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Concepts and Methods

Aboriginal Peoples Survey, 2006: Concepts and Methods Guide

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Symbols

The following standard symbols are used in Statistics Canada publications:

.	not available for any reference period
..	not available for a specific reference period
...	not applicable
0	true zero or a value rounded to zero
0^s	value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
^{p}	preliminary
^{r}	revised
x	suppressed to meet the confidentiality requirements of the *Statistics Act*
^{E}	use with caution
F	too unreliable to be published

Table of contents

1.0 Introduction

This guide is intended to provide an understanding of the concepts and methods used in the 2006 Aboriginal Peoples Survey (APS), which was conducted in the fall of 2006 through the spring of 2007.

The Aboriginal Peoples Survey provides data on the social and economic conditions of First Nations people living off reserve, Métis and Inuit, aged 6 years and older.

Technical details on sampling, processing and data quality are included in this guide. Further, the guide explains the relationship between the APS and the 2006 Census and cautions users about important differences in the data produced from the two sources.

In Inuit regions, data from the 2006 Aboriginal Peoples Survey is available for selected Inuit communities. Outside Inuit regions, data is available for selected census subdivisions (CSDs) with large concentrations of Aboriginal people, for selected census metropolitan areas, as well as for a number of other geographical domains. Within each of these geographical domains, data is available for specific Aboriginal groups for, generally, both children and adults. A list of the different domains of estimation for the survey (groups of units for which estimates are targeted) is found in appendix 1.

Appendix 2 contains a glossary of terms that relate to the APS. Links to the 2006 APS questionnaires are found in appendix 3.

2.0 Background

The 2006 Aboriginal Peoples Survey was conducted by Statistics Canada to collect data on the lifestyles and living conditions of Aboriginal peoples in Canada. The survey was designed and implemented in partnership with national Aboriginal organizations.

This is the third time the Aboriginal Peoples Survey has been carried out by Statistics Canada; the first time was in 1991 and the second was in 2001. The data from both the 1991 and 2001 APS were widely used. An extremely important user of the 1991 data was the Royal Commission on Aboriginal Peoples (RCAP). They used the data as a primary source of demographic, social and economic data for their final report and related research studies. The Commission's final report recommended that the APS be conducted regularly to monitor the demographic and social conditions of Aboriginal peoples. Data from the 1991 and 2001 APS have also been used by Aboriginal organizations, community planners, service providers, governments and researchers to inform decision-making (program / policy planning and development), to improve services for Aboriginal peoples and to support academic research. With the release of 2006 data, the APS can also be used to track changes over time and provide an up-to-date picture of the situation of Aboriginal peoples.

3.0 Survey objectives

The primary objective of the 2006 APS is to provide data on the social and economic conditions of Aboriginal people in Canada. More specifically, it focuses on issues such as health, language, employment, income, schooling, housing, and mobility.

There are gaps in the data that presently exist for Aboriginal people and the 2006 APS was designed to address some of these gaps. This is information that cannot be found anywhere else and it can be used to answer a wide range of questions related to community planning, program development and health care priorities, among others. Over 60,000 people were selected to participate in the 2006 survey.

4.0 Survey development

4.1 Content development

Statistics Canada is committed to working closely with Aboriginal peoples on projects of joint interest, and representatives of Aboriginal organizations were involved in all aspects of the design and implementation of the 2006 Aboriginal Peoples Survey (APS) through participation in the Implementation Committee.

The Aboriginal Peoples Survey, Implementation Committee (IC) is a unique forum bringing together representatives from national Aboriginal organizations, federal departments, provinces and territories. Representatives from the Congress of Aboriginal Peoples, the Inuit Tapiriit Kanatami, the Métis National Council, the National Association of Friendship Centres, the Native Women's Association of Canada, and an Elder / facilitator were involved in the development and implementation of the survey and continue to be involved in disseminating the data. The Assembly of First Nations was an active member until the spring of 2001. Two federal departments, Indian and Northern Affairs Canada and Canadian Heritage, are also on the committee to act as representatives of federal partners. The committee also includes a provincial / territorial representative and representatives from Statistics Canada.

4.2 Questionnaire content

The Aboriginal Peoples Survey collects a wide variety of data on the lifestyles and living conditions of Aboriginal people across Canada and was designed in collaboration with national Aboriginal organizations. The Aboriginal Peoples Survey had four questionnaires: Adult Core (people aged 15 and older); Children and Youth (people aged 6 to 14); Métis Supplement (adults who identified as Métis or who had Métis ancestry); and Arctic Supplement (adults living in Inuit regions).

4.2.1 Adult core

This questionnaire was administered to all adults (15 years and older). The following is a list of the sections and some of the key variables:

Education
- Highest level of schooling
- Aboriginal content in schooling (Aboriginal teachers, language, curriculum)
- Location of schools
- Reasons for not completing high school / post-secondary
- Funding for post-secondary schooling
- Residential school attendance

Language
- Aboriginal languages spoken
- Ability to understand, speak, read and write Aboriginal languages
- Extent of use in the home, at work, in school, at other places
- Services available in Aboriginal languages
- Importance of keeping, learning or re-learning Aboriginal languages
- Mother tongue

Labour activity
- Labour force status (employed, unemployed)
- Reasons for not working
- Reasons for working part-time
- Traditional activities (hunting, fishing, gathering, trapping)

Income
- Source of income

Health
- General health status (excellent, very good, fair, poor)
- Contact with health professionals and traditional healers
- Chronic conditions (including diabetes, tuberculosis, heart disease, cancer)
- Height and weight (body mass index)
- Smoking
- Drinking
- Social support
- Social problems in community

Communication technology
- Use of communication technology (computers, Internet)
- Location of use of communication technology

Mobility
- Number of moves in past 5 years
- Reasons for moving
- Temporary absences

Housing
- Subsidized Housing
- Features in the home (running water, telephone, smoke detectors, etc.)
- Special features to assist a household member with a health problem (ramps, alerting devices, etc.)
- Quality of drinking water
- Owned/rented
- Social housing list, duration on list
- Home insurance

4.2.2 Children and youth

This questionnaire was developed for Aboriginal children and youth 6 to14 years of age. The parent or guardian of the child/youth answered the questionnaire on their behalf. Following is a list of sections and key variables:

General health
- Height and weight
- Physical activity
- Birth weight
- Breastfeeding
- Health care utilization
- Contact with health professionals (pediatrician, public health nurse, etc.)
- Location of contact with health professionals
- Overnight stays in hospital

Activities of daily living and medical conditions
- Activity limitations
- Chronic conditions
- Medications

Physical injuries
- Type and cause of injuries

Dental care
- Dental treatment in past year
- Dental care required

Nutrition
- How often child eats breakfast
- Types of foods child eats

Education
- Aboriginal specific preschool attendance
- School attendance
- Assessment of school
- Absent from school

Social activities and relationships
- Leisure activities (sports, clubs, cultural activities, watching TV, etc.)
- Quality of relationships with peers, teachers, parents, siblings
- Types of worries

Language
- Ability to understand and speak an Aboriginal language
- Who provides help in learning language

General household information
- Number of persons in the household
- Main source of household income

4.2.3 Métis supplement

This part of the survey, developed jointly with the Métis National Council, was administered only to the Aboriginal adult population (15 years and older) who self-identify as Métis and/or who have Métis ancestry. This portion of the survey was not conducted in Inuit regions. This supplement contains the following sections:

Family background
- Community of birth of respondent, mother and father
- Ancestry of mother, father
- Cause of death of mother, father

Child Welfare
- Removal of children
- Adoption
- Child care arrangements

Social interaction
- Marital status
- Ancestry of spouse/partner
- Use of Aboriginal languages in home
- Métis cultural activities

Health

- Contact with health professionals
- Testing for diabetes, high blood pressure, PAP smear test, mammogram, Prostate specific antigen (PSA) blood test
- Type and cause of injuries
- Health care use
- Leisure activities (physical activities such as walking, bicycling, and non-physical activities such as watching television, playing video games)
- Depression
- Spirituality

4.2.4 Arctic supplement

The Arctic supplement was developed based on the Survey of Living Conditions in Circumpolar Arctic Countries (SLiCA), developed jointly with the Inuvialuit Regional Corporation, Nunavut Tunngavik Incorporated, Makivik Corporation, the Labrador Inuit Association, Inuit Tapiriit Kanatami and Laval University, was administered to the Aboriginal adult population (15 years and older) residing in Inuit regions. This supplement contains the following sections:

Household and harvesting activities

- Paid work (full-time / part-time jobs, self-employment, etc.)
- Unpaid work (taking care of children, process or prepare animals for food, skins or cook meals, etc.)
- Harvesting country food
- Equipment for harvesting activities (trucks, snowmobiles, etc.)
- Use of country food (eaten, shared, sold, etc.)
- Household income from harvesting activities

Personal wellness

- Social support (in times of need, for advice, etc.)
- Community ties

Community wellness and social participation

- Degree of satisfaction with conditions in community (such as job opportunities, quality of education, quality of housing, etc.)
- Participation in community (volunteer work, attendance at public meetings)
- Vote in recent elections

4.2.5 Census topics

Some information that was obtained from the 2006 Census has been appended to the APS analytical file to provide a very rich and detailed data set for analysis.

The following Census variables have been appended to the APS analytical file.

- Census subdivision type
- Period of construction of dwelling
- Structural type of dwelling
- Is anyone in the household a farm operator?
- Gross rent
- Primary household maintainer
- Marginal dwelling indicator
- Number of household maintainers
- Number of persons in household
- Owner's major payments
- Tenure - condominium
- Number of rooms
- Is dwelling in need of repair?
- Tenure of dwelling
- Value of dwelling
- Census family status
- Census family structure
- Common-law status
- Economic family status
- Marital status (legal)
- Census family total income
- Economic family total income
- Employment income
- Total government transfer payments
- Household total income
- Investment income
- Low income before tax status
- Total income
- Unpaid work: Hours Spent Doing Unpaid Housework
- Unpaid work: Hours spent looking after children, without pay
- Unpaid work: Hours spent providing unpaid care or assistance to seniors
- Unpaid work: Summary variable for unpaid work
- Number of children – Refers to the number of children in private households
- Presence of children – Refers to the number of children in private households by age group
- Labour force activity
- Industry sectors
- Industry sub-sectors
- Occupation major groups
- Weeks worked in 2005
- Work activity in 2005

- Official language
- Census subdivision type of residence 1 year ago
- Census subdivision type of residence 5 years ago
- Mobility status – place of residence 1 year ago
- Mobility status – place of residence 5 years ago
- Census subdivision of residence 1 year ago
- Census subdivision of residence 5 years ago
- Rural-urban place of residence 1 year ago
- Rural-urban place of residence 5 years ago
- CMA or CA of work
- Type of commuting
- Province or territory of work
- Commuting distance to work
- Census subdivision of work
- Place of work status
- Mode of transportation to work

Note:
Because these variables were obtained from the 2006 Census responses for APS respondents, they refer to the situation on the day of the Census, that is, May 16, 2006. Users should be aware that in some cases, the respondent could have moved or the composition of the household could have changed between Census day and the date of the APS interview, so that some of the information provided by the census data may not always be reflective of the respondent's situation when the APS interview took place.

5.0 Survey design

5.1 Target population and coverage

The target population for the 2006 APS is composed of the Aboriginal population in Canada living in private dwellings, 6 years of age and older as of October 31, 2006, excluding people living in Indian Settlements or on reserve. Reserves in the territories are included in the target population, however. The "Aboriginal population" is defined in section 5.1.1

5.1.1 Identifying the aboriginal population

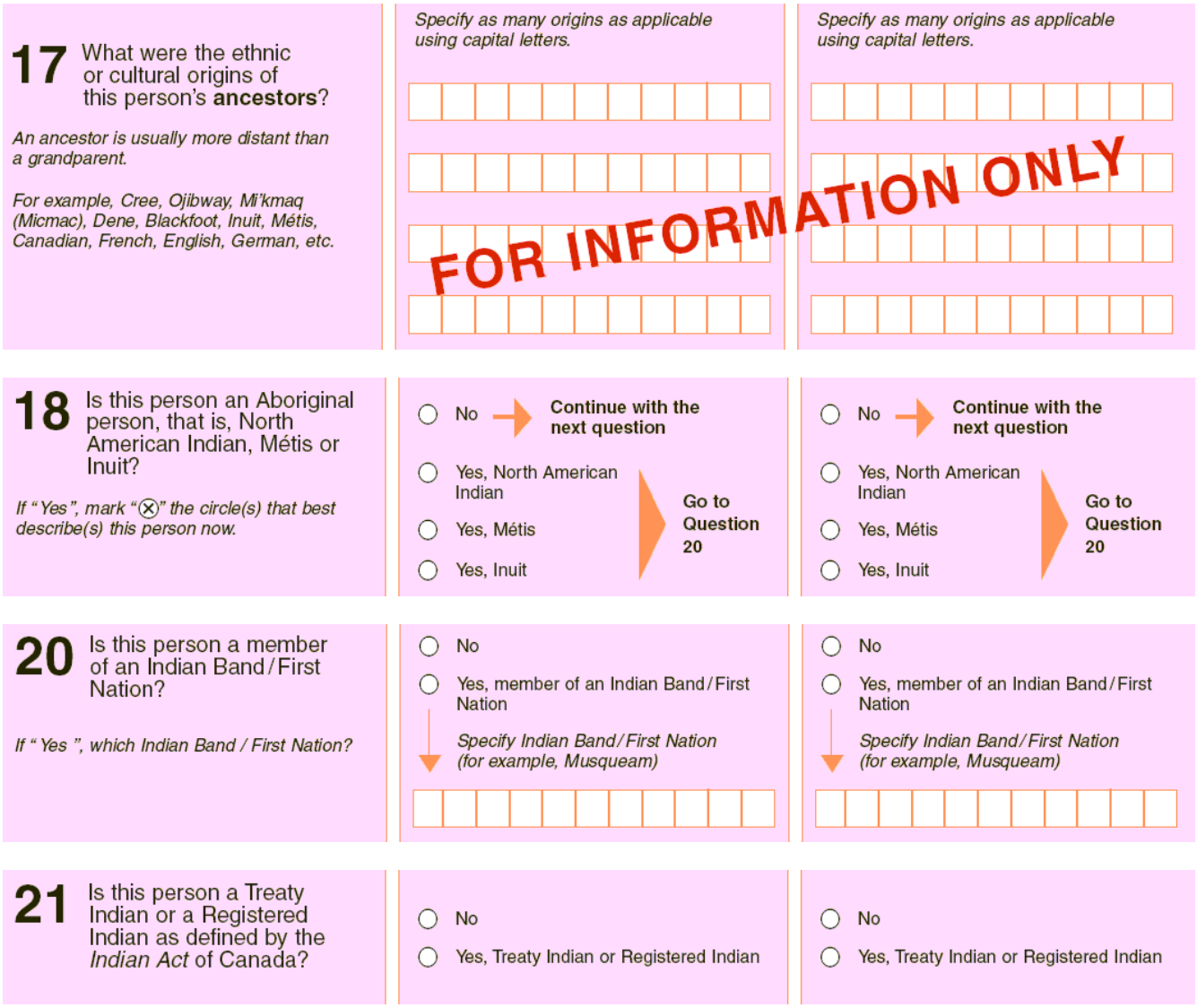
The Aboriginal Peoples Survey is a postcensal survey, which means that the APS sample was selected from reported answers to the Census questionnaire. More precisely, the APS sample was selected from reported answers to four screening questions on the Census long form, which has two main versions, the 2B form and the 2D form.

The 2B form is completed by self-enumeration and is administered to approximately one in five households in most parts of Canada (2B regions). Other than the basic demographic questions, the 2B form asks questions on labour activity, income, education, activity limitations, citizenship, housing, ethnic origin and so on.

The 2D form, identical in content to the 2B form except for some adaptation of examples, is administered by personal interview to all households in remote areas and Indian reserves (2D regions).

Other households in Canada receive the short form, which only contains basic demographic questions (name, sex, date of birth, legal marital status, common-law status, relationship to person 1, first language learned in childhood and consent question to make data public in 92 years).

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



The derived Aboriginal identity concept refers to those persons who reported identifying with at least one Aboriginal group, that is, North American Indian, Métis or Inuit, and/or those who reported being a Treaty Indian or a Registered Indian, as defined by the *Indian Act* of Canada, and/or those who reported they were members of an Indian band or First Nation. The Aboriginal identity population is derived from three questions (questions 18, 20 and 21).

The reporting of an Aboriginal origin to question 17 defines the Aboriginal ancestry population (or ancestry population). Individuals with an Aboriginal origin without identity are defined as the Aboriginal ancestry-only population (or ancestry-only population). The Aboriginal population is defined as either the identity population or the ancestry-only population.

5.1.2 Survey reference date

October 31, 2006 was selected as the reference date for the Aboriginal Peoples Survey. This date approximately corresponds to the beginning of data collection for the survey (October 23 was the official start date). The age is determined as of this reference date and is used to determine which type of questionnaire to administer (children and youth or one of the adult questionnaires).

5.1.3 Census frame

A sampling frame provides a means of accessing the population to be covered by a survey. The APS frame was built in a series of steps. The frame was constructed for both the APS and the ACS. In the first step, a list was created containing all individuals falling in the Aboriginal population according to answers reported to the four screening questions of the Census long form (children and adults).

In a second step, household members of the Aboriginal people selected in the first step were added to the list. These correspond to additional household members belonging to an Aboriginal household (household containing at least one Aboriginal person). These additional individuals could be potentially added to the target population if they had missing information to the screening questions (at the time of sample selection, Census data were not imputed and could therefore be missing). These individuals were also used as potential contact persons to trace the selected individuals in the household.

In a third step, missing information on the screening questions was imputed. Individuals with missing information on the screening questions (or 'filters') belongs to an Aboriginal household have a good chance of being Aboriginal people as well. On the other hand, individuals with missing filters not belonging to an Aboriginal household have a very small chance of being Aboriginal people and were not considered as potential additions to the frame. In general, the imputation rules looked at the household composition for individuals with non missing filters. Individuals with missing filters were imputed as being Aboriginal people if at least 50% of the household members with non missing filters were Aboriginal people.

In the fourth and final step, (based on imputed data), all Aboriginal children aged 6 to 14 years old and all adults aged 15 and older were kept on the frame for the APS. Aboriginal people with missing age responses on the Census form were included in APS, (greater chance of being older than 5 years than being less than 6), but were excluded from the ACS. In these cases, a child / adult flag was derived from answers to the Census to determine whether they should be part of the child or adult APS frame.

5.2 Sampling design

5.2.1 Domains of estimation

a) Domains

Domains of estimation are groups of units for which estimates are targeted. The domains of estimation for APS were very similar to the ones used in 2001, except for the fact that Indian reserves were not covered in 2006 (with the exception of the territories). These domains of estimation correspond to geographical regions for which estimates with an "acceptable" level of precision for a particular Aboriginal group (i.e. North American Indian (NAI), Métis, Inuit) are targeted. No estimate is targeted for the ancestry-only population. Estimates are targeted for the identity population as well as the ancestry population (with or without identity combined). Since most individuals of the identity population also have Aboriginal ancestry, the domains of estimation were based on the identity population.

The identity Aboriginal groups were defined as follows:

- North American Indian (NAI) only - individuals reporting only NAI to question18
- Métis only - individuals reporting only Métis to question 18
- Inuit only - individuals reporting only Inuit to question 18
- Multiple identity – individuals reporting more than one group to question 18
- Registered Indian or band member only – individuals with a positive answer to question 20 or question 21 but *No* to question 18

Geographical regions were separated between Inuit regions and outside Inuit regions.

i) Inuit regions

For Inuit regions, estimates are targeted for the Inuit communities In general, for the adults estimates are targeted for all Aboriginal groups combined for all large enough Inuit communities (33 communities). Estimates are also targeted for the Inuit only at the Inuit region level (Nunavik, Nunatsiavut, Inuvialuit and Nunavut) for both adults and children.

For individual Inuit community profiles in the adult population, the target was to estimate a characteristic present for no less than 10% of the population (minimum proportion for which estimates are targeted, called) with a coefficient of variation (CV) of 25%. The coefficient of variation is a measure of precision of the estimate which is described in section 8.1 (*Sampling Errors*). As for estimates pertaining to the Inuit at the Inuit region level, a *min p* of 7.5% and 10% were selected for the adults and children respectively with a CV of 20%.

As a rule of thumb, it was decided, for confidentiality reasons, to target estimates for populations of at least 200 individuals based on the 2001 Census. When this could not be met, grouping was done.

ii) Outside Inuit regions

Outside Inuit regions, large provinces were divided into the main Census Metropolitan Areas (CMAs), the rest of the urban portion of the province and the rest of the rural portion of the province. Certain small provinces were divided into rural and urban only and Newfoundland was divided between Labrador and non Labrador. No estimate was targeted for Prince Edward Island separately.

In addition, estimates were targeted for 5 Census Subdivisions (CSDs) with large Aboriginal concentrations for all Aboriginal groups combined (adults and children separately). These are the CSD of Thompson (Manitoba), Prince Albert (Saskatchewan), Prince Rupert (British Columbia), Whitehorse (Yukon) and Yellowknife (Northwest Territories).

Outside Inuit regions, other than the 5 large CSDs, ideally estimates would be produced by region and Aboriginal group for both adults and children separately. Since some of these combinations would include a very small number of individuals, some grouping was done.

Other than the 5 large CSDs, the target was to estimate a *min p* of 7.5% for the adults and 10% for the children with a CV of 20%. For the 5 large CSDs, a CV of 25% was chosen with a *min p* of 10% for the adults and 15% for the children.

b) Targets in each domain

The ability of achieving the targeted CV*s* would depend on factors such as the population size, the number of long forms available, the expected response rate, the expected number of false positives (an Aboriginal person according to the Census but a non Aboriginal person according to the APS), the expected sample loss due to the constraint of selecting no more than three individuals per household, the expected loss due to the reduction of overlap with other postcensal surveys and the expected loss due to the overlap with the NLSCY (section 5.3). In certain domains, it was not possible to achieve this precision. In these cases, a CV of 25% or 33% was targeted.

5.2.2 Sampling plan

The Aboriginal Peoples Survey selects its sample from the Census long form sample (either from the 2B or the 2D version of the long form). Outside Indian reserves, the 2D covers the Northern part of each province and the three territories with the exception of Yellowknife and Whitehorse which use the 2B form. In 2D regions, all households receive the 2D version of the long form. In 2B regions (all parts of Canada outside 2D regions), a systematic sample of approximately one in five households receives the 2B version of the long form within each Collection Unit (CU).

Once the frame has been constructed, it is then stratified according to the domains of estimation, and further stratified by 2B/2D regions. A simple random sample is then selected within each domain of estimation crossed by 2B/2D regions. Since the Aboriginal Peoples Survey sample is a sample of the long form sample, its sample design is called a two-phase sample, where a sample of households is selected in the first phase and a sample of individuals is selected in the second phase.

5.3 Overlap with other surveys

In order to control respondent burden, it was decided to reduce the overlap between the APS and the other postcensal surveys as well as the National Longitudinal Survey of Children and Youth (NLSCY). For the Aboriginal Peoples Survey, a total of 1538 units were removed from the overlap and treated as a particular form of non-response in the weighting process. These different sample losses had been estimated before selecting the final sample and the original sample size was increased to compensate for the loss.

5.3.1 Overlap with other postcensal surveys

In 2006, five postcensal surveys were conducted at approximately the same time: the APS, the Aboriginal Children's Survey (ACS), the Participation and Activity Limitation Survey (PALS), the Survey on the Vitality of Official-Language Minorities (SVOLM) and the Maternity Experience Survey (MES). All of these surveys selected their sample from the Census and most of them only from answers to the Census long form. This means that a given household could potentially have been selected for up to five surveys if the household had members of all target populations. Although very unlikely, a household could have been selected for three of four surveys in some cases. Also, more than one person in each household could have been selected for the same survey. The absence of a procedure to reduce the overlap at the household level could have represented a very high response burden for many households.

Consequently, rules were used to limit the overlap between the different surveys once the samples were selected. The idea was to limit the number of surveys to two per household and to three interviews per household. In certain cases, four interviews per household (two for each of two surveys) were allowed. In a first step, the number of surveys per household was reduced to a maximum of two. If a household was initially assigned to more than two surveys, two surveys were selected at random. In a second step, the number of interviews per household was limited to three or four using another random procedure.

5.3.2 Overlap with National Longitudinal Survey of Children and Youth

The National Longitudinal Survey of Children and Youth (NLSCY) content is somewhat related to the children and youth component of the Aboriginal Peoples Survey (APS). For this reason, it was decided to exclude some selected APS children falling in households of certain NLSCY cohorts. There were also certain children selected in NLSCY cohorts overlapping with the APS sample who were dropped from the NLSCY sample.

5.4 Sample sizes

The initial sample size for the APS was 62,579 and after the overlap reduction with other surveys, this number was reduced to 61,041 individuals. The distribution of these 61,041 individuals in the various domains of estimation is given in Table 1 by geographical domain and type of population (identity and ancestry only) with their corresponding observed response rates. It should be noted that the number of individuals also includes those people who agreed to participate in the survey but who reported (or reported for their child) being non-Aboriginal in the APS (false positives).

Table 1
Sample sizes and response rate by geographical domain and type of population

Geographical domain	Identity	Ancestry only	Total	Respondents	Response rate
	number of respondents				percent
Nunatsiavut	644	11	655	581	88.7
Nunavik	1,561	20	1,581	1,331	84.2
Inuvialuit	966	25	991	844	85.2
Nunavut	3,626	52	3,678	3,256	88.5
Nunaat total	**6,797**	**108**	**6,905**	**6,012**	**87.1**
Newfoundland and Labrador excluding Nunatsiavut	1,796	639	2,435	2,081	85.5
Prince Edward Island	148	132	280	219	78.2
Nova Scotia	1,214	982	2,196	1,792	81.6
New Brunswick	1,023	943	1,966	1,586	80.7
Quebec excluding Nunavik	4,860	3,061	7,921	6,252	78.9
Ontario	6,818	2,894	9,712	7,808	80.4
Manitoba	4,722	470	5,192	4,034	77.7
Saskatchewan	5,966	519	6,485	5,097	78.6
Alberta	6,708	1,658	8,366	6,576	78.6
British Columbia	6,092	1,288	7,380	5,665	76.8
Yukon	868	51	919	721	78.5
Northwest Territories excluding Inuvialuit	1,260	24	1,284	1,078	84.0
Rest of Canada total	**41,475**	**12,661**	**54,136**	**42,909**	**79.3**
Canada total	**48,272**	**12,769**	**61,041**	**48,921**	**80.1**

Source: Statistics Canada, Aboriginal Peoples Survey, 2006

6.0 Data collection

The Aboriginal Peoples Survey was conducted from October 2006 to March 2007

6.1 Mode of collection

The Aboriginal Peoples Survey was collected using a paper questionnaire.

The Adult Questionnaire was administered to adults (15 years and older). (No interview with an individual who was between the ages of 15 and 17 could proceed without the prior approval of the individual's parent or guardian.)

The Children and Youth questionnaire was administered for Aboriginal children and youth 6 to 14 years of age. The parent or guardian of the child / youth answered the questionnaire on their behalf, however children from 12 to 14 years old could respond themselves if the parent permitted it. Children who lived on their own could complete the questionnaire without parental or guardian consent.

The survey was conducted using personal interviews in Inuit regions, Labrador and in the Northwest Territories (except Yellowknife). Telephone interviews were conducted elsewhere in Canada. In a number of locations, personal interviews were undertaken when people could not be reached by telephone.

6.2 Aboriginal languages

The Aboriginal Peoples Survey was translated into 20 Aboriginal languages and interpreters were hired. Translators were hired when requests were received for the survey to be conducted in other Aboriginal languages.

6.3 Coordination with the Aboriginal Children's Survey

The collection of the Aboriginal Children's Survey (ACS) occurred during the same period of time as the APS. In order to keep respondent burden to a minimum, the collection of these two surveys was coordinated. For households who were selected for both surveys, the surveys were conducted by the same interviewer during the same telephone contact or personal visit, whenever possible.

7.0 Data processing

7.1 Data capture

Data capture was carried out at the head office in Ottawa. Two methods, optical character recognition (scanning) and key entry, were used to capture the questionnaires. Checkboxes and numeric write-in responses (e.g. date of birth) were captured by scanning, while other write-in responses were captured by key entry. Questionnaires were recaptured when data quality fell below acceptable standards. As well, some abnormalities created by the optical reading system were identified and corrected during editing.

7.2 Editing

The first stage of error detection was done during the data collection. Interviewers were asked to check their questionnaires page by page ensuring that everything had been filled in correctly and clearly and to ensure that skips had been followed correctly. In cases where questions were incorrectly missed, interviewers were instructed to contact the respondent again to obtain the missing information.

The second stage of survey processing involved editing all the survey records according to pre-specified edit rules to check for errors, gaps and inconsistencies in the survey data. Validity checks on each variable were made to ensure, for example, that numerical answers to certain questions fell within acceptable logical ranges and that invalid multiple responses to certain questions were identified. Checks were also made to ensure that the questionnaire flows were followed properly and that portions of the questionnaire that were to be skipped in the interview because of a previous answer were in fact skipped. Inconsistencies between related questions were also corrected.

Where errors were found, the erroneous information was replaced by a “not stated” code, or corrected based on the answers to other questions. Although the corrections were generally done in an automated way, analysts reviewed some problematic situations on a case by case basis.

Finally, a macro-level verification was done by analyzing frequency distributions to identify anomalies (for example, missing categories or unusually large frequencies).

7.3 Weighting

In a sample survey, each selected person represents not only himself / herself, but also other persons who were not sampled. Consequently, a weight is associated with each selected person to indicate the number of persons that he / she represents. This weight must be used for all estimations. For example, in a simple random sample of 2% of the population, each person represents 50 persons in the population. The initial weight is then adjusted for such things as non-response and discrepancies between the characteristics of the sample and known totals for the target population (post-stratification adjustment). In fact, seven steps were used in the weighting process.

7.3.1 Initial weights

The initial weight was the inverse of the inclusion probability (probability of falling in the sample). The initial weight was the product of two components: the inverse of the stratum sampling fraction and the inverse of the initial Census sampling fraction. The stratum sampling fraction is calculated as the number of individuals selected in each stratum divided by the total number of individuals on all long forms available in that stratum on the Census frame. The initial Census sampling fraction, which is unique to each Collection Unit (CU), is calculated as the number of completed long forms divided by the total number of short and long forms for that CU (usually slightly smaller than 1/5 in 2B regions and slightly smaller than 1 in 2D regions because of non-response).

7.3.2 Adjustment for overlap with other surveys

As mentioned in Section 5.3, 1538 individuals were lost from the initial sample of size 62,579 due to the reduction of the overlap with other surveys. To compensate for that loss, a simple ratio adjustment was applied by population type (identity, ancestry-only), Aboriginal group and age group (adults / children). That is, for each of these groupings, the sum of the initial weights was calculated over the full initial sample and over the remaining sample of 61,041 individuals after reduction of overlap. Initial weights were then multiplied by these factors for the remaining sample to obtain the adjusted weights. The adjusted weights of the units removed were set to 0. Hence, the sum of the adjusted weights for the remaining units adds up to the sum of the initial weights within each combination.

7.3.3 Adjustment for units selected in the Aboriginal Children's Survey

A small number of individuals selected for the Aboriginal Children's Survey (ACS) were in fact "in scope" for APS and ended up completing the APS questionnaire. This was due to errors in the Census date of birth. Although interviewers were not supposed to convert an ACS to an APS questionnaire, a small number of such interviews were done. In order to keep these interviews, a special procedure was used to assign them a weight.

Looking at the ACS strata in which these individuals were selected, it was possible to assign the corresponding APS strata in which they would have fallen had the correct Census date of birth for these individuals been available. These individuals were initially assigned the average weight (weight adjusted for the overlap loss) of the corresponding stratum. The weights of all individuals in these strata were then slightly proportionally decreased to preserve the stratum totals.

7.3.4 Adjustment for adult-child child-adult conversion

Because of errors in the Census date of birth, 62 individuals selected as adults were in fact children and 127 individuals selected as children were in fact adults upon verification of the date of birth in the APS. Even though transfers of questionnaires between the ACS and the APS were not allowed, transfers of questionnaires between adults and children were allowed in the APS. Transfers from one stratum at the sampling stage to another stratum at the data collection stage are called *strata jumpers*. Had these strata jumpers been selected in the correct strata, they would have had a different weight. The following strategy was used for these cases.

For each adult in the APS selected as a child in the Census, it was possible to assign the corresponding adult stratum from the child stratum in which this adult was selected. Similarly, for each child in the APS selected as an adult in the Census, it was possible to assign the corresponding child stratum from the adult stratum in which this child was selected. For each strata jumper, the average previous stratum weight (weight adjusted for the addition of APS respondents selected in the ACS) was first assigned. Weights for all individuals were then adjusted by stratum such that the sum of the new weights was equal to the sum of the previous weights in each stratum, using a ratio adjustment.

7.3.5 Adjustment for out of scope units

Some individuals were found to be out of scope for reasons other than reporting that the individual was not an Aboriginal person. In fact, 153 individuals were too young (or too old) to complete the survey, 121 were deceased and 3 were no longer living in Canada.

Individuals too young for the survey may be cases with an error in the Census date of birth or cases for which no age was available in the Census (such individuals were put on the APS frame since they would be more likely to be 6 years of age or older than under 6 years old). If they were younger than 6 years old, they would be out of scope for the APS. If they were selected as adults and they were from 6 to 14, they would be too young for the adult questionnaire. In this case, interviewers were supposed to switch from an adult to a children and youth questionnaire. Some interviewers did not follow this procedure and these cases were coded as out of scope for being too young. In theory, no one should have been classified as being too old for the survey. This may be situations where someone was selected as an adult but was from 6 to 14 years old. Even though interviewers should have switched questionnaires in such cases, some of them classified these cases as being too old for the survey.

The Census age available for these individuals (too young or too old) had a tendency of being proportionally higher for the ages near the limits chosen for the survey (6 years old for children and youth and 15 years old for the adults). About 60% of the deceased individuals were more than 55 years old. Age groups were created accordingly and used for the adjustment. The weights of the out of scope individuals were set to zero. In order to compensate for these losses, a simple ratio adjustment by Census age group was done to preserve the total sum of weights in each age group. That is, the weights of the in scope units were inflated such that the sums of the new weights were preserved in each age group.

7.3.6 Adjustment for non-response

Two adjustments were made for two types of non-response: the selected persons for whom no contact was made with the person himself / herself or the parent or guardian of the child (4090 adults and 1740 children) and the persons contacted who did not (or could not) provide the information for themselves or their child (mainly refusals, 4360 adults and 1660 children). The weights were first adjusted for non-contact and then for other forms of non-response for the adults and the children separately. In what follows, the term ‘non-response” will be used for both types of non-response. The term “respondent” refers to the person completing the information for the selected person (usually themselves for the adults or a parent or guardian for the children). The term “responding unit” refers to the selected person for whom a response was obtained (either from themselves or from the child parent or guardian).

Each non-response adjustment was done in three steps. First, a logistic regression model was used to predict the response probability (probability of obtaining a response) for each selected person (for both responding and non-responding units) from a series of explanatory variables. These variables, consisting of the selected person characteristics, the parent or guardian characteristics for the children and household characteristics, were either Census characteristics (for example family structure, Census Aboriginal group) or collection variables (for example number of attempts to contact a subject, whether field follow up was required, etc.). For children, as parent or guardian characteristics were required for responding and non-responding units, the Census family structure was used to determine who would be the “most likely” parent or guardian of the child for non-responding units. Collection variables were found to be particularly good predictors of the response or non-response as many of these variables measure the effort to contact a person or to obtain a response from a contacted person. For instance, individuals requiring a large number of attempts to be contacted were found to be very similar to individuals for whom no contact was made (all attempts failed).

The non-response adjustment was then done by forming non-response adjustment classes in such a way that selected persons in each class had similar response probabilities. Finally, the inverse of the weighted response rate in a class was used as the weighting adjustment factor for that class and the weights of the responding units within the class were adjusted accordingly.

7.3.7 Post-stratification adjustments

The post-stratification adjustment ensures that the sum of the final weights for the responding units matches the population counts from the Census, according to different groups. For the Aboriginal Peoples Survey, these groups, called post-strata, were defined from combinations of several variables: the Census Aboriginal group (North American Indian, Métis, Inuit, multiple Aboriginal responses or registered Indian/band member only), the Aboriginal population type (identity or ancestry only), the geographical domain and the age group (adults or children and youth). The weights were adjusted using the ratio of the Census weighted count to the sample weighted count for each post-stratum. This ensured that the sample did not under or over-represent certain combinations of Census Aboriginal groups, regions and age groups.

Since answers to the screening questions (presented in section 5.1.1) can differ between the APS and the Census, a second post-stratification was carried out. This guaranteed that the total Aboriginal population (identity or ancestry), as estimated from the APS filter questions, matched those from the Census filter questions. This post-stratification was done by geographical domain and by age group, according to the total count of Aboriginal people, and not according to each Aboriginal group, in order not to hide the transitions observed between the Census and the survey that are due to such factors as the proxy effect, the time effect and the survey instrument effect (see section 10.0 The Relationship Between the APS and the Census*)*.

8.0 Data quality

8.1 Sampling Errors

The estimates that can be derived from this survey are based on a sample of individuals. Somewhat different estimates might be obtained if a complete census had been taken using the same questionnaire, 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 was developed. Several bootstrap methods exist in the literature but none of them was appropriate for the APS sample design. The particularities of the design that make the estimation of sampling errors difficult are the following:

- Two-phase sample design in which households are selected in the first phase and individuals in the second phase
- The sampling fraction of the first phase sample (long form sample) is non-negligible (about 20% in 2B regions) and the second phase sampling fraction is relatively high in most strata
- The second-phase strata (combinations of domains of estimation, 2B/2D regions) are non nested within first-phase strata (collection units).
- The method used has 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.

The method developed is a general bootstrap methodology for two-phase sampling (Langlet, Beaumont and Lavallée, 2008). Several bootstrap methods exist in the literature for one-phase 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 (the variance is a particular measure of sampling error) is then calculated as a function of the squared differences between estimates coming from each of the *M* bootstrap samples and the estimate coming from the survey sample.

The variance calculation is greatly simplified though the use of bootstrap weights. For each subsample, 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 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 of the units 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 of the full sample are applied to the initial bootstrap weights to obtain the final bootstrap weights which will capture the variance associated with not only the particular sample design but also the variance associated to all weight adjustments applied to the full sample to derive the final weights.

Any bootstrap method can be used by deriving bootstrap weights and any bootstrap weights can be seen as the product of the initial sampling weights and a random adjustment factor. This is the idea of the general bootstrap methodology for two-phase sampling. In the case of a two-phase sample, the variance can be decomposed into two components, each one associated to a phase of sampling. The method generates a random adjustment factor for each phase of sampling. The initial bootstrap weight of a given unit in a bootstrap sample is the product of its initial sampling weight by the values of the two random adjustment factors for that unit.

There is a major advantage of having two sets of random adjustment factors. The first set of adjustment factors can be used for estimates based on the first phase only, that is, estimates based on the Census long form sample. These estimates are used when the weights are adjusted to the Census totals in the post-stratification adjustment. This will produce variable Census totals from each bootstrap sample and reflects the fact that the Census totals used are based on a sample and are not known fixed totals.

For the Aboriginal Peoples Survey, 1,000 sets of bootstrap weights were generated using the method described above. The method used is slightly biased in the sense that it slightly overestimates the variance. 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 which reduced their variability. Therefore, the variance calculated on these transformed bootstrap weights has to be multiplied by a factor which is a function of a certain parameter, called *phi*. The value of the parameter is selected as the smallest integer that makes all bootstrap weights positive. For the Aboriginal Peoples Survey, this factor is 4. The variances calculated from the transformed bootstrap weights have to be multiplied by $4^2 = 16$. Alternatively, the CVs obtained (square root of the variance divided by the estimate itself) have to be multiplied by 4. However, most software producing 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.[1]

It is of course 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 producing sampling error estimates from bootstrap weights.

The measure of sampling error used for the APS is the coefficient of variation (CV) of the estimate, which is the standard error of the estimate divided by the estimate itself. For this survey, when the CV of an estimate is greater than 16.5% 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%, the cell estimate will be replaced by the letter "F" to indicate that the data is suppressed for reasons of reliability. An "X" is used to indicate that an estimate is suppressed to meet confidentiality requirements of the *Statistics Act*.

1. More information on the bootstrap method used can be obtained in the reference.

8.2 Non-sampling errors

Errors which are not related to sampling may occur at almost every phase of a survey. Interviewers may misunderstand instructions, respondents may make errors in answering questions, answers may be incorrectly entered on the questionnaire, errors may be introduced in the processing and tabulation of the data and so on. These are all examples of non-sampling errors. Over a large number of observations, randomly occurring errors will have little effect on estimates. However, errors occurring systematically will contribute to biases in the survey estimates.

The 2006 Aboriginal Peoples Survey being very similar to the 2001 APS in terms of content and methodology used, no pilot test was done for the APS. Hence, the experience of the 2001 APS was used to evaluate the entire survey process, from the questionnaire content to the data processing. This helped reduce the magnitude of non-sampling error.

Coverage errors occur when there are differences between the target population and the sampled population. Because the APS sample is selected from those who participated in the 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 and given the adjustments made on the initial Census sampling weights.

Total non-response can be a major source of non-sampling error in surveys depending on the degree to which respondents and non-respondents differ with respect to characteristics of interest. Total non-response occurred if the selected individual could not be contacted or refused to participate in the survey. High response rates are essential for quality data. To reduce the number of non-response cases, the interviewers were all trained by Statistics Canada's staff, provided with detailed interviewer manuals, and were under the direction of interviewer supervisors. Refusals were followed up by senior interviewers to encourage respondents to participate in the survey. In regions covered by telephone interviewing, a field follow-up procedure was put in place to further reduce the level of non-response.

Partial non-response occurred if the respondent did not answer a specific question, possibly because he/she did not know the answer or the question was too sensitive. Generally, the extent of partial non-response was small in the APS. Results from the 2001 APS were used to evaluate potential problems and changes to the questionnaires were made. In particular, special measures were put in place to facilitate the collection of data on sensitive topics. Where required, special introductions were included (e.g. question on mental, spiritual and emotional health in the Métis supplement), “refused” categories were added and so on.

A response error occurs when the respondent misunderstands a question or the interviewer records an incorrect answer. Several procedures were taken to minimize this type of error, including interviewer training and qualitative testing of the new questions.

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

9.0 Dissemination

9.1 Analytical products

Accompanying the release of data from the Aboriginal Peoples Survey was an analytical article entitled “Inuit Health and Social Conditions; Highlights from the 2006 Aboriginal Peoples Survey”, which provides information on health status provided through data on self-reported health and chronic conditions. Determinants such as access to health care, education, housing, harvesting and country food consumption were examined.

A fact sheet, providing highlights from the analytical article, is also available.

In early 2009, analytical articles and fact sheets will be released focusing on First Nations children aged 6 to 14 living off reserve and on Métis people.

9.2 Data products and services

The master data file for the 2006 APS is available in Statistics Canada’s Research Data Centres (RDCs). Accompanying the file, is the record layout, SAS and SPSS syntax to load the file, as well as metadata in the form of a codebook that describes each variable and provides weighted and unweighted frequency counts.

Supporting data tables that provide provincial and territorial estimates, as well estimates for Inuit regions, for key indicators from the analytical article are available.

Profiles that provide information on a variety of topics covered in the APS are available on Statistics Canada’s website. Information is displayed for different concepts and levels of geography.

Custom tabulations will be produced, upon request, on a cost-recoverable basis.

9.3 Survey documentation

Information about the Aboriginal Peoples Survey is available on Statistics Canada’s website. This information includes:

- Questionnaires
- Concepts and Methods Guide
- User’s Guide
- Integrated Metadata Base (IMDB)

10.0 The relationship between the Aboriginal Peoples Survey and the Census

The Aboriginal Peoples Survey (APS) is a post-censal survey, which means that Census information was used to determine who would be included in the APS sample. More detailed information about how Census responses were used to determine the population of interest for the APS is provided in section 5.0 (s*urvey 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 example, the Census provides some information about highest level of certificate, diploma or degree. Adding information from APS provides an opportunity to learn about any schooling below high school completion, whether teachers were Aboriginal people, whether financial assistance was obtained to pursue post-secondary schooling or why people didn't continue their formal schooling.

The Aboriginal Peoples Survey also covers entire topics or themes that are not included in the Census. For example, the APS can provide information on the health of Aboriginal people, and their use of communication technology.

Both the Census and the APS conceptually cover the two types of Aboriginal populations; that is, the "identity population" and the "ancestry population" as described in section 5.

10.1 Differences in counts

While the post-stratification (see section 7.3.7) ensured that the total number of people with Aboriginal ancestry or identity is the same for the Census and the APS, it did not ensure that the counts for the Aboriginal groups would match. Indeed, the Census and the APS produce different counts at the Aboriginal group level. This is due to changes in the way respondents answered questions about their Aboriginal ancestry and Aboriginal identity from the time of the Census to the time of the APS. Respondents may have changed their responses for a number of reasons, including differences in how the information was collected.

10.1.1 Different modes of interview

Most of the 2006 Census data were collected through self-enumeration using a mail-out mail-back methodology (except for Indian reserves and remote areas, including all Inuit communities, where the canvasser methodology was used). In general, one household member completed the Census form for all household members. This is called proxy reporting, meaning someone other than the person for whom the information is reported answers the questions.

In all Inuit communities, all of the Northwest Territories (except Yellowknife) and Labrador, APS data were collected through personal interviews. Everywhere else in Canada, data were collected mostly though telephone interviews (some places had field follow-up done at the end of data collection to reduce non-response).

For the Aboriginal Peoples Survey, the interview was completed by the selected person for the adults or by one of the child's parent or guardian for the children. Proxy reporting for the adult population was allowed only in special circumstances. 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.

10.1.2 Different questionnaires

Another source of discrepancy between the Census and the Aboriginal Peoples Survey is the "ethnic origin" or "ancestry" question. The Census uses an open-ended ethnic origin question (t*o which ethnic or cultural group(s) did this person's ancestors belong?*) Answers to this write-in question are coded to determine whether the person has Aboriginal ancestry, and, if they do, which Aboriginal ancestry group(s) they fall into (North American Indian, Métis and/or Inuit). In the Aboriginal Peoples Survey, three Aboriginal group-specific questions are asked regarding North American Indian, Métis and Inuit ancestries.

A3. Do any of ___'s ancestors belong to any of the following Aboriginal groups?

INTERVIEWER: Read list and wait for a response after each question is read (Mark "Yes", "No", "Don't know" or "Refused" to each.)

	Yes	No	Don't know	Refused
a. North American Indian	1	2	7	8
b. Métis	1	2	7	8
c. Inuit	1	2	7	8

As a result, more people reported Aboriginal ancestry in the APS compared to the Census, with many more multiple combinations. For example, one may have written in "Métis" on the Census ancestry question, and then reported having both North American Indian and Métis ancestries when asked about each group in the APS.

The Aboriginal self-reporting question (the "identity" question) is essentially the same on both the Census and the APS forms (*Are you / Is ____ an Aboriginal person, that is, North American Indian, Métis or Inuit?).* However, on the Census form, there is an instruction saying "*If "yes", mark "x" the circle(s) that best describe(s) this person now*". This may influence the respondent to choose the category that best describes the person concerned, and therefore mark only one category as opposed to many. During the APS training, interviewers were asked to pay attention to the possibility of having multiple Aboriginal self-reporting and to read the question completely, including the three Aboriginal groups. This may have led to the reporting of more Aboriginal groups in the APS compared to the Census. Also, because of the fact that in the APS, the Aboriginal self reporting question is preceded by three specific questions on Aboriginal ancestries (three questions in one) and not by a general open-ended ethnic origin question as in the Census, respondents may be more likely to report themselves as an Aboriginal person with the APS question.

10.1.3 Different context

The Census form is very general in terms of content whereas the APS is a survey specifically designed for Aboriginal people. As a result, individuals may have given more detailed information about their Aboriginal ancestry and Aboriginal identity in the APS.

10.1.4 Coverage and sampling methodology

The Aboriginal Peoples Survey sample was selected among those who reported Aboriginal ancestry and/or Aboriginal identity on the Census. However, when contacted for the APS, some individuals no longer reported having Aboriginal ancestry or Aboriginal identity. This may have been due to several factors. For example, perhaps the Census form was completed by a parent for all household members. The parent reported that all his/her children had Aboriginal origins. However, when the teenage son (at least 15 years old) was contacted for the APS, he did not report having Aboriginal origins. As mentioned above, in order to compensate for any such loss in the overall Aboriginal population, a post-stratification was carried out as part of the weighting process.

It is important to note that there were transitions between the Aboriginal ancestry population and the Aboriginal identity population from the time of the Census to the APS. Some individuals who reported having Aboriginal identity in the Census reported having only Aboriginal ancestry (with no Aboriginal identity) on the APS. Conversely, some individuals who reported having only Aboriginal ancestry (with no Aboriginal identity) in the Census reported having Aboriginal identity on the APS. For the reasons described above, a larger group of individuals fell into the second category; in other words many people "gained" Aboriginal identity on the APS. As a result of this effect, the count of the total Aboriginal identity population will be larger from the APS than from the Census. The count of people with only Aboriginal ancestry (with no Aboriginal identity) will be smaller from the APS than from the Census.

An example to illustrate how one may move from having only Aboriginal ancestry (with no Aboriginal identity) on the Census to the Aboriginal identity population on the APS may help clarify this. On the Census, a person reports that he / she has North American Indian ancestry (along with non-Aboriginal ancestry such as Irish and Scottish), but does not report identifying with any Aboriginal group. When contacted for the APS, the same person reports having North American Indian ancestry and North American Indian identity. This means that they have moved from the Aboriginal ancestry only population on the Census (and therefore not being counted in the identity population) to the Aboriginal identity population for the APS.

On the other hand, because of the Aboriginal group-specific nature of the ancestry question on the APS, the number of individuals who reported Aboriginal identity only (with no Aboriginal ancestry) is substantially smaller for the APS than for the Census. For example, on the Census one may report French ancestry with "Métis" identity. When contacted for the APS, they may have been more specific about their ancestry. They may have reported having both North American Indian and French ancestries in addition to reporting having a Métis identity. (It is common for Métis people to have both North American Indian and French ancestries). They have then moved from having only Aboriginal identity on the Census, to having both Aboriginal identity and Aboriginal ancestry on the APS.

Transitions between the different Aboriginal groups (North American Indian, Métis and Inuit) also occurred. For example, one may have reported having North American Indian identity on the Census, but both North American Indian and Métis identity in the APS.

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

Table 2 and table 3 compare respectively the non-reserve[2] Census and the APS counts for the *identity population* and *ancestry only population* without double counting.

Table 4 and 5 are similar to tables 2 and 3, but include double counting. This means that someone with a multiple identity of NAI and Métis counts in both the NAI and Métis categories.

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.

2. Data for the Yukon and Northwest Territories include First Nations communities.

Table 2
Non-reserve identity counts for Census and Aboriginal Peoples Survey without double-counting

Geographical domain	NAI only		Métis only		Inuit only		NAI and Métis		Other multiples		Band/Registered only	
	Census	APS	Census	APS	Census	APS	Census	APS	Census	APS	Census	APS
	number of respondents											
Nunatsiavut	0	10	40	30	1,970	1,900	0	0	0	10	0	0
Nunavik	40	30	20	70	8,170	8,040	0	0	10	40	0	0
Inuvialuit	750	780	160	130	2,780	2,710	0	40	0	90	40	10
Nunavut	100	130	120	130	21,080	21,050	0	0	30	60	10	10
Nunaat total	**890**	**950**	**330**	**360**	**33,990**	**33,710**	**0**	**40**	**50**	**210**	**60**	**20**
Newfoundland and Labrador excluding Nunatsiavut	5,930	12,080	5,940	6,180	2,370	2,890	70	230	210	300	4,010	1,980
Prince Edward Island	720	1,120	320	190	20	30	10	0	0	10	70	60
Nova Scotia	6,780	11,770	7,250	8,560	320	400	70	320	30	40	740	850
New Brunswick	4,930	8,240	3,970	5,090	170	360	40	270	60	40	600	710
Quebec excluding Nunavik	29,580	41,990	25,790	34,310	1,220	1,540	800	3,090	90	150	3,140	3,890
Ontario	100,360	136,080	68,410	78,800	1,720	1,710	1,510	4,810	220	350	5,870	5,390
Manitoba	38,390	42,080	64,130	64,020	440	540	500	2,860	30	310	1,220	1,090
Saskatchewan	38,230	38,850	42,730	43,570	180	110	510	2,360	30	20	910	1,240
Alberta	50,290	59,100	76,710	84,780	1,420	1,590	890	4,890	150	250	2,290	1,660
British Columbia	71,580	81,030	54,240	60,490	710	860	1,310	3,310	170	330	3,200	2,890
Yukon	5,690	5,870	730	780	220	170	30	80	10	0	170	170
Northwest Territories excluding Inuvialuit	10,560	9,940	3,090	3,060	900	1,050	60	640	20	100	100	40
Rest of Canada total	**363,040**	**448,160**	**353,300**	**389,830**	**9,680**	**11,250**	**5,810**	**22,870**	**1,020**	**1,890**	**22,290**	**19,970**
Canada total	**363,940**	**449,110**	**353,630**	**390,190**	**43,670**	**44,960**	**5,810**	**22,910**	**1,070**	**2,100**	**22,350**	**19,990**

Notes:
NAI = North American Indian
APS = Aboriginal Peoples Survey
Source: Statistics Canada, Aboriginal Peoples Survey and Census, 2006

Table 3
Non-reserve origin only counts for Census and Aboriginal Peoples Survey without double counting

Geographical domain	NAI only		Métis only		Inuit only		NAI and Métis		Other multiples	
	Census	APS	Census	APS	Census	APS	Census	APS	Census	APS
	number of respondents									
Nunatsiavut	0	0	0	0	0	70	0	0	0	10
Nunavik	0	30	0	0	0	120	0	0	0	0
Inuvialuit	0	30	0	10	0	80	0	0	0	0
Nunavut	70	0	10	0	280	310	0	0	0	0
Nunaat total	**70**	**60**	**10**	**10**	**280**	**580**	**0**	**0**	**0**	**10**
Newfoundland and Labrador excluding Nunatsiavut	9,450	4,780	780	830	1,820	1,010	80	380	230	200
Prince Edward Island	1,350	970	170	260	30	0	20	70	0	0
Nova Scotia	17,200	10,100	3,360	2,800	670	440	180	1,190	90	180
New Brunswick	13,070	8,260	2,090	1,020	230	180	210	1,010	40	250
Quebec excluding Nunavik	116,730	80,900	17,040	7,910	1,120	840	1,250	20,740	100	730
Ontario	126,070	76,910	28,890	16,170	1,570	1,550	1,260	14,380	290	680
Manitoba	7,160	4,370	11,830	6,310	240	160	280	2,460	50	70
Saskatchewan	5,770	2,420	5,090	3,770	70	20	170	1,330	40	40
Alberta	34,820	17,500	17,770	10,250	850	300	770	5,470	100	300
British Columbia	41,270	25,540	14,710	8,690	680	460	720	4,730	60	320
Yukon	570	320	90	90	40	0	10	70	0	0
Northwest Territories excluding Inuvialuit	440	280	80	70	120	0	0	60	20	0
Rest of Canada total	**373,890**	**232,340**	**101,890**	**58,190**	**7,440**	**4,970**	**4,960**	**51,870**	**1,020**	**2,760**
Canada total	**373,970**	**232,400**	**101,900**	**58,190**	**7,720**	**5,540**	**4,960**	**51,870**	**1,020**	**2,770**

Notes:
NAI = North American Indian
APS = Aboriginal Peoples Survey
Source: Statistics Canada, Aboriginal Peoples Survey and Census, 2006

Table 4
Non-reserve identity counts for Census and Aboriginal Peoples Survey with double counting

Geographical domain	NAI		Métis		Inuit		Band/Registered Indian	
	Census	APS	Census	APS	Census	APS	Census	APS
	number of respondents							
Nunatsiavut	0	10	40	40	1,970	1,910	0	0
Nunavik	60	60	20	80	8,180	8,080	0	0
Inuvialuit	760	910	160	210	2,780	2,810	40	10
Nunavut	120	170	130	170	21,110	21,110	10	10
Nunaat total	**930**	**1,140**	**340**	**490**	**34,040**	**33,910**	**60**	**20**
Newfoundland and Labrador excluding Nunatsiavut	6,050	12,440	6,180	6,660	2,580	3,190	4,010	1,980
Prince Edward Island	720	1,120	330	190	20	40	70	60
Nova Scotia	6,850	12,100	7,350	8,920	350	440	740	850
New Brunswick	5,000	8,550	4,040	5,400	230	400	600	710
Quebec excluding Nunavik	30,440	45,180	26,640	37,520	1,310	1,690	3,140	3,890
Ontario	102,040	141,150	69,990	83,830	1,940	2,060	5,870	5,390
Manitoba	38,930	45,080	64,640	67,190	470	840	1,220	1,090
Saskatchewan	38,760	41,210	43,250	45,950	210	140	910	1,240
Alberta	51,270	64,180	77,720	89,800	1,580	1,830	2,290	1,660
British Columbia	73,000	84,510	55,630	64,040	890	1,190	3,200	2,890
Yukon	5,730	5,950	770	860	230	170	170	170
Northwest Territories excluding Inuvialuit	10,640	10,660	3,150	3,750	910	1,150	100	40
Rest of Canada total	**369,430**	**472,130**	**359,690**	**414,120**	**10,710**	**13,150**	**22,290**	**19,970**
Canada total	**370,370**	**473,280**	**360,040**	**414,610**	**44,740**	**47,060**	**22,350**	**19,990**

Notes:
NAI = North American Indian
APS = Aboriginal Peoples Survey
Source: Statistics Canada, Aboriginal Peoples Survey and Census, 2006

Table 5
Non-reserve origin only counts for Census and Aboriginal Peoples Survey with double counting

Geographical domain	NAI		Métis		Inuit	
	Census	APS	Census	APS	Census	APS
	number of respondents					
Nunatsiavut	0	0	0	0	0	80
Nunavik	0	30	0	0	0	120
Inuvialuit	0	30	0	10	0	80
Nunavut	70	0	10	0	280	310
Nunaat total	**70**	**60**	**10**	**10**	**280**	**580**
Newfoundland and Labrador excluding Nunatsiavut	9,680	5,240	950	1,380	2,050	1,210
Prince Edward Island	1,370	1,050	200	330	30	0
Nova Scotia	17,420	11,460	3,580	4,000	760	620
New Brunswick	13,320	9,470	2,330	2,090	280	430
Quebec excluding Nunavik	118,060	102,370	18,300	28,920	1,220	1,580
Ontario	127,500	91,840	30,260	30,810	1,860	2,220
Manitoba	7,450	6,840	12,140	8,830	290	230
Saskatchewan	5,980	3,760	5,270	5,120	110	50
Alberta	35,660	23,150	18,580	15,830	950	590
British Columbia	42,030	30,570	15,440	13,580	740	790
Yukon	580	390	100	160	40	0
Northwest Territories excluding Inuvialuit	460	340	80	130	140	0
Rest of Canada total	**379,510**	**286,480**	**107,240**	**111,190**	**8,460**	**7,730**
Canada total	**379,590**	**286,550**	**107,250**	**111,200**	**8,740**	**8,310**

Notes:
NAI = North American Indian
APS = Aboriginal Peoples Survey
Source: Statistics Canada, Aboriginal Peoples Survey and Census, 2006

11.0 Levels of geography of output

Because the APS is a sample survey, there are some limitations to the geographic areas for which data can be compiled. The population that reported that they identify as Aboriginal people (North American Indian, Métis or Inuit) and/or have registered Indian status and/or are members of an Indian Band / First Nation is commonly referred to as the “Aboriginal identity” population. See Table 6 for a summary of levels of geography for which estimates will be available for this population.

Table 6
Availability of data for the Aboriginal identity" population

Geography	Data availability
National	Data will be available at the national level for all Aboriginal groups.
Provincial / Territorial	Data will be available at the provincial level (except for Prince Edward Island) and at the territorial level
Subprovincial	Data will be available for some sub-provincial breakdowns
Community level	For Inuit regions, data will be available for each large enough Inuit community. Outside Inuit regions, data will be available for selected Census subdivisions (CSDs) with large concentrations of Aboriginal people, and for selected Census metropolitan areas. (see appendix 1)

Appendix 1: Domains of estimation

Data from the 2006 Aboriginal Peoples Survey will be available for the following domains of estimation which are combinations of geographical regions and Aboriginal groups for adults and children.

Domains of estimation for the identity population – Inuit regions

Geographical domain	Aboriginal group	Age
10-HAPPY VALLEY-GB	All	Adults 15 and over
10-HOPEDALE	All	Adults 15 and over
10-NAIN	All	Adults 15 and over
10-NUNATSIAVUT	Inuit	Adults 15 and over
10-NUNATSIAVUT	Inuit	Children 6 to 14
24-INUKJUAK	All	Adults 15 and over
24-KANGIQSUALUJJUAQ	All	Adults 15 and over
24-KANGIQSUJUAQ	All	Adults 15 and over
24-KUUJJUAQ	All	Adults 15 and over
24-KUUJJUARAPIK	All	Adults 15 and over
24-PUVIRNITUQ	All	Adults 15 and over
24-SALLUIT	All	Adults 15 and over
24-NUNAVIK	Inuit	Adults 15 and over
24-NUNAVIK	Inuit	Children 6 to 14
61-AKLAVIK	Inuit	Adults 15 and over
61-INUVIK	Inuit	Adults 15 and over
61-TUKTOYAKTUK	All	Adults 15 and over
61-INUVIALUIT	Inuit	Adults 15 and over
61-INUVIALUIT	Inuit	Children 6 to 14
62-ARCTIC BAY	All	Adults 15 and over
62-ARVIAT	All	Adults 15 and over
62-BAKER LAKE	All	Adults 15 and over
62-CAMBRIDGE BAY	All	Adults 15 and over
62-CAPE DORSET	All	Adults 15 and over
62-CLYDE RIVER	All	Adults 15 and over
62-CORAL HARBOUR	All	Adults 15 and over
62-GJOA HAVEN	All	Adults 15 and over
62-HALL BEACH	All	Adults 15 and over
62-IGLOOLIK	All	Adults 15 and over
62-IQALUIT	All	Adults 15 and over
62-KUGAARUK	All	Adults 15 and over
62-KUGLUKTUK	All	Adults 15 and over
62-PANGNIRTUNG	All	Adults 15 and over
62-POND INLET	All	Adults 15 and over
62-QIKIQTARJUAQ	All	Adults 15 and over
62-RANKIN INLET	All	Adults 15 and over
62-REPULSE BAY	All	Adults 15 and over
62-SANIKILUAQ	All	Adults 15 and over
62-TALOYOAK	All	Adults 15 and over
62-NUNAVUT	Inuit	Adults 15 and over
62-NUNAVUT	Inuit	Children 6 to 14

Domains of estimation for the identity population – Outside Inuit regions

Geographical domain	Aboriginal group	Age
00-Atlantic	Métis	Adults 15 and over
00-Atlantic	Métis	Children 6 to 14
00-Canada	Inuit	Adults 15 and over
00-Canada	Inuit	Children 6 to 14
10-Labrador	NAI	Adults 15 and over
10-Labrador	NAI	Children 6 to 14
10-North Labrador	NAI	Adults 15 and over
10-North Labrador	NAI	Children 6 to 14
12-Global	NAI	Children 6 to 14
12-Rural	NAI	Adults 15 and over
12-Urban	NAI	Adults 15 and over
13-Global	NAI	Children 6 to 14
13-Rural	NAI	Adults 15 and over
13-Urban	NAI	Adults 15 and over
24-Montreal	Métis	Adults 15 and over
24-Montreal	Métis	Children 6 to 14
24-Montreal	NAI	Adults 15 and over
24-Montreal	NAI	Children 6 to 14
24-Rural	Métis	Adults 15 and over
24-Rural	Métis	Children 6 to 14
24-Rural	NAI	Adults 15 and over
24-Rural	NAI	Children 6 to 14
24-Urban	Métis	Adults 15 and over
24-Urban	Métis	Children 6 to 14
24-Urban	NAI	Adults 15 and over
24-Urban	NAI	Children 6 to 14
35-Ottawa-Gatineau	Métis	Adults 15 and over
35-Ottawa-Gatineau	Métis	Children 6 to 14
35-Ottawa-Gatineau	NAI	Adults 15 and over
35-Ottawa-Gatineau	NAI	Children 6 to 14
35-Rural	Métis	Adults 15 and over
35-Rural	Métis	Children 6 to 14
35-Rural	NAI	Adults 15 and over
35-Rural	NAI	Children 6 to 14

Domains of estimation for the identity population – Outside Inuit regions (continued)

Geographical domain	Aboriginal group	Age
35-Toronto	Métis	Adults 15 and over
35-Toronto	Métis	Children 6 to 14
35-Toronto	NAI	Adults 15 and over
35-Toronto	NAI	Children 6 to 14
35-Urban	Métis	Adults 15 and over
35-Urban	Métis	Children 6 to 14
35-Urban	NAI	Adults 15 and over
35-Urban	NAI	Children 6 to 14
46-Rural	Métis	Adults 15 and over
46-Rural	Métis	Children 6 to 14
46-Rural	NAI	Adults 15 and over
46-Rural	NAI	Children 6 to 14
46-Urban	Métis	Adults 15 and over
46-Urban	Métis	Children 6 to 14
46-Urban	NAI	Adults 15 and over
46-Urban	NAI	Children 6 to 14
46-Winnipeg	Métis	Adults 15 and over
46-Winnipeg	Métis	Children 6 to 14
46-Winnipeg	NAI	Adults 15 and over
46-Winnipeg	NAI	Children 6 to 14
47-Regina	Métis	Adults 15 and over
47–Thompson	ALL	Adults 15 and over
47–Thompson	ALL	Children 6 to 14
47-Regina	Métis	Children 6 to 14
47-Regina	NAI	Adults 15 and over
47-Regina	NAI	Children 6 to 14
47-Rural	Métis	Adults 15 and over
47-Rural	Métis	Children 6 to 14
47-Rural	NAI	Adults 15 and over
47-Rural	NAI	Children 6 to 14
47-Saskatoon	Métis	Adults 15 and over
47-Saskatoon	Métis	Children 6 to 14
47-Saskatoon	NAI	Adults 15 and over
47-Saskatoon	NAI	Children 6 to 14
47-Urban	Métis	Adults 15 and over
47-Urban	Métis	Children 6 to 14
47-Urban	NAI	Adults 15 and over
47-Urban	NAI	Children 6 to 14
47–Prince Albert	ALL	Adults 15 and over
47–Prince Albert	ALL	Children 6 to 14

Domains of estimation for the identity population – Outside Inuit regions (concluded)

Geographical domain	Aboriginal group	Age
48-Calgary	Métis	Adults 15 and over
48-Calgary	Métis	Children 6 to 14
48-Calgary	NAI	Adults 15 and over
48-Calgary	NAI	Children 6 to 14
48-Edmonton	Métis	Adults 15 and over
48-Edmonton	Métis	Children 6 to 14
48-Edmonton	NAI	Adults 15 and over
48-Edmonton	NAI	Children 6 to 14
48-Rural	Métis	Adults 15 and over
48-Rural	Métis	Children 6 to 14
48-Rural	NAI	Adults 15 and over
48-Rural	NAI	Children 6 to 14
48-Urban	Métis	Adults 15 and over
48-Urban	Métis	Children 6 to 14
48-Urban	NAI	Adults 15 and over
48-Urban	NAI	Children 6 to 14
59-Prince Rupert	ALL	Adults 15 and over
59-Prince Rupert	ALL	Children 6 to 14
59-Rural	Métis	Adults 15 and over
59-Rural	Métis	Children 6 to 14
59-Rural	NAI	Adults 15 and over
59-Rural	NAI	Children 6 to 14
59-Urban	Métis	Adults 15 and over
59-Urban	Métis	Children 6 to 14
59-Urban	NAI	Adults 15 and over
59-Urban	NAI	Children 6 to 14
59-Vancouver	Métis	Adults 15 and over
59-Vancouver	Métis	Children 6 to 14
59-Vancouver	NAI	Adults 15 and over
59-Vancouver	NAI	Children 6 to 14
60-Yukon	NAI	Adults 15 and over
60-Yukon	NAI	Children 6 to 14
60-Whitehorse	ALL	Adults 15 and over
60-Whitehorse	ALL	Children 6 to 14
61-Northwest Territories	NAI	Adults 15 and over
61-Northwest Territories	NAI	Children 6 to 14
61-Yellowknife	ALL	Adults 15 and over
61-Yellowknife	ALL	Children 6 to 14
66-Territories	Métis	Adults 15 and over
66-Territories	Métis	Children 6 to 14

Appendix 2: Glossary of terms

Aboriginal people
The descendants of the original inhabitants of North America. The Canadian Constitution recognizes three groups of Aboriginal people – **First Nations** (or **North American Indian** people, consisting of **Status** and **non-Status Indians**), **Métis** and **Inuit**. These are three separate peoples with unique heritages, languages, cultural practices and spiritual beliefs.

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 university 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.

C

Census metropolitan area (CMA) and Census agglomeration (CA)
Area consisting of one or more neighbouring municipalities situated around a major urban core. A census metropolitan area must have a total population of at least 100,000 of which 50,000 or more live in the urban core. A census agglomeration must have an urban core population of at least 10,000.

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

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 by community groups, businesses and governments to develop plans for education and training, seniors' housing, day care, fire protection, public transport, and many other programs.

Cohort
As used in demography, a number of people having a common characteristic, for example, all persons in a given population who were born in 1940, or all persons suffering from a particular disease.

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 can not 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.

CV – Coefficient of variation
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**).

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.

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.

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.

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 overcounted (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 some loss of accuracy is inevitable.

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.

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

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**".

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

F

First Nations
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 peoples" 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**.

Frequency distribution
A chart or table showing how often each value or range of values of a **variable** appear in a **dataset**. It is sometimes called a one-way frequency table to indicate that the distribution contains counts for one variable only.

G - H - I

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**.

In scope
A **unit** that meets all criteria for the survey. For the APS, in the provinces, all Aboriginal individuals living off reserve, aged 6 to 14 years of age as of October 31, 2006 were in scope for the children and youth component, and all Aboriginal individuals aged 15 and older as of October 31, 2006 were in scope for the adult component. In the territories, all Aboriginal individuals living on- and off-reserve aged 6 to 14 years of age as of October 31, 2006 were in scope for the children and youth component, and all Aboriginal individuals aged 15 and older as of October 31, 2006 were in scope for the adult component.

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 1985.

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, the language of Inuit people. Most Inuit live in the Northwest Territories, Nunavut, Northern Quebec and Labrador.

Inuit Nunaat
Inuit Nunaat is the homeland of **Inuit** of Canada. It includes communities in Nunatsiavut (Northern coastal Labrador), Nunavik (Northern Quebec), the territory of Nunavut and the Inuvialuit region (Northwest Territories). These regions collectively encompass the area traditionally used and 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
People of mixed **North American Indian** and European ancestry who identify themselves as Métis people, as distinct from North American Indian people, **Inuit** or non-**Aboriginal people**. The Métis have a unique culture that draws on their diverse ancestral origins, such as Scottish, French, Ojibway and Cree.

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

N - O

Non-status Indian
A non-Status Indian is a person who identifies as **First Nation** or **North American Indian** but is not registered under the ***Indian Act***.

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'.

Out of scope
A **sampled unit** that does not meet all criteria for being surveyed. For the APS, in the provinces, a person could be out of scope by, for example, being less than 6 years of age or by being non-Aboriginal or by living on reserve. In the territories, a person could be out of scope by being less than 6 years of age or by being non-Aboriginal.

P

Population
The complete group of units to which survey results are to apply. These units may be persons, households, businesses, institutions, etc. The term "Target Population" is often used to refer to all potentially **surveyed units**, as defined in a clear, precise way by the survey study. This is the population for which information is wanted.

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 data have been processed.

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.

PUMF - Public use microdata file
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.

Registered Indian
A Status or Registered Indian is a person who is registered under the ***Indian Act***. The act sets out the requirements for determining who is a **Status Indian**.

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 micro data 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
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 APS, the respondents are the parent or guardian of the selected children and youth aged 6 to 14 years, and the adult aged 15 and older for the Adult component.

Responding unit
The responding unit refers to the **surveyed unit** for which a response is obtained. In the case of the APS, it would be the child/youth aged 6 to 14 years of age for whom a response is obtained from the parent or guardian. This term is defined to distinguish it from the term "**respondent**" which in the case of APS refers to the parent or guardian providing the information for the child/youth. For the Adult component for APS for aged 15 and older, the responding unit is the same as the adult respondent.

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.

Rural area
Rural areas include all territory lying outside urban areas. An urban area has a minimum population concentration of 1,000 persons and a population density of at least 400 persons per square kilometre, based on the current census population count. Taken together, urban and rural areas cover all of Canada. Rural population includes all population living in the rural fringes of census metropolitan areas (CMAs) and census agglomerations (CAs) , as well as population living in rural areas outside CMAs and CAs.

Sample 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 and multi-stage sampling.

Sampling rate / Sampling fraction
Sample size divided by the population size.

Sampling or 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.

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 **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
See Registered Indian.

Stratified sampling, 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.

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 was 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 units since APS is a sample survey) is the children/youth 6 to 14 years of age and the adults aged 15 and older.

T - U - V

Treaty Indian
A Status or Registered Indian who belongs to a First Nation that signed a treaty with the Crown.

Unit
Same as **surveyed unit**

Urban area
An urban area has a minimum population concentration of 1,000 persons and a population density of at least 400 persons per square kilometre, based on the current census population count. All territory outside urban areas is classified as rural. Taken together, urban and rural areas cover all of Canada. The urban population includes all population living in the urban cores, secondary urban cores and urban fringes of census metropolitan areas (CMAs) and census agglomerations (CAs), as well as the population living in urban areas outside CMAs and CAs.

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.

Appendix 3: Questionnaires

The questionnaires are available on the Statistics Canada website at http://www.statcan.gc.ca/english/sdds/3250.htm

Children and youth questionnaire:
This questionnaire was directed at Aboriginal children and youth (6 to 14 years), living off-reserve (in all provinces and territories). The parent or guardian of the child/youth answered the questionnaire on their behalf. The questionnaire included questions on: general health, health care utilization, activity limitations, chronic conditions, medications, physical injuries, dental care, nutrition, education, social activities and relationships, language, child care arrangements and general household information.

Adult core:
This questionnaire was administered to adults (15 years and older) living off reserve (in all provinces and territories). The following sections were included: education, language, labour activity, income, health, communication technology, mobility and housing.

Adult - arctic supplement:
For the 2001 Aboriginal Peoples Survey, Statistics Canada, the Inuvialuit Regional Corporation, Nunavut Tunngavik, Makivik Incorporated, the Labrador Inuit Association, Inuit Tapiriit Kanatami and Laval University developed jointly a supplement to the APS core survey. This supplement for those aged 15 and older included a number of questions from the Survey of Living Conditions in the Arctic (SLiCA), carried out in a number of circumpolar countries. The supplement contained the following sections: household and harvesting activities, personal wellness and community wellness. Questions from the supplement were asked of those living in the four Inuit regions across the north of Canada.

Adult - Métis supplement:
This part of the survey, developed jointly with the Métis National Council, was administered only to the Aboriginal adult population (15 years and older) who self-identify as Métis and/or who have Métis ancestry. This portion of the survey was not conducted on-reserve or in Inuit communities. This supplement contains the following sections: family background, household information, cultural background and health.

References

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Sitter, R.R. (1992). Comparing Three Bootstrap Methods for Survey Data. *Canadian Journal of Statistics*, 20, 135-154.