

Census Program Transformation Project Updates

Researching a new approach to census-taking



Release date: August 11, 2017

CENSUS • RECENSEMENT



Statistics
Canada

Statistique
Canada

Canada

How to obtain more information

For information about this product or the wide range of services and data available from Statistics Canada, visit our website, www.statcan.gc.ca.

You can also contact us by

email at STATCAN.infostats-infostats.STATCAN@canada.ca

telephone, from Monday to Friday, 8:30 a.m. to 4:30 p.m., at the following numbers:

- | | |
|---|----------------|
| • Statistical Information Service | 1-800-263-1136 |
| • National telecommunications device for the hearing impaired | 1-800-363-7629 |
| • Fax line | 1-514-283-9350 |

Depository Services Program

- | | |
|------------------|----------------|
| • Inquiries line | 1-800-635-7943 |
| • Fax line | 1-800-565-7757 |

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, Statistics Canada has developed standards of service that its employees observe. To obtain a copy of these service standards, please contact Statistics Canada toll-free at 1-800-263-1136. The service standards are also published on www.statcan.gc.ca under “Contact us” > “Standards of service to the public.”

Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued co-operation and goodwill.

Standard table symbols

The following symbols are used in Statistics Canada publications:

- | | |
|----------------|--|
| . | not available for any reference period |
| .. | not available for a specific reference period |
| ... | not applicable |
| 0 | true zero or a value rounded to zero |
| 0 ^s | value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded |
| ^p | preliminary |
| ^r | revised |
| x | suppressed to meet the confidentiality requirements of the <i>Statistics Act</i> |
| ^E | use with caution |
| F | too unreliable to be published |
| * | significantly different from reference category ($p < 0.05$) |

Published by authority of the Minister responsible for Statistics Canada

© Minister of Industry, 2017

All rights reserved. Use of this publication is governed by the Statistics Canada [Open Licence Agreement](#).

An HTML version is also available.

Cette publication est aussi disponible en français.

First report on the Census Program Transformation Project: Researching a new approach to census-taking

What's new in census research?

The 2016 Census Strategy Project was conducted from 2010 to 2012. It examined three approaches to census-taking used by countries around the world: the traditional census, the use of existing administrative registers and the use of continuous measurement.

After examining the benefits and challenges of these approaches in the Canadian context, the [Final report on 2016 Census Options](http://www12.statcan.gc.ca/census-recensement/fc-rf/reports-rapports/r2_index-eng.cfm) (http://www12.statcan.gc.ca/census-recensement/fc-rf/reports-rapports/r2_index-eng.cfm) concluded that the traditional census approach was the only viable methodology for the 2016 Census Program, notably because of time constraints. The report recommended continued long-term research on alternative methodologies for the Census Program, in particular the increased use of [administrative data](http://www.statcan.gc.ca/eng/about/admin_data_faq) (http://www.statcan.gc.ca/eng/about/admin_data_faq).

Since 2013, Statistics Canada has continued its research and built prototypes of a statistical population database—known as the *Canadian Statistical Demographic Database*—in an effort to reproduce the 2011 Census head count. This database was built using administrative data obtained primarily from the Canada Revenue Agency and Immigration, Refugees and Citizenship Canada, as well as provincial and territorial vital statistics under the authority of the [Statistics Act](http://laws-lois.justice.gc.ca/eng/acts/S-19/FullText.html) (http://laws-lois.justice.gc.ca/eng/acts/S-19/FullText.html). It contained basic demographic information such as sex, date of birth and an address for each person in Canada with the goal of being used for statistical purposes only. The counts from the database were compared with the [2011 Census counts](http://www12.statcan.gc.ca/census-recensement/2011/rt-td/index-eng.cfm) (http://www12.statcan.gc.ca/census-recensement/2011/rt-td/index-eng.cfm) and the [2011 Censal Demographic Estimates](http://www.statcan.gc.ca/daily-quotidien/130926/dq130926a-eng.htm) (http://www.statcan.gc.ca/daily-quotidien/130926/dq130926a-eng.htm). They compared well with them at the national, provincial and territorial levels, as well as by age and sex. However, the research found that more work was needed at lower levels of geography to achieve the same quality as the census and that more analysis of sub-populations was required.

For 2016, Statistics Canada built other versions of the Canadian Statistical Demographic Database, enhancing it with additional administrative data to ensure all Canadians are placed in the right location. A thorough analysis is being conducted to assess the efficiency and quality of the 2016 prototypes.

What is the Census Program Transformation Project?

The long-term research recommended in the *Final report on 2016 Census Options* culminated into the Census Program Transformation Project (CPTP), which was launched in June 2016. The CPTP continues to explore how the use of administrative data can support the production of the census population and dwelling counts, but it does so in a more holistic way than previous research.

The CPTP is investigating the development of a new combined census methodology to produce population and dwelling counts, while ensuring that Canadians continue to receive the high-quality information they expect from the Census Program. This new methodology would leverage available administrative data rather than collecting the information directly from Canadians. The CPTP's overall objective is to improve the efficiency of the census by building robust and interconnected statistical registers on buildings and population using a variety of administrative data sources.

Research into this new approach will assess how current methodology for the short- and long-form census would have to be adjusted to complement information not available in statistical registers. It will also assess options for measuring the coverage of population counts produced from a collection methodology that combines traditional census and administrative data from statistical registers.

Message to census stakeholders and Canadians

The use of statistical registers should reduce Census Program costs as well as the response burden placed on Canadians while maintaining overall quality and relevance. Statistics Canada will also be able to reuse the statistical registers to improve the efficiency, relevance and responsiveness of its social statistics programs.

Population counts and associated coverage errors are at the heart of Statistics Canada's Demographic Estimates Program. These estimates are used as part of the funding formula to determine the distribution of major federal transfer payments to the provinces and territories under the [Federal-Provincial Fiscal Arrangements Act](http://laws-lois.justice.gc.ca/eng/acts/F-8/) (<http://laws-lois.justice.gc.ca/eng/acts/F-8/>). The CPTP will ensure the high quality of demographic estimates is maintained with a combined census model.

As research progresses, Statistics Canada will continue to consult and engage with census data users, stakeholders and Canadians. The agency will provide ongoing updates on its research plans and progress, and will seek feedback during key phases of the research.

Canadians can rest assured that their privacy will continue to be protected; Statistics Canada treats administrative data with the same degree of scrutiny for confidentiality and security as information collected through its surveys. The research performed by CPTP falls within the scope of [Statistics Canada's privacy impact assessment](http://www.statcan.gc.ca/eng/about/pia/generic/section1) (<http://www.statcan.gc.ca/eng/about/pia/generic/section1>), which concluded that risks associated with the collection of personal information under the authority of the *Statistics Act*—including administrative data—are properly mitigated to protect the privacy of individuals.

Next steps

In 2017 and 2018, research efforts will focus on:

- developing the statistical registers
- establishing options to best combine information from statistical registers and census questionnaires to produce population and dwelling counts and estimates of other census demographic characteristics and to continue as such to respond to priority data needs; and
- determining options to measure coverage of the population counts under this new model.

The first test and assessment of the new combined census model will take place in 2019. If this assessment proves promising, portions of the model could be partially implemented in 2021 to support non-response follow-up efforts as part of the collection of short-form census questionnaires. The combined model will be further tested in 2021 to determine whether—and to what extent—it can replace the use of short-form census questionnaires in 2026 and future censuses.

More on statistical registers

The Census Program Transformation Project relies on the development of two statistical registers: an exhaustive Statistical Building Register that lists all private and collective dwellings, and a Statistical Population Register that provides basic demographic data on household members residing at these dwellings (information that is normally found on the short-form census questionnaire). Obtaining administrative data from provincial and territorial organizations will be key to the creation of the statistical registers. They will be used for statistical purposes only in accordance with the *Statistics Act*.

Statistical Building Register

The Statistical Building Register will cover both residential and non-residential buildings. Development of the building register will begin with the agency's Address Register, to which data from [Statistics Canada's Business Register](http://www.statcan.gc.ca/eng/survey/business/1105) (<http://www.statcan.gc.ca/eng/survey/business/1105>) and new administrative sources will be added to help improve coverage and information about buildings and their living units.

Statistical Population Register

Development of the Statistical Population Register will be based on research conducted since 2013 on the Canadian Statistical Demographic Database. Statistics Canada will investigate whether a regularly-maintained statistical population register can be developed to provide basic demographic information on individuals living in Canada. New administrative sources that can help place Canadians in the right location will be incorporated into the register creation.

More on a combined census model

Traditional census approach will continue to be used to obtain information that is either unavailable or of insufficient quality through statistical registers. However, the content of the census questionnaires may change to respond to priority data needs and to adapt to the fact that some short-form data are now available through statistical registers. This model is known internationally as a *combined census* ([UNECE, 2015](https://unstats.un.org/unsd/demographic/sources/census/wphc/default.htm) (<https://unstats.un.org/unsd/demographic/sources/census/wphc/default.htm>)), and offers the advantage of incremental implementation; the statistical registers are just another way to collect census data.