

Catalogue no. 89-653-X
ISBN 978-0-660-28231-2

Aboriginal Peoples Survey

Aboriginal Peoples Survey, 2017: Concepts and Methods Guide

by Brittny Vongdara, Danielle Léger, Edith Latendresse and Ron Budinski
Social and Aboriginal Statistics Division
Release date: November 26, 2018



 Statistics Canada Statistique Canada

Canada 

How to obtain more information

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

You can also contact us by

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

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

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

Depository Services Program

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

Standards of service to the public

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

Note of appreciation

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

Published by authority of the Minister responsible for Statistics Canada

© Her Majesty the Queen in Right of Canada as represented by the Minister of Industry, 2018

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

1. Introduction.....	5
1.1. Survey overview	5
1.2. Purpose of the Concepts and Methods Guide.....	6
2. Survey content: concepts and questions	6
2.1. Content development process	6
2.2. Aboriginal identity groups.....	7
2.3. Levels of geography	8
2.4. Survey content themes	9
2.5. Questionnaire modules.....	10
2.6. Linked content from the 2016 Census of Population.....	12
2.7. Content input from other surveys.....	13
3. Survey design	14
3.1. Target population and coverage.....	14
3.2. Sampling design.....	18
3.3. Sample size and response rate	23
4. Data collection.....	24
4.1. Time frame.....	24
4.2. Mode of collection.....	24
4.3. Supervision and quality control.....	24
4.4. Proxy interviews	25
4.5. Communications strategy	25
4.6. Special issues in the field	25
4.7. Final response rates	25
5. Data processing	26
5.1. Data capture	26
5.2. Social survey processing steps.....	26
5.3. Receipt of raw data and record clean up	26
5.4. Variable recodes and multiple response questions.....	27
5.5. Flows: response paths, valid skips and question non-response	28
5.6. Coding	29
5.7. Edit and imputation	29
5.8. Derived variables and Census linkage	30
5.9. Creation of final data files and Data Dictionary (codebook).....	31
6. Weighting	31
6.1. Initial weights.....	32
6.2. Adjustment for units not sent to collection.....	32
6.3. Non-response adjustment.....	32

6.4. Adjustment for partial respondents	33
6.5. Post-stratification	33
6.6. Adjustment for extreme weights – Sigma gap method	34
6.7. Addition of units not enrolled under the Nunavut Agreement	34
7. Data quality	34
7.1. Overview of data quality evaluation	34
7.2. Sampling errors and bootstrap method	35
7.3. Non-sampling errors.....	37
8. Differences between the Aboriginal Peoples Survey and other data sources	39
8.1. Differences between the Aboriginal Peoples Survey and the 2016 Census	39
8.2. Differences between the 2012 APS and the 2017 APS.....	43
8.3. Differences between the 2017 APS and the APS - Nunavut Inuit Supplement	44
9. Data dissemination.....	45
9.1. An overview of 2017 Aboriginal Peoples Survey dissemination	45
9.2. Data products and services.....	45
9.3. Analytical products.....	46
9.4. Reference products	46
9.5. Disclosure control.....	47
Appendix A: 2017 Aboriginal Peoples Survey high level indicators.....	48
Appendix B: Extra response categories created for “Other-specify” questions	54
Appendix C: Standard classifications used for the 2017 Aboriginal Peoples Survey	55
Appendix D: Glossary of survey terms	57
References	65

Aboriginal Peoples Survey, 2017: Concepts and Methods Guide

by **Brittney Vongdara, Danielle Léger, Edith Latendresse** and **Ron Budinski**

1. Introduction

1.1. Survey overview

The Aboriginal Peoples Survey (APS) is a national survey on the social and economic conditions of First Nations people living off reserve, Métis and Inuit. The objectives of the APS are to identify the needs of these Aboriginal groups and to inform policy and programs aimed at improving the well-being of Aboriginal peoples. The APS aims to provide current and relevant data for a variety of stakeholders, including Aboriginal organizations, communities, service providers, researchers, governments, and the general public.

The APS has been conducted by Statistics Canada since 1991, providing a range of social and economic indicators about Aboriginal peoples. It is a postcensal survey, designed to follow and complement the Census of Population. The 2017 APS represents the fifth cycle of the survey and follows the thematic approach that was first introduced in the 2012 APS. The focus for the 2017 APS is on transferable skills, practical training, use of information technology, Aboriginal language attainment, and participation in the Canadian economy. The survey will continue to provide core indicators in the areas of labour, health and education. Funding was provided by three federal departments: Crown-Indigenous Relations and Northern Affairs Canada & Indigenous Services Canada (formerly Indigenous and Northern Affairs Canada) and Employment and Social Development Canada.

This cycle of the APS was conducted from January 16, 2017 to August 15, 2017. Approximately 43,000 people were selected to participate in the survey and the final response rate was 76%. The survey design allowed for the production of reliable data for each of the provinces and territories (Atlantic provinces grouped), as well as for each of the four Inuit regions: Nunatsiavut (Northern coastal Labrador), Nunavik (Northern Quebec), the territory of Nunavut and the Inuvialuit region of the Northwest Territories. The survey also targeted three particular age groups: 18 to 24, 25 to 54, and 55 and over. Separate analyses on these dimensions are possible for each Aboriginal group: First Nations people living off reserve, Métis and Inuit. Although 15 to 17 years olds were not specifically targeted, they were still sampled. This was done so that estimates for the entire target population could be produced and also in part to conform to harmonized content so that the APS could be comparable to other Statistics Canada surveys, such as the Labour Force Survey (LFS).

Historically, data from the APS have been used to support research for policy planning and program development, with the goal of improving services for Aboriginal peoples. The Royal Commission on Aboriginal Peoples (RCAP) used the 1991 APS data as a primary source of demographic, social and economic information for their final report and related research studies. The RCAP's final report recommended that the APS be conducted regularly to monitor the demographic and social conditions of Aboriginal peoples.

The 2017 APS will continue to inform policy and programming activities aimed at improving the well-being of Aboriginal peoples. The survey's new thematic data will help to provide a deeper understanding of the opportunities and challenges of increasing Aboriginal participation in the Canadian economy. Information on education, health, language, income, housing and mobility will also be available for analysis. The APS will continue to serve as an important source of information for First Nations, Métis and Inuit organizations; community planners; service providers; governments; and researchers.

For the 2017 APS, a supplement which was targeted toward Inuit enrolled under the Nunavut Agreement was added. This included a large supplementary sample of Inuit in Nunavut as well as an additional set of questions designed to learn more about the availability, interest and level of preparedness of Inuit enrolled under the Nunavut Agreement for government employment. The purpose of the APS - Nunavut Inuit Supplement is to provide information for the Nunavut Inuit Labour Force Analysis (NILFA) project and find ways to increase Inuit employment in government. This guide will focus only on the main APS sample. Please refer to the Aboriginal Peoples Survey—Nunavut Inuit Supplement, 2017: User's Guide to the Analytical File for more information about this supplement.

1.2. Purpose of the Concepts and Methods Guide

This *Concepts and Methods Guide* is intended to provide a detailed review of the 2017 APS with respect to its subject matter and methodological approaches. It is designed to assist APS data users by serving as a guide to the concepts and measures of the survey as well as the technical details of the survey's design, field work and data processing. This guide is meant to provide users with helpful information on how to use and interpret survey results. The discussion on data quality also allows users to review the strengths and limitations of the data for their particular needs.

Chapter 1 of this guide provides an overview of the 2017 APS by introducing the survey's background and objectives. Chapter 2 outlines the survey's themes and explains the key concepts and definitions used for the survey. Chapters 3 to 6 cover important aspects of the APS survey methodology, sampling design, data collection and processing. Chapters 7 and 8 review issues of data quality and caution users about comparing 2017 APS data with data from other sources. Chapter 9 outlines the survey products available to the public, including data tables, analytical articles and reference material. The Appendices provide a comprehensive list of survey indicators, extra coding categories and standard classifications used on the APS. Lastly, a glossary of survey terms is also provided.

2. Survey content: concepts and questions

2.1. Content development process

The content for the 2017 Aboriginal Peoples Survey (APS) was developed by Statistics Canada in collaboration with three federal funding departments: Crown-Indigenous Relations and Northern Affairs Canada & Indigenous Services Canada (formerly Indigenous and Northern Affairs Canada) and Employment and Social Development Canada. The content was built to meet the commitments put forward in the Treasury Board Submission entitled "Renewal of the Surveys on Aboriginal People for a fifth cycle focused on Aboriginal Participation in the Canadian Economy", while also meeting the data needs and priorities of the funding departments. The 2017 APS also drew on many key indicators from previous cycles of the APS which were developed in collaboration with national Aboriginal organizations for historical compatibility and cross-sectional analysis.

With respect to new content requirements for 2017, relevant standardized and well-established measures used on other Statistics Canada surveys were gathered and reviewed as potential indicators. These indicators increase opportunities to compare responses between the APS and other Statistics Canada surveys. In addition, recognizing the new theme of Aboriginal participation in the Canadian economy, new APS content was sought that would allow for the measurement of a diverse range of labour market experiences among First Nations people living off reserve, Métis and Inuit. With the goal of identifying the predictive factors of employment in the Aboriginal population, the new content was developed to cover the following seven pillars: barriers and levers to economic participation; labour mobility; entrepreneurship; postsecondary education; targeted skills training; reliance on government transfers; and accumulation of wealth and financial security.

The questions in the 2017 APS were designed for a Computer Assisted Interviewing (CAI) environment, which was first introduced for the 2012 APS to replace previous cycles of this survey which had only been collected on paper. CAI incorporated many features that served to maximize the quality of data collection. A computer-assisted interview questionnaire was developed for two different modes of collection used for this survey: a Computer Assisted Telephone Interview (CATI) and a Computer Assisted Personal Interview (CAPI). Refer to section 4.6 for more details on the APS data collection.

In order to supplement data collection for this survey, variables from the census were added to the analytical file. Respondents were informed that their census data would be linked and they were able to choose not to link their census data, but the majority of them implicitly agreed.

2.2. Aboriginal identity groups

A definition of Aboriginal identity

The 2017 Aboriginal Peoples Survey identifies the Aboriginal identity population as anyone who self-reported being at least one of the following:

- an Aboriginal person, that is, First Nations (North American Indian), Métis or Inuk (Inuit);
- a Status Indian, that is, a Registered or Treaty Indian as defined by the *Indian Act* of Canada; and/or
- a member of a First Nation or Indian band.

The first criterion above is referred to as “Aboriginal self-reporting”. A respondent may self-report as being an Aboriginal person and/or they may see themselves as belonging to one or more of the particular Aboriginal groups mentioned: First Nations, Métis or Inuit. First Nations includes Status and Non-Status Indians. It should also be noted that some respondents use the term *First Nations* while others use the term *North American Indian*.

As the APS definition implies, a person does not need to self-report as Aboriginal (e.g., as First Nations, Métis or Inuk) in order to be considered part of the Aboriginal identity population. If a person has reported being a Status Indian and/or a member of a First Nation or Indian band, they are considered to be part of the Aboriginal identity population, regardless of their responses to the Aboriginal group questions. Individuals who are not First Nations (North American Indian), Métis or Inuk (Inuit) but who have Registered or Treaty Indian status and/or Membership in a First Nation or Indian band are considered as “Aboriginal responses not included elsewhere”.

With respect to the measurement of “Status Indian”, the 2017 APS includes everyone who said that they are a Registered or Treaty Indian as defined by the *Indian Act*. Registered Indians are persons who are registered under the *Indian Act* of Canada. Treaty Indians are persons who belong to a First Nation or Indian band that signed a treaty with the Crown.

The universe or target population for the 2017 APS are persons who meet the definition of Aboriginal identity. Although the survey data will support distinct analyses for First Nations living off reserve, Métis and Inuit, the APS was not designed to produce estimates for the group ‘Aboriginal responses not included elsewhere’. This is a very small group and caution should be used when conducting analyses for this group (see section 8).

The 2017 APS did not include First Nations people who were living in First Nations communities (on reserve). For current information on First Nations people living on reserve, please refer to the [2016 Census of Population](#) or to a similar themed survey, the First Nations Regional Early Childhood, Education and Employment Survey (FNREES), conducted on-reserve by the First Nations Information Governance Centre. More information on this survey is available on the [First Nations Information Governance Centre](#) website.

Questionnaire items for Aboriginal identification

Table 1 below lists the four Aboriginal identification questions asked in the 2017 APS and shows the Aboriginal identity classification derived from the answers provided to these questions. As shown, in order for someone to be part of the Aboriginal identity population, respondents needed to have a YES response to ID_Q05 (self-reported Aboriginal person), to ID_Q25 (Status Indian) or to ID_Q30 (Member of First Nation or an Indian band). Note that those who answered NO to all these questions were classified as non-Aboriginal and considered out-of-scope for the survey. Adjustments to survey weights were made accordingly.

As shown in Table 1, the measurement of Aboriginal self-reporting was divided into two parts: ID_Q05 and ID_Q10. This allowed respondents to self-report as an Aboriginal person in question ID_Q05 even if they did not self-report as a specific group as named in ID_Q10 (First Nations, Métis or Inuit). For cases where respondents said YES to ID_Q05 but did not respond to ID_Q10, census data was used to determine the identity group (including Aboriginal responses not included elsewhere). Additionally, it is important to note that individuals classified as “Aboriginal responses not included elsewhere” had their answer to ID_Q05 changed to NO if they said YES.

Table 1
Questionnaire flow and Aboriginal identity classification

Questionnaire flow	Aboriginal identity classification
ID_Q05 - Are you an Aboriginal person, that is, First Nations (North American Indian), Métis or Inuk (Inuit)? First Nations (North American Indian) includes Status and Non-Status Indians?	
Yes ... see subsequent questions	
ID_Q10 - Are you First Nations (North American Indian), Métis or Inuk (Inuit)?	
First Nations (North American Indian)	First Nations
Métis	Métis
Inuk (Inuit)	Inuit
No - see subsequent questions	
ID_Q25 - Are you a Status Indian, that is, a Registered or Treaty Indian as defined by the Indian Act of Canada?	
Yes, Status Indian (Registered or Treaty)	Aboriginal responses not included elsewhere
No - classification based on overall responses	
ID_Q30 - Are you a member of a First Nation or Indian band?	
Yes	Aboriginal responses not included elsewhere
No - classification based on overall responses	
No to all questions:	
ID_Q05-Q10, ID_Q25 and ID_Q30	Non-Aboriginal (out of scope)

Aboriginal identity variables available to data users

Data made available from the 2017 APS will provide analytical variables for each aspect of Aboriginal identity. These variables will be central to data users for conducting their analyses of subject matter themes for each group - First Nations people living off reserve, Métis, Inuit and Aboriginal responses not included elsewhere. Aboriginal identity variables will include indicators of both single and multiple identities (for example, persons who reported as being both a First Nations person and Métis). Variables on Status Indian (Registered or Treaty) will also be available for analysis. Derived variables for Aboriginal ancestry, based on data from the 2016 Census, will be provided since Aboriginal ancestry was not measured directly by the 2017 APS.

2.3. Levels of geography

The 2017 APS ensured coverage of certain core geographic domains. These included provinces and territories (with the Atlantic provinces grouped) and the four Inuit regions of Inuit Nunangat.

Inuit Nunangat is the homeland of Inuit of Canada. It includes the communities located in the four Inuit regions:

- Nunatsiavut (Northern coastal Labrador),
- Nunavik (Northern Quebec),
- the territory of Nunavut and
- the Inuvialuit region of the Northwest Territories.

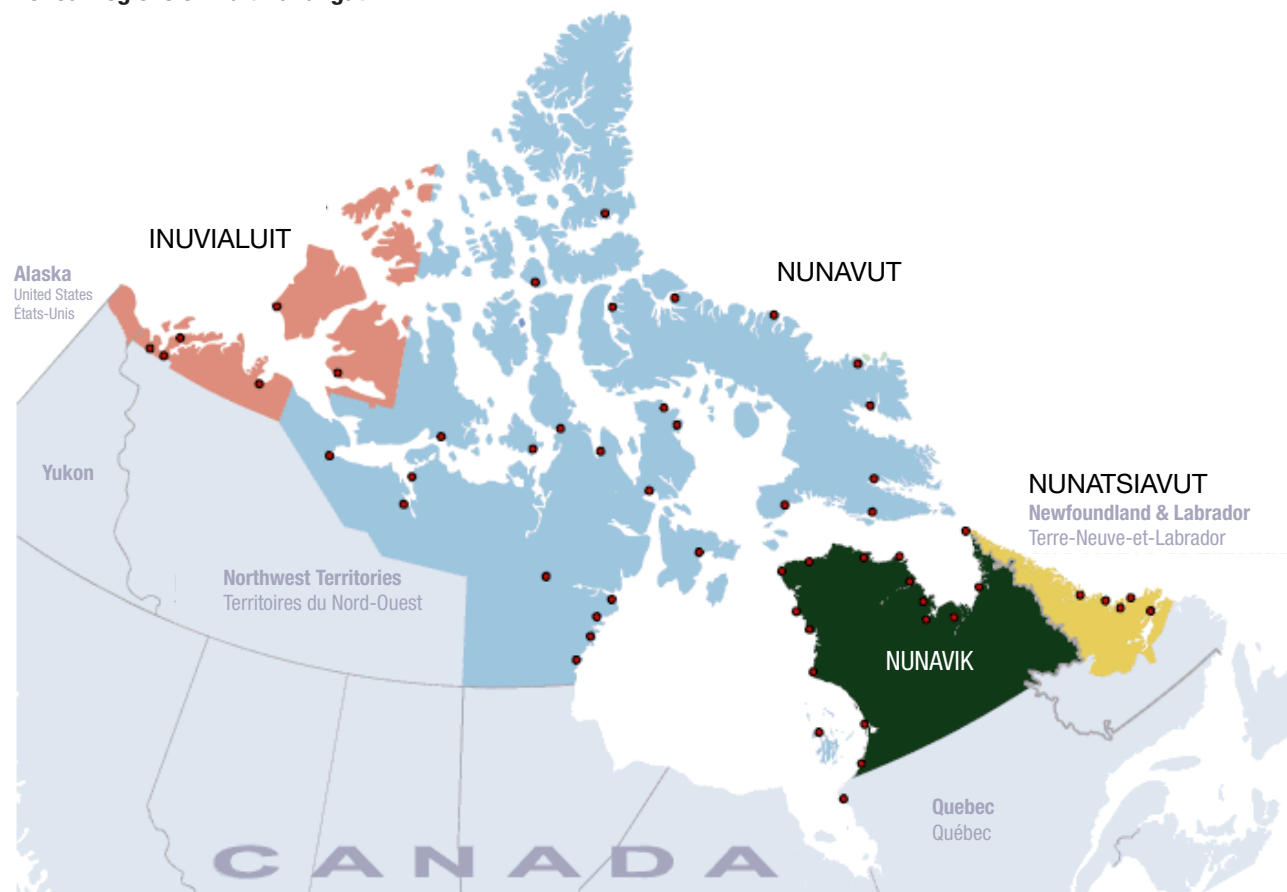
These regions collectively encompass the area traditionally occupied by Inuit in Canada (see map 1).

These geographic domains were targeted by the 2017 APS to ensure that adequate data estimates would be available at these levels of geography. Other geographic variables are also available in the 2017 APS database, based on geographies from the 2016 Census of Population. These include census metropolitan areas (CMAs), census subdivisions (CSDs) and population centres, among others. In addition, geographies will include [health regions](#) across Canada which represent administrative areas or regions of interest to health authorities.

Users should note that not all APS data can be cross-tabulated or analyzed at detailed levels of geography. Some data tables will be possible for more detailed geographies but the reliability of data estimates at each level will need to be examined on a case-by-case basis.

Data users are directed to the 2017 APS Data Dictionary for a complete list of geographies available from the APS. For details on how to obtain the Data Dictionary, please contact Statistics Canada Client Services at statcan.sasclientservices-dsseaserviceaclientele.statcan@canada.ca. The [2016 Census Dictionary](#) also defines geographies relevant to the APS.

Map 1
The four regions of Inuit Nunangat



Source: Inuit Tapiriit Kanatami.

2.4. Survey content themes

Reflecting a focused thematic approach, the 2017 Aboriginal Peoples Survey collected data falling into six content areas:

- Labour
- Health
- Education
- Skills and training
- Economic well-being
- Aboriginal-specific

These blocks are placed throughout the survey, and contain questions specifically related to Aboriginal people in Canada. A comprehensive description of all the variables available from the survey data is provided in the 2017 APS Data Dictionary.

Labour

The employment component of the 2017 APS is intended to help better understand the current labour market experiences of those aged 15 years and over. It was built on the employment component of the 2012 APS, while accommodating stakeholders' requests for additional data on this theme. These labour blocks consists of questions about the types of jobs that Aboriginal people hold, the methods they use to find work, barriers as well as their willingness to move to improve their job opportunities.

Health

The 2017 APS Health component is designed to obtain information about the health of Aboriginal people. For example, questions on general health, mental health and community support are asked in this module. These indicators provide for potential analyses of issues related to health care access, physical and mental health status and areas of health risks.

Education

The content for the education component of the 2017 APS focuses primarily on postsecondary education. The education blocks collect information about high school (or its equivalent) completion or reasons for not completing. Information is also gathered about preparedness for post-secondary education, guidance, funding, post-secondary field of study chosen and education that was desired, but not taken. The data allow for in-depth analysis of characteristics of Aboriginal people who are most likely to access and successfully complete postsecondary education; and help better understand the labour market returns to postsecondary education and types of programs that provide the best returns.

Skills and training

The skills component is a new addition for the 2017 APS. This block attempts to gather information related to respondent skill sets and allows them to self-assess their abilities. The questions also ask about training that they have taken, and whether anything is limiting them in their job.

Economic well-being

Questions asking if the respondent's household is capable of meeting basic needs are a new addition to the 2017 APS, which were intended to measure financial security. Continued inclusion of questions measuring food security, housing and income will allow for ongoing tracking of economic well-being for First Nations people living off reserve, Métis and Inuit.

Aboriginal-specific

Topics such as residential school attendance, Aboriginal languages, other labour activities, sense of belonging, and community involvement were introduced to measure cultural connectedness and sense of belonging to First Nations living off reserve, Métis or Inuit or belonging to Canada. Continued inclusion of questions related to residential school attendance, languages, and other labour activities in the questionnaire will allow for historical compatibility and cross-sectional analysis of Aboriginal-specific variables.

2.5. Questionnaire modules

This section provides a list of the modules on the 2017 APS questionnaire. Appendix A provides a detailed list of the indicators measured in each of these modules. Appendix B lists the extra classification categories created during survey coding. Appendix C describes the standard classifications used to create indicators for open-ended survey questions.

- Demographics
 - Aboriginal identification
 - Household composition
 - Mobility

- Labour
 - Labour market activities minimal
 - Labour force status
 - Multiple employment
 - Class of worker
 - Incorporated business
 - Self-employed
 - Job tenure
 - Availability for government employment
 - Industry
 - Occupation
 - Usual hours of work
 - Part-time employment
 - Permanent work
 - Job satisfaction
 - Looking for work
 - Labour market attachment
 - Past job attachment
 - Labour mobility

- Health
 - General health 1
 - General mental health
 - Pregnancy and childbirth
 - Height and weight
 - Chronic conditions
 - Injuries
 - Eating habits
 - Smoking
 - Alcohol
 - Drug use
 - Disease screening
 - Consultations about mental health
 - Suicide
 - General health 2
 - Disability screening questions

- Education
 - Elementary and high school
 - Postsecondary education
 - Postsecondary credentials
 - Current postsecondary attendance
 - Some postsecondary education
 - Postsecondary preparedness and distance education

- Guidance
- Funding for postsecondary education
- Education not taken
- Skills
 - Skills and training
 - Information technology
- Economic well-being
 - Food security
 - Basic needs
 - Housing
 - Sources of personal income
 - Total personal income
 - Employment income
 - Retirement income
- Aboriginal-specific
 - Other labour activities
 - Community involvement
 - Sense of belonging
 - Residential school
 - Aboriginal language

2.6. Linked content from the 2016 Census of Population

The APS is a postcensal survey, with its sample drawn from Aboriginal census respondents. In 2001, 2006 and 2012, APS data were linked with each corresponding Census of Population (or National Household Survey). For 2017, the APS sample was drawn from 2016 Census of Population respondents and the final APS microdata file was linked with the 2016 Census of Population Dissemination Database.

The benefits of an APS-census record linkage are reduced response burden for the target population of the APS; the establishment of survey weights, which are crucial to providing valid estimates; and the creation of a comprehensive microdata file, which can be used by data analysts to extend their learning and to inform policy and program development for Aboriginal Peoples in Canada. Together, data from the two sources will provide a detailed statistical portrait of First Nations people living off reserve, Métis and Inuit in Canada. These data are not available from any other source.

At the time of data collection, all census respondents were informed that the information they provided might be used to support other Statistics Canada surveys. Specifically, the message on the cover of the 2016 Census questionnaire stated: “The data may also be used by Statistics Canada for other statistical and research purposes or be combined with other survey or administrative data sources.” As well, at the outset of the 2017 APS survey interview, respondents were told about the purpose of the survey, its voluntary nature and that:

“In order to reduce the number of questions, Statistics Canada plans to combine information collected during the 2016 Census of Population with the information you provide in this interview. We may also add information from other surveys or administrative data sources. All information will be kept confidential and used for statistical purposes only.”

As a note, respondents can choose not to have their data linked from the APS to other surveys or administrative data sources. All products containing linked data are disseminated in accordance with Statistics Canada’s policies,

guidelines and standards. Only aggregate statistical estimates that conform to the confidentiality provisions of the *Statistics Act* can be released outside of Statistics Canada. All data requests for APS tabulations are screened for confidentiality and the aggregate data are rounded before being released to clients.

More than 200 variables from the 2016 Census were linked to the final 2017 APS file. The list below indicates the type of census variables that have been appended to the APS analytical file. It is important to note that these census variables, having been obtained from the 2016 Census responses for 2017 APS respondents, refer to each respondent's situation on the Census reference day, that is, as of May 10, 2016. Users should be aware that in some cases, the respondent may have moved, had a change in the composition of their household, or had a change in employment between the date of the 2016 Census and the date of the APS interview. In other words, some of the information provided by the 2016 Census may not be reflective of the respondent's situation when the APS interview took place.

A complete list of linked census variables and their accompanying notes are provided in the 2017 APS Data Dictionary which accompanies the APS analytical file.

Household level variables

- Geography - including CMAs, CSDs and health regions
- Housing - including tenure, number of rooms in dwelling and condition of dwelling
- Family - including family status, presence of grandparents and multigenerational status of the household

Person-level variables

- First Nation or Indian band
- Labour - including, class of worker, full- or part-time weeks worked in 2015 and hours worked for pay or in self-employment
- Place of work - including province, census division or CSD
- Mobility - including place of residence 1 and 5 years ago, inter and intra CMA mobility status, and inter and intra provincial mobility status
- Income - including family income, employment income and number of earners
- Language - including first official language spoken, home language, Aboriginal home language and Inuit home language

2.7. Content input from other surveys

The 2017 APS drew on questionnaire content from multiple sources. The 2012 APS was used as a starting point and served as a key source of well-established questions for First Nations people living off reserve, Métis and Inuit. Questions were also drawn from other surveys as much as possible to enhance robustness of the data and to allow for comparability across data sources, where appropriate. Sometimes these questions were modified for a better fit with the APS. In such instances, the data are not directly comparable.

This section outlines the primary sources used for 2017 APS questionnaire development in relation to the main survey themes. It should be noted that these sources do not represent a comprehensive list of all the Statistics Canada surveys that include indicators found on the APS.

Aboriginal identification

- 2012 Aboriginal Peoples Survey (APS), 2006 APS
- 2016 Census of Population
- 2011 National Household Survey (NHS)

Labour

- 2012 APS, 2006 APS
- 2002 Aboriginal Entrepreneurs Survey (AES)
- 2012 Canadian Survey on Disability (CSD)
- 2015 Labour Force Survey (LFS) (October)
- 2014 Longitudinal and International Study of Adults (LISA)
- 2000 Survey of Self-Employment (SSE)
- 2008 Survey of Older Workers (SOW)

Health

- 2012 APS, 2006 APS
- 2009-2011 Canadian Health Measures Survey (CHMS) - Cycle 2
- 2015 Canadian Community Health Survey (CCHS), 2014 CCHS
- 2008 First Nations Regional Health Survey (RHS) (FNIGC)

Education

- 2012 APS, 2006 APS
- 1991 School Leavers Survey (SLS)
- 2006-2007 Youth in Transition Survey (YITS) - Cycle 5, 2008-2009 YITS - Cycle 6
- Class of 2009-2010 National Graduates Survey (NGS)

Skills

- 2012 APS
- 2012 Canadian Internet Use Survey (CIUS)

It is also worth noting that there are four main social surveys at Statistics Canada for which data are available by Aboriginal group: the Census of Population, the Labour Force Survey (LFS), the General Social Survey (GSS) and the Canadian Community Health Survey (CCHS).

3. Survey design

3.1. Target population and coverage

The target population of the 2017 Aboriginal Peoples Survey (APS) was composed of the Aboriginal identity population of Canada, 15 years of age and over as of January 15, 2017, living in private dwellings excluding people living on Indian reserves and settlements and in certain First Nations communities in Yukon and the Northwest Territories (NWT). These exclusions are the same as those in the 2012 APS. The census subdivisions (CSD) covered in Yukon and the NWT are listed in Table 2.

Table 2
List of census subdivisions in Yukon and Northwest Territories (NWT)

Territory	CSD No.	Name of CSD	CSD type
Yukon	6001003	Watson Lake	T
	6001004	Faro	T
	6001009	Whitehorse	CY
	6001029	Dawson	T
	6001044	Mt. Lorne	HAM
	6001045	Yukon, Unorganized	NO
	6001046	Swift River	SÉ
	6001049	Destruction Bay	SÉ
	6001050	Stewart Crossing	SÉ
	6001052	Keno Hill	SÉ
	6001055	Ibex Valley	HAM
	6001058	Marsh Lake	NO
	6001059	Macpherson-Grizzly Valley	NO
	6001060	Whitehorse, Unorganized	NO
	NWT	6101014	Paulatuk
6101017		Inuvik	T
6101025		Aklavik	HAM
6101036		Tuktoyaktuk	HAM
6101041		Sachs Harbour	HAM
6101063		Region 1, Unorganized	NO
6101095		Ulukhaktok	HAM
6102007		Norman Wells	T
6102063		Region 2, Unorganized	NO
6103097		Region 3, Unorganized	NO
6104097		Region 4, Unorganized	NO
6105003		Enterprise	HAM
6105016		Hay River	T
6105026		Reliance	SET
6105097		Region 5, Unorganized	NO
6106023		Yellowknife	CY
6106097		Region 6, Unorganized	NO

The CSD types can be found in [Table 1.5](#) of the Census Dictionary.

3.1.1. Identifying the Aboriginal population

The APS selected its sample from respondents who reported either Aboriginal identity or Aboriginal ancestry to the 2016 Census questionnaire. More precisely, the APS sample was selected from respondents who gave specific answers to four screening questions on the census long-form questionnaire, which had two main versions, the 2A-L form and the 2A-R form.

The [2A-L form](#) was completed by self-enumeration and was administered to approximately one in four households in most parts of Canada (2A-L regions). Other than the basic census demographic questions (name, sex, date of birth, legal marital status, common-law status, relationship to person 1, various language questions and the

consent question to release the data in 92 years), the 2016 Census 2A-L form included questions on labour market activity, income, education, activity limitations, citizenship, housing, ethnic origin, and so on.

The [2A-R form](#), identical in content to the 2A-L form, except for some adapted examples and excluded questions¹, was administered by personal interview to all households in remote areas, Inuit communities and Indian reserves and settlements (2A-R regions).

The four screening questions used to identify the Aboriginal population were ethnic origin (question 17), Aboriginal self-reporting (question 18), Status Indian (Registered or Treaty Indian, question 20), and First Nation/Indian band membership (question 21).

The reporting of an Aboriginal origin in question 17 defines the Aboriginal ancestry population (or ancestry population).

The Aboriginal identity population of the 2016 Census is derived from three questions: questions 18, 20 and 21. The concept of Aboriginal identity refers to those persons who either (a) self-reported as at least one Aboriginal group, namely, First Nations (North American Indian), Métis or Inuit; and/or (b) reported being a Status Indian (Registered Indian or Treaty Indian, as defined by the *Indian Act* of Canada); and/or (c) reported being a member of a First Nation or Indian band.

Within the context of the APS, individuals with an Aboriginal ancestry who did not have an Aboriginal identity in the census are defined as the Aboriginal ancestry-only population (or ancestry-only population). For the purposes of APS sampling, the Aboriginal population includes both the identity population and the ancestry-only population. Although, similarly to the 2012 APS, the ancestry-only population was not part of the 2017 APS target population, it was still sampled in the Census because it was noted that in past survey iterations, slightly less than one-third of the census ancestry-only population reported Aboriginal identity in the APS.

The Aboriginal identity concept in the APS is the same as that in the Census, but is defined based on a slightly different set of questions (see Table 1 in section 2.2).

2016 Census – 2A-L, question 17

What were the ethnic or cultural origins of this person’s ancestors?

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.

1: Specify as many origins as applicable using capital letters.

2016 Census – 2A-L, question 18

Is this person an Aboriginal person, that is, First Nations (North American Indian), Métis or Inuk (Inuit)? Note: First Nations (North American Indian) includes Status and Non-Status Indians.

If “Yes”, mark the circle(s) that best describe(s) this person now.

- 1: No, not an Aboriginal person. Continue with the next question.
- 2: Yes, First Nations (North American Indian). Go to question 20.
- 3: Yes, Métis. Go to question 20.
- 4: Yes, Inuk (Inuit). Go to question 20.

1. The questions on citizenship (question 13), immigrant status received (question 14) and year of immigration (question 15) are not asked of people living on Indian reserves and settlements who were enumerated using the 2A-R form.

2016 Census – 2A-L, question 20

Is this person a Status Indian (Registered or Treaty Indian as defined by the *Indian Act* of Canada)?

- 1: No
- 2: Yes, Status Indian (Registered or Treaty)

2016 Census – 2A-L, question 21

Is this person a member of a First Nation/Indian band?

If “Yes”, which First Nation/Indian band?

For example, Musqueam Indian Band, Sturgeon Lake First Nation, Atikamekw of Manawan.

- 1: No
- 2: Yes, member of a First Nation/Indian band.
Specify name of First Nation/Indian band.

3.1.2. Survey reference date

January 15, 2017 was used as the APS reference date. This date corresponds approximately to the beginning of data collection for the survey. Age is established based on this reference date.

3.1.3. The 2016 Census frame

The APS sample was selected from the unedited, non-imputed database of the 2016 Census, which is the census database referred to as the Response Database (RDB). Before selecting the sample, survey methodologists developed an editing and imputation strategy to deal with missing values in any of the four census screening questions or in the variables used during stratification (including age and certain education variables), as well as for individuals with certain characteristics which appeared to be inconsistent with being Aboriginal.

The first step in selecting the sample was to include on the survey frame all individuals reporting Aboriginal identity or ancestry who were aged 15 and over as of January 15, 2017.

In the second step, all individuals who were part of the same households as the units in the initial frame were added to the frame. These additional persons were retained on the frame only if their responses to screening questions were missing but the characteristics of the people in the household who had answered the screening questions indicated that they would have had a good chance of having Aboriginal identity and/or ancestry. Hence, an individual with missing screening questions on identity would normally have been imputed as having Aboriginal identity if at least 50% of the members of the same household who completed the identity screening questions had Aboriginal identity. Similarly, an individual with non-response to the ancestry screening question would normally have been imputed as having Aboriginal ancestry if at least 50% of the members of the same household who completed the screening question on ancestry had Aboriginal ancestry.

It was important to stratify the 2017 APS sample by age group (18 to 24 years of age, 25 to 54 years of age, 55 or more years of age). Estimates were targeted for each of these three groups. Although estimates were not specifically targeted for them, individuals aged 15 to 17 years of age as of January 15, 2017 were also included in the sample.

Once the processing was complete, individuals under 15 years of age as of January 15, 2017, those living on reserves or in certain specific communities in Yukon and the NWT and individuals who no longer self-identified as Aboriginal following processing were excluded from the survey frame.

3.2. Sampling design

3.2.1. Domains of estimation

An effective stratification uses domains of estimation. Domains of estimation are groups of units for which estimates are targeted. In the case of the APS, *stratification-specific domains of estimation* were used. These domains of estimation corresponded to geographical regions for which estimates with an “acceptable” level of precision for a particular Aboriginal group (i.e. First Nations, Métis or Inuit) and particular age group were targeted.

An example of a domain of estimation would be Métis in Alberta aged 25 to 54. During stratification, the Métis Aboriginal group was comprised of individuals reporting Métis identity alone to Census question 18 or, for individuals without Aboriginal identity (Aboriginal ancestry-only population), Métis ancestry alone to question 17 (with or without non-Aboriginal ancestry). In reality, Aboriginal ancestry-only individuals were not part of the survey’s target population but were sampled because they had a relatively important chance of reporting identity on the survey as described in section 3.1.1. This is why the term “*stratification-specific domains of estimation*” is used rather than the term “*survey-specific domains of estimation*”.

More precisely, the stratification-specific domains of estimation were created by cross-tabulating the following variables:

- Geography
 - Inuit regions
 - Outside Inuit regions
 - province/territory
 - Atlantic provinces grouped
- Age group
 - 18 to 24 years of age
 - 25 to 54 years of age
 - 55 or more years of age
- Aboriginal group
 - Inuit in Inuit regions
 - Inuit outside Inuit regions (rest of Canada)
 - Aboriginal groups (excluding Inuit) combined for Atlantic Canada (outside Nunatsiavut), Quebec (outside Nunavik), Yukon and NWT (outside Inuvialuit)
 - For Ontario, Manitoba, Saskatchewan, Alberta and British Columbia
 - Status First Nations people living off reserve
 - Non-Status First Nations people living off reserve
 - Métis

Below is how the Aboriginal groups were defined during stratification based on responses to the Census:

- Status First Nations people living off reserve – persons answering First Nations alone to Census question 18 and answering YES to Census question 20
- Non-Status First Nations people living off reserve – persons answering First Nations alone to question 18 and answering NO to question 20 or persons without Aboriginal identity but responding First Nations alone to question 17 (with or without non-Aboriginal ancestry)
- Métis only – persons answering Métis only to question 18 or persons without Aboriginal identity but answering Métis alone to question 17 (with or without non-Aboriginal ancestry)

- Inuit only – persons answering Inuit only to question 18 or persons without Aboriginal identity but answering Inuit alone to question 17 (with or without non-Aboriginal ancestry)
- Multiple Aboriginal group – persons reporting more than one identity to question 18 or persons without Aboriginal identity but reporting more than one Aboriginal ancestry to question 17 (with or without non-Aboriginal ancestry)
- Status Indian or member of a First Nation / Indian band only – persons answering YES to question 20 or to question 21 but NO to question 18.

In Atlantic Canada outside Nunatsiavut, in Quebec outside Nunavik, in Yukon and in the NWT outside Inuvialuit, the number of Métis is generally too small to be able to produce separate estimates for First Nations people and Métis by age group. For this reason, all Aboriginal groups (excluding Inuit) were combined during stratification.

Note that estimates were targeted for Inuit outside Inuit regions nationally; therefore, a domain of estimation was created for this group.

In total, 72 target domains of estimation and 60 supplementary domains of estimation were created, for a total of 132 domains of estimation. Supplementary domains of estimation included domains where there was no plan to produce estimates for the APS but where a particular group should still be represented in the sample. Examples of supplementary domains of estimation included the non-Inuit population living in Inuit regions and the population aged 15 to 17 years old.

For each target domain, the goal was to estimate a characteristic present for at least 10% of individuals in the domain, with a given coefficient of variation (CV). Depending on the domain sizes, CV values were set to 20%, 22.5%, 25% or 33%. The CV is a measure of the precision of the estimate, which is described in section 7.2. The minimum proportion targeted is referred to as “*min-p*”. The ability to achieve the targeted CVs for a given *min-p* value depended on such factors as:

- the size of the population,
- the number of respondents available from the 2016 Census,
- the expected response rate,
- the expected number of false positives (persons reporting Aboriginal identity or ancestry in the census without Aboriginal identity in the APS, a very specific type of respondents outside the target population),
- the sample loss associated with the constraint of selecting a maximum of three persons per household and
- the loss associated with reducing overlap with other surveys.

The following table gives the targeted CVs and *min-p* for each target domain of estimation.

Table 3
Coefficients of variation and min-p values by domain of estimation

Region	Age group		
	18 to 24 (min-p=10%)	25 to 54 (min-p=10%)	55 or more (min-p=10%)
	percentage		
Nunatsiavut - Inuit	25.0	20.0	25.0
Nunavik - Inuit	20.0	20.0	20.0
Inuvialuit - Inuit	25.0	20.0	25.0
Nunavut - Inuit	20.0	20.0	20.0
Inuit outside Nunangat - Inuit	20.0	20.0	20.0
Atlantic outside Nunatsiavut - All ¹	20.0	20.0	20.0
Québec outside Nunavik - All ¹	20.0	20.0	20.0
Ontario			
Status First Nations	25.0	25.0	25.0
Non- Status First Nations	25.0	25.0	25.0
Métis	22.5	22.5	22.5
Manitoba			
Status First Nations	25.0	25.0	25.0
Non- Status First Nations	33.0	25.0	33.0
Métis	22.5	22.5	22.5
Saskatchewan			
Status First Nations	25.0	25.0	25.0
Non- Status First Nations	33.0	25.0	33.0
Métis	22.5	22.5	22.5
Alberta			
Status First Nations	25.0	25.0	25.0
Non- Status First Nations	25.0	25.0	25.0
Métis	22.5	22.5	22.5
British Columbia			
Status First Nations	25.0	25.0	25.0
Non- Status First Nations	25.0	25.0	25.0
Métis	22.5	22.5	22.5
Yukon - All ¹	33.0	25.0	33.0
NWT outside Inuvialuit - All ¹	20.0	20.0	20.0

1. The category All for Atlantic, Québec, Yukon and NWT excludes Inuit individuals, which are included in the "Inuit outside Nunangat" domain for these provinces/territories.

Clearly, any combination of domains will give smaller CVs. Because separate estimates were targeted for Status and Non-Status First Nations people for each province between Ontario and British Columbia, CVs of 25% or 33% were set for these two groups, which should produce CVs around 20% for First Nations as a whole. CVs of 22.5% were targeted for Métis in each province between Ontario and British Columbia.

3.2.2. Stratification

Stratification will produce more precise estimates if units are homogeneous within strata and heterogeneous between strata. In addition, the estimation weights associated with survey respondents should ideally be as close as possible within strata.

Three variables were used to create the 2017 APS strata:

- the region associated with the census form type (2A-L or 2A-R),
- whether the individual self-responded to the census or responded during non-response follow-up (NRFU), and
- the type of Aboriginal identification.

One of the assumptions used in the APS sample allocation method was that the census weights would vary as little as possible within an APS stratum. As previously mentioned, the region associated with the census form type (2A-L or 2A-R) and the collection method created a difference in census weights. In regions where the 2A-L form was administered, a systematic sample of one in four households was drawn. In contrast, in regions where the 2A-R form was used, the form was administered to all households.

The other two factors considered for the APS stratification, the type of census respondent (self-respondent or NRFU) and the type of Aboriginal identification (Aboriginal ancestry-only or Aboriginal identity) are unrelated to

the variability of the census weights. It was important to consider these variables as stratification factors since past studies have shown that individuals who self-respond to the census have different characteristics than those who respond during NRFU and similarly, the Aboriginal identity (ID) group and the Aboriginal ancestry-only (AO) group also have very different characteristics. Incorporating these variables in the stratification will increase the homogeneity of the strata. Moreover, considering the type of Aboriginal identification (AO or ID) will allow the allocation of the sample to reflect the probability of each unit being part of the target population (having Aboriginal identity on the APS). Nationally, based on past survey data, individuals having identity on the census have a probability of about 88% of having identity on the APS, while individuals with ancestry-only on the census have a probability of about 32% of having identity on the APS.

Combining the factors form type (2A-L or 2A-R), type of census respondent (self-respondent or NRFU respondent) and type of Aboriginal identification (AO or ID) gave a maximum of six strata per domain of estimation:

- 2A-L, self-respondent, AO
- 2A-L, self-respondent, ID
- 2A-L, NRFU respondent, AO
- 2A-L, NRFU respondent, ID
- 2A-R, AO
- 2A-R, ID

For certain domains such as Status First Nations, there were only three possible strata because included individuals had Aboriginal identity by definition. Some strata may also have been empty, especially in the supplementary domains. For example, for a specific Inuit region, it was possible that no one classified as Aboriginal ancestry-only had Aboriginal ancestry other than Inuit.

3.2.3. Sampling design and sample allocation

The 2017 APS selected its sample from 2016 Census long-form respondents. Thus, the APS sampling design can be considered a two-phase design where the first phase corresponds to the census long-form sample and the second phase corresponds to the APS sample.

Once the frame had been constructed, it was stratified according to domain of estimation and then substratified by form type (2A-L vs. 2A-R), type of census respondent (self-respondent vs. NRFU respondent) and type of Aboriginal identification (ID vs. AO). A systematic random sample was then selected within each stratum, the frame having been pre-sorted by household and person number. The purpose of this was to ensure proper distribution of the sample geographically within the strata as well as across as many households as possible. This procedure was, however, limited by the fact that members of the same household can be in different strata.

A method for optimal allocation between the substrata of a particular domain was used by taking into account the different types of sample size loss as described in section 3.2.4 as well as the probability of each unit belonging to the target population in a given stratum. This allocation depended in part on the census weights. It should be noted that at the time of the allocation, these weights had not yet been calculated. Preliminary weights were therefore derived solely for the allocation. The definitive weights derived by the methodology team working on the census estimates were used during weighting (see section 6).

Allocation was done in the survey's target domains first. For the non-targeted or supplementary domains (for example, non-Inuit in Inuit regions or persons 15 to 17 years of age), the sample size in a given stratum was calculated using a sampling fraction equal to or less than the sampling fraction of the corresponding stratum in the corresponding target domain. These supplementary domains had to be retained in order to cover the entire target population but did not require a specific sample size since no estimates were to be derived for them. For non-targeted Aboriginal groups, such as non-Inuit in Inuit regions, the same sampling fraction as for Inuit was used. For persons 15 to 17 years of age, half of the sampling fraction of persons 18 years of age or over (i.e. all other age groups combined) was used.

Although the plan was to select the 2017 APS sample in a single wave, supplementary sample was selected at two additional different occasions.

On the first day of collection, it was discovered that the Whapmagoostui reserve in Nunavik had been incorrectly included on the sampling frame and individuals living on reserve had been selected for the APS sample. These individuals were removed from collection, the sampling frame was corrected and all sample size calculations were repeated for Nunavik. This led to an additional sample of 8 individuals being selected in Nunavik to meet sample size requirements.

Midway throughout collection, it was noticed that the proportion of the sample selected among First Nations without Status in Ontario to British Columbia (rate of Aboriginal identity on the survey) was lower than expected, in particular for those who had Aboriginal ancestry-only on the census. Therefore, it was decided to select a top-up sample.

To calculate the size of the top-up sample, the identity rates on the survey were reviewed for First Nations without Status in Ontario to British Columbia based on the results observed during collection. The same allocation method was then used to determine new sample sizes. The difference between this sample size and the size of the initial sample gave the size of the top-up sample. The top-up sample contained a total of 822 additional individuals.

The initial APS sample consisted of 42,815 individuals across Canada. After the two additional samples were selected, the total APS sample consisted of 43,645 individuals.

3.2.4. Sample size adjustment

a) *Probability of belonging to the target population*

Past survey iterations found that approximately 88% of individuals with Aboriginal identity in the census report Aboriginal identity in the APS and approximately 32% of those with ancestry-only in the census report identity in the APS. These probabilities of belonging to the target population were expected to be lower in 2017 than in 2012. Accordingly, the probabilities of belonging to the specified 2017 target population were adjusted downward by multiplying 2012 figures by 95% in the census Aboriginal ancestry-only strata and in the census identity strata.

b) *Response rates*

Response rates from the 2012 APS were used to allocate the sample for the 2017 APS. As a preventive measure, these rates were reduced by multiplying them by an adjustment factor of 90%. Note that increasing the sample size based on an expected response rate is a protective measure to reduce sampling error but does nothing to reduce non-response bias, a particular type of non-sampling error (see section 7.3). Clearly, it is preferable to obtain a higher response rate on a smaller sample size than a lower response rate on a larger sample size.

c) *Households with more than three individuals selected*

Because the sample unit was the individual and not the household, the sample may have included several individuals from a single household. To limit response burden, one of the constraints imposed during collection was to select no more than three individuals per household. As a way to estimate this loss, preliminary samples were selected and the average number of persons who would have been removed from the sample because of this constraint was calculated. The relative loss obtained was multiplied by 1.1 for each combination of domains and strata and was incorporated in the sample size adjustment factor.

d) *Overlap with other surveys*

The APS collection period overlapped with several other Statistics Canada surveys. It is generally understood that an individual contacted for one survey is less likely to agree to participate in that survey if he or she has just been interviewed for another survey. To compensate for this potential loss, the total sample size was increased uniformly by about 5%. Several of the overlapping surveys also cover the territories where the Aboriginal population represents a high portion of the total population. Therefore, there was a higher possibility of overlap between the

different surveys in the territories. Special attention was given to this matter to reduce overlap as much as possible in order to reduce the potential burden on respondents. Overlap in the territories was examined for the [Canadian Community Health Survey](#) (CCHS), the [Labour Force Survey](#) (LFS) and the Survey of Household Spending (SHS) and steps were taken to minimize response burden where possible.

For example, overlap with the CCHS was of particular concern. Some of the APS questions on health are drawn directly from the CCHS, including several highly sensitive questions on mental health. No measures were taken for the CCHS interviews held before and after the initial APS collection period before January 2017 and after June 2017. However, the identifiable overlap in households to be interviewed between January 2017 and June 2017 for the CCHS was eliminated. Households selected for the CCHS between January and June, and which had responded to the census long-form were removed from the APS survey frame. Within each community covered by the CCHS, the weights of the remaining census long-form households were adjusted to represent all of the community's households. Since these households had been removed from the APS survey frame, they therefore had no chance of being selected.

3.3. Sample size and response rate

The final sample of the 2017 APS contained a total of 43,645 units, 405 of which were not sent to collection (see section 6.2.). Table 4 shows the allocation of the 43,240 units sampled by geographical domain and the corresponding response rates.

A response rate is defined as the number of eligible respondents divided by the number of eligible units in the sample.

Persons living outside of Canada or in an institution at the time of the survey or under 15 years of age as of January 15, 2017 are examples of ineligible units for the APS.

Two definitions of eligible units were used for the APS. In the first definition, individuals without Aboriginal identity on the APS were deemed ineligible (in addition to the other types of ineligible units). In the second definition, these individuals were deemed eligible and were included as respondents. These individuals agreed to participate in the survey and completed all of the questions administered to them, that is, the screening questions determining whether or not they have Aboriginal identity.

These two definitions of eligible units and respondents therefore offer two ways to measure the response rate. The first response rate of 70.1% is generally the response rate used during collection. This is a response rate relative to the sampled units falling within the APS identity population. The second response rate of 76.0% is the one used by Methodology and is a response rate which is more relative to all sampled units (with some exclusions). Of course, in both cases, non-responding units cannot always be classified as being eligible or not eligible. Given that the probability of having identity on the APS differs substantially between individuals with Aboriginal identity on the census and those with ancestry-only on the census, the response rate used during collection is highly influenced by the allocation of the sample between these two groups, which is not the case for the response rate used by Methodology. In Inuit regions, because most individuals have identity, the two response rates are quite similar, which is not the case in the other regions. The maximum difference between the two rates occurs in Quebec outside Nunavik. In this region, the Aboriginal ancestry-only population forms a large part of the total Aboriginal population and, according to past APS surveys, the probabilities of having Aboriginal identity on the survey are the lowest in the country regardless of whether the individual has Aboriginal ancestry-only or Aboriginal identity on the census.

Table 4
Sample size and response rate by geographical domain using two definitions

Geographical domain	Total	Eligible 1 ¹	Eligible 2 ²	Respondents 1 ³	Respondents 2 ⁴	Response Rate 1 ⁵	Response Rate 2 ⁶
	number of units				percentage		
Nunatsiavut	715	692	701	618	627	89.3	89.4
Nunavik	1,275	1,210	1,220	1,029	1,039	85.0	85.2
Inuvialuit	1,155	1,131	1,142	909	920	80.4	80.6
Nunavut	1,494	1,437	1,453	1,222	1,238	85.0	85.2
Nunangat (total)	4,639	4,470	4,516	3,778	3,824	84.5	84.7
Atlantic excluding Nunatsiavut	3,384	2,533	3,340	2,011	2,818	79.4	84.4
Quebec excluding Nunavik	4,856	2,644	4,817	1,979	4,152	74.8	86.2
Ontario	6,973	5,126	6,887	3,519	5,280	68.7	76.7
Manitoba	4,837	4,103	4,740	2,597	3,234	63.3	68.2
Saskatchewan	4,429	3,718	4,315	2,270	2,867	61.1	66.4
Alberta	5,732	4,532	5,666	2,949	4,083	65.1	72.1
British Columbia	5,941	4,794	5,870	3,110	4,186	64.9	71.3
Yukon	954	855	934	635	714	74.3	76.4
NWT excluding Inuvialuit	1,495	1,401	1,471	1,098	1,168	78.4	79.4
Rest of Canada (total)	38,601	29,706	38,040	20,168	28,502	67.9	74.9
Canada (total)	43,240	34,176	42,556	23,946	32,326	70.1	76.0

1. Sample size excluding out of scope on the APS (non-Aboriginal individuals are out of scope under this definition).

2. Sample size excluding out of scope on the APS (non-Aboriginal individuals are in scope under this definition).

3. Number of respondents excluding non-Aboriginal individuals on the APS.

4. Number of respondents including non-Aboriginal individuals on the APS.

5. Response rate excluding non-Aboriginal individuals on the APS.

6. Response rate including non-Aboriginal individuals on the APS.

4. Data collection

4.1. Time frame

The 2017 Aboriginal Peoples Survey (APS) was conducted from January 16, 2017 to August 15, 2017. The original collection period was from January 16 to June 30 but it was extended until August 15. As a postcensal survey, it followed the 2016 Census of Population which was held in May 2016.

4.2. Mode of collection

The questions in the 2017 APS were administered in a computer assisted interviewing (CAI) environment. Two computer-assisted interview methods were used for this survey: Computer Assisted Telephone Interviews (CATI) and Computer Assisted Personal Interviews (CAPI). In 2017, CAPI was used for all Inuit regions, the Northwest Territories (excluding parts of Yellowknife) and in some parts of the Yukon. CATI was the primary mode of collection for dwellings in the provinces.

Respondents were interviewed in English or French. For Inuit regions, the questionnaire was translated as a paper copy into Inuktitut and Inuinnaqtun. On-screen help instructions were also available in the Inuit languages. These instructions could include: include/exclude statements, definitions, examples and/or supplementary instructions.

The time required to complete the survey varied from person to person. In some cases, the 2017 APS interview took up to an hour or more to finish, but on average the survey took about 40 minutes to complete.

4.3. Supervision and quality control

All Statistics Canada interviewers were under the supervision of senior interviewers who were responsible for ensuring that interviewers were familiar with the concepts and procedures of the survey to which they were assigned. Senior interviewers were also responsible for periodically monitoring the interviewers.

Interviewers were trained on the survey content and the CAI application. In addition to classroom training, the interviewers completed a series of mock interviews to become familiar with the survey and its concepts and definitions.

4.4. Proxy interviews

For individuals between the ages of 15 and 17, interviews were conducted directly with the youth only with the prior approval of the individual's parent or guardian. Where approval was not provided the data were collected through proxy from the parent or guardian.

The questionnaires were designed to be answered by the selected person him/herself. Proxy interviews were acceptable in some circumstances, such as when the selected respondent was not able to answer due to mental or physical health, due to a language barrier, or because the selected respondent was absent from home for the duration of the survey.

4.5. Communications strategy

In the months leading up to data collection, efforts were made to raise awareness of the 2017 APS and to encourage participation. The communications strategy included the development of an APS brochure and posters. Statistics Canada's team of Aboriginal Liaison Program Advisors served as contacts for the APS in regions across the country. They promoted awareness of the APS and encouraged participation using the materials provided. They met with local and provincial organizations and [Friendship Centres](#) across Canada.

Prior to collection, introductory letters and identity-specific brochures were mailed to selected respondents outlining the purpose of the survey and emphasizing the importance of their participation. These were available in English, French, Inuktitut and Inuinnaqtun. Public Service Announcements were prepared for broadcast over local radio stations in the Northern provinces and territories. Newspaper advertisements were run in communities to coincide with collection plans; therefore, they would be advertised in the weeks prior and during the collection period within that community. They briefly announced the arrival of the survey in the community and explained that a Statistics Canada interviewer could be coming to their door. Social media was a significant tool in raising awareness of the 2017 APS. Facebook posts and tweets were posted every two weeks during the collection period to raise awareness of the survey. Aboriginal organizations were encouraged to repost and share our social media posts.

4.6. Special issues in the field

Interviewers were instructed to make all reasonable attempts to obtain a completed interview with the selected member of the household. Those who refused at first to participate were re-contacted up to two more times to explain the importance of the survey and to encourage their participation. For cases in which the timing of the interviewer's call was inconvenient, an appointment was arranged to call back at a more convenient time. For cases in which no one was home, numerous call backs were made. As the computer-assisted interview questionnaire was developed for two different modes of collection, cases or individuals could be transferred from CATI to CAPI, to improve collection responses. Therefore, non-contacts and difficult cases could be transferred from CATI to CAPI so that interviewers could then contact these individuals on the field.

Special issues arose in relation to data collection for the APS which were addressed with extra coordination in the field and corrective adjustments to survey methods. For instance, the collection of the 2017 APS occurred during the same time period as several other surveys conducted by Statistics Canada, creating a potentially heavy response burden for individuals who might be selected for participation in more than one survey. Careful planning and adjustments to survey design were implemented to address and minimize this type of respondent-burden. Please refer to section 3.2.4 for more detail about the survey overlap.

4.7. Final response rates

Approximately 32,330 respondents completed the 2017 APS including those who reported being non-Aboriginal on the APS for a final response rate of 76%. Excluding 8,380 non-Aboriginal respondents, the total number of Aboriginal respondents included in the 2017 APS database was 24,220 (including the approximately 280 additional respondents from the APS - Nunavut Inuit Supplement– see subsection 6.7).

A detailed description of the sample design used and response rates obtained is provided in chapter 3 of this guide. Table 4 in section 3.3 provides the final response rates and sample sizes for each of the geographic domains covered by the survey (e.g. provinces, territories).

5. Data processing

5.1. Data capture

Responses to survey questions were captured directly by the interviewer at the time of the interview using a computerized questionnaire. A computerized questionnaire reduces processing time and costs associated with data entry, transcription errors and it reduces data transmission.

Some editing of data was done directly at the time of the interview. Specifically, where a particular response appeared to be inconsistent with previous answers or outside of expected values, the interviewer was prompted, through message screens on the computer, to confirm answers with the respondent and, if needed, to modify the information.

5.2. Social survey processing steps

Data processing involves a series of steps to convert the electronic questionnaire responses from their initial raw format to a high-quality, user-friendly database involving a comprehensive set of variables for analysis. A series of data operations are executed to clean files of inadvertent errors, rigorously edit the data for consistency, code open-ended questions, create useful variables for data analysis, and finally to systematize and document the variables for ease of analytical usage.

The 2017 APS used a set of social survey processing tools developed at Statistics Canada called the “Social Survey Processing Environment” (SSPE). The SSPE involves SAS software programs, custom applications and manual processes for performing the following systematic steps:

Processing steps:

- Receipt of raw data
- Clean up
- Recodes
- Flows
- Coding
- Edits and imputations
- Derived variables
- Creation of final processing file
- Creation of dissemination files

5.3. Receipt of raw data and record clean up

Following the receipt of raw data from the electronic questionnaire applications, a number of preliminary cleaning procedures were implemented for the 2017 APS at the level of individual records. These included the removal of all personal identifier information from the files, such as names and addresses, as part of a rigorous set of ongoing mechanisms for protecting the confidentiality of respondents. Duplicate records were resolved at this stage. Also, part of clean up procedures was the review of all respondent records to ensure each respondent was “in-scope” and had a sufficiently completed questionnaire. Note that the criteria to determine whether or not a respondent was in scope was applied before any edit or imputation was done. Specific criteria for determining who would be a final APS respondent and who would not be a final APS respondent are provided below.

5.3.1. Definition of a respondent

1. To be “in scope”, respondents must have been at least 15 years of age as of January 15, 2017 and met a minimum of one Aboriginal identity criterion (see section 2.2 for complete criteria).

2. To have a “complete” questionnaire, respondents aged 15 and over must have provided valid responses (i.e. not “Don’t know” or “Refused”) to specified key questions in the area of labour **and** either the areas of health or education.

Those that did not meet the above criteria were removed from the database. As per the rules above, all “partial” respondents, who were in-scope according to part 1 of the definition but who did not fulfill the content-completion requirements in part 2, were among those removed from the final database. Please refer to section 6.4 of this document for more information on partial respondents.

5.4. Variable recodes and multiple response questions

This stage of processing involved changes at the level of individual variables. Variables could be dropped, recoded, re-sized or left as is. Formatting changes were intended to facilitate processing as well as analysis of the data by end-users. One such change was the conversion of multiple-response questions (“Mark-all-that-apply” questions) to corresponding sets of single-response variables which are easier to use. For each response category associated with the original question, a variable was created with YES/NO response values. An example is provided below.

Original multiple-response question:

LW_Q05 - How did you go about looking for work?

1. Contacted potential employer(s) directly
2. Searched the Internet
3. Through friend(s)/relative(s)
4. Placed or answered newspaper ad(s)
5. Contacted public employment agency (Service Canada Centre/Canada Employment Centre, provincial employment centre)
6. Community bulletin boards/radio
7. Contacted Aboriginal organization or Aboriginal employment agency
8. Through co-worker(s)
9. Was referred by another employer
10. Was referred by a union
11. Other - Specify

DK, RF

Final variables in single-response YES/NO format:

LW_Q05A - How did you go about looking for work?

- Contacted potential employer(s) directly
 1. Yes
 2. No

DK, RF

LW_Q05B - How did you go about looking for work?

- Searched the Internet
 1. Yes
 2. No

DK, RF

LW_Q05C - How did you go about looking for work?

- Through friend(s)/relative(s)

1. Yes
2. No

DK, RF

...

LW_Q05K - How did you go about looking for work?

- Other - Specify

1. Yes
2. No

DK, RF

5.5. Flows: response paths, valid skips and question non-response

Another set of data processing procedures for the 2017 APS was the verification of questionnaire flows or skip patterns. All response paths and skip patterns built into the questionnaire were verified to ensure that the universe or “target population” for each question was accurately captured during processing. Special attention was paid to distinctions between valid skips and non-response. These concepts are explained below in order to assist users to better understand question universes as well as statistical outputs for APS survey variables.

- | | |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Response | An answer directly relevant to the content of the question that can be categorized into pre-existing answer categories, including “Other-specify”. |
| Valid skip | Indicates that the question was skipped because it did not apply to the respondent’s situation, as determined by valid answers to an earlier question. In such cases, the respondent is not considered to be part of the target population or universe for that question. As noted below, where a question was skipped due to an undetermined path (that is, a “Don’t know” or “Refusal” to a previous question caused the skip), the respondent is coded to “Not stated” for that question. |
| Don’t know | The respondent was unable to provide a response for one or more reasons (due to lack of recall, or because they were responding for someone else, for example). |
| Refusal | The respondent refused to respond, perhaps due to the sensitivity of the question. |
| Not stated | This indicates that the question response is missing and there is an undetermined path for the respondent, such as when a respondent did not answer the previous filter question or where an inconsistency was found in a series of responses. |

Special codes have been designated to each of these types of responses to facilitate user recognition and data analysis. For instance, “valid skip” codes are set to “6” as the last digit, with any preceding digits set to “9” (for example, code would be “996” for a 3 digit variable). All “Don’t know” responses end in “7”, with any preceding digits set to “9” (for example, “997”). Refusals end in “8”, with any preceding digits set to “9” (for example, “998”); and “Not stated” values end in 9, with any preceding digits set to “9” also (for example, “999”). Further, those who chose not to share their census data will have distinct reserve codes for their census records. These reserve codes are different for each variable, depending on how many categories the variable has and the length of the variable.

5.6. Coding

5.6.1. “Other-specify” items

Data processing also includes the coding of “Other-specify” items, also referred to as “write-in responses”. For most questions on the APS questionnaire, pre-coded answer categories were supplied and the interviewers were trained to assign a respondent’s answers to the appropriate category. However, in the event that a respondent’s answer could not be easily assigned to an existing category, many questions also allowed the interviewer to enter a long-answer text response in the “Other-specify” category.

All questions with “Other-specify” categories were closely examined during processing. Based on a qualitative review of the types of text responses given, coding guidelines were developed for each question. Based on these coding guidelines, many of the long answers provided were re-coded back into one of the pre-existing listed categories. Responses that were unique and different from existing categories were kept as “Other”. For some questions, one or more new categories were created when there were sufficient numbers of responses to warrant them. In the case of questions where “Other-specify” responses constituted less than roughly 5% of overall responses to the question, coding was not performed and responses were left in “Other”.

Approximately 18,000 responses across 31 questionnaire items were recorded under “Other-specify” and reviewed for coding. These will be taken into account when refining the answer categories for future cycles of the survey.

5.6.2. Open-ended questions and standard classifications

A few questions on the 2017 APS questionnaire were recorded by interviewers in a completely open-ended format. These included questions related to the respondent’s occupation and industry of work as well as their major field of postsecondary study, where applicable. These responses were coded using a combination of automated and interactive coding procedures. Standardized classification systems were used to code these responses. Appendix C provides details of these classifications.

A standardized classification was also used to code Aboriginal languages that respondents spoke or understood as well as the first language learned in childhood. For languages, interviewers had been provided a comprehensive drop-down menu of languages to choose from, but write-in responses were also captured as needed. Overall, 67 Aboriginal language categories were used to code APS language data.

5.7. Edit and imputation

After the coding stage of processing, a series of customized edits were performed on the data. These consisted of validity checks within and across variables to identify gaps, inconsistencies, extreme outliers and other problems in the data. To resolve the problematic data identified by the edits, corrections were performed based on logical edit rules. In some cases, corresponding data were taken from the respondent’s answers to the census. This is referred to as imputation.

An example of a validity check within a single question is the multiple jobs variable relating to the number of multiple jobs that a respondent had in the last week, which allowed for an interviewer to record a minimum of 2 jobs and a maximum of 20 jobs. To remove outlier responses that were suspected of being invalid, an edit was built to ensure that the reported numbers of multiple jobs did not exceed an upper limit of 20.

Additionally, many consistency edits across questions were performed to avoid any contradictions. For example, a person who had not reported ever having attended a specific postsecondary educational institution such as a university, a trade school, a college, CEGEP or other non-university institution, and then subsequently reported currently working toward a certificate, diploma or degree from one of these institutions, was assumed to have attended that type of institution. The response to the earlier question was changed from a “NO” to a “YES” for the specific type of institution where the edit was required.

For the 2017 APS, a series of important imputations was conducted in relation to Aboriginal identity classifications. These imputations were the following:

- a) First, those with missing data for questions ID_Q25 on Status Indian or ID_Q30 on membership in a First Nation or Indian band were imputed values based on their responses to the equivalent questions in the census;
- b) Next, those with missing data for question ID_Q05 on Aboriginal self-identification would not have been asked the next question ID_Q10 on Aboriginal identity group. Due to the APS respondent definition, these respondents would have had to identify as either a Status Indian in ID_Q25 or a member of a First Nation or Indian band in ID_Q30 in order to be considered an APS respondent. If these respondents had self-identified as Aboriginal persons on the census, then they were imputed to have Aboriginal identity in question ID_Q05 and their Aboriginal identity group(s) for question ID_Q10 were imputed from their identity group(s) on the census;
- c) Next, those with missing data for question ID_Q10 who nevertheless identified with any of the Aboriginal identity groups on the census were imputed values for ID_Q10 based on their census identity group(s);
- d) Next, respondents who self-identified as Aboriginal persons in ID_Q05 but had missing data for ID_Q10, did not identify as Status Indians nor members of a First Nation or Indian band, and did not self-identify as Aboriginal persons on the census but identified as having Aboriginal ancestry on the census, had values for ID_Q10 imputed from their Aboriginal ancestry group on the census;
- e) Finally, those who had missing data for question ID_Q05 or question ID_Q10 but who identified as being Status Indians in ID_Q25 or members of a First Nation or Indian band in ID_Q30, and did not self-identify as Aboriginal persons on the census, were imputed as not having Aboriginal identity in ID_Q05. These persons are still considered to be APS respondents due to their affirmative response(s) in ID_Q25 and/or ID_Q30 and the APS respondent definition, and in the derived variable for Aboriginal identity they are grouped as “Aboriginal responses not included elsewhere”.

Finally, although all of these edits across topics were performed systematically using computer programmed edits, there were some cases for which very complex combinations of information were reviewed and corrected manually.

5.8. Derived variables and Census linkage

In order to facilitate more in-depth analysis of the rich APS dataset, approximately 240 derived variables were created by combining items on the questionnaire. Derived variables (DVs) were created across all major content domains. In addition, approximately 230 variables from the 2016 Census were linked to the final 2017 APS analytical file.

Some simple DVs involved the collapsing of categories into broader categories. In other cases, two or more variables were combined to create a new or more complex variable which would be useful for data analysts. Some of the DVs were based on linked variables from the census, including multiple census geographies and Inuit regions. Aboriginal ancestry was also taken from the census since it is not measured directly by the 2017 APS. If a respondent refuses census linkage then their data are suppressed in census and census-based variables.

For most DVs, there is a residual category labelled “Not stated” for when the responses to the DV source questions do not meet the conditions to place a respondent in any of the valid categories for the DV. In many, but not all cases, a respondent is included in the “Not stated” category if any part of the equation was not answered (that is, if any question used in the DV had been coded to “Don’t know”, “Refused” or “Not stated”).

Most DV names have a “D” in the first character position of the name. One exception is the Geography DVs, since they reflect the corresponding census variable name. The other exceptions are the DVs indicating levels 1, 2 and 3 of the North American Industry Classification System (NAICS) Canada 2017, based on responses to the APS industry questions, and levels 1, 2, 3 and 4 of the National Occupation Classification (NOC) 2016, based on responses to the APS Occupation questions. For all linked census variables, the census variable name was preserved as much as possible on the APS database. However, some census variables were required to be renamed since APS variable names are restricted to eight characters whereas some census variable names

exceed this limit. In these cases, there is a note in the Data Dictionary to indicate the original Census variable name that it was shortened from.

The 2017 APS Data Dictionary identifies in detail which variables were derived and indicates the source variables from which the DVs were derived. Highlights of DVs are listed by theme in Appendix A along with other survey indicators. A complete list of linked census variables and their accompanying notes are provided in the 2017 APS Data Dictionary which accompanies the APS analytical file.

5.9. Creation of final data files and Data Dictionary (codebook)

Four final data files are created in data processing:

- Final processing file,
- Analytical file for use in research data centres (RDCs),
- PUMF, and
- Inuit share files, as per data sharing agreement with the four Inuit regions.

The final processing file is an in-house file that includes a number of temporary variables used exclusively for processing purposes. The analytical file, PUMF and the Inuit share files are dissemination files which are processed further for release purposes. Dissemination files are scheduled for distribution at various points in time following the APS release day, November 26, 2018.

The analytical file is distributed in [RDCs](#) across Canada but can only be accessed by researchers who fulfill certain requirements. The analytical file is also used at Statistics Canada to produce data tables in response to client requests. The PUMF is constructed for wider public distribution. The Inuit share files are produced in accordance with data sharing agreements with the Inuit regions: Nunatsiavut, Nunavik, Nunavut and the Inuvialuit region. On all of these dissemination files, many steps are taken to ensure respondent confidentiality.

In order to transform the final, cleaned processing file to a final analytical file for researchers, a number of steps were taken. First, several measures were taken for the enhanced protection of respondent confidentiality. Next, person-level weights were added to the file. Finally, all temporary variables or variables used exclusively for processing purposes were removed from the final processing file.

Accompanying the 2017 APS analytical file is the record layout, SAS, SPSS and Stata syntax to load the file, and metadata in the form of a Data Dictionary that describes each variable and provides weighted and unweighted frequency counts.

In order to ensure the non-disclosure of confidential information, the level of detail of the PUMF is not as exhaustive as that of the analytical files kept by Statistics Canada. Actions are taken to protect against the recognition of respondents with potentially identifiable combinations of characteristics. These protective actions include the restriction of geographies included in the file, adjustments to survey weights, review of overlaps with other PUMFs being published, exclusion of variables, grouping of categories for some variables, capping of some extreme numerical values, as well as identification of unique records at risk and rare occurrences.

6. Weighting

In a sample survey each selected person represents not only themselves but also others who were not sampled. Consequently, a weight is associated with each person selected to indicate the number of people they represent. This weight must be used for all estimates. For example, in a simple random sample of 2% of the population, each person represents 50 people in the population. The initial weight is then adjusted for such things as non-response and gaps between the characteristics of the sample and the known totals for the target population (post-stratification). The weighting process for the Aboriginal Peoples Survey (APS) consists of seven steps.

In this chapter, the term “census” will be used to refer to the long-form census questionnaire.

6.1. Initial weights

The initial weight of a given unit in an APS stratum corresponds to the product of two components: the inverse of the stratum sampling fraction and the corrected census weight for the unit in question. The stratum sampling fraction is calculated as being the number of people selected for the APS in each stratum divided by the total number of available census respondents for that stratum. The census weight used is the census survey weight corrected for non-response and for overlap with other surveys (see subsection 3.2.4).

6.2. Adjustment for units not sent to collection

Some sampled units were not sent to collection for various reasons. Among these units were:

1. units for which three members of the same household had already been selected;
2. units selected for the top-up sample (see subsection 3.2.3) that were in a household in which some members had already been selected (due to operational requirements, individuals in these households who were selected for the top-up sample were not eligible for collection);
3. units without a name or date of birth;
4. duplicates identified by overlap of names, birthdates and addresses following sample selection; and
5. units from the Whapmagoostui Reserve selected by mistake, as mentioned in subsection 3.2.3.

In the first, second and third cases, a ratio adjustment was made by region, Aboriginal group and age group. The weight of units removed in the first, second and third cases were set to zero and the weights of the remaining units were increased proportionally (ratio adjustment) within a region, Aboriginal group and age group. The weights of duplicates and units from the Whapmagoostui Reserve were simply set to zero. A total of 405 units were not sent to collection.

6.3. Non-response adjustment

Two adjustments were made for two types of non-response: selected people with whom no contact was made (non-contact: 3,994 people) and people contacted who did not (or could not) provide information about themselves (non-response with contact: 5,874 people). The second type of non-response is mainly associated with refusals or “disguised” refusals. An example of a disguised refusal might be a person contacted several times who continually postpones the interview. Two adjustments were made since the characteristics of the people who could not be reached are often different from those who refused to respond when contacted.

Weights were first adjusted for non-contact cases then for non-response with contact. In the rest of the document, the term “non-response” will be used for both types of non-response.

Each non-response adjustment was done in three steps. In the first step, a logistic regression model was used to predict the response probability (probability of getting a response) for each unit (both responding and non-responding units) from a series of explanatory variables. These explanatory variables are divided into two groups. The first group consists of the “person” or “household” characteristics from the 2016 Census for the person selected (e.g., Aboriginal group of the person selected, number of people in the household of the person selected, etc.). The second group of explanatory variables consists of collection variables called “paradata”. The number of attempts made to contact a person or whether tracing was required are examples of paradata. The paradata were found to be good predictors of response or non-response since many of these variables measure the effort to contact a person or to obtain a response from a contacted person. For example, individuals for whom many contact attempts were required to establish initial contact can be considered to be very similar to individuals for whom no contact was made despite numerous attempts.

In the second step, respondents and non-respondents with similar response probabilities were divided into adjustment classes using cluster analysis. A simulation was carried out to determine approximately the optimal number of classes and the minimum number of respondents per class. The response rate was calculated for each class based on the number of respondents and non-respondents in the class. The calculated response rate was then weighted using the weights from the previous adjustment step.

In the third step, the weights of the responding units within each class were adjusted using the inverse of the weighted response rate in that class. The weights of the non-responding units were set to zero.

It is important to note that at this stage, all units considered to be out-of-scope were classified as respondents. In fact, all the information required to determine that they were out-of-scope was obtained from these individuals. The weights of these units were set to zero in the second post-stratification (see section 6.5) and these units were removed from the analytical file. Retaining them until that step will make it possible to internally produce weighted estimates of different groups of units outside the target population. This will be very useful, for example, in estimating certain parameters at the time of the next survey.

6.4. Adjustment for partial respondents

Partial respondents are individuals who reported Aboriginal identity in the APS but who did not provide sufficient information to meet the definition of respondent, as defined in chapter 5. There were 362 partial respondents, which should have little impact on the estimates.

A ratio adjustment was carried out by region, Aboriginal group and age group, as measured in the 2016 Census. Only the weights of respondents with Aboriginal identity were increased to reflect the removal of partial respondents (the weights of out-of-scope units, including non-Aboriginal individuals on the APS, were not adjusted), knowing that these partial respondents had reported Aboriginal identity. The weights of partial respondents were then set to zero.

6.5. Post-stratification

Post-stratification ensures that the sum of the adjusted weights for the responding units corresponds to the census estimates, according to different groups called post-strata.

Two separate post-stratifications were carried out for the APS. The first one aimed to adjust the weights to the Aboriginal identity or ancestry population estimated by the census, by post-stratum, using the identity and ancestry variables from the RDB (see subsection 3.1.3) at the time of sample selection (and not the variables measured by the APS, which were the subject of the second post-stratification). The post-strata were defined from certain combinations of region, Aboriginal type (identity or ancestry only), Aboriginal group (Status First Nations, Non-status First Nations, Métis, Inuit, other) and age group. The distinction between Status and Non-status First Nations was used only for the provinces between Ontario and British Columbia. The census estimates on which the APS weights were adjusted correspond exactly to the APS coverage, i.e., the Aboriginal identity or ancestry-only population aged 15 and over as of January 15, 2017, excluding people living on reserve and some First Nations communities in the territories.

The weights were adjusted according to the ratio of the weighted census estimate to the weighted APS sample estimate for each post-stratum. This ensures that the sample did not underrepresent or overrepresent certain combinations of Aboriginal groups, regions and age groups from the census.

Given that the responses to the questions defining the Aboriginal identity population (see subsection 3.1.1) could differ between the APS and the census, a second post-stratification was carried out. It should be noted that the APS questions defining the Aboriginal identity population were slightly different from those asked in the census (see Table 1 in section 2 and subsection 3.1.1). The second post-stratification ensured that the Aboriginal identity population—estimated from the APS questions—corresponded to the Aboriginal identity population defined according to the census within each post-stratum. Unlike the first post-stratification, the second one was not a classical post-stratification, in which weights were readjusted to take account of underrepresentation or overrepresentation of certain groups in the sample. In fact, the answers to the questions on Aboriginal identity in the APS may have differed from those obtained in the census for a variety of reasons (see section 8.1). Instead, this post-stratification ensured that the APS Aboriginal identity population counts were the same as those obtained from the census. After this step, only respondents with an Aboriginal identity according to the APS had positive weights. The weights of out-of-scope units had been set to zero.

The second post-strata were formed from specific combinations of region, Aboriginal identity group (Status First Nations, Non-status First Nations, Métis, Inuit) and age group. Since it was impossible to preserve the multiple identity counts between the APS and the census estimates (counts too small or discrepancies too large), individuals who reported an identity of First Nations and Métis, First Nations and Inuit, or First Nations, Métis and Inuit were combined with individuals who reported a First Nations identity during the second post-stratification. Individuals who reported a Métis and Inuit identity were combined with Métis. Moreover, unlike the 2012 APS, the 2017 APS did not impute respondents from the group “Status Indian or member of a First Nation/Indian band only” as being part of the First Nations group. Individuals reporting being a Status Indian or member of a First Nation/Indian band but not self-reporting as Aboriginal were kept as a separate fourth identity group (Aboriginal responses not included elsewhere), ensuring consistency with census concepts. However, during the second post-stratification, individuals in this group were combined with the First Nations group. In fact, there were few units in the “Aboriginal responses not included elsewhere” group and including them in the First Nations group will improve comparability between the 2017 APS estimates and the 2012 APS estimates.

6.6. Adjustment for extreme weights – Sigma gap method

Once the above weight adjustments were completed, some weights could have very large values compared to others. This could have created problems during estimation if, in addition to very large weights, these units also had very different characteristics from the units with smaller weights. A method referred to as the “sigma gap” method was used to detect extreme weights within each post-stratum, the post-strata being closely linked to the survey’s domains of estimation (see subsection 3.2.1). Bernier and Nobrega (1998)² describe one application of the sigma gap method. The sigma gap method used here was intended to detect extreme weights by calculating the difference between two successive weights after being sorted in descending order. This difference was compared to $n \times \text{standard deviation}$ of the weights within each post-stratum. If the difference exceeded $n \times \text{standard deviation}$ of the weights, the largest of the two weights was declared extreme. Once a weight was declared extreme, all others in its post-stratum that were larger than it were automatically considered to be extreme as well. Those weights were then truncated to the value of the first weight that was not extreme. The mass of the truncated weights was then redistributed within the post-strata using a ratio adjustment. After examining a number of scenarios, a value of 2.5 was finally selected for n . This particular value of n identified an acceptable number of extreme weights. In fact, most weights that would have been intuitively identified as extreme following a manual review were identified by applying the sigma gap method with a value of 2.5 for n . As well, a small number of weights per post-stratum were identified as extreme, thereby leaving the vast majority of the weights calculated in the previous steps unchanged.

6.7. Addition of units not enrolled under the Nunavut Agreement

In the last weighting step, a total of 274 responding units were added to the APS sample. These units were selected for the APS - Nunavut Inuit Supplement and were ultimately determined to be out-of-scope for that survey because they were not enrolled under the Nunavut Agreement. Consequently, these units were excluded from the APS - Nunavut Inuit Supplement sample. Nonetheless, as they had completed the APS questionnaire, it would have been unfortunate to lose their information. Therefore, these 274 units were added to the APS sample with a weight of one. The APS sample units in Nunavut that were not enrolled under the Nunavut Agreement were then reweighted within the second post-stratification adjustment groups in order to maintain the previously achieved control totals.

7. Data quality

7.1. Overview of data quality evaluation

The objective of the 2017 Aboriginal Peoples Survey (APS) is to produce quality estimates in the areas of employment, health, education and other core indicators for First Nations people living off reserve, Métis and Inuit aged 15 years and over.

Sections 7.2 and 7.3, below, explain the two types of errors that occur in surveys: sampling and non-sampling errors. Each type of error is evaluated in the context of the 2017 APS. Sampling error is the difference between

2. Bernier, J. and K. Nobrega. 1998. Outlier detection in asymmetric samples: A comparison of an inter-quartile range method and a variation of a sigma-gap method. Statistical Society of Canada Annual Meeting, June 1998.

the data obtained from the survey sample and the data that would have resulted from a complete census of the entire population taken under similar conditions. Thus, sampling error can be described as differences arising from sample-to-sample variability. Non-sampling errors are all other errors that are unrelated to sampling. Non-sampling errors can occur at any stage of the survey process, and include non-response for the survey as well as errors introduced during data collection or computer processing. Respondents may have made errors in their responses, trying to recall facts from the past, for example, or when a proxy stands in for a respondent. A response may have been incorrectly captured due to interviewer fatigue or a computer malfunctioning. An error may have been made in programming when the data were being processed or totaled. These are all examples of non-sampling errors.

This chapter describes the various measures adopted to prevent errors from occurring wherever possible and to adjust for any errors found throughout the different stages of the APS. Areas of caution for interpreting APS data are noted.

7.2. Sampling errors and bootstrap method

The estimates that can be derived from the 2017 APS are based on a sample of individuals. Somewhat different estimates might be obtained if a complete census had been taken using the same questionnaires, interviewers, supervisors, processing methods, etc. as those actually used. The difference between an estimate obtained from the sample and the one resulting from a complete count taken under similar conditions is called the “sampling error” of the estimate.

In order to provide estimates of sampling error for statistics produced in the APS, a particular type of bootstrap method (the bootstrap being itself a specific resampling method), was developed. Several bootstrap methods exist in the literature but none of them was appropriate for the APS sampling design. The particularities of the APS design that made the estimation of sampling errors difficult were the following:

- Two-phase sampling design in which households (or dwellings) were selected in the first phase and individuals in the second phase (section 3.2.3);
- The sampling fraction of the first phase sample (census long form sample) was non negligible (about one-fourth in the 2A-L regions) and the APS sampling fraction was generally relatively high in most strata;
- The APS strata (combinations of domains of estimation, 2A-L or 2A-R form type, census self-respondent vs. NRFU respondent, identity vs. ancestry-only) were not nested within the census strata (collection units);
- The method used had to be flexible enough to produce standard statistics such as proportions, totals, means and ratios but also more sophisticated statistics, including percentiles, logistic regression coefficients, etc.

Several bootstrap methods exist in the literature for single-phase sampling and for multi-stage sampling. The most common one is called the “with-replacement bootstrap” and consists of selecting M with-replacement subsamples from the main sample and producing estimates for each subsample. The bootstrap variance estimate is then derived as a function of the squared differences between estimates coming from each of the M bootstrap subsamples and the estimate coming from the survey sample.

Variance calculation is greatly simplified through the use of bootstrap weights. For each subsample (bootstrap replication), the initial sampling weight first has to be adjusted for bootstrap subsampling, which produces what is called “initial bootstrap weights”. Since each bootstrap sample is drawn by selecting the units with replacement, a unit can appear several times in a particular bootstrap sample. It can be shown that the bootstrap weights are a function of the initial sampling weight of the observation multiplied by what is called “the multiplicity” of the unit in the bootstrap sample, which is the number of times the unit is selected in the bootstrap sample. The multiplicity of a unit in the bootstrap sample is a random variable following what is called a “multinomial distribution”. Hence, the bootstrap weights can be seen as the product of the initial sampling weights by a random adjustment factor (in this case, a function of the multiplicity of the unit). Once initial bootstrap weights have been derived, all weight adjustments applied on the initial sampling weights are applied to the initial bootstrap weights to obtain the final bootstrap weights, which will capture the variance associated with not only the particular sampling design but also the variance associated to all weight adjustments applied to the full sample to derive the final weights.

For the 2006 APS, a general bootstrap method for two-phase sampling³ was developed. In 2006, the first phase of sampling corresponded to the 2006 Census long-form sample while the 2006 APS corresponded to the second phase sample. As mentioned earlier, bootstrap weights can be seen as the product of the initial sampling weight by a random adjustment factor. This is the idea behind the general bootstrap methodology used in 2006. In the case of that two-phase sample, the variance was decomposed into two components, each one associated to a phase of sampling. The general two-phase bootstrap methodology produced a random adjustment factor for each phase of sampling. In the case of the 2006 APS, the initial bootstrap weight of a unit was the product of the initial sampling weight by these two random adjustment factors.

For the 2012 APS, this general bootstrap method was adapted to account for the National Household Survey (NHS) sampling design which itself included two phases: the initial sample of approximately 1 in 3 dwellings as the first phase and the sub-sample of non-respondents on which non-response follow-up (NRFU) was conducted as the second phase. A more detailed description of the NHS sampling design is found in [chapter 3](#) of the [National Household Survey User Guide](#). In the 2012 APS, for the purpose of calculating variances only, NRFU respondents were considered a third phase sample. These three phases of the NHS were then combined into a single phase and the general two-phase bootstrap methodology (one NHS phase and one APS phase) was applied. More details can be found in the [Aboriginal Peoples Survey, 2012: Concepts and Methods Guide](#).

With the return of the 2016 Census long form, the 2017 APS could have used the general bootstrap method as was done in 2006. The first phase would have consisted of the census long-form sample while the second phase would have consisted of the 2017 APS sample. However, to increase the precision of the variance estimation, a modified version of the 2012 approach was utilized. **For the purpose of calculating variances only**, the 2016 Census was seen to have two phases: the initial sample of approximately 1 in 4 dwellings as the first phase and census respondents as the second phase. Although the final response rate was quite high for the 2016 Census (97.8% for the long form), this second phase ensures that the variance calculation takes into account the non-response that occurred.

For the 2017 APS, the two phases of the census were combined into a single phase using the same methodology as in 2012. The general two-phase bootstrap methodology (one census phase and one APS phase) was then applied, which involved calculating two sets of random adjustment factors; therefore, one set for each phase.

The presence of these two sets of random adjustment factors had a major advantage. The first set could be used for estimates based on the first phase only, that is, estimates based on the census long-form sample. These estimates were used when the weights were adjusted based on the census totals at the time of post-stratification (section 6.5). This produced variable census totals for each bootstrap sample and reflected the fact that census totals were based on a sample and not on known, fixed totals.

For the APS, 1000 sets of bootstrap weights were generated using the method described above. The method used is slightly biased upward in the sense that it slightly overestimates the variance. However, the amount of overestimation was found to be negligible for the APS. The method can also lead to negative bootstrap weights. To overcome this problem, a transformation was done on the bootstrap weights that reduced their variability. Therefore, the variance calculated on these transformed bootstrap weights has to be multiplied by a factor that is a function of a certain parameter, called phi. The value of the parameter corresponds to the smallest integer that makes all bootstrap weights positive. For the APS, this parameter has a value of 4. The variances calculated on the transformed bootstrap weights have to be multiplied by $4^2 = 16$. In addition, the CVs obtained (square root of the variance divided by the estimate itself) have to be multiplied by 4. However, most software which produce sampling error estimates from bootstrap weights have an option to specify this adjustment factor such that the correct variance estimate is obtained without the need of an extra step to multiply by the constant.

3. Langlet, É., Beaumont, J.-F., and Lavallée, P. (2008). *Bootstrap Methods for Two-Phase Sampling Applicable to Postcensal Surveys*. Paper presented at Statistics Canada's Advisory Committee on Statistical Methods, May 2008, Ottawa.

It is extremely important to use the appropriate multiplicative factor for any estimate of sampling error such as variance, standard error or CV. Omission of this factor would lead to erroneous results and conclusions. This factor is often specified as the “Fay adjustment factor” in software which produces sampling error estimates from bootstrap weights.

Note that if C is the variance multiplicative factor, some software use the parameter k instead where $k = 1 - 1/\sqrt{C}$. In our case, since $C=16$, then $k=0.75$. For examples of procedures using the Fay adjustment factor, see the Aboriginal Peoples Survey, 2017: User’s Guide to the Analytical File.

The sampling error measure used for the APS is the CV of the estimate, which is the standard error of the estimate divided by the estimate itself. When the CV of an estimate is less than or equal to 16.6%, the estimate can be used without restriction. In this survey, when the CV of an estimate is greater than 16.6% but smaller or equal to 33.3%, the estimate will be accompanied by the letter “E” to indicate that the data should be used with caution. When the CV of an estimate is greater than 33.3%, or if an estimate is based on less than 10 units, the cell estimate will be replaced by the letter “F” to indicate that the data is suppressed for reasons of reliability.

7.3. Non-sampling errors

Besides sampling, a number of factors at almost every stage of a survey can cause errors in survey results. Non-sampling errors arise primarily from the following sources: non-response, coverage, measurement and processing. For each of these areas, the following sections discuss the various measures used to minimize and correct error. For example, measurement errors may be due to respondents misunderstanding the questions and answering them inaccurately; also responses may be entered incorrectly during data capture and errors may be introduced in the processing and tabulation of data. Using Computer Assisted Interviewing (CAI) in 2017 reduces the level of non-sampling error because CAI allows for the direct capture of responses, automated flows between questions, built in edits which eliminate inconsistencies and outliers, etc. (for more information on CAI, please refer to section 2.1).

Over a large number of observations, randomly occurring errors will have little effect on the estimates from the survey. However, errors occurring systematically will contribute to biases in the survey estimates. Thus, much time and effort was devoted to reduce non-sampling errors in the survey as described in the following sections.

7.3.1. Non-response errors

Non-response errors result from a failure to collect complete information on all units in the selected sample. Non-response produces errors in the survey estimates in two ways. First, non-respondents often have different characteristics from respondents, which can result in biased survey estimates if non-response is not corrected properly. The larger the non-response rate, the larger the risk of potential bias will be. Second, having a larger number of non-respondents reduces the effective size of the sample. As a result, the precision of the estimates decreases (the sampling error on the estimates will increase). This second aspect can be overcome by selecting a larger sample size initially. However, this will not reduce the potential bias in the estimates.

There are many types of non-response. One form of non-response is item non-response (or partial non-response), where the respondent does not respond to one or more questions, but has completed a significant portion of the overall questionnaire. Item non-response can be due to difficulty understanding a particular question.

Generally, the extent of item non-response was relatively small in the APS. Extensive qualitative reviews and testing of questionnaire was done prior to the survey, hence reducing the extent of item non-response. A response to key pre-defined questions was required before a case was classified as “respondent” as described in section 5.3.1. There were some cases, however, where a large proportion of responses to key questions were missing. These cases were eliminated from the database of respondents (did not satisfy definition of respondent) and were treated during weighting as a special case of total non-response (see section 6.4). Finally, there is total non-response when the person selected to participate in the survey could not be contacted or did not participate once contacted.

Weights of respondents were inflated in order to compensate for those who did not respond as described in section 6.3.

To mitigate the number of non-response cases, many initiatives were undertaken. In the months leading up to the survey, a comprehensive communications strategy was implemented to encourage participation as described in section 4. In addition, in-depth interviewer training was conducted. Interviewer training in conjunction with detailed interviewer manuals was done by experienced Statistics Canada training staff, who oversaw activities in the field. Efforts to reach non-respondents through call-backs and follow-ups were also made by senior interviewers to encourage respondents to participate in the survey. When possible, additional telephone numbers were provided to maximize the chances of reaching a respondent during collection. These numbers were obtained using administrative files as well as the most recent version of the residential telephone file⁴ at Statistics Canada. Field follow-up, using CAPI interviewers, was also conducted in many specific regions.

A detailed table of final response rates obtained for the 2017 APS is provided in section 3.3 of this guide (Table 4).

7.3.2. Coverage errors

As mentioned in section 3.1, the target population of the 2017 APS was the Aboriginal identity population of Canada, aged 15 years and over as of January 15, 2017, living in private dwellings, excluding persons living on Indian reserves or settlements and in certain First Nations communities in Yukon and the Northwest Territories. The population sampled or covered by the survey corresponded to 2016 Census long-form respondents reporting Aboriginal ancestry or identity (see section 3.1.1) with the same restrictions as those for the target population in terms of age and geography. For data on First Nations people living on reserve, researchers are directed to use the 2016 Census.

Coverage errors occur when there are differences between the target population and the sampled population (population covered by the frame). Over-coverage is generally not an issue since out of scope units in the sample are typically identified during data collection and can be estimated for the entire survey frame. However, under-coverage can exist. Because the APS sample was selected from those who had participated in the 2016 Census, individuals who did not participate in the Census could not be sampled for the APS. If this group of individuals is significantly different than the ones who participated in the Census with respect to the characteristics measured in the APS, a bias could be introduced. This bias is assumed to be relatively small given the very high response rate obtained in the census (97.8% response rate for the long form) and given the adjustments made on the initial census sampling weights.

7.3.3. Measurement errors

Measurement errors occur when a provided response differs from the real value. Such errors may be attributable to the respondent, the interviewer, the questionnaire, the collection method or the respondent's record-keeping system. Extensive efforts were made to develop questions for the 2017 APS which would be understood, relevant and culturally sensitive.

Following the release of data from the 2012 APS, an extensive content review was conducted of 2012 APS questions. The review brought together expertise from a diverse group of researchers and subject matter experts from within and outside of Statistics Canada. An analysis was conducted on which questions worked the best and which were most effective in producing valid indicators. This process also extended into an extensive search for relevant questions from other standardized survey questions at Statistics Canada.

Questions selected for potential inclusion on the 2017 questionnaire then underwent several rounds of qualitative testing using one-on-one interviews with respondents in ten different communities across various regions of Canada, including Iqaluit and Yellowknife. Testing was done among First Nations people, Métis and Inuit. Qualitative testing of the survey questionnaire was carried out by Statistics Canada's Questionnaire Design Resource Centre (QDRC). To minimize measurement error, adjustments were made to question wording and flows based on those results.

4. This file is created and updated using various sources such as the census, Info-direct and administrative files.

Many other measures were also taken to specifically reduce measurement error, including the use of skilled interviewers, extensive training of interviewers with respect to the survey procedures and content, and observation and monitoring of interviewers to detect problems of questionnaire design or misunderstanding of instructions.

7.3.4. Processing errors

Processing errors may occur at various stages of the survey process including data capture, coding and editing. Quality control procedures were applied to every stage of APS data processing to minimize this type of error.

At the data processing stage, a detailed set of procedures and edit rules was used to identify and correct any inconsistencies between the responses provided. A set of thorough, systematized procedures was developed to assess the quality of every variable and to make corrections to any errors found. A snapshot of the output files was taken at each step and verification was done by comparing files at the current and previous step. The programming of all edit rules was exhaustively tested before being applied to the data. Some examples of the data processing verifications were:

- the review of all question flows, including very complex sequences, to ensure skip values were accurately assigned and distinguished from different types of missing values;
- quality control double-coding of “Other-specify” responses;
- experienced supervision of coding to standardized classifications; and
- the review of all derived variables against their component variables to ensure accurate programming of derivation logic, including very complex derivations.

See the data processing chapter (section 5) of this guide for more details.

8. Differences between the Aboriginal Peoples Survey and other data sources

Due to a number of differences in methodology between the 2017 Aboriginal Peoples Survey (APS), previous APS cycles and other Statistics Canada surveys, comparisons of data between sources should be done with caution. The following sections of this document provide a detailed review of items affecting data comparability, providing data users with important information on factors to consider when conducting analyses with APS data.

8.1. Differences between the Aboriginal Peoples Survey and the 2016 Census

The APS selects its sample from respondents with specific responses in the census. More detailed information about how census responses were used to determine the population of interest for the APS is provided in section 3 (Survey design).

The census and the APS are both rich sources of information on Aboriginal peoples that complement each other. The APS takes concepts that are touched on in the census and asks questions that dig deeper in order to provide more detailed information. For instance, the census provides information on labour market activities (which includes: labour force status, class of worker, industry, occupation and work activity during the reference year; from questions 30 to 49). Adding information from the APS provides an opportunity to learn more about part-time employment, permanent work, job satisfaction, looking for work, labour market attachment, past job attachment, labour mobility and other labour activities.

The APS also covers entire topics or themes that are not included in the census. For example, the APS can provide detailed information on the education and health of Aboriginal peoples.

Although both surveys cover the “identity population” by design, the 2017 APS, like the 2012 APS, did not cover the “ancestry-only population” described in section 3. (Census respondents reporting Aboriginal ancestry-only were part of the APS sample because they had a non-negligible probability of reporting identity on the APS, and these respondents only remained in the APS data set if they actually reported Aboriginal identity in the APS.)

In general, the Aboriginal identity population counts on the 2017 APS for certain subpopulations may differ from those obtained from the census, even if the population universe for the census is restricted to that of the APS. The second post-stratification described in section 6.5 ensured that the number of individuals with Aboriginal identity was the same in the census and the APS, but this applied only to certain combinations of Aboriginal group, region and age group. However, the Aboriginal identity population counts may differ for other subpopulations which were not controlled for during post-stratification. Moreover, for a given individual, the Aboriginal identity reported may differ in some cases between the census and the APS. There are a number of reasons why Aboriginal identity may not be the same on both surveys.

8.1.1. Different interview methods and impact of proxy reporting

In most regions 2016 Census data were collected by self-enumeration. Questionnaires were completed on the Internet or returned by mail. For Indian reserves and remote areas, including Inuit communities, census interviewers were used. Often one member of the household completed the census form for all members of the household. This is called proxy reporting.

As described in section 4.2, the APS data were collected by computer-assisted interview (CAI) from the individual selected for most cases. Because the person contacted for the APS may not be the same person who filled in the census questionnaire, there may be some differences in responses to similar questions.

8.1.2. Different questionnaires

The Aboriginal self-reporting question is one of the other sources of discrepancy between the census and the APS. For the 2017 APS, this question was divided into two parts as described in section 2.2. In addition, although there is no question on Aboriginal ancestry in the 2017 APS, the census asks a question on ethnic or cultural origins (question 17) immediately before the census question on Aboriginal self-reporting (question 18). Several Aboriginal origins are included as examples in the census ethnic or cultural origins question. This might affect the responses provided to question 18 on Aboriginal self-reporting.

8.1.3. Different contexts

The census questionnaire asks a limited number of general questions for the entire population of Canada, while the APS is specifically targeted to Aboriginal people. Consequently, given the more refined context of the APS, the concept of Aboriginal identity may be understood more clearly. Hence, it is possible that individuals who had reported being Aboriginal on the census may no longer report themselves as being Aboriginal in the APS. Conversely, individuals who had reported Aboriginal ancestry-only in the census may later report Aboriginal identity in the APS.

8.1.4. Effect of time

The concept of Aboriginal identity may not be a static characteristic in time. Events affecting the rights of certain Aboriginal groups or changes in the general population's perception of Aboriginal Peoples may affect the way in which Aboriginal identity questions are answered. Individuals who see themselves as having only Aboriginal ancestry at one point in time may later self-report as being Aboriginal. Furthermore, individuals may see themselves as First Nations people at a certain point in time and Métis at another.

8.1.5. Processing

For the 2012 APS, all individuals who were either Status Indian or a member of a First Nation/Indian band but who had not also self-reported as Aboriginal were imputed as being a First Nations person on the APS. This imputation was not repeated in 2017. Instead, the 2017 APS kept these individuals as a separate fourth identity group (Aboriginal responses not included elsewhere). However, since this group was quite small in the 2017 APS, these individuals were combined with First Nations respondents during the post-stratification (see section 6.5). Hence, when comparing Census and 2017 APS Aboriginal identity counts by Aboriginal group, census respondents who were either Status Indian or a member of a First Nation/Indian band and who did not self-report as Aboriginal should be included in the estimate for First Nations people and similarly for APS.

8.1.6. Differences in the estimates

The following tables compare Census estimates to APS estimates for different geographic regions and Aboriginal groups. The four Inuit regions are separated from the rest of Canada.

Table 5 compares Census estimates to APS estimates for the Aboriginal identity population without double counting. This is the Aboriginal identity population aged 15 and over as of January 15, 2017, living in private dwellings excluding persons living on Indian reserves or settlements and excluding certain First Nations communities in Yukon and the Northwest Territories (NWT), which corresponds to the APS coverage. A column has been created for the total of the Census and APS “First Nations” and “Status Indian or member of a First Nation / Indian band only” categories.

Table 6 is similar but reflects the double count. Hence, a person with a multiple identity of First Nations and Métis will be counted in the First Nations category as well as in the Métis category.

All counts in the next tables are rounded to the nearest 10. Since totals are rounded independently from individual cells, the cells may not add up exactly to the corresponding totals.

Table 5.1
Number of persons aged 15 and over¹ living off reserve² and reporting Aboriginal identity on the two surveys without double counting

Region	First Nations					
	Census First Nations	Census IB ³	Census total ⁴	APS First Nations	APS IB ³	APS total ⁴
	number					
Nunatsiavut	10	0	10	10	0	10
Nunavik	90	0	90	30	0	30
Inuvialuit	660	0	660	580	0	590
Nunavut	160	10	160	150	20	180
Nunangat (total)	920	10	930	770	30	810
Atlantic excluding Nunatsiavut	42,450	3,300	45,760	44,760	420	45,180
Quebec excluding Nunavik	42,330	3,370	45,700	46,070	1,230	47,300
Ontario	139,080	5,820	144,900	145,180	1,450	146,620
Manitoba	44,490	580	45,070	45,500	130	45,630
Saskatchewan	38,710	670	39,380	39,980	50	40,030
Alberta	60,900	1,580	62,480	62,410	90	62,500
British Columbia	87,850	2,030	89,880	91,160	550	91,710
Yukon	3,470	60	3,530	3,580	20	3,600
NWT excluding Inuvialuit	2,670	20	2,690	2,660	0	2,660
Rest of Canada (total)	461,950	17,430	479,390	481,290	3,940	485,230
Canada (total)	462,870	17,440	480,310	482,070	3,970	486,040

1. Persons who were aged 15 and over as of January 15, 2017.

2. Persons who were living off reserves and not living in certain First Nations communities in the Yukon and NWT.

3. Status Indian or member of a First Nation/Indian band only.

4. Total for First Nations or Status Indian or member of a First Nation/Indian band only.

Table 5.2
Number of persons aged 15 and over¹ living off reserve² and reporting Aboriginal identity on both surveys without double counting

Region	Métis		Inuit	
	Census	APS	Census	APS
	number			
Nunatsiavut	30	30	1,790	1,790
Nunavik	20	10	7,750	7,750
Inuvialuit	120	120	2,270	2,270
Nunavut	140	80	19,650	19,650
Nunangat (total)	310	250	31,460	31,460
Atlantic excluding Nunatsiavut	34,680	34,670	4,170	4,310
Quebec excluding Nunavik	57,850	57,870	1,550	1,540
Ontario	97,830	97,940	2,750	3,090
Manitoba	68,090	68,120	380	310
Saskatchewan	42,460	42,440	260	130
Alberta	86,100	86,190	1,740	1,800
British Columbia	68,990	68,950	1,060	870
Yukon	750	760	170	150
NWT excluding Inuvialuit	1,740	1,740	500	370
Rest of Canada (total)	458,480	458,670	12,580	12,580
Canada (total)	458,790	458,920	44,030	44,030

1. Persons who were aged 15 and over as of January 15, 2017.

2. Persons who were living off reserves and not living in certain First Nations communities in the Yukon and NWT.

Table 5.3
Number of persons aged 15 and over¹ living off reserve² and reporting Aboriginal identity on both surveys without double counting

Region	Multiple		Identity (total)	
	Census	APS	Census	APS
	number			
Nunatsiavut	0	0	1,830	1,830
Nunavik	10	80	7,870	7,870
Inuvialuit	10	80	3,060	3,060
Nunavut	30	70	19,980	19,980
Nunangat (total)	50	230	32,740	32,740
Atlantic excluding Nunatsiavut	1,480	2,060	86,080	86,220
Quebec excluding Nunavik	2,290	670	107,390	107,380
Ontario	4,310	2,470	249,780	250,120
Manitoba	1,290	710	114,830	114,760
Saskatchewan	860	230	82,960	82,830
Alberta	2,020	1,910	152,340	152,400
British Columbia	2,940	1,140	162,870	162,680
Yukon	90	10	4,530	4,510
NWT excluding Inuvialuit	70	90	4,990	4,870
Rest of Canada (total)	15,330	9,300	965,770	965,770
Canada (total)	15,380	9,530	998,520	998,520

1. Persons who were aged 15 and over as of January 15, 2017.

2. Persons who were living off reserves and not living in certain First Nations communities in the Yukon and NWT.

Table 6.1
Number of persons aged 15 and over¹ living off reserve² and reporting Aboriginal identity on both surveys with double counting

Region	First Nations					
	Census First Nations	Census IB ³	Census total ⁴	APS First Nations	APS IB ³	APS total ⁴
	number					
Nunatsiavut	10	0	10	20	0	20
Nunavik	100	0	100	90	0	90
Inuvialuit	670	0	670	650	0	660
Nunavut	180	10	180	210	20	230
Nunangat (total)	950	10	960	960	30	990
Atlantic excluding Nunatsiavut	43,770	3,300	47,080	46,660	420	47,080
Quebec excluding Nunavik	44,530	3,370	47,900	46,660	1,230	47,900
Ontario	143,210	5,820	149,030	147,580	1,450	149,030
Manitoba	45,740	580	46,320	46,190	130	46,320
Saskatchewan	39,540	670	40,210	40,160	50	40,210
Alberta	62,820	1,580	64,390	64,310	90	64,390
British Columbia	90,730	2,030	92,760	92,210	550	92,760
Yukon	3,550	60	3,610	3,590	20	3,610
NWT excluding Inuvialuit	2,740	20	2,750	2,750	0	2,750
Rest of Canada (total)	476,620	17,430	494,060	490,120	3,940	494,060
Canada (total)	477,580	17,440	495,020	491,080	3,970	495,050

1. Persons who were aged 15 and over as of January 15, 2017.

2. Persons who were living off reserves and not living in certain First Nations communities in the Yukon and NWT.

3. Status Indian or member of a First Nation/Indian band only.

4. Total for First Nations or Status Indian or member of a First Nation/Indian band only.

Table 6.2
Number of persons aged 15 and over¹ living off reserve² and reporting Aboriginal identity on both surveys with double counting

Region	Métis		Inuit	
	Census	APS	Census	APS
	number			
Nunatsiavut	30	30	1,790	1,790
Nunavik	30	30	7,760	7,830
Inuvialuit	120	140	2,290	2,340
Nunavut	150	100	19,680	19,720
Nunangat (total)	320	300	31,510	31,680
Atlantic excluding Nunatsiavut	35,990	36,350	4,550	4,880
Quebec excluding Nunavik	60,050	58,460	1,830	1,700
Ontario	101,960	100,410	3,180	3,160
Manitoba	69,370	68,820	440	320
Saskatchewan	43,300	42,660	310	190
Alberta	88,070	88,020	1,930	1,900
British Columbia	71,880	70,040	1,250	1,020
Yukon	800	760	210	160
NWT excluding Inuvialuit	1,800	1,810	520	400
Rest of Canada (total)	473,210	467,330	14,210	13,720
Canada (total)	473,530	467,630	45,720	45,410

1. Persons who were aged 15 and over as of January 15, 2017.

2. Persons who were living off reserves and not living in certain First Nations communities in the Yukon and NWT.

8.2. Differences between the 2012 APS and the 2017 APS

Some changes took place between the 2012 APS and the 2017 APS, not only in terms of survey content but also in terms of methodology. Because of these changes, caution should be exercised when comparing population estimates from the two surveys. In fact, the APS dissemination strategy has never been focused on the production of Aboriginal population counts. Rather, the strategy was to present the characteristics of the population for certain subgroups using proportions.

8.2.1. Methodological differences

The most significant difference between the 2017 APS and the 2012 APS is the addition of the 'Aboriginal responses not included elsewhere' identity group (which includes individuals reporting being a Status Indian or member of a First Nation/Indian band only). In 2012, members of this group were imputed to being a First Nations person.

Therefore, when comparing First Nations estimates between the 2012 and 2017 APS, 2017 APS respondents who were either Status Indian or a member of a First Nation/Indian band and who did not self-report as Aboriginal should be included in the estimate for First Nations people. It should be noted that although ‘Aboriginal responses not included elsewhere’ was kept as a distinct identity group in 2017, individuals in this group were combined with First Nations individuals during the post-stratification (see section 6.5) as in 2012.

Another important difference in methodology is the fact that the 2017 APS sample was selected from respondents to the 2016 Census, while the 2012 APS sample was selected from respondents to the 2011 NHS. The characteristics of respondents to the census may be different than those of respondents to the NHS. The fact that non-respondents have different characteristics than respondents creates what is called non-response bias. Despite the fact that the NHS used follow-up strategies and non-response adjustment strategies at weighting to reduce this bias, it is possible that some non-response bias still remains.

8.2.2. Changes to Aboriginal identity questions

Inuit Enrolled under an Inuit Land Claim Agreement

This question appeared in the exit module in the 2012 APS, but has been added into the Identification module of the 2017 APS. Only those who self-identified as Inuit are asked this question. This question was moved before the Registered Indian and Band membership questions to improve data quality.

Status Indian (Registered or Treaty Indian)

Questions ID_Q04A and ID_Q04B were removed for the 2017 APS. These questions asked if the respondent had applied or had been registered as a Status Indian under Bill C-31 or Bill C-3. In the 2012 APS, a relatively high percentage of respondents answered ‘don’t know’ to these questions. Therefore, it was decided that these questions would be dropped and that further analysis would rely on data linkages between the APS and the Indian Register.

Table 7

Status Indian, 2017 APS, 2012 APS, 2016 Census and 2011 NHS

2017 APS	2012 APS
ID_Q25 - Are you a Status Indian, that is, a Registered or Treaty Indian as defined by the Indian Act of Canada?	ID_Q03 - Are you a Status Indian, that is, a Registered or Treaty Indian as defined by the Indian Act of Canada?
	ID_Q04A - Have you ever applied to Aboriginal Affairs and Northern Development Canada (previously named INAC) to be registered as a Status Indian under Bill C-31 or Bill C-3?
	ID_Q04B - Have you been registered as a Status Indian under Bill C-31 or Bill C-3?
2016 Census	2011 NHS
Is this person a Status Indian (Registered or Treaty Indian as defined by the Indian Act of Canada)?	Is this person a Status Indian (Registered or Treaty Indian as defined by the Indian Act of Canada)?

8.3. Differences between the 2017 APS and the APS - Nunavut Inuit Supplement

As mentioned in section 1.1, the APS—Nunavut Inuit Supplement consisted of a large supplementary sample of Inuit living in Nunavut. Individuals selected for the APS—Nunavut Inuit Supplement and identifying as being enrolled under the Nunavut Agreement (NA) completed the 2017 APS questionnaire as well as an additional set of questions designed to learn more about their availability, interest and level of preparedness for government employment. Please refer to the *Aboriginal Peoples Survey—Nunavut Inuit Supplement, 2017: User’s Guide to the Analytical File* for more information about this supplement.

Although Nunavut estimates for 2017 APS content can be produced using the 2017 APS sample or the APS—Nunavut Inuit Supplement sample, these estimates can differ for various reasons as discussed in section 8.3.1. Because of these differences, it is not recommended to compare estimates between the 2017 APS and the APS—Nunavut Inuit Supplement.

8.3.1 Methodological differences

There are many methodological differences between the 2017 APS and the APS - Nunavut Inuit Supplement. To begin, the populations covered by each survey are not the same. The APS - Nunavut Inuit Supplement only includes data for Inuit enrolled under the NA while the 2017 APS includes data for all Inuit (and all other Aboriginal identity groups).

Moreover, the domains of interest and sampling strata were not the same for the two surveys. The 2017 APS sample was selected based on domains of interest defined using geography (Inuit regions, province/territory, Atlantic provinces grouped), Aboriginal group and age group (see section 3.2). In comparison, the APS - Nunavut Inuit Supplement sample was selected based on domains of interest defined by Nunavut community and education group. In fact, the APS - Nunavut Inuit Supplement was designed to produce community-level estimates in Nunavut whereas the 2017 APS was designed to produce estimates only at the Nunavut level.

The domains of interest of each survey also impacted the weighting strategy. For the 2017 APS, the poststratification produced weights so that population counts by geography, Aboriginal group and age group matched 2016 Census totals (see section 6.5). For the APS - Nunavut Inuit Supplement, the poststratification was done for each education group within each Nunavut community. The difference in the weighting strategies can create differences between the estimates produced for the two surveys.

When comparing estimates of the 2017 APS content across different regions in Canada (e.g. comparing estimates for different Inuit regions), the 2017 APS sample should be used to produce the estimates.

Estimates for the APS - Nunavut Inuit Supplement questions should be produced using the APS - Nunavut Inuit Supplement sample. The 2017 APS content for this sample should be used as auxiliary information to enhance the analysis of Inuit enrolled under the NA.

9. Data dissemination

9.1. An overview of 2017 Aboriginal Peoples Survey dissemination

Data for the 2017 Aboriginal Peoples Survey (APS) were released on November 26, 2018. A set of data tables designed to accompany the analytical article has been made available on the Statistics Canada website. An APS analytical file is also available through [Research Data Centres](#) (RDCs). Additional custom data tables are also available on a cost-recovery basis.

Later releases of APS data, mostly in 2019, will include data tables, other analytical papers and a public use microdata file (PUMF).

Statistics Canada also delivers special APS presentations to national Aboriginal Organizations, researchers working out of RDCs, other key stakeholders and at various conferences. In addition, Statistics Canada's network of Aboriginal Liaison Program Advisors across Canada will be distributing APS-focused newsletters and responding to APS data needs in their regions.

9.2. Data products and services

Three booklets, three infographics and eight data tables on the theme of economic participation have been made available with the first 2017 APS release on November 26, 2018, providing data at the national and regional levels for First Nations people living off reserve, Métis and Inuit. An interactive map, which is an online data visualization tool, serves as another means for the public to access APS data.

In 2019, a more extensive set of APS indicators will be available on the Statistics Canada website. These data tables will be available online to the public free of charge.

An analytical file for the 2017 APS has been made available in Statistics Canada's RDCs across the country. In order to access the file, researchers must undergo a research and ethics committee review for approval. Their use of the data must be conducted according to Statistics Canada policies, guidelines and standards (for instance,

only aggregate statistical estimates that conform to the confidentiality provisions of the *Statistics Act* may be released outside of Statistics Canada). For more information on the RDCs Program, please refer to the [Frequently Asked Questions](#).

Accompanying the analytical file is the record layout, SAS, SPSS and Stata syntax to load the file, as well as metadata in the form of a data dictionary that describes each variable and provides weighted and unweighted frequency counts. In addition, a detailed User's Guide provides researchers with guidelines they need for conducting statistical analysis of 2017 APS data.

A PUMF will also be disseminated in 2020, allowing for wider and direct use of the data by researchers. In order to provide extra assurance with respect to the non-disclosure of confidential information, the level of detail of the PUMF is not as fine as that of the analytical file kept by Statistics Canada.

Statistics Canada plans to have four data sharing agreements for the 2017 APS with each of the Inuit regions of Canada: Nunatsiavut (Northern coastal Labrador), Nunavik (Northern Quebec), the territory of Nunavut and the Inuvialuit region of the Northwest Territories. These data sharing agreements are an excellent method to increase data use and make the data more accessible. Only those respondents who are Inuit and have agreed to share their information with their respective region will be part of the data sharing file.

Statistics Canada is developing an Indigenous Statistical Capacity Building Initiative. This Initiative is aimed at providing expanded services and building statistical capacity, grounded in the needs of First Nations people, Métis and Inuit. The Initiative will offer statistical training, engagement and outreach, enabling Indigenous organizations to develop and sustain statistical capacity.

Another means of access to the data file is the Real Time Remote Access (RTRA) tool at Statistics Canada. This is a subscription service provided for a fee to clients associated with an academic institution, a government department or a non-profit organization. RTRA is an online remote access tool allowing users to run SAS software programs, in real-time, against microdata sets located in a central and secure location. Researchers using the RTRA system do not gain direct access to the microdata and cannot view the content of the microdata file. Using a secure username and password, the RTRA provides around the clock access to survey results from any computer with internet access. Confidentiality rules and reliability guidelines are applied to all requests in an automated way by the RTRA system, eliminating the need for manual intervention and allowing for rapid access to results. An RTRA agent can be reached at: statcan.madrtrasupport-damadtrsupport.statcan@canada.ca or please visit [The Real Time Remote Access \(RTRA\) system](#) for more information on how to obtain a user account.

In addition to these data products and services, clients can request custom data tables from Statistics Canada's Social and Aboriginal Statistics Division Client Services by email at sasdclientservices-dsseaserviceaclientele.statcan@canada.ca. All custom requests are screened for confidentiality and aggregate data are rounded before being released to clients.

9.3. Analytical products

A detailed analytical report is planned for spring 2019. This report uses data from the nationally representative 2017 Aboriginal Peoples Survey to broadly examine self-reported (1) reasons for economic participation such as part-time employment, self-employment, and not being in the labour-force despite wanting to work, (2) characteristics associated with employment, unemployment, and being not in the labour force, such as methods of looking for work among unemployed, and prevalence of doing cultural activities for income or supplementing income, and job dissatisfaction among others, (3) barriers experienced by employed, unemployed, and those not in the labour force, and (4) perceived enablers of finding work among those unemployed or not in the labour force.

9.4. Reference products

Information about the APS is available on Statistics Canada's website. Statistics Canada provides an Integrated Metadata Base (IMDB) online for all surveys that it conducts, including the [2017 Aboriginal Peoples Survey](#). The purpose of the IMDB is to provide information that will assist the public in interpreting Statistics Canada's published data. The information (also known as metadata) is provided to ensure an understanding of the basic concepts that

define the data, including variables and classifications; the underlying statistical methods and surveys; and key aspects of the data quality. Direct access to the [2017 APS questionnaire](#) is also provided.

As well, this Concepts and Methods Guide is provided online for a detailed discussion of survey content, sampling design, data collection and processing, weighting of the data, data quality, differences between the 2017 APS and other data sources, including the 2016 Census of Population, and dissemination products for the APS.

For researchers using the Analytical File in Statistics Canada's RDCs, the *Aboriginal Peoples Survey, 2017: User's Guide to the Analytical File* is available which details the concepts and methods of the survey along with detailed step-by-step instructions for using the data file. It also provides detailed guidelines for tabulation and statistical analysis, how to apply the necessary weights to the data, information of software packages available and guidelines for the release of data, such as rounding rules. The process of estimating the reliability of estimates, both quantitative and qualitative, is covered in detail. The RDC User's Guide describes the structure of the data file in detail, including all core variables, derived variables and linkages to the census. A detailed Data Dictionary provides information for all variables available.

Finally, a separate *PUMF User Guide* will be created for users of the public use microdata file for APS. This will cover variables available, a Data Dictionary (codebook), the process of estimation, use of weights and guidelines for tabulation, statistical analysis and dissemination of data.

9.5. Disclosure control

Statistics Canada is prohibited by law from releasing any information it collects which could identify any person, business, or organization, unless consent has been given by the respondent or as permitted by the *Statistics Act*. Various confidentiality rules are applied to all data that are released or published to prevent the publication or disclosure of any information deemed confidential. If necessary, data are suppressed to prevent direct or residual disclosure of identifiable data.

Appendix A: 2017 Aboriginal Peoples Survey high level indicators

This document lists all themes and their associated high-level indicators contained in the content of the 2017 Aboriginal Peoples Survey (APS). Each theme is listed in the order as it appears in the survey followed by the high-level indicators associated with its respective theme.

Please note that only high level indicators are listed and not each question in the survey. In some cases more than one question is used for a particular concept or indicator. In cases where a number of survey questions comprise a calculated scale, the main result (indicator) for that scale is named in the list, not each separate question within the scale. Please refer to the questionnaire of the 2017 APS to see the questions.

Themes

- Demographics
- Labour
- Education
- Skills
- Health
- Economic well-being
- Aboriginal-specific questions

High Level Indicators by Theme

Demographics

- Identification
 - First Nations (North American Indian), Métis or Inuk (Inuit)
 - Inuit enrolled under an Inuit land claim agreement
 - Status Indian (Registered or Treaty) as defined by the *Indian Act*
 - Member of a First Nation or Indian band
- Household composition
 - Number of household members under 18 at the address
- Mobility
 - Moved in last five years

Labour

- Labour market activities
 - Worked at a job or business last week
 - Job or business from which you were absent last week
- Labour force status
 - Finding work
 - Want a job with more or less than 30 hours per week
- Multiple employment
 - More than one job or business last week
- Class of worker
 - Employee or self-employed
- Incorporated business
 - Had an incorporated business

- Self-employed
 - Had employees
 - Main reason for becoming self-employed
 - Business received assistance from any government agency, Aboriginal organization or financial institution
- Job tenure
 - Year started working at job or business
- Availability for government employment
 - Worked in a government or hamlet job in Nunavut
- Industry and Occupation
 - Industry and occupation
- Usual hours of work
- Part-time employment
- Permanent work
- Job satisfaction
 - Level of satisfaction with job or business
- Looking for work
 - Difficulty in finding work
 - Length of time
- Labour market attachment
 - Not looking for work
 - Looking for work in next 12 months
 - Main reason not available to work last week
 - Help in finding a job
- Past job attachment
 - Ever worked at a job or business
 - When last worked
- Labour mobility
 - Willing to move to improve job or career opportunities
 - In last 5 years moved for job-related reasons

Health

- General health and general mental health
 - General health
 - General mental health
 - Regular medical doctor
 - Seen or talked to health professionals about physical, emotional or mental health
 - Seen or talked to a family doctor or general practitioner (past 12 months)
 - Seen or talked to a nurse (past 12 months)
 - Any other medical doctor or specialist (past 12 months)
 - Dental care
- Pregnancy and childbirth
 - Currently pregnant

- Number of children given birth to
- Number of children fathered
- Age at first child birth
- Height and weight
 - Height
 - Weight
 - Considers himself/herself overweight/underweight/just about right
- Chronic conditions
 - Long-term conditions
 - Asthma
 - Arthritis, excluding fibromyalgia
 - High blood pressure
 - Chronic bronchitis, emphysema, or chronic obstructive pulmonary disease (COPD)
 - Diabetes
 - Heart disease
 - Intestinal or stomach ulcers
 - Bowel disorder
 - Mood disorder
 - Anxiety disorder
- Injuries
 - Injured in the past 12 months
 - Cause of injury
- Eating habits
 - How often do you eat vegetables
 - How often do you eat fruit
- Smoking
 - Smoking habits
 - Does anyone smoke inside your home
- Alcohol use
 - Drinking habits
- Drug use
 - Cannabis use (past 12 months)
 - Street drugs (past 12 months)
 - Prescription drugs for recreational purposes (past 12 months)
- Disease screening
 - Mammogram
 - Pap smear
 - Screened for colorectal cancer
- Consultations about mental health
 - Seen or talked on telephone to anyone about problems with emotions, mental health or use of alcohol or drugs
- Suicide

- Ever seriously contemplated suicide in the past 12 months
- Ever seriously attempted suicide in the past 12 months
- Disability screening questions

Education

- Elementary and high school
 - Elementary and high school education
 - Highest grade of elementary or high school completed
 - High school diploma or its equivalent
 - Currently attending high school or a high school equivalency program
- Postsecondary education screener
 - Education toward a certificate, diploma or degree
 - Obtained any diploma, certificate or degree above high school level
- Postsecondary credentials
 - Year most recent certificate, diploma or degree was obtained
 - Field of study
- Current postsecondary attendance
 - Currently working towards a trades, college, CEGEP or university diploma, certificate or degree
- Some postsecondary education
 - Reasons for choosing certificate, diploma or degree
 - Reasons for not finishing postsecondary education
- Postsecondary preparedness and distance education
 - Took part in workshops designed to help Aboriginal students adjust to or succeed in postsecondary education
 - Took postsecondary courses through the Internet or other form of distance education
- Guidance
 - Feelings about school guidance above the high school level
- Funding for post-secondary education
 - Sources of funding for education
- Education not taken
 - Main reasons that prevented schooling

Skills

- Skills and training
 - Took courses, workshops or seminars or training to develop job skills
 - Reasons for not taking courses, workshops or seminars or training (past 12 months)
 - Training costs
 - Participated in a co-op placement, work experience program or internship
 - Limiting your job opportunities:
 - Computer skills
 - Reading skills
 - Work with numbers
 - Feels overqualified for job held last week

- Feels underqualified for job held last week
- Information technology
 - Regularly used a computer in last job
 - Regularly used the internet in last job
 - Access to the internet at home
 - Internet with a smart phone, tablet or other wireless handheld device

Economic well-being

- Food security
 - Food just didn't last, and there wasn't any money to get more
 - Couldn't afford to eat balanced meals
 - Cut the size of your meals or skip meals
 - Eat less than you felt you should
 - Hungry but didn't eat
- Basic needs
 - Income enough to meet household's needs
 - Cover an unexpected expense of \$500
- Housing
 - Satisfaction with housing conditions
 - Dwelling in need of repairs
 - Number of rooms in this dwelling
- Sources of personal income
 - Income sources
 - Main source of total personal income
- Total personal income
 - Best estimate of total personal income
- Employment Income
 - Total wages and salaries from your job or business
- Retirement income
 - Preparing for retirement

Aboriginal-specific questions

- Other labour activities
 - Hunt, fish or trap
 - Reasons for hunting, fishing or trapping
 - Gathered wild plants
 - Made carvings, drawings, jewellery or other artwork
- Community involvement
 - Volunteer for a group or organization
 - Helping people not on behalf of an organization
- Sense of belonging
 - Group identity

- Residential school
 - Was ever a student at a residential school
 - Parents ever a student at a residential school
 - Any grandparents were students at a residential school
 - Current spouse or partner ever a student at a residential school
 - Any of your other relatives ever a student at a residential school
- Aboriginal language
 - Knowledge of Aboriginal languages
 - Primary Aboriginal language
 - Ability to understand this language

Appendix B: Extra response categories created for “Other-specify” questions

The table below summarizes the extra categories added to certain survey questions during the coding of data from questions involving an “Other-specify” category.

Appendix B

Extra response categories created for “Other-specify” questions

Theme	Indicator	Questions	Extra categories
Labour	Main reason for working less than 30 hours per week	PT_Q05	Semi-retired
			Age
Labour	Main reason for not moving	LM_Q10	Pre-retirement
			Shorten commute
			Moved for school
Labour	Reason for moving	LM_Q20	Moved for spouse’s employment
Housing	Reasons for being dissatisfied with housing conditions	HOU_Q10	Problems with landlord, neighbours or other tenants
Health	Who does he/she talk to	CMH_Q10	Other mental health care provider
Health	Recently, the type of care that was needed	GH2_Q40	Dental care
			Higher education not available
			Age
Education	Reason for leaving elementary or high school	EHS_Q20	Helping at home/taking care of family member(s)
Education	Reason(s) for choosing this certificate, diploma or degree (postsecondary credentials)	PSC_Q30	Money (e.g. earning potential, financial stability)
		SPS_S15G	Self-improvement/self-satisfaction
Education	Reason(s) for choosing this certificate, diploma or degree (some postsecondary education)	SPS_Q20	Lack of employment opportunities
Education	Main reason that prevented him/her from taking this schooling	EDNT_Q15	Age
Skills	Reasoning that explain why he/she did not take any training in the past 12 months	SAT_Q020	Health-related issue (e.g. injury, illness, disability)
Skills	Reasons for participating in training	SAT_Q35	Personal self-interest/self-interest

Appendix C: Standard classifications used for the 2017 Aboriginal Peoples Survey

Major field of study: Classification of Instructional Programs

Respondents of the 2017 APS provided information on the major field of study of the highest certificate, diploma or degree that they completed. Responses were coded according to the [Classification of Instructional Programs \(CIP\) Canada 2016](#).

The CIP was developed in 1980 by the National Center for Educational Statistics (NCES) in the United States. NCES released updates in 1985, 1990, 2000 and 2010. CIP Canada 2016 is the third Canadian version of this classification; the two first Canadian versions being CIP Canada 2000 and CIP Canada 2011. The CIP Canada 2016 structure, classes and titles are the same as the CIP Canada 2011 structure, classes and titles.

CIP is designed to classify ‘instructional programs’. The organizing principle behind CIP is ‘field of study’. At Statistics Canada, a field of study is defined as a “discipline or area of learning or training”.

Industry and occupation: North American Industry Classification System and National Occupational Classification

APS respondents provided information on their occupation and the industry in which they worked during the reference week of the survey. These responses were coded using the [North American Industry Classification System \(NAICS\) Canada](#) and the [National Occupational Classification \(NOC\)](#). Data were coded to the 4-digit level of detail and were coded to current/emerging versions of these classification systems, as follows:

NAICS Canada 2017 Version 2.0 – North American Industry Classification System (NAICS) Canada

NAICS Canada 2017 Version 1.0 – North American Industry Classification System (NAICS) Canada

NOC – 2016: National Occupational Classification (NOC)

NAICS is an industry classification system developed by the statistical agencies of Canada, Mexico and the United States. Created against the background of the North American Free Trade Agreement, it is designed to provide common definitions of the industrial structure of the three countries and a common statistical framework to facilitate the analysis of the three economies. NAICS is a comprehensive system encompassing all economic activities. It has a hierarchical structure. At the highest level, it divides the economy into 20 sectors. At lower levels, it further distinguishes the different activities in which businesses are engaged. A public consultation was launched through a call for proposals for changes to the 2012 NAICS version. NAICS Canada revisions for 2017 (Version 1.0) were finalized early 2016. Various kind of changes are brought into NAICS for 2017 (Version 1.0). Many changes involved clarification of the definition and boundary of classes through changes to the descriptive text of the definition; the illustrative examples; the exclusions; and titles of industries. Some changes involve the reduction of industry detail, while other industries are detailed further. NAICS Canada 2017 Version 2.0 was released in March 2017.

NOC is the nationally accepted taxonomy and organizational framework of occupations in the Canadian labour market. The NOC is designed to classify occupational information from statistical surveys. The basic principle of the NOC is the kind of work performed. Occupations are identified and grouped primarily in terms of the work usually performed, this being determined by the tasks, language duties, and responsibilities of the occupation. An occupation is defined as a collection of jobs, sufficiently similar in work performed to be grouped under a common label for classification purposes. The NOC provides a systematic classification structure that categorizes the entire range of occupational activity of Canada. Its detailed occupations are identified and grouped primarily according to the work performed, as determined by the tasks, duties and responsibilities of the occupation. The NOC 2016 represents an update, and uses the NOC 2011 classification structure. No major groups, minor groups or unit groups have been added, deleted or combined, though some groups have new names or updated content. NOC 2016 maintains the structure of the NOC 2011 version and provides historic comparability.

Aboriginal languages

For the coding of Aboriginal languages captured on the 2017 APS, 67 Aboriginal language categories were used. The number of Aboriginal languages has increased from previous census years because of several factors. Respondents who filled out the questionnaire online were prompted to provide more specific language information. For example, if a respondent filled in “Cree,” he or she may have then provided a more specific name upon prompting, such as “Woods Cree.” The population threshold for speakers of specific languages was lowered to 45, allowing for a greater number of languages to be reported. Coding was conducted in accordance with the 2016 Census Classification of Language(s). This differs from the classifications used in 2012, 2006 and 2001. For details on the complete classification and the concordances with previous years, see the [*Dictionary, Census of Population, 2016: Appendix 3.0 Mother tongue and home language, classifications from 2016, 2011 and 2006*](#).

Appendix D: Glossary of survey terms

A

Aboriginal peoples

Aboriginal peoples in Canada include three distinct groups: **First Nations (North American Indian)**, **Métis** and **Inuk** (Inuit), each recognized in the *Constitution Act*. There are many cultural, historical, regional, political and socio-economic differences between these groups, as well as within each of the three groups.

Administrative data

Administrative data are information that is collected by other government agencies and private sector companies for their own purposes, which is then used by Statistics Canada to efficiently accomplish its mandated objectives. Statistics Canada treats all data that can identify a person, a business or an organization with strict confidentiality.

Analytical file

A Statistics Canada **microdata** set for a given survey, available for use in [Research Data Centres](#) (RDCs) across Canada. RDCs provide researchers with access, in a secure setting, to **microdata** from population and household surveys. The centres are staffed by Statistics Canada employees. They are operated under the provisions of the *Statistics Act* in accordance with all the **confidentiality** rules and are accessible only to researchers with approved projects who have been sworn in under the *Statistics Act* as ‘deemed employees.’

B

Bootstrap method

The bootstrap method is an approach for estimating **error** in a **dataset** related to **sampling**. **Sampling** introduces **error** because **data** are not taken from the entire **population**, but only a sub-section, called a sample, which is then used to make estimates for the whole population. There are several methods for **estimating** the level of **sampling error**. The bootstrap method usually selects a number of subsamples from the main sample and produces estimates for each subsample. The **sampling error** is estimated as a function of the observed differences between estimates from the different subsamples and estimates from the complete sample.

C

Census metropolitan area (CMA)

A census metropolitan area (CMA) is formed by one or more adjacent municipalities centred on a **population centre** (known as the core). A CMA must have a total **population** of at least 100,000 of which 50,000 or more must live in the cored based on adjusted data from the previous **Census of Population** Program.

Census of population

A census is the collection of information about all units in a **population**, sometimes also called a 100% sample survey. Under the *Statistics Act* of 1971, it is a statutory requirement to conduct a nationwide census every five years. The Census of Population provides information needed to plan community services such as schools, day care, police services and fire protection, to forecast consumer demand and to conduct market research studies.

Census subdivision (CSD)

Census subdivision (CSD) is the general term for municipalities (as determined by provincial/territorial legislation) or areas treated a municipal equivalents for statistical purposes (e.g., Indian reserves, Indian settlements and unorganized territories).

Coefficient of variation (CV)

In a sample survey, results from the sample are used to estimate what the findings would be if the whole population were to be measured. In this process of estimation, some level of **error** is inevitable. The coefficient of variation (CV) is a way of expressing the **sampling error** associated with an **estimate**. First a **standard error** or ‘average’ **error** of the **estimate** is calculated. The CV is obtained by dividing the **standard error** of the **estimate** by the

estimate itself and expressing the resulting fraction as a percentage. The lower the CV, the higher the **data quality** (see **margin of error**).

Confidential information

This is a term used within Statistics Canada to describe information that is subject to the secrecy provisions of the **Statistics Act**. Information is deemed confidential either because it directly identifies a **responding unit**, for example, by name, or because it could permit specific **responding units** to be identified, even when the data is stripped of identifiers, due to the information's detail or its geographical structure or format.

Confidentiality

Confidentiality denotes an implied trust relationship between the person providing the information and the individual or organization collecting it. This relationship is built on the assurance that the information will not be disclosed without the person's permission. Under the **Statistics Act**, information that would identify an individual, business or institution cannot be disclosed without their knowledge or consent.

Coverage

Coverage is the extent to which every person or unit intended for inclusion in a survey or census is in fact counted and counted only once. Coverage **errors** refer to when persons or units of the survey or census are missed (under-coverage) or over-counted (over-coverage). Studies are often conducted by Statistics Canada to provide **estimates** of under-coverage and over-coverage of a given survey or census or to examine related issues. For example, Statistics Canada has studied and analyzed the extent to which cell-phone use affects coverage for telephone surveys.

D

Data

Observations and measurements collected during a survey, census or other study. Facts or figures from which conclusions can be drawn.

Data quality

A degree or level of confidence that the **data** and statistical information are "fit for use". The particular issues of quality or fitness for use that must be addressed by Statistics Canada are relevance, accuracy, timeliness, accessibility, **interpretability** and coherence.

Dataset, database

An organized and sorted list of facts or information about a set of individuals, households, businesses, or other relevant units. A Statistics Canada dataset is usually generated by a survey or administrative **data**, stored on a computer, and organized in such a way that it may be accessed easily by a wide variety of statistical application programs.

Derived variable

A new **variable** constructed by applying logical or mathematical operations to one or more existing **variables** in order to meet particular **data** needs. For example, an age variable can be derived from date of birth information. As another example, a derived variable could be obtained called 'presence of a chronic health condition' based on whether or not a **respondent** answered 'yes' at least once to a series of questions asking about specific chronic health conditions such as asthma, diabetes, heart disease, etc.

Dissemination

The process of providing statistical products and services to the general public and to specific **data** users. Statistics Canada disseminates **data** and analysis in the form of survey results, research reports, technical papers, periodical magazines, census products, and research compendia. Online products date from 1996 to the present. Historical material can be located using the Library Catalogue. Statistics Canada information is also distributed to an approved network of depository libraries. The objective of dissemination activities is to provide relevant information in a timely fashion, in useful formats, and through accessible channels. Activities in place to support the dissemination of products include client consultation services, marketing, promotions, user-training and other client services.

E

Editing

Editing is a process that ensures survey **data** are accurate, complete and consistent. A set of editing rules or conditions is applied to a **dataset**. **Data** which do not meet the conditions are examined and corrected where appropriate.

Errors

In a sample survey, results from the sample are used to estimate what the findings would be if the whole **population** were to be measured. The accuracy of such an **estimate** is a measure of how much the **estimate** differs from the correct or “true” figure. Departures from true figures are known as errors. Errors can arise from many sources, but can be grouped into a few broad categories: **coverage errors**, **non-response errors**, **response errors**, **processing errors** and **sampling errors**.

Coverage errors

Coverage errors refer to when persons or units of the survey are missed (under-coverage) or over-counted (over-coverage).

Non-response errors

Non-response errors occur when it proves impossible to obtain a complete questionnaire from a person, household, or organization. Although certain adjustments for missing **data** can be made during processing, non-response means that some loss of accuracy is inevitable.

Processing errors

Processing errors include mistakes made during **data** entry, coding, tabulation or other forms of **data** manipulation.

Response errors

Response errors indicate that a response may not be entirely accurate. The **respondent** may have misinterpreted the question or may not know the answer, especially if it is given for an absent household member, for example.

Sampling error

Sampling error refers to the fact that the results of the weighted sample differ somewhat from the results that would have been obtained from the total **population**. The difference is known as sampling error. The actual sampling error is of course unknown, but it is possible to calculate an “average” value, known as the “**standard error**”.

Estimate, estimation

Using results of the weighted sample to estimate the characteristics of the total **population**.

F

First Nations, First Nations people

A term that came into common usage in the 1970s to replace the word “Indian,” which many people found offensive. Although the term First Nations is widely used, no legal definition of it exists. Among its uses, the term “First Nations people” refers to the **North American Indian** people in Canada, both Status and Non-Status. Many people have also adopted the term “First Nation” to replace the word “band” in the name of their community.

Frame

A list, map, or conceptual specification of the units comprising the survey **population** from which persons can be selected. For example, a telephone or city directory, or a list of members of a particular association or group.

Frequency

The number of times an event or item occurs in a **dataset**.

G - H - I

Health regions

Health regions are legislated administrative areas defined by provincial ministries of health. These administrative areas represent geographic areas of responsibility for hospital boards or regional health authorities. Health regions, being provincial administrative areas, are subject to change.

Imputation

Imputation involves replacing either missing or invalid **data** with valid **data**. This is normally performed using predetermined rules or with the use of data from a ‘statistical neighbour’—another **responding unit** who has similar characteristics. Imputation is often combined with data **editing**.

Indian Act

The Canadian federal legislation, first passed in 1876, that sets out certain federal government obligations, and regulates the management of Indian reserve lands. The act has been amended several times, most recently in 2017.

Indian band

A group of **North American Indian** people for whom lands have been set apart and money is held by the Crown. Each band has its own governing band council, usually consisting of one or more chiefs, and several councillors. Community members choose the chief and councillors by election, or sometimes through traditional custom. The members of a band generally share common values, traditions and practices rooted in their ancestral heritage. Today, many bands prefer to be known as **First Nations**.

Information

Data that have been recorded, classified, organized, related or interpreted within a framework so that meaning emerges.

Information product

Organization of results from Statistics Canada activities, including **data** files, **databases**, tables, graphs, maps, and text. This organization can be either pre-defined (standard information product) or made in response to special requests (customized information product). Information products can be made available on either print or electronic media.

Interpretability

Interpretability reflects the ease with which the user may understand, properly use and analyze the data or information. The degree of interpretability is largely determined by: the adequacy of definitions on concepts, target populations and variables; terminology underlying the data; and information on any limitations of the data.

Inuit

“Inuit” means “people” in Inuktitut, one of the languages of Inuit people. Most Inuit live in the Northwest Territories, Nunavut, Northern Quebec and Labrador.

Inuit Nunangat

Inuit Nunangat is the homeland of Inuit of Canada. It includes the communities located in the four Inuit regions: Nunatsiavut (Northern coastal Labrador), Nunavik (Northern Quebec), the territory of Nunavut and the Inuvialuit region of the Northwest Territories. These regions collectively encompass the area traditionally occupied by **Inuit** in Canada.

Inuk

The singular form of the word **Inuit** (i.e. ‘a person’).

J - K - L

Logistic regression

A form of **regression** analysis used when the response **variable** is a binary **variable** (a **variable** having two possible values).

M

Margin of error

In a sample survey, results from the sample are used to estimate what the findings would be if the whole **population** were to be measured. In this process of **estimation**, some level of error is inevitable. The margin of error, a measure used to build confidence intervals, serves as a rough indicator of the precision of an estimate. For example, pollsters often say that a certain percentage of the **population**, plus or minus the margin of error (expressed in percentage points), is likely to vote for a certain candidate, 19 times out of 20. To calculate the margin of error, which in this example corresponds to a 95% confidence interval, the pollster would use the equivalent of plus or minus two **standard errors** of the **estimate** (see **Standard error**).

Methodology

A set of research methods and techniques applied to a particular field of study. At Statistics Canada, methodology refers to survey methodology.

Métis

There is no single definition of Métis. To some respondents, Métis refers to the Métis Nation; to others, it might refer to a person of mixed Aboriginal and European ancestry who self-identifies as Métis.

Microdata

Files of **records** pertaining to individual **responding units**.

N - O

National Household Survey (NHS)

This survey took place in 2011 as a replacement for the long census questionnaire, more widely known as Census Form 2B/2D. The NHS was designed to collect social and economic **data** about the Canadian population. The objective of the NHS was to provide **data** for small geographic areas and small population groups. For more information please visit the [2011 National Household Survey](#).

North American Indian

A term that describes all Aboriginal people in Canada who are not **Inuit** or **Métis**. North American Indian peoples are one of three groups of people recognized as Aboriginal in the Constitution Act, 1982. This also refers to **First Nations** people consisting of Status and non-Status **Indians**.

Observation

Data collected for a given **variable** about a particular **responding unit**. Examples include the specific values for a **responding unit** on characteristics such as age, gender or marital status—the observation might be ‘77’, ‘woman’ and ‘widowed’.

P

Population centre

The term population centre replaces the term urban area (as used in the **Census of Population** until 2006). A population centre is defined as an area with a population of at least 1,000 and no fewer than 400 persons per square kilometre. Population centres are classified into three groups, depending on the size of their population:

- small population centres, with a population between 1,000 and 29,999;
- medium population centres, with a population between 30,000 and 99,999; and
- large urban population centres, with a population of 100,000 or more.

Postcensal survey

A postcensal survey is one where **surveyed units** are selected based upon their responses to the **Census of Population**. These surveys are generally conducted shortly after the Census.

Proportion

A proportion refers to how many responses fall into a given response category in relation to the total responses. It is calculated by dividing the **frequency** of the response category by the total number of responses to the question.

Public use microdata file (PUMF)

Public use microdata files provide access to **responding units** so that users can conduct their own research or analysis. They involve a non-identifiable **data set** containing characteristics pertaining to the units of the survey (e.g., individuals, households or businesses). All such **datasets** have been authorized for release to the public by the Statistics Canada Microdata Release Committee. The **dataset** contains no **confidential information** in that individual identifiers have been removed and any **data** combination or geography which could potentially reveal the identity of a **responding unit** has been modified.

Q - R

Record

A record is the data for an individual **responding unit** in a file containing **data** for all of a survey's **responding units**.

Regression

A statistical method which tries to predict the value of a characteristic by studying its relationship with one or more other characteristics. This relationship is expressed through the means of a regression equation.

Research Data Centres (RDCs)

The [Research Data Centre Program](#) provides researchers with access, in a secure Statistics Canada governed setting, to **microdata** from population and household surveys. The RDC program is part of an initiative by Statistics Canada, the Social Sciences and Humanities Research Council (SSHRC) and university consortia to help strengthen Canada's social research capacity and to support the policy research community. The program is also supported by the Canadian Foundation for Innovation (CFI) and the Canadian Institutes of Health Research (CIHR).

Respondent, responding unit

The respondent is the person providing the information for the **surveyed unit**, which could be a person, household, business or institution. In the case of the 2017 Aboriginal Peoples Survey, in general, the respondent is the selected person aged 18 and older. For youth between the ages of 15 and 17, the prior approval of the individual's parent or guardian is required in order to conduct the interview directly with the youth. Thus, for the age group 15 to 17, the respondent is either the youth or his or her parent or guardian.

Response rate

The proportion of a sample for which a response to a questionnaire is obtained, usually expressed as a percentage. Non-response covers those who refused to participate as well as persons whom the survey was unable to reach.

S

Sample design, Sampling design

A set of specifications that describe the **sampling** elements of a survey in detail. These elements include **population**, **frame**, **surveyed units**, sample size, sample selection and **estimation** method.

Sampling

The process of selecting some part of a **population** to observe so as to estimate something of interest about the whole **population**. Examples of different sampling methods include simple random sampling, stratified random sampling, cluster sampling, multiple-phase sampling and multi-stage sampling.

Sampled unit

The unit selected by the **sample design** and from which measurements are taken for a survey. Examples include persons, households, families or businesses. For APS, the sampling unit is the person.

Sampling fraction

Sample size divided by the **population** size.

Standard deviation

Standard deviation measures the dispersion of a **data set** around the mean. It is the most widely-used measure of dispersion. Mathematically, the standard deviation is the square root of the **variance**.

Standard error

In a sample survey, results from the sample are used to estimate what the findings would be if the whole **population** were to be measured. **Sampling error** refers to the fact that the results of the weighted sample differ somewhat from the results that would have been obtained from the total **population**. The difference is known as **sampling error**. The actual **sampling error** is of course unknown, but it is possible to calculate an “average” value, known as the “standard error”.

Statistics Act

An Act regarding statistics of Canada. Includes the definition of Statistics Canada’s mandate: “There shall continue to be a statistics bureau under the Minister, to be known as Statistics Canada, the duties of which are:

- to collect, compile, analyze, abstract and publish statistical information relating to the commercial, industrial, financial, social, economic and general activities and condition of the people;
- to collaborate with departments of government in the collection, compilation and publication of statistical information, including statistics derived from the activities of those departments;
- to take the census of population of Canada and the census of agriculture of Canada as provided in this Act;
- to promote the avoidance of duplication in the information collected by departments of government; and,
- generally, to promote and develop integrated social and economic statistics pertaining to the whole of Canada and to each of the provinces thereof and to coordinate plans for the integration of those statistics.”

Status Indian

“Status Indians” include Registered and Treaty Indians.

Registered Indian

Registered Indians are persons who are registered under the *Indian Act* of Canada.

Treaty Indian

Treaty Indians are persons who belong to a First Nation or Indian band that signed a treaty with the Crown.

Stratification

A **sampling** procedure in which the **population** is divided into homogeneous subgroups or strata and the selection of samples is done independently in each stratum.

Suppress, Suppression

The process by which particular **data** are prevented from being released based on criteria designed to protect **confidentiality**. ‘Cell’ suppression refers to procedures used to protect sensitive tabular **data** from disclosure; a cell being an individual entry in a table. For the APS, **data** were also suppressed for reasons of data quality (CV larger than 33.3%).

Surveyed unit

The selected unit from which measurements are taken for a sample survey or a census. Examples include persons, households, families or businesses. For APS, the surveyed unit (which is also the **sampled unit** since the APS is a sample survey) includes persons aged 15 and older.

T - U - V

Target population

The complete group of units to which survey results are to apply. These units may be persons, households, businesses, institutions, etc. This is the population for which information is wanted.

User guides

These guides accompany Statistics Canada survey **datasets**, such as **analytical files** and **Public use microdata files (PUMF)**, providing the detailed technical information required to use the **data** appropriately. The guide typically contains important information to know prior to data analysis: weighting **variables** to use, procedures related to the estimate of **variance**, and precautions to take in the dissemination of the **data**.

Variable

A characteristic that may assume more than one value to which a numerical measure can be assigned (e.g. income, age and weight).

Variance

A measure of dispersion for a given characteristic or **variable** in a **dataset**. It indicates how much variability exists for that characteristic. Technically, it is calculated as the average squared deviation from the mean of each **observation** in the **data set** for a particular **variable**.

W - X - Y - Z

Weight

A weight is the average number of units in the **population** that a unit in the survey represents. Examples of a unit include a person or a household. Weights are applied to **responding units** in a sample **database** in order to ensure that, when making inferences from the survey **data** to population parameters, **estimates** of characteristics for the total **population** are obtained.

References

- Bernier, J. and Nobrega, K. (1998). Outlier detection in asymmetric samples: A comparison of an inter-quartile range method and a variation of a sigma-gap method. Statistical Society of Canada Annual Meeting, June 1998.
- Canadian Council on Learning (CCL). (2009). The State of Aboriginal Learning in Canada: A Holistic Approach To Measuring Success. Ottawa.
- Haddou, M. (2013). Bootstrap Variance Estimation Specifications - Aboriginal Peoples Survey. Internal document, January 2013.
- Langlet, É., Beaumont, J.-F., and Lavallée, P. (2008). Bootstrap Methods for Two-Phase Sampling Applicable to Postcensal Surveys. Paper presented at Statistics Canada's Advisory Committee on Statistical Methods, May 2008, Ottawa.
- Verret, F. (2013). The estimation methodology of the 2011 National Household Survey. Paper presented at the 2013 Joint Statistical Meetings.