

Non-Response Reduction Methods in Establishment Surveys

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Presented at the
Fourth International Conference on Establishment Surveys
Montreal Canada
June 2012

Lecture Overview

- What is the IGEN?
- Review of the response process for establishment surveys
- Non-response reduction techniques used by IGEN agencies
- Specific agency examples and research to support their use

Interagency Group on Establishment Non-response (IGEN)

- Members include US Federal agencies that conduct establishment surveys
- Meets quarterly to share information, exchange ideas and promote good practices to reduce non-response in member agency surveys

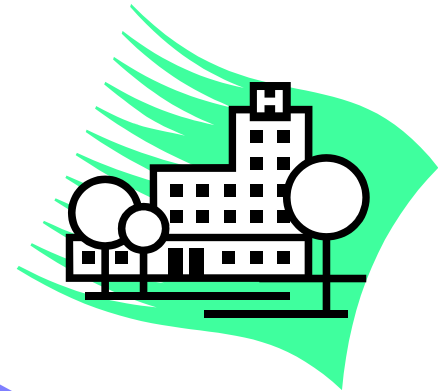


Agencies represented on IGEN:

- Agency for Healthcare Research and Quality (AHRQ)
- Bureau of Economic Analysis (BEA)
- Bureau of Justice Statistics (BJS)
- Bureau of Labor Statistics (BLS)
- Bureau of Transportation Statistics (BTS)
- Census Bureau (CB)
- Energy Information Agency (EIA)
- Federal Highway Administration (FHA)
- Government Accountability Office (GAO)
- Internal Revenue Service (IRS)
- National Agricultural Statistics Service (NASS)
- National Center for Education Statistics (NCES)
- National Center for Health Statistics (NCHS)
- National Science Foundation (NSF)
- Office of Management and Budget (OMB)
- Social Security Administration (SSA)
- Substance Abuse and Mental Health Services Administration (SAMHSA)

Some Types of Establishments Surveyed by IGEN agencies:

- Hospitals
- Businesses
- Farms and Ranches
- Government Agencies
- Buildings
- Schools and Universities

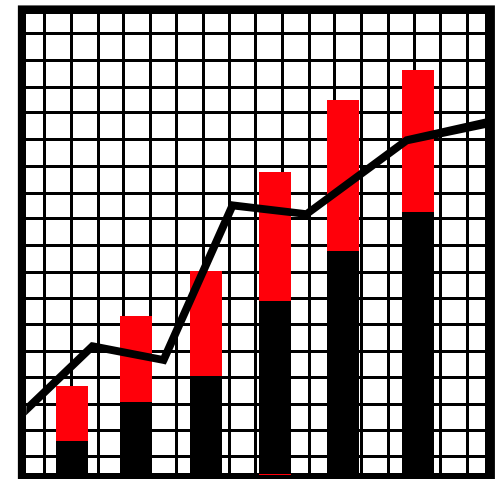


For establishment survey response, respondents must have:

- Authority,
 - Data reporter may need higher level permission to release establishment data
- Capacity,
 - Data must be available in existing information systems/records
 - Data reporter must be person(s) with access to information
- Motivation to respond
 - Providing data may not be high priority for the establishment
 - Establishments may not want to release data that is considered proprietary or sensitive
 - Companies may have policies against providing data

Why Bother with Non-Response Reduction?

- Higher levels of non-response increase potential for survey bias
- Unlike household surveys, size and other characteristics of establishments may vary widely, with the potential for extreme non-response bias
- Establishments can be selected for many different surveys over time
- Establishments are often sampled for panel surveys involving multiple contacts



Most surveys use multiple non-response reduction techniques

- Before Data Collection
 - Survey infrastructure
 - Survey planning and design
- During Data Collection
 - Techniques focused on respondents
 - Techniques focused on interviewers
- After Data Collection
 - Review and assessments
 - Changes intended for future data collections



Practices employed by IGEN agencies

- Multiple techniques are used by all agencies
- Some are more common than others
 - Green (***) : often employed by most agencies
 - Yellow (**): employed some of the time
 - Red (*): rarely employed



Activities Before Data Collection

- Survey Organization Management
- Public Relations and Publicity
- Frame Management and Sample Design
- Questionnaire Design



Survey Organization Management

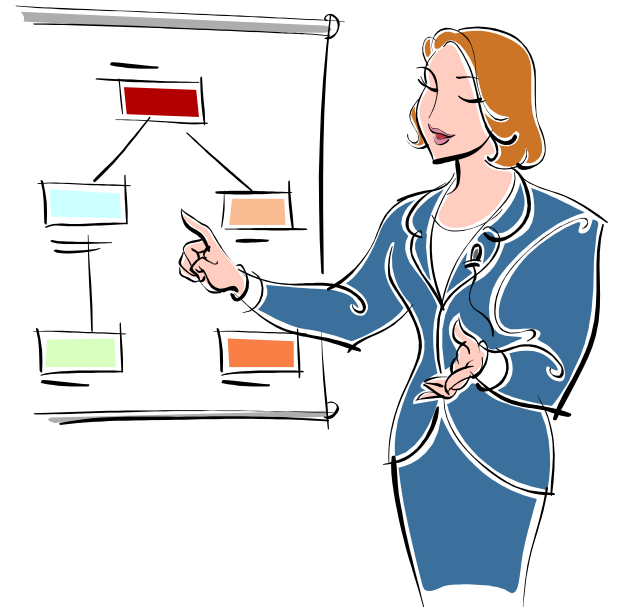
- ** Agencies promote resource sharing to encourage use of in house expertise and best practices
- ** Many agencies actively develop and promote cross program information sharing
- ** Other agencies are structured with functional units serving all program areas

Some Examples

- Census Bureau has developed Customer Relationship Management Program for largest companies to manage on-going contacts across surveys; NASS has also begun development of this type of program; similar activities in BLS
- Refusal avoidance training and techniques shared across programs at BLS

Some more examples

- US GAO is structured with centralized survey expertise and functions
- NASS is organized along functional lines with units (i.e. sampling, training, survey administration) supporting all programs



Survey Organization Management

- * Some agencies have mandatory reporting requirements for individual surveys

Your Response is Required By Law

Some Examples

- EIA has mandatory reporting for most surveys and emphasizes this in data collection; response rates typically exceed 90%
- Census generally has lower response rates for surveys without mandatory reporting authority

Public Relations and Publicity

- *** Outreach events to target population
- ** Promotion to industry to publicize or promote positive views of surveys
- * Senior Management contacts to certainty units



Examples and Research

- NASS research has shown that survey respondents are more familiar with and have more positive attitudes toward the agency than survey refusals
- BLS and others provide brochures or other materials to promote importance of survey to respondents
- SAMHSA updated survey contact materials tested after multiple round testing and review by survey methodology experts

Examples and Research

- Most agencies attend relevant industry tradeshows to promote the agency and its surveys
- BLS has Assistant Regional or Regional Commissioners contact the very largest businesses if they are reluctant to respond
- NASS used video of Secretary of Agriculture discussing importance of specific survey and respondent cooperation



Frame Management and Sample Design

- ***Frame maintenance and clean up
 - ***Updated contact information
 - ***Auxiliary data
 - **Pre-survey screening
 - *Reporter continuity/succession planning
- **Sample Design
 - **Sample redesigns
 - **Definition of the reporting unit



Some Examples

- Agencies (NASS, Census, and others) routinely conduct surveys to collect up to date frame data
- BLS field offices will review survey samples before data collection to verify validity of postal addresses
- NASS has developed models to predict non-respondents; verifying contact info for those most likely to be non-contacts

More Examples

- Rotation of sample units to reduce burden (Census, BLS)
- NASS samples jointly across several independent surveys to reduce burden on individual operations
- Agencies may define the reporting unit to more closely match units available in establishment records

Questionnaire Design

- *** Question testing and improvements
- ** Design of forms to match company records
- ** Revising instructions
- * Extraction of information directly from company records



Some Examples

- Many agencies use cognitive testing to determine if questions match company records
- BLS has a usability lab for testing forms
- Financial questions will often be aligned to Generally Accepted Accounting Practices

Some Examples

- BLS web instruments that can be made accessible to other respondents within organization
- Shortened version of instructions
- Many agencies always include a contact phone number for respondent questions; respondent websites are also becoming more common

Questionnaire Design

- ** Allowing/aiding estimation or explicit use of previous reports
- ** Carrying over previously reported data into current wave
- ** Use of administrative data
- * **Customized questionnaires for individual establishments**



Examples

- Census has done debriefings where respondents report wanting previous data to aid current response
- Forms may be tailored to industry, but it is rare that they are tailored to individual respondents

Examples

- Automatic data transfer is rare due to the excessive amount of additional (and idiosyncratic) processing and translation necessary; thus usually limited to “important” establishments

During Data Collection

- Techniques focused on respondents
- Techniques focused on interviewers



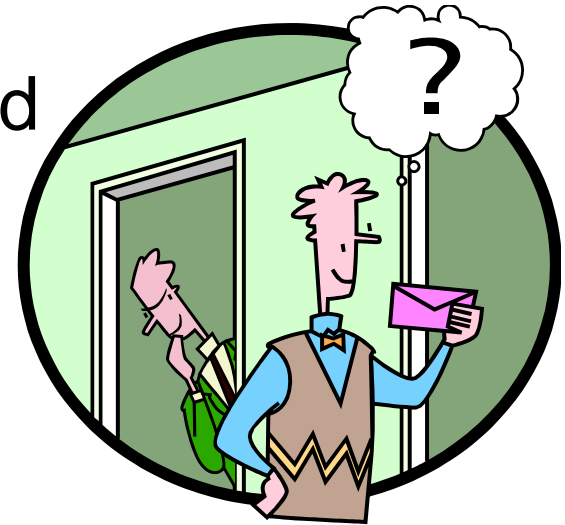
Techniques Focused on Respondents

- *** Respondent Identification and Selection
- ** Allowing the use of proxy respondents
- ** Contacting alternative staff within organization
- ** Pre-survey mailings or contacts
- ** Pre-survey screening
- * Reporter continuity/succession planning



Examples and Research

- GAO will often do extensive pre-survey work to identify the reporting unit
- One GAO experiment suggested more personalization (specific person or role) increased response over generic “high authority informant”
- Census is using pre-survey mailings to ask some companies to identify appropriate contact for the upcoming Economic Census



Examples

- NSF Director will make initial contacts with University Presidents/Chancellors to have them appoint a survey coordinator
- EIA will sometimes escalate requests to reporter's CEO or VP

Examples

- GAO will ask organization insiders or “gatekeepers” to urge respondents to report
- Agencies may enlist support from data users elsewhere in the organization (who may not be the respondents)
- Proxy reporters: NASS asks for the “person making day to day decisions for this operation” to act as respondent, but will also allow operators’ spouse, partners, accountants, etc. to report if necessary

Techniques Focused on Respondents

***“Bundled” reporting for multiple surveys

***Technical support for reporters

*Allowing multiple respondents

*Use of external administrative data in data collection



Examples


- The degree of “bundling” varies across agencies from physically bundling multiple forms for mailing to redesign of instruments for transparent multi-survey data collection
- “Look and Feel” of survey instruments is standardized across programs within many agencies
- “Single sign-in” used for web access to multiple surveys (NASS, BLS)

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http://edrreview-dev/production/agcounts

Customize Links Free Hotmail Windows Marketplace Windows Media Windows



United States Department of Agriculture
National Agricultural Statistics Service



Available surveys for: Uncle John's Doe Farm / Mr. John 100000021 Doe

Survey Name	Dates Survey is Available		Status
UNITED STATES CENSUS OF AGRICULTURE 2007	10/16/2006	to 11/04/2006	Click for Survey
PEANUT STOCKS AND PROCESSING REPORT CB	10/16/2006	to 11/30/2006	Click for Survey
PEANUT STOCKS AND PROCESSING REPORT B	10/16/2006	to 11/30/2006	Click for Survey
PEANUT STOCKS AND PROCESSING REPORT CP	10/16/2006	to 11/30/2006	Click for Survey
PEANUT STOCKS AND PROCESSING REPORT A	10/16/2006	to 11/30/2006	Click for Survey
CENSUS OUT OF BUSINESS TEST	10/16/2006	to 11/04/2006	Click for Survey
PRICES RECEIVED BY FARMERS FOR PEANUTS WEEKLY	10/16/2006	to 11/05/2006	Click for Survey
AGRICULTURAL LABOR SURVEY	10/16/2006	to 11/11/2006	Click for Survey
FARM RAISED CATFISH	10/16/2006	to 12/05/2006	Click for Survey
FARM RAISED CATFISH	10/16/2006	to 11/04/2006	Click for Survey

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Examples and Research

- NASS creates a special combined questionnaire for operations selected for the Agricultural Resource Management Survey in the Census year; this way they do not have to complete a survey form and the separate Census form
- Census research found that establishment respondents wanted to know well in advance about upcoming survey contacts and timing

Examples and Research

- NASS conducted analysis of NASS imposed burden and response. No clear relationship between burden and non-response
- BLS has built capability into electronic form for respondent to designate additional respondents if they are not able to complete entire form themselves

Examples

- AHRQ is exploring the possibility of using data from State-level Health Insurance Exchanges by matching to surveyed establishments' EIN's
- NCHS is collecting hospital automated inpatient claims data files to eliminate routine manual data collection

Techniques Focused on Respondents

***Confidentiality assurances

*Incentives



Examples and Research

- Confidentiality assurances are routinely used to motivate response
- Limits to access of data may be reinforced by having data collection done by other agencies
- Some agencies have experimented with monetary incentives (NASS, NCHS)



Techniques Focused on Respondents

- ***Provision of alternative modes / multi-mode administration
- **Customization of fieldwork, including “special handling” of key operations
- *Break large request into multiple smaller data requests

Examples

- BLS uses Mail, CATI, Touchtone Data Entry (TDI), Electronic Data Interchange (EDI), Fax, and Web based Internet reporting for the Current Employment Survey
- For some small surveys, BLS will have staff visit and use company records to complete the survey

Techniques Focused on Respondents

- ** Adjusting timing of data collection
- ** Third party sponsorship/collaborations
- * Identifying likely nonrespondents before data collection for special handling
- * Identifying data users within establishment to help encourage response



Examples

- Requests for financial records can be scheduled to coincide with business tax reporting schedule
- Third parties such as professional associations or trade groups have provided endorsements of surveys to their membership

Examples

- NASS has developed predictive models to identify establishments most likely to be nonrespondents; additional resources or data collection techniques can be targeted to these

Non-response Follow Up

- ***Follow up reminders
- **Refusal conversion
- *Extension of field period
- *Use of abbreviated questionnaire for non-respondents



Examples and Research

- Many agencies will follow mailings with phone calls to non-respondents
- GAO study of response curves after follow up mailings shows significant but declining effect over time
- Few agencies use abbreviated questionnaires, anecdotes from those who do cite respondents questioning the worth of all original questions on initial questionnaire
- EIA used abbreviated questionnaires for phone and email follow up

Techniques Focused on Interviewers

**Use of alternative staff for follow up
(i.e. subject matter analysts, management)

**Refusal avoidance training

*Interviewer matching

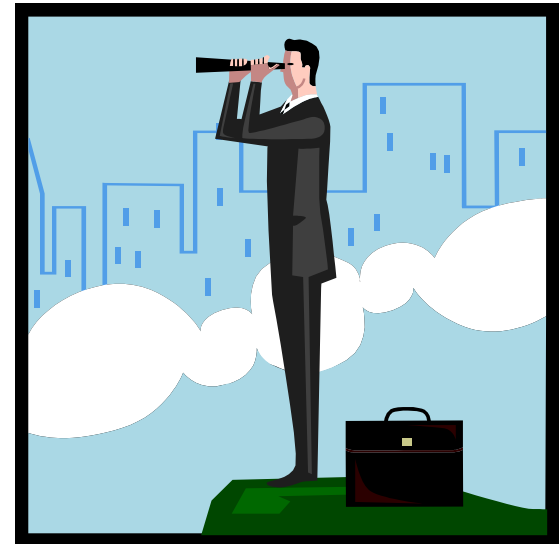


Examples

- GAO and others use program analysts (subject matter experts) or other staff for follow-up
- BLS have developed training specifically focusing on refusal avoidance; this topic is also frequently included in other interviewer training programs
- NASS has plans to recruit interviewers from Indian Reservations to collect data from Indian agricultural operations.

After Data Collection

- Post survey activities
- Changes intended for future data collections



Post Survey Activities

- ***Self Assessments, lessons learned
- Respondent Reinforcement
 - ***Demonstration of value of participation
 - ***Expressions of Thanks
 - *Customized data products and survey results for respondents
- *Research into reasons for past non-response
- *Response analyses



Examples

- Census Bureau routinely perform “Lessons Learned” sessions at the end of survey cycles which may include non-response
- Census also convened focus groups of internal staff following the Economic Census to review all steps of the process.
- NSF, Census, BLS, EIA, NASS, others have convened data users and outside “experts” to evaluate survey programs; non-response is one area covered

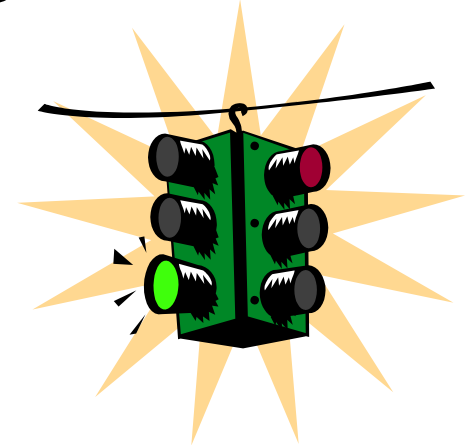
Examples and Research

- NASS routinely compiles and sends survey results to survey participants (this may include a special abbreviated brochure explicitly tying the results to their survey participation)
- BJS, BLS, others design tables to specifically be useful to survey participants in addition to other data users
- NASS has provided respondents with customized data summaries comparing their operation with survey estimates, but it does not appear to increase response

Examples

- NSF Director sends Thank You letters to University Presidents/Chancellors for some surveys
- BLS and NCHS conduct Response Analyses; these can include analysis of non-response and analysis of data from “soft” refusals

Most Common Non-response Reduction Activities

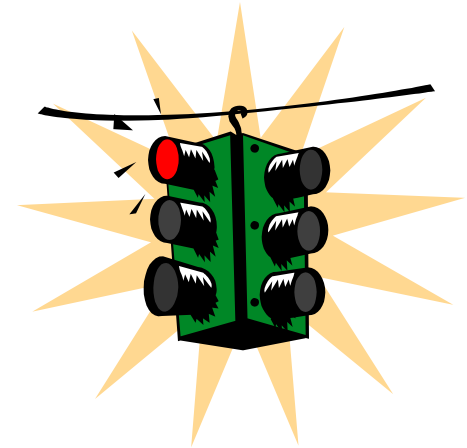


- Publicity and Public Relations
- Follow up contact strategies
- Question comprehension improvements
- Assisting reporters during fieldwork
- Respondent selection enhancements

Less Common Non-response Reduction Activities

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- Incentives
- Utilizing mandatory reporting requirements
- Electronic Data Interchange or other extraction directly from establishment records



More research is needed.....

- Many of the practices employed by member agencies are based on limited or anecdotal evidence
- More empirical support for their use is needed

Thank You!

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