

Changing the Way We Look at Survey Nonresponse

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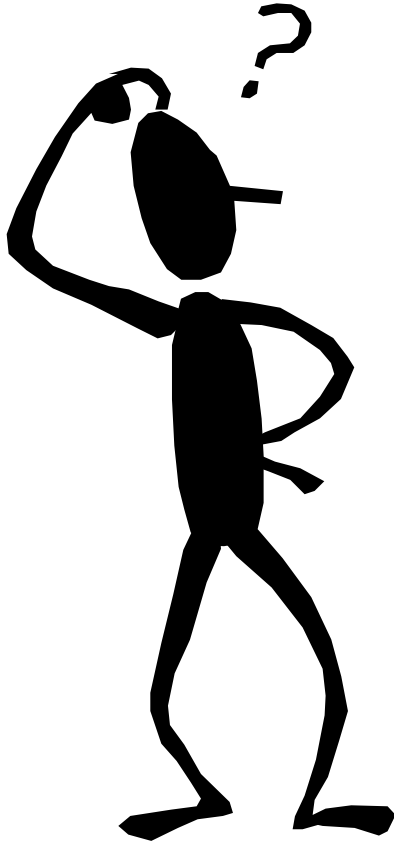


Outline

- Motivation
- Response rates as a measure of success
- Paradata
- American Community Survey
- Additional metrics
- Looking ahead

Motivation

- Rising costs associated with maintaining high responses rates
- Recent criticisms about respondent burden and repeated contact attempts to obtain high response rates
- Current approach may not be sustainable



Do we really
need high
response rates?

Response Rates

- OMB and federal agency standards and performance metrics cite response rates
- Data collection managers are evaluated by the response rates they achieve
- Managers use response rates to evaluate interviewer performance

Response Rates

- Efforts to obtain high response rates
 - result in additional burden on our respondents
 - are costly
- High response rates
 - do not ensure high quality
 - could mask data collection problems

Paradata

- Concern about falling response rates led to Response Rate Summit in 2002
 - Top recommendation was to collect and analyze detailed contact record data
 - Automated system to capture case histories
 - Paradata could serve as feedback mechanism to regional offices and interviewing staff
 - Paradata could provide foundation for evaluations

Paradata

- Contact History Instrument (CHI)
 - First application in 2004
 - CHI records date and time of entries; interviewers prompted to record details on each contact attempt and outcome
 - ACS started in 2011

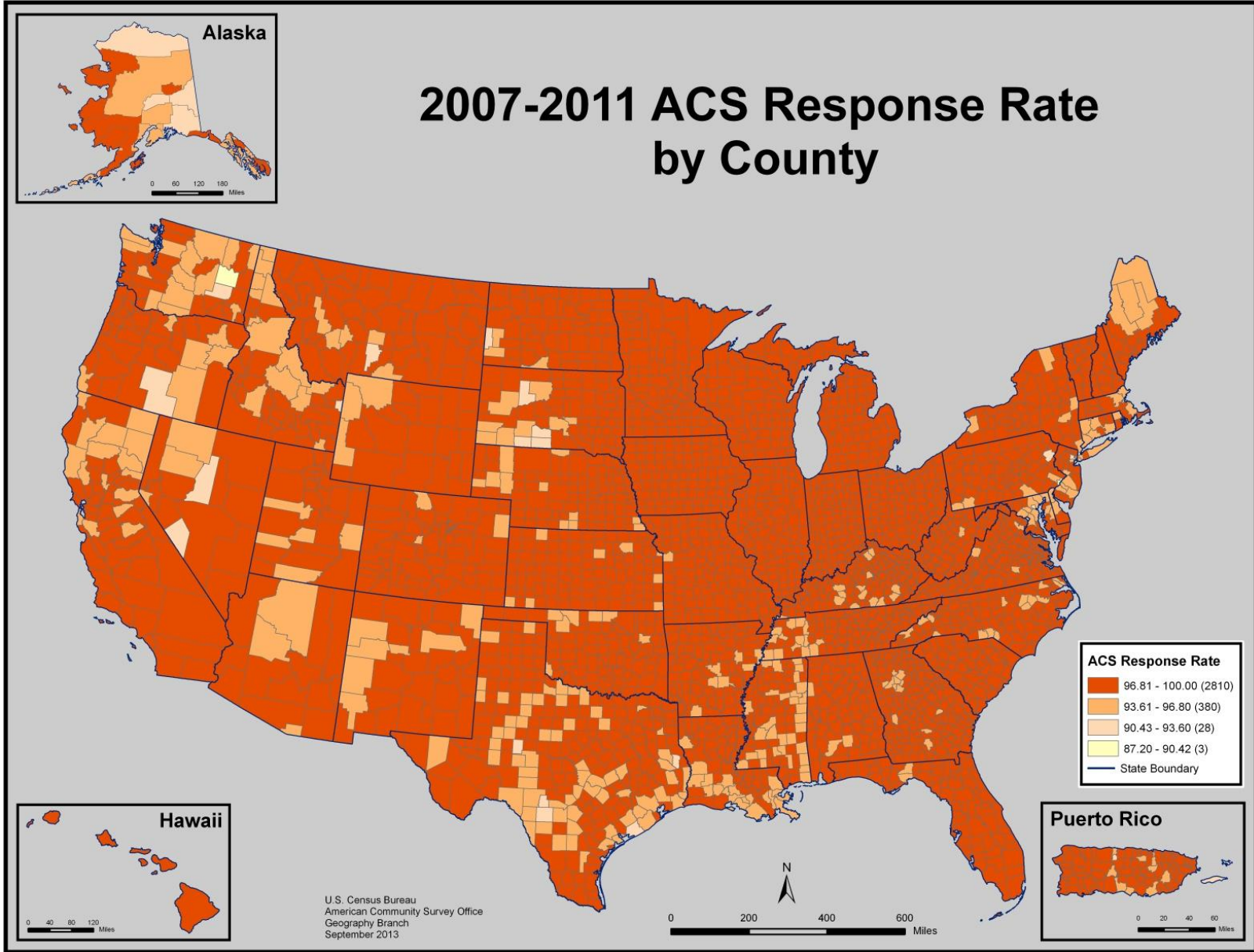
The American Community Survey

- Household survey responsible for collecting demographic, social, economic, and housing data
- Focus is the production of information for all communities and population groups
- Annual sample of about 3.5 million addresses, allocated into 12 monthly samples for data collection

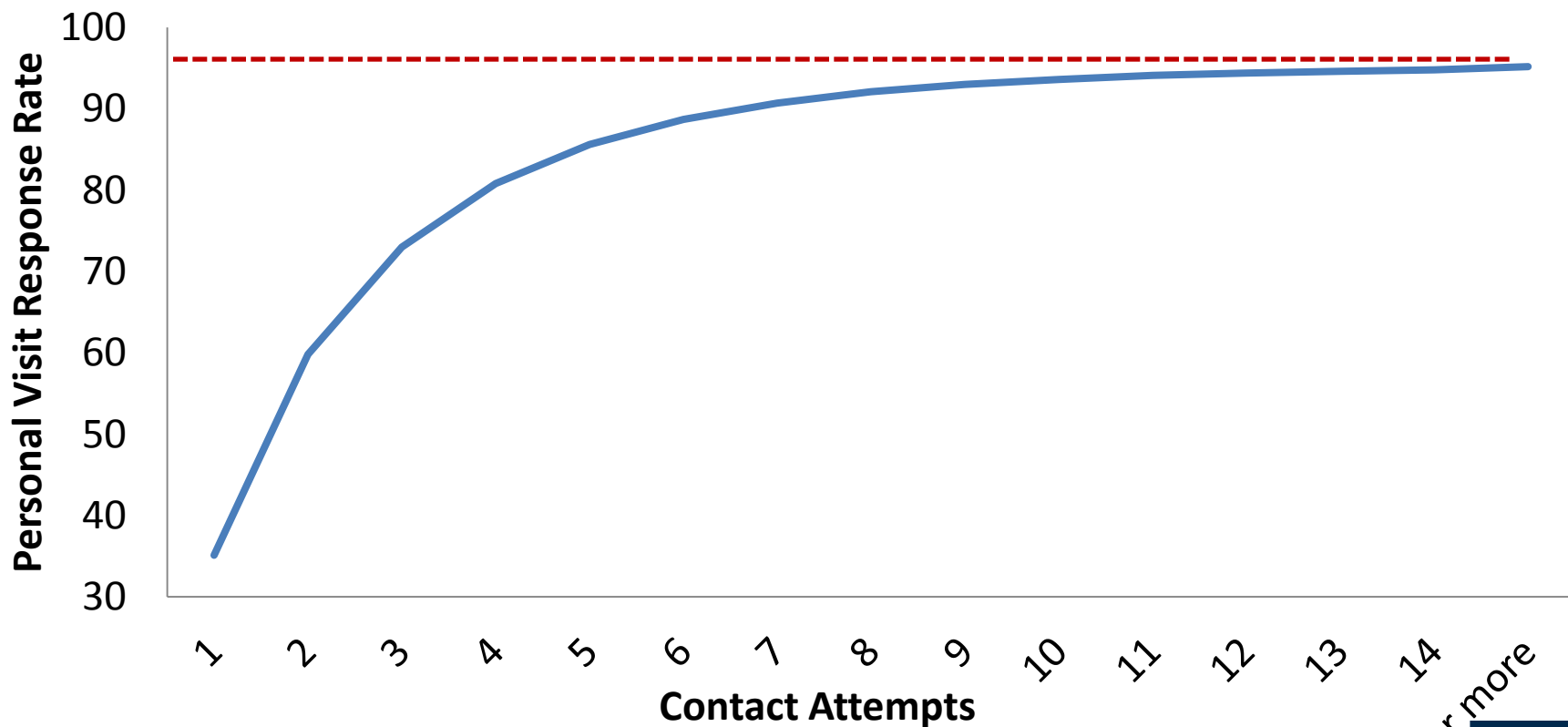
The American Community Survey Data Collection

Sample Panel	Calendar Month		
	Mar 2013	April 2013	May 2013
Jan 2013	In-person		
Feb 2013	Telephone	In-person	
Mar 2013	Internet/Mail	Telephone	In-person
April 2013		Internet/Mail	Telephone

2007-2011 ACS Response Rate by County



Potential Burden Associated with High Response Rates



Source: January – December 2012 ACS Personal Visit Follow-up

Potential Burden Associated with High Response Rates

Contact Attempts to Complete	Percent of Eligible, Occupied Housing Units	Estimated Respondents Each Year
1 or 2	54.1	248,000
3 to 5	30.8	141,000
5 to 9	10.9	50,000
10 or more	4.2	19,000

Source: January – December 2012 ACS Personal Visit Follow-up

Costs Associated with High Response Rates

- CHI allows us to identify contact attempts and estimate associated costs
- Estimated the cost of the additional contacts required to increase the response rate
- Paper includes the methodology as well as the basic findings

Quality Associated with High Response Rates

- Nonresponse bias (unit level)
- Completeness of responses
- Coverage error
- Measurement error

Additional Performance Measures

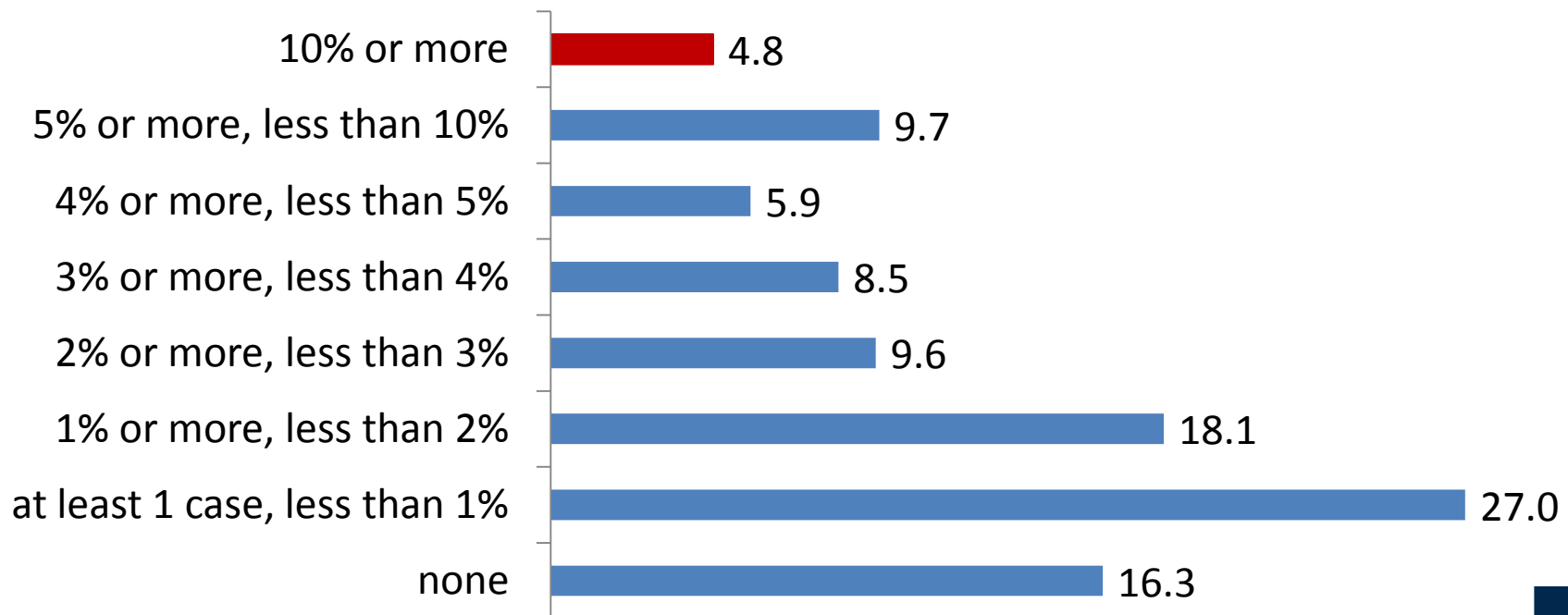
Data collection efficiency

- Possible metrics:
 - Distribution of final outcomes
 - Percent of workload completed with fewer than 3 contact attempts
 - Percent of workload requiring 10 or more contact attempts
 - Percent of contact attempts that resulted in an interview

Additional Performance Measures

Data Collection Efficiency

Distribution of ACS Field Representatives by the proportion of their workload requiring 10 or more contact attempts – 2012 ACS

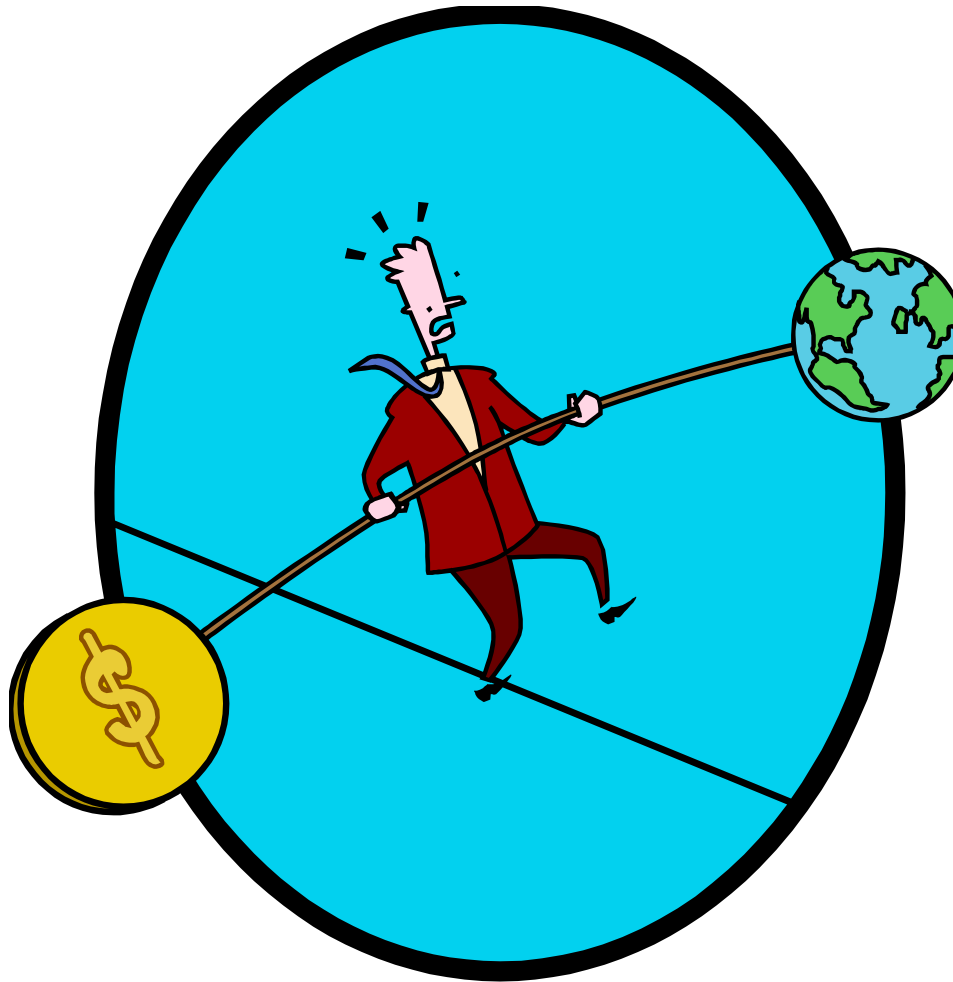


Additional Performance Measures

Cost and quality summaries

- Mean costs per contact attempt
- Cumulative costs by case
- Costs per percentage point increase in response rate
- Quality metrics

Conclusions and Next Steps



Conclusions and Next Steps

Unified Tracking System

All Completed CAPI Interviews by Number of Contact Attempts

# of Contact Attempts		All Completed Interviews																		
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18+
Region	Survey Period																			
+ Atlanta	201302 ACS HU CAPI	293	3,599	2,355	1,198	734	389	240	153	91	69	34	17	21	11	8	7	7	6	4
+ Chicago	201302 ACS HU CAPI	208	3,447	2,450	1,235	679	400	259	172	110	76	50	35	29	19	12	9	5	4	13
+ Denver	201302 ACS HU CAPI	268	4,291	2,728	1,494	856	519	342	185	142	72	65	56	33	20	11	12	11	9	17
+ Los Angeles	201302 ACS HU CAPI	235	2,901	2,074	1,103	662	377	218	140	82	43	31	23	15	4	5	5	3	2	4
+ New York	201302 ACS HU CAPI	225	2,520	2,414	1,224	681	393	215	160	86	51	37	24	19	11	9	5	9	1	13
+ Philadelphia	201302 ACS HU CAPI	254	2,719	1,979	1,096	620	362	241	187	81	69	35	34	25	11	6	7	1	3	8

Source: U.S. Census Bureau, Unified Tracking System reports, 2013

Conclusions and Next Steps

- New performance measures related to burden
- Improved tools to identify field representatives with high contact attempts
- Research to assess nonresponse bias reductions associated with high response rates

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Any views expressed are those of the authors and not necessarily those of the U.S. Census Bureau.