



Catalogue no. 92F0153GIE

# Postal Code Conversion File (PCCF), Reference Guide

January 2003



STATISTICS CANADA  
**GEO**  
STATISTIQUE CANADA



Statistics  
Canada

Statistique  
Canada

Canada

## **How to obtain more information**

For information on the wide range of data available from Statistics Canada, you can contact us by calling one of our toll-free numbers. You can also contact us by e-mail or by visiting our Web site.

|  |                             |
|--|-----------------------------|
| <b>National inquiries line</b>                                     | <b>1 800 263-1136</b>       |
| <b>National telecommunications device for the hearing impaired</b> | <b>1 800 363-7629</b>       |
| <b>Depository Services Program inquiries</b>                       | <b>1 800 700-1033</b>       |
| <b>Fax line for Depository Services Program</b>                    | <b>1 800 889-9734</b>       |
| <b>E-mail inquiries</b>  | <b>infostats@statcan.ca</b> |
| <b>Web site</b>  | <b>www.statcan.ca</b>       |

## **Ordering and subscription information**

This product, Catalogue no. 92F0153GIE, is available on Internet free. Users can obtain single issues at <http://www.statcan.ca/cgi-bin/downpub/freepub.cgi>.

## **Standards of service to the public**

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner and in the official language of their choice. To this end, the Agency has developed standards of service which its employees observe in serving its clients. To obtain a copy of these service standards, please contact Statistics Canada toll free at 1 800 263-1136.



Statistics Canada

# Postal Code Conversion File (PCCF), Reference Guide

January 2003

Published by authority of the Minister responsible for Statistics Canada

© Minister of Industry, 2003

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior written permission from Licence Services, Marketing Division, Statistics Canada, Ottawa, Ontario, Canada, K1A 0T6.

July 2003

Catalogue no. 92F0153GIE

ISBN: 0-662-34724-2

Frequency: Semi-annual

Ottawa

La version française de cette publication est disponible sur demande (n° 92F0153GIF au catalogue).

---

## Note of appreciation

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

## What's new?

- The postal code reference date for this update is January 2003. Normally, the reference date for the July release is May, but converting the PCCF to 2001 base and a systems change delayed data capture. The January 2004 release will return to the regular schedule with the release of December 2003 postal code data.
- A slight change in the methodology for the creation of the single link indicator. When a postal code with more than one type is assigned to a representative point, the postal codes types are now ranked by numerical value. The single link indicator is then assigned to the first record.
- The 2001 postal code conversion process has produced some cases of reduced data quality. A part of the process generated cases where a postal code was assigned to all blocks along a road. This occurred when a postal code could be geo-coded to a road but not to an specific address. The system then assigned the postal code to all blocks linked to the 2001 road identifier. In some cases, especially if the road was very long, this process was not appropriate and has resulted in poorer data quality. We acknowledge the issue and are committed to improving the PCCF product in future releases.
- A new geographic unit, the block, has been added to the standard hierarchy.
- A new statistical area classification code (SAC) has been added to the census subdivision.
- All the spatial information is now based on the North American Datum of 1983 (NAD83).

### **New standard geographic areas and classifications**

- The national road coverage and related geographic attributes permit the creation of a new basic geographic unit—the block. A block is an area bounded on all sides by roads and/or boundaries of selected standard geographic areas.
- These blocks are used to automatically generate dissemination areas (DAs). The dissemination area is a small, relatively stable geographic unit composed of one or more blocks. Dissemination areas cover all the territory of Canada and replace the enumeration area (that is still used for census collection) as the smallest standard geographic area for which census profile data are disseminated. In most cases, dissemination areas have a population of between 400 and 700.
- For the first time, urban areas are defined using population counts and population density data from the current census instead of from the previous census. The population density data are block-based rather than enumeration area-based as for previous censuses.
- Statistical area classification (SAC) classifies census subdivisions according to whether they are a component of a census metropolitan area (CMA), a census agglomeration (CA), an influenced zone or a territory.

---

## Table of contents

|   |           |
|---|-----------|
| <b>1. About this guide .....</b>  | <b>1</b>  |
| <b>2. Overview .....</b>  | <b>2</b>  |
| Reference Dates   |           |
| <b>3. How to use this product.....</b>                                      | <b>3</b>  |
| Purpose of the product  |           |
| Limitations   |           |
| General Methodology   |           |
| Content   |           |
| Comparison to the 1996 Postal Code Conversion File                          |           |
| <b>4. Data quality .....</b>  | <b>7</b>  |
| Lineage   |           |
| Positional accuracy   |           |
| Attribute accuracy  |           |
| Logical consistency   |           |
| Consistency with other products   |           |
| Completeness  |           |
| <b>5. Technical specifications .....</b>                                    | <b>12</b> |
| File specifications   |           |
| Data descriptions and record layouts  |           |
| <b>6. Glossary .....</b>  | <b>19</b> |
| <b>Appendix A: Hierarchy of Standard Geographic Units.....</b>              | <b>25</b> |
| <b>Appendix B: Structure of the postal code.....</b>                        | <b>26</b> |
| <b>Appendix C: Representative points.....</b>                               | <b>28</b> |
| <b>Appendix D: Census subdivision types by province and territory .....</b> | <b>29</b> |
| <b>References.....</b>  | <b>31</b> |
| <b>Geography products and services.....</b>                                 | <b>32</b> |
| <b>End-use licence agreement.....</b>                                       | <b>37</b> |

## **1. About this guide**

This reference guide is intended for users of the Postal Code Conversion File (PCCF). It provides general information about the product, including a description of the general methodology used to create the product.

Section 4, Data quality gives a detailed description of the various steps in the creation of Postal Code Conversion File. This section also provides information to evaluate the suitability of the data for a particular use.

Technical specifications in Section 5 include record layout and item descriptions.

Geographic terms and concepts are described in the glossary. More details can be found in the 2001 Census Dictionary, Catalogue number 92-378-XIE. Supplementary information is provided in the appendices with a list of related products and services.

This reference guide is based on the best information available at the time of its release. It in no way constitutes a warranty of the data in the event that users may observe characteristics that deviate from those stated in this document. All efforts have been made to ensure a thorough verification of this product, however, there is no guarantee that the data are 100% accurate.

## 2. Overview

The Postal Code Conversion File (PCCF) is a digital file, which provides a correspondence between the six character postal code and Statistics Canada's standard geographical areas for which census data and other statistics are produced. Through the link between postal codes and standard geographic areas, the Postal Code Conversion File permits the integration of data from various sources.

The geographic coordinates attached to each postal code on the Postal Code Conversion File are commonly used to map the distribution of data for spatial analysis (e.g., clients, activities). The location information is a powerful tool for marketing, planning, or research purposes.

In April 1983, the Geography Division released the first version of the Postal Code Conversion File, which linked postal codes to census geographic areas and included geographic coordinates. Since then, the file has been updated on a regular basis to reflect postal code changes provided by Canada Post Corporation.

Every five years, the postal code linkages on the Postal Code Conversion File are “converted” to the latest census geographic areas. The original Postal Code Conversion File was linked to the 1981 Census geographic areas. Since then, the Postal Code Conversion File has undergone four “conversions”, following the 1986, 1991, 1996 and 2001 censuses. A revised automated system was used for the 1996-2001 conversion. The 2001 Census postal codes reported by respondents were used to validate the Postal Code Conversion File links.

### Reference Dates

The reference date for postal codes contained in the Postal Code Conversion File is documented with each release.

The geographic reference date is a date determined by Statistics Canada to finalize the geographic framework for which the Census data will be collected, tabulated and reported. The geographic reference date for the 2001 Census is January 1, 2001.

## 3. How to use this product

### Purpose of the product

The Postal Code Conversion File (PCCF) provides a link between six-character postal codes and standard 2001 Census geographic areas (such as dissemination areas, municipalities, census tracts). It also provides the x,y (latitude/longitude) coordinates for a point representing the approximate location of the postal code to support mapping.

### Limitations

The Postal Code Conversion File contains multiple records for a postal code when the postal code straddles more than one block-face, block or dissemination area. Multiple records are quite common for rural postal codes and community mailboxes.

Rural postal codes are defined in terms of rural routes which are not explicitly attached to dwellings as are civic address ranges. These routes tend to straddle several dissemination areas, often crossing boundaries of standard geographic areas such as census tracts or census subdivisions. It is difficult, if not impossible, to identify a precise physical location based on a rural postal code.

Community mailboxes are a growing source for multiple records on the Postal Code Conversion File. In new urban delivery areas, postal codes are assigned to a community mailbox that may cover partial blocks, both sides of a street and different streets within 200 metres of any customer's door. These situations often result in multiple links being established between the postal code and block-faces, unlike the more traditional urban postal codes, which correspond generally to a block-face.

The "single link indicator" (SLI) was created to assist users in dealing with postal codes with multiple records. The method used to establish the single link indicator identifies the geographic area with the majority of dwellings assigned to a particular postal code. Users should be aware that only a partial correspondence between the postal code and other geographic areas is achieved when using the single link indicator. It should also be noted that the single link indicator is identified on both active and retired postal codes. Users will find when working with both active and retired postal codes, multiple SLI's will appear for a postal code that has been retired and rebirthed.

The following table presents the number of postal codes (including retired postal codes) and shows the occurrence of multiple links for selected geographic areas.

| Geographic area                   | Postal codes with multiple links |
|-----------------------------------|----------------------------------|
| Dissemination area                | 84,676                           |
| Census tract                      | 17,030                           |
| Census subdivision (municipality) | 5,100                            |
| Census division                   | 1,022                            |
| Census metropolitan area          | 325                              |
| Province/Territory                | 11                               |

The address associated with a postal code does not always represent the location of those receiving mail using that postal code. This is particularly the case in rural areas, where rural route service and post office



pick-up is commonly used to deliver mail. The delivery mode type of “W” (rural) and “H” (rural route) on the Postal Code Conversion File identifies postal codes that are usually considered rural.

A typical rural route address, such as "RR#3 Caledon, Ontario", does not provide sufficient address information to identify a precise physical location. A rural post office address such as "PO BOX 4001 STN A VICTORIA BC" is also imprecise and not explicitly attached to the dwellings served by that postal code. Consequently, rural postal codes can not be used in the same manner as most urban postal codes can to precisely geo-reference a physical location.

Similarly, postal codes with a delivery mode type “K” (group of post office boxes) or “M” (one post office box) are generally linked to the location of the post office on the Postal Code Conversion File, as opposed to the physical location of customers who rent a post office box.

## **General Methodology**

The Postal Code Conversion File is updated on a regular basis and is released every six months. The regular maintenance of the file takes the postal code changes continually introduced by Canada Post Corporation (CPC) and finds the corresponding census geographic areas. Every five years, after each census, the Postal Code Conversion File must be converted to the new census geographic areas.

Canada Post Corporation provides Statistics Canada with a file every month containing the latest postal codes, address ranges and other attributes (e.g., delivery mode type). Within major urban areas, postal code address ranges are linked to the National Geographic Base (NGB) and wherever possible, a block-face link is identified. Municipality maps are used where necessary and as a last resort, contact is made with local authorities to get as precise a street location as possible. The relationship to a block or dissemination area is then determined. All other postal code links to geographic areas are derived from the dissemination area.

## **Content**

This version of the Postal Code Conversion File (PCCF) contains 826,709 postal codes (775,202 active, 51,507 retired codes that have not been reactivated, and 4,929 that have been reborn). This represents all valid postal codes as of January 2003 according to Canada Post Corporation. These postal codes are linked to the geographic areas used in the 2001 Census and to latitude/longitude coordinates.

Postal codes do not respect Census geographic boundaries and therefore may be linked to more than one standard geographic area or be assigned to more than one set of coordinates. Therefore, one postal code may be represented by more than one record.

The following table provides the number of unique postal codes and total records by province/territory:

| Province/Territory        | Number of postal codes | Number of records |
|---------------------------|------------------------|-------------------|
| Newfoundland and Labrador | 10,289                 | 28,101            |
| Prince Edward Island      | 3,246                  | 9,790             |
| Nova Scotia               | 25,673                 | 65,055            |
| New Brunswick             | 57,490                 | 93,527            |
| Quebec                    | 203,936                | 463,277           |
| Ontario                   | 277,385                | 624,744           |
| Manitoba                  | 25,372                 | 73,138            |
| Saskatchewan              | 22,716                 | 92,571            |
| Alberta                   | 78,315                 | 215,396           |
| British Columbia          | 120,626                | 276,084           |
| Yukon Territory           | 1,052                  | 3,670             |
| Northwest Territories     | 569                    | 1,949             |
| Nunavut                   | 40                     | 191               |
| Canada Total              | 826,709                | 1,947,493         |

Postal codes can straddle provincial boundaries. See Appendix B for more information.

Each record on the file consists of the following (for more detailed information refer to Section 5 - Technical Specifications):

- a six character postal code
- the dissemination area (DA) identifier --made up of the province code, the census division code and the dissemination area code-- for the dissemination area linked to the postal code
- geographic codes of all other higher level standard geographic areas in which the dissemination area is located
- the federal electoral district code (1996 Representation Order)
- the census subdivision (CSD) name, code and type
- the block – new basic geographic unit
- latitude/longitude coordinates representing approximate point location for the postal code

Canada Post Corporation (CPC) information relevant to each postal code - its birth date, retirement date, type of mail delivery, CPC community name and various flags: single link indicator, type of representation point, and postal code type.

Purchasers of the Postal Code Conversion File also receive supplementary “Names” files. Due to the size of the name fields, and because of their repetition, the names are provided on separate files:

- Census Division Names File (C02.DAT)
- Federal Electoral District Names File - 1996 Representation Order (FED02.DAT)
- Statistical Area Classification Names File (SAC02.DAT)

The basic link between the postal code and other standard census geographic areas is made through one or more 2001 dissemination areas (DA). The geographic areas contained on the Postal Code Conversion File are shown on the hierarchy chart provided as Appendix A.

The Postal Code Conversion File is available as standard packages for Canada, the provinces and territories, census metropolitan areas (CMAs) and tracted census agglomerations (CAs). Custom orders are available on request. Contact the nearest regional reference centre.

### **Comparison to the 1996 Postal Code Conversion File**

Users familiar with the 1996 version of the Postal Code Conversion File should take note of the following changes, affecting both the record layout and content:

- DAuid has replaced EAuid
- Block has been added
- Statistical Area Classification has replaced CMA/CA
- Statistical Area Classification type has replaced CMA/CA type
- UARA code has replaced EAurb\_rur
- UARA type has been added
- PCMA and PCMA type have been removed

---

## 4. Data quality

*Spatial data quality elements provide information on the fitness-for-use of a spatial database by describing why, when and how the data are created, and how accurate the data are. The elements include an overview describing the purpose and usage, as well as specific quality elements reporting on the lineage, positional accuracy, attribute accuracy, logical consistency and completeness. This information is provided to users for all spatial data products disseminated for the census.*

### Lineage

*Describes the history of the spatial data, including descriptions of the source material from which the data were derived, and the methods of derivation. It also contains the dates of the source material, and all transformations involved in producing the final digital files or map products.*

The Postal Code Conversion File is the result of two updating activities. One is the ongoing maintenance activity that links the latest postal codes from Canada Post Corporation to census geographic areas. These links are continuously recorded on the Geography Division's postal code data base. The other update activity is done every five years, after each census, to convert the data base to the latest census geographic areas.

#### **Postal code to dissemination area links - Ongoing updates (sources)**

The sources used to keep up with ongoing postal code updates are:

- Canada Post Corporation Address look-up file and auxiliary files,
- Statistics Canada National Geographic Base (NGB),
- 2001 Census collection maps,
- maps provided by other sources (e.g., municipalities), and
- telephone contact with local authorities.

#### **Postal code to dissemination area links - Ongoing updates (process)**

In addressable areas covered by the National Geographic Base (NGB), an attempt is made to link postal codes to one or more block-faces. The list of new postal codes and address range records from Canada Post Corporation (CPC) are matched to the National Geographic Base street listings according to elements common to both files, i.e., province, municipality, street name, type, direction and address range.

Once matched, the postal code, province code, dissemination area code and block or block-face representative points are transferred to the postal code data base.

For those postal codes that cannot be coded by the above method, municipal maps are used to find the street(s). When a street is found, the same street is located on a 2001 Census collection map and the address range from Canada Post is then used to link to the dissemination area, block or, if available, to the block-face representative point(s) for that postal code.

If a street cannot be found on a municipal map, local authorities (such as Planning and Engineering Departments and local post offices) are contacted to assist in the location of the street. In areas experiencing growth, new maps are requested from the proper authority. After the street is located, 2001 Census collection maps are used to determine the dissemination area.

#### Rural postal codes

A rural postal code denotes an area serviced by rural route delivery from a post office or postal station. A zero (0) in the second position of the postal code typically identifies a rural postal code.

---

Such a postal code can cross several geographic area boundaries. The 2001 Census collection documents are used to help determine these service areas.

#### Post Office Addresses

In some cases, the ultimate destination of mail delivery is not the same as the pick-up point. For example, in urban areas postal codes may be associated with post office boxes at a postal station. In these cases, the geographic link for the postal code provided by the Postal Code Conversion File (PCCF) identifies the location of the post office rather than the residential, industrial or commercial location of the client renting a post office box.

#### **Update from 1996 to 2001 Census Geography (sources)**

The sources used to update the census geography linkage from 1996 to 2001 were:

- September 2002 postal codes and address range information from Canada Post Corporation,
- 2001 block-face, block and representative points data files,
- Oracle tables from the dissemination base,
- 1996-2001 enumeration area/dissemination area correspondance file,
- 2001 Census reported postal code data.

#### **Update from 1996 to 2001 Census Geography (process)**

The method used to bring the Postal Code Conversion File from 1996 to 2001 Census geographic links can be summarized as follows:

1. Automated address range matching
2. Assigning 2001 enumeration area, then 2001 dissemination area using 1996 links
3. Validating conversion results using 2001 Census data
4. Assigning the single link indicator to flag the “best” record for each postal code
5. Assigning all higher levels of geography

##### Step 1. Automated address range matching

This conversion replaced postal code data base address information with current address range information from Canada Post Corporation for active postal codes. This information was then used to find an associated block-face, block and/or dissemination area link on the National Geographic Base (NGB). Where this was successful, block-face(s), block(s) and dissemination area(s) links were generated.

##### Step 2. Assigning 2001 enumeration area then 2001 dissemination area by using 1996-2001 enumeration area correspondance file

Where a match could not be found through the automated address matching system, the following was used to convert from 1996 enumeration areas to 2001 enumeration areas, then to 2001 dissemination area :

This step used the road name and previous census enumeration area (1996 enumeration area) in order to link to a dissemination area and/or block. To reduce the multiple linkages from this correspondence step, the 2001 census reported postal code linkages to blocks were used for postal codes identified in both files. For postal codes not reported in the census dissemination area links could only be established.

##### Step 3. Validating conversion results using the 2001 Census data

The relationship between the postal code and dissemination areas as reported by the 2001 Census was used to confirm postal code to dissemination area linkages created through the automated Step 1 and 2 above. Postal codes reported in the Census do not represent the entire universe of postal codes.

Also, the postal codes reported in the census may represent a location other than that of a respondent's usual place of residence, such as work place or post office box. Despite these limitations, the 2001 Census reported postal codes were considered to be a valuable source for the validation of postal code to dissemination area linkages on the Postal Code Conversion File.

There were 681,528 postal code to dissemination area linkages on the Postal Code Conversion File confirmed by the 2001 Census data.

Postal code to dissemination area linkages obtained in Step 1 and 2 but not confirmed by the census data were judged valid if the postal code:

- was linked to a block-face
- was not reported in the census
- had a business delivery mode type
- to dissemination area link represented the location of a post office

#### Step 4. Assigning the single link indicator

Many postal codes are represented by multiple records on the Postal Code Conversion File. This can become problematic for some applications and therefore, a flag identifying a "single" link for each postal code has been created. The single link indicator has the value "1" to flag the "best" (or only) link for a given postal code. The value "0" indicates an additional record.

It should also be noted that the single link indicator is identified on both active and retired postal codes. Users will find when working with both active and retired postal codes, multiple SLIs will appear for a postal code that has been retired and rebirthed.

The single link indicator is assigned using the traditional method based on Canada Post Corporation address ranges. For each address range associated with a postal code, the low address is subtracted from the high address. The address range with the highest difference is determined and that postal code record is selected as the best link and assigned the value "1". In cases where the postal code spans more than one dissemination area, the address range differences are totalled for each dissemination area, and the dissemination area with the highest total difference is selected as the single link indicator.

Users should be cautioned that by using the single link indicator, only a partial correspondence between the postal code and other geographic areas is achieved.

#### Step 5. Assigning higher levels of geography

Higher levels of geography are assigned based on the DAuid.

## Positional accuracy

*Refers to the absolute and relative accuracy of the positions of geographic features. Absolute accuracy is the closeness of the coordinate values in a dataset to values accepted as or being true. Relative accuracy is the closeness of the relative positions of features to their respective relative positions accepted as or being true. Descriptions of positional accuracy include the quality of the final file or product after all transformations.*

The geographic coordinates assigned to postal codes are those of either block-face, block or dissemination area representative points calculated for census purposes. Therefore, the positional accuracy of the postal code is dependent on:

- the accuracy of the links established between the postal code and the block-face, block or dissemination area, and
- the positional accuracy of the dissemination area, block and block-face representative point with respect to the dissemination area, block or block-face.

The different methods used to create linkages on the Postal Code Conversion File result in varying degrees of accuracy for those linkages. Postal codes linked to block-faces are considered to be the most accurate, as they have been linked as close as possible with the address ranges representing the location of the postal code according to Canada Post Corporation.. Where the block-face link could not be produced, postal codes have been linked to a block or dissemination area.

There is no further measurement of data quality available to describe the accuracy of the linkages.

No measurements of positional accuracy of the representative points were made. Positional accuracy is presented here in terms of descriptive statements.

Generally, the block-face geographic coordinates are relatively accurate point locators for a postal code. The 2001 National Geographic Base was used to create most of the block-face, block and dissemination area representative points.

Where the block-face link could not be produced, the geographic coordinate provided is the block and/or dissemination representative point.

The geographic coordinates included on the Postal Code Conversion File are derived from Statistics Canada's National Geographic Base (NGB). Users should be aware that absolute positional accuracy is not an intended feature of the NGB. Consequently, these files and any by-product are not recommended for engineering or legal applications or for emergency dispatching services.

For more information on the method used to calculate representative points for block-faces, blocks and dissemination areas, refer to Appendix D.

### **Attribute accuracy**

*Refers to the accuracy of the quantitative and qualitative information attached to each feature (such as population for an urban area, street name, census subdivision name and code).*

The Postal Code Conversion File is essentially a flat file giving attributes for postal codes and for the dissemination area(s), block(s) etc. linked to the postal code. Most of these attributes are taken from two independent sources. Some attributes were also created for the Postal Code Conversion File.

The geographic code, type and name of all other higher level standard geographic areas in which the dissemination area is located are extracted from the ORACLE tables of the dissemination base maintained by Statistics Canada. The quality of the data obtained from this base is a direct result of its quality.

The information relevant to each postal code—birth date, retirement date, delivery mode type, type of postal code and Canada Post Corporation community name - is carried forward from Canada Post Corporation Address look-up file and auxiliary files. In some cases, the postal code type was imputed by Statistics Canada (refer to Section 5. Technical specifications).

The single link indicator (refer to section 4, step 4) and the type of representative point were assigned by Statistics Canada. No measure of accuracy was made for these fields.

## Logical consistency

*Describes the fidelity of relationships encoded in the data structure of the digital spatial data.*

In some cases, especially in rural areas, the postal code service areas do not respect dissemination area boundaries. When this occurs, the same postal code will be repeated two or more times with different geographical information (i.e., different coordinates or dissemination area codes). These multiple records for a postal code reflect the relationship between the postal code and census geographic areas. Also, a postal code can be linked to more than one block-face or block within the same dissemination area.

Conversely, different postal codes could have the same coordinate. This happens where more than one postal code has been linked to the same dissemination area. Also, more than one postal code can be linked to a single block-face or block.

## Consistency with other products

Data contained on the Postal Code Conversion File are consistent with all 2001 Census related geographic products with the exception of the 2001 Census Forward Sortation Areas Boundary File (Catalogue No. 92F0170XCE) which represent only the FSAs reported in the 2001 Census and valid as of May 2001. The Postal Code Conversion File provides all postal codes (both in use and retired) and is updated twice a year to include recent postal codes.

## Completeness

*Refers to the degree to which geographic features, their attributes and their relationships are included or omitted in a dataset. It also includes information on selection criteria, definitions used, and other relevant mapping rules.*

Completeness in the context of the Postal Code Conversion File is the degree to which all valid postal codes are accounted for on the Postal Code Conversion File and all geographic codes from the 2001 Census are linked to a postal code. All postal codes, valid as of January 2003 according to Canada Post Corporation, have been linked to census geography. There are 1,112 populated dissemination areas that are not linked to any postal code on the Postal Code Conversion File. There are 1,249 populated dissemination areas that are not linked to any active postal code on the Postal Code Conversion File.



## 5. Technical specifications

### File specifications

The current version of the Postal Code Conversion File (PCCF) includes four files: the “Postal Code Conversion” file and three “Names” files. It is an ASCII file and does not include any software or instructions on how to use the product within specific Geographical Information Systems (GIS) or mapping packages.

### Data descriptions and record layouts

#### Record layout Postal Code Conversion File

| Position | Size | Type | Field Name  | Description  |
|----------|------|------|-------------|--|
| 1        | 6    | C    | Postal Code | Postal code  |
| 7        | 3    | C    | FSA         | Forward Sortation Area   |
| 10       | 8    | C    | DAuid       | Dissemination area unique identifier                                     |
| 18       | 2    | C    | Block       | Block  |
| 20       | 9    | N    | Lat         | Latitude   |
| 29       | 11   | N    | Long        | Longitude  |
| 40       | 1    | C    | SLI         | Single link indicator  |
| 41       | 2    | C    | PR          | Province/territory code  |
| 43       | 4    | C    | CDuid       | Census division unique identifier  |
| 47       | 3    | C    | CSD         | Census subdivision code  |
| 50       | 70   | C    | CSDname     | Census subdivision name  |
| 120      | 3    | C    | CSDtype     | Census subdivision type  |
| 123      | 3    | C    | CCS         | Census consolidated subdivision code                                     |
| 126      | 3    | C    | SAC         | Statistical Area Classification code<br>(includes CMA/CA)                |
| 129      | 1    | C    | SACtype     | Statistical Area classification type<br>(includes CMA/CA)                |
| 130      | 7    | C    | CTname      | Census tract name  |
| 137      | 2    | C    | ER          | Economic region (ER) code  |
| 139      | 4    | C    | DPL         | Designated place (DPL) code  |
| 143      | 5    | C    | FED96uid    | Federal electoral district (1996 Representation Order) unique identifier |
| 148      | 4    | C    | UARA        | Urban Areas Rural Areas code   |
| 152      | 1    | C    | UARAtype    | Urban Areas Rural Areas type   |
| 153      | 1    | C    | Rep_Point   | Representative point flag  |
| 154      | 1    | C    | PCtype      | Postal code type   |
| 155      | 30   | C    | Comm_Name   | Community name   |
| 185      | 1    | C    | DMT         | Delivery mode type (DMT)   |
| 186      | 1    | C    | H_DMT       | Historic delivery mode type (DMT)  |
| 187      | 8    | C    | Birth_Date  | Birth date   |
| 195      | 8    | C    | Ret_Date    | Retired date   |

\*The field type “N” refers to numeric values while “C” refers to both alphabetic and numeric characters.

Note: A unique identifier is the code that can be used to uniquely identify a geographic area.

## Field descriptions

### Postal Code

The Canadian postal code offers a unique reference system which provides a means of identifying a mail delivery location. It is composed of six characters, in the form of “ANA NAN”, where “A” represents a letter of the alphabet and “N” a number. Refer to Appendix B for more information about postal codes.

### DAuid

Uniquely identifies a dissemination area. The DAuid is composed of the two digit province code, the two digit census division code and the four digit dissemination area code.

### Block

Area equivalent to a city block bounded by intersecting streets. These areas cover all of Canada. This code should be combined with the DAuid to uniquely identify the block in the country. This field will be ‘00’ for postal codes linked to dissemination area only (Rep\_Point =3).

### Lat

Latitude (in degrees and decimals) of the dissemination area, block or blockface representative point. The decimal point is explicit.

### Long

Longitude (in degrees and decimals) of the dissemination area, block or blockface representative point. The decimal point is explicit.

### SLI

The single link indicator (SLI) can be used to establish a one-to-one relationship between postal codes and dissemination areas or block-face.

Values for SLI

- 1 indicates the “best” (or only) record for the postal code;
- 0 indicates an additional record for the postal code.

### PR

Uniquely identifies provinces and territories.

Values

- 10 Newfoundland and Labrador
- 11 Prince Edward Island
- 12 Nova Scotia
- 13 New Brunswick
- 24 Quebec
- 35 Ontario
- 46 Manitoba
- 47 Saskatchewan
- 48 Alberta
- 59 British Columbia
- 60 Yukon Territory
- 61 Northwest Territories
- 62 Nunavut

**CDuid**

Uniquely identifies a census division. The first two digits of the CDuid identify the province or territory (PR). Census division names are found in the Census Division Name file.

**CSD**

Identifies a census subdivision (municipality) within a census division. This code should be combined with the census division unique identifier (CDuid) to uniquely identify a census subdivision in the country. The province, census division and census subdivision (municipality) codes represent the 2001 Standard Geographical Classification (SGC).

**CSDname**

Contains the name of the census subdivision (municipality) in effect as of January 1, 2001.

**CSDtype**

This field provides abbreviations used to identify the census subdivision (municipality) type. See Appendix D for the complete list.

**CCS**

Identifies a census consolidated subdivision within a census division. This code should be combined with the census division unique identifier (CDuid) to uniquely identify a census consolidated subdivision in the country.

**SAC**

The Statistical Area Classification (SAC) groups census subdivisions according to whether they are a component of a census metropolitan area (CMA), a census agglomeration (CA), a census metropolitan area and census agglomeration influenced zone (strong MIZ, moderate MIZ, weak MIZ or no MIZ), or the territories (Northwest Territories, Nunavut and Yukon Territory).

## Values

|                |                              |
|----------------|------------------------------|
| 000            | Territories                  |
| <b>001-995</b> | <b>CMA/CA code</b>           |
| 996            | Strongly Influenced (zone)   |
| 997            | Moderately Influenced (zone) |
| 998            | Weakly Influenced (zone)     |
| 999            | Not Influenced (zone)        |

**SACtype**

Identifies the type of statistical area classification (SAC) in which the dissemination area is located.

## Values

|   |                                  |
|---|----------------------------------|
| 1 | Census metropolitan area         |
| 2 | Tracted census agglomeration     |
| 3 | Non-tracted census agglomeration |
| 4 | Strongly Influenced (zone)       |
| 5 | Moderately Influenced (zone)     |
| 6 | Weakly Influenced (zone)         |
| 7 | Not Influenced (zone)            |
| 8 | Territories                      |

**CTname**

Uniquely identifies a census tract within a CMA/CA. This field must be combined with the CMA/CA code to uniquely identify a census tract.

Non-tract areas outside a CMA/CA are assigned a four-digit code that is a concatenation of 99 plus the two-digit province/territory code.

**ER**

Identifies an economic region within a province. This field must be combined with the province/territory code to uniquely identify an economic region. (Economic region replaces the term “subprovincial region”)

**DPL**

Identifies a designated place within a province. This field must be combined with the province/territory code to uniquely identify a designated place.

Areas which are not a designated place are assigned a four-digit code that is a concatenation of 99 plus the two-digit province/territory code.

**FED96uid**

Uniquely identifies a federal electoral district (1996 Representation Order). The first two digits of the FED96uid identify the province or territory (PR). Corresponding names are found in the 1996 Federal Electoral District Name file.

**UARA**

Urban area codes are unique four-digit codes that are assigned sequentially upon the UA creation. These codes remain constant between censuses. If an urban area is retired due to amalgamation or failure to meet the population or density thresholds, then its code is retired.

Rural area codes are unique four-digit codes which are a concatenation of 99 plus the two-digit province/territory code.

This field will be ‘0000’ for postal codes linked to dissemination area only (Rep\_Point =3).

**UARAtype**

For urban areas (UAs) the type code indicates the relationship of the urban area to the census metropolitan area/census agglomeration (CMA/CA) structure.

## Values

- |   |  |
|---|--|
| 1 | Urban core   |
| 2 | Urban fringe   |
| 3 | Rural fringe inside Census Metropolitan Areas and Census Agglomerations  |
| 4 | Urban Areas outside Census Metropolitan Areas and Census Agglomerations  |
| 5 | Rural fringe outside Census Metropolitan Areas and Census Agglomerations |
| 6 | Secondary urban core   |

**This field will be ‘0’ for postal codes linked to dissemination areas only (Rep\_Point =3)**

**Rep\_Point**

Identifies whether the record uses a block-face, block or dissemination area representative point as the coordinate.

Values

| Code | Type                                     | Records   |
|------|--|-----------|
| 1    | Block-face representative points         | 814,200   |
| 2    | Block representative points              | 1,031,941 |
| 3    | Dissemination area representative points | 101,352   |

**PCtype**

Indicates the type of addresses used to identify the points of call served by the postal code. This field was introduced by Canada Post Corporation some time after the creation of the original PCCF. Where possible, a value has been imputed by Statistics Canada for retired postal codes using historical address information and delivery mode type.

Values

- 1 Street address with letter carrier service
- 2 Street address with route service
- 3 Post office box
- 4 Route service
- 5 General delivery
- 0 unknown

**Comm\_Name**

The community name, as defined by Canada Post Corporation, denotes any city, town or village in Canada that is recognised as a valid mailing address.

**DMT**

Delivery Mode Type as defined by Canada Post Corporation. Note that Statistics Canada assigns a DMT of "W" to rural postal codes (left blank by CPC). A postal code can be assigned more than one DMT.

Values

| DMT | Description   | Postal codes   | Records          |
|-----|---|----------------|------------------|
| A   | Delivery to Block Face Address                                  | 720,831        | 1,231,405        |
| B   | Delivery to an Apartment Building                               | 17,477         | 27,429           |
| E   | Delivery to a Business Building                                 | 9,263          | 25,008           |
| G   | Delivery to a Large Volume Receiver                             | 8,362          | 24,157           |
| H   | Delivery via a Rural Route                                      | 998            | 58,053           |
| J   | General Delivery  | 642            | 2,376            |
| K   | Delivery to a PO Box (not a CMB)                                | 7,367          | 30,752           |
| M   | Delivery to a Large Volume Receiver (PO Box)                    | 4,982          | 18,231           |
| T   | Delivery via a Suburban Service                                 | 79             | 1,345            |
| W   | Rural postal codes (the second digit of the postal code is "0") | 5,200          | 327,210          |
| X   | Delivery via a Mobile Route                                     | 1              | 62               |
| Z   | Postal Codes is retired (No further delivery to this code)      | 56,436         | 201,465          |
|     | <b>Total</b>  | <b>831,638</b> | <b>1,947,493</b> |

**H\_DMT**

Historic delivery mode retains the previous delivery mode type (DMT) value.

DMT prior to retirement for retired postal codes,

Previous DMT in cases where a postal code has changed DMT but not retired,

For retired postal codes when DMT before retirement is not known to Statistics Canada

Current DMT for postal codes that were never retired or never changed DMT.

**Birth\_Date**

Date (YYYYMMDD) when the postal code became effective. All postal codes created before April, 1983 were given a birth date of 19830401.

**Ret\_Date**

Date (YYYYMMDD) when a postal code is retired, or in other words, it is no longer in use by Canada Post Corporation. All postal codes retired before April 1983 have 19830401 as the retirement date. Users should note that some postal codes have been retired and re-introduced at a later date. Active postal codes have a retirement date of 19000001.

## Record layout name files

In order to reduce the size of the Postal Code Conversion File, names for 1996 Representation Order Federal Electoral Districts, Census Divisions, Statistical Area Classification are shown on the following individual Name Files.

| <b>1996 Federal Electoral District (FED96) Name File</b> |             |             |                   |  |
|--|-------------|-------------|-------------------|--|
| <b>Position</b>  | <b>Size</b> | <b>Type</b> | <b>Field Name</b> | <b>Description</b>   |
| 1  | 5           | C           | FED96uid          | Federal electoral district (1996 Representation Order) unique identifier |
| 6  | 100         | C           | EFED96name        | Federal electoral district (1996 Representation Order) name              |

| <b>Census Division (CD) Name File</b> |             |             |                   |  |
|---------------------------------------|-------------|-------------|-------------------|--|
| <b>Position</b>                       | <b>Size</b> | <b>Type</b> | <b>Field Name</b> | <b>Description</b>                     |
| 1-                                    | 4           | C           | CDuid             | Census division (CD) unique identifier |
| 5                                     | 100         | C           | CDname            | Census division name                   |

| <b>Statistical Area Classification (SAC) Name File</b> |             |             |                   |  |
|--|-------------|-------------|-------------------|--|
| <b>Position</b>  | <b>Size</b> | <b>Type</b> | <b>Field Name</b> | <b>Description</b>                         |
| 1  | 3           | C           | SAC               | Statistical Area Classification (SAC) code |
| 4  | 100         | C           | SACname           | SAC name                                   |

---

## 6. Glossary

### Adjusted Counts

Adjusted counts refer to previous census population and dwelling counts that have been adjusted (i.e., recompiled) to reflect current census boundaries (such as when a boundary change occurs between two censuses).

### Block

A block is an area bounded on all sides by roads and/or boundaries of standard geographic areas. Blocks cover all the territory of Canada. The block is the smallest geographic area for which population and dwelling counts are disseminated.

### Block-face

A block-face is one side of a street between two consecutive features intersecting that street. The features can be other streets, boundaries of standard geographic areas, or limits of map tiles.

Block-faces are used for generating block-face representative points, which in turn are used for geocoding and census data extraction when the street and address information is available.

### Cartographic Boundary Files

Cartographic Boundary Files (CBF) contain boundaries of standard geographic areas, along with shorelines and lakes, at a level of detail appropriate for small-scale mapping.

### Census Agricultural Region

Census agricultural regions (CAR) are composed of groups of adjacent census divisions. In Saskatchewan, census agricultural regions are made up of groups of adjacent census consolidated subdivisions, but these groups do not necessarily respect census division boundaries.

### Census Consolidated Subdivision

A census consolidated subdivision (CCS) is a grouping of adjacent census subdivisions. Generally, the smaller, more urban census subdivisions (towns, villages, etc.) are combined with the surrounding larger, more rural census subdivision, in order to create a geographic level between the census subdivision and the census division.

### Census Division

Census division (CD) is the general term for provincially legislated areas (such as county, *municipalité régionale de comté* and regional district) or their equivalents. Census divisions are intermediate geographic areas between the province level and the municipality (census subdivision).

### Census Metropolitan Area and Census Agglomeration

A census metropolitan area (CMA) or a census agglomeration (CA) is formed by one or more adjacent municipalities centred on a large urban area (known as the **urban core**). The census population count of the urban core must be at least 10,000 to form a census agglomeration and at least 100,000 to form a census metropolitan area. To be included in the CMA or CA, other adjacent municipalities must have a high degree of integration with the central urban area, as measured by commuting flows derived from census place of work data.

If the population of the urban core of a CA declines below 10,000, the CA is retired. However, once an area becomes a CMA, it is retained as a CMA even if the population of its urban core population declines below 100,000. The urban areas that are located in the CMA or CA but are not contiguous to the urban core are called the **urban fringe**. Rural areas in the CMA or CA are called the **rural fringe**.



When a CA has an urban core of at least 50,000 based on census counts, it is subdivided into **census tracts**. Census tracts are maintained for the CA even if the population of the urban core subsequently falls below 50,000. All CMAs are subdivided into census tracts.

### **Census Metropolitan Area and Census Agglomeration Influenced Zone**

The census metropolitan area and census agglomeration influenced zone (MIZ) is a concept that geographically differentiates the area of Canada outside census metropolitan areas (CMAs) and census agglomerations (CAs). Census subdivisions outside CMAs and CAs are assigned to one of four categories according to the degree of influence (strong, moderate, weak or no influence) that the CMAs and/or CAs have on them.

Census subdivisions (CSDs) are assigned to a MIZ category based on the percentage of their resident employed labour force that has a place of work in the urban core(s) of CMAs or CAs. CSDs with the same degree of influence tend to be clustered. The zones they form around CMAs and CAs progress through the categories from “strong” to “no” influence as distance from the CMAs and CAs increases.

### **Census Subdivision**

Census subdivision (CSD) is the general term for municipalities (as determined by provincial legislation) or areas deemed to be their equivalents (for example, Indian reserves, Indian settlements and unorganized territories) used for statistical reporting purposes.

### **Census Tract**

Census tracts (CTs) are small, relatively stable geographic areas that usually have a population of 2,500 to 8,000. They are located in census metropolitan areas (CMAs) and in census agglomerations (CAs) with an urban core population of 50,000 or more in the previous census.

A committee of local specialists (for example, planners, educators and health and social workers ) initially delineates CTs in conjunction with Statistics Canada. Once a CMA or CA has been subdivided into census tracts, the census tracts are maintained even if the urban core population subsequently declines below 50,000.

### **Coordinate System**

A coordinate system is a reference system based on mathematical rules for specifying positions (locations) on the surface of the earth. The coordinate values can be spherical (latitude and longitude) or planar (such as the Universal Transverse Mercator).

The Cartographic Boundary Files, the Road Network Files and the representative points are disseminated in latitude/longitude coordinates.

### **Datum**

A datum is a geodetic reference system that specifies the size and shape of the earth, and the base point from which the latitude and longitude of all other points on the earth’s surface are referenced.

The spatial data disseminated for the 2001 Census are based on the North American Datum of 1983 (NAD83).

### **Designated Place**

A designated place (DPL) is normally a small community or settlement that does not meet the criteria established by Statistics Canada to be a census subdivision (an area with municipal status) or an urban area.

---

Designated places are created by provinces and territories, in cooperation with Statistics Canada, to provide data for submunicipal areas.

**Dissemination Area**

The dissemination area (DA) is a small, relatively stable geographic unit composed of one or more blocks. It is the smallest standard geographic area for which all census data are disseminated. DAs cover all the territory of Canada.

**Economic Region**

An economic region (ER) is a grouping of complete **census divisions** (with one exception in Ontario) created as a standard geographic unit for analysis of regional economic activity.

**Ecumene**

Ecumene is a term used by geographers to mean inhabited land. It generally refers to land where people have made their permanent home, and to all work areas that are considered occupied and used for agricultural or any other economic purposes. Thus, there can be various types of ecumenes, each having its own unique characteristics (population ecumene, agricultural ecumene, industrial ecumene, etc.).

**Enumeration Area**

An enumeration area (EA) is the geographic area canvassed by one census representative. An EA is composed of one or more adjacent blocks. EAs cover all the territory of Canada.

Enumeration areas are only used for census data collection. The dissemination area (DA) replaces the EA as a basic unit for dissemination.

**Federal Electoral District**

A federal electoral district (FED) is an area represented by a member of the House of Commons. The federal electoral district boundaries used for the 2001 Census are based on the 1996 Representation Order.

**Geocoding**

Geocoding is the process of assigning geographic identifiers (codes) to map features and data records. The resulting geocodes permit data to be linked geographically.

Households and postal codes are linked to block-face representative points when the street and address information is available; otherwise, they are linked to block representative points.

**Geographic Code**

A geographic code is a unique number used to identify and access standard geographic areas for the purposes of data storage, retrieval and display.

**Geographic Reference Date**

The geographic reference date is a date determined by Statistics Canada for the purpose of finalizing the geographic framework for which census data will be collected, tabulated and reported. For the 2001 Census, the geographic reference date is January 1, 2001.

**Land Area**

Land area is the area in square kilometres of the land-based portions of standard geographic areas.

The land area measurements are unofficial and are provided for the sole purpose of calculating population density.

**Locality**

Locality (LOC) refers to the historical place names of former census subdivisions (municipalities), former designated places and former urban areas, as well as to the names of other entities, such as neighbourhoods, post offices, communities and unincorporated places.

**Map Projection**

A map projection is the process of transforming and representing positions from the earth's three-dimensional curved surface to a two-dimensional (flat) surface. The process is accomplished by a direct geometric projection or by a mathematically derived transformation.

The Lambert Conformal Conic map projection is widely used for general maps of Canada at small scales and is the most common map projection used at Statistics Canada.

**National Geographic Base**

The National Geographic Base (NGB) is a new database that contains roads and boundaries of standard geographic areas in one integrated layer with other physical and cultural features (such as hydrography, railroads and power transmission lines) stored as separate layers.

The NGB is an internal maintenance database that is not disseminated. It supports a wide range of census operations, such as geocoding, updating the road network and address ranges, supporting the block program and delineating the boundaries of standard geographic areas (including the automated delineation of enumeration areas, urban areas and dissemination areas). As well, the NGB is the source for generating many geography products for the 2001 Census, such as reference maps and Cartographic Boundary Files.

**Place Name**

Place name (PN) refers to the set of names that includes current census subdivisions (municipalities), current designated places and current urban areas, as well as the names of localities.

**Population Density**

Population density is the number of persons per square kilometre.

**Postal Code**

The postal code is a six-character code defined and maintained by Canada Post Corporation for the purpose of sorting and delivering mail.

**Province or Territory**

Province and territory refer to the major political units of Canada. From a statistical point of view, province and territory are basic areas for which data are tabulated. Canada is divided into ten provinces and three territories.

**Reference Map**

A reference map shows the location of the geographic areas for which census data are tabulated and disseminated. The maps display the boundaries, names and codes of standard geographic areas, as well as major cultural and physical features, such as roads, railroads, coastlines, rivers and lakes.

**Representative Point**

A representative point is a single point that represents a linear or areal feature. The point is centrally located along the linear feature or centrally within the areal feature.

Representative points are generated for block-faces, blocks, enumeration areas, dissemination areas, census subdivisions and designated places. The block-face and block representative points support the geocoding of households and postal codes.

---

**Road Network Files**

The Road Network Files (RNFs) provide national coverage of roads, province / territory boundaries and other visible features such as hydrography, as well as attribute information (for example, street names and address ranges for streets with assigned addresses). The RNFs replace the Street Network Files (SNFs), which were a similar product previously available only for the large urban centres of Canada.

**Rural Area**

Rural areas include all territory lying outside urban areas. Taken together, urban and rural areas cover all of Canada.

Rural population includes all population living in the rural fringes of census metropolitan areas (CMAs) and census agglomerations (CAs), as well as population living in rural areas outside CMAs and CAs.

**Spatial Data Quality Elements**

Spatial data quality elements provide information on the fitness-for-use of a spatial database by describing why, when and how the data are created, and how accurate the data are. The elements include an overview describing the purpose and usage, as well as specific quality elements reporting on the lineage, positional accuracy, attribute accuracy, logical consistency and completeness. This information is provided to users for all spatial data products disseminated for the census.

**Standard Geographical Classification**

The Standard Geographical Classification (SGC) is Statistics Canada's official classification for three types of geographic areas: **provinces and territories**, **census divisions** (CDs) and **census subdivisions** (CSDs). The SGC provides unique numeric identification (codes) for these hierarchically related geographic areas.

**Statistical Area Classification**

The Statistical Area Classification (SAC) groups census subdivisions according to whether they are a component of a census metropolitan area, a census agglomeration, a census metropolitan area and census agglomeration influenced zone (strong MIZ, moderate MIZ, weak MIZ or no MIZ), or the territories (Northwest Territories, Yukon Territory and Nunavut). The SAC is used for data dissemination purposes.

**Thematic Map**

A thematic map shows the spatial distribution of one or more specific data themes for standard geographic areas. The map may be qualitative in nature (e.g., predominant farm types) or quantitative (e.g., percentage population change).

**Urban Area**

An urban area (UA) has a minimum population concentration of 1,000 persons and a population density of at least 400 persons per square kilometre, based on the current census population count. All territory outside urban areas is classified as rural. Taken together, urban and rural areas cover all of Canada.

Urban population includes all population living in the urban cores, secondary urban cores and urban fringes of census metropolitan areas (CMAs) and census agglomerations (CAs), as well as the population living in urban areas outside CMAs and CAs.

**Urban Core, Urban Fringe and Rural Fringe**

Urban core, urban fringe and rural fringe distinguish between central and peripheral urban and rural areas within a census metropolitan area (CMA) or census agglomeration (CA).

**Urban core** is a large urban area around which a CMA or a CA is delineated. The urban core must have a population (based on the previous census) of at least 100,000 persons in the case of a CMA, or between 10,000 and 99,999 persons in the case of a CA.

**Urban fringe** includes all small urban areas (with less than 10,000 population) that are located within a CMA or CA but are not contiguous with the urban core of the CMA or CA.

**Rural fringe** comprises all territory that is located within a CMA or CA but is not classified as an urban core or an urban fringe.

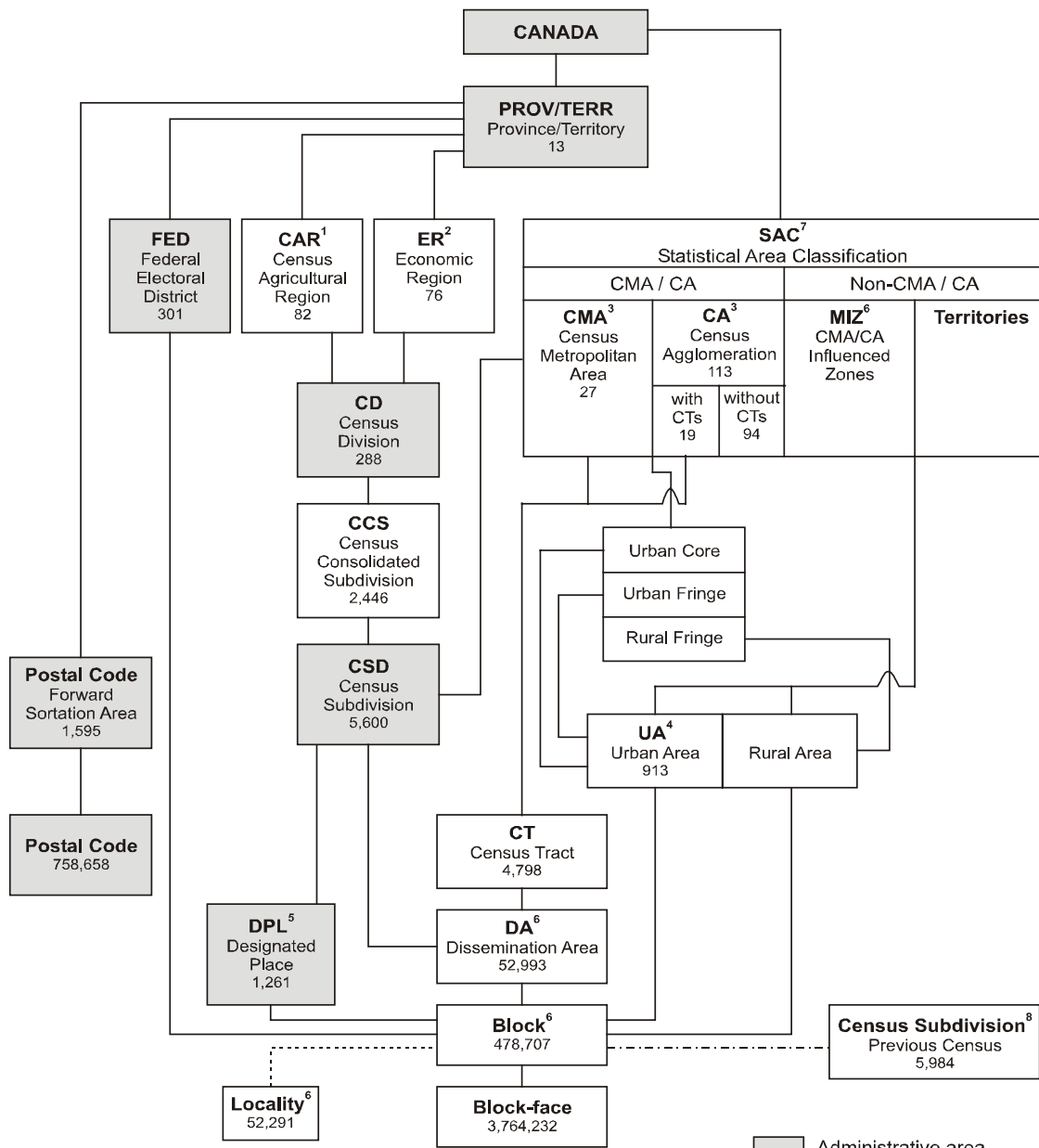
### **Urban Population Size Group**

Urban population size group refers to the classification used in standard tabulations where **urban areas** are distributed according to the following predetermined size groups, based on the current census population.

|                    |   |         |
|--------------------|---|---------|
| 1,000              | – | 2,499   |
| 2,500              | – | 4,999   |
| 5,000              | – | 9,999   |
| 10,000             | – | 24,999  |
| 25,000             | – | 49,999  |
| 50,000             | – | 99,999  |
| 100,000            | – | 249,999 |
| 250,000            | – | 499,999 |
| 500,000            | – | 999,999 |
| 1,000,000 and over |   |         |

Tabulations are not limited to these predetermined population size groups; the census database has the capability of tabulating data according to any user-defined population size group.

## Appendix A: Hierarchy of Standard Geographic Units



<sup>1</sup> Census agricultural regions in Saskatchewan are composed of census consolidated subdivisions.

<sup>2</sup> Economic regions in Ontario are composed of municipalities (census subdivisions).

<sup>3</sup> One CMA and four CAs cross provincial boundaries.

<sup>4</sup> Five UAs cross provincial boundaries.

<sup>5</sup> Designated places do not cover the total area of CSDs. Eighty-four DPLs cross CSD boundaries, of which 12 also cross CD boundaries.

<sup>6</sup> Census metropolitan area and census agglomeration influenced zones (MIZ), dissemination area, block, and locality are new concepts for the 2001 Census.

<sup>7</sup> The Statistical Area Classification (SAC) is a new geographic classification that allocates each CSD according to whether it is a component of a CMA, CA, a census metropolitan area and census agglomeration influenced zone (MIZ), or the territories outside the CAs of Whitehorse and Yellowknife.

<sup>8</sup> For the 2001 Census only, a best fit linkage is created between the 1996 CSDs and 2001 blocks to facilitate historical data retrieval. See the definition of Census Subdivision – Previous Census.

- Administrative area
- Statistical area
- Linkage using point-in-polygon process
- Best fit linkage

## Appendix B: Structure of the postal code

The postal code is an alpha-numeric combination of six characters describing the destination of each item of mail addressed in Canada. The characters are arranged in the form "ANA NAN" where "A" represents an alphabetic character and "N" represents a numeric character (e.g. K1A 0T6). The postal code uses 19 alphabetic characters and 10 numeric characters. Seven alphabetic characters (D, F, I, O, Q, U, and Z) are not in use at the present time.

The first character of a postal code is allocated in alphabetic sequence from east to west across Canada and denotes a province, territory or a major sector found entirely within the boundaries of a province:

| Province/Territory/<br>Region | first character of the<br>postal code | Province/Territory/<br>Region      | first character of the<br>postal code |
|-------------------------------|---------------------------------------|------------------------------------|---------------------------------------|
| Newfoundland and<br>Labrador  | A                                     | Toronto                            | M                                     |
| Nova Scotia                   | B                                     | Southwestern Ontario               | N                                     |
| Prince Edward Island          | C                                     | Northern Ontario                   | P                                     |
| New Brunswick                 | E                                     | Manitoba                           | R                                     |
| Quebec East                   | G                                     | Saskatchewan                       | S                                     |
| Montreal Metropolitan         | H                                     | Alberta                            | T                                     |
| Quebec West                   | J                                     | British Columbia                   | V                                     |
| Eastern Ontario               | K                                     | Northwest Territories<br>& Nunavut | X                                     |
| Central Ontario               | L                                     | Yukon Territory                    | Y                                     |

In the Postal Code Conversion File there are 88 postal codes that are linked to a different province from their first character allocation. Provincial counts for these records assign these to the province where the single link indicator has been set to "1".

The first three characters of the postal code ("ANA") represent a set of well-defined and stable areas known as Forward Sortation Areas (FSAs). The FSA represents a specific area within a major geographical region or province. As of January 2003, there were 1,609 FSAs in use across Canada. There were 1,425 FSAs with urban mail delivery service and only 184 with rural mail delivery service. Rural FSAs are identifiable by the presence of a zero (0) in the second position of the FSA code.

The last three characters of the postal code ("NAN") identify routes known as local delivery unit (LDUs). In urban areas, a single postal code can correspond to the following types of LDUs:

- a block-face (one side of a city street between consecutive intersections)
- a community mailbox (commonly called super mailboxes)
- an apartment building
- a business building
- a large firm/organisation that does considerable business with Canada Post Corporation
- a federal government department, agency or branch
- a mail delivery route (rural, suburban or mobile)
- general delivery at a specific post office
- one or more post office boxes

In new urban growth areas, postal codes are now linked to community mailboxes. A community mailbox postal code can service both odd and even sides of the same street, or different streets, within a 200 metre radius of the community mailbox.

In rural areas, the Local Delivery Unit (LDU) refers to all services which originate from a post office or postal station. These include rural routes, general deliveries, Post Office boxes, and suburban services. Often, rural postal codes represent the location of the place where the mail is sorted and not the final place of delivery.



---

## Appendix C: Representative points

A representative point is a single point that represents a linear or areal feature. The point is centrally located along the linear feature or centrally within the areal feature.

Representative points are generated for block-faces, blocks, enumeration areas, dissemination areas, census subdivisions and designated places. The block-face and block representative points support the geocoding of households and postal codes.

Representative points are located by the following methods using the National Geographic Base (NGB):

### Block-face Representative Points

Block-face representative points are computed along addressable and non-addressable streets, midway (or approximately midway) between two consecutive features intersecting a street. The features can be other streets, boundaries of standard geographic areas, or limits of map tiles.

The points are set back a perpendicular distance of either 10, 5 or 1 metre(s) from the street centre line to ensure that all points have unique coordinates, and are located in the correct block and on the correct side of the street.

### Geographic Area Representative Points

The representative points for blocks, enumeration areas (EAs), dissemination areas (DAs), census subdivisions (CSDs) and designated places (DPLs) are created using the Arc/Info® GIS software, which locates the point suitable for label or symbol placement in each polygon. Representative points are also generated for all DPL parts (i.e. DPLs that straddle CSDs). If a block, EA, DA or CSD is in multiple parts, the point is located in the portion having the largest area.

The representative points for blocks, enumeration areas, dissemination areas, census subdivisions and designated places are guaranteed to fall within the appropriate geographic area using an automated topology check. Some block-face, block, enumeration area, dissemination area, census subdivision and designated place representative points may fall in NGB water bodies.

Households and postal codes are linked to block-face representative points when the street and address information is available; otherwise they are assigned to block representative points.

Representative points can also be used for data retrieval, data analysis and mapping. All representative points are calculated based on the x,y coordinates of the Lambert Conformal Conic map projection, but are disseminated in latitude/longitude coordinates.

## Appendix D: Census subdivision types by province and territory

| Census Subdivision Type             | Total | Nfld. Lab. | P.E.I. | N.S. | N.B. | Que.  | Ont. | Man. | Sask. | Alta. | B.C. | Y.T. | N.W.T. | Nvt. |
|-------------------------------------|-------|------------|--------|------|------|-------|------|------|-------|-------|------|------|--------|------|
|                                     | 5,600 | 381        | 113    | 98   | 275  | 1,476 | 586  | 298  | 1,002 | 452   | 816  | 35   | 37     | 31   |
| C City – Cité                       | 148   | 3          | 2      | –    | 7    | 2     | 51   | 8    | 14    | 15    | 44   | 1    | 1      | –    |
| CC Chartered Community              | 2     | –          | –      | –    | –    | –     | –    | –    | –     | –     | –    | –    | 2      | –    |
| CM County (Municipality)            | 28    | –          | –      | –    | –    | –     | –    | –    | –     | 28    | –    | –    | –      | –    |
| COM Community                       | 33    | –          | 33     | –    | –    | –     | –    | –    | –     | –     | –    | –    | –      | –    |
| CT Canton (Municipalité de)         | 66    | –          | –      | –    | –    | 66    | –    | –    | –     | –     | –    | –    | –      | –    |
| CU Cantons unis (Municipalité de)   | 7     | –          | –      | –    | –    | 7     | –    | –    | –     | –     | –    | –    | –      | –    |
| DM District Municipality            | 53    | –          | –      | –    | –    | –     | –    | –    | –     | –     | 53   | –    | –      | –    |
| HAM Hamlet                          | 36    | –          | –      | –    | –    | –     | –    | –    | –     | –     | –    | 2    | 10     | 24   |
| ID Improvement District             | 8     | –          | –      | –    | –    | –     | –    | –    | –     | 8     | –    | –    | –      | –    |
| IGD Indian Government District      | 2     | –          | –      | –    | –    | –     | –    | –    | –     | –     | 2    | –    | –      | –    |
| IM Island Municipality              | 1     | –          | –      | –    | –    | –     | –    | –    | –     | –     | 1    | –    | –      | –    |
| LGD Local Government District       | 2     | –          | –      | –    | –    | –     | –    | 2    | –     | –     | –    | –    | –      | –    |
| LOT Township and Royalty            | 67    | –          | 67     | –    | –    | –     | –    | –    | –     | –     | –    | –    | –      | –    |
| M Municipalité                      | 590   | –          | –      | –    | –    | 590   | –    | –    | –     | –     | –    | –    | –      | –    |
| MD Municipal District               | 48    | –          | –      | 12   | –    | –     | –    | –    | –     | 36    | –    | –    | –      | –    |
| NH Northern Hamlet                  | 9     | –          | –      | –    | –    | –     | –    | –    | 9     | –     | –    | –    | –      | –    |
| NL Nisga'a Land                     | 1     | –          | –      | –    | –    | –     | –    | –    | –     | –     | 1    | –    | –      | –    |
| NV Northern Village                 | 13    | –          | –      | –    | –    | –     | –    | –    | 13    | –     | –    | –    | –      | –    |
| NVL Nisga'a Village                 | 5     | –          | –      | –    | –    | –     | –    | –    | –     | –     | 5    | –    | –      | –    |
| P Paroisse (Municipalité de)        | 265   | –          | –      | –    | –    | 265   | –    | –    | –     | –     | –    | –    | –      | –    |
| PAR Parish                          | 152   | –          | –      | –    | 152  | –     | –    | –    | –     | –     | –    | –    | –      | –    |
| R Indian Reserve – Réserve indienne | 1,047 | 1          | 4      | 24   | 19   | 31    | 145  | 78   | 169   | 88    | 487  | 4    | 2      | –    |
| RC Rural Community                  | 1     | –          | –      | –    | 1    | –     | –    | –    | –     | –     | –    | –    | –      | –    |

Continued on next page

| Census Subdivision Type (Cont'd) |  | Total | Nfld. Lab. | P.E.I. | N.S. | N.B. | Que. | Ont. | Man. | Sask. | Alta. | B.C. | Y.T. | N.W.T. | Nvt. |
|----------------------------------|--|-------|------------|--------|------|------|------|------|------|-------|-------|------|------|--------|------|
| RDA                              | Regional District Electoral Area         | 165   | -          | -      | -    | -    | -    | -    | -    | -     | -     | 165  | -    | -      | -    |
| RG                               | Region                                   | 1     | 1          | -      | -    | -    | -    | -    | -    | -     | -     | -    | -    | -      | -    |
| RGM                              | Regional Municipality                    | 4     | -          | -      | 3    | -    | -    | -    | -    | -     | 1     | -    | -    | -      | -    |
| RM                               | Rural Municipality                       | 417   | -          | -      | -    | -    | -    | -    | 120  | 297   | -     | -    | -    | -      | -    |
| RV                               | Resort Village                           | 43    | -          | -      | -    | -    | -    | -    | -    | 43    | -     | -    | -    | -      | -    |
| S-E                              | Indian Settlement – Établissement indien | 28    | -          | -      | -    | -    | 5    | 6    | 4    | 1     | 4     | 3    | 5    | -      | -    |
| SA                               | Special Area                             | 3     | -          | -      | -    | -    | -    | -    | -    | -     | 3     | -    | -    | -      | -    |
| SCM                              | Subdivision of County Municipality       | 28    | -          | -      | 28   | -    | -    | -    | -    | -     | -     | -    | -    | -      | -    |
| SET                              | Settlement                               | 31    | -          | -      | -    | -    | -    | -    | -    | -     | -     | -    | 13   | 15     | 3    |
| SM                               | Specialized Municipality                 | 2     | -          | -      | -    | -    | -    | -    | -    | -     | 2     | -    | -    | -      | -    |
| SUN                              | Subdivision of Unorganized               | 90    | 90         | -      | -    | -    | -    | -    | -    | -     | -     | -    | -    | -      | -    |
| SV                               | Summer Village                           | 52    | -          | -      | -    | -    | -    | -    | -    | -     | 52    | -    | -    | -      | -    |
| T                                | Town                                     | 794   | 286        | 7      | 31   | 27   | -    | 111  | 52   | 147   | 110   | 15   | 3    | 4      | 1    |
| TI                               | Terre inuite                             | 10    | -          | -      | -    | -    | 10   | -    | -    | -     | -     | -    | -    | -      | -    |
| TL                               | Teslin Land                              | 1     | -          | -      | -    | -    | -    | -    | -    | -     | -     | -    | 1    | -      | -    |
| TP                               | Township                                 | 245   | -          | -      | -    | -    | -    | 245  | -    | -     | -     | -    | -    | -      | -    |
| TR                               | Terres réservées                         | 9     | -          | -      | -    | -    | 9    | -    | -    | -     | -     | -    | -    | -      | -    |
| UNO                              | Unorganized – Non organisé               | 147   | -          | -      | -    | -    | 110  | 17   | 11   | 2     | -     | -    | 2    | 2      | 3    |
| V                                | Ville                                    | 271   | -          | -      | -    | -    | 271  | -    | -    | -     | -     | -    | -    | -      | -    |
| VC                               | Village cri                              | 8     | -          | -      | -    | -    | 8    | -    | -    | -     | -     | -    | -    | -      | -    |
| VK                               | Village naskapi                          | 1     | -          | -      | -    | -    | 1    | -    | -    | -     | -     | -    | -    | -      | -    |
| VL                               | Village                                  | 647   | -          | -      | -    | 69   | 87   | 11   | 23   | 307   | 105   | 40   | 4    | 1      | -    |
| VN                               | Village nordique                         | 14    | -          | -      | -    | -    | 14   | -    | -    | -     | -     | -    | -    | -      | -    |

---

**References**

- McNiven, C., H. Puderer and D. Janes. 2000. *Census Metropolitan Area and Census Agglomeration Influence Zones (MIZ): A Description of the Methodology*. Geography Working Paper Series No. 2000-2. Geography Division. (Statistics Canada Catalogue No. 92F0138MPE). Ottawa: Minister responsible for Statistics Canada.
- McNiven, C. and H. Puderer. 2000. *Delineation of Canada's North: An Examination of the North-South Relationship in Canada*. Geography Working Paper Series No. 2000-3. Geography Division. (Statistics Canada Catalogue No. 92F0138MPE). Ottawa: Minister responsible for Statistics Canada.
- Mendelson, R. 2001. *Geographic Structures as Census Variables: Using Geography to Analyse Social and Economic Processes*. Working Paper Series No. 2001-1. Geography Division. (Statistics Canada Catalogue No. 92F0138MPE). Ottawa: Minister responsible for Statistics Canada.
- Puderer, H. 2000. *Introducing the Dissemination Area for the 2001 Census*. Geography Working Paper Series No. 2000-4. Geography Division. (Statistics Canada Catalogue No. 92F0138MPE). Ottawa: Minister responsible for Statistics Canada.
- Rambeau, S. and K. Todd. 2000. *Census Metropolitan Area and Census Agglomeration Influenced Zones (MIZ) with Census Data*. Geography Working Paper Series No. 2000-1. Geography Division. (Statistics Canada Catalogue No. 92F0138MPE). Ottawa: Minister responsible for Statistics Canada.
- Statistics Canada. 2000. "Policy on Informing Users of Data Quality and Methodology." Approved March 31, 2000. *Policy Manual*. Ottawa: Minister responsible for Statistics Canada. <http://dissemination.statcan.ca/english/concepts/inform.htm>
- . 2002a. *2001 Census Dictionary*. 2001 Census of Canada. (Statistics Canada Catalogue No. 92-378-XPE). Ottawa: Minister responsible for Statistics Canada.
- . 2002b. *2001 Census Handbook*. 2001 Census of Canada. (Statistics Canada Catalogue No. 92-379-XPB). Ottawa: Minister responsible for Statistics Canada.
- . 2002c. *Population and Dwelling Counts*. 2001 Census of Canada. (Statistics Canada Catalogue no. 93-360-XPB). Ottawa: Minister responsible for Statistics Canada.
- . 2002d. *Standard Geographical Classification, Volume I*. 2001 Census of Canada. (Statistics Canada Catalogue no. 12-571-XPB). Ottawa: Minister responsible for Statistics Canada.
- . 2002e. *Standard Geographical Classification, Volume II*. 2001 Census of Canada. (Statistics Canada Catalogue no. 12-572-XPB). Ottawa: Minister responsible for Statistics Canada.
- Weiss, C. and A. Akuoko-Asibey. 1998. *Automated Land Area Tests for the 2001 Census: Preliminary Results Using the 1996 Digital Cartographic Files*. Geography Working Paper Series No. 1998-1. Geography Division. (Statistics Canada Catalogue No. 92F0138MPE). Ottawa: Minister responsible for Statistics Canada.

---

## Geography products and services

This section provides brief descriptions of Geography products and services related to the 2001 Census. For additional details, consult the nearest Statistics Canada Regional Reference Centre.

### 1. Reference Maps

Reference maps show the location of the geographic areas for which census data are tabulated and disseminated. The maps display the boundaries, names and codes of standard geographic areas, as well as major cultural and physical features, such as roads, railroads, coastlines, rivers and lakes. Over 5,600 reference maps are available for the 2001 Census. Given the diversity in size of these geographic areas, different map scales and map coverages are required to show the appropriate level of detail. Descriptions of each series are provided with the individual catalogue entries below.

#### National Reference Maps

- 92F0172XCB Reference Maps – Complete Set, 2001 Census
- 92F0144XIB Census Divisions, 2001
- 92F0144XIB Economic Regions and Census Divisions, 2001
- 92F0144XIB Census Metropolitan Areas and Census Agglomerations, 2001
- 92F0144XIB Statistical Area Classification, 2001 Census Subdivisions
- 92F0152XPE Federal Electoral Districts (1996 Representation Order) Reference Map

#### 92F0149XPB Census Division and Census Subdivision Reference Maps

The set of Census Division and Census Subdivision Reference Maps covers all of Canada, by province and territory. The maps show the boundaries, names and codes of census divisions (such as counties and regional districts) and census subdivisions (such as cities, towns, villages, other local municipal entities, townships and Indian reserves). The maps also show the boundaries of census metropolitan areas and census agglomerations. There are 22 maps that vary in scale (ranging from 1:310,000 to 1:3,500,000).

#### 92F0145XPB Census Tract Reference Maps, by Census Metropolitan Area or Census Agglomeration

The series of Census Tract Reference Maps covers all 27 census metropolitan areas (CMAs) and the 19 census agglomerations (CAs) with census tracts. The maps show the boundaries and names of census tracts and census subdivisions, as well as the urban core, urban fringe and rural fringe within the CMAs or CAs. The maps include background information such as rivers, lakes, railroad tracks and provincial boundaries, and other significant features. There are 85 maps in the series, with one to four maps covering each CMA or CA. The map scales range from 1:25,000 to 1:2,000,000, and the maximum map dimensions are approximately 91 cm by 101 cm (36 inches by 40 inches).

#### 92F0146XPB Dissemination Area Reference Maps, by Census Tract, for Census Metropolitan Areas and Census Agglomerations.

The set of Dissemination Area Reference Maps by Census Tract covers all 27 census metropolitan areas (CMAs) and the 19 census agglomerations (CAs) that are part of the census tract program. Each map in the set covers one census tract (CT) and shows the boundaries and codes of dissemination areas within that CT. The maps also show census tract, census subdivision, and census metropolitan area or census agglomeration boundaries on a background of detailed street networks and other visible features such as rivers, lakes and railroad tracks.

There are approximately 4,800 maps in this set—generally one map per census tract. The dimensions of each map are approximately 27 cm by 43 cm (11 inches by 17 inches).

**92F0147XPB Dissemination Area Reference Maps, by non-tracted Census Agglomeration**

The set of Dissemination Area Reference Maps by Non-tracted Census Agglomeration covers the smaller census agglomerations that are not part of the census tract program. Each map in the set covers one census agglomeration (CA) and shows the boundaries and codes of dissemination areas within that CA. The maps also show the boundaries of census subdivisions (municipalities), as well as urban areas, and representative points for designated places. The maps include background information such as rivers, lakes, railroad tracks and provincial boundaries, and other significant features.

There are approximately 100 maps in this set—generally one map per census agglomeration (The maps vary in scale and size; the maximum map dimensions are approximately 91 cm by 101 cm (36 inches by 40 inches)).

**92F0148XPB Dissemination Area Reference Maps, by Census Division, for Areas Outside Census Metropolitan Areas and Census Agglomerations**

The set of Dissemination Area Reference Maps by Census Division covers areas outside census metropolitan areas (CMAs) and census agglomerations (CAs). Each map in the set covers one census division (CD) and shows the boundaries and codes of dissemination areas within that CD. The maps also show the boundaries of census subdivisions, census metropolitan areas and census agglomerations, as well as urban areas and representative points for designated places. The maps include background information such as rivers, lakes, railroad tracks and provincial boundaries, and other significant features.

**2. Geographic Data Products**

Geographic data products are those that contain 2001 Census population and dwelling counts.

**93-360-XPB National Overview Tables, 2001 Census**

The National Overview tables provide population and dwelling counts established by the 2001 Census of Canada. The levels of geography covered are Canada, provinces and territories, and other geographic areas including census subdivisions (municipalities), census metropolitan areas and census agglomerations. For selected geographies, the tables provide percentage change in the population and dwellings between 1996 and 2001. Data are also provided for land area and population density. Geographic Boundaries are those in effect on January 1, 2001.

**92F0150XCB GeoSuite, 2001 Census**

GeoSuite is a tool for data retrieval, query and tabular output, with software and data on a CD-ROM. GeoSuite allows users to explore the links between all standard levels of geography and to determine geographic codes, names, and population and dwelling counts. GeoSuite includes a dissemination area (DA) reference map listing that facilitates identification of appropriate DA reference maps.

**3. Spatial Information Products**

Spatial information provides the shape and location of geographic features. The boundaries, road network and other features of standard geographic areas are available in digital form for mapping and geographic information system (GIS) applications. These products include Cartographic Boundary Files (CBFs), Road Network Files (RNFs) and Skeletal Road Network Files (SRNFs).

**Cartographic Boundary Files (CBFs), 2001 Census**

Cartographic Boundary Files (CBFs) contain the boundaries of standard geographic areas together with the shoreline around Canada and the larger inland lakes, all integrated in a single layer. In the second edition (released October 8, 2002), the hydrography was generalized by removing small lakes from the file to reduce noise. Large rivers emptying into the oceans were closed off, then the interior hydrography (double line river and lake polygons) was extracted to create the supplementary hydrography. The coordinates are latitude/longitude and are based on the North American Datum of

1983 (NAD83). The Cartographic Boundary Files for 2001 replace the Digital Cartographic Files produced for the 1996 Census.

Cartographic Boundary Files can be used with Census of Population, Census of Agriculture or other Statistics Canada data for data analysis and thematic mapping (with appropriate software). Geographic codes provide the linkage between the statistical data and the geographic area boundaries. CBFs can also be used to create new geographic areas by aggregating standard geographic areas, and for other data manipulations available with the user's software. The CBFs can be used with the Road Network Files and Skeletal Road Network Files, which provide additional geographic context for mapping applications.

92F0160XCE Provinces and Territories Cartographic Boundary File  
 92F0163XCE Federal Electoral Districts (1996 Representation Order) Cartographic Boundary File  
 92F0161XCE Census Divisions and Economic Regions Cartographic Boundary File  
 92F0167XCE Census Consolidated Subdivisions Cartographic Boundary Files  
 92F0162XCE Census Subdivisions Cartographic Boundary Files  
 92F0165XCE Designated Places Cartographic Boundary File  
 92F0166XCE Census Metropolitan Areas/Census Agglomerations Cartographic Boundary File  
 92F0168XCE Census Tracts Cartographic Boundary Files  
 92F0164XCE Urban Areas Cartographic Boundary File  
 92F0169XCE Dissemination Areas Cartographic Boundary Files

#### **92F0159XCE Population Ecumene Census Division Boundary File, 2001 Census**

The Population Ecumene Census Division Boundary File contains a generalised population ecumene based on 2001 Census population density data with at least one ecumene polygon for every census division (CD). It can be used to produce small-scale thematic maps of statistical data.

For the 2001 Census, a population ecumene was defined based on population density criteria at the block level. The resulting detailed population ecumene polygons were generalised and small, non-contiguous ecumene pockets were aggregated to ensure visibility for small-scale thematic mapping at the census division level (see Figure 9). When ecumene boundaries are used for dot and choropleth mapping, they give a more accurate depiction of the spatial distribution of data within standard geographic areas.

The Population Ecumene Census Division Boundary File is available as a standard package for Canada free on the Internet or it can be purchased on CD-ROM through the nearest regional office. This file is not a Cartographic Boundary File and it has its own reference guide.

#### **92F0170XCE Census Forward Sortation Areas Boundary File**

The 2001 Census Forward Sortation Area (FSA) Boundary File contains the boundaries of 1,577 forward sortation areas (the first three characters of a postal code) derived from postal codes captured from the 2001 Census of Population questionnaires. Through analysis of the postal codes reported by Census households, a single Forward Sortation Area was assigned to each reported block based on the most frequently reported Forward Sortation Area for the block. Unreported blocks were assigned a Forward Sortation Area based on proximity to reported blocks in the same province or territory.

#### **92F0157XCE Road Network Files (RNF), 2001 Census**

Road Network Files (RNFs) contain a road layer for the entire country and a province/territory boundary layer. The road layer includes roads, with road names and address ranges (arc attributes), and geographic codes to identify blocks, census subdivisions, census metropolitan areas/census agglomerations, and provinces/territories (polygon attributes). Address ranges are mainly available in the large urban centres of Canada. The province/territory boundary layer incorporates hydrography (the

shoreline around Canada and the larger inland lakes) with the boundaries and the geographic codes. The digital coordinates are in latitude/longitude and are based on the North American Datum of 1983 (NAD83).

Road Network Files are available for Canada, for individual provinces and territories, and for census metropolitan areas (CMAs) and those census agglomerations (CAs) with census tracts.

#### **92F0158XCE Skeletal Road Network Files (SRNF), 2001 Census**

The Skeletal Road Network Files contain selected roads (with road names, but no addresses) that are derived from Road Network Files (Catalogue No. 92F0157XCE). The selected roads are ranked according to four levels of detail (see Figure ?). The different levels of detail are suitable for mapping at small to medium scales. The SRNF can be used to provide some cartographic reference features when producing thematic maps with the Cartographic Boundary Files. The positional accuracy of the SRNF does not support cadastral, surveying or engineering applications. The SRNF does not include hydrography.

The Skeletal Road Network Files are available for Canada, provinces and territories, and census metropolitan areas (CMAs) and tracted census agglomerations (CAs).

#### **92F0177XCE Block Digital Boundary File**

Block digital boundary files portray the official boundaries used for the 2001 Census. They often extend as straight lines into bodies of water. Digital boundary files provide a framework for mapping and geographic analysis that are possible using commercially available geographic information systems (GISs) or other mapping software. The files may not be suitable for mapping or display where realistic shoreline is required.

### **4. Attribute Information Products**

Attribute information products are those that give descriptive information about the features. The attribute files include Postal Code Conversion File (PCCF) and Postal Code by Federal Ridings File (PCFRF).

#### **92F0153XCE Postal Code Conversion File (PCCF)**

The Postal Code Conversion File (PCCF) provides a link between six-character postal code and standard 2001 Census geographic areas (such as dissemination areas, municipalities, census tracts). It also provides the x,y (latitude/longitude) coordinates for a point representing the approximate location of the postal code to support mapping.

The PCCF is available as standard packages for Canada, the provinces and territories, census metropolitan areas (CMAs) and some census agglomerations (CAs). A reference guide is included.

#### **92F0153UCE Postal Code Conversion File (PCCF) – Update**

The Postal Code Conversion File (PCCF) is updated with new postal codes on a semi-annual basis and is available in January and July. Clients must purchase the Postal Code Conversion File at the initial price; then subsequent updated files (92F0154UCE) may be purchased at the update or subscription rate. The update rate is a flat rate that in most cases is much lower than the initial purchase price. An additional 25% discount on updates is given to PCCF update subscribers. The subscription requires clients to pay in advance for at least one updated file per year until the PCCF reflecting the geography of the 2001 Census is released.

The PCCF Updates are available as standard packages for Canada and the provinces and territories. A reference guide is included.



---

**92F0028XDB Postal Codes by Federal Ridings (1996 Representation Order) File**

The Postal Codes by Federal Ridings File (PCFRF) provides a link between the six character postal codes and the federal electoral districts (1996 Representation Order). A federal electoral district (FED), commonly referred to as a federal riding, is an area represented by a Member of Parliament in the House of Commons.

The PCFRF is intended as a tool for use with administrative files containing postal codes. By using the postal code as a link, data from administrative files may be organised and/or tabulated by federal riding. This PCFRF allows a link of more than 680,000 postal code records to the 301 federal electoral districts.

The PCFRFs are available as standard packages for Canada and five regions. A reference guide is included.

**92F0028XDB Postal Codes by Federal Ridings (1996 Representation Order) File (PCFRF) – Update**

The Postal Code by Federal Ridings File (PCFRF) is updated with new postal codes on a semi-annual basis and is available in January and July. Updates released in July provide new postal codes effective January of the release year. Updates released in January provide new postal codes in use in July of the previous year. Clients who purchase the PCFRF (92F0028XDB) at the initial price may then purchase subsequent updated files (92F0028UDB) at the update rate (see Table 11 for details).

The PCFRF Updates are available as standard packages for Canada and five regions.

**5. Geographic Services**

A variety of services is available, including custom mapping, custom data extraction (geocoding) and the development of custom geography products.

**97C0006 Geography Custom Service**

If standard geography products do not satisfy a client's needs, the Geography Custom Service is available to produce non-standard geographic products. Examples include alternative packaging of geographic files, special data retrievals, manipulations or merges using any of the geography computer files (postal codes, attribute files, boundary files and road network files). Contact the nearest regional office for details.

**97C0005 Custom Area Creation Service (formerly Geocoding Service)**

The Custom Area Creation Service (formerly called Geocoding Service) allows users to define their own geographic areas of study (user-defined areas or aggregations of standard census geographic areas) for census data tabulations. This custom geography is produced from the aggregation of blocks, or where necessary, block-faces within the road network file coverage. The custom area files thus created are then passed to Census for data tabulation. Contact the nearest regional office for details.

**97C0007 Geography Custom Mapping**

Thematic maps and other maps, specially designed to meet customer needs, can be produced. Contact the nearest regional office for details.

---

## End-use licence agreement

### COPYRIGHT

The Government of Canada (Statistics Canada) is the owner or a licensee of all intellectual property rights (including copyright) in this data product. In consideration of your payment of the requisite fee, you or your organisation, as the case may be, (hereinafter referred to as the "licensee") are granted a non-exclusive, non-assignable and non-transferable licence to use this data product subject to the terms below. This license is not a sale of any or all of the rights of the owner(s).

### TERMS OF USE

1. All copyright and proprietary notices and all conditions of use associated with the data product must be communicated to all users of the data product.
2. The licensed organisation shall not transfer this data product to or store the data product in any electronic network for use by more than three (3) users unless it obtains prior written permission from Statistics Canada and pays any additional fees.
3. The licensee shall not lend, rent, lease, sub-licence, transfer or sell any part of the data product nor any right granted under this agreement to any person outside the licensed organisation or to any other organisation.
4. The licensee shall not disassemble, decompile or in any way attempt to reverse engineer any software provided as part of the data product.
5. The licensee shall not use any part of the data product to develop or derive any other data product or data service for distribution or commercial sale.
6. The licensee is granted reasonable rights of use of the content of this data product only for personal, corporate or public policy research, as well as for educational purposes. This permission includes the use of the content in analyses and the reporting of results and conclusions, including the citation of limited amounts of supporting data extracted from the data product in such documents. In such cases, the source of the data must be acknowledged in all such documents and communications by providing the following source citation at the bottom of each table and graph:
7. *Source* (or "*Adapted from*", if appropriate): *Statistics Canada, name of product, catalogue number of product, reference date of product.*
8. The Licensee shall obtain approval from Statistics Canada, before publishing any significant volumes of material extracted from the data product in any medium.
9. Any violation of this license renders it void and of no effect. This agreement will terminate automatically without notice if the licensee fails to comply with any term of this agreement. In the event of termination, the licensee must immediately return the data product to Statistics Canada or destroy it and certify this destruction in writing to Statistics Canada.

### WARRANTIES AND DISCLAIMERS

This data product is provided "as-is", and Statistics Canada makes no warranty, either express or implied, including but not limited to, warranties of merchantability and fitness for a particular purpose. In no event will Statistics Canada be liable for any direct, special, indirect, consequential or other damages however caused.

### ACCEPTANCE OF TERMS

It is *YOUR RESPONSIBILITY* to ensure that your use of this data product complies with these terms and to seek prior written permission from Statistics Canada for any uses not permitted or not specified in this agreement. Any infringement of Statistics Canada's rights may result in legal action.

**ANY USE WHATSOEVER OF THIS DATA PRODUCT SHALL CONSTITUTE YOUR ACCEPTANCE OF THE TERMS OF THIS AGREEMENT.**

**For further information please contact:**

Licensing Services

Marketing Division, Statistics Canada

R.H. Coats Building, 9<sup>th</sup> floor, section A

Ottawa, Ontario K1A 0T6, Canada

E-mail: [licensing@statcan.ca](mailto:licensing@statcan.ca)

Telephone: (613) 951-1122

Fax: (613) 951-1134

© Statistics Canada, 2002