

Come to Your Census!

One symbol of a developed nation-state is its capacity to conduct an unbiased and comprehensive census of its population. In Canada, this has been a reality for the past 140 years, with the first official survey of our population counting 3.7 million residents in 1871. This first Canadian Census covered a variety of subjects, posing 211 questions on land and holdings, vital statistics, religion, education, administration, the military, justice, agriculture, commerce, industry, and finance.

Since 1871 the Canadian population has changed dramatically, growing almost ten-fold and becoming much more diverse along most elements surveyed. The Canadian Census is essentially a count of population and households; using a mandatory short-form questionnaire that is sent to all occupied Canadian households, and a more detailed mandatory long-form questionnaire that is sent to twenty percent of Canadian households (one in five). This long-form questionnaire collects information on a variety of social and economic characteristics of the nation's population.

What is the proposed change to the Census?

For the upcoming 2011 Census the federal government has instructed Statistics Canada to eliminate the compulsory long-form questionnaire sent to one in five Canadian households. Statistics Canada, has, in turn, proposed to replace the compulsory long-form with a voluntary National Household Survey (NHS) questionnaire that would be sent to one in three households. This change has raised significant concerns on the part of both researchers and the larger community of businesses, organizations and social groups who rely on Census data as a part of their planning and policy-making processes.

Should we be concerned about the change?

The compulsory long-form questionnaire, based on a random sample of households, has been part of the Census since 1941. Prior to 1941, all households were required to fill out the equivalent to the long-form questionnaire, which has consistently asked questions that are remarkably similar in nature to those asked today, ranging from religion, race, and ancestry, to education, occupation, and family status. As a result of the consistency of the questions it has posed and its compulsory nature, the Census has proved to be a reliable and comprehensive database on the demographic, economic, social, and cultural characteristics of the Canadian population for more than a century.

The information provided by the Census has allowed Canadians to better understand who we are and how our villages, towns, cities, and provinces are changing. The Census data represent the core of evidence-based decision-making and are used to monitor changes in our communities; to articulate policies to access markets and improve our well-being; and, among other things, to evaluate the impacts and the consequences of change. While everyone may not directly use Census data in their day-to-day lives, every single Canadian is impacted by decisions based on them, from the types of food stocked in your local grocery store, to how long you'll have to wait at a red light, to the type and magnitude of government funding provided for health care and social programs.

There are two primary elements that are essential to the collection of useful Census data: random selection and compulsory response. These elements are fundamental to the Census in that they ensure all of us are included – or at least represented – in the descriptions of our communities. The switch from a compulsory long-form survey to a voluntary NHS will mean that we will no longer be able to rely on the data in the same manner as we have in the past; the data will no longer reflect all of us – merely the portion of us who choose to reply. In replacing the mandatory long-form questionnaire with a voluntary one the data will over-represent the attributes of some respondents (those who choose to fill out the NHS) and under-represent the attributes of others (those who do not

respond). This phenomenon is referred to by statisticians and pollsters as voluntary selection bias, an issue which is directly addressed on Statistics Canada's own website:

"Sampling voluntary participants as opposed to the general population may introduce strong biases. Often in opinion polling, only the people who care strongly enough about the subject one way or another tend to respond. The silent majority does not typically respond, resulting in large selection bias."

In addition, Statistics Canada acknowledges that:

"people who contribute to voluntary surveys might have different views than those who do not."

The concern with voluntary surveys relates to those who do not respond, as they become under-represented in the data. From a statistical perspective, however, equal concern should be raised by activist-stimulated responses, where members of a group within a community are exhorted to respond in order to increase their representation in the data. In both instances this means that the results are neither representative nor reliable; in the latter instance it means the entire pool of responses becomes tainted by interest group activism rather than the impartial provision of information on the composition of our communities.

As there are no other data sets that represent everyone in a community other than those collected on the mandatory long-form Census questionnaire, if we switch to the voluntary NHS we will not even be able to say who is missing or who is overrepresented in any future Census data – we simply will not know. Additionally, as the response to the voluntary survey will be neither random nor universal, the results from all future Census surveys will not be comparable to historical Census data, making it impossible to develop short- or long-range assessments of how our communities are changing.

Along with eliminating the compulsory long-form, the federal government has also decided that individual Census results will never be released, in contrast to the current practice of releasing information from specific records after 92 years. This has raised significant concerns from genealogists. Why the government chose to make this change is puzzling; as is noted on the Census questionnaire, unless respondents explicitly say "yes" to releasing their personal information after 92 years, it will never be released:

"Statistics Canada also ensures that respondents understand what is involved when they are asked for access to their personal records. In the 2006 Census, two new questions ask for respondents' permission to access their income tax files and to release their personal information after 92 years. Without permission from each respondent, Statistics Canada will neither access income tax records nor provide files for release in 92 years. Questions left blank will be viewed as a "no" response."

What is Statistics Canada's mandate?

Perhaps the most bewildering element of all is that these changes to the Census violate both the Canada Statistics Act and Statistics Canada's own mandate. Under the Statistics Act, Statistics Canada is required to:

"collect, compile, analyse, abstract and publish statistical information relating to the commercial, industrial, financial, social, economic and general activities and conditions of the people of Canada."

Furthermore, Statistics Canada has two main objectives:

1. *To provide statistical information and analysis about Canada's economic and social structure to:*
 - *develop and evaluate public policies and programs; and*
 - *improve public and private decision-making for the benefit of all Canadians.*

2. *To promote sound statistical standards and practices by:*
 - *using common concepts and classifications to provide better quality data;*
 - *working with the provinces and territories to achieve greater efficiency in data collection and less duplication;*
 - *reducing the burden on respondents through greater use of data sharing agreements (sources used include annual tax records, monthly employee payroll records and customs records); and*
 - *improving statistical methods and systems through joint research studies and projects.*

The proposed changes to the 2011 Census are not consistent with Statistics Canada's mandate to "promote sound statistical standards and practices" and to "improve statistical methods and systems." It is therefore unlikely that the changes will "improve public and private decision-making for the benefit of all Canadians." Rather, the changes will impede – not improve – public and private decision-making, as the resulting data will be neither random nor representative. It will not reduce the burden on respondents, for it will merely shift it from a representative sample to a non-representative one if the same response rate is to be achieved. It will reduce the efficiency of data collection, for it necessitates 65 percent more questionnaires being sent out in order to achieve the same level of response.

Why did the government impose the change?

Since it is clear that implementing a less efficient method of collecting unrepresentative and biased data in no way "improves public and private decision-making for the benefit of all Canadians", why is the government seeking to eliminate the mandatory long-form questionnaire? It was not the result of a request from Statistics Canada in an effort to pursue its mandate:

"The decision to change the census came from the federal government and not from [Industry Canada] or Statistics Canada" Vancouver Sun, June 29, 2010.

It was also not the result of public consultations conducted by Statistics Canada for the 2011 Census. Consider the following:

"The consultation process involved speaking to MPs who'd heard from constituents complaining that the mandatory long-form census was intrusive and Statistics Canada could be 'heavy-handed' about ensuring compliance with the threat of fines and jail time." Industry Minister Tony Clement (Statistics Canada falls under the purview of Industry Canada).

Thus, the changes appear to be driven by what the government perceives to be an intrusion into the lives of many Canadians:

"This change was made to reasonably limit what many Canadians felt was an intrusion of their personal privacy," Erik Waddell, spokesman for Industry Minister Tony Clement.

"We've made plans to make sure that the data collected is valuable data and is legitimate data, and that's the right balance in our society...You try to limit the amount of state coercion that

you have, you try to limit the intrusiveness of government activities, and that's the balance that we've struck." Montreal Gazette, July 7, 2010.

In the context of privacy and how it relates to valuable and legitimate data, that the Minister made the decision on behalf of "many Canadians" based on speaking with fellow MP's is in itself troubling. It raises the question of, out of a population of 34 million people, how many Canadians was "many"? We can't say. However, what we do know is that according to the Office of Canada's Privacy Commissioner:

"Only three complaints were laid about any aspect of the census in the last decade: two in 2006 and one in 2001." Globe & Mail, July 15, 2010.

If the decision to change the way in which Canada's Census data are collected was in fact based on discussions with a handful of MP's around Parliament Hill, a much more representative sample of the Canadian population would certainly be warranted given the magnitude of what the changes will mean for our ability to understand what our communities look like and how they are changing. On the other hand, if the decision to change the Census represented the opinion of at least 2.9 million Canadian households (the response rate desired for the NHS), then some fundamental changes to the long-form questionnaire may be warranted.

However, without knowing the actual scale or nature of complaints relating to privacy and the long-form Census questionnaire, it is impossible to make effective decisions that at the same time address these concerns and the mandate of Statistics Canada.

What should be done?

Having noted the government's objective to "limit the amount of state coercion and intrusiveness of government activities" in Canadian household affairs, there are better means by which to meet that objective while still obtaining representative Census data that will improve public and private decision-making.

As a first step this would involve reinstating the one-in-five, randomly-distributed compulsory long-form questionnaire that has been the standard in Canada for six decades.

To assuage the government's concerns, an avenue could be provided for those who feel that the compulsory long-form questionnaire is an intrusion of their personal privacy – and only those who feel so – by allowing those concerned to simply apply for an exemption from filling out the long-form questionnaire if they were to receive it. In this way, other reasons, such as indifference, would not exempt people from responding to the Census. Importantly, this avenue to exemption would require people to actively pursue exemption: if one feels strongly enough that filling out the Census long-form questionnaire is "state coercion", then they also need to feel strongly enough to do something about it.

Of course, there is a much simpler way to assess how Canadians feel about the Census with respect to privacy: as part of the next Census enumeration respondents could be asked whether or not they feel that the Census is an intrusion into their privacy. At the very least this would provide a more factual basis upon which to make fundamental changes to the collection of Census data than what is currently being presented.

In addition to distributing the 2.9 million compulsory long-form questionnaires in 2011, an additional 1.6 million voluntary questionnaires – with the same questions as its mandatory counterpart – could be sent out. (Note that this would not represent any additional cost relative to the current proposal to distribute 4.5 million NHS's.) This would allow for a comparison of survey methods with respect to both the overall response rate and the results themselves. If the two methods were found to generate the same results, then it could be argued that the voluntary form may be preferable to the compulsory one for the 2016 Census. However, if significant differences were identified, either in

response rate or in the responses themselves, this would at the very least warrant pause before any decisions were made about overhauling the nature of Census enumeration in Canada.

Our final thoughts

No matter how you look at it, the proposed changes to the Census will have a significant detrimental effect on the quality of the data collected, the ability to identify long-term socio-economic trends occurring within Canadian communities, and the capacity to make informed public and private decisions at the community, provincial, and national levels.

In almost half a century of working with all levels of government, industry groups and private sector clients to help understand how demographic and economic change will affect them in the future, we feel the proposed changes will negatively impact the ability of businesses, organizations, communities, and governments to make effective and efficient decisions regarding a wide range of issues including economic development, transportation planning, health care and social policy, just to name a few. At a time when all facets of Canadian society are changing rapidly, a reliable and representative census will become increasingly important to having better knowledge, and thus, making better decisions.

As we've shown, there are other approaches to achieving the government's stated objectives that embody a great deal more common sense without reducing the quality and reliability of Statistics Canada's data collection.