# Reducing Respondent Burden in the US Census Bureau Using CARI (Computer Audio-Recorded Interviewing)



# Computer Audio-Recorded Interviewing (CARI)

- Recording of interview
  - Used for analysis
  - Can be transmitted
  - Must Have consent



#### Respondent Burden

- Office of Management and Budget (OMB).
  - Standards & Guidelines for Statistical Surveys
    Defines Respondent Burden:
    - Number of Contacts
    - 2. Length of Interview
    - 3. Effort Required by Respondent



#### Contribution to Respondent Burden

#### For U.S. Census Bureau:

- 1. Surveys
  - Initial data collection
- 2. Evaluations
  - Smaller sample than survey



# Contribution to Respondent Burden (cont'd)

- 3. Quality Assurance (QA)
  - Random Monitoring
  - PANDA
  - Supplementary or Subjective Monitoring



### How Does CARI Reduce Respondent Burden?

- Surveys
  - Initial interview sets CARI baseline (no need for second interview)
  - Reduces all three
- Evaluations
  - Can be used if objectives surround data collected during initial interview
  - Reduces all three



### QA Reduction in Respondent Burden

- Quality Assurance
  - When used as a complete Quality Assurance Program, can reduce number of contacts burden by as much as 10%



#### CARI Impact on QA

#### **EXAMPLE**

```
Survey ABC:
```

```
# Contacts x Length x Effort = RB
```

```
55,000 \times 10 \text{ min x constant} = 550,000 \text{ min}
```

With CARI (10% reduction)

```
49,500 x 10 min x constant = \frac{495,000}{55,500} min (55,500) min
```



#### Indirect Benefits of CARI

- Improve survey quality
  - Clarification of commonly misunderstood questions
  - Address questions that frequently lead to refusals
- Improve FR training
  - Interviewer behavior impacts respondent comfort level



### Improve Survey Quality

- Coders evaluate respondent reactions to questions
- Questions that frequently require clarification or cause discomfort may need rewording
- Behavior analysis allows the survey redesign process to be more targeted, keeping what works and changing what does not



### Improve FR Training

- Serves as a training tool
- Allows supervisors to "observe" interviewers without doing ride-alongs, which have the potential to increase stress for the respondent
- Interviewers that demonstrate specific problems can be targeted for directed remedial training without needing to bring everyone in
- Interviewers that do an especially good job can be recognized and held up as an example on how to deal with specific difficult situations

#### Conclusion

 The CARI system assists in reducing respondent burden through reducing the number of respondent contacts. CARI indirectly reduces respondent burden by affecting the length of interviews and effort by the respondent to comply.



### Questions?



#### For More Information

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