



Reference Document: A Strategy for Census Response Management

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1. Introduction

This note proposes a strategy for census response management with the objective of obtaining a high **and uniform** response rate throughout the country. It is predicated on a computer assisted personal interview approach for data collection. It does not consider population living in institutions or other collectives.

Whether implemented formally as outlined below or informally by training Field Supervisors and Area Managers in the principles and strategy, this can assist in guiding data collection work to a successful conclusion.

2. Background

For the purposes of explanation we will assume the following set-up for census data collection.

The country is partitioned into a set of enumeration districts (ED) for each of which a single enumerator is normally responsible. Sets of EDs and their enumerators are delineated with each set the responsibility of a field supervisor. And, in turn, an area manager is responsible for a set of field supervisors and their areas.

Data collection is done using software capable of providing supervisors and managers near real time information on data collection progress. Such information will be needed down to the level of ED. Key indicators would include at least: number of dwellings, number occupied, number of completed questionnaires submitted, number of partial responses submitted, response rate $((\text{completes} + \text{partials})/(\text{occupied}))$.

3. Response management

As data collection starts, by some process a list of dwellings in each ED is created. Every one of these dwellings must be classified as to its status on Census Day: occupied, not occupied and possibly other classifications. This note concerns itself only with those dwellings classified as occupied on Census Day. For these dwellings, the objective is to obtain a response from every one.

In practice though, this is not realistic and we strive for as high a response rate as we can achieve given our constraints (e.g. time, available human and financial resources). It is desirable that this response rate be as uniform as possible across the country. For a variety of reasons this can be difficult to achieve.

Better field supervisors and area managers may, on their own, implement resource re-allocation strategies that will help achieve this objective. This note outlines a formal structure for such a process that could be applied by all supervisors and managers.

This response management strategy should be administered at the level of area managers or higher. Field supervisor is definitely too low a level for the strategy to be properly effective.

The main approach of this census response management strategy is to stop data collection in areas where clear quality targets have been met in order to redirect resources to areas where they are most needed. This strategy can be seen as an adaptive approach where the goal is not necessarily to obtain the highest aggregate response rate as possible, but to ensure that the response rate is high AND as uniform as possible across the country at small geographic levels, and that the respondents are representative of the population.

Work on each ED is to continue until either completed (every dwelling classified and 100% response rate) or a response management stop work order is received. After such a stop work order, active data collection is stopped but work may remain to assign a final response status for outstanding dwellings and to submit any remaining questionnaires.

For this purpose a response is defined to be a questionnaire, either complete or acceptable partial, submitted by either enumerator or field supervisor for approval. Alternatively it may be appropriate to require that the questionnaire have been approved and submitted to coding.

Response management is done at the level of the ED, the enumerator's work unit. As soon as an ED's response rate is considered sufficient (the definition of sufficient is adjusted during collection), data collection is halted in that ED, and the enumerator and field supervisor in charge are notified. When an ED is deactivated for collection, efforts are redirected to other EDs. Each ED's response rate is assessed daily against a criterion specified in the strategy for that ED.

I propose here a three-tier response management approach. The three tiers identify situations requiring changes in quality expectations so that resources can be dynamically re-allocated as efficiently as possible to obtain the most uniform response rates possible. It is described in terms of an eight week data collection period. Dwelling listing may or may not have taken place prior to the start of this. This period includes interviewing activity, nonresponse follow-up, refusal conversions (including attempts by Field Supervisors) and final classification of dwellings at to their response status.

- Tier 1:
 - Observation: Observe collection for the first three weeks of the data collection period. The quality target is a response rate of 100%. The area manager (or higher) monitors progress by ED and follows up as needed with field supervisors regarding any EDs where progress appears to be lagging relative to the plan or where any other quality concern is apparent. Implicitly this requires a model – which could be very simple – for planned progress by point in time. It is unlikely that any ED actually reaches the 100% target in this period and work should continue in every ED.

- Tier 2:
 - Aim High: The next three weeks: Aim for 98% (or other suitable percentage depending on the national situation) response rate to allow effort to be made to resolve “easy” cases and compensate for the lower response rates for some CUs.
 - As this period starts, every ED should be assessed. Decision criteria could be structured as follows:
 - Response rate low: continue working; consider adding resources
 - Response rate high (say between 70 and 95%) and progress being made: continue working
 - Response rate high and progress stalled: investigate and decide what to do
 - Response rate very high(say >95%) consider closing to reallocate resources if needed elsewhere
 - During this time period, it may be reasonable to stop work on EDs whose response rate has exceeded 98% and reallocate enumerators to assist in other EDs, especially ones with particularly weak progress. Such re-allocation could cross field supervisor areas or even area supervisor boundaries as needed.
- Tier 3:
 - Concentrate Efforts: The last two weeks: A further reduced response rate target is used, say 92% for example. By stopping work on EDs by using a variety of criteria (those with response rates close to the target, where there is little work left, or those with fewest remaining cases left, etc.). Towards the end, reduce the objective to obtaining basic demographics only.

Throughout all the tiers, a verification of quality conditions (e.g. sufficient item response to be considered a response, adequate text for coding) is needed.

The above indicates a uniform target response rate everywhere. This is ideal but experience and local knowledge may indicate some areas where data collection may be particularly difficult. In such areas it may be wise to initially allocate greater resources and/or set a slightly lower target starting at tier 2.