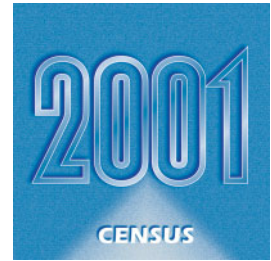




Catalogue No. 92-380-XIE

## **Age, Sex, Marital Status and Common-law Status**

### **2001 Census Technical Report**



ELECTRONIC PUBLICATIONS AVAILABLE AT  
**[www.statcan.ca](http://www.statcan.ca)**



## 2001 Census Technical Report

# Age, Sex, Marital Status and Common-law Status

	Page
<b>INTRODUCTION.....</b>	<b>2</b>
<b>1. DATA COLLECTION AND COVERAGE.....</b>	<b>3</b>
1.1 General .....	3
1.1.1 Collection Methods .....	3
1.1.2 Special Coverage Studies .....	3
1.2 Questionnaire and Instructions .....	3
<b>2. DATA PROCESSING.....</b>	<b>5</b>
2.1 General .....	5
2.1.1 Regional Processing.....	5
2.1.2 Imaging.....	6
2.1.3 Interactive Verification .....	6
2.1.4 Automated Coding.....	7
2.1.5 Edit and Imputation.....	8
2.1.5.1 General.....	8
2.1.5.2 Dwelling Classification Study (DCS).....	9
2.1.5.3 Weighting .....	9
2.2 Demographic Variables – Pre-processing .....	9
2.2.1 Interactive Verification – Dispatch Process.....	9
2.2.2 Automated Coding.....	10
2.3 Demographic Variables - Processing .....	10
2.3.1 Stratification.....	10
2.3.2 Edit and Imputation.....	12
2.3.2.1 Edit .....	13
2.3.2.2 Imputation .....	14
2.3.3 Finalization .....	15
<b>3. DATA QUALITY MEASUREMENT.....</b>	<b>17</b>
3.1 General .....	17
3.2 Demographic Variables .....	17
3.2.1 Comparison of 20% Sample Data, Phase 1 and Phase 2 .....	17
3.2.2 Evaluation of 100% Data.....	19
<b>4. HISTORICAL COMPARABILITY.....</b>	<b>33</b>
<b>5. CONCLUSION.....</b>	<b>37</b>
<b>APPENDICES</b>	
Appendix A. Glossary of Terms .....	38
Appendix B. Edit Rules .....	39
Appendix C. Appendix Tables.....	45
Appendix D. 2001 Census Products and Services .....	70
<b>BIBLIOGRAPHY.....</b>	<b>71</b>

# Introduction

The 2001 Census required the participation of the entire population of Canada, i.e. some 30 million people distributed over a territory of 9 million square kilometres. An endeavour of this magnitude represented a tremendous challenge. Although there are high quality standards governing the collection and processing of the data, and in spite of efforts aimed at reducing non-response, for example through the use of communications, it is not possible to eliminate all errors. While this term does not necessarily imply any mistake as such, some element of error is bound to result in view of decisions to control census costs.

Statistics Canada is committed to explaining the methods and concepts used to collect and process its data and to providing users with information on the quality of the data produced, as well as other data characteristics which might limit their usefulness or interpretation. This report is aimed at informing users on the complexity of the data and on any difficulties that could affect their use. It explains the theoretical framework and the definitions used to gather the data, and describes unusual circumstances that could affect data quality. Moreover, the report touches upon data capture, edit and imputation, and deals with the historical comparability of the data.

The **2001 Census Technical Reports Series** includes 16 reports covering the variables of the 2001 Census of Population, as well as *Coverage* and *Sampling and Weighting*.

This report deals with age, sex, marital status and common-law status. It has been prepared by the Demography Division, with the support of staff from the Census Operations Division and the Social Survey Methods Division.

Users will find additional information on census concepts, variables and geography in the *2001 Census Dictionary* (Catalogue No. 92-378-XIE), and an overview of the complete census process in the *2001 Census Handbook* (Catalogue No. 92-379-XIE).

# 1. Data Collection and Coverage

This stage of the census process ensures that each of the 11.8 million households in Canada is enumerated. The census enumerates the entire Canadian population, which consists of Canadian citizens (by birth and by naturalization), landed immigrants, and non-permanent residents, together with family members who live with them. Non-permanent residents are persons living in Canada who have a Minister's permit, a student or employment authorization, or who are claiming refugee status, and family members living with them.

The census also counts Canadian citizens and landed immigrants who are temporarily outside the country on Census Day. This includes federal and provincial government employees working outside Canada, Canadian embassy staff posted to other countries, members of the Canadian Armed Forces stationed abroad, and all Canadian crew members of merchant vessels. Because people outside the country are enumerated, the Census of Canada is considered a modified *de jure* census.

## 1.1 General

### 1.1.1. Collection Methods

To ensure the best possible coverage, the country is divided into small geographic areas called enumeration areas (EAs). Each census representative is responsible for at least one EA. The optimal number of households in an EA ranges from 175 in rural areas to 600 in urban areas. In the 2001 Census, there were 42,851 enumeration areas in Canada, and 38,000 people were engaged in collecting the data.

In 2001, approximately 98% of households were self-enumerated. Self-enumeration requires that a census representative drop off a questionnaire at each household during the two weeks before Census Day. An adult or responsible member of the household is asked to complete the questionnaire for all members of the household, and then mails the questionnaire in a pre-addressed envelope.

Approximately 2% of households were enumerated in the 2001 Census using the canvasser enumeration method. In this case, a census representative visits the household and completes a questionnaire for the household by interview. This method is normally used in remote and northern areas of the country, and on most Indian reserves. The canvasser enumeration method is also used in certain urban areas where it is considered highly possible that respondents would be unlikely to return a questionnaire.

### 1.1.2 Special Coverage Studies

Since 100% coverage is virtually impossible with such a large survey, a number of checks are performed on the collection of data. These studies measure the extent of coverage errors that occur when dwellings or individuals are missed, incorrectly included or double-counted. These checks are the Vacancy Check, the Reverse Record Check and the Overcoverage Study. These studies are discussed in the 2001 Census Technical Report on *Coverage* (Catalogue No. 92-394-XIE), planned for release in November 2004.

## 1.2 Questionnaire and Instructions

Six types of questionnaires were used to collect the 2001 Census data. Of these, 4 out of 5 households used the 2A questionnaire (short form) and the remainder of Canadians used either the 2B, the 2C or the 2D questionnaire (long form). The 3A and 3B questionnaires were used in private dwellings to enumerate usual residents who wanted to be enumerated separately, and in collective dwellings.

Data on age, sex, marital status and common-law status were collected from 100% of the population from the responses to Questions 2 to 5 on all questionnaires.

## Sex

No instructions were provided for this question, and the answer circles were placed one above the other.

<b>2 SEX</b>	01. 01 <input type="radio"/> Male 02 <input type="radio"/> Female
--------------	---

## Date of Birth

The data from this question were used to calculate the respondent's age as of May 15, 2001. The instructions for this question were changed slightly so that new response categories could be added to the Relationship to Person 1 question. Also, the "1" pre-printed in the "Year" box was removed.

<b>3 DATE OF BIRTH</b> Day Month Year Example: 23 02 1954 If exact date is not known, enter best estimate.	Date of birth Day Month Year 03 <input type="text"/> <input type="text"/> <input type="text"/>
---	--

## Marital Status

The question and the instructions were not changed from 1996. Two changes were made in the layout of the response categories. The French category "Célibataire (*jamais marié*)" was altered to make it consistent with the English version. The wording was changed to "Jamais légalement marié (*célibataire*)". In addition, this category was placed at the top of the list, since it is the most frequently used category.

<b>4 MARITAL STATUS</b> Mark "ⓧ" one circle only.	04 <input type="radio"/> Never legally married (single) 05 <input type="radio"/> Legally married (and not separated) 06 <input type="radio"/> Separated, but still legally married 07 <input type="radio"/> Divorced 08 <input type="radio"/> Widowed
--	---

## Common-law

In the 2001 Census, two people of the same sex who were living common-law were able to indicate that fact. The instructions were altered to reflect the change.

<b>5 IS THIS PERSON LIVING WITH A COMMON-LAW PARTNER?</b> <i>Common-law refers to two people of the opposite sex or of the same sex who live together as a couple but who are not legally married to each other.</i>	09 <input type="radio"/> Yes 10 <input type="radio"/> No
---	---

## 2. Data Processing

This part of the census process involved the processing of all the completed questionnaires, from the data capture of the information through to the creation of an accurate and complete retrieval database. The final database was transferred to the Data Quality Measurement Project to determine the overall quality of the data, and to the Dissemination Project for the production and marketing of the 2001 Census products and services. A new objective for 2001 was to create an image retrieval system giving access to the images (pictures) of all the census questionnaires and visitation records, so that subsequent processes requiring access to original census forms would not have to handle the thousands of boxes and paper documents, as in previous censuses.

### 2.1 General

#### 2.1.1 Regional Processing

Regional Processing was responsible for the manual coding of the industry and occupation responses and the data capture of the questionnaire information into a machine-readable format for subsequent processing systems. Given the enormous volume of census questionnaires and information to be captured (representing over 4 billion keystrokes), Regional Processing has been contracting this work out since 1981 to the Canada Customs and Revenue Agency (CCRA), formerly called Revenue Canada. By using the trained staff and infrastructure already in place at CCRA, the census realized cost savings by partnering with another government agency. For the 2001 Census, approximately 2,800 CCRA employees were sworn to secrecy under the *Statistics Act* to perform the census work, under the same rules and regulations as those which apply to the employees of Statistics Canada.

When the collection activities for a specific enumeration area (EA) were completed, the questionnaires, along with their maps and visitation records, were shipped in EA boxes from the field collection units to one of eight designated CCRA tax centres across the country.

The first step was to prepare the completed questionnaires for data capture. This traditionally included the manual assignment of codes to written answers that were provided by the respondents. For 2001, most of the written responses were converted to codes using automated systems (see Section 2.1.4). The only written responses that had to be manually coded for the 2001 Census were the questions on industry and occupation contained in the long-form questionnaires. Research into the automation of the coding of these questions has begun, and it is expected that an automated system will be operational for the 2006 Census.

The industry responses were coded at CCRA according to the North American Industry Classification System (NAICS), which was introduced as a standard within Statistics Canada a few years ago. NAICS is designed to provide a common framework for Canada, the United States and Mexico, which will enable the production of industry statistics under the North American Free Trade Agreement (NAFTA). This meant a change for industry coding - in 1996, industry was coded using the 1980 Standard Industrial Classification (SIC). In order to allow longitudinal comparisons, the 2001 industry question was also coded using the 1980 SIC during the Automated Coding phase (see Section 2.1.4). This phase was carried out with more automated means than in previous censuses.

Once the questionnaires were received and registered at one of the CCRA tax centres, and the industry and occupation codes assigned, the next step was to sort, label and batch the questionnaires in preparation for data capture. The labels affixed to each questionnaire contained a unique sequence number that was used to control the movement of the questionnaire throughout the CCRA operations. For the first time, the label also included a bar code to facilitate the scanning of the questionnaire in the imaging operation (see Section 2.1.2).

Data capture was then performed by traditional manual keying at mainly mainframe terminals. Verification of the accuracy of the data capture operation was done by selecting a sample of questionnaires that were already key-entered and capturing the information from the questionnaires in this sample a second time. Quality control statistics were produced by comparing the two sets of captured information.

As the data were keyed, they were transmitted in real time over dedicated communication lines to the CCRA computer in Ottawa. Within 24 hours, the data were then transferred to tape cartridges and transported by bonded carrier to Statistics Canada, where they were loaded into the mainframe computer. Questionnaires were reassembled into their EA boxes for shipment to Statistics Canada's 2001 processing site in Ottawa.

### **2.1.2 Imaging**

In previous censuses, the remaining processing steps that required access to the questionnaires and visitation records used the paper documents. For 2001, the need to handle the paper was eliminated by imaging (scanning) all the questionnaires and visitation records as soon as they arrived at the 2001 processing site from the CCRA tax centres. Subsequent operations then had access to the questionnaires and visitation record images, using an image retrieval system, rather than using the paper documents.

As the EA boxes arrived at the 2001 processing site, they were registered. Then, the documents were prepared for imaging. Since the questionnaires and visitation records were in booklet format, they had to be cut into separate sheets in order to be run through the scanners. Following the cutting, since the 2A questionnaire was actually two booklets glued together (one English and the other French), the unused portion had to be separated from the completed portion. Extra material that was included with the questionnaires was removed (e.g., paper clips, notes). The questionnaires were then batched by EA for imaging.

The 13 million documents were imaged using 15 high-volume scanners running five days a week, two shifts per day. The geographic identifier that was required to identify each document image was automatically assigned using the bar code on the label affixed during the data capture operations at CCRA (see Section 2.1.1). Quality control was performed to ensure that each document contained the right number of pages, and that the number of questionnaires by form type was correct for each EA. A problem resolution operation resolved any problems that arose. The images were then written to optical platters for subsequent access and archiving. As the questionnaires were scanned, their images were also kept in magnetic storage for immediate access by the Interactive Verification activities (see Section 2.1.3).

The images on the optical platters are being kept in a secure location and are only accessible to authorized Statistics Canada employees from within the secure location.

### **2.1.3 Interactive Verification**

The main objective of Interactive Verification was to identify and correct errors in the data, for which proper resolution required reference to the images of the questionnaires and/or visitation records. A detailed set of edits was applied to the captured data to identify possible errors, such as households with missing or duplicate persons, incorrect enumeration of foreign or temporary residents, questionnaires assigned to the wrong household, or misclassification of households as occupied or unoccupied. A thorough review of the information on all relevant census forms was conducted to determine the appropriate corrective action for each edit failure. In some cases, this required adding and/or deleting persons or dwellings; consequently, this process had an impact on the census counts.



As the census data arrived on cartridges from CCRA, they were loaded into Statistics Canada's computers, ready for the Interactive Verification activities. A series of automated "structural" edits were performed, mainly to verify the information filled out by the Census Representative on the front cover of the questionnaire. These edits included, among other things, matching questionnaire and household types, cross-checking the number of questionnaires and people enumerated, and verifying that the geographic identifiers were unique. Some edits were also performed on the income information, so that anomalies could be extracted and examined by income subject-matter experts.

All edits were done by EA. Errors were flagged, and then corrected by referring to the images of the questionnaires and visitation record for that EA. The corrections were made to the electronic data using an interactive PC-based system. Some of the corrections were also noted on the questionnaire images, using a process commonly called "annotation".

Once the EA edits were completed, automated and manual processes were used to verify the block number that the Census Representative had copied from the EA map onto the questionnaire and visitation record.

A National Block Program has been implemented for the first time in 2001. A "block" is basically the smallest area bounded by streets or roads, lakes and rivers. In urban centres, "blocks" are generally recognizable city blocks. In rural areas, "blocks" are much larger areas, but are still bounded by identifiable features, with no significant feature splitting an area. These blocks are added together to create the EAs for data collection purposes, and the dissemination areas (DAs) for the dissemination of census products and services.

During the field collection operations, as census representatives delivered a questionnaire to each dwelling within their EA, they wrote the person's name (if possible) and the address in their visitation records (VRs). At the same time, they copied the VR line number from the VR onto the questionnaire, to uniquely identify the questionnaire for that dwelling. As well, they identified the block number for the dwelling from their EA map and copied the number into the VR and onto the questionnaire. These block numbers were data-captured, so that all the dwellings in Canada could be identified as belonging to a particular block.

As a final step in the Interactive Verification process, the data were reformatted and forwarded for the final processing steps, namely Automated Coding and Edit and Imputation.

Interactive Verification also performed some special processing to ensure that Canadians living outside Canada on Census Day (people aboard coast guard and Canadian Armed Forces vessels, Canadian-registered merchant vessels, and diplomatic and military personnel) were enumerated.

### **2.1.4 Automated Coding**

Automated coding matched the write-in responses that were "data-captured" from the long-form questionnaires during Regional Processing (see Section 2.1.1) to entries in an automated reference file/classification structure containing a series of words or phrases and corresponding numerical codes. Although a large percentage of write-in responses can be coded in a purely automated manner, a series of responses always remains unmatched. Specially trained coders and subject-matter experts reviewed all unmatched responses and, with the assistance of PC-based interactive coding systems, assigned the appropriate numerical code after examining responses to other questions and from other members of the household. Automated coding was applied to write-in responses for the following questions on the long form (2B):

- relationship to Person 1;
- home language;
- non-official languages;

- first language learned in childhood (mother tongue);
- language of work (new in 2001);
- place of birth;
- place of birth of parents (new in 2001);
- citizenship;
- ethnic origin (ancestry);
- population group;
- Indian Band/First Nation;
- place of residence 1 year ago;
- place of residence 5 years ago;
- major field of study;
- religion (last asked in 1991);
- place of work;
- industry according to the 1980 SIC (first time for automated coding in 2001).

As the responses for a particular variable were coded, the data for that variable were sent to the Edit and Imputation phase.

## 2.1.5 Edit and Imputation

### 2.1.5.1 General

The data collected in any survey or census contain omissions or inconsistencies. These errors can be the result of respondents answering the questions incorrectly or incompletely, or they can be due to errors generated during processing. For example, a respondent may be reluctant to answer a question, may fail to remember the right answer or may misunderstand the question. Census staff may code responses incorrectly or may make other mistakes during processing.

Prior to Edit and Imputation, the questionnaires underwent some basic manual edits during collection. Field staff reviewed the questionnaires for missing responses or unacceptable multiple responses. Such problems were resolved by contacting the respondents and obtaining the required information. Following collection, Interactive Verification (see Section 2.1.3) performed some basic structural edits, where the images of the questionnaires and visitation records were referenced as necessary.

The final clean-up of the data was done in Edit and Imputation and was, for the most part, fully automated. It applied a series of detailed edit rules that identified any missing or inconsistent responses. These missing or inconsistent responses were corrected most of the time by changing the values of a few variables as possible through imputation. Imputation invoked "deterministic" and/or "minimum-change hot-deck" methods. For deterministic imputation, errors were corrected by inferring the appropriate response value from responses to other questions. For minimum-change hot-deck imputation, a record with a number of characteristics in common with the record in error was selected. Data from this "donor" record were borrowed and used to change the minimum number of variables necessary to resolve all the edit failures.

Two different automated systems were used to carry out this processing.

The **N**earest-neighbour **I**mputation **M**ethod (NIM), developed for the 1996 Census to perform Edit and Imputation for basic demographic characteristics such as age, sex, marital status, common-law status and relationship to Person 1, was expanded for 2001 and implemented in a system called CANCEIS (**C**ANadian **C**ensus **E**dit and **I**mputation **S**ystem) to include Edit and Imputation for such variables as industry, place of work, mode of transportation and mobility. As in 1996, CANCEIS continued to allow more extensive and exact edits to be applied to the response data, while preserving responses through minimum-change "hot-deck" imputation.

SPIDER (**S**ystem for **P**rocessing **I**nstructions from **D**irectly **E**ntered **R**equirements) was used to process the remaining census variables, such as mother tongue, dwelling and income. This tool translated subject-matter requirements, identified through decision logic tables, into computer-executable modules. SPIDER performed both deterministic and "hot-deck" imputation.

### **2.1.5.2 Dwelling Classification Study (DCS)**

The Dwelling Classification Study takes a sample of dwellings declared either unoccupied or absent during the collection process. Later, the DCS returns to these dwellings to determine if, on Census Day, they were occupied, unoccupied or should not have been listed because they did not meet the definition of a census dwelling. If a dwelling was occupied, one of two separate adjustments is made to the census database. If the dwelling was listed as vacant in the census, then a technique, called "random additions", was applied to add households and persons to the census database. In the 2001 Census, 111,628 households and 222,720 persons were added to the database to account for the estimated number of persons living in vacant dwellings. The second adjustment was concerned with absent households. These were adjusted by creating a new household size for all such dwellings on the census database. A total of 143,681 households with 317,587 persons were added to the census database through this adjustment.

### **2.1.5.3 Weighting**

Data on age, sex, marital status, common-law status, mother tongue and relationship to Person 1 were collected from all Canadians. However, the bulk of the information gathered in the census came from the 20% sampling of the population. Weighting, applied to the respondent data after Edit and Imputation, was used to adjust the census sample to represent the whole population.

The weighting method produced fully representative estimates from the sample data. For the 2001 Census, weighting employed a methodology known as calibration (or regression) estimation. Calibration estimation started with initial weights of approximately 5 and then adjusted them by the smallest possible amount needed to ensure closer agreement between the sample estimates (e.g., number of males, number of people aged 15 to 19) and the actual population counts for age, sex, marital status, common-law status and household size.

Once invalid and non-response data were corrected, they were transferred to the final national retrieval databases for subsequent data quality studies and dissemination.

## **2.2 Demographic Variables – Pre-processing**

### **2.2.1 Interactive Verification – Dispatch Process**

The 1996 Head Office Processing (HOP) step was renamed Interactive Verification, simply because it was a more accurate description of the activities carried out in the step. The Dispatch Process, on the other hand, remained essentially the same. The processing of responses to the Sex, Marital Status and Common-law Status questions did not change.

A few changes were made, however, in the processing of responses to the Date of Birth question, primarily because the year of birth could fall in any one of three centuries (1880 to 2001). As in 1996, the date of birth was broken down into its main components: day, month and year of birth. To compute a preliminary age, at least a valid year of birth was required.

For some partial response cases, it was possible to determine the respondent's intention with certainty. For example, if the year of birth was "\_\_ 5 4", it was imputed to "1 9 5 4", and a preliminary age was calculated. In other partial response cases, the answer to the Relationship to Person 1 question was used

to assign a year of birth. For example, if the year of birth was “\_\_ 9 8” and the Relationship to Person 1 was “Grandchild of Person 1”, the year of birth was imputed to “1 9 9 8”, and a preliminary age was calculated. In all other partial response cases where the year of birth was unclear, no preliminary age was computed.

In the case of responses in which only the day and/or month of birth was missing or invalid, the Dispatch Process imputed the missing data randomly and then computed the preliminary age. As a result, a missing or invalid day or month of birth did not prevent calculation of a preliminary age. The vast majority of responses (98%) contained enough information to compute a preliminary age.

## 2.2.2 Automated Coding

For the 2001 Census, as was the case in 1996, the decision was made not to capture the write-in responses to the Relationship to Person 1 and Mother Tongue questions on the short form. This means that write-in responses on 2A questionnaires are not available for processing. This decision has an impact on the processing of demographic data. The effect of this decision will be discussed in Sections 2.3.2 – Edit and Imputation, 3.2 – Data Quality Measurement and 4 – Historical Comparability.

## 2.3 Demographic Variables – Processing

For the remainder of the report, the term “demographic variables” includes age, sex, marital status, common-law status and relationship to Person 1. As the variable Relationship to Person 1 was an integral part of the 2001 edits, this variable will be included in the description of changes to the various systems which also had an impact on age, sex, marital status and common-law status.

The changes in the processing of demographic variables began in Interactive Verification (see Section 2.2.1) and to certain subsequent processes: the stratification and the edit and imputation. A description of the changes for each process follows.

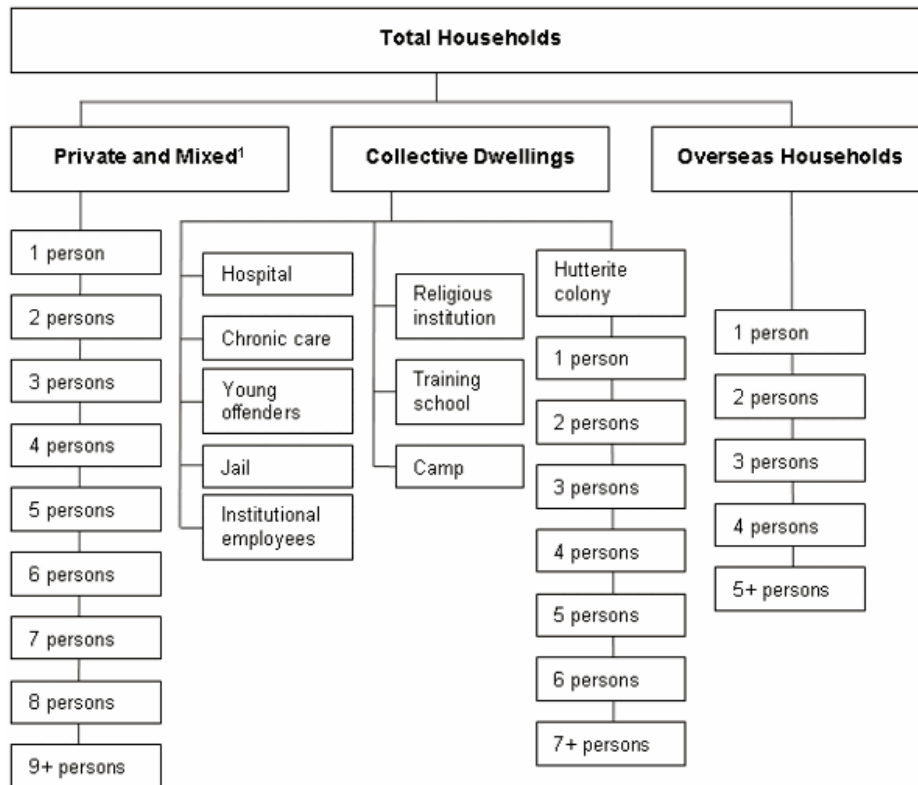
### 2.3.1 Stratification

As in 1996, the first step to processing was Stratification. This step was required in order to group together households and individuals with similar characteristics (i.e. geographic region, household type, and household composition). These strata ensured that the imputation system was able to select, in the most efficient manner possible, a donor record with demographic characteristics which most closely resembled those of the record requiring imputation.

The number of strata was slightly reduced from 29 in 1996 to 23 in 2001. The most significant changes since 1996 stemmed from modifications to the classification of collective dwellings. In particular, the “Hospital” stratum now includes chronic care hospitals along with hospitals, psychiatric hospitals and institutions for the physically handicapped. The name of the stratum that previously contained chronic care hospitals has changed from “Chronic Care” to “Senior Citizens”, since it now contains only nursing homes and residences for senior citizens. The “Shelter” stratum, new in 2001, includes persons living in hostels, homeless shelters and other shelters with assistance services.

In 1996, people living in Hutterite colonies were stratified by household size. In 2001, the seven size-strata were combined into a single stratum since, in 2001, most (99.67%) of the people living in Hutterite colonies were living in households with seven or more members. Hence, there was no need for the seven strata used in 1996.

**Figure 1. 1996 Census Processing of Demographic Data – Stratification of Households**



<sup>1</sup> At least one household member not related by blood, marriage or adoption. Includes campgrounds and parks, hotels, motels and tourist homes, lodging and rooming houses, YM/YWCAs, missions and shelters, and other collective dwellings.

Collective dwellings are grouped as indicated below:

Hospital: hospital, institution for persons physically handicapped, psychiatric hospital.

Chronic care: chronic care hospital, nursing home, residence for senior citizens.

Young offenders: children's group home, young offenders' facility.

Jail: correctional institution, penal institution and jail.

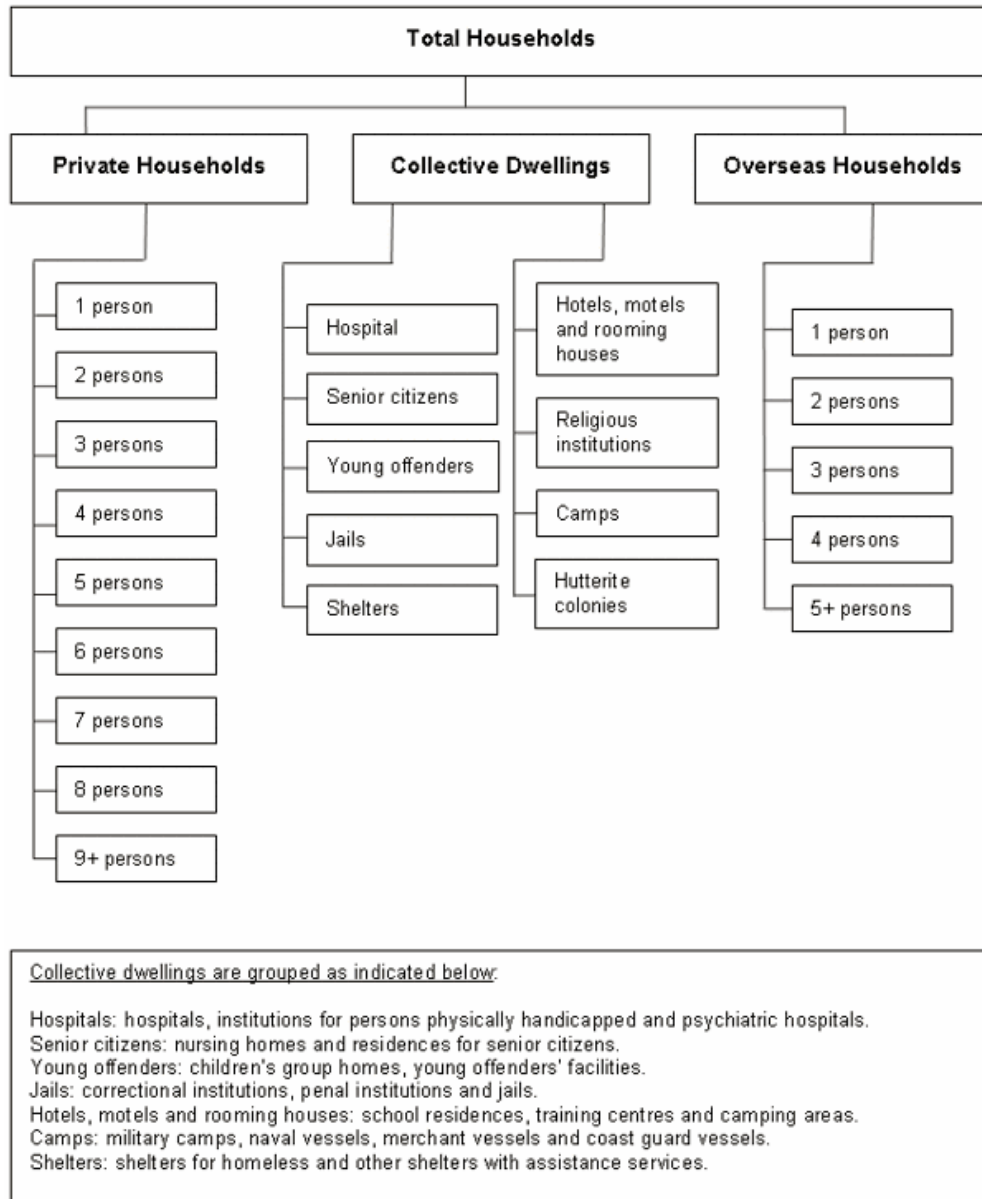
Camp: military camp, naval vessel, merchant vessel and coast guard vessel.

Religious institution: religious institution.

Training school: school residence and training centre.

In 2001, a person living in a hotel, motel, campground, etc. was considered to be living in a collective dwelling and was not included in the private dwelling stratum.

**Figure 2. 2001 Census Processing of Demographic Data – Stratification of Households**



### 2.3.2 Edit and Imputation

As in 1996, the write-in responses to the Relationship to Person 1 question on the short form were not captured. As a result of that decision, processing had to be carried out in two steps. First, all questionnaires (long and short) were processed without write-ins in order to produce the 100% data. Then the long forms were processed again with the write-ins to produce the 20% (sample) data.

Since a larger variety of relationships to Person 1 are possible in the sample data, the set of edit rules for the long forms is much more detailed. A complete list of possible values for the Relationship to Person 1 question is provided in Appendix B.

The questions on the short forms could not be processed without the responses from the long forms as all data from the long forms were required as possible donors to achieve the best imputation results. As well, the questions from the long forms had to be processed without write-ins during the first phase of processing so that they would be compatible with the responses from the short forms.

During the second phase of processing, the raw sample data were processed using the more comprehensive set of edits. An evaluation of both sets of sample data (the first one having been processed in Phase 1, and the second in Phase 2) can be found in Chapter 3.

Except for the write-in responses, the editing and the imputation of the data proceeded the same way for both streams. The following sections will explain these two processes and how they differ from the processing of the 1996 Census data.

### 2.3.2.1 Edit

In 1996, the NIM (**N**earest-neighbour **I**mputation **M**ethodology) system was used to edit the demographic data. At that time, NIM was the replacement for the CANEDIT system. NIM allowed for edits on both qualitative and quantitative variables. In 2001, NIM was revised and improved. CANCEIS (**CAN**adian **C**ensus **E**dit and **I**mputation **S**ystem) was given edit and imputation responsibility, not only for demographic variables, but also for other variables.

At the edit stage, CANCEIS uses a set of conflict resolution rules (edit rules). Those rules were put in place to determine whether a record has missing, invalid or inconsistent responses. When such a record is identified, it is imputed at the next stage in the process. The complete list of edit rules is presented in Appendix B.

As in 1996, before the edits could be applied, each household went through a process whereby all pairs of persons within each household were evaluated.<sup>1</sup> A score was assigned to each possible pair to reflect the likelihood for the pair of being a real couple (i.e. husband-wife or common-law partner). In 2001, for the first time, all pairs of persons were also scored for the likelihood that there was parent-child relationship (or a grandparent-grandchild relationship if the parent was absent) between the two persons. In all cases, the pairs with the highest scores were selected. This step allowed for more extensive editing of the data within couples using a minimum of edit rules.

Below is a sample household comprised of four persons.

	<b>Relationship</b>	<b>Age</b>	<b>Sex</b>	<b>Marital Status</b>	<b>Common-law</b>
1	Person 1	48	M	Legally married	No
2	Wife	46	F	Legally married	No
3	Son	21		Single	No
4	Mother	56	F	Legally married	Yes

In the example shown above, the first two persons would be flagged as a couple and the pairs of Persons 1 and 3, as well as Persons 2 and 3, would be flagged as parent-child pairs. If each record is evaluated separately, Person 3 has a missing piece of data, and Person 4 has an inconsistency between Marital Status and Common-law Status. (Conflict detection indicates that the person is both legally married and living common-law.) Then, when the records are compared, there is an inconsistency

<sup>1</sup> This process was done by the FAMFORM system. For more information, please refer to the 2001 Census Technical Report: *Families*, scheduled to be released at the end of November 2003.

between the birth dates of Person 1 and Person 4, since there has to be at least 15 years' difference between a parent and a child.

In 1996, a large number of the edits were used for basic family relationships as well as other links such as room-mates and employees. In 2001, two new features greatly increased the number of edit rules: first, the above-mentioned process for identifying parent-child pairs, and second, the fact that the set of possible values of the Relationship to Person 1 variable doubled between 1996 and 2001. That is, a number of possible responses, such as aunt, uncle and employee, are no longer lumped into an "Other" category, and edits are now possible on those responses. This means that an eight-member household underwent about 32,000 edits.

The edit rules applied to each record and the edit rules applied between two records are known as primary edit rules. A record that does not satisfy all primary edit rules is imputed. In 2001, about 17% of households failed one or more primary demographic edit rules.

As in 1996, there is a second set of rules called the secondary edit rules. Those rules are used to identify records containing outliers.

Below is a sample household comprised of two persons.

	<b>Relationship</b>	<b>Age</b>	<b>Sex</b>	<b>Marital Status</b>	<b>Common-law</b>
1	Person 1	22	M	Widow	No
2	Son	3	M	--	--

First, the marital status and common-law data are missing for Person 2. As a result, the record fails two primary edit rules. It will be imputed to ensure that the new record satisfies all primary and secondary edit rules. Person 1 satisfies the primary edit rules, but fails the secondary rules because, according to one of those rules, a record containing a widow under age 24 is an outlier. A household can be considered as an imputation donor if and only if it satisfies all primary and secondary edit rules.

### **2.3.2.2 Imputation**

CANCEIS uses hot-deck imputation and adheres more closely to the following objectives:

- The donor household should closely resemble the failed-edit household.
- Imputed data should come from a single donor.
- Possible donor households should have an equal chance of being selected.

CANCEIS also has the ability to classify the members of potential donor households in order to improve the search for the best possible match with the failed-edit household. The classification and matching step sometimes produced more than one potential donor. All potential donor records were scored, and only those which might keep the number of imputation measures to a minimum were selected for the pool of final donor records. The final donor record was then selected at random from the pool.

The table below provides a comparison of imputation rates in 1996 and 2001. While the rates have increased, they remain low and evenly distributed across the country. A detailed analysis of the data is presented in Chapter 3.



**Table 1. Demographic Variable Imputation Rates, Canada and Regions, 1996 and 2001 Censuses – 100% Data**

Variable	Canada	East	Quebec	Ontario	West	Overseas
Percentage						
1996						
Age	1.38	1.02	1.22	1.53	1.42	2.54
Sex	1.56	1.19	1.43	1.76	1.51	2.82
Marital Status	2.59	1.92	2.72	2.76	2.47	4.38
Common-law Status	5.88	4.91	5.72	6.23	5.83	8.57
2001						
Age	2.07	1.50	2.15	2.23	1.96	-
Sex	2.38	1.95	2.44	2.58	2.20	-
Marital Status	3.97	3.06	4.74	3.96	3.59	-
Common-law Status	7.33	5.90	8.54	7.30	6.75	-

**Note:** The East database comprises the four Atlantic provinces, and the West database comprises all the provinces west of Ontario and the three territories. People living overseas were processed within their province of origin in 2001.

### 2.3.3 Finalization

Two additional steps were performed before the data could be considered as final. These steps required that imputation be complete. Since 1996, only finalization of the Common-law variable has been dropped. At that time, one of the guidelines was that the answer to the Common-law question must not be “Yes” if no partner was present in the household. In 2001, that check was performed with edit rules.

#### (a) The Finalization of the Date-of-birth Components

If the imputation system had not changed the age for a person and all the date-of-birth components were valid, then the original date-of-birth components were copied into the final variables. If, on the other hand, the preliminary age computed in Dispatch Processing was not changed by the imputation system, the year of birth was recalculated to ensure consistency between the two variables. Similarly, if no preliminary age was computed and the imputation system had to impute an age, the year of birth was recalculated at the finalization stage.

The day and month of birth were assigned at random in Dispatch Processing if they were invalid. A final check was performed to ensure that dates such as February 30 and November 31 were corrected.

In this way, as much of the original data were retained as possible, and finalized components were available for processing of other subject-matter data.

(b) The Derivation of the Historical Marital Status Variable

This was accomplished by grouping those persons who indicated that they were legally married and those persons who indicated that they were living in a common-law union. They formed the value “now married” for this variable.

With the finalization of these two steps, the processing of the demographic data was complete. The next section describes the impact of the various processes on each variable and evaluates the outcome by comparing the data to other data sources.

## 3. Data Quality Measurement

### 3.1 General

Throughout the census-taking process, every effort was made to ensure high-quality results. Rigorous quality standards were set for data collection and processing, and the Public Communications Program assisted in minimizing non-response. A Data Quality Measurement Program was established to provide users with information on the quality and limitations of census data.

Although considerable effort is made throughout the entire process to ensure high standards of data quality, the resulting data are subject to a certain degree of inaccuracy. To assess the usefulness of census data for their purposes and to understand the risk involved in drawing conclusions or making decisions on the basis of these data, users should be aware of their inaccuracies and appreciate their origin and composition.

Within the **2001 Census Technical Reports Series**, users will find detailed 2001 Census information on *Coverage* and *Sampling and Weighting*. These two reports are scheduled to be released in November and December 2004 respectively.

### 3.2 Demographic Variables

The data evaluation process begins the moment the questionnaire is received, and continues after the processing has ended. The objective of the evaluation is to ensure the reliability of the data. Throughout this process, some questions are addressed: Did respondents understand the questions? Did the processing systems have an impact on the data? How do the resulting data compare to other data sources?

For 2001, the first evaluation consisted of identifying the differences between sample data when processed with or without write-ins for the Relationship to Person 1 question. Since 1996, this evaluation is necessary as a result of the decision not to capture write-ins for the Relationship to Person 1 question for the 100% data processed during Phase 1. As mentioned previously, the long forms were processed the first time as part of the 100% data, without write-ins for the "Relationship to Person 1" response. These responses were processed a second time using the write-in responses during Phase 2. As you will see from the evaluation, there were few differences between the two phases.

#### 3.2.1 Comparison of 20% Sample Data, Phase 1 and Phase 2

In order to evaluate the results from data processing with and without write-in responses for the Relationship to Person 1 question, 2B respondents were selected and then their responses to the two phases were compared.

Figure 3 presents age data. The most prominent differences translate into an increase of 12,500, or 0.2% of the sample data, in the under-15 population following Phase 2 processing.

**Figure 3. Comparison of Processings, Phase 1 and Phase 2, Age**

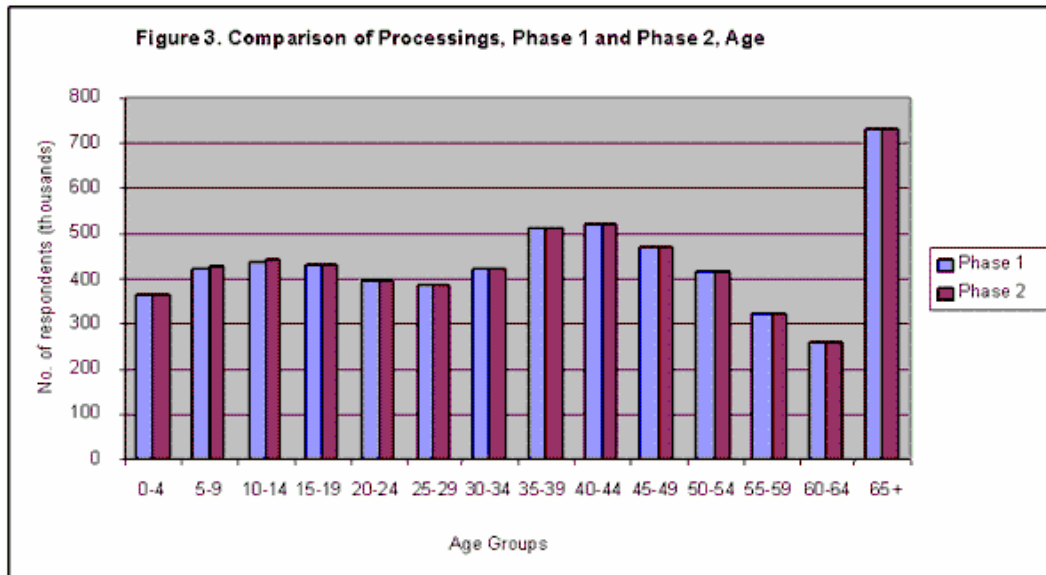


Figure 4 presents data from the responses to the Sex question. Differential processing of the data affected only about 140 records, or 0.002% of the sample data.

**Figure 4. Comparison of Processings, Phase 1 and Phase 2, Sex**

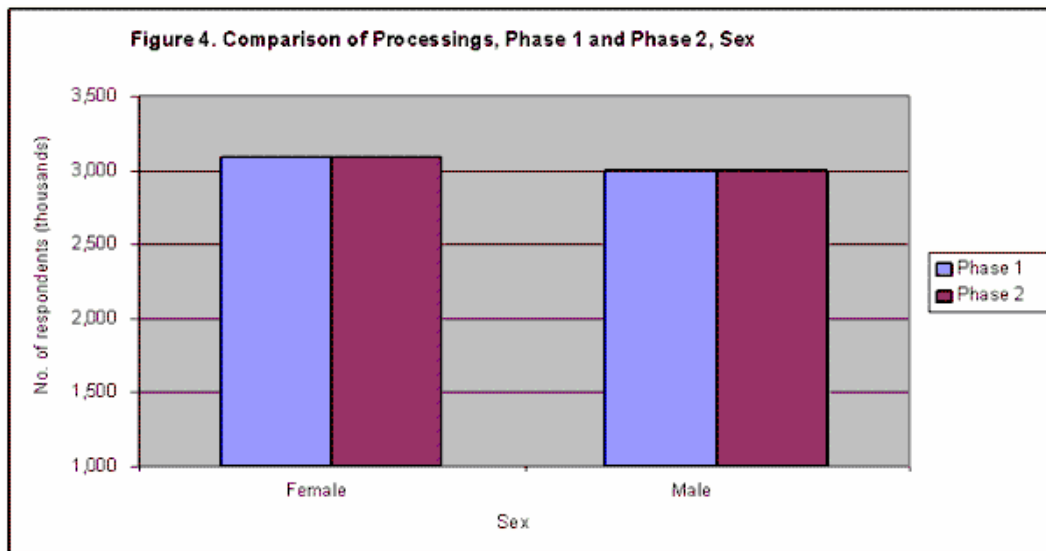
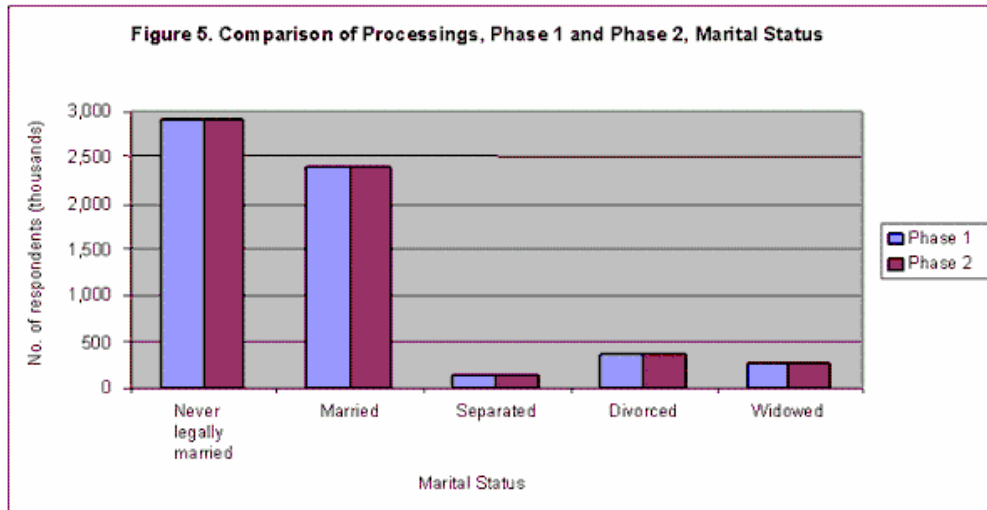


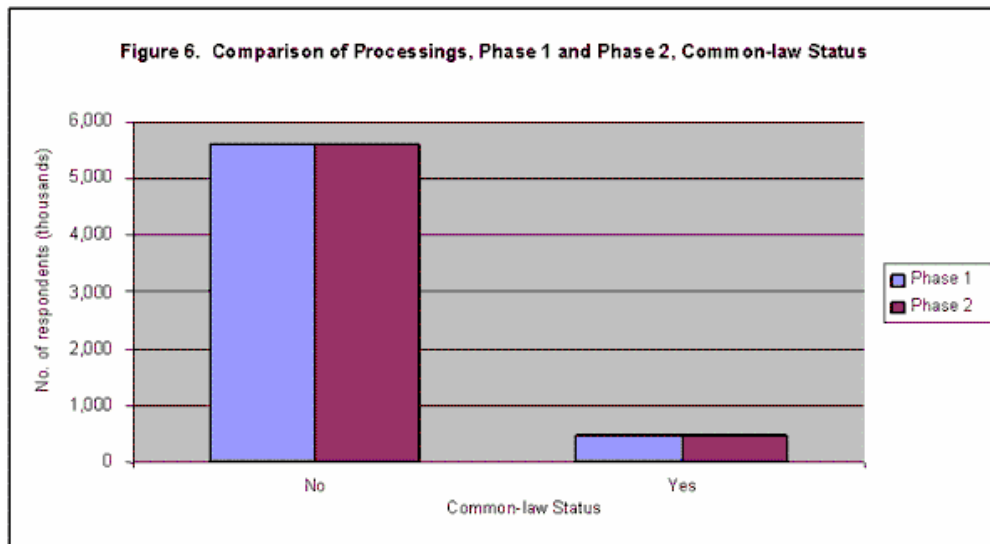
Figure 5 presents the differences for the Marital Status variable. Once again, taking write-ins into account in processing produced very little change. The “Never legally married” category gained about 1,300 people after Phase 2 processing, at the expense of the “Married” and “Divorced” categories. Changes in the Marital Status variable affected only 0.06% of records.

**Figure 5. Comparison of Processings, Phase 1 and Phase 2, Marital Status**



Finally, the last figure in this series presents data for the "Common-law Status" question. When write-ins for the "Relationship to Person 1" question were included, only 150 records switched from "No" to "Yes". This is 0.002% of the sample data.

**Figure 6. Comparison of Processings, Phase 1 and Phase 2, Common-law Status**



The data presented above show that ignoring Relationship to Person 1 write-in responses has little effect on the final outcome. Consequently, the observed differences will have no impact on the evaluation of 100% data that follows.

### 3.2.2 Evaluation of 100% Data

The sections that follow contain an evaluation of the 100% data for the Date of Birth, Sex, Marital Status, and Common-law Status questions. To ensure that census data continue to be of high quality, they are compared to data from several sources. These sources, Vital Statistics, Demographic Estimates and the

2001 General Social Survey (GSS) (Cycle 15) have been proven through time to present data of consistently good quality.

(a) Date of Birth

The "Date of Birth" question provides data on day of birth, month of birth, year of birth and, of course, age.

Table 2 presents the distribution of the number of births by month, for 1979 to 2000, from Vital Statistics and the 2001 Census. The table is further split by period, which corresponds to before and after Census Day. For all periods, the census data remain extremely comparable to the Vital Statistics data. The largest differences (0.11%) occur in the cumulative periods (January 1 to May 14, and May 15 to December 31).

**Table 2. Population Distribution Born Between 1979 and 2000 by Month of Birth and Period of Birth, in Percentage, Vital Statistics and 2001 Census, for Canada – 20% Sample Data**

Month and Period	Vital Statistics	2001 Census
January	7.94	7.88
February	7.63	7.59
March	8.72	8.70
April	8.63	8.63
May 1 to May 14	4.08	4.11
January 1 to May 14	37.01	36.90
May 15 to May 31	4.87	4.89
June	8.57	8.58
July	8.76	8.75
August	8.50	8.45
September	8.54	8.56
October	8.19	8.20
November	7.70	7.71
December	7.86	7.95
May 15 to December 31	62.99	63.10
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

**Note:** The 20% data were used for this table in order to select only those persons who were born in Canada.

Table 3 shows the distribution of the number of births by period (before and after the census), for 1979 to 2000, from Vital Statistics and the 2001 Census, by provinces and territories. The largest differences are in Newfoundland and Yukon. Vital Statistics for Newfoundland are less precise because of collection problems in the early 1980s. For Yukon, it is difficult to make comparisons because of the small population. For all other provinces and territories, there are only slight differences between the 2001 Census data and Vital Statistics.

**Table 3. Population Distribution Born Between 1979 and 2000 by Month of Birth and Period of Birth, in Percentage, Vital Statistics and 2001 Census, for Canada, Provinces and Territories – 20% Sample Data**

Province/Territory	January 1 to May 14		May 15 to December 31	
	Vital Statistics	2001 Census	Vital Statistics	2001 Census
Canada	37.01	36.90	62.99	63.10
Newfoundland and Labrador	37.95	36.54	62.05	63.46
Prince Edward Island	36.98	37.06	63.02	62.94
Nova Scotia	37.01	36.96	62.99	63.04
New Brunswick	36.85	36.79	63.15	63.21
Quebec	37.36	37.31	62.64	62.69
Ontario	36.68	36.51	63.32	63.49
Manitoba	37.06	36.59	62.94	63.41
Saskatchewan	37.71	37.28	62.29	62.73
Alberta	37.10	37.21	62.90	62.79
British Columbia	36.84	37.08	63.16	62.92
Yukon Territory	37.37	35.84	62.63	64.16
Northwest Territories	37.08	36.60	62.92	63.40
Nunavut	37.14	36.89	62.86	63.11

**Note:** The 20% data were used for this table in order to select only those persons who were born in Canada.

The data on year of birth are evaluated in Table 4. The 2001 Census population is distributed by year of birth and region. The birth attraction index is also presented to evaluate the impact that processing has on year of birth.

“The quality of year-of-birth data was evaluated by computing the ratio of the number of persons born in a particular year to the average number of persons born in the five years surrounding that year. The ratio is then multiplied by 1,000. An index higher than 1,000 indicates an attraction to the year of birth, and an index below 1,000 indicates the opposite. In other words, the higher the number of births for the base year compared with the other years, the higher the index will be. An index in the range of 975 to 1,025 is considered acceptable.”<sup>2</sup>

Indexes are calculated using the following formula:

$$\text{Index} = \frac{\text{Births in year } x}{\text{Births in year } x-2, x-1, x, x+1, x+2} \times 5 \times 1,000$$

<sup>2</sup> See Monette (1997).

**Table 4. Population Distribution by Year of Birth, 1900 to 2001, for Canada and Regions, 2001 Census – 100% Data**

Year of Birth	Canada		East		Quebec		Ontario		West	
	No.	Index	No.	Index	No.	Index	No.	Index	No.	Index
1900	1,330	921.7	115	809.9	290	932.5	485	930.9	440	930.2
1901	1,950	888.4	205	985.6	400	840.3	735	919.9	620	865.9
1902	2,810	888.1	255	888.5	630	918.4	1,005	866.4	925	894.6
1903	4,155	928.5	375	939.8	915	934.6	1,510	925.8	1,355	922.4
1904	5,575	897.0	485	891.5	1,195	865.9	2,065	905.3	1,830	910.0
1905	7,885	928.5	675	917.1	1,755	922.2	2,840	915.8	2,615	950.9
1906	10,650	936.6	930	948.0	2,405	943.1	3,985	961.6	3,330	901.7
1907	14,195	956.4	1,215	947.7	3,245	962.6	5,105	950.5	4,620	959.7
1908	18,550	962.0	1,600	955.8	4,150	947.3	6,725	964.3	6,070	971.2
1909	22,930	946.8	1,990	945.4	5,300	956.2	8,200	942.1	7,435	945.4
1910	30,085	991.3	2,635	988.7	6,805	978.7	10,855	995.8	9,795	996.5
1911	35,335	950.9	3,085	947.5	8,215	964.2	12,635	947.9	11,400	945.8
1912	44,845	990.5	4,015	1,015.7	10,295	1,000.9	16,090	989.6	14,445	977.5
1913	52,600	988.1	4,555	982.5	11,985	989.4	18,870	985.0	17,190	992.0
1914	63,510	1,031.7	5,475	1,025.9	14,130	1,008.3	22,845	1,027.4	21,055	1,054.2
1915	69,885	1,007.5	6,050	1,005.7	15,940	997.2	25,345	1,014.3	22,550	1,007.7
1916	76,945	988.0	6,590	969.1	17,715	975.5	28,025	1,001.9	24,620	987.0
1917	83,890	972.3	7,410	980.4	20,150	995.5	29,855	957.1	26,475	970.4
1918	95,160	966.4	8,475	996.5	22,865	995.3	33,785	936.1	30,025	971.8
1919	105,500	946.2	9,265	977.3	24,540	938.8	38,950	943.6	32,745	946.3
1920	130,835	1,049.2	10,785	1,038.6	29,595	1,011.9	49,840	1,065.5	40,610	1,060.6
1921	142,125	1,035.6	11,465	1,035.6	33,545	1,040.0	53,955	1,031.6	43,165	1,037.2
1922	149,895	1,000.0	11,930	1,014.2	35,695	1,001.3	57,350	996.3	44,910	1,000.0
1923	157,870	991.1	11,910	964.6	37,900	984.8	61,405	1,000.9	46,660	990.6
1924	168,720	1,006.2	12,725	987.9	41,515	1,014.8	65,270	1,006.2	49,210	1,003.8
1925	177,820	1,010.8	13,705	1,024.4	43,775	1,007.2	68,770	1,010.2	51,570	1,010.8
1926	184,105	999.9	14,135	1,014.2	45,655	992.0	71,555	1,007.7	52,765	992.6
1927	191,115	1,000.3	14,415	999.2	48,460	1,008.5	73,365	998.6	54,880	995.8
1928	198,855	997.6	14,705	986.0	50,720	1,005.3	76,075	993.2	57,360	999.8
1929	203,395	985.1	15,170	980.4	51,655	980.0	77,570	982.6	58,995	994.3
1930	219,175	1,027.2	16,145	1,002.7	55,785	1,017.6	84,395	1,038.0	62,850	1,028.0
1931	219,775	1,009.2	16,935	1,021.8	56,930	1,017.7	83,330	1,004.2	62,580	1,004.9
1932	225,620	1,014.5	17,550	1,026.6	59,020	1,031.5	85,150	1,006.0	63,900	1,007.4
1933	220,910	981.7	17,070	976.0	56,320	974.0	84,470	988.0	63,050	981.8
1934	226,455	990.4	17,775	992.1	58,030	992.6	85,865	986.6	64,780	992.9
1935	232,385	1,004.7	18,115	995.5	58,805	1,000.0	88,685	1,005.5	66,775	1,010.3
1936	237,915	1,001.3	19,070	1,011.9	60,145	994.3	91,000	1,005.5	67,700	999.0



Year of Birth	Canada		East		Quebec		Ontario		West	
	No.	Index	No.	Index	No.	Index	No.	Index	No.	Index
1937	238,775	979.6	18,950	971.4	60,720	973.7	90,960	982.1	68,150	983.9
1938	252,510	1,002.1	20,315	1,004.3	64,755	996.3	96,000	1,008.3	71,440	998.5
1939	257,140	986.8	21,085	1,008.6	67,360	989.3	96,450	986.9	72,245	978.3
1940	273,560	999.7	21,725	986.1	72,005	997.9	101,625	996.1	78,210	1,010.2
1941	280,865	979.8	22,450	972.4	75,605	992.6	103,595	974.9	79,210	976.1
1942	304,095	1,012.3	24,580	1,018.9	81,065	1,007.7	112,435	1,015.2	86,015	1,011.0
1943	317,690	1,015.8	25,600	1,011.5	84,810	1,002.7	117,205	1,022.9	90,075	1,020.2
1944	325,780	974.7	26,260	964.0	88,730	992.6	118,910	966.6	91,880	971.5
1945	335,370	939.2	27,650	944.2	92,685	987.8	120,760	914.4	94,280	925.1
1946	388,210	1,033.0	32,110	1,036.1	99,670	1,018.8	145,815	1,048.1	110,605	1,025.4
1947	418,410	1,061.9	34,800	1,068.4	103,255	1,020.0	157,635	1,079.0	122,720	1,075.4
1948	411,270	997.5	34,140	1,003.7	104,795	1,004.4	152,490	994.0	119,845	994.2
1949	416,825	991.2	34,165	992.6	105,770	995.9	153,765	986.5	123,120	992.8
1950	426,870	1,000.3	34,860	1,005.2	108,200	1,001.3	157,355	998.8	126,450	1,000.0
1951	429,170	983.4	34,135	972.3	109,015	990.0	158,100	983.0	127,920	981.2
1952	449,535	998.9	36,100	1,007.6	112,515	993.2	166,025	1,002.1	134,895	997.4
1953	459,735	994.6	36,280	997.8	115,080	992.6	168,940	993.2	139,440	997.1
1954	484,810	1,018.6	37,760	1,015.4	121,620	1,023.7	177,925	1,014.5	147,500	1,020.3
1955	487,970	1,000.2	37,530	994.4	121,480	996.0	179,480	997.7	149,480	1,008.3
1956	497,625	999.1	38,260	1,005.1	123,325	990.5	184,545	1,001.4	151,490	1,001.8
1957	509,225	1,008.5	38,875	1,017.0	128,360	1,018.7	188,620	1,004.4	153,365	1,003.1
1958	510,770	994.7	37,905	984.1	127,770	1,002.0	190,870	990.9	154,225	996.0
1959	519,000	1,001.9	38,560	997.5	129,080	1,008.2	195,470	998.2	155,895	1,002.7
1960	530,775	1,019.7	38,980	1,009.4	129,010	1,012.9	203,575	1,024.6	159,210	1,021.6
1961	520,205	994.9	38,960	1,004.2	125,920	993.5	200,625	996.0	154,700	992.2
1962	521,835	1,001.7	38,675	1,000.5	125,040	997.1	202,930	1,001.6	155,195	1,005.9
1963	522,595	1,024.6	38,805	1,021.5	124,640	1,018.8	204,580	1,024.3	154,565	1,030.6
1964	509,385	1,030.9	37,860	1,027.9	122,395	1,036.3	201,365	1,035.3	147,770	1,021.6
1965	476,170	1,004.5	35,635	1,006.7	113,725	1,008.8	189,145	1,009.9	137,655	993.1
1966	440,505	973.0	33,180	983.7	104,765	980.8	174,480	973.0	128,075	964.0
1967	421,500	971.1	31,510	977.5	98,120	969.3	166,860	970.8	125,005	971.4
1968	416,015	985.8	30,465	979.9	95,050	979.2	164,740	986.5	125,755	991.3
1969	415,950	1,005.2	30,380	995.4	94,485	1,004.4	164,130	1,004.4	126,955	1,009.2
1970	416,055	1,023.9	29,915	999.8	92,925	1,014.1	164,725	1,029.1	128,490	1,030.1
1971	399,475	1,004.2	30,325	1,034.5	89,795	999.3	156,590	1,004.2	122,765	1,000.7
1972	384,295	986.9	28,515	998.5	85,920	970.2	150,160	990.0	119,700	992.6
1973	373,165	976.7	27,430	980.7	86,180	975.8	144,050	977.1	115,500	975.9
1974	373,985	988.6	26,605	971.9	87,965	986.6	142,895	989.2	116,525	993.3
1975	379,415	1,005.9	26,970	992.9	91,720	1,009.9	143,455	1,008.0	117,265	1,003.3

Year of Birth	Canada		East		Quebec		Ontario		West	
	No.	Index	No.	Index	No.	Index	No.	Index	No.	Index
1976	380,610	1,003.8	27,345	1,000.8	94,015	1,014.1	141,695	1,000.6	117,550	1,000.3
1977	378,705	987.2	27,470	982.1	94,205	990.2	139,455	983.1	117,570	990.7
1978	383,115	983.9	28,230	980.9	95,650	986.9	140,555	980.6	118,675	986.2
1979	396,275	1,005.7	29,840	1,007.7	100,085	1,023.6	144,070	996.9	122,280	1,001.2
1980	408,160	1,020.9	31,010	1,014.6	100,620	1,029.1	150,900	1,028.4	125,625	1,007.1
1981	403,975	996.9	31,505	999.2	98,315	1,013.6	147,625	989.5	126,535	992.2
1982	407,515	996.6	32,240	1,004.8	94,195	988.3	150,510	991.8	130,570	1,006.4
1983	410,325	1,000.2	33,060	1,019.9	91,745	983.4	152,870	998.4	132,645	1,009.4
1984	414,480	1,008.7	32,615	1,005.3	91,670	1,005.0	156,870	1,013.0	133,325	1,007.1
1985	414,870	1,013.5	32,660	1,015.8	90,560	1,010.4	157,690	1,013.5	133,965	1,014.9
1986	407,310	998.1	31,645	998.7	87,895	988.2	156,340	1,001.9	131,430	1,000.3
1987	399,815	979.5	30,785	981.5	86,280	966.3	154,160	984.6	128,595	981.9
1988	403,860	985.0	30,730	987.2	88,305	971.0	155,175	985.0	129,655	994.3
1989	415,025	1,009.0	31,010	1,009.2	93,405	1,006.1	159,460	1,008.9	131,155	1,011.3
1990	424,015	1,026.7	31,480	1,036.6	98,840	1,042.8	162,550	1,023.4	131,140	1,016.6
1991	413,875	1,006.3	29,630	996.2	97,380	1,019.5	158,955	1,001.6	127,915	1,004.6
1992	408,080	1,004.4	28,990	1,001.9	95,970	1,012.9	158,005	1,003.4	125,115	999.8
1993	395,440	992.6	27,610	988.9	91,975	995.7	154,520	993.8	121,335	989.7
1994	390,050	1,001.6	26,960	994.3	89,560	997.2	153,350	1,004.7	120,175	1,002.7
1995	384,425	1,018.1	26,410	1,009.6	86,990	1,007.8	152,555	1,026.8	118,470	1,016.5
1996	369,060	1,006.7	25,600	1,009.9	84,555	1,020.1	144,740	1,000.0	114,165	1,004.9
1997	348,990	980.4	24,220	981.1	78,495	986.3	137,700	977.5	108,575	979.8
1998	340,450	992.5	23,560	988.4	74,855	982.6	135,390	998.8	106,640	992.5
1999	336,840	-	23,640	-	73,025	-	133,945	-	106,230	-
2000	319,785	-	22,160	-	69,970	-	126,020	-	101,640	-
2001	119,040	-	7,820	-	26,745	-	47,105	-	37,370	-

The indexes for the years 1900 to 1913 are low because of the high mortality rates in the older ages. In addition, some indexes were lowered by international conflicts, especially the indexes for 1916-1919 and 1944-1945. The number of births dropped during those years and then rebounded during the recovery periods and the baby boom (1920-1921 and 1946-1965).

The regional distributions usually follow that of Canada. Certain isolated cases are explained by interprovincial and international migration, of which Ontario, Alberta and British Columbia have benefited. On the other hand, Quebec and the Atlantic provinces have not been able to attract immigrants, and have lost population through out-migration.

The last table (Table 5) evaluating the Date of Birth responses gives data by age groups and sex for the 2001 Census and Population Estimates. The table also shows the discrepancies between the two distributions. The minor discrepancies indicate a close correspondence between the census data and the estimates.

There are, however, slightly more significant differences in the 20-29 age group, particularly among males. The problem of undercoverage in that age group is a longstanding one. People in the group tend to be highly mobile and therefore more difficult to enumerate in the census.

**Table 5. Enumerated Population, Estimated Population and Percentage Discrepancy by Age Groups and Sex, for Canada, 2001 Census – 100% Data**

Age Groups	2001 Census			Population Estimates <sup>1</sup>			Discrepancy <sup>2</sup> (%)		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total	30,007,090	14,706,850	15,300,245	30,304,390	14,890,783	15,413,607	-0.98	-1.24	-0.74
0-4	1,696,285	868,080	828,205	1,738,189	888,942	849,247	-2.41	-2.35	-2.48
5-9	1,976,135	1,011,465	964,675	1,990,660	1,019,605	971,055	-0.73	-0.80	-0.66
10-14	2,053,115	1,051,455	1,001,665	2,056,713	1,054,670	1,002,043	-0.17	-0.30	-0.04
15-19	2,053,325	1,052,150	1,001,180	2,073,777	1,065,117	1,008,660	-0.99	-1.22	-0.74
20-24	1,955,815	982,285	973,525	2,060,333	1,047,682	1,012,651	-5.07	-6.24	-3.86
25-29	1,898,195	935,510	962,685	2,011,687	1,002,792	1,008,895	-5.64	-6.71	-4.58
30-34	2,096,745	1,031,250	1,065,490	2,143,217	1,060,368	1,082,849	-2.17	-2.75	-1.60
35-39	2,522,855	1,244,995	1,277,860	2,541,680	1,255,156	1,286,524	-0.74	-0.81	-0.67
40-44	2,578,765	1,271,725	1,307,040	2,580,589	1,273,249	1,307,340	-0.07	-0.12	-0.02
45-49	2,333,530	1,151,155	1,182,380	2,330,226	1,151,419	1,178,807	0.14	-0.02	0.30
50-54	2,085,760	1,033,365	1,052,395	2,070,297	1,026,137	1,044,160	0.75	0.70	0.79
55-59	1,594,240	789,205	805,030	1,593,432	788,502	804,930	0.05	0.09	0.01
60-64	1,273,785	621,570	652,215	1,264,401	616,620	647,781	0.74	0.80	0.68
65-69	1,133,625	543,830	589,800	1,116,902	534,290	582,612	1.50	1.79	1.23
70-74	1,009,215	461,785	547,430	993,915	453,813	540,102	1.54	1.76	1.36
75-79	813,670	338,820	474,850	805,229	334,215	471,014	1.05	1.38	0.81
80-84	516,135	192,640	323,495	514,096	191,451	322,645	0.40	0.62	0.26
85-89	281,790	91,435	190,355	282,869	91,904	190,965	-0.38	-0.51	-0.32
90+	134,120	34,150	99,970	136,178	34,851	101,327	-1.51	-2.01	-1.34

<sup>1</sup> These population estimates, as of May 15, 2001, have not been adjusted for net coverage.

<sup>2</sup> Calculated as follows:  $((2001 \text{ Census} - \text{Population estimates}) / \text{Population estimates}) * 100$

**Note:** This table is shown at the provincial/territorial level in Table C1.

(b) Sex

Table 6 shows the sex ratios by five-year age groups for the previous censuses, the 2001 Census and the Population Estimates. The sex ratio is defined as the ratio of males to females, multiplied by 1,000.

Ratios are quite close with the exception of those in the 20-24 and 25-29 age groups. As previously indicated, there is a high rate of census undercoverage for these two age groups since 1986. On the other hand, these discrepancies for the three last censuses are very similar, indicating that the problem has neither worsened nor improved.

**Table 6. Sex Ratios by Age Groups, Enumerated Population, Estimated Population and Discrepancy, for Canada, 1981 to 2001 Censuses – 100% Data**

Age Groups	Censuses					Estimates <sup>1</sup>	Discrepancy <sup>2</sup>
	1981	1986	1991	1996	2001		
Total	983.2	973.6	972.0	965.5	961.2	966.1	-4.9
0-4	1,052.4	1,051.4	1,048.4	1,050.6	1,048.1	1,046.7	1.4
5-9	1,054.4	1,051.7	1,052.0	1,050.0	1,048.5	1,050.0	-1.5
10-14	1,051.9	1,053.7	1,052.3	1,054.9	1,049.7	1,052.5	-2.8
15-19	1,043.4	1,048.6	1,052.9	1,049.8	1,050.9	1,056.0	-5.1
20-24	1,004.1	1,008.5	1,008.8	1,005.9	1,009.0	1,034.6	-25.6
25-29	992.0	990.2	991.3	980.4	971.8	994.0	-22.2
30-34	1,004.3	983.6	987.5	980.0	967.9	979.2	-11.4
35-39	1,017.7	996.0	985.1	978.2	974.3	975.6	-1.3
40-44	1,017.2	1,008.9	997.6	976.4	973.0	973.9	-0.9
45-49	1,022.7	1,006.2	1,009.3	988.4	973.6	976.8	-3.2
50-54	999.8	1,005.0	1,001.7	996.1	981.9	982.7	-0.8
55-59	929.4	973.8	989.0	977.5	980.3	979.6	0.8
60-64	894.5	892.0	945.7	957.1	953.0	951.9	1.1
65-69	860.8	833.7	848.2	897.4	922.1	917.1	5.0
70-74	798.5	783.4	775.4	784.6	843.6	840.2	3.3
75+	623.0	604.0	601.8	590.9	603.5	600.8	2.7

<sup>1</sup> These population estimates, as of May 15, 2001, have not been adjusted for net coverage.

<sup>2</sup> Calculated as follows: 2001 Census – Estimates.

At the provincial level, as indicated in Table 7, the small number of persons in the Atlantic provinces explain the large discrepancies. The provincial data highlight the undercoverage problem for those persons aged 20-29.

**Table 7. Comparison of Sex Ratios by Age Groups and Discrepancy Between the Enumerated Population and the Estimated Population, for Provinces, 2001 Census – 100% Data**

Age Groups	Nfld.-Lab.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
<b>Total</b>	<b>-3.5</b>	<b>-8.4</b>	<b>-8.1</b>	<b>-5.2</b>	<b>-5.3</b>	<b>-4.4</b>	<b>-2.7</b>	<b>-3.0</b>	<b>-6.5</b>	<b>-4.7</b>
0-4	11.5	30.3	6.7	-25.5	3.5	1.7	6.2	25.1	-12.0	3.2
5-9	7.0	-10.6	-8.4	37.6	1.2	-1.2	-4.3	-5.2	-14.6	-2.3
10-14	8.4	13.3	-18.5	5.6	-2.2	-3.2	-14.6	2.8	0.0	-4.2
15-19	-8.3	7.1	-12.9	-4.3	-12.1	-4.9	1.7	-16.1	4.3	3.3
20-24	-16.1	-45.4	-45.1	-45.3	-26.5	-26.5	-29.2	-40.7	-20.4	-15.6
25-29	-54.9	-1.4	-33.3	-14.8	-18.2	-29.6	-9.3	26.0	-20.7	-18.9
30-34	3.6	-24.2	0.9	-5.2	-11.5	-16.9	-0.5	-0.9	-24.3	2.5
35-39	1.5	-21.1	-0.6	-9.2	-2.0	1.3	-14.2	-11.9	-3.8	0.0
40-44	-6.0	-24.5	-7.6	-14.8	-2.9	2.5	8.9	-2.8	9.7	-11.8
45-49	0.4	6.6	-15.3	-13.8	-1.1	-3.5	10.7	-5.3	-12.5	0.7
50-54	-4.6	4.5	-7.5	0.2	-3.5	5.2	3.9	1.1	-9.0	-6.0
55-59	-21.4	-51.0	3.5	9.2	-3.3	7.4	-0.2	-1.6	9.3	-11.5
60-64	6.7	26.2	4.1	8.2	0.7	-1.0	4.6	0.0	3.3	0.8
65-69	26.1	8.4	3.9	11.7	2.2	4.1	5.8	14.2	3.7	5.9
70-74	2.0	5.5	-8.1	11.7	1.0	6.3	0.4	16.8	-0.7	-0.9
75+	12.3	-13.4	22.7	7.7	4.0	2.9	8.0	-6.0	5.7	-7.4

<sup>1</sup> These population estimates, as of May 15, 2001, have not been adjusted for net coverage.

<sup>2</sup> The territories are excluded because their population size makes comparisons difficult.

**Note:** The sex ratios used to calculate these discrepancies are shown in Table C2.

#### (c) Marital Status

Two series of data for the Marital Status variable are available from the 2001 Census: Legal Marital Status and Chronological (or Historical) Marital Status. The Legal Marital Status data come directly from the responses indicated in the questionnaires. In this case, those persons living in common-law unions are placed in categories (except for “Legally married”) according to their legal marital status. These data became available when the question on common-law status was included in the 1991 Census. Furthermore, Historical Marital Status is a derived variable, and includes in the “Married” category those persons who, on Census Day, were living in a common-law union. These historical marital status data can be compared to data from the 1986 census and previous censuses.

Population estimates are used in Table 8. In this table, the ratio of 2001 Census data to population estimates is presented by legal marital status and sex. The “Married” and “Separated” categories were combined to make the two series compatible. There was generally a high degree of similarity between the 2001 Census data and the population estimates, except in categories containing small numbers of people (e.g., divorced and widowed under age 30). The same pattern occurs in the provincial and territorial data, provided in the appendices.

**Table 8. Ratio<sup>1</sup> of the Enumerated Population to the Estimated Population<sup>2</sup> by Certain Age Groups, Sex and Legal Marital Status, for Canada, 2001 Census – 100% Data**

Age Groups	Men				Women			
	Never married	Married and separated	Divorced	Widowed	Never married	Married and separated	Divorced	Widowed
Total	0.97	1.01	0.93	0.97	0.98	1.01	0.96	1.00
15-19	0.98	2.84	120.56	11.67	0.99	1.13	26.86	7.88
20-24	0.94	0.85	1.12	2.97	0.97	0.87	0.89	1.49
25-29	0.92	0.97	0.73	1.79	0.93	0.99	0.83	1.22
30-34	0.93	1.03	0.81	1.00	0.95	1.02	0.91	0.90
35-39	0.98	1.01	0.88	0.92	0.98	1.00	0.95	0.96
40-44	1.00	1.01	0.93	0.99	1.01	1.00	0.96	1.00
45-49	1.02	1.01	0.94	0.95	1.03	1.01	0.97	0.99
50-54	1.05	1.01	0.95	1.02	1.04	1.01	0.98	1.00
55-59	1.06	1.00	0.96	1.01	1.04	1.00	0.98	1.00
60-64	1.08	1.01	0.96	1.01	1.05	1.01	0.98	1.00
65-69	1.10	1.02	0.96	1.00	1.05	1.02	0.96	0.99
70-74	1.08	1.02	0.94	0.99	1.03	1.03	0.93	1.00
75+	1.09	1.03	0.90	0.93	1.04	1.02	0.93	0.99

<sup>1</sup> Calculated as follows: (2001 Census / Population estimates).

<sup>2</sup> These population estimates, as of May 15, 2001, have not been adjusted for net coverage.

**Note:** This table is shown at the provincial/territorial level in Table C3.

The 2001 General Social Survey is a survey where the fifteenth cycle was conducted between February and March 2001. The target population was those persons aged 15 and over; the survey excluded the population in the Yukon Territory, the Northwest Territories and Nunavut, as well as institutional residents.

To make the GSS data and the 2001 Census data comparable, institutional residents and residents of the territories were excluded from the 2001 Census data for this evaluation. Table 9 shows the ratio of 2001 Census data to GSS data by historical marital status and sex. The ratios are close to 1.00 in most cases, which means that there is good agreement between the two distributions. The smaller the groups are, the more the ratio differs from 1.00. This is the case for never-married people aged 45 and over, and for divorced and widowed people under 45.

**Table 9. Ratio<sup>1</sup> of the Enumerated Population as the GSS<sup>2</sup> by Certain Age Groups, Sex and Historical Marital Status, for Canada, 2001 Census – 100% Data**

Age Groups	Men					Women				
	Never married	Married	Separated	Divorced	Widowed	Never married	Married	Separated	Divorced	Widowed
<b>Total</b>	<b>0.99</b>	<b>0.92</b>	<b>1.01</b>	<b>1.16</b>	<b>0.82</b>	<b>1.03</b>	<b>0.93</b>	<b>1.05</b>	<b>1.03</b>	<b>1.01</b>
15-19	0.98	0.74	-	-	-	0.99	0.88	-	-	-
20-24	0.90	0.97	2.03	7.92	-	0.97	0.88	0.62	2.61	-
25-29	0.92	0.83	0.53	1.37	-	0.98	0.88	0.91	0.99	0.59
30-34	1.12	0.81	1.31	1.11	-	1.14	0.89	1.18	0.97	2.91
35-39	1.07	0.88	1.08	1.03	6.26	1.20	0.93	1.04	1.08	0.66
40-44	1.09	0.91	1.08	1.12	0.62	1.18	0.95	0.95	1.07	0.69
45-49	1.22	0.90	1.09	1.43	1.11	1.30	0.94	0.98	1.01	1.37
50-54	1.12	0.96	0.86	1.09	1.27	1.13	0.96	1.46	1.05	0.83
55-59	1.27	0.94	0.86	1.22	0.93	1.07	0.93	1.10	1.03	1.20
60-64	1.04	0.97	1.35	1.03	0.87	1.19	0.98	1.15	0.85	1.06
65-69	1.26	0.99	0.91	1.09	0.85	1.25	0.97	0.87	1.05	1.07
70-74	0.89	1.03	1.05	1.37	0.71	0.86	0.96	1.33	1.20	1.05
75+	1.17	1.01	1.19	0.90	0.78	1.12	0.89	0.98	1.11	0.99

<sup>1</sup> Calculated as follows: (2001 Census / GSS survey).

<sup>2</sup> 2001 General Social Survey, Cycle 15.

#### (d) Common-law Status

This section relates to the data quality evaluation on marital status. In the course of this evaluation, these data will be compared with those of previous censuses and those of the 2001 General Social Survey.

The 2001 Census counted 2,280,990 persons living in common-law unions, a 25% increase over the 1996 Census. Between 1991 and 1996, the number of persons living in common-law unions increased by 26%.

Table 10 shows the population counts and distributions by sex and province of residence for the 1991, 1996 and 2001 Censuses. For comparability, only data for persons living in occupied private dwellings are presented here. In 1991, Common-law Status data were derived from the Relationship to Person 1 question for persons living in census families. The latter are enumerated only in occupied private dwellings. The provincial distributions are fairly similar across the censuses.



**Table 10. Persons 15 Years and Over Living in Common-law Unions, for Canada, Provinces and Territories, 1991, 1996 and 2001 Censuses – 100% Data<sup>1</sup>**

Province/Territory	Men			Women		
	1991	1996	2001	1991	1996	2001
<b>Canada</b>	725,950	913,505	1,143,805	725,955	913,505	1,137,185
Newfoundland and Labrador	9,960	13,135	14,360	9,960	13,135	14,400
Prince Edward Island	2,030	2,760	3,485	2,025	2,760	3,520
Nova Scotia	20,125	23,960	29,325	20,125	23,960	29,425
New Brunswick	15,885	22,370	27,095	15,890	22,370	27,180
Quebec	306,910	399,250	507,440	306,910	399,250	503,510
Ontario	182,155	224,895	292,950	182,155	224,900	290,275
Manitoba	21,310	25,085	29,000	21,310	25,085	29,135
Saskatchewan	17,755	21,970	24,635	17,755	21,970	24,720
Alberta	59,950	71,495	91,780	59,950	71,495	91,845
British Columbia	85,630	102,695	117,570	85,625	102,695	116,945
Yukon Territory	1,415	1,835	1,735	1,415	1,835	1,775
Northwest Territories	1,860	2,415	2,480	1,860	2,415	2,505
Nunavut	965	1,635	1,955	965	1,640	1,955
		%			%	
Newfoundland and Labrador	1.37	1.44	1.26	1.37	1.44	1.27
Prince Edward Island	0.28	0.3	0.3	0.28	0.3	0.31
Nova Scotia	2.77	2.62	2.56	2.77	2.62	2.59
New Brunswick	2.19	2.45	2.37	2.19	2.45	2.39
Quebec	42.28	43.71	44.36	42.28	43.71	44.28
Ontario	25.09	24.62	25.61	25.09	24.62	25.53
Manitoba	2.94	2.75	2.54	2.94	2.75	2.56
Saskatchewan	2.45	2.41	2.15	2.45	2.41	2.17
Alberta	8.26	7.83	8.02	8.26	7.83	8.08
British Columbia	11.8	11.24	10.28	11.79	11.24	10.28
Yukon Territory	0.19	0.2	0.15	0.19	0.2	0.16
Northwest Territories	0.26	0.26	0.22	0.26	0.26	0.22
Nunavut	0.13	0.18	0.17	0.13	0.18	0.17

<sup>1</sup> For comparison purposes, these data do not include persons living in occupied private dwellings.

Table 11 compares the distributions of persons aged 15 and over by age groups and sex for the 2001 Census with the 2001 General Social Survey data. The differences between the two distributions are low in all age groups, except for men aged 45-49 (-2.99%) and women aged 20-24 (-2.64%). These slightly higher differences are partly attributable to the fact that the GSS estimates are adjusted for 1996 Census net undercoverage. Nevertheless, the two series are comparable.

**Table 11. Distribution of the Population Aged 15 Years and Over Living in Common-law Unions by Age Groups and Sex, for Canada, GSS<sup>1</sup> and 2001 Census<sup>2</sup> – 100% Data**

Age Groups	2001 Census		2001 GSS		Discrepancy	
	Men	Women	Men	Women	Men	Women
15-19	0.63	2.05	0.81	2.47	-0.18	-0.42
20-24	8.29	13.17	7.72	15.81	0.57	-2.64
25-29	15.59	16.91	17.00	17.84	-1.41	-0.93
30-34	15.63	15.24	16.74	15.03	-1.11	0.22
35-39	16.03	15.38	14.91	14.52	1.12	0.86
40-44	13.67	13.06	13.66	13.06	0.01	0.00
45-49	10.27	9.65	13.27	8.62	-2.99	1.03
50-54	7.82	6.63	6.67	6.35	1.15	0.28
55-59	5.12	3.80	4.39	3.26	0.73	0.54
60-64	3.03	1.94	2.58	1.58	0.45	0.36
65-69	1.88	1.04	1.07	0.64	0.81	0.41
70-74	1.14	0.62	0.36	0.57	0.77	0.05
75+	0.91	0.52	0.82	0.26	0.09	0.25

<sup>1</sup> 2001 General Social Survey, Cycle 15.

<sup>2</sup> For comparison purposes, data for the territories as well as those for institutional residents were excluded from the census statistics.

## 4. Historical Comparability

With each census, the questionnaire undergoes some modifications, with the goal of improving data quality. However, these changes may affect data comparability from one census to the other. This section describes in detail all the changes that have occurred, since 1971, to the questions on date of birth, marital status and common-law status. (There will be no discussion of the Sex question, as no changes have occurred.) Changes in coverage will also be discussed.

### (a) Date of Birth

As processing systems have become more sophisticated, more respondent data have been captured and used.

In 1971 and 1976, the respondent had to check a box corresponding to the decade of birth, year of birth and period of birth (January to May or June to December). Since 1981, respondents must indicate clearly their day, month and year of birth.

While the question remained the same, the method of processing the data has changed at each census. The processing changes had not affected the data quality on age.

### (b) Marital Status

The Marital Status question has undergone five changes in the last 30 years. Table 12 shows the changes to the response categories.

**Table 12. Marital Status Categories in Census Questionnaires from 1971 to 2001**

1971 and 1976	1981 and 1986	1991	1996	2001
Single (never married)	Now married (excluding separated)	Legally married (and not separated)	Legally married (and not separated)	Never legally married (single)
Now married	Separated	Legally married and separated	Separated, but still legally married	Legally married (and not separated)
Widowed	Divorced	Divorced	Divorced	Separated, but still legally married
Divorced	Widowed	Widowed	Widowed	Divorced
Separated	Never married (single)	Never married (single)	Never married (single)	Widowed

In 1971 and 1976, the question was entitled "Marital Status" and was accompanied by a directive to fill in one circle only. In 1981 and 1986, the question "What is your marital status?" was added before the instruction. For the 1991 Census, this question was dropped and the title of the question was changed to "Legal Marital Status". This was the first census where data was available on the legal marital status of a

person. Until this census, respondents who were living in common-law unions were directed to answer "Married".

Since 1991, in addition to the Legal Marital Status variable, a derived variable (Historical Marital Status) was created which placed those persons who had indicated living in a common-law union within the "Married" category. By doing so, historical comparability was maintained. In 1996, as a result of respondent testing, the question title reverted to "Marital Status".

#### (c) Common-law Status

In 1976 and 1981, persons living in common-law unions were given specific instructions on how to respond to the Marital Status question. As there was no question on common-law status, they were directed (in the guide) to respond "Now married". This caused confusion, as they were also divorced, widowed or single.

In 1986, the questionnaire directed the common-law respondents to answer the question with any other category but "Married". While this cleared up the confusion of the previous census, it made it difficult to determine which of those not married were living in couples. Responses from the Relationship to Person 1 question helped, but a more precise measure was required.

The Common-law Status question was asked for the first time in the 1991 Census. This question was able to eliminate the confusion observed in the previous censuses and to improve the quality of the marital status and common-law union data. To ensure that the data for common-law unions were of good quality, they were derived as they had been in the 1986 Census. The responses to the Common-law Status question were not changed during imputation, and the output from this question was used for analysis purposes.

While the question did not change since 1996, a significant processing change took place. With the use of the NIM and CANCEIS edit and imputation systems and a greater familiarity with the data, the common-law responses were imputed when required. This resulted in better-quality data.

Table 13 shows the changes to the instructions to the Marital Status question found in the census guide that have occurred since 1971. It shows that, for 1996 and 2001, there were no instructions in the guide related to this question. Instead, to increase data quality, a definition was placed below the question on the questionnaire.

**Table 13. Instructions to Respondents Living in Common-law Unions Regarding Their Reported Marital Status, 1971 to 2001 Censuses**

Census	Instructions
1971	No instructions given.
1976	“Now married” should include persons living in a common-law union.
1981	For census purposes, couples living in a common-law type of arrangement are considered as “Now married (excluding separated)”, regardless of their legal marital status.
1986	Persons in a common-law type of arrangement should mark one of the boxes “Separated”, “Divorced”, “Widowed” or “Never married (single)”.
1991	If this person is living in a common-law relationship, choose the category in Question 5 which best describes this person’s legal marital status.
1996	No instructions given.
2001	No instructions given.

(d) Non-permanent Residents

For the 1991 Census, for the first time, permanent residents and non-permanent residents were enumerated. Non-permanent residents are people from another country who have an employment authorization, a student authorization, or a Minister’s permit, or who are refugee claimants at the time of the census, and family members living here with them. Before 1991, only permanent residents were included in the census.

Today, permanent residents make up a growing percentage of the Canadian population, and their presence has an impact on the Canadian economy. Consequently, it has become necessary to include them in the census. Users should exercise caution in comparing data collected since 1991 with data from earlier censuses, especially in geographic areas where there is a significant concentration of non-permanent residents.

Table 14 shows the distribution of non-permanent residents by sex for Canada, provinces and territories. The number of non-permanent residents has increased by 19% over the past five years, to reach 198,640 persons. The majority of those are found in Ontario (46%), in Quebec (20%) and in British Columbia (19%).

**Table 14. Non-permanent Resident Population by Sex, for Canada, Provinces and Territories, 2001 Census – 20% Sample Data**

Province/Territory	Both sexes	Males	Females
<b>Canada</b>	<b>198,640</b>	<b>99,955</b>	<b>98,685</b>
Newfoundland and Labrador	955	520	435
Prince Edward Island	310	120	190
Nova Scotia	2,595	1,460	1,135
New Brunswick	1,685	915	775
Quebec	40,195	21,535	18,655
Ontario	90,615	45,740	44,875
Manitoba	4,520	2,285	2,230
Saskatchewan	3,105	1,625	1,485
Alberta	17,275	8,205	9,070
British Columbia	37,185	17,455	19,735
Yukon Territory	55	30	25
Northwest Territories	120	55	65
Nunavut	20	10	15

## 5. Conclusion

For the 2001 Census, 30,007,094 persons were enumerated within 11,562,975 households in Canada. No operation on this scale could be error-free. With new, improved data processing programs, however, the 2001 Census has again produced data of superior quality.

The concept of the questions for Date of Birth, Sex, Marital Status and Common-law Status have not been changed in the last three censuses. The same cannot be said of the methods used to process these data. New programs and new technology were used to process the demographic data. Each step of the data processing was examined and improved.

The changes to the stratification have clearly contributed to the improvement and processing quality of the demographic data. Among other things, the change in the collective dwelling classification ensured a better homogeneity in the strata, and the reduction of the number of strata made it possible to reduce time allocated to processing.

In addition, the identification of potential couples and parent-child pairs and the expansion of the set of values of the Relationship to Person 1 variable have substantially increased the number of edits on demographic data. The result of having edit rules that are more complete and more detailed is even more extensive processing of demographic data.

The evaluation of the 2001 Census demographic data was done using the results of the previous census, Vital Statistics, population estimates and the 2001 General Social Survey data. This evaluation also confirms that the changes to the demographic data processing did not adversely affect data quality.

## Appendix A. Glossary of Terms

The definitions of census terms, variables and concepts are presented here as they appear in the *2001 Census Dictionary* (Catalogue No. 92-378-XIE). Users should refer to the *2001 Census Dictionary* for full definitions and additional remarks related to any concepts, such as information on direct and derived variables and their respective universe.

**Age:** Refers to the age at last birthday (as of the census reference date, May 15, 2001). This variable is derived from date of birth.

**Common-law Status:** Refers to two people of the opposite sex or of the same sex who live together as a couple, but who are not legally married to each other.

**Date of Birth:** Refers to the day, month and year of birth, collected for the purpose of determining the person's age as of the census reference date. Persons who were unable to give the exact date of birth were asked to give the best possible estimate.

**Legal Marital Status:** A person's conjugal status under the law. Never legally married (single), Legally married (and not separated), Separated, but still legally married, Divorced, Widowed.

**Marital Status:** Refers to the conjugal status of a person. Never legally married (single), Legally married (and not separated), Separated, but still legally married, Divorced, Widowed.

**Relationship to Person 1:** Refers to the relationship of household members to the household reference person (Person 1). A person may be related to Person 1 through blood, marriage, common-law or adoption (e.g. spouse, common-law partner, son or daughter, father or mother) or unrelated (e.g. lodger, room-mate or employee).

**Sex:** Refers to the gender of the respondent.



# Appendix B. Edit Rules

## Appendix B1 - Edit Rules

### 2001 Primary and Secondary Edit Rules for Sex, Age, Marital Status, Common-law Status and Relationship to Person 1

In 1996, the edit rules included checks for missing and invalid responses for the variables Sex, Age, Marital Status, Common-law Status and Relationship to Person 1. For 2001, these edits were removed from CANCEIS but were still performed through "domain validation" before the application of the edits. These included the following checks:

- Any of the variables Sex, Age, Marital Status, Common-law Status and Relationship to Person 1 were blank or invalid.
- The age of a person was negative or more than 121 years.

In the following edit rules, certain terminological conventions are used:

- "Living common-law" means that the value of the common-law status variable is "Yes". By contrast, "common-law partner" refers to the person's relationship to Person 1. "Common-law partners" includes both opposite-sex and same-sex common-law partners.
- "Single" and "legally married" refer to values of the Marital Status variable.
- "Person 1" and "Person 2" refer to the reporting position on the questionnaire.
- If two persons were "flagged as a couple", then, based on their responses to the demographic questions, as well as the proximity of their reporting positions on the questionnaire, the FAMFORM program found that there was enough evidence to consider them as a potential couple for purposes of edit and imputation in CANCEIS. The phrases "flagged as a parent/child pair" or "flagged as a grandparent/grandchild pair" refer to a similar evaluation procedure conducted by FAMFORM.

Appendix B2 shows the possible values of the Relationship to Person 1 variable. Note that three special values were created to accommodate the immediate relatives of same-sex partners, specifically, son/daughter of same-sex partner, father/mother of same-sex partner and brother/sister of same-sex partner (rather than including such persons in the categories stepson/stepdaughter, father-in-law/mother-in-law and brother-in-law/sister-in-law respectively). This was done in order to permit closer monitoring of households with same-sex couples, since this was the first census where such information was retained throughout edit and imputation.

## PRIMARY EDITS

### Within-person Edit Rules

1. Someone other than Person 1 had a relationship of "Person 1".
2. Person 1's husband/wife or common-law partner was present but was not Person 2.
3. A person in a private household was a Hutterite or institutional resident.
4. Person 1 had a relationship other than "Person 1".
5. Person 1 was younger than 15 years of age.
6. A person younger than 15 years of age was not single (never married).
7. A person younger than 15 years of age was living common-law.
8. A person younger than 15 years of age had a relationship to Person 1 reserved for adults.
9. A foster child was not single (never married).
10. A foster child was living common-law.
11. A person was living alone and living common-law.

12. A person was legally married and living common-law.
13. A common-law partner was legally married.
14. A common-law partner was not living common-law.
15. Person 1's son-in-law/daughter-in-law was single (never married) and not living common-law.
16. A person having a husband/wife relationship (other than Person 1's husband/wife) was not legally married and not living common-law.
17. Person 2 was Person 1's husband/wife but was not legally married.
18. Person 2 was Person 1's husband/wife but was living common-law.
19. Person 2 was living common-law and was flagged as a couple with Person 1, but was not Person 1's common-law partner.
20. Person 1's son/daughter was more than 106 years of age.
21. Person 1's grandchild was more than 91 years of age.
22. Person 1's great grandchild was more than 76 years of age.
23. Person 1's grandparents were less than 45 years of age (this also applied to common-law partners of grandparents).
24. Person 1's parents were less than 30 years of age (this also applied to step-parents, common-law partners of parents, parents-in-law [including parents of same-sex partner] and common-law partners of parents-in-law).

### **Between-person Edit Rules**

1. Person 1 and Person 1's husband/wife or opposite-sex partner had the same sex.
2. Person 1 and Person 1's same-sex common-law partner did not have the same sex.
3. Person 1 was not legally married but Person 2 was Person 1's husband/wife.
4. Person 1 was living common-law but Person 2 was Person 1's husband/wife.
5. Person 1 was legally married but Person 2 was Person 1's common-law partner.
6. Person 1 was not living common-law but Person 2 was Person 1's common-law partner.
7. Person 1 was living common-law but Person 2 was not Person 1's common-law partner.
8. Person 1 was less than 15 years older than Person 1's son/daughter, and Person 1's husband/wife or common-law partner was not present.
9. Person 1 and Person 1's husband/wife or common-law partner were both less than 15 years older than Person 1's son/daughter.
10. Person 1's husband/wife or common-law partner was less than 15 years older than Person 1's stepson/stepdaughter (also applies to the son/daughter of Person 1's same-sex partner).
11. Person 1's father/mother was less than 15 years older than Person 1, and only one parent was present.
12. Person 1's father/mother was less than 15 years older than Person 1's brother/sister, and only one parent was present.
13. Person 1's father-in-law/mother-in-law was less than 15 years older than Person 1's husband/wife or common-law partner, and only one parent-in-law was present (also applies to father/mother of Person 1's same-sex partner).
14. Person 1's father and Person 1's mother were both less than 15 years older than Person 1.
15. Person 1's father-in-law and mother-in-law were both less than 15 years older than Person 1's husband/wife or common-law partner (also applies to parents of Person 1's same-sex partner).
16. Person 1's father and Person 1's mother were both less than 15 years older than Person 1's brother/sister.
17. Person 1's grandparent was less than 30 years older than both Person 1 and Person 1's husband/wife or common-law partner.
18. Person 1's grandparent was less than 30 years older than Person 1, and Person 1's husband/wife or common-law partner was not present.
19. Both Person 1 and Person 1's husband/wife or common-law partner were less than 30 years older than Person 1's grandchild.
20. Person 1 was less than 30 years older than Person 1's grandchild, and Person 1's husband/wife or common-law partner was not present.

21. Both Person 1 and Person 1's husband/wife or common-law partner were less than 45 years older than Person 1's great grandchild.
22. Person 1 was less than 45 years older than Person 1's great grandchild, and Person 1's husband/wife or common-law partner was not present.
23. Person 1's father-in-law/mother-in-law was younger than Person 1, and Person 1's husband/wife or common-law partner was not present.
24. Person 1's son-in-law/daughter-in-law was older than Person 1.
25. Person 1 was more than 50 years older than Person 1's son/daughter, and Person 1 was female.
26. Person 1's husband/wife or common-law partner was more than 50 years older than Person 1's son/daughter, and the husband/wife or common-law partner was female.
27. Person 1's mother was more than 50 years older than Person 1.
28. Person 1's mother-in-law was more than 50 years older than Person 1's husband/wife or common-law partner (also applies to the mother of Person 1's same-sex partner).
29. More than 2 persons in the household were reported as Person 1's parent (this also included step-parents and common-law partners of parents).
30. More than 2 persons in the household were reported as Person 1's parent-in-law (this also included parents of Person 1's same-sex partner, and common-law partners of parents-in-law).
31. More than 4 persons in the household were reported as Person 1's grandparent. (This also included common-law partners of grandparents).
32. Two persons were flagged as a couple and had explicit opposite-sex couple relationships, or were both legally married, and had the same sex.
33. Two persons were flagged as a couple and had explicit same-sex couple relationships, but did not have the same sex.
34. Two persons had appropriate relationships for a couple, one was legally married and the other was not.
35. Two persons had explicit same-sex couple relationships and at least one was legally married.
36. Two persons had appropriate relationships for a couple, one was living common-law and the other was not.
37. Two persons had appropriate relationships for a couple, one was neither legally married nor living common-law.
38. Two persons were flagged as a couple, one was living common-law but did not have an appropriate relationship to the other person for a couple.
39. Where secondary relationships were present, there had to be a primary relationship (for example, if there was a lodger's husband/wife, there had to be a lodger).

## Family Edit Rules

The following set of rules performed age verification and other edits on parent/child pairs or grandparent/grandchild pairs that did not include Person 1.

1. Both parents were less than 15 years older than the child.
2. A person's husband/wife or common-law partner was less than 15 years older than the person's stepchild.
3. Both grandparents were less than 30 years older than the grandchild.
4. For opposite-sex couples, the female parent was more than 50 years older than the child.
5. For same-sex female couples, both parents were more than 50 years older than the child.
6. A person's female husband/wife or common-law partner was more than 50 years older than the person's step-child.
7. Where the parent's husband/wife or common-law partner was unidentifiable, the parent was less than 15 years older than the child.
8. Where the female parent's husband/wife or common-law partner was unidentifiable, the parent was more than 50 years older than the child.
9. The parent was less than 15 years older than the child, and only one parent was present in the household.

10. The female parent was more than 50 years older than the child, and only one parent was present in the household.
11. The grandparent was less than 30 years older than the grandchild, and only one grandparent (and no parent) was present.
12. Two persons were flagged as a parent/child pair or grandparent/grandchild pair, but did not have the appropriate relationships to form a pair, and only one parent (or grandparent) was present in the household.
13. Two persons were flagged as a parent/child pair or grandparent/grandchild pair, but did not have the appropriate relationships to form a pair, and two parents (or grandparents) were present in the household.
14. Where secondary relationships were present, there had to be a primary relationship (for example, if there was a lodger's husband/wife, there had to be a lodger).

### **Additional Edit Rules for Collective Households**

In addition to the rules stated above, the following rules were applied to certain types of collective households.

1. A person living in an institutional collective dwelling has a relationship other than institutional resident or employee.
2. A person living in an institutional collective dwelling is living common-law.
3. A person living in a Hutterite colony has a relationship other than Person 1, Person 1's immediate family member, Hutterite or Hutterite's relative.
4. A person living in a Hutterite colony is living common-law.
5. A person living in a collective dwelling other than an institution or a Hutterite colony has a relationship of "Person 1", institutional resident, Hutterite or Hutterite's relative.

### **SECONDARY EDITS (auxiliary constraints)**

1. A widowed person was less than 24 years of age.
2. Person 1 was more than 25 years older than Person 1's brother/sister.
3. Person 1's brother/sister was more than 20 years older than Person 1.
4. Person 1's husband/wife or common-law partner was more than 25 years older than Person 1's brother-in-law/sister-in-law.
5. Person 1's brother-in-law/sister-in-law was more than 20 years older than Person 1's husband/wife or common-law partner.
6. Person 1's same-sex partner was more than 25 years older than the brother/sister of Person 1's same-sex partner.
7. The brother/sister of Person 1's same-sex partner was more than 20 years older than Person 1's same-sex partner.
8. Person 1's nephew/niece was more than 10 years older than Person 1.
9. Person 1's husband/wife or common-law partner was not present, and Person 1 was less than 15 years older than Person 1's stepchild.
10. Person 1's husband/wife or common-law partner was not present, and Person 1 was less than 15 years older than Person 1's foster child.
11. Both Person 1 and Person 1's husband/wife or common-law partner were less than 15 years older than Person 1's foster child.

## Appendix B2 - Valueset for Relationship to Person 1

Brother/sister  
Brother/sister's opposite-sex partner  
Brother/sister's same-sex partner  
Brother-in-law/sister-in-law  
Brother-in-law/sister-in-law's opposite-sex partner  
Brother-in-law/sister-in-law's same-sex partner  
Cousin  
Cousin's husband/wife  
Cousin's opposite-sex partner  
Cousin's same-sex partner  
Cousin's son/daughter  
Employee  
Employee's grandchild  
Employee's husband/wife  
Employee's opposite-sex partner  
Employee's same-sex partner  
Employee's son/daughter  
Employee's stepson/stepdaughter  
Father/mother  
Father/mother's opposite-sex partner  
Father/mother's same-sex partner  
Father-in-law/mother-in-law  
Father-in-law/mother-in-law's opposite-sex partner  
Father-in-law/mother-in-law's same-sex partner  
Foster/guardianship child  
Grandchild  
Grandchild's husband/wife  
Grandchild's opposite-sex partner  
Grandchild's same-sex partner  
Grandparent  
Grandparent's opposite-sex partner  
Grandparent's same-sex partner  
Great grandchild  
Husband/wife  
Hutterite  
Hutterite's grandchild  
Hutterite's husband/wife  
Hutterite's son/daughter  
Institutional resident  
Lodger or boarder  
Lodger's grandchild  
Lodger's husband/wife  
Lodger's opposite-sex partner  
Lodger's same-sex partner  
Lodger's son/daughter  
Lodger's stepson/stepdaughter  
Nephew/niece  
Nephew/niece's husband/wife  
Nephew/niece's opposite-sex partner  
Nephew/niece's same-sex partner  
Nephew/niece's son/daughter  
Opposite-sex partner  
Other relative

Other relative's grandchild  
Other relative's husband/wife  
Other relative's opposite-sex partner  
Other relative's same-sex partner  
Other relative's son/daughter  
Other relative's stepson/stepdaughter  
Owner/manager  
Owner/manager's grandchild  
Owner/manager's husband/wife  
Owner/manager's opposite-sex partner  
Owner/manager's same-sex partner  
Owner/manager's son/daughter  
Owner/manager's stepson/stepdaughter  
Person 1  
Room-mate  
Room-mate's grandchild  
Room-mate's husband/wife  
Room-mate's opposite-sex partner  
Room-mate's same-sex partner  
Room-mate's son/daughter  
Room-mate's stepson/stepdaughter  
Same-sex partner  
Same-sex partner's brother/sister  
Same-sex partner's father/mother  
Same-sex partner's son/daughter  
Son/daughter  
Son/daughter's opposite-sex partner  
Son/daughter's same-sex partner  
Son-in-law/daughter-in-law  
Stepfather/stepmother  
Stepson/stepdaughter  
Uncle/aunt  
Uncle/aunt's opposite-sex partner  
Uncle/aunt's same-sex partner

## Appendix C. Appendix Tables

**Table C1. Enumerated Population, Estimated Population and Discrepancy in Percentage by Age Groups and Sex, for Provinces and Territories, 2001 Census – 100% Data**

Age Groups	2001 Census			Population Estimates <sup>1</sup>			Discrepancy <sup>2</sup> (%)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Newfoundland and Labrador</b>									
<b>Total</b>	<b>512,930</b>	<b>250,965</b>	<b>261,965</b>	<b>524,581</b>	<b>257,137</b>	<b>267,444</b>	<b>-2.22</b>	<b>-2.40</b>	<b>-2.05</b>
0-4	24,820	12,705	12,115	25,622	13,045	12,577	-3.13	-2.61	-3.67
5-9	29,040	14,975	14,065	29,159	14,988	14,171	-0.41	-0.09	-0.75
10-14	34,915	17,870	17,045	35,304	17,998	17,306	-1.10	-0.71	-1.51
15-19	39,455	20,065	19,385	39,745	20,294	19,451	-0.73	-1.13	-0.34
20-24	33,870	16,725	17,150	36,838	18,339	18,499	-8.06	-8.80	-7.29
25-29	30,525	14,640	15,885	34,653	17,121	17,532	-11.91	-14.49	-9.39
30-34	36,040	17,140	18,900	36,533	17,338	19,195	-1.35	-1.14	-1.54
35-39	41,730	20,000	21,730	42,671	20,434	22,237	-2.21	-2.12	-2.28
40-44	43,470	21,200	22,275	44,716	21,875	22,841	-2.79	-3.09	-2.48
45-49	43,285	21,330	21,955	44,186	21,769	22,417	-2.04	-2.02	-2.06
50-54	39,695	19,805	19,890	39,974	19,990	19,984	-0.70	-0.93	-0.47
55-59	30,160	15,055	15,105	30,003	15,136	14,867	0.52	-0.54	1.60
60-64	22,880	11,470	11,410	22,716	11,350	11,366	0.72	1.06	0.39
65-69	19,155	9,465	9,695	18,887	9,202	9,685	1.42	2.86	0.10
70-74	16,275	7,620	8,655	16,051	7,506	8,545	1.40	1.52	1.29
75-79	12,655	5,550	7,105	12,519	5,411	7,108	1.09	2.57	-0.04
80-84	8,655	3,345	5,310	8,672	3,403	5,269	-0.20	-1.70	0.78
85-89	4,435	1,480	2,945	4,340	1,440	2,900	2.19	2.78	1.55
90+	1,880	540	1,345	1,992	498	1,494	-5.62	8.43	-9.97

Age Groups	2001 Census			Population Estimates <sup>1</sup>			Discrepancy <sup>2</sup> (%)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Prince Edward Island</b>									
<b>Total</b>	<b>135,295</b>	<b>65,755</b>	<b>69,540</b>	<b>137,263</b>	<b>67,013</b>	<b>70,250</b>	<b>-1.43</b>	<b>-1.88</b>	<b>-1.01</b>
0-4	7,555	3,875	3,675	7,538	3,814	3,724	0.23	1.60	-1.32
5-9	9,090	4,685	4,405	9,062	4,693	4,369	0.31	-0.17	0.82
10-14	10,005	5,040	4,965	10,045	5,027	5,018	-0.40	0.26	-1.06
15-19	10,230	5,180	5,050	10,402	5,249	5,153	-1.65	-1.31	-2.00
20-24	8,730	4,315	4,410	9,573	4,843	4,730	-8.81	-10.90	-6.77
25-29	7,875	3,810	4,060	8,646	4,189	4,457	-8.92	-9.05	-8.91
30-34	8,595	4,175	4,420	8,818	4,339	4,479	-2.53	-3.78	-1.32
35-39	10,535	5,130	5,400	10,898	5,369	5,529	-3.33	-4.45	-2.33
40-44	10,795	5,205	5,585	10,919	5,338	5,581	-1.14	-2.49	0.07
45-49	10,125	4,985	5,135	10,302	5,057	5,245	-1.72	-1.42	-2.10
50-54	9,995	4,930	5,070	9,912	4,875	5,037	0.84	1.13	0.66
55-59	7,215	3,600	3,615	6,990	3,575	3,415	3.22	0.70	5.86
60-64	5,990	2,990	3,000	5,874	2,893	2,981	1.97	3.35	0.64
65-69	5,340	2,580	2,760	5,211	2,506	2,705	2.48	2.95	2.03
70-74	4,355	2,000	2,360	4,395	2,009	2,386	-0.91	-0.45	-1.09
75-79	3,730	1,580	2,150	3,709	1,590	2,119	0.57	-0.63	1.46
80-84	2,675	955	1,725	2,649	954	1,695	0.98	0.10	1.77
85-89	1,605	495	1,110	1,562	464	1,098	2.75	6.68	1.09
90+	865	235	630	758	229	529	14.12	2.62	19.09



Age Groups	2001 Census			Population Estimates <sup>1</sup>			Discrepancy <sup>2</sup> (%)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Nova Scotia</b>									
<b>Total</b>	<b>908,005</b>	<b>439,090</b>	<b>468,920</b>	<b>921,736</b>	<b>447,702</b>	<b>474,034</b>	<b>-1.49</b>	<b>-1.92</b>	<b>-1.08</b>
0-4	47,455	24,325	23,130	48,483	24,774	23,709	-2.12	-1.81	-2.44
5-9	55,840	28,385	27,455	55,890	28,523	27,367	-0.09	-0.48	0.32
10-14	61,730	31,455	30,270	62,529	32,140	30,389	-1.28	-2.13	-0.39
15-19	61,750	31,560	30,190	63,923	32,867	31,056	-3.40	-3.98	-2.79
20-24	56,185	27,365	28,815	61,183	30,512	30,671	-8.17	-10.31	-6.05
25-29	54,490	26,000	28,495	59,209	28,779	30,430	-7.97	-9.66	-6.36
30-34	60,720	29,265	31,455	62,204	29,965	32,239	-2.39	-2.34	-2.43
35-39	75,470	36,680	38,790	75,730	36,818	38,912	-0.34	-0.37	-0.31
40-44	76,955	37,435	39,520	77,751	37,977	39,774	-1.02	-1.43	-0.64
45-49	71,070	34,630	36,440	71,607	35,178	36,429	-0.75	-1.56	0.03
50-54	67,210	33,210	34,000	67,039	33,254	33,785	0.26	-0.13	0.64
55-59	51,265	25,330	25,935	51,497	25,399	26,098	-0.45	-0.27	-0.62
60-64	41,300	20,215	21,085	40,602	19,830	20,772	1.72	1.94	1.51
65-69	35,965	17,355	18,610	35,160	16,930	18,230	2.29	2.51	2.08
70-74	30,680	13,810	16,875	30,129	13,633	16,496	1.83	1.30	2.30
75-79	25,680	10,660	15,025	25,083	10,277	14,806	2.38	3.73	1.48
80-84	18,730	6,840	11,895	18,643	6,729	11,914	0.47	1.65	-0.16
85-89	10,440	3,320	7,120	10,046	2,877	7,169	3.92	15.4	-0.68
90+	5,065	1,260	3,810	5,028	1,240	3,788	0.74	1.61	0.58

Age Groups	2001 Census			Population Estimates <sup>1</sup>			Discrepancy <sup>2</sup> (%)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>New Brunswick</b>									
<b>Total</b>	<b>729,495</b>	<b>356,705</b>	<b>372,795</b>	<b>742,288</b>	<b>363,959</b>	<b>378,329</b>	<b>-1.72</b>	<b>-1.99</b>	<b>-1.46</b>
0-4	37,690	19,405	18,285	39,684	20,667	19,017	-5.02	-6.11	-3.85
5-9	44,115	22,630	21,490	44,930	22,637	22,293	-1.81	-0.03	-3.60
10-14	48,295	24,825	23,465	48,866	25,056	23,810	-1.17	-0.92	-1.45
15-19	50,670	25,895	24,770	51,130	26,185	24,945	-0.90	-1.11	-0.70
20-24	46,760	23,415	23,345	50,490	25,840	24,650	-7.39	-9.38	-5.29
25-29	45,685	22,350	23,335	50,216	24,759	25,457	-9.02	-9.73	-8.34
30-34	49,115	24,010	25,110	50,786	24,893	25,893	-3.29	-3.55	-3.02
35-39	60,340	29,615	30,725	60,925	30,047	30,878	-0.96	-1.44	-0.50
40-44	61,830	30,440	31,390	62,052	30,785	31,267	-0.36	-1.12	0.39
45-49	58,580	28,780	29,800	59,509	29,447	30,062	-1.56	-2.27	-0.87
50-54	54,575	27,240	27,335	54,521	27,210	27,311	0.10	0.11	0.09
55-59	40,595	20,420	20,175	40,328	20,194	20,134	0.66	1.12	0.20
60-64	32,315	15,985	16,330	31,694	15,611	16,083	1.96	2.40	1.54
65-69	27,840	13,250	14,590	27,252	12,882	14,370	2.16	2.86	1.53
70-74	24,180	10,820	13,360	23,763	10,548	13,215	1.75	2.58	1.10
75-79	20,855	8,725	12,130	20,542	8,483	12,059	1.52	2.85	0.59
80-84	14,225	5,330	8,895	13,997	5,127	8,870	1.63	3.96	0.28
85-89	7,905	2,565	5,330	7,796	2,604	5,192	1.40	-1.50	2.66
90+	3,920	1,000	2,920	3,807	984	2,823	2.97	1.63	3.44

Age Groups	2001 Census			Population Estimates <sup>1</sup>			Discrepancy <sup>2</sup> (%)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Quebec</b>									
<b>Total</b>	<b>7,237,480</b>	<b>3,532,845</b>	<b>3,704,635</b>	<b>7,287,474</b>	<b>3,567,421</b>	<b>3,720,053</b>	<b>-0.69</b>	<b>-0.97</b>	<b>-0.41</b>
0-4	375,765	192,280	183,485	383,507	195,917	187,590	-2.02	-1.86	-2.19
5-9	457,225	232,650	224,575	459,384	233,617	225,767	-0.47	-0.41	-0.53
10-14	458,585	234,140	224,445	459,890	235,049	224,841	-0.28	-0.39	-0.18
15-19	462,065	235,855	226,220	466,701	239,566	227,135	-0.99	-1.55	-0.40
20-24	487,410	246,140	241,270	506,111	258,825	247,286	-3.70	-4.90	-2.43
25-29	441,335	220,590	220,750	464,873	234,449	230,424	-5.06	-5.91	-4.20
30-34	480,440	239,375	241,070	487,939	244,514	243,425	-1.54	-2.10	-0.97
35-39	604,040	301,025	303,010	606,626	302,627	303,999	-0.43	-0.53	-0.33
40-44	639,940	316,490	323,455	641,039	317,502	323,537	-0.17	-0.32	-0.03
45-49	583,730	288,600	295,130	583,670	288,733	294,937	0.01	-0.05	0.07
50-54	526,215	259,480	266,735	522,824	258,276	264,548	0.65	0.47	0.83
55-59	430,920	211,530	219,385	429,127	211,021	218,106	0.42	0.24	0.59
60-64	329,990	159,430	170,560	326,281	157,579	168,702	1.14	1.17	1.10
65-69	291,335	136,285	155,045	286,107	133,665	152,442	1.83	1.96	1.71
70-74	255,850	112,450	143,400	252,026	110,690	141,336	1.52	1.59	1.46
75-79	197,630	79,000	118,630	195,426	77,687	117,739	1.13	1.69	0.76
80-84	120,550	41,940	78,615	119,704	41,639	78,065	0.71	0.72	0.70
85-89	64,140	18,710	45,425	64,336	18,944	45,392	-0.30	-1.24	0.07
90+	30,310	6,870	23,445	31,903	7,121	24,782	-4.99	-3.52	-5.40

Age Groups	2001 Census			Population Estimates <sup>1</sup>			Discrepancy <sup>2</sup> (%)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Ontario</b>									
<b>Total</b>	<b>11,410,045</b>	<b>5,577,060</b>	<b>5,832,985</b>	<b>11,539,844</b>	<b>5,653,744</b>	<b>5,886,100</b>	<b>-1.12</b>	<b>-1.36</b>	<b>-0.90</b>
0-4	671,250	343,340	327,910	683,168	349,158	334,010	-1.74	-1.67	-1.83
5-9	772,655	396,385	376,265	780,883	400,840	380,043	-1.05	-1.11	-0.99
10-14	788,845	404,970	383,880	790,156	406,244	383,912	-0.17	-0.31	-0.01
15-19	769,415	394,920	374,500	777,425	399,926	377,499	-1.03	-1.25	-0.79
20-24	718,415	359,650	358,775	753,624	382,181	371,443	-4.67	-5.90	-3.41
25-29	729,650	356,180	373,470	777,827	385,644	392,183	-6.19	-7.64	-4.77
30-34	828,840	404,515	424,320	852,540	419,824	432,716	-2.78	-3.65	-1.94
35-39	989,845	487,610	502,235	999,796	492,184	507,612	-1.00	-0.93	-1.06
40-44	969,675	476,230	493,440	969,992	475,762	494,230	-0.03	0.10	-0.16
45-49	859,130	419,475	439,660	855,476	418,473	437,003	0.43	0.24	0.61
50-54	776,145	382,065	394,080	768,902	377,465	391,437	0.94	1.22	0.68
55-59	584,495	288,120	296,380	587,697	288,568	299,129	-0.54	-0.16	-0.92
60-64	479,505	232,450	247,055	479,283	232,472	246,811	0.05	-0.01	0.10
65-69	430,880	205,780	225,095	426,963	203,429	223,534	0.92	1.16	0.70
70-74	387,290	177,840	209,445	382,458	174,912	207,546	1.26	1.67	0.91
75-79	313,795	130,435	183,360	312,378	129,435	182,943	0.45	0.77	0.23
80-84	190,135	71,830	118,300	190,474	71,488	118,986	-0.18	0.48	-0.58
85-89	101,600	33,160	68,445	102,284	33,597	68,687	-0.67	-1.30	-0.35
90+	48,470	12,100	36,365	48,518	12,142	36,376	-0.10	-0.35	-0.03

Age Groups	2001 Census			Population Estimates <sup>1</sup>			Discrepancy <sup>2</sup> (%)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Manitoba</b>									
<b>Total</b>	<b>1,119,585</b>	<b>549,600</b>	<b>569,985</b>	<b>1,130,335</b>	<b>555,653</b>	<b>574,682</b>	<b>-0.95</b>	<b>-1.09</b>	<b>-0.82</b>
0-4	70,670	36,390	34,285	72,137	37,037	35,100	-2.03	-1.75	-2.32
5-9	80,350	41,045	39,305	80,839	41,378	39,461	-0.60	-0.80	-0.40
10-14	82,695	42,280	40,415	83,950	43,212	40,738	-1.49	-2.16	-0.79
15-19	80,425	41,220	39,205	81,517	41,747	39,770	-1.34	-1.26	-1.42
20-24	72,855	36,445	36,410	76,749	38,945	37,804	-5.07	-6.42	-3.69
25-29	70,400	35,195	35,205	75,245	37,791	37,454	-6.44	-6.87	-6.00
30-34	72,775	36,175	36,600	74,396	36,990	37,406	-2.18	-2.20	-2.15
35-39	87,405	43,270	44,135	87,209	43,487	43,722	0.22	-0.50	0.94
40-44	89,725	44,915	44,810	89,548	44,626	44,922	0.20	0.65	-0.25
45-49	82,340	40,885	41,460	82,032	40,505	41,527	0.38	0.94	-0.16
50-54	73,375	36,380	36,995	72,691	35,968	36,723	0.94	1.15	0.74
55-59	55,415	27,525	27,890	55,525	27,582	27,943	-0.20	-0.21	-0.19
60-64	44,740	21,890	22,850	44,703	21,818	22,885	0.08	0.33	-0.15
65-69	40,750	19,630	21,120	39,927	19,171	20,756	2.06	2.39	1.75
70-74	37,810	17,185	20,630	37,095	16,853	20,242	1.93	1.97	1.92
75-79	33,650	13,980	19,670	33,113	13,676	19,437	1.62	2.22	1.20
80-84	23,230	8,740	14,490	22,721	8,426	14,295	2.24	3.73	1.36
85-89	13,860	4,590	9,270	13,824	4,531	9,293	0.26	1.30	-0.25
90+	7,120	1,880	5,235	7,114	1,910	5,204	0.08	-1.57	0.60

Age Groups	2001 Census			Population Estimates <sup>1</sup>			Discrepancy <sup>2</sup> (%)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Saskatchewan</b>									
<b>Total</b>	<b>978,935</b>	<b>481,750</b>	<b>497,185</b>	<b>988,592</b>	<b>487,269</b>	<b>501,323</b>	<b>-0.98</b>	<b>-1.13</b>	<b>-0.83</b>
0-4	60,935	31,035	29,905	63,797	32,099	31,698	-4.49	-3.31	-5.66
5-9	69,330	35,420	33,905	70,861	36,292	34,569	-2.16	-2.40	-1.92
10-14	76,960	39,365	37,595	78,235	39,964	38,271	-1.63	-1.50	-1.77
15-19	78,315	40,210	38,105	77,793	40,236	37,557	0.67	-0.06	1.46
20-24	65,925	33,305	32,620	70,378	36,242	34,136	-6.33	-8.10	-4.44
25-29	57,330	28,435	28,890	61,324	30,008	31,316	-6.51	-5.24	-7.75
30-34	57,795	28,350	29,450	58,411	28,664	29,747	-1.05	-1.10	-1.00
35-39	72,125	35,210	36,920	72,281	35,507	36,774	-0.22	-0.84	0.40
40-44	77,205	38,500	38,710	76,911	38,404	38,507	0.38	0.25	0.53
45-49	71,410	36,065	35,340	71,016	35,961	35,055	0.55	0.29	0.81
50-54	59,475	29,905	29,565	58,589	29,446	29,143	1.51	1.56	1.45
55-59	45,245	22,610	22,635	45,135	22,573	22,562	0.24	0.16	0.32
60-64	39,315	19,200	20,115	38,701	18,900	19,801	1.59	1.59	1.59
65-69	37,165	18,055	19,110	36,825	17,751	19,074	0.92	1.71	0.19
70-74	35,420	16,620	18,790	34,786	16,161	18,625	1.82	2.84	0.89
75-79	30,830	13,425	17,405	29,606	13,062	16,544	4.13	2.78	5.20
80-84	23,060	9,005	14,055	22,637	8,827	13,810	1.87	2.02	1.77
85-89	14,010	4,945	9,065	14,257	5,099	9,158	-1.73	-3.02	-1.02
90+	7,085	2,085	4,995	7,049	2,073	4,976	0.51	0.58	0.38

Age Groups	2001 Census			Population Estimates <sup>1</sup>			Discrepancy <sup>2</sup> (%)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Alberta</b>									
<b>Total</b>	<b>2,974,805</b>	<b>1,486,585</b>	<b>1,488,220</b>	<b>2,990,300</b>	<b>1,499,206</b>	<b>1,491,094</b>	<b>-0.52</b>	<b>-0.84</b>	<b>-0.19</b>
0-4	186,435	95,265	91,165	192,573	98,954	93,619	-3.19	-3.73	-2.62
5-9	208,480	106,865	101,615	207,847	107,256	100,591	0.30	-0.36	1.02
10-14	222,675	114,105	108,575	220,399	112,938	107,461	1.03	1.03	1.04
15-19	222,960	114,040	108,920	225,611	115,165	110,446	-1.18	-0.98	-1.38
20-24	215,125	109,730	105,395	225,341	116,033	109,308	-4.53	-5.43	-3.58
25-29	211,455	107,010	104,445	220,260	112,566	107,694	-4.00	-4.94	-3.02
30-34	218,770	109,425	109,340	221,840	112,296	109,544	-1.38	-2.56	-0.19
35-39	252,965	125,745	127,220	251,204	125,110	126,094	0.70	0.51	0.89
40-44	265,550	133,735	131,815	263,447	132,045	131,402	0.80	1.28	0.31
45-49	232,265	117,905	114,360	230,208	117,553	112,655	0.89	0.30	1.51
50-54	188,625	95,385	93,235	186,026	94,482	91,544	1.40	0.96	1.85
55-59	135,205	68,060	67,145	134,459	67,374	67,085	0.55	1.02	0.09
60-64	105,885	52,740	53,145	105,462	52,441	53,021	0.40	0.57	0.23
65-69	92,810	45,685	47,120	92,499	45,446	47,053	0.34	0.53	0.14
70-74	80,380	38,180	42,200	79,262	37,665	41,597	1.41	1.37	1.45
75-79	61,985	26,640	35,350	61,050	26,189	34,861	1.53	1.72	1.40
80-84	40,365	15,645	24,715	40,036	15,354	24,682	0.82	1.90	0.13
85-89	22,195	7,495	14,700	22,226	7,424	14,802	-0.14	0.96	-0.69
90+	10,670	2,910	7,755	10,550	2,915	7,635	1.14	-0.17	1.57

Age Groups	2001 Census			Population Estimates <sup>1</sup>			Discrepancy <sup>2</sup> (%)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>British Columbia</b>									
<b>Total</b>	<b>3,907,735</b>	<b>1,919,100</b>	<b>1,988,640</b>	<b>3,947,219</b>	<b>1,943,305</b>	<b>2,003,914</b>	<b>-1.00</b>	<b>-1.25</b>	<b>-0.76</b>
0-4	205,655	105,370	100,280	213,555	109,260	104,295	-3.70	-3.56	-3.85
5-9	241,060	123,845	117,215	242,157	124,541	117,616	-0.45	-0.56	-0.34
10-14	259,360	132,720	126,640	258,087	132,324	125,763	0.49	0.30	0.70
15-19	270,280	139,195	131,085	271,449	139,584	131,865	-0.43	-0.28	-0.59
20-24	244,065	121,940	122,120	262,932	132,390	130,542	-7.18	-7.89	-6.45
25-29	242,560	117,985	124,580	252,321	123,974	128,347	-3.87	-4.83	-2.94
30-34	276,050	135,045	141,000	282,015	137,778	144,237	-2.12	-1.98	-2.24
35-39	320,280	156,695	163,585	326,213	159,597	166,616	-1.82	-1.82	-1.82
40-44	335,890	163,695	172,195	336,657	165,105	171,552	-0.23	-0.85	0.37
45-49	314,895	155,015	159,880	315,781	155,397	160,384	-0.28	-0.25	-0.31
50-54	284,815	142,015	142,800	284,249	142,163	142,086	0.20	-0.10	0.50
55-59	210,170	104,955	105,210	209,084	105,014	104,070	0.52	-0.06	1.10
60-64	169,580	83,955	85,625	166,683	82,488	84,195	1.74	1.78	1.70
65-69	150,785	74,855	75,925	146,529	72,526	74,003	2.90	3.21	2.60
70-74	135,925	64,680	71,245	132,851	63,249	69,602	2.31	2.26	2.36
75-79	112,205	48,500	63,705	111,113	48,053	63,060	0.98	0.93	1.02
80-84	74,140	28,830	45,315	74,170	29,304	44,866	-0.04	-1.62	1.00
85-89	41,410	14,590	26,820	42,005	14,853	27,152	-1.42	-1.77	-1.22
90+	18,625	5,225	13,400	19,368	5,705	13,663	-3.84	-8.41	-1.92



Age Groups	2001 Census			Population Estimates <sup>1</sup>			Discrepancy <sup>2</sup> (%)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Yukon Territory</b>									
<b>Total</b>	<b>28,670</b>	<b>14,445</b>	<b>14,230</b>	<b>28,890</b>	<b>14,651</b>	<b>14,239</b>	<b>-0.76</b>	<b>-1.41</b>	<b>-0.06</b>
0-4	1,695	850	845	1,729	926	803	-1.97	-8.21	5.23
5-9	2,025	1,030	1,000	1,985	984	1,001	2.02	4.67	-0.10
10-14	2,320	1,230	1,090	2,322	1,215	1,107	-0.09	1.23	-1.54
15-19	2,285	1,175	1,110	2,361	1,224	1,137	-3.22	-4.00	-2.37
20-24	1,640	815	820	1,787	902	885	-8.23	-9.65	-7.34
25-29	1,745	805	935	1,804	848	956	-3.27	-5.07	-2.20
30-34	2,110	995	1,120	2,216	1,062	1,154	-4.78	-6.31	-2.95
35-39	2,610	1,200	1,415	2,729	1,293	1,436	-4.36	-7.19	-1.46
40-44	2,990	1,450	1,535	2,858	1,430	1,428	4.62	1.40	7.49
45-49	2,785	1,430	1,350	2,616	1,306	1,310	6.46	9.49	3.05
50-54	2,285	1,185	1,105	2,165	1,145	1,020	5.54	3.49	8.33
55-59	1,490	840	645	1,605	910	695	-7.17	-7.69	-7.19
60-64	965	550	425	1,042	556	486	-7.39	-1.08	-12.55
65-69	690	375	320	603	298	305	14.43	25.84	4.92
70-74	455	255	195	479	281	198	-5.01	-9.25	-1.52
75-79	285	145	145	308	155	153	-7.47	-6.45	-5.23
80-84	160	60	95	166	66	100	-3.61	-9.09	-5.00
85-89	95	40	55	72	30	42	31.94	33.33	30.95
90+	45	15	25	43	20	23	4.65	-25.00	8.70

Age Groups	2001 Census			Population Estimates <sup>1</sup>			Discrepancy <sup>2</sup> (%)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Northwest Territories</b>									
<b>Total</b>	<b>37,360</b>	<b>19,115</b>	<b>18,240</b>	<b>38,747</b>	<b>19,779</b>	<b>18,968</b>	<b>-3.58</b>	<b>-3.36</b>	<b>-3.84</b>
0-4	3,010	1,515	1,490	3,179	1,609	1,570	-5.32	-5.84	-5.10
5-9	3,595	1,835	1,760	3,923	1,885	2,038	-8.36	-2.65	-13.64
10-14	3,510	1,785	1,730	3,661	1,838	1,823	-4.12	-2.88	-5.10
15-19	2,950	1,550	1,400	3,129	1,771	1,358	-5.72	-12.48	3.09
20-24	2,695	1,355	1,345	2,973	1,477	1,496	-9.35	-8.26	-10.09
25-29	2,865	1,395	1,465	3,138	1,563	1,575	-8.70	-10.75	-6.98
30-34	3,195	1,585	1,610	3,277	1,590	1,687	-2.50	-0.31	-4.56
35-39	3,550	1,785	1,760	3,491	1,724	1,767	1.69	3.54	-0.40
40-44	3,250	1,665	1,585	3,353	1,713	1,640	-3.07	-2.80	-3.35
45-49	2,690	1,405	1,280	2,574	1,425	1,149	4.51	-1.40	11.40
50-54	2,245	1,185	1,060	2,116	1,135	981	6.10	4.41	8.05
55-59	1,355	775	580	1,378	820	558	-1.67	-5.49	3.94
60-64	820	445	380	943	467	476	-13.04	-4.71	-20.17
65-69	620	335	285	625	289	336	-0.80	15.92	-15.18
70-74	430	225	205	425	224	201	1.18	0.45	1.99
75-79	280	130	145	262	120	142	6.87	8.33	2.11
80-84	165	100	65	172	95	77	-4.07	5.26	-15.58
85-89	85	30	55	97	31	66	-12.37	-3.23	-16.67
90+	60	25	35	31	3	28	93.55	733.33	25.00

Age Groups	2001 Census			Population Estimates <sup>1</sup>			Discrepancy <sup>2</sup> (%)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Nunavut</b>									
<b>Total</b>	<b>26,745</b>	<b>13,840</b>	<b>12,905</b>	<b>27,121</b>	<b>13,944</b>	<b>13,177</b>	<b>-1.39</b>	<b>-0.75</b>	<b>-2.06</b>
0-4	3,355	1,725	1,630	3,217	1,682	1,535	4.29	2.56	6.19
5-9	3,340	1,710	1,630	3,740	1,971	1,769	-10.7	-13.24	-7.86
10-14	3,230	1,685	1,545	3,269	1,665	1,604	-1.19	1.20	-3.68
15-19	2,520	1,285	1,235	2,591	1,303	1,288	-2.74	-1.38	-4.11
20-24	2,135	1,090	1,045	2,354	1,153	1,201	-9.30	-5.46	-12.99
25-29	2,275	1,105	1,170	2,171	1,101	1,070	4.79	0.36	9.35
30-34	2,290	1,205	1,085	2,242	1,115	1,127	2.14	8.07	-3.73
35-39	1,965	1,030	935	1,907	959	948	3.04	7.40	-1.37
40-44	1,495	775	720	1,346	687	659	11.07	12.81	9.26
45-49	1,230	655	580	1,249	615	634	-1.52	6.50	-8.52
50-54	1,100	575	525	1,289	728	561	-14.66	-21.02	-6.42
55-59	715	385	325	604	336	268	18.38	14.58	21.27
60-64	500	260	245	417	215	202	19.90	20.93	21.29
65-69	285	170	115	314	195	119	-9.24	-12.82	-3.36
70-74	145	95	60	195	82	113	-25.64	15.85	-46.90
75-79	90	55	30	120	77	43	-25.00	-28.57	-30.23
80-84	45	30	20	55	39	16	-18.18	-23.08	25.00
85-89	20	10	10	24	10	14	-16.67	0.00	-28.57
90+	10	5	0	17	11	6	-41.18	-54.55	-100.00

<sup>1</sup> These population estimates, as of May 15, 2001, have not been adjusted for net coverage.

<sup>2</sup> Calculated as follows:  $((2001 \text{ Census} - \text{Population estimates}) / \text{Population estimates}) * 100$ .

**Table C2. Sex Ratios by Age Groups, Enumerated Population, Estimated Population and Discrepancy, for Provinces<sup>1</sup>, 2001 Census – 100% Data**

Age Groups	2001 Census	Population estimates <sup>2</sup>	Discrepancy
<b>Newfoundland and Labrador</b>			
<b>Total</b>	<b>958.00</b>	<b>961.50</b>	<b>-3.50</b>
0-4	1,048.70	1,037.20	11.50
5-9	1,064.70	1,057.70	7.00
10-14	1,048.40	1,040.00	8.40
15-19	1,035.10	1,043.30	-8.30
20-24	975.20	991.40	-16.10
25-29	921.60	976.60	-54.90
30-34	906.90	903.30	3.60
35-39	920.40	918.90	1.50
40-44	951.70	957.70	-6.00
45-49	971.50	971.10	0.40
50-54	995.70	1,000.30	-4.60
55-59	996.70	1,018.10	-21.40
60-64	1,005.30	998.60	6.70
65-69	976.30	950.10	26.10
70-74	880.40	878.40	2.00
75+	653.40	641.10	12.30
<b>Prince Edward Island</b>			
<b>Total</b>	<b>945.60</b>	<b>953.90</b>	<b>-8.40</b>
0-4	1,054.40	1,024.20	30.30
5-9	1,063.60	1,074.20	-10.60
10-14	1,015.10	1,001.80	13.30
15-19	1,025.70	1,018.60	7.10
20-24	978.50	1,023.90	-45.40
25-29	938.40	939.90	-1.40
30-34	944.60	968.70	-24.20
35-39	950.00	971.10	-21.10
40-44	932.00	956.50	-24.50
45-49	970.80	964.20	6.60
50-54	972.40	967.80	4.50
55-59	995.90	1,046.90	-51.00
60-64	996.70	970.50	26.20
65-69	934.80	926.40	8.40
70-74	847.50	842.00	5.50
75+	581.50	594.90	-13.40

Age Groups	2001 Census	Population estimates <sup>2</sup>	Discrepancy
<b>Nova Scotia</b>			
<b>Total</b>	<b>936.40</b>	<b>944.50</b>	<b>-8.10</b>
0-4	1,051.70	1,044.90	6.70
5-9	1,033.90	1,042.20	-8.40
10-14	1,039.10	1,057.60	-18.50
15-19	1,045.40	1,058.30	-12.90
20-24	949.70	994.80	-45.10
25-29	912.40	945.70	-33.30
30-34	930.40	929.50	0.90
35-39	945.60	946.20	-0.60
40-44	947.20	954.80	-7.60
45-49	950.30	965.70	-15.30
50-54	976.80	984.30	-7.50
55-59	976.70	973.20	3.50
60-64	958.70	954.70	4.10
65-69	932.60	928.70	3.90
70-74	818.40	826.40	-8.10
75+	583.40	560.60	22.70
<b>New Brunswick</b>			
<b>Total</b>	<b>956.80</b>	<b>962.00</b>	<b>-5.20</b>
0-4	1,061.30	1,086.80	-25.50
5-9	1,053.00	1,015.40	37.60
10-14	1,058.00	1,052.30	5.60
15-19	1,045.40	1,049.70	-4.30
20-24	1,003.00	1,048.30	-45.30
25-29	957.80	972.60	-14.80
30-34	956.20	961.40	-5.20
35-39	963.90	973.10	-9.20
40-44	969.70	984.60	-14.80
45-49	965.80	979.50	-13.80
50-54	996.50	996.30	0.20
55-59	1,012.10	1,003.00	9.20
60-64	978.90	970.70	8.20
65-69	908.20	896.50	11.70
70-74	809.90	798.20	11.70
75+	601.90	594.20	7.70

Age Groups	2001 Census	Population estimates <sup>2</sup>	Discrepancy
<b>Quebec</b>			
<b>Total</b>	<b>953.60</b>	<b>959.00</b>	<b>-5.30</b>
0-4	1,047.90	1,044.40	3.50
5-9	1,036.00	1,034.80	1.20
10-14	1,043.20	1,045.40	-2.20
15-19	1,042.60	1,054.70	-12.10
20-24	1,020.20	1,046.70	-26.50
25-29	999.30	1,017.50	-18.20
30-34	993.00	1,004.50	-11.50
35-39	993.40	995.50	-2.00
40-44	978.50	981.30	-2.90
45-49	977.90	979.00	-1.10
50-54	972.80	976.30	-3.50
55-59	964.20	967.50	-3.30
60-64	934.70	934.10	0.70
65-69	879.00	876.80	2.20
70-74	784.20	783.20	1.00
75+	550.60	546.60	4.00
<b>Ontario</b>			
<b>Total</b>	<b>956.10</b>	<b>960.50</b>	<b>-4.40</b>
0-4	1,047.10	1,045.40	1.70
5-9	1,053.50	1,054.70	-1.20
10-14	1,054.90	1,058.20	-3.20
15-19	1,054.50	1,059.40	-4.90
20-24	1,002.40	1,028.90	-26.50
25-29	953.70	983.30	-29.60
30-34	953.30	970.20	-16.90
35-39	970.90	969.60	1.30
40-44	965.10	962.60	2.50
45-49	954.10	957.60	-3.50
50-54	969.50	964.30	5.20
55-59	972.10	964.70	7.40
60-64	940.90	941.90	-1.00
65-69	914.20	910.10	4.10
70-74	849.10	842.80	6.30
75+	609.00	606.10	2.90

Age Groups	2001 Census	Population estimates <sup>2</sup>	Discrepancy
<b>Manitoba</b>			
<b>Total</b>	<b>964.20</b>	<b>966.90</b>	<b>-2.70</b>
0-4	1,061.40	1,055.20	6.20
5-9	1,044.30	1,048.60	-4.30
10-14	1,046.10	1,060.70	-14.60
15-19	1,051.40	1,049.70	1.70
20-24	1,001.00	1,030.20	-29.20
25-29	999.70	1,009.00	-9.30
30-34	988.40	988.90	-0.50
35-39	980.40	994.60	-14.20
40-44	1,002.30	993.40	8.90
45-49	986.10	975.40	10.70
50-54	983.40	979.40	3.90
55-59	986.90	987.10	-0.20
60-64	958.00	953.40	4.60
65-69	929.50	923.60	5.80
70-74	833.00	832.60	0.40
75+	599.80	591.80	8.00
<b>Saskatchewan</b>			
<b>Total</b>	<b>969.00</b>	<b>972.00</b>	<b>-3.00</b>
0-4	1,037.80	1,012.70	25.10
5-9	1,044.70	1,049.80	-5.20
10-14	1,047.10	1,044.20	2.80
15-19	1,055.20	1,071.30	-16.10
20-24	1,021.00	1,061.70	-40.70
25-29	984.30	958.20	26.00
30-34	962.60	963.60	-0.90
35-39	953.70	965.50	-11.90
40-44	994.60	997.30	-2.80
45-49	1,020.50	1,025.80	-5.30
50-54	1,011.50	1,010.40	1.10
55-59	998.90	1,000.50	-1.60
60-64	954.50	954.50	0.00
65-69	944.80	930.60	14.20
70-74	884.50	867.70	16.80
75+	647.20	653.20	-6.00

Age Groups	2001 Census	Population estimates <sup>2</sup>	Discrepancy
<b>Alberta</b>			
<b>Total</b>	<b>998.90</b>	<b>1,005.40</b>	<b>-6.50</b>
0-4	1,045.00	1,057.00	-12.00
5-9	1,051.70	1,066.30	-14.60
10-14	1,050.90	1,051.00	0.00
15-19	1,047.00	1,042.70	4.30
20-24	1,041.10	1,061.50	-20.40
25-29	1,024.60	1,045.20	-20.70
30-34	1,000.80	1,025.10	-24.30
35-39	988.40	992.20	-3.80
40-44	1,014.60	1,004.90	9.70
45-49	1,031.00	1,043.50	-12.50
50-54	1,023.10	1,032.10	-9.00
55-59	1,013.60	1,004.30	9.30
60-64	992.40	989.10	3.30
65-69	969.50	965.80	3.70
70-74	904.70	905.50	-0.70
75+	638.50	632.90	5.70
<b>British Columbia</b>			
<b>Total</b>	<b>965.00</b>	<b>969.80</b>	<b>-4.70</b>
0-4	1,050.80	1,047.60	3.20
5-9	1,056.60	1,058.90	-2.30
10-14	1,048.00	1,052.20	-4.20
15-19	1,061.90	1,058.50	3.30
20-24	998.50	1,014.20	-15.60
25-29	947.10	965.90	-18.90
30-34	957.80	955.20	2.50
35-39	957.90	957.90	0.00
40-44	950.60	962.40	-11.80
45-49	969.60	968.90	0.70
50-54	994.50	1,000.50	-6.00
55-59	997.60	1,009.10	-11.50
60-64	980.50	979.70	0.80
65-69	985.90	980.00	5.90
70-74	907.90	908.70	-0.90
75+	650.90	658.30	-7.40

<sup>1</sup> The territories are excluded because their population size makes comparisons difficult.

<sup>2</sup> These population estimates, as of May 15, 2001, have not been adjusted for net coverage.



**Table C3. Ratio<sup>1</sup> of Enumerated Population to Estimated Population<sup>2</sup> by Selected Age Groups, Sex, and Legal Marital Status, Provinces and Territories, 2001 Census – 100% Data**

Age Groups	Men				Women			
	Single	Married and separated	Divorced	Widowed	Single	Married and separated	Divorced	Widowed
<b>Newfoundland</b>								
<b>Total</b>	<b>0.96</b>	<b>0.98</b>	<b>0.93</b>	<b>1.00</b>	<b>0.97</b>	<b>0.99</b>	<b>0.95</b>	<b>0.99</b>
15-19	0.99	8.75	0.00	0.00	1.00	0.97	0.00	0.00
20-24	0.92	0.64	2.27	0.00	0.95	0.72	2.17	0.71
25-29	0.89	0.78	0.88	3.33	0.94	0.86	1.05	0.95
30-34	1.05	0.95	0.93	1.47	0.95	1.00	1.02	0.86
35-39	0.94	0.99	0.96	0.69	0.93	0.99	1.01	0.82
40-44	0.95	0.98	0.94	0.78	1.02	0.98	0.89	0.88
45-49	1.02	0.98	0.92	0.93	1.01	0.99	0.91	0.93
50-54	1.10	0.99	0.89	0.91	1.01	1.00	0.93	1.02
55-59	1.03	0.99	0.96	1.04	0.99	1.02	0.97	1.05
60-64	1.06	1.01	0.96	1.00	0.99	1.01	0.88	1.01
65-69	1.08	1.04	0.89	0.91	0.94	1.00	0.94	1.01
70-74	1.11	1.01	0.92	1.04	0.95	1.03	1.02	1.00
75+	0.91	1.02	0.98	1.03	1.00	1.04	0.99	0.98
<b>Prince Edward Island</b>								
<b>Total</b>	<b>0.97</b>	<b>0.98</b>	<b>0.91</b>	<b>1.07</b>	<b>0.99</b>	<b>0.98</b>	<b>0.99</b>	<b>1.00</b>
15-19	0.98	3.00	0.00	0.00	0.98	0.63	0.00	0.00
20-24	0.89	0.93	3.75	0.00	0.95	0.80	1.36	1.67
25-29	0.89	0.97	0.53	2.50	0.84	1.00	0.94	1.25
30-34	1.05	0.93	0.73	1.25	1.20	0.93	0.85	0.94
35-39	1.02	0.93	0.96	1.67	1.13	0.96	0.92	0.82
40-44	1.07	0.96	0.89	0.88	1.08	0.99	0.94	1.19
45-49	1.04	0.99	0.87	0.57	1.06	0.97	0.97	0.91
50-54	1.16	1.00	0.92	1.86	0.96	1.00	1.01	1.10
55-59	1.02	1.02	0.90	1.53	1.10	1.05	1.20	0.96
60-64	1.12	1.04	0.97	0.93	1.08	1.01	1.09	0.91
65-69	1.17	1.02	0.85	1.07	1.07	1.04	0.98	0.96
70-74	1.06	0.97	1.38	0.95	1.10	0.98	0.93	0.99
75+	0.91	1.00	0.95	1.07	1.20	1.00	1.50	1.02

Age Groups	Men				Women			
	Single	Married and separated		Widowed	Single	Married and separated		Widowed
		Divorced	Widowed			Divorced	Widowed	
<b>Nova Scotia</b>								
<b>Total</b>	<b>0.95</b>	<b>1.00</b>	<b>0.96</b>	<b>1.00</b>	<b>0.97</b>	<b>1.00</b>	<b>0.97</b>	<b>1.00</b>
15-19	0.96	6.00	0.00	0.00	0.97	1.02	35.00	0.00
20-24	0.90	0.82	6.00	5.00	0.95	0.81	0.87	1.33
25-29	0.89	0.92	0.94	2.50	0.94	0.94	0.89	1.11
30-34	0.96	0.99	0.93	1.09	0.97	0.98	0.91	1.02
35-39	0.99	1.00	1.00	1.03	0.99	1.00	1.01	0.96
40-44	1.00	0.99	0.94	0.88	1.01	1.00	0.94	0.97
45-49	0.99	0.99	0.94	0.88	1.04	1.00	0.98	1.03
50-54	1.07	1.00	0.94	1.02	1.03	1.01	0.99	1.01
55-59	1.06	1.00	0.98	0.96	1.02	1.00	0.98	0.98
60-64	1.13	1.02	0.95	0.96	1.07	1.02	0.94	1.00
65-69	1.17	1.03	0.95	0.94	1.05	1.02	0.98	1.02
70-74	1.00	1.02	0.95	0.99	1.00	1.04	1.03	1.01
75+	1.16	1.04	0.98	1.03	0.99	1.02	1.00	1.00
<b>New Brunswick</b>								
<b>Total</b>	<b>0.96</b>	<b>1.00</b>	<b>0.95</b>	<b>0.99</b>	<b>0.96</b>	<b>1.00</b>	<b>0.96</b>	<b>0.99</b>
15-19	0.99	3.20	0.00	0.00	0.99	1.00	0.00	0.00
20-24	0.91	0.80	1.96	10.00	0.97	0.83	0.94	1.07
25-29	0.88	0.94	0.98	3.00	0.89	0.97	0.81	1.11
30-34	0.92	1.02	0.80	1.52	0.91	1.01	0.93	0.98
35-39	0.99	0.99	0.92	0.61	0.97	1.01	0.94	1.08
40-44	1.03	0.98	0.95	0.83	1.00	1.00	1.02	0.99
45-49	1.04	0.98	0.90	0.78	1.01	0.99	0.97	0.98
50-54	1.05	1.00	0.96	1.01	1.06	1.00	0.96	0.98
55-59	1.02	1.01	0.97	1.08	1.08	1.00	0.99	0.96
60-64	1.08	1.02	1.00	1.04	1.01	1.03	0.99	0.97
65-69	1.07	1.02	1.04	1.03	1.03	1.04	0.95	0.98
70-74	1.07	1.03	1.04	0.98	1.03	1.05	0.90	0.97
75+	1.12	1.04	1.00	0.98	1.04	1.05	0.86	1.00

Age Groups	Men				Women			
	Single	Married and separated		Widowed	Single	Married and separated		Widowed
		Divorced	Widowed			Divorced	Widowed	
<b>Quebec</b>								
<b>Total</b>	<b>0.98</b>	<b>1.02</b>	<b>0.93</b>	<b>0.92</b>	<b>0.99</b>	<b>1.02</b>	<b>0.96</b>	<b>0.98</b>
15-19	0.98	2.33	165.00	0.00	0.99	1.13	19.09	16.00
20-24	0.95	0.83	0.78	5.41	0.98	0.89	0.78	2.07
25-29	0.95	0.93	0.71	3.57	0.95	0.99	0.82	1.56
30-34	0.97	1.03	0.79	1.32	0.98	1.03	0.89	0.95
35-39	0.99	1.03	0.87	1.08	0.99	1.01	0.95	0.97
40-44	1.00	1.01	0.93	1.02	1.01	1.01	0.97	0.98
45-49	1.01	1.01	0.95	0.99	1.01	1.01	0.97	0.99
50-54	1.03	1.01	0.96	1.02	1.03	1.01	0.98	1.00
55-59	1.03	1.01	0.97	1.04	1.03	1.01	0.98	1.01
60-64	1.07	1.02	0.96	1.02	1.04	1.02	0.99	1.00
65-69	1.08	1.03	0.95	1.00	1.04	1.04	0.96	0.99
70-74	1.06	1.03	0.91	0.97	1.03	1.04	0.90	1.00
75+	1.11	1.09	0.83	0.83	1.04	1.09	0.89	0.97
<b>Ontario</b>								
<b>Total</b>	<b>0.96</b>	<b>1.01</b>	<b>0.92</b>	<b>0.99</b>	<b>0.98</b>	<b>1.00</b>	<b>0.95</b>	<b>1.00</b>
15-19	0.98	3.46	115.00	5.83	0.99	1.20	21.14	5.91
20-24	0.95	0.83	1.23	2.29	0.99	0.84	0.90	1.38
25-29	0.91	0.96	0.72	1.34	0.93	0.98	0.84	1.37
30-34	0.90	1.03	0.78	0.89	0.93	1.01	0.91	0.91
35-39	0.97	1.01	0.86	0.90	0.97	1.00	0.94	0.97
40-44	1.01	1.01	0.93	1.00	1.00	1.00	0.96	1.01
45-49	1.03	1.01	0.95	0.92	1.05	1.01	0.97	0.98
50-54	1.07	1.01	0.95	1.03	1.04	1.01	0.97	1.00
55-59	1.08	1.00	0.95	1.00	1.04	0.99	0.96	0.99
60-64	1.09	1.00	0.94	1.02	1.07	1.00	0.96	1.00
65-69	1.12	1.01	0.95	1.00	1.07	1.02	0.96	0.99
70-74	1.11	1.02	0.95	0.98	1.06	1.03	0.94	0.99
75+	1.09	1.01	0.92	0.99	1.06	0.99	0.93	1.00

Age Groups	Men				Women			
	Single	Married and separated		Widowed	Single	Married and separated		Widowed
		Divorced	Widowed			Divorced	Widowed	
<b>Manitoba</b>								
<b>Total</b>	<b>0.96</b>	<b>1.01</b>	<b>0.93</b>	<b>0.99</b>	<b>0.96</b>	<b>1.01</b>	<b>0.94</b>	<b>1.00</b>
15-19	0.99	1.51	0.00	0.00	0.98	1.00	40.00	5.00
20-24	0.94	0.92	1.94	10.00	0.97	0.92	1.00	0.79
25-29	0.90	1.01	0.74	2.50	0.89	1.02	0.80	0.63
30-34	0.91	1.04	0.86	1.22	0.88	1.04	0.86	0.80
35-39	0.98	1.02	0.84	0.82	0.99	1.03	0.93	1.02
40-44	1.00	1.02	0.95	0.92	1.03	1.00	0.93	1.09
45-49	1.02	1.02	0.92	1.14	0.98	1.01	0.96	1.07
50-54	1.08	1.01	0.97	1.01	1.05	1.01	0.98	1.04
55-59	1.08	0.99	0.96	1.03	1.05	1.00	0.94	1.02
60-64	1.05	1.00	0.96	1.13	1.04	1.01	0.94	0.99
65-69	1.13	1.02	0.95	1.08	1.05	1.03	0.95	1.00
70-74	1.14	1.01	0.93	1.02	1.07	1.04	0.95	0.99
75+	1.18	1.04	0.90	0.95	1.02	1.03	0.93	1.00
<b>Saskatchewan</b>								
<b>Total</b>	<b>0.98</b>	<b>1.01</b>	<b>0.91</b>	<b>0.99</b>	<b>0.98</b>	<b>1.01</b>	<b>0.92</b>	<b>1.01</b>
15-19	1.00	2.29	15.00	0.00	1.01	0.93	35.00	0.00
20-24	0.92	0.89	1.16	0.00	0.96	0.91	0.80	1.00
25-29	0.94	0.97	0.74	1.67	0.88	0.97	0.82	1.02
30-34	1.02	0.99	0.78	1.32	0.97	1.01	0.89	0.99
35-39	0.95	1.02	0.88	1.19	1.00	1.02	0.90	1.12
40-44	1.02	1.01	0.89	1.19	1.00	1.02	0.90	1.07
45-49	1.02	1.01	0.92	1.00	1.06	1.02	0.93	0.96
50-54	1.07	1.03	0.89	1.00	1.08	1.02	0.97	1.03
55-59	1.07	1.00	0.94	1.04	1.08	1.00	0.95	1.03
60-64	1.10	1.01	0.96	1.04	1.02	1.02	1.01	1.01
65-69	1.09	1.01	0.99	1.03	1.06	1.01	0.94	0.98
70-74	1.17	1.03	0.94	0.99	1.01	1.03	0.87	0.99
75+	1.13	1.02	0.93	0.96	1.07	1.03	0.93	1.02

Age Groups	Men				Women			
	Single	Married and		Widowed	Single	Married and		Widowed
		separated	Divorced			separated	Divorced	
<b>Alberta</b>								
<b>Total</b>	<b>0.96</b>	<b>1.03</b>	<b>0.92</b>	<b>0.98</b>	<b>0.96</b>	<b>1.02</b>	<b>0.97</b>	<b>1.00</b>
15-19	0.99	1.95	130.00	0.00	0.99	0.95	23.33	5.00
20-24	0.95	0.90	1.07	1.00	0.97	0.94	1.07	1.55
25-29	0.91	1.06	0.79	0.85	0.88	1.08	0.89	0.98
30-34	0.89	1.05	0.87	0.81	0.89	1.06	0.95	0.85
35-39	0.99	1.03	0.90	0.80	0.98	1.02	0.97	0.91
40-44	1.00	1.03	0.91	0.99	1.00	1.01	0.96	1.00
45-49	1.01	1.02	0.92	0.94	1.05	1.02	0.97	0.98
50-54	1.02	1.02	0.94	1.05	1.07	1.03	0.97	0.99
55-59	1.06	1.03	0.91	0.93	1.07	1.01	0.97	0.98
60-64	1.09	1.01	0.94	0.97	1.05	1.01	0.98	0.99
65-69	1.09	1.00	0.96	1.00	1.04	1.01	0.98	0.97
70-74	1.03	1.02	0.91	1.00	0.96	1.03	0.96	1.01
75+	1.06	1.02	0.99	0.99	0.99	1.01	0.99	1.01
<b>British Columbia</b>								
<b>Total</b>	<b>0.97</b>	<b>1.00</b>	<b>0.95</b>	<b>0.95</b>	<b>0.98</b>	<b>1.00</b>	<b>0.98</b>	<b>1.01</b>
15-19	0.99	3.60	0.00	3.00	0.99	1.30	190.00	4.00
20-24	0.93	0.84	1.10	1.25	0.94	0.88	0.86	1.40
25-29	0.95	0.97	0.68	1.28	0.97	0.99	0.77	1.02
30-34	0.96	1.01	0.85	0.75	0.95	0.99	0.97	0.78
35-39	0.98	1.00	0.88	0.83	0.97	0.99	0.98	0.92
40-44	1.01	0.99	0.96	0.99	1.02	1.00	1.00	1.02
45-49	1.03	1.00	0.97	0.96	1.02	1.00	0.99	0.97
50-54	1.06	1.00	0.98	0.98	1.05	1.00	0.99	1.02
55-59	1.06	1.00	0.97	0.99	1.03	1.01	1.01	1.01
60-64	1.10	1.02	0.99	0.97	1.05	1.02	0.99	1.01
65-69	1.12	1.03	0.98	1.01	1.11	1.03	0.99	1.02
70-74	1.09	1.03	0.96	1.00	1.02	1.03	0.96	1.03
75+	1.04	1.02	0.89	0.92	1.04	1.00	0.93	1.01

Age Groups	Men				Women			
	Single	Married and separated		Widowed	Single	Married and separated		Widowed
		Divorced	Widowed			Divorced	Widowed	
<b>Yukon Territory</b>								
<b>Total</b>	<b>0.93</b>	<b>1.08</b>	<b>0.86</b>	<b>0.93</b>	<b>1.02</b>	<b>0.99</b>	<b>0.91</b>	<b>1.04</b>
15-19	0.96	0.00	0.00	0.00	0.97	1.67	0.00	0.00
20-24	0.88	5.00	0.00	0.00	0.89	1.37	7.50	0.00
25-29	0.80	2.72	0.29	0.00	0.91	1.17	0.80	0.00
30-34	0.81	1.19	0.98	0.83	1.00	0.92	0.84	10.00
35-39	0.87	1.04	0.68	2.50	1.11	0.93	0.84	1.25
40-44	1.05	1.02	0.96	0.45	1.18	1.05	0.99	1.14
45-49	1.15	1.24	0.75	0.00	1.35	0.97	0.93	0.92
50-54	1.29	0.99	0.95	2.22	1.59	1.02	1.02	0.94
55-59	0.92	0.92	0.92	1.00	1.39	0.93	0.83	0.95
60-64	0.97	1.01	0.92	0.87	1.29	0.88	0.93	0.87
65-69	1.54	1.45	0.93	0.29	1.33	1.05	0.80	1.00
70-74	1.11	0.94	0.89	0.74	1.92	1.31	0.40	0.89
75+	0.78	0.75	0.67	1.59	0.50	1.13	0.48	1.07
<b>Northwest Territories</b>								
<b>Total</b>	<b>0.90</b>	<b>1.07</b>	<b>0.89</b>	<b>1.24</b>	<b>0.96</b>	<b>1.00</b>	<b>1.07</b>	<b>0.98</b>
15-19	0.88	0.00	0.00	0.00	1.03	0.50	0.00	0.00
20-24	0.90	5.83	5.00	0.00	0.88	1.01	0.00	0.00
25-29	0.75	2.68	0.00	0.00	0.78	1.48	2.22	0.00
30-34	0.80	1.41	1.28	0.00	0.87	1.06	0.94	1.25
35-39	1.02	1.05	0.92	10.00	1.12	0.92	1.04	0.45
40-44	1.01	0.96	0.90	1.00	1.03	0.93	1.03	0.95
45-49	1.10	0.96	0.95	1.11	1.43	1.03	1.21	1.52
50-54	1.19	1.06	0.83	0.71	1.21	1.04	1.32	0.78
55-59	1.16	0.93	0.87	0.80	1.11	0.98	1.16	1.02
60-64	1.01	0.88	1.08	1.76	1.25	0.82	0.71	0.74
65-69	1.37	1.13	0.83	1.52	1.15	0.84	0.45	0.95
70-74	0.82	1.15	0.36	1.43	1.19	1.07	1.25	1.01
75+	1.92	1.01	0.00	1.15	0.81	0.71	0.56	1.08

Age Groups	Men				Women			
	Single	Married and		Widowed	Single	Married and		Widowed
		separated	Divorced			separated	Divorced	
<b>Nunavut</b>								
<b>Total</b>	<b>0.98</b>	<b>1.16</b>	<b>0.49</b>	<b>0.95</b>	<b>0.96</b>	<b>1.07</b>	<b>0.57</b>	<b>0.89</b>
15-19	0.99	0.00	0.00	0.00	0.95	1.43	0.00	0.00
20-24	0.92	2.37	0.00	0.00	0.84	1.29	0.00	0.00
25-29	0.88	2.13	0.50	0.00	0.97	1.58	0.00	0.00
30-34	0.94	1.61	0.32	0.00	1.05	0.95	0.34	1.11
35-39	1.16	1.13	0.51	0.00	0.96	1.03	0.43	1.39
40-44	0.99	1.25	0.67	2.50	1.13	1.18	0.73	0.88
45-49	1.32	1.08	0.46	0.56	1.37	0.85	0.51	0.81
50-54	1.20	0.76	0.57	0.29	1.09	0.94	0.68	0.93
55-59	1.16	1.30	0.41	1.56	1.40	1.45	1.04	0.96
60-64	1.73	1.44	0.21	0.96	1.32	1.35	0.50	1.04
65-69	2.78	0.90	1.25	0.78	0.33	1.50	1.00	0.85
70-74	1.67	1.28	0.00	1.30	1.25	0.42	1.00	0.67
75+	0.00	0.68	0.00	1.00	5.00	0.91	0.00	0.63

<sup>1</sup> Calculated as follows: 2001 Census / Population estimates.

<sup>2</sup> These population estimates, as of May 15, 2001, have not been adjusted for net coverage.

## Appendix D. 2001 Census Products and Services

The census is a reliable source for describing the characteristics of Canada's people and dwellings. The range of products and services derived from census information is designed to produce statistics that will be useful, understandable and accessible to all users. Sources, such as the *2001 Census Catalogue*, the Statistics Canada Web site (<http://www.statcan.ca>) and, specifically, the On-Line Catalogue, contain detailed information about the full range of 2001 Census products and services.

There are several new product and service features for the 2001 Census:

### 1. Media

- The Internet is the preferred medium for disseminating standard data products and reference products.
- More census data are available to the public free of charge via the Internet.

### 2. Content

- Data tables for the 2001 Census are released by topics, that is, groups of variables on related subjects.
- Wherever possible, the language and vocabulary used in 2001 Census products available on the Internet is simplified to make the information accessible to more people.
- Users are offered various methods of searching and navigating through census standard products (including reference products) on the Internet.

### 3. Geography

- Geographic units such as dissemination areas, urban areas, designated places and metropolitan influenced zones were added to the standard products line. Some new units, such as dissemination areas, replace others.

### 4. Variables

- Information on the following new subjects was collected in the 2001 Census: birthplace of parents, other languages spoken at home and language of work. The 2001 questionnaire also included the question on religion, which is asked in every decennial census. The family structure variable was broadened to include same-sex couples.



## Bibliography

Chavez, B. *Attestation de qualité : Âge et sexe*, Demography Division, Statistics Canada. Unpublished report, June 2002.

Chavez, B. *Attestation de qualité : État matrimonial et union libre*, Demography Division, Statistics Canada. Unpublished report, September 2002.

Janes, D. *CANCEIS User Guide*. Social Survey Methods Division. Statistics Canada. Unpublished report, June 2002.

Monette, M. *Attestation de qualité : Âge et sexe*, Demography Division. Statistics Canada. Unpublished report, August 1997.

Statistics Canada. *1996 Census Technical Reports : Age, Sex, Marital Status and Common-law Status*. Ottawa: Industry Canada, 1997. 1996 Census of Canada. Catalogue number 92-353-XPB.

Statistics Canada. *The 2001 Census Handbook*. Ottawa: Industry Canada, 2002. 2001 Census of Canada. Catalogue number 92-379-XPB.

Statistics Canada. *2001 Census Dictionary*. Ottawa: Industry Canada, 2002. 2001 Census of Canada. Catalogue number 92-378-XPE.