

Postal Code^{OM} Conversion File (PCCF), Reference Guide

June 2013 postal codes^{OM}



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Standard symbols

The following symbols are used in Statistics Canada publications:

- | | |
|----------------|--|
| . | not available for any reference period |
| .. | not available for a specific reference period |
| ... | not applicable |
| 0 | true zero or a value rounded to zero |
| 0 ^s | value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded |
| P | preliminary |
| r | revised |
| X | suppressed to meet the confidentiality requirements of the <i>Statistics Act</i> |
| E | use with caution |
| F | too unreliable to be published |
| * | significantly different from reference category ($p < 0.05$) |

What's new?

- The postal code^{OM} reference date for this Postal Code^{OM} Conversion File (PCCF) is June 2013.
- This is the first release with the 2011 Census geographies.
- The postal codes^{OM} are linked to the geographic areas used in the 2011 Census of Population. The reference date for these geographic areas is January 1, 2011.
- Records representing postal codes^{OM} retired prior to January 1, 2011 are available in a separate file. This file follows the same record layout as the PCCF.
- A small number of new postal codes^{OM} are linked to a census subdivision only. These new postal codes^{OM} do not yet link to Statistics Canada's geographic frame. Linkage below the census subdivision will appear on these records when the street and address information becomes available on the geographic frame. This new linkage will appear on subsequent releases of the PCCF.

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Table of contents

	Page
What's new?	3
1. About this guide	5
2. Overview	6
How to cite this guide.....	6
How to cite this product	6
Acknowledgements.....	6
3. About this product	7
Purpose of the product	7
Definitions and concepts.....	7
Content	7
General methodology	9
Limitations.....	9
Comparison to other products/versions	10
Using with other products	10
Reference date	10
4. Technical specifications	11
Record layouts and data descriptions.....	11
File specifications.....	22
Software formats.....	22
System requirements.....	22
Installation instructions	22
Geographic representation	22
File naming convention	22
5. Data quality	23
Lineage	23
Positional accuracy.....	26
Attribute accuracy	27
Logical consistency.....	27
Consistency with other products.....	27
Completeness	28
Appendix A Glossary	29
Appendix B Hierarchy of standard geographic units for dissemination, 2011 Census	35
Appendix C Geographic units by province and territory, 2011 Census	36
Appendix D Census subdivision types by province and territory, 2011 Census	37

1. About this guide

This reference guide is intended for users of the Postal Code^{OM} Conversion File (PCCF). The guide provides an overview of the file, the general methodology used in its creation and important technical information.

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2. Overview

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

The geographic coordinates, which represent the standard geostatistical areas linked to each postal code^{OM} on the PCCF, 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 PCCF, which linked postal codes^{OM} to 1981 Census geographic areas and included geographic coordinates. Since then, the file has been updated on a regular basis to reflect changes.

For this release of the PCCF, the vast majority of the postal codes^{OM} are directly geocoded to 2011 Census geography. This improves precision of the file over the previous conversion process used to align postal code^{OM} linkages to new geographic areas after each census.

About 94% of the postal codes^{OM} were linked to geographic areas using the new automated process. A quality indicator for the confidence of this linkage is available in the PCCF.

How to cite this guide

Postal Code^{OM} Conversion File (PCCF), Reference Guide, 2013. Statistics Canada Catalogue no. 92-154-G.

How to cite this product

Postal Code^{OM} Conversion File (PCCF), 2013. Statistics Canada Catalogue no. 92-154-X.

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3. About this product

Purpose of the product

The purpose of the Postal Code^{OM} Conversion File (PCCF) is to provide a link between six-character postal codes^{OM} and standard 2011 Census geographic areas (e.g., dissemination areas, census subdivisions, census tracts). The purpose of the file is not to validate postal codes^{OM}.

Definitions and concepts

Geographic terms and concepts are briefly defined in the glossary (Appendix A). More details can be found in the *2011 Census Dictionary* (Catalogue no. 98-301-X) and the 2011 Illustrated Glossary (Catalogue no. 92-195-X).

Content

This version of the PCCF contains a total of 848,476 postal codes^{OM} (845,396 active, 3,080 retired codes that are not active). Postal codes^{OM} retired before January 1, 2011 are included in a separate file called Retired 2010 (R2010.txt), available with the PCCF. These postal codes^{OM} are linked to the geographic areas used in the 2011 Census, which include latitude and longitude coordinates. This file contains postal code^{OM} data under license from Canada Post Corporation (CPC). The CPC file from which the active postal code^{OM} data were obtained is dated June 2013. The PCCF includes all valid postal codes^{OM} where it was possible to link to Statistics Canada's geographic frame and therefore determine a link to one or more standard geostatistical areas as of June 2013 according to CPC. The PCCF is available as a national file.

Postal codes^{OM} do not respect census geographic boundaries and so may be linked to more than one standard geographic area, or assigned to more than one set of coordinates. Therefore, one postal code^{OM} may be represented by more than one record. Postal codes^{OM} can also straddle provincial boundaries. See the Technical specifications section for more information on postal codes^{OM}.

Table 3.1 provides the number of unique postal codes^{OM} and total records by province and territory. (Table 4.3 in the Technical specifications section provides counts of postal codes^{OM} by the first letter of the forward sortation area[®].)

Table 3.1 Province and territory postal code^{OM} counts

Province or territory	Unique postal codes ^{OM}	Number of records
Newfoundland and Labrador	11,133	21,610
Prince Edward Island	3,995	10,277
Nova Scotia	28,171	64,840
New Brunswick	59,530	104,545
Quebec	215,419	471,164
Ontario	282,123	615,409
Manitoba	24,934	41,754
Saskatchewan	22,214	35,137
Alberta	82,962	169,632
British Columbia	116,462	240,190
Yukon	983	1,879
Northwest Territories	522	1,494
Nunavut	28	96
Total	848,476	1,777,977

Each record in the file consists of the following:

- six-character postal code^{OM}
- dissemination area (DA) identifier: made up of the province/territory code, the census division code and the dissemination area code
- dissemination block: a basic geographic unit (where possible)
- latitude and longitude coordinates of the census geography to which the postal code^{OM} is linked
- census subdivision (CSD) name, code and type
- geographic codes of other higher level standard geographic areas in which the dissemination block/dissemination area is located
- federal electoral district code – 2003 Representation Order
- CPC information relevant to each postal code^{OM}: 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^{OM} type.
- Record level metadata related to the quality such as the quality indicator and the source of geocoding. There is also an indicator showing whether the postal code^{OM} is linked to a postal installation.

Purchasers of the PCCF also receive supplementary files. Due to the size of the name fields, and because of their repetition, the names are provided in separate files:

- Census division names file (CD_DR.txt)
- Federal electoral district names file – 2003 Representation Order (FED03_CEF03.txt)
- Statistical Area Classification names file (SAC_CSS.txt)
- Retired 2010 (R2010.txt)

The basic link between the postal code^{OM} and other standard census geographic areas is made through one or more 2011 Census dissemination blocks. The geographic areas contained on the PCCF are shown on the hierarchy chart (Appendix B).

The PCCF is available as a standard package for Canada. Custom orders are available on request. Contact us by e-mail at infostats@statcan.gc.ca or by visiting our website at www.statcan.gc.ca.

General methodology

The Postal Code^{OM} Conversion File (PCCF) is updated on a regular basis and is released yearly. The regular maintenance of the file takes all postal code^{OM} changes continually introduced by Canada Post Corporation (CPC) and finds the corresponding census geographic areas. Every five years, after each census, the PCCF is aligned with the new census geographic areas.

Every month, Statistics Canada obtains files from CPC containing the latest postal codes^{OM}, address ranges and other attributes such as delivery mode type. Whenever possible, postal code^{OM} address ranges are linked to a block-face, dissemination block or dissemination area. Municipality maps are also used and, when necessary, contact is made with local authorities to obtain as precise a street and address location as possible. When the block-face or dissemination block cannot be precisely determined, the postal code^{OM} is coded to a dissemination area(s).

All other postal code^{OM} links to higher level geographic areas are derived from the block-face, dissemination block or dissemination area.

Limitations

The PCCF contains multiple records for a postal code^{OM} when the postal code^{OM} straddles more than one block-face, dissemination block, or dissemination area. It should be acknowledged that the Canada Post Corporation source data used to create the PCCF contains some postal codes^{OM} which have links to multiple address ranges. For example, in the June 2013 file received from Canada Post Corporation, 889 postal codes^{OM} were linked to between 50 and 100 different address ranges, and 558 postal codes^{OM} were linked to 100 or more address ranges.

Civic addresses are not available for some postal codes^{OM} such as those associated with rural routes. Many of these postal codes^{OM} tend to straddle several dissemination areas and often cross boundaries of standard geographic areas such as census tracts or census subdivisions. It is difficult, if not impossible, to identify the precise physical location of a rural postal code^{OM}.

Community mailboxes are a growing source for multiple records per postal code^{OM} on the PCCF. In newer urban delivery areas, postal codes^{OM} are assigned to a community mailbox that may cover partial dissemination blocks, both sides of a street, and different streets within 200 metres of the community mailbox. These situations often result in multiple links being established between a postal code^{OM} and block-faces, unlike the more traditional urban postal codes^{OM}, which correspond generally to a block-face.

The single link indicator (SLI) was created to assist users in dealing with postal codes^{OM} 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^{OM}. Users should be aware that only a partial correspondence between the postal code^{OM} 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^{OM}. Users will find when working with both active and retired postal codes^{OM}, multiple SLIs will appear for a postal code^{OM} that has been retired and reintroduced.

Table 3.2 presents the number of postal codes^{OM} (including retired postal codes^{OM}) that show multiple links by geographic area.

Table 3.2 Postal codes^{OM} with multiple links

Geographic area	Number of postal codes^{OM}
Dissemination block	129,029
Dissemination area	75,350
Census tract	13,610
Census subdivision	6,162
Census division	1,178
Census metropolitan area	132
Province or territory	0

The address associated with a postal code^{OM} does not always represent the location where those receiving mail using that postal code^{OM} actually reside. This is particularly the case in rural areas, where rural route service and post office pick-up are commonly used to deliver mail. The delivery mode type of 'W' (rural) and 'H' (rural route) on the PCCF identify postal codes^{OM} that are usually considered rural.

A typical rural route address, such as 'RR#6, Georgeville, Québec', 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^{OM}. Consequently, rural postal codes^{OM} cannot be used in the same manner as most urban postal codes^{OM} can to precisely geo-reference a physical location.

Similarly, postal codes^{OM} with a delivery mode type of 'K' (group of post office boxes) or 'M' (one post office box) may be linked to the location of the postal installation on the PCCF, as opposed to the physical location of customers who rent a post office box. A new variable indicating whether a postal code^{OM} is linked to a post office location or to where the customers reside is now available in the PCCF.

Comparison to other products/versions

- The 2011 Census PCCF record layout has not changed when compared to the 2006 Census PCCF.
- The 2011 Census PCCF links to 2011 Census geographic areas, whereas the 2006 Census PCCFs linked to 2006 Census geographic areas.

Using with other products

Not applicable

Reference date

The reference date for postal codes^{OM} contained in this product is June 2013.

The geographic reference date is a date determined by Statistics Canada to finalize the geographic framework for which the census data are collected, tabulated and reported. The geographic reference date for the 2011 Census is January 1, 2011.

4. Technical specifications

Record layouts and data descriptions

Table 4.1 Postal Code^{OM} Conversion File (PCCF) and Retired 2010 (R2010.txt) record layouts

Position	Size	Type ¹	Field name	Description
1	6	C	Postal code ^{OM}	Postal code ^{OM}
7	3	C	FSA [®]	Forward sortation area [®]
10	2	C	PR	Province or territory code
12	4	C	CDuid	Census division unique identifier
16	7	C	CSDuid	Census subdivision unique identifier
23	70	C	CSDname	Census subdivision name
93	3	C	CSDtype	Census subdivision type
96	3	C	CCScode	Census consolidated subdivision code
99	3	C	SAC	Statistical Area Classification code (includes CMA/CA)
102	1	C	SACtype	Statistical Area Classification type (includes CMA/CA)
103	7	C	CTname	Census tract name
110	2	C	ER	Economic region code
112	4	C	DPL	Designated place code
116	5	C	FED03uid	Federal electoral district – 2003 Representation Order unique identifier
121	4	C	POP_CNTR_RA	Population centre/rural area code
125	1	C	POP_CNTR_RA_type	Population centre/rural area type
126	8	C	DAuid	Dissemination area unique identifier
134	2	C	Dissemination block	Dissemination block code
136	1	C	Rep_Pt_Type	Representative point type
137	11	N	LAT	Latitude of lowest level geographic area for postal code ^{OM} record (as indicated in Rep_Pt_Type variable)
148	13	N	LONG	Longitude of lowest level geographic area for postal code ^{OM} record (as indicated in Rep_Pt_Type variable)
161	1	C	SLI	Single link indicator
162	1	C	PCtype	Postal code ^{OM} type
163	30	C	Comm_Name	Community name
193	1	C	DMT	Delivery mode type
194	1	C	H_DMT	Historic delivery mode type
195	8	C	Birth_Date	Birth date (yyyymmdd)
203	8	C	Ret_Date	Retired date (yyyymmdd)
211	1	C	PO	Delivery installation
212	3	C	QI	Quality indicator
215	1	C	Source	Source of geocoding
216	1	C	POP_CNTR_RA_SIZE_CLASS	Population centre and rural area classification

1. The type 'N' refers to numeric values while 'C' refers to both alphabetic and numeric characters.

Postal code^{OM}

The postal code^{OM} is a six-character code defined and maintained by Canada Post Corporation (CPC) for the purpose of sorting and delivering mail. 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^{OM} uses 18 alphabetic characters and 10 numeric characters. Eight alphabetic characters (D, F, I, O, Q, U, W and Z) are not in use at the present time.

The first character of a postal code^{OM} 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.

Table 4.2 First character of the postal code^{OM} and corresponding province, territory or region

Province, territory or region	Postal code ^{OM} first character
Newfoundland and Labrador	A
Nova Scotia	B
Prince Edward Island	C
New Brunswick	E
Eastern Québec	G
Metropolitan Montréal	H
Western Québec	J
Eastern Ontario	K
Central Ontario	L
Metropolitan Toronto	M
Southwestern Ontario	N
Northern Ontario	P
Manitoba	R
Saskatchewan	S
Alberta	T
British Columbia	V
Northwest Territories and Nunavut	X
Yukon	Y

Note: The regions used in this table are defined by Canada Post Corporation.

In the Postal Code^{OM} Conversion File (PCCF), there are 19 postal codes^{OM} linked to a different province from their first character allocation. The counts of postal codes^{OM} given by province and territory in Table 4.3 are generated by grouping all postal codes^{OM} by the first letter of the forward sortation area[©].

Table 4.3 Province and territory postal code^{OM} counts by first letter of forward sortation area[®]

Province or territory	Unique postal codes ^{OM}	Number of records
Newfoundland and Labrador	11,133	21,610
Prince Edward Island	3,995	10,227
Nova Scotia	28,171	64,840
New Brunswick	59,530	104,545
Quebec	215,400	471,145
Ontario	282,142	615,428
Manitoba	24,934	41,754
Saskatchewan	22,214	35,137
Alberta	82,962	169,632
British Columbia	116,462	240,190
Yukon	983	1,879
Northwest Territories	522	1,494
Nunavut	28	96
Total	848,476	1,777,977

The first three characters of the postal code^{OM} ('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, a province or a territory. As of June 2013, there were 1,641 FSAs[®] in use across Canada. There were 1,457 FSAs[®] with urban mail delivery service and only 184 with rural mail delivery service. Rural postal codes^{OM} are identifiable by the presence of a zero (0) in the second position of the FSA[®] code. Urban postal codes^{OM} are composed of FSAs[®] with numerals 1 to 9 in the second position of the code.

The last three characters of the postal code^{OM} ('NAN') identify routes known as local delivery units (LDUs). In population centres, a single postal code^{OM} may correspond to the following types of LDU:

- 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 or organisation that does considerable business with CPC
- 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.

A community mailbox postal code^{OM} services both odd and even sides of the same street, or different streets, within a 200 metre radius of the community mailbox.

In rural FSAs[®], the LDU generally refers to services which originate from a post office or postal station. These include rural routes, general deliveries, post office boxes, and suburban services. Often, in rural FSAs[®], the postal code^{OM} identifies a specific rural community.

Forward sortation area[®] (FSA[®])

The forward sortation area[®] is the first three characters of the postal code^{OM}, designating a postal delivery area within Canada.

Province or territory code (PR)

The PR uniquely identifies provinces and territories.

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
61	Northwest Territories
62	Nunavut

Census division unique identifier (CDuid)

This 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 names file (CD_DR.txt).

Census subdivision unique identifier (CSDuid)

This uniquely identifies a census subdivision in the country. The province/territory, census division, and census subdivision (municipality) codes combine to represent the 2011 Standard Geographical Classification (SGC).

Census subdivision name (CSDname)

This contains the name of the census subdivision (municipality) in effect as of January 1, 2011.

Census subdivision type (CSDtype)

This field provides abbreviations used to identify the census subdivision (municipality) type. See Appendix D, Census subdivision types by province and territory, 2011 Census, for the complete list.

Census consolidated subdivision code (CCScode)

This identifies a census consolidated subdivision within a census division. It should be combined with the CDuid to uniquely identify a census consolidated subdivision in the country.

Statistical Area Classification code (SAC)

The Statistical Area Classification groups census subdivisions according to whether they are a component of a census metropolitan area (CMA), a census agglomeration (CA), a census metropolitan influenced zone (strong metropolitan influenced zone, moderate metropolitan influenced zone, weak metropolitan influenced zone or no metropolitan influenced zone), or the territories (Yukon, Northwest Territories and Nunavut). Corresponding names are found in the Statistical Area Classification names file (SAC_CSS.txt).

000	Territories, outside of CA
001 to 995	CMA/CA unique identifier
996	Strong metropolitan influenced zone
997	Moderate metropolitan influenced zone
998	Weak metropolitan influenced zone
999	No metropolitan influenced zone

Statistical Area Classification type (SACtype)

This identifies the type of Statistical Area Classification in which the census subdivision is located.

- 1 Census subdivision within census metropolitan area
- 2 Census subdivision within census agglomeration with at least one census tract
- 3 Census subdivision within census agglomeration having no census tracts
- 4 Census subdivision outside of census metropolitan area and census agglomeration having strong metropolitan influence
- 5 Census subdivision outside of census metropolitan area and census agglomeration having moderate metropolitan influence
- 6 Census subdivision outside of census metropolitan area and census agglomeration having weak metropolitan influence
- 7 Census subdivision outside of census metropolitan area and census agglomeration having no metropolitan influence
- 8 Census subdivision within the territories, outside of census agglomeration

Census tract name (CTname)

This identifies a census tract within a CMA/CA. To uniquely identify each census tract in its corresponding census metropolitan area or tracted census agglomeration, the three-digit CMA/CA code must precede the census tract 'name.' If a census tract is split into two or more parts due to a population increase, the number after the decimal point identifies the splits. For example, CT 0042.00 becomes CT 0042.01 and CT 0042.02. If CT 0042.01 is subsequently split, it becomes CT 0042.03 and CT 0042.04.

Non-tracted areas outside a CMA/CA are assigned a code that is a concatenation of '99' plus the two-digit province or territory code. For example, records in areas outside of a CMA/CA in Nova Scotia are assigned a CT name of '9912.00.'

Economic region code (ER)

This identifies an economic region within a province or territory. This field must be combined with the province or territory code to uniquely identify an economic region.

Designated place code (DPL)

This identifies a designated place within a province or territory. This field must be combined with the province or 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 or territory code. For example, records in areas outside of a DPL in New Brunswick are assigned a DPL of '9913.'

Federal electoral district – 2003 Representation Order unique identifier (FED03uid)

This uniquely identifies a federal electoral district – 2003 Representation Order. The first two digits of the FED03uid identify the province or territory (PR). Corresponding names are found in the 2003 Federal electoral district names file (FED03_CEF03.txt).

Population centre/rural area code (POP_CNTR_RA)

Population centre codes are unique four-digit codes that are assigned sequentially upon the POP_CNTR_RA creation. These codes remain constant between censuses. If a population centre 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 or territory code. For example, records in rural areas in Manitoba are assigned '9946.' This field will be '0000' for postal codes^{OM} linked to dissemination areas (Rep_Pt_Type = 3) and census subdivisions (Rep_Pt_Type = 4).

Population centre/rural area type (POP_CNTR_RA_type)

For population centres, the type code indicates the relationship of the population centre to the census metropolitan area and census agglomeration structure.

- 0 Rural area
- 1 Core
- 2 Fringe
- 4 Population centre outside CMAs and CAs
- 6 Secondary core

This field will be '9' for postal codes^{OM} linked to dissemination areas (Rep_Pt_Type = 3) and census subdivisions (Rep_Pt_Type = 4). There is no POP_CNTR_RA_type available for postal codes^{OM} linked at the dissemination area or census subdivision level. POP_CNTR_RA_type is only available for postal codes^{OM} linked at the more detailed dissemination block or block-face level.

Dissemination area unique identifier (DAuid)

The DAuid uniquely identifies a dissemination area. It is composed of the two-digit province or territory code, the two-digit census division code and the four-digit dissemination area code.

Dissemination block

A dissemination block (DB) is an area bounded on all sides by roads and/or boundaries of standard geographic areas. Dissemination blocks cover all the territory of Canada. This code should be combined with the dissemination area unique identifier to uniquely identify the dissemination block within the country. This field will be '00' for postal codes^{OM} linked to dissemination areas (Rep_Pt_Type = 3) or census subdivisions (Rep_Pt_Type = 4).

Representative point type (Rep_Pt_Type)

This identifies whether the record uses a block-face, dissemination block, dissemination area or census subdivision representative point as the coordinate.

Table 4.4 Representative points in the Postal Code^{OM} Conversion File (PCCF)

Code	Type	Number of records
1	Block-face	1,469,512
2	Dissemination block	153,857
3	Dissemination area	148,145
4	Census subdivision	6,463
Total		1,777,977

A representative point is a point that represents a line or a polygon. The point is centrally located along the line, and centrally located or population weighted in the polygon.

Representative points are generated for block-faces, dissemination blocks (DBs), dissemination areas (DAs), census subdivisions (CSDs), population centres (POPCTRs) and designated places (DPLs). These points support the mapping of postal codes^{OM} to geographic areas.

Representative points are located by the following methods using the Spatial Data Infrastructure (SDI):

Block-face representative points

The 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 or boundaries of standard geographic areas.

The points are set back a perpendicular distance of 10, 5, 1 or 0.5 metres 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 DBs, DAs, CSDs, POPCTRs and DPLs are generated in conjunction with their respective cartographic boundary file (CBF). The most detailed dissemination hydrography in the CBF is used. The points are initially calculated and stored based on the Lambert conformal conic projection; they are also transformed to latitude/longitude coordinates.

Topology checks are applied to ensure that the points fall within the appropriate geographic area. Since some dissemination blocks and designated places are located in water only, their representative points fall in water.

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.

Latitude (LAT)

This is the latitude, in decimal degrees, of the dissemination area, dissemination block, or block-face representative point. The decimal point is explicit.

Longitude (LONG)

This is the longitude, in decimal degrees, of the dissemination area, dissemination block, or block-face representative point. The decimal point is explicit.

Single link indicator (SLI)

The single link indicator (SLI) provides a geographic record for mapping a postal code^{OM} representative point. It can be used to establish a one-to-one relationship between postal codes^{OM} and dissemination areas, dissemination blocks, or block-faces. The SLI has the value of '1' to flag one record of an active postal code^{OM}. Every set of retired records for a postal code^{OM}, for a given retirement date, has one SLI equal to '1.' The SLI value '0' indicates additional records.

Postal code^{OM} type (PCTYPE)

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

Table 4.5 Postal code^{OM} types in the Postal Code^{OM} Conversion File (PCCF)

PCTYPE	Description
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

Community name (Comm_Name)

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

Delivery mode type (DMT)

This is the delivery mode type as defined by CPC. Note that Statistics Canada assigns a DMT of 'W' to rural postal codes^{OM}, which are left blank by CPC. See Table 4.6 for DMT descriptions.

Table 4.6 Delivery mode types in the Postal Code^{OM} Conversion File (PCCF)

DMT	Description	Number of postal codes ^{OM}	Number of records
A	Delivery to block-face address	786,187	1,390,060
B	Delivery to an apartment building	21,596	23,806
E	Delivery to a business building	9,975	11,811
G	Delivery to a large volume receiver	8,056	10,347
H	Delivery via a rural route	636	29,527
J	General delivery	580	969
K	Delivery to a post office box (not a Community Mail Box)	7,618	14,587
M	Delivery to a large volume receiver (post office box)	5,115	9,528
T	Delivery via a suburban service	281	12,573
W	Rural postal codes ^{OM} (the second digit of the postal code ^{OM} is '0')	5,352	268,826
X	Delivery via a mobile route	0	0
Z	Postal code ^{OM} is retired (no further delivery to this code)	3,321	5,943
Total		848,717	1,777,977

Note: Some postal codes^{OM} may have more than one delivery mode type.

Historic delivery mode type (H_DMT)

The historic delivery mode retains the previous delivery mode type value, if known. If the previous DMT is not known, it contains the current DMT.

Birth date (Birth_Date)

This is the approximate date when the postal code^{OM} became effective. All postal codes^{OM} created before April 1983 were given a birth date of '19830401.'

Retired date (Ret_Date)

This is the approximate date when a postal code^{OM} was retired. All postal codes^{OM} retired before April 1983 have '19830401' as the retirement date. Users should note that some postal codes^{OM} have been retired and reintroduced at a later date. Active postal codes^{OM} have a retirement date of '19000001.'

Delivery installation (PO)

This indicates whether the record represents coding to a post office where the mail can be accessed. The value '1' indicates this record was coded to a post office or other postal installation and the value '2' indicates 'unknown.' The value '0' indicates this record was coded to the area serviced by the postal code^{OM}.

Postal code^{OM} type (PCtype) 3 and 5 postal codes^{OM} represent mail service that can be accessed at the post office or other postal installation. Where possible, these records are coded to the appropriate post office or other postal installation.

Quality indicator (QI)

The quality indicator provides an indicator of the quality of the geocoding that links the postal code^{OM} and its address information and that of the Geography Division's Spatial Data Infrastructure. The QI is established at the record level and is currently available only for the postal codes^{OM} that were geocoded using the automated geocoding system. A QI of 'AAA' indicates the highest quality and a QI of 'CCC' indicates the lowest quality. The possible values of QI and the number of records by source are indicated in Table 4.7.

Table 4.7 Number of records by geocoding source and quality indicator

Quality indicator	Source			
	1	2	3	4
AAA	1,271,626	0	0	0
AAB	22,690	0	0	0
AAC	0	0	0	0
AAN	67,695	0	0	0
ABA	6,155	0	0	0
ABB	204	0	0	0
ABC	0	0	0	0
ABN	1,181	0	0	0
ACA	0	0	0	0
ACB	0	0	0	0
ACC	0	0	0	0
ACN	28,844	0	0	0
ANN	0	0	0	0
BAA	186,215	0	0	0
BAB	10,371	0	0	0
BAC	0	0	0	0
BAN	14,858	0	0	0
BBA	1,345	0	0	0
BBB	141	0	0	0
BBC	0	0	0	0
BBN	604	0	0	0
BCA	0	0	0	0
BCB	0	0	0	0
BCC	0	0	0	0
BCN	8,550	0	0	0
BNN	0	0	0	0
CAA	28,223	0	0	0
CAB	193	0	0	0
CAC	0	0	0	0
CAN	4,774	0	0	0
CBA	179	0	0	0
CBB	5	0	0	0
CBC	0	0	0	0
CBN	264	0	0	0
CCA	0	0	0	0
CCB	0	0	0	0
CCC	0	0	0	0
CCN	10,773	0	0	0
CNN	0	0	0	0
NNN	362	62,769	26,995	22,961
Total	1,665,252	62,769	26,995	22,961

The final quality indicator output after geocoding is complete is a concatenation such that:

$$QI = QI_1 | QI_2 | QI_3$$

i) The quality indicator (QI_1)

QI_1 indicates the quality of the general area where geocoding occurred. It is an indicator of our certainty that the postal code^{OM} is linked to the correct census subdivision.

QI is assigned as follows:

A	good, verifiable geocoding, search area verified by more than one source
B	good, search area based on 2011 Census data
C	satisfactory approximation based on place name match to CSD alone
N	unknown

ii) The quality indicator (QI_2)

QI_2 indicates the level of confidence of the match to the correct street. This is not available for postal code^{OM} type (PCtype) 3, 4 and 5 records, when delivery installation (PO) = 0 or 2, since they do not represent service to a particular civic address; when PO = 1 QI_2 represents the confidence of the match to a delivery installation address.

QI is assigned as follows:

A	good, match on street name, type, and direction
B	good, but match only on street name and type
C	satisfactory match on street name only or street name and direction
N	unknown

iii) The quality indicator (QI_3)

QI_3 indicates the level of confidence of the match to the correct address range. This is not available for PCtype 3, 4 and 5 records, when PO = 0 or 2, since they do not represent service to a particular civic address; when PO = 1 QI_3 represents the confidence of the match to a delivery installation address.

QI is assigned as follows:

A	good, if the parity was matched on both addresses on the Spatial Data Infrastructure
B	good, but the parity was matched on one address only on the Spatial Data Infrastructure
C	satisfactory, if the parity was not matched but the ranges overlap
N	unknown

For more information, please see the working paper entitled *How Postal Codes Map to Geographic Areas* (Catalogue no. 92F0138MIE2007001), which is available on the Statistics Canada website at www.statcan.gc.ca.

Source

The source indicates the primary source of the geocoding. The values of the source are given in Table 4.8.

Table 4.8 Explanations of geocoding sources codes used in the Postal Code^{OM} Conversion File (PCCF)

Source	Explanation
1	Automated geocoding directly to 2011 Census geographic areas
2	Geocoded using 2011 Census response
3	Converted from geocoding done to 2006 Census geographic areas
4	Manually geocoded

Population centre and rural area classification (POP_CNTR_RA_SIZE_CLASS)

Population centre and rural area classification:

- 1 rural area
- 2 small population centre (1,000 to 29,999)
- 3 medium population centre (30,000 to 99,999)
- 4 large urban population centre (100,000 or greater)

Name files record layouts

To reduce the size of the PCCF, names for census divisions, Statistical Area Classification, federal electoral districts – 2003 Representation Order, are shown in the following individual name files.

Table 4.9 Census division (CD_DR.txt) name file record layout

Position	Size	Type	Field name	Description
1	4	C	CDuid	Census division unique identifier
5	100	C	CDname	Census division name

Table 4.10 Statistical Area Classification (SAC_CSS.txt) name file record layout

Position	Size	Type	Field name	Description
1	3	C	SAC	Statistical Area Classification unique identifier
4	100	C	SACname	Statistical Area Classification name

Table 4.11 Federal electoral district — 2003 Representation Order (FED03_CEF03.txt) name file record layout

Position	Size	Type	Field name	Description
1	5	C	FED03uid	Federal electoral district – 2003 Representation Order unique identifier
6	100	C	FED03name	Federal electoral district – 2003 Representation Order name

File specifications

The current version of the Postal Code^{OM} Conversion File (PCCF) includes five files: the PCCF, three name files (CD_DR.txt, FED03_CEF03.txt, SAC_CSS.txt), and a special file, Retired 2010 (R2010.txt). Postal codes^{OM} retired before January 1, 2011 are included in the Retired 2010 file. This reduces the size of the PCCF. These are ASCII files and do not include any software nor instructions on how to use the product within specific Geographical Information Systems (GIS) or mapping packages.

Software formats

Not applicable

System requirements

Not applicable

Installation instructions

Not applicable

Geographic representation

Not applicable

File naming convention

The naming convention for Postal Code^{OM} Conversion Files (PCCF) is bilingual and reflects the reference date (June 2013) of the Canada Post Corporation (CPC) data used in the release. The file name for this release is pccfNat_JUN13_fccpNat.zip.

5. Data quality

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

Lineage

Lineage describes the history of the linkage 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.

The Postal Code^{OM} Conversion File (PCCF) is the result of two updating activities. The first is done every five years, after each census, to align the database to the latest census geographic areas. The other is the ongoing maintenance activity that links the latest postal codes^{OM} from Canada Post Corporation (CPC) to census geographic areas. These links are recorded on the Geography Division's postal code^{OM} database.

Linking to 2011 Census geographic areas

Sources

The sources used to align the census geography linkage from 2006 to 2011 were:

- Monthly updates of the Address Lookup File, Postal Code^{OM} Delivery Mode File, and Householder File from CPC
- Geography Division's Spatial Data Infrastructure (SDI)
- 2011 Census of Population and Dwellings
- 2011 Census block-face, dissemination block, and representative points data files
- Dissemination area correspondence file

Process

The following steps were used to assign 2011 Census geographic areas to the PCCF:

1. Process information from the CPC files
2. Automated geocoding of postal codes^{OM} to 2011 Census block-face, dissemination block or dissemination area
3. Assign 2011 Census dissemination areas for postal codes^{OM} using the correspondence between 2006 Census and 2011 Census geographic areas
4. Manually geocode postal codes^{OM}
5. Sample verification of postal code^{OM} records
6. Assign the single link indicator (SLI)
7. Assign higher levels of geography.

Step 1: Process information from the CPC files

The monthly files received from CPC are processed to assign birth date, retired date, historic delivery mode type (H_DMT) and delivery mode type (DMT). Records are extracted from the CPC Address Lookup File with the postal code^{OM}, postal code^{OM} type (PCtype) and related address information. Birth date is the date the postal code^{OM} became effective. Retired date is the date the postal code^{OM} is no longer found in the CPC monthly files. The delivery mode type is assigned using the Delivery Mode Type File. When a DMT is updated for a postal code^{OM}, the previous DMT becomes the H_DMT. Users should note that some postal codes^{OM} are retired and reintroduced at a later date, possibly in another location.

Step 2: Automated geocoding of postal codes^{OM} to 2011 Census block-face, dissemination block or dissemination area

All postal codes^{OM} active in June 2013 are geocoded using an automated geocoding system. A detailed discussion of the approach to geocoding is found in the working paper entitled *How Postal Codes Map to Geographic Areas* (Catalogue no. 92F0138MIE2007001), which is available on the Statistics Canada website at www.statcan.gc.ca.

The system uses the forward sortation area[®] (FSA[®]) search area file and a match between CPC municipality and census subdivision (CSD) to determine the general area where the postal code^{OM} would be found. Census responses are used to create FSA[®] search areas. These FSA[®] areas are composed of dissemination areas where a particular FSA[®] was reported in the 2011 Census. Canada Post municipalities are matched to 2011 Census subdivisions using the province of the municipality and the similarity in name. When the match is not clear, historical CSD files on the Spatial Data Infrastructure (SDI) are used to determine the match.

Postal codes^{OM} with civic address ranges associated with them (PCtype 1 and 2) are coded to the appropriate dissemination area, dissemination block or block-face in the SDI. About 97% of the PCtype 1 and 2 postal code^{OM} records in the June 2013 PCCF were coded in this way.

The postal code^{OM} response in the 2011 Census is used to code rural routes, postal installation/post office boxes and postal codes^{OM} that service general areas. These postal codes^{OM} are geocoded to the dissemination area (DA) level. The number of DAs coded to is reduced in a post process to remove duplication in DA assignment. However, not all active postal codes^{OM} are geocoded in this way, either because the address information is not found or the census response is not significant (at least four responses of that postal code^{OM} per dissemination block) to determine the appropriate area for geocoding.

A quality indicator (QI) is assigned in the automated geocoding process. The indicator is based on the confidence of the link of the postal code^{OM} to the geographic area. Please see the Technical specifications section for more details.

Step 3: Assign 2011 Census dissemination areas for postal codes^{OM} using the correspondence between 2006 Census and 2011 Census geographic areas

When a match could not be found through the automated address matching system, postal codes^{OM} that had been previously coded to a 2006 Census geographic area are linked to a 2011 Census geographic area using the correspondence between 2006 Census and 2011 Census geographic areas. These links are created at the 2011 Census DA level only.

Step 4: Manually geocode postal codes^{OM}

Postal codes^{OM} are manually geocoded when they could not be coded at an acceptable degree of precision using the automated process or when they could not be converted using the correspondence between the 2006 Census and 2011 Census geographic areas.

In addressable areas covered by the Spatial Data Infrastructure (SDI), an attempt is made to link postal codes^{OM} to one or more block-faces. The list of new postal codes^{OM} and address range records from CPC was matched to the SDI street listings according to elements common to both files (e.g., province, municipality, street name, type, direction, and address range). Once matched, the postal code^{OM} and related geographic area codes are transferred to the postal code^{OM} database.

Step 5: Sample verification of postal code^{OM} records

The relationship between the postal code^{OM}, dissemination blocks and dissemination areas is verified by sampling records from the geocoding completed in each of the processes above. These records are independently manually geocoded. The two sets of geocodes are compared as part of the verification.

Step 6: Assign the single link indicator (SLI)

Many postal codes^{OM} are represented by multiple records on the PCCF. The single link indicator (SLI) is created to assist users dealing with postal codes^{OM} having multiple records. The SLI provides a geographic record for mapping a postal code^{OM} representative point. The SLI has a value of '1' to flag the best (or only) link for a given postal code^{OM}. The value '0' indicates an additional record.

Please note that the SLI is identified on both active and retired postal codes^{OM}. Users will find when working with both active and retired postal codes^{OM} that multiple SLIs will appear for a postal code^{OM} that was retired and reintroduced. However, there will only be one SLI for a set of active records for a postal code^{OM}.

When assigning the SLI, priority is given to postal codes^{OM} associated with civic addresses or dwellings (based on the PCtype). The confidence of coding to the geographic area (the quality indicator) and the precision of the geocoding (the block-face, dissemination area or dissemination block), as well as the population, are considered. When the postal code^{OM} was linked to a DA associated with multiple federal electoral district (FED), population centre (POPCTR), or designated place (DPL), the SLI is linked to the record represented by the greatest proportion of the FED, POPCTR, or DPL population.

Users are cautioned that the SLI provides only a partial correspondence between the postal code^{OM} and other geographic areas.

Step 7: Assign higher levels of geography

Higher levels of geography are assigned based on the block-face, dissemination block, or dissemination area. Please see the hierarchy chart in Appendix B for how geographic areas are related. When a dissemination area is related to more than one FED, POPCTR or DPL, more than one record appears in the PCCF for that postal code^{OM} to dissemination areas linkage.

Positional accuracy

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 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^{OM} are either block-face, dissemination block or dissemination area representative points calculated for census purposes. Therefore, the positional accuracy of the postal code^{OM} is dependent on:

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

Using different methods to create links in the PCCF results in varying degrees of accuracy for those links. Postal codes^{OM} linked to block-faces are considered to be the more precise, as they are linked as closely as possible to address ranges representing the location of the postal code^{OM} according to CPC. When the block-face link cannot be produced, postal codes^{OM} are linked to a dissemination block or dissemination area.

Table 5.1 illustrates the lowest level to which geocoding was completed for postal codes^{OM} associated with address ranges (PCTYPE 1 and 2).

Table 5.1 Geocoded postal code^{OM} of PCTYPE 1 and 2 records – active in June 2013

Geocoded records	Records		Postal codes ^{OM} associated with records	
	number	percent	number	percent
Geocoded to block-face	1,461,590	85.50	754,398	88.13
Geocoded to dissemination block	151,660	8.87	60,886	7.11
Geocoded to dissemination area	90,367	5.29	36,109	4.22
Geocoded to census subdivision	5,813	0.34	4,631	0.54
Total	1,709,430	100.00	856,024	100.00

Note: Some postal codes^{OM} may have more than one representative point. The postal code^{OM} counts in this table differ from those given in the section About this product/Comparison to other products/versions, which include all postal code^{OM} types as well as both active and retired records.

The quality indicator (QI) illustrates the confidence of the link established between the postal code^{OM} and the more precise geographic area for each record geocoded using the automated system. For more information on the QI, refer to the Technical specifications section.

The geographic coordinates included on the PCCF are derived from Statistics Canada's Spatial Data Infrastructure (SDI). Users should be aware that absolute positional accuracy is not an intended feature of the SDI. 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, dissemination blocks and dissemination areas, refer to the Technical specifications section.

Attribute accuracy

Attribute accuracy refers to the accuracy of the quantitative and qualitative information attached to each feature (such as population for a population centre, street name, census subdivision name and code).

The PCCF is a flat file providing attributes for postal codes^{OM} and for those dissemination area(s), dissemination block(s), etc. linked to the postal code^{OM}. Most of these attributes are taken from two independent sources. Some attributes are also created for the PCCF.

The geographic code, type, and name of all higher level standard geographic areas in which a block-face, dissemination block or dissemination area is located are extracted from the Spatial Data Infrastructure.

The information relevant to each postal code^{OM} – birth date, retirement date, delivery mode type, type of postal code^{OM} and CPC community name – is carried forward from the CPC address look-up file and auxiliary files. In some cases, the postal code^{OM} type was imputed by Statistics Canada (see the Technical specifications section).

The single link indicator (SLI; see Process) and the type of representative point are assigned by Statistics Canada.

Tests are run to ensure that certain basic data relationships were consistent within the set of records in the PCCF.

Logical consistency

Logical consistency describes the fidelity of relationships encoded in the data structure of the digital linkage data.

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

Conversely, different postal codes^{OM} could have the same coordinates. This happens when more than one postal code^{OM} has been linked to the same dissemination area. Also, more than one postal code^{OM} can be linked to a single block-face or dissemination block.

Every set of active records for a postal code^{OM} has one SLI equal to '1.' Every set of retired records for a postal code^{OM}, for a given retirement date, has one SLI equal to '1.'

Consistency with other products

Geographic areas contained in the PCCF are consistent with all 2011 Census related geographic products, except for the 2011 Census Forward Sortation Area Boundary File (Catalogue no. 92-179-X). The 2011 Census Forward Sortation Area Boundary File represents only the forward sortation

areas[®] reported in the 2011 Census, whereas the PCCF is updated annually to include recent postal codes^{OM} and also includes retired postal codes^{OM}.

Completeness

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 PCCF is the degree to which all valid postal codes^{OM} are accounted for on the PCCF and all geographic codes from the 2011 Census are linked to a postal code^{OM}. Almost all postal codes^{OM} as of June 2013 according to CPC have been linked to census geography.

There are also 3,080 retired postal codes^{OM} included in the PCCF. Postal codes^{OM} retired before January 1, 2011 are included in the Retired 2010 text file, R2010.txt. There are 66,102 retired postal codes^{OM} in the Retired 2010 file.

The quality indicator (QI) is currently available only for the records using the automated geocoding process. When postal codes^{OM} were geocoded using address information, each of the three characters of the QI contains an 'A', 'B' or 'C' indicating the confidence of geocoding. When the QI could not be determined, an 'N' is used to represent 'unknown.' The QI for the records that are manually geocoded or were directly converted from the 2006 Census geocodes contain an 'NNN' for the QI.

Every attempt was made to ensure that the delivery installation (PO) value indicated whether a postal code^{OM} of PType 3 or 5 was coded to a postal installation or to the area serviced by the postal code^{OM}. Occasionally a PType 3 or 5 record may be coded to a postal installation (indicated in a record with PO='1') and to a service area (indicated by a record with PO='0'). In some cases, including where the geographic area linkages were directly based on conversion from the 2006 Census geocodes, the PO is unknown (this is indicated by a PO='2').

Appendix A Glossary

Adjusted counts

'Adjusted counts' refer to previous census population and dwelling counts that were adjusted (i.e., recomputed) to reflect current census boundaries, when a boundary change occurs between the two censuses.

Block-face

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

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 are available.

Census agricultural region

Census agricultural regions (CARs) 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 group of adjacent census subdivisions. Generally, the smaller, more densely-populated 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/territory 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 population centre (known as the core). A CMA must have a total population of at least 100,000 of which 50,000 or more must live in the core. A CA must have a core population of at least 10,000. To be included in the CMA or CA, other adjacent municipalities must have a high degree of integration with the core, as measured by commuting flows derived from previous census place of work data.

If the population of the 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 its total population declines below 100,000 or the population of its core falls below 50,000. Small population centres with a population count of less than 10,000 are called fringe. All areas inside the CMA or CA that are not population centres are rural areas.

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

Census metropolitan influenced zone

The census metropolitan influenced zone (MIZ) is a concept that geographically differentiates the area of Canada outside census metropolitan areas (CMAs) and census agglomerations (CAs). Census subdivisions (CSDs) within provinces that are 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 or CAs have on them. CSDs within the territories that are outside CAs are assigned to a separate category.

Census subdivisions within provinces are assigned to a MIZ category based on the percentage of their resident employed labour force that commutes to work in the core(s) of CMAs or CAs. CSDs with the same degree of influence tend to be clustered. They form zones around CMAs and CAs that progress through the categories from 'strong' to 'no' influence as distance from the CMAs and CAs increases. As many CSDs in the territories are very large and sparsely populated, the commuting flow of the resident employed labour force is unstable. For this reason, CSDs in the territories that are outside CAs are assigned to a separate category that is not based on their commuting flows.

Census subdivision

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

Census tract

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

A committee of local specialists (for example, planners, health and social workers, and educators) initially delineates census tracts in conjunction with Statistics Canada. Once a census metropolitan area (CMA) or census agglomeration (CA) has been subdivided into census tracts, the census tracts are maintained even if the 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) using angular units of measure such as degrees, minutes and seconds or planar (Lambert conformal conic) using linear units such as metres.

Cartographic boundary files, digital boundary files, representative points and road network files are disseminated in Lambert conformal conic projection.

Core, fringe and rural area

The terms 'core,' 'fringe' and 'rural area' replace the terms 'urban core,' 'urban fringe' and 'rural fringe' for the 2011 Census. These terms distinguish between population centres (POPCTRs) and rural areas (RAs) within a census metropolitan area (CMA) or census agglomeration (CA).

A CMA or CA can have two types of cores: the core and the secondary core. The core is the population centre with the highest population, around which a CMA or a CA is delineated. The core must have a population (based on the previous census) of at least 50,000 persons in the case of a CMA, or at least 10,000 persons in the case of a CA.

The secondary core is a population centre within a CMA that has at least 10,000 persons and was the core of a CA that has been merged with an adjacent CMA.

The term 'fringe' includes all population centres within a CMA or CA that have less than 10,000 persons and are not contiguous with the core or secondary core.

All territory within a CMA or CA that is not classified as a core or fringe is classified as rural area.

Datum

A datum is a geodetic reference system which includes an ellipsoid and an origin against which the latitude and longitude of all other points on the earth's surface are referenced. A datum may often be associated with a particular ellipsoid (mathematical reference model of the earth).

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 a population centre.

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

Dissemination area

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

Dissemination block

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

Economic region

An economic region (ER) is a grouping of complete census divisions (CDs) (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 purpose. Thus, there can be various types of ecumenes, each having its own unique characteristics (population ecumene, agricultural ecumene, industrial ecumene, etc.).

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 2011 Census are based on the 2003 Representation Order.

Geocoding

Geocoding is the process of assigning geographic identifiers (codes or x,y coordinates) to map features and data records. The resulting geocodes permit data to be linked geographically to a place on the earth.

Households, postal codes^{OM} and place of work data are linked to block-face representative points (coordinates) when the street and address information is available; otherwise, they are linked to dissemination block (DB) representative points. In some cases, postal codes^{OM} and place of work data are linked to dissemination area (DA) representative points when they cannot be linked to DBs. As well, place of work data are linked to census subdivision representative points when the data cannot be linked to DAs.

Geographic code

A geographic code is a numerical identifier assigned to a geographic area. The code is 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 2011 Census, the geographic reference date is January 1, 2011.

OM: Postal code is an official mark of Canada Post Corporation.

Geographical region of Canada

The geographical regions of Canada are groupings of provinces and territories established for the purpose of statistical reporting. The six geographical regions of Canada are: Atlantic, Quebec, Ontario, Prairies, British Columbia and Territories.

Land area

Land area is the area in square kilometres of the land-based portions of standard geographic areas. Land area data are unofficial and are provided for the sole purpose of calculating population density.

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 Database

The National Geographic Database (NGD) is a shared database between Statistics Canada and Elections Canada. The database contains roads, road names and address ranges. It also includes separate reference layers containing physical and cultural features, such as hydrography and hydrographic names, railroads and power transmission lines.

Place name

'Place name' refers to selected names of active and retired geographic areas as well as names from the Canadian Geographical Names Data Base. Place names include names of census subdivisions (municipalities), designated places and population centres, as well as the names of some local places.

Population centre

A population centre (POPCTR) has a population of at least 1,000 and a population density of 400 persons or more per square kilometre, based on the current census population count. All areas outside population centres are classified as rural areas. Taken together, population centres and rural areas cover all of Canada.

Population centres are classified into three groups, depending on the size of their population:

- small population centres, with a population between 1,000 and 29,999
- medium population centres, with a population between 30,000 and 99,999
- large urban population centres, with a population of 100,000 or more

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

Population density

Population density is the number of persons per square kilometre.

Postal code^{OM}

The postal code^{OM} 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 10 provinces and 3 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 unique identifiers 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 coordinate point that represents a line or a polygon. The point is centrally located along the line, and centrally located or population weighted in the polygon.

Representative points are generated for block-faces, as well as for selected geographic areas – province/territory (PR), federal electoral district (FED), economic region (ER), census division (CD), census metropolitan area/census agglomeration (CMA/CA), census subdivision (CSD), population centre (POPCTR), designated place (DPL), census tract (CT), dissemination area (DA) and dissemination block (DB).

Households, postal codes^{OM} and place of work data are linked to block-face representative points (coordinates) when the street and address information is available; otherwise, they are linked to dissemination block (DB) representative points. In some cases, postal codes^{OM} and place of work data are linked to dissemination area (DA) representative points when they cannot be linked to DBs. As well, place of work data are linked to census subdivision (CSD) representative points when the data cannot be linked to DAs.

Rural area

Rural areas (RAs) include all territory lying outside population centres (POPCTRs). Taken together, population centres and rural areas cover all of Canada.

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

Spatial Data Infrastructure

The Spatial Data Infrastructure (SDI) is an internal maintenance database that is not disseminated outside of Statistics Canada. It contains roads, road names and address ranges from the National Geographic Database (NGD), as well as boundary arcs of standard geographic areas that do not follow roads, all in one integrated line layer. The database also includes a related polygon layer consisting of basic blocks (BB; basic blocks are the smallest polygon units in the database, and are formed by the intersection of all roads and the arcs of geographic areas that do not follow roads), boundary layers of standard geographic areas, and derived attribute tables, as well as reference layers containing physical and cultural features (such as hydrography, railroads and power transmission lines) from the NGD.

The SDI supports a wide range of census operations, such as the maintenance and delineation of the boundaries of standard geographic areas (including the automated delineation of dissemination blocks and population centres) and geocoding. The SDI is also the source for generating many geography products for the 2011 Census, such as cartographic boundary files and road network files.

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) 2011 is Statistics Canada's main classification of geographic areas in Canada. It is designed to classify statistical information by geographic areas. The classification consists of four levels: geographical regions of Canada, provinces and territories, census divisions (such as counties and regional municipalities) and census subdivisions (such as municipalities). The four geographic levels are hierarchically related; a seven-digit code is used to show this relationship.

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 or a census metropolitan influenced zone (MIZ). The MIZ classifies all CSDs in provinces and territories that are outside census metropolitan areas and census agglomerations.

The Statistical Area Classification is a variant of the Standard Geographical Classification (SGC). Census subdivisions (CSDs) form the lowest level of the classification variant. The next level consists of individual census metropolitan areas (CMAs), census agglomerations (CAs) and census metropolitan influenced zones (MIZs). The highest level consists of three categories that cover all of the land mass of Canada:

- census metropolitan areas
- census agglomerations
- outside census metropolitan areas and census agglomerations.

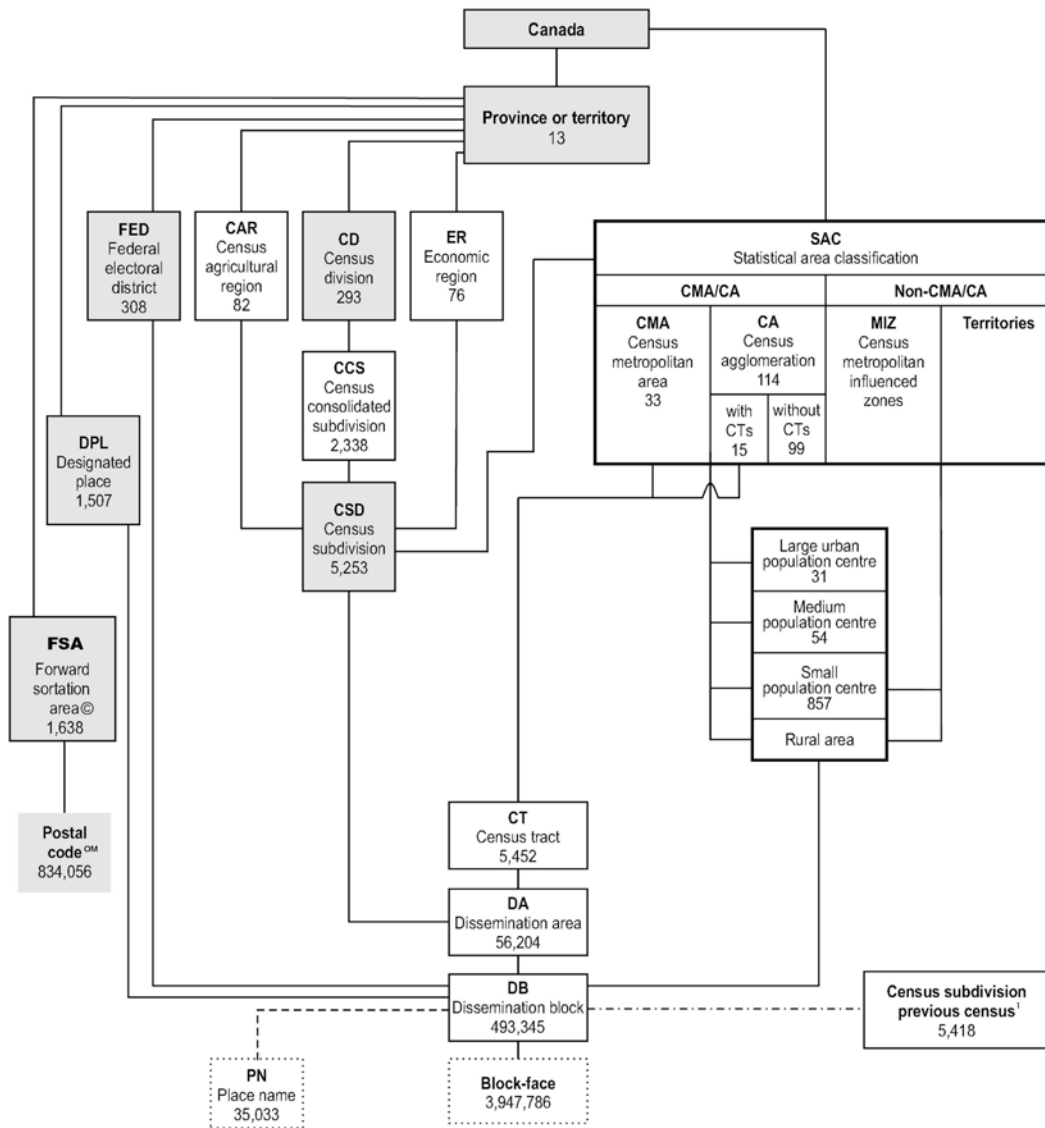
The SAC provides unique numeric identification (codes) for these hierarchically-related geographic areas. It was established for the purpose of reporting statistics.

Thematic map

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

Appendix B Hierarchy of standard geographic units for dissemination, 2011 Census

Figure B.1 Hierarchy of standard geographic units for dissemination, 2011 Census



- 1. A best fit linkage is created between the previous census CSDs and the current census dissemination blocks to facilitate historical data retrieval.
 - OM. Postal code is an official mark of Canada Post Corporation.
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- Administrative area
 - Statistical area
 - Polygon
 - Representative point
 - Best fit linkage
 - Linkage using point-in-polygon process

Sources: Statistics Canada, 2011 Census of Population; Canada Post Corporation, May 2011.

Appendix C Geographic units by province and territory, 2011 Census

Table C.1 Geographic units by province and territory, 2011 Census

Geographic unit	Canada 2006	Canada 2011	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nvt.
Federal electoral district (2003 Representation Order)	308	308	7	4	11	10	75	106	14	14	28	36	1	1	1
Economic region	76	76	4	1	5	5	17	11	8	6	8	8	1	1	1
Census agricultural region	82	82	3	3	5	4	14	5	12	20	8	8	0	0	0
Census division	288	293	11	3	18	15	98	49	23	18	19	29	1	6	3
Census consolidated subdivision	2,341	2,338	89	68	43	151	1,005	316	126	300	77	153	1	6	3
Census subdivision (CSD)	5,418	5,253	376	113	99	273	1,285	574	287	959	435	743	37	41	31
CSD dissolutions (Jan. 2, 2006 to Jan. 1, 2011)	221	...	3	0	1	6	13	13	13	26	19	126	0	1	0
CSD incorporations (Jan. 2, 2006 to Jan. 1, 2011)	...	56	2	0	0	3	4	2	3	1	1	33	2	5	0
Designated place	1,289	1,507	183	0	65	167	106	114	97	194	261	319	1	0	0
Census metropolitan area	33	33	1	0	1	2	6 ¹	15 ¹	1	2	2	4	0	0	0
Census agglomeration (CA)	111	114	3	2	4	5 ¹	25 ¹	28 ¹	4	7 ¹	16 ¹	21	1	1	0
CA with census tracts	15	15	0	0	0	1	3	4	0	0	3	4	0	0	0
CA without census tracts	96	99	3	2	4	4 ¹	22 ¹	24 ¹	4	7 ¹	13 ¹	17	1	1	0
Census tract	5,076	5,452	47	0	93	102	1,371	2,273	173	109	573	711	0	0	0
Small population centre (1,000 to 29,999)	811	857	29	6	35	30 ¹	224 ¹	237 ¹	42 ¹	59 ¹	101 ¹	87	1	3	7
Medium population centre (30,000 to 99,999)	54	54	0	1	1	2	13	19	1	2	6	9	0	0	0
Large urban population centre (100,000 or more)	29	31	1	0	1	1	6 ¹	14 ¹	1	2	2	4	0	0	0
Place name	21,411	35,033	1,836	709	3,138	2,679	6,985	8,091	1,839	2,687	3,117	3,528	195	153	76
Dissemination area	54,626	56,204	1,071	293	1,645	1,454	13,622	19,964	2,179	2,467	5,711	7,582	68	98	50
Dissemination block	478,831	493,345	8,732	3,573	15,842	15,415	109,455	132,777	30,471	51,610	66,332	55,529	1,359	1,492	758
Block-face	3,739,041	3,947,786	81,868	27,050	155,484	135,411	842,992	1,003,813	201,005	362,238	525,180	577,975	13,036	15,612	6,122
Forward sortation area [®]	1,625	1,638	35	7	77	111	418	526	64	48	153	190	3	3	3
Postal code ^{OM}	805,640	834,056	10,878	3,316	27,852	58,617	212,162	276,844	24,568	21,923	80,948	115,435	968	516	29

... not applicable

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1. Census metropolitan areas, census agglomerations, large urban population centres and small population centres crossing provincial boundaries are counted in both provinces, and, therefore, do not add up to the national total.

Sources: Statistics Canada, 2011 Census of Population; Canada Post Corporation, May 2011.

Appendix D Census subdivision types by province and territory, 2011 Census

Table D.1 Census subdivision types by province and territory, 2011 Census

Census subdivision type		Canada	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nvt.
		5,253	376	113	99	273	1,285	574	287	959	435	743	37	41	31
C	City / Cité	6	...	...	...	4	...	2	...	...	...	...	...	...	...
CC	Chartered community	3	...	...	...	...	...	...	...	...	...	...	...	3	...
CG	Community government	4	...	...	...	...	...	...	...	...	...	...	...	4	...
CN	Crown colony / Colonie de la couronne	1	...	...	...	...	...	...	...	1	...	...	...	...	...
COM	Community	33	...	33	...	...	...	...	...	...	...	...	...	...	...
CT	Canton (municipalité de)	45	...	...	...	...	45	...	...	...	...	...	...	...	...
CU	Cantons unis (municipalité de)	2	...	...	...	...	2	...	...	...	...	...	...	...	...
CV	City / Ville	2	...	...	...	...	...	2	...	...	...	...	...	...	...
CY	City	149	3	2	...	4	...	46	9	16	17	49	1	1	1
DM	District municipality	52	...	...	...	...	...	...	...	...	...	52	...	...	...
HAM	Hamlet	36	...	...	...	...	...	...	...	...	...	...	2	10	24
ID	Improvement district	7	...	...	...	...	...	...	...	...	7	...	...	...	...
IGD	Indian government district	2	...	...	...	...	...	...	...	...	...	2	...	...	...
IM	Island municipality	1	...	...	...	...	...	...	...	...	...	1	...	...	...
IRI	Indian reserve / Réserve indienne	961	3	4	25	18	27	139	75	168	81	419	...	2	...
LGD	Local government district	2	...	...	...	...	...	...	2	...	...	...	...	...	...
LOT	Township and royalty	67	...	67	...	...	...	...	...	...	...	...	...	...	...
M	Municipality / Municipalité	3	...	...	...	...	...	3	...	...	...	...	...	...	...
MD	Municipal district	76	...	...	12	...	...	...	...	...	64	...	...	...	...
MÉ	Municipalité	619	...	...	...	...	619	...	...	...	...	...	...	...	...
MU	Municipality	54	...	...	...	...	...	54	...	...	...	...	...	...	...
NH	Northern hamlet	11	...	...	...	...	...	...	...	11	...	...	...	...	...
NL	Nisga'a land	1	...	...	...	...	...	...	...	...	...	1	...	...	...
NO	Unorganized / Non organisé	137	...	...	...	...	96	16	10	2	...	...	4	6	3
NV	Northern village	11	...	...	...	...	...	...	...	11	...	...	...	...	...
P	Parish / Paroisse (municipalité de)	150	...	...	...	150	...	...	...	...	...	...	...	...	...
PE	Paroisse (municipalité de)	179	...	...	...	...	179	...	...	...	...	...	...	...	...
RCR	Rural community / Communauté rurale	4	...	...	...	4	...	...	...	...	...	...	...	...	...

Table D.1 Census subdivision types by province and territory, 2011 Census (continued)

Census subdivision type		Canada	N.L.	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	158	...	...	...	...	...	...	...	...	...	158	...	...	...
RG	Region	1	1	...	...	...	...	...	...	...	...	...	...	...	...
RGM	Regional municipality	4	...	...	3	...	...	...	...	...	...	1	...	...	...
RM	Rural municipality	413	...	...	...	...	...	...	117	296	...	...	...	...	...
RV	Resort village	40	...	...	...	...	...	...	...	40	...	...	...	...	...
S-É	Indian settlement / Établissement indien	28	...	...	...	...	6	5	4	1	4	3	5	...	...
SA	Special area	3	...	...	...	...	...	...	...	...	3	...	...	...	...
SC	Subdivision of county municipality / Subdivision municipalité de comté	28	...	...	28	...	...	...	...	...	...	...	...	...	...
SÉ	Settlement / Établissement	13	...	...	...	...	...	...	...	...	...	...	13	...	...
SET	Settlement	13	...	...	...	...	...	...	...	...	...	...	...	10	3
SG	Self-government / Autonomie gouvernementale	4	...	...	...	...	...	...	...	...	...	...	4	...	...
SM	Specialized municipality	5	...	...	...	...	...	...	...	...	5	...	...	...	...
SNO	Subdivision of unorganized / Subdivision non organisée	92	92	...	...	...	...	...	...	...	...	...	...	...	...
SV	Summer village	51	...	...	...	...	...	...	...	...	51	...	...	...	...
T	Town	743	277	7	31	13	...	88	51	147	108	14	3	4	...
TC	Terres réservées aux Cris	8	...	...	...	...	8	...	...	...	...	...	...	...	...
TI	Terre inuite	12	...	...	...	...	12	...	...	...	...	...	...	...	...
TK	Terres réservées aux Naskapis	1	...	...	...	...	1	...	...	...	...	...	...	...	...
TL	Teslin land	1	...	...	...	...	...	...	...	...	...	...	1	...	...
TP	Township	207	...	...	...	...	...	207	...	...	...	...	...	...	...
TV	Town / Ville	15	...	...	...	14	...	1	...	...	...	...	...	...	...
V	Ville	222	...	...	...	...	222	...	...	...	...	...	...	...	...
VC	Village cri	8	...	...	...	...	8	...	...	...	...	...	...	...	...
VK	Village naskapi	1	...	...	...	...	1	...	...	...	...	...	...	...	...
VL	Village	550	...	...	...	66	45	11	19	266	95	43	4	1	...
VN	Village nordique	14	...	...	...	...	14	...	...	...	...	...	...	...	...

... not applicable

Source: Statistics Canada, 2011 Census of Population.