

Catalogue no. 92-156-G

# Correspondence Files, Reference Guide

Census year 2011



## 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 at [www.statcan.gc.ca](http://www.statcan.gc.ca), e-mail us at [infostats@statcan.gc.ca](mailto:infostats@statcan.gc.ca), or telephone us, Monday to Friday from 8:30 a.m. to 4:30 p.m., at the following numbers:

### Statistics Canada's National Contact Centre

Toll-free telephone (Canada and United States):

Inquiries line	1-800-263-1136
National telecommunications device for the hearing impaired	1-800-363-7629
Fax line	1-877-287-4369

Local or international calls:

Inquiries line	1-613-951-8116
Fax line	1-613-951-0581

### Depository Services Program

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

## To access this product

This product, Catalogue no. 92-156-G, is available free in electronic format. To obtain a single issue, visit our website at [www.statcan.gc.ca](http://www.statcan.gc.ca) and browse by "Key resource" > "Publications."

## 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](http://www.statcan.gc.ca) under "About us" > "The agency" > "Providing services to Canadians."

# Correspondence Files, Reference Guide

Census year 2011

Published by authority of the Minister responsible for Statistics Canada

© Minister of Industry, 2011

All rights reserved. The content of this electronic publication may be reproduced, in whole or in part, and by any means, without further permission from Statistics Canada, subject to the following conditions: that it be done solely for the purposes of private study, research, criticism, review or newspaper summary, and/or for non-commercial purposes; and that Statistics Canada be fully acknowledged as follows: Source (or "Adapted from", if appropriate): Statistics Canada, year of publication, name of product, catalogue number, volume and issue numbers, reference period and page(s). Otherwise, no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form, by any means—electronic, mechanical or photocopy—or for any purposes without prior written permission of Licensing Services, Information Management Division, Statistics Canada, Ottawa, Ontario, Canada K1A 0T6.

November 2011

Catalogue no. 92-156-G

ISBN 978-1-100-19467-7

Frequency: occasional

Ottawa

Cette publication est disponible en français.

---

## Note of appreciation

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

## What's new?

- Dissemination areas (DAs) were not redelineated to support the 2011 Census. DAs were refined where administrative (i.e., census subdivision) boundaries changed or as a result of growth. Therefore there is a high degree of correspondence between the 2006 DA and the 2011 DA (92%).
- Changes to hydrography data in British Columbia have had an impact on land area calculation. Dissemination block (DB) or DA unique identifiers used in these files are not impacted. A 2011 DA is considered to be equal to a 2006 DA when the change of geometry is the only reason for a discrepancy.
- The three 2011 Census Correspondence Files are now available in Excel format (.xlsx), in addition to ASCII format (.txt).

## Table of contents

	Page
<b>What's new?</b> .....	<b>4</b>
<b>1. About this guide</b> .....	<b>6</b>
<b>2 Overview</b> .....	<b>7</b>
How to cite this guide .....	7
How to cite this product .....	7
<b>3 About this product</b> .....	<b>8</b>
Purpose of the product .....	8
Definitions and concepts .....	8
Content .....	8
General methodology .....	10
Limitations.....	10
Comparisons to other products/versions.....	10
Using with other products .....	10
Reference date .....	10
<b>4 Technical specifications</b> .....	<b>11</b>
Record layouts and data descriptions .....	11
File specifications .....	12
Software formats .....	12
System requirements.....	12
Installation instructions .....	12
Geographic representation .....	12
File naming convention.....	12
<b>5 Data quality</b> .....	<b>13</b>
Lineage .....	13
Positional accuracy.....	13
Attribute accuracy .....	13
Logical consistency .....	13
Consistency with other products .....	14
Completeness.....	14
<b>Appendix A Glossary</b> .....	<b>15</b>
<b>Appendix B Hierarchy of standard geographic units for dissemination, 2011 Census</b> .....	<b>21</b>
<b>Appendix C Geographic units by province and territory, 2011 Census</b> .....	<b>22</b>
<b>Appendix D Census subdivision types by province and territory, 2011 Census</b> .....	<b>23</b>
<b>Appendix E Statistics Canada Open Licence Agreement</b> .....	<b>25</b>

## 1. About this guide

This reference guide is intended for users of the 2011 Census Correspondence Files. Technical specifications in section 4 includes record layouts.

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. The appropriate licence agreement for the 2011 Census Correspondence Files is found in Appendix E Statistics Canada Open Licence Agreement.

## 2. Overview

There are three 2011 Census Correspondence Files that provide users with tabular data that describes the correspondence between two vintages of geographic areas:

- The Dissemination Area Correspondence File describes the relationship between the 2011 dissemination area and the 2006 dissemination area
- The Dissemination Area and Land Area Correspondence File describes the percentage of 2011 dissemination area's land area contained within the boundaries of the 2006 dissemination area
- The Dissemination Block Correspondence File describes the relationship between the 2011 dissemination block and the 2006 dissemination block.

Each file contains a unique identifier for the 2011 Census geographic area and the corresponding unique identifier for the 2006 Census geographic area. In addition, a relationship flag is included which indicates the degree of correspondence between the geographic areas, facilitating a comparison between census years.

### How to cite this guide

*Correspondence Files, Reference Guide, 2011 Census.* Statistics Canada Catalogue no. 92-156-G.

### How to cite this product

*Correspondence Files, 2011 Census.* Statistics Canada Catalogue no. 92-156-X.

## 3. About this product

### Purpose of the product

The 2011 Census Correspondence Files provide users with tabular data that describes the correspondence between two vintages of geographic areas.

### Definitions and concepts

Geographic terms and concepts are briefly defined in the glossary (Appendix A). More details will be found in the *2011 Census Dictionary*, to be released on February 8, 2012. Supplementary information is provided in the appendices.

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. Due to modifications to roads or higher geographic levels (such as census subdivisions [municipalities]), or to improve the shape of some DBs (e.g., long DBs in coastal areas), DBs may be modified from one census to the next.

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. For the 2011 Census, one objective was to keep DAs as stable as possible. The DAs should still be composed of a relatively small population, usually between 400 and 700 persons. This small population is a target to release census data at a detailed geographic level while avoiding the suppression of the counts to be applied based on census confidentiality rules. For this reason and because DAs must respect higher geographic levels such as census subdivisions (municipalities), DAs may be modified from one census to the next.

### Content

#### Dissemination Area Correspondence File

The Dissemination Area Correspondence File (2011\_92-156\_DA\_AD.txt, 2011\_92-156\_DA\_AD.xlsx) describes the relationship of the 2011 dissemination area with the 2006 dissemination area. The fields available in the file are the 2011 dissemination area unique identifier (DAUID2011), the 2006 dissemination area unique identifier (DAUID2006), the 2011 dissemination block unique identifier (DBUID2011) and a relationship flag. The relationship flag indicates if the current census dissemination area is equal to the previous census dissemination area or if it has a one-to-many, many-to-one or many-to-many relationship. Together, these fields allow comparison between the 2011 dissemination area and the 2006 dissemination area.

The following series of tables contain detailed counts illustrating the relationship between 2006 and 2011 DAs. This will provide users statistical information explaining the changes to the DAs between 2006 and 2011 censuses.



The following table contains detailed counts for all 2011 dissemination areas.

**Table 3.1 Relationship type, 2011 dissemination area to 2006 dissemination area**

Relationship type	Count	Percent <sup>1</sup>
one 2011 dissemination area = one 2006 dissemination area	51,785	92.1%
one 2011 dissemination area = many 2006 dissemination areas	17	0%
many 2011 dissemination areas = one 2006 dissemination area	1,850	3.3%
many 2011 dissemination areas = many 2006 dissemination areas	2,552	4.5%

The following table contains detailed counts for 2011 dissemination areas inside census tracts.

**Table 3.2 Relationship type, 2011 dissemination area to 2006 dissemination area – group 1**

Relationship type	Count	Percent
one 2011 dissemination area = one 2006 dissemination area	34,470	91.5%
one 2011 dissemination area = many 2006 dissemination areas	1	0%
many 2011 dissemination areas = one 2006 dissemination area	1,762	4.7%
many 2011 dissemination areas = many 2006 dissemination areas	1,429	3.8%

The following table contains detailed counts for 2011 dissemination areas outside census tracts.

**Table 3.3 Relationship type, 2011 dissemination area to 2006 dissemination area – group 2**

Relationship type	Count	Percent <sup>1</sup>
one 2011 dissemination area = one 2006 dissemination area	17,315	93.4%
one 2011 dissemination area = many 2006 dissemination areas	16	0.1%
many 2011 dissemination areas = one 2006 dissemination area	88	0.5%
many 2011 dissemination areas = many 2006 dissemination areas	1,123	6.1%

### Dissemination Block Correspondence File

The Dissemination Block Correspondence File (2011\_92-156\_DB\_ID.txt, 2011\_92-156\_DB\_ID.xlsx) describes the relationship of the 2011 dissemination block with the 2006 dissemination block. The fields available in the file are the 2011 dissemination block unique identifier (DBUID2011), the 2006 dissemination block unique identifier (DBUID2006), and a relationship flag. The relationship flag indicates if the current census dissemination block is equal to the previous census dissemination block or if it has a one-to-many, many-to-one or many-to-many relationship. Together, these fields allow comparison between the 2011 dissemination block and the 2006 dissemination block.

The following table contains detailed counts for all 2011 dissemination blocks.

**Table 3.4 Relationship type, 2011 dissemination block to 2006 dissemination block**

Relationship type	Count	Percent <sup>1</sup>
one 2011 dissemination block = one 2006 dissemination block	417,614	84.7%
one 2011 dissemination block = many 2006 dissemination blocks	15,053	3.1%
many 2011 dissemination blocks = one 2006 dissemination block	42,907	8.7%
many 2011 dissemination blocks = many 2006 dissemination blocks	17,771	3.6%

1. Totals may not add to 100 due to rounding.

## **Dissemination Area and Land Area Correspondence File**

The Dissemination Area and Land Area Correspondence File (2011\_92-156\_DALand\_ADsup.txt, 2011\_92-156\_DALand\_ADsup.xlsx) describes the relationship of the 2011 dissemination area with the 2006 dissemination area. The fields available in the file are the 2011 dissemination area unique identifier (DAUID2011), the 2006 dissemination area unique identifier (DAUID2006), a relationship flag and percentage of land area attribute. The relationship flag indicates if the current census dissemination area is equal to the previous census dissemination area or if it has a one-to-many, many-to-one or many-to-many relationship. The percentage of land area attribute describes the percentage of the 2011 dissemination area's land area within the boundaries of the 2006 dissemination area. Together, these fields allow comparison between the 2011 dissemination area and the 2006 dissemination area.

## **General methodology**

The 2006 dissemination block is maintained on the 2011 Statistics Canada Spatial Data Infrastructure, facilitating the creation of correspondence files which describe the relationship between the 2006 dissemination block and the 2011 dissemination block. As a result, correspondence files for other geostatistical areas which are rolled up from the 2006 dissemination block or 2011 dissemination block can also be generated.

## **Limitations**

Not applicable

## **Comparisons to other products/versions**

Not applicable

## **Using with other products**

The 2011 Census Correspondence Files can be used to link 2011 data with the corresponding 2006 areas. The unique identifiers (DBUID and DAUID) can be used as a link to previous census geography products, such as GeoSuite and the Geographic Attribute File, to retrieve higher geographic level data, census population and dwelling counts or other attributes included in these products or 2006 Census data.

## **Reference date**

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

## 4. Technical specifications

### Record layouts and data descriptions

**Table 4.1 Record layout — Dissemination Area Correspondence File**

Attribute name	Data type	Description
DAUID2011	CHAR2(8)	Uniquely identifies a dissemination area (composed of the 2-digit province/territory code, the 2-digit census division code, and the 4-digit dissemination area code), 2011 Census.
DAUID2006	CHAR2(8)	Uniquely identifies a dissemination area (composed of the 2-digit province/territory code, the 2-digit census division code, and the 4-digit dissemination area code), 2006 Census.
DBUID2011	CHAR2(10)	Uniquely identifies a dissemination block (composed of the 2-digit province/territory code, the 2-digit census division code, the 4-digit dissemination area code, and the 2-digit dissemination block code), 2011 Census.
DA_rel_flag	CHAR2(1)	Relationship flag indicating if the 2011 dissemination area is equal to the 2006 dissemination area or has a one-to-many relationship, a many-to-one relationship or a many-to-many relationship. <ul style="list-style-type: none"> <li>• 1 – one 2011 dissemination area was one 2006 dissemination area</li> <li>• 2 – one 2011 dissemination area was many 2006 dissemination areas</li> <li>• 3 – many 2011 dissemination areas were one 2006 dissemination area</li> <li>• 4 – many 2011 dissemination areas were many 2006 dissemination areas</li> </ul>

**Table 4.2 Record layout — Dissemination Block Correspondence File**

Attribute name	Data type	Description
DBUID2011	CHAR2(10)	Uniquely identifies a dissemination block (composed of the 2-digit province/territory code, the 2-digit census division code, the 4-digit dissemination area code, and the 2-digit dissemination block code), 2011 Census.
DBUID2006	CHAR2(10)	Uniquely identifies a dissemination block (composed of the 2-digit province/territory code, the 2-digit census division code, the 4-digit dissemination area code, and the 2-digit dissemination block code), 2006 Census.
DB_rel_flag	CHAR2(1)	Relationship flag indicating if the 2011 dissemination block is equal to the 2006 dissemination block or has a one-to-many relationship, a many-to-one relationship or a many-to-many relationship. <ul style="list-style-type: none"> <li>• 1 – one 2011 dissemination block was one 2006 dissemination block</li> <li>• 2 – one 2011 dissemination block was many 2006 dissemination blocks</li> <li>• 3 – many 2011 dissemination blocks were one 2006 dissemination block</li> <li>• 4 – many 2011 dissemination blocks were many 2006 dissemination blocks</li> </ul>

**Table 4.3 Record layout — Dissemination Area and Land Area Correspondence File**

Attribute name	Data type	Description
DAUID2011	CHAR2(8)	Uniquely identifies a dissemination area (composed of the 2-digit province/territory code, the 2-digit census division code, and the 4-digit dissemination area code), 2011 Census.
DAUID2006	CHAR2(8)	Uniquely identifies a dissemination area (composed of the 2-digit province/territory code, the 2-digit census division code, and the 4-digit dissemination area code), 2006 Census.
DA_rel_flag	CHAR2(1)	Relationship flag indicating if the 2011 dissemination area is equal to the 2006 dissemination area or has a one-to-many relationship, a many-to-one relationship or a many-to-many relationship. <ul style="list-style-type: none"> <li>• 1 – one 2011 dissemination area was one 2006 dissemination area</li> <li>• 2 – one 2011 dissemination area was many 2006 dissemination areas</li> <li>• 3 – many 2011 dissemination areas were one 2006 dissemination area</li> <li>• 4 – many 2011 dissemination areas were many 2006 dissemination areas</li> </ul>
DA_area_percentage	NUMBER(6,2)	Percentage of the 2011 dissemination area's land area within the extent of the 2006 dissemination area

**File specifications**

Not applicable

**Software formats**

Not applicable

**System requirements**

Not applicable

**Installation instructions**

Not applicable

**Geographic representation**

Not applicable

**File naming convention**

The 2011 Census Correspondence Files follow a naming convention. The file names represent: Census year\_catalogue number\_english geographic area acronym\_french geographic acronym.

## 5. Data quality

### Lineage

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

### Codes and unique identifiers

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

In the correspondence files, the unique identifier (UID) is a concatenation of geographic codes that uniquely identify standard geographic areas in Canada. For example, each dissemination area (DA) is assigned a four-digit code that is unique within a census division (CD). In order to uniquely identify each DA in Canada, the four-digit DA code must be preceded by the two-digit province code (PR) and the two-digit CD code. This concatenated code (PR + CD + DA) is called the DAUID.

The unique identifier is established by Statistics Canada.

### Positional accuracy

Not applicable

### Attribute accuracy

Not applicable

### Logical consistency

Logical consistency describes the fidelity of relationships encoded in the data structure of the digital spatial data. Statistics Canada's Spatial Data Infrastructure keeps track of the correspondence between the previous and the current censuses for standard geographic areas.

### Internal consistency

Consistency between the data at the various geographic levels was verified. These included checks to ensure all the 2011 dissemination blocks or 2011 dissemination areas are included in the correspondence files. All geographic areas have been verified to ensure that they have a unique identifier that is valid for the 2011 Census. Also, all 2011 dissemination area land area is equal to 100% of their 2006 dissemination area components.

### 2011 Census land area

Land area data for standard geographic areas reflect the boundaries in effect on January 1, 2011 (the geographic reference date for the 2011 Census of Canada).

The data are derived from the Spatial Data Infrastructure (SDI), including selected water polygon layers. The Lambert conformal conic projection is transformed to the Albers equal-area conic projection, since the property of equal area is indispensable for calculating land area. The same projection parameters (two standard parallels, central meridian and latitude of projection origin) are used for each province or territory.

Land area is calculated using ArcGIS® software. There is a two-stage aggregation procedure. First, the data are calculated and stored in square kilometres at the smallest geographic level available for internal use only, the basic block (BB). Secondly, the BB data are individually aggregated to the DA geographic level to calculate the percentage of the 2011 DAs within the extent of the 2006 DA.

Users should note that even when the boundaries of standard geographic areas did not change between the 2006 and 2011 censuses, the land areas may differ due to geometry shifts. The shifts are caused by a change in the underlying database architecture and by improvements in the absolute positional accuracy of some of the roads.

## **Consistency with other products**

The unique identifiers (UID) used in the correspondence files are the same as those used in other geography products and represent the same geographic areas.

## **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.

The 2011 Census Correspondence Files contain the complete set of dissemination blocks or dissemination areas.

Appendix C indicates the number of geographic units by province and territory. The 2011 Census Correspondence Files have been verified to contain the correct number of geographic areas.

## Appendix A Glossary

### **Adjusted counts**

'Adjusted counts' refer to previous census population and dwelling counts that were adjusted (i.e., recompiled) 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.

### **Cartographic boundary files**

Cartographic boundary files (CBFs) contain the boundaries of standard geographic areas together with the shoreline around Canada. Selected inland lakes and rivers are available as a supplementary layer.

### **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 that are outside CMAs and CAs within provinces 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. The CSDs in the territories but outside CAs are assigned a separate category.

Census subdivisions (CSDs) 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 that are outside CAs in the territories are assigned 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 of 2,500 to 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 (Universal Transverse Mercator) using linear units such as metres.

Cartographic boundary files, digital boundary files, representative points and road network files are disseminated in latitude/longitude coordinates.

**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.

### **Digital boundary files**

Digital boundary files (DBFs) portray the boundaries used for 2011 Census collection and, therefore, often extend as straight lines into bodies of water.

### **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 their 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 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 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.

### **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' provides name and location information on local place names. It also includes selected records of active and retired geographic areas as well as names from the Canadian Geographic Names Database.

'Place name' refers to the set of names that includes 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 or more persons 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.

**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 and place of work data are linked to block-face representative points when the street and address information is available; otherwise, they are linked to dissemination block (DB) representative points. In some cases, postal codes 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.

**Road network file**

The road network file (RNF) contains roads, road names, types, directions, address ranges and road ranks for the entire country. Address ranges are dwelling-based.

**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 the 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.

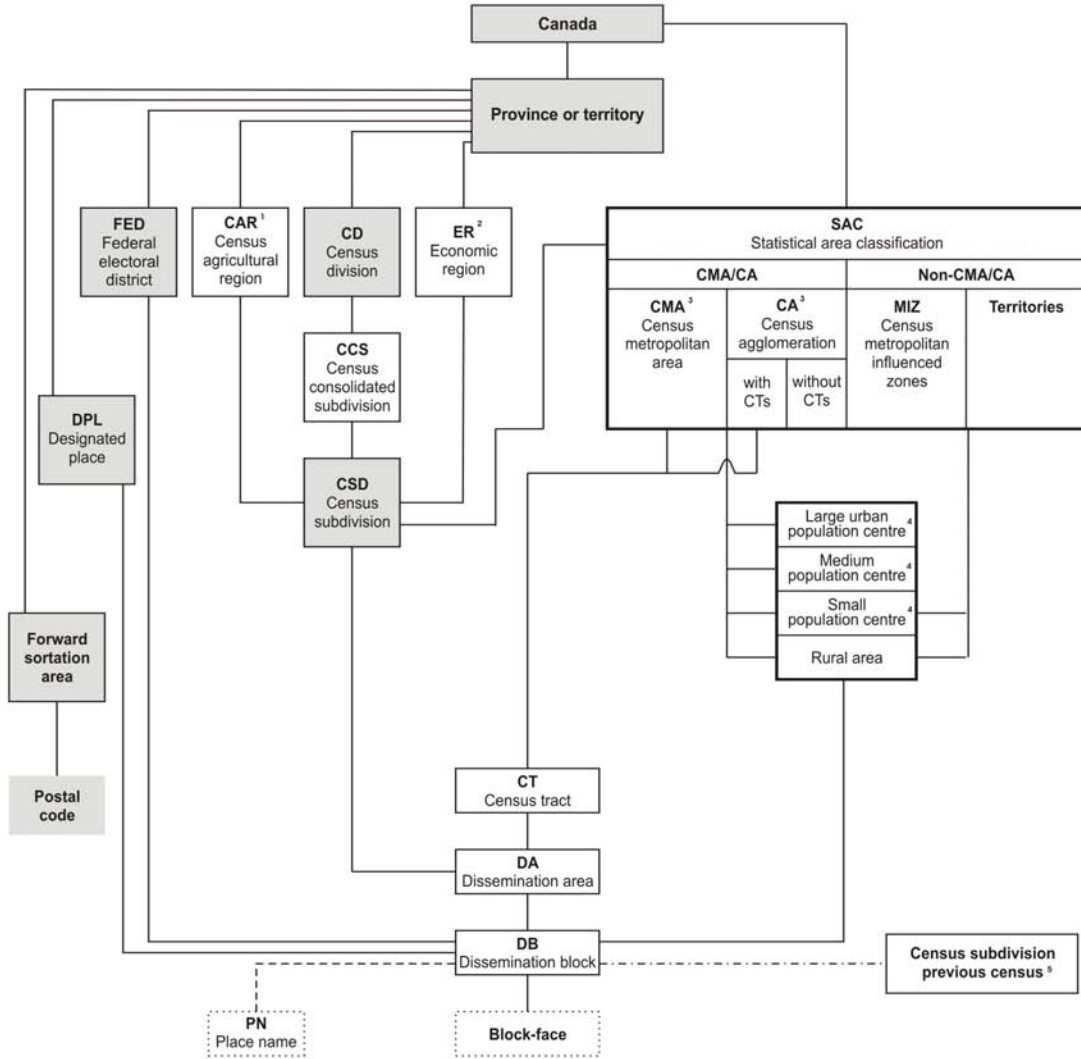
The SAC provides unique numeric identification (codes) for these hierarchically-related geographic areas. It was established for the purpose of reporting statistics.

### **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. Census agricultural regions in Saskatchewan are composed of census consolidated subdivisions.
2. Economic regions are composed of complete census divisions except for one CD in Ontario.
3. One CMA and three CAs cross provincial boundaries.
4. Five population centres (POPCTRs) cross provincial boundaries.
5. A best fit linkage is created between the previous census CSDs and the current census dissemination blocks to facilitate historical data retrieval.

- 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 (January 2, 2006 to January 1, 2011)	221	...	3	0	1	6	13	13	13	26	19	126	0	1	0
CSD incorporations (January 2, 2006 to January 1, 2011)	...	56	2	0	0	3	4	2	3	1	1	33	2	5	0
Census metropolitan area	33	33	1	0	1	2	6 <sup>1</sup>	15 <sup>1</sup>	1	2	2	4	0	0	0
Census agglomeration (CA)	111	114	3	2	4	5 <sup>1</sup>	25 <sup>1</sup>	28 <sup>1</sup>	4	7 <sup>1</sup>	16 <sup>1</sup>	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 <sup>1</sup>	22 <sup>1</sup>	24 <sup>1</sup>	4	7 <sup>1</sup>	13 <sup>1</sup>	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
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	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

1. Census metropolitan areas and census agglomerations 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	Canton 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	...	...	...	...	...	...	...	...	...
RDA	Regional district electoral area	158	...	...	...	...	...	...	...	...	...	158	...	...	...
RG	Region	1	1	...	...	...	...	...	...	...	...	...	...	...	...

**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.
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.



## Appendix E Statistics Canada Open Licence Agreement

This agreement is between Her Majesty the Queen in Right of Canada, as represented by the Minister for Statistics Canada (“Statistics Canada”) and you (an individual or a legal entity that you are authorized to represent) (“you”).

The following are terms governing your use of the Information. Your use of any Information indicates your understanding and agreement to be bound by these terms. If you do not agree to these terms, you may not use the Information.

Statistics Canada may modify this agreement at any time, and such modifications shall be effective immediately upon posting of the modified agreement on the Statistics Canada website. Your use of the Information will be governed by the terms of the agreement in force as of the date and time you accessed the Information.

### Definitions

“Information” means any data files, data bases, tables, graphs, maps and text for which Statistics Canada is the owner or a licensee of all intellectual property rights and made available to you in accordance with this agreement, at cost or no cost, either on the Statistics Canada website or by other means as a result of a contract for goods or services.

“Value-added Products” means any products you have produced by adapting or incorporating the Information, in whole or in part, in accordance with this agreement.

### Licence Grant

Subject to this agreement, Statistics Canada grants you a worldwide, royalty-free, non-exclusive licence to:

- use, reproduce, publish, freely distribute, or sell the Information;
- use, reproduce, publish, freely distribute, or sell Value-added Products; and,
- sublicense any or all such rights, under terms consistent with this agreement.

In doing any of the above, you shall:

- reproduce the Information accurately;
- not use the Information in a way that suggests that Statistics Canada endorses you or your use of the Information;
- not misrepresent the Information or its source;
- use the Information in a manner that does not breach or infringe any applicable laws;
- not merge or link the Information with any other databases for the purpose of attempting to identify an individual person, business or organization; and
- not present the Information in such a manner that gives the appearance that you may have received, or had access to, information held by Statistics Canada about any identifiable individual person, business or organization.

### Intellectual Property Rights

Intellectual Property Rights, being any and all intellectual property rights recognized by the law, including but not limited to, intellectual property rights protected through legislation, in Value-added Products, shall vest in you, in such person as you shall decide or as determined by law.

Intellectual Property Rights that Statistics Canada may have in the Information shall remain the property of Statistics Canada. Intellectual Property Rights that third parties may have in the Information shall remain their property.

### **Acknowledgment of Source**

(a) You shall include and maintain the following notice on all licensed rights of the Information:

*Source: Statistics Canada, name of product, reference date. Reproduced and distributed on an "as is" basis with the permission of Statistics Canada.*

(b) Where any Information is contained within a Value-added Product, you shall include on such Value-added Product the following notice:

*Adapted from Statistics Canada, name of product, reference date. This does not constitute an endorsement by Statistics Canada of this product.*

or any other notice approved in advance in writing by the Statistics Canada.

### **Advertising and Publicity**

You shall not include on any reproduction of the Information or any material relating to your Value-added Product, or elsewhere:

(a) the name, crest, logos or other insignia or domain names of Statistics Canada or the official symbols of the Government of Canada, including the Canada wordmark, the Coat of Arms of Canada, and the flag symbol, without written authorization from the Treasury Board Secretariat. Request for authorization from the Treasury Board Secretariat may be addressed to:

information@fip-pcim.gc.ca  
Federal Identity Program  
Treasury Board of Canada Secretariat  
300 Laurier Avenue West  
Ottawa, Canada K1A 0R5

(b) any annotation that may be interpreted as an endorsement by the Statistics Canada of the Value-added Product or that would imply that you have an exclusive distribution arrangement for any or all of the Information or that you have access to any confidential information or information not available to others.

### **No Warranty and no Liability**

The Information is licensed 'as is', and Statistics Canada makes no representations or warranties whatsoever with respect to the Information, whether express or implied, in relation to the Information and expressly disclaims any implied warranty of merchantability or fitness for a particular purpose of the Information.

Statistics Canada or any of its Ministers, officials, servants, employees, agents, successors and assigns shall not be liable for any errors or omissions in the Information and shall not, under any circumstances, be liable for any direct, indirect, special, incidental, consequential, or other loss, injury or damage, however caused, that you may suffer at any time by reason of your possession, access to or use of the Information or arising out of the exercise of your rights or the fulfilment of your obligations under this agreement.

### **Term**

This agreement is effective as of the date and time you access the Information and shall terminate automatically if you breach any of the terms of this agreement.

Notwithstanding termination of this agreement:

1. you may continue to distribute Value-added Products for the purpose of completing orders made before the termination of this agreement provided you comply with the requirements set out in the Acknowledgment of Source clause; and
2. individuals or entities who have received Value-added Products or reproductions of the Information from you pursuant to this agreement will not have their licences terminated provided they remain in full compliance with those licences.

### **Survival**

All obligations which expressly or by their nature survive termination of this agreement shall continue in full force and effect. For greater clarity, and without limiting the generality of the foregoing, the following provisions survive expiration or termination of this agreement: Acknowledgment of Source, and No warranty and no Liability.

### **Applicable Law**

This agreement shall be governed and construed in accordance with the laws of the province of Ontario and the laws of Canada applicable therein. The parties hereby attorn to the exclusive jurisdiction of the Federal Court of Canada.

© Statistics Canada, 2011