Postal Codes^{OM} by Federal Ridings File (PCFRF) 2013 Representation Order, Reference Guide

Release date: September 15, 2020

Canada

How to obtain more information

For information about this product or the wide range of services and data available from Statistics Canada, visit our website, www.statcan.gc.ca.

You can also contact us by

email at STATCAN.infostats-infostats.STATCAN@canada.ca

telephone, from Monday to Friday, 8:30 a.m. to 4:30 p.m., at the following numbers:

• Statistical Information Service	1-800-263-1136
• National telecommunications device for the hearing impaired	1-800-363-7629
• Fax line	1-514-283-9350

Depository Services Program

• Inquiries line	1-800-635-7943
• Fax line	1-800-565-7757

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, Statistics Canada has developed standards of service that its employees observe. To obtain a copy of these service standards, please contact Statistics Canada toll-free at 1-800-263-1136. The service standards are also published on www.statcan.gc.ca under "Contact us" > "Standards of service to the public."

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 co-operation and goodwill.

Table of Contents

Introduction

The Postal Code Project is responsible for linking the approximately 900,000 single postal codes in Canada to Statistics Canada's Census dissemination geography, (presently 2016 Census geography). This process is performed by using data provided by Canada Post Corporation and linked to Census Dissemination geography via the process of geocoding. The result is the creation of the Postal Code Conversion File (PCCF) which provides a correspondence between the six character postal code and Statistics Canada's standard geographical areas and the Postal Code Federal Ridings File (PCFRF) which provides a link between the six character postal code and Canada's federal electoral districts.

Roles and Responsibilities

This reference guide is intended for users of the Postal Code Conversion File (PCCF). The guide provides an overview of the file, the general methodology used in its creation and important technical information. On the Statistics Canada Web site, it is reported that the product was discontinued as an official release product. Therefore, officially, the Reference Guides, product 92-178-X (Postal code file by federal electoral district (PCFRF) and product 92-154-G (Postal Code Conversion File (PCCF)), are no longer distributed by statistics Canada but continues to be distributed to our partners. Canada Post distributes to other individuals and organizations.

Licenses

The Postal Code Conversion File (PCCF) and the Postal code file by federal electoral district (PCFRF) data products are available for license by Statistics Canada and Canada Post.

Both organizations agreed that Statistics Canada would manage licensing with Focal Points, Federal Government Agencies, Crown Corporations, Funding FEDS and Cancer Registry end-users, while Canada Post Corporation would manage licences for value-added distributors/commercial, provincial or municipal government and non-government users.

Statistics Canada will process licensing for and distribute the Postal Code Data Products to the share partners permitted under the new revised licensing governance between Statistics Canada and Canada Post.

For internal users, to contact statistics Canada about the distribution of PCCF and PCFRF please use the following email address: statcan.pccf-fccp.statcan@canada.ca

For external users, based on the agreement reached between Statistics Canada and the Canada Post Corporation, you have to obtain the Postal Code End-use licence agreement to continue to use and receive the Postal Code Data Products files directly from Canada Post Corporation.

For external users, the distribution of PCCF and PCFRF please use the following email address: data.targetingsolutions@canadapost.ca

Postal Codes^OM by Federal Ridings File (PCFRF) 2013 Representation Order, Reference Guide, August 2020

This reference guide is intended for users of the Postal Codes^OM by Federal Ridings File (PCFRF). The guide provides an overview of the file, the general methodology used in its creation and important technical information.

What's new?

- The postal code^OM reference date for this update is August 2020. The Postal Codes^OM by Federal Ridings File (PCFRF) refers to the federal electoral districts (FEDs) based on the 2013 Representation Order.

- The 'unique link' variable indicates if the postal code^OM is linked to one or more FEDs.

- The 'weight' variable estimates the proportion of the population of a postal code^OM that resides within each FED based on 2016 Census population counts.

© This data includes information copied with permission from Canada Post Corporation. Postal code^OM is an official mark of Canada Post Corporation.

This table provides the number of unique postal codes^OM, total records, count of postal codes^OM overlapping FED by province and territory.

Province or territory	Number Of Records	Unique Postal Code	Count of PCs Overlap FED
Newfoundland and Labrador	11349	11019	330
Prince Edward Island	3997	3973	24
Nova Scotia	28721	28454	267
New Brunswick	59487	58441	1046
Quebec	217200	216057	1143
Ontario	287851	283665	4186
Manitoba	25353	25198	155
Saskatchewan	22795	22379	416
Alberta	87602	85643	1959
British Columbia	118566	117480	1086
Yukon	1001	1001	0
Northwest Territories	532	532	0
Nunavut	28	28	0
Total	**864482**	**853870**	**10612**

1. About this guide

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

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

2. Overview

The Postal Codes^{OM} by Federal Ridings File (PCFRF) is a digital file which provides a link between the six-character postal code^{OM} and Canada's federal electoral districts (which are also known as federal ridings).

Elections Canada defines a federal electoral district (FED) as any place or territorial area entitled to return a Member of Parliament (MP) to serve in the House of Commons. Federal electoral district legal limits and descriptions are the responsibility of the Chief Electoral Officer, and are usually revised every ten years after the results of the decennial census. There are 338 FEDs in the 2013 Representation Order, the most recent revision of the federal electoral districts limits.

Acknowledgements

© This data includes information copied with permission from Canada Post Corporation.

3. About this product

Purpose of the product

The Postal Codes^OM by Federal Ridings File (PCFRF) was conceived as a tool to provide a linkage between postal codes^OM and federal electoral districts (FEDs).

Definitions and concepts

Geographic terms and concepts are briefly defined in the *Dictionary, Census of Population, 2016*. www12.statcan. gc.ca/census-recensement/2016/ref/dict/index-eng.cfm (catalogue n° 98-301-X)

Content

The PCFRF contains the active postal codes^OM.

Each record of the file contains the following:

- six-character postal code^OM
- federal electoral district code – 2013 Representation Order
- federal electoral district name – English
- federal electoral district name – French
- unique link: an indicator of whether the postal code^OM is linked to more than one federal electoral district
- weight: for use in proportional allocation

General methodology

Not applicable

Limitations

Some postal codes^OM straddle one or more FED boundaries. The 'unique link' variable indicates if the postal code^OM is linked to one or more FEDs.

Users often link the postal code^OM in their data set to the FED in the PCFRF. When performing this link, users should be aware that the postal code^OM in their data set may represent a mailing address used by a person, not necessarily where the person actually resides. Similarly, a postal code^OM in a business-based mailing address may not necessarily indicate where the business activity took place.

Before using the Postal Codes^OM by Federal Ridings File (PCFRF) with administrative files containing postal codes^OM, users should be aware of some characteristics of postal codes^OM that may affect their linkage to federal electoral districts on the PCFRF.

Postal delivery areas do not respect federal electoral district boundaries

A postal delivery area (as represented by the six-character postal code^OM) may straddle one or more federal electoral district boundaries. This means that, in the Postal Codes^OM by Federal Ridings File, the same postal code^OM may be linked to two or more federal electoral districts. Most federal electoral districts are affected in this way in both population centres and rural areas.

Postal codes^{OM} may be associated with post office boxes at a postal station that is not in the same federal electoral district as the client using the post office box

The postal code^{OM} associated with a lock box (post office box) may be geocoded to the physical location of the associated postal installation (post office). This could be located in a federal electoral district that is different from the ultimate destination of the mail delivery – the residential, industrial, or commercial location of the client renting the lock box.

Canada Post Corporation (CPC) regularly retires postal codes^{OM} and may also reactivate retired postal codes^{OM} for use again

Users of the PCFRF must keep in mind that the file contains only the postal codes^{OM} from CPC that are active as of the reference data.

If the addresses of postal codes^{OM} in a user's administrative file are not of the same vintage there may be non-matches with the PCFRF because some of the postal codes^{OM} in the user's file may have been retired, or may even have been reactivated and re-assigned by CPC to another range of addresses outside the riding where they had previously been used.

Statistics Canada maintains an audit trail of the birth dates and retirement dates of postal codes^{OM} in the PCCF. Users may wish to consult the Postal Code^{OM} Conversion File (PCCF) Reference Guide, an updated version of the PCCF is released concurrently with the PCFRF.

Using with other products

Not applicable

Reference date

The reference date for postal codes^{OM} contained in the PCFRF is August 2020. This is the same date as the postal codes^{OM} contained in the Postal Code^{OM} Conversion File (PCCF) product released concurrently with this version of the PCFRF.

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 2016 Census is January 1, 2016.

4. Technical specifications

Record layout and data descriptions

Table 4.1
Postal Codes^{OM} by Federal Ridings File (PCFRF) record layout

Position	Size	Type[1]	Description
1	6	C	Postal code^{OM}
7	5	C	Federal electoral district code
12	56	C	Federal electoral district name - English
68	56	C	Federal electoral district name - French
124	1	C	Unique link
125	3	C	Weight

1. The field type 'C' refers to both alphabetic and numeric characters

Postal code^{OM}

The postal code^{OM} is a six-character alphanumeric code defined and maintained by Canada Post Corporation (CPC) for the sortation and delivery of mail.

The alphanumeric characters are arranged in the form ANA NAN, where 'A' represents a letter of the alphabet and 'N' a numeric digit. The first character of a postal code^{OM} (allocated in alphabetic sequence from east to west across Canada) represents a province or territory or a major sector entirely within a province.

The first three characters represent a set of well-defined and stable areas known as the forward sortation area© (FSA©). Rural FSAs© are identifiable by the presence of a '0' in the second position of the FSA© code.

The last three characters identify the local delivery unit (LDU). In population centres, the LDU can specify a small and easily defined area within an FSA© such as blockface (one side of a city street between consecutive intersections with streets), an apartment building, an office building, or a large firm or organization which does large volume business with the post office. In rural areas, the LDU denotes a service area – the area serviced by rural route delivery from a post office or station (e.g., a rural route, general delivery, or post office box).

Federal electoral district code

A federal electoral district (FED) is any place or territorial area entitled to return a member to serve in the House of Commons. FED legal limits and descriptions are the responsibility of the Chief Electoral Officer, and are usually revised every ten years after the results of the decennial census. The 2013 Representation Order is the most current revision. This code uniquely identifies a federal electoral district – 2013 Representation Order. The first two digits identify the province or territory.

Federal electoral district name – English

This contains the English name of the federal electoral district from the 2013 Representation Order.

Federal electoral district name – French

This contains the French name of the federal electoral district from the 2013 Representation Order.

Unique link

The unique link value given in the file can be either '1,' which indicates the postal code^{OM} is linked to one FED, or '2,' which indicates that the postal code^{OM} is linked to two or more FEDs.

Weight

The 'weight' estimates the proportion of the population of a postal code^{OM} that resides within each FED. If a postal code^{OM} is linked to only one FED in the PCFRF, the weight is equal to 1. When a postal code^{OM} is linked to more than one FED, the sum of weights for that postal code^{OM} equals 1.0.

The letter found at the end of the weight values represents the weight source.
Where weight source:

I = 1 postal code^{OM} FED
The postal code^{OM} is associated with only one FED in the PCFRF (i.e. variable unique link = 1).

M = Maintain old weights
The postal code^{OM} is associated with multiple FEDs, maintain old weights as much as possible.

C = civic address ranges
A postal code^{OM} with either whole or part of its service defined in terms of civic address ranges, the weight will indicate the number of dwellings (estimated based on the address ranges from Canada Post Corporation) that is associated with each FED.

S = Simple weight calculation
Calculate weight using the following method for still unresolved cases with multiple FED…
2 FED — assign each a weight of 0.5
3 FED — assign the one with the SLI=1 in PCCF with a weight = 0.4, assign the other two a weight of 0.3 each
4 FED — assign the one with the SLI=1 in the PCCF with a weight of 0.4, assign the other two records a weight of 0.2 each
5 or more FED — investigated and weight assigned manually.

File specifications

The current version of the Postal Codes^{OM} by Federal Ridings File (PCFRF) 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.

Software formats

Not applicable

System requirements

Not applicable

Installation instructions

Not applicable

Geographic representation

Not applicable

File naming convention

The naming convention for PCFRF data files is bilingual and reflects the reference date (August 2020) of the Canada Post Corporation data used in the release. The file name for this release is PCFRF_dataNatFED2013_08020.txt

5. Data quality

Linkage data quality elements provide information on the fitness-for-use of a tabular and spatial 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, 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.

Sources

The sources used to derive the Postal Codes^{OM} by Federal Ridings File (PCFRF) are as follows:

- The Postal Code^{OM} Conversion File (PCCF) links postal codes^{OM} (provided by Canada Post Corporation [CPC] on the Address Lookup File updated to the Reference Date to geographic codes for 2016 Census geographic areas, including province and federal electoral district 2013 Representative Order codes. These geographical areas have a reference date of January 1, 2016, except for the Federal electoral district – 2013 Representation Order.

- The PCFRF contains postal code^{OM} data under license from Canada Post Corporation.

- Federal electoral district (FED) names are derived from the Statistical Registers and Geography Division's Spatial Data Infrastructure. The source of the geographic names and codes of federal electoral districts is the 2013 Representation Order of the Chief Electoral Office, Elections Canada. The Spatial Data Infrastructure contains a table with the name of each federal electoral district and its associated identification code. This table is updated based on name changes provided by Elections Canada. Where changes to the electoral boundaries have been provided by Elections Canada, the correspondence between the federal electoral district and postal codes^{OM} is updated.

- The 2016 Census of Population is used as a source for deriving the weights. When a postal code^{OM} is linked in the PCFRF to more than one FED, the number of persons reporting the postal code^{OM} in the census may be used to derive the weights.

Method of derivation

The PCFRF is created by extracting the active postal codes^{OM} and the related FED codes included in the PCCF. Each FED code in this file is linked to the list of federal electoral districts – 2013 Representation Order codes and names. The linkage to the FED on the PCCF is based on the dissemination block or dissemination area geocoded in the PCCF.

The resulting PCFRF file contains active postal code^{OM} records of which most are uniquely linked to one federal electoral district. There are some that are linked to more than one federal electoral district and are thus represented by multiple records in the PCFRF.

The unique link variable is derived based on the postal code^{OM} and FED codes in the PCFRF. If the postal code^{OM} is linked to only one FED, the unique link is assigned a value of 1, otherwise it is assigned a value of 2.

The 'weight' estimates the proportion of the population of a postal code^{OM} that resides within each FED. If a postal code^{OM} is linked to only one FED in the PCFRF, the weight is equal to 1. If the postal code^{OM} is linked to more than one FED and is reported in the 2016 Census, the weight is equal to the proportion of the population that reported the postal code^{OM} in each of the FEDs. If the postal code^{OM} was not reported in the census, the weight is estimated using the address ranges in the service area of the postal code^{OM} as found in the Address Lookup File from Canada Post Corporation. If necessary, the weights for a postal code^{OM} are normalized and adjusted using the single link indicator variable in the PCCF so that the sum of weights equals 1.0.

Positional accuracy

Not applicable

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 attribute accuracy of the PCFRF is dependent on the accuracy of the geocodes for the dissemination blocks and dissemination areas in the PCCF. The linkage of the dissemination blocks or dissemination areas to the FEDs is based on the boundaries of the FEDs as found in the Spatial Data Infrastructure.

The accuracy of the weight variable is based on the linkage to the FED in the PCFRF, the population reporting the postal code^{OM} in the census as well as address range data in Canada Post's Address Lookup File.

The population on which the weight variable in the PCFRF is based was derived from the total population data of the 2016 Census. Population counts are determined according to the 'de jure' method. This means that people are enumerated at their usual place of residence, regardless of where they may have been on Census Day. If a postal code^{OM} is linked to more than one FED in the PCFRF and was not reported in the census, address range data from the Address Lookup File is used to estimate the weight. This is the case for about 1% of the postal codes^{OM}

in the PCFRF. Because large populations residing in apartments or collective dwelling units may be represented by only one address, this method can underestimate the weight associated with these populations.

Logical consistency

Not applicable

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 PCFRF is the degree to which all valid postal codes^{OM} are accounted for. Almost all postal codes^{OM}, valid and active as the Reference Date according to Canada Post Corporation, have been linked to census geography.

There are 338 FEDs in the 2013 Representation Order of the Chief Electoral Office, Elections Canada. All of these FEDs are included in the PCFRF.

Appendices

See definitions of the geography universe from the *Dictionary, Census of Population, 2016* (www12.statcan.gc.ca/census-recensement/2016/ref/dict/index-eng.cfm).

See Figure 1.1 Hierarchy of standard geographic areas for dissemination, 2016 Census from the *Dictionary, Census of Population, 2016* (www12.statcan.gc.ca/census-recensement/2016/ref/dict/figures/f1_1-eng.cfm).

See Table 1.1 Geographic areas by province and territory, 2016 Census from the *Dictionary, Census of Population, 2016* (www12.statcan.gc.ca/census-recensement/2016/ref/dict/tab/t1_1-eng.cfm).

See Table 1.5 Census subdivision types by province and territory, 2016 Census from the *Dictionary, Census of Population, 2016* (www12.statcan.gc.ca/census-recensement/2016/ref/dict/tab/t1_5-eng.cfm).