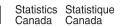**Analytical Paper**

Aboriginal Children's Survey, 2006: Concepts and Methods Guide

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Aboriginal Children's Survey, 2006: Concepts and Methods Guide

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

Acknowledgement

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1.0   Introduction

This guide is intended to provide an understanding of the concepts and methods used in the 2006 Aboriginal Children's Survey (ACS), which was conducted from October 2006 to March 2007.

The Aboriginal Children's Survey (ACS) provides data on the development and well-being of Aboriginal children under 6 years of age (First Nations children living off reserve, Métis children and Inuit children) living in urban, rural and northern locations throughout Canada.

Aboriginal children living in Indian settlements and reserves in the 10 provinces were not included in the 2006 ACS data collection. In the three territories, all First Nations children were included in the target population. Some First Nations[1] communities in Quebec[2] were also included.

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

Appendix 1 contains a glossary of terms that relate to the ACS. Answers to some frequently asked questions are provided in appendix 2. Links to the 2006 ACS questionnaires are found in appendix 3.

Survey of Northern Children

The Survey of Northern Children (SNC) was originally a component of the National Longitudinal Survey of Children and Youth. In 2006, children selected for the Survey of Northern Children were surveyed using the Aboriginal Children's Survey / Survey of Northern Children 2006 (Children - aged 0 to 5) questionnaire (see appendix 3).

The SNC targeted all children (without distinction between Aboriginal and non-Aboriginal children) under 6 years of age living in Nunavut, Northwest Territories and Yukon.

2.0   Background

The Aboriginal Children's Survey (ACS) is a post-censal survey conducted for the first time in 2006. The data collected allows Aboriginal organizations, community planners, service providers, parents, governments and researchers to:

- Honour and acknowledge Aboriginal children (needs, values and cultural heritage)
- Inform decision-making (program and policy planning and development)
- Support academic research (educators and researchers)

The survey was developed by Statistics Canada in partnership with Human Resources and Social Development Canada and Aboriginal advisors from across the country. A unique process was used involving direct participation of parents, front-line workers, early childhood educators, researchers and Aboriginal organizations.

A Technical Advisory Group (TAG), which consists of educators, researchers and other professionals in the field of Aboriginal research and early childhood development (ECD), provided guidance for the ACS on an ongoing basis.

The target population for the ACS was previously covered by the Aboriginal Peoples Survey (APS), Children and Youth Component in 2001 and 1991, which collected data for Aboriginal children 0 to 14 years of age.

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1. The terms First Nations and North American Indian are used interchangeably throughout this document.
2. The First Nations communities covered in Quebec have been removed from the analytical file to facilitate representative analysis of the Aboriginal Children's Survey (ACS) The remainder of this document highlights the concepts and methods used in producing the data that appears on the analytical file.

3.0   Survey objectives

There is currently little data available about the health and development of Aboriginal children under 6 years of age. The Aboriginal Children's Survey (ACS) was designed to address this data gap.

Based on recommendations from the TAG, the ACS 2006 is holistic in nature and collected information on a wide range of topics, including child's health, sleep, nutrition, motor, social and cognitive development, nurturing, child care, school, language, behaviour, and activities. Since the child's environment is important to their development and well-being, some information was collected on the child's parent(s) or guardian(s) and their neighbourhood or community.

4.0   Survey development

4.1   Stakeholders

The Aboriginal Children's Survey (ACS) was developed with the advice and input of Aboriginal people, organizations, governments and others. Discussions were held with major stakeholders to ensure that the ACS is relevant to the needs of a variety of different data users.

The development process for the ACS began with discussions with national Aboriginal organizations followed by regional content discussions, both of which provided an understanding of the broad areas of interest and data needs. A Technical Advisory Group (TAG) was established to obtain the advice, guidance and perspectives of Aboriginal peoples throughout the development and implementation of the ACS. As well, federal, provincial, and territorial governments were involved in identifying priority areas to be included in the questionnaire.

4.1.1   National Aboriginal Organizations (NAOs)

Statistics Canada works closely with National Aboriginal Organizations on all of its Aboriginal data projects. The National Aboriginal Organizations who have provided input into the ACS are:

> Congress of Aboriginal Peoples (CAP)
> Inuit Tapiriit Kanatami (ITK)
> Métis National Council (MNC)
> National Association of Friendship Centres (NAFC)
> Native Women's Association of Canada (NWAC)

At the beginning of the survey process, Statistics Canada met with representatives from the National Aboriginal Organizations in order to assess the feasibility of undertaking a national survey about Aboriginal children. These organizations provided input on their data needs and have provided advice throughout the process.

4.1.2   Regional content discussions

In 2004, Statistics Canada held a number of one-day meetings with representatives from Aboriginal organizations, service-providing agencies, researchers and parents of Aboriginal children in selected regions across Canada to discover important issues in the early development of Aboriginal children, the appropriateness of possible topic areas, and regional issues to be considered.

4.1.3   Technical advisory group

A Technical Advisory Group (TAG) was established to provide advice and guidance throughout the survey process. This group was composed of a cross-section of Aboriginal and non-Aboriginal educators, researchers and other professionals in early childhood development.

In collaboration with the TAG, Statistics Canada developed a survey specifically designed for young Aboriginal children including questions that provide a cultural context. The technical advisory group was invaluable in recommending content and processes that respect First Nations, Métis, and Inuit values.

4.1.4 Federal / Provincial / Territorial Governments

A Steering Committee comprising representatives from Human Resources and Social Development Canada (HRSDC), Health Canada (HC), and Indian and Northern Affairs Canada (INAC) was established to provide ongoing strategic direction to the ACS.

Prior to developing the survey content, Statistics Canada contacted federal, provincial and territorial governments to determine the data needs and priorities of these levels of government. Governments were asked to identify areas or topics of importance to their department or region.

4.2 Survey content

4.2.1 Aboriginal Children's Survey questionnaire

The Aboriginal Children's Survey (ACS) is holistic in nature and covers a wide variety of topics. Cultural elements are woven throughout the various sections of the questionnaire.

The questionnaire was administered to a parent or guardian of children under 6 years old. The following is a list of the sections and some of the key variables. See Appendix 3 for links to the 2006 ACS questionnaire.

- Identification
  - Aboriginal Ancestry
  - Aboriginal Identity
- Household Roster
  - Age
  - Sex
  - Marital status
  - Relationship to child
- Child's Health
  - General health
  - Birth weight
  - Contact with health professionals (paediatrician, public health nurse, and other)
  - Chronic conditions
  - Incidence of injuries
  - Medications
- Food and Nutrition
  - Breastfeeding
  - Types of foods child eats
- Sleep
  - Sleeping Habits
- Developmental Milestones (0 and 1 year)
  - Walking
  - Sharing
  - Expressing needs
  - Speech
- Developmental Milestones (2 to 5 years)
  - Expressing needs
  - Telling stories
  - Counting
- Nurturing
  - People involved in raising the child

- School
  - School attendance
  - School grade

- Child Care
    - Type of childcare
    - Reasons receiving child care
    - Reasons not receiving regular child care
    - Language of childcare
    - Cost of childcare
- Language
    - Ability to understand and speak languages
    - Home language
    - Exposure to Aboriginal language
- Strengths and Difficulties
    - Conduct problems
    - Inattention-hyperactivity
    - Emotional symptoms
    - Peer problems
    - Pro-social behaviour
- Learning and Activities
    - Play activities
    - People with whom the child plays
    - Understanding First Nations, Métis or Inuit culture
- Parent Profile
    - Aboriginal ancestry and identity
    - Education
    - Main Activity
    - Mother tongue
    - General health rating

4.2.2 Strengths and difficulties questionnaire

The Aboriginal Children's Survey (ACS) includes the Strengths and Difficulties Questionnaire (SDQ), developed by Robert Goodman (2000). The Strengths and Difficulties Questionnaire is made up of 25 items (included as questions K01A to K01Y on the ACS). These 25 items are designed to be grouped into 5 sub-scales that measure: conduct problems, inattention-hyperactivity, emotional symptoms, peer problems, and pro-social behaviour.

The Aboriginal Children's Survey (ACS) file includes the 25 items of the SDQ; however the 5 sub-scale groupings have not been included on the analytical file. Please note that: 1) the version of the SDQ included on the ACS was designed for children aged 3 to 4 years, although it was applied to 2 to 5 year olds in the ACS; 2) the SDQ was developed to be self-administered by parents, while the ACS was conducted in a personal-interview format; and 3) the SDQ was not specifically designed to assess Aboriginal children in Canada. Although the validity and reliability of the SDQ has been widely confirmed internationally, further research is required to explore the applicability of the SDQ and the 5 sub-scales to Aboriginal children in Canada (including each of the three Aboriginal groups of First Nations living off reserve, Métis and Inuit).

4.2.3   Census topics appended

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

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

- Period of construction of dwelling
- Structural type of dwelling
- Is anyone in the household a farm operator?
- Gross rent
- Marginal dwelling indicator
- Number of household maintainers
- Owner's major payments
- Registered condominium status
- Number of rooms
- Is dwelling in need of repair?
- Tenure of dwelling
- Value of dwelling
- Census family total income
- Economic family total income
- Household total income
- Low income status (before taxes)
- Census subdivision type one year ago
- Mobility status - place of residence one year ago
- Census subdivision of residence one year ago
- Rural-urban place of residence one year ago

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

5.0   Survey design

5.1   Target population

5.1.1 Identifying Aboriginal Children

The target population for the ACS includes all children in Canada with North American Indian, Métis or Inuit identity or ancestry, under the age of 6 years as of October 31, 2006, excluding children living in Indian settlements or on-reserve. Children living in institutions were not included. Although children living on-reserve were not included in the provinces, all Aboriginal children living in the territories and children in some First Nations communities in Quebec were included.

The target population for the Survey of Northern Children includes all children (Aboriginal and non-Aboriginal) living in the territories, under the age of 6 years as of October 31, 2006. Children living in institutions were not included.

The Aboriginal Children's Survey (ACS) is a postcensal survey, which means that the ACS sample was selected based on reported answers to the Census questionnaire. More precisely, the ACS sample was selected based on 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).

17 What were the ethnic or cultural origins of this person's **ancestors**?

An ancestor is usually more distant than a grandparent.

For example, Cree, Ojibway, Mi'kmaq (Micmac), Dene, Blackfoot, Inuit, Métis, Canadian, French, English, German, etc.

Specify as many origins as applicable using capital letters.

Specify as many origins as applicable using capital letters.

FOR INFORMATION ONLY

18 Is this person an Aboriginal person, that is, North American Indian, Métis or Inuit?

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

○ No → **Continue with the next question**

○ Yes, North American Indian
○ Yes, Métis
○ Yes, Inuit
Go to Question 20

○ No → **Continue with the next question**

○ Yes, North American Indian
○ Yes, Métis
○ Yes, Inuit
Go to Question 20

20 Is this person a member of an Indian Band / First Nation?

If " Yes ", which Indian Band / First Nation?

○ No
○ Yes, member of an Indian Band / First Nation

Specify Indian Band / First Nation (for example, Musqueam)

○ No
○ Yes, member of an Indian Band / First Nation

Specify Indian Band / First Nation (for example, Musqueam)

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

○ No
○ Yes, Treaty Indian or Registered Indian

○ No
○ Yes, Treaty Indian or Registered Indian

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 3 questions (questions 18, 20 and 21).

The addition of the ancestry-only population was done for consistency with the APS. The addition of non-Aboriginal children in the territories allowed for integration with the Survey of Northern Children (SNC) which targets estimates for all children under six without distinction between Aboriginal and non-Aboriginal children.

5.1.2 Survey reference date

October 31, 2006 was selected as the reference date for the ACS. 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 in the skip patterns of the questionnaire.

5.1.3 Census frame

A sampling frame provides a means of accessing the population to be covered by a survey. The Aboriginal Children's Survey (ACS) frame was built in a series of steps. The frame was constructed for both the ACS and the APS. In the first step, a list was created containing all individuals falling in the target population according to answers reported to the four screening questions of the Census long form (children and adults). (Also included in this step were the non-Aboriginal children under six living in one of the territories.)

In a second step, household members of the Aboriginal children 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 child(ren) in the household.

In a third step, missing information on the screening questions was imputed. Missing information on screening questions (or "filters") belonging 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 the final step, all Aboriginal children under 6 (based on the imputed data), were kept on the frame for ACS as well as all non-Aboriginal children in the territories. Aboriginal people with missing age responses on the Census form were all excluded from the ACS and were included on the APS frame (more likely to be older than 5 than being under 6)

5.2   Sampling design

5.2.1 Domains of estimation

Domains of estimation are groups of units for which estimates are targeted. The domains of estimation for the ACS were selected to provide the maximum level of detail possible to users given the very small size of the target population. Ideally, estimates would be produced by province / territory / region, age group (0 to 1, 2 to 3 and 4 to 5) and Aboriginal group (First Nations, Métis and Inuit).

The Aboriginal identity groups were defined as follows:

- North American Indian (NAI) only - individuals reporting only NAI to question 18
- 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

Some of the combinations of province / territory / region, age group and Aboriginal group would include a very small number of children, which could cause either confidentiality problems or poor-quality estimates (or both). The domains of estimation were designed according to estimated population counts of the identity population as well as the estimated number of long-form records available to produce the estimates. This was based entirely on the counts from the 2001 Census.

Estimates for the Inuit (Inuit only) were required for each of the four Inuit Land Claim regions, namely Nunatsiavut, Nunavik, Inuvialuit and Nunavut. The regions of Inuvialuit and Nunatsiavut are considerably smaller than Nunavik and Nunavut. Therefore, for these two regions, age groups were combined. As a general rule, it was decided, for confidentiality reasons, to target estimates for populations of at least 200 children. When this could not be met, age groups were combined.

For the rest of the population, estimates would be produced for each age group for First Nations and Métis separately. Due to the small numbers, this would not be possible. In terms of geography, the Atlantic provinces had to be grouped together. In terms of Aboriginal groups, only Ontario and the four Western provinces contained a large enough number of Métis children to consider separate estimates for the Métis. In the Atlantic region, Quebec, Northwest Territories and Yukon, all Aboriginal groups were combined. In addition, in Yukon, following the rule of a minimum population of 200 children per age group (the 0-1 age group being the smallest), all age groups had to be combined.

Estimates are to be produced within each domain of estimation. In general, within each domain of estimation, the target was to estimate a characteristic present for no less than 10% of the population with a coefficient of variation (CV) of 20%. The CV is a measure of precision of the estimate which is described in Section 8.1 (*Sampling Errors*). The ability to achieve this CV 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 (children who were reported to be Aboriginal on the Census but who were reported to be non-Aboriginal on to ACS), the expected sample loss due to the constraint of selecting no more than two children per household, the expected loss due to the reduction of overlap with other postcensal surveys and the elimination of the overlap with the National Longitudinal Survey of Children and Youth (NLSCY) (section 5.3). In certain domains, it was not possible to achieve this precision. In these cases, a CV of 25% was targeted.

Table 1 gives the targeted CV and targeted / expected response rate (R) for each domain of estimation. In this table, the domain "Atlantic Other" refers to the Atlantic provinces excluding Nunatsiavut. The domain "Quebec Other" refers to Quebec excluding Nunavik. Finally, the domain "Northwest Territories Other" refers to the Northwest Territories excluding Inuvialuit.

Table 1
Targeted coefficient of variation and response rate by domain of estimation for the identity population, 2006

Geographical domain	Aboriginal Group	CV 0 to 1	CV 2 to 3	CV 3 to 4	CV 0 to 5	Response rate
	text	percentage				
Nunatsiavut	Inuit	…	…	…	20%	85%
Nunavik	Inuit	20%	20%	20%	…	85%
Inuvialuit	Inuit	…	…	…	20%	88%
Nunavut	Inuit	20%	20%	20%	…	85%
Atlantic Other	All	25%	25%	25%	…	82%
Quebec Other	All	25%	25%	25%	…	82%
Ontario	NAI	20%	20%	20%	…	75%
Ontario	Métis	25%	25%	25%	…	75%
Manitoba	NAI	20%	20%	20%	…	85%
Manitoba	Métis	20%	20%	20%	…	85%
Saskatchewan	NAI	20%	20%	20%	…	85%
Saskatchewan	Métis	20%	20%	20%	…	85%
Alberta	NAI	20%	20%	20%	…	82%
Alberta	Métis	20%	20%	20%	…	82%
British Columbia	NAI	20%	20%	20%	…	75%
British Columbia	Métis	25%	25%	25%	…	75%
Yukon	All	…	…	…	25%	75%
Northwest territories, other	All	25%	25%	25%	…	85% [1]

1. Excluding Yellowknife (R=75% for Yellowknife).
CV = coefficient of variation
NAI =North American Indian
Source(s): Statistics Canada, *Aboriginal Children Survey, 2006*

5.2.2 Sampling plan

As mentioned, the ACS 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 is 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 ACS 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 subsample of children 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 ACS and the other postcensal surveys as well as the National Longitudinal Survey of Children and Youth (NLSCY). For the Aboriginal Children's Survey (ACS), a total of 835 units were removed from the sample 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 this loss.

5.3.1 Overlap with other postcensal surveys

In 2006, five postcensal surveys were conducted at approximately the same time, the ACS, the Aboriginal Peoples Survey (APS), the Participation and Activity Limitation Survey (PALS), the Survey on the Vitality of Official-Language Minorities (SVOLM) and the Maternity Experiences 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 or 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 closely related to that of the ACS. For this reason, it was decided to exclude some selected ACS children falling in households of certain NLSCY cohorts. There were also certain children selected in the 0-1 NLSCY cohort overlapping with the ACS sample who were dropped from the NLSCY sample.

5.4 Sample sizes

The initial sample size excluding the First Nations communities in Quebec was 18,307 children and after the overlap reduction with other surveys, this number was 17,472 children. The distribution of these 17,472 children in the various domains of estimation is given in Table 2 by geographical domain and type of population (identity, ancestry-only and non-Aboriginal) with their corresponding observed response rates. It should be noted that the number of children also include those whose parent or guardian consented to participate in the survey but who were reported as being non-Aboriginal in the ACS (false positives).

Table 2
Sample sizes and response rate by geographical domain and type of population, 2006

Geographical domain	Type of population			Total sample	Total respondents	Response rate
	Identity	Ancestry only	Non-Aboriginal			
	numbers					percentage
Nunatsiavut	131	1	0	132	121	91.70%
Nunavik	632	4	0	636	565	88.80%
Inuvialuit	218	6	44	268	222	82.80%
Nunavut	785	7	43	835	744	89.10%
Inuit Nunaat total	**1,766**	**18**	**87**	**1,871**	**1,652**	**88.30%**
Atlantic Other	604	475	0	1,079	902	83.60%
Quebec Other	698	663	0	1,361	1,112	81.70%
Ontario	1,969	963	0	2,932	2,386	81.40%
Manitoba	1,893	211	0	2,104	1,625	77.20%
Saskatchewan	1,772	139	0	1,911	1,492	78.10%
Alberta	1,935	538	0	2,473	2,014	81.40%
British Columbia	1,882	457	0	2,339	1,847	79.00%
Yukon	268	9	307	584	464	79.50%
Northwest territories, other	553	6	259	818	676	82.60%
Rest of Canada total	**11,574**	**3,461**	**566**	**15,601**	**12,518**	**80.20%**
Canada total	**13,340**	**3,479**	**653**	**17,472**	**14,170**	**81.10%**

Source(s): Statistics Canada, *Aboriginal Children's Survey, 2006*

6.0   Data collection
The Aboriginal Children's Survey was conducted between October 2006 and March 2007.

6.1   Mode of collection
The Aboriginal Children's Survey was collected using a paper questionnaire and the respondent was the parent or guardian of the selected child.

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 ACS questions were translated into 5 Inuktitut dialects (Innuinaqtun, Inuvialuktun, Labrador, Nunavik and Nunavut) and 2 dialects of Cree. Interpreters were hired when required. Translators were hired when requests were received for the survey to be conducted in other Aboriginal languages.

6.3   Coordination with the Aboriginal Peoples Survey
The collection of the Aboriginal Peoples Survey (APS) occurred during the same period of time as the ACS. 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 Processing the household roster

The processing of the household roster (section B) of the ACS questionnaire requires special mention. The roster asked, for each person living in a given household, their date of birth, age, sex, marital status, and relationship to the selected child(ren). If more than one selected child lived in the household, the roster was to be completed only once.

During the processing of the data, an unexpectedly high degree of non-response to the roster questions was observed. In particular, the information about who was the respondent for the selected child was often not provided. This was especially a problem for households having two selected children. In many cases, the paper questionnaires were examined in an effort to resolve these cases or to make informed assumptions about the situation. A series of household-level variables (e.g. number of generations in child's family) were derived based on this section and it is mainly these variables, rather than the responses to the individual roster questions, that were retained on the analytical file. The only individual-level data from the roster that were retained on the analytical file are the age of the selected child, and the age, sex, marital status and relationship of the respondent to the child.

7.4   Weighting

In a sample survey, each selected person represents not only himself or 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 or 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, six steps were used in the weighting process.

7.4.1   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 children selected in each stratum divided by the number of 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).

7.4.2   Adjustment for overlap with other surveys

As mentioned in Section 5.3, 835 children were lost from the initial sample of size 18,307 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 and non- Aboriginal), Aboriginal group and age group. 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 17,472 children after deduction of the 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.

7.4.3   Adjustment for units selected in Aboriginal Peoples Survey

A small number of individuals selected for the Aboriginal Peoples Survey were in fact "in scope" for ACS and ended up completing the ACS questionnaire. This was due to errors in the Census date of birth. Although interviewers were not supposed to convert an APS to an ACS 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 APS strata in which these individuals were selected, it was possible to assign the corresponding ACS strata in which they would have fallen had the correct Census date of birth for these children been available. These individuals were initially assigned the average weight (weight adjusted for the overlap loss) of the corresponding stratum. The weights of all children in these strata were then slightly proportionally decreased to preserve the stratum totals.

7.4.4   Adjustment for out of scope units

Some individuals were found to be out of scope for reasons other than reporting that the child was not an Aboriginal person. In fact, 162 individuals were not under the age of 6 years, 10 were deceased and one was no longer living in Canada. Individuals who did not fall into the target group for the survey may have been cases with an error in the Census date of birth. The Census age available for these individuals had a tendency to be proportionally higher for the 0-year-olds and 5-years-olds. The deceased individuals were proportionally higher for the 0-year-olds. Since most out of scope units were individuals older than 5 years of age with a small number of deceased individuals, an adjustment by single year of age was judged appropriate. The weights of these children were set to zero. In order to compensate for these losses, a simple ratio adjustment by Census single year of age (0, 1, 2, 3, 4 and 5) 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 by single year of age were preserved.

7.4.5 Adjustment for non-response

Two adjustments were made for two different types of non-response: the children for whom no contact was made with the parent or guardian (1,700 children) and the children for whom the contacted parent or guardian did not (or could not) provide the information for the child (mainly refusals, about 1,570 children). The weights were first adjusted for non-contact and then for other forms of non-response. In what follows, the term "non-response" will be used for both types of non-response. The term "respondent" refers to the parent or guardian who is contacted or who provides the information for the selected child once contacted. The term "responding unit" refers to the child for whom a response is obtained from the 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 child (for both responding and non-responding units) from a series of explanatory variables. These variables, including parent or guardian characteristics, household characteristics and child characteristics, were either Census characteristics, (for example, family structure, Census Aboriginal group of the child) or collection variables (for example, number of attempts to contact a subject, whether field follow-up was required, etc.). As parent or guardian characteristics were required for both 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. 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 the children 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.

7.4.6 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 ACS, 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, the province of residence and the age group (0-1, 2-3, 4-5 years old). The weights were adjusted using the ratio of the Census weighted count to the sample weighted count for each post-stratum. This ensures that the sample did not under- or over-represent certain Census Aboriginal groups, regions or age groups.

Since answers to the screening questions (presented in section 5.1.1) can differ between ACS and the Census, a second post-stratification was carried out in the provinces. This guaranteed that the **total Aboriginal population** (identity or ancestry), as estimated from the ACS 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 ACS and the Census).*

Note that, when individuals are selected with either Aboriginal identity or ancestry, the only possibility is to lose people from the total Aboriginal population since non-Aboriginal persons who could turn out to be Aboriginal persons in the survey were not sampled (except in the territories). This second post-stratification compensates for that fact. However, non-Aboriginal children were sampled in the territories for the purpose of collecting data for the SNC. In the territories, there were proportionally more non-Aboriginal children in the Census who were reported to be Aboriginal children in the ACS than the reverse (Aboriginal children in the Census reported to be non-Aboriginal children in the ACS). Had this second post-stratification been done in the territories, the effect would have been to reduce the weights of the Aboriginal population while they were being increased in the provinces. This is one of the reasons why the second post-stratification was carried out only in the provinces. The other reason is the fact there was no need to post-stratify in the territories since both Aboriginal and non-Aboriginal children were included in the sample (and there was the possibility for non-Aboriginal children to be reported as Aboriginal children in the ACS).

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 ACS, a particular type of "bootstrap" method was developed. Several bootstrap methods exist in the literature but none of them was appropriate for the ACS 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 children 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 typically quite 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, E., Beaumont, J.-F. and Lavallée, P., 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 through the use of bootstrap weights. For each subsample, the initial sampling weights first had 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 Children's Survey (ACS), 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 ACS. 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 ACS, this factor is 3. The variances calculated from the transformed bootstrap weights have to be multiplied by $3^2 = 9$. Alternatively, the CVs obtained (square root of the variance divided by the estimate itself) have to be multiplied by 3. 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.

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 ACS 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 equal to or higher than 16.6% but smaller than 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 equal to or higher 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 the confidentiality requirements of the *Statistics Act*.

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.

A pilot test was conducted from January to February 2006 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 ACS sample is selected from those who participated in the Census, individuals who did not participate in the Census could not be sampled for the ACS. If this group of individuals is significantly different from the ones who participated in the Census with respect to the characteristics measured in the ACS, a bias could be introduced. This bias is assumed to be relatively small given the very high coverage rate and 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 responding units and non-responding units differ with respect to characteristics of interest. In the ACS, total non-response occurred if no contact was made with the parent or guardian of the selected child or if the contacted parent or guardian did not provide the information for the child. 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 to a minimum.

Partial non-response occurs if the respondent does not answer a specific question, possibly because he or she does not know the answer or the question is felt to be sensitive. Generally, the extent of partial non-response was small in the ACS. Results from the pilot tests 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 from sensitive questions. Where required, special introductions were included (e.g. question on federal residential school), "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 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 files

Accompanying the release of data from the Aboriginal Children's Survey was an analytical article entitled "Aboriginal Children's Survey 2006: Family, Community and Child Care", which provides information on the families, communities, cultural activities and child care arrangements for off-reserve First Nations, Métis and Inuit children, under 6 years of age. The findings are presented separately for each Aboriginal group. Fact sheets, providing highlights from the analytical article, are also available.

9.2 Data products and services

The master data file for the 2006 ACS 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 released analytical article are available.

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

A remote data access service will be available in the spring of 2009. This service will allow researchers to write and test programs on a "synthetic file", which has the same layout as the ACS master data file, however it does not contain the real information from respondents. Once programs have been written and tested, researchers can submit their programs to Statistics Canada, who will run the programs using the master data file, vet the results for confidentiality and return the aggregate data tables to the researchers. This service will be offered on a cost-recoverable basis.

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

9.3 Survey documentation

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

- Questionnaires
- Concepts and Methods Guide
- User's Guide
- Integrated Metadatabase (IMDB)

10.0 The Relationship between the Aboriginal Children's Survey and the Census

As discussed above, the ACS is a post-censal survey, which means that Census information was used to determine who would be included in the ACS sample. More detailed information about how Census responses were used to determine the population of interest for the ACS is provided in Section 5.0 (*Survey Design*).

The Census and the ACS are both rich sources of information on Aboriginal peoples that complement each other. The ACS 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 on the language spoken most often at home, mother tongue and which languages the child can speak. Adding information from the ACS provides the opportunity to learn how often the child is exposed to an Aboriginal language, in which languages the child can express his or her needs, etc.

The ACS also covers entire topics or themes that are not included in the Census. For example, the ACS can provide extensive information on child health, nutrition, sleep and early childhood development among others.

Both the Census and the ACS 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 7.4.6) ensured that the total number of people with Aboriginal ancestry or identity is the same for the Census and the ACS (except in the territories due to the sampling of the non-Aboriginal population), it did not ensure that the counts for the Aboriginal groups would match. Indeed, the Census and the ACS 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 ACS. 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 a 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, ACS 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). In the ACS, the interview is completed by one of the child's parents or guardians. Because the person contacted for the ACS 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 ACS is the "ethnic origin" or "ancestry" question. The Census uses an open-ended ethnic origin question (*To 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 Children's Survey (ACS), 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 of the respondents to the ACS reported Aboriginal ancestry in the ACS than in 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 ACS.

The Aboriginal self-reporting question is essentially the same on both the Census and the ACS forms (*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 ACS 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 ACS than in the Census. Also, because of the fact that in the ACS, 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 ACS question.

10.1.3 Different context

The Census form is very general in terms of content whereas the ACS 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 ACS.

10.1.4 Coverage and sampling methodology

Except in the territories (where the non-Aboriginal population was also sampled), the ACS sample was selected among those who reported Aboriginal ancestry and / or Aboriginal identity in the Census. However, when contacted for the ACS, some individuals no longer reported their child as having Aboriginal ancestry or Aboriginal identity. This may have been due to several factors. In particular, in the case of a father with Aboriginal identity and a non-Aboriginal mother, the father may very well report an Aboriginal identity for his child on the Census form whereas the mother may not have reported it in the ACS when contacted. As mentioned above, in order to compensate for any such loss in the overall Aboriginal population, a post-stratification adjustment was carried out as part of the weighting process.

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

An example to illustrate how one may move from having only an Aboriginal ancestry (with no Aboriginal identity) in the Census to the Aboriginal identity population in the ACS may help clarify this. On the Census, a person reports his or her child having a North American Indian ancestry (along with non-Aboriginal ancestries such as Irish and Scottish), but does not report the child as having Aboriginal identity. When contacted for the ACS, the same person or his or her spouse reports the child as having North American Indian ancestry and North American Indian identity. This means that the child has moved from the Aboriginal ancestry-only population in the Census (and therefore not being counted in the identity population) to the Aboriginal identity population for the ACS.

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

Transitions between the different Aboriginal groups (North American Indian, Métis and Inuit) also occurred. For example, one may have reported his or her child as having a North American Indian identity on the Census, but both a North American Indian and a Métis identity in the ACS.

The following tables compare the Census counts to the ACS counts for different geographical regions and Aboriginal groups. For these tables, the non-Aboriginal population covered in the ACS for the territories is excluded. The four Inuit regions are separated from the rest of Canada. Hence, the region *Atlantic Other* excludes Nunatsiavut, *Quebec Other* excludes Nunavik and *Northwest Territories Other* excludes Inuvialuit.

Tables 3 and Table 4 compare respectively the non-reserve (except in the territories where First Nations communities are included) Census and the ACS counts for the *identity population* and *ancestry-only population* without double counting.

Tables 5 and 6 are similar to Tables 3 and 4, but include double counting. This means that someone with a multiple identity of NAI and Métis counts in both the NAI and Métis categories.

Table 3
Identity counts for the Census and the Aboriginal Children's Survey <u>without</u> double counting, 2006

Geographical domain	NAI only		Métis only		Inuit only		Multiples		Band / Registered Indian only	
	Census	ACS	Census	ACS	Census	ACS	Census	ACS	Census	ACS
	number									
Nunatsiavut	0	0	0	0	190	180	0	0	0	0
Nunavik	0	10	0	0	1,400	1,360	10	10	0	0
Inuvialuit	80	90	10	20	330	310	0	20	0	0
Nunavut	10	10	10	40	3,520	3,450	10	30	0	0
Inuit Nunaat total	**90**	**110**	**30**	**70**	**5,430**	**5,300**	**20**	**50**	**0**	**0**
Atlantic other	1,560	2,710	1,200	1,520	180	240	20	100	250	130
Quebec other	1,930	3,100	1,850	2,260	90	100	30	210	130	140
Ontario	10,670	13,580	4,740	6,130	290	350	170	490	360	300
Manitoba	5,960	6,660	6,770	6,880	80	80	130	460	150	130
Saskatchewan	6,590	6,560	4,810	5,040	30	30	60	230	140	80
Alberta	6,640	7,590	7,850	8,300	150	200	140	610	110	130
British Columbia	8,370	9,150	4,290	4,620	60	190	120	200	330	230
Yukon	560	560	60	50	30	50	10	30	20	30
Northwest territories, other	1,200	1,080	270	320	140	170	20	130	10	10
Rest of Canada total	**43,490**	**51,000**	**31,850**	**35,130**	**1,060**	**1,410**	**710**	**2,460**	**1,500**	**1,200**
Canada total	**43,580**	**51,110**	**31,870**	**35,200**	**6,490**	**6,700**	**720**	**2,510**	**1,510**	**1,200**

NAI =North American Indian
ACS = Aboriginal Children's Survey
Source(s): Statistics Canada, *Aboriginal Children Survey and Census, 2006*

Table 4
Ancestry-only counts for the Census and the Aboriginal Children's Survey <u>without</u> double counting, 2006

Geographical domain	NAI only		Métis only		Inuit only		Multiples	
	Census	ACS	Census	ACS	Census	ACS	Census	ACS
	number							
Nunatsiavut	0	0	0	0	0	0	0	0
Nunavik	0	0	0	0	10	40	0	0
Inuvialuit	0	10	0	0	20	10	0	0
Nunavut	0	0	0	0	60	90	0	0
Inuit Nunaat total	**10**	**10**	**10**	**0**	**80**	**160**	**0**	**10**
Atlantic other	3,880	2,320	670	550	260	180	130	390
Quebec other	10,170	6,640	1,300	1,030	90	150	130	2,090
Ontario	13,250	7,930	2,930	2,220	220	110	180	1,700
Manitoba	970	270	1,630	950	20	10	100	350
Saskatchewan	720	230	690	670	10	10	50	240
Alberta	4,160	1,850	2,500	2,170	140	70	190	980
British Columbia	4,010	2,760	1,760	1,340	120	60	80	600
Northwest territories, other	10	50	10	60	0	0	0	10
Yukon	30	70	30	60	0	0	0	10
Rest of Canada total	**37,200**	**22,130**	**11,500**	**9,050**	**860**	**600**	**870**	**6,360**
Canada total	**37,210**	**22,130**	**11,510**	**9,050**	**950**	**760**	**870**	**6,360**

NAI =North American Indian
ACS = Aboriginal Children's Survey
Source(s): Statistics Canada, *Aboriginal Children Survey and Census, 2006*

Table 5
Identity counts for the Census and the Aboriginal Children's Survey <u>with</u> double counting, 2006

Geographical domain	NAI		Métis		Inuit		Band / Registered Indian only	
	Census	ACS	Census	ACS	Census	ACS	Census	ACS
	number							
Nunatsiavut	0	0	0	0	190	190	0	0
Nunavik	10	20	0	0	1,410	1,370	0	0
Inuvialuit	80	110	10	30	330	310	0	0
Nunavut	10	30	10	50	3,520	3,480	0	0
Inuit Nunaat total	**110**	**150**	**30**	**90**	**5,450**	**5,340**	**0**	**0**
Atlantic other	1,560	2,790	1,220	1,620	200	260	250	130
Quebec oher	1,960	3,290	1,870	2,460	90	140	130	140
Ontario	10,820	14,060	4,880	6,600	340	380	360	300
Manitoba	6,090	7,080	6,890	7,340	90	120	150	130
Saskatchewan	6,660	6,790	4,870	5,270	30	30	140	80
Alberta	6,780	8,170	7,990	8,910	180	260	110	130
British Columbia	8,480	9,340	4,420	4,820	70	210	330	230
Yukon	570	590	70	70	50	60	20	30
Northwest territories other	1,230	1,200	280	430	150	210	10	10
Rest of Canada total	**44,130**	**53,320**	**32,500**	**37,520**	**1,200**	**1,660**	**1,500**	**1,200**
Canada total	**44,240**	**53,470**	**32,530**	**37,610**	**6,640**	**7,000**	**1,510**	**1,200**

NAI =North American Indian
ACS = Aboriginal Children's Survey
Source(s): Statistics Canada, *Aboriginal Children Survey and Census, 2006*

Table 6
Ancestry-only counts for the Census and the Aboriginal Children's Survey <u>with</u> double counting, 2006

Geographical domain	NAI only		Métis only		Inuit only	
	Census	ACS	Census	ACS	Census	ACS
	number					
Nunatsiavut	0	0	0	0	0	0
Nunavik	0	0	0	0	10	50
Inuvialuit	0	10	0	10	20	20
Nunavut	0	0	0	0	60	90
Inuit Nunaat total	**10**	**10**	**10**	**10**	**90**	**160**
Atlantic other	4,000	2,640	730	880	340	310
Quebec other	10,310	8,730	1,430	3,110	90	180
Ontario	13,410	9,600	3,090	3,820	260	230
Manitoba	1,060	610	1,720	1,300	30	30
Saskatchewan	770	460	720	910	20	20
Alberta	4,340	2,810	2,690	3,130	160	110
British Columbia	4,090	3,330	1,850	1,920	130	130
Yukon	30	80	30	70	0	0
Northwest territories other	10	60	10	70	10	0
Rest of Canada total	**38,010**	**28,310**	**12,270**	**15,210**	**1,040**	**1,010**
Canada total	**38,020**	**28,320**	**12,270**	**15,210**	**1,130**	**1,170**

NAI =North American Indian
ACS = Aboriginal Children's Survey
Source(s): Statistics Canada, *Aboriginal Children Survey and Census, 2006*

Appendix 1: 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, including **Status** and **non-Status Indians**), **Métis** and **Inuit**. These are three separate peoples with unique heritages, languages, cultural practices and spiritual beliefs.

A

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 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.

C

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.

D

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 Nation
A term that came into common usage in the 1970s to replace the word "Indian," which many people found offensive. Although the term First Nation 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 ACS, in the provinces, a unit was in scope if he or she was under 6 years of age, was Aboriginal, and did not live on a reserve (except for some First Nation communities in Quebec). In the territories, a unit was in scope if he or she was under 6 years of age (Aboriginal or not, living on reserve or not).

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 the **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 including **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 observations might be '77', 'woman' and 'widowed'.

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

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.

Post-censal survey
A post-censal 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 ACS, the respondent is the parent or guardian of the selected child.

Responding unit
The responding unit refers to the **surveyed unit** for which a response is obtained. In the case of ACS, it would be the child 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 ACS refers to the parent or guardian providing the information for the child.

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.

S

Sample design
A set of specifications that describe the sampling elements of a survey in detail. These elements include population, frame, survey 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
The size of a sample divided by the total population being estimated.

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 ACS, the sampling unit is the child.

Standard deviation
Standard deviation measures the spread or dispersion of a data set around the mean. It is the most widely-used measure of spread. 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.

S

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 ACS, the surveyed unit (which is also the sampled unit since ACS is a sample survey) is the child.

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 set of values to which a numerical measure can be assigned (e.g., income, age and weight).

Variance
A measure of spread 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 2: Frequently asked questions

What is the Aboriginal Children's Survey?
This survey is a national survey of First Nations children living off reserve, Métis children and Inuit children under the age of 6 years living in urban, rural and northern locations throughout Canada. There is currently little data available about the health and development of Aboriginal children under 6 years of age. The Aboriginal Children's Survey (ACS) is designed to address this data gap and provide information on the motor, social and cognitive development of young Aboriginal children.

What data will be produced?
The Aboriginal Children's Survey collects information about First Nations children living off reserve, Métis children and Inuit children for the age groups 0-1 years, 2-3 years and 4-5 years. The survey provides valuable data on issues specific to Aboriginal children's development and well-being.

Data covers the following themes:

- o Family and Community (Nurturing, Child care arrangements, Parent's perception of community);
- o Early Learning (Developmental milestones, Learning and activities, Strengths and difficulties);
- o Healthy Living (Health status, Access to health care, Food and nutrition, Sleep, Healthy environment);
- o Languages.

Why are these data important?
Survey data can be used by Aboriginal organizations, community planners, service providers, parents, governments and researchers to:

- o Honour and acknowledge Aboriginal children (needs; values and cultural heritage)
- o Inform decision-making (program and policy planning and development)
- o Support academic research (educators and researchers)

How were Aboriginal people involved in the survey process?
Aboriginal people have been involved in all aspects of the survey. For example:

- o Aboriginal advisors have been involved in developing the content of the questionnaire and defining survey procedures.
- o Parents and guardians of children participated in discussions on the survey questions.
- o National Aboriginal organizations have been involved in the promotion of the survey.
- o Throughout the ACS, Aboriginal people were encouraged to participate in data collection activities and other survey operations.
- o Aboriginal children provided artwork that was used in the promotional materials for the survey.

Where was the survey conducted?
Information has been collected about First Nations children living off reserve, Métis children and Inuit children living in urban, rural and northern locations throughout Canada.

The survey was conducted from October 2006 until March 2007.

Did you conduct the Aboriginal Children's Survey on reserves?
Statistics Canada recognizes the importance of collecting quality and representative data on First Nations children living on reserve. However, a mutually agreed-upon process with First Nations communities must first be in place, as it is essential to achieving good participation.
Statistics Canada will work with its federal partners and First Nations leadership to explore the possibilities of conducting surveys on-reserve in the future.

Are the data confidential?
Yes. Statistics Canada follows strict rules to ensure the confidentiality of information.

Under the *Statistics Act*, employees must take an oath of secrecy. Only employees who need to work with the data files have access to them. When survey data are released, individual answers are combined with those of other participants. No information is ever released that could identify an individual.

What is STC doing to improve the coverage of the Aboriginal population?
Statistics Canada continues to work with Aboriginal organizations and communities to determine their data needs and has signed agreements with Aboriginal organizations in some provinces and territories for cooperation and support in carrying out the census. Discussions are ongoing in other Statistics Canada program areas to support a variety of surveys.

An important resource for Statistics Canada to improve its coverage of the Aboriginal population is the work of its Aboriginal Communications and Liaison Officers (ACLOs). Aboriginal peoples and communities in each province have an ACLO available to keep them informed on Statistics Canada information activities and help them find and better understand the data that is available for their community.

How is the diversity of Aboriginal people dealt with in the survey?
Where data permits, Statistics Canada will produce separate estimates for First Nations people living off reserve, Métis and Inuit.

Content of the Aboriginal Children's Survey was developed with the Technical Advisory Group, consisting of people from across Canada knowledgeable about First Nations, Métis and Inuit cultures. As such, the questions were designed to be relevant and to address issues of importance to First Nations, Métis and Inuit children.

Where can I find out more information about the Aboriginal Children's Survey?
For more information about the Aboriginal Children's Survey, please contact Statistics Canada by email at sasd-dssea@statcan.gc.ca or call 1 (800) 263-1136.

Appendix 3:   Questionnaires

The 2006 Aboriginal Children's Survey questionnaires are available on the Statistics Canada website and may be accessed using the following hyperlinks:

Aboriginal Children's Survey 2006 (provinces):
http://www.statcan.gc.ca/english/sdds/instrument/5108_Q2_V1_E.pdf

Aboriginal Children's Survey / Survey of Northern Children 2006 (territories):
http://www.statcan.gc.ca/english/sdds/instrument/5108_Q3_V1_E.pdf

Reference

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