



Boundary Files, Reference Guide

Census year 2006 Third edition





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Census year 2006 Third edition

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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?

- The 2006 Boundary Files for census subdivisions and other high-level geographies are available free of charge.
- All boundary files are available for download from the Statistics Canada website.
- 2006 Standard Geographical Classification, Volume II: Reference Maps are available free of charge from the Statistics Canada website as a complementary product to the 2006 Boundary Files.
- Digital boundary files are reinstated for the 2006 Census.
- A 2006 Dissemination Block Cartographic Boundary File is available.
- The 2006 Census Metropolitan Area / Census Agglomeration Boundary Files now include census metropolitan area / census agglomeration parts where limits cross provincial boundaries.
- The Designated Place Parts Boundary File showing census subdivision components is no longer available.
- The hydrographic files contain improved detail including water feature names and types, and scale dependent ranking.
- All high-level geographic attributes are available in the Census Subdivision Boundary File
- Changes were made to the census subdivision names and types to accommodate new bilingual names. To date, there are six new bilingual census subdivision names:
 Beaubassin East / Beaubassin-est (N.B.), Grand Falls / Grand-Sault (N.B.), French River / Rivière des Français (Ont.), Greater Sudbury / Grand Sudbury (Ont.), The Nation / La Nation (Ont.) and West Nipissing / Nipissing Ouest (Ont.).
- The Dissemination Block Boundary Files contain co-ordinates for dissemination block representative points. These representative points are a single x,y co-ordinate that represents each dissemination block. The representative points are in latitude and longitude co-ordinates.

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Unrestricted use licence agreement for Statistics Canada's free Boundary Files for Province/Territory, Economic Region, Census Division, Census Metropolitan Area/Census Agglomeration, Census Consolidated Subdivision, and Census Subdivision, 2006 Census50
End-use licence agreement for Statistics Canada's Boundary Files for Census Tract, Dissemination Area, Dissemination Block, Federal Electoral District, Urban Area and Designated Place, 2006 Census

1. About this guide

This reference guide is intended for users of the 2006 Boundary Files. The guide provides an overview of the files, the general methodology used to create them, and important technical information for users.

Technical specifications in Section 5 include system requirements, installation instructions, record layouts, and item descriptions.

Geographic terms and concepts found throughout the text are described in Appendix A: Glossary. More details can be found in the *2006 Census Dictionary* (Catalogue no. 92-566-XWE, available February 2007). Supplementary information is provided in the appendices.

This reference guide does not provide details on specific software packages that are available for use with the 2006 Boundary Files. Users are advised to contact the appropriate software vendor for information.

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2. Overview

2006 Boundary Files

The 2006 Boundary Files are a series of products that depict boundaries of standard geographic units. In this reference guide, the term 'standard geographic units' is used to refer to the geographical levels defined in the *Standard Geographical Classification*, *Volume I* and geographical levels established primarily for the purpose of collecting and disseminating census data. A diagram illustrating the hierarchy of standard geographic units is included in Appendix B of this guide.

The 2006 Boundary Files are available for download in two types: cartographic and digital. See Figure 2.1.

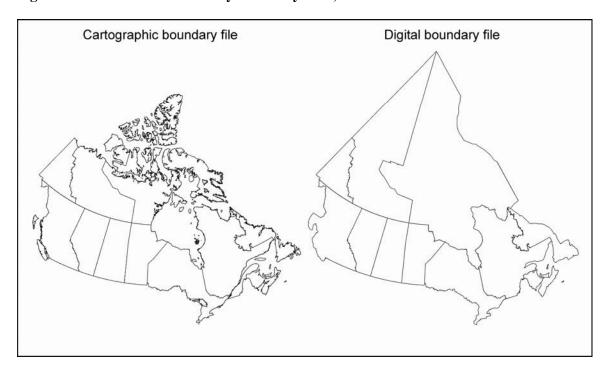


Figure 2.1 Province and Territory Boundary Files, 2006 Census

The 2006 Boundary Files provide a framework for mapping and spatial analysis. Digital files depict the full extent of the geographical areas, including the coastal water area. Cartographic files depict the geographical areas using only the major land mass of Canada and its coastal islands. The files are available in three formats: ArcInfo® (.shp), Geography Markup Language (.gml) and MapInfo® (.tab).

Separate files for lakes, some rivers and some estuaries are also available. These 'water' layers can be used for additional reference purposes when mapping or displaying the boundaries in either the digital or cartographic boundary files.

Digital and cartographic boundary files are available for the following levels of geography:

- provinces and territories
- census divisions
- economic regions
- census metropolitan areas and census agglomerations
- census consolidated subdivisions
- census subdivisions
- federal electoral districts (2003 Representation Order)
- census tracts
- dissemination areas
- dissemination blocks
- designated places
- urban areas
- forward sortation areas available fall 2007

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 geographic area boundaries in digital and cartographic boundary files is January 1, 2006.

3. How to use this product

Purpose of the product

The 2006 Digital Boundary Files portray the boundaries used for the 2006 Census collection and dissemination activities and as such often extend as straight lines into bodies of water.

The 2006 Cartographic Boundary Files support the spatial analysis and thematic mapping of data from the 2006 Census where displaying the main landmass of Canada is preferred. They can also be used with Census of Agriculture or other Statistics Canada data for data analysis and thematic mapping.

With the appropriate computer software, the boundary files provide the framework for thematic mapping to support applications such as: land use and demographic studies, or social, economic and market research. Geographic identifiers permit linkage of statistical data to geographic areas depicted in the boundary files. Boundary files can also be used to create new geographic areas by aggregating standard geographic areas and for other data manipulations available with the user's software. The boundary files are positionally consistent with the 2006 Road Network File, which provides additional geographic context for mapping applications.

The cartographic boundary files were created for thematic mapping – particularly choropleth mapping of census data. The shorelines were integrated with the boundaries to enable users to easily shade the land polygons. Supplementary hydrography is also available to support the mapping of inland lakes, oceans and land outside the landmass of Canada. The cartographic boundary files include the shoreline around Canada and the shoreline of larger inland water bodies within Canada (e.g., Great Lakes).

Using 2006 Boundary Files with other boundary files

When considering using 2006 Boundary Files, one should be aware of the compatibility of these files with other similar files. Other boundary files are available for download on the Internet from other websites; however, they may not be positionally compatible with Statistics Canada files.

Cartographic boundary files are recommended for thematic mapping and visualisation of census data at the more detailed levels of geography. In deciding which set of boundary files to use, one should consider what other geospatial data will be used in conjunction with the boundary files.

Limitations

The positional accuracy of the 2006 Boundary Files does not support cadastral, surveying, digitizing or engineering applications.

The data used to create the products are based on source data that had a wide range of scales. Digital and cartographic boundary files will not be precise if plotted at a larger scale than the scale of the source material used in its creation. The maps should not be used for digitizing purposes or to determine the precise location of boundaries. They are not intended to serve as a detailed legal or cadastral representation of the geographic areas.

Comparison with other products

- Any 2006 Boundary File is compatible with other 2006 Census Boundary File products.
- The 2006 Boundary Files are not compatible with the 2001 Census Boundary File products.

4. Data quality

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.

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.

The geographic area boundaries, names, codes, and the relationships among the various geographic levels are found on Statistics Canada's Spatial Data Infrastructure. These data for administrative areas are updated using information from provincial and territorial sources. These data for statistical areas are updated using the results of the previous census and input from users.

Creation of the 2006 Digital Boundary Files

The Spatial Data Infrastructure (SDI) is the source for all 2006 Digital Boundary File products. Primary data manipulation of the product layers included preserving the geographic hierarchy of attributes inherent within a geography. This data manipulation included copying source data to a production environment and the joining of hierarchical geographic attributes. The final data treatment was an output of various file formats supported by Geographic Information System (GIS) software.

Creation of the 2006 Cartographic Boundary Files

The creation of the 2006 Cartographic Boundary File used the 2006 Digital Boundary Files and a set of hydrographic features from the National Geographic Database. The hydrographic features used included coastal features (e.g., oceans, bays) and the Great Lakes, and the St. Lawrence River. These data were used to remove from the digital boundary files that portion of the geographical area that is within these major coastal water features.

Additional formatting

The files were transformed from Lambert conformal conic projection into latitude / longitude coordinates. Finally, the files were verified, translated into French and English versions and appropriately labelled.

The files were converted into three output formats (ArcInfo[®] [.shp], Geography Markup Language [.gml] and MapInfo[®] [.tab]).

Creation of the coastal layer

The coastal layer was created by selecting water features exterior to Canada's land mass from the National Geographic Database's hydrographic reference layers. These reference data were sourced from the National Topographic Data Base (1:50,000 and the 1:250,000 maps) and the Digital Chart of the World. This included polygon features forming the Pacific, Atlantic and Arctic oceans, as well as the Beaufort and Labrador seas and all related channels, straits, passages, inlets and bays including Hudson Bay and James Bay. In addition, features forming the Great Lakes, Lake of the Woods and the St. Lawrence Seaway were also included.

The coastal layer was then generalized by removing all islands smaller than 100,000 square metres except when the islands accounted for the only land area for geographic areas or when they were intersected by road arcs found on the road network file.

Creation of the inland water layer

The inland water layer was created by selecting water features from the National Geographic Database's hydrographic reference layers. These reference data were sourced from the National Topographic Data Base (1:50,000 and the 1:250,000 maps) and the Digital Chart of the World. Each feature was assigned a rank based on its size and/or cultural importance. The largest and most important features have lower rank values. These ranks can be used to select and format features for map display at different scales.

Positional accuracy

Positional accuracy refers to the absolute and relative accuracy of the positions of geographic features. Absolute accuracy is the closeness of the coordinate values in a dataset to values accepted as or being true. Relative accuracy is the closeness of the relative positions of features to their respective relative positions accepted as or being true. Descriptions of positional accuracy include the quality of the final file or product after all transformations.

The boundaries are derived from the Spatial Data Infrastructure. The data in the Spatial Data Infrastructure are stored in double precision. This precision allows features that are next to each other on the ground to be placed in the correct position on the map, relative to each other, without overlap. However, the absolute positional accuracy of the features in the database varies depending on the source of the features.

The Spatial Data Infrastructure is not Global Positioning Systems (GPS)-compliant. However, every possible attempt is made to ensure that the geographic area boundaries maintained in the Spatial Data Infrastructure respect the limits of the administrative entities that they represent (e.g., census division and census subdivision) or on which they are based (e.g., census metropolitan area or census agglomeration). The positional accuracy of these limits is dependent upon source materials used by Statistics Canada to identify the location of limits. In addition, due to the importance placed on relative positional accuracy, the positional accuracy of other geographic data (e.g., road network data and hydrographic data) that are stored within the Spatial Data Infrastructure is considered when positioning the limits of the geographic areas.

Attribute accuracy

Attribute accuracy refers to the accuracy of the quantitative and qualitative information attached to each feature (such as population for an urban area, street name, census subdivision name and code).

As noted under Lineage, the attributes (names, types and codes) for all geographic areas displayed on the maps are sourced from the Spatial Data Infrastructure. The names and types for administrative geographic areas have been updated from the 2001 Census using source materials from provincial and territorial authorities.

The attribute data associated with the polygons in the boundary files were independently verified against the data in the Spatial Data Infrastructure and found to be accurate.

Logical consistency

Logical consistency describes the fidelity of relationships encoded in the data structure of the digital spatial data.

In each boundary file, all geographic areas have been verified to have a unique identifier that is valid for the 2006 Census.

Boundaries found in this file are consistent with those found in other spatial products produced as part of the suite of 2006 Census products.

The hydrographic data files were specially created for the boundary files to enable thematic mapping at local and regional scales.

The land area for geographic areas present in GeoSuite may not be consistent with that computed from the cartographic boundary files. This is because the water features used in the creation of the cartographic boundary files are based on a set of hydrographic features that was created for thematic mapping.

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.

Each boundary file contains the complete set of geographic areas for that level of the geographic hierarchy.

It is important to note that in both digital boundary files and cartographic boundary files, a geographic area may be depicted by more than one polygon. In the digital boundary files there are some geographic areas that have two or more parts. This is particularly the case for some census subdivisions. In cartographic boundary files, this is due to having removed the coastal water area from the digital boundary files, thus creating several polygons for one geographic area. In the cartographic boundary files this impacts only on geographic areas that are situated on the coastal areas.

5. Technical specifications

Software formats

Boundary Files for the 2006 Census are available for download from the Statistics Canada website in the following formats:

• ArcInfo® format version 9.0 File extension: .shp

Geography Markup Language version 2.1.2
 File extension: .gml

• MapInfo® format version 8.0 File extension: .tab

Installation instructions

The ArcInfo®, Geography Markup Language and MapInfo® files are compressed into WinZip® files (file extension .zip).

An additional template (.tem) file is included with the Geography Markup Language files for use with the Java Unified Mapping Platform (JUMP) free GIS data viewer.

Some of the 2006 Boundary Files contain attributes with accented characters. These characters can be seen in UNIX and Windows® versions of ArcInfo® and MapInfo®. They were tested on desktop versions of ArcGIS® 9.0 and MapInfo® 7.0, 8.0 and 8.5.

Geographic representation

The 2006 Boundary Files are available on the Statistics Canada website in the following geographic representation:

Datum: NAD 83

Coordinates: Latitude / Longitude

To ensure calculations are relevant (e.g., to calculate land area), it is recommended that the latitude/longitude coordinates be transformed to an appropriate map projection.

Record layouts and item/field descriptions

1. Province and Territory

The Province and Territory Boundary Files contain the boundaries of all 10 provinces and three territories. 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.

Attribute name	Data type	Description
FID	Object ID (4)	Specific to ArcInfo [®] .
Shape	Geometry	Specific to ArcInfo®.
Digital Boundary Cartographic Boundary	MultiPolygon Property Type	Shape geometry; specific to Geography Markup Language.
PRUID	char (2)	Uniquely identifies a province or territory.
PRNAME	char (100)	The province or territory name.
PRENAME	char (100)	The province or territory name in English.
PRFNAME	char (100)	The province or territory name in French.
PREABBR	char (10)	The English abbreviation of the province or territory name.
PRFABBR	char (10)	The French abbreviation of the province or territory name.

2. Census division

The Census Division Boundary Files contain the boundaries of all 288 census divisions. A census division is an administrative area which is a component of the Standard Geographical Classification and is comprised of census subdivisions. Census division 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 or territorial level and the municipality (census subdivision).

Table 5.2.1 Record layouts — ArcInfo® (.shp), Geography Markup Language (.gml), and MapInfo® (.tab) files

Attribute name	Data type	Description
FID	Object ID (4)	Specific to ArcInfo®.
Shape	Geometry	Specific to ArcInfo®.
Digital		
Boundary	MultiPolygon	Shape geometry; specific to Geography
Cartographic	Property Type	Markup Language.
Boundary		
		Uniquely identifies a census division
CDUID	char (4)	(composed of the 2-digit province/territory
		code and the 2-digit census division code).
CDNAME	char (100)	The census division name.
CDTYPE	char (3)	The type of census division (see Domain).
PRUID	char (2)	Uniquely identifies a province or territory.
PRNAME	char (100)	The province or territory name.

Domain

The following is a list of the types associated with census divisions.

Census division / Division de recensement (CDR)

County / Comté (CT)

County (CTY)

District (DIS)

District municipality (DM)

Management board (MB)

Municipalité régionale de comté (MRC)

Regional district (RD)

Region (REG)

Regional municipality (RM)

Territoire équivalent (TÉ)

Territory / Territoire (TER)

United counties (UC)

3. Economic region

The Economic Region Boundary Files contain the boundaries of all 76 economic regions. An economic region is a grouping of complete census divisions (with one exception in Ontario) created as a standard geographic area for analysis of regional economic activity.

Table 5.3.1 Record layouts — $ArcInfo^{\otimes}$ (.shp), Geography Markup Language (.gml), and $MapInfo^{\otimes}$ (.tab) files

Attribute name	Data type	Description
FID	Object ID (4)	Specific to ArcInfo®.
Shape	Geometry	Specific to ArcInfo®.
Digital		
Boundary	MultiPolygon	Shape geometry; specific to Geography
Cartographic	Property Type	Markup Language.
Boundary		
		Uniquely identifies an economic region
ERUID	char (4)	(composed of the 2-digit province/territory
		code and the 2-digit economic region code).
ERNAME	char (100)	The economic region name.
PRUID	char (2)	Uniquely identifies a province or territory.
PRNAME	char (100)	The province or territory name.

4. Census metropolitan area/census agglomeration

The Census Metropolitan Area/Census Agglomeration Boundary Files contain the boundaries of all 33 census metropolitan areas and 111 census agglomerations. A census metropolitan area (CMA) or a census agglomeration (CA) is formed by one or more adjacent municipalities centred on a large urban area (known as the urban core). A census metropolitan area must have a total population of at least 100,000 of which 50,000 or more must live in the urban core. A census agglomeration must have an urban core population of at least 10,000. To be included in the census metropolitan area or census agglomeration, other adjacent municipalities must have a high degree of integration with the central urban area, as measured by commuting flows derived from census place of work data.

There are four census metropolitan areas/census agglomerations that cross provincial boundaries. In each of these cases, the census metropolitan area/census agglomeration is divided by the provincial limit and is represented as two polygon records in the boundary file.

The four census metropolitan areas and census agglomerations that cross provincial limits are:

- Census Agglomeration of Campbellton, CMAuid 330, crosses the New Brunswick/Quebec provincial boundary
- Census Agglomeration of Hawkesbury, CMAuid 502, crosses the Quebec/Ontario provincial boundary
- Census Metropolitan Area of Ottawa Gatineau, CMAuid 505, crosses the Quebec/Ontario provincial boundary
- Census Agglomeration of Lloydminster, CMAuid 840, crosses the Saskatchewan/Alberta provincial boundary

Table 5.4.1 Record layouts — ArcInfo® (.shp), Geography Markup Language (.gml), and MapInfo® (.tab) files

Attribute name	Data type	Description
FID	Object ID (4)	Specific to ArcInfo [®] .
Shape	Geometry	Specific to ArcInfo [®] .
Digital		
Boundary	MultiPolygon	Shape geometry; specific to Geography
Cartographic	Property Type	Markup Language.
Boundary		
		Uniquely identifies the provincial parts of a
CMAUID	char (5)	census metropolitan area or census
		agglomeration.
CMANAME	char (100)	The name of the census metropolitan area or
CMANAMIL	Chai (100)	census agglomeration.
		A one-character field identifying whether the
CMATYPE	char (1)	unit is a census metropolitan area or a census
		agglomeration (see Domain).
PRUID	char (2)	Uniquely identifies a province or territory.
PRNAME	char (100)	The province or territory name.

Domain

CMATYPE:

The types associated with the census metropolitan areas/census agglomerations are: census metropolitan area is a B, census agglomeration with no census tracts, D and census agglomeration with census tracts is K.

20

5. Census consolidated subdivision

The Census Consolidated Subdivision Boundary Files contain the boundaries of all 2,341 census consolidated subdivisions. A census consolidated subdivision is a statistical area comprised of an aggregation of adjacent census subdivisions which is used by the Census of Agriculture. Generally, the smaller more urban 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.

Table 5.5.1 Record layouts — $ArcInfo^{\otimes}$ (.shp), Geography Markup Language (.gml), and $MapInfo^{\otimes}$ (.tab) files

Attribute name	Data type	Description
FID	Object ID (4)	Specific to ArcInfo [®] .
Shape	Geometry	Specific to ArcInfo [®] .
Digital		
Boundary	MultiPolygon	Shape geometry; specific to Geography Markup
Cartographic	Property Type	Language.
Boundary		
CCSUID	char (7)	Uniquely identifies a census consolidated subdivision (composed of the 2-digit province/territory code and the 2-digit census division code and the 3 digit census consolidated subdivision code).
CCSNAME	char (100)	The name of the census consolidated subdivision.
PRUID	char (2)	Uniquely identifies a province or territory.
PRNAME	char (100)	The province or territory name.

6. Census subdivision

The Census Subdivision Boundary Files contain the boundaries of all 5,418 census subdivisions. A census subdivision is an administrative area which is a component of the Standard Geographical Classification. Census subdivision is the general term for municipalities, as determined by provincial and territorial legislation, or areas treated as municipal equivalents for statistical purposes, for example, Indian reserves, Indian settlements and unorganized territories.

Table 5.6.1 Record layouts — $ArcInfo^{\otimes}$ (.shp), Geography Markup Language (.gml), and $MapInfo^{\otimes}$ (.tab) files

Attribute name	Data type	Description
FID	Object ID (4)	Specific to ArcInfo [®] .
Shape	Geometry	Specific to ArcInfo [®] .
Digital Boundary Cartographic Boundary	MultiPolygon PropertyType	Shape geometry; specific to Geography Markup Language.
CSDUID	char (7)	Uniquely identifies a census subdivision (composed of 2-digit province/territory code, 2-digit census division code and 3-digit census subdivision code).
CSDNAME	char (100)	The name provided by federal or provincial/territorial authorities.
CSDTYPE	char (3)	Census subdivisions are classified into 55 types according to designations adopted by provincial/territorial or federal authorities.
PRUID	char (2)	Uniquely identifies a province or territory.
PRNAME	char (100)	The province or territory name.
CDUID	char (4)	Uniquely identifies a census division (composed of the 2-digit province/territory code and the 2-digit census division code).
CDNAME	char (100)	The census division name.
CDTYPE	char (3)	The type of census division (see Domain on page 17).
CMAUID	char (3)	The census metropolitan area/census agglomeration area code is a 3-digit code that uniquely identifies each census metropolitan area/census agglomeration area in Canada.
CMANAME	char (100)	The name of the census metropolitan area or census agglomeration.
SACTYPE	char (1)	The Statistical Area Classification groups census subdivisions according to whether they are a component of a census metropolitan area, a census agglomeration, or a census metropolitan area or a census agglomeration influenced zone (see Domain in this section).
ERUID	char (4)	Uniquely identifies an economic region (composed of the 2-digit province/territory code and the 2-digit economic region code).
ERNAME	char (100)	The economic region name.

Domain

SACTYPE:

The Statistical Area Classification groups census subdivisions according to whether they are a component of a census metropolitan area, a census agglomeration, a census metropolitan area and census agglomeration influenced zone (strong MIZ, moderate MIZ, weak MIZ or no MIZ), or the territories (Yukon Territory, Northwest Territories and Nunavut). The Statistical Area Classification is used for data dissemination purposes.

The values for Statistical Area Classification are:

- 1 Census subdivision within census metropolitan area
- 2 Census subdivision within census agglomeration with at least one census tract
- 3 Census subdivision within census agglomeration having no census tracts
- 4 Census subdivision outside of census metropolitan area/census agglomeration area having strong metropolitan influence
- 5 Census subdivision outside of census metropolitan area/census agglomeration area having moderate metropolitan influence
- 6 Census subdivision outside of census metropolitan area/census agglomeration area having weak metropolitan influence
- 7 Census subdivision outside of census metropolitan area/census agglomeration area having no metropolitan influence
- 8 Census subdivision within a territory

7. Federal electoral district

The Federal Electoral District Boundary Files portray the federal electoral district boundaries for which 2006 Census data are disseminated. A federal electoral district is an area represented by a member of the House of Commons. The federal electoral district boundaries used for the 2006 Census are based on the 2003 Representation Order. The files contain the boundaries for all 308 federal electoral districts which combined cover all of Canada.

Table 5.7.1 Record layouts – ArcInfo® (.shp), Geography Markup Language (.gml) and MapInfo® (.tab) files

Attribute name	Data type	Description
FID	Object ID (4)	Specific to ArcInfo [®] .
Shape	Geometry	Specific to ArcInfo®.
DigitalBoundary	MultiPolygon	Shape geometry; specific to Geography Markup
CartographicBoundary	PropertyType	Language.
		Uniquely identifies a federal electoral district
FEDUID	char (5)	(composed of the 2-digit province/territory code
		and the 3-digit federal electoral district code).
FEDNAME	char (100)	Federal electoral district name.
FEDENAME	char (100)	Federal electoral district name, in English.
FEDFNAME	char (100)	Federal electoral district name, in French.
PRUID	char (2)	Uniquely identifies a province or territory.

8. Census tract

The Census Tract Boundary Files portray the census tract boundaries for which 2006 Census data are disseminated. Census tracts are small, relatively stable geographic areas that usually have a population of 2,500 to 8,000. They are located in census metropolitan areas and in census agglomerations with an urban core population of 50,000 or more in the previous census. The files contain the boundaries of all 5,076 census tracts located within the 33 census metropolitan areas and 15 census agglomerations which are part of the Census Tract Program.

 $\begin{tabular}{ll} Table 5.8.1 & Record layouts-ArcInfo & (.shp), Geography Markup Language (.gml) and & MapInfo & (.tab) files \\ \end{tabular}$

Attribute name	Data type	Description
FID	Object ID (4)	Specific to ArcInfo [®] .
Shape	Geometry	Specific to ArcInfo [®] .
DigitalBoundary CartographicBoundary	MultiPolygon PropertyType	Shape geometry; specific to Geography Markup Language.
CTUID	char (10)	Uniquely identifies a census tract (composed of the 3-digit census metropolitan area/census agglomeration code followed by the 7-character CTNAME).
CMAUID	char (3)	Uniquely identifies a census metropolitan area or census agglomeration.
PRUID	char (2)	Uniquely identifies a province or territory.

9. Dissemination area

The Dissemination Area Boundary Files portray the dissemination area boundaries for which 2006 Census data are disseminated. A dissemination area is a small area composed of one or more neighbouring blocks and is the smallest standard geographic area for which all census data are disseminated. The digital boundary file contains the boundaries of the 54,626 dissemination areas which combined cover all of Canada. The cartographic boundary file contains the boundaries of 54,624 dissemination areas. Dissemination areas 59290104 and 59290108 are not included within the cartographic boundary file because they are located entirely within coastal waters, they are therefore automatically removed during the production of the cartographic boundary file.

Table 5.9.1 Record layouts – ArcInfo® (.shp), Geography Markup Language (.gml) and MapInfo® (.tab) files

Attribute name	Data type	Description
FID	Object ID (4)	Specific to ArcInfo [®] .
Shape	Geometry	Specific to ArcInfo [®] .
DigitalBoundary	MultiPolygon	Shape geometry; specific to Geography Markup
CartographicBoundary	PropertyType	Language.
DAUID	char (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).
CSDUID	char (7)	Uniquely identifies a census subdivision (composed of the 2-digit province/territory code, the 2-digit census division code and the 3-digit census subdivision code).
CCSUID	char (7)	Uniquely identifies a census consolidated subdivision (composed of the 2-digit province/territory code, the 2-digit census division code and the 3-digit census consolidated subdivision code).
CDUID	char (4)	Uniquely identifies a census division (composed of the 2-digit province/territory code and the 2-digit census division code).
ERUID	char (4)	Uniquely identifies an economic region (composed of the 2-digit province/territory code and the 2-digit economic region code).
PRUID	char (2)	Uniquely identifies a province or territory.
CTUID	char (10)	Uniquely identifies a census tract (composed of the 3-digit census metropolitan area/census agglomeration code followed by the 7-character CTNAME).
CMAUID	char (3)	Uniquely identifies a census metropolitan area or census agglomeration.

10. Dissemination block

The Dissemination Block Boundary Files portray the dissemination block boundaries for which 2006 Census data are disseminated. A dissemination block is an area bounded on all sides by roads and/or boundaries of standard geographic areas and is the smallest geographic area for which population and dwelling count data are disseminated. The digital boundary file contains the boundaries of all 478,831 dissemination blocks which combined cover all of Canada. The cartographic boundary file contains the boundaries of 478,780 dissemination blocks.

Attribute name Data type		Description		
FID	Object ID (4)	Specific to ArcInfo®.		
Shape	Geometry	Specific to ArcInfo [®] .		
DigitalBoundary CartographicBoundary	MultiPolygon PropertyType	Shape geometry; specific to Geography Markup Language.		
DBUID	char (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).		
RPLAT	num (9,6)	The latitude in decimal degrees of the dissemination block representative point.		
RPLONG	num (11,6)	The longitude in decimal degrees of the dissemination block representative point.		
DAUID	char (8)	Uniquely identifies a dissemination area (composed of the 2-digit province/territory cod the 2-digit census division code, and the 4-digit dissemination area code).		
CSDUID	char (7)	Uniquely identifies a census subdivision (composed of the 2-digit province/territory code the 2-digit census division code, and the 3-digit census subdivision code).		
CCSUID	char (7)	Uniquely identifies a census consolidated subdivision (composed of the 2-digit province/territory code, the 2-digit census division code and the 3-digit census consolidate subdivision code).		
CDUID	char (4)	Uniquely identifies a census division (composed of the 2-digit province/territory code and the 2-digit census division code).		
ERUID	char (4)	Uniquely identifies an economic region (composed of the 2-digit province/territory code and the 2-digit economic region code).		
PRUID	char (2)	Uniquely identifies a province or territory.		

 $\begin{array}{ll} Table \ 5.10.1 & Record \ layouts - ArcInfo^{\circledcirc} \ (.shp), Geography \ Markup \ Language \ (.gml) \ and \\ & MapInfo^{\circledcirc} \ (.tab) \ files \ (continued) \end{array}$

Attribute name	Data type Description	
CTUID	char (10)	Uniquely identifies a census tract (composed of the 3-digit census metropolitan area/census agglomeration code followed by the 7-character CTNAME).
CMAUID	char (3)	Uniquely identifies a census metropolitan area or census agglomeration.

The table below lists the 51 dissemination blocks which are not included within the cartographic boundary file. These dissemination blocks are located entirely within coastal waters and are therefore automatically removed during the production of the cartographic boundary file.

Table 5.10.2 Dissemination blocks which are not included within the Dissemination Block Cartographic Boundary File

1001050302	1008017007	1305015308	3551009002	5917064819
1001050401	1212011001	1314009312	3558038574	5917067709
1001052001	1212012209	1314009609	3558043301	5921026004
1001055609	1217034103	1315015803	5915356907	5925026810
1001072415	1301010302	1315015901	5915356908	5929010401
1002011705	1301010309	1315016605	5915356909	5929010801
1007048703	1302005612	1315029006	5915356910	5929016502
1007051410	1302006304	1315029104	5915356911	
1007051918	1305015304	2423006610	5915360205	
1007055003	1305015305	3501023505	5917047201	
1007055004	1305015307	3551007201	5917064208	

11. Urban area

The Urban Area Boundary Files portray the urban area boundaries for which 2006 Census data are disseminated. An urban area has a minimum population concentration of 1,000 persons and a population density of at least 400 persons per square kilometre, based on the current census population count. The files contain the boundaries of all 895 urban areas defined for the 2006 Census.

 $\begin{tabular}{ll} Table~5.11.1 & Record~layouts-ArcInfo^{@}~(.shp),~Geography~Markup~Language~(.gml)~and \\ & MapInfo^{@}~(.tab)~files \end{tabular}$

Attribute name	Data type	Description
FID	Object ID (4)	Specific to ArcInfo [®] .
Shape	Geometry	Specific to ArcInfo®.
DigitalBoundary	MultiPolygon	Shape geometry; specific to Geography Markup
CartographicBoundary	PropertyType	Language files.
UAPUID	char (6)	Uniquely identifies the provincial parts of each urban area (composed of the 2-digit province/territory code and the 4-digit urban area code).
UANAME	char (100)	Urban area name.
UATYPE	char (1)	Urban area type.
PRUID	char (2)	Uniquely identifies a province or territory.
PRNAME	char (100)	The province or territory name.

12. Designated place

The Designated Place Boundary Files portray the designated place boundaries for which 2006 Census data are disseminated. A designated place 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 an urban area. Designated places are created by provinces and territories, in cooperation with Statistics Canada, to provide data for sub-municipal areas.

The digital boundary file contains the boundaries of all 1,289 designated places which combined cover all of Canada. The cartographic boundary file contains the boundaries of 1,285 designated places. Designated places 350084 (Campbell part B, Ontario), 590239 (Saltspring Island Trust Area part F, British Columbia), 590240 (Saltspring Island Trust Area part G, British Columbia) and 590253 (Gambier Island Trust Area part E, British Columbia) are not included within the cartographic boundary file because they are located entirely within coastal waters, they are therefore automatically removed during the production of the cartographic boundary file.

Table 5.12.1 Record layouts – ArcInfo® (.shp), Geography Markup Language (.gml) and MapInfo® (.tab) files

Attribute name	Data type	Description
FID	Object ID (4)	Specific to ArcInfo®.
Shape	Geometry	Specific to ArcInfo®.
DigitalBoundary	MultiPolygon	Shape geometry; specific to Geography Markup
CartographicBoundary	PropertyType	Language.
DPLUID	char (6)	Uniquely identifies a designated place (composed of the 2-digit province/territory code and the 4-digit designated place code).
DPLNAME	char (100)	Designated place name.
DPLTYPE	char (3)	Designated place type.
CSDUID	char (7)	Uniquely identifies a census subdivision (composed of the 2-digit province/territory code, 2-digit census division code and the 3-digit census subdivision code).
CSDNAME	char (100)	The name provided by federal or provincial/territorial authorities.
CSDTYPE	char (3)	Census subdivisions are classified into 55 types according to designations adopted by provincial/territorial or federal authorities.
PRUID	char (2)	Uniquely identifies a province or territory.
PRNAME	char (100)	The province or territory name.

13. Supplementary hydrographic layers

The supplementary hydrographic layers are provided to allow for the mapping of inland water, oceans, Great Lakes, St. Lawrence River and land outside the Canadian land mass. The hydrographic layers were created to be used in conjunction with the boundary files. The record layout in Table 5.13.1 below is for interior water bodies (polygons), coastal water bodies (polygons) and interior rivers (lines).

Table 5.13.1 Record layouts — ArcInfo® (.shp), Geography Markup Language (.gml), and MapInfo® (.tab) files

Attribute name	Data type	Description
FID	Object ID (4)	Specific to ArcInfo [®] .
Shape	Geometry	Specific to ArcInfo [®] .
DigitalBoundary Cartographic Boundary	MultiPolygon PropertyType	Shape geometry; specific to Geography Markup language.
HYDROUID	double (11)	Uniquely identifies a water feature.
NAME	char (120)	Feature name
TYPE	char (6)	Feature type description
RANK	double (11)	Feature rank
PRUID	char (2)	Uniquely identifies a province or territory.

Table 5.13.2 Recommended ranks for scale dependent mapping

Interval (1:)	Rank	Number of polygons	Number of lines
10,000,000 plus	1	87	0
6,000,000 to 9,999,999	2	2,555	7,360
2,000,000 to 5,999,999	3	2,091	9,762
500,000 to 1,999,999	4	7,526	18,157
100,000 to 499,999	5	12,967	36,526
25,000 to 99,999	6	49,697	36,475

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 urban 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 large urban area (known as the urban core). A CMA must have a total population of at least 100,000 of which 50,000 or more must live in the urban core. A CA must have an urban 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 central urban area, as measured by commuting flows derived from census place of work data.

If the population of the urban 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 urban core falls below 50,000. The urban areas in the CMA or CA that are not contiguous to the urban core are called the urban fringe. Rural areas in the CMA or CA are called the rural fringe.

When a CA has an urban 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 urban core subsequently falls below 50,000. All CMAs are subdivided into census tracts.

Census metropolitan area and census agglomeration influenced zone

The census metropolitan area and census agglomeration influenced zone (MIZ) is a concept that geographically differentiates the area of Canada outside census metropolitan areas (CMAs) and census agglomerations (CAs). Census subdivisions outside CMAs and CAs are assigned to one of four categories according to the degree of influence (strong, moderate, weak or no influence) that the CMAs and/or CAs have on them.

Census subdivisions (CSDs) are assigned to a MIZ category based on the percentage of their resident employed labour force that has a place of work in the urban 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.

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. They are located in census metropolitan areas and in census agglomerations with an urban 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 urban 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) or planar (such as Universal Transverse Mercator).

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

Datum

A datum is a geodetic reference system that specifies the size and shape of the earth, and the base point from which the latitude and longitude of all other points on the earth's surface are referenced.

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 an urban area.

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 2006 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 2006 Census are based on the 2003 Representation Order.

Geocoding

Geocoding is the process of assigning geographic identifiers (codes) to map features and data records. The resulting geocodes permit data to be linked geographically.

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 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 2006 Census, the geographic reference date is January 1, 2006.

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.

Locality

'Locality' (LOC) refers to the historical place names of former census subdivisions (municipalities), former designated places and former urban areas, as well as to the names of other entities, such as neighbourhoods, post offices, communities and unincorporated places.

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.

The NGD was created in 1997 as a joint Statistics Canada/Elections Canada initiative to develop and maintain a national road network file serving the needs of both organizations. The active building of the NGD – that is, integrating the files from Statistics Canada, Elections Canada and Natural Resources Canada – occurred from 1998 to 2000. Thereafter, Statistics Canada and Elections Canada reconciled their digital boundary holdings to the new database's road network geometry so that operational products could be derived.

Since 2001, the focus of the NGD has been on intensive data quality improvements, especially regarding the quality and currency of its road network coverage. There has been considerable expansion of road names and civic addresses ranges, as well as the addition of hydrographic names. Priorities were determined by Statistics Canada and Elections Canada, enabling the NGD to meet the joint operational needs of both agencies in support of census and electoral activities.

Place name

'Place name' refers to the set of names that includes current census subdivisions (municipalities), current designated places and current urban areas, as well as the names of localities.

Population density

Population density is the number of persons per square kilometre.

Postal code

The postal code is a six-character code defined and maintained by Canada Post Corporation for the purpose of sorting and delivering mail.

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 three 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 codes 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 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, dissemination blocks, dissemination areas, census subdivisions, urban areas and designated places.

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 representative points when the data cannot be linked to DAs.

Road network file

The road network file (RNF) contains roads, road names, address ranges and road ranks for the entire country. Most commonly, address ranges are dwelling-based and are mainly available in the large urban centres of Canada.

Rural area

Rural areas include all territory lying outside urban areas. Taken together, urban and rural areas cover all of Canada.

Rural population includes all population living in the rural fringes 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), formerly known as the National Geographic Base (NGB), 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, dissemination areas and urban areas), and geocoding. The SDI is also the source for generating many geography products for the 2006 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) is Statistics Canada's official classification for three types of geographic areas: provinces and territories, census divisions (CDs) and census subdivisions (CSDs). The SGC provides unique numeric identification (codes) for these hierarchically related geographic areas.

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, a census **m**etropolitan area and census agglomeration **i**nfluenced **z**one (strong MIZ, moderate MIZ, weak MIZ or no MIZ), or the territories (Yukon Territory, Northwest Territories and Nunavut). The SAC is used for data dissemination purposes.

Thematic map

A thematic map shows the spatial distribution of one or more specific data themes for standard geographic areas. The map may be qualitative in nature (e.g., predominant farm types) or quantitative (e.g., percentage population change).

Urban area

An urban area has a minimum population concentration of 1,000 persons and a population density of at least 400 persons per square kilometre, based on the current census population count. All territory outside urban areas is classified as rural. Taken together, urban and rural areas cover all of Canada.

Urban population includes all population living in the urban cores, secondary urban cores and urban fringes of census metropolitan areas (CMAs) and census agglomerations (CAs), as well as the population living in urban areas outside CMAs and CAs.

Urban core, urban fringe and rural fringe

'Urban core, urban fringe and rural fringe' distinguish between central and peripheral urban and rural areas within a census metropolitan area (CMA) or census agglomeration (CA).

'Urban core' is a large urban area around which a CMA or a CA is delineated. The urban 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 urban core of a CA that has been merged with an adjacent CMA or larger CA is called the 'secondary urban core'.

'Urban fringe' includes all small urban areas within a CMA or CA that are not contiguous with the urban core of the CMA or CA.

'Rural fringe' is all territory within a CMA or CA not classified as an urban core or an urban fringe.

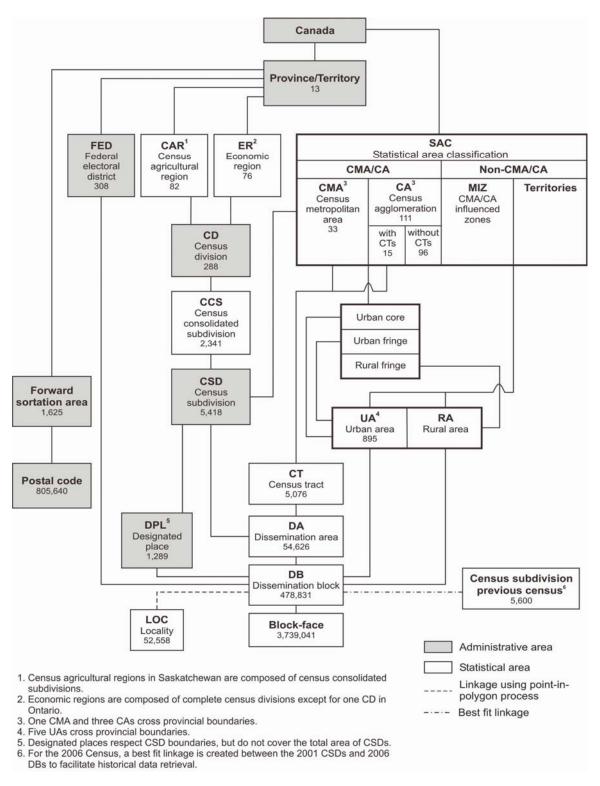
Urban population size group

The term 'urban population size group' refers to the classification used in standard tabulations where urban areas are distributed according to the following predetermined size groups, based on the current census population.

1,000	to	2,499
2,500	to	4,999
5,000	to	9,999
10,000	to	24,999
25,000	to	49,999
50,000	to	99,999
100,000	to	499,999
500,000	and	over

Tabulations are not limited to these predetermined population size groups; the census database has the capability of tabulating data according to any user-defined population size group.

Appendix B: Hierarchy of standard geographic units for dissemination, 2006 Census



Appendix C: Geographic units by province and territory, 2006 Census

Geographic unit	Canada 2001	Canada 2006	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)	3011	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	288	11	3	18	15	98	49	23	18	19	28	1	2	3
Census consolidated subdivision	2,446	2,341	89	68	43	151	1,008	316	127	300	77	156	1	2	3
Census subdivision	5,600	5,418	377	113	100	276	1,294	585	297	984	453	836	35	37	31
(CSD) CSD dissolutions (January 2, 2001 to January 1,	340		9	0	0	0	282	5	7	29	4	4	0	0	0
2006) CSD incorporations (January 2, 2001 to January 1, 2006)	::-	158	5	0	2	1	100	4	6	11	5	24	0	0	0
Designated place	1,261	1,289	182	0	49	167	83	88	58	159	262	240	1		0
Census metropolitan area	27	33	1	0	1	2	6 ²	15 ²	1	2	2	4	0	0	0
Census agglomeration (CA)	113	111	3	2	4	5 ²	26 ²	28 ²	3	72	12 ²	22	1	1	0
CA with census tracts	16	15	0	0	0	1	3	4	0	0	3	4	0	0	0
CA without census tracts	94	96	3	2	4	42	23 ²	24 ²	3	72	9 ²	18	1	1	0
Census tract	4,798	5,076	46	0	88	99	1,289	2,136	168	105	491	654	0	0	0
Urban area	913	895	32	7	36	32 ²	226 ²	260 ²	38 ²	58 ²	107 ²	95	1	3	5
Locality	52,291	52,558	2,445	964	3,924	3,450	12,617	10,905	2,349	3,898	3,472	7,708	363	173	290
Dissemination area	52,993	54,626	1,062	292	1,633	1,439	13,408	19,177	2,152	2,431	5,357	7,471	78	84	42
Dissemination block	478,707	478,831	8,199	3,251	14,656	14,864	108,751		30,421	51,729	65,071	52,808	1,261	967	609
Block-face	3,764,232	3,739,041	78,376	26,190	154,564	132,873	835,458	942,567	198,063	361,069	507,859	473,418	11,888	11,620	5,096
Forward sortation area	1,595	1,625	35	7	76	110	415	522	64	48	150	189	3		3
Postal code	758,658	805,640	10,378	3,157	25,313	57,355	202,972	269,676	23,943	21,541	76,924	112,904	942	506	29

^{...} not applicable

^{1.} Federal electoral districts (1996 Representation Order).

^{2.} Census metropolitan areas, census agglomerations and urban areas 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, 2006 Census

		Total	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nvt.
Ce	nsus subdivision type	5,418	377	113	100	276	1,294	585	297	984	453	836	35	37	31
С	City / Cité	7				3	·	4							
CC	Chartered														
,	community	3												3	
CÉ	Cité	1					1								
CG	Community														
CM	government	4												4	
	County (municipality)	28									28				
CN	Crown colony /														
	Colonie de la	1								_					
COM	couronne Community	1								1					
CT	Canton	33		33											
	(municipalité de)	50					50								
CU	Cantons unis														
	(municipalité de)	2					2								
CY	City	146	3	2		5		46	9	14	16	48	1	1	1
DM	District municipality	50										50			
HAM	Hamlet	35											2	9	24
ID	Improvement district	7									7				
IGD	Indian government district	2										2			
IM	Island municipality	1										1			
IRI	Indian reserve /											•			•••
	Réserve indienne	1,095	2	4	26	20	30	148	82	177	93	507	4	2	
LGD	Local government														
	district	2							2						
LOT	Township and royalty	67		67											
М	Municipality /														
	Municipalité	3						3							
MD	Municipal district	49			12						37				
MÉ	Municipalité	578					578								
MU	Municipality	52						52							
NH	Northern hamlet	9								9					
NL	Nisga'a land	1										1			
NO	Unorganized / Non organisé	133					97	17	10	2			2	2	3
NV	Northern village	13								13					
NVL	Nisga'a village	5										5			
Р	Parish / Paroisse	<u> </u>										<u> </u>	•••		
	(municipalité de)	152				152									
PE	Paroisse (municipalité de)	215					215								
RCR	Rural community /														
	Communauté rurale	1				1									

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RDA ((continued)												1		
RDA		Total	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nvt.
	Regional district electoral area	162				•••						162			
RG	Region	1	1												
RGM	Regional municipality	4			3						1				
RM	Rural municipality	414							118	296					
RV	Resort village	40								40					
SA	Special area	3									3				
SC	Subdivision of county municipality / Subdivision municipalité de comté	28			28										
SÉ	Settlement / Établissement	13											13		
S-É	Indian settlement / Établissement indien	28	1		1		6	5	4	1	4	3	5		:
SET	Settlement	14												11	3
SM	Specialized municipality	2									2				
SNO	Subdivision of unorganized / Subdivision non organisée	92	92		:						;			::	
SV	Summer village	51									51				
T	Town	751	279	7	31	15		88	52	147	110	15	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	210						210							
TV	Town / Ville	12				11		1							
V	Ville	220					220								
VC	Village cri	8					8								
VK	Village naskapi	1					1								
VL	Village	583				69	51	11	20	284	101	42	4	1	
VN	Village nordique	14					14								

42

... not applicable

Appendix E: Spatial file naming conventions

For the 2006 Census, spatial product file names for files disseminated to clients follow a spatial file naming convention. The geographic area and code, file type, geographic reference date, software type and language are embedded within the name. Standardizing the names of the files should facilitate the storage of compressed files, all having the extension .zip.

Each file name is 13 characters in length, which meets the requirements of ArcInfo®'s and MapInfo®'s limitations for file name sizes. All alphabetic characters are in lower case to maintain consistency.

First character: projection of file

- g if projection is Geographic (latitude/longitude)
- 1 if projection is Lambert conformal conic

Next three characters: primary geographic area of file

Table E.1 Spatial file naming conventions — geographic area of file

Geographic area/product	English file	French file
National/provincial	pr_	pr_
Federal electoral district	fed	cef
Economic region	er_	re_
Census division	cd_	dr_
Census subdivision	csd	sdr
Census agricultural region	car	rar
Census consolidated subdivision	ccs	sru
Census metropolitan area/census agglomeration	cma	rmr
Census tract	ct_	sr_
Urban area	ua_	ru_
Designated place	dpl	ld_
Dissemination area	da_	ad_
Dissemination block	db_	id_
Population ecumene	ecu	eco
Population ecumene national/provincial	epr	epr
Population ecumene census division	ecd	edr
Agricultural ecumene	eca	eca
Road network file	rnf	frr
Road network and geographic attribute file	rgf	frg
International boundary files (part of mainland U.S.A. and Alaska as well as Greenland)	int	int
Supporting hydrography (Great Lakes, St. Lawrence River, oceans, etc.)	hy_	hy_

Next three numbers: geographic code of coverage

Table E.2 Spatial file naming conventions — geographic code of coverage

National,	provincial and territorial coverages
000	Canada
010	Newfoundland and Labrador
011	Prince Edward Island
012	Nova Scotia
013	New Brunswick
024	Quebec
035	Ontario
046	Manitoba
047	Saskatchewan
048	Alberta
059	British Columbia
060	Yukon
061	Northwest Territories
062	Nunavut

Next character: file type

- a if digital boundary file, detailed coverage for large-scale mapping excluding hydrographic coverage
- b if cartographic boundary file, detailed coverage for small-scale mapping
- c if detailed interior lakes hydrographic coverage (polygon)
- d if detailed interior rivers hydrographic coverage (line)
- e ecumene
- f if detailed interior lakes hydrographic coverage closure lines (line)
- g cartographic boundary file, generalized for desktop mapping
- h additional cartographic international boundary coverage and hydrographic coverage of Great Lakes, St. Lawrence River and surrounding oceans
- 1 if detailed interior islands (part of hydrographic coverage [polygon])
- r road network files (RNFs)

Next two numbers: 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 2006 Census, the geographic reference date is January 1, 2006.

- of if geographic reference date is 2005
- of if geographic reference date is 2006

Next character: file format

- a ArcInfo® shapefile (.shp)
- g Geography Markup Language (GML) file (.gml)
- m MapInfo® TAB file (.tab)

Final two characters: language

- _e English
- _f French

Examples of the use of the file naming conventions

- The 2006 Dissemination Area Digital Boundary File for Saskatchewan with English attributes in ArcInfo® format: gda_047a06a_e.zip
- The 2006 Federal Electoral District Cartographic Boundary File with French attributes in Geography Markup Language format: gcef000b06g_f.zip

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Appendix F: Unique identifiers consistent with other geography products

Unique identifiers are codes that uniquely identify a geographic area within Canada. Data from different files (but for the same geographic area) can be joined or related based on the unique identifier. For example, the data in GeoSuite can be mapped on the Census Subdivision Boundary Files using the CSDUID as the field by which the two data sets can be related.

The following are the unique identifiers for geographic areas:

Geographic area	Unique identifier	Code composition
Province/Territory	PRUID	2-digit province code
Federal electoral district	FEDUID	(2-digit province code) and (3-digit federal electoral district code)
Census metropolitan area/Census agglomeration	CMAUID	3-digit census metropolitan area/census agglomeration code Where there are no census metropolitan areas/census
		agglomerations, this code is NULL.
Census tract	CTUID	(3-digit census metropolitan area/census agglomeration code) and (7-character census tract name)
		Where there are no census tracts, this code is NULL.
Urban area	UAUID	4-digit urban area code
		Where there are no urban areas, this code is NULL.
Economic region	ERUID	(2-digit province code) and (2-digit economic region code)
Census division	CDUID	(2-digit province code) and (2-digit census division code)
Census subdivision	CSDUID	(2-digit province code) and (2-digit census division code) and (3-digit census subdivision code)
Census agricultural region	CARUID	(2-digit province code) and (2-digit census agricultural region code)
Census consolidated subdivision	CCSUID	(2-digit province code) and (2-digit census division code) and (3-digit census consolidated subdivision code)
Designated place	DPLUID	(2-digit province code) and (4-digit designated place code)
		Where there are no designated places, this code is NULL.
Dissemination area	DAUID	(2-digit province code) and (2-digit census division code) and (4-digit dissemination area code)
Dissemination block	DBUID	(2-digit province code) and (2-digit census division code) and (4-digit dissemination area code) and (2-digit dissemination block code)

Appendix G: Geography Markup Language (GML)

Scope

The Geography Markup Language (GML) is an XML encoding for the modelling, transport and storage of geographic information including both the spatial and non-spatial properties of geographic features. This specification defines the XML Schema syntax, mechanisms, and conventions that:

- Provide an open, vendor-neutral framework for the definition of geospatial application schemas and objects;
- Allow profiles that support proper subsets of GML framework descriptive capabilities;
- Support the description of geospatial application schemas for specialized domains and information communities;
- Enable the creation and maintenance of linked geographic application schemas and datasets;
- Support the storage and transport of application schemas and datasets;
- Increase the ability of organizations to share geographic application schemas and the information they describe.

United States Bureau of Census (USBC) Partnership - TIGER/GML

Statistics Canada has committed to working with the United States Bureau of the Census (USBC) to ensure cross-border consistency in our products, and foster the development and application of a common, North American data model.

Like the United Kingdom Ordnance Survey and the United States Bureau of the Census, Statistics Canada has chosen to disseminate data in the Open Geospatial Consortium standard Geography Markup Language (GML) format. This standard allows organisations to achieve maximum compatibility not only of format but eventually of content. In partnership with USBC, Statistics Canada is committed to providing a harmonized North American street network file by 2008. This release of the Digital Boundary Files and Cartographic Boundary Files, along with the Road Network File is the first step in delivering a harmonized international street network by 2008.

Example of 2006 Digital Boundary File dataset in GML format

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<wfs:FeatureCollection xmlns:c2006="http://geodepot.statcan.ca/2006"</p>
            xmlns:ogc="http://www.opengis.net/ogc"
            xmlns:gml="http://www.opengis.net/gml"
            xmlns:wfs="http://www.opengis.net/wfs"
            xmlns:xlink="http://www.w3.org/1999/xlink"
            xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
            xmlns="http://geodepot.statcan.ca/2006">
 <gml:boundedBy>
   <gml:Box srsName="">
     <gml:coordinates>
                -128.94260038423948.51.165575832724286
                -59.991263338764725,89.99942707562514
         </gml:coordinates>
   </gml:Box>
 </gml:boundedBy>
 <gml:featureMember>
   < Census Subdivision fid="C2006 CF 6204001">
     <csdUid>6204001</csdUid>
```

Example of 2006 Digital Boundary File dataset in GML format, continued

```
<csdname>Sanikiluaq</csdname>
    <csdtype>HAM</csdtype>
    <prUid>62</prUid>
    prname>Nunavut
    <cdUid>6204</cdUid>
    <cdname>Baffin</cdname>
    <cdtype>REG</cdtype>
    <sactype>8</sactype>
    <erUid>6210</erUid>
    <ername>Nunavut</ername>
    <digitalBoundary>
      <gml:MultiPolygon srsName="EPSG:4269">
        <gml:polygonMember>
         <gml:Polygon>
           <gml:outerBoundaryIs>
             <gml:LinearRing>
              <gml:coordinates decimal="." cs="," ts=" ">
                                       -79.29804103854309,56.497272474867614
                                       -79.21118424192504,56.49187445804674
                                       -79.2972407494058,56.50007703254238
                                       -79.29798348587173,56.49800249872243
                                       -79.29804103854309,56.497272474867614
                                </gml:coordinates>
             </gml:LinearRing>
           </gml:outerBoundaryIs>
         </gml:Polygon>
        </gml:polygonMember>
        <gml:polygonMember>
         <gml:Polygon>
           <gml:outerBoundaryIs>
             <gml:LinearRing>
              <gml:coordinates decimal="." cs="," ts=" ">
                                       -79.14752411220125,56.60989920436488
                                       -79.14712599992077,56.61004617771573
                                       ... etc ...
                                       -79.14804208624359,56.60996985880892
                                       -79.14752411220125,56.60989920436488
                                </gml:coordinates>
            </gml:LinearRing>
           </gml:outerBoundaryIs>
         </gml:Polygon>
        </gml:polygonMember>
      </gml:MultiPolygon>
    </digitalBoundary>
   </CensusSubdivision>
 </gml:featureMember>
 <gml:featureMember>
   <CensusSubdivision fid="C2006_CF_6204005">
    <csdUid>6204005</csdUid>
    <csdname>Kimmirut</csdname>
               ... etc...
   </CensusSubdivision>
 </gml:featureMember>
</wfs:FeatureCollection>
```

Appendix H: Hydrography ranked layers

The Lakes and Rivers (polygon) file includes water layers which are ranked based on the number of water features displayed. The six layers contain various levels of hydrographic detail and are designed to suit different map scales and applications. For instance, rank 1 contains some of the largest lakes in Canada, excluding the St. Lawrence River, the Great Lakes and Lake of the Woods. By contrast, rank 6 contains an expanded set of water features for mapping at larger scales.

These layers are designed to be used at, but are not limited to, specific scales. The rank attribute is created specifically for use with Statistics Canada's census boundary files.

Lakes and Rivers (polygon) ranked layer details:

Rank 1: Contains polygons forming lakes. There are a total of 87 polygons in rank 1, 85 named polygons and 2 unnamed polygons.

Recommended scales for rank 1: 1: 10,000,000 or smaller scale.

Rank 2: Contains polygons forming lakes and rivers which are not included within rank 1. There are a total of 2,555 polygons in rank 2, 1,484 named polygons and 1,071 unnamed polygons.

Recommended scales for rank 2: between 1: 6,000,000 and 1: 9,999,999.

Rank 3: Contains polygons forming lakes and rivers which are not included within ranks 1 or 2. There are a total of 2,091 polygons in rank 3, 949 named polygons and 1,142 unnamed polygons.

Recommended scales for rank 3: between 1: 2,000,000 and 1: 5,999,999.

Rank 4: Contains polygons forming lakes and rivers which are not included within ranks 1 through 3. There are a total of 7,526 polygons in rank 4, 5,251 named polygons and 2,275 unnamed polygons.

Recommended scales for rank 4: between 1: 500,000 and 1: 1,999,999.

Rank 5: Contains additional water features across Canada, with a focus on census metropolitan areas (CMAs). This layer was derived by examining the hydrography present in reference maps of each CMA and adding all water features present in these maps. Because of the concentration of water features within CMAs, this rank is only recommended when displaying a specific CMA. This rank contains polygons forming lakes and rivers which are not included within ranks 1 through 4. There are a total of 12,967 polygons in rank 5, 5,786 named polygons and 7,181 unnamed polygons.

Recommended scales for rank 5: between 1: 100,000 and 1: 499,999.

Rank 6: Contains polygons forming lakes and rivers which are not included within ranks 1 through 5. There are a total of 49,697 polygons in rank 6, 44,949 named polygons and 4,748 unnamed polygons.

Recommended scales for rank 6: between 1: 25,000 and 1: 99,999.

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- V AND WHEREAS the parties hereto are desirous of entering into a licence agreement on the basis herein set forth,
 NOW THEREFORE, in consideration of the covenants contained in this Agreement, the parties agree as follows:

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- 6.1 This Agreement may be terminated
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 - (ii) upon written notice of termination by the Licensee at any time, and such termination shall take effect thirty (30) days after the receipt by the Licensor of such notice; or
 - (iii) upon mutual agreement of the parties.
- Upon termination of this Agreement, for whatever reason, the Licensee's rights under section 3 shall immediately cease; and all obligations of the Parties which expressly or by their nature survive termination shall continue in full force and effect subsequent to and notwithstanding such termination, until they are fully satisfied or by their nature expire. For greater clarity, but without restricting the generality of the foregoing, the following provisions survive termination of this Agreement:
 - section 5 (representations, warranties, indemnities)
- 6.3 Notwithstanding subsections 6.1 and 6.2 above, the Licensee may continue to use the Data for the purpose of completing orders of Derived Products made before the termination date of this Agreement
- 6.4 Notwithstanding the termination of this Agreement, all agreements entered into by the Licensee in the exercise of its rights under section 3 thereof prior to such termination and all obligations imposed therein shall continue in full force and effect subject to their terms.

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7.1 Applicable Law

This Agreement shall be construed and enforced in accordance with, and the rights of the parties shall be governed by, the laws of Ontario and Canada, as applicable.

7.2 Entirety of Agreement

This Agreement hereto constitute the entire agreement between the parties with respect to its subject matter. This Agreement may only be amended in writing, signed by both parties, which expressly states the intention to amend this Agreement.

7.3 Alternate Dispute Resolution

If a dispute arises concerning this Agreement, or if a proposed modification of any term of this Agreement cannot be agreed between the parties, the parties shall attempt to resolve the matter first by negotiation.

If the parties have not succeeded in negotiating a resolution, then they shall jointly submit the dispute to a mutually accepted mediator. If the parties cannot agree on an acceptable mediator, then either party may submit the dispute to binding arbitration.

The arbitral tribunal shall be governed by the UN Commercial Arbitration Code (the "Code"), referred to in the Commercial Arbitration Act, R.S.C 1985, c. C-4.6, and judgment upon the award rendered by the arbitral tribunal may be entered in any court having jurisdiction over the matter.

The arbitral tribunal shall consist of one arbitrator chosen by the parties. Subject to the Code, the parties agree that the award and determination of the arbitral tribunal shall be final and binding on both parties, shall be without right of appeal and shall be the exclusive remedy between the parties regarding any claims, counterclaims, issues or disputes presented to the arbitral tribunal.

Costs

The Parties shall bear the costs of the mediation equally, except that each party shall bear its own personal costs of the mediation.

The costs of the arbitral tribunal's fees and expenses shall be shared equally by the parties. The parties shall bear their own personal costs except that the losing party shall pay all costs, fees, levies and taxes arising from and necessitated by the enforcement of the arbitral tribunal's award, including, without limitation, registration, enforcement charges or other judicial levies or costs.

7.4 No Joint Venture

The Parties expressly disclaim any intention to create a partnership, joint venture or joint enterprise. The Parties acknowledge and agree that nothing contained in this Agreement nor any acts of any party shall constitute or be deemed to constitute the parties as partners, joint ventures or principal and agent in any way or for any purpose. No Party has the authority to act for, or to assume any obligation or responsibility on behalf of the other Party. The relationship between the Parties is intended to be, and shall at all times be construed as that of licensor and licensee.

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