



2011 Canadian Census of Population

Introduction

Conducted every five years, the Canadian Census of Population is a major undertaking whose planning and implementation spans a period of over eight years. Statistics Canada generally works on two and even three censuses at any given point in time. Before the final results of one census are out, planning and systems development are already well under way for the next one.

The census is unique because it is the only source of detailed socio-economic, demographic data at small geographic areas including neighbourhoods and communities. It is the only body of comprehensive sub-provincial statistical data on population, housing and agriculture and hard-to-reach/special population groups such as seniors, persons with disabilities, Aboriginal persons and ethnic communities. Information and data from the census are integral to the continued sound management of a number of key government federal programs including the distribution of funds to provinces and territories.

Most households in Canada (80%) receive a short census questionnaire which contains seven questions on basic topics such as household and family relationship, age, sex, marital status, and mother tongue. One in five households (20%) receives a long questionnaire which contains the seven questions from the short form plus over fifty additional questions on topics such as education, ethnicity, mobility, income and employment.

Consultations and testing key to determining content of the census

Before each census, Statistics Canada embarks on an extensive user consultation and testing program to develop the questionnaire content. Data users and interested parties across Canada are asked for their views on the type and extent of information they believe should be available from the census. The goal is to ensure that Statistics Canada takes account of emerging social and economic issues and, where appropriate, uses the census to shed light on them.

Consultations on the 2011 Census content were held in 2007 with a broad range of users, including key federal government departments, provinces and territories, local authorities, libraries, academia, the private sector, special interest groups and the general public. The Internet has become the primary vehicle for consultation material. Written submissions, dedicated meetings, conferences and working groups also continue to be highly effective ways to engage with users.

A new question will be added to the 2011 Census questionnaires only after testing clearly demonstrates it to be effective and shows Canadians' willingness and ability to answer it. A number of focus groups and in-depth one-on-one interviews were conducted to initially assess the question wording. Quantitative tests then statistically assess the quality of information that would result from

changes made to the questions and questionnaire design. In preparation for the 2011 Census, there are two such tests. A smaller Content Test was held in May 2008 while the dress rehearsal National Census Test will take place this May 2009. In Canada, final approval of the census questions is given by the federal cabinet. This is scheduled for Spring 2010.

Many elements are weighed when determining census content. These include the requirement to support legislation and government programs and policies; to support the need for census data of geographically dispersed populations, small geographic areas and target populations; to maintain high standards of data quality; to manage costs; to ensure historical comparisons; to consider the burden to respondents; and to assess alternative data sources.

Collection: Building on multi-modal approach of previous censuses

The 2011 Census is leveraging on the successes and lessons learned from the 2006 and previous censuses. As usual, emerging pressures and opportunities make it necessary for Statistics Canada to continue to refine its collection and processing methodologies. Through continuous improvement, the census will remain responsive, efficient and relevant to the needs of decision makers who rely heavily on timely and quality results.

The 2006 Census responded to privacy concerns regarding the local enumerator issue by centralizing census returns, automating edits and conducting follow-up for missing information from three computer-assisted telephone interviewing sites. A secure and efficient internet response option was offered to Canadian households, integrated with collection and processing operations and over 2.26 million households used this on-line means to complete their census questionnaire. Intelligent character recognition technologies were used to substitute for manual data entry of some 13 million census questionnaires in an efficient and timely fashion. Lastly, the need for a large (over 50,000) decentralized field staff was significantly reduced by more than half, responding in part to the increased difficulty in attracting employees to take on a short-term and difficult assignment.

In order to reduce the number of field staff for the 2011 Census, an 80-85% mail-out is targeted compared with the 70% reached in 2006. This has required improving the coverage of the Address Register (AR) coverage to approximately 90-95% of all addresses in Canada. Effective recruitment, hiring and retention strategies are also being developed to ensure required staffing levels are maintained through-out the non-response follow-up period.

The 2011 Census also needs to be more environmentally friendly and reduce its reliance on paper. Traditionally, the census requires large quantities of paper such as questionnaires, training manuals and user guides for the field staff, etc. The Census needs to be more environmentally conscious and at the same time, provide the same opportunity to its respondents. Based on the strength of the Internet response in 2006, the target is to double the Internet response rate in 2011 to 35-40% (4.4 million dwellings). At the same time, building on the research conducted during the 2006 Census, a letter inviting households to complete the questionnaire on-line will be sent instead of the paper questionnaire to approximately 60% of the private dwellings across Canada. In addition, transactions traditionally done through the production and faxing of paper, will be replaced by using more automation and electronic information technologies to expedite field notification and optimize the management of field activities.

Internet key to communications and dissemination strategy

Statistics Canada has developed a communications and dissemination strategy around the Internet to enable it to efficiently meet the various data requirements of its users via the same platform. The results of the Canadian census are used by a broad range of users, including government officials, media, academic researchers, grade school students and the general public. There is also a wide range with regard to the sophistication of the users and the complexity of the data products.

The Census module on the Statistics Canada web site thus provides direct access to a wide range of products. The *Census Analysis Series* provides an analytical perspective on 2006 Census topics, complemented with animated vignettes and thematic maps. A separate *Maps* module presents thousands of general 2006 Census reference maps. As well, a geographic mapping tool includes features that permit one to search and zoom in on geographic areas as fine as city blocks.

Under the *Data Products* portal, *Community Profiles* presents basic demographic and socio-economic information for all communities in Canada at no cost to data users. *Census Trends* complements this with a series of summary data trends spanning three censuses: 2006, 2001 and 1996. *Highlight Tables* provide measurements of the distribution and percentage change over time of these data, which can be ranked and sorted across a wide range of geographies. *Topic-based Tabulations* series presents hundreds of cross sectional tabulations. More complex tables in this last series are available to certain stakeholders using passwords while still other tables are available to all data users for a fee. Finally, extensive reference material is available including data dictionaries, users' guides, geographic name changes and data quality notes.

More sophisticated users often require the more detailed data available from the Public Use Microdata File. This microdata file is based on a 3% sample of census household records. Access to the even more restricted confidential census microdata is provided to researchers in secure Research Data Centres under strict conditions. There are presently 25 Research Data Centres in universities across the country.

Statistics Canada works extensively with the stakeholders including the media to improve how it conveys information to Canadians, particularly about their own community. In particular, it works closely with them weeks in advance of a census release, discussing the concepts behind the data often with data from previous censuses. The census results themselves are of course not shared in advance. For the 2006 Census releases this approach led to very high interest across the country, with extensive in-depth media coverage, record numbers of visits to the Statistics Canada Internet site and a large demand to speak at government and professional conferences.

Concluding remarks

Statistics Canada with the 2011 Census continues to address both internal and external pressures to change its collection, processing and dissemination strategies. Using a number of pilot tests and phasing changes over the 2001, 2006 and 2011 Census cycles, the Agency moves from a decentralized, manually intensive collection and data entry operation to a more centralized and automated approach. This in particular addresses key concerns regarding confidentiality and security of personal census data. At the same time, a more proactive census communications and dissemination strategy has been adopted which has led to substantial increases to the amount of media coverage, to interest by a large number of census stakeholders and to the amount of information accessible on the internet at no cost.