

2016 Census Program Content Test: Design and Results

Census of Population, 2016

Release date: April 1, 2016



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 toll-free numbers:

- | | |
|---|----------------|
| • Statistical Information Service | 1-800-263-1136 |
| • National telecommunications device for the hearing impaired | 1-800-363-7629 |
| • Fax line | 1-877-287-4369 |

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, 2016

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.

Table of Contents

List of tables	3
1. Introduction.....	6
1.1. Objectives.....	6
2. Design.....	7
2.1. Overview.....	7
2.2 Target population and sampling.....	7
2.2.1 Wave approach to the census.....	10
2.3 Data collection	10
2.4 Processing returned questionnaires	11
2.5 Data processing	11
2.6 Total response rate	11
2.7 Analysis strategy	13
3. Content Test: Changes tested and analysis results.....	14
3.1 Coverage steps	14
3.1.1 Step A – Email address	14
3.1.2 Step B – Enumeration	16
3.1.3 Step C – Persons not listed	19
3.2 Paper questionnaire format	23
3.3 Demographic questions	25
3.3.1 Interrogative mode.....	25
3.3.2 Marital status and common law	25
3.3.3 Relationship to Person 1	28
3.4 Language questions	30
3.4.1 Language spoken at home.....	31
3.4.2 Mother tongue	32
3.5 Social insurance number (SIN) question.....	33
3.5.1 Response rates	34
3.5.2 Quality of responses provided	35
3.5.3 Impacts of the question	36
3.6 Income and earnings	37

2016 Census Program Content Test: Design and Results

3.7	Integrated census–NHS questionnaire	38
3.8	Activities of daily living	40
3.9	Sociocultural information.....	42
3.9.1	Question on respondent's place of birth	43
3.9.2	Question on citizenship	46
3.9.3	Question on year of immigration.....	47
3.9.4	Question on ethnic origin.....	48
3.9.5	Questions on Aboriginal identity	51
3.9.6	Question on population group	53
3.10	Education.....	54
3.10.1	Questions on degrees obtained.....	54
3.10.2	Major field of study	61
3.10.3	Question on school attendance	62
3.11	Labour market activities.....	64
3.11.1	Restructuring the section on labour market activities	64
3.11.2	Industry and occupation	65
3.11.3	Question on language of work.....	65
3.12	Permission to make personal census information available after 92 years	67
4.	Conclusion	69
	Appendices	70
	Appendix A – List of major changes to the content of the 2016 Census Program	70
	Appendix B – List of questions in test and control questionnaires (Content Test).....	71

List of tables

Table 1	Proposed models for the 2016 Census and the 2016 National Household Survey, Content Test.....	7
Table 2	Subsets of population under consideration, Content Test	8
Table 3	Wave collection approach	10
Table 4	Census return rates, by test and Panel	12
Table 5	NHS return rates, by test and Panel.....	12
Table 6	Distribution of responses by response mode, Content Test	15
Table 7	Distribution of responses by response mode, SIN Test.....	15
Table 8	Non-response rates for the question on the number of persons at this address, by Panel, paper response mode, Content Test	18
Table 9	Non-response rates for the household members list, by Panel, paper response mode, Content Test.....	18
Table 10	Proportion (%) of households that reported a person in Step C, by Panel and collection mode, Content Test and SIN Test.....	21
Table 11	Persons listed and added in Step C, by reason stated, EQ, Content Test	22
Table 12	Non-response rate to census questions, by household size and position of the person, paper questionnaires, 2011 Census and Content Test	23
Table 13	Census completion rate, paper questionnaire, 2011 Census, Content Test.....	24
Table 14	Distribution of responses to common law, by Panel and questionnaire language, persons aged 15 years and over with a valid response, Content Test.....	26
Table 15	Distribution of responses to marital status among persons who reported being in a common-law relationship, by Panel and questionnaire language, persons aged 15 years and over with a valid response, Content Test	27
Table 16	Distribution of the “other relationship” category to the question on relationship to Person 1 by collection mode, Content test	29
Table 17	Distribution and non-response rate to the question on relationship to Person 1, by respondent age and collection mode, Content Test	30

2016 Census Program Content Test: Design and Results

Table 18

Distribution of responses to the question on language spoken most often at home, by Panel, response mode and questionnaire language, Content Test 32

Table 19

Distribution of responses to the question on mother tongue, by Panel, response mode and questionnaire language, Content Test..... 33

Table 20

Rates of transition to NHS, by Panel and collection mode, SIN Test 35

Table 21

Distribution of responses to the social insurance number question, by collection mode, SIN Test 35

Table 22

Distribution of responses to the SIN question by position of the person in the household, by collection mode for self-responding households, SIN Test..... 36

Table 23

Estimated impacts of the SIN question on 2016 reminder and follow-up activities 36

Table 24

Rates of transition to the NHS, by test and response mode..... 39

Table 25

Non-response rates for the disability question, by collection mode, Test Panel only, Content Test 42

Table 26

Distribution of responses on the respondent's place of birth, by Panel, electronic questionnaire, Content Test..... 45

Table 27

Derived immigrant population, by Panel and collection mode, Content Test..... 46

Table 28

Distribution of ethnic origins (single responses), by Panel and collection mode, Content Test..... 50

Table 29

Single responses and multiple responses to the question on ethnic origin, by Panel and collection mode, Content Test 51

Table 30

Distribution of responses for the self-reported Aboriginal identity question, by Panel and collection mode, Content Test 52

Table 31

Distribution of responses to the question on Indian status, by Panel and collection mode, Content Test..... 53

Table 32

Distribution of highest level of education completed, by Panel, EQ only, Content Test..... 57

Table 33

Distribution of responses for trade and college diplomas, by Panel, EQ 57

Table 34

Non-response rates for education questions, by Panel and collection mode, Content Test..... 58

Table 35

Distribution of non-respondents for the question on postsecondary education, by Panel, paper questionnaire only, Content Test 59

Table 36

Summary of wording changes made to postsecondary education sub-questions for 2016 60

2016 Census Program Content Test: Design and Results

Table 37

Distribution of school attendance, by respondent age, by Panel and collection mode, 2014 Content Test, 2011 NHS and 2011 LFS63

Table 38

Distribution of non-response rates for questions in the work section, by Panel and collection mode, Content Test64

Table 39

Distribution of responses for the question on the language used most often at work, by Panel, response mode and questionnaire language, Content Test66

Table 40

Estimated distribution of persons who would be included or excluded from the universe of the question on languages spoken in the workplace in 2016 on the basis of the 2011 NHS67

Table 41

Distribution of responses to the disclosure question, by collection mode and Panel, Content Test68

Table 42

Distribution of responses to the disclosure question, by collection mode and panel, NHS (N1), persons under the age of 15, Content Test69

1. Introduction

From May 2 to June 30, 2014, Statistics Canada conducted the 2016 Census Program Content Test, which included the mandatory census questionnaire (2A) and the combined census and National Household Survey questionnaire (N1),¹ both of which could be used in the next cycle. A total of five tests helped test different aspects of the 2016 Census Program. At Statistics Canada, these tests are referred to as “Behaviour Tests” and correspond to the acronym “BT.” Tests 1 and 4, i.e., BT1 and BT4, helped test the communication material; tests BT3 and BT5 focused on field operations and the BT2 helped test proposed content options of the 2016 Census Program. The reference date for the BT2 test was May 13, 2014.

This report presents the Content Test objectives, the design and the summary of this analysis to determine potential content determination. Results from the data analysis of the test are not the only elements used to determine the content for 2016. Several other elements were considered to determine the content, such as response burden, comparability over time in terms of estimates and counts, and user needs.

1.1. Objectives

Changes were proposed to the content for 2016 compared to the 2011 Census and the 2011 NHS. These changes were considered based on the following elements:

- the needs expressed by various census data user partners during consultations conducted in the fall of 2012
- the operational and budgetary requirements of the Census Program
- the compliance with normative frameworks recently adopted by the agency to standardize collection tools and reduce household response burden
- the results from various qualitative tests conducted before the Content Test, between May 2013 and January 2014.

All changes to the content have been thoroughly assessed in terms of the impact on the quality of responses obtained. Taking into account all the proposed changes, two key objectives were defined for the Content Test.

Objective no. 1: validate the proposed changes to the content concerning:

- the wording of questions and instructions on answering them
- proposed response options
- the structure of the census questionnaire and the NHS questionnaire
- the paper questionnaire
- the paper format of questionnaires
- the electronic format of questionnaires and the application functionalities.

Objective no. 2: measure the impact of including the social insurance number (SIN) question on the data quality, the collection operations and the possible matches with other administrative files.

1. Statistics Canada began the implementation of the Government of Canada’s decision to restore the mandatory long-form census questionnaire in November 2015.

2. Design

2.1. Overview

The test was designed to meet the following two main objectives: to assess the impact of any proposed content changes (objective no. 1) and to measure the impact of the SIN question (objective no. 2). To this end, two model questionnaires were developed to meet the objectives, namely a model with all the proposed changes EXCEPT the SIN question and a model with all the proposed changes INCLUDING the SIN question. A control model questionnaire with the 2011 content was also developed. Table 1 presents each of these model questionnaires.

Table 1

Proposed models for the 2016 Census and the 2016 National Household Survey, Content Test

	Model 1	Model 2	Control model
Census	Nine mandatory questions with proposed changes	Ten mandatory questions with proposed changes, including the SIN question	Nine mandatory questions identical to those used in 2011
National Household Survey (NHS)	Twenty-six voluntary questions, including proposed changes for collecting information on the following themes: activities of daily living, sociocultural information (immigration, Aboriginal identity, visible minority), mobility (1 year and 5 years), parents' place of birth, education, labour market activities		Fifty-five questions identical to those used in 2011

Source: Statistics Canada, 2014 Content Test

To adequately meet objective no. 2 and properly measure the SIN question's impact on collection, the Content Test was mandatory for respondents. The mandatory aspect was required to make the conditions of the Content Test similar to those of the Census of Population (the census is mandatory). The mandatory aspect only applied to the census questions; the NHS questions were voluntary.

In total, the Content Test required developing different test and control forms, in English and in French, distributed among 11 analysis Panels. These 11 Panels were grouped to meet the two main objectives. Five Panels were used for objective no. 1 and six Panels were used for objective no. 2.

Questions included in models 1 and 2 of the NHS gave us the opportunity to evaluate potential changes to some questions and to evaluate a reduced content in the context of the greater use of administrative data and a reduction of response burden.

2.2 Target population and sampling

For each of the 11 Panels, a target population was defined and a sample was selected (see Figure 1). Due to the collection constraints of the test (for example, the absence of field staff to deliver the questionnaires), the sample was selected from private dwellings located in mail-out areas in one of the 10 provinces. Collective dwellings were excluded from this test, as were private dwellings located in list/leave areas or canvasser areas. Only households living in occupied private dwellings in 2011 which had responded to the NHS were targeted. This rule was adopted to maximize the number of test respondents who had also completed the NHS in 2011, to obtain more 2011 and 2014 responses for comparison among matched respondents. For the SIN test, it was not required to have responded to the NHS, since households that had not responded in 2011 were included in the target population.

The sampled dwellings of each Panel were selected to be representative of various target populations, for use in either the content analysis of objective no. 1 (Panels 1 to 5) or the SIN analysis of objective no. 2 (Panels 6 to 11). Of all the proposed changes, some only applied to the paper questionnaire (for example, the format of the paper

2016 Census Program Content Test: Design and Results

questionnaire) and others only applied to the electronic questionnaire (EQ) (for example, electronic functionality). The target population and the collection method of the 11 Panels were defined to obtain a sufficient number of “paper” responses and a sufficient number of “electronic” responses to ensure that all the proposed changes were tested properly. This was required to obtain an adequate level of accuracy during data analysis to detect statistically significant differences by response mode (paper or EQ). Table 2 shows the target population and objective associated with each of the 11 Panels.

Table 2

Subsets of population under consideration, Content Test

Target population	Panels	Objectives
Households in mail-out areas that responded to the paper version of the NHS questionnaire in 2011	Test Panels no. 1 and no. 2 vs. Control Panel no. 4	Measure the impact of changes made to paper questionnaire
Households in mail-out areas that responded to the electronic version of the NHS questionnaire in 2011	Test Panel no. 3 vs. Control Panel no. 5	Measure the impact of changes made to electronic questionnaire and its functionality
Households in mail-out areas in 2011	Test Panel no. 6 vs. Control Panel no. 9 Test Panel no. 7 vs. Control Panel no.10 Test Panel no. 8 vs. Control Panel no.11	Measure the impact of SIN question on quality, collection and potential matching with other data sources

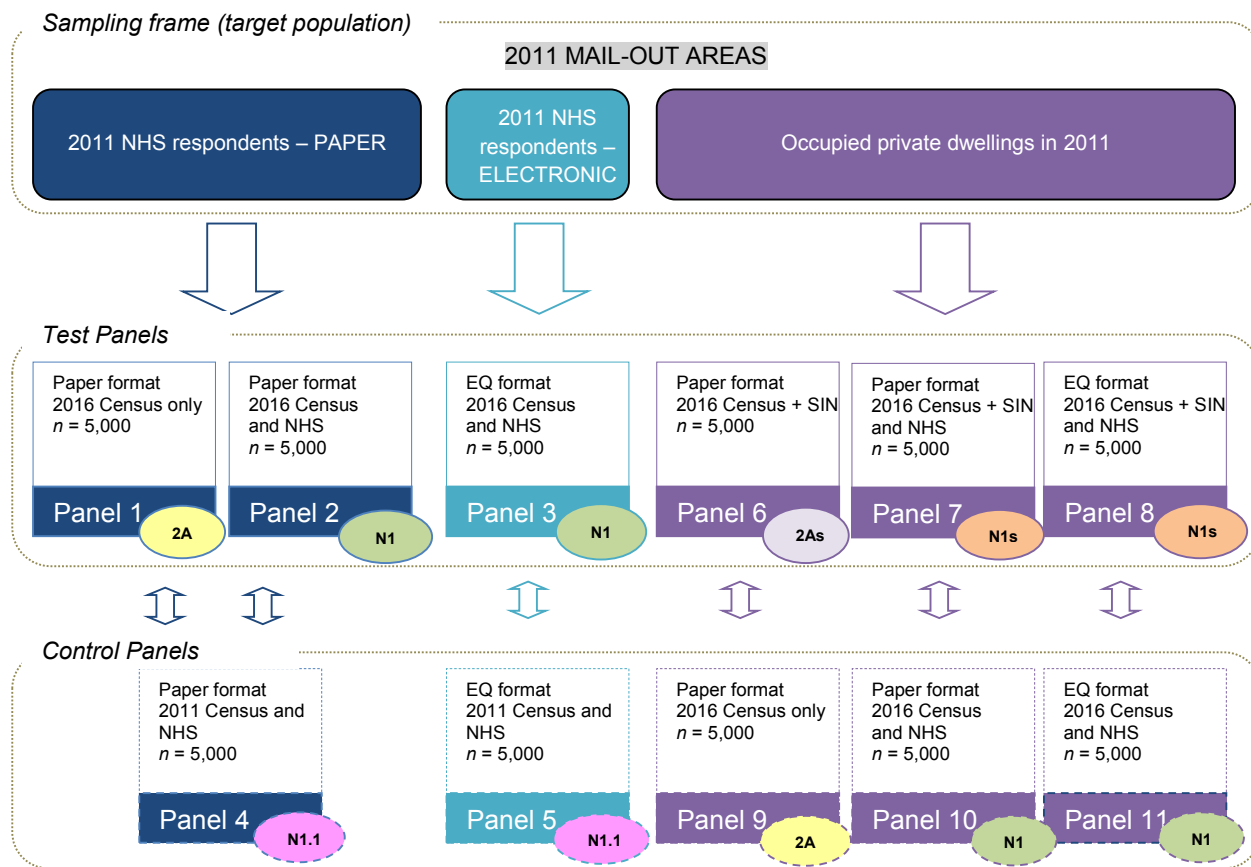
Source: Statistics Canada, 2014 Content Test

Figure 1 illustrates the design of each Panel and indicates whether it is a Test Panel (a Panel used for proposed changes) or a Control Panel. The description of each Panel also gives the target population (sampling frame), sample size (*n*), main type of questionnaire used (paper or EQ), form name (2A, N1, N1.1, 2As, N1s) and associated model questionnaire (see Table 1 for the various models). Form N1 was the form that integrated census questions and NHS questions for the Test Panels, and Form N1.1 was the form that integrated census questions and those of the NHS for the Control Panels.

2016 Census Program Content Test: Design and Results

Figure 1

Design of the 2014 Content Test



For each of the Panels 1 to 5, the sample was a stratified simple random sample (stratified by province and language). For each of the Panels 6 to 11, to minimize non-response follow-up (NRFU) costs, the sample was first stratified by local census office; then, a total of 400 clusters (areas) were selected within the strata using systematic probability-proportional-to-size sampling. Lastly, a simple random sample of 75 dwellings was selected in each of the clusters.

2016 Census Program Content Test: Design and Results

2.2.1 Wave approach to the census

The wave approach was used for Content Test data collection. This approach made it possible to maximize response rates while minimizing collection costs. Table 3 shows the key dates for the various waves. This approach is very similar to the one used in the 2011 Census and the one planned for the 2016 Census.

Table 3

Wave collection approach

Collection stage	Main activity	Targeted panels	Start date
Wave 1	Receipt of letter containing secure access code	EQ format Panels	May 5, 2014
	Receipt of questionnaire package	Paper format Panels	May 5, 2014
Wave 2	Receipt of reminder letter containing secure access code	All non-responding households	May 13, 2014
Wave 3	Receipt of questionnaire package	EQ and paper format Panels: non-responding households in Wave 1 that received a letter	May 21, 2014
NHS Wave	Receipt of reminder letter containing secure access code for NHS EQ only ("standalone" NHS EQ)	All EQ households that responded to the census portion but not to the NHS portion	May 30, 2014
Wave 4	Notices of visit and start of non-response follow-up (NRFU); personal visit and telephone	Panels for objective no. 2 (SIN): subsample of nonresponding households	June 2, 2014

Source: Statistics Canada, 2014 Content Test

In total, 55,000 dwellings divided into 11 analysis Panels were contacted during the Content Test; 20,000 initial letters of invitation, 35,000 Wave 1 questionnaire envelopes and reminder letters were sent by Canada Post during these waves.

2.3 Data collection

Collection took place from May 2 to June 30, 2014. The reference date was May 13.

In addition to using the wave approach, other collection activities were put in place to promote the response rate. The Census Help Line (CHL) was open from May 2 to June 30, 2014. Those who had questions or who required assistance to complete their questionnaire could therefore talk to an agent. The CHL received 7,400 calls. When the call was to assist a respondent in completing his/her questionnaire, the agents used the application iEQ, which was an electronic questionnaire developed specifically for this purpose.

For respondents who received a letter containing a secure access code and who could not or did not wish to use the EQ, a paper questionnaire request system was implemented.

Non-response follow-up (NRFU) also took place from June 2 to June 30. NRFU only applied to the Panels used for SIN analysis. It was implemented to compare data collection when a SIN question was included (Panels 6, 7 and 8) with data collection when the SIN question was not included (Panels 9, 10 and 11). NRFU was carried out by Statistics Canada interviewers. The interviewers were required to contact households on all Panels that had not responded as of May 30, by telephone or through a personal interview. As a result of limited resources and a desire to control collection costs, the number of follow-ups was reduced by selecting a subsample of non-responding households.

2.4 Processing returned questionnaires

For the Content Test, EQs completed by respondents were sent directly to the servers at Statistics Canada's Data Operations Centre (DOC) and saved automatically upon receipt. The paper questionnaires that were mailed back were also saved at the DOC by scanning the bar code on the cover of the questionnaire. The questionnaires completed by interviewers during NRFU were mailed to the DOC.

Once recorded, the paper questionnaires were processed for data capture.

2.5 Data processing

Paper questionnaire data were captured using ANYDOC, an optical character recognition data capture system. Once captured, the paper questionnaire data were combined with the EQ data in a single file. A complex integration process was required to standardize the data for each response mode. The purpose of this process was to obtain a single file for all response modes and all Panels. Processing rules were applied to this file to ensure that certain problems and inconsistencies were identified and corrected (for example, a paper questionnaire returned with no responses, or a paper questionnaire and an electronic questionnaire completed for the same household, etc.). An edit also made it possible to identify questionnaires containing no information or not enough information to proceed to the processing and analysis stages.

Given the resources available, the production schedule and the analysis objectives, the data were not subjected to the edit and imputation process. As well, write-in responses in the questionnaires were not coded.

2.6 Total response rate

This section deals with the household return rate of the Content Test. This rate is calculated from the number of completed questionnaires versus the number of dwellings selected. For the census portion, a questionnaire was considered completed if at least one question had been answered starting at Question 2 (Sex). For the NHS portion, a questionnaire was considered completed if at least one question pertaining to the NHS content had been answered. These rules are the same as the ones used in 2011. Table 4 shows the census return rates for the Content Test and SIN Test. Return rates were calculated based on the number of households who returned a fully or partially completed questionnaire divided by the total number of dwellings in the sample. The rates do not take into account unoccupied dwellings.

2016 Census Program Content Test: Design and Results

Table 4

Census return rates, by test and Panel

	Total questionnaires sent	Total questionnaires received	Return rate (%)
Content Test (objective no. 1)			
Test Panel (1)	5,000	4,168	83.4
Test Panel (2)	5,000	4,163	83.3
Control Panel (4)	5,000	4,106	82.1
Test Panel (3)	5,000	4,122	82.4
Control Panel (5)	5,000	4,062	81.2
SIN Test (objective no. 2)			
Test Panel (6)	5,000	4,424	88.5
Control Panel (9)	5,000	4,418	88.4
Test Panel (7)	5,000	4,386	87.7
Control Panel (10)	5,000	4,417	88.3
Test Panel (8)	5,000	4,408	88.2
Control Panel (11)	5,000	4,426	88.5

Source: Statistics Canada, 2014 Content Test

As indicated in Table 4, good census data collection results were obtained for the Content Test and the SIN Test, with return rates greater than 80% for all Panels and collection modes. The reason for these high participation rates is that the Content Test, even though considered a test, was mandatory, and the households selected for Panels 1 to 5 were also those that had responded voluntarily to the NHS in 2011. We must also take into consideration the fact that NRFU was implemented for the SIN Test (Panels 6 to 11) starting on June 2, which made it possible to gain the participation of approximately 2,400 additional households. Lastly, the wave methodology definitely contributed to the high numbers. Table 5 shows the NHS return rates for the Content Test and SIN Test.

Table 5

NHS return rates, by test and Panel

	Total questionnaires sent	Total questionnaires received	Return rate (%)
Content Test (objective no. 1)			
Test Panel (2)	5,000	3,974	79.5
Control Panel (4)	5,000	3,837	76.7
Test Panel (3)	5,000	3,398	68.0
Control Panel (5)	5,000	3,413	68.3
SIN Test (objective no. 2)			
Test Panel (7)	5,000	3,963	79.3
Control Panel (10)	5,000	4,010	80.2
Test Panel (8)	5,000	3,679	73.6
Control Panel (11)	5,000	3,757	75.1

Source: Statistics Canada, 2014 Content Test

2016 Census Program Content Test: Design and Results

As for NHS return rates, the Content Test results and SIN Test results are slightly different. The former (Panels for content) vary from 73.6% to 80.2% whereas the latter (Panels for SIN), from 68% to 79.5%. Note that participation in the NHS was voluntary, which may explain the reason for these lower rates.

2.7 Analysis strategy

To perform the analysis of the data collected as part of the Content Test, a working group composed of subject-matter analysts, methodologists and representatives associated with the tasks of content determination and certification was created. This working group developed a plan for the analyses to be performed, specifying assumptions to be validated regarding the impact of the changes for each content change as well as the work required to develop the response database, and derive the variables required for the analysis. Methods of comparison were also defined and validated by the working group. An independent analysis plan, specific to the addition of the SIN question, was also developed.

For purposes of analysis and assumption validation, the results of the test and Control Panels were compared to assess the impact of the proposed content changes. Responses from the paper questionnaires and electronic questionnaires were analyzed separately. The analysis mainly focused on the impact of the changes on the distribution of responses and non-response rates.

For changes to the existing content, the results of the test and Control Panels were compared and the differences were evaluated. For the new questions, the results of the Test Panel were compared with the results of the Control Panel to ensure that the questions did not have an effect on neighbouring questions in the questionnaire or on other related questions. To verify data accuracy and consistency, we also compared the test and Control Panels results of the questions without changes.

Results of the Control Panels were also analyzed and compared to data from the 2011 Census. Since the content of the Control Panels was similar to the one in 2011, summary analysis were conducted between data from the Control Panels and data from 2011 to make sure that data distributions and quality were similar.

Data

A database combining electronic and paper collection modes and containing clean data and sampling weights allowed us to do content-related analysis (objective no. 1).

For the SIN Test analysis (objective no. 2), an independent database, including the sampling weights with a restricted access to those involved in the analysis, was created.

Furthermore, the test data were matched with 2011 Census and NHS data. So, for respondents living in the same household as during the 2011 Census, the responses provided in the 2014 Test were compared to those provided in 2011, to gain a better understanding of potential variations in the data and to provide a more thorough analysis of data on the proposed changes.

3. Content Test: Changes tested and analysis results

Given the objective of the Content Test, the analysis presented in this report deals in large part with the Test Panels since those are the ones targeted by the proposed changes. The analysis results will refer to the test and Control Panels, the test and control questionnaires or the test and control questions. The terms “paper questionnaire” (PQ) and “electronic questionnaire” (EQ) are also used to refer to the collection mode.

For each theme, the report first presents the changes made to the content in the paper and electronic versions of the questionnaires, followed by the analysis results with supporting data.

The data presented in this section are the ones from the Panels used for objective no. 1 (Panels 1 to 5 for content analysis), except for the data on the SIN question, which are data from the Panels used for objective no. 2 (Panels 6 to 11 for the SIN).

The results presented, with the exception of the sub-section on the data analysis based on the coverage steps, are based on weighted data. In terms of questions included in the coverage steps, only the questionnaires of the households considered as responding were used. The analyses were done on an unweighted basis because respondents from various Panels were sometimes combined, including Content Test respondents with SIN Test respondents.

3.1 Coverage steps

The census questionnaire begins with Steps A, B and C, which are called “coverage steps” because their purpose is to determine the exact population counts on the census reference day.² Population coverage is based on two concepts, namely the target population (the persons to be enumerated) and the place in which each person in the target population must be enumerated. Each person in the target population must be enumerated only once, in his or her usual place of residence, on census day.

In the paper and electronic versions of the questionnaire, minor changes were made to the wording of the questions and instructions in the coverage steps. The major changes pertain to the addition of an email address question in Step A in the paper and electronic versions, and a complete change to Step C in the electronic version.

Analyses of the coverage steps were initially done with the objective no. 1 (content) Panels. To validate certain findings and trends, the objective no. 2 (SIN question) Panels were also used. The results of this subsection therefore present analyses done using the Panels for objectives 1 and 2.

3.1.1 Step A – Email address

For the first time, respondents were asked to provide an email address (see Figure 2). This question was part of Step A on questionnaires for the Test Panels only. The question was asked immediately after the telephone number question and before the address question.

This question did not apply to all households – there was no validation message for non-response in the electronic questionnaire, but there was a message if the respondent omitted the “at” sign (@) or dot (.). For purposes of this analysis, two conditions were added for an email address to be considered valid. It had to follow the generally accepted format “character’@’character.character” that is, the address provided had to start with an alphanumeric character and be at least five characters long.

2. Step D identifies households living on a farm, and responses in this step are used for the Census of Agriculture.

2016 Census Program Content Test: Design and Results

The rates for valid responses among self-reporting households that chose the electronic questionnaire are very similar for the Content Test (86.5%) and SIN Test (85.3%). The rates are also very similar to the proportion of households that have an Internet connection (83%), as reported in the 2012 Canadian Internet Use Survey.³

The invalid response rates also include cases in which the respondent provided responses such as “do not have an email address.” These cases represent 65% of the responses classified as invalid. If these responses were considered as not applicable, the actual invalid response rate would be 0.9% of all responses. Among the major reasons for these invalid responses, 58% of respondents responded with their mailing address, and 5%, their name. These results reflect primarily the behaviour of respondents to the paper questionnaire, given the very small number of invalid responses received through the electronic questionnaire.

The final content of the 2016 Census Program was disseminated on Statistics Canada’s website. This content is available at <http://www12.statcan.gc.ca/nhs-enm/2016/ref/questionnaires/questions-eng.cfm> and <http://www12.statcan.gc.ca/census-recensement/2016/ref/questionnaires/questions-eng.cfm>. As specified in those links, the question pertaining to the email address included in the Content Test was selected for the 2016 Census Program.

3.1.2 Step B – Enumeration

In Step B, the respondent specifies the number of persons who usually live at the address indicated on the questionnaire (B1) and lists those persons (B2).

B1 – Number of persons at the address

In both the electronic and paper versions of the questionnaire, the question on the number of persons at the address was changed to reduce the number of cases in which the respondent forgets to include himself or herself in the total reported (Figures 3 and 4). In the electronic questionnaire, unlike in the paper version, respondents cannot leave the question blank, because the number reported is used to generate Step B2 – List of household members.

For paper questionnaires, since there were no response integration and verification steps, as is usually the case when paper questionnaires are being processed for a census, no counterchecks can be performed to determine whether or not persons had failed to include themselves during the Test.

3. See www.statcan.gc.ca/daily-quotidien/131126/dq131126d-eng.htm.

2016 Census Program Content Test: Design and Results

Figure 3

Question on the number of persons at this address (EQ)

Test
<div>1. Including yourself, how many persons are staying at this address on May 13, 2014?</div> <div>Include: all persons who have their main residence at this address, even if they are temporarily away.</div> <div>Press the "? Help" button located at the top right corner of this box to see instructions on "Whom to include" and "Where to include persons with more than one residence" (for example, children in joint custody, students, permanent residents, persons at their secondary residence, etc.).</div> <div><div>? Help</div></div> <div>Number of persons</div> <div><input type="text"/></div>

Source: Statistics Canada, 2014 Content Test, Form 2A.

Control
<div>1. How many persons are staying at this address on May 13, 2014, including yourself?</div> <div>Include all persons who have their main residence at this address, even if they are temporarily away.</div> <div>Select the "? Help" button located at the top right corner of this box to see instructions on "Whom to include" and "Where to include persons with more than one residence" (for example, joint custody, students, permanent residents, secondary residence, etc.).</div> <div><div>? Help</div></div> <div>Number of persons</div> <div><input type="text" value="1"/></div>

Source: Statistics Canada, 2014 Content Test, Form 2A.

Figure 4

Question on the number of persons at this address (PQ)

Test
<div>1. Including yourself, how many persons usually live at this address on May 13, 2014?</div> <div>Include: all persons who have their main residence at this address, even if they are temporarily away.</div> <div>See the instructions on page 3 (joint custody, students, landed immigrants, secondary residence, etc.).</div> <div><div><input type="text" value=""/><input type="text" value=""/></div> ← Number of persons</div>

Source: Statistics Canada, 2014 Content Test, Form 2A

Control
<div>1. How many persons usually live at this address as of May 13, 2014, including yourself?</div> <div>Include all persons who have their main residence at this address, even if they are temporarily away.</div> <div>See the instructions on page 3 (joint custody, students, permanent residents, secondary residence, etc.).</div> <div><div><input type="text" value=""/><input type="text" value=""/></div> ← Number of persons</div>

Source: Statistics Canada, 2014 Content Test, Form N1.1.

Results

Since this question is mandatory in the electronic version, non-response rates refer to paper questionnaires only. Among all Panels, this question was left blank on 10.2% of paper questionnaires. As shown in Table 8, these rates do not differ significantly between the Test Panels and Control Panels, which indicates that paper questionnaire respondents in 2014 reacted to the question in the same way as they did in 2011. Among the households that were targeted for the electronic questionnaire (Panel nos. 3 and 5) but chose to respond using the paper form, the households in Panel no. 3 (new content) have a lower non-response rate than the households in Panel no. 5 (2011 content). Earlier qualitative tests had shown that non-response was generated either because respondents did not see the answer box or because pages 2 and 3 of the paper form were stuck together. In the Test, nearly 20% of paper questionnaire respondents who left the question blank did not answer the other questions on pages 2 and 3.

2016 Census Program Content Test: Design and Results

Table 8

Non-response rates for the question on the number of persons at this address, by Panel, paper response mode, Content Test

Panels	Total households	Total non-response	%
Content Test	12,253	1,246	10.2
Test Panel (1)	3,744	377	10.1
Test Panel (2)	3,780	396	10.5
Control Panel (4)	3,686	369	10.0
Test Panel (3)*	570	49	8.6
Control Panel (5)*	473	55	11.6

* Households targeted for the EQ but which chose the paper response mode.

Source: Statistics Canada, 2014 Content Test

The wording of the question which was tested has been retained for the 2016 Census Program.

B2 – List of household members

After reporting the number of persons in the household, the respondent must provide the family name and given name of each person. In the paper version, the changes made are minor: specifically, the field for the given name was lengthened from 12 characters to 14 characters. In the electronic version, the changes made are also minor: the text field was lengthened from 60 characters in 2011 to 80 characters in 2014, the help content was improved and a validation message was added for when the respondent provides only the family or given name. Lastly, the format for the instructions was changed in both versions.

Results

For electronic questionnaires, the number of names entered must be consistent with the number of persons reported in Step B1. As paradata analysis shows, the validation message on a missing family or given name was seen by less than 1% of respondents, of which 98% made a correction. Overall, one can conclude that the changes helped to improve the quality of the data reported for this question.

For the paper version, 2.7% of the 25,420 responding households ($n = 681$) did not complete Step B2. On 450 of these questionnaires, pages 2 and 3 were left completely blank by the respondent. Of the 51,851 persons listed in paper questionnaires, the non-response rate for the “family name” and “given name” fields was 2.7%. There is no significant difference between the Panels in either the Content Test or the SIN Test.

Table 9 shows the rate of persons entered on paper questionnaires for whom the “family name” and “given name” fields are blank. For the Content Test questionnaires as a whole, the rate is 3.1%.

Table 9

Non-response rates for the household members list, by Panel, paper response mode, Content Test

Panels	Total persons	Total non-response	%
Content Test	22,513	697	3.1
Test Panel (1)	6,770	187	2.8
Test Panel (2)*	8,119	263	3.2
Control Panel (4)*	7,624	247	3.2

* Including households targeted for EQ but which chose the paper response mode.

Source: Statistics Canada, 2014 Content Test

2016 Census Program Content Test: Design and Results

On the paper questionnaires, increasing the number of boxes available for the “given name” field made it possible to improve the quality of the information reported. Approximately 2% of the names reported used all 14 boxes available, while the proportion was 3.7% for those reported on the 2011 version (which provided only 12 boxes).

The quality of responses in the coverage steps of the paper questionnaires can also be evaluated by comparing the number of persons reported in B1 and the number of names listed in B2.⁴ Of the 25,827 questionnaires in which fewer than 10 persons were listed in Steps B1 and B2, 439 (1.9%) contained an inconsistency between the two steps. The calculated difference between B1 and B2 varies between +1 in 51% of cases and -1 in 29% of cases. These differences may be the result of errors in questionnaire data capture, but they also suggest that respondents are having some difficulty answering these questions. Specifically, the results tend to confirm what earlier studies have shown, namely that respondents are not including themselves in one of the two steps in Step B. As well, single persons tend to ignore this question, thinking that it does not apply to their situation. In the Test, 16% of the questionnaires containing an inconsistency were questionnaires of single persons.

3.1.3 Step C – Persons not listed

In the paper version of the questionnaire, no significant changes were made to Step C. A few examples were added of persons who often are not enumerated. In the electronic version, however, Step C was completely restructured. As for the paper version, the list of examples of persons most often omitted from the census was improved. As well, respondents can indicate the number of persons whom they are not sure should be included and choose the most appropriate situation for each of them. A series of questions is then asked to determine whether or not the persons should in fact be excluded. If appropriate, the person is added to the list of household members (Figure 5).

4. In Step B2 the maximum number of names that can be listed is 10. If a household wishes to report more than 10 persons in Step B2, the household must complete additional questionnaires. However, in the Content Test, no additional questionnaires were provided. Therefore, the analysis is limited to a comparison between the number reported in B1 and the number of family and given names listed in B2 for households reporting a size of fewer than 10 persons.

2016 Census Program Content Test: Design and Results

Figure 5
Step C in the electronic questionnaire, Test Panel

C1

1. Did you **leave anyone out** because **you were not sure** the person should be included? Help

For example:

- Student
- Child in joint custody
- Spouse or common-law partner temporarily away
- Person currently living in an institution (hospital, old-age home, prison, etc.)
- Person who has one or more other residences
- Person who moved out, moved in, newborn, deceased, around May 13, 2014
- Person temporarily away (for work, studies, travel, etc.)
- Person who stays or lives temporarily at this address (in transit between residences, no fixed residence, etc.)
- Person from another country with a work or study permit or refugee claimant
- Permanent resident (landed immigrant)
- Person living at the same address (roommate, lodger, employee, etc.)
- Any other situation

☐ No

☐ Yes

Specify the number of persons **not listed** because you were not sure.

C2

2. Specify the **name(s) of the person(s) not listed** because you were not sure they should be included. Help

	Family name	Given name
Person 1	<input type="text"/>	<input type="text"/>

C3

3 a) What is **4 4**'s situation on May 13, 2014? Help

Select the first answer from the list that best describes this person's situation.

Your answers will determine whether this person should be listed at this address. If yes, this person will be added in this questionnaire.

4 4

- ☐ Student
- ☐ Child in joint custody
- ☐ Spouse or common-law partner temporarily away (for work, studies, travel, etc.)
- ☐ Person currently living in an institution (hospital, old-age home, prison, etc.)
- ☐ Person who has one or more other residences
- ☐ Newborn, person who recently moved in
- ☐ Person who recently moved out or passed away
- ☐ Person temporarily away (for work, studies, travel, etc.)
- ☐ Person who stays or lives temporarily at this address (in transit between residences, no fixed residence, etc.)
- ☐ Person from another country with a work or study permit or asking for refugee status
- ☐ Permanent resident (landed immigrant)
- ☐ Person living at the same address (roommate, lodger, employee, etc.)
- ☐ Other situation - specify:

2016 Census Program Content Test: Design and Results

C4

Based on your answers this person **will not be listed** on this questionnaire:

John Smith

Therefore, the list of **all persons at this address** is:

John Doe
Jane Doe

Source: Statistics Canada, 2014 Content Test, Form 2A.

Step C in the electronic questionnaire is subdivided into four sections:

- C1 – reporting whether there are persons not listed in the questionnaire because the respondent was not sure they should be included
- C2 – identifying the excluded persons (family name and given name)
- C3 – specifying the situation of each of the persons
- C4 – viewing the results and adding or excluding persons.

Results

Table 10 shows that a larger proportion of persons marked “yes” for the first question in Step C in the electronic test questionnaires (2.4%) compared to the control questionnaires (1.5%). Likewise, a larger number of persons listed a person in this field in the paper test questionnaires (1.7%) compared to the control questionnaires (1.5%). These results indicate that the changes to the list of examples appear to be working.

Table 10

Proportion (%) of households that reported a person in Step C, by Panel and collection mode, Content Test and SIN Test

	Electronic	Paper
Content Test		
Test Panel (2A)	n/a	1.7
Test Panel (N1)	2.4	1.7
Control Panel (N1.1)	1.5	1.5
SIN Test		
Panels with SIN (N1s)	2.9	2.3
Panels without SIN (N1)	2.3	2.0

Source: Statistics Canada, 2014 Content Test

Special attention was given to the analysis of the electronic questionnaires since this step was completely restructured. Approximately 3% of electronic questionnaires which contained the new section contained a “yes” to the question “Did you leave anyone out because you were not sure the person should be listed?” This step made it possible to list 561 additional persons, 177 of which were added to the household (Table 11).

2016 Census Program Content Test: Design and Results

The 107 persons listed with the reason “other situation” are from 77 dwellings. Among the other write-in responses not covered in the response options of Step C3a, note that there are two situations that are more common than all the others. The first, by far, is persons living in the same house (27 cases, for example “tenants,” “lives in the basement suite,” “downstair residence,” “renter,” etc.). For these cases, it is not known whether it is a separate dwelling or whether the “tenants” in question received their own questionnaire. These situations will have to be clarified during the failed edit follow-up (FEFU) and, if required, a questionnaire should be sent to these dwellings. The second most common case is persons outside Canada (nine cases).⁵

Table 11

Persons listed and added in Step C, by reason stated, EQ, Content Test

	Persons listed		Persons added	
	Number	%	Number	%
Total	561	100.0	177	31.5
Student	58	10.3	38	65.5
Child in joint custody	178	31.7	50	28.1
Spouse or common-law partner temporarily away from home	14	2.5	8	57.1
Person currently living in an institution	18	3.2	3	16.7
Person with another residence or multiple residences	26	4.6	4	15.4
Newborn infant or person who recently moved in	4	0.7	3	75.0
Person who recently moved out or died	21	3.7	3	14.3
Person temporarily away from home	34	6.1	5	14.7
Person living or staying temporarily at this address	51	9.1	26	51.0
Person from another country with a work or study permit, or a refugee claimant	16	2.8	16	100.0
Permanent resident (landed immigrant)	14	2.5	10	71.4
Person living at the same address	20	3.6	11	55.0
Other situation	107	19.1	0	0.0

Source: Statistics Canada, 2014 Content Test

For the 107 responses under “other,” the application cannot determine whether the persons should be added to the household. During a normal collection period, the 77 dwellings that reported them would be part of the failed edit follow-up (FEFU). The new question represents a reduction in the FEFU workload in 2016. In fact, in 2011, all households with a response in Step C were part of the FEFU while in the new version of Step C (EQ), only the 107 persons (19% of the individuals identified in Step C [EQ]) would be included (in addition to those identified in the PQ). For the 454 persons remaining, Question 3 successfully determined those who should be included and those who should not. A total of 39% of those persons were added as a household member.

When the persons listed in Step C are compared with those listed at the start of the questionnaire (in the “roster” in Step B), there is a risk of overcoverage since there are persons who appear in both lists. Even though they are not considered to be part of the household in Step C, they will nevertheless be included, as they will have been listed in Step B. In the Test, this applied to six dwellings for a total of 10 persons listed twice.

5. “Other examples of write-in responses not available in the response options in Step C3a include the following: “awaiting permanent resident status” “girlfriend” “home stay working” “tourist” “home share” “my wife her sponsor application in process” “travelling for work no permanent address at this time” “visiting on super visa from India” etc.”

2016 Census Program Content Test: Design and Results

3.2 Paper questionnaire format

In 2011, the census form – commonly referred to as “2A” – was formatted as a brochure.⁶ In 2016, the format used will be that of an eight-page, 8½” × 11” “booklet” stapled in the middle. This booklet format was used in the 2014 Content Test. The questions are arranged in the same way as in 2011, that is, pages 1 to 3 are for coverage; pages 4 and 5 are for demographic content, starting with the question on the person’s sex; pages 6 and 7 are for language questions, starting with the question on knowledge of official languages; the last question is the one on disclosure 92 years after collection. Page 8 is for respondents to provide any comments.

In 2011, respondents had to unfold the form to page 4 to answer the demographic questions for Persons 3 to 6 and to answer the language questions for Persons 1 and 2. Analyses conducted after the collection confirmed what qualitative tests had suggested, namely that some respondents did not unfold the form. The booklet format adopted for 2016 should therefore reduce the non-response.

Results

Table 12 shows non-response rates by position of the person in small-, medium- or large-sized households.

Table 12

Non-response rate to census questions, by household size and position of the person, paper questionnaires, 2011 Census and Content Test

	Small households (1 or 2 persons)			Medium or large households (3 or more persons)					
	Positions 1 and 2			Positions 1 and 2			Positions 3 to 6		
	2011	2014	Diff	2011	2014	Diff	2011	2014	Diff
Total	2,824,818	6,034,422		1,221,243	4,118,653		1,081,780	3,865,183	
Sex	1.7	2.3	0.6	0.7	1.0	0.3	2.6	2.9	0.3
Marital status	2.6	1.4	-1.2	2.6	1.7	-0.9	15.7	2.0	-13.7
Common law	10.9	9.7	-1.2	7.3	11.6	4.3	17.5	7.5	-10.0
Relationship to Person 1	5.7	5.7	0.0	1.1	1.5	0.4	2.4	2.5	0.1
Official languages	6.1	4.2	-1.9	1.8	4.0	2.1	2.7	6.4	3.7
Home language – Often	7.2	4.7	-2.5	1.9	4.4	2.5	3.3	7.5	4.2
Home language – On a regular basis	7.9	6.2	-1.7	2.8	7.2	4.4	4.4	10.3	5.9
Mother tongue	7.4	5.1	-2.3	2.3	4.5	2.2	4.3	7.2	2.9
Disclosure	17.7	7.4	-10.3	8.5	6.0	-2.5	9.4	8.6	-0.8

Source: Statistics Canada, 2014 Content Test

The results indicate the following:

- The booklet format had a positive impact compared with the brochure format, for one- and two-person households. In 2011, persons completing questionnaire tended not to unfold the pages to respond to

6. The brochure consisted of a double-sided 34” × 11” page folded to create eight 8½” × 11” pages of information.

2016 Census Program Content Test: Design and Results

the language questions. The non-response rate for these questions was unusually high for persons in positions 1 and 2. In 2014, the non-response rates have decreased for households of this size. The non-response rates for the language questions increased in 2014, regardless of the person's position or the household size, for households with three or more persons. This result suggests that persons completing the paper questionnaire tend not to open the booklet to pages 6 and 7, on which the language questions appear.

A census questionnaire completion indicator was also calculated on the basis of the last question answered (Table 13). The results show that 92.7% of the persons completed the entire questionnaire, answering all the questions in 2014, including the disclosure question. By comparison, the completion rate was 91.1% in 2011.

Table 13

Census completion rate, paper questionnaire, 2011 Census, Content Test

	2011	2014	Difference
Total	5,127,841	14,018,258	
Sex	0.0	0.0	0.0
Age	0.0	0.0	0.0
Marital status	0.0	0.0	0.0
Common law	0.0	0.0	0.0
Relationship to Person 1 (R2P1)	0.7	3.7	3.0
Official languages	0.2	0.2	0.0
Home language – Often	0.2	0.3	0.1
Home language – On a regular basis	0.3	0.3	0.0
Mother tongue	7.4	2.9	-4.5
Disclosure	91.1	92.7	1.6

Source: Statistics Canada, 2014 Content Test

The results show that the question on the relationship to Person 1 (R2P1) appears to show a different behaviour in 2014, since 3.7% of the persons stopped responding at this point, compared with only 0.7% in 2011.

The census collects information by proxy. Therefore, the completion rate may vary depending on the position of the person in the household. However, the results show that the likelihood of stopping the questionnaire at the R2P1 question varied insignificantly in 2014, regardless of household size or the position of the persons in the household.

The results therefore tend to confirm that in 2014, among respondents to the booklet version of the census questionnaire, a greater number of persons did not turn the pages properly. Specifically, on page 5, after responding to the question on the relationship to Person 1, which is the last question on that page, they turned pages 5 and 7 together and closed the questionnaire, thereby failing to respond to the language questions.

The booklet format for the census is recommended for the 2016 collection even if there is a small risk that some households won't answer languages questions for the paper version. Other elements were considered for the choice of this booklet format. The risk is minimal considering the parameters for the 2016 collection: this risk only applies to paper self-responses and the main mode of response is the electronic questionnaire.

3.3 Demographic questions

3.3.1 Interrogative mode

As part of the standardization of collection tools, it was necessary to convert the demographic questions into the interrogative mode. This conversion was applied to the questions on SEX, DATE OF BIRTH and AGE, MARITAL STATUS and RELATIONSHIP TO PERSON 1.

Analyses of the questions affected by these changes showed that the interrogative mode had no effect on the quality of the responses obtained, whether from the electronic questionnaire or the paper questionnaire.

3.3.2 Marital status and common law

In the 2014 version, the questions on marital status and common law were integrated into a single twopart question (Figure 6). The universe of the question was restricted to persons aged 15 years and over; therefore, electronic questionnaire respondents did not see the question for persons under the age of 15. The definitions of legal marital status and common law were added as additional tips for the respondent. Lastly, the common-law response options were reversed, with “no” appearing first instead of “yes,” as in 2011.

Figure 6

Questions on marital status and common law

Test questionnaire	Control questionnaire
<p>Answer questions 4 a) and 4 b) for each person aged 15 and over.</p> <p>4 a) What is this person's legal marital status?</p> <p>Legal marital status: refers to the person's marital status without taking into account his or her common-law status.</p> <p>b) Is this person living with a common-law partner?</p> <p>Common-law: refers to two people who are not married but live together as a couple.</p> <p> <input type="radio"/> Never married <input type="radio"/> Married (and not separated) <input type="radio"/> Widowed <input type="radio"/> Divorced <input type="radio"/> Separated </p> <p> <input type="radio"/> No <input type="radio"/> Yes </p>	<p>4 MARITAL STATUS</p> <p>Mark “<input checked="" type="radio"/>” one circle only.</p> <p> <input type="radio"/> Never legally married <input type="radio"/> Legally married (and not separated) <input type="radio"/> Separated, but still legally married <input type="radio"/> Divorced <input type="radio"/> Widowed </p> <p>5 Is this person living with a common-law partner?</p> <p>Common-law refers to two people who live together as a couple but who are not legally married to each other.</p> <p> <input type="radio"/> Yes <input type="radio"/> No </p>
Source: Statistics Canada, 2014 Content Test, Form 2A.	Source: Statistics Canada, 2014 Content Test, Form N1.1.

These changes were proposed to reduce the confusion of respondents living in a common-law relationship with regard to the question on marital status, and to reduce inconsistent responses that suggest that the two questions are not necessarily well understood.

2016 Census Program Content Test: Design and Results

Results

Differences in the distribution of responses to the marital status and common-law questions between Test Panels and Control Panels are not statistically significant. The language of the questionnaire must be considered before differences become apparent for the common-law question (Table 14). This means that there is an increase of nearly three percentage points for the “yes” response option among respondents who used the French version of the questionnaire, regardless of the collection mode, but a slight decrease among respondents who used the English version of the questionnaire. Among respondents who used the French version of the questionnaire, the increase in the “yes” response is 30% for the electronic questionnaire mode and 10% for the paper mode. As well, respondents who responded in French using the paper questionnaire had a greater propensity to not respond to the question on marital status, but to respond only to the question on common law. Among respondents who responded using the English version of the questionnaire, it was observed that, when they reported being “married,” they did not respond to the common-law question.

Table 14

Distribution of responses to common law, by Panel and questionnaire language, persons aged 15 years and over with a valid response, Content Test

	QUESTIONNAIRES IN FRENCH				QUESTIONNAIRES IN ENGLISH			
	Control Panels		Test Panels		Control Panels		Test Panels	
	Number	%	Number	%	Number	%	Number	%
Electronic								
Total	448,804	100.0	507,985	100.0	1,114,099	100.0	1,050,988	100.0
No	382,011	85.1	419,763	82.6	1,017,313	91.3	965,483	91.9
Yes	66,792	14.9	88,222	17.4	96,786	8.7	85,506	8.1
Paper								
Total	2,419,654	100.0	2,352,511	100.0	9,790,281	100.0	9,492,749	100.0
No	1,780,056	73.7	1,654,449	70.3	8,785,715	89.7	8,562,384	90.2
Yes	639,599	26.4	698,062	29.7	1,004,566	10.3	930,364	9.8

Source: Statistics Canada, 2014 Content Test

2016 Census Program Content Test: Design and Results

The two-part question format makes it possible to reduce the level of inconsistency among responses, regardless of the collection mode. Table 15 shows the number of persons who reported being both married and in a common-law relationship. There is a significant reduction in the results obtained in the Test Panels compared with the Control Panels, for both English and French questionnaires, regardless of the collection mode.

Table 15

Distribution of responses to marital status among persons who reported being in a common-law relationship, by Panel and questionnaire language, persons aged 15 years and over with a valid response, Content Test

	QUESTIONNAIRES IN FRENCH				QUESTIONNAIRES IN ENGLISH			
	Control Panels		Test Panels		Control Panels		Test Panels	
	Number	%	Number	%	Number	%	Number	%
Electronic								
Total	639,599	100.0	698,062	100.0	1,004,566	100.0	930,364	100.0
Married	11,446	1.8	4,639	0.7	193,028	19.2	80,275	8.6
Other	628,153	98.2	693,422	99.3	811,538	80.8	850,089	91.4
Paper								
Total	66,552	100.0	84,155	100.0	95,902	100.0	80,620	100.0
Married	3,993	6.0	1,388	1.6	18,915	19.7	4,110	5.1
Other	62,559	94.0	82,768	98.4	76,987	80.3	76,510	94.9

Source: Statistics Canada, 2014 Content Test

The results show that respondents demonstrate a better understanding of these questions. For both the electronic questionnaire and the paper questionnaire, the proportion of married respondents that report being in a common-law relationship as well is systematically lower in the Test Panels, compared with the Control Panels.

The content tested seems to show a decline in the number of inconsistent answers to the marital status question and the common-law question but this could impact comparability. As specified on the page showing the content for the 2016 Census Program, the marital status and common-law questions have the same format as in 2011 and will appear as two separate questions.

2016 Census Program Content Test: Design and Results

3.3.3 Relationship to Person 1

The question on the relationship of each household member to the reference person (Person 1) was rewritten in the interrogative mode, and two small changes were made to the Content Test (Figure 7). The changes are:

- Most of the notes for this question in 2011 were removed, leaving only the following instruction: “If none of the responses in the list describes this person’s relationship to Person 1, then specify a response under ‘Other relationship.’”
- The order of the two check boxes was changed. It is proposed that “Grandchild of Person 1” appear before “Son-in-law or daughter-in-law of Person 1.”

Figure 7

Question on the relationship to Person 1

Test questionnaire		
<p>5 What is the relationship of this person to Person 1?</p> <p>If none of the responses in the list describes this person’s relationship to Person 1, then specify a response under “Other relationship”.</p>	<p>⊗ PERSON 1</p>	<div style="list-style-type: none; padding-left: 0;"> <input type="radio"/> Opposite-sex husband or wife of Person 1 <input type="radio"/> Opposite-sex common-law partner of Person 1 <input type="radio"/> Same-sex married spouse of Person 1 <input type="radio"/> Same-sex common-law partner of Person 1 <input type="radio"/> Son or daughter of Person 1 only <input type="radio"/> Grandchild of Person 1 <input type="radio"/> Son-in-law or daughter-in-law of Person 1 <input type="radio"/> Father or mother of Person 1 <input type="radio"/> Father-in-law or mother-in-law of Person 1 <input type="radio"/> Brother or sister of Person 1 <input type="radio"/> Foster child <input type="radio"/> Room-mate, lodger or boarder </div> <p>Other relationship — specify:</p> <div style="border: 1px solid black; width: 100px; height: 20px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 20px;"></div>

Source: Statistics Canada, 2014 Content Test, Form 2A.

2016 Census Program Content Test: Design and Results

Figure 7

Question on the relationship to Person 1

Control questionnaire

6 RELATIONSHIP TO PERSON 1

For **each** person usually living here, describe his or her relationship to Person 1.

Mark "⊗" or specify one response only.

Adopted children should be considered sons and daughters.

Children in joint custody should be included in the home of the parent where they live most of the time.

Children who spend equal time with each parent should be included in the home of the parent with whom they are staying on May 13, 2014.

For all children, please consider the relationship to Person 1 and Person 2.

If none of the choices apply, specify this person's relationship to Person 1 under "Other".

Examples of "Other" relationships to Person 1:

- brother-in-law or sister-in-law • niece or nephew
- grandfather or grandmother • room-mate's son or daughter • lodger's husband or wife • employee • etc.

⊗ **PERSON 1**

- ☐ Opposite-sex husband or wife of Person 1
- ☐ Opposite-sex common-law partner of Person 1
- ☐ Same-sex married spouse of Person 1
- ☐ Same-sex common-law partner of Person 1
- ☐ Son or daughter of Person 1 only
- ☐ Son-in-law or daughter-in-law of Person 1
- ☐ Grandchild of Person 1
- ☐ Father or mother of Person 1
- ☐ Father-in-law or mother-in-law of Person 1
- ☐ Brother or sister of Person 1
- ☐ Foster child
- ☐ Room-mate, lodger or boarder
- ☐ Other — Specify

Source: Statistics Canada, 2014 Content Test, Form N1.1.

Results

The distribution of responses between the Control Panels and Test Panels by collection mode shows a few differences, but they are not statistically significant.

Table 16

Distribution of the "other relationship" category to the question on relationship to Person 1 by collection mode, Content test

	Control Panels		Test Panels	
	Number	%	Number	%
Electronic				
Total	14,690,173	100.0	14,261,546	100.0
Other	269,036	1.8	327,461	2.3
Paper				
Total	1,783,118	100.0	1,783,630	100.0
Other	9,692	0.5	12,249	0.7

Source: Statistics Canada, 2014 Content Test

The question asks respondents to specify the relationship to the reference person (Person 1) in the "other relationship" category if none of the responses listed are appropriate. According to Table 16, the analysis of this category shows that Test Panel respondents made use of this option more often than the Control Panel respondents did, for both the electronic and paper collection modes. The reason for this difference is due to the fact that the list of examples provided in 2011 was deleted in 2016 and only the following instruction appears: If none of the responses in the list describes this person's relationship to Person 1, then specify a response under "Other relationship."

2016 Census Program Content Test: Design and Results

Table 17

Distribution and non-response rate to the question on relationship to Person 1, by respondent age and collection mode, Content Test

	Control Panels		Test Panels	
	Number	%	Number	%
Electronic questionnaire				
Total < 15 years	2,444,671	100.0	2,391,017	100.0
Non-response	1,285	0.1	2,015	0.1
Total ≥ 15 years	12,263,822	100.0	11,888,606	100.0
Non-response	17,034	0.1	16,061	0.1
Paper				
Total < 15 years	121,840	100.0	116,608	100.0
Non-response	3,081	2.5	795	0.7
Total ≥ 15 years	1,689,438	100.0	1,710,205	100.0
Non-response	28,609	1.7	39,632	2.3

Source: Statistics Canada, 2014 Content Test

The question on the relationship to Person 1 appears immediately after the marital status and commonlaw questions. In 2014, the marital status and common-law questions were restricted to persons aged 15 years and over, while the question on the relationship to Person 1 applied to all household members, regardless of their age. The electronic questionnaire controls the questions that are shown to respondents according to the age reported. That is not the case for the paper questionnaire. Therefore, the non-response rate for persons under the age of 15 may be higher for paper questionnaires. However, this hypothesis cannot be confirmed from the analyses conducted (Table 17).

As specified on the web page showing the content of the 2016 Census Program, for the question on the Relationship to Person 1, the instructions were modified as well as the order of two check boxes.

3.4 Language questions

Four language questions are asked in the census questionnaire. The questions relate to knowledge of official languages, languages spoken most often and on a regular basis at home and mother tongue. The data reported are used to determine the linguistic diversity profile of Canada's population and to fulfill the government's obligations under the *Official Languages Act*.

The question on knowledge of official languages remained unchanged. The questions on the language spoken at home and on mother tongue underwent minor changes.

2016 Census Program Content Test: Design and Results

3.4.1 Language spoken at home

The question on the language spoken at home is composed of two sub-questions, namely (a) the language spoken most often at home and (b) the language spoken on a regular basis at home. Two instructions were added to each sub-question (Figure 8). The first asks respondents to report only one language to reduce the number of multiple responses, and the second asks respondents to exclude languages reported under sub-question (a). The purpose of this instruction was to reduce the number of duplicate responses between (a) and (b).

Figure 8

Questions on language spoken most often at home, language spoken on a regular basis at home and mother tongue

Test questionnaire	Control questionnaire
<p>7 a) What language does this person speak most often at home?</p> <p>Report only one language, unless other languages are spoken equally often.</p> <p>b) Does this person speak any other languages on a regular basis at home?</p> <p>Exclude: languages already reported in question 7 a) for this person.</p> <p>8 What is the language that this person first learned at home in childhood and still understands?</p> <p>Report only one language, unless other languages were learned at the same time.</p> <p>If this person no longer understands the first language learned, indicate the second language learned.</p>	<p>8 (a) What language does this person speak most often at home?</p> <p>(b) Does this person speak any other languages on a regular basis at home?</p> <p>9 What is the language that this person first learned at home in childhood and still understands?</p> <p>If this person no longer understands the first language learned, indicate the second language learned.</p>

Source: Statistics Canada, 2014 Content Test, Form 2A.

Source: Statistics Canada, 2014 Content Test, Form N1.1.

As well, in the electronic questionnaire, two features were introduced in the tested version of the questionnaire:

- For the text field in sub-questions (a) and (b), a validation message asked respondents to be more specific if they reported languages such as "Chinese," "Cree," "Slavey," "Tutchone," "Amerindian," "Aboriginal" (see Box 1). If they reported that the person was a "baby," the message asked them to specify the language used most often at home to communicate with that child. The purpose of this feature was to obtain responses that were more precise, to make it easier to code the responses.
- For sub-question b), a "dynamic text" feature reminded the person about the language reported in sub-question a). The purpose of this feature was to reduce the number of duplicate responses.

Box 1: Example of a validation message for languages spoken

Please be more specific in Question 7a) for #{GIVENNAME} #{FAMILYNAME}. For example, instead of Chinese, enter Cantonese, Mandarin, Teochew, Hokkien, Hakka, Shanghainese, Taiwanese, etc.

2016 Census Program Content Test: Design and Results

Results

Adding the instruction to report only one language did not reduce the number of multiple languages. Regardless of collection mode or questionnaire language, the proportion of multiple responses is greater for the Test Panels than for the Control Panel, for which the instruction does not appear. This is true for both the language spoken most often at home (Table 18) and the language spoken on a regular basis (data not shown).

Table 18

Distribution of responses to the question on language spoken most often at home, by Panel, response mode and questionnaire language, Content Test

	QUESTIONNAIRES IN FRENCH			QUESTIONNAIRES IN ENGLISH		
	Test Panel	Test Panel ¹	Control Panel	Test Panel	Test Panel ¹	Control Panel
Electronic						
French	91.8	n/a	91.4	1.3	n/a	1.6
English	1.9	n/a	2.1	80.7	n/a	79.7
Non-official language	4.0	n/a	4.8	12.2	n/a	14.3
Multiple	2.2	n/a	1.7	5.7	n/a	4.4
Paper						
French	89.3	91.8	94.8	1.4	1.3	1.4
English	0.6	1.4	0.9	80.5	80.2	83.7
Non-official language	4.9	3.6	2.8	10.0	11.0	11.4
Multiple	5.1	3.2	1.5	8.1	7.5	3.5

1. Since the census and NHS questions have been combined into a single questionnaire, households that receive the paper questionnaire and that are targeted to respond to the NHS must respond to the census questions on the NHS form (N1). EQ households respond first to the census questionnaire and then proceed to the NHS questionnaire.

Source: Statistics Canada, 2014 Content Test

The counts obtained during the collection are too low to produce a robust analysis of the impact of the instruction not to report the same language as in sub-question a) or the impact of the dynamic text feature.

Lastly, the validation message asking respondents through the electronic questionnaire to provide a more specific response worked as expected. The paradata show that the validation message was displayed 98 times as a result of vague responses entered in the text field and, each time, the message resulted in the respondent reporting a specific language spoken in China (such as Mandarin or Cantonese).

3.4.2 Mother tongue

As was done for the question on the language spoken most often at home, an instruction was added to the question on mother tongue to reduce the number of multiple responses (Figure 8). For electronic questionnaires, a validation message for overly vague responses was also introduced in the text field.

Results

As was the case with the question on the language spoken at home, the results obtained were not conclusive with respect to the potential reduction in the number of multiple responses. The instruction appears not to have worked as desired (table 19). In fact, in the Test Panels, the proportion of multiple responses is systematically greater for the Test Panels than for the Control Panels.

2016 Census Program Content Test: Design and Results

Table 19

Distribution of responses to the question on mother tongue, by Panel, response mode and questionnaire language, Content Test

	QUESTIONNAIRES IN FRENCH			QUESTIONNAIRES IN ENGLISH		
	Test Panel	Test Panel ¹	Control Panel	Test Panel	Test Panel ¹	Control Panel
Electronic						
French	88.8	n/a	88.9	2.5	n/a	3.0
English	1.5	n/a	2.0	69.2	n/a	68.9
Non-official language	7.4	n/a	8.2	26.1	n/a	26.1
Multiple	2.3	n/a	0.9	2.2	n/a	1.9
Paper						
French	89.2	90.9	92.6	3.0	3.2	3.7
English	0.7	1.4	1.2	71.6	70.0	71.5
Non-official language	7.2	5.8	4.7	21.9	23.5	22.0
Multiple	3.0	1.8	1.4	3.5	3.4	2.8

1. Since the census and NHS questions have been combined into a single questionnaire, households that receive the paper questionnaire and that are targeted to respond to the NHS must respond to the census questions on the NHS form (N1). EQ households respond first to the census questionnaire and then proceed to the NHS questionnaire.

Source: Statistics Canada, 2014 Content Test

Similar to the question on languages spoken most often at home, the analyses showed that the validation message introduced in the electronic questionnaires helped reduce the number of vague responses. Of 133 vague responses such as “Chinese,” after which the validation message was shown to the respondent, 128 (or 98%) were changed to specify one of the languages spoken in China (such as Mandarin or Cantonese).

3.5 Social insurance number (SIN) question

During the May 2014 test, the social insurance number question was asked for the first time. Statistics Canada wanted to take this opportunity to assess the impact of this question, considered sensitive, on response rates and the quality of responses provided, and to verify whether this information over a longer term would help improve the linkage of survey data and administrative data.

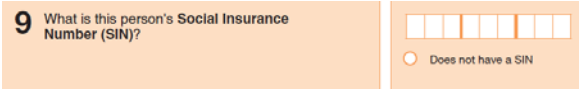

The question was part of the census questionnaire and, therefore, from the mandatory section. It was the second last question, appearing immediately after the mother tongue question and before the disclosure question.

As illustrated in Figure 9, respondents could either provide their nine-digit number or mark “*Does not have a SIN.*” They were required to respond for themselves and for each household member who usually lived at that address. In the electronic version of the questionnaire, the number entered was validated by an algorithm and a message was displayed if the respondent had entered an incorrect number (a number with fewer than nine digits) or an invalid number (invalid according to the algorithm for identifying valid and invalid numbers) or if the respondent had failed to respond to the question. A “Save” button for saving a partially completed questionnaire was also made available to respondents starting at this point, to allow them to find their number and the numbers of other household members if required, and to respond later.

2016 Census Program Content Test: Design and Results

Figure 9

Social insurance number question

Test questionnaires	
 <p>9 What is this person's Social Insurance Number (SIN)?</p> <p><input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p> <p><input type="radio"/> Does not have a SIN</p>	 <p>9 What is this person's Social Insurance Number (SIN)?</p> <p><input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p> <p><input type="radio"/> Does not have a SIN</p>
Source: Statistics Canada, 2014 NAS Test, Form 2A.s.	Source: Statistics Canada, 2014 NAS Test, Form N1.s.

The SIN question had been tested during qualitative interviews in January 2014, and focus groups were also organized at the same time to gather input regarding this question. The results showed mixed opinions.

On one hand, respondents appeared to be inclined to provide Statistics Canada with their SIN, since the agency is part of the government and is known for its privacy policies and practices in terms of protecting personal information. However, the education level and collection mode appeared to be key factors in the decision. Highly-educated persons or professionals were reluctant to share this information. As well, persons using the electronic questionnaire were confident that the required security measures would be taken to protect their personal information. However, persons using paper questionnaires were unwilling to give their SIN, neither in writing nor to a third party by telephone or in person, even if the third party was a StatCan enumerator with proper identification.

On the other hand, if respondents agreed to give their own SIN, this was not automatically the case when it came to the SIN of other household members. For example, they often did not know their spouse's SIN, much less the SIN of another relative or roommate; furthermore, even if they had access to this information, they felt obligated to ask for the person's permission to provide it.

As described in Section 2, a total of six Panels were used to test the SIN question. The results in this section are therefore drawn from analyses of data from those Panels.

3.5.1 Response rates

The social insurance number question did not have a significant effect on census questionnaire return rates. Specifically, 88.8% of the census questionnaires that included the SIN question were returned. The rate was 88.9% for the Control Panel, which did not have the question. As for NHS questionnaires, 75.1% of those with the question were returned, compared with 73.7% of those without the question.⁷

7. The data presented are from the Panels that received an invitation letter in Wave 1.

2016 Census Program Content Test: Design and Results

The question had no specific impact on the transition to the NHS among the households that responded using the paper form, whether they were self-responding households or non-response follow-up participants. The greatest difference can be seen in the rate of transition from the census to the NHS for EQ respondents: 78% made the transition for the Test Panel and 80% made the transition for the Control Panel.

Table 20

Rates of transition to NHS, by Panel and collection mode, SIN Test

	Self-response			Non-response follow-up		
	Test Panels	Control Panels	Diff	Test Panels	Control Panels	Diff
Electronic (%)	78.0	80.0	-2.0	n/a	n/a	n/a
Paper (%)	95.3	95.4	-0.1	91.7	92.0	-0.3

Source: Statistics Canada, 2014 Content Test

3.5.2 Quality of responses provided

Overall, 78.6% of respondents on the SIN Test Panels provided a valid social insurance number and 2%, an invalid number. However, SIN reporting varies depending on response mode (Table 21).

Table 21

Distribution of responses to the social insurance number question, by collection mode, SIN Test

	Self-response		Interview	
	Electronic %	Paper %	Electronic (CHL) %	Paper (NRFU) %
Total	28,084	29,120	356	6,174
Non-response	1.9	17.4	19.3	34.7
Invalid SIN	0.0	2.4	0.0	3.8
Does not have a SIN	9.3	4.6	35.6	10.4
Valid SIN	88.8	75.5	45.0	51.2

Source: Statistics Canada, 2014 Content Test

Self-responding households using the electronic application were more inclined to provide their SIN. Specifically, 88.8% of SINs were obtained through self-response using the electronic questionnaire. As a result of the validation algorithm, the numbers reported are valid numbers. Note that a valid SIN reported for a person does not necessarily mean that it is actually the SIN of that person. However, there is a much larger proportion of persons who reported not having a SIN, which may be a form of soft refusal.

As for the paper collection, 75.5% of self-responding households provided a valid SIN. However, the non-response rates for this question are higher for this response mode. Slightly less than one quarter of self-respondents (or 17.4%) left the question blank. As well, there is a higher rate of invalid numbers for the paper mode because the number written is not validated.

As for households that responded through an interviewer, it was noticed that the rates for valid SINs are lower than those for self-response, while the non-response rates are significantly higher. That tends to corroborate what the qualitative tests had suggested, namely that persons are reluctant to provide their SIN through a third party.

SINs are provided for Person 1 more often than for other household members, regardless of collection mode (Table 22). It is approximately 12% more among self-responding households using the electronic or paper questionnaire.

2016 Census Program Content Test: Design and Results

Table 22

Distribution of responses to the SIN question by position of the person in the household, by collection mode for self-responding households, SIN Test

	Person 1		Other persons	
	Electronic	Paper	Electronic	Paper
	%	%	%	%
Non-response or invalid response	1.4	17.5	2.3	21.7
Does not have a SIN	2.1	0.4	13.9	8.2
Valid SIN	96.5	82.1	83.8	70.1

Source: Statistics Canada, 2014 Content Test

The effects of age can be observed regardless of the collection mode. The proportion of youths less than 20 years of age who provide a SIN is lower than that of other age groups, and they are more likely to report not having a SIN. This result is expected given their age. Respondents aged 40 to 59 years are the most likely to provide their SIN, but the difference with other age groups remains low.

3.5.3 Impacts of the question

For electronic and paper collection, the results obtained show that the households that were required to respond to the question reacted differently from those that did not have the question.

Electronic questionnaire results

In the electronic version, a "SAVE" button appeared on the page containing the SIN question to allow the respondent to speak with household members, obtain their consent and their number, as the case may be, or to find their own SIN. Therefore, a questionnaire could be submitted in more than one session. The analyses showed that 20% of households required to provide the SIN submitted their questionnaire after multiple sessions, while that was true for only 3% of households in the Control Panel without the SIN. The number of sessions is strongly correlated to the size of the household, since one third of households with four or more persons needed multiple sessions to submit their questionnaire. A total of 90% of respondents who saved their session came back to it later and provided a SIN.

The SIN question also had an impact on the length of the sessions. The households that had the question had sessions lasting an average of 11 minutes for the census portion, which is two minutes longer than the sessions of households not having to respond to the SIN question.

The help file accessible from the SIN page is the one most frequently viewed, according to the paradata study, and the validation message was the one most frequently launched.

The addition of the question affected questionnaire return times and therefore contributed to an increase in the volume of material sent to households in the reminder waves that followed, which aimed to ensure high-quality return rates (Wave 2 and Wave 3) and non-response follow-up. Table 23 shows estimates of these impacts, given the planning assumption for the 2016 collection.

Table 23

Estimated impacts of the SIN question on 2016 reminder and follow-up activities (EQ and PQ)

	Estimated growth	
	%	Volume
Reminder letter (Wave 2)	+2.0	+172,000
Questionnaire mail-out (Wave 3)	+3.0	+135,000
Number of non-respondents at *start* of NRFU period	+6.0	+210,000

Source: Statistics Canada, 2014 Content Test

2016 Census Program Content Test: Design and Results

NRFU results

The SIN Test included a non-response follow-up (NRFU) operation. Therefore, interviewers visited the homes of households that had not returned their questionnaire by May 30, to collect their responses. The collection mode was by telephone or personal interview using the paper questionnaire.

Interviews of households that were required to respond to the SIN question lasted an average of five minutes longer than those of households not having to respond to the question, according to the qualitative observations of the interviewers. The interviewers reported difficulties with the question, respondents asking about the reasons for the question and being reluctant to provide their number. In 70% of the cases in which the question is left blank, indicating a refusal, the interviewers were unable to change the decision of those who refused to provide the information, despite the training that the interviewers had received and the instruction manuals to which they had access. On the telephone, respondents were more hesitant to give their SIN.

Matching results

Respondents in the households participating in the SIN Test were initially matched with administrative files of income tax returns and statements of earnings for 2012, and then with a cumulative file of income tax return administrative data. Household members on the Test Panels and Control Panels were matched using the method normally used at Statistics Canada. The method involves linking records by contact information (family name, given name, address) and demographic information (date of birth and sex). For analysis purposes, the results of the matching between the test and Control Panels were initially compared. The main objectives of the analysis were to determine whether or not the SIN made it possible to find additional matches for the Test Panels and to identify false matches (for example matches by family name, address, date of birth, etc.).

The results showed the SIN did not improve the record linkage.

As specified in the list of questions for the 2016 Census Program, the SIN question is not included.

3.6 Income and earnings

Income and earnings data were usually part of the long-form census (2B). Starting with the 2006 cycle, the agency introduced the “informed consent” question (Figure 10). By responding “yes,” respondents authorized the agency to impute their income data from their tax returns. This proposal reduced the response burden while increasing the accuracy of the amounts reported. The informed consent question was also included in the 2011 National Household Survey.

Figure 10

Informed consent question in 2011

55 To save time, each person can give Statistics Canada permission to use the income information already available in his or her income tax files instead of answering **Question 56**.

- This option is only available for persons who filed a tax return for the year ending December 31, 2013.
- Please note that your income tax information will be used for statistical purposes only.

Does this person give Statistics Canada permission to use the income information available in his/her income tax files for the year ending December 31, 2013?

<input type="radio"/> Yes → Person 1 agrees. Go to STEP F on page 42	<input type="radio"/> Yes → Person 2 agrees. Go to STEP F on page 42
<input type="radio"/> No → Continue with the next question	<input type="radio"/> No → Continue with the next question

Source: Statistics Canada, 2014 Content Test, Form N1.1.

2016 Census Program Content Test: Design and Results

Starting in 2016, two major changes will be in effect with respect to income data:

- Respondents will no longer need to give their permission to use their tax returns; they will simply be informed about the use of these data in the message from the Chief Statistician, on the cover page of the form (Figure 11). This is referred to as “information communicated to the respondent.”
- Data will be obtained for the entire population of Canada, and data on household and individual income will be part of census releases.

Figure 11

Message from the Chief Statistician of Canada for 2016

The census provides a portrait of our people and the places in which we live. Be part of this new portrait of Canada and complete your Census Test questionnaire. Census information is vital to plan services such as schools, public transportation, senior housing and police and fire services. In order to reduce the number of questions in this questionnaire, Statistics Canada will obtain your income information from your personal income tax and benefits records.

By law, your household must complete a Census Test questionnaire. Your answers are collected under the authority of the *Statistics Act* and will be kept strictly confidential.

The information that you provide may be used by Statistics Canada for other statistical and research purposes or be combined with other survey or administrative data sources.

Thank you for your cooperation.

Source: Statistics Canada, 2014 Content Test, forms 2A and N1.

These changes will also apply to on-reserve collection tools.

Income data were not part of the 2014 Content Test. The forms that were tested did not contain a section on income, neither in the paper version nor in the electronic version. The Content Test control questionnaire was a reproduction of the 2011 NHS. The paper format contained the entire income section while in the electronic format, only the consent question appeared. Income data collected during the test were not analyzed. However, Statistics Canada continues to assess the impact that the changes planned for 2016 could have on the quality of the estimates produced and released.

During collection for the Content Test, Statistics Canada did not receive any negative feedback from respondents through the Census Help Line, during non-response follow-up or through any other channels about the fact that Statistics Canada was to obtain income information from personal income tax and benefit records. As specified in the list of questions for the 2016 Census Program, Statistics Canada is planning to inform respondents about the use of tax data and to remove income questions from questionnaires.

3.7 Integrated census–NHS questionnaire

In the electronic version of the Content Test, when respondents had completed the census portion, they submitted the questionnaire by clicking the “SUBMIT” button. The questionnaire was then recorded as a response in the central data collection system. For households that were selected for the NHS, respondents immediately saw a “transition” message informing and reminding them about the importance of participating in the survey. Respondents could then “CONTINUE,” which took them to the question on activities of daily living, at the start of the NHS questionnaire.

Households selected to participate in the NHS received a questionnaire composed of the following:

- coverage questions
- census questions
- the transition message (Figure 12)
- NHS questions.

2016 Census Program Content Test: Design and Results

Figure 12

NHS transition message

2014 NATIONAL HOUSEHOLD SURVEY TEST

Your household has been selected to participate in the National Household Survey. It is important that you complete this survey so that your community has the information it needs for planning services such as child care, schooling, family services, housing, roads and public transportation, and skills training for employment.

Your answers are collected under the authority of the *Statistics Act* and will be kept strictly confidential. The information that you provide may be used by Statistics Canada for other statistical and research purposes.

Statistics Canada may also add information from other survey or administrative data sources to the information collected on this survey.

Source: Statistics Canada, 2014 Content Test, Form N1.

By integrating the census and NHS into a single form, the goal was to reduce the response burden for those selected in the NHS by asking them to answer one questionnaire only. In 2011, households selected for the NHS had to complete two separate questionnaires (census and NHS) and it implied the repetition of some questions. The integration should also reduce operational costs and streamline nonresponse follow-up, as required.

Results

The Content Test and SIN Test made it possible to evaluate the degree to which households were moving towards the NHS from the census. In the electronic questionnaire, when respondents clicked the "CONTINUE" button on the transition page, a paradata item indicating that the transition had taken place was created and transmitted to the Collection Management System. However, it was not recorded as a response to the NHS, since an XML file containing the NHS responses had not yet been created. Respondents had to submit the NHS questionnaire which meant reaching the end, or they had to save their questionnaire, or that the questionnaire be saved automatically by the system for an XML file to be generated and consequently, a response be associated to the household.

For a response to be taken into account in the calculation of the response rate, and therefore of the transition, the NHS questionnaire must contain, at a minimum, one response starting with the question on activities of daily living. This rule also applies to NHS questionnaires in paper format.

Table 24

Rates of transition to the NHS, by test and response mode

	Content Test		SIN Test	
	Test Panels	Control Panels	Test Panels	Control Panels
Electronic				
Households that responded to the census	3,552	3,589	2,751	2,810
Households that responded to the NHS	2,843	2,935	2,124	2,220
Transition rate (%)	80.0	81.8	77.2	79.0
Paper				
Households that responded to the census	3,780	3,686	2,830	2,767
Households that responded to the NHS	3,651	3,490	2,693	2,620
Transition rate (%)	96.6	94.7	95.2	94.7

Source: Statistics Canada, 2014 Content Test

The rate of transition to the NHS is the ratio of the number of NHS questionnaires considered to have been answered over the number of answered census questionnaires in the pool of households targeted for the NHS. If all households targeted for the NHS that responded to the census also responded to the NHS, the transition rate would be 100%. That is not the case in any of the Panels, according to the data in Table 24. However, transition rates are high overall and indicate that a voluntary approach with a single questionnaire could provide higher response rates for the NHS. These results are especially promising for paper questionnaires. However, transition rates for electronic questionnaires are lower than those for the paper collection mode. Likewise, transition rates were lower for electronic questionnaires in the Test compared with 2011. It cannot be verified whether or not this trend between electronic questionnaire and paper transition rates existed in 2011 because, at that time, there was no paper census-NHS questionnaire with transition.

3.8 Activities of daily living

The National Household Survey is used as a sampling frame for postcensal surveys and health surveys that collect information on persons with a disability. As such, questions on the activities of daily living act as filter questions to identify persons who are more likely to have a disability. Therefore, persons who answer “yes” to one of these filter questions in the NHS questionnaire may be included in the sampling frame of these special surveys. The challenge is great, however, since it involves proposing a series of questions that will be well understood by respondents, while being sufficiently detailed to reduce the number of persons who provide a positive response to the NHS filter questions, but do not have a disability in the special surveys (false positives) and to identify a wider, more realistic range of disabilities, in particular those that are “less visible,” such as cognitive disabilities or disabilities related to mental or psychological health.

In the context of the Content Test, a new question was tested (Figure 13). Internal analyses performed by the agency showed that the filter questions used in the 2011 NHS made it possible to adequately identify persons with a physical disability, but were much more limited with respect to persons with cognitive disabilities or disabilities related to mental or psychological health. The new question is worded to better cover all disabilities. As well, the question is preceded by a preamble.

Since this question was being asked for the first time, the analysis had a number of objectives:

- Assess the impact on the number of positive responses to new proposed filter questions compared with those used in 2011, with special attention to the number of persons who reported cognitive challenges (Q 10d) or emotional, psychological or mental health challenges (Q 10e).
- Ensure that non-response rates associated to the new filter questions are not higher than those of the 2011 filter questions, especially with respect to the sub-questions on cognitive challenges (Q 10d) and emotional, psychological or mental health challenges (Q 10e).
- Consider respondents who reported at least one positive response in the 2014 Content Test and compare the responses to the responses that they provided to the filter questions in 2011.
- Lastly, compare the filtering rates obtained for the new question to the expected rates calculated on the basis of other data sources that also used this question, namely the Labour Force Survey and the Canadian Community Health Survey.

2016 Census Program Content Test: Design and Results

Figure 13

Questions on activities of daily living

Test questionnaire	Control questionnaire
<p>ACTIVITIES OF DAILY LIVING</p> <p>The following question is about difficulties a person may have doing certain activities. Only difficulties or long-term conditions that have lasted or are expected to last for six months or more should be considered.</p> <p>10 Does this person have any:</p> <p>a) difficulty seeing (even when wearing glasses or contact lenses)?</p> <p><input type="radio"/> No <input type="radio"/> Often <input type="radio"/> Sometimes <input type="radio"/> Always</p> <p>b) difficulty hearing (even when using a hearing aid)?</p> <p><input type="radio"/> No <input type="radio"/> Often <input type="radio"/> Sometimes <input type="radio"/> Always</p> <p>c) difficulty walking, using stairs, using his/her hands or fingers or doing other physical activities?</p> <p><input type="radio"/> No <input type="radio"/> Often <input type="radio"/> Sometimes <input type="radio"/> Always</p> <p>d) difficulty learning, remembering or concentrating?</p> <p><input type="radio"/> No <input type="radio"/> Often <input type="radio"/> Sometimes <input type="radio"/> Always</p> <p>e) emotional, psychological or mental health conditions (anxiety, depression, bipolar disorder, substance abuse, anorexia, etc.)?</p> <p><input type="radio"/> No <input type="radio"/> Often <input type="radio"/> Sometimes <input type="radio"/> Always</p> <p>f) other health problem or long-term condition that has lasted or is expected to last for six months or more?</p> <p><input type="radio"/> No <input type="radio"/> Often <input type="radio"/> Sometimes <input type="radio"/> Always</p> <p>Exclude: any health problems previously reported above.</p>	<p>ACTIVITIES OF DAILY LIVING</p> <p>11 Does this person have any difficulty hearing, seeing, communicating, walking, climbing stairs, bending, learning or doing any similar activities?</p> <p><input type="radio"/> Yes, sometimes <input type="radio"/> Yes, often <input type="radio"/> No</p> <p>12 Does a physical condition or mental condition or health problem reduce the amount or the kind of activity this person can do:</p> <p>(a) at home?</p> <p><input type="radio"/> Yes, sometimes <input type="radio"/> Yes, often <input type="radio"/> No</p> <p>(b) at work or at school?</p> <p><input type="radio"/> Yes, sometimes <input type="radio"/> No <input type="radio"/> Yes, often <input type="radio"/> Not applicable</p> <p>(c) in other activities, for example, transportation or leisure?</p> <p><input type="radio"/> Yes, sometimes <input type="radio"/> Yes, often <input type="radio"/> No</p>
Source: Statistics Canada, 2014 Content Test, Form N1.	Source: Statistics Canada, 2014 Content Test, Form N1.1.

Results

The first result of this analysis shows that the new question helps identify more persons likely to have a disability. The growth is approximately +16% among households that responded using the paper questionnaire (Panel 2) and +89% among those that responded using the electronic questionnaire (Panel 3). To understand these differences, it must be noted that Panel-2 households responded on paper in 2011 and are also older compared with Panel-3 respondents, who responded using the electronic questionnaire in 2011. The filtering rates of older households were already fairly high with the old questions, hence the small increase in the rates with the new version. By contrast, Panel-3 households, which responded using the electronic questionnaire in 2011, were younger and had filtering rates that were fairly low with the old questions. The new questions therefore have a greater impact on these households. The new questions also make it possible to filter a greater number of children under the age of 15 compared with the old questions. Lastly, it can be seen that a nonnegligible proportion of persons are filtered solely because they responded positively to either Question 10d) (cognitive challenges) or Question 10e) (emotional, psychological or mental health challenges). It is likely these persons would have been excluded with the old questions, since the old questions did not properly cover these types of disability.

2016 Census Program Content Test: Design and Results

The non-response rates of the new and old questions are very similar. The question on an emotional, psychological or mental health condition, which could be a more sensitive question for respondents, has a slightly higher non-response rate than the other questions. However, according to the analysis, the added value of this question, which makes it possible to better cover persons with this kind of disability, more than offsets the non-response (Table 25).

Table 25

Non-response rates for the disability question, by collection mode, Test Panel only, Content Test

	Electronic	Paper
Total persons	7,434	6,587
(a) Visual	3.6 ¹	1.6
(b) Hearing	1.9	2.0
(c) Mobility	1.8	2.1
(d) Cognitive	1.8	2.1
(e) Mental health or psychological	1.9	2.6
(f) Other	2.0	3.9

1. An error in the EQ application during the initial days of the collection prevented the question from displaying for Person 2 of the household, which explains the high non-response rates.

Source: Statistics Canada, 2014 Content Test

The test data were also analyzed, taking into account the linkage file linking test respondents to their responses in 2011. Even though a person's state of health changes over time, a comparison was desired between the 2011 filtering rates (old filter questions) and those of the 2014 test for old and new questions. The results showed that the filtering rates for the new questions are similar to those of the old questions among persons who responded positively in 2011. However, the filtering rates for the new questions are considerably greater than those of the old questions among persons who responded negatively in 2011.

Lastly, it was observed that the filtering rates for the new question in the 2014 Test are similar to those observed in two other surveys that used these filtering rates, namely the Labour Force Survey and the Canadian Community Health Survey.

As specified in the list of questions for the 2016 Census Program, the questions on activities of daily living of the Content Test are included for 2016.

3.9 Sociocultural information

The section on sociocultural information is used to collect information about the ethnic and cultural diversity of Canada's population, the movements of persons within Canada and from other countries to Canada, immigration, and persons of Aboriginal ancestry or members of a visible minority group. These data are used to develop policies, programs or services for the population regarding immigrant settlement or labour market integration.

3.9.1 Question on respondent's place of birth

The question on place of birth remained unchanged in the paper version. However, a number of changes were made to the question on the electronic questionnaire, to reduce the number of persons who reported their province of residence as their province of birth and the number of immigrants who reported that they were born in Canada.

In the control version (similar to that of 2011) of the electronic questionnaire, the question provided a choice of 13 radio buttons corresponding to the provinces and territories of birth for respondents born in Canada, and a text field for those born outside Canada to enter their country of birth (Figure 14). In the test version of the electronic questionnaire, the question begins by asking respondents to select one of two check boxes, "Born in Canada" or "Born outside Canada."

Respondents must then select the province or territory of birth if they indicated that they were born in Canada or specify the country if they indicated that they were born outside Canada. Instead of radio buttons for selecting the province or territory, the tested version displayed a drop-down menu in which the provinces and territories are listed alphabetically.

Box 2:

Example of a validation message for the country of birth of persons born outside Canada

Please specify the country based on current borders in Question 11 for #{GIVENNAME} #{FAMILYNAME}. For example, instead of Africa, please specify Morocco, Republic of South Africa, Nigeria, Kenya, Democratic Republic of the Congo, etc.

2016 Census Program Content Test: Design and Results

Figure 14

Question on place of birth in the electronic questionnaire

Test questionnaire

11. Where was this person born? Help

Specify place of birth according to present boundaries.

Person 1

☐ Born in Canada

Specify the province or territory:

<< Select >>

☐ Born outside Canada

Specify the country:

Control questionnaire

13. Where was this person born? Help

Specify one response only, according to present boundaries.

person1

☐ Alberta

☐ British Columbia

☐ Manitoba

☐ New Brunswick

☐ Newfoundland and Labrador

☐ Northwest Territories

☐ Nova Scotia

☐ Nunavut

☐ Ontario

☐ Prince Edward Island

☐ Quebec

☒ Saskatchewan

☐ Yukon

☐ Born outside Canada - Specify Country

Source: Statistics Canada, 2014 Content Test, Form N1.

In addition, in the tested version of the electronic questionnaire, a validation message is associated with the text field for country of birth, to reduce the number of vague responses and improve coding operations in 2016. The responses considered vague were Ireland, Congo, Korea, Sudan, the USSR, Czechoslovakia, the West Indies or the Caribbean, Africa.

2016 Census Program Content Test: Design and Results

Results

By comparing the data from the Test and Control Panels (Table 26), one can readily see that the proportion of persons born in Canada whose reported province or territory of birth was different from their place of residence was greater in the Test Panel (15.2%) than in the Control Panel (13.1%). Likewise, a greater proportion of persons reported a place of birth outside Canada in the Test Panel (23.6%) than in the Control Panel (22.2%), despite a higher non-response rate for the Test Panel.

Table 26

Distribution of responses on the respondent's place of birth, by Panel, electronic questionnaire, Content Test

	Test Panels	Control Panels	Difference (%)
Electronic			
Total	13,693,199	14,104,071	-2.9
Born in Canada	72.7	76.3	-3.6
- In the province of residence	84.8	86.9	-4.0
- Outside the province of residence	15.2	13.1	-1.2
Born outside Canada	23.6	22.2	-3.8
No response or invalid response	3.2	1.6	17.8

Source: Statistics Canada, 2014 Content Test

These results are in the right direction, even though the differences observed are not statistically significant. The relatively small size of the samples makes it difficult to study small populations. Since only approximately 11% of the sample population was born in Canada, in a province or territory other than their place of residence, there would have had to have been a larger difference for it to be statistically significant.

There was also some volatility in the distribution of provinces and territories of birth, but no clear trend could be seen. Ontario, which is in the middle of the drop-down lists in English and French, showed a statistically insignificant decrease of -1.1% between the Test Panel (35.8%) and the Control Panel (36.9%). The provinces with the greatest response growth (+0.8%) between the Test Panel and the Control Panel are Alberta and British Columbia—both at the top of the drop-down list in both languages. For the “Yukon” response, which was problematic in 2006, the number of responses is much too low to be able to draw conclusions on the quality of the data (four occurrences in the Test Panel and one in the Control Panel). Note that the population of the territories was excluded from the test, which limits the analytical capacity for this specific change.

The number of vague responses is lower in the Test Panel than in the Control Panel. Vague responses in the Control Panel accounted for 3.1% of all write-in responses. The proportion decreased to 0.4% in the Test Panel. Even though the small size of the sample of vague responses makes it impossible to produce robust statistics on the differences observed, the significant decrease in this type of response seems to indicate increased data quality.⁸

8. These results also apply to the country of birth of the father and mother since, in the electronic questionnaire of the test questionnaire, the same functionality was introduced. There too, there was a decrease from 2.9% to 0.5% for the father's country of birth and from 3.2% to 0.5% for the mother's country of birth.

2016 Census Program Content Test: Design and Results

3.9.2 Question on citizenship

The test version of the questionnaire does not include the question on citizenship. In the 2011 NHS, this question appeared immediately after the question on place of birth and is followed by the question on landed immigrant status.

The absence of this question may have two impacts:

- It may contribute to the underestimation of the immigrant population, in particular established immigrants or those having acquired Canadian citizenship through naturalization and who do not tend to report themselves as being immigrants. In 2011, that was the case for 114,000 respondents whose status was reinstated as a result of their response to the citizenship question; that made it possible to increase the final immigrant population estimates by 1.6%.
- It may prevent the estimation of non-permanent residents, since the distinction between citizens by birth, by naturalization or from another country, combined with immigration status, makes it possible to derive this population. Therefore, the immigrant status variable would have only two categories in 2016, namely the non-immigrant population (including non-permanent residents) and the immigrant population.

Results

Table 27 shows the distribution of the immigrant population derived with citizenship (Control Panels) and without citizenship (Test Panels). According to the results obtained, the Test Panels produce estimates of the immigrant population that are less than those obtained in the Control Panels, regardless of the collection mode.

Table 27

Derived immigrant population, by Panel and collection mode, Content Test

	Test Panels	Control Panels	Difference (%)
ELECTRONIC QUESTIONNAIRE			
Total	13,693,199	14,104,071	-2.9
Non-immigrant	75.7	75.3	-2.5
Immigrant	20.7	21.7	-7.3
No response or invalid response	3.6	3.0	17.7
PAPER			
Total	2,126,506	2,088,398	1.8
Non-immigrant	77.7	78.1	1.4
Immigrant	20.3	20.6	0.4
No response or invalid response	2.0	1.3	50.7

Source: Statistics Canada, 2014 Content Test

In addition, the question on immigrant status has combined no-response/invalid-response scores that are greater in the Test Panels than in the Control Panels (3.6% for the electronic questionnaire test and 2.0% for the paper Test Panel). If the citizenship question were to be removed, the invalid values for immigrant status would not be able to be corrected using auxiliary information on citizenship.

If there is no question on citizenship, the immigrant population could be underestimated to a greater extent but it is risky to estimate this underestimation due to the small sample size.

As specified in the list of questions for the 2016 Census Program, the citizenship question is included for 2016.

2016 Census Program Content Test: Design and Results

3.9.3 Question on year of immigration

Two minor changes were made to the question on year of immigration: first, the “1974” example was added to both the paper questionnaire and the electronic questionnaire (Figure 15). This addition was required by the standards on electronic questionnaires and should have no significant impact on the values provided by respondents.

Figure 15

Question on year of immigration

Test questionnaire	Control questionnaire
<p>12 Is this person now, or has this person ever been, a landed immigrant?</p> <p>A “landed immigrant” (permanent resident) is a person who has been granted the right to live in Canada permanently by immigration authorities.</p> <p><input type="radio"/> No <input type="radio"/> Yes</p> <p>Go to question 14</p>	<p>15 Is this person now, or has this person ever been, a landed immigrant?</p> <p>A “landed immigrant” (permanent resident) is a person who has been granted the right to live in Canada permanently by immigration authorities.</p> <p><input type="radio"/> No → Go to Question 17 <input type="radio"/> Yes</p>
<p>13 In what year did this person first become a landed immigrant?</p> <p>Year</p> <p>Example: <input type="text" value="1"/> <input type="text" value="9"/> <input type="text" value="7"/> <input type="text" value="4"/></p> <p>If exact year is not known, enter best estimate.</p>	<p>16 In what year did this person first become a landed immigrant?</p> <p>Year</p> <p><input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/></p> <p>If exact year is not known, enter best estimate.</p>

Source: Statistics Canada, 2014 Content Test, Form N1.

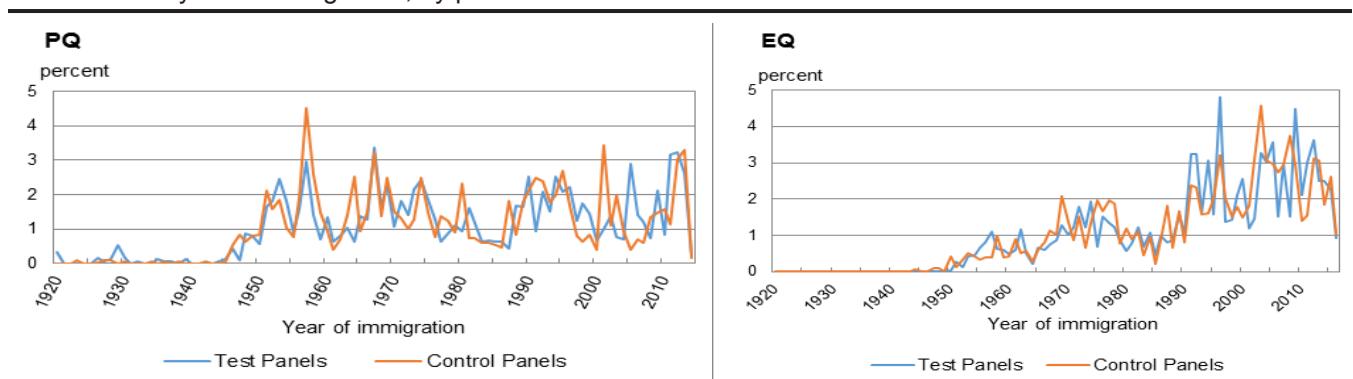
The second change, which applies to the electronic version only, is the addition of a validation message for respondents who specified a year of immigration earlier than the year of birth. Given the small number of occurrences of respondents reporting a year of immigration earlier than the year of birth in 2011 (approximately 0.1% of respondents specified “yes” for the question on immigrant status) and given the relatively small sample sizes, this change should not have a significant effect on Content Test data.

Results

The changes made to the question on the year of immigration do not appear to affect the distribution of responses provided for year of immigration (Figure 16). The “1974” example is given to indicate to the respondent that the response must contain four digits. However, the number of respondents not having provided a number between 1893 and 2014 is too small, regardless of the panel, for a conclusion to be drawn. On the paper questionnaire, 12 respondents had given a response outside the acceptable limits for the test questionnaire, and one respondent for the control questionnaire. For the electronic versions, these figures were 0 and 1, respectively.

Figure 16

Distribution of year of immigration, by panel and collection mode



Source: Statistics Canada, 2014 Content Test.

2016 Census Program Content Test: Design and Results

Another change involves the electronic questionnaire (Figure 18) where each text field for entering origins is preceded by a label, “Origin 1,” “Origin 2 (if any),” and so on for up to four origins. The labels are required to meet accessibility requirements.

Figure 18

Question on ethnic origin (EQ)

14. What were the ethnic or cultural origins of this person's **ancestors**? Help

An ancestor is usually more distant than a grandparent.

For example, Canadian, English, Chinese, French, East Indian, Italian, German, Scottish, Cree, Mi'kmaq, Salish, Métis, Inuit, Filipino, Irish, Dutch, Ukrainian, Polish, Portuguese, Vietnamese, Korean, Jamaican, Greek, Iranian, Lebanese, Mexican, Somali, Colombian, etc.

This question collects information on the ancestral origins of the population and provides information about the composition of Canada's diverse population.

Specify as many origins as applicable.

Person 1

Origin 1

Origin 2 (if applicable)

Origin 3 (if applicable)

Additional origin(s) (if applicable)

Source: Statistics Canada, 2014 Content Test, Form N1.

Results

In the context of the test, the responses were not coded. Therefore, the analysis dealt with the responses provided by the respondents without taking into account, for example, of spelling variations.

The changes made to the order of the proposed origin examples had minimal effect on response rates for the question, regardless of collection mode. The data show small differences in the distributions of the origins “Chinese” and “French” (Table 28). The number of responses “French origin” obtained in the Test Panel through the electronic questionnaire is smaller than that of the Control Panel, but the reverse is true for the paper collection mode. No change is observed for the response “Chinese origin” between the two electronic questionnaire Panels but, in the paper collection mode, the Test Panel has a greater proportion of persons who reported Chinese origin. The changes to the list of examples proposed also had little effect on the distributions obtained. As expected, there were fewer responses “Jewish origin” in the Test Panels, and that may be related to the absence of this origin in the list of examples.

2016 Census Program Content Test: Design and Results

Table 28

Distribution of ethnic origins (single responses), by Panel and collection mode, Content Test

	Test Panels		Control Panels		Diff
	Number	%	Number	%	
Electronic					
Total	8,453,781	100.0	7,634,098	100.0	0.0
Canadian	2,556,604	30.2	1,152,559	15.1	15.1
French	495,778	5.9	487,553	6.4	-0.5
Chinese	702,600	8.3	635,242	8.3	0.0
Aboriginal (all origins)	47,028	0.6	31,336	0.4	0.1
Mexican (new in 2014)	21,125	0.2	32,527	0.4	-0.2
Iranian (new in 2014)	82,054	1.0	39,470	0.5	0.5
Salvadoran (removed in 2014)	7,961	0.1	1,059	0.0	0.1
Jewish (removed in 2014)	24,553	0.3	49,150	0.6	-0.4
PAPER					
Total	1,176,911	100.0	1,135,250	100.0	0.0
Canadian	406,792	34.6	395,546	34.8	-0.3
French	88,971	7.6	77,648	6.8	0.7
Chinese	50,872	4.3	33,075	2.9	1.4
Aboriginal (all origins)	5,950	0.5	4,557	0.4	0.1
Mexican (new in 2014)	148	0.0	151	0.0	0.0
Iranian (new in 2014)	844	0.1	4,754	0.4	-0.3
Salvadoran (removed in 2014)	970	0.1	1,327	0.1	0.0
Jewish (removed in 2014)	2,826	0.2	14,838	1.3	-1.1

Source: Statistics Canada, 2014 Content Test

The results of the Content Test show that adding the text “Origin 1,” “Origin 2 (if any),” “Origin 3 (if any),” “Additional origins (if any)” above the text fields for electronic respondents reduces the number of multiple origins reported. The text “if any” may have discouraged respondents from reporting the origin, as if these fields were optional.

2016 Census Program Content Test: Design and Results

Table 29

Single responses and multiple responses to the question on ethnic origin, by Panel and collection mode, Content Test

	Test Panels		Control Panels		Diff
	Number	%	Number	%	
Electronic					
Total	13,693,199	100.0	14,104,071	100.0	
Single responses	8,453,781	61.7	7,634,098	54.1	7.6
Multiple responses	4,478,187	32.7	5,492,667	38.9	-6.2
No response	761,231	5.6	977,306	6.9	-1.4
Paper					
Total	2,126,506	100.0	2,088,398	100.0	
Single responses	1,176,911	55.3	1,135,250	54.4	1.0
Multiples responses	649,684	30.6	708,532	33.9	-3.4
No response	299,911	14.1	244,616	11.7	2.4

Source: Statistics Canada, 2014 Content Test

The Test Panel for the electronic questionnaire has a rate of multiple responses 6.2% lower than that of the Control Panel, and the difference is statistically significant. As for paper questionnaires, the Test Panel had a lower number of multiple responses, but the difference was not statistically significant (Table 29).

The results indicate that the instructions influenced the single responses. The results of the Test Panel for electronic questionnaires show an increase of approximately 15.1% in the “Canadian” origin as a single response. If these responses are examined in the linkage file with 2011 NHS data, it can be seen that 29.7% of the persons in the EQ Test Panels who reported a single origin had reported more than one origin in 2011.

As specified in the list of questions for the 2016 Census Program, the examples for the ethnic origin question used in the Content Test are included for 2016. In addition, the instructions appearing above the text box in the EQ are removed.

3.9.5 Questions on Aboriginal identity

Aboriginal identity is based on the information provided in response to four questions.

- Is this person an Aboriginal person, that is, First Nations (North American Indian), Métis or Inuk (Inuit)?
- Is this person a Status Indian (Registered or Treaty Indian as defined by the Indian Act of Canada)?
- What were the ethnic or cultural origins of this person’s ancestors? (data source on Aboriginal ancestors)
- Is this person a member of a First Nation/Indian band?

The changes made to these questions in 2014 involve the question on self-reported identity (Figure 19) for which changes were made to the instructions and to the format of the arrows in the paper format that directs respondents to the next question according to the response provided. As well, the question on belonging to a First Nation/Indian band was removed for the test.

2016 Census Program Content Test: Design and Results

Figure 19

Question on Aboriginal identity

Test questionnaire	Control questionnaire
<p>15 Is this person an Aboriginal person, that is, First Nations (North American Indian), Métis or Inuk (Inuit)?</p> <p>Include: Status and non-Status Indians as First Nations.</p> <p>If "Yes", mark "X" the circle(s) that best describe(s) this person now.</p> <p> <input type="radio"/> No, not an Aboriginal person <input type="radio"/> Yes, First Nations (North American Indian) <input type="radio"/> Yes, Métis <input type="radio"/> Yes, Inuk (Inuit) </p> <p>Go to question 16</p> <p>Go to question 17</p>	<p>19 Is this person an Aboriginal person, that is, First Nations (North American Indian), Métis or Inuk (Inuit)?</p> <p><i>Note: First Nations (North American Indian) includes Status and Non-Status Indians.</i></p> <p>If "Yes", mark "X" the circle(s) that best describe(s) this person now.</p> <p> <input type="radio"/> No, not an Aboriginal person <input type="radio"/> Yes, First Nations (North American Indian) <input type="radio"/> Yes, Métis <input type="radio"/> Yes, Inuk (Inuit) </p> <p>Continue with the next question</p> <p>Go to Question 21</p>
Source: Statistics Canada, 2014 Content Test, Form N1.	Source: Statistics Canada, 2014 Content Test, Form N1.1.

Results

Tables 30 and 31 show the distribution of responses for the question on self-reported Aboriginal identity and the question on Indian status, respectively. The differences between the distributions of the Test and Control Panels reveal small differences, in both electronic and paper collection modes. However, none of the differences were statistically significant, because of the size of the samples.

Table 30

Distribution of responses for the self-reported Aboriginal identity question, by Panel and collection mode, Content Test

	Test Panels	Control Panels	Diff
	%	%	
Electronic			
Total	13,693,199	14,104,071	
First Nations (North American Indian)	1.3	0.9	0.4
Métis	1.1	1.7	-0.6
Inuk (Inuit)	0.0	0.0	0.0
Non-Aboriginal	92.1	90.8	1.3
Multiple responses	0.0	0.0	0.0
Invalid response or no response	5.6	6.6	-1.0
Paper			
Total	2,126,506	2,088,398	
First Nations (North American Indian)	0.8	1.1	-0.3
Métis	1.3	0.9	0.4
Inuk (Inuit)	0.0	0.0	0.0
Non-Aboriginal	90.1	89.1	1.0
Multiple responses	0.1	0.2	-0.1
Invalid response or no response	7.7	8.8	-1.1

Source: Statistics Canada, 2014 Content Test

2016 Census Program Content Test: Design and Results

The test data do not make it possible to produce conclusive analysis results in this area, because the rules for selecting households participating in the test. By excluding the test canvasser areas, including territories, Aboriginal populations were more difficult to target.

Table 31

Distribution of responses to the question on Indian status, by Panel and collection mode, Content Test

	Test Panels	Control Panels	Diff
	%	%	
Electronic			
Total	13,693,199	14,104,071	
No	93.6	94.3	-0.7
Yes, Status Indian	1.1	0.5	0.6
Invalid response or no response	5.4	5.2	0.2
Paper			
Total	2,126,506	2,088,398	
No	91.5	88.4	3.1
Yes, Status Indian	0.8	0.8	0.0
Invalid response or no response	7.7	10.8	-3.1

Source: Statistics Canada, 2014 Content Test.

In addition, if the results obtained for the question on ethnic origin are considered, which were also used to derive the estimates of the Aboriginal population, the decrease in the number of multiple responses from electronic questionnaires indicates that respondents had a tendency to interpret the text field as optional because of the text "if any" that appeared above. That may have significant effects on the estimates of the Aboriginal population in 2016. In 2011, 46.5% of the respondents who reported having an Aboriginal origin listed it as their second to sixth origin. The new format of the question in the electronic version could therefore reduce the estimates of the population having an Aboriginal ancestry.

As specified in the list of questions for the 2016 Census Program, the question on Indian band is included in 2016. The instructions for the Aboriginal identity question for 2016 are the same as the instructions in 2011.

3.9.6 Question on population group

This question makes it possible to derive membership in a visible minority group. The question is included mainly to support the *Employment Equity Act*.

The main changes made to the question involve the list of examples illustrating the category "Southeast Asia," in which the example "Malaysian" provided in 2011 was replaced by "Thai" in 2014. This change is based on the same methodology as that which determines the order of major ethnic origins described above. In addition, in the paper version of the questionnaire, the text that explains why this question is asked was changed slightly and placed in the preamble to the question (Figure 20).

2016 Census Program Content Test: Design and Results

Figure 20

Question on population group

Test questionnaire	Control questionnaire
<p>This question collects information in accordance with the <i>Employment Equity Act</i> and its Regulations and Guidelines to support programs that promote equal opportunity for everyone to share in the social, cultural, and economic life of Canada.</p> <p>16 Is this person:</p> <p>Mark "X" more than one circle or specify, if applicable.</p> <div> <input type="radio"/> White <input type="radio"/> South Asian (e.g., East Indian, Pakistani, Sri Lankan, etc.) <input type="radio"/> Chinese <input type="radio"/> Black <input type="radio"/> Filipino <input type="radio"/> Latin American <input type="radio"/> Arab <input type="radio"/> Southeast Asian (e.g., Vietnamese, Cambodian, Laotian, Thai, etc.) <input type="radio"/> West Asian (e.g., Iranian, Afghan, etc.) <input type="radio"/> Korean <input type="radio"/> Japanese </div> <p>Other — specify:</p> <div></div>	<p>20 Is this person:</p> <p>Mark "X" more than one or specify, if applicable.</p> <p><i>This information is collected in accordance with the Employment Equity Act and its Regulations and Guidelines to support programs that promote equal opportunity for everyone to share in the social, cultural, and economic life of Canada.</i></p> <div> <input type="radio"/> White <input type="radio"/> South Asian (e.g., East Indian, Pakistani, Sri Lankan, etc.) <input type="radio"/> Chinese <input type="radio"/> Black <input type="radio"/> Filipino <input type="radio"/> Latin American <input type="radio"/> Arab <input type="radio"/> Southeast Asian (e.g., Vietnamese, Cambodian, Malaysian, Laotian, etc.) <input type="radio"/> West Asian (e.g., Iranian, Afghan, etc.) <input type="radio"/> Korean <input type="radio"/> Japanese Other — Specify <div></div> </div>

Source: Statistics Canada, 2014 Content Test, Form N1.

Source: Statistics Canada, 2014 Content Test, Form N1.1.

Results

The analysis of the data from the Test and Control Panels showed that the changes made did not affect the estimates produced.

As specified in the list of questions for the 2016 Census Program, the examples for the population group question used in the Content Test are included for 2016.

3.10 Education

Education data provide information on the level of education completed and school attendance of residents of Canada. This theme is considered a key socioeconomic result, which may affect employment and quality of life. Education data are used to support legislative and regulatory commitments of the federal government and the implementation of a number of programs.

3.10.1 Questions on degrees obtained

To derive the highest completed level of education, the section on education starts with a series of questions that asks, for each person in the household aged 15 years or over, if the person holds:

- a high school diploma or equivalent
- a Registered Apprenticeship certificate or diploma from a trade school or vocational centre
- a college, CEGEP or other non-university diploma
- a university certificate, diploma or degree.

2016 Census Program Content Test: Design and Results

In 2014, regardless of the collection mode, the question on holding a high school diploma has the same format as in 2011 on the French questionnaires. On the English questionnaires, the question is worded slightly differently. In 2014, the question reads, “Has this person completed a high school (secondary school) diploma or equivalency certificate?” rather than, “Has this person completed a secondary (high) school diploma or equivalent?” The response categories for this question in 2014 reflect the changes.

The questions on postsecondary education are worded almost the same as in 2011. Slight changes in wording were made to the response categories. For example, specific acronyms were added within parentheses to some categories of university degrees that characterize the degree (for example B.A., B.Sc., B.Ed. and LL.B. for the bachelor level; and M.A., M.Sc., M.Ed. and M.B.A. for the master level).

The most significant change made to the questions on postsecondary education primarily involves their format. In the paper version, the three original questions (Q. 29, Q. 30 and Q. 31) are grouped into a single question (Q. 22) that is subdivided into three sub-questions, (a), (b) and (c). This format was adopted to ensure that the question on the paper form would be consistent with the one in the electronic questionnaire, which was also redesigned with respect to the way in which it is presented to respondents. In the electronic version, the question is structured in sequences (Figure 21). That means that the respondent sees the three sub-questions appear on the screen with the option of responding yes or no (Sequence 1); if yes, a list of check boxes is displayed (Sequence 2). This format was developed for a number of reasons, namely to indicate to the respondent that only earned qualifications should be reported and to inform the respondent that these questions refer to different types of degrees. As well, the new format should make it possible to correct the over-reporting of postsecondary levels (especially “university certificate below bachelor level”) and overlap (Trade/College, College/University), two results observed during the certification of the 2006 and 2011 education data and also observed during qualitative tests that preceded the 2014 test.

Results

The new electronic question in 2014 contributed to changing the distribution of postsecondary education levels significantly, as shown by the data in Table 32. The greatest decrease can be seen mostly among respondents who reported holding a university degree below bachelor level, with a difference of 1.9% among questionnaires in French and 3% among questionnaires in English. This result is what was intended.

2016 Census Program Content Test: Design and Results

Figure 21

Question on postsecondary education proposed in the test questionnaire, electronic questionnaire

Sequence 1

22. Has this person ever: ? Help

Person 1

a) completed a **Registered Apprenticeship** or other **trades** certificate or diploma?
(Include Journeyperson's designation.)

☐ Yes

☐ No

b) completed a **college, CEGEP** or other **non-university** certificate or diploma?

☐ Yes

☐ No

c) completed a **university** certificate, diploma or degree (e.g., Bachelor's degree)?

☐ Yes

☐ No

Sequence 2, when the "yes" is selected

22. Has this person ever: ? Help

Person 1

a) completed a **Registered Apprenticeship** or other **trades** certificate or diploma?
(Include Journeyperson's designation.)

☒ Yes

Select as many responses as applicable.
Includes only **completed** certificates or diplomas.

☐ Certificate of Apprenticeship or Certificate of Qualification (Journeyperson's designation)

☐ Other trades certificate or diploma

☐ No

b) completed a **college, CEGEP** or other **non-university** certificate or diploma?

☒ Yes

Select as many responses as applicable.
Includes only **completed** certificates or diplomas.
Excludes any trades certificates or diplomas reported above in question 22 a).

☐ Certificate or diploma from a program of less than 3 months

☐ Certificate or diploma from a program of 3 months to less than 1 year

☐ Certificate or diploma from a program of 1 year to 2 years

☐ Certificate or diploma from a program of more than 2 years

☐ No

c) completed a **university** certificate, diploma or degree (e.g., Bachelor's degree)?

☒ Yes

Select as many responses as applicable.
Includes: only **completed** certificates, diplomas or degrees.

☐ University certificate or diploma **below** bachelor level

☐ Bachelor's degree (e.g., B.A., B.A. (Hons), B.Sc., B.Ed., LL.B.)

☐ University certificate or diploma **above** bachelor level

☐ Degree in medicine, dentistry, veterinary medicine or optometry (M.D., D.D.S., D.M.D., D.V.M., O.D.)

☐ Master's degree (e.g., M.A., M.Sc., M.Ed., M.B.A.)

☐ Earned doctorate (e.g., Ph.D.)

☐ No

Source: Statistics Canada, 2014 Content Test, Form N1.

2016 Census Program Content Test: Design and Results

Table 32

Distribution of highest level of education completed, by Panel, EQ only, Content Test

	QUESTIONNAIRES IN FRENCH			QUESTIONNAIRES IN ENGLISH		
	Test Panel	Control Panel	Diff	Test Panel	Control Panel	Diff
	%					
High school or less	34.0	33.5	0.5	39.4	35.7	3.7
Trade school or apprenticeship	17.7	16.8	0.9	6.7	8.0	-1.3
College or CEGEP	18.7	19.2	-0.5	20.6	18.9	1.7
University below bachelor level	3.6	5.5	-1.9	2.5	5.5	-3.0
University	26.0	25.0	-1.0	30.7	31.8	-1.1

Source: Statistics Canada, 2014 Content Test.

The 2014 results are therefore encouraging and tend to show that the new format, which places more emphasis on the qualifications acquired, enables respondents to report in more detail the titles they have acquired. This improvement also applies to the other levels of education. These results are observed in particular among the questionnaires in English.

The overlap between levels also decreased. The proportion of persons who reported having a diploma from a trade school and a college diploma decreased significantly among the Test Panels. For example, 5.5% of respondents reported holding both types of diploma in the Test Panel, versus 12.2% in the Control Panel, which represents a reduction of one half (Table 33).

Table 33

Distribution of responses for trade and college diplomas, by Panel, EQ

	Test Panels		Control Panels	
	Number	%	Number	%
Electronic				
Total	6,115	100.0	6,308	100.0
Trade or college only	2,293	33.7	2,265	31.4
Trade and college	282	5.5	660	12.2
Neither trade nor college	3,159	54.4	2,974	47.3
Partial response	11	0.1	13	0.2
No response	370	6.2	396	9.0

Source: Statistics Canada, 2014 Content Test

The non-response rates for the question are lower in the electronic questionnaire Test Panel than in the Control Panel. According to the analysis of EQ paradata, Test Panel respondents were three times more likely than those of the Control Panel to leave one of the sub-questions (a), (b) or (c) blank and therefore to see a validation message (edit) asking them to respond. Therefore, even though the new form appears to increase the number of edits, the edits make it possible to correct the responses, since 97% of those who received a message provided a response, and the non-response rates after the validation messages were applied are lower in the Test Panel. In addition, in the vast majority of cases, non-response appears to be the omission of a "no" response. In fact, the rate of "no" responses provided after an edit message had been displayed is 93% for the trade/apprentice level, 83% for the college level and 93% for the university level.

2016 Census Program Content Test: Design and Results

Table 34

Non-response rates for education questions, by Panel and collection mode, Content Test

	Test Panels	Control Panels
	%	
Electronic		
High school	6.3	7.4
Trade school or apprenticeship	6.2	7.5
College or CEGEP	6.3	7.7
University	6.3	7.8
Major field of study	0.4 ¹	7.9
Paper		
High school	4.1	4.5
Trade school or apprenticeship	10.0	7.4
College or CEGEP	9.5	6.8
University	8.9	6.5
Major field of study	10.6	11.5

1. In the test version of the questionnaire, persons who reported not having a postsecondary diploma do not see this question. Therefore, the universe of the question for calculating the non-response rate is different from that of the Control Panel. For this reason, the rates for this question in electronic format should not be compared between Panels

Source: Statistics Canada, 2014 Content Test..

The non-response rates of paper questionnaires are higher by an average of 2.4 to 2.8 percentage points in the Test Panel than in the Control Panel. These rates are higher especially for the questions on postsecondary education, which are also the ones with the most changes to ensure consistency with the EQ. The question on high school diploma shows non-response rates that are similar between the two Panels.

The analysis of non-respondents among paper questionnaires was performed in more detail to determine whether or not the new numbering of the three sub-questions was a possible cause of the higher non-response rates (Table 35). Non-respondents were considered in the following subgroups:

- Abandonments, or those who did not respond to any of the education questions or questions that followed.
- Non-respondents by omission, who responded to only one of the three sub-questions, usually the one that best described their situation.
- Non-respondents, for this question only, namely those who responded to the question before, on high school education, and to the question after, on major field of study, but did not respond to any of the three sub-questions.

2016 Census Program Content Test: Design and Results

Table 35

Distribution of non-respondents for the question on postsecondary education, by Panel, paper questionnaire only, Content Test

	Trade		College		University	
	Test Panel	Control Panel	Test Panel	Control Panel	Test Panel	Control Panel
Total non-responses	635	447	602	423	549	373
% abandonments	27	34	29	36	31	40
% omissions	51	47	48	44	43	37
% non-responses to the three sub-questions	22	19	23	20	26	23
% who responded to the question on high school diploma ¹	15	6	16	6	18	7

1. This category is a subset of the preceding category. It shows the proportion of respondents who responded to the high school education question, but not to any of the postsecondary education questions.

Source: Statistics Canada, 2014 Content Test.

According to the compiled data, most of the non-response to the new question appears to be from nonresponse by omission. That means that respondents appear to have a tendency to provide one response in three, and therefore to select only the response that describes their situation. Respondents also tended to consider this question divided into three sub-questions as being a single question for which the response options are boxes to be checked only if required. It can be seen that the proportion of respondents who responded to the high school question but did not respond to any of the postsecondary education questions is greater in the Test Panels than in the Control Panels. It may therefore be that paper respondents are reading only the first sub-question, a), regarding having a trade school diploma, and, if it does not apply to them, they continue to the next question instead of the next sub-question.

2016 Census Program Content Test: Design and Results

Table 36

Summary of wording changes made to postsecondary education sub-questions, Content Test

		Test questionnaire	Control questionnaire
Apprenticeship or trade school diploma			
Response category	French version	Un certificat d'apprenti inscrit ou certificat de qualification professionnelle (un titre de compagnon)	Un certificat d'apprenti inscrit (y compris un certificat de qualification professionnelle, un titre de compagnon)
	French version	Un autre certificat ou diplôme d'une école de métiers ou d'un centre de formation professionnelle (p. ex., DEP)	Un autre certificat ou diplôme d'une école de métiers ou d'un centre de formation professionnelle
	English version	Certificate of Apprenticeship or Certificate of Qualification (Journey person's designation)	Registered Apprenticeship certificate (including Certificate of Qualification, Journey person's designation)
College, CEGEP or non-university certificate or diploma			
Question	French version	Cette personne a-t-elle obtenu un certificat ou un diplôme d'études collégiales, d'un cégep ou d'un autre établissement non universitaire? Exclure : tous les certificats ou diplômes déclarés à la question 23 a)	Cette personne a-t-elle obtenu un certificat ou un diplôme d'études collégiales, d'un cégep ou d'un autre établissement non universitaire? (Autres que les certificats ou diplômes déclarés à la question 29.)
	English version	Has this person completed a college, CEGEP or other non-university certificate of diploma? Exclude: any certificates or diplomas reported in Question 23 a)	Has this person completed a college, CEGEP or other non-university certificate of diploma? (Other than certificates or diplomas reported in Question 29.)
Examples	French and English versions	List of three examples	List of five examples
University certificate, diploma or degree			
Response categories	French and English versions	Addition of acronyms associated with certain degrees to differentiate between the various types that exist: Bachelor's degree (e.g., B.A., B.Sc., B.Ed. and LL.B.) Degree in medicine, dentistry, veterinary medicine or optometry (M.D., D.D.S., D.M.D., D.M.V. or O.D.) Master's degree (e.g., M.A., M.Sc., M.Ed. and M.B.A.) Earned doctorate (e.g., Ph.D.) "Degree in medicine" appears as a response option before "Master's degree"	No distinction between the various types of degrees at the same level "Master's degree" appears as a response option before "Degree in medicine"

Source: Statistics Canada, 2014 Content Test.

3.10.2 Major field of study

The main changes made to the question on major field of study affected the electronic version of the question. The changes include the following:

- A validation message was added for responses entered in the text field that are too vague. For example, a respondent entering “science” as a field would see the message in Box 3. In total, 16 types of vague responses were documented to streamline response coding operations.
- A dynamic text function was added that considers the responses provided in the previous question and indicates to the respondent the highest-level qualification to which the major field of study should refer. For example, if a bachelor’s degree was reported, the dynamic text would ask for the major field of study of the bachelor’s degree.
- A skip was added for this question for persons who reported not having a postsecondary diploma.
- The check box “No certificate, diploma or degree higher than high school” was removed when respondents reported having at least one qualification in the previous question.

Box 3:
Example of a validation message for major field of study

Please be more specific in Question 23 for #{GIVENNAME} #{FAMILYNAME} (if possible), for example biology, chemistry, physics, environmental sciences, etc.

In the paper and electronic versions of the question, “early childhood education” was removed from the list of examples of fields that was provided to guide the respondent.

Results

The validation message was displayed 495 times. In most cases, the message was seen once by respondents, which indicates that they provided a sufficiently detailed level of information after receiving the message. As well, the field was left blank in only four cases, and the message was displayed more than once in only 26 cases. Of the 17-response categories considered vague, those subject pertaining to “engineer,” “bachelor of arts,” “teaching” and “business” were the most frequent.

The dynamic text function, which reminds the respondent about the highest level of education hereinbefore reported, appears to yield results in the right direction, although the numbers on which the analysis is based are small. Specifically, the function appears to decrease the number of fields of study that are inconsistent with the level of education: in the Test Panel, 1.2% of the fields of study reported are inconsistent with the highest level of education; the proportion is 1.9% in the Control Panel, where the functionality was not implemented.

A skip for this question for those who reported not having a postsecondary diploma reduces the response burden, and there is no reason to believe that the reporting of the “early childhood education” field would be affected by removing this field from the list of examples.

Lastly, the removal of the check box “No certificate, diploma or degree higher than high school” for respondents who reported having at least one qualification at this level in the previous questions makes it possible to improve the responses provided in the field for major field of study. In the Control Panel, where the check box was provided, 7.5% of respondents with a postsecondary qualification selected this response option and 92.3% reported a field of study. In the Test Panel, 99.4% of respondents with a postsecondary qualification reported a major field of study.

2016 Census Program Content Test: Design and Results

3.10.3 Question on school attendance

The question on school attendance is often misinterpreted by respondents. The 2006 Census and the 2011 NHS showed higher school attendance rates than other surveys for persons aged 45 years and over. According to qualitative test results, some respondents tend to include cooking or wine appreciation classes in school attendance.

To make things easier to understand and reduce response errors, the question asked in 2014 was modified in a number of ways. First, the original question was divided into two sub-questions: a) respondents were asked whether or not they attended an educational institution during the year and b) if so, they were asked to specify the diploma being sought. In the electronic version, the question is presented in sequences, since respondents see the response options for the sub-question b) **only** if they respond **yes** to the sub-question a).

Next, the response options for sub-question b) refer to the diploma for which the person was attending school. This change was made so that the NHS would be compatible with the Pan-Canadian Education Indicators Program (PCEIP), the standards of which focuses on the program that persons are taking rather than the type of institution they attended.

Lastly, a new response category was added to distinguish between apprenticeship titles or titles from a trade school, and titles from a college, CEGEP or other non-university institution. Under the PCEIP and the International Standard Classification of Education, these are separate types of programs and levels of education. This change has been made so that NHS data will be compatible with international classifications.

Figure 22

Question on school attendance, test questionnaire, electronic questionnaire

Sequence 1	Sequence 2
<p>24. At any time between September 2013 and May 2014, did this person attend school, such as high school, college, CEGEP or university?</p> <p>Report only attendance for courses that can be used as <i>crédits</i> towards a certificate, diploma or degree. Distance learning for credit is included.</p> <p>Person 1</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p>	<p>24. At any time between September 2013 and May 2014, did this person attend school, such as high school, college, CEGEP or university?</p> <p>Report only attendance for courses that can be used as <i>credits</i> towards a certificate, diploma or degree. Distance learning for credit is included.</p> <p>Person 1</p> <p><input checked="" type="radio"/> Yes</p> <p>For what type of certificate, diploma or degree was this person attending school?</p> <p>Select as many responses as applicable.</p> <p><input type="checkbox"/> For a high school diploma or equivalent (include elementary and junior high school attendance)</p> <p><input type="checkbox"/> For a trades certificate or diploma</p> <p><input type="checkbox"/> For a certificate or diploma from a college, CEGEP or other non-university institution</p> <p><input type="checkbox"/> For a university certificate, diploma or degree (e.g., B.A.)</p> <p><input type="radio"/> No</p>

Source: Statistics Canada, 2014 Content Test, Form N1.

2016 Census Program Content Test: Design and Results

Results

The main result, although based on a small number of persons aged 15 to 17 years, shows that the new format of the question resulted in a significant decrease of school attendance rates among youths, the population the most likely to be participating in the school system. The data in Table 37 show that the attendance rates of persons less than 18 years of age are lower in the Test Panels than in the Control Panels. By contrast, the new version of the question made it possible to reduce the number of adults who reported attending an institution. By electronic questionnaire, only 2.2% of persons aged 45 years and over reported attending an institution in 2014 under the new question in the Test Panels, compared with 4.3% for persons in the same age group in the Control Panels. Among paper questionnaire respondents, a significant decrease could also be seen. For purposes of information and comparison with the Content Test, the school attendance rates of the 2011 NHS and the 2011 Labour Force Survey (LFS) are also shown in Table 37.

Table 37

Distribution of school attendance, by respondent age, by Panel and collection mode, 2014 Content Test, 2011 NHS and 2011 LFS

	Test Panels		Control Panels		2011 NHS ¹	2011 LFS ²
	Number	%	Number	%	%	%
Electronic						
15 years	77	78.7	89	93.3	89.4	97.5
16 years	83	86.5	74	91.1	89.8	95.5
17 years	91	77.7	95	93.9	88.7	91.5
18 years	83	91.0	92	91.8	81.0	72.1
19 years	84	76.5	84	68.7	73.1	63.8
20 to 24 years	418	55.6	396	61.0	53.8	40.6
25 to 29 years	380	18.7	355	25.0	23.4	13.8
30 to 34 years	394	9.3	418	16.4	14.0	8.0
35 to 39 years	476	8.2	512	10.5	10.7	5.9
40 to 44 years	459	5.4	480	7.9	8.6	4.4
45 years and older	3,160	2.2	3,260	4.3	3.5	n/a
45 to 64 years	2,331	3.1	2,294	5.0	4.5	1.9
Paper						
15 years	36	81.6	28	86.5	89.4	97.5
16 years	38	79.3	36	62.0	89.8	95.5
17 years	37	88.5	29	94.4	88.7	91.5
18 years	37	80.6	47	87.8	81.0	72.1
19 years	38	64.2	40	69.6	73.1	63.8
20 to 24 years	185	58.0	187	57.0	53.8	40.6
25 to 29 years	183	27.1	153	23.0	23.4	13.8
30 to 34 years	194	14.4	178	11.5	14.0	8.0
35 to 39 years	174	11.4	173	6.4	10.7	5.9
40 to 44 years	202	1.8	200	7.7	8.6	4.4
45 years and older	4,392	1.0	4,307	1.8	3.5	n/a
45 to 64 years	1,756	2.0	1,700	2.4	4.5	1.9

1. Data for provinces only, including paper and electronic data.

2. February 2011 data.

Source: Statistics Canada, 2014 Content Test.

2016 Census Program Content Test: Design and Results

As specified in the list of questions of the 2016 Census Program, the school attendance question for 2016 will be similar to the one used in 2011. In addition, the new format of the education questions used in the EQ of the Content Test will be used for 2016.

3.11 Labour market activities

3.11.1 Restructuring the section on labour market activities

The section on labour market activities was remodelled in the version of the questionnaire tested in 2014. The changes are as follows:

- The questions on classes of workers (Q. 44), incorporation status (Q. 45), place of work (Q. 46), journey to work (Q. 47a) to Q. 48b), weeks worked in the previous year (Q. 50) and full-time or part-time weeks worked in the previous year (Q. 51) were removed.
- Question 40, which asked when last worked for pay or in self-employment, was removed. This question appears initially at the end of the block on labour market activity, before the industry and occupation questions (Q. 40 to Q. 43). In the electronic version, respondents are directed according to the responses provided for each of the questions. In the paper version, they are guided by instructions and arrows. These have been changed to reflect the removal of Question 40. Because of the space allocated on the paper, the arrows have a different format from those used in the 2011 questionnaire.

Results

The removal of Question 40 had a significant impact in that a greater number of “employed” persons did not respond to the industry and occupation questions, which they were supposed to answer. This result can be seen among the paper questionnaires for which the non-response rates for the industry and occupation questions are from 20.9% to 26.7% for the Test Panel and from 8.7% to 12.9% for the Control Panel.

Among the paper questionnaires, most respondents did not follow the proper response path. A total of 64% of those in the Test Panel and 73% of those in the Control Panel who provided valid hours of work in Question 35 responded to Questions 36 to 39, when they should not have. However, 18% of those on the Test Panel who took the wrong response path did not respond to the industry and occupation questions (versus only 7.8% of those on the Control Panel). This effect can be attributed to the fact that, in the Control Panel, the question on the date of last job makes it possible to “recover” those who took the wrong response path starting with the question on number of hours worked. Since the question on date of last job is absent from the Test Panel, non-response rates that are twice as high can be observed for the industry and occupation questions for this Panel.

Table 38

Distribution of non-response rates for questions in the work section, by Panel and collection mode, Content Test

	Electronic questionnaires		Paper questionnaires	
	Test Panels %	Control Panels %	Test Panels %	Control Panels %
Q. 35 Hours worked	7.6	9.7	8.5	7.4
Q. 36 Temporary absence	0.6	0.6	8.5	7.2
Q. 37 Arrangements	0.1	0.0	4.2	0.9
Q. 38 Search for work	0.2	0.0	4.9	2.2
Q. 39 Availability for work	0.0	0.5	3.6	0.4
Q. 41 Employer	1.7	4.7	20.9	8.7
Q. 42 Industry	1.7	4.8	23.3	9.1
Q. 43 Occupation	1.7	4.9	22.9	10.1
Q. 44 Main activity	1.7	5.0	26.7	12.9

Source: Statistics Canada, 2014 Content Test.

2016 Census Program Content Test: Design and Results

As specified in the list of questions of the 2016 Census Program, the question on the last time the person had worked is included in 2016.

3.11.2 Industry and occupation

In the EQ application, the functionality introduced in 2011 for the industry question (“What kind of business, industry or service was this?”) and the occupation question (“What was this person’s work or occupation?”) were retained in the tested version, but the list of vague responses was expanded.

Specifically, the list of vague responses for industry contains five items in the tested version: “Construction” and “Sales,” which already existed, to which were added “Government,” “Finance” and “Health.” On the list for occupation, “Teacher” was added to “Engineer” and “Student,” which were already considered vague responses in 2011.

Results

The message prompting the respondent to provide more detail was displayed to 298 respondents for the industry question and to 156 respondents for the occupation question. In 98.3% and 99.4% of cases respectively, the message resulted in a more detailed response. The addition of examples in the message displayed did not affect the responses reported, to the extent that the distributions indicate a rather wide variation.

3.11.3 Question on language of work

The question on language of work was changed in the same way as the question on languages spoken at home (Figure 23). Two new instructions were added: one for the sub-question on the language *most often* used at work, to reduce multiple responses, and the other, for the sub-question on other languages used *on a regular basis*, to prevent duplicate responses. As well, the electronic application functionalities for languages spoken at home were also implemented for this question.

Figure 23

Questions on language of work

Test questionnaire	Control questionnaire
<p>34 a) In this job, what language did this person use most often?</p> <p>Report only one language, unless other languages are used equally often.</p> <p><input type="radio"/> English <input type="radio"/> French Other language — specify: <input type="text"/></p> <hr/> <p>b) Did this person use any other languages on a regular basis in this job?</p> <p>Exclude: languages already reported in question 34 a) for this person.</p> <p><input type="radio"/> No <input type="radio"/> Yes, English <input type="radio"/> Yes, French Yes, other language — specify: <input type="text"/></p>	<p>50 (a) In this job, what language did this person use most often?</p> <p><input type="radio"/> English <input type="radio"/> French Other — Specify <input type="text"/></p> <hr/> <p>(b) Did this person use any other languages on a regular basis in this job?</p> <p><input type="radio"/> No <input type="radio"/> Yes, English <input type="radio"/> Yes, French Yes, Other — Specify <input type="text"/></p>

Source: Statistics Canada, 2014 Content Test, Form N1.

Source: Statistics Canada, 2014 Content Test, Form N1.1.

2016 Census Program Content Test: Design and Results

Results

As observed previously, the instructions did not reduce the number of multiple responses, contrary to what was intended (Table 39). Of the four combinations of the language of the form (English and French) and the collection mode (paper and EQ), three had higher response rates for the question with the instruction than for the question without the instruction. The instruction appears to have had the opposite effect to what was intended, and contributed to an increase in the number of multiple responses.

Table 39

Distribution of responses for the question on the language used most often at work, by Panel, response mode and questionnaire language, Content Test

	QUESTIONNAIRES IN FRENCH		QUESTIONNAIRES IN ENGLISH	
	Test Panels	Control Panels	Test Panels	Control Panels
	%			
Electronic				
French	84.7	88.5	1.7	2.4
English	8.7	6.9	95.0	94.0
Non-official language	0.1	0.1	0.6	1.4
Multiple	6.5	4.5	2.7	2.2
Paper				
French	91.6	90.7	1.6	2.1
English	4.6	3.4	94.7	95.0
Non-official language	0.3	0.2	0.9	1.1
Multiple	3.5	5.8	2.8	1.8

Source: Statistics Canada, 2014 Content Test.

Similar to the question on languages spoken at home, it was not possible to obtain conclusive results from the data with respect to a language not being repeated in sub-questions a) and b).

An unexpected result was also observed for this question. The universe of persons for which the question is intended is reduced. This reduction results from the removal of Question 40 in the previous section, regarding work, in the tested version of the questionnaire. A study was conducted using 2011 NHS data to quantify the reduction of the universe (Table 40). According to the data, 13.3% of the persons in the universe of the question on language of work in 2011 would be excluded in 2016 if the new conditions determining who should respond to the question on language of work were taken into account. The exclusion would primarily affect those who report a single, non-official language, since 22.1% of them would be excluded (compared with 13.4% of Anglophones and 12.3% of Francophones).

2016 Census Program Content Test: Design and Results

Table 40

Estimated distribution of persons who would be included or excluded from the universe of the question on languages spoken in the workplace in 2016 on the basis of the 2011 NHS

	Included in 2016	Excluded in 2016	Total	% included	% excluded
Total	16,595,033	2,538,275	19,133,308	86.7	13.3
English only	12,665,487	1,957,417	14,622,904	86.6	13.4
French only	3,361,222	470,311	3,831,533	87.7	12.3
Non-official language	195,494	55,522	251,016	77.9	22.1
English and French	277,959	39,178	317,137	87.6	12.4
English and a non-official language	80,725	13,374	94,099	85.8	14.2
French and a non-official language	4,199	979	5,178	81.1	18.9
English, French and a non-official language	9,946	1,495	11,441	86.9	13.1

Source: Statistics Canada, 2014 Content Test.

The removal of Question 40 from the Control Panels of the Content Test changes the universe of persons for languages in the workplace and changes the distributions of responses for this question. The group of persons potentially excluded from the universe for the question on languages spoken in the workplace for 2016 is different from that of persons potentially included, since it can be seen that 2.2% of those potentially excluded reported a non-official language in 2011 and 1.2% of those potentially included reported a non-official language.

As specified in the list of questions for the 2016 Census Program, the instructions for the language at work questions used in the Content Test are not included in 2016. The Question 40 on the last time the person had worked is included in 2016.

3.12 Permission to make personal census information available after 92 years

The disclosure question in 2014 is worded in the same way as in 2011. However, changes were made to the instructions and the design. In 2011, the instructions described various ways in which the person's data might be used when they were disclosed and emphasized the wealth of genealogical information involved by referring to "your family history" and the fact that "family members" would have access to the information. This personal reference was replaced with a more generic wording ("future generations" and historical researchers).

As well, on the form that combines the census and the NHS (N1), the question appears twice, at the end of the mandatory section for collecting census data and at the end of the following section, for collecting NHS data.

Results

The data did not confirm that households responding using the electronic questionnaire in 2016 will tend not to give their consent. The changes made to the instructions do not appear to have affected the distribution of responses (Table 41). Among paper questionnaires, the distribution of responses is more diverse among the Panels. Non-response rates are higher and can definitely be considered "not by omission," given the instruction "Only if you answer 'YES' will your responses be available to future generations," to which was added in 2011 that, if the answer was 'NO' or the question was left blank, the data would not be sent. There is definitely an effect related to respondent age in the paper collection, since 41% of respondents are aged 65 years and over.

2016 Census Program Content Test: Design and Results

Table 41

Distribution of responses to the disclosure question, by collection mode and Panel, Content Test

	Census			NHS	
	Control Panel	Test Panel	Test Panel ¹	Control Panel	Test Panel
Electronic					
Total	14,727,763	14,286,192	n/a	14,104,071	13,693,199
No response	1.4	0.6	n/a	21.4	10.7
Yes	85.5	86.0	n/a	62.0	76.1
No	13.1	13.4	n/a	16.6	13.2
Paper					
Total	2,042,978	2,062,894	2,062,894	2,088,398	2,126,506
No response	20.2	9.3	9.3	15.5	14.9
Invalid response	0.1	0.1	0.1	0.0	0.1
Yes	64.9	76.2	76.2	65.3	67.6
No	14.9	14.4	14.4	19.2	17.4

1. Since the census and NHS questions have been combined into a single questionnaire, households that receive the paper questionnaire and that are targeted to respond to the NHS must respond to the census questions on the NHS form (N1). EQ households respond first to the census questionnaire and then proceed to the NHS questionnaire.

Source: Statistics Canada, 2014 Content Test.

However, for the second question, which appears at the end of the NHS questionnaire, the nonresponse rates show a transfer from “yes” to no response, especially among electronic questionnaire respondents. Like the question on census data disclosure, respondents tend to give a “no by omission” by not answering the question. This can also be seen among paper questionnaires.

Since the NHS section tested was voluntary, non-response rates for the second question should be as high in the Test Panels as in the Control Panels. However, there should be an age effect in the Test Panels compared with the Control Panels since, on Form N1, the question appears immediately after language of work. However, this question is only for persons aged 15 years and over (the instruction appears in bold, in a wide banner at the top of the page on which the disclosure question appears). Still, even though respondents are reminded in the instructions for the disclosure question that the question is intended for all household members, it can be assumed that the instruction will not be read and, therefore, that the non-response rates for this question will be higher for persons under the age of 15, especially in the Paper Panels.

The data made it possible to verify this assumption, specifically for paper respondents (Table 42). Nonresponse rates for persons under the age of 15 are largely greater in the Test Panel than in the Control Panel. Focusing the analysis on only households with at least one child under the age of 15, it was revealed that the non-response rate for the disclosure question on the N1 questionnaire was 1.5 times higher for this household group.

2016 Census Program Content Test: Design and Results

Table 42

Distribution of responses to the disclosure question, by collection mode and panel, NHS (N1), persons under the age of 15, Content Test

	All		Less than 15 years of age	
	Test Panel	Control Panel	Test Panel	Control Panel
Electronic				
Total	13,693,199	14,104,071	2,333,501	2,382,110
No response	10.7	21.4	15.7	26.8
Yes	76.1	62.0	68.9	57.5
No	13.2	16.6	15.3	15.7
Paper				
Total	2,126,506	2,088,398	166,437	156,359
No response	14.9	15.5	43.0	15.0
Invalid response	0.1	0.0	0.2	0.0
Yes	67.6	65.3	49.0	61.2
No	17.4	19.2	7.8	23.8

Source: Statistics Canada, 2014 Content Test.

4. Conclusion

Before each Census of Population, Statistics Canada carries out a three- to four-year process to review the content of the Census Program questionnaires in consultation with data users, performing tests and developing questionnaire content to ensure that it accounts for changes in Canadian society. Factors considered in developing the content include legislative requirements regarding information, program and policy requirements; the burden placed on respondents to respond to questions; privacy concerns; feedback from consultations and tests; data quality; costs and operational considerations; the comparability of data with earlier data; and the availability of alternative data sources.

The Content Test that ran from May to June 2014 was an opportunity for Statistics Canada to test a number of content proposals, namely a model questionnaire combining the census and the NHS, an abridged version of the NHS questionnaire shortened to 35 questions, the addition of the question on social insurance number, and changes to certain questions. The Test was also significant since, for the first time, the agency was able to test the operation of a new electronic questionnaire application for household surveys as part of the standardization of collection tools.

Analyses of the data collected showed that a number of the changes should be implemented in the 2016 collection, while others should not be considered. Appendix A contains a summary of the major changes that will be made to the 2016 content.

Appendices

Appendix A – List of major changes to the content of the 2016 Census Program

Questionnaire

- Census and NHS questions are combined onto a single questionnaire for households selected to participate in the NHS.
- A transition message has been added to invite respondents to participate in the NHS. The voluntary nature of the survey is not mentioned on the paper questionnaires. Households who receive a paper questionnaire are informed in the letter that accompanies the questionnaire package.

Coverage

- An email address question has been added (Step A).
- The wording of the question on the number of persons at the address (Step B) has been improved.
- There are new steps in the electronic version to determine whether or not a person in the household should be included as a usual resident (Step C).

Income

- Census respondents will be linked to income tax data.
- Income questions are removed from the NHS.

Demographic information

- Questions on sex, age, marital status and relationship to Person 1 are written in the interrogative form.

Activities of daily living

- There is a new question on activities of daily living.

Ethnocultural information

- Questions on the place of birth of the respondent and the respondent's parents are displayed in sequences on the electronic questionnaire. As well, a validation message has been added to help with providing a specific country of birth.
- The order of examples of ethnic origin has been changed, with French appearing third, after Canadian and Chinese.

Education

- Questions on postsecondary education are displayed in sequences on the electronic questionnaire.
- Changes have been made to the response options for the apprenticeship question.

Languages

- A validation message has been added for the language questions on the electronic questionnaire to help with providing specific responses.

2016 Census Program Content Test: Design and Results

Appendix B – List of questions in test and control questionnaires (Content Test)

Test questionnaire		Control questionnaire	
CENSUS			
Q. 2	What is this person's sex ?	Q. 2	SEX
Q. 3	What are this person's date of birth and age ?	Q. 3	DATE OF BIRTH AND AGE
Q. 4	a) What is this person's legal marital status ?	Q. 4	MARITAL STATUS
	b) Is this person living with a common-law partner ?	Q. 5	Is this person living with a common-law partner?
Q. 5	What is the relationship of this person to Person 1 ?	Q. 6	RELATIONSHIP TO PERSON 1
Q. 6	Can this person speak English or French well enough to conduct a conversation?	Q. 7	Can this person speak English or French well enough to conduct a conversation?
Q. 7	a) What language does this person speak most often at home?	Q. 8	a) What language does this person speak most often at home?
	b) Does this person speak any other languages on a regular basis at home?		b) Does this person speak any other languages on a regular basis at home?
Q. 8	What is the language that this person first learned at home in childhood and still understands ?	Q. 9	What is the language that this person first learned at home in childhood and still understands ?
Q. 9	Does this person agree to make his or her 2016 Census information available in 2108 (92 years after the census)?	Q. 10	Does this person agree to make his or her 2016 Census information available in 2108 (92 years after the census)?
NATIONAL HOUSEHOLD SURVEY			
Q. 10	Does this person have any: a) difficulty seeing (even when wearing glasses or contact lenses)? b) difficulty hearing (even when using a hearing aid)? c) difficulty walking, using stairs, using his/her hands or fingers or doing other physical activities? d) difficulty learning, remembering or concentrating? e) emotional, psychological or mental health conditions (anxiety, depression, bipolar disorder, substance abuse, anorexia, etc.)? f) other health problem or long-term condition that has lasted or is expected to last for six months or more ?	Q. 11	Does this person have any difficulty hearing, seeing, communicating, walking, climbing stairs, bending, learning or doing any similar activities?
		Q. 12	Does a physical condition or mental condition or health problem reduce the amount or the kind of activity this person can do: a) at home? b) at work or at school? c) in other activities, for example, transportation or leisure?
Q. 11	Where was this person born?	Q. 13	Where was this person born?
		Q. 14	Of what country is this person a citizen?

2016 Census Program Content Test: Design and Results

Test questionnaire		Control questionnaire	
Q. 12	Is this person now, or has this person ever been, a landed immigrant ?	Q. 15	Is this person now, or has this person ever been, a landed immigrant ?
Q. 13	In what year did this person first become a landed immigrant?	Q. 16	In what year did this person first become a landed immigrant?
		Q. 17	What language(s), other than English or French , can this person speak well enough to conduct a conversation?
Q. 14	What were the ethnic or cultural origins of this person's ancestors ?	Q. 18	What were the ethnic or cultural origins of this person's ancestors ?
Q. 15	Is this person an Aboriginal person, that is, First Nations (North American Indian), Métis or Inuk (Inuit)?	Q. 19	Is this person an Aboriginal person, that is, First Nations (North American Indian), Métis or Inuk (Inuit)?
Q. 16	Is this person: [checklist of visible minority groups]	Q. 20	Is this person: [checklist of visible minority groups]
Q. 17	Is this person a Status Indian (Registered or Treaty Indian as defined by the Indian Act of Canada)?	Q. 21	Is this person a Status Indian (Registered or Treaty Indian as defined by the Indian Act of Canada)?
		Q. 22	Is this person a member of a First Nation / Indian band?
		Q. 23	What is this person's religion?
Q. 18	Where did this person live 1 year ago , that is, on May 13, 2013 ?	Q. 24	Where did this person live 1 year ago , that is, on May 13, 2013 ?
Q. 19	Where did this person live 5 years ago , that is, on May 13, 2009 ?	Q. 25	Where did this person live 5 years ago , that is, on May 13, 2009 ?
Q. 20	Where was each of this person's parents born? a) Father b) Mother	Q. 26	Where was each of this person's parents born? a) Father b) Mother
Q. 21	Has this person completed a high school (secondary school) diploma or equivalency certificate?	Q. 28	Has this person completed a secondary (high) school diploma or equivalent?
Q. 22	a) Has this person completed a Registered Apprenticeship or other trades certificate or diploma? b) Has this person completed a college, CEGEP or other non-university certificate or diploma? c) Has this person completed a university certificate, diploma or degree?	Q. 29	Has this person completed a Registered Apprenticeship or other trades certificate or diploma?
		Q. 30	Has this person completed a college, CEGEP, or other non-university certificate or diploma?
		Q. 31	Has this person completed a university certificate, diploma or degree?
Q. 23	What was the major field of study of the highest certificate, diploma or degree that this person completed?	Q. 32	What was the major field of study of the highest certificate, diploma or degree that this person completed?

2016 Census Program Content Test: Design and Results

Test questionnaire		Control questionnaire	
		Q. 33	In what province, territory or country did this person complete his or her highest certificate, diploma or degree?
Q. 24	a) At any time between September 2013 and May 2014 , did this person attend school, such as high school, college, CEGEP or university? b) For what type of certificate, diploma or degree was this person attending school (at any time between September 2013 and May 2014)?	Q. 34	At any time since September 2013 , has this person attended a school, college, CEGEP or university?
Q. 25	During the week of Sunday, May 4 to Saturday, May 10, 2014 , how many hours did this person spend working for pay or in self-employment?	Q. 35	During the week of Sunday, May 4 to Saturday, May 10, 2014 , how many hours did this person spend working for pay or in self-employment?
Q. 26	During the week of May 4 to May 10, 2014 , was this person on temporary lay-off or absent from his/her job or business?	Q. 36	During the week of May 4 to May 10, 2014 , was this person on temporary lay-off or absent from his/her job or business?
Q. 27	During the week of May 4 to May 10, 2014 , did this person have definite arrangements to start a new job within the next four weeks?	Q. 37	During the week of May 4 to May 10, 2014 , did this person have definite arrangements to start a new job within the next four weeks?
Q. 28	Did this person look for paid work during the four weeks from April 13 to May 10, 2014 ?	Q. 38	Did this person look for paid work during the four weeks from April 13 to May 10, 2014 ?
Q. 29	Could this person have started a job during the week of Sunday, May 4 to Saturday, May 10, 2014 had one been available?	Q. 39	Could this person have started a job during the week of Sunday, May 4 to Saturday, May 10, 2014 had one been available?
		Q. 40	When did this person last work for pay or in self-employment, even for a few days?
Q. 30	For whom did this person work?	Q. 41	For whom did this person work?
Q. 31	What kind of business, industry or service was this?	Q. 42	What kind of business, industry or service was this?
Q. 32	What was this person's work or occupation?	Q. 43	What was this person's work or occupation?
Q. 33	In this work, what were this person's main activities?	Q. 44	In this work, what were this person's main activities?
		Q. 45	In this job or business was this person mainly: [class of worker].
		Q. 46	If self-employed, was this person's farm or business incorporated?
		Q. 47	At what address did this person usually work most of the time ?

2016 Census Program Content Test: Design and Results

Test questionnaire		Control questionnaire	
		Q. 48	a) How did this person usually get to work? b) How many people, including this person, usually shared the ride to work in this car, truck or van?
		Q. 49	a) What time did this person usually leave home to go to work? b) How many minutes did it usually take this person to get from home to work?
Q. 34	a) In this job, what language did this person use most often ? b) Did this person use any other languages on a regular basis in this job?	Q. 50	a) In this job, what language did this person use most often ? b) Did this person use any other languages on a regular basis in this job?
		Q. 51	How many weeks did this person work in 2013 ?
		Q. 52	During most of those weeks , did this person work full time or part time ?
		Q. 53	In 2013 , did this person pay for child care , such as day care or babysitting, so that this person could work at his or her paid job(s) ?
		Q. 54	In 2013 , did this person pay child or spousal support payments to a former spouse or partner?
		Q. 55	Does this person give Statistics Canada permission to use the income information available in his/her income tax files for the year ending December 31, 2013?
Q. 35	Does this person agree to make his or her 2016 National Household Survey information available in 2108 (92 years after the census)?		Does this person agree to make his or her 2016 National Household Survey information available in 2108 (92 years after the National Household Survey)?