



Statistics
Canada

Statistique
Canada

Canada



Statistics Canada
www.statcan.gc.ca



PRASC



**Project for the Regional
Advancement of Statistics
in the Caribbean**

**Projet régional pour
l'avancement de la statistique
dans les Caraïbes**

Funded by the
Government
of Canada

Canada



Statistics
Canada

Statistique
Canada

Canada



Statistics Canada
www.statcan.gc.ca



Project for the Regional Advancement of Statistics in the Caribbean

PRASC

Component: Business Survey Infrastructure

Funded by the
Government
of Canada

Canada



Collection Management

Moreno Da Pont
Assistant Director, Enterprise Statistics Division

January 21, 2016
Port of Spain, Trinidad and Tobago



Outline

- Data collection objectives
- Questions to address when developing a collection plan
- Methods for facilitating response
- Example of a collection plan
- Determining a follow-up strategy



Data collection objectives

- Obtain timely data of acceptable quality, i.e., data that are fit for intended use
 - Quality targets need to be measurable; response rates are often used to assess the effectiveness of collection activities
- Obtain respondent cooperation and minimize reporting burden
- Facilitate response by ensuring survey concepts are reportable and the collection mode is in line with respondents ability to report



Key questions for developing a collection plan

- What can be done to facilitate response?
- What is the most appropriate collection method?
- When is the best time to collect data?
- What quality measures will be used to assess collection progress?
 - Weighted response rates often used for business surveys
 - How will the quality measure be tracked during active collection?
- What is the collection follow-up strategy?



Facilitating response

- Developing a flexible collection strategy
 - Is a pre-contact strategy required? This will depend on the quality of the data on the survey frame.
 - Is a multi mode design best suited for the survey?
 - Provide flexibility to accept alternative formats for reported data, e.g., unstructured data from the respondent
 - Develop special reporting arrangements, if required
 - Will result in more effort to capture data into collection systems but may also increase response from influential units

Facilitating response - special reporting arrangements

- Manage response burden for the largest enterprises with custom solutions if required
 - Largest enterprises have significant reporting burden and are often crucial for achieving quality targets
 - Negotiate data delivery timelines if necessary
 - Offer alternatives reporting arrangements
 - Collect aggregate data that cuts across industry and/or geographic estimation domains if required to reduce reporting burden
 - Collect data to help allocate aggregate reports, e.g., revenue and employment for each location of the enterprise
 - Some enterprises (companies) may prefer to output a report from their systems



Collection plan - selecting a method

Collection Method	Key advantage(s)	Key disadvantage(s)
Electronic Questionnaire	Online edits and validation, electronic data output, data available sooner	Accessibility for respondents, infrastructure costs
Paper questionnaire	Accessibility (drop off, mail out, fax)	Slower response, reduced options for auto-editing, auto-coding, data must be captured
CATI	Good option for follow up (non-response, failed edit); can provide guidance to respondent	Require experienced interviewers, costly
CAPI	Same as CATI, easier to address concerns face to face	Requires extremely well trained interviewers, very costly, time consuming
Customized reporting arrangement	Reduction of response burden	Data may not be adhere to concepts, capture costs



Collection plan – Example of a basic collection plan

- Pre-contact the respondent: telephone call, CAPI to verify frame information and obtain contact information
- Mail out\Mail back survey – ‘Please report by’ date
- Reminder notifications by telephone, fax, e-mail
- Determine a priority ranking for follow-up activities
- Non-response follow up (NRFU) begins after the ‘report by date’ expires based on priority ranking
- Edit failures for key data are followed up (FEFU) based on priority ranking
- Develop management reports to measure progress, e.g., weighted response rate report; adjust plan if necessary

Determining a follow-up strategy

- A follow up strategy is often necessary to achieve an acceptable level of quality
- Limited time and resource capacity requires a well defined priority ranking for collection units
- Priorities can be determined and progress reports generated based on the following inputs:
 - Stage code
 - Response code
 - Priority status code



Determining a follow-up strategy – assigning a stage code

- Collection stages are useful to keep track of progress (especially during active follow-up)

- Typical stages:
 - 1- Case initiated
 - 2- Case being processed
 - 3- Case final



Determining a follow-up strategy – identifying a response code

- Response code: Codes assigned based on status of response
- Examples of response status:
 - 01- Mailed not received
 - 10- Completed (no failed edits)
 - 20- Partially reported (some mandatory variables missing)
 - 53- Non response - Unable to contact
 - 60- Non response – Out of business
 - 61- Non response - Unable to locate
 - 40- Refusal
 - 04- Post office return
 - 42- Ring no answer
 - Etc.



Follow-up strategy - example of collection tasks

The table below provides an example of how collection activities for a record are managed using stage and response codes

Stage Code	Response Code	Follow up eligibility	Collection Task
Initiated	Mailed/Not received	Yes	Wait for 'report by date'
Being processed	Post office return	Yes	Tracking/research phone number
Being processed	Ring no answer	Yes	Schedule follow up call
Final	Partial response	No	Send to imputation



Follow-up strategy – assigning a priority status

- Options for assigning priority status:
 - Strata (e.g. Must-Take units)
 - Size measure (e.g. revenue from the frame)
 - Other
- Priority groups and targeted effort – Example:
 - Priority 1 – Must obtain response
 - Priority 2 – Call weekly – Max attempt 6
 - Priority 3 – Call every two weeks – Max attempt 3
 - Priority 4 – Call if resources are available



Follow-up strategy – identifying type of response and record type

Assigning priority status based on type of response and record type

Type of response	Type of record	Priority status
Total non response	Stratum - Must-Take	Priority 1
Refusal	Stratum - Must-Take	Priority 1 (Refusal conversion?)
Total non response	Revenue GT \$250K	Priority 2
Partial response – Key variables missing	Revenue GT \$250K	Priority 2
Total non response	Revenue between \$100-250K	Priority 3
Total non response	Revenue LT \$100K	Priority 4



Follow-up strategy - final response status and data processing outcome

Response	Processing outcome
Non response – Unable to locate	In-scope
Non response – Out of business	Out-of-scope
Non response – Refusal	In-scope
Out of business	Out-of-scope
Partial response – failed severe edits	In-scope
Response – Part year operation	In-scope (special treatment)
Response - Combined reporter (parent)	In-scope
Non response - Combined reporter (child)	Out-of-scope (or special treatment)



Is supported software available to manage collection activities?

- World bank has a system that can be used to manage data collection
- What other systems are currently employed?
- Is it possible to share technologies?



You can contact the PRASC team at:

prasc@statcan.gc.ca

or

statcan.prasc-prasc.statcan@canada.ca

Canada