic Census training
  - New hires only
  - Covers cross-survey skills
- Four-day classroom training
  - All SIPP FRs
  - Specific to SIPP
- Pre- and post-classroom self-study modules
- Ends with certification test

Certification Test

72 questions, divided into 8 sections:

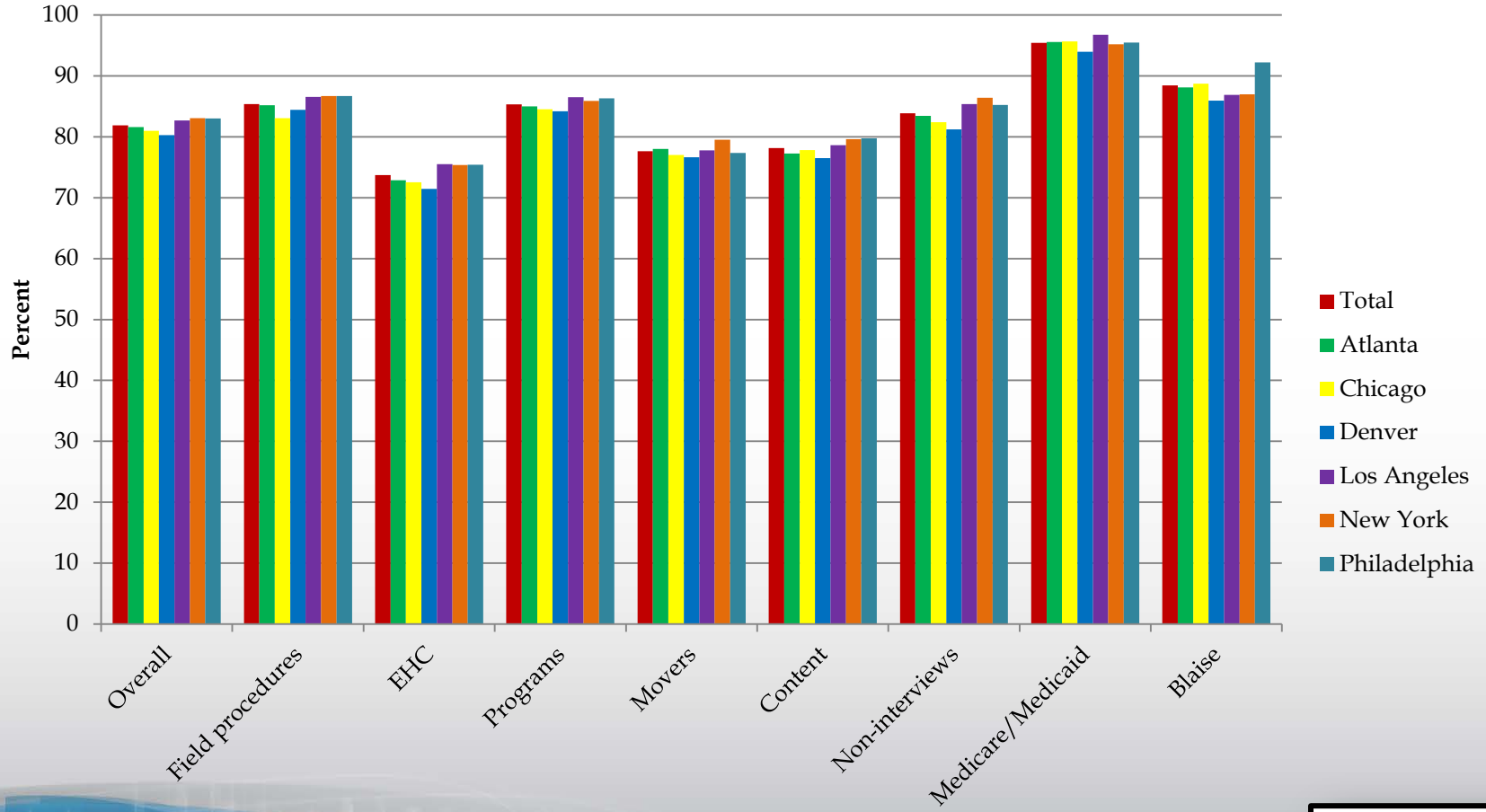
1. Field Procedures (11)
2. Event History Calendar (12)
3. Programs (6)
4. Movers (15)
5. Content (10)
6. Noninterviews (6)
7. Medicare vs. Medicaid (7)
8. Blaise/Instrument Navigation (5)

Certification Test

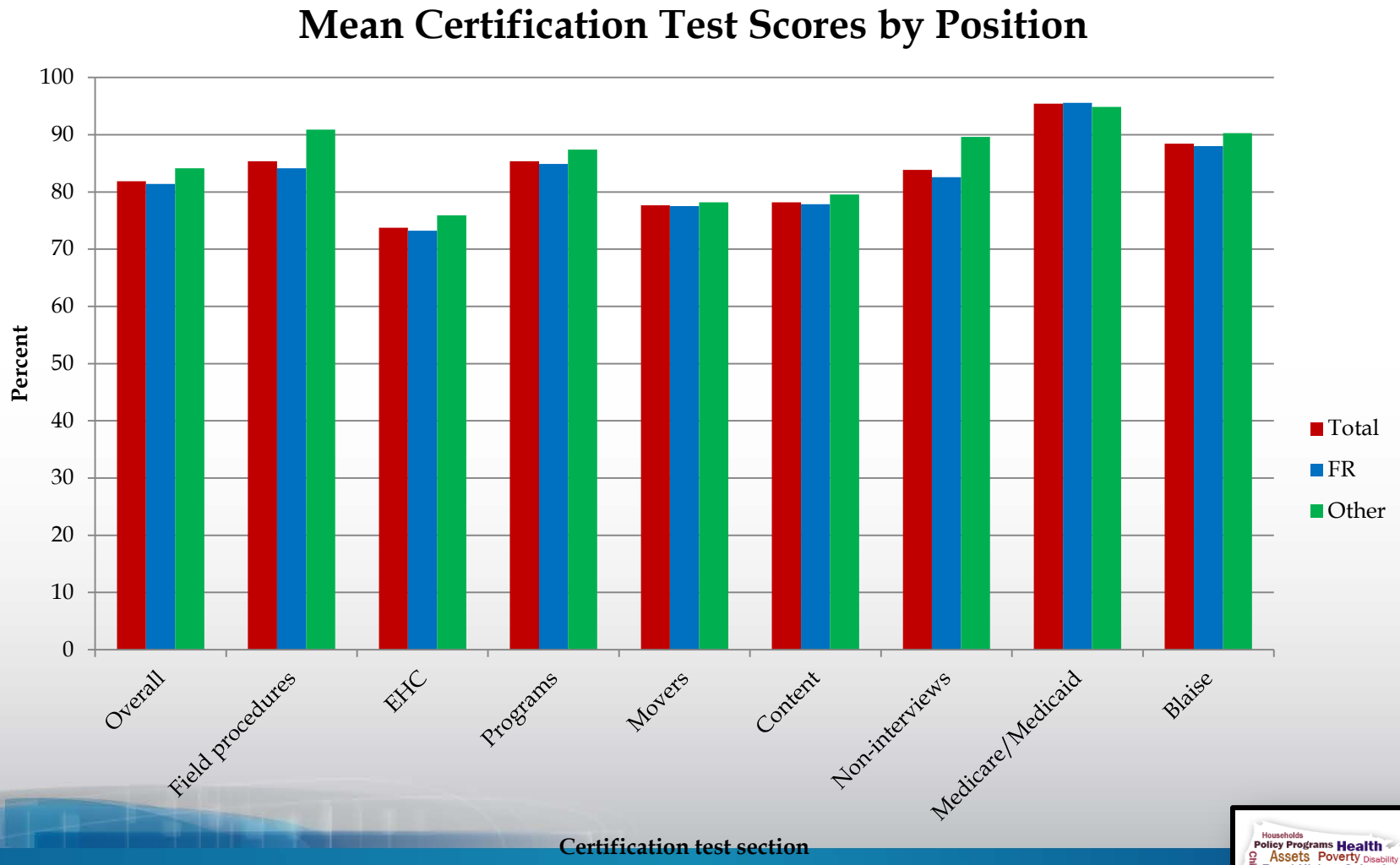


Certification Test

Mean Certification Test Scores by Regional Office



Certification Test

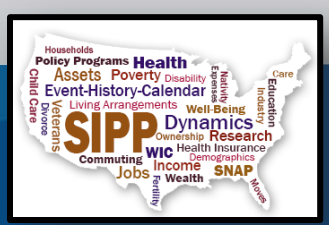


Debriefing Instrument

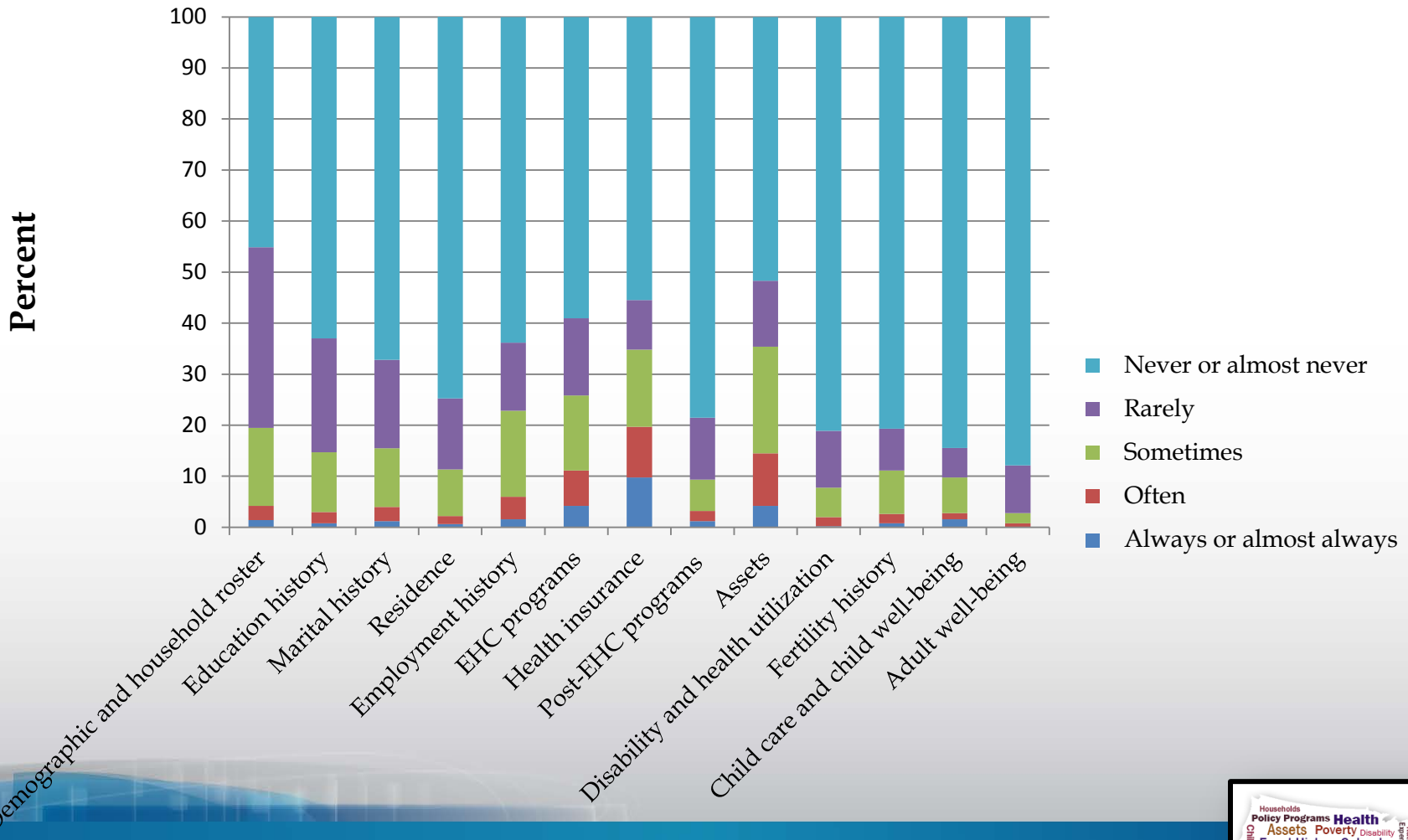
- Administered to FRs when they complete their SIPP interviews
- Asks them about the type and frequency of encountered problems in each section of SIPP interview:
  - Question wording
  - Response-related
  - Technical
  - Context/flow/redundancy

Debriefing Instrument

- Most FRs report that they "never or almost never" experienced problems in the field
  - Wording and response-related problems are reported more frequently than either technical or context, flow and redundancy problems
- Most FRs (87%) provide feedback for at least one open-ended question

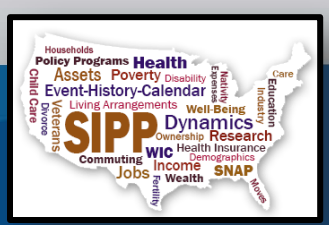


Debriefing Instrument



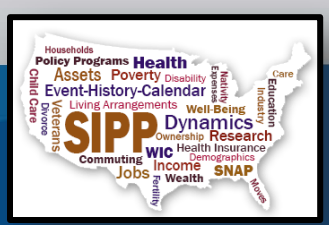
Debriefing Instrument

- Examples of resulting instrument updates:
  - Update Health Insurance FAQ to better explain different kinds of health insurance
  - Allow minimum values of $0 in most Assets fields
  - New FR notes explaining how to handle timeshares, leased vehicles, and reinvested dividends



Debriefing Instrument

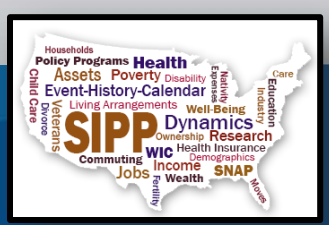
- Debriefing one of the best ways we have of getting FRs' direct feedback
  - Item notes are also useful, but debriefing covers whole interviewing period
- These results help drive continuous improvement of our instrument, training, and processes



Audit Trails

- Audit trail files are a record of all of the keystrokes entered by a field representative (FR) during an interview

- Audit trail files can be used to create paradata on such things as:
  - Section timers,
  - Don't know/refused counts,
  - Help screen calls,
  - Checks encountered,
  - Item-level notes left, and
  - FR navigation throughout the instrument



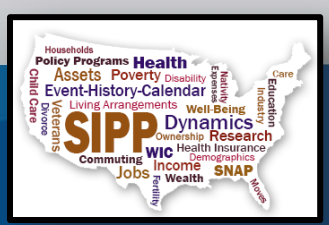
Audit Trails

Statistics (Completed cases)

Variables	Total			Range	
	Mean	SD	Median	Min	Max
Don't Know (CTRL+D)	13.33	15.61	9.00	0	214
Refuse (CTRL+R)	4.46	15.60	0.00	0	385
Help Call Screens (F1)	0.37	0.92	0.00	0	24
Field Case Notes (F7)	0.76	2.90	0.00	0	120
Survey Time (in minutes)	102.41	51.89	92.68	6.9	682.73

CARI

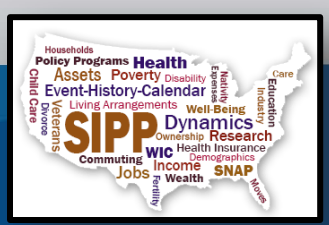
- Computer-Assisted Recorded Interviewing
- FRs must obtain consent from each respondent to record the interview
- Records interactions between Field Representatives (FRs) and respondents
- The goal of CARI is to ensure the accuracy and quality of data collected
  - Monitor and improve the FR's performance
  - Identify difficult or problematic questions



CARI

We consider data inauthentic when interviewers do not collect them directly from respondent

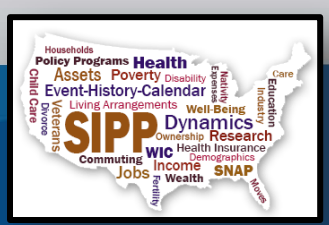
- FRs may feel they already know the answer (and do not confirm it)
- FRs may skip a question
- Occasionally, FRs may fabricate a response entirely



CARI

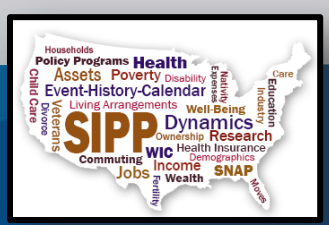
Errors in question administration arise when questions are presented differently

- FRs do not read the questions as worded
- Speed/volume of interviewer's voice does not match respondents'
- FRs do not probe or lead the respondent



CARI

- Behavioral problems arise when the interviewer's conduct is inappropriate for a Census Bureau employee
  - Off-topic personal discussions
  - Overly task-oriented
  - Unfriendly or hostile
- SIPP is dependent on respondents having a good relationship with FRs

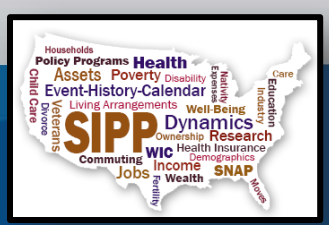


Contact History Instrument (CHI)

- Keeps a history of every contact attempt for every case
- Collects information about the kind of response received (if contact is made)
  - Reluctant respondent, hostile respondent, etc.
- Also collects FR's observation about housing unit/environmental conditions
  - Condition of the sample unit
  - Presence of bars on windows

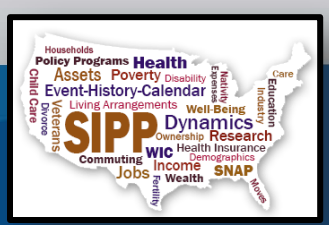
UTS

- Unified Tracking System
- A Census Bureau application that provides real-time survey information
- Allows for detailed monitoring of FRs, costs, and cases
- Can also track overall survey progress
  - For example, have we contacted as many cases as we should, given where we are in the interviewing window?



Conclusion

- SIPP (and the Census Bureau more generally) has access to more paradata than we have ever had in the past
- Effective use of this paradata for FR monitoring and performance helps us improve interview administration
- We can also evaluate data quality and survey design, allowing continuous improvement and streamlining



THANK YOU!

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http://www.census.gov/sipp