Catalogue No. 92F0146GIE

Dissemination Area Reference Maps 2001 Census

Reference Guide

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Statistics Canada

Dissemination Area Reference Maps 2001 Census

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?

- all maps digitally derived from Geography Division's National Geographic Database (NGB).
- all geographic area boundaries derived from a new geographic area for 2001, the Census Block.
- all maps are available in portable document format (.pdf) or on paper as a "print-on-demand" product.

What's new in the 2001 Dissemination Area Maps, by Census Tract, for Census Metropolitan Areas and Census Agglomerations?

- the number of maps increases to over 5,000 from 4,200.
- in areas of congested map detail, the maps are split into two or more enlargements.
- formerly called "Large Urban Enumeration Area Reference Maps".

What's New in the 2001 Dissemination Area Reference Maps, by Non-tracted Census Agglomeration?

- all non-tracted CAs appear on a single map; large non-tracted CAs have insets on a second map.
- all maps are one of the following map sizes (inches):
  - 22.7 x 18.7
  - 18.7 x 18.7
  - 22.7 x 14.7
  - 25.2 x 26.2
  - 30.2 x 21.2
  - 32.2 x 28.2
  - 40.2 x 36.2
- formerly called "Small Urban Enumeration Area Reference Maps"

What's New in the 2001 Dissemination Area Reference Maps, by Census Division, for Areas Outside Census Metropolitan Areas and Census Agglomerations?

- the map découpage is census division.
- there are more than 1,000 maps in the series.
- some CD maps include insets which are usually a single CSD.
- some maps have selected CSDs, internal to the CD, on a separate map sheet.
- all maps are one of the following map sizes (inches):
  - 22.7 x 18.7
  - 18.7 x 18.7
  - 22.7 x 14.7
  - 25.2 x 26.2
  - 30.2 x 21.2
  - 32.2 x 28.2
  - 40.2 x 36.2
- formerly called "Rural Enumeration Area Reference Maps"

Table of Contents

1. About this guide

This reference guide was prepared to accompany the 2001 Dissemination Areas, by Census Tract, for Census Metropolitan Areas and Census Agglomerations (Catalogue No. 92F0146XIB)), Dissemination Areas, by Non-tracted Census Agglomerations (Catalogue No. 92F0147XIB) and Dissemination Areas, by Census Division, for Areas Outside Census Metropolitan Areas and Census Agglomerations (Catalogue No. 92F0148XIB) Reference Maps.

This reference guide describes the map content, the general methodology used to create the maps and provides information about data quality.

Geographic terms and concepts in the text are described in the Glossary, Section 5. More details can be found in the *2001 Census Dictionary* (Catalogue No.92-378-XIE). Supplementary information is provided in the appendices and a list of related products and services is also included.

This reference guide is based on the best information available at the time of its release. It in no way constitutes a warranty of the data in the event that users may observe characteristics that deviate from those stated in this document. All efforts have been made to ensure that the verification of this product has been thoroughly done, however, there is no guarantee that the data are 100% accurate. For further information see Section 4, Data Quality.

2. Overview

Introduction

Census data are disseminated for a wide range of geographic areas ranging from the national level down to the highly detailed dissemination area (DA) level. Reference maps depict the boundaries of these geographic areas and help users put the census data in a spatial context. Appendix A, Hierarchy of Geographic Units, 2001, shows the hierarchy of geographic areas. Also included on the reference maps are names and codes of census geographic areas, and major physical and cultural features such as roads, railroads, coastlines, rivers and lakes and other notable physical features. This reference guide includes information on the three map series listed below.

The dissemination area reference maps cover three distinct types of areas: census tracts within census metropolitan areas (CMAs) and tracted census agglomerations (CAs); non-tracted CAs; and census divisions outside of CMAs and CAs. All depict the dissemination area as their smallest reference unit.

In Canada, there are 52,993 dissemination areas defined for the 2001 Census (see Appendix B for a table of the geographical units by province and territory). Together, the three map series presented in this reference guide cover all of Canada.

2001 Dissemination Area Reference Maps, by Census Tract, for Census Metropolitan Areas and Census Agglomerations (Catalogue No. 92F0146XIB)

The set of Dissemination Area Reference Maps by Census Tract covers all 27 census metropolitan areas and the 19 census agglomerations that are part of the census tract program. Each map in the set covers one census tract (CT) and shows the boundaries and codes of dissemination areas within that CT. The maps also show census tract, census subdivision, and census metropolitan area or census agglomeration boundaries on a background of detailed street networks and other visible features such as rivers and lakes.

There are 6,154 maps in this set—generally one map per census tract. The dimensions of each map are approximately 27 cm by 43 cm (11 inches by 17 inches). Map scales vary according to the size of the census tract; thus the maps cannot be cut and pasted together. In cases where there is too much detail to show on one map, the census tract may be split into two or more maps.

2001 Dissemination Area Reference Maps, by Non-tracted Census Agglomeration (Catalogue No. 92F0147XIB)

The set of Dissemination Area Reference Maps by Non-tracted Census Agglomeration covers smaller census agglomerations that are not in the census tract program. Each map in the set covers one census agglomeration (CA) and shows the boundaries and codes of dissemination areas within that CA. The maps also show the boundaries of census subdivisions (municipalities), as well as urban areas, and representative points for designated places. The maps include background information such as rivers, lakes, railroad tracks and provincial boundaries, and other significant features.

There are 172 maps in this set—generally one map per census agglomeration. Some maps include insets to show detail for the congested areas. These insets appear on the main map where possible, but in some cases they appear on a second map sheet. The maps vary in scale and size; the maximum map dimensions are approximately 40.2 inches by 36.2 inches.

2001 Dissemination Area Reference Maps, by Census Division, for Areas Outside Census Metropolitan Areas and Census Agglomerations (Catalogue No. 92F0148XIB)

The set of Dissemination Area Reference Maps by Census Division covers areas outside census metropolitan areas and census agglomerations. Each map in the set covers one census division (CD) and shows the boundaries and codes of dissemination areas within that CD. The maps also show the boundaries of census subdivisions, census metropolitan areas and census agglomerations, as well as urban areas and representative points for designated places. The maps include background information such as rivers, lakes, railroad tracks and provincial boundaries, and other significant features.

There are approximately 1,000 maps in this set—generally two or more maps per census division. Some maps include insets to show detail for the congested areas. These insets appear on the main map where possible, but in some cases they appear on a second map sheet. The maps vary in scale and size; the maximum dimensions are approximately40.2 inches by 36.2 inches.

3. About this product

Content

Dissemination Area Reference Maps, by Census Tract, for Census Metropolitan Areas and Census Agglomerations

There are 6,154 maps in this series, consisting of at least one map per census tract (CT). In cases of congested map detail, the CT was split into two or more enlargements. The maps display the 2001 Census geographic boundaries and National Geographic Base (NGB) features.

Geographic Hierarchy and Boundaries

Dissemination area (DA) boundaries respect the boundaries of all standard geographic areas except for Federal Electoral Districts (FEDs). Consequently, DA boundaries may not always follow visible features.

In addition to DAs, the maps depict the following boundaries: census tract (CT), census subdivision (CSD), and census metropolitan area / census agglomeration (CMA/CA). The names and/or codes of these geographic areas are also shown.

To reduce map complexity in some cases where two or more boundaries coincide, only the higher level geographic boundaries are depicted. For example, CT, CSD, and CMA/CA boundaries also depict DA boundaries and CMA/CA boundaries also depict CT and CSD boundaries.

Découpage, Map Scale and Map Orientation

The découpage for the reference maps is the CT. The maps depict DAs by individual CT (referred to as the "target" CT). The area inside the target CT is white, whereas the area outside (referred to as "buffer" CTs) is shaded grey. DA boundaries and codes are not shown in the buffer CTs.

Generally, each census tract fits on a 28 cm by 43 cm (11" by 17") page size. Map scales and orientation are based on the 'best fit' approach in order to show the target CT in as large a scale as possible. Thus, scales will vary from map to map (except for the split CT maps), with most maps having a unique scale. Since map orientation was adjusted, adjacent map sheets may have different map orientations (the north arrow may point either straight up or to the left).

If the target CT depicted in the map had cluttered or overlapping details (features and labels), then the map was split into two or more parts in order to show those details better. Every 'split' map has an indicator to the right of the CT name to identify it as part of a series of split maps (for example, 1 of/de 4 and 2 of/de 4, and so on). A single index map depicting the splits for a target CT is included as map one of a split series.

Dissemination Area Symbology

DAs are displayed as regular shaped or trapezoid shaped polygons, depending upon their area and whether they comprise one address or more than one address, as follows:

- DAs comprising more than one address are shown as regular polygons, regardless of area.

- individual, single-address DAs smaller than 30,000 square metres are shown as a small trapezoid-shaped polygon.

Features and Names

Small islands and lakes are not plotted to reduce feature congestion.

Some streets may lack names in the target CT or in the buffer. This restriction is governed by whether the street name and type fit along a segment of the street. As well, in the buffer CT area, CT names were plotted when the CTs are contiguous with the target CT. The remaining CT names in the buffer were plotted only if they fit inside the polygon (as determined by the software).

The NGB does not contain any hydrographic names so water features are unnamed on all maps. No interactive edits were done, resulting in sub-optimal text orientation and placement in some cases.

Dissemination Area Reference Maps, by Non-tracted Census Agglomeration

These maps depict DAs within non-tracted CAs. Also shown are the limits of the CSDs and point symbols for DPLs and in the case of adjacency to a CMA or CA, the CMA or CA limits — with their corresponding names, types, and/or codes.

All maps were computer generated and are one of the following sizes (inches):

- 22.7 x 18.7
- 18.7 x 18.7
- 22.7 x 14.7
- 25.2 x 26.2
- 30.2 x 21.2
- 32.2 x 28.2
- 40.2 x 36.2

Dissemination Area Reference Maps, by Census Division, for Areas Outside Census Metropolitan Areas and Census Agglomeration

These maps depict DAs for all CDs, which are partially or totally outside of CMA/CA covered areas. These maps are all computer-generated using data from the NGB. Also shown are the limits of CSDs and CMA/CAs, and points for DPLs - with their corresponding names and/or codes.

General Methodology

Dissemination Area Reference Maps, by Census Tract, for Census Metropolitan Areas and Census Agglomerations

These reference maps were generated from digital files using ARC/INFO® Version 8.1, geographic information systems (GIS) software, produced by Environmental Systems Research Systems Research Institute Inc. (ESRI) in a fully automated mapping production system. This system contained three components: an extract inputs and integrate module, a load input module and a map production module. The relevant NGB coverages were extracted and integrated in the first component. The load input module prepared the integrated coverage to produce the maps and created the street coverage and the boundary coverages (DA, CT, CSD, and CMA/CA). The map production module produced the maps by CT.

For further details about the methodology used to produce the maps, refer to Section 4 on Data quality.

Dissemination Area Reference Maps, by Non-tracted Census Agglomeration and Dissemination Area Reference Maps, by Census Division, for Areas Outside Census Metropolitan Areas and Census Agglomerations

Both of these reference map series were generated from digital files using ArcView Version 3.2, a geographic information systems (GIS) software, produced by Environmental Systems Research Systems Research Institute Inc. (ESRI), and AVALabel™, Version 3.1, an extension to ArcView GIS for feature labeling produced by MapLogic Corporation. The resulting system contained four components: an extract inputs and integrate module, a load input module, an automated map layout and design module, and a manual cartographic enhancement module. These reference maps were produced with background base information from the NGB. The map scales vary.

For further details about the methodology used to produce the maps, refer to Section 4 on Data quality.

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 2001 Census, the geographic reference date is January 1, 2001.

Names, boundaries and other attributes of geographic areas change frequently (for example, municipal amalgamations, annexations, name and status changes). Since the geographic framework is used for the census enumeration process, the geographic reference date must be set sufficiently in advance of Census Day to permit all changes to be processed in time. Furthermore, notification of these changes is normally not received from the applicable federal and provincial authorities until after the changes have occurred. For these reasons, the census reports data according to the geographic areas that were in effect on January 1, 2001, provided the information on the changes was received by Statistics Canada by March 1, 2001.

Since census data refer to conditions as they existed on Census Day (May 15, 2001), and the geographic framework is established according to the geographic areas in effect as of January 1, 2001, census data may be reported for geographic areas that have subsequently changed during this period.

The geographic framework established for census purposes may not reflect the actual geographic framework in effect on January 1, 2001, if the appropriate notification from applicable federal and provincial authorities was not received by March 1, 2001.

Comparison to 1996 Enumeration Area Reference Maps

Dissemination Area Reference Maps, by Census Tract, for Census Metropolitan Areas and Census Agglomerations

This series is very similar to the 1996 Large Urban Enumeration Area Reference Maps with a few exceptions. All streets are now represented as single line features; in 1996 some streets were double-lined. As well, large CTs may now be split into 2 or more enlargements; in 1996

map splitting was restricted to 2 or 4 enlargements. Finally, single address dissemination areas are now represented by a small trapezoid shaped polygon. In 1996, singe address enumeration areas were represented with a "star" symbol. The index maps for the 2001 series are from the 2001 Census Tract Reference Maps, by Census Metropolitan Area or Census Agglomeration: Individual Maps (Catalogue No. 92F0145XIB). All maps are available as .pdf or on paper as "print-on-demand".

Dissemination Area Reference Maps, by Non-tracted Census Agglomerations

There have been several significant enhancements to this series for 2001. The découpage for this series is now non-traced census agglomerations. All maps in the series were digitally produced using data from the NGB. All maps are one of the following common paper sizes (inches):

- 22.7 x 18.7
- 18.7 x 18.7
- 22.7 x 14.7
- 25.2 x 26.2
- 30.2 x 21.2
- 32.2 x 28.2
- 40.2 x 36.2

All maps are available as .pdf or on paper as a "print-on-demand" product.

Dissemination Area Reference Maps, by Census Division, for Areas Outside Census Metropolitan Areas and Census Agglomerations

There have been several significant enhancements to this series for 2001. The découpage for this series is now census division. All maps in the series were digitally produced using data from the NGB. All maps are one of the following common paper sizes (inches):

- 22.7 x 18.7
- 18.7 x 18.7
- 22.7 x 14.7
- 25.2 x 26.2
- 30.2 x 21.2
- 32.2 x 28.2
- 40.2 x 36.2

All maps are available as .pdf or on paper as a "print-on-demand" product.

Limitations

Dissemination Area Reference Maps, by Census Tract, for Census Metropolitan Areas and Census Agglomerations

Automated Production System. In order to produce the large quantity of maps required, the production process was undertaken using the constraints of a largely automated mapping system, rather than a more flexible, interactive one.

Software Limitations. Maps were created using the ARC/INFO® geographic information system software. Map specifications were programmed into the system software in order to present the required information. The feature and text placement are dependent upon the ability of the production system and software.

All DA map series

The maps should not be used for digitizing purposes nor to determine the precise location of boundaries. They are not intended to serve as a legal or cadastral representation of geographic areas.

Recommended applications

The maps are designed to enable users to identify the general location and boundaries of the geographic areas for which 2001 Census data are available.

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.*

Dissemination Area Reference Maps, by Census Tract, for Census Metropolitan Areas and Census Agglomerations

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.

Source materials

Each Dissemination Area Reference Map, by Census Tract, for Census Metropolitan Areas and Census Agglomerations shows the Dissemination Areas (DAs) within the target census tract (CT). Every map also shows census metropolitan areas/census agglomerations (CMAs/CAs) and census subdivision (CSD) boundaries. The boundaries for these census geographic areas were derived from an internal Census Block (CB) digital boundary file. The linkages between the CBs, DAs, CTs, CSDs, CMAs and CAs are those found on the 2001 ORACLE Query Base. (This database contains attribute information for all standard geographic areas, including the relationships or linkages between these areas.)

The geographic reference date for the 2001 Census boundaries and the associated attributes is January 1, 2001 (the geographic reference date of the 2001 Census). The background base map information (coastlines, rivers, lakes, roads) was obtained from the 2001 National Geography Base (NGB) produced by Statistics Canada. Much of this base information is from the National Topographic Data Base (NTDB), produced by Natural Resources Canada (NRCan). Dissemination Area Reference Maps, by Census Tract, for Census Metropolitan Areas and Census Agglomerations were produced for every CT in Canada. For the 2001 Census there were 4,798 CTs in Canada. The legend area contains descriptive information for selected DAs. These DAs can range from a single apartment building, large townhouse complex, hospital, jail, to a Canadian Arms Forces ship. This information, obtained from the ORACLE Query Base, includes the DA code.

Method of derivation

The maps were produced using a customised automated mapping program developed with ARC/INFO® Version 8.1. Processing was done in batches, with all the CTs within a CMA or CA processed in one batch.

All coverages were obtained from the NGB. The ORACLE Query Base was used to link census blocks to the other geographic areas. Census Blocks were aggregated to derive the other geographic areas.

The source of road name information is from the former Street Network Files (Geography Division, Statistics Canada) and information from Elections Canada. The DA Reference Maps, by CT, for CMAs and CAs were produced in Lambert Conformal Conic Projection.

Users should be aware that there was no interactive adjustment of labels in this entirely automatically produced DA Reference Maps, by CT, for CMAs and CAs series. Consequently, the labels on the maps are not always legible.

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.

These maps are provided for reference purposes only. They depict the 2001 Census boundaries with respect to the features represented on the maps. They should not be used for digitizing purposes nor to determine the precise location of boundaries.

For this document, the "true" DA boundary is considered to be the boundary as shown relative to the base map features in the DA Reference Maps, by CT, for CMAs and CAs. Here, positional accuracy depends on the quality of the source material used: the NGB for the position of roads, railroads, rivers, lakes, etc. No numerical measurements of positional accuracy were made. The CMA/CA, CT, and DA polygons are aggregations of the Census Block (CB) polygons and therefore the positional accuracy of the CB boundaries is reflected in these higher level boundaries. The positional accuracy of the DA boundaries, which are derived from CB boundaries, is described here relative to the base map features.

A DA is usually displayed as a polygon enclosed by DA boundaries. However, in the case of selected DAs (usually apartment buildings and collective dwellings), the DA boundary is displayed as a small trapezoid displayed at the geographic centre of the DA polygon.

Some DA boundaries follow hydrographic features. However, in areas with bodies of water, DA boundaries often do not follow the shoreline but extend into water. The boundaries are depicted in this manner to ensure complete coverage of the land areas and islands and/or to follow official municipal boundaries. Some DAs may be represented entirely in water. These DAs are usually created by the intersection of the boundaries of higher level geographic areas. Vessels (ships) and oil rigs can also form DAs. Where possible, these are shown in the water of their home port. (See Appendix C for a list of the DAs in water). All streets on the maps are displayed as single line features.

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).

The objective of each map is to display information within the target CT. Every surrounding CT that shares a boundary with the target CT was labelled for reference, but other CTs on the map

may not be labelled. Depending on space constraints, CTs on the outer edge of the map may not be labelled, or the label may be truncated if it is near the edge of the map.

If a DA was split between two or more maps, then there is a label on each of the maps to identify it. If a DA is shown in multiple parts on any given page, then a DA label is placed in every part of the DA.

The most frequent problem encountered in map production was the positioning of feature labels. With the automated method of labelling and no interactive editing, labels may not be placed in the most appropriate position and they may overlap other labels. Labels for CSDs, CMA and CAs follow their respective boundary lines, and water feature and property labels follow their respective feature lines. As a result label text may be subject to twisting and curving.

All labelled features are derived from the National Geographic Base (NGB). For the most part, labels are printed in one language. For maps in Quebec, the labels are in French. The other nine provinces have labels in English. Labelling is dependent upon the direction of digitizing. A polygon label may be on the inside or the outside of the polygon. Single line streets are labelled on the left or the right of a street line segment depending on the direction of the digitizing.

Logical Consistency

Describes the fidelity of relationships encoded in the data structure of the digital spatial data.

Internal Consistency

All higher level boundaries are consistent with the CB boundaries and can be derived as aggregations of complete CBs. CB boundaries generally follow features present on the maps. (Refer to section on Method of Derivation.) To reduce map complexity when boundaries coincide, in some cases coincident higher level geographic boundaries also depict lower level ones (for example, CMA/CA boundaries also depict CT and CSD boundaries).

Consistency with Other Products

All three Dissemination Area Reference Map series are generally consistent with other geographic products such as Cartographic Boundary Files, other reference maps, Road Network Files (RNFs) and GeoSuite.

Water features on the Census Tract Reference Maps, by Census Metropolitan Area or Census Agglomeration and the Cartographic Boundary Files were taken from sources different from those of the Dissemination Area Reference Maps, by Census Tract, for Census Metropolitan Areas and Census Agglomerations and therefore may not be consistent with them.

GeoSuite allows users to explore the links between all standard levels of geography and to determine geographic codes, names, and population and dwelling counts. All DAs portrayed on the Dissemination Area Reference Maps, by Census Tract, for Census Metropolitan Areas and Census Agglomerations can be found in GeoSuite.

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.

A Dissemination Area Reference Map, by Census Tract, for Census Metropolitan Areas and Census Agglomerations was produced for every CT in Canada and included all dissemination areas for that CT.

The completeness of the base map data (features and their labels) for this reference map series is dependent on the data that were available in the NGB

In order to reduce map congestion, very small water or island polygons on the maps were automatically removed. The removal of the polygons may cause difficulty in the interpretation of the map. Roads or other features on a removed island and single lines attached to the removed island are left on the map (seemingly in the middle of the water). A single-line river may seem discontinuous where a small water polygon in its course was removed.

Some streets may lack names in the target CT or in the buffer. This restriction was governed by whether the street name and type fit along a segment of the street. As well, in the buffer CT area, CT names were plotted when the CTs are contiguous with the target CT; the remaining CT names in the buffer were plotted only if they fit inside the polygon (as determined by the software).

Dissemination Area Reference Maps, by Non-tracted Census Agglomerations and Dissemination Area Reference Maps, by Census Division, for Areas Outside of Census Metropolitan Areas and Census Agglomerations

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.

Source materials

All maps were produced using both manual and computer automated techniques. The background base map information for all maps (coastlines, rivers, lakes, roads, railroads, and so on) was obtained from the 2001 NGB. Geographic boundaries were derived from an internal Census Block digital boundary file. The ORACLE Query Base was used to aggregate Census Blocks to higher level geographic areas. Scales will vary from map to map.

Method of derivation

The maps were produced using a partially automated mapping program developed with ArcView™ Versions 3.2 and and AVALabel™, Version 3.1, an extension to ArcView GIS for feature labeling produced by MapLogic Corporation. Feature labeling conflicts were resolved manually.

All coverages were obtained from the NGB. The ORACLE Query Base was used to link Census Blocks to the other geographic areas. Census Blocks were aggregated to derive the other geographic areas.
The source of road name information is from the former Street Network Files (Geography Division, Statistics Canada) and information from Elections Canada. Both map series were produced in Lambert Conformal Conic Projection.

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.

These maps are provided for reference purposes only. They depict the 2001 Census boundaries with respect to the features represented on the maps. They should not be used for digitizing purposes nor to determine the precise location of boundaries.

For this document, the "true" DA boundary is considered to be the boundary as shown relative to the base map features in the both Reference Map series. Here, positional accuracy depends on the quality of the source material used: the NGB for the position of roads, railroads, rivers, lakes, etc. No numerical measurements of positional accuracy were made. The CD, CA, CSD, and DA polygons are aggregations of the Census Block polygons and therefore the positional accuracy of the Census Block boundaries is reflected in these higher level boundaries.

Some DA boundaries follow hydrographic features. However, in areas with bodies of water, DA boundaries often do not follow the shoreline but extend into water. The boundaries are depicted in this manner to ensure complete coverage of the land areas and islands and/or to follow official municipal boundaries. Some DAs may be represented entirely in water. These DAs are usually created by the intersection of the boundaries of higher level geographic areas. Vessels (ships) and oil rigs can also form DAs. Where possible, these are shown in the water of their home port. (See Appendix C for a list of the DAs in water).

The representative points for Designated Places (DPLs) were generated using the Arc/Info™ GIS software, which locates the point suitable for label or symbol placement in each polygon. As well, representative points were generated for all DPL parts (i.e. DPLs that cross CSDs). Any DPL representative point, which fell in water was moved onto land for the reference maps.

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).

The objective of each map is to display information for a selected CA or CD. Adjacent CAs or CMAs will not have their DA labelled. The most frequent problem encountered in map production was the positioning of feature labels. Every attempt was made during the interactive editing portion of production to ensure that no labels overlapped. Labels for CDs, CSDs, and CAs follow their respective boundary lines, and water feature and property labels follow their respective feature lines. As a result label text may be subject to twisting and curving.

All labelled features are derived from the National Geographic Base (NGB). For the most part, labels are printed in one language. For maps in Quebec, the labels are in French. The other nine provinces have labels in English.

Labelling is dependent upon the direction of digitizing. A polygon label may be on the inside or the outside of the polygon. Single line streets are labelled on the left or the right of a street line segment depending on the direction of the digitizing.

Logical Consistency

Describes the fidelity of relationships encoded in the data structure of the digital spatial data.

Internal Consistency

All higher level boundaries are consistent with the Census Block (CB) boundaries and can be derived as aggregations of complete CBs. DA boundaries, which are derived from CB boundaries, generally follow features present on the maps. (Refer to section on Method of derivation.).

To reduce map complexity where boundaries coincide, some higher level geographic boundaries also depict lower level ones. For more details refer to section 4, the Data quality statement for both map series.

Consistency with Other Products

All three Dissemination Area Reference Map series are generally consistent with other geographic products such as Cartographic Boundary Files, other reference maps, Road Network Files (RNFs) and GeoSuite.

GeoSuite allows users to explore the links between all standard levels of geography and to determine geographic codes, names and population and dwelling counts. All dissemination areas portrayed on any of the DA reference maps including the Dissemination Area Reference Maps, by Non-tracted Census Agglomerations and Disseimation Area Reference Maps, by Census Division for Areas Outside Census Metropolitan Areas and Census Agglomerations can be found in GeoSuite (Catalogue No. 92F0150XCB).

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 full DA reference map series consisting of the Census Tract, for Census Metropolitan Areas and Census Agglomerations, Non-tracted Census Agglomerations, and Census Divisions, for Areas Outside Census Metropolitan Areas and Census Agglomerations Reference Maps contain all DAs (52,993) found on the SDI-A.

The completeness of the base map data is dependent on the data that were available for its creation.

Some textual attribute information may not be depicted or may be abbreviated due to space limitations. For example, not all street names are shown; only those street names that fit on a line segment are plotted in order to avoid text overlap with crossing street names.

5. Glossary

Adjusted Counts
Adjusted counts refer to previous census population and dwelling counts that have been adjusted (i.e., recompiled) to reflect current census boundaries (such as when a boundary change occurs between two censuses).

Block
A block is an area bounded on all sides by roads and/or boundaries of standard geographic areas. Blocks cover all the territory of Canada. The block is the smallest geographic area for which population and dwelling counts are disseminated.

Block-face
A block-face is one side of a street between two consecutive features intersecting that street. The features can be other streets, boundaries of standard geographic areas, or limits of map tiles.

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 is available.

Cartographic Boundary Files
Cartographic Boundary Files (CBF) contain boundaries of standard geographic areas, along with shorelines and lakes, at a level of detail appropriate for small-scale mapping.

Census Agricultural Region
Census agricultural regions (CAR) 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 grouping 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 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**). The census population count of the urban core must be at least 10,000 to form a census agglomeration and at least 100,000 to form a census metropolitan area. 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 the population of its urban core

population declines below 100,000. The urban areas that are located in the CMA or CA but 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 based on census counts, 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 **m**etropolitan area and census agglomeration **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 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. The zones they form around CMAs and CAs 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 legislation) or areas deemed to be their equivalents (for example, Indian reserves, Indian settlements and unorganized territories) used for statistical reporting purposes.

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 (CMAs) and in census agglomerations (CAs) with an urban core population of 50,000 or more in the previous census.

A committee of local specialists (for example, planners, educators and health and social workers) initially delineates CTs in conjunction with Statistics Canada. Once a CMA or CA has been subdivided into census tracts, the census tracts are maintained even if the urban core population subsequently declines below 50,000.

Co-ordinate System
A co-ordinate system is a reference system based on mathematical rules for specifying positions (locations) on the surface of the earth. The co-ordinate values can be spherical (latitude and longitude) or planar (such as the Universal Transverse Mercator).

The Cartographic Boundary Files, the Road Network Files and the representative points are disseminated in latitude/longitude co-ordinates.

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.

The spatial data disseminated for the 2001 Census are based on the North American Datum of 1983 (NAD83).

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 co-operation with Statistics Canada, to provide data for submunicipal areas.

Dissemination Area
The dissemination area (DA) is a small, relatively stable geographic unit composed of one or more blocks. It is the smallest standard geographic area for which all census data are disseminated. DAs cover all the territory of Canada.

Economic Region
An economic region (ER) is a grouping of complete **census divisions** (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 purposes. Thus, there can be various types of ecumenes, each having its own unique characteristics (population ecumene, agricultural ecumene, industrial ecumene, etc.).

Enumeration Area
An enumeration area (EA) is the geographic area canvassed by one census representative. An EA is composed of one or more adjacent blocks. EAs cover all the territory of Canada.

Enumeration areas are only used for census data collection. The dissemination area (DA) replaces the EA as a basic unit for dissemination.

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 2001 Census are based on the 1996 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 and postal codes are linked to block-face representative points when the street and address information is available; otherwise, they are linked to block representative points.

Geographic Code
A geographic code is a unique number 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 2001 Census, the geographic reference date is January 1, 2001.

Land Area
Land area is the area in square kilometres of the land-based portions of standard geographic areas.

The land area measurements 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 Base
The National Geographic Base (NGB) is a new database that contains roads and boundaries of standard geographic areas in one integrated layer with other physical and cultural features (such as hydrography, railroads and power transmission lines) stored as separate layers.

The NGB is an internal maintenance database that is not disseminated. It supports a wide range of census operations, such as geocoding, updating the road network and address ranges, supporting the block program and delineating the boundaries of standard geographic areas (including the automated delineation of enumeration areas, urban areas and dissemination areas). As well, the NGB is the source for generating many geography products for the 2001 Census, such as reference maps and Cartographic Boundary Files.

Place Name
Place name (PN) 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 ten 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 single point that represents a linear or areal feature. The point is centrally located along the linear feature or centrally within the areal feature.

Representative points are generated for block-faces, blocks, enumeration areas, dissemination areas, census subdivisions and designated places. The block-face and block representative points support the geocoding of households and postal codes.

Road Network Files
The Road Network Files (RNFs) provide national coverage of roads, province / territory boundaries and other visible features such as hydrography, as well as attribute information (for example, street names and address ranges for streets with assigned addresses). The RNFs replace the Street Network Files (SNFs), which were a similar product previously available only for 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 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 metropolitan area and census agglomeration influenced zone (strong MIZ, moderate MIZ, weak MIZ or no MIZ), or the territories (Northwest Territories, Yukon Territory 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 (UA) 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 100,000 persons in the case of a CMA, or between 10,000 and 99,999 persons in the case of a CA.

Urban fringe includes all small urban areas (with less than 10,000 population) that are located within a CMA or CA but are not contiguous with the urban core of the CMA or CA.

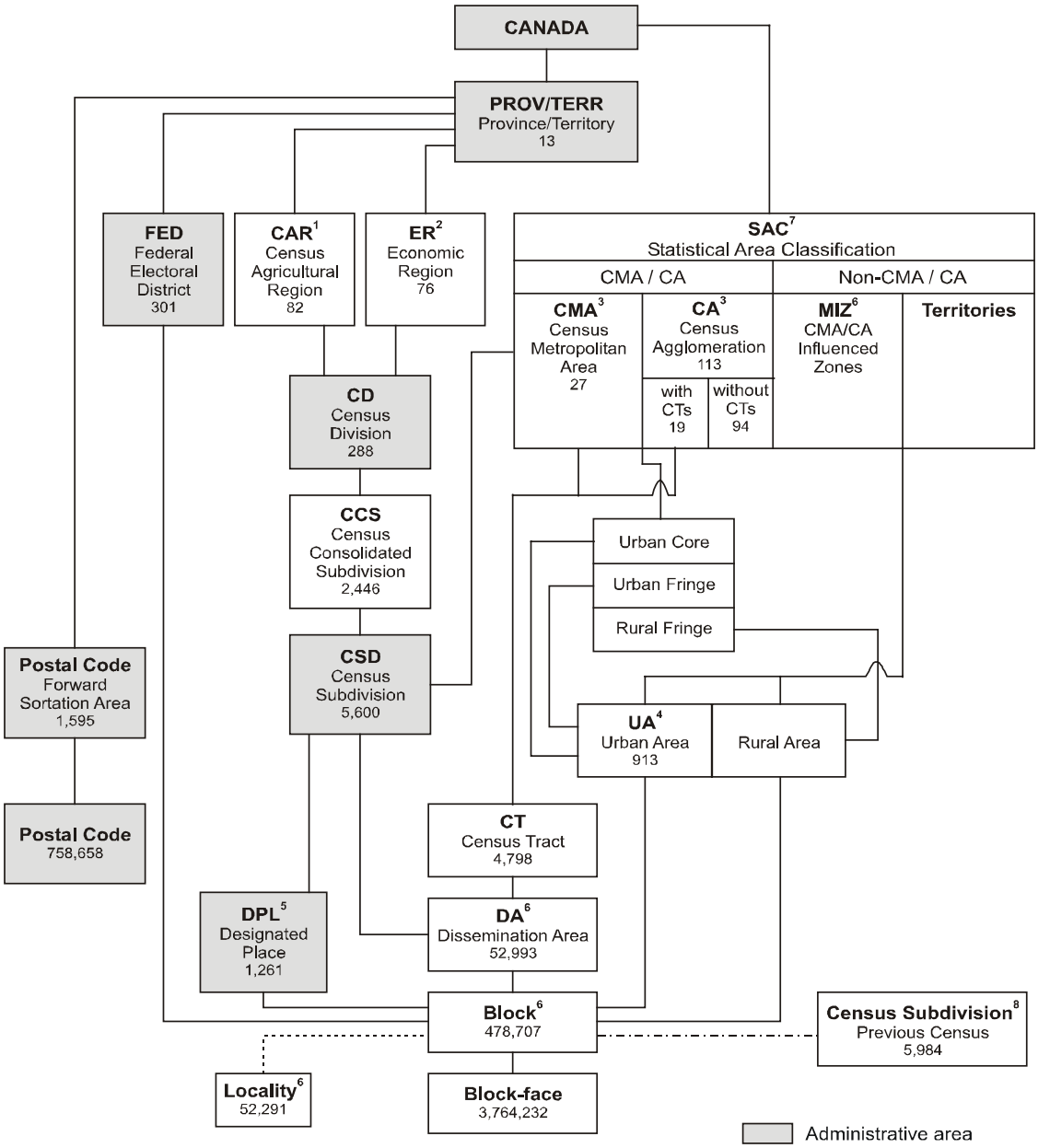
Rural fringe comprises all territory that is located within a CMA or CA but is not classified as an urban core or an urban fringe.

Urban Population Size Group
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	–	2,499
2,500	–	4,999
5,000	–	9,999
10,000	–	24,999
25,000	–	49,999
50,000	–	99,999
100,000	–	249,999
250,000	–	499,999
500,000	–	999,999
1,000,000 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 A: Hierarchy of Standard Geographic Units for Dissemination



[1] Census agricultural regions in Saskatchewan are composed of census consolidated subdivisions.
[2] Economic regions in Ontario are composed of municipalities (census subdivisions).
[3] One CMA and four CAs cross provincial boundaries.
[4] Five UAs cross provincial boundaries.
[5] Designated places do not cover the total area of CSDs. Eighty-four DPLs cross CSD boundaries, of which 12 also cross CD boundaries.
[6] Census metropolitan area and census agglomeration influenced zones (MIZ), dissemination area, block, and locality are new concepts for the 2001 Census.
[7] The Statistical Area Classification (SAC) is a new geographic classification that allocates each CSD according to whether it is a component of a CMA, CA, a census metropolitan area and census agglomeration influenced zone (MIZ), or the territories outside the CAs of Whitehorse and Yellowknife.
[8] For the 2001 Census only, a best fit linkage is created between the 1996 CSDs and 2001 blocks to facilitate historical data retrieval. See the definition of Census Subdivision – Previous Census.

Appendix B: Geographic Units by Province and Territory

Geographic Unit	Canada		Nfld. Lab.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Nvt.
	1996	2001													
Federal electoral district (1996 Representation Order)	295*	301	7	4	11	10	75	103	14	14	26	34	1	1	1
Economic region	74	76	4	1	5	5	17	11	8	6	8	8	1	1	1
Census agricultural region	78	82	3	3	5	4	14	5	12	20	8	8	–	–	–
Census division	288	288	10	3	18	15	99	49	23	18	19	28	1	2	3
Census consolidated subdivision	2,607	2,446	87	68	43	151	1,111	318	127	301	77	157	1	2	3
Census subdivision	–	5,600	381	113	98	275	1,476	586	298	1,002	452	816	35	37	31
1996 Census	5,984	–	381	113	110	283	1,599	947	298	970	467	713	35	68	N/A
Dissolutions (January 2, 1996 to January 1, 2001)	910	–	–	–	14	12	232	529	3	18	18	83	1	–	N/A
Incorporations (January 2, 1996 to January 1, 2001)	–	526	–	–	2	4	109	168	3	50	3	186	1	–	N/A
Designated place	828	1,261	182	–	59	172	78	81	51	158	260	219	1	–	–
Census metropolitan area	25	27	1	–	1	1	6	11	1	2	2	3	–	–	–
Census agglomeration	112	113	4	2	4	5	28	30	3	7	10	22	1	1	–
With census tracts	18	19	–	–	–	1	3	8	–	–	3	4	–	–	–
Without census tracts	94	94	4	2	4	4	25	22	3	7	7	18	1	1	–
Census tract	4,223	4,798	45	–	86	71	1,263	2,013	165	101	457	597	–	–	–
Urban area	929	913	36	7	39	34	229	258	42	65	108	93	1	3	3
Locality	N/A	52,291	2,428	964	3,920	3,445	12,448	10,889	2,339	3,868	3,466	7,699	362	173	290
Dissemination area	N/A	52,993	1,231	225	1,397	1,349	12,153	18,596	2,235	2,937	5,143	7,463	117	92	55
Enumeration area	49,361	42,851	1,204	225	1,337	1,216	9,133	14,753	1,805	2,697	4,129	6,088	117	92	55
Block	N/A	478,707	8,331	2,831	15,161	13,929	108,760	128,327	30,567	56,040	60,061	53,147	674	745	134
Block-face	817,734	3,764,232	80,162	19,854	168,840	136,311	865,600	955,847	200,569	377,776	435,604	499,365	10,644	12,304	1,356
Forward sortation area	1,477	1,595	33	7	74	110	398	518	64	47	147	188	3	3	3
Postal code	680,910	758,658	7,900	2,856	23,354	55,104	188,427	254,757	23,250	21,184	70,672	109,753	884	487	30

* Federal electoral districts (1987 Representation Order)

Note: Underlined numbers indicate that those census metropolitan areas, census agglomerations and urban areas crossing provincial boundaries are counted in both provinces.

Appendix C: Dissemination areas associated with Ships and Oil Rigs

There are Dissemination Areas which were equivalent to Enumeration Areas which are exclusively ships or oil rigs. They have zero land area. Those having population were included on the CBF, while those not having population were left out of the product. Some Ship and Oil Rig Enumeration Areas are a part of a larger DA having land area, and thus are not exclusively ships or oil rigs but are listed here.

The following are Ship and Oil Rig dissemination areas on the dissemination area Cartographic Boundary File:

10010191	12090355	24230875	35200832	35570139
10010294	12090356	24661919	35200834	35570188
10010301	13010055	24661920	35240430	35580315
10010376	13010103	35060239	35260569	59153181
		35070028		59170312

Land based dissemination areas to which some Ships or Oil Rigs census data are assigned :

10010369	12040024	12090554	12170139	35280150
10010481	12090546	12090555	24010017	35400046
10030036	12090548	12090556	24090034	35410001
11020113	12090549	12090557	24950024	35420052
11020114	12090550	12090558	35070028	35430534
12010028	12090551	12090559	35140093	35430535
12010029	12090552	12090560	35280140	35490072
12040023	12090553	12140038	35280149	59430056
				59470051

There is one DA, which is a known boundary error on the National Geographic Base, and DA Cartographic Boundary File. DA 48190032, Peace River Correctional Institution, is incorrectly located in the Peace River and should be on the north shore within DA 48190030 (see below).

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Geography Products and Services

This section provides brief descriptions of Geography products and services related to the 2001 Census. For additional details, consult the nearest Statistics Canada Regional Reference Centre.

1. Reference Maps

Reference maps show 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. Over 5,600 reference maps are available for the 2001 Census. Given the diversity in size of these geographic areas, different map scales and map coverages are required to show the appropriate level of detail. Descriptions of each series are provided with the individual catalogue entries below.

National Reference Maps

92F0172XCB Reference Maps – Complete Set, 2001 Census
92F0144XIB Census Divisions, 2001
92F0144XIB Economic Regions and Census Divisions, 2001
92F0144XIB Census Metropolitan Areas and Census Agglomerations, 2001
92F0144XIB Statistical Area Classification, 2001 Census Subdivisions
92F0152XPE Federal Electoral Districts (1996 Representation Order) Reference Map

92F0149XPB Census Division and Census Subdivision Reference Maps

The set of Census Division and Census Subdivision Reference Maps covers all of Canada, by province and territory. The maps show the boundaries, names and codes of census divisions (such as counties and regional districts) and census subdivisions (such as cities, towns, villages, other local municipal entities, townships and Indian reserves). The maps also show the boundaries of census metropolitan areas and census agglomerations. There are 22 maps that vary in scale (ranging from 1:310,000 to 1:3,500,000).

92F0145XPB Census Tract Reference Maps, by Census Metropolitan Area or Census Agglomeration

The series of Census Tract Reference Maps covers all 27 census metropolitan areas (CMAs) and the 19 census agglomerations (CAs) with census tracts. The maps show the boundaries and names of census tracts and census subdivisions, as well as the urban core, urban fringe and rural fringe within the CMAs or CAs. The maps include background information such as rivers, lakes, railroad tracks and provincial boundaries, and other significant features. There are 85 maps in the series, with one to four maps covering each CMA or CA. The map scales range from 1:25,000 to 1:2,000,000, and the maximum map dimensions are approximately 91 cm by 101 cm (36 inches by 40 inches).

92F0146XPB Dissemination Area Reference Maps, by Census Tract, for Census Metropolitan Areas and Census Agglomerations.

The set of Dissemination Area Reference Maps by Census Tract covers all 27 census metropolitan areas (CMAs) and the 19 census agglomerations (CAs) that are part of the census tract program. Each map in the set covers one census tract (CT) and shows the boundaries and codes of dissemination areas within that CT. The maps also show census tract, census subdivision, and census metropolitan area or census agglomeration boundaries on a background of detailed street networks and other visible features such as rivers, lakes and railroad tracks.

There are approximately 4,800 maps in this set—generally one map per census tract. The dimensions of each map are approximately 27 cm by 43 cm (11 inches by 17 inches).

92F0147XPB Dissemination Area Reference Maps, by non-tracted Census Agglomeration
The set of Dissemination Area Reference Maps by Non-tracted Census Agglomeration covers the smaller census agglomerations that are not part of the census tract program. Each map in the set covers one census agglomeration (CA) and shows the boundaries and codes of dissemination areas within that CA. The maps also show the boundaries of census subdivisions (municipalities), as well as urban areas, and representative points for designated places. The maps include background information such as rivers, lakes, railroad tracks and provincial boundaries, and other significant features.

There are approximately 100 maps in this set—generally one map per census agglomeration (The maps vary in scale and size; the maximum map dimensions are approximately 91 cm by 101 cm (36 inches by 40 inches).

92F0148XPB Dissemination Area Reference Maps, by Census Division, for Areas Outside Census Metropolitan Areas and Census Agglomerations The set of Dissemination Area Reference Maps by Census Division covers areas outside census metropolitan areas (CMAs) and census agglomerations (CAs). Each map in the set covers one census division (CD) and shows the boundaries and codes of dissemination areas within that CD. The maps also show the boundaries of census subdivisions, census metropolitan areas and census agglomerations, as well as urban areas and representative points for designated places. The maps include background information such as rivers, lakes, railroad tracks and provincial boundaries, and other significant features.

2. Geographic Data Products

Geographic data products are those that contain 2001 Census population and dwelling counts.

93-360-XPB National Overview Tables, 2001 Census
The National Overview tables provide population and dwelling counts established by the 2001 Census of Canada. The levels of geography covered are Canada, provinces and territories, and other geographic areas including census subdivisions (municipalities), census metropolitan areas and census agglomerations. For selected geographies, the tables provide percentage change in the population and dwellings between 1996 and 2001. Data are also provided for land area and population density. Geographic Boundaries are those in effect on January 1, 2001.

92F0150XCB GeoSuite, 2001 Census
GeoSuite is a tool for data retrieval, query and tabular output, with software and data on a CD-ROM. GeoSuite allows users to explore the links between all standard levels of geography and to determine geographic codes, names, and population and dwelling counts. GeoSuite includes a dissemination area (DA) reference map listing that facilitates identification of appropriate DA reference maps.

92F0086XCB Postal Codes Counts
Note: Postal code products for the 2001 Census are currently under review. The planned release for these products is in the fourth quarter of 2002. Until that time, postal codes products containing 1996 Census data will continue to be available.

Postal Code Counts, 1996 Census contains population and dwelling counts for all six character postal codes reported by respondents. The population and dwelling counts are provided by individual postal code, by forward sortation area (FSA - the first three character of the six-

character postal code) and by province or territory. The data are provided with Windows-based software that enables users to perform simple data manipulations such as searching the data set for specific postal codes, importing groups of postal codes for which counts are required and exporting groupings of postal codes. Documentation and reference material are contained in electronic form on the CD-ROM.

3. Spatial Information Products

Spatial information provides the shape and location of geographic features. The boundaries, road network and other features of standard geographic areas are available in digital form for mapping and geographic information system (GIS) applications. These products include Cartographic Boundary Files (CBFs), Road Network Files (RNFs) and Skeletal Road Network Files (SRNFs).

Cartographic Boundary Files (CBFs), 2001 Census

Cartographic Boundary Files (CBFs) contain the boundaries of standard geographic areas together with the shoreline around Canada and the larger inland lakes, all integrated in a single layer. The coordinates are latitude/longitude and are based on the North American Datum of 1983 (NAD83). The Cartographic Boundary Files for 2001 replace the Digital Cartographic Files produced for the 1996 Census.

Cartographic Boundary Files can be used with Census of Population, Census of Agriculture or other Statistics Canada data for data analysis and thematic mapping (with appropriate software). Geographic codes provide the linkage between the statistical data and the geographic area boundaries. CBFs 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 CBFs can be used with the Road Network Files and Skeletal Road Network Files, which provide additional geographic context for mapping applications.

92F0160XCE Provinces and Territories Cartographic Boundary File
92F0163XCE Federal Electoral Districts (1996 Representation Order) Cartographic Boundary File
92F0161XCE Census Divisions and Economic Regions Cartographic Boundary File
92F0167XCE Census Consolidated Subdivisions Cartographic Boundary Files
92F0162XCE Census Subdivisions Cartographic Boundary Files
92F0165XCE Designated Places Cartographic Boundary File
92F0166XCE Census Metropolitan Areas/Census Agglomerations Cartographic Boundary File
92F0168XCE Census Tracts Cartographic Boundary Files
92F0164XCE Urban Areas Cartographic Boundary File
92F0169XCE Dissemination Areas Cartographic Boundary Files

92F0159XCE Population Ecumene Census Division Boundary File, 2001 Census

The Population Ecumene Census Division Boundary File contains a generalised population ecumene based on 2001 Census population density data with at least one ecumene polygon for every census division (CD). It can be used to produce small-scale thematic maps of statistical data.

For the 2001 Census, a population ecumene was defined based on population density criteria at the block level. The resulting detailed population ecumene polygons were generalised and small, non-contiguous ecumene pockets were aggregated to ensure visibility for small-scale thematic mapping at the census division level (see Figure 9). When ecumene boundaries are used for dot

and choropleth mapping, they give a more accurate depiction of the spatial distribution of data within standard geographic areas.

The Population Ecumene Census Division Boundary File is available as a standard package for Canada free on the Internet or it can be purchased on CD-ROM through the nearest regional office. This file is not a Cartographic Boundary File and it has its own reference guide.

92F0039XDE Forward Sortation Areas Boundary File
Note: Postal code products for the 2001 Census are currently under review. The planned release for these products is in the fourth quarter of 2002. Until that time, postal code products containing 1996 Census data will continue to be available.

The **1996 Census Forward Sortation Areas Digital Cartographic File** is available as a standard package for Canada. It depicts forward sortation area (FSA) boundaries derived from postal codes captured from the 1996 Census questionnaires. Through analysis of the postal codes reported by census households, a single FSA was assigned to each enumeration area (most often the FSA reported by the largest number of census households). FSA polygons were formed by grouping enumeration areas. Therefore, the Census based FSA boundaries are not equivalent to FSA boundaries in use by Canada Post, but are representations created from enumeration areas.

92F0157XCE Road Network Files (RNF), 2001 Census
Road Network Files (RNFs) contain a road layer for the entire country and a province/territory boundary layer. The road layer includes roads, with road names and address ranges (arc attributes), and geographic codes to identify blocks, census subdivisions, census metropolitan areas/census agglomerations, and provinces/territories (polygon attributes). Address ranges are mainly available in the large urban centres of Canada. The province/territory boundary layer incorporates hydrography (the shoreline around Canada and the larger inland lakes) with the boundaries and the geographic codes. The digital coordinates are in latitude/longitude and are based on the North American Datum of 1983 (NAD83).

Road Network Files are available for Canada, for individual provinces and territories, and for census metropolitan areas (CMAs) and those census agglomerations (CAs) with census tracts.

92F0158XCE Skeletal Road Network Files (SRNF), 2001 Census
The Skeletal Road Network Files contain selected roads (with road names, but no addresses) that are derived from Road Network Files (Catalogue No. 92F0157XCE). The selected roads are ranked according to four levels of detail (see Figure ?). The different levels of detail are suitable for mapping at small to medium scales. The SRNF can be used to provide some cartographic reference features when producing thematic maps with the Cartographic Boundary Files. The positional accuracy of the SRNF does not support cadastral, surveying or engineering applications. The SRNF does not include hydrography.

The Skeletal Road Network Files are available for Canada, provinces and territories, and census metropolitan areas (CMAs) and tracted census agglomerations (CAs).

4. Attribute Information Products

Attribute information products are those that give descriptive information about the features. The attribute files include Postal Code Conversion File (PCCF) and Postal Code by Federal Ridings File (PCFRF).

92F0027XCB Postal Code Conversion File (PCCF)
The Postal Code Conversion File (PCCF) provides a link between six-character postal code and standard 1996 Census geographic areas (such as enumeration areas, municipalities, census tracts). It also provides the x,y (latitude/longitude) coordinates for a point representing the approximate location of the postal code to support mapping.

The PCCF is available as standard packages for Canada, the provinces and territories, census metropolitan areas (CMAs) and some census agglomerations (CAs). A reference guide is included.

92F0027UCB Postal Code Conversion File (PCCF) – Update
The Postal Code Conversion File (PCCF) is updated with new postal codes on a semi-annual basis and is available in January and July. Clients must purchase the Postal Code Conversion File at the initial price; then subsequent updated files (92F0027UDB) may be purchased at the update or subscription rate. The update rate is a flat rate that in most cases is much lower than the initial purchase price. An additional 25% discount on updates is given to PCCF update subscribers. The subscription requires clients to pay in advance for at least one updated file per year until the PCCF reflecting the geography of the 2001 Census is released.

The PCCF Updates are available as standard packages for Canada and the provinces and territories. A reference guide is included.

92F0028XDB Postal Codes by Federal Ridings (1996 Representation Order) File
The Postal Codes by Federal Ridings File (PCFRF) provides a link between the six character postal codes and the federal electoral districts (1996 Representation Order). A federal electoral district (FED), commonly referred to as a federal riding, is an area represented by a Member of Parliament in the House of Commons.

The PCFRF is intended as a tool for use with administrative files containing postal codes. By using the postal code as a link, data from administrative files may be organised and/or tabulated by federal riding. This PCFRF allows a link of more than 680,000 postal code records to the 301 federal electoral districts.

The PCFRFs are available as standard packages for Canada and five regions. A reference guide is included.

92F0028XDB Postal Codes by Federal Ridings (1996 Representation Order) File (PCFRF) – Update
The Postal Code by Federal Ridings File (PCFRF) is updated with new postal codes on a semi-annual basis and is available in January and July. Updates released in July provide new postal codes effective January of the release year. Updates released in January provide new postal codes in use in July of the previous year. Clients who purchase the PCFRF (92F0028XDB) at the initial price may then purchase subsequent updated files (92F0028UDB) at the update rate (see Table 13 for details).

The PCFRF Updates are available as standard packages for Canada and five regions.

5. Geographic Services

A variety of services is available, including custom mapping, custom data extraction (geocoding) and the development of custom geography products.

97C0006 Geography Custom Service
If standard geography products do not satisfy a client's needs, the Geography Custom Service is available to produce non-standard geographic products. Examples include alternative packaging of geographic files, special data retrievals, manipulations or merges using any of the geography computer files (postal codes, attribute files, boundary files and road network files). Contact the nearest regional office for details.

97C0005 Custom Area Creation Service (formerly Geocoding Service)
The Custom Area Creation Service (formerly called Geocoding Service) allows users to define their own geographic areas of study (user-defined areas or aggregations of standard census geographic areas) for census data tabulations. This custom geography is produced from the aggregation of blocks, or where necessary, block-faces within the road network file coverage. The custom area files thus created are then passed to Census for data tabulation. Contact the nearest regional office for details.

97C0007 Geography Custom Mapping
Thematic maps and other maps, specially designed to meet customer needs, can be produced. Contact the nearest regional office for details.

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