clsa élcv
Canadian Longitudinal Study on Aging
Étude longitudinale canadienne sur le vieillissement

Data Support Materials
Forward Sortation Areas (FSA) and Census Subdivisions (CSD)

1. Background

Users of CLSA data may request variables that pertain to the geographic location of participants, including Census Subdivisions and Forward Sortation Areas:

- The CLSA has derived *Census Subdivision (CSD) code and names* using the Postal Code Conversion File (PCCF)[1] created by Statistics Canada.
- *Forward Sortation Areas* (FSA), are a set of well-defined and stable areas defined by the first three characters of the 6-character postal code.

2. Implementation

i. Postal Code Conversion File (PCCF)

Postal codes are managed by Canada Post Corporation (CPC) for the efficient sorting and delivery of mail. They are not created as units for the analysis or mapping of population, business or dwelling characteristics. The postal code products created by Statistics Canada provide the link between postal codes and Statistics Canada's standard geographic areas to allow for these various uses of the data.

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

In April 1983, the Geography Division of Statistics Canada released the first version of the PCCF, which linked postal codes to 1981 Census geographic areas and included geographic coordinates. Since then, the file has been updated on a regular basis to reflect changes. For the current release of the PCCF (August 2015), the vast majority of the postal codes are directly geocoded to 2011 Census geography.

ii. Census Subdivision (CSD)

The census geographic units of Canada are the country subdivisions defined and used by Statistics Canada to conduct the country's five-yearly census. They exist on four levels: the top-level (first-level) divisions are Canada's provinces and territories; these are divided into second-level census divisions, which in turn are divided into third-level census subdivisions (CSD, roughly corresponding to municipalities) and fourth-level dissemination areas. CSDs have unique codes that can be linked with other sociodemographic or census data. Within these 7-digit CSD codes:

- The first two digits represent the province (Table 1).
- The next two digits represent the census division.
- The last three digits represent the census subdivision.

CSD codes correspond to CSD names, as defined by the PCCF.

iii. Forward Sortation Area (FSA)

A Forward Sortation Area is a geographical unit based on the first three characters in a Canadian postal code. The FSA represents a specific area within a major geographical region or province/territory. All postal codes that start with the same three characters—for example, K1A—are together considered an FSA.

Each individual character in an FSA code provides information:

a) The first character is a letter that identifies the province or territory (Nunavut and the Northwest Territories share the letter X). For Ontario and Quebec, the first character further identifies a part of the province: for example, G identifies Eastern Quebec, H – Metropolitan Montréal, K – Eastern Ontario and M – Metropolitan Toronto (Table 2).
b) The second character is a numeral that identifies whether the area is urban or rural. A zero indicates a wide-area rural region, while all digits 1 – 9 indicate urban areas.
c) The third character is a letter that, in combination with the first two characters, identifies a more precise geographic district—a specific rural region, an entire medium-sized city or a section of a major metropolitan area.

As of May 2011, there were 1,638 FSAs in use across Canada. There were 1,454 FSAs with urban mail delivery service and 184 with rural mail delivery service.

3. How are the collected data cleaned/prepared?

Area suppression is used to remove all characteristic data for geographic areas below a specified population size. Guidelines published by Statistics Canada[2], define the specified minimum population size for all standard areas or aggregations of standard areas as 40, except for blocks, block-faces (one side of a street between two consecutive features intersecting that street) or postal codes. Consequently, no characteristics or tabulated data are released if the total population of the area is less than 40. The CLSA has decided to take a more stringent approach to participant privacy and confidentiality, and has set the minimum population size at 50.

Population size for FSAs and CSDs were extracted from 2011 census data by linking with CLSA data separately to FSAs and CSDs, based on six-digit postal codes. Population size of all FSAs exceeded the CLSA criterion of a population size of 50 or more. The population size of three CSDs we identified to be less than 50. To protect the privacy of CLSA participants, we replaced these CSDs with neighbouring CSDs that had the highest common boundaries attached geographically and whose population size exceeded our minimum criterion.

i. What data are available for use?

CSD names and codes as well as FSAs are available for all CLSA participants. The available CSD variables are:

SDC_CSDUID_TRM
SDC_CSDNAME_TRM
SDC_CSDUID_COM
SDC_CSDNAME_COM

The available FSA variables are:

SDC_FSA_TRM
SDC_FSA_COM

ii. What are the conditions of use?

These data are available to approved researchers through a special request within the 'CLSA Data and Biospecimen Request Application'. When completing the 'Part 2: Data Checklist' portion of the application, researchers are asked to make their request in the 'Comments' box provided. Researchers must also explain in their application how these data will be used optimally to support research to benefit all Canadians and are required to follow the CLSA Data and Biospecimen Access Policies and Guiding Principles.

References

[1]Statistics Canada - Postal Code Conversion File (PCCF), Reference Guide - Aug 2015 - http://www.statcan.gc.ca/pub Online Catalogue #92-154-G Consulted on 27_02_2017

[2]Statistics Canada – Data Quality and Confidentiality Standards and Guidelines – 2011 Census Dissemination Available at: https://www12.statcan.gc.ca/census-recensement/2011/ref/DQ-QD/2011_DQ-QD_Guide_E.pdf

Table 1 – Province codes (PR) used by CPC uniquely identify provinces and territories

PR code	Province, territory or region
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

Table 2 – First character of the postal code and corresponding province, territory or region

Province, territory or region	Postal code 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.