

# Census Handbook

*Census  
Recensement*

*Canada 1986*

99-104E

## Reference



0.4



Statistics Canada / Statistique Canada

Canada





Statistics Statistique  
Canada Canada

---

Census  
Recensement  
Canada 1986

Reference

# Census Handbook

---

Published under the authority of the Minister of  
Supply and Services Canada

© Minister of Supply and Services Canada, 1988

Extracts from this publication may be reproduced for individual use without permission provided the source is fully acknowledged. However, reproduction of this publication in whole or in part for purposes of resale or redistribution requires written permission from the Publishing Services Group, Permissions Officer, Canadian Government Publishing Centre, Ottawa, Canada K1A 0S9.

June 1988

Price: Canada, \$18.00  
Other Countries, \$19.00

Catalogue 99-104E

ISBN 0-660-12670-2

Ottawa

La version française est disponible sur demande  
(n° 99-104F au catalogue).

---



---

## **PREFACE**

The first census on what became Canadian soil was conducted by Jean Talon in 1666. That census was limited to an enumeration of the colony's inhabitants and their age, sex, marital status and occupation. Some 320 years later, the Census of Canada has become the major source of information about Canadians and how they live.

The 1986 Census Handbook draws together census information from many sources and is a convenient "first stop" for both new and experienced data users. Readers will find here a brief history of census-taking, a question-by-question outline of the 1986 Census, an explanation of how the variables derived from the census questions can be used, and an introduction to the geography of the census. Also included is information about how the latest census differs from its predecessors, and about what new products and services are available.

The preparation of the 1986 Census Handbook was one of the measures taken to help data users better understand and use census data. More than 40 people contributed to the Handbook, making it truly a corporate effort. Nevertheless, their individual contributions were essential for the completion of this publication, and illustrate the range of skills required to conduct a successful census.

Ivan P. Fellegi  
Chief Statistician



---

This publication was developed under the general direction of Doug Norris, Project Manager, Census Output. Marie Patry, Task Manager of Census Reference Products, was responsible for managing the actual production of the 1986 Census Handbook.

Much of the initial work on designing the contents of the Handbook was done by Maryanne Webber, who also authored and edited parts of the text. Her initial enthusiasm and continuing involvement contributed greatly to the successful completion of the project. Others who were involved in research and writing parts of the text included Pierre Gauthier, Joanne Paradis, Pam Tallon, Nancy Turner and Louise Whalen.

The coordination of the day-to-day production activities was the responsibility of Jeannine Morissette and the production/editing team included Maureen Boisvenu, Christine Campbell, Nicole Charbonneau, Terry Emond, Aurore Leblanc, Jim Reil and Daniel Scott.

Initial drafts of the document were reviewed by Bruno Gnassi, Library of Parliament and Joseph J. Phelan, Regional Municipality of Ottawa-Carleton. Numerous subject-matter specialists at Statistics Canada also reviewed the document. Their comments were helpful in developing the final text.





---

## TABLE OF CONTENTS

	Page
List of Figures .....	5
Chapter 1 – A Brief History .....	7
Chapter 2 – 1986 Census Questions .....	15
Chapter 3 – 1986 Census Variables .....	51
Chapter 4 – Census Geography .....	71
Chapter 5 – Data Quality .....	85
Chapter 6 – Products and Services .....	91
Chapter 7 – Taking a Census .....	107
Census Quiz .....	119
Appendix I – Legislation Requiring Census Data .....	121
Appendix II – 1986 Census Guide for Respondents Completing Their Census Form .....	125
Index .....	143
Bibliography .....	147
Regional Reference Centres .....	149



---

## LIST OF FIGURES

	Page
1. Census Questions Since Confederation .....	12
2. Highest Level of Schooling .....	58
3. Population and Labour Force Activity Components, 1986 Census of Canada .....	59
4. Components of Income .....	62
5. Link Between Households, Economic Families and Census Families .....	65
6. The Dwelling Universe in the 1986 Census .....	67
7. Census Geostatistical Areas by Province and Territory, 1986 Census .....	72
8. The 1986 Census Geographic Hierarchy .....	73
9. Census Metropolitan Areas .....	77
10. Census Agglomerations .....	78
11. Consolidated Census Metropolitan Areas (CMAs) and Census Agglomerations (CAs) With Their Constituent PCMA/PCAs .....	80
12. Overview of 1986 Census Publications .....	93
13. 1986 Census Timetable .....	107
14. Data Collection Steps .....	114
15. Edit and Imputation .....	115



# CHAPTER 1



---

# CHAPTER 1

## A BRIEF HISTORY

### 1.1 Before Confederation

The practice of census-taking (from the Latin word *censere*, to assess) can be traced back to at least 2275 B.C., when the first recorded survey of tax-paying households was conducted in China. The Chinese Emperors used their survey information to set taxes and to register young men for military service. Since all ancient governments needed both funds and soldiers, enumeration techniques gradually became everywhere part of the apparatus of power: the Bible mentions an enumeration of military men among the Israelites at the time of the Exodus.

These early efforts differed substantially from modern censuses, however: methods were crude and goals were short term. It was not until the Industrial Revolution had begun to dramatically alter demographic and economic patterns in Europe and the New World that the value of national statistical profiles became clear. Social scientists, politicians and a host of others needed reliable, regularly collected data to help them understand and direct change.

Jean Talon, an outstanding New World contributor to the development of census-taking, recognized the value of solid statistics. As Louis XIV's Intendant of New France, Talon took stock of the colony's human capital in 1666. In fact, Talon not only masterminded the first census on what became Canadian soil, he also did a good deal of the data collection personally, visiting door-to-door throughout New France. In the end, he discovered that the total population (excluding aboriginals and royal troops) was 3,215. Talon also collected information on age, sex, marital status and locality. And for 763 of his respondents, profession or trade was recorded.

After concluding his census, Talon realized that he did not have all the information he needed. Not easily discouraged, he conducted a follow-up census of livestock and cultivated land one year later. Talon was one of the first to understand that agricultural and economic measures are as important as demographic information.

Thirty-six censuses, the last in 1739, were conducted under the French regime. The idea also caught on in territories that had been ceded to the British by the Treaty of Utrecht (1713); in the same period, 19 censuses were held in the Péninsule Acadienne (Nova Scotia), 16 in Isle Royale (Cape Breton Island), 25 in Newfoundland, four in the area of St-John River (New Brunswick) and seven in St-John Island (Prince Edward Island). A wide range of questions were used to cover such subjects as crops, livestock, buildings, churches, grist mills, sawmills -- even swords and firearms!

The British were less fervent census takers than the French, but the practice was not entirely abandoned: censuses were taken in 1765, 1784 and 1790. And after 1817, they seem to have come back into vogue. In 1824, Upper Canada (now Ontario) instituted an annual census that lasted until 1842. Lower Canada (Quebec) conducted seven censuses between 1825 and 1844, and 13 were taken at irregular intervals between 1814 and 1856 in the Assiniboine and Red River District (Manitoba). The scope of these enquiries varied widely, but after 1827 they generally covered a broad range of topics.

Towards the middle of the century, these independent efforts were fused under the Canadian Census Act of the United Provinces (1847 amendment). A general census was taken in 1848, and again two years later. In 1851, royal assent was given to a new act requiring censuses of the provinces in 1852, 1861 and every tenth year thereafter. The decennial Canadian census had been established.

Set against a two-hundred-year background of avid census-taking, the past century looks relatively uneventful: since 1861 only 13 decennial and four less extensive quinquennial censuses have been conducted.

## 1.2 After Confederation

The 1870 Census Act, following on the heels of the British North America Act of 1867, set the tone for census-taking after Confederation. Many of the provisions are still with us. For example, the census had to be conducted before a certain date (in 1911, this was set as the first week in June). The Act also gave census takers access to public records and instituted a penalty for refusing to answer census questions.

The 1871 Census enumerated the population of the four original Canadian provinces – Nova Scotia, New Brunswick, Quebec and Ontario. Manitoba and British Columbia, which had by then also joined Confederation, were surveyed separately. The major goal was to determine appropriate representation by population in the new Parliament: the provinces were divided into 206 census districts corresponding generally to electoral ridings.

Following data collection, 35 to 50 clerks, unaided by machines of any kind, compile results that were published in five bilingual volumes in 1873.

The 1871 Census yielded *de jure* rather than *de facto* population counts. The *de facto* method, popular in Europe, essentially “freezes” people where they happen to be on Census Day -- it produces a snapshot of the population. The *de jure* method counts people at their usual (or “official”) residences, regardless of where they are on Census Day. Most censuses are a compromise between pure *de jure* and pure *de facto*. So it is in Canada, but the emphasis since 1871 has been on *de jure* population counts.

In 1881, two major changes were made to the census. All census takers were required to take an Oath of Secrecy -- a pledge still required today -- and the geographical scope was extended to include British Columbia, Manitoba and Prince Edward Island.



---

In the closing decade of the 19th century, Canada's western population was growing rapidly with the arrival of European immigrants and a steady tide of settlers from the Eastern provinces. An 1896 farm and population census of Manitoba helped quantify these rapid changes. And when Alberta and Saskatchewan were created from the vast sweep of the Northwest Territories in 1905, the farm census was extended. A year later, a Census and Statistics Office -- a permanent government bureau -- was established so that "the experience gained in the taking of one census was preserved for use in the next, instead of being pitched in the discard..."<sup>1</sup>

Responsibility for the census shifted from the Ministry of Agriculture to the Ministry of Trade and Commerce in 1912. Six years later, the Dominion Bureau of Statistics was created to

"... collect, abstract, compile and publish statistical information relative to the commercial, industrial, social, economic and general activities and condition of the people, to collaborate with all other departments of the Government in the compilation and publication of statistical records of administration according to the regulations, and to take the Census of the Dominion."

Mid-decade (or quinquennial) censuses of the Prairie provinces became statutory early in the 20th century. By 1956, rapid economic growth and urbanization meant that national demographic information was needed more frequently, and the quinquennial census was extended to the whole country. The 1986 Census was the fourth such mid-decade census.

### 1.3 1986 Census: Scope and Cost

Canada's quinquennial censuses have traditionally covered fewer subjects than their decennial counterparts. But in the years leading up to the 1986 Census, data users argued persuasively that labour market and income questions should be included. Nothing but a full census could meet the growing need for local labour market data, a need made more pressing by the occurrence of a major recession (1981-82) since the last census.

Yet, the 1980s have been a period of public sector restraint. Statistics Canada, therefore, faced the challenge of expanding the content relative to other quinquennial censuses while reducing costs. A policy of minimum change was thus adopted in planning the 1986 Census. In other words, unless there were compelling reasons not to do so, 1981 Census questions, and data collection and processing procedures, were retained to keep development costs as low as possible.

Other cost-cutting measures taken were:

- no paid advertising in the public communications program;
- cancellation of a quality check on the coverage of dwellings;
- employment of students and other youths in temporary census positions, using funds earmarked for youth employment programs;

---

<sup>1</sup> Dominion Bureau of Statistics. D.B.S. – History, Function and Organization (Ottawa: DBS, 1952), p.9.

- the recovery of funds spent on data dissemination through the sale of products and services.

These and other steps resulted in substantial cost reductions. Measured in constant dollars, costs dropped from \$18 per household in 1981 to \$15 in 1986. Savings are more dramatic when compared to the 1971 Census, which cost \$30 per household.

When deciding on the questions to include in any census, a balance must be struck between current relevance and historical continuity. Many users of census data need to compare results over time, but information stretching back several decades is of limited value if the question or underlying subject are not currently meaningful. Every census must find its own solution to this dilemma; in 1986, a number of content changes were made, but the imperative of minimum change gave the edge to historical continuity.

## 1.4 The Census and the Law

Requirements for census data are imbedded in a multitude of acts and statutes. Some, like the Constitution Act, are sweeping in scope. Others have a more local context: the Library Act of Nova Scotia, for example.

As noted earlier, the British North America Act of 1867 established the decennial census, which is still the basis for the allocation of seats for each province in the House of Commons. Originally, the BNA gave 65 seats to Quebec, and the number of seats assigned to other provinces was based on the ratio of Quebec seats to Quebec population, as determined by the census. The BNA provided for a redistribution of seats based on the 1871 Census, and on all subsequent decennial censuses. The BNA census mandate was replaced by a series of acts that culminated in the Statistics Act of 1970, which states:

“A Census of Population of Canada shall be taken in the month of June in the year 1971, and every fifth year thereafter in a month to be fixed by the Governor in Council.”

Census data are important for setting the boundaries of federal electoral districts. These boundaries change over time, as specified in Representation Orders. Both the 1961 and 1966 Censuses respected the boundaries of the 1952 Representation Order, which defined 265 federal electoral districts. The 1971 and 1976 Censuses were taken according to the 1966 Representation Order. The latest order (1976) was observed for the 1981 and 1986 Censuses.

---

Small area data on mother tongue (the first language learned and still understood) are required decennially under the Official Languages Act to establish bilingual districts. Mother tongue data may also be required for litigation under the Canadian Charter of Rights and Freedoms minority language education clause.

There are many other requirements for census data under Canadian law, and a partial list is given in Appendix I.

Did you know that...

... One million Canadians are now aged 75 years or over.

... More than half the Canadian population is over age 30.

Figure 1. Census Questions Since Confederation

	First time in census (before 1961)	1961	1966	1971	1976	1981	1986
<b>Demographic Characteristics</b>							
- Name	1871	X	X	X	X	X	X
- Relationship to reference person	1891	X	X	X	X	X	X
- Sex	1871	X	X	X	X	X	X
- Marital status	1871	X	X	X	X	X	X
- Date of birth	1871	X	X	X	X	X	X
- Place of residence five years ago	1941	X	-	X	X	X	X
- Number of moves since previous census	-	-	-	X	-	-	-
- Date of first marriage	1941	X	-	X	-	X	-
- Fertility	1941	X	-	X	-	X	-
<b>Ethno-cultural and Language</b>							
- Mother tongue	1901	X	-	X	X	X	X
- Home language	-	-	-	X	-	X	X
- Knowledge of official languages	1901	X	-	X	-	X	X
- Place of birth	1871	X	-	X	-	X	X
- Place of birth of parents	1891	-	-	X	-	-	-
- Period/year of immigration	1901	X	-	X	-	X	X
- Citizenship	1901	X	-	X	-	X	X
- Ethnic origin	1871	X	-	X	-	X	X
- Aboriginal status	-	-	-	-	-	-	X
- Religion	1871	X	-	X	-	X	-
<b>Schooling</b>							
- School attendance	1871	X	-	X	X	X	-
- Highest grade of elementary or secondary	1941	X	-	X	X	X	X
- Years of postsecondary	-	-	-	X	X	X	X
- University degree or diploma	-	-	-	X	X	X	X
- Completion of full-time vocational course (3 months or more)	-	-	-	X	-	-	-
- Province of elementary or secondary (or outside Canada)	-	-	-	X	-	-	-
- Major field of study	-	-	-	-	-	-	X
<b>Labour Force Characteristics</b>							
- Hours worked last week	1951	X	-	X	X	X	X
- Hours usually worked each week	1911	X	-	X	-	-	-
- When last worked	-	-	-	X	-	X	X
- Industry	1901	X	-	X	-	X	X
- Occupation	1871	X	-	X	-	X	X
- Class of worker	1891	X	-	X	-	X	X
- Place of work	-	-	-	X	-	X	X

**Figure 1. Census Questions Since Confederation -  
Continued**

	First time in census (before 1961)	1961	1966	1971	1976	1981	1986
<b>Labour Force Characteristics - Concluded</b>							
- Weeks worked in previous year	1901	X	-	X	-	X	X
- Full-time/part-time work	-	-	-	X	-	X	X
<b>Income</b>							
- Total income	-	X	-	X	-	X	X
- Wages and salaries	1901	X	-	X	-	X	X
- Self-employment income <sup>1</sup>	-	X	-	X	-	X	X
- Income from government transfer payments	-	X	-	X	-	X	X
- Investment income	-	X	-	X	-	X	X
- Retirement pensions and other money income	-	X	-	X	-	X	X
<b>Family and Household</b>							
- Presence of mortgage	1941	X	-	X	-	X	X
- Who holds first mortgage	-	X	-	X	-	-	-
- Gross rent	1941	X	-	X	-	X	X
- Total cash rent	1941	X	-	X	-	X	X
- Payment of reduced rent (e.g., gov't. subsidized housing)	-	-	-	X	-	-	-
- Automobiles available for personal use	1941	X	-	X	-	-	-
- Vacation home ownership	-	-	-	X	-	-	-
- Major home appliances <sup>2</sup>	1931	X	-	X	-	-	-
- Average payment for							
• water	-	X	-	X	-	X	X
• electricity	-	X	-	X	-	X	X
• gas	-	X	-	X	-	X	X
• oil, coal, wood, etc.	-	X	-	X	-	X	X
• mortgage	-	-	-	-	-	X	X
• property taxes	-	-	-	-	-	X	X
- Condominiums	-	-	-	-	-	X	X

1 Questions on net farm and non-farm self-employment income were asked in each of the indicated years except 1961, when only the latter was asked.

2 The appliances listed varied from one census to another. In 1931, respondents were asked if they owned a radio; the 1971 list included refrigerator, freezer, dishwasher, clothes dryer, and colour or black and white television.

**Figure 1. Census Questions Since Confederation -  
Concluded**

	First time in census (before 1961)	1961	1966	1971	1976	1981	1986
<b>Housing</b>							
- Dwelling owned/rented	1941	X	X	X	X	X	X
- Value of dwelling	1941	X	-	X	-	X	X
- Structural type	1941	X	X	X	X	X	X
- Number of dwellings in the building	1941	-	-	X	-	-	-
- Number of rooms in the dwelling	1941	X	-	X	-	X	X
- Garage	-	X	-	X	-	-	-
- Piped running water in dwelling	1941	X	-	X	-	-	-
- Bath or shower	1941	X	-	X	-	-	-
- Use of flush toilet in building	1941	X	-	X	-	-	-
- Unoccupied dwelling, reason for	-	-	-	-	X	-	X
- Period of construction	1941	X	-	X	-	X	X
- Length of occupancy	1941	X	-	X	-	X	-
- Number of bedrooms	-	X	-	X	-	-	-
- Source of water supply	-	X	-	X	-	-	-
- Method of sewage disposal	-	X	-	X	-	-	-
- Principal type of heating equipment	1941	X	-	X	-	X	X
- Principal fuel used for							
• cooking	-	-	-	X	-	-	-
• heating	1941	X	-	X	-	X	X
• water heating	-	-	-	X	-	X	-
- Number of bathrooms	-	-	-	-	-	X	-
- Condition of dwelling	-	X	-	-	-	X	-
<b>Other</b>							
- Disability	-	-	-	-	-	-	X
- Wartime service	1951	X	-	X	-	-	-

## CHAPTER 2





---

## CHAPTER 2

### 1986 CENSUS QUESTIONS

#### 2.1 Introduction

The best starting point for a census data user is the census questionnaire itself. Familiarity with question wordings, answer categories and accompanying instructions is useful in understanding the results of any survey. With the census, it is doubly important because self-enumeration meant that respondents generally interpreted the questions for themselves, without the help of trained field staff. This chapter will take the reader through the census questionnaire and is a companion and introduction to the overview of census variables in Chapter 3.

Four questionnaires are used by respondents to give information on population and housing.

The short questionnaire (Form 2A) was bilingual. The long questionnaire (Form 2B) was given to households in the official language of their choice when the Census Representative was able to make contact, and in both official languages when contact did not occur.

#### Form 2A – Short Questionnaire

Used to enumerate four-fifths of all private households in Canada, this form contained the following nine questions:

<u>Question No.</u>	<u>Content</u>
1	Name
2	Relationship to Person 1
3	Date of birth
4	Sex
5	Marital status
6	Mother tongue
7	Aboriginal status
8	Person responsible for household payments and "coverage"
9	Tenure (dwelling owned or rented)

Form 2A provided enough space for up to six household members; additional questionnaires were used for larger households.

#### Form 2B – Long Questionnaire

Form 2B used the nine questions on Form 2A and added 23 others. One of every five private households received Form 2B, except in northern and remote areas where it was distributed to all households to improve the reliability of data for populations too small to support sampling. A Form 2B is provided in the inside back cover pocket.

The additional 23 questions on the Form 2B were:

<u>Question No.</u>	<u>Content</u>
10	Period of construction of dwelling
11	Number of rooms in dwelling
12	Main type of heating equipment and principal heating fuel
13	Payments for shelter, value of dwelling, condominiums
14	Place of birth
15	Citizenship
16	Year of immigration
17	Ethnic origin
18	Home language
19	Ability to speak Canada's official languages
20	Disability
21	Years of schooling
22	Degrees, certificates and diplomas
23	Major field of study
24	Mobility (place of residence in 1981)
25	Work in past week (hours, lay-off, job search, etc.)
26	When last worked
27	Industry (employer, name of firm, kind of business)
28	Place of work
29	Occupation (type of work, most important duties)
30	Class of worker (employee, self-employed, etc.)
31	Weeks worked in 1985, full time/part time
32	Income

### Form 2C - Overseas Questionnaire

Form 2C enumerated Canadians posted abroad in the Armed Forces or in government services. It contained all of the Form 2B questions pertaining to individuals, with the exception of place of residence in 1981. Housing questions were not included: however, questions about the person's usual place of residence in Canada were used. Unlike Form 2A and Form 2B, this questionnaire was designed to record information for one person only.

### Form 3 - Individual Census Questionnaire

Persons in collective dwellings such as hotels, motels and rooming-houses were enumerated using Form 3, which contained no housing questions but otherwise was the same as Form 2B. Form 3 also recorded information on one individual only. Hence it was used to enumerate persons in private households who, for reasons of privacy, did not want to have their information on a household form.

Form 3 served a third objective as well: persons away from home on Census Day and staying with friends, in commercial establishments and so on, completed the first eight questions which included address of usual residence and enough information to determine if the person was enumerated at home.

---

### Other Forms

Many other forms were used by the Census Representative during enumeration. For example, the Visitation Record (VR) was used to list all the dwellings in the enumeration area (by address or physical description) and the number of usual and temporary residents. The VR provided control totals to help ensure that all dwellings and persons were enumerated.

Another form was used by Census Representatives to enumerate hospitals and jails (Form 1A). These institutions tend to have large temporary populations and for practical reasons enumeration was done from the institution's administrative records. Form 1A streamlined enumeration by collecting only one line of basic information for each temporary resident.

## **2.2 Questionnaire Changes Since the 1981 Census**

The 1981 and 1986 Census questionnaires are not identical. Questions on these subjects were not asked in 1986:

- fertility
- religion
- date of first marriage
- school attendance
- condition of dwelling
- length of occupancy
- type of fuel used for heating water
- number of bathrooms

And three new questions were added:

- aboriginal status
- disability
- major field of study

Other changes were made to question wordings and response categories, and these will be noted in the question-by-question review. For information on questions from census years before 1981, consult Figure 1 in Chapter 1.

### **The Census Guide**

Guidelines for answering questions were included on the short questionnaire. For the long questionnaire, an eighteen-page guide was given to households. The guide goes through each question, expanding and clarifying. Because this information is useful to data users, the guide has been reproduced as Appendix II to this publication. A copy of the Guide is also provided in the inside back cover pocket.



## 1986 CENSUS QUESTIONNAIRE

## Front Cover



## 1986 Census of Canada

Please complete your questionnaire on  
Tuesday, June 3, 1986

Prov.	FED No.	EA No.	VN	<b>2B</b>	1.
Hhld. No.	Form type 3	No. of persons	Quest. No. of		2.
			<input type="checkbox"/> TD 1 <input type="checkbox"/> M 3 <input type="checkbox"/> TR		
			<input type="checkbox"/> UD 2 <input type="checkbox"/> DC 4 <input type="checkbox"/> FR		

**CONFIDENTIAL WHEN COMPLETED**

Only persons sworn to secrecy under the Statistics Act will have access to your completed questionnaire. Information derived from this questionnaire will be treated in accordance with the confidentiality provisions of the Act. Persons who have been sworn to secrecy under the Act are subject to prosecution if they violate these provisions.

**Legal requirement**

The information sought in this questionnaire is collected under the authority of the Statistics Act. Everyone is required to provide this information.

**NOTE:** The Guide includes reasons why questions are asked and should provide the answers to any problems that may arise. If not, do not hesitate to call our Telephone Assistance Service. The numbers to dial are listed on the back cover and long-distance calls are free of charge.

**Please complete address or exact location:**

Street and No. or lot and concession

City, town, village, municipality, Indian reserve

Province or territory

Postal code

**Telephone number:**

-

**To Temporary Residents**

If all members of this household are **Temporary Residents** (that is, persons staying here temporarily who have a usual home elsewhere in Canada), enter the total number of temporary residents in this box.....

and do **not** complete this questionnaire. Follow the **return instructions** indicated on the envelope which contained this questionnaire.

**To Foreign Residents**

If all members of this household are **Foreign Residents** (see below), mark here.....

and do **not** complete this questionnaire. Follow the **return instructions** indicated on the envelope which contained this questionnaire.

Foreign Residents are persons in any one of the following categories:

- government representatives of another country attached to the legation, embassy or other diplomatic body of that country in Canada, and their families;
- members of the Armed Forces of another country, and their families;
- students from another country attending school in Canada, and their families;
- workers from another country in Canada on Employment Visas, and their families; and
- residents of another country visiting in Canada temporarily.

The front cover of the census questionnaire contained:

- the guarantee of confidentiality;
- the statement of legal obligation to complete the questionnaire;
- control information, including an address and a unique numerical identifier for each household;
- instructions to temporary and foreign residents not to complete the questions.

The cover had small boxes labelled UD, M and DC. The UD box identified unoccupied dwellings that were part of the housing stock even though they were vacant. The M box indicated a "marginal" or "seasonal" dwelling included in the census because it was occupied but that was not considered part of the housing stock because it was not suitable for year-round living. The DC box recorded a dwelling under construction that was occupied although it could not yet be considered suitable for year-round living.

### **Structural Type**

The cover also had a small box labelled TD. The TD box was used by the Census Representative to record structural type (type of dwelling), using one of the following codes:

- |  |   |
|--|---|
| 1 - Single-detached house                  | 6 - Apartment in a building that has five or more storeys   |
| 2 - Semi-detached house                    | 7 - Apartment in a building that has less than five storeys |
| 3 - Row house                              | 8 - Mobile home   |
| 4 - Other single attached house            | 9 - Other movable dwelling                                  |
| 5 - Apartment or flat in a detached duplex |   |

The 1981 Census included a self-enumeration question on structural type, but serious response problems were encountered: respondents seemed to have difficulty categorizing dwellings other than single-detached house, apartment in a building that has five or more storeys, and movable dwelling. For the 1986 Census, Census Representatives coded structural type. Originally, the CRs were to identify only four categories because the training required for more detailed coding was considered prohibitively expensive. These categories were: single-detached, apartment of five or more storeys, movable dwelling (other than a mobile home) and all other types. In the end, though, a number of data users were willing to fund training and processing for the nine-category list. The more detailed breakdown is therefore available, but only as a custom request.

## Question 1 - Name

<b>1. NAME</b> Using the instructions given on the left, <b>print below</b> the names of all persons usually living here as of Tuesday, June 3, 1986.	
<div style="border: 1px solid black; display: inline-block; padding: 2px;">01</div>	39 <input type="checkbox"/> A
<b>Person 1</b>	
<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	
Last name	
<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	
Given name and initial	

In 1981: Same.

Names helped during the early stages of processing (by facilitating follow-up, for example), but to ensure confidentiality, they were not kept in the census data base.

This question, with the support of Question 8, provided population counts.

The questionnaire contained instructions on "Whom to Include" to help respondents resolve the most frequently encountered problems; Census Representatives had more extensive instructions in case further help was needed. The instructions were to:

"Include all persons who usually live here, even if they are temporarily away (such as on business, at school, or on vacation).

Also include any person staying or visiting here who have no usual home elsewhere.

As a further guide, include:

- a husband, wife or common-law partner who stays elsewhere while working but who returns to this home periodically;
- unmarried sons or daughters who are postsecondary students, unless they are financially independent and living elsewhere;
- unmarried persons who live here while working, even if they return to another home periodically;

- persons who usually live here but are now in an institution (such as a hospital or correctional centre), if they have been there less than six months;
- infants born on or before June 2, 1986;
- persons now deceased who were still alive at midnight between June 2 and 3, 1986.

Do not include:

- unmarried sons or daughters who live elsewhere most of the time while working, even if they return to this home on weekends or holidays;
- persons who are now in an institution and have been there for the past six months or longer;
- foreign residents.”



## Question 2 - Relationship to Person 1

### 2. RELATIONSHIP TO PERSON 1

For each person in this household, mark  **one box only** to describe his or her relationship to Person 1. If you mark the box "Other relative" or "Other non-relative", print in the relationship to Person 1.

Some examples of the "Other" relationships are:

grandmother  
uncle

room-mate's daughter  
employee's husband

common-law partner of  
son or daughter

(See Guide)

01  Person 1

02  Husband or wife of Person 1

03  Common-law partner of  
Person 1

04  Son or daughter of Person 1

05  Father or mother of Person 1

06  Brother or sister of Person 1

07  Son-in-law or daughter-in-law  
of Person 1

08  Father-in-law or mother-in-law  
of Person 1

09  Brother-in-law or sister-in-law  
of Person 1

10  Grandchild of Person 1

11  Nephew or niece of Person 1

Other relative of Person 1  
(print below)

12  Lodger

13  Lodger's husband or wife

14  Lodger's son or daughter

15  Room-mate

16  Employee

Other non-relative (print below)

17



In 1981: Same.

This question, in conjunction with date of birth, sex and marital status, identified census (nuclear) families, economic families and household composition for analysis of Canadian living arrangements.

### Question 3 – Date of birth

<p><b>3. DATE OF BIRTH</b>          Print day, month and year. Example:          If you were born on the 10th of          February, 1945, you would enter</p>					
<table style="margin: auto;"> <tr> <td style="border: 1px solid black; padding: 2px;">10</td> </tr> <tr> <td style="text-align: center; font-size: small;">Day</td> </tr> </table>		10	Day		
10					
Day					
<table style="margin: auto;"> <tr> <td style="border: 1px solid black; padding: 2px;">02</td> <td style="border: 1px solid black; padding: 2px;">1945</td> </tr> <tr> <td style="text-align: center; font-size: small;">Month</td> <td style="text-align: center; font-size: small;">Year</td> </tr> </table>		02	1945	Month	Year
02	1945				
Month	Year				
<p><i>If exact date is not known,          enter best estimate.</i></p>					
<table style="margin: auto;"> <tr> <td style="border: 1px solid black; width: 40px; height: 20px; text-align: center;"> </td> </tr> <tr> <td style="text-align: center; font-size: small;">Day</td> </tr> </table>			Day		
Day					
<p>18</p> <table style="margin: auto;"> <tr> <td style="border: 1px solid black; width: 40px; height: 20px; text-align: center;"> </td> <td style="border: 1px solid black; width: 100px; height: 20px; text-align: center;">       </td> </tr> <tr> <td style="text-align: center; font-size: small;">Month</td> <td style="text-align: center; font-size: small;">Year</td> </tr> </table>			Month	Year	
Month	Year				
<p>19 <input type="checkbox"/> D</p>					

In 1981: Same.

The age variable is derived from this question. Asking for date of birth yields more accurate results than a direct question on age.

### Question 4 – Sex

<p><b>4. SEX</b></p>
<p>20 <input type="checkbox"/> Male</p>
<p>21 <input type="checkbox"/> Female</p>

In 1981: Same.

This question added value to the analysis of other census variables, not only for the population as a whole, but also for subgroups (e.g., aboriginal women, elderly women, lone-parent families headed by men).

---

### Question 5 – Marital status

<b>5. MARITAL STATUS</b> What is your marital status? <i>(See Guide)</i>  <i>Mark one box only</i>	
22	<input type="checkbox"/> Now married (excluding separated)
23	<input type="checkbox"/> Separated
24	<input type="checkbox"/> Divorced
25	<input type="checkbox"/> Widowed
26	<input type="checkbox"/> Never married (single)

In 1981: Same, except for the instructions provided for common-law partners.

The marital status question is used in conjunction with Question 2 (relationship to Person 1) to group individuals into families. Marital status data are also important for the preparation of intercensal population estimates.

In 1981, common-law partners were instructed to record their marital status as "now married". In 1986, they were asked to report themselves as single, divorced, separated or widowed. The responses were then recoded through the editing process so that the 1981 and 1986 data are totally comparable.

### Question 6 - Mother tongue

<p><b>6.</b> What is the language you ▪ <b>first learned</b> in childhood and <b>still</b> understand? (See Guide)</p>			
27	<input type="checkbox"/> English		
28	<input type="checkbox"/> French		
29	<input type="checkbox"/> Italian		
30	<input type="checkbox"/> German		
31	<input type="checkbox"/> Ukrainian		
32	<table border="1"><tr><td style="width: 40px; height: 20px; border: 1px solid black;">       </td><td style="width: 150px; height: 20px; border: 1px solid black;"></td></tr></table>		
<i>Other (specify)</i>			

In 1981: Same, except that respondents were instructed to mark one box only.

Question 6 identified respondents' mother tongue. In 1986, more extensive guidelines were given to the respondents who wanted to report more than one language. Also, in the list of languages (which were the five most prevalent, based on the previous census results), the order of German and Italian was inverted, as Italian had moved to third most common.

## Question 7 – Aboriginal status

7. Do you consider yourself an aboriginal person or a native Indian of North America, that is, Inuit, North American Indian or Métis? (See Guide)

33  No, I do not consider myself Inuit, North American Indian or Métis

34  Yes, Inuit

35  Yes, status or registered Indian

36  Yes, non-status Indian

37  Yes, Métis

38

In 1981: Not included.

Question 7 was meant to identify and locate the aboriginal population of Canada. This question was separated from the ethnic origin question and asked of 100% of the population instead of, as in 1981, a sample.

The question wording encouraged "self-perception"; hence, multiple responses were accepted, excluding of course a "No" response in combination with any other response.

Significant data quality problems have been identified with this question: published counts of the aboriginal population will be based on Question 17, the ethnic origin question. (For more information, see Chapter 5.)

## Question 8 – Person responsible for household payments and "coverage"

**8. (a)** Print the name of the person (or one of the persons) who lives here  
 • and is responsible for paying the rent, or mortgage, or taxes, electricity, etc., for this dwelling.

**07**

01

Last name

Given name and initial

*This person shall answer Questions 8 (b) to 13.*

**NOTE:** *If no one living here makes any such payments, mark here  and answer Questions 8 (b) to 13 yourself.*

**(b)** How many persons usually live here (according to the WHOM TO INCLUDE item in the INSTRUCTIONS FOR QUESTION 1)?

02  Number of persons

**(c)** Did you leave anyone out of Question 1 because you were not sure whether he or she should be listed? *For example, a student, a lodger who also has another home, a new baby still in hospital, live-in help, or a member of this household who has become a patient in a hospital or nursing home within the past six months.*

Yes                       No

*If "Yes", print the name of each person left out and the reason.*

Name

Reason

Name

Reason

*If you require more space, please use the Comments section on the last page of this questionnaire.*

**(d)** How many persons who have a usual home elsewhere in Canada are staying or visiting here temporarily (as of Census Day, June 3)?

None  
 OR  
 Number of persons

In 1981: Same.

This question played both an administrative and a data role. Administratively, it ensured that a person knowledgeable about the dwelling answered the housing questions. And parts (b), (c) and (d) were designed to enumerate Canadian citizens and landed immigrants who might have been missed by other questions. Census Representatives conducted follow-up interviews when a householder expressed doubts about the status of someone in the household, and they also contacted households to complete a Form 3 for any temporary residents reported in Question 8(d). Discrepancies between the number of household members reported in Question 8(b) and the number of people actually listed in Question 1 were also followed up.

### Question 9 – Tenure (dwelling owned or rented)

9. Do you (or does any other member of this household):

Mark one box only

03  own this dwelling (even if it is still being paid for)?

04  rent this dwelling (even if no cash rent is paid)?

In 1981: Slight change in wording.

Question 9 and resulting data are referred to as *tenure*. In 1981, the question was passively worded: "Is this dwelling: (a) owned or being bought by you or a member of this household or, (b) rented (even if no cash rent is paid)?"

For historical and statutory reasons, shelter occupancy on reserves does not lend itself to the usual classification by standard tenure categories. Therefore, a special category on reserve has been created for 1986 Census products to apply to all occupied private dwellings on reserves whether originally reported as owned or rented. Thus, tenure categories owned and rented refer to occupied private non-reserve dwellings only.

### Question 10 – Period of construction of dwelling

10. To the best of your knowledge, when was this dwelling or the building containing this dwelling originally built? (Mark the period in which the building was completed, not the time of any later remodelling, additions or conversions.)

Mark one box only

08

01  1920 or before

02  1921 - 1945

03  1946 - 1960

04  1961 - 1970

05  1971 - 1975

06  1976 - 1980

07  1981 - 1985

08  1986

In 1981: Same, except that the categories after 1971-1975 were 1976-1979, 1980 and 1981.

This was the first of the questions asked of the sample. It yielded the variable called *period of construction*.

### Question 11 – Number of rooms in dwelling

11. How many rooms are there in this dwelling? (Include kitchen, bedrooms, finished rooms in attic or basement, etc. Do not count bathrooms, halls, vestibules and rooms used solely for business purposes.)

09  Number of rooms

In 1981: Same.

The number of rooms in a dwelling is valuable for housing-stock data. When related to household size, it can also be used as a measure of crowding.



## Question 12 – Main type of heating equipment and principal heating fuel

12. (a) What is the main type of heating equipment for this dwelling?

•

*Mark one box only*

10  Steam or hot water furnace or boiler

11  Forced hot air furnace with heat pump

12  Forced hot air furnace without heat pump and using one type of fuel/energy only (e.g., natural gas, oil, or electricity)

13  Forced hot air furnace without heat pump and using more than one type of fuel/energy for heating (e.g., oil and wood, or oil and electricity)

14  Installed electric heating system, e.g., built-in baseboard

15  Other electric heating system (plug-in)

16  Heating stove, cooking stove, space heater

17  Other, e.g., fireplace

(b) Which fuel or energy is used most for heating this dwelling?

*Mark one box only*

18  Piped gas, e.g., natural gas

19  Bottled gas, e.g., propane

20  Electricity only

21  Electricity as the main source where more than one fuel/energy is used, e.g., electricity and oil

22  Oil or kerosene

23  Wood

24  Coal or coke

25  Other fuel or energy

In 1981: Answer categories were less extensive.

In 1981, only five answer categories were provided for the question on the main type of heating equipment: steam or hot water furnace; forced hot air furnace; installed electric heating system; heating stove, cooking stove, space heater; other (fireplace, etc.).

The answer categories for the question on the type of fuel or energy used for heating the dwelling were increased by one in 1986: in 1981, there had been only one electricity category.

Heating equipment data are useful to agencies responsible for energy, including Energy, Mines and Resources Canada, provincial electrical utilities, and private sector gas and oil companies. Manufacturers of heating equipment also have an obvious interest.

## Question 13 - Payments for shelter, value of dwelling, condominiums

13. For this dwelling, what are the yearly payments (last 12 months) for:

(a) electricity?

27  None, or included in rent or other payments.  
OR

Dollars                      Cents

28   00 per year

(b) oil, gas, coal, wood or other fuels?

29  None, or included in rent or other payments.  
OR

Dollars                      Cents

30   00 per year

(c) water and other municipal services?

31  None, or included in rent, municipal taxes or other payments.  
OR

Dollars                      Cents

32   00 per year

---

**RENTERS, answer part (d); OWNERS, go to part (e).**

(d) What is the monthly cash rent you pay for this dwelling?

33  Rented without payment of cash rent  
OR

Dollars                      Cents

34   00 per month

▶ Go to the questions concerning Person 1 on page 6

---

**OWNERS, answer parts (e) through (l).**

(e) What are your total regular monthly mortgage (or debt) payments for this dwelling?

35  None ▶ Go to part (g)  
OR

Dollars                      Cents

36   00 per month

(f) Are your property taxes (municipal and school) included in the amount shown in part (e)?

37  Yes ▶ Go to part (h)  
38  No

(g) What are your estimated yearly property taxes (municipal and school) for this dwelling?

39  None  
OR

Dollars                      Cents

40   00 per year

(h) If you were to sell this dwelling now, for how much would you expect to sell it?

Dollars                      Cents

41   00

(i) Is this dwelling part of a registered condominium?

42  Yes  
43  No

In 1981: Same.

Data from these questions are used to estimate shelter costs. Respondents who had occupied their dwelling for less than one year were asked to "estimate and report the yearly amount based on your payments up to this date and on other available information".

### Question 14 – Place of birth

<b>14. Where were you born? (Mark or specify one only, according to present boundaries.)</b>	
<div style="border: 1px solid black; display: inline-block; padding: 2px 5px; margin-bottom: 5px;">09</div> <p><b>IN CANADA</b></p> <p>01 <input type="checkbox"/> Nfld.</p> <p>02 <input type="checkbox"/> P.E.I.</p> <p>03 <input type="checkbox"/> N.S.</p> <p>04 <input type="checkbox"/> N.B.</p> <p>05 <input type="checkbox"/> Que.</p> <p>06 <input type="checkbox"/> Ont.</p> <p>07 <input type="checkbox"/> Man.</p> <p>08 <input type="checkbox"/> Sask.</p> <p>09 <input type="checkbox"/> Alta.</p> <p>10 <input type="checkbox"/> B.C.</p> <p>11 <input type="checkbox"/> Yukon</p> <p>12 <input type="checkbox"/> N.W.T.</p>	<p><b>OUTSIDE CANADA</b></p> <p>13 <input type="checkbox"/> United Kingdom</p> <p>14 <input type="checkbox"/> Italy</p> <p>15 <input type="checkbox"/> U.S.A.</p> <p>16 <input type="checkbox"/> West Germany</p> <p>17 <input type="checkbox"/> East Germany</p> <p>18 <input type="checkbox"/> Poland</p> <div style="border: 1px solid black; width: 100%; height: 20px; margin: 5px 0;"></div> <p style="text-align: center;">Other (specify)</p> <p>19 <input style="width: 50px; height: 20px; border: 1px solid black;" type="text"/></p>

In 1981: Same.

For question 14, respondents were asked to refer to current boundaries if these differed from the boundaries in effect when they were born. Note that this question was the first of the 2B questions pertaining to individual household members.

### Question 15 – Citizenship

<p><b>15. Of what country are you a citizen?</b></p> <p>▪ <i>Mark more than one box, if applicable</i></p> <p>20 <input type="checkbox"/> Canada, by birth</p> <p>21 <input type="checkbox"/> Canada, by naturalization</p> <p>22 <input type="checkbox"/> Same as country of birth (other than Canada)</p> <p>23 <input type="checkbox"/> Other</p> <p style="margin-top: 10px;"><i>If you are a citizen of Canada by birth, go to Question 17.</i></p>
--

In 1981: Same.

Although the 1986 citizenship question was unchanged from 1981, respondents' instructions were more extensive. Citizenship is complex; some people born in Canada are not Canadian citizens (for example, the children of foreign diplomats stationed in Canada), while others are legally Canadians by birth although born abroad (for example, any person born abroad after February 15, 1977 who has at least one Canadian parent).

This question and the place of birth question can be used to identify the country of citizenship of all respondents, with one exception: persons born outside Canada who are neither citizens of Canada nor of their country of birth.

---

## Question 16 – Year of immigration

16. In what year did you first immigrate to Canada?

24

Year

*If exact year is not known, please enter best estimate.*

In 1981: Same.

Question 16 was addressed to all respondents who did not identify themselves as citizens of Canada by birth in Question 15.

Although collected by year, the data from this question can be grouped into "period of immigration" categories.

## Question 17 – Ethnic origin

17. To which ethnic or cultural group(s) do you or did your ancestors belong? (See Guide)

▪ Mark or specify as many as applicable

25  French  
 26  English  
 27  Irish  
 28  Scottish  
 29  German  
 30  Italian  
 31  Ukrainian  
 32  Dutch (Netherlands)  
 33  Chinese  
 34  Jewish  
 35  Polish  
 36  Black  
 37  Inuit  
 38  North American Indian  
 39  Métis

Other ethnic or cultural group(s). For example, Portuguese, Greek, Indian (India), Pakistani, Filipino, Japanese, Vietnamese. (specify below)

40   Other (specify)

41   Other (specify)

42   Other (specify)

In 1981: Several differences, described below.

*Ethnic origin*, a very popular variable with 1981 Census data users, underwent several changes in 1986:

- The question wording was modified from the 1981 version, which asked "To which ethnic or cultural group did you or your ancestors belong on first coming to this continent?"
- A new mark-in box for "Black" was added.
- The number of write-in spaces was increased from one to three.
- The 1981 categories "Status or registered Indian" and "Non-status Indian" were replaced by "North American Indian".
- The ordering of answer categories was changed to more accurately reflect the relative sizes of Canada's ethnic populations.
- An instruction to mark or specify all applicable categories was included, whereas in 1981 multiple responses were accepted but not specifically encouraged.

### Question 18 – Home language

<b>18. What language do you yourself speak at home now?</b> ▪ (If more than one language, which language do you speak most often?) (See Guide)	
43	<input type="checkbox"/> English
44	<input type="checkbox"/> French
45	<input type="checkbox"/> Italian
46	<input type="checkbox"/> Chinese
47	<input type="checkbox"/> German
48	<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; width: 40px; height: 20px; margin-right: 10px;"></div> <div style="border: 1px solid black; width: 150px; height: 20px; margin-right: 10px;"></div> </div> <p style="text-align: center; margin-top: 5px;">Other (specify)</p>

In 1981: Same, except that respondents were instructed to mark one box only.

In 1986, more extensive guidelines were given to the respondents who wanted to report more than one language. Also, some changes were made to the answer categories (Chinese was added, Ukrainian deleted) to reflect changes in the prevalence of languages.

### Question 19 – Ability to speak Canada’s official languages

<b>19. Can you speak English or French well enough to conduct a conversation?</b> (See Guide)	
<i>Mark one box only</i>	
49	<input type="checkbox"/> English only
50	<input type="checkbox"/> French only
51	<input type="checkbox"/> Both English and French
52	<input type="checkbox"/> Neither English nor French

In 1981: Same.

This was the third and last of the census language questions.

The Guide instructed respondents not to report French or English learned at school unless they could conduct a conversation of some length on various topics in that language.

It should be noted that this question relied on respondents’ assessments of their language abilities.

---

## Question 20 – Disability

**20. (a)** Are you limited in the kind or amount of activity that you can do because of a long-term physical condition, mental condition or health problem: *(See Guide)*

At home?

53  No, I am not limited

54  Yes, I am limited

At school or at work?

55  No, I am not limited

56  Yes, I am limited

57  Not applicable

In other activities, e.g., transportation to or from work, leisure time activities?

58  No, I am not limited

59  Yes, I am limited

**(b)** Do you have any long-term disabilities or handicaps?

60  No

61  Yes

In 1981: Not included.

This was a screening question. The results were used to select a sample for a post-censal survey on disability.

## Question 21 – Years of schooling

21. (a) What is the **highest** grade (or year) of **secondary** (high) or **elementary** school you ever attended? *(See Guide)*

62  Enter highest grade or year (1 to 13) of secondary or elementary school

OR

63  Never attended school or attended kindergarten only

(b) How many years of education have you ever completed at **university**?

64  None

65  Less than 1 year (of completed courses)

66  Enter number of completed years at university

21. (c) How many years of schooling have you ever completed at an institution **other than** a university, secondary (high) or elementary school? Include years of schooling at community colleges, institutes of technology, CEGEPs (general and professional), private trade schools or private business colleges, diploma schools of nursing, etc. *(See Guide)*

**10**

01  None

02  Less than 1 year (of completed courses)

03  Enter number of completed years

In 1981: Same.

This question, addressed to all persons 15 years of age and over, produced a number of variables concerning schooling.

Persons educated outside Canada were asked to convert their education to the equivalent in their province of residence. Quite extensive instructions were provided in the Guide because educational systems have changed over time.



## Question 22 – Degrees, certificates and diplomas

**22.** What degrees, certificates or diplomas have you ever obtained?  
 (See Guide)

Mark as many boxes as applicable

- 04  None  
 05  Secondary (high) school graduation certificate  
 06  Trades certificate or diploma  
 07  Other non-university certificate or diploma (obtained at community college, CEGEP, institute of technology, etc.)  
 08  University certificate or diploma **below** bachelor level  
 09  Bachelor's degree(s) (e.g., B.A., B.Sc., B.A.Sc., LL.B.)  
 10  University certificate or diploma **above** bachelor level  
 11  Master's degree(s) (e.g., M.A., M.Sc., M.Ed.)  
 12  Degree in medicine, dentistry, veterinary medicine or optometry (M.D., D.D.S., D.M.D., D.V.M., O.D.)  
 13  Earned doctorate (e.g., Ph.D., D.Sc., D.Ed.)

In 1981: Same.

Question 22 produced an inventory of the educational qualifications of the Canadian population. The Guide gave instructions for a number of potentially confusing categories:

- "Trade certificate or diploma" -- refers to apprenticeship (journeyman's) training and/or in-school training in trades-level vocational and pre-vocational courses that do not have high school graduation as a prerequisite;
- "Other non-university certificate or diploma" -- can be obtained from a community college, CEGEP, institute of technology or any other non-degree-granting educational institution.

The question allowed multiple response and can therefore be used in several ways. For example, the number of people with a particular qualification or combination of qualifications can be tabulated. Or one can present data according to the "highest" degree, certificate or diploma -- this ordering reflects, as far as possible, progressions within the educational system.

### Question 23 – Major field of study

23. What was the major field of study of your **highest** degree, certificate or diploma (**excluding** secondary or high school graduation certificates)? (*See Guide*)

(For example, accounting, civil engineering, history, legal secretary, welding.)

If you have no degree, certificate or diploma or have a secondary (high) school graduation certificate only, mark below.

- 14  ► Go to Question 24

15

In 1981: Not included.

This question had never been asked in the census before. Its inclusion in 1986 was indicative of the need for more extensive labour market data: for example, it can be used in conjunction with the occupation question to identify mismatches between workers' skills and jobs. Answers were coded using a classification with more than 430 categories.

## Question 24 – Mobility (place of residence in 1981)

**24.** Where did you live 5 years ago, that is, on June 1, 1981?

*Mark one box only*

**NOTE:** If your place of residence 5 years ago was a municipality within a large urban area, be careful not to confuse suburban municipalities with the largest city. For example, distinguish between Montréal-Nord and Montréal, Scarborough and Toronto, West Vancouver and Vancouver.

16  This dwelling

17  Different dwelling in this city, town, village, township, municipality or Indian reserve

18  Outside Canada

19  Different city, town, village, township, other municipality or Indian reserve in Canada (*specify below*)

▶ Go to Question 25

City, town, village, township, other municipality or Indian reserve

County Province or territory

20

In 1981: Minor differences.

Question 24 distinguishes between “non-movers”, “movers” (people who have changed dwellings in the past five years but have stayed in the same census subdivision) and “migrants” (people not living in the same CSD as they were at the time of the last census). Note that although the question was addressed to respondents 15 years of age and over, tabulations will show mobility for the population 5 years and over: the mobility status of 5-14 year-olds was determined from information reported by other family members.

Emphasis was placed in 1986 on ensuring that Indian reserves were accurately reported in mobility data. In 1981, the second and fourth answer categories referred only to cities, towns, villages, boroughs, or municipalities.

## Question 25 – Labour force activity

**25. (a)** Last week, how many hours did you work (not including housework, maintenance or repairs for your own home)?  
*Include as work:*

- working without pay in a family farm or business (e.g., assisting in seeding, doing accounts);
- working in your own business, farm or professional practice, alone or in partnership;
- working for wages, salary, tips or commission.

21  Number of hours (to the nearest hour) ► Go to Question 27

OR

22  None ► Continue with Questions 25 (b) to 32

• **(b)** Last week, were you on temporary lay-off or absent from your job or business?  
*Mark one box only*

23  No

24  Yes, on temporary lay-off from a job to which I expect to return

25  Yes, on vacation, ill, on strike or locked out, or absent for other reasons

• **(c)** Last week, did you have definite arrangements to start a new job within the next four weeks?

26  No

27  Yes

• **(d)** Did you look for work during the past four weeks? For example, did you contact a Canada Employment Centre, check with employers, place or answer newspaper ads?  
*Mark one box only*

28  No ► Go to Question 26

29  Yes, looked for full-time work

30  Yes, looked for part-time work (less than 30 hours per week)

• **(e)** Could you have started work last week had a job been available?  
*Mark one box only*

31  Yes, could have started work

32  No, already had a job

33  No, temporary illness or disability

34  No, personal or family responsibilities

35  No, going to school

36  No, other reasons

In 1981: The same variables as in 1981, although a number of wording changes were made.

Completed by all persons aged 15 years and over, this question was used to divide the population into the employed, the unemployed and persons not in the labour force. The reference period was the week preceding Census Day.

The employed included all persons who worked any number of hours, part (a); and those who had a job but did not work because they were on vacation, ill, on strike, locked out or absent for other reasons, part (b). The unemployed included persons on lay-off, part (b); those with a definite arrangement to start a new job in four weeks, part (c); and those looking for a job, part (d) who were available in the reference week, part (e). Note that only the last two answers in part (e) resulted in a person being considered unavailable (and therefore not in the

labour force); the other impediments were considered short-term.

Main changes in 1986 were:

- the order of the activities counted as work in part (a) was inverted to emphasize the importance of reporting unpaid family work;
- in 1981, part (e) was phrased negatively: "Was there any reason why you could not start work last week?" Thus a "no" reply indicated availability, and this may have confused some respondents.

### Question 26 – When last worked

<p><b>26.</b> When did you last work, even for a few days (not including housework, maintenance or repairs for your own home)?</p> <p>▪ <i>Mark one box only</i></p> <p>37 <input type="checkbox"/> In 1986</p> <p>38 <input type="checkbox"/> In 1985</p> <p>39 <input type="checkbox"/> Before 1985</p> <p>40 <input type="checkbox"/> Never worked in lifetime</p>	<p>▶ <i>Answer Questions 27 to 32</i></p> <p>▶ <i>Go to Question 32</i></p>
---	---

In 1981: Minor wording differences.

This question covered all persons 15 years of age and over who did not work in the week preceding Census Day. It screened out those who had not worked at any time since January 1985 from the subsequent questions on industry and occupation.

In 1981, the parenthetical comment in the question referred to "housework or other work around your home". The 1986 wording was more precise.

## Question 27 – Industry (employer, name of firm, kind of business)

**27. NOTE:** Questions 27 to 30 refer to your job or business last week. If you held no job last week, answer for your job of longest duration since January 1, 1985. If you held more than one job last week, answer for the job at which you worked the most hours.

**(a)** For whom did you work?

Name of firm, government agency, etc.

Department, branch, division, section or plant

**(b)** What kind of business, industry or service was this?

*Give full description. For example, wheat farm, trapping, road maintenance, retail shoe store, secondary school, temporary help agency, municipal police.*

41

In 1981: Minor differences in the examples.

This question provided data on industry of employment for all persons aged 15 and over who had worked since January 1, 1985. For the employed, the question referred to the current job or business; for everyone else, it referred to the job of longest duration held in the past year and a half.

The employer's name helped to assign an industry code to the description provided by the respondent. Indeed, if the employer's name could be found in the Business Register (a list of establishments maintained for statistical purposes at Statistics Canada), the industry code was simply copied out.

## Question 28 – Place of work

28. At what address did you work? If no usual place of work, see Guide.

*Mark one box only*

11 (i)  Worked at home (includes living and working on the same farm)  
(ii)  Worked outside Canada  
(iii)  Worked at the address below (*please specify*)

*If street address is not known, give the building name, shopping centre or street intersection, etc.*

Number Street

*If you worked in a suburban municipality within a large urban area, specify that municipality, not the main city.*

City, town, village, township, other municipality or Indian reserve

County Province or territory

In 1981: Same.

This question helped identify employers, and thus improved the accuracy of industry coding. In 1981, it was also a data source, but in 1986 work addresses were not coded as a cost-cutting measure.

## Question 29 – Occupation (type of work, most important duties)

29. (a) What kind of work were you doing?

*For example, accounting clerk, door-to-door salesperson, civil engineer, secondary school teacher, chief electrician, food processing labourer, fishing guide. (If in the Armed Forces, give rank.)*

(b) In this work, what were your most important activities or duties?

*For example, verifying invoices, selling cosmetics, managing the research department, teaching mathematics, supervising construction electricians, cleaning vegetables, guiding fishing parties.*

07

In 1981: The same question wording, some difference in the examples.

The responses to Question 29 are coded into about 500 occupational categories. Parts (a) and (b) of the question are complementary. Part (a) provides information on the type of work done while part (b) adds precision by providing information on the number and complexities of the activities or duties. The combined information is used for coding.

**Question 30 – Class of worker (employee, self-employed, etc.)**

<p>30. (a) In this job were you mainly:</p> <p>08 <input type="checkbox"/> working for wages, salary, tips or commission?</p> <p>09 <input type="checkbox"/> working without pay for your spouse or another relative in a family farm or business?</p> <p>10 <input type="checkbox"/> self-employed without paid help (alone or in partnership)?</p> <p>11 <input type="checkbox"/> self-employed with paid help (alone or in partnership)?</p> <p>▪ (b) If self-employed, was your farm or business incorporated?</p> <p>12 <input type="checkbox"/> No</p> <p>13 <input type="checkbox"/> Yes</p>	<p>Go to Question 31</p> <p>Continue with Question 30 (b)</p>
---	---

In 1981: Minor wording differences.

This question divided the population who worked at some time since January 1, 1985 into paid workers, unpaid family workers and self-employed with and without paid help. The second part of the question identified those who have incorporated their business or farm. These workers have conventionally been treated as paid workers in most published data because they are technically employees of their own business.

In 1981, the second category read, "working without pay for a relative in a family farm or business", and the third and fourth categories did not include the qualifier "alone or in partnership".

Beyond their intrinsic value, data from this question were sometimes useful for coding occupation.



---

**Question 31 – Weeks worked in 1985, full time/part time**

<p><b>31. (a) In how many weeks</b> did you work during 1985 (not including housework, maintenance or repairs for your own home)?</p> <p><i>Include those weeks in which you:</i></p> <ul style="list-style-type: none"><li>• <i>were on vacation or sick leave with pay;</i></li><li>• <i>were self-employed or an unpaid worker in a family farm or business;</i></li><li>• <i>worked full time or part time.</i></li></ul> <p>14 <input type="checkbox"/> None ► Go to Question 32</p> <p>OR</p> <p>15 <input type="text"/> Number of weeks</p> <p><b>(b) During most of those weeks, did you work full time or part time?</b></p> <p><i>Mark one box only</i></p> <p>16 <input type="checkbox"/> Full time</p> <p>17 <input type="checkbox"/> Part time</p>
---

In 1981: A few differences, noted below.

Part-time work is described in the Guide as "work which is less than the normally scheduled weekly hours of work performed by persons doing similar work".

In 1981, the comment in parentheses in the question referred to "housework or other work around your home", and the reference to unpaid family workers did not appear.

This question can be analyzed with Question 32, which refers to the same time period -- the 1985 calendar year. It is not as easy to relate Question 31 to industry, occupation and class of worker. For example, an employed person may have worked throughout 1985, but changed jobs in 1986. The new job may mean a change in industry, occupation and/or class of worker.

### Question 32 - Income

**32.** During the year ending December 31, 1985, did you receive any income or suffer any loss from the sources listed below?

- If yes, please mark the "Yes" box and enter the amount; in case of a loss, also mark the "Loss" box.
- If no, please mark the "No" box and proceed to the next source.
- Do not include family allowances and child tax credits
- Please consult the Guide for details.

AMOUNT

		Dollars	Cents
(a) Total wages and salaries including commissions, bonuses, tips, etc., before any deductions	19 <input type="checkbox"/> Yes 20 <input type="checkbox"/> No	▶	▶
(b) Net non-farm self-employment income (gross receipts minus expenses) from unincorporated business, professional practice, etc., on own account or in partnership	21 <input type="checkbox"/> Yes 23 <input type="checkbox"/> No	▶	▶
(c) Net farm self-employment income (gross receipts minus expenses) from agricultural operations on own account or in partnership	24 <input type="checkbox"/> Yes 26 <input type="checkbox"/> No	▶	▶
(d) Old age security pension and guaranteed income supplement from federal government only (provincial income supplements should be reported in (g))	27 <input type="checkbox"/> Yes 28 <input type="checkbox"/> No	▶	▶
(e) Benefits from Canada or Quebec Pension Plan	29 <input type="checkbox"/> Yes 30 <input type="checkbox"/> No	▶	▶
(f) Benefits from Unemployment Insurance (total benefits before tax deductions)	31 <input type="checkbox"/> Yes 32 <input type="checkbox"/> No	▶	▶
(g) Other income from government sources including provincial income supplements and grants and social assistance, e.g., veterans' pensions, workers' compensation, welfare payments (do not include family allowances and child tax credits) (See Guide)	33 <input type="checkbox"/> Yes 34 <input type="checkbox"/> No	▶	▶
(h) Dividends and interest on bonds, deposits and savings certificates, and other investment income, e.g., net rents from real estate, interest from mortgages	35 <input type="checkbox"/> Yes 37 <input type="checkbox"/> No	▶	▶
(i) Retirement pensions, superannuation and annuities	38 <input type="checkbox"/> Yes 39 <input type="checkbox"/> No	▶	▶
(j) Other money income, e.g., alimony, scholarships	40 <input type="checkbox"/> Yes 41 <input type="checkbox"/> No	▶	▶
(k) Total income from all of the above sources	42 <input type="checkbox"/> Yes 44 <input type="checkbox"/> No	▶	▶
			43 <input type="checkbox"/> Loss

In 1981: The category "old age security pension and guaranteed income supplement" was grouped with "benefits from Canada and Quebec Pension Plan". Likewise, categories (i) and (j) were combined in 1981.

---

This question collected information about "before-tax income" from all sources for the calendar year preceding the census. The Guide (Appendix II) provided detailed instructions for respondents on how to complete the income questions. These instructions may be of interest to the data user because they explain the kind of income reported in each category.

**Did you know that...**

- ... Families increased in number but declined in size. The average family size fell from 3.3 in 1981 to 3.1 in 1986.
- ... Lone-parent families continue to grow at a faster rate than husband-wife families.



# CHAPTER 3



---

## CHAPTER 3

### 1986 CENSUS VARIABLES

#### 3.1 Introduction

Chapter 2 examined the 1986 Census questions. But while the census had 32 questions, the **1986 Census Dictionary** lists well over 100 variables. Obviously, there is not a one-to-one correspondence between questions and variables: some questions produce several variables, while some variables are derived using responses from several questions.

By the same token, some census variables closely resemble the information as it was gathered on the questionnaires, while others are very different. For example, sex has two answer categories, male and female: the categories on the questionnaire correspond exactly to those on the data base. *Sex* is therefore called a direct variable.

Derived variables have undergone transformations. For example, "date of birth" was collected on the questionnaire but *age* is the data base variable. Sometimes the link between collected information and the data base variable is not so straightforward. For example, several questions are used to identify the *unemployed*, yet the word "unemployed" does not appear anywhere on the questionnaire, and the definition is not intuitively obvious.

This chapter looks at census information as variables rather than as questions and answers: uses of the variables are also outlined. More information can be found in the **1986 Census Dictionary**, which provides more detailed variable definitions, expands on the historical comparability of census data and examines pitfalls in data use.

Census variables are grouped into these categories:

- counts and demographic
- ethno-cultural and language
- schooling
- labour force
- income
- families and households
- housing
- institutions and other collectives
- disability

The potential for creating new census variables is virtually limitless: the variables described in this chapter are only the most conventional. With a working knowledge of these variables and of the question and response categories looked at in Chapter 2, data users can derive variables tailored to their needs.

## 3.2 Universes

A "universe" in the census refers to what is counted in a tabulation. The possibilities are:

- population (i.e. individuals)
- families
- households
- dwellings

"Families" are groups within a household; the census offers tabulations according to two distinct definitions, *census family* and *economic family* (see Figure 5). There may be more than one family in a household, but families, by definition, can only include people who are usual residents of the same dwelling.

A "household" consists of all persons living in the same dwelling. There are, therefore, the same number of households as there are occupied dwellings. "Households" and "dwellings" are two distinct universes, though, because household variables refer to people; dwelling variables describe the structures they live in.

Some variables (e.g., *income*) can be tabulated for more than one universe; others (e.g., *ethnic origin*) are suitable for tabulations with one universe only.

## 3.3 Counts and Demographic Data

The census produces counts of people and dwellings by geographic area, and these counts are the first results to be released, usually about 10 months after Census Day. Population counts are used to redefine federal electoral boundaries after each decennial census. They also play a part in determining income transfers under the Federal Provincial Fiscal Arrangements and Established Program Financing Act. Because of such uses, quick release is important.

The census objective is to count:

- all Canadian citizens and landed immigrants with a residence in Canada;
- Canadian citizens and landed immigrants who are abroad, either on a military base or attached to a diplomatic mission;
- Canadian citizens and landed immigrants at sea or in port aboard merchant vessels under Canadian registry.

Persons in the second and third categories may of course also have a place of residence in Canada, but they need not be associated with a dwelling to be counted.

Seen another way, the census counts all people in Canada on Census Day, except for the following:



- 
- foreign diplomats and foreign military personnel and their families;
  - work permit holders and their families;
  - student visa holders and their families;
  - visitors from another country.

The census objective is to count people at their usual place of residence; for most Canadians, this presents no difficulties. Problems can arise, though, when a person is not associated with a dwelling that fits the concept of a "usual place of residence", or is associated with more than one dwelling in Canada.

In the former case, the person is enumerated where he or she stayed on the night preceding Census Day: this could be a hotel, an institution, the home of friends and so on. The latter case includes families who maintain two residences, and students living away from their parents' home. Guidelines for such cases were outlined in Chapter 2 (Question 1).

In short, the population count for a community includes all Canadian citizens and landed immigrants whose usual place of residence is in that community, regardless of where they happen to be on Census Day. Any Canadian citizens and landed immigrants who are staying in the community at the time of the census and who have no usual place of residence elsewhere in Canada are also included.

Linking people to a usual residence has certain implications for the data user. Some areas (for example, resort areas and those that include large work camps) may find that the demand for essential services per head of population (i.e. census-based usual resident population) is high because a large temporary population must be serviced.

### Age, Sex and Marital Status

The age structure of a population changes over time, and data on these changes are needed to adjust the allocation of resources for education, day care, health care, pension plans and a host of other social services.

Census data on the sex structure of the population are essential to maintain the accuracy of population estimates. However, the most important role of this variable is in examining other variables by gender, both for the total population and for subgroups such as the elderly, lone-parent families and the unemployed. When combined with occupation and education data, the sex variable can be used to analyze the extent of the earning gap between men and women. It is also useful for developing and evaluating affirmative action programs and programs that encourage women to enter non-traditional occupations.

*Marital status* is an important variable for tracking the evolution of social attitudes and institutions. Indeed, recent census results have made it clear that the assumptions of family stability upon which many social services and programs have been based in the past are becoming increasingly invalid.

In combination with economic and family data, marital status data are useful for analyzing the economic difficulties faced by lone-parent families.

*Mobility* is often grouped with the demographic variables. It divides the population aged 5 and over into non-movers, movers (people who have changed dwellings since the last census) and migrants (people who have moved into a different census subdivision). Migrant data can be obtained for either origin or destination. For a given area, population in-flow, out-flow and net migration can be analyzed.

### 3.4 Ethno-cultural and Language Data

These variables can be grouped into three sets:

- ethnic origin;
- place of birth, citizenship, year of immigration, period of immigration and age at immigration;
- mother tongue, home language and knowledge of official languages.

#### Ethnic Origin

With one exception (1891), decennial censuses since 1871 have included a question on the "origins" of respondents. Data on aboriginal origins have changed in each census. In 1981, status and non-status Indian, Métis and Inuit origins were identified. In 1986, a new "aboriginal status" question was introduced. However, significant data quality problems with this question have been identified (see Chapter 5). Published counts of the aboriginal population will thus again be based on the ethnic origin question which did not, in 1986, distinguish between status and non-status Indians as the term "North American Indian" was used.

It is the purpose of the ethnic origin question to collect data on the ethnic or cultural ancestral roots of the Canadian population. Responses may reflect a variety of influences such as ancestry, nationality, race, language and religion.

Census ethnic origin data have been used by governments and ethnic groups to identify Canada's visible minority population as this population has recently been included in employment equity programs. However, the 1981 ethnic origin question was intended to capture the ethnic or cultural characteristics of Canada's population as opposed to the "racial" characteristics. This was explained in a recent Statistics Canada report:

"...almost half the persons born in Haiti gave their ethnic origin as French and many persons with a place of birth in Jamaica gave theirs as British. "Visible" is grounded firmly on racial or colour identifiers, traits which the question does not clearly address..."<sup>1</sup>

In response to the Parliamentary Committee report **Equality Now** and the Abella Commission report **Equality in Employment**, the 1986 Census ethnic origin question included the mark-in box "Black". Respondents could mark just Black or mark Black in combination with other origins.

---

<sup>1</sup> Walton O. Boxhill, "Limitations to the Use of Ethnic Origin Data to Quantify Visible Minorities in Canada", Statistics Canada: December 1984, p.10.

---

Although multiple response was not specifically encouraged in 1981, 7.6% of the population reported more than one origin. In 1986, multiple response was encouraged and 28% of the population reported more than one ethnic origin. The respondent could, in 1986, check off any combination of the 15 mark-in boxes listed on the questionnaire, and list up to three additional origins in the write-in spaces. In total, 105 different ethnic and cultural groups were collected. Hence, the possible number of multiple combinations is immense. Summary tabulations will be available for:

- all single origins, with all multiples grouped into a residual category;
- all single origins, plus several multiple combinations involving British and French, with all remaining multiples grouped into a residual category;
- all persons reporting a particular ethnic origin alone or in combination with other origins;
- or, the user can group origins into broad categories, such as "Scandinavian" for the origins of Danish, Icelandic, Norwegian, Swedish and Scandinavian, not included elsewhere.

The *ethnic origin* variable has changed over time, and this must be considered in historical comparisons. Comparability up to 1981 is dealt with extensively in the **1981 Census Summary Guide: Sample Population** (Statistics Canada, Catalogue No. 99-903). The 1981 and 1986 ethnic origin data are not comparable due to changes made to the 1986 question.

#### Place of Birth, Citizenship and Year of Immigration

The *place of birth* variable has 214 categories -- the Canadian provinces and territories plus 202 countries. Comparing province of residence with province of birth for those born in Canada yields "lifetime" interprovincial migration estimates. On the other hand, the birthplace and citizenship questions in combination with other cultural, social and economic variables are a unique source of "stock" data on the immigrant population in Canada. Other data sources, for example, Employment and Immigration registration systems, provide data on international migration flows, but do not yield data on the immigrant population living in Canada on Census Day.

*Citizenship* is a legal concept and the data accordingly reflect the subtleties and variations over time in Canada's citizenship laws. For example, it is possible to hold dual or multiple citizenships. Also, changes introduced by the Citizenship Act of February 1977 may change the propensity of immigrants to acquire Canadian citizenship. Thus, historical comparisons should take into account changes in legislation and related regulations.

Year or period of immigration data make it possible to study immigrant groups that came to Canada at a particular time. Analysis can thus take on a historical dimension: for example, the effects of world events and variations in Canadian immigration policy on the size and composition of the immigrant population.

Year of immigration, in combination with year of birth, yields a variable called *age at immigration* that is useful in the study of differences in the adaptation and integration of Canada's immigrants.

## Language

By world standards, the language data collected in the Canadian census are very detailed. The three principal variables are: *mother tongue*, *home language*, and *ability to speak the country's two official languages*, English and French.

Data on mother tongue -- the first language learned in childhood and still understood at the time of the census -- have traditionally been used to measure the size and distribution of language groups across the country. In 1986, more than 85 languages were identified, including 25 aboriginal languages.

However, since *mother tongue* refers only to the respondent's first language learned in childhood, it is not necessarily an accurate reflection of current language usage in Canada. To meet this need, a new question was asked in 1971 and repeated in 1981 and 1986. This question asked for the language the respondent now speaks at home.

The official language question examines the extent of English/French bilingualism in Canada, and estimates the portion of the population unable to speak either official languages.

The three language variables are widely used to study the evolution of language minorities and bilingualism in Canada. In addition, mother tongue and home language data are often examined together by researchers studying "language assimilation" in Canada. Segments of the population reporting a home language that differs from mother tongue are considered to have made a "language transfer" or a "language shift".

## 3.5 Schooling

The 1986 Census questionnaire included three education questions from which nine variables on schooling are derived.

The first education question deals with years of schooling at three levels of education:

- highest grade (or year) of elementary or secondary school;
- years of university;
- years of other non-university.

These variables can be added together to obtain *total years of schooling* from which statistics such as median or average years of schooling can be derived. These central tendency statistics are useful rough measures or indicators for comparing population groups. However, data users should be careful in drawing comparisons between provinces or over time because of differences and changes in educational systems. For example, B.C. changed from a 13-grade to a 12-grade system in 1971; many people will have completed a grade in B.C. that no longer exists.

---

The second schooling question asks for all degrees, certificates and diplomas ever obtained and yields a number of variables. In addition to the standard hierarchy of highest degree, certificate or diploma (see Question 22), it identifies persons with:

- degrees in medicine, dentistry, veterinary medicine or optometry;
- trades and other non-university certificates;
- university certificates and diplomas above the bachelor level.

For the variable *highest level of schooling*, the years of schooling question is combined with the degrees, certificates and diplomas question. Figure 2 shows the resulting categories.

The third schooling question relates to the *major field of study* of a person's highest postsecondary degree, certificate or diploma. This is a new 1986 Census question and will yield data of value in analyzing labour market needs for certain types of skills or training, and thus will shed some light on the nature of human capital in Canada.

### 3.6 Labour Force

The need for post-recession small area labour market data played a key role in the decision to conduct a large scale census in 1986. Increased participation of women in the labour market, a changing occupational and industrial structure within the economy, and affirmative action and economic development programs for small areas have all contributed to this need.

Labour force characteristics from the census can be divided into three groups:

- labour force activity data for the week preceding Census Day (i.e. the last week in May);
  - data relating to work activities in the calendar year preceding the census year;
  - job characteristics, which describe a person's current position or the one of longest duration held in the year and a half preceding Census Day.
1. **Labour force activity** data divide the population aged 15 years and over (excluding institutional residents) into employed, unemployed and not in the labour force categories. These categories are divided into more detailed groupings. For example, the employed are divided into those who worked in the week preceding Census Day and those who did not; for persons not in the labour force, one can distinguish between those who had worked since January 1, 1985 and those who had not (see Figure 3).

The census definitions of employed, unemployed and not in the labour force are similar to those used for the Labour Force Survey (LFS), the source of the monthly unemployment rate and other labour force data. The LFS produces current labour market data; the geographically detailed data from the census can be analyzed according to characteristics (language, ethnicity) not covered by the LFS.

Figure 2. Highest Level of Schooling

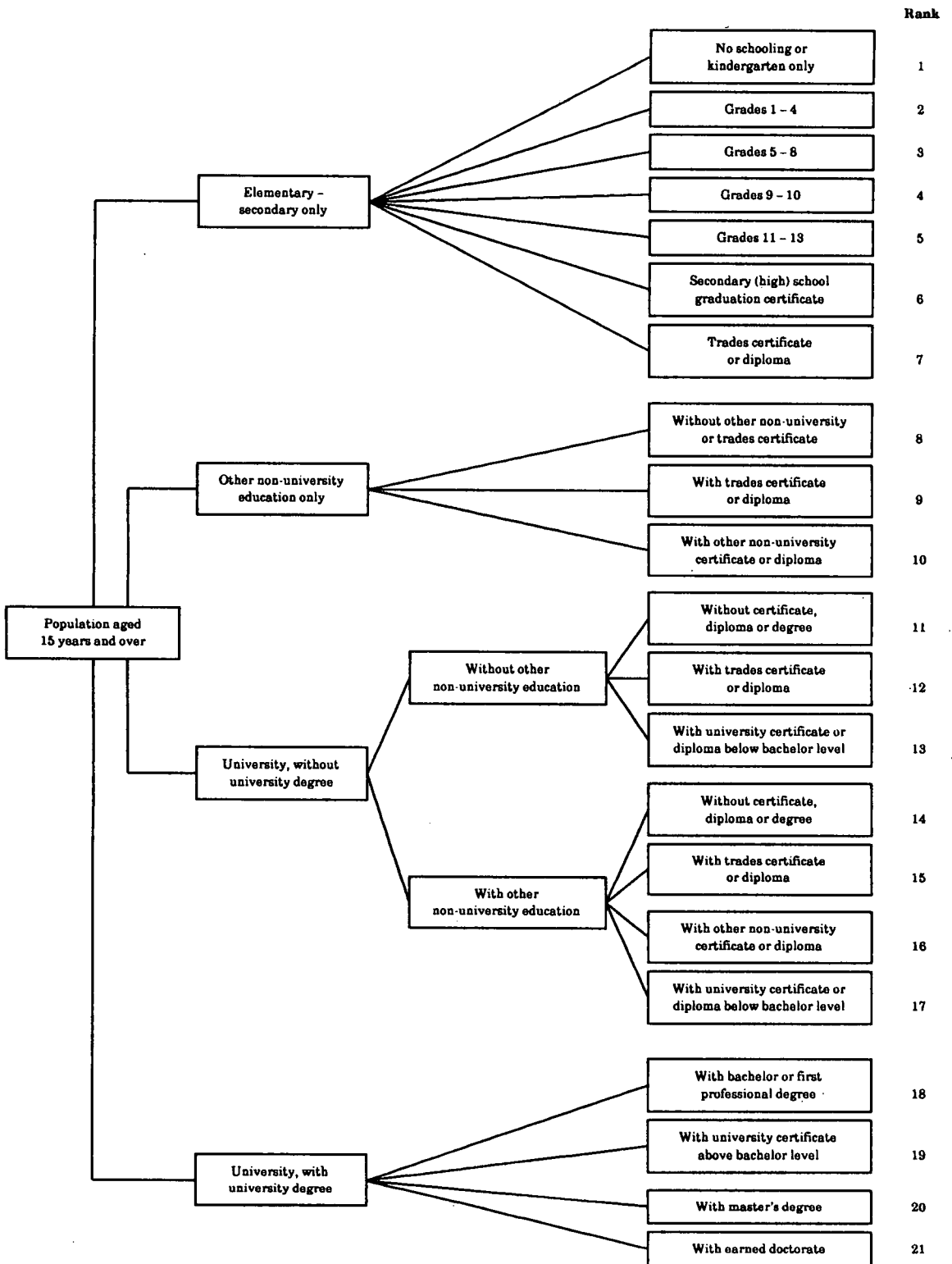
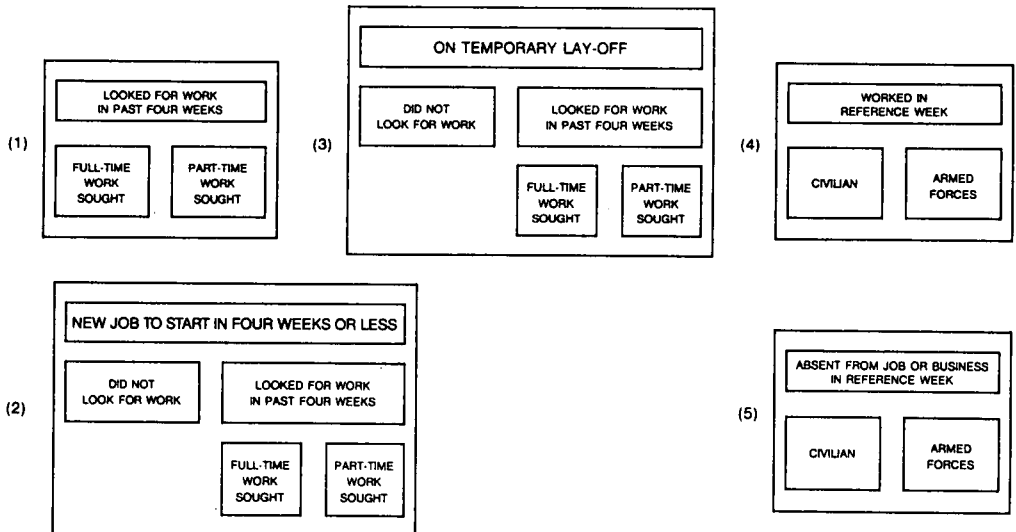
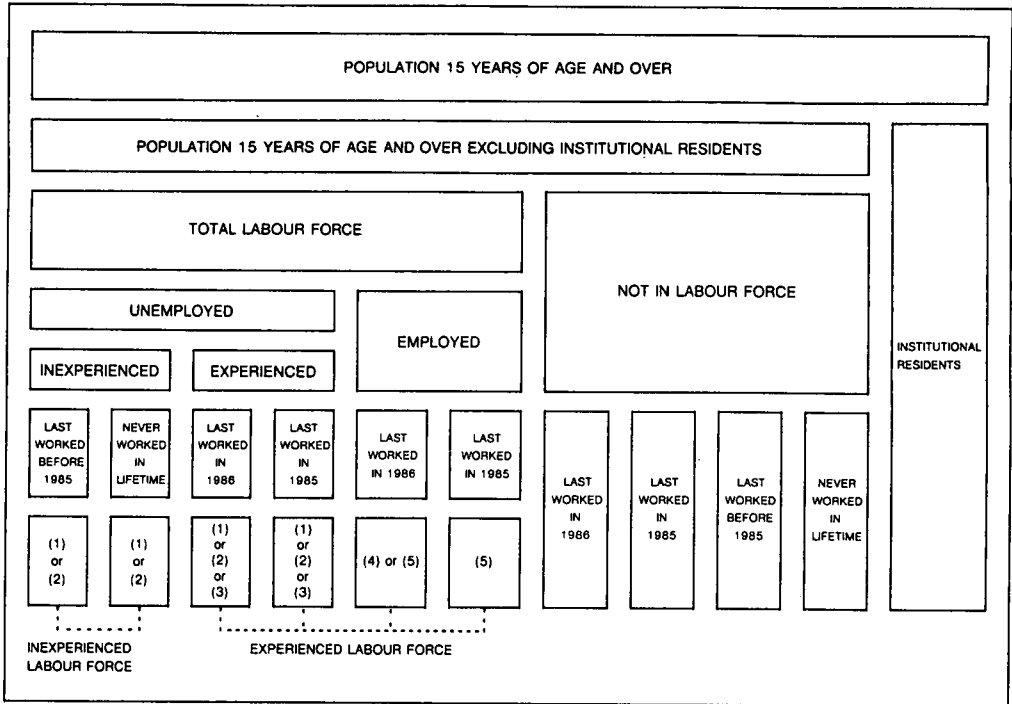


Figure 3. Population and Labour Force Activity Components, 1986 Census of Canada



The following should be noted:

- Persons who did any work at all (from one hour to seven full days) in the reference week are employed. So are those who had a job from which they were absent because of vacation, illness or a labour dispute.
  - "Work" is an activity done in exchange for pay, or with the intention of making a profit. It includes "unpaid family work", which is defined as work without pay in a farm or business owned by a related household member.
  - Persons are unemployed if they are not employed during the reference week but are searching for a job, waiting for recall from a temporary lay-off or waiting to begin a new job that will start within the next four weeks. Also, to be counted as unemployed, a person must be available for work in the reference week.
  - The employed and the unemployed together make up the labour force, and the unemployment rate shows the unemployed as a percentage of the labour force; the participation rate shows the labour force as a percentage of the population 15 years of age and over.
2. **Work activity** provides information on work experienced in 1985 of persons 15 years of age and over, whether they were active during the census reference week or not. Data on the number of weeks worked in 1985, and whether these weeks were mostly full time or part time, were recorded. The term "full-year, full-time worker" is used in the census to describe people who worked full time for 49 to 52 weeks in 1985.
3. **Job characteristics** were collected for persons who worked anytime during the 17-month period from January 1, 1985 to the census reference week. Job characteristics include industry, occupation and class of worker.

**Industry** describes the economic sector of the employer -- manufacturing, retail trade and so on. These descriptions are assigned a code from the Standard Industrial Classification (SIC), which contains over 300 basic categories, and higher level "roll-ups" -- major groups and divisions, for example.

Both the 1970 SIC and the 1980 SIC were used to code census industry descriptions: the 1980 SIC reflects structural changes in the economy but the 1970 SIC is useful for comparisons over time, since it is consistent with data available from the 1981 and 1971 Censuses.

**Occupation** describes work by most important duties. These descriptions are assigned one of over 500 codes from the 1980 Standard Occupational Classification (SOC) system. The 1986 data are available using either the 1980 Standard Occupational Classification (SOC) or the 1971 Occupational Classification Manual (OCM). This permits comparisons with data from the 1981 and 1971 Censuses.



The third job characteristic, **class of worker**, distinguishes between people who work for others (paid workers), those who work for themselves, and unpaid family workers. Traditionally, owners of incorporated businesses have been treated as paid workers (since they are technically employees of their own business), but some data users prefer to have them grouped with other self-employed, i.e. those who have not incorporated. Census data users have a choice: the variable called *class of worker* (direct) includes owners of incorporated businesses with other self-employed, while *class of worker* (derived) groups them in with paid workers.

For analyzing data on industry and occupation, data users can define the target population in different ways. For example:

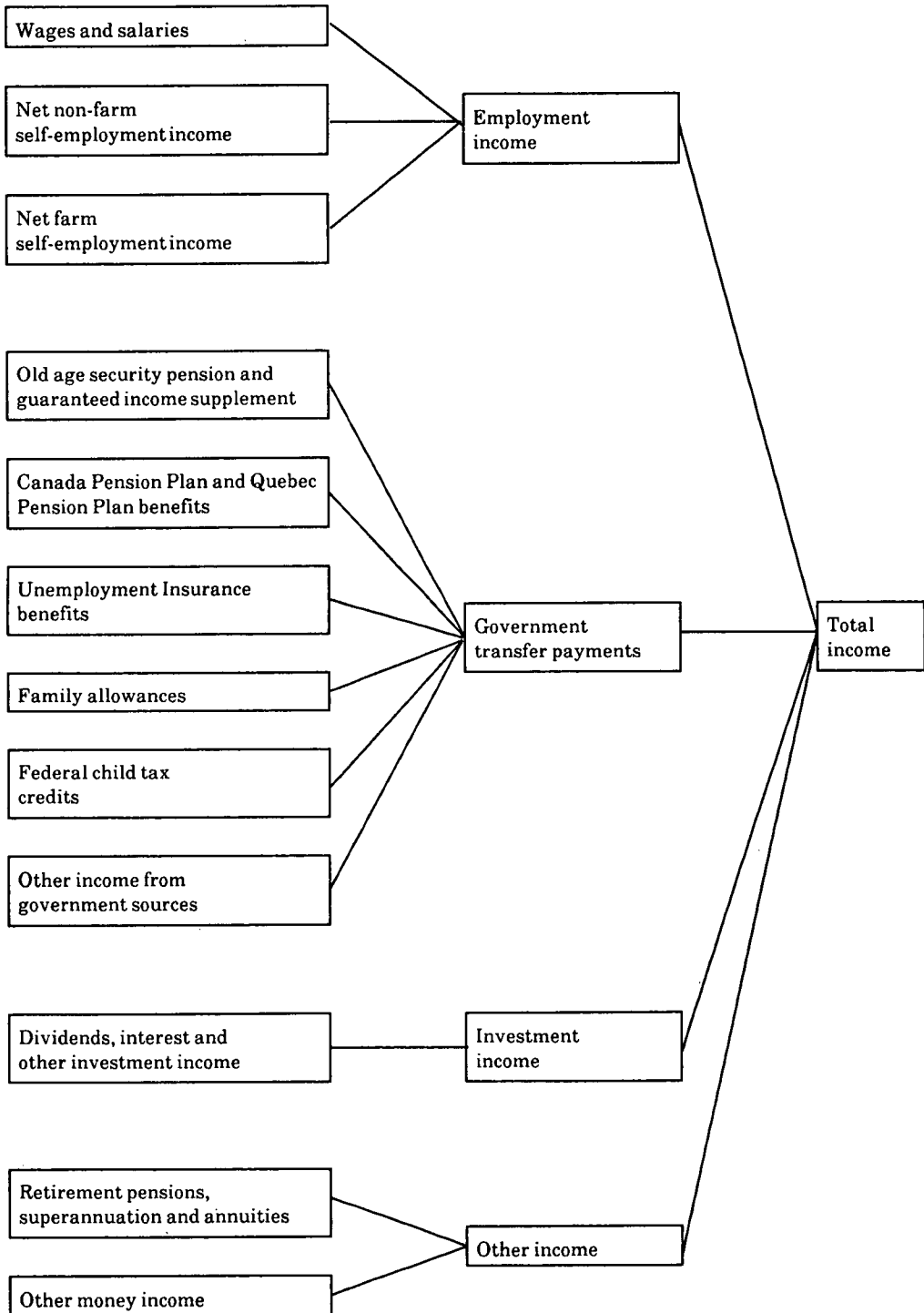
- the employed;
- the experienced labour force -- persons who have worked in the past 17 months and who are currently employed or unemployed;
- those who have worked in the past 17 months, regardless of whether they were in the labour force in the reference week.

Caution should be exercised when relating industry and occupation to variables such as *1985 work activity* and *1985 employment income*. If, for example, a person has changed jobs, the occupation and industry data reported for the reference week, may differ from those for which the respondent reported work activity and income for 1985.

### 3.7 Income

The **1986 Census Dictionary** lists numerous income variables relating to individuals, families and households. The census approaches the analysis of income data in a number of ways:

1. Since the census data base contains the actual income of individuals, families and households, users can define income classes for comparison and analysis.
2. Summary measures such as average and median income can easily be obtained for different segments of the population.
3. The population can be ranked by size of income. This approach was adopted in a 1981 Census analysis of high income families. For this study, census families were ranked by income, and the analysis focused on the top 1%, which corresponded to a 1980 family income of \$93,000 or higher.
4. The income composition of a given group -- women, the elderly, husband-wife families, etc. -- can be obtained by examining income by source (employment, transfer payments, etc.).
5. With sources of income, the number of income recipients for a given source and the amount received can be identified. Alternatively, one can look at the *major source of income*, which identifies the source that accounts for most of a person's or family's income; this variable can show, for example, that in a given group, 75% received most of their income from employment while 10% received most of their income from government transfer payments, and so on.

**Figure 4. Components of Income**

---

Users of census income statistics must also decide:

- Is the unit of analysis individuals, families or households?
- Will the existing income concept be used or does it need to be redefined?
- Will income statistics from different censuses be compared?

Census income data can be tabulated for individuals, census families, economic families and households, or users can define their own analytical unit. Users also have several income concept options -- total income, total income less government transfer payments, income from employment, income from other sources, joint income for husbands and wives, and so on.

Once conceptual and coverage differences have been accounted for, income data from different censuses can be compared by converting them into comparable (constant) dollars. The Survey of Consumer Finances provides a useful source of intercensal income estimates.

### 3.8 Families and Households

*Family* and *household* data are important for understanding the socio-economic and cultural characteristics of a population. The past few decades have seen rapid changes in Canadian family stability, and census data provide a statistical base for studying these changes.

Users of family and household data sometimes face two problems:

1. *Family* and *household* variables can seem cumbersome: it is very difficult to translate complex human relationships into tables. Users should consult the **1986 Census Dictionary** and keep in mind the broad objectives behind the household and family variables.
2. Users often want to analyze family and household data together with characteristics pertaining to individuals. Except for income, none of the census questions directed at individuals can be aggregated into family or household responses. For example, it is impossible to obtain a tabulation of families by citizenship. There would, however, be two ways of obtaining citizenship data in a family context. First, one could tabulate families by the citizenship of one family member -- the husband or lone parent, for example. Second, one could select a variable such as *census family status* for which the unit of measurement is individuals rather than families. This variable shows the individual's situation within the family -- "husband/wife", "child", and so on. It is quite feasible to cross-tabulate such a variable with *citizenship*, another "individual" characteristic.

#### Definitions

Several people living in the same dwelling must meet the following conditions to be considered a *census family*: they are husband and wife or common-law

partners, with or without children, or a lone parent and at least one child who has never been married.

The *census family* includes all children who live in the dwelling and have never married. It is possible for two census families to be sharing a dwelling; the families may or may not be related to each other.

An *economic family*, on the other hand, includes all persons related by blood, marriage or adoption living in the same dwelling. For example, a brother and a sister living together, or a mother and her separated daughter, would constitute an economic family, but not a census family.

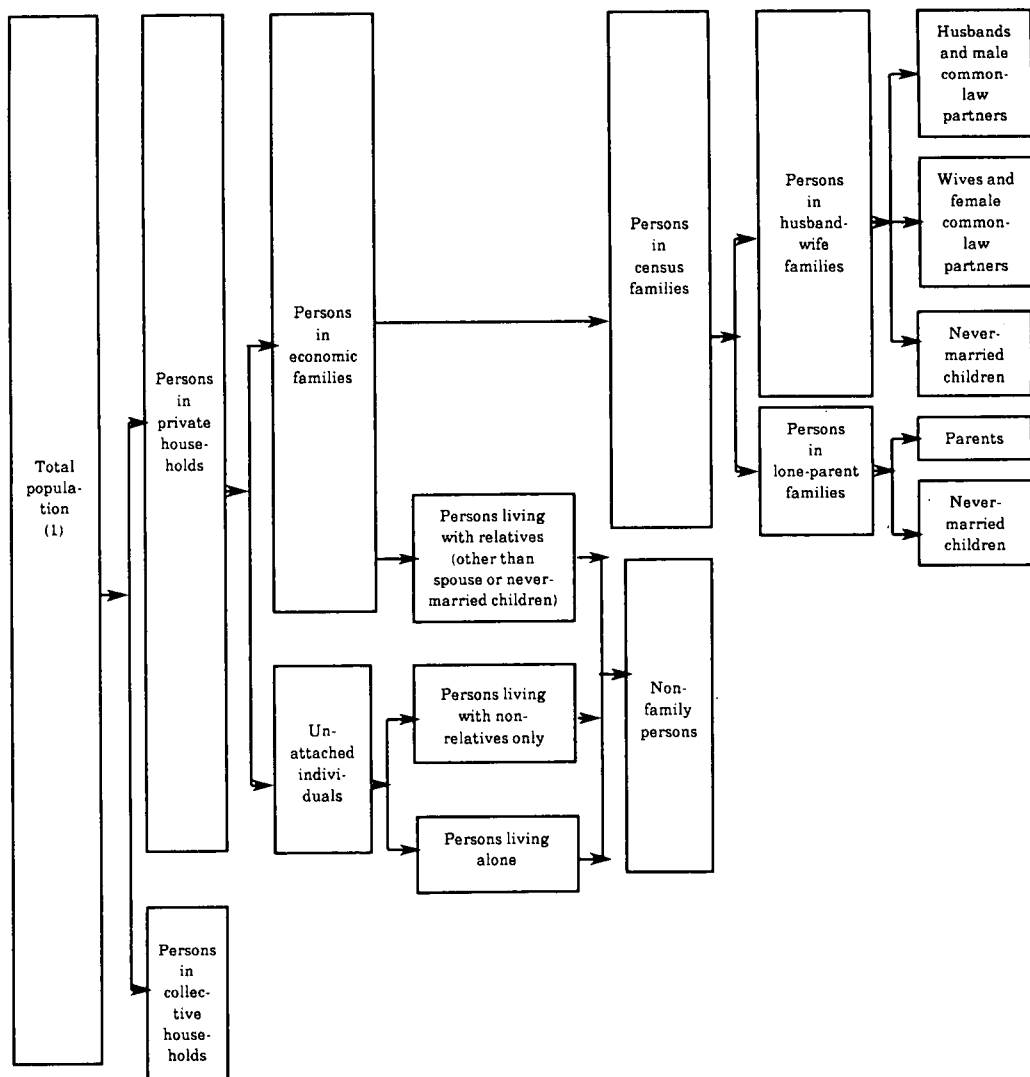
Finally, the *household* is the broadest concept, encompassing all persons who live in a particular dwelling whether they are related or not. Figure 5 shows the link between households, economic families and census families.

With a general decline in household size has come an increased interest in the problems and advantages of living alone. The chart shows that there are three ways of defining a target population for a study of this issue. The narrowest definition would be "persons living alone" -- in other words, one-person households. The second option is "unattached individuals", which includes persons living alone and those living with other people to whom they are not related: these other people could also be unattached individuals or they could constitute an economic family. The third and least restrictive option is "non-family persons", which includes unattached individuals and people living with relatives, but not part of a census family.

The full range of census variables for families and households is presented in the **1986 Census Dictionary**; one will be singled out here for special mention. *Income* stands apart from other variables because it is conceptually suited to analysis based on individuals, families or households. If income data are used to analyze aspects of employment, then the individual is likely the appropriate unit. However, in an analysis of economic well-being, the family is important: the decision to use the *economic family* or the *census family* concept is usually based on assumptions about income sharing.

Finally, a number of variables included in the **1986 Census Dictionary** under *household* refer not only to the individuals composing a household, but also to the structure they live in. These variables include all those related to shelter costs -- *annual payments for electricity, other energy and water; gross rent and monthly cash rent; annual property taxes, monthly mortgage payments; owner's major payments* (average monthly shelter cost) and *condominium ownership*. Users interested in housing data should remember not to neglect this source of data.

**Figure 5. Link Between Households, Economic Families and Census Families**



<sup>1</sup> Excludes "temporary residents" for whom household/family characteristics do not apply.

---

### 3.9 Housing Data

“A dwelling is a separate set of living quarters with a private entrance from the outside or from a common hallway or stairway inside the building. This entrance should not be through someone else’s living quarters.”

– *Instruction to respondents, 1986 Census questionnaire*

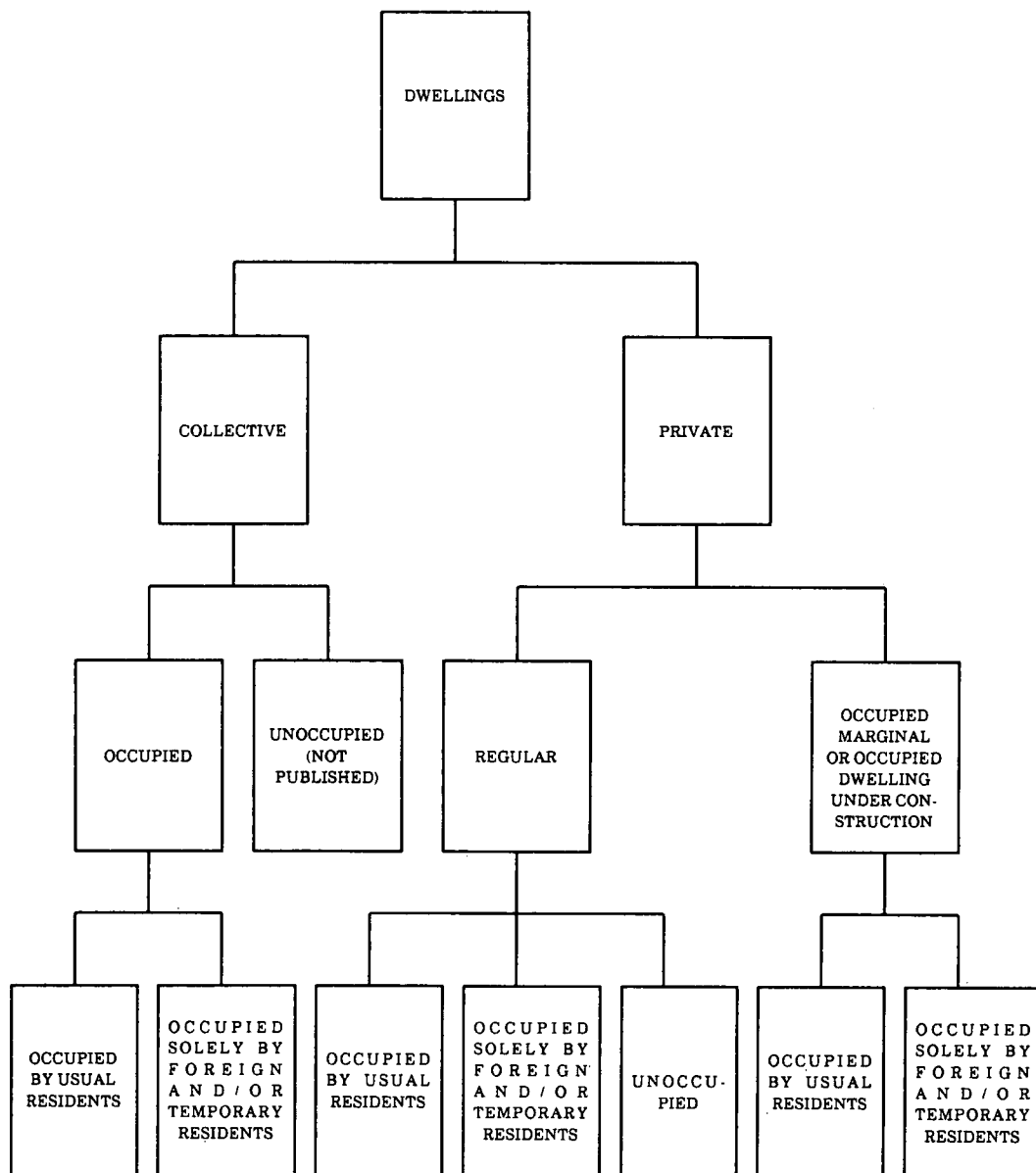
The census identifies dwellings for two main reasons. The first is to associate people with a spatial unit – it would otherwise be impossible to count people once and only once. The second objective is to publish counts of the dwellings themselves along with information on dwelling characteristics.

The **1986 Census Dictionary** describes a range of housing variables that can be used to characterize the housing market at fine levels of geographical detail. Among the 100% data variables are: whether the dwelling is *owned* or *rented* by its occupants and its *structural type*. The 20% data housing variables -- *period of construction*, the *principal type of heating equipment* in the dwelling, the *principal fuel used for heating* -- are essential data for the energy-conscious 1980s. Also, these variables and others such as the number of *rooms* per dwelling and the *value of dwelling* are essential data for economic planners, government, housing agencies and the construction industry.

Figure 6 is a dwelling classification that illustrates the progression from the census questionnaire definition to the definition underlying housing stock estimates. The primary distinction in the classification is between “collective” and “private” dwellings: dwelling characteristics data are collected mainly for occupied private dwellings. Collective dwellings refer to living quarters occupied by 10 or more people unrelated to the reference person, or any other living quarters that are clearly identified communal (rooming-houses), institutional (jails, hospitals) or commercial (hotels), regardless of the number of occupants.

As shown in Figure 6, private dwellings are divided into “regular” and “occupied marginal or under construction”. A regular dwelling is suitable for permanent year-round living; marginal dwellings (including cottages not suitable for year-round use) and dwellings under construction are only listed if occupied. However, if the occupants are foreign or temporary residents, no data on dwelling characteristics are collected.

Figure 6. The Dwellings Universe in the 1986 Census



### 3.10 Institutions and Other Collectives

The census also produces estimates of the number of collective dwellings by type. Among the "institutional collectives" we find orphanages and children's homes; special care homes and institutions for the elderly and chronically ill; hospitals; psychiatric institutions; treatment centres and institutions for the physically handicapped; correctional and penal institutions; young offenders facilities and jails.

Among the "non-institutional collectives" we find hotels, motels and tourist homes; lodging- and rooming-houses; school residences and residences for training centres; YM/YWCAs, missions, hostels, campgrounds and parks; work camps; religious institutions; Hutterite colonies; military camps; merchant and coast guard vessels; naval vessels; other collectives.

The **1986 Census Dictionary** provides the definitions of the list of institutions and other collectives.

The dividing line between institutions and other collective types can sometimes be nebulous. Half-way houses, for example, are considered rooming- or boarding-houses when privately operated; however, when they are government-operated and providing a specific service (e.g., for drug addiction, alcoholism or the rehabilitation of persons released from penal institutions), they are classified as an institution.

Collective dwellings, like private dwellings, may be occupied by either usual or temporary residents. In addition, institutional collectives may be occupied by institutional residents, resident staff or both. The information collected by the census varies, as shown on the following page.

Many people in institutions on Census Day are only there as temporary residents. This fact is important to data users who are interested in knowing more about these facilities -- for example, their capacity and the degree to which they are used.



Type of collective dwelling	Type of resident		Type of census data collected
Institutional	Institutional resident (in care or custody)	Usual resident (has no usual residence elsewhere OR has been in an institution for six months or longer)	Information contained on the 2A questionnaire, except housing
		Temporary resident (has a usual residence elsewhere AND has been in an institution for less than six months)	Name, date of birth, sex, marital status, usual address (i.e. information to confirm that person was enumerated at usual residence)
	Resident staff (has no usual residence elsewhere)	Information contained on the 2B questionnaire, except housing	
Non-institutional	Usual resident		Information contained on the 2B questionnaire, except housing
	Temporary resident		Name, date of birth, sex, marital status, usual address (i.e. information to confirm that person was enumerated at usual residence)

### 3.11 Disability Data

Immediately following the collection phase of the 1986 Census, a number of respondents were selected for a "disability survey". The survey sample included not only those who had reported themselves on the census questionnaire as having a disability, but a number of people who reported no disability. These people were also screened into the sample because past studies have shown that a general limitation question of the type included in the census does not identify all people with an activity limitation.

Results of the post-censal disability survey will be available at about the same time as sample census data. It will be possible to analyze the disability data with a full complement of regular census variables.



# CHAPTER 4



---

## CHAPTER 4

# CENSUS GEOGRAPHY

### 4.1 Introduction

Before data collection can take place, geographic boundaries must be drawn to define the area of responsibility for each Census Representative. Once collection and processing have been completed, data are disseminated for geographic levels ranging from Canada-wide totals to individual communities. Between collection and dissemination, geographic coding occurs in a wide range of census operations.

Data from the 1986 Census will be available for numerous standard geostatistical areas, as well as for non-standard or user-defined areas. Standard geostatistical areas are of two types:

- legally defined administrative areas that are respected by the census, for example, federal electoral districts (FEDs) and census subdivisions (CSDs);
- statistical areas defined by Statistics Canada for the presentation of data, for example, census metropolitan areas (CMAs) and census tracts (CTs).

The main links between geostatistical areas are examined in Section 4.3. The enumeration area (EA) is the building block underlying all other standard geostatistical areas. For example, the 44,042 EAs can be aggregated into 282 federal electoral districts (FEDs) or into 6,009 census subdivisions.

Figure 7 provides a breakdown by province of the standard areas and shows the distribution of the 35 different types of CSDs (townships, hamlets, and so on).

### 4.2 Overview of Standard Geostatistical Areas

The following standard geostatistical areas are used to disseminate census data:

1. Province/Territory
2. Federal Electoral District (FED)
3. Census Division (CD)
4. Census Subdivision (CSD)
5. Census Consolidated Subdivision (CCS)
6. Enumeration Area (EA)
7. Census Metropolitan Area (CMA) and Census Agglomeration (CA)
8. Primary Census Metropolitan Area (PCMA) and Primary Census Agglomeration (PCA)
9. CMA/CA Parts
10. Census Tract (CT)
11. Provincial Census Tract (PCT)
12. Urban Area/Rural Area

This section looks briefly at each type of area. The appropriate links are shown in Figure 8.

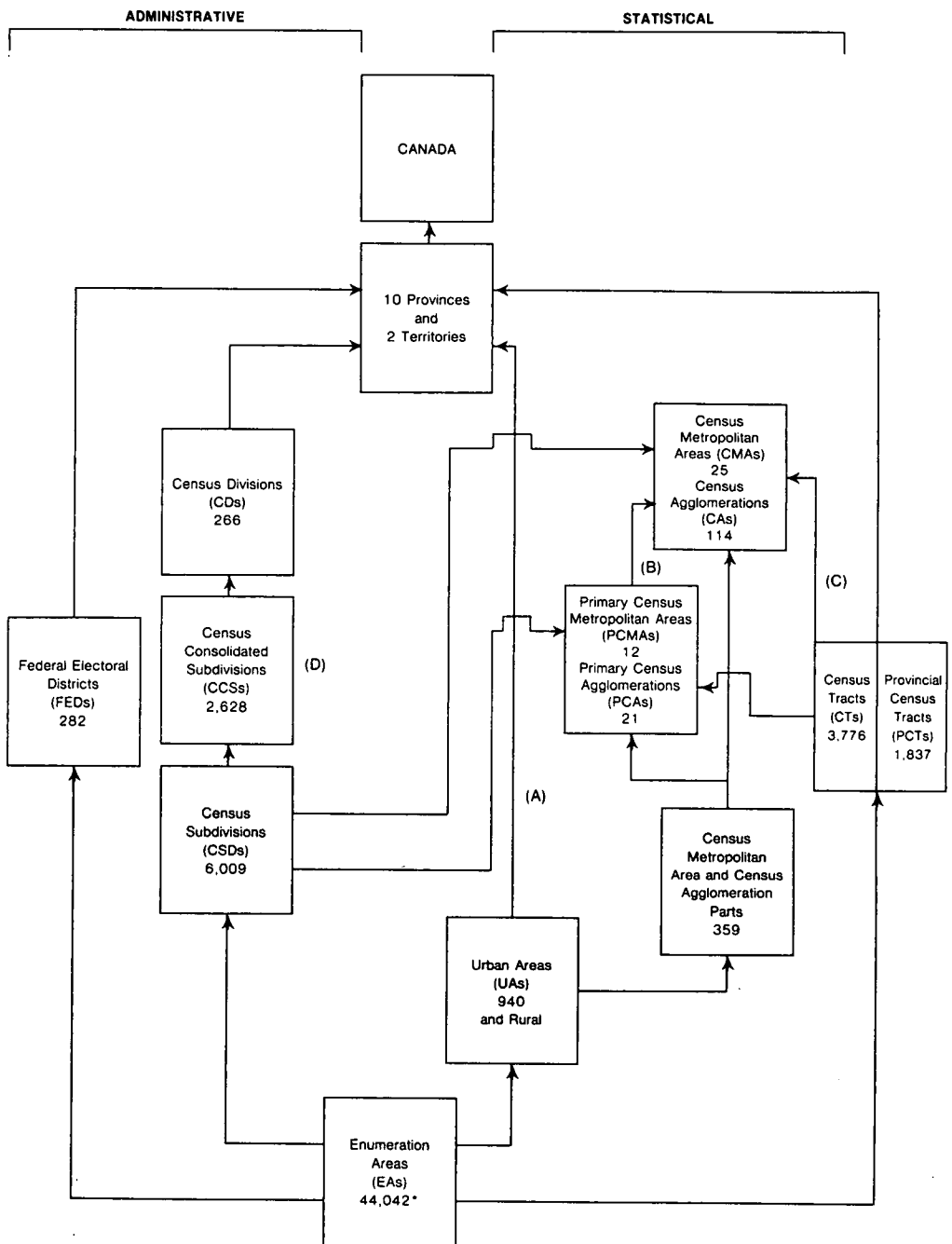
Figure 7. Census Geostatistical Areas by Province and Territory, 1986 Census

	Total	Newfound-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon	Northwest Territories
Federal Electoral District	282	7	4	11	10	75	95	14	14	21	28	1	2
Census Division	266	10	3	18	15	76	49	23	18	19	29	1	5
Census Division	70	10	-	-	-	-	-	23	18	19	-	-	-
County	136	-	3	18	15	76	24	-	-	-	-	-	-
District	10	-	-	-	-	-	10	-	-	-	-	-	-
District Municipality	1	-	-	-	-	-	1	-	-	-	-	-	-
Metropolitan Municipality	1	-	-	-	-	-	1	-	-	-	-	-	-
Region	7	-	-	-	-	-	-	-	-	-	1	1	5
Regional District	28	-	-	-	-	-	-	-	-	-	28	-	-
Regional Municipality	10	-	-	-	-	-	10	-	-	-	-	-	-
United Counties	3	-	-	-	-	-	3	-	-	-	-	-	-
Census Consolidated Subdivision	2,628	87	68	54	150	1,153	527	127	302	72	82	1	5
Census Subdivision	6,009	401	123	118	284	1,868	956	283	942	432	688	34	72
BOR : Borough	1	-	-	-	-	-	1	-	-	-	-	-	-
C : City - Cité	134	2	1	3	6	2	49	5	13	15	36	1	1
CM : County (Municipality)	30	-	-	-	-	-	-	-	-	30	-	-	-
COM : Community	182	140	42	-	-	-	-	-	-	-	-	-	-
CT : Canton (Municipalité de)	117	-	-	-	-	117	-	-	-	-	-	-	-
CU : Cantons unis (Municipalité de)	12	-	-	-	-	12	-	-	-	-	-	-	-
DM : District Municipality	47	-	-	-	-	-	-	-	-	-	47	-	-
HAM : Hamlet	30	-	-	-	-	-	-	-	-	-	-	1	29
ID : Improvement District	27	-	-	-	-	-	7	-	-	20	-	-	-
LGD : Local Government District	21	-	-	-	-	-	-	21	-	-	-	-	-
LOT : Township and Royalty	68	-	68	-	-	-	-	-	-	-	-	-	-
MD : Municipal District	32	-	-	12	-	-	-	-	-	20	-	-	-
NH : Northern Hamlet	14	-	-	-	-	-	-	-	14	-	-	-	-
NV : Northern Village	10	-	-	-	-	-	-	-	10	-	-	-	-
P : Paroisse (Municipalité de)	436	-	-	-	-	436	-	-	-	-	-	-	-
PAR : Parish	151	-	-	-	151	-	-	-	-	-	-	-	-
R : Indian Reserve - Réserve indienne	920	-	4	23	19	36	124	71	104	63	470	4	2
RM : Rural Municipality	404	-	-	-	-	-	-	105	299	-	-	-	-
RV : Resort Village	22	-	-	-	-	-	-	-	22	-	-	-	-
SA : Special Area	3	-	-	-	-	-	-	-	-	3	-	-	-
SCM : Subdivision of County Municipality	41	-	-	41	-	-	-	-	-	-	-	-	-
SD : Sans désignation (Municipalité)	450	-	-	-	-	450	-	-	-	-	-	-	-
S-E : Indian Settlement - Etablissement indien	32	-	-	-	-	2	12	7	1	-	3	7	-
SET : Settlement	42	-	-	-	-	-	-	-	-	-	-	13	29
SRD : Subdivision of Regional District	89	-	-	-	-	-	-	-	-	-	69	-	-
SUN : Subdivision of Unorganized	90	90	-	-	-	-	-	-	-	-	-	-	-
SV : Summer Village	50	-	-	-	-	-	-	-	-	50	-	-	-
T : Town	697	169	8	39	28	-	145	35	145	109	13	3	5
TP : Township	479	-	-	-	-	-	479	-	-	-	-	-	-
UNO : Unorganized - Non organisé	180	-	-	-	-	122	20	10	2	-	-	1	5
V : Ville	255	-	-	-	-	255	-	-	-	-	-	-	-
VC : Village Cri	8	-	-	-	-	8	-	-	-	-	-	-	-
VK : Village Neskapi	1	-	-	-	-	1	-	-	-	-	-	-	-
VL : Village	982	-	-	-	82	215	119	39	332	122	46	4	1
VN : Village Nordique	12	-	-	-	-	12	-	-	-	-	-	-	-
Census Metropolitan Area	25	1	-	1	1	6*	10*	1	2	2	2	-	-
Census Agglomeration	114	5	2	3	5*	30*	32*	5*	7*	7*	22	1	-
Primary Census Metropolitan Area	12	1	-	-	-	3*	6*	-	1	1	2	-	-
Primary Census Agglomeration	21	1	-	2	-	4	8	-	-	2	4	-	-
Census Tract	3,776	39	-	74	64	996	1,610	148	91	351	403	-	-
Provincial Census Tract	1,837	84	26	117	98	491	410	91	148	169	193	5	7
Urban Area	940	57	7	39	39*	242*	252*	41*	69*	100*	92	1	6
Enumeration Area**	44,042	1,153	258	1,411	1,294	10,431	14,116	2,097	2,912	4,855	5,371	106	238

\* CMAs/CAAs, PCMAAs/PCAs and urban areas crossing provincial limits are counted in both provinces.

\*\* Final count.

Figure 8. The 1986 Census Geographic Hierarchy



(A) 5 urban areas cross provincial boundaries.

(B) 12 of the 25 CMAs and 2 of the 114 CAs are broken down into PCMAS/PCAs.

(C) All 25 of the CMAs, but only 12 of the 114 CAs, have a census tract program.

(D) Defined by Statistics Canada, in conjunction with the provincial authorities, as a statistical area.

\* Final count.

Definitions, historical boundary changes and descriptions of available maps are covered more thoroughly in other census reference products, including the **1986 Census Dictionary** (Cat. No. 99-101), the **1986 Census Products and Services – Final Edition** (Cat. No. 99-103), the **CMAs/CAs: A 1986-1981 Comparison** (Cat. No. 99-105) and the **1986 Census Geography: A Historical Comparison** (Cat. No. 99-106).

1. Province/Territory

The ten provinces and two territories are the major political units of Canada. They are also the basic geographic units for tabulating and cross-classifying census data.

2. Federal Electoral District (FED)

Federal electoral districts are established by the Parliament of Canada. Each FED is represented by a member in the House of Commons.

3. Census Division (CD)

Census division is a general term that applies to census divisions, counties, regional districts, regional municipalities, and five other types of geographical areas. These areas are made up of groups of census subdivisions.

4. Census Subdivision (CSD)

Census subdivisions are municipalities, Indian reserves, Indian settlements and unorganized territories. In Newfoundland, Nova Scotia and British Columbia, CSDs can also be geostatistical areas created by Statistics Canada, in cooperation with the provinces, as equivalents for municipalities.

5. Census Consolidated Subdivision (CCS)

A CCS is a group of contiguous census subdivisions.

Census consolidated subdivisions are delineated according to these rules:

- all CSDs smaller than 25 square kilometres are grouped with a larger CSD;
- a CSD larger than 25 square kilometres forms a CCS of its own unless it is surrounded on more than half its perimeter by another CSD; then it is included as part of the CCS formed by the other CSD;
- a CSD with a population greater than 100,000 forms a CCS on its own, if it is surrounded by rural CSDs.



## 6. Enumeration Area (EA)

An enumeration area is the area canvassed by one Census Representative. It is the basic building block of all standard geostatistical areas. EAs are defined by the number of households and by geographic boundaries -- an EA never cuts across a boundary recognized by the census. Enumeration areas are normally the smallest geographic units for which census data are available.

## 7. Census Metropolitan Area (CMA) and Census Agglomeration (CA)

A CMA is an urbanized core of at least 100,000 population (based on the previous census), together with its main labour market area. A CA is the main labour market area of an urbanized core with a population of at least 10,000, based on the previous census. The 1986 Census recognizes 25 CMAs (Figure 9) and 114 CAs (Figure 10).

Once a CA attains an urbanized core population of 100,000, it becomes a CMA, and continues to be one even if its population subsequently declines below 100,000. If, however, a CA drops below 10,000 population in its urbanized core, it is dropped from the CA program.

The 1986 CMAs and CAs were delineated using data derived from the place of work and place of residence questions in the 1981 Census. For a census subdivision (CSD) to be included in a CMA, at least one of the following criteria must be satisfied:

- the CSD falls completely or partly inside the urbanized core;
- at least 50% of the employed labour force living in the CSD works in the urbanized core;
- at least 25% of the employed labour force working in the CSD lives in the urbanized core.

In some parts of Canada, adjacent CMAs and CAs are socially and economically integrated. When this occurs, they are grouped to form a single consolidated CMA or CA. Regular CMAs and CAs, on the other hand, are independent. To be eligible for consolidation, the total commuting interchange between CMAs and CAs must be equal to at least 35% of the labour force living in the smaller CMA or CA. If consolidation takes place, the original CMAs or CAs become subregions (called primary CMAs or CAs) within the consolidated CMA or CA.

Figure 11 lists all consolidated CMAs and CAs with their constituent Primary CMAs and Primary CAs.

## 8. Primary Census Metropolitan Area (PCMA) and Primary Census Agglomeration (PCA)

A PCMA or a PCA is a labour market subregion within a larger consolidated CMA or CA. All PCMAs or PCAs, like regular CMAs and CAs, contain one or more census subdivisions.

## 9. CMA/CA Parts

CMA/CA parts are the rural and urban areas within a census metropolitan area or a census agglomeration. There are three CMA/CA parts:

- (a) urbanized core: a large urban area around which a CMA or CA is delineated;
- (b) urban fringe: an urban area within a CMA or CA, but outside of the urbanized core;
- (c) rural fringe: all territory within a CMA or CA lying outside of urban areas.

Every CMA, CA, PCMA, PCA has an urbanized core, but may or may not have urban or rural fringe areas. The total urbanized core of a consolidated CMA or CA is the sum of the constituent cores. Similarly, the totals for urban and rural fringes of a consolidated CMA or CA are the sums of the constituent fringes.

## 10. Census Tract (CT)

A CT is a permanent small census geostatistical area established in a large urban community with the assistance of local specialists who help define boundaries that are useful for urban and social research. Populations of CTs vary between 2,500 and 8,000, with an average of about 4,000. For the 1986 Census, 37 CMA/CAs have census tracts.

All census metropolitan areas and census agglomerations containing a CSD with a population of 50,000 or more, at the previous census, are eligible for a census tract program. Once an urban centre is added to the program, it is retained even if its population subsequently declines.

## 11. Provincial Census Tract (PCT)

Provincial census tracts are permanent small rural or urban census geostatistical areas. They exist in areas not covered by the census tract program. Populations of PCTs vary between 3,000 and 8,000, with an average of about 5,000. As much as possible, their limits follow permanent physical features or geographic boundaries suggested by authorities from the provinces and territories.

## 12. Urban Area/Rural Area

An urban area is a continuously built-up area with a population of 1,000 or more and a population density of at least 400 per square kilometre based on the previous census. To be considered continuous, the built-up area must not have a discontinuity exceeding two kilometres. Rural areas are all territory lying outside of urban areas.

**Figure 9. Census Metropolitan Areas (1)**

<b>Newfoundland</b>	<b>Ontario - Concluded</b>
St. John's	Ottawa-Hull (Ont./Que.)
	St. Catharines-Niagara
<b>Nova Scotia</b>	Sudbury
Halifax	Thunder Bay
	Toronto
	Windsor
<b>New Brunswick</b>	<b>Manitoba</b>
Saint John	Winnipeg
<b>Quebec</b>	<b>Saskatchewan</b>
Chicoutimi-Jonquière	Regina
Montréal	Saskatoon
Ottawa-Hull (Ont./Que.)	
Québec	
Sherbrooke*	<b>Alberta</b>
Trois-Rivières	Calgary
	Edmonton
<b>Ontario</b>	<b>British Columbia</b>
Hamilton	Vancouver
Kitchener	Victoria
London	
Oshawa	

\* New CMA for 1986.

(1) Also census-tracted centre.

Figure 10. Census Agglomerations

<b>Newfoundland</b>	<b>Quebec - Concluded</b>
Carbonear	Rivière-du-Loup
Corner Brook	Rouyn
Gander*	Saint-Georges
Grand Falls	Saint-Hyacinthe
Labrador City	Saint-Jean-sur-Richelieu
	Saint-Jérôme
<b>Prince Edward Island</b>	Salaberry-de-Valleyfield
	Sept-Îles
Charlottetown	Shawinigan
Summerside	Sorel
	Thetford Mines
<b>Nova Scotia</b>	Val-d'Or
	Victoriaville
New Glasgow	
Sydney	<b>Ontario</b>
Truro	Barrie
	Belleville
<b>New Brunswick</b>	Brantford (1)
	Brockville
Bathurst	Chatham
Campbellton (N.B./Que.)	Cobourg
Edmundston	Collingwood*
Fredericton	Cornwall
Moncton (1)	Elliot Lake*
	Guelph (1)
<b>Quebec</b>	Haileybury
Alma*	Hawkesbury (Ont./Que.)
Baie-Comeau	Kapuskasing*
Campbellton (N.B./Que.)	Kenora
Chibougamau*	Kingston (1)
Cowansville*	Kirkland Lake*
Dolbeau	Leamington
Drummondville	Lindsay
Granby	Midland
Hawkesbury (Ont./Que.)	North Bay (1)
Joliette	Orillia
La Tuque	Owen Sound
Lachute	Pembroke (Ont./Que.)
Magog	Peterborough (1)
Matane*	Sarnia (1)
Montmagny*	Sault Ste. Marie (1)
Pembroke (Ont./Que.)	Simcoe*
Rimouski	Stratford

\* New CA for 1986.

(1) Also census-tracted centre.

**Figure 10. Census Agglomerations – Concluded**

<b>Ontario - Concluded</b>	<b>British Columbia</b>
Tillsonburg*	Campbell River*
Timmins*	Chilliwack
Wallaceburg*	Courtenay
Woodstock*	Cranbrook*
<b>Manitoba</b>	Dawson Creek*
Brandon*	Duncan*
Flin Flon (Man./Sask.)	Fort St. John*
Portage la Prairie	Kamloops (1)
Selkirk*	Kelowna (1)
Thompson	Kitimat*
<b>Saskatchewan</b>	Matsqui*
Flin Flon (Man./Sask.)	Nanaimo
Lloydminster (Alta./Sask.)*	Penticton*
Moose Jaw	Port Alberni
North Battleford	Powell River
Prince Albert	Prince George (1)
Swift Current	Prince Rupert
Yorkton*	Quesnel*
<b>Alberta</b>	Terrace
Camrose*	Trail
Fort McMurray*	Vernon
Grande Prairie*	Williams Lake*
Lethbridge* (1)	<b>Yukon</b>
Lloydminster (Alta./Sask.)*	Whitehorse*
Medicine Hat	
Red Deer*	

\* New CA for 1986.

(1) Also census-tracted centre.

**Figure 11. Consolidated CMAs and CAs With Their Constituent PCMA and PCAs**

<b>St. John's, Nfld. (CMA)</b>	<b>St. Catharines - Niagara, Ont. (CMA)</b>
St. John's (PCMA)	St. Catharines - Niagara (PCMA)
Conception Bay South (PCA)	Fort Erie (PCA)
<b>Sydney, N.S. (CA)</b>	<b>London, Ont. (CMA)</b>
Sydney (PCA)	London (PCMA)
Sydney Mines (PCA)	St. Thomas (PCA)
<b>Chicoutimi-Jonquière, Que. (CMA)</b>	<b>Sudbury, Ont. (CMA)</b>
Chicoutimi-Jonquière (PCMA)	Sudbury (PCMA)
La Baie (PCA)	Valley East (PCA)
<b>Montréal, Que. (CMA)</b>	<b>Edmonton, Alta. (CMA)</b>
Montréal (PCMA)	Edmonton (PCMA)
Beloil (PCA)	Leduc (PCA)
Châteauguay (PCA)	Spruce Grove (PCA)
<b>Ottawa-Hull, Ont./Que. (CMA)</b>	<b>Kelowna, B.C. (CA)</b>
Ottawa-Hull (PCMA)	Kelowna (PCA)
Buckingham (PCA)	Central Okanagan, Subd. B (PCA)
Kanata (PCA)	<b>Vancouver, B.C. (CMA)</b>
<b>Oshawa, Ont. (CMA)</b>	Vancouver (PCMA)
Oshawa (PCMA)	Maple Ridge (PCA)
Newcastle (PCA)	<b>Victoria B.C. (CMA)</b>
<b>Toronto, Ont. (CMA)</b>	Victoria (PCMA)
Toronto (PCMA)	Sidney (PCA)
Halton Hills (PCA)	
Milton (PCA)	
Orangeville (PCA)	

### 4.3 Standard Geostatistical Area Hierarchies

The standard geostatistical areas described above can be arranged into five hierarchies, as illustrated in Figure 8. A description of each hierarchy follows.

#### 1. The EA - FED - Province/Territory - Canada Hierarchy

The federal electoral district boundaries used in the 1986 Census are those established by the 1976 Representation Order. FED boundaries may cut across all geostatistical areas except provinces/territories and enumeration areas. (In effect, EA boundaries respect FED boundaries.)

#### 2. The EA - CSD - CCS - CD - Province /Territory - Canada Hierarchy

This is one of the most important geostatistical hierarchies. Data users interested in subprovincial administrative areas rely heavily on it, and its components form the Standard Geographical Classification (SGC) system. The use of the SGC system for surveys is encouraged because it makes it easier to bring together data from more than one source.

#### 3. The EA - Urban/Rural - Province/Territory - Canada Hierarchy

Urban areas are comprised of complete EAs, and for the most part they also respect provincial or territorial boundaries. There are some exceptions, however, where urban areas cross provincial boundaries. For the 1986 Census, these urban areas are:

<u>Urban Area</u>	<u>Provinces</u>
Campbellton	New Brunswick and Quebec
Hawkesbury	Quebec and Ontario
Ottawa-Hull	Quebec and Ontario
Flin Flon	Manitoba and Saskatchewan
Lloydminster	Saskatchewan and Alberta

The relationships between urban areas and EAs, CSDs, CCSs and CDs are outlined in publications called EA Reference Lists.

#### 4. The EA - CT/PCT - Province/Territory - Canada Hierarchy

Census tract boundaries do not necessarily respect census subdivision boundaries, but they do respect the boundaries of census metropolitan areas and census agglomerations, and their constituent PCMA and PCA.

Provincial census tracts do not necessarily respect the boundaries of CSDs or CAs. Census tracts, together with provincial census tracts, provide complete coverage for each province and territory and for Canada.

#### 5. The EA - CMA/CA Parts - PCMA/PCA - CMA/CA Hierarchy

Finally, data for CMA or CA parts can be aggregated to PCMA/PCAs, which are in turn aggregated to CMAs/CAs. This hierarchy stops at the CMA/CA level because only a small area of the country is covered by CMAs and CAs, although they account for much of the population.

## 4.4 Geocoding

Geocoding, or the Geographically Referenced Data Storage and Retrieval System (GRDSR), is used to retrieve census data according to boundaries specified by data users. With this system, data can be retrieved for almost any geographic area.

### Urban Areas

Geocoding begins by defining small areas that are then used as building blocks. In large urban areas (50,000 population and over), block-faces (one side of a city street, between consecutive intersections) are defined using a street map and an up-to-date street index that links street addresses to enumeration areas.

Digitizing equipment measures block-face centroid (a geographical point to which the data for the block-face are "attached") positions and generates one horizontal and one vertical coordinate for each block-face. This digitized information can then be processed by computer. Block-faces can be aggregated to conform to a user's exact requirements.

The digitized geographical information and associated census data are merged on an Area Master File (AMF) for the city. An AMF references every street, address range, block-face and coordinate in the area covered. The other coded features -- railroad tracks, rivers, municipal boundaries -- help users to choose boundaries for their special tabulations.

### Rural Areas

Geocoding is also done outside large urban areas, but in this case EAs take the place of block-faces. All EAs are manually assigned a centroid -- a geographical point to which the data for that EA are "attached". The centroid represents the population centre of the EA. Thus, when a data user defines a geographic area that cuts across an EA, the data for that EA will be included or excluded depending on whether the centroid is inside or outside the area of interest to the user.

Any area that can be drawn on a map can be geocoded. Possible areas include:

- city blocks;
- postal code zones;
- market areas;
- transportation and utility corridors;
- polling subdivisions;
- provincial electoral districts;
- school zones;
- firefighting districts;
- policing districts;
- social service areas.



---

## Query Area Library

Once a user-defined area has been coded, it is stored on the Statistics Canada computer in the Query Area Library (QAL). Areas in the library can be recalled to produce a wide range of tabulations at any time.

### Uses of Geocoding

For *market research*, geocoding can be used to assess the market potential of an area, to locate important market segments, and to help select an efficient retail site. Geocoding can also help in choosing locations for telephone exchanges and banks, and radio and television stations. Oil, hydro and gas utilities use information retrieved from geocoded areas to predict demand and plan distribution.

*Municipal governments* use geocoding to forecast the needs of their communities. For example, tabulations on the number and distribution of school-aged children in a neighbourhood are useful for planning the location of new schools and school districts, and for routing school buses. Data on variables such as age, ethnic origin, language, occupation and income can be obtained for geocoded districts to help determine school curricula or adult education and recreation programs.

*Urban planning* applications include optimizing the location of city services and facilities, planning mass transit, and analyzing land values, housing data and potential urban renewal areas.

In *academic studies* of economic and social issues, geocoding can be used to define areas where special populations are concentrated -- ethnic, language or income groups, for example.

### Confidentiality

To ensure confidentiality, only population and dwelling counts are available for individual block-faces.

### Coverage of the Geocoding Program

When geocoding was introduced in 1971, 14 large urban centres, representing approximately 35% of the population of Canada, were covered by AMFs. Geocoding could be done at the block-face level for these areas. This coverage rose to over 50% for the 1981 Census. For the 1986 Census, approximately 57% of the Canadian population (including residents of most urban areas with a population of 50,000 or more) were covered.

## 4.5 Geographic Products

Reference products help users interpret and analyze census data. Many reference products are regular publications, others are produced for custom orders: this is the case, for example, with street indexes that link city street data (name, type, address number ranges, etc.) to geographic data (CSD, FED,

EA, CT). CARTLIBs, digital cartographic "libraries" of the boundaries of various geostatistical areas, are another example of non-published geographical information.

For further information on geographic products and services, see Chapter 6 of this publication.

**Did you know that...**

- ... One in 12 couples lives in a common-law partnership.
- ... Alberta remained the fastest growing province between 1981 and 1986, but even there population growth is down compared to the 1976-1981 change.

# CHAPTER 5



---

## CHAPTER 5

### DATA QUALITY

#### 5.1 Introduction

In a project as large and complex as the Canadian census, results can never be perfect. All statistics, even those based on a complete count, are subject to error. And while statistics do not have to be perfect to be useful, it is important that data users understand the nature and magnitude of errors in census data, and the risks involved in basing conclusions or decisions on these data. Data quality information also helps census statisticians improve future censuses. In this chapter, the sources of error in census data are outlined along with steps taken by Statistics Canada to control and measure error.

#### 5.2 Errors in Census Data

The accuracy of a statistical estimate is a measure of how much the estimate differs from the correct or "true" figure. Departures from true figures are known as errors; although this term does not imply that anyone has made a mistake: some degree of error is the inevitable result of decisions taken to control the cost of the census. This is an important point, since many kinds of errors can be anticipated and, by building special procedures into the census, controlled. The more resources put into these procedures, the tighter the control and the lower the degree of error in the data. But there is a point at which the benefits of a further reduction in error are too minor to justify the expense.

The significance of error to the data user depends very much on the nature of the error, the intended use of the data, and the level of detail involved. Some errors occur more or less at random and tend to cancel out when individual responses are aggregated for a sufficiently large group. For example, some people may overestimate their income while others underestimate. If there is no systematic tendency for people to err in either direction, then overestimates by some individuals will more or less offset underestimates by others in the group. The larger the group, the closer the average reported income is likely to be to the true value. On the other hand, if many people forget a source of income, the result will be a general tendency to understate total income. In this case, the average reported income will be lower than the true average. Such systematic errors are far more serious a problem for most users than random errors: the bias they cause in the data persists no matter how large the group, and is very difficult to measure.

#### 5.3 Sources of Error

Errors can arise from many sources, but can be grouped into a few broad categories: coverage errors, non-response errors, response errors, processing errors and sampling errors.

### Coverage Errors

The census attempts to count every Canadian resident on Census Day. Census Representatives (CRs) make a list of all dwellings in their enumeration area and drop off a census questionnaire at each dwelling. The householder is asked to list all usual residents of the dwelling by following the "Whom to include" guidelines on the questionnaire. Mistakes can occur in these tasks. The CR may misjudge the location of the enumeration area boundaries and so miss dwellings. A dwelling may be missed because it is inside what looks like a single dwelling or on a road not marked on the enumeration area map. Or the CR may fail to drop off a questionnaire at an occupied dwelling because it appears to be vacant. Householders may misunderstand the "Whom to include" guidelines and not list all the usual residents of the dwelling; for example, a family member temporarily away from home at a job or school could be left out. A family maintaining two residences could be missed at both because of confusion about where they should be counted. Such ambiguities could also lead to double counting or "overcoverage", although this is usually less of a problem than "undercoverage", which occurs when individuals or households are missed.

### Non-response Errors

Sometimes it proves impossible to obtain a complete response from a household, even though the dwelling was identified as occupied and a questionnaire was dropped off. The household members may be away over the whole census period or, rarely, may refuse to complete the form. More often, the questionnaire is returned but information is missing for some questions or individuals. CRs edit the questionnaires and follow up on missing information. The CR's work is in turn checked by both a supervisor and a quality control technician. Nevertheless, some non-response is inevitable and, although certain adjustments for missing data can be made during processing, some loss of accuracy must follow.

### Response Errors

A response may not be entirely accurate. The respondent may have misinterpreted the question or may not know the answer, especially if it is given for an absent household member. Occasionally, a response error may be caused by the CR when following up for a missing response or recording items such as the structural characteristics of a dwelling.

### Processing Errors

After Census Day, questionnaires are sent to regional processing sites. Write-in entries on the form are numerically coded. Mistakes can occur in coding, especially when the written information is ambiguous, incomplete or difficult to read. The coded information is key-entered onto a computer file. Keying errors can occur, despite rigorous quality checks on each key operator's work.

Census data files are sent to Ottawa where they undergo a series of computer checks to identify missing or inconsistent responses. Responses are created or "imputed" for missing or unacceptable information. The computer cannot, of

course, impute a correct response every time, but when results are tabulated for sufficiently large geographical areas or subgroups of the population, imputation errors will more or less cancel out.

### Sampling Errors

Some census questions are asked of all Canadian residents, but most of the cultural and economic information is obtained from a sample of one in five households. The information collected from these households is "weighted" to produce estimates for the whole population. The simplest weighting procedure would be to multiply the results for the sampled households by five, since each household in the sample represents five households in the total population. The actual census procedure is more complex, but similar in principle.

Naturally, the results of the weighted sample differ somewhat from results that would have been obtained from the total population. The difference is known as sampling error. The actual sampling error is of course unknown, but it is possible to calculate an "average" value.

If several samples of the same size were selected using a similar random process to that used in the actual census, the weighted results would differ to a greater or lesser degree from the true result for the total population. The "standard error" is a measure of dispersion of these weighted results around the true value. Fortunately, it is not necessary to actually generate a number of samples to estimate the standard error for the census: it can be estimated from the single sample actually taken.

## **5.4 Data Quality Measurement**

To allow data users to assess the impact of errors, and to improve our own understanding of how and where errors occur, a number of data quality studies have been conducted for recent censuses. For the 1986 Census, special studies examine errors in coverage, content (i.e. non-response, response and processing), and sampling.

### Coverage Errors

Four studies address coverage errors. First, the Temporary Residents Study checks a sample of persons identified as temporary residents of dwellings on Census Day. The questionnaires filled in at the usual place of residence of these people are located to see if they were enumerated. Based on the sample, an estimate is made of the total number of persons missed because of temporary absence, and the census results are adjusted.

Second, a sample of dwellings listed by CRs as vacant are revisited to establish how many were in fact occupied on Census Day. Estimates are obtained of the total number of dwellings and persons missed in this way, and again the census results are adjusted.

The remaining studies provide estimates of gross undercoverage and overcoverage, but are not the basis for corrections of census results. The

Reverse Record Check estimates gross undercoverage by identifying a sample of people before the census, and then checking census questionnaires to see if these people were enumerated. The sample was selected from 1981 Census returns, and from birth and immigrant registrations. People identified as missed in the 1981 Reverse Record Check were also added to the sample.

In 1986, for the first time in Canada, the census includes a study to measure overcoverage. A sample of 1986 Census questionnaires was selected for an interview to check if any household members were enumerated at another dwelling in Canada.

### Content Errors

A number of studies evaluate the quality of data for each question. Response rates and edit failure rates and a comparison of estimates before and after imputation are among the data quality measures used. Tabulations from the 1986 Census are also compared with corresponding data from past censuses and from other surveys and administrative sources. Detailed cross-tabulations are checked for consistency and plausibility. Some of these checks are conducted prior to the release of census data in a process known as certification: more detailed studies take longer.

### Sampling Errors

As mentioned earlier, it is possible to calculate standard errors for sample variables. In addition, studies evaluate sampling and weighting procedures.

## **5.5 Publication of Data Quality Information**

Census data quality information is disseminated in two ways. All census publications include a section on data quality that examines sources of errors and provides cautionary notes for users. In some cases, estimates of the magnitude of errors are given -- for example, estimates of sampling error. Information is also available in reports that summarize the results of data quality studies.

## **5.6 1986 Census Data Quality Problems**

Many of the 1986 Census data quality studies were still in progress at the time this publication was prepared. Two data quality problems had already been identified, however.

First, Census Representatives were refused access to a number of Indian reserves. In the absence of population and dwelling counts for these reserves, they have been omitted from the census data base. However, the total population and dwelling counts for the affected provinces do include an estimate for the missing reserves. These estimates were obtained by applying average growth rates for enumerated reserves to the 1981 Census counts. A User Information Bulletin outlining the methodology used to estimate the Indian reserve population is available.



Second, it appears that some respondents had problems with the new question on aboriginal status (see Question 7 in Chapter 2). The term "aboriginal" may have been misunderstood, because a number of non-aboriginal persons were incorrectly reported in one or more of the aboriginal response categories: Inuit, status Indian, non-status Indian, Métis. Even though the proportion of respondents making such a mistake was very small, these errors had a significant impact on the census estimates of the relatively small aboriginal populations. Counts of the Inuit population, and to a lesser extent counts of the other aboriginal categories, were inflated and data on the characteristics of aboriginal people were distorted. Data quality problems arising from these response errors were sufficiently severe to make the results misleading: hence they will not be published. Instead, 1986 Census data on Canada's aboriginal people will be limited to what can be derived from the sample question on ethnic origin. A data quality report entitled *1986 Census Data Quality Note on Question 7 (Aboriginal Status)* July 1987, J. Hagey, Housing, Family and Social Statistics, describes the problem.

**Did you know that...**

- ... Fully 30% of our total population now live in the three census metropolitan areas of Toronto, Montréal and Vancouver.
- ... One in four elderly persons lives alone.



# CHAPTER 6



---

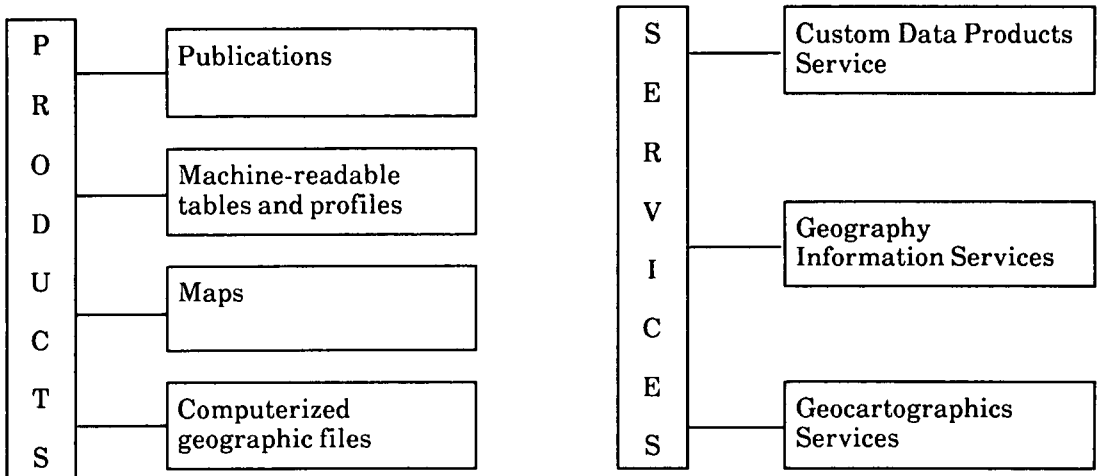
## CHAPTER 6

### PRODUCTS AND SERVICES

#### 6.1 Introduction

In a series of extensive consultations, data users expressed what they wanted from 1986 Census products and services. These views, and the requirement that the cost of census output be covered by the sale of products and services, determined the final range of products.

This chapter is an overview of census output. The first part looks at products and the second at services. The following diagram shows the groups of products and services:



## 6.2 PRODUCTS

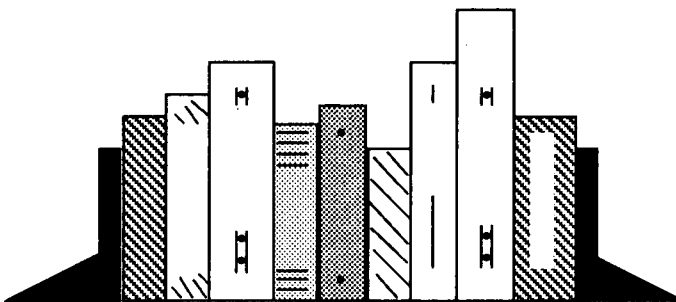
This section covers the products available to data users, including:

- publications;
- machine-readable tables and profiles;
- maps;
- computerized geographic files.

### 6.2.1 Publications

Publications, the core of the 1986 Census output program, fall into nine series divided into four broad groups.

<b>Groups</b>	<b>Series</b>
Population and dwelling counts publications	- Population - Place Name Reference Lists
Population and dwelling characteristics publications	- The Nation - Dimensions - Profiles
Analytical publications	- Metropolitan Atlas - Focus on Canada
General and geographic reference publications	- Reference (General) - Reference: Geographic



**Figure 12. Overview of 1986 Census Publications**

<b>Group/Series</b>	<b>No. of publications</b>	<b>Release date</b>
<u>Population and Dwelling Counts</u>		
Geographic Distributions for Canada	5	from 3rd Quarter 1987 to 2nd Quarter 1988
Geographic Distributions for Provinces/Territories	12	Released
Place Name Reference Lists	3	2nd Quarter 1988
<u>Population and Dwelling Characteristics</u>		
The Nation Series - 100%	4	Released
- 20%	15	1st Quarter 1989
Dimensions Series - 20%	7	1st Quarter 1989
Profile Series - 100%	52	Released
- 20%	53	3rd and 4th Quarters 1988
<u>Analytical Publications</u>		
Metropolitan Atlas Series	12	2nd Quarter 1989
Focus on Canada Series	16	from 2nd Quarter 1988 to 2nd Quarter 1989
<u>General and Geographic Reference Publications</u>		
Reference (General)	6	Released
Geographic Reference	13	from 2nd Quarter 1987 to 2nd Quarter 1988

## Population and Dwelling Counts Publications

The Population and Dwelling Counts publications provide basic 1986 counts for all standard geographic areas. Measures of change since 1981 are frequently given as well.

A total of 20 publications are available in two series: Population and Place Name Reference Lists.

### A. Population

These 17 publications provide final, unrounded population and dwelling counts. Five publications (one for each type of selected standard geographic area) provide counts for Canada; e.g., one publication contains data on all FEDs. The remaining 12 publications, one per province or territory, list counts by various standard geographic levels within the province or territory.

The titles are:

- Census Divisions and Subdivisions
- Federal Electoral Districts
- Federal Electoral Districts and Census Enumeration Areas
- Census Metropolitan Areas and Census Agglomerations
- Unincorporated Places
- Population and Dwelling Counts - Provinces and Territories (one for each province and territory)

### B. Place Name Reference Lists

These three publications alphabetically list place names in provinces and territories. Census level (CD, CSD, UP, etc.) is given along with counts, the Standard Geographic Classification code, longitude, latitude and information on relevant census maps.

The titles are:

- Atlantic Provinces
- Quebec and Ontario
- Western Provinces and the Territories

## Population and Dwelling Characteristics Publications

These publications present a wide range of census data by variable, selected topics (industry trends, for example), and standard geographic areas.

The **Nation Series** (19 publications) presents data for every census variable. These cross-tabulations illustrate the analytical potential of the census. Some tables include comparisons with 1981 data and a few go back to earlier censuses.



**Dimensions** publications focus on subjects that many census clients have expressed considerable interest in. The presentation varies from a summary of data to detailed breakdowns and cross-tabulations. Geographic levels also vary: some tables show national data, others examine census metropolitan areas.

The **Profiles** look at a range of variables in limited detail for standard geographic areas. Percentages and rates are given, but not cross-tabulations. Variables covered include:

- demography
- mobility
- ethno-cultural characteristics
- language
- schooling
- labour force characteristics
- income
- families
- households
- dwellings

Separate profiles are published for 100% data and the 20% sample data.

### A. The Nation

Publications based on 100% data (collected from all households):

- Age, Sex and Marital Status
- Language: Part 1
- Dwellings and Households: Part 1
- Families: Part 1

Publications based on 20% data (collected from one in five households):

- Language: Part 2
- Dwellings and Households: Part 2
- Families: Part 2
- Mobility Status and Inter-provincial Migration
- Ethnicity, Immigration and Citizenship
- Schooling and Major Field of Study
- Labour Force Activity
- Occupation
- Industry
- Total Income: Individuals
- Employment Income: Individuals
- Employment Income by Occupation
- Family Income: Census Families
- Family Income: Economic Families
- Household Income: Private Households

### B. Dimensions

The titles for this series are:

- Occupational Trends, 1961 - 1986
- Industry Trends, 1951 - 1986
- Language Retention and Transfer
- Profile of Ethnic Groups
- Profile of the Immigrant Population
- Census Metropolitan Areas
- Canadians and Their Occupations - A Profile

## C. Profiles

The 105 publications of this series are distributed by:

- Census Divisions and Subdivisions (CDs and CSDs)
- Federal Electoral Districts (FEDs)
- Census Metropolitan Areas and Census Agglomerations (CMAs/CAs)
- Urban and Rural Areas
- Labour Force Survey Economic Regions
- Census Tracts

## Analytical Publications

The Metropolitan Atlas Series and the Focus on Canada Series present analysis of census data in two forms: thematic maps and analytical texts.

### A. Metropolitan Atlas

These 12 publications cover Canada's major census metropolitan areas and combine maps, graphs and text to present 1986 Census data in a concise format. Key demographic, housing, social and economic information emphasizes important characteristics of metropolitan areas. Maps summarize, pinpoint areas of concentration, facilitate comparisons and reveal changing patterns - helping us to better understand the cities we live in. The series includes:

- St. John's
- Halifax
- Québec
- Montréal
- Ottawa-Hull
- Toronto
- Hamilton
- Winnipeg
- Regina
- Calgary
- Edmonton
- Vancouver

### B. Focus on Canada

The Focus on Canada Series consists of 16 descriptive studies that cover all of the broad census subjects -- demography, schooling, ethno-cultural, labour, income and housing. Data from the 1986 Census and, where possible, from past censuses are presented in simple tables and charts.

The titles are:

- Canada's Population from Ocean to Ocean
- Canada's Seniors
- Canada's North, A Profile
- The Inner City in Transition
- Canada's Youth
- The Work Women Do
- A Profile of the Disabled in Canada
- Families in Canada
- Family Income
- Employment Income
- Affordability of Housing in Canada
- Canada - A Linguistic Profile
- Ethnic Diversity in Canada
- Canada's Farm Population
- Educational Attainment of Canadians
- Trends in Occupation and Industry

---

## General and Geographic Reference Publications

These publications help data users understand census concepts, products and services.

### A. Reference (General)

(i) 1986 Census Dictionary

Defines all major census variables and terms, including the geographic terms, and discusses historical comparability of census data.

(ii) 1986 Census Products and Services - Preliminary Edition

Gives full details of products and services from the 100% data base and an outline of products and services from the 20% sample data base, along with price and ordering information.

(iii) 1986 Census Products and Services - Final Edition

Gives full details of products and services from the 100% data base and the 20% sample data base, along with price and ordering information. This version replaces the Preliminary Edition.

(iv) 1986 Census Reference Paper Series

These papers provide detailed background information on census-related topics. They will be of interest to major data users and to intermediaries such as librarians, Statistics Canada's regional reference centres, user advisory staff, and universities. The following list of topics will be expanded gradually as needs are identified:

- CMAs/CAs: A 1986-1981 Comparison
- 1986 Census Geography: A Historical Comparison

(v) 1986 Census Handbook

This is the first edition of the Handbook.

### B. Geographic Reference

The following 13 publications make it easier to use census data. They are reference tools rather than data sources.

(i) Maps

Two publications, national in scope, contain reference maps for CDs, CSDs, CMAs and CAs. These maps are also available unbound and are included in data publications where appropriate. The titles are:

- Census Divisions and Subdivisions
- Census Metropolitan Areas and Census Agglomerations

## (ii) Enumeration Area Reference Lists

This series of 10 publications links EAs to higher census geographic levels. The publications are:

- Census Divisions and Subdivisions, Atlantic Provinces
- Census Divisions and Subdivisions, Quebec
- Census Divisions and Subdivisions, Ontario
- Census Divisions and Subdivisions, Western Provinces and the Territories
- Census Tracts
- Provincial Census Tracts, Atlantic Provinces
- Provincial Census Tracts, Quebec
- Provincial Census Tracts, Ontario
- Provincial Census Tracts, Western Provinces and the Territories
- Census Metropolitan Areas and Census Agglomerations

## (iii) Equivalent Enumeration Areas, 1986 and 1981

This publication shows geographically equivalent enumeration areas for 1981 and 1986 by FED. (For more information on Census Geography, refer to Chapter 4 of this publication.)

## 6.2.2 Machine-readable Tables and Profiles (Basic Summary Products)

There are two types of machine-readable products: Basic Summary Tables and Profiles.

### A. Basic Summary Tables

The basic summary tables are 43 cross-classifications of two and three variables for small geographic areas. The content of the tables was determined by the most common needs of users of small area data, as identified through consultation and analysis of demand for 1981 Census products. The tables are available on magnetic tape, in printed form or on diskette, on demand.

Basic summary tables are produced for:

- enumeration areas (EAs) and federal electoral districts (FEDs)
- census subdivisions (CSDs) and census divisions (CDs)
- census tracts (CTs), census metropolitan areas (CMAs), tracted census agglomerations (CAs) and provincial census tracts (PCTs)

### B. Profiles

Profiles provide indicators that can easily be compared across geographic areas or subpopulations. Data on the major categories of the census are presented as counts, rates and averages. Profiles are particularly suited for basic data analysis such as comparisons and mapping. Two profile series

---

are available, one for 100% data and one for 20% sample data. The data presented on magnetic tape are the same as that found in published profiles. Diskettes are also available.

Machine-readable profiles are available for the following standard geographic levels:

- census divisions and subdivisions (CDs and CSDs)
- federal electoral districts (FEDs)
- census metropolitan areas and census agglomerations (CMAs and CAs)
- census tracts (CTs)
- enumeration areas (EAs)

### **6.2.3 Maps**

These maps permit users to relate statistical data to corresponding geographic areas.

They are presented in three series:

#### **A. Published Maps**

Small scale reference maps of the different kinds of geostatistical areas – excluding enumeration areas – are included in certain publications.

#### **B. Individual Reference Map Sheets**

Eight series of larger reference maps (called the "G86" series) are available at various levels of detail on Ozalid paper, Intermediate film and Ozopaque film for all geostatistical areas of the 1986 Census.

The titles of the series are:

- G86-10 Provincial Maps
- G86-12 Maps of Rural Enumeration Areas
- G86-13 Maps of Census Tracts/Enumeration Areas
- G86-13A Maps of Census Tracts/Enumeration Areas
- G86-14 Maps of Selected Census Subdivisions
- G86-16 Place Maps
- G86-18 Maps of Federal Electoral Districts/Enumeration Areas
- G86-21 Maps of Provincial Census Tracts

#### **C. Pre-printed Statistical Maps**

These maps on popular themes such as population change and population density are produced in black and white or color, in a variety of sizes.

## 6.2.4 Computerized Geographic Files

These files allow users to manipulate geographic data with computer systems both in batch and interactively. Eight files are available:

- A. Geography Tape File
- B. Place Name Master File
- C. Postal Code Geographic Conversion File
- D. Area Master File
- E. Attribute File
- F. Block-face Data Linkage File
- G. Boundary File
- H. Cartographic Boundary File (CARTLIB)

### A. Geography Tape File

This file assigns to each enumeration area (the basic unit of census data collection) all higher geographic levels by codes and names. It includes all standard geographic codes, and also locates each enumeration area centroid according to Universal Transverse Mercator (UTM) coordinates and Lambert coordinates, as well as by latitude and longitude. Final 1986 population counts and occupied private dwelling counts for all enumeration areas are also presented.

### B. Place Name Master File

This file lists census divisions, census subdivisions and all unincorporated places for which 1986 population was reported. Information given includes Standard Geographical Classification codes, census codes, type of place, location in latitude and longitude, census map number and population. For unincorporated places, a breakdown of population by enumeration area is also given.

### C. Postal Code Geographic Conversion File

This file links postal codes in Canada to the census geographic hierarchy, including Universal Transverse Mercator (UTM) coordinates and latitude/longitude coordinates.

Information is normally supplied on tape, but for smaller areas, files can also be supplied on diskette or paper copy.

### D. Area Master File

The Area Master File (AMF) contains representations of all city streets and other features (such as railroad tracks, rivers, and municipal boundaries) in machine-readable form. The AMF geographically references every street, address range, block-face and centroid coordinate in the coverage area. AMF is available mainly for urban centres with a population of 50,000 or more.

### E. Attribute File

The Attribute File consists of lists of various geographic areas and their Standard Geographical Classification code, the 1981 population adjusted to 1986 boundaries and the 1986 final population, the 1986 land area and the National Topographic System (NTS) map number.

### F. Block-face Data Linkage File

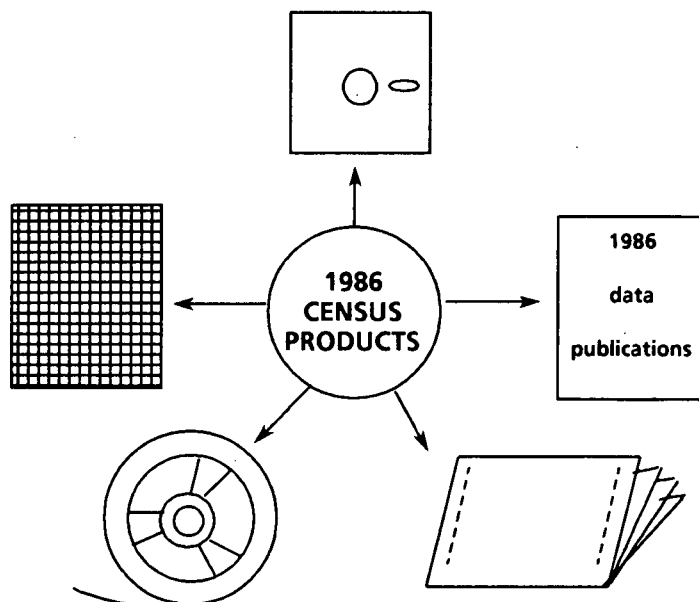
The Block-face Data Linkage File (BFDLF) relates each block-face to the Standard Geographical Classification and also provides population and dwelling counts.

### G. Boundary File

This file consists of basic area identification and lists of coordinates to create a polygon representing the particular geographic area. It is available for selected geographic areas such as census metropolitan areas, census agglomerations, provincial census tracts and urban areas.

### H. Cartographic Boundary File (CARTLIB)

CARTLIBs are digital cartographic libraries of the boundaries of various geostatistical areas, e.g., federal electoral district, census division, census consolidated subdivision, census subdivision, census tract. They are stored on magnetic tape and, with appropriate software, can be used to map data. Customized CARTLIB products are available for these and different coverages such as forward sortation areas in formats suitable for several different mapping programs.



## **6.3 1986 CENSUS SERVICES**

Data users' needs have grown more complex in recent years. This has resulted in a greater range of census services. This section covers the services offered to data users, including:

- Custom Data Products Service
- Geography Information Services
- Geocartographics Services

### **6.3.1 Custom Data Products Service**

A large number of users are now undertaking detailed analysis on machine-readable media. This has resulted in the development of a greater range of census products and services to meet the needs of today's users. For example, users can choose to specify their exact data requirement as "custom" tabulations. Or they may choose from a selection of "semi-custom" products designed to meet individual users' needs as closely as possible, while keeping cost and delivery time down.

#### **A. Semi-custom Products**

The semi-custom products have been developed to meet the needs of users who require basic data tabulations for specialized geographic areas or output media.

There are two main components of the Semi-custom Service: cross-tabulations and profiles.

##### **(i) Cross-tabulations**

These cross-tabulations of two or three census variables can be produced for geographic areas defined by the user. They reflect demand for 1981 Census data and ongoing consultation with users. They cover all of the Basic Summary Cross-tabulations, any published tables suitable for small geographic areas, plus other tables specially designed for the cross-tabulation service. The list will continue to evolve as new data needs and issues are identified. Tabulations are available on computer print-out, specially formatted print output, magnetic tape and microfiche.

##### **(ii) Profiles**

Data are presented as counts, rates and averages which can easily be compared across geographic areas or population groups.



---

Profiles can be produced on paper or magnetic tape from the 100% data base or the 20% sample base for geocoded areas and aggregations of the standard census areas. These standard regions are:

- provinces and territories
- census metropolitan areas (CMAs) and census agglomerations (CAs)
- primary census metropolitan areas (PCMAs) and primary census agglomerations (PCAs)
- census divisions (CDs)
- census subdivisions (CSDs)
- census consolidated subdivisions (CCSs)
- federal electoral districts (FEDs)
- census tracts (CTs)
- provincial census tracts (PCTs)
- urban areas (UAs)
- enumeration areas (EAs)

## **B. Custom Products**

A custom product is any tabulation of census micro-data not available through other products or services. Custom products can be produced from the 1971, 1976, 1981 and 1986 Census micro-data bases.

Statistics Canada consultants help individual clients determine content, geography and output medium, which can be computer print-out, specially formatted print-out, magnetic tape or microfiche. Custom products can be produced for geocoded areas as well as for all the census geographic areas previously listed.

## **6.3.2 Geography Information Services**

The Geography Division of Statistics Canada offers a variety of services as listed below.

### **A. Geocoding**

The Geographically Referenced Data Storage and Retrieval System (GRDSR), or Geocoding System, is used to code and store census data. Geographic coordinates (centroids) are assigned to the population centre of every enumeration area (EA) in Canada and each block-face in most large urban areas. Data for that EA or block-face will be included or excluded depending on whether the centroid is inside or outside the area of interest to the user.

### **B. Special Population Compilations**

Population compilations may be produced based on the current census and from previous censuses. Population counts are based on compilations from census collection documents.

### **C. Special Analysis/User Consultation and Systems Development**

Users can obtain assistance in defining custom geographic products and systems or in making better use of existing products and services.

### **D. Map Library**

The Geography Division's Map Library contains all maps used by census collection personnel (Census Representatives) from the 1971 Census onward, and can reproduce these maps at the same size or as enlargements or reductions.

### **E. Customized Street Index File**

A cross-referenced street index file of address ranges by user-defined areas can be produced from the Area Master File.

### **F. Node Maps/AMF Street Network**

These maps, available for all areas covered by the AMF, show street patterns in detail, including names, as well as other features such as railroad tracks, rivers, municipal boundaries and all nodes (where streets and other features intersect).

## **6.3.3 Geocartographics Services**

The Geocartographics Division of Statistics Canada offers a variety of services as listed below.

### **A. Customized Maps and Atlases**

Customized maps and atlases (statistical or reference) for national, regional, provincial and urban areas can be produced for regions defined by standard census geography, postal codes, or client-supplied specifications, on paper, mylar, film, transparency or slide.

### **B. Customized Cartographic Files**

A range of cartographic files for standard and non-standard census geography in user-specified coordinate systems and formats suitable for use with various mapping systems (including SAS/GRAPH, ATLAS, GIMMS and ARC/INFO) are available. Included among others are provinces, federal electoral districts, census divisions, census subdivisions, census tracts and forward sortation areas. Data are available on tape or diskette.

---

### C. Cartographic Consultation and Training

Consultation and training are available on automated mapping packages, geographic information systems, geographic data bases, and micro-based statistical mapping. Standard training courses are available on geographic information systems, census cartography, the GIMMS mapping package, and the TELL-A-GRAF graphics package.

**Did you know that..**

- ... The proportions of Francophones in Canada and Anglophones in Quebec continue to fall.
- ... There is greater diversity of languages other than English and French in 1986 than in 1961.



# CHAPTER 7



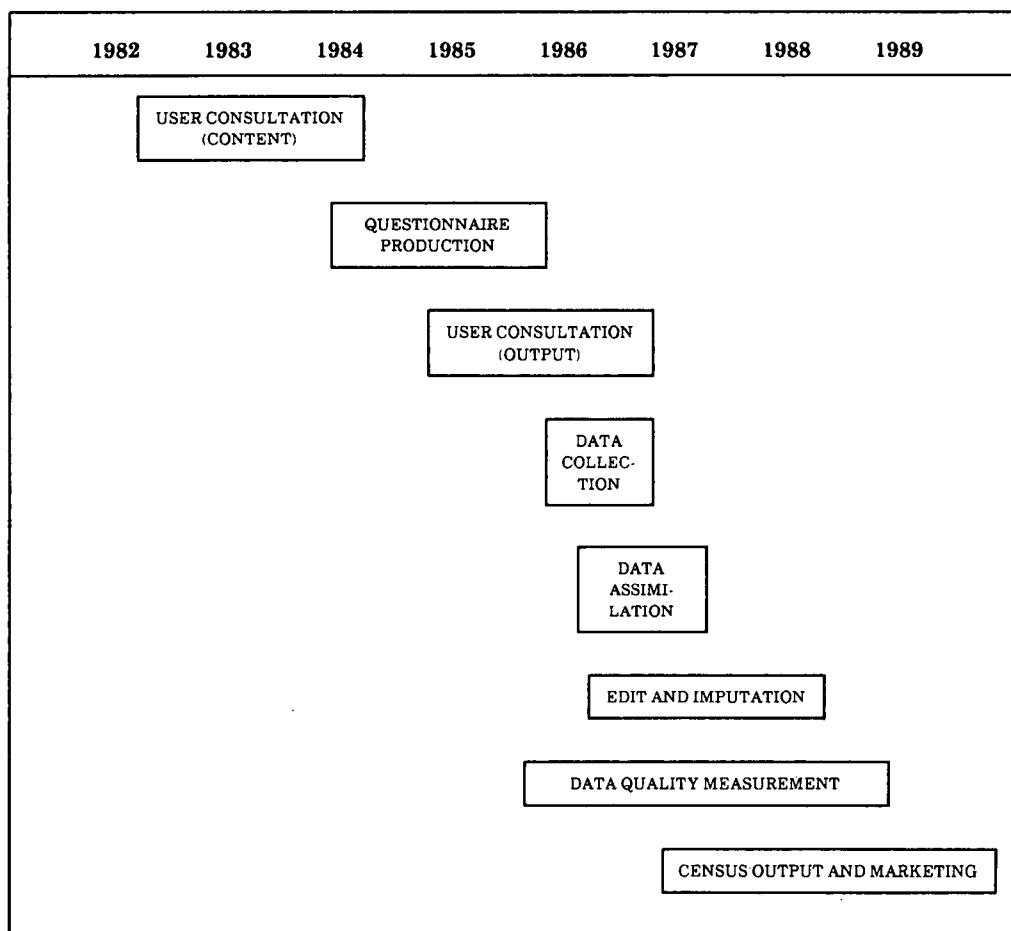
## CHAPTER 7

### TAKING A CENSUS

#### 7.1 Introduction

As with all surveys, the census involves a number of stages that culminate in a final data set, but the scale of the census is unique and presents special problems. For example, a wide range of data users must be consulted far in advance of Census Day to make sure appropriate data are gathered. And the logistics of collecting information on more than 25 million people scattered across 9.2 million square kilometres can be daunting.

**Figure 13. 1986 Census Timetable**



## 7.2 User Consultation on Content

Statistics Canada asks census data users what kind of information they need most.

For the 1986 Census more than 200 major users were consulted, including:

- federal government departments
- provincial/territorial governments
- municipal governments
- businesses
- public interest groups
- researchers
- ethnic organizations

Consultation began in April 1982 and lasted two years. Users were asked to keep several goals in mind. First, as little change as possible should be made to the 1981 Census questionnaire, to keep development costs down. Second, questions that benefit users the least should be eliminated. And third, costs per household must be lowered.

The most important data needs were:

- basic demographic figures
- the labour market
- native peoples
- disability
- ethnic groups/visible minorities
- cultural activities
- housing

In the end, the content of the census was a compromise between the needs of data users and the cost of collecting and processing more information.

## 7.3 Documentation

The starting point for data collection was the compilation and production of maps for every enumeration area in Canada. Based on topographical sheets in rural areas and census tract diagrams in large urban areas, these maps defined the area each Census Representative was responsible for. The information for updating the maps from the last census was provided primarily by provincial authorities for municipal changes and local planning boards for census tract changes. However, drafting more than 40,000 maps takes time, and changes occurred in many EAs while this process took place. To make sure that no dwelling was missed, CRs were given detailed instructions on how to update their maps before Census Day. Census questionnaires, a number of other forms, booklets and envelopes must be produced.



These forms include:

#### Visitation Record (Form 1)

- given to Census Representatives to record all dwellings in their enumeration areas (EAs).

#### Collective Dwelling Record (Form 1A)

- for enumerating temporary residents of general hospitals and jails.

#### Short Questionnaire (Form 2A)

- given to four-fifths of the private households in Canada;
- asks name, date of birth, sex and marital status as well as questions on aboriginal status, mother tongue, type of dwelling and dwelling ownership.

#### Long Questionnaire (Form 2B)

- given to every fifth household in self-enumeration areas, and every household in remote (canvasser) areas;
- contains all of the questions on Form 2A plus several others, including labour force activity, income, education, disability, citizenship, housing (energy use and shelter costs) ethnicity and language.

#### Overseas Population Form (Form 2C)

- for enumerating Canadians posted abroad in the Armed Forces or government service;
- identical to Form 2B except for the exclusion of the housing questions.

#### Individual Census Questionnaire (Form 3)

- for enumerating persons in non-institutional collective dwellings such as hotels, motels and rooming-houses;
- similar questions to the Form 2B, but housing questions are excluded;
- also used in private households when members (lodgers, for example) wish to keep their responses confidential from one another.

The census questions were translated into 30 non-official languages for people who do not read either of Canada's official languages. These non-official languages included Aboriginal languages, Chinese, Dutch, Korean, Russian and Vietnamese. English and French Braille versions were also available.

## 7.4 Collecting Data

For the 1986 Census, information was collected from more than nine million dwellings. Collection staff across the country were also responsible for a preliminary check of data quality.

Two collection methods were used for the 1986 Census: self-enumeration and canvasser enumeration. A public communications program and a multi-lingual telephone assistance service supported data collection.

## **7.5 Collection Methods**

In self-enumeration areas, a questionnaire was dropped off at each household before Census Day. A member of the household was to complete the questionnaire on Census Day. Questionnaires were either (1) mailed back in pre-addressed envelopes, if the household was in an urban area with a population of 10,000 or more; or (2) kept until the Census Representative returned to pick it up, if the household was in a rural area or smaller centre with a population of 10,000 or less.

Self-enumeration was introduced for the 1971 Census because it is relatively inexpensive, gives respondents time to consult birth certificates, income tax returns, and other information sources and eliminates possible misinterpretation of questions by the Census Representative.

In small communities and rural areas, the pick-up approach was favoured over mail-back for two reasons. First, for the Census of Agriculture, conducted at the same time as the Census of Population, the Census Representative must be present to ensure that all agricultural land is counted and to help complete forms. Second, the success of the mail-back method in reducing costs hinges on using the telephone to conduct follow-up when errors or omissions are detected. Party lines in rural areas make telephone follow-up impractical, since the census guarantees confidentiality.

In 1986, less than 2% of households were enumerated by canvassers: Census Representatives completed a long form questionnaire for these households by interview. This method was used in remote or northern areas and on Indian reserves where irregular mail service makes mail-back impractical and long distances rule out the pick-up method.

The long form questionnaire (Form 2B) is given to every household in remote areas.

The Public Communications Program supported the census by heightening public awareness and by encouraging complete, accurate and punctual responses to the questionnaires. To cut costs, there was no paid advertising budget for the 1986 Census. Businesses, associations, unions, government and others were asked to help make Canadians aware of the census through regular communication channels, such as newsletters. Attempts were also made to obtain media exposure through public service announcements and regular coverage of census highlights.

---

The multilingual Telephone Assistance Service (TAS) was available to households that had problems understanding census questions or that did not receive a questionnaire. The TAS numbers were printed on the back of each questionnaire and calls were free of charge. During its nine days of operation, over a quarter of a million calls were handled by TAS. The service was also available for users of TDD/TTY (telecommunications devices for the deaf/teletype machines).

## **7.6 Data Assimilation**

The assimilation process turned the questionnaire responses into machine-readable information. This processing had three stages:

- Regional Office Processing - manual checking for completeness, and coding of several questions
- Direct Data Entry - keying the census data onto a computer file
- Head Office Processing - automated and manual checking of data

To lower costs, Statistics Canada used Revenue Canada - Taxation facilities for Regional Office Processing and direct data entry.

### **Regional Office Processing (ROP)**

ROP had the following elements:

#### **(a) Receipt and Document Preparation**

When completed questionnaires reached the Regional Office they were logged, counted and prepared for key entry. Preparation included consistency checks between the questionnaires and the Visitation Record -- making sure, for example, that the number of household members on both documents matched. Legibility checks ensured that the documents were suitable for computer entry. Finally, all written answers on household relationships (Question 2), mother tongue, home language, place of birth, ethnic origin and place of residence five years ago were converted to numerical codes.

#### **(b) Reverse Record Check**

A sample of persons was selected from 1981 Census records and external sources, and 1986 documents were searched for these same persons. If a person was found, 1986 characteristics were noted and sent to Head Office. For those not found, further tracing determined if they had been enumerated elsewhere in Canada or missed altogether. The Reverse Record Check is described further in Chapter 5.

### (c) Economic Coding

Written responses for some labour market questions on the long census forms were converted into numerical codes suitable for Direct Data Entry. Three tasks were involved:

- editing to determine if the respondent had worked at any time during the period January 1, 1985 to June 3, 1986;
- converting the industry, occupation and major field of study questions to numerical codes;
- editing the class of worker question.

Supervisors and coding consultants resolved any discrepancies in coding before the questionnaires for an EA proceeded to the next stage. Sometimes other sources -- city directories and subject-matter personnel, for example -- were consulted.

### (d) Processing

Questionnaires were transferred in work units to Direct Data Entry at RC-T regional processing centres: from there, after keying, they were sent to Statistics Canada in Ottawa.

#### **Direct Data Entry (DDE)**

All questionnaire responses were keyed into a computer. A sample was then re-keyed and compared with the first attempt as a quality control measure. The computer tapes were then sent to Statistics Canada in Ottawa for further processing.

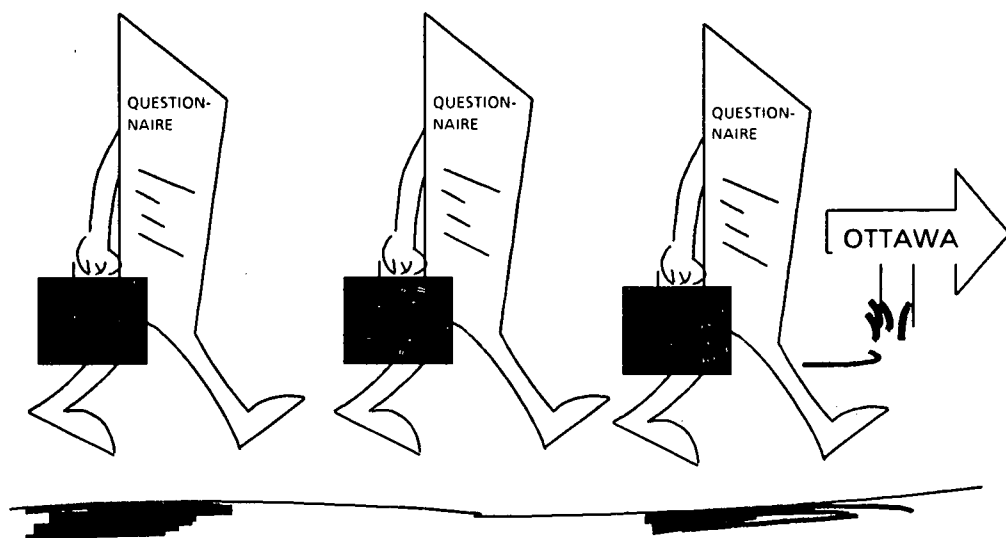
#### **Head Office Processing (HOP)**

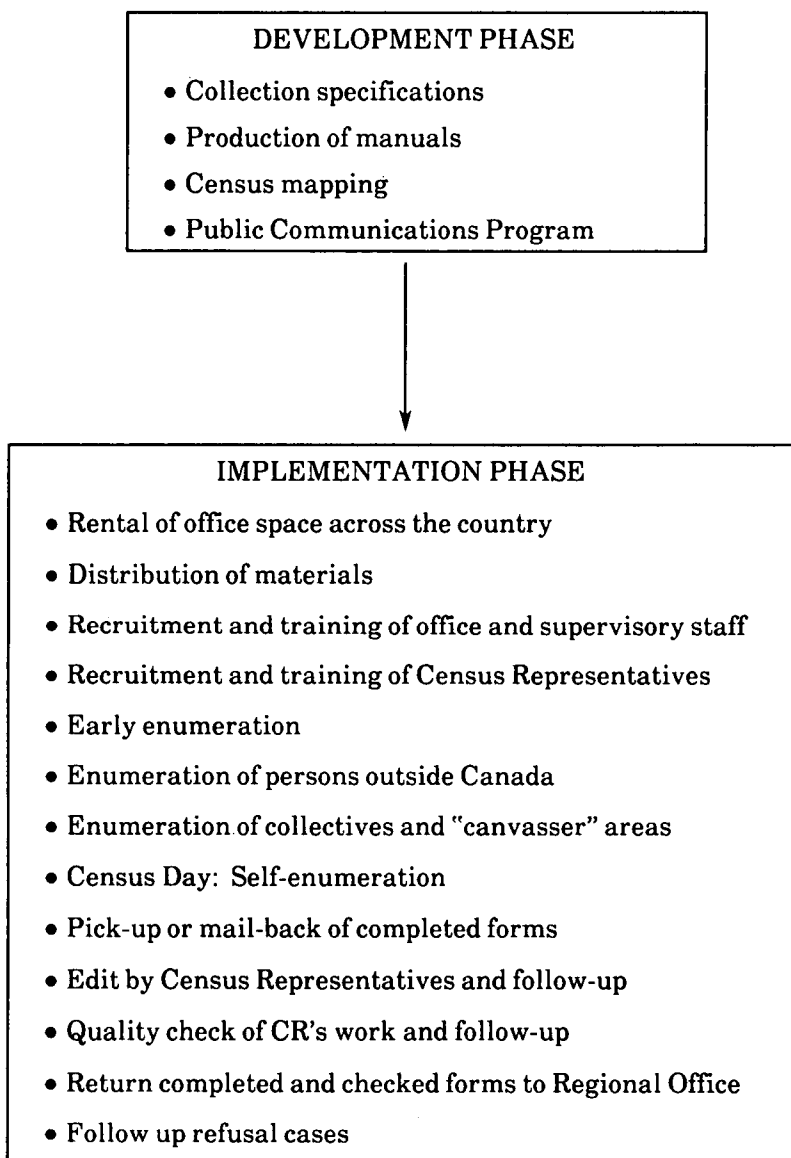
Visitation Records, data tapes and questionnaires for each EA were registered at Head Office. Visitation Records were checked for adherence to EA boundaries and corrections were made where necessary.

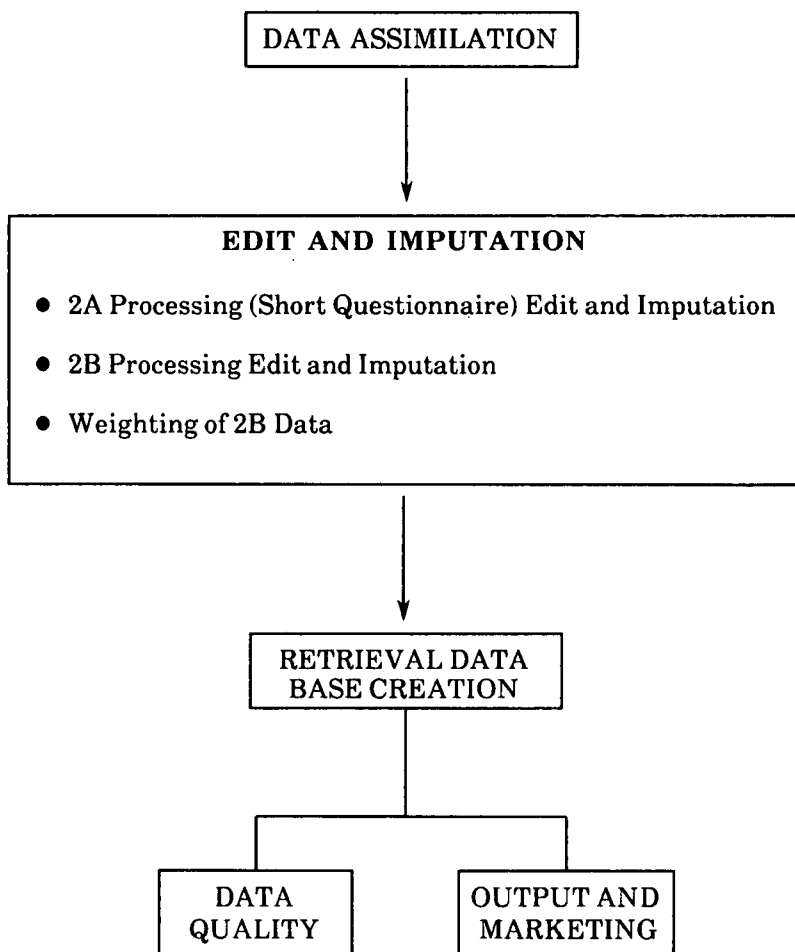
Data analysis reconciled document and person counts and adjusted data to account for individuals away from their usual place of residence on Census Day. At this stage, questionnaires not processed by the Regional Offices were also dealt with -- including, for example, persons enumerated outside of Canada and on merchant, navy and coast guard vessels.

## 7.7 Edit and Imputation

At this stage all data were screened for errors, such as illogical entries and missing values. Some errors were made by respondents, but mistakes also occurred during coding and processing. After detecting errors, values for missing or incomplete entries were imputed. Imputation can be "deterministic" or "probabilistic": both methods were used in the census. For deterministic imputation, errors are corrected by inferring the "right" value from other questionnaire answers. The probabilistic approach selects a record that has a number of characteristics in common with the record in error, and imputes the missing information from this "donor" record.



**Figure 14. Data Collection Steps**

**Figure 15. Edit and Imputation**

Two automated systems are used for census data:

### CANEDIT

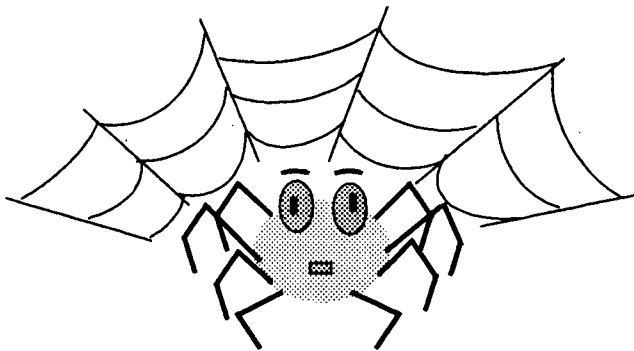
This system identifies illogical and missing responses and was applied to some of the data from both the short and long questionnaires. CANEDIT searches for a donor record -- one with similar characteristics to the record being imputed. If a match is not found, the search criteria are relaxed until a donor record is located. The donor is used to impute a value that replaces the illogical or missing one. For example, if a record indicated that a woman was married to Person 1 (reference person on the census questionnaire) and her date of birth was February 28, 1981 (giving her an age of 5 at the time of the 1986 Census) the combination would not be accepted. One possible correction would be to impute an appropriate age from another record. Records that had already been edited and found to be correct would be searched to find a married woman in the same geographic area who matched on other relevant characteristics such as age of husband.

### SPIDER (System for Processing Instructions from Directly Entered Requirements)

The SPIDER system was developed to handle more complex variables for the 1981 Census. It is used, for example, to process data on mother tongue as well as sample questions with many possible answers.

SPIDER works with logic tables, which are a series of "IF-THEN-ELSE" statements that determine the logical route for the computer to follow. The tables are grouped by related variables; labour force information, for example. The system detects logical inconsistencies between different edits; these inconsistencies can arise because the census editing process is large and complex.

Imputation is achieved by finding a donor with similar characteristics. If a match is not found within a reasonable number of searches, an arbitrary value is assigned.

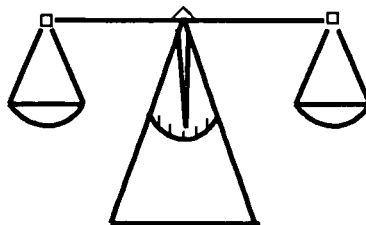




## Weighting

Data from one-fifth of Canadian households had to be weighted to represent the entire population. The simplest way of doing this would be to multiply all the units by 5. This method, however, is not very accurate. Sampling error can be reduced with a technique called ratio estimation. This technique ensures that census estimates of the population within a particular geographical area by age, sex and marital status are the same, whether one looks at data for the total population or weighted data from the sample: this is achieved by adjusting the basic weight of 5 attached to each sample record.

Edit and imputation of data took about 15 months to complete for all of Canada. As processes were completed, parts of the edit and imputation data base were transferred to the final census data base.



## 7.8 Measuring Data Quality

Throughout the census-taking process, care was taken to ensure high-quality results. Rigorous quality standards were set for data collection and processing, and the Public Communications Program attempted to minimize non-response. These steps reduced, but could not eliminate, errors. Therefore, a Data Quality Measurement program was established to pass information on to users. It will also help improve future censuses by identifying problems.

Sources of error in census data, and some of the main studies undertaken to measure error, are examined in Chapter 5.

## 7.9 Census Data Output and Marketing

Census data users' needs vary widely in subject, geographic detail and output format (i.e. paper, tape, microfiche). A wide range of publications and machine-readable files are produced, and many needs are met through custom tabulations.

Users were consulted extensively on output. Some were given a discussion paper and questionnaire that they were asked to complete and return. And many meetings took place with representatives from government and the private sector.

Users stressed the need for publications containing subprovincial data especially at the census tract and census metropolitan area levels. Considerable interest was also expressed in products presenting data on a particular topic, such as elderly persons or the labour market, and in the inclusion of historical data. Chapter 6 describes the products and services developed in response to these needs.

The role of marketing is to make sure that potential data users get the information they need. And the process is on-going: census information continues to be used many years after collection as the basis for time-series studies and population projections and estimates. In fact, Statistics Canada regularly handles requests for data from the 1981, 1976 and 1971 Censuses.

# CENSUS QUIZ



---

## CENSUS QUIZ

Now that you're familiar with the census, you might be interested in testing your skill with the following quiz.

1. The total population of Canada's first census in 1666 was:
- (a) 10,000
  - (b) 9,850
  - (c) 3,215
2. In 1986, a new question was added to the census on:
- (a) major field of study
  - (b) mother tongue
  - (c) occupation
3. The 1986 Census short form contained:
- (a) 7 questions
  - (b) 9 questions
  - (c) 10 questions
4. The long form was distributed to what portion of the population?
- (a) one-fifth
  - (b) one-fourth
  - (c) one-third
5. The cost of the 1986 Census per household was:
- (a) \$15
  - (b) \$30
  - (c) \$18

6. For the ethnic question, a new category was added:
- (a) Métis
  - (b) Dutch
  - (c) Black
7. The 1986 Census had how many EAs?
- (a) 15,385
  - (b) 21,832
  - (c) 44,042
8. Approximately what percentage of households were enumerated by canvassers in 1986?
- (a) 2%
  - (b) 5%
  - (c) 20%
9. The mid-decade census became mandatory in:
- (a) 1912
  - (b) 1956
  - (c) 1946
10. The third most prevalent mother tongue language in Canada is:
- (a) Italian
  - (b) German
  - (c) Ukrainian

Answers:

1 (c), 2 (a), 3 (b), 4 (a), 5 (a), 6 (c), 7 (c), 8 (a), 9 (b), 10 (a)

# APPENDIX I





---

## APPENDIX I:

### LEGISLATION REQUIRING CENSUS DATA

Many pieces of legislation require census data. Some examples are cost-sharing formulae in the Federal-Provincial Fiscal Arrangements and Federal Postsecondary Education and Health Contributions Act (1977), and the Canada Student Loans Act. Other acts that refer to or require census data include:

- Official Languages Act
- Canada Health Act
- Canada Council Act, section 17, subsection 2
- Canada Pension Act, section 115, subsection 5
- Provincial Subsidies Act, section 4
- Health Resources Fund Act, section 4, subsection 2
- Railway Relocation and Crossing Act, section 2, subsection 1
- Industrial and Regional Development Act, section 2
- Old Age Assistance Act
- War Veterans Allowance Act

Many provincial statutes implicitly or explicitly refer to census data. The following is a partial list:

#### Newfoundland

The Electoral Boundaries Delimitation Act, 1973, No. 44, section 14 (2)  
 Local Government Act, R.S. 1970, chapter 216, section 6 (8, 12)  
 Local Road Boards Act, R.S. 1970, chapter 219, section 19 (2)  
 Schools Act, R.S. 1970, chapter 346, section 90

#### Nova Scotia

Libraries Act, R.S.N.S. 1967, chapter 165, section 9 (2)

#### Prince Edward Island

Municipal Grants Act, R.S. 1980, chapter 38, section 5

#### New Brunswick

Municipal Assistance Act, 1973, chapter M-19, section 7 (4)

#### Quebec

An Act Respecting Elections in Certain Municipalities, R.S.Q. 1986, chapter E-2.1, division I  
 An Act Respecting Electoral Representation, R.S.Q. 1986, chapter R-24.1, section 3  
 An Act Respecting Public Elementary and Secondary Education, R.S.Q. 1986, chapter E-8.1, section 118

Cities and Towns Act, R.S.Q. 1986, chapter C-19, section 7  
Municipal Code of Quebec, R.S.Q. 1986, chapter 27.1, section 94

### Ontario

Assessment Act, 1980, chapter 31, section 14 (1)  
Education Act, 1980, chapter 129, section 90 (3)  
Election Act, S.O. 1984, chapter 54, section 69 (2)  
Juries Act, 1980, chapter 226, section 6 (2)  
Municipal Act, 1980, chapter 302, section 208 (21)  
Municipal Elections Act, 1980, chapter 308, section 92 (1)  
Police Act, 1980, chapter 381, section 8 (1)

### Manitoba

The Electoral Divisions Act, 1970, chapter E-40, section 9  
The Health Services Act, 1970, chapter H-30, section 90a  
The Liquor Control Act, 1970, chapter L-60, section 2 (43)  
The Manitoba Natural Resources Act, 1970, chapter N-30, section 20  
The Municipal Act, S.M. 1970, chapter M-225, section 96  
The Unconditional Grants Act, 1970, chapter U-10, section 2a  
The Water Supply Districts Act, 1970, chapter W-100, section 21 (2)

### Saskatchewan

The Community Capital Fund Program Act, 1978, chapter C-18, section 8  
The Community Capital Fund Program Act, 1978, chapter C-18.1, section 7  
The Community Health Unit Act, S.S. 1979, chapter C-19.1, section 3 (1)  
The Constituency Boundaries Commission Act, 1978, chapter C-28,  
section 13 (3)  
The Fire Departments Platoon Act, 1978, chapter F-14, section 3  
The Liquor Licensing Act, 1978, chapter L-21, section 62  
The Municipal Assessment Act, S.S. 1979, chapter M-23.1, section 3 (5)  
The Planning and Development Act, 1978, chapter P-13, section 82 (1)  
The Public Health Act, 1978, chapter P-37, section 44 (1b)  
The Saskatchewan Assessment Act, S.S. 1980-81, chapter S-6.1, section 8 (3)  
The Tuberculosis Sanatoria and Hospitals Act, 1978, chapter T-24,  
section 25 (2b)  
The Urban Municipality Act, 1978, chapter U-10, section 16 (2)

### Alberta

County Act, 1980, chapter C-27, section 5 (4b)  
Municipal and School Administration Act, 1980, chapter M-29, section 18 (3b)  
Municipal Government Act, 1980, chapter M-26, section 124 (2)  
Police Act, 1980, chapter P-12, section 20  
Property Tax Reduction Act, 1980, chapter P-19, section 27 (3a)

### British Columbia

Hospital District Act, 1979, chapter 178, section 9 (3)  
Municipal Act, 1979, chapter 290, section 779 (4, 5)

In the past, constitutional requirements for census data were imbedded in many acts, including:

- Representation Act, 1974
- Canada Act, 1982, section 38
- The Manitoba Act, 1870, section 25
- The British Columbia Terms of Union, 1871, Schedule, part 3
- The Prince Edward Island Terms of Union, 1873, Schedule
- The Alberta Act, 1905, section 18
- The Saskatchewan Act, 1905, section 18
- The Newfoundland Act (1949), Schedule



## APPENDIX II



---

## APPENDIX II

### 1986 Census Guide for Respondents Completing Their Census Form

Count Yourself In On Census Day, Tuesday, June 3, 1986.

This Guide will help you fill out your questionnaire. It should provide the answers to any problems that may arise. If not, do not hesitate to call our Telephone Assistance Service. The numbers to dial are listed on the last page of your questionnaire and long-distance calls are free of charge. This Guide will also answer some questions you may have about the census.

#### **Why take a census?**

A census is an inventory of a nation's people and their living condition. It is the only source of information from which Canadians can draw a complete and reliable picture of their community and their country. This picture taken on June 3, 1986 is produced by combining answers to various census questions as well as by comparing the change in various characteristics of the population between censuses. While it is true that some information could be obtained through other means, only the census provides Canadians with enough information to relate age, sex and education to employment or income, for example. As such the census provides a vast and invaluable store of knowledge about each Canadian community. This knowledge is useful to all levels of government, business and associations which represent a diversity of interests.

Census data can be useful for your personal needs as well. With the information the census provides, you can plan a business, or evaluate the needs of your community for day care, school, recreational and other facilities.

#### **How are the questions made up?**

Statistics Canada listens to the needs and concerns of Canadians before deciding which questions should be asked. Before the content of the 1986 questionnaire was decided, talks were held with many different groups across the country. These talks have resulted in questions on aboriginal peoples, the handicapped and the work force, to note just a few.

This Guide provides some of the reasons why each question is asked.

#### **Yes, but I feel this is an invasion of my privacy...**

You may feel uncomfortable about answering a question. You may think, "This is no one's business but my own". But, here's what happens. The information you provide is processed in such a way that your personal characteristics are protected in the statistical data base.

#### **Well then, why do I have to give my name?**

Your name is required so that census workers can contact you in case basic information is missing on your questionnaire.

#### **How do I know you'll keep it all a secret?**

Statistics Canada has upheld its guarantee of confidentiality ever since it began taking the census. Its record is unblemished. Your answers are kept in the strictest confidence and are used only to compile statistics.

Although you are required, by law, to provide the information requested in the census questionnaire, you are also protected by that law.

#### **Our message to you...**

The 1986 Census will give you the chance to work for a better Canada. Please count yourself in. It's your right.

Thank you for your co-operation.

## Question 1

Refer to the instructions for Question 1 on the questionnaire when considering whom to (or not to) include as members of your household. If you have doubts as to whether a person should be listed, enter the person's name and the reason for your uncertainty in the space provided in Question 8(c).

If there are more than six persons in your household and you do not have a second questionnaire, note this in the "Comments" section of your questionnaire, complete the questionnaire for six persons in your household and return as instructed. A Census Representative will contact you later.

*Names are required to contact the household for missing information.*

## Question 2

To enable us to identify family groups within the household, it is necessary to select a reference person (Person 1), and to state the relationship of each household member to that person. For example, if John Smith lives with his father Thomas Smith, and Thomas Smith has been entered as Person 1, John Smith would mark "Son or daughter of Person 1".

There may be a member or members of your household whose relationship to Person 1 is not described in Question 2. In such cases, mark either "Other relative of Person 1" or "Other non-relative", and also print the exact relationship to Person 1 in the space provided.

"Other relative" includes persons such as uncles, aunts, cousins, grandfathers, grandmothers, and so on. "Other non-relative" refers to household members who are not related to Person 1 by blood, marriage, adoption or common-law. Some examples are employee's wife, employee's daughter, room-mate's son, landlord, and so on.

The term "common-law", as used in "Common-law partner of Person 1" or as may be used to describe any other such partnership in the household (for example, "Lodger's common-law partner") applies to any case of a couple living together in this type of union.

Note that stepchildren, adopted children, and children of a common-law partner should be considered as sons and daughters. Foster children, wards and guardianship children who are not related to Person 1 by blood, marriage, adoption or common-law should be listed as lodgers.

*This question is needed to identify family and non-family groups and persons living alone. Information on the numbers and characteristics of these groups is essential for planning of social programs such as old age security and family allowance. These data are also used in identifying future needs for housing and community services from health and education to recreation and transportation.*

## Question 3

*Information on age is essential in projecting future population trends and in better understanding social and economic changes. It is a key element in planning for a community's needs such as day care facilities, schools and senior citizens' housing.*



#### Question 4

*This question is vital in studying population trends. Data classified by sex are needed to understand the changing social and economic roles of men and women.*

#### Question 5

Mark “Now married” if you have a husband or wife who is now living, even if you are temporarily living apart because one of you is employed away from home, hospitalized, etc., but not if you are actually separated or have obtained a divorce.

Mark “Separated”, if you are separated from your husband or wife due to causes such as desertion or marriage breakdown, or because you no longer want to live together, provided that no divorce has been obtained.

Mark “Divorced” if you have obtained a divorce and have not remarried.

Persons in a common-law type of relationship should mark one of the boxes “separated”, “divorced”, “widowed” or “never married” according to the guidelines provided above.

*Marital patterns of the population can affect family laws and social programs geared to such groups as single-parent families, the elderly living alone, etc.*

#### Question 6

You should report the first language you learned in childhood, that is, before you went to school. If you no longer understand that language, report the second language you learned. If you are answering for someone else, report the first language that he/she learned in childhood.

If you understand more than one language, report the one you learned first. If you learned two languages at the same time, report the language you **yourself** spoke **most often at home**. If you used the two languages **equally often**, report both.

For a child who has not yet learned a language, report the language he/she will first be learning **at home**. If he/she is learning two languages at the same time, report the one in which he/she is spoken to **most often**. If the two languages are used **equally often**, report both.

Persons who speak an **Indian** language (**from India**) should not report Indian but rather Hindi, Urdu, Punjabi or some other language as applicable. Persons who speak an **Amerindian** language (North American Indian) should report Cree, Ojibway or some other Amerindian language as applicable.

*Mother tongue data are used in programs which protect and promote rights and privileges established by the Canadian Charter of Rights and Freedoms and the Official Languages Act.*

#### Question 7

It is essential that **everyone** answer this question regardless of whether or not he/she is an aboriginal person of North America. Whenever possible, the answer to this question should be provided by the person to whom the information refers.

### Question 7 (concluded)

Anyone who feels he/she is an aboriginal person (for example, Inuit, Métis, treaty or non-treaty status Indian) should respond to the categories beginning with “Yes...”, as appropriate. Aboriginal children, even if adopted by non-aboriginal families, should also have a “Yes...” response.

Any person who considers him/herself to be **East Indian** or **Asian Indian** or **Asiatic Indian**, or who feels he/she has ethnic roots on the subcontinent of India, should mark “No...” to this question. Any other person who considers him/herself **not** to be an aboriginal person of North America should also mark “No...”.

*The purpose of this question is to obtain counts of Canada’s aboriginal population, its characteristics and its geographical distribution.*

### Question 8

**Part (a):** If more than one person is responsible for such payments, enter the name of the person who usually pays the largest amount.

**Part (b):** If your household has more than six persons you will require more than one questionnaire. Please see the guidelines for Question 1 (second paragraph) above. If you are using more than one questionnaire, please answer this question on the first questionnaire only.

**Part (c):** If you have difficulty determining if a person should be included on your questionnaire, please refer to the WHOM TO INCLUDE item in the column adjacent to Question 1 on the questionnaire and to the guidelines for Question 1 above.

**Part (d):** Every Canadian or landed immigrant should be enumerated as either a permanent or temporary resident of the dwelling he/she occupied overnight between June 2/3, 1986. Visitors, students or married workers with another usual home are examples of temporary residents.

Mark either “None” or enter the number of temporary residents.

*Part (a) is used to determine the person who can best answer the dwelling questions. Parts (b), (c) and (d) help to ensure that no one is left out who should be counted.*

### Question 9

Mark “Owned” if the dwelling you occupy is owned or being bought by you and/or a member of this household even if (a) it is situated on rented or leased land or (b) it is part of a condominium (whether registered or unregistered). For census purposes, a **condominium** is a multi-unit residential complex in which dwellings are owned individually while land is held in joint ownership with others.

Mark “Rented” in all other cases, even if the dwelling you occupy is (a) provided without cash rent or at a reduced rent, such as a clergyman’s residence, a superintendent’s dwelling in an apartment building, etc., or is (b) part of a co-operative. For census purposes, a **co-operative** is jointly owned by all members who occupy their dwelling units under a lease agreement.

*This information is important both in assessing housing markets and in the development of housing programs.*

### Question 10

*Information on the period of construction of Canada's housing supply is used in renovation and energy conservation programs.*

### Question 11

Do not enter "half-rooms"; for example, instead of 1½ enter either 1 or 2, depending on which best describes your dwelling.

Include as **separate rooms** partially divided rooms which you consider to be separate because of fixed or movable partition(s) or because of their use (e.g., "L-shaped" living-dining rooms).

*Statistics comparing the number of rooms to the number of people living in various types of dwellings provide important information on living conditions throughout Canada.*

### Question 12

**Part (a):** A **heat pump** is a device which, in winter, extracts heat from exterior sources such as air or water and transmits it to an interior distribution system (usually a furnace) which circulates that heat through the dwelling. In summer, the heat pump extracts heat from within the dwelling and transmits it to the exterior, thus cooling the dwelling. (A heat pump should not be confused with an electrically driven fan or blower which is found on forced hot air furnaces.)

If a heat pump or a combination (dual-fuel) furnace is part of a steam or hot water heating system, mark "Steam or hot water furnace or boiler".

**Part (b):** Mark "Electricity only" if your dwelling is heated exclusively by electricity. If the electricity is the main but not the only source of heat, mark "Electricity as the main source...".

**Note:** If you use both commercial fuels/energy (e.g., oil, natural gas or electricity) and energy retrieved from the environment, for example, by heat pumps or solar panels, mark the category which identifies the **commercial fuel** used.

*Information about household heating equipment and fuel is useful in planning energy conservation and housing programs.*

### Instruction prior to Question 13

In Question 13, parts (a), (b) and (c), if your payments include both **business and residential** expenses, enter your estimate for the residential portion only.

### Question 13

**Parts (a), (b) and (c):** If you have occupied this dwelling for **less than a year**, estimate and report **the yearly** amount based on your payments up to this date or on other available information.

**Condominium owners** – If electricity or other service charges are included in the condominium fee, mark "None".

**Part (b):** If uncertain of the total annual cost of fuel, multiply the amount consumed (e.g., litres of oil, containers of propane gas, cords of wood, tons of coal) by the per unit price.

**Part (d):** Include **parking fees** paid with the rent, if any.

### Question 13 (concluded)

**Part (e):** Mortgage payments are sometimes made in other than monthly instalments (e.g., once a year, twice a year or every three months). In this case, to obtain the average monthly amount paid, add all payments made in the last 12 months and divide the total by 12.

**Part (f):** If your regular monthly mortgage payments, shown in part (e), include municipal property taxes, but exclude school taxes:

- (i) check "No" in part (f); and
- (ii) enter in part (g) the amount of annual school taxes paid by you directly to school tax collectors.

**Part (g):** Include local improvement taxes with the property taxes, even if billed separately.

**Part (h):** For single dwellings, state the value of the entire property, including the value of the land it is on and of any other structure, such as a garage, which is on the property. If your dwelling is located in a building which contains several dwellings, or a combination of residential and business premises, all of which you or other members of your household own, estimate and report a portion of the market value that applies only to the dwelling in which you reside. Alternatively, you may estimate the value of your dwelling by multiplying by 100 the amount of rent per month which you could obtain for that one dwelling.

*This question provides information on housing costs which can be combined with information from other census questions to evaluate the economic situation of Canadians.*

### Question 14

Persons born in parts of Canada which were part of the Northwest Territories at the time of their birth, but which have since become provinces of Canada, should report their place of birth according to present provincial boundaries. Persons born in the province of Newfoundland and Labrador before that province joined Confederation should mark "Nfld.". Persons born in the six counties of Northern Ireland should mark "United Kingdom". Persons born in any of the other counties of Ireland should print "Eire" in the space provided.

If you are not sure of the country of your birth because of boundary changes, print the name of the nearest city or district in the space provided.

*This information, when combined with information from other census questions, can be used to review employment and immigration policies and programs, and to plan education, health and other services.*

### Question 15

Mark "Canada, by birth", if you were:

- (a) born in Canada  
(except for persons of parents, one of whom was, at the time of their birth:
  - (i) in the service of a foreign government, or
  - (ii) an employee of a person in (i), or
  - (iii) in the service of an international organization to whom there is granted diplomatic privileges,

**AND neither parent was a Canadian citizen or permanent resident (landed immigrant));**

### Question 15 (concluded)

- (b) born outside Canada of one or both Canadian parents, on or after February 15, 1977;
- (c) born outside Canada before February 15, 1977 of both Canadian parents, if you did not lose your Canadian citizenship;
- (d) born outside Canada of one Canadian parent, if your birth was registered as Canadian with Canadian authorities, and if you did not lose this citizenship.

Persons providing a response of “Canada, by birth” will not have gone through the immigration process, and thus should not have a response to the year of immigration question.

Persons who are Canadian citizens by naturalization would normally have received citizenship certificates from Canadian citizenship authorities.

If you have dual citizenship, mark the applicable boxes, e.g., Canada by birth or Canada by naturalization **and** country of birth (other than Canada).

If you were born outside Canada and are not a Canadian citizen, mark “Same as country of birth (other than Canada)”, if you still retain this citizenship; otherwise mark “Other”.

If you have lost your former citizenship and have not yet become a Canadian citizen, or if you have no citizenship for any other reason, mark “Other”.

*This question serves several purposes. It identifies populations who may need special minority language education programs. It also supports electoral planning at all levels of government when combined with age information. Knowledge of the extent of non-citizenship when combined with language information helps those responsible for conducting citizenship preparation programs and court facilities.*

### Question 16

*Information on period of immigration is important for studies of immigration trends.*

### Question 17

Ethnic or cultural group refers to the “roots” or ancestral origin of the population and should not be confused with citizenship or nationality. Canadians belong to many ethnic and cultural groups, such as Inuit, North American Indian, Métis, Irish, Scottish, Ukrainian, Chinese, Japanese, East Indian (from the subcontinent of India), Dutch, English, French, etc.

Note that in cases where you use language as a guide to your ethnic group, you should report the specific ethnic group to which you belong, e.g., Haitian rather than French; Austrian rather than German.

*The ethnic origin question will provide information which is used extensively by the many ethnic or cultural associations in Canada to study the size, location, characteristics and other aspects of their respective groups.*

### Question 18

You should report the language you **yourself** speak **most often at home**. If you are answering for someone else, report the language that **he/she** speaks **most often**.

If you speak two languages **equally often**, report both.

**Question 18 (concluded)**

For a child who has not yet learned a language, report the language spoken **most often at home**. If two languages are used **equally often**, report both.

If you are mute, report the language you use most often at home to make yourself understood.

If you live alone, report the language in which you feel most comfortable.

Persons who speak an **Indian** language (**from India**) should not report Indian but rather Hindi, Urdu, Punjabi or some other language as applicable. Persons who speak an **Amerindian** language (North American Indian) should report Cree, Ojibway or some other Amerindian language as applicable.

*Information on the languages Canadians speak at home, when used in combination with other language data, provides important insights on language retention.*

**Question 19**

Do not report French or English learned at school unless you can conduct a conversation of some length on various topics in that language.

For a child who has not yet learned a language, report the language spoken most often at home if it is either English or French. If the two languages are used equally often, report "English and French". If neither language is used often, mark "Neither English nor French".

If you are mute, report English, French or both provided you are able to make yourself understood in one or both of these languages.

*This question not only gives an estimate of the ability of Canadians to communicate in English and French, but also the number of people who speak neither English nor French. The information is used by business and governments to determine the potential demand for language education and translation services.*

**Question 20**

This question asks you to indicate if you are limited, even to a minor degree, in your activities at home, at work, at school or in other places because of a long-term physical or mental condition or health problem.

A long-term physical condition, mental condition or health problem is one that has lasted or is expected to last six or more months. This period of time is measured from the time the condition or problem began.

Wherever possible, the answer to this question should be provided by the adult to whom the information refers. The answer for persons less than 15 years of age should be provided by a parent or guardian.

*This question will provide new information on the numbers of mentally and physically disabled Canadians as well as those with chronic health problems that result in some limitation in activity. Responses will also assist Statistics Canada in designing surveys to provide the additional information needed in support of the disabled.*

## Question 21

**Part (a):** Indicate the highest grade or year attended according to the province where the education was obtained, and do not attempt to convert to the equivalent level of the province of present residence (if the two are different). Conversion is only required if the education was obtained outside of Canada. In this case an estimate of the equivalent level of schooling should be made according to the education system of the province in which you reside.

Note that the “Versification” year of the former classical colleges of Quebec should be considered as equal to Grade 11.

If you are studying to complete a regular school grade by private instruction, correspondence or part-time (day or evening) attendance at class, report the grade or year in which these courses would be included in the regular daytime program.

If you are attending a special education school, or an institution where the classes are ungraded, estimate the grade or year level as closely as possible to the equivalent level of the school system of the province.

If you are a student in secondary school taking classes at different levels, indicate the level of the majority of your classes.

**Part (b):** In calculating years, indicate the number of academic years successfully completed regardless of the actual length of time it may have taken. If you attended a university which used the semester system, consider two semesters with the normal course load as equivalent to one academic year. If you received university training by correspondence, or through part-time (day or evening) study, the accumulated credits should be converted to the equivalent number of years in the regular full-time university program.

If you received your university education in a classical college in Quebec, the following guide may be useful: “Belles-Lettres” and “Rhétorique” should not be considered university education (see Question 21(c)); however, “Philo I” and “Philo II” should be considered as “1 year” and “2 years” of university education respectively.

If you received teacher training in a faculty of education associated or affiliated with a university, you should indicate this training at the university level here; otherwise, indicate that training in Question 21(c).

**Part (c):** Include schooling in all institutions other than university, secondary or elementary schools, whether or not they require a secondary (high) school certificate for entrance, including non-university teachers’ colleges, police schools, etc.

Do not include courses taken for leisure or recreation.

In calculating years, enter the number of academic years successfully completed, regardless of the actual length of time it may have taken.

If you received other non-university training by correspondence, or through part-time (day or evening) attendance, the accumulated credits should be converted to the equivalent numbers of years in the regular full-time program.

CEGEP (general) or pre-university courses and CEGEP (professional) or career-terminal technical-vocational courses are postsecondary programs in the province of Quebec. The latter are similar to community college programs in other provinces.

The “Belles-Lettres” and “Rhétorique” levels of classical college in Quebec should be considered as “1 year” and “2 years” of other non-university education respectively.

*Information on the level of schooling is used to assess the need for continuing education, and employment potential throughout Canada.*

## Question 22

**Secondary (high) school graduation certificate:** Mark this box if you graduated from a high school where the certificate was classed as junior or senior matriculation, general or technical-commercial.

**Trades certificate or diploma:** Mark this box if you received a certificate or diploma obtained through apprenticeship (journeyman's) training and/or in-school training in trades-level vocational and pre-vocational courses at community colleges, institutes of technology and similar institutions where the minimum entrance requirement was **less than** secondary (high) school, junior or senior matriculation, or equivalent.

**Other non-university certificate or diploma:** Mark this box if you obtained a certificate or diploma (other than a trade certificate or diploma) granted by a community college (both transfer and semi-professional career programs), CEGEP (both general and professional), institute of technology, or any other non-degree-granting educational institution.

If you obtained a teaching certificate awarded by a Provincial Department of Education at an approved institution such as a normal school or a college of education, mark this box. However, if you obtained your teacher's qualification in a faculty of education associated with a university, mark bachelor's degree(s).

**University certificate or diploma:** If you have a diploma, certificate or licence, awarded by a professional association (e.g., in accounting, banking, insurance) on the basis of successful completion of courses conducted through or by a university, you should indicate these as either:

- (a) university certificate or diploma **below** bachelor level, if a bachelor degree is not a normal prerequisite; or
- (b) university certificate or diploma **above** bachelor level, if a bachelor degree is a normal prerequisite.

*This question, in conjunction with Question 23, provides more specific information on the educational resources of our population. This information will determine whether these resources are sufficient to accommodate future requirements in the areas of technology, science, engineering and social services.*

## Question 23

Be as specific as possible in indicating a subfield of specialization within a broader discipline or area of training, especially in the case of graduate studies or other advanced training.

If you have earned more than one highest degree, certificate or diploma (e.g., two bachelor's degrees or two master's degrees), then indicate the major field of study for the one that was most recently conferred.

If you have specialized in more than one major field of study in your degree, certificate, or diploma, then indicate the one in which you experienced the greatest degree of specialization (e.g., the field in which you received the most number of courses or credits).

*Knowledge of the qualifications of the labour force is critical to the planning of basic education and retraining programs in the face of changing technological and labour market needs.*



## Question 24

Give the information for your usual residence 5 years ago even if you were away temporarily on June 1, 1981.

Mark only one of the four boxes.

If you marked “Different city, town, village, township, other municipality or Indian reserve in Canada”, be sure to enter the name of your locality of residence 5 years ago, and the county (or regional municipality, regional district, etc.) and province or territory in which it is located. If you lived in an area where the same name is used for both a city, town or village, and a parish, township or other municipality, indicate which is correct by specifying the type (e.g., St. Andrews **town** or St. Andrews **parish**; Granby **city** or Granby **municipality**, Kingston **city** or Kingston **township**).

*The internal migration information obtained from this question is needed to prepare accurate estimates and projections of national and provincial populations. Population estimates are used as a basis for distributing funds between the federal government and the provinces. Population projections are required for planning by both government and business, for example, in determining future needs for housing, education and social services.*

## Question 25

**Part (a):** Enter total number of hours of work in the following situations:

(i) **Working without pay for your spouse or another relative on a family farm or in a business**

This means working without regular money wages for a spouse or a relative who is a member of the same household, at tasks which contribute to the operation of a farm or business run by the relative (e.g., if you worked on book-keeping for a farm or business owned by your spouse).

(ii) **Working in your own farm, business or professional practice (i.e. self-employed with or without paid help)**

You should take into account fishing, trapping or hunting for profit or for the maintenance of your community, with your own or rented equipment or with equipment in which you have a share.

The hours you worked should include all time spent on preparing, maintaining and administering the operation of a farm, business or professional practice. For example, farmers should include hours spent maintaining farm fences, buildings or machinery, as well as on cultivating, sowing or milking. Fishermen should include time spent preparing and maintaining boats, nets, etc. If the number of hours is not known, enter your best estimate.

(iii) **Working for wages, salaries, tips or commission**

**Note:** Refer to Question 30 in this Guide for complete definitions of these three situations.

**Part (b):** Answer “Yes, on temporary lay-off” if you **expect to return** to the job from which you were laid off regardless of how long ago the lay-off occurred.

Answer “Yes, on vacation, ill, on strike or locked out, or absent for other reasons” if you had a job or business last week from which you were absent for the whole week, with or without pay, because of vacation, illness, a strike or lock-out at your place of work, or such other reasons as maternity leave, bad weather, fire, personal or family responsibilities, etc. For paid workers, absence on training courses should be reported only if you are receiving wages or salary from your employer.

### Question 25 (concluded)

**Part (e):** Mark “No, personal or family responsibilities” if you could not have started work last week because of illness in your family, child care difficulties, jury duty, etc.

Mark “No, other reasons” only if you did not already have a job, were not temporarily ill, did not have personal or family responsibilities, or were not going to school, i.e. if you were no longer interested in working, on vacation, etc.

*Geographically detailed employment and unemployment statistics, available only from the census, enable all levels of government to direct economic development efforts to those areas of the country most in need.*

### Question 26

While housework or other work around your own home and volunteer work are important activities, they should not be included because this question is designed to obtain information on work involved in the production of goods and services for the economy.

*This question complements Question 25, and serves to provide information on the numbers and characteristics of other Canadians with recent employment experience.*

### Question 27

If you are self-employed, enter in part (a) of the question, the name of the business you operate. If your business does not have a name, enter your own name.

If your wages are paid by an agency which hires out your services, enter the name of the agency.

If you work as an employee in a private household, enter the name of the family for whom you work and write: “private household”.

Give a complete description in part (b) of the question. See examples below:

Complete responses	Incomplete responses
(a) <b>wheat farm</b>	(a) agriculture
(b) <b>motor vehicle parts manufacturing</b>	(b) auto parts
(c) <b>retail household furniture and appliance store</b>	(c) furniture
(d) <b>secondary school</b>	(d) school
(e) <b>aluminum rolling, casting and extruding</b>	(e) aluminum
(f) <b>municipal police department</b>	(f) police

*This question provides information on the number of workers in each industry. When compared with information from previous censuses, this information can help identify contracting and expanding industries, for example. The employer's name is essential for accurate coding of the industry.*

## Question 28

If you have marked "Worked at the address below", give as complete an address as possible. If the full address is not known, enter as much information as you can. If you worked in an area where the same name is used for both a city, town or village, and a parish, township or other municipality, indicate which is correct by including the type (e.g., St. Andrews **town** or St. Andrews **parish**; Granby **city** or Granby **municipality**; Kingston **city** or Kingston **township**).

### Away temporarily

If a member of this household is away temporarily (e.g., on a work assignment, business trip, training course, or holidays), then give his or her usual place of work.

### Worked at home

If you worked in your home, or if your place of work was in the same building as your place of residence, mark "Worked at home". For example, dressmakers, apartment building superintendents, storekeepers with a store attached to their home or persons with an office in their homes should mark "Worked at home".

### No usual place of work

If you worked in a different location each day, or you travelled about during the day, see the examples below:

- If you went regularly to a headquarters, depot, garage, shop, etc., before actually starting work each day, then write in the address or name of the headquarters, depot, etc.
- If you worked at least part of the time at a fixed address, then write in the address, building name, etc., where you most often worked.
- If you went from your home to various work locations, then write in "No usual place" in the space provided for the street address.

*Knowledge about concentrations of employment in particular areas can help in the planning of services such as parking, banking and shopping facilities. Local transportation planners may use this information to determine public transit needs.*

## Question 29

The description should be as precise as possible and you will probably need to use two, three or more words in each part of the question. The description should avoid using terms such as worker, employee, etc., in favour of specific descriptions of the kind of work.

Use specific descriptions in both parts (a) and (b) of the question. In part (b) be sure to indicate if your job involves supervision or management.

See examples below:

Complete responses	Incomplete responses
(a) maintaining electrical equipment (b) repair and maintenance of electric motors	(a) maintenance (b) repair work
(a) typing, general office work (b) typing and filing	(a) office work (b) clerical
(a) inspecting electronic equipment (b) supervising electronic equipment inspection	(a) inspecting (b) supervising

**Question 29 (concluded)**

Members of religious orders engaged in activities such as primary school teaching, nursing, etc. should report these rather than religious activity.

*This information, combined with similar information from previous censuses, is essential for establishing future job market requirements and for preparing people for future jobs.*

**Question 30**

**Part (a):** Mark “**working for wages, salary, tips or commission**” if, in the job reported, your were:

- working for wages and/or salaries;
- working for piece-rates;
- working for payment “in kind” (room, board or supplies) in non-family enterprises, e.g., as a member of a religious order;
- serving as a member of the Armed Forces;
- working on commission as a salesperson for only one company and did not maintain an office or staff;
- working an hour or more for pay in a job such as baby-sitting, cleaning, delivering circulars, etc.;
- working as a paid housekeeper or paid “nanny”.

Mark “**working without pay for your spouse or another relative in a family farm or business**”, if, in the job reported, you worked without regular money wages for a spouse or a relative who is a member of the same household, at tasks which contributed to the operation of a farm or business which was run by the relative.

Volunteer work or housework or other work around your home are not considered to be work without pay.

Mark “**self-employed without paid help**” or “**self-employed with paid help**” as appropriate, and indicate whether your business or farm was incorporated if, in the job reported, you were:

- operating a farm, business or professional practice, alone or in a partnership even if no goods or services were sold or rendered;
- operating a farm, business or professional practice, even if it suffered a loss;
- operating a farm whether you own or rent the land;
- working on a free-lance basis or on contract to do a job, e.g., architects, private duty nurses, dressmakers;
- providing meals and/or rooms and/or day care services in your own home for boarders, roomers or neighbours’ children;
- operating a direct distributorship selling and delivering products such as cosmetics, newspapers, brushes, soap products, etc.;
- fishing, trapping or hunting for profit or for the maintenance of your community, with your own equipment or with equipment in which you had a share;
- working to set up a business, farm or professional practice.

*The identification of the self-employed, employees, and unpaid family workers indicates the distinct contribution of these kinds of workers to overall employment and economic development in Canada.*

### Question 31

- (a) Count as a week any week in which you worked, even if you worked only a few hours.

Enter 52 weeks if you were paid for the full year or if you operated a farm, business or professional practice for the full year, even though you worked less than a full year (for example, a school teacher paid on a 12-month basis).

Include weeks on paid vacation but exclude weeks on leave without pay.

- (b) Part-time work is that work which is less than the normally scheduled weekly hours of work performed by persons doing similar work.

*This information is essential in evaluating trends in part-time employment as well as determining how many people were continuously employed in 1985 as opposed to being employed for only part of the year.*

### Question 32

#### Please note these important points

- Information on your **census questionnaire is strictly confidential by law** and no individual, government department or agency outside of Statistics Canada has access to it. The Statistics Act prohibits the disclosure by Statistics Canada of any information that can be related to any identifiable individual person.
- Answer every part of this question whether you were working or not. Income reported should be the **total money income** received during the calendar year 1985. If you had no income from any of the listed sources, mark "No". In case of a loss, report the amount and also mark "Loss".
- If you are not sure of an answer, consult the relevant documents, e.g., income tax returns. Otherwise make your best estimate.
- If you received income from abroad, report it in Canadian dollars. However, if you immigrated to Canada after January 1, 1985, do not report income received before your arrival in Canada.
- Do not report either the family allowances received from the Federal and Provincial Governments or the child tax credits. These allowances and credits will be estimated for each family from the number of children shown on this questionnaire.
- Also excluded from income are gambling gains and losses, lottery prizes, money inherited during the year in a lump sum, capital gains or losses, receipts from the sale of property, income tax refunds, loan payments received, lump-sum settlements of insurance policies, rebates received on property taxes, and refunds of pension contributions.

**Part (a): Total Wages and Salaries.** Report total wages and salaries from all jobs before deductions for income tax, pensions, hospital insurance, etc. (Do not report take-home pay.)

Include military pay and allowances.

Include tips and cash bonuses received during 1985. Also include all types of casual earnings whether or not T4 slips for income tax have been issued.

Commissions should also be included. However, salesmen who worked for more than one company, or who maintained their own office or staff, should report in "non-farm self-employment" part (b). Also persons baby-sitting in their own homes and newspaper boys/girls should report in part (b).

### Question 32 (continued)

Do not include the value of taxable allowances and benefits provided by employers, such as free lodging, free automobile use, bursaries, travelling expenses of spouse, contributions towards medical insurance, etc.

If consulting T4 slips to answer this question, report income shown in Box C of T4 Federal Income Tax slips less the value of "taxable allowances and benefits" shown in Boxes K to O.

Owners of an unincorporated business or farm should report all the income from that business or farm as self-employment in part (b) or (c).

**Part (b): Net Non-farm Self-employment Income.** Report an amount if you owned and operated a non-farm, unincorporated business or professional practice during 1985, whether by yourself or in partnership. In case of a partnership, report only your share of the net income. Receipts from incorporated businesses should be reported in "wages" and/or "investment income".

Report net income (gross receipts minus expenses of operation such as wages, rents, depreciation, etc.). Do not subtract personal deductions such as income tax and pensions.

Persons baby-sitting in their own homes, operators of direct distributorships such as selling and delivering cosmetics, newspapers, etc., and odd jobbers who obtained by themselves contracts or agreements to do jobs should report their income in this part.

Artists, writers, music teachers, hairdressers, dressmakers, etc. should report their net income from free-lance activities.

In case of a loss, report the amount and also mark "Loss".

**Part (c): Net Farm Self-employment Income.** Report an amount only if you operated a farm in 1985 by yourself or in partnership. In case of a partnership, report only your share of net income.

Report your net income (gross receipts from farm sales minus depreciation and cost of operation). Cash advances should be included in gross receipts for the year in which they are received. Include also government supplementary payments. Exclude the value of income "in kind", such as agricultural products produced and consumed on the farm.

Answer the question even if you employed a hired manager to run your farm and deduct the manager's salary as expenses. If you rent out your farm, report the net rent in "investment income", part (h). Similarly, income from incorporated farms should be reported in "wages" and/or "investment income".

In case of a loss, report the amount and also mark "Loss".

**Agricultural operations** include production of field crops, vegetables, fruits, greenhouse and nursery products and seeds, maple products, raising poultry and livestock, production of animal products such as eggs, milk and wool, and fur farming and beekeeping.

**Part (d): Old Age Security Pension and Guaranteed Income Supplement.** Report payments to persons 65 years and over and to 60 to 64-year-old spouses/widows of Old Age Security Pension recipients (Spouse's Allowance) from federal government only.

Provincial income supplements are to be reported in part (g). Retirement pensions of civil servants, RCMP and military personnel are to be reported in part (i). Old age, retirement and war pensions and other similar payments received from foreign governments in 1985 should be reported in (j).

---

**Question 32 (continued)**

**Part (e): Benefits from Canada or Quebec Pension Plan.** Report benefits received under the Canada or Quebec Pension Plan, e.g., retirement pensions, survivors' benefits, disability pensions.

Please do not report your contributions to the Plan but the benefits from it.

Do not include lump-sum death benefits.

Retirement pensions of civil servants, RCMP and military personnel are to be reported in part (i).

**Part (f): Benefits from Unemployment Insurance.** Report total unemployment insurance benefits, before income tax deductions. Include benefits for sickness, maternity, fishing, work sharing, retraining and retirement received under the Federal Unemployment Insurance program.

**Part (g): Other Income from Government Sources Including Provincial Income Supplements and Grants and Social Assistance.** Report payments received from provincial or municipal programs by persons in need, including mothers with dependent children, persons temporarily or permanently unable to work, elderly individuals, the blind and the disabled. Include cash benefits covering basic needs (e.g., food, fuel, shelter, clothing) plus cash benefits for special needs.

Include provincial income supplements, i.e. provincial payments to seniors to supplement Old Age Security and Guaranteed Income Supplement.

Include provincial payments to seniors to help offset accommodation costs.

Include here all other transfer payments such as for training under the National Training Program (NTP), veterans' pensions, war veterans' allowance, pensions to widows and dependants of veterans, workers' compensation, etc.

Include, if applicable, provincial tax credits and allowances such as "Nova Scotia Tax Credits", "New Brunswick Tax Credits", "Quebec Real Estate Tax Refund", "Allowances for Children Under Age 6", "Ontario Tax Credits", "Manitoba Tax Credits", "Alberta Royalty Tax Credits", "Alberta Tax Credits", "British Columbia Tax Credits" and "Yukon Territory Tax Credits" as claimed on your income tax return.

Do not include family allowances and federal child tax credits.

Retirement pensions to career military personnel, civil servants, etc., are to be reported in part (i).

**Part (h): Dividends and Interest on Bonds, Deposits and Savings Certificates, and Other Investment Income.** Report actual amount of dividends received, not the taxable amount for dividends received from Canadian corporate stocks.

Also report here dividends received from foreign stocks.

Report interest from deposits in banks, trust companies, co-operatives, credit unions, caisses populaires, etc., as well as interest on savings certificates, bonds and debentures.

Also report here net rents from real estate (including farm land), mortgage and loan interest received, regular income from an estate or trust fund, and interest from insurance policies.

Also include investment income received from abroad.

If this total is a loss, write the amount and also mark "Loss".

**Question 32 (concluded)**

**Part (i): Retirement Pensions, Superannuation and Annuities.** Report income received as the result of having been a member of a pension plan of one or more employers; payments received from all annuities, including payments from a matured registered retirement savings plan (RRSP) in the form of a life annuity, a fixed term annuity, a registered retirement income fund or an income-averaging annuity contract; pensions paid to widows or other relatives of deceased pensioners; pensions of retired civil servants, Armed Forces personnel and RCMP officers; annuity payments received from Canadian Government Annuities Fund, an insurance company, etc.

Do not include lump-sum death benefits, lump-sum benefits and withdrawals from a pension plan or RRSP or refunds of overcontributions. Severance pay and retirement allowances and pensions from outside Canada should be entered in Question 32(j).

**Part (j): Other Money Income.** Include here all other regular cash income not covered in the questions above.

**Examples are:**

- alimony;
- child support;
- periodic support from persons not in the household;
- net income from roomers and boarders;
- income from abroad (e.g., pensions) except dividends and interest which should go into (h);
- non-refundable scholarships and bursaries;
- severance pay;
- royalties;
- strike pay.

**Do not include:**

- family allowances and federal child tax credits;
- cash refunds of pension fund contributions;
- lump-sum death benefits or any other one time lump-sum payment.

*Income provides important information on the economic well-being of Canadians and is essential in measuring the welfare of the elderly, single parents, ethnic minorities and the community as a whole. Various government income support programs are based on these data. Income data are also used extensively by businesses in marketing products, locating retail outlets and selecting which new consumer goods to produce.*



# INDEX



## INDEX

This index is alphabetized following the letter-by-letter principles. The abbreviations are listed first. An asterisk is used to indicate figures.

- AMF.** *See* Area Master File
- Ability to speak the official  
languages ..... 36, 56
- Aboriginal status ..... 27, 54, 89
- Age**
- at immigration ..... 55
  - structure of a  
population ..... 24, 53
- Analysis/user consultation  
and systems development .. 104
- Analytical publications ..... 96
- Area Master File ..... 82, 100
- Attribute File ..... 101
- Basic Summary Tables** ..... 98
- Block-face Data Linkage  
File ..... 101
- Boundary File ..... 101
- CA.** *See* Census agglomerations
- CANEDIT** ..... 116
- CARTLIB.** *See* Cartographic  
Boundary File
- CD.** *See* Census divisions
- CMA.** *See* Census metropolitan  
areas
- CMA/CA Parts** ..... 76, 81
- CSD.** *See* Census subdivisions
- CT.** *See* Census tracts
- Canvasser enumeration  
method ..... 110
- Cartographic
- Boundary File ..... 101, 104
  - consultation and training .. 105
- Census Act, 1870 ..... 8
- Census**
- agglomerations .... 72\*, 73\*, 75,  
78\*, 81
  - - consolidated ..... 80\*
  - decennial ..... 8
  - divisions ..... 72\*, 73\*, 74, 81
  - families ..... 52, 63, 65\*
  - geography ..... 71
  - guide ..... 17, 125
  - history ..... 7
  - metropolitan areas ... 72\*, 73\*,  
75, 77\*, 81
  - - consolidated ..... 75, 80\*
  - objectives ..... 52
  - products and services, 1986 .. 91
  - questionnaire ..... 19
  - quinquennial ..... 9
  - quiz ..... 119
  - scope and cost ..... 9
  - subdivisions .... 72\*, 73\*, 74, 81
  - - consolidated ..... 74, 81
  - taking ..... 107
  - timetable ..... 107\*
  - tracts ..... 72\*, 73\*, 76
- Certificates ..... 39, 57
- Citizenship ..... 33, 55, 63
- Class of worker ..... 46, 61
- Collection methods ..... 110
- Collective dwelling  
record ..... 17, 109
- Collective dwellings ... 66, 68, 69\*
- Common-law partners ..... 25, 64
- Computerized files ..... 100
- Consultation . 105, 107\*, 108, 118
- Content errors ..... 88
- Cost reductions ..... 9, 108, 110
- Coverage errors ..... 86, 87
- Cross-tabulations .. 88, 94, 95, 102
- Custom products ..... 103, 104
- DDE.** *See* Direct data entry
- Data**
- assimilation ..... 111, 115\*
  - collection ..... 109, 110, 114\*
  - quality ..... 85, 87, 117
  - - problems ..... 54, 88
- Date of birth ..... 24, 51
- De facto method ..... 8
- Degrees, certificates and  
diplomas ..... 39, 57
- De jure method ..... 8
- Demographic data ..... 12\*, 52
- Dimensions Series ..... 95
- Diplomas ..... 39, 57

- Direct data entry ..... 112  
 Disability ..... 37, 69  
 Double counting. *See*  
     Overcoverage  
 Dwellings ..... 52, 66, 67\*  
   – collective ..... 68, 69\*  
   – listed as vacant ..... 87  
   – overcoverage problem ..... 86
- EA.** *See* Enumeration areas  
**Economic**  
   – coding ..... 112  
   – families ..... 52, 64, 65\*  
 Edit and imputation .... 113, 115\*  
 Education. *See* Schooling  
 Employed ..... 57, 61  
**Enumeration**  
   areas ..... 71, 72\*, 73\*, 75, 81  
 Errors in census data ..... 85, 87  
 Ethnic origin ..... 35, 54  
 Ethno-cultural data ..... 12\*, 54
- FED.** *See* Federal electoral  
   districts  
 Families ..... 13\*, 52, 63, 65\*  
**Federal electoral**  
   districts ..... 10, 72\*, 73\*, 74, 81  
 Focus on Canada Series ..... 96  
 Form 1. *See* Visitation Record  
 Form 1A. *See* Collective  
   dwelling record  
 Form 2A. *See* Short questionnaire  
 Form 2B. *See* Long questionnaire  
 Form 2C. *See* Overseas questionnaire  
 Form 3. *See* Individual Census  
   Questionnaire
- "G86" Series** ..... 99  
**GRDSR.** *See* Geographically  
   Referenced Data Storage and  
   Retrieval System  
 Geocartographics Services ... 104  
 Geocoding ..... 82, 83, 103  
 Geographic files ..... 100  
**Geographically Referenced**  
   Data Storage and Retrieval  
   System ..... 82  
**Geography Information**  
   Services ..... 103
- Geography Tape File** ..... 100  
**Geostatistical areas** ..... 71, 72\*  
   – hierarchies ..... 81  
 Groups of publications .... 92, 93\*  
 Guide ..... 17, 125
- HOP.** *See* Head Office  
   Processing  
 Head Office Processing ..... 112  
 Heating equipment and  
   principal heating fuel ... 31, 66  
**History**  
   – after Confederation ..... 8  
   – before Confederation ..... 7  
 Home language ..... 36, 56  
 Households .... 13\*, 52, 63, 64, 65\*  
 Housing data ..... 14\*, 64, 66
- Imputation** ..... 113, 115\*  
**Income** ..... 13\*, 48, 61, 62\*, 63  
**Indian reserves,**  
   refusals ..... 88  
**Individual Census**  
   Questionnaire ..... 16, 109  
**Individuals, unattached** ..... 64  
**Industry** ..... 44, 60  
**Institutions** ..... 68, 69\*  
**Instruction.** *See* Schooling
- Jean Talon** ..... 7  
**Job characteristics** ..... 60
- Labour force character-**  
   istics ..... 12\*, 42, 57, 59\*  
**Language data** ..... 12\*, 54, 56  
**Legislation requiring census**  
   data ..... 10, 121  
**Long questionnaire** ..... 15, 109
- Machine-readable**  
   – profiles ..... 98  
   – tables and products ..... 98  
**Major field of study** ..... 40, 57  
**Map library** ..... 104  
**Maps** ..... 99, 104  
**Marital status** ..... 25, 53  
**Marketing** ..... 115\*, 117

- Metropolitan Atlas Series ..... 96  
 Minority population ..... 54  
 Mobility ..... 41, 54  
 Mother tongue ..... 26, 56  
 Multiple ethnic response ..... 55
- Name** ..... 21  
 Nation Series ..... 94, 95  
 New France ..... 7  
 Node maps/AMF street  
   network ..... 104  
 Non-family persons ..... 64  
 Non-response errors ..... 86  
 Not in the labour force ..... 42, 57  
 Number of rooms in dwelling ... 30
- Occupation** ..... 45, 60  
 Official languages ..... 36, 56  
 Output ..... 115\*, 117  
 Overcoverage ..... 86, 87  
 Overseas questionnaire ... 16, 109
- PCA.** *See* Primary census  
   agglomeration  
**PCMA.** *See* Primary census  
   metropolitan area  
**PCT.** *See* Provincial census tract  
 Payments for shelter, value of  
   dwelling, condominiums . 32, 64  
 Period of construction of  
   dwelling ..... 30, 66  
 Period of immigration ..... 34, 55  
 Person responsible for  
   household payments and  
   "coverage" ..... 28  
 Persons living alone ..... 64  
**Place Name**  
   - Master File ..... 100  
   - Reference Lists ..... 94  
 Place of birth ..... 33, 55  
 Place of work ..... 45  
 Population and dwelling  
   - characteristics publications .. 94  
   - counts publications ..... 94  
**Population**  
   - compilations ..... 103  
   - counts ..... 8, 21, 52  
   - series ..... 94  
**Postal Code Geographic**  
   Conversion File ..... 100
- Primary census**  
   - agglomeration ..... 75, 81  
   - metropolitan area ..... 75, 81  
 Private dwellings ..... 66  
 Processing errors ..... 86  
 Products ..... 83, 91, 92  
 Profiles ..... 95, 96, 98  
 Provinces ..... 74, 81, 121  
**Provincial**  
   - census tract ..... 76, 81  
   - statutes requiring  
     census data ..... 10, 121  
 Publications ..... 91-98  
**Public Communications**  
   Program ..... 110
- Query Area Library** ..... 83  
 Questionnaires ..... 15  
   - changes since 1981 ..... 17  
 Questions ..... 21-49  
   - added in 1986 ..... 17  
   - not asked in 1986 ..... 17  
   - since Confederation ..... 12\*  
 Quiz ..... 119
- ROP.** *See* Regional Office  
   Processing  
 Receipt and document  
   preparation ..... 111  
 Reference publications ..... 97  
 Regional Office Processing ... 111  
 Relationship to Person 1 ..... 23  
**Representation by**  
   population ..... 8, 10  
 Residents ..... 69\*  
 Response errors ..... 86  
 Reverse Record Check .... 88, 111  
**Rural**  
   - areas ..... 76, 81, 82  
   - fringe ..... 76
- SPIDER** ..... 116  
 Sampling errors ..... 87, 88  
 Schooling ..... 12\*, 56, 58\*  
 Self-enumeration method .... 110  
 Semi-custom products ..... 102  
 Series of publications ..... 92, 93\*  
 Services ..... 91, 102  
 Sex ..... 24, 53  
   - structure of a population .... 53

---

Short questionnaire .....	15, 109
Structural type .....	20, 66
System for processing instructions from directly entered requirements. <i>See</i> SPIDER	
<b>Temporary residents</b> .....	68, 69
- study .....	87
Tenure .....	29, 66
Territories .....	74, 81
Timetable .....	107*
<b>Unattached individuals</b> .....	64
Undercoverage .....	86, 87
Unemployed .....	51, 57, 60
Universes .....	52
Urban	
- areas .....	76, 81, 82
- fringe .....	76
User consultation ...	91, 104, 108, 118
<b>Value of dwelling</b> .....	32, 66
Variables .....	51
Visible minority population ...	54
Visitation Record .....	17, 109
<b>Weeks worked in 1985,</b> full time/part time .....	47, 60
Weighting .....	117
When last worked .....	43, 57
Work activity .....	60, 61
<b>Year of immigration</b> .....	34, 55
Years of schooling .....	38, 56

---

## BIBLIOGRAPHY

CANADA. Dominion Bureau of Statistics. *Seventh Census of Canada, 1931: Administrative Report of the Dominion Statistician*. Ottawa, 1934.

--. Dominion Bureau of Statistics. *D.B.S. - History, Function and Organization*, Cat. No. 12-D-52. Ottawa, 1952.

--. Statistics Canada. *Content of Questionnaire: Census of Canada, 1986*. Ottawa, 1985.

--. Statistics Canada. *Directory to Microdata and Special Tabulations, 1983*, Cat. No. 11-514E. Ottawa, May 1984.

--. Statistics Canada. *General Review: Administrative Report of the 1971 Census*, Cat. No. 99-740, Vol. VI, Part 1. Ottawa, May 1976.

--. Statistics Canada. *Geography and the 1981 Census of Canada: Working Paper*, No. 2-GEO82. Ottawa, October 1982.

--. Statistics Canada. *Products and Services of the 1981 Census of Canada*. Ottawa, June 1982.

--. Statistics Canada. *Statistics Canada Catalogue*, Cat. No. 11-204E. Ottawa, 1985.

--. Statistics Canada. *Summary Guide: Sample Population*, Cat. No. 99-903. Ottawa, November 1984.

--. Statistics Canada. *Summary Guide: Total Population*, Cat. No. 99-902. Ottawa, December 1983.

--. Statistics Canada. *1971 Census Questionnaires, Forms 2A and 2B*. Ottawa, 1971.

--. Statistics Canada. *1976 Census Questionnaires, Forms 2A and 2B*. Ottawa, 1976.

--. Statistics Canada. *1981 Census Questionnaires, Forms 2A and 2B*. Ottawa, 1981.

--. Statistics Canada. *1986 Census Questionnaires, Forms 2A and 2B*. Ottawa, 1986.

--. Statistics Canada. *1971 Census of Canada: Households: Introduction to Volume II (Part 1)*, Cat. No. 93-701 (Bulletin 2.1-1). Ottawa, May 1977.

--. Statistics Canada. *1971 Census of Canada: Population: Introduction to Volume I (Part 2)*, Cat. No. 92-713 (Bulletin 1.2-1). Ottawa, January 1976.

---

**BIBLIOGRAPHY - Concluded**

- . Statistics Canada. *Dictionary of the 1971 Census Terms*, Cat. No. 12-540. Ottawa, December 1982.
- . Statistics Canada. *1981 Census Dictionary*, Cat. No. 99-901. Ottawa, May 1982.
- . Statistics Canada. *1986 Census Dictionary*, Cat. No. 99-101. Ottawa, January 1987.
- . Statistics Canada. *1986 Census Guide and Reasons Why Questions Are Asked, Form 9B*. Ottawa, November 1985.
- . Statistics Canada. *1986 Census Reference Paper Series - 1986 Census Geography: A Historical Comparison*, Cat. No. 99-106E, January 1988.



## ACCESSIBLE FROM COAST TO COAST

Statistics Canada's regional reference centres provide a full range of the census products and services. Each reference centre is equipped with a library and a sales counter where users can consult or purchase census publications, microcomputer diskettes, microfiche, maps and more. Each centre has facilities to retrieve information from Statistics Canada's computerized data retrieval systems - CANSIM and TELICHART. A telephone inquiry service is also available with toll-free numbers for regional clients outside local calling areas. Many other services - from seminars to consultations - are offered. Call or write your regional reference centre for information.

### NEWFOUNDLAND AND LABRADOR

Advisory Services  
Statistics Canada  
3rd Floor, Viking Building  
Crosbie Road  
St. John's, Newfoundland A1B 3P2  
Local calls: 709-772-4073  
Toll-free service: 1-800-563-4255

### MARITIME PROVINCES

Advisory Services  
Statistics Canada  
North American Life Centre  
1770 Market Street  
Halifax, Nova Scotia B3J 3M3  
Local calls: 902-426-5331  
Toll-free service: 1-800-565-7192

### QUEBEC

Advisory Services  
Statistics Canada  
Guy Favreau Complex  
200 René Lévesque Blvd. W.  
Suite 412, East Tower  
Montréal, Quebec H2Z 1X4  
Local calls: 514-283-5725  
Toll-free service: 1-800-361-2831

### NATIONAL CAPITAL REGION

Central Inquiries Service  
Statistics Canada  
Lobby, R.H. Coats Building  
Tunney's Pasture  
Ottawa, Ontario K1A 0T6  
Local calls: 613-951-8116  
If outside the local calling area,  
please dial the toll-free number for  
your province.

### ONTARIO

Advisory Services  
Statistics Canada  
10th Floor, Arthur Meighen  
Building  
25 St. Clair Avenue East  
Toronto, Ontario M4T 1M4  
Local calls: 416-973-6586  
Toll-free service: 1-800-268-1151

### NIPISSING REGION

Advisory Services  
Statistics Canada  
Civic Administration Centre  
225 Holditch Street  
Sturgeon Falls, Ontario P0H 2G0  
Local calls: 705-753-4888  
If outside the local calling area,  
please dial the toll-free number  
given above for Ontario residents.

### MANITOBA

Advisory Services  
Statistics Canada  
6th Floor, General Post Office  
Building  
266 Graham Avenue  
Winnipeg, Manitoba R3C 0K4  
Local calls: 204-983-4020  
Toll-free service: 1-800-542-3404

### SASKATCHEWAN

Advisory Services  
Statistics Canada  
5th Floor, 530 Midtown Centre  
Regina, Saskatchewan S4P 2B6  
Local calls: 306-780-5405  
Toll-free service: 1-800-667-7164







## Electronic Census "Profiles"

If you find the demographic, cultural, and economic view of Canada's urban centres you get in the Census Tract Profiles publications series useful, you'll appreciate the flexibility of having it in electronic form.

That's why Statistics Canada's Electronic Data Dissemination Division is producing the Profiles series on tape and diskette.

From St. John's to Victoria, Census Tract Profiles are available for 37 large urban areas at both the census tract and component municipalities levels. Further, such profiles are also available for all Census Divisions and Census Subdivisions in the country. And you can easily analyze them in your own computing environment.

1986 Census Tract data are more complete than ever before, with more detailed data on mother tongue and the 65-plus age group, and an additional census-tract centre - Lethbridge, Alberta.

Any way you want them, the stats on Canada's urban centres are waiting for you at Statistics Canada. Please call your nearest regional reference centre for details.

## Les «Profils» du recensement sur support électronique

Si vous trouvez utiles les aperçus démographiques, culturels et économiques des centres urbains du Canada que vous présente la série de publications «Profils - Secteurs de recensement», vous apprécierez d'autant plus la possibilité de les obtenir sur support électronique.

C'est pourquoi la Division de la diffusion informatique des données de Statistique Canada stocke actuellement cette série sur bandes et sur disquettes.

Vous pouvez ainsi obtenir des profils portant sur 37 grands centres urbains, de St. John's à Victoria; ceux-ci présentent de l'information au niveau des secteurs de recensement et des municipalités les composant. Vous pouvez aussi vous procurer des profils des divisions et subdivisions de recensement. Il ne vous restera plus ensuite qu'à les analyser avec votre propre système informatique.

Vous vous apercevrez également que les données des secteurs de recensement de 1986 sont plus complètes que jamais. Entre autres, il y a davantage de données détaillées sur la langue maternelle et sur les personnes âgées de 65 ans et plus ainsi que des profils des secteurs de recensement de Lethbridge (Alberta).

Quelle que soit la forme sous laquelle vous les désirez, les données portant sur les centres urbains du Canada n'attendent que vous. Pour en savoir plus long, il vous suffit de communiquer avec le centre de consultation de Statistique Canada de votre région.