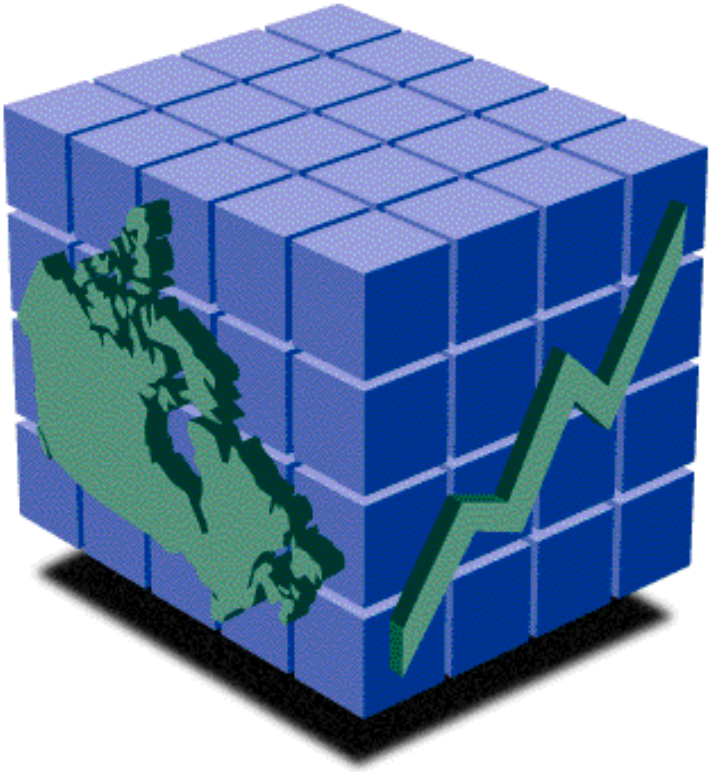
Statistics Canada

Postal Code Population Weight File
May 1996 Postal Codes

Reference Guide



STATISTICS CANADA

GEO

STATISTIQUE CANADA

Statistics Canada Statistique Canada

Canada

Data in many forms

Statistics Canada disseminates data in a variety of forms. In addition to publications, both standard and special tabulations are offered. Data are available on the Internet, compact disc, diskette, computer printouts, microfiche and microfilm, and magnetic tape. Maps and other geographic materials are available for some types of data.

How to obtain more information

Inquiries about this product and related statistics or services should be directed to the Statistics Canada Regional Reference Centre in:

Halifax (902) 426-5331	Regina (306) 780-5405
Montréal(514) 283-5725	Edmonton (403) 495-3027
Ottawa (613) 951-8116	Calgary (403) 292-6717
Toronto (416) 973-6586	Vancouver (604) 666-3691
Winnipeg(204) 983-4020	

Toll-free access is provided **for all users who reside outside the local dialing area** of any of the Regional Reference Centres.

National inquiries line	**1 800 263-1136**
National telecommunications device for the hearing impaired	**1 800 363-7629**
Order-only line (Canada and United States)	**1 800 267-6677**

You can also visit our World Wide Web site: http://www.statcan.ca

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner and in the official language of their choice. To this end, the agency has developed standards of service which its employees observe in serving its clients. To obtain a copy of these service standards, please contact your nearest Statistics Canada Regional Reference Centre.

Statistics Canada

Postal Code Population Weight File

May 1996 Postal Codes

Reference Guide

Published by authority of the Minister
responsible for Statistics Canada

August 1998

Reference Guide for Catalogue 93F0040XDB

Ottawa

Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership involving 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

page

1. About this guide

This reference guide was prepared to accompany the Postal Code Population Weight File, (Catalogue No. 93F0040XDB). It provides general information about the product, including a description and the general methodology used to create it.

The Data Quality section provides information to evaluate the suitability of the data for a particular use.

A record layout is provided in the Technical Specifications section.

Geographic terms and concepts highlighted in **bold** in the text are described in the glossary.

2. Overview

The Postal Code Population Weight File has been created as a supplementary product to the Postal Code Conversion File (PCCF). It provides users with a population 'weight' for postal codes with multiple links on the PCCF. The weight associated with each record on the Postal Code Population Weight File represents the proportion of the population reporting the postal code within a specific enumeration area.

Only a small percentage of postal codes are linked to more than one enumeration area on the PCCF (4%). However, these postal codes tend to serve relatively large areas and large populations. The weights will allow users to allocate their data proportionally to the population distribution reported in the 1996 Census.

This file can also be used in combination with the PCCF to identify those postal code-to-enumeration area links confirmed by census reported postal code data.

For more information about the Postal Code Conversion File, refer to the PCCF Reference Guide, Catalogue no. 92F0027XDB. For more information about the Population and Dwelling Counts for Postal Codes Reported in the 1996 Census, refer to the Postal Code Counts User's Guide, Catalogue No. 92F0086XCB.

3. About this product

The Postal Code Population Weight File contains a total of 588,414 postal codes (633,879 postal code-to-enumeration area links) which were reported in the 1996 Census.

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

Province/Territory	Number of postal codes	Number of records
Newfoundland	6,294	7,278
Prince Edward Island	2,456	2,759
Nova Scotia	16,635	18,342
New Brunswick	12,646	14,228
Quebec	153,491	162,493
Ontario	213,525	229,116
Manitoba	19,036	21,064
Saskatchewan	17,565	20,495
Alberta	53,701	58,614
British Columbia	91,972	98,179
Northwest Territories	438	527
Yukon Territory	655	784
Canada Total	**588,414**	**633,879**

Note: Postal codes can straddle provincial boundaries. The provincial breakdown above is based on the first digit of the postal code.

Of the 588,414 postal codes found on this file, there are 563,618 postal codes uniquely linked to one enumeration area. The remaining 24,796 (4%) are tied to more than one enumeration area.

Each record of the Postal Code Population Weight File includes three fields: postal code, enumeration area unique identifier, and a population weight.

3.1 Reference date

The reference date for postal codes and the population distribution contained in the Postal Code Population Weight File Conversion File is May 1996 (in effect at the time of the 1996 Census).

3.2 Limitations

The Postal Code Population Weight File represents approximately 80% of all of the PC-EA links provided on the PCCF. The PCCF carries additional links where census data were not available (i.e., business addresses, location of post office, new postal codes, etc.).

The Postal Code Population Weight File will not be updated until the next Census.

4. Data quality

The purpose of this data quality statement is to provide detailed information so that users may evaluate the suitability of the data for their use. Five fundamental components of a data quality statement are: lineage, positional accuracy, attribute accuracy, logical consistency and completeness.

4.1 Lineage

Lineage includes descriptions of the source material from which the data were derived and the methods of derivation, including the dates of the source material and all transformations involved in producing the final product.

4.1.1 Source Files

The Postal Code Population Weight File has been created using two files:

- 1996 Census reported postal code population and dwelling counts by enumeration areas, and
- Postal Code Conversion File, May 1998.

4.1.2 Method of derivation

The Postal Code Population Weight File is a supplement to the May 1998 version of the Postal Code Conversion File. It contains all postal code-to-enumeration area links reported in the Census AND included on the PCCF. Users should refer to the PCCF Reference Guide for detailed information on the creation of the PCCF.

The population reported in the Census for this subset of links was used to calculate the population distribution (or 'weights').

The 'weight' is the ratio of postal code population for a given enumeration area to the total population for the postal code. Where the postal code is linked to only one EA, the weight is equal to one (1.00). Where the population for a given postal code is distributed among two or more enumeration areas (or links), the weights represent the distribution of the population for that postal code across enumeration areas.

For example:

Postal code	**EAUID**	**Weight**
K0K 0J1	35000001	0.70
K0K 0J1	35000002	0.30
J9J 1K3	24000001	1.00

In the example above, seventy percent (70%) of the population of K0K 0J1 is found in enumeration area 35000001 and the remaining thirty percent (30%) is in 35000002. On the other hand, 100% of the population reporting J9J 1K3 in the census lived in enumeration area 24000001. The sum of the weights for each postal code equals 1.00.

4.2 Positional accuracy

Positional accuracy is the difference between the "true" position of a feature in the real world and the "estimated" position stored in the Postal Code Population Weight File.

Does not apply to this product.

4.3 Attribute accuracy

Attribute accuracy refers to the accuracy of the non-positional information attached to each postal code.

The attribute accuracy of the Postal Code Population Weight File is dependent on the accuracy of the reported postal code data from the 1996 Census.

The postal codes were processed through a series of activities including data capture, editing and imputation. Data were captured from the 1996 Census form. Postal codes were determined to be valid if they were on a list obtained from Canada Post Corporation for May 1996 and the postal code provided by the respondent was no more than one province or territory away from the respondent's regular place of residence. The imputation stage assigned valid postal codes where either no postal code or an invalid postal code was reported. More details on the edit and imputation stages are available from the Postal Code Counts User's Guide, Catalogue No. 92F0086XCB.

This process only validates postal codes within neighbouring provinces. The Postal Code Population Weight File shows the links between postal codes and enumeration areas. There are no measures of the accuracy of the data at this level. However, several measures were taken to eliminate "weak" links from the final product.

4.4 Logical consistency

Logical consistency is the degree to which features are accurately represented in the data structure and fulfil all the internal requirements of the data structure. In other words, how well elements of the data structure follow the rules imposed on them.

The sum of the weights associated with each postal code is equal to 1.00.

4.5 Consistency with other products

Postal codes on this file are a subset of the total available from the 1996 Census (*Postal Code Counts,* Catalogue no. 92F0086XCB). For more information on this topic refer to Section 4.6 *Completeness*.

The Postal Code Population Weight File contains approximately 80% of postal code-to-enumeration area linkages provided on the PCCF. The PCCF provides all postal codes (both in use and retired) and is updated twice a year to include recent postal codes. The Postal Code Population Weight File contains a subset of postal codes reported in the Census (May 1996).

All postal code-to-enumeration area linkages provided on the Postal Code Population Weight File are also included on the Postal Code Conversion File.

4.6 Completeness

Completeness expresses the degree to which the geographic entities (features) are captured according to the data capture specifications. It also contains information about selection criteria, definitions used and other relevant mapping rules.

The Postal Code Population Weight File contains a link to one or several enumeration areas for 588,414 postal codes. This represents a subset of the 607,456 postal codes reported in the 1996 Census. Postal code-to-enumeration area links reported in the Census were retained if they were confirmed by the Postal Code Conversion File or if they were reported by a larger number of dwellings.

Not all valid postal codes were reported in the Census. In particular, postal codes used exclusively by businesses are missing.

5. Technical specifications

5.1 System requirements

The Postal Code Population Weight File is a flat ASCII file and does not include any software.

5.2 Record Layout

Field	Size	Position	Type	Title
1	6	1-6	C	Postal code
2	8	7-14	C	Enumeration area unique identifier
3	4	15-19	N	Weight

6. Glossary

Enumeration Area (EA)

An enumeration area (EA) is the geographic area canvassed by one census representative. It is the smallest standard geographic area for which census data are reported. All the territory of Canada is covered by EAs.

Postal Code

The postal code is a six-character alpha-numeric code defined and maintained by Canada Post Corporation for the processing (sortation and delivery) of mail.

The alpha-numeric 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 (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 established urban areas, the LDU can specify a small and easily defined area within an FSA such as block-face (one side of a city street between consecutive intersections with streets or similar physical features), 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.

References

Statistics Canada, [1992]

Policy Manual, Policy on Informing Users of Data Quality and Methodology, Statistics Canada, April 7, 1992.

Statistics Canada, [1997]

1996 Census Dictionary. Ottawa: Industry Canada, 1997. 1996 Census of Canada. Catalogue number 92-351-XPE.

Limited use data product licence agreement

The Government of Canada (Statistics Canada) is the owner or a licensee of all intellectual property rights (including copyright) in this data product. In consideration of your payment of the requisite fee, you or your organization, as the case may be, (hereinafter referred to as the "licensee") are granted a non-exclusive, non-assignable and non-transferable licence to use this data product subject to the terms below.

This licence is not a sale of any or all of the rights of the owner(s). This data product may be used only by you or your organization, as the case may be. No part of the data product nor any right granted under this agreement shall be sold, rented, leased, lent, sub-licenced or transferred to any other person or organization. The licensee shall not use any part of the data product to develop or derive any other data product or data service for distribution or commercial sale, without a licence to do so. The licensee may not disassemble, decompile or in any way attempt to reverse engineer any software provided as part of the data product.

The licensee may not transfer this data product to or store the data product in any electronic network for use by more than one user unless it obtains prior written permission from Statistics Canada and pays any additional fees.

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 indirect, special, consequential or other damages however caused.

This agreement will terminate automatically without notice if the licensee fails to comply with any term of this agreement. In the event of termination, the licensee must immediately return the data product to Statistics Canada or destroy it and certify this destruction in writing to Statistics Canada.

It is YOUR RESPONSIBILITY to ensure that your use of this data product complies with these terms and to seek prior written permission from Statistics Canada for any uses not permitted or not specified in this agreement.

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

For further information please contact:

Licence Services Tel: 613-951-8211

Marketing Division Fax: 613-951-1134

Statistics Canada
Ottawa, Ontario
Canada, K1A 0T6

Revised 12/11/96