

**Bermuda Government
Department of Statistics**

*The 17th Meeting of the Regional Census Coordinating Committee (RCCC)
Castries, St. Lucia
October 29th 2009*



Country Report

Planning for the 2010 Census of Population & Housing

Questionnaire Design

The 2000 Census Questionnaire was used as the basis for designing a draft copy of the 2010 Census questionnaire. New questions and sections were added emanating from consultancy with Government Line Ministries and Departments.

Housing section –the assessment number was added as a unique identifier for the household; new questions covered household use of lap-top computers and type of internet connection; additional sources of generating energy, recycling; local migration; and first time home owners.

Population section - new questions were added on internal migration, health - questions derived from the UN Washington Group, health questions on autism; lupus, learning disabilities, sickle cell anemia, and one question on amount spent on prescription drugs; questions relating to male fertility; education, in particular, the name of school attending, programme of study, and title of degree; how much spent on child care.

New section – an insert on emigration to assess number of persons leaving the Island to live overseas. This will provide the benchmark data needed, and fill the data gap on migration statistics for the production of population projections. Households will only answer questions on the insert if members of the household emigrated during the census interim..

2009 Census Pre-test

- The Census Pre-test fieldwork was launched via a press conference by the Minister on May 20th 2009. The field work extended May 20th to June 30th 2009 – roughly 6 weeks.
- For the first time a bi-modal approach was used to collect census data. This comprised both the traditional Paper and Pencil Interview (PAPI) and the Computer Assisted Telephone Interview (CATI) data collection methods.
- The pre-test focused on testing the wording and content of the census questionnaire, the personnel recruitment procedures, mapping process, training of field workers, quality control aspects, data processing procedures, remuneration, and the Computer Assisted Telephone Interview (CATI) process.

Recruitment

1. Recruitment commenced in April 2009 for Census pre-test interviewers.
2. An application form was designed to collect the applicants past experience working on surveys, computer experience, transportation accessibility, and availability.
3. Advertisements were placed in the newspapers and applicants were advised to complete an application form and a security vetting form.
4. Applications were vetted by the Government Security Vetting Officer at the Police Department. A total of 21 interviewers were initially needed to interview a sample of 210 household at 10 households per interviewer. The sample later increased to 260 households as the CATI method would be tested using 50 households.

Training

1. The Census Planning Team conducted the pre-test training.
2. A centrally located senior high school served as the training venue. A total of 53 persons were invited to train but only 47 actually showed up.
3. Training lasted for 2 weeks from May 4th to May 15th, Monday to Friday, from 5:30pm – 9:00pm each evening.
4. The interviewers were provided with an additional 6 hours of tutoring on how to effectively operate the CATI data capture application.
5. There was a high attrition rate of 53% with 23 persons being sent in the field. This raised concern for potential loss during the training for the 2010 Census.
6. The enumerator's manual was used verbatim to train potential interviewers.
7. A take-home test was administered which may not be used in the future as trainees worked in groups to complete the test making it difficult to obtain an individual assessment of the trainee's understanding of the concepts.

Mapping

1. The ArcView GIS software was used to produce maps for the enumerator's portfolio.
2. This portfolio provided a compact package for the interviewer while in the field. It integrated the visitation record, a GIS map and the household assessment control list.
3. The GIS technology offered more flexibility in the production of maps, replacing the former labour-intensive method of manually photocopying and taping the maps into protective folders.

Publicity

1. There was limited publicity for the census pre-test which included a press statement by the Acting Minister on the eve of the fieldwork which commenced May 20th 2009.
2. In April 2009, information postcards were mailed to those households selected to participate in the census pre-test.
3. It was decided to retain the 2000 Census logo and use it as a branding for all future censuses along with the slogan "Because People Count".

Electronic Calendar Interview Appointment System

1. This innovation proved to be a valuable census pre-test tool. Households visited the Statistics website or called to schedule a convenient time and day to be interviewed.
2. Respondents chose to be interviewed using the PAPI or CATI method.
3. A total of 36 households or roughly 14% of the sample booked appointments; 27 booked CATI interviews and 9 PAPI interviews.

4. CATI appointments were scheduled at various times during working hours and in the evening from 5:30 - 8:30 pm.

PAPI Fieldwork

1. A sample of 210 households was selected for the census pre-test.
2. 23 interviewers were tasked with completing roughly 10 households each. In the end a total of 204 households were completely interviewed.
3. Interviewers were paid \$28 for each completed questionnaire (\$25 for the completed questionnaire and \$3 for transportation costs).

CATI Fieldwork

1. Of the 250 households sampled, 50 were selected for CATI interviews.
2. A total of 33 households were interviewed in testing the CATI system.
3. 27 households pre-scheduled appointments, the remaining 6 interviews were cold calls.
4. There was one flaw observed in using the appointment system. The system was left open for booking appointments after the PAPI interviews had commenced.
5. Some households booked appointments for a CATI interview while field workers were in the field resulting in confusion. In some cases households were interviewed twice.
6. The stated timeframe for making appointments must be kept to avoid this duplication. Hence giving time to remove addresses of households being interviewed using CATI.

Fieldwork Challenges

- Language barriers due to the diversity of foreign workers recruited in since last census
- Outright refusal of household members to answer the door knock
- Some selected households were spread out; this caused traveling challenges.
- Dogs were not secured
- Duplication of effort when some households requested CATI interviews but were still visited by interviewers to conduct PAPI interviews.

Data Processing

1. The Optical Mark Reader (OMR) Opscan 10 Scanner was refurbished in February 2009.
2. Scantools Plus software was upgraded for use with the scanner. Training was obtained in using this software.
3. Approximately 85% of the census pre-test computer edits have been completed to date.
4. Scanning of the questionnaires commenced October 26th 2009.

Census Pre-test Findings:

A follow-up evaluation session was held with all interviewers inclusive of a feedback form to obtain input on census pre-test activities. The following refers:

- The Washington Group disability questions in the health section were repetitive. Respondents made the same comments with all interviewers: "I just answered that". Some of these questions were deleted.
- Interviewers had difficulty reading the text on the coloured income flashcards; errors of omission were picked up on the flashcards.
- Interviewers felt they should have been paid for attending the training sessions.
- Some questions had to be reworded as they were too long and had to be repeated often.
- The callback cards needed to be redesigned to hook around the door knob.

Summary of 2009 Census Pretest Results		
	CATI	PAPI
Number of households in targeted sample	50	210
Total number of households contacted	44	-
Number of completed Interviews	34	204
Average time taken to administer questionnaire	55 minutes	40 minutes
Average household size (persons)	2.2	2.4
Number of households that made an appointment	27	9
Number of households completing the questionnaire without an appointment	7	-
Number of partially completed interviews	1	1
Number of callbacks	4	N/A
Response Rate	68%	97%

2010 Publicity Planning

1. A 2010 Census Count-Down Clock was planned to use in a central geographical area as part of the publicity and awareness campaign. It was too expensive. A count-down clock was posted on the Government portal and the Statistics website homepage instead.
2. Census 2010 will be advertised on decals applied on the rear view windows of approximately 20 public buses that cover a number of routes throughout the island.
3. A school poster competition will take place from October 2009 to December 2009 targeting three age categories: primary, middle-school and senior secondary. Prizes will be awarded for the top three (3) individuals in each age category.
4. Posters will be displayed and judged by a panel of judges. The top three posters will be selected based on criteria set out in a Rubric.
5. Other publicity campaign activities include digital signage, Government TV, radio, television and newspaper advertisements, franking mail, shopping bags, and postcards.
6. A marketing strategy will follow the Segmentation, Targeting and Positioning (STP) Process. This refers to using various communication channels to deliver messages to specific audiences such as the youth, the elderly, business persons, etc.