



# Overview

- Background
- Testing Business Surveys at STC
- Practices and Considerations
- Challenges
- What we have learned. How can we improve?
- Emerging Issues

# Questionnaire Design Resource Centre



- Focal point for questionnaire design & testing at Statistics Canada
- Established in 1985
- Provides consultation & testing services for:
  - Social surveys
  - Business & establishment surveys
  - Agricultural surveys
- Services provided in both official languages

# Cognitive Testing at Statistics Canada



- Cognitive methods first used to test household & social surveys (1987)
  - *1991 Census*
  - *Labour Force Survey*
  - *Survey of School Leavers*
  
- Methods extended to business & agricultural survey questionnaires (early 1990's)
  - *Census of Construction*
  - *Survey of Employment, Payrolls and Hours*
  - *1992 Farm Financial Survey*

# Testing Business Surveys



- Increased demand in recent years.
  - Program initiatives (respondent relations, efficiencies)
  - Broader scope of subject matter
  - New & emerging data needs

## Examples:

- Information & Technology
- Research & Development
- Environment
- Globalization

# Practices & Considerations



- Recruitment and scheduling
- Test materials
- Methodologies & fieldwork
- Reporting

# Recruitment Considerations



- Selective
- Sources:
  - Centralized, confidential lists of business operations (e.g. business or farm registers, or survey-specific sampling frames)
- Recruiters:
  - Experienced STC recruiter or trained interviewers
  - Task is not out-sourced
  - Improved control over recruitment

# Recruitment Challenges



- Accuracy and completeness of recruitment lists
- Finding Person Most Knowledgeable (PMK)
- Endorsement by industry associations
- Scheduling & on-site visits
- Monitoring overlap

# Preparation of Test Materials



- Timing
- Translation
- Developing interviewer guide
- Are participants receiving advance materials?

# Methodology & Fieldwork



- **Cognitive Interviews**
- **Verbal Probes**
  - Maintains control of the interview
  - Consultant manages time for test items & probing
  - Pre-determined & situational
- **Think-alouds**
  - Not typically used
  - General lack of proficiency; burden; ‘training time’
  - ‘Over-think’ reality

# Methodology & Fieldwork



## Concurrent or Retrospective

- Decided as part of overall test strategy

## Factors

- Questionnaire size and complexity
- Proposed data collection methodology
- Scope of testing requirements or phase

## Other Fieldwork Considerations- Business Surveys



- One-on-one interviews (with observer)
- Small interview team
- Recording
- Testing in phases (locally, when feasible)
- Reporting
  - Interim debriefing sessions
  - Draft & final reports

# Challenges - Summary



- Recruitment & scheduling
- Test-ready materials
- Implementing fieldwork

# Business Survey Testing – Recent Developments



## Usability Testing

- **Example: Greenhouse Gas (GHG) Report**
  - Concurrent cognitive interviews & usability testing
  - On-site visits with large oil & gas, manufacturing & mining and electricity companies.
  - QD Consultant, Program Developer and Subject Matter Expert

# Testing & Survey Practices- Recent Examples



- **Tillage Survey**
  - Land management practices
  - Machinery
- **Information & Communication Technology Survey**
  - Terminology and level of knowledge
  - Comparability
- **Agricultural Water Use Survey**
  - Data collection methods
  - Data complexity and detail

# Looking Ahead



## Areas for continued improvement:

- Earlier involvement with conceptual development
- Usability testing - gain experience
- Alternative measures of success