Catalogue no. 92-156-G

# **Correspondence Files, Reference Guide**

Census year 2011





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# Correspondence Files, Reference Guide

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#### 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).

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## 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.

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## 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%

<sup>1.</sup> 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.  • 1 – one 2011 dissemination area was one 2006 dissemination area  • 2 – one 2011 dissemination area was many 2006 dissemination areas  • 3 – many 2011 dissemination areas were one 2006 dissemination area  • 4 – many 2011 dissemination areas were many 2006 dissemination areas

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.  • 1 – one 2011 dissemination block was one 2006 dissemination block  • 2 – one 2011 dissemination block was many 2006 dissemination blocks  • 3 – many 2011 dissemination blocks were one 2006 dissemination blocks  • 4 – many 2011 dissemination blocks were many 2006 dissemination blocks

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.  • 1 – one 2011 dissemination area was one 2006 dissemination area  • 2 – one 2011 dissemination area was many 2006 dissemination areas  • 3 – many 2011 dissemination areas were one 2006 dissemination area  • 4 – many 2011 dissemination areas were many 2006 dissemination areas
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 **m**etropolitan **i**nfluenced **z**one (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 threedimensional 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.

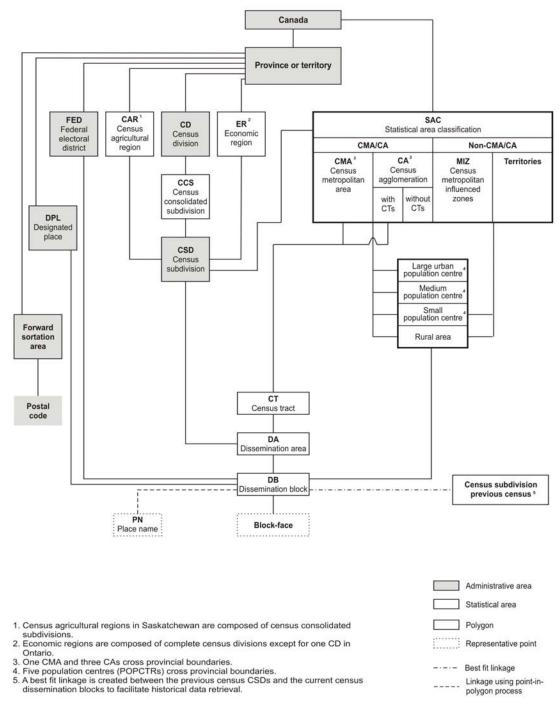
The SAC provides unique numeric identification (codes) for these hierarchically-related geographic areas. It was established for the purpose of reporting statistics.

#### 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



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	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.
unit Federal	308	308	7	4	11	10	75	106	14	14	28	36	1	1	1
electoral district (2003 Representation															
Order)															
Economic region	76	76	4	1	5	5	17	11	8	6	8	8	1	1	1
Census	82	82	3	3	5	4	14	5	12	20	8	8	0	0	0
agricultural region															
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	5,418	5,253	376	113	99	273	1,285	574	287	959	435	743	37	41	31
(CSD) CSD dissolutions	221		3	0	1	6	13	13	13	26	19	126	0	1	0
(January 2, 2006 to January 1,															
2011) CSD		56	2	0	0	3	4	2	3	1	1	33	2	5	0
incorporations (January 2, 2006 to January 1,		00	2	J	· ·	o o	·		0		·	50	2	ŭ	v
2011) Census	33	33	1	0	1	2	6 <sup>1</sup>	15 <sup>1</sup>	1	2	2	4	0	0	0
metropolitan area															
Census agglomeration	111	114	3	2	4	51	251	281	4	71	16¹	21	1	1	0
(CA) 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	41	221	241	4	71	13¹	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 applicab															

<sup>...</sup> not applicable

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

<sup>1.</sup> Census metropolitan areas and census agglomerations crossing provincial boundaries are counted in both provinces, and, therefore, do not add up to the national total.

## 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
С	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											
СТ	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											
М	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					
Р	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				
Т	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.

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