Street Network Files and Street Network and Feature Extension Files
1996 Census
Reference Guide

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1996 Street Network Files and Street Network and Feature Extension Files

Reference Guide

What's New in the 1996 Street Network Files

♦ *Street information updated to May 1996.*

♦ *Address information updated to May 1996.*

♦ *Addresses have been imputed in order to increase address range information.*

♦ *Separate water polygon file.*

The New Street Network and Feature Extension Files

♦ *Extend the feature coverage of the Street Network Files to provide a full digital coverage of all Census Metropolitan Areas and tracted Census Agglomerations (CMA/CAs).*

♦ *Combine two sources:*

  ▪ *1996 Street Network Files, and*

  ▪ *Portion of the National Topographic Data Dase obtained from Geomatics Canada, Natural Resources Canada.*

  ▪ *Useful for thematic mapping and display of entire urban centres.*
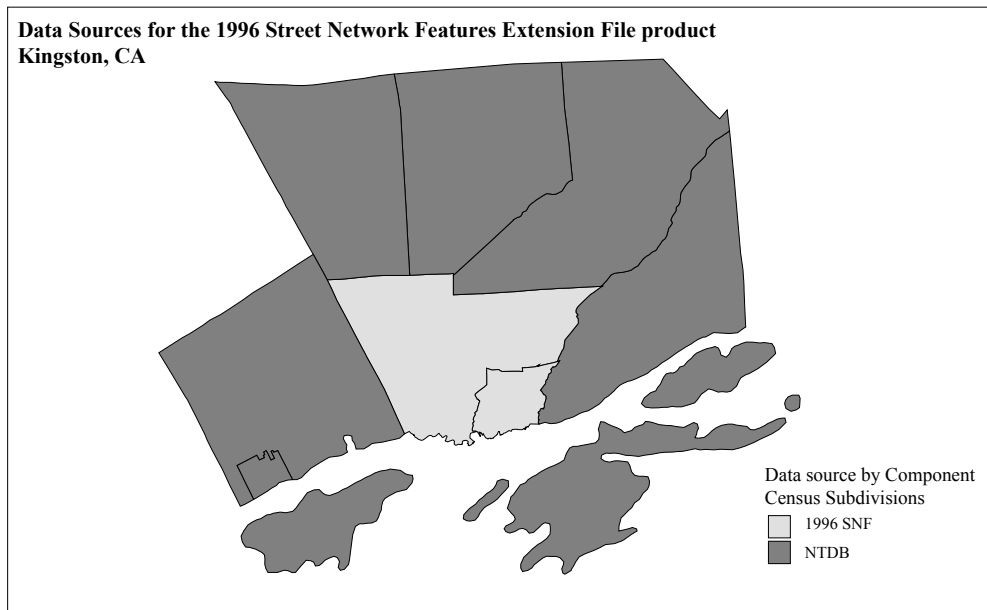

Data Sources for the 1996 Street Network Features Extension File product Kingston, CA

Data source by Component Census Subdivisions
☐ 1996 SNF
■ NTDB

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1. *About this Guide*

This reference guide is intended for users of any or all 1996 Street Network Files (SNFs) or of the new Street Network and Feature Extension Files (SNFEFs). It provides general information about the products, including a description and the general methodology used to create the products.

Since most of the SNFEFs contains a core 1996 SNF, the SNFs are discussed first within each section of this reference guide and the SNFEFs are discussed when applicable.

The Data Quality statement gives a detailed description of the various steps in the creation of the SNF and SNFEF, including the new address imputation procedure. This statement also provides information to evaluate the suitability of the data for a particular use.

Technical specifications in Section 5 include system requirements, installation guidelines, record layout and item descriptions, and file sizes (in bytes).

Geographic terms and concepts highlighted in **bold** in the text are described in the glossary. More details can be found in the *1996 Census Dictionary*, Catalogue number 92-351-XPE. Supplementary information is provided in the appendices with a list of related products and services.

This reference guide does not provide details on specific software packages that are available for use with the 1996 Street Network File. Users are advised to contact the appropriate software vendor for information. A current list of software vendors able to supply 1996 Street Network File products in their own format is maintained by Statistics Canada. Please contact your nearest Regional Reference Centre for further information.

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. Many geographic codes and numbers presented in this guide have been transcribed from computer screens and internal written reports and then key-entered. All efforts have been made to ensure a thorough verification of this product, however, there is no guaranty that the data are 100% accurate.

2. *Overview*

2.1 The Street Network File

The Street Network Files (SNFs), formerly known as the Area Master Files (AMFs), were first created in the early 1970s as the basis for retrieval of Census data for user-defined geographic areas. More recently, the Street Network Files have also been used in Census data collection, specifically in the delineation of **enumeration areas** and the automated production of census collection and **reference maps**.

The Street Network Files contain information on visible features such as streets, hydrography, railroad tracks and power lines, and information on invisible (or abstract) features such as municipal and park boundaries. The files also contain attribute information on the features (for example, street and hydrographic names and address ranges for streets with assigned addresses).

The 1996 Street Network Files (SNFs) are available as standard products for 50 urban centres:

- 25 **census metropolitan areas** (CMAs),
- 18 **census agglomerations** (CAs), and
- Seven **census subdivisions** (CSDs) outside CMA/CA areas.

Street Network Files provide full digital coverage for 23 urban centres and partial coverage for 27.

In total, 344 census subdivisions are covered by a Street Network File. These CSDs represent a population of approximately 18 million people or 62% of the total population of Canada. A comprehensive list of CMA/CAs and their component census subdivisions covered by a Street Network File is presented in Appendix D.

The 1996 Street Network Files contain street information and address ranges current to Census Day, May 14, 1996.

2.2 The New Street Network and Feature Extension Files (SNFEFs)

The new Street Network and Feature Extension Files combine the 1996 Street Network Files (SNFs) with a road and feature network taken from the digital National Topographic Data Base files (NTDB) produced by Geomatics Canada, Natural Resources Canada. By combining these two sources of data, the SNFEFs extend the digital coverage of twenty-six (26) urban centres partially covered by the SNF to provide full digital coverage of all census tracted CMAs/CAs. SNFEFs also provide coverage for three new tracted CAs not covered at all by Street Network Files.

The NTDB portions of the 1996 SNFEF cover 298 census subdivisions, representing a population of approximately 1.9 million people. The SNFEFs (NTDB extensions joined to the 1996 SNFs) cover 642 CSDs and approximately 19.8 million people or 68% of the total population of Canada.

The extended coverage included in the SNFEFs does not include all the features and attributes of the SNF (notably, address ranges are missing). For this reason, the SNFEFs, and in particular the extended portion based on NTDB data, were created for mapping and display purposes only. Further information on this is provided in section 4.1 *Lineage.*

A list of urban centres for which a SNF and/or a SNFEF are available appears in Table 1.

2.3 Adjusted Boundary Files

NTDB features do not align with the standard Digital Boundary (DBF)/ Digital Cartographic Files (DCF) - Catalogue number 92F0029XDE, 92F0030XDE and 92F0032XDE to 92F0040XDE. Adjusted Enumeration Area (EA), Census

Tract (CT) and Census Subdivision (CSD) boundary files were created to allow users of the SNFEF to map 1996 Census data. These adjusted boundary files cover the entire SNFEFs. However, only boundaries in the NTDB portion of the SNFEFs are adjusted; the boundaries in the areas covered by SNFs are generally consistent with SNF features (refer to section 4.4.1 *Consistency with other products*).

Table 1. Street Network Files (SNF) and Street Network and Feature Extension Files (SNFEF)

Geographic type	SNF/SNFEF product name	Geographic code	SNF	SNFEF
CA	Abbotsford	932	X	X
CA	Barrie	568		X
CA	Belleville	522	X	X
CSD	Benito	4620043	X	
CA	Brantford	543	X	
CSD	Brock	3518039	X	
CMA	Calgary	825	X	X
CMA	Chicoutimi - Jonquière	408	X	X
CMA	Edmonton	835	X	X
CSD	Fergus	3523026	X	
CA	Fredericton	320	X	
CA	Guelph	550	X	
CMA	Halifax	205	X	X
CMA	Hamilton	537	X	
CA	Kamloops	925	X	X
CA	Kelowna	915	X	X
CA	Kingston	521	X	X
CMA	Kitchener	541	X	
CA	Lethbridge	810	X	
CMA	London	555	X	
CA	Moncton	305	X	X
CMA	Montréal	462	X	X
CA	Nanaimo	938		X
CA	North Bay	575	X	X
CMA	Oshawa	532	X	
CMA	Ottawa - Hull	505	X	X
CA	Peterborough	529	X	X
CA	Prince George	970	X	
CMA	Québec	421	X	X
CA	Red Deer	830	X	
CMA	Regina	705	X	X
CMA	Saint John	310	X	X
CA	Saint-Jean-sur-Richelieu	459		X
CA	Sarnia	562	X	
CMA	Saskatoon	725	X	X
CA	Sault Ste. Marie	590	X	
CSDs	Scugog + Scugog 34	3518020, 3518022	X	
CMA	Sherbrooke	433	X	X
CMA	St. Catharines - Niagara	539	X	
CMA	St. John's	001	X	X
CA	Stratford	553	X	
CMA	Sudbury	580	X	X
CMA	Thunder Bay	595	X	X
CMA	Toronto	535	X	X
CMA	Trois-Rivières	442	X	X
CMA	Vancouver	933	X	
CMA	Victoria(+3 CSDs)	935	X	
CSD	Wellesley	3530027	X	
CSD	West Lincoln	3526021	X	
CSD	Wilmot	3530020	X	
CMA	Windsor	559	X	X
CMA	Winnipeg	602	X	X
CA	Woodstock	544	X	

3. *About these Products*

3.1 Content

The 1996 Street Network File

The Street Network Files contain information on visible features such as streets, hydrography, railroad tracks and power lines, and information on invisible (or abstract) features such as municipal and park boundaries. The files also contain attribute information on the features (for example, street and hydrographic names and address ranges for streets with assigned addresses).

For the first time in 1996, some addresses have been imputed in order to increase the number of complete address ranges in the final product. Imputed addresses were specifically created to assist users who wish to geocode addresses. An address imputation field is included on the files for the identification of imputed addresses.

The 1996 Street Network File products are based on NAD27 and are available in latitude and longitude coordinates.

The Street Network and Feature Extension Files

The new Street Network and Feature Extension Files integrate the 1996 Street Network Files (SNFs) with a road and feature network taken from the digital National Topographic Data Base files (NTDB) produced by Geomatics Canada, Natural Resources Canada (NRCan). By combining these two sources of data, the SNFEFs extend the digital coverage of 26 urban centres partially covered by the SNF to provide full digital coverage of all census tracted CMA/CAs[1]. SNFEFs also provide coverage for three new tracted CAs not covered at all by SNFs, namely Saint-Jean-sur-Richelieu (Quebec), Barrie (Ontario) and Nanaimo (British Columbia).

The 1996 SNFEFs are based on NAD27 and are available in latitude and longitude coordinates.

The main differences between the two source files used in the creation of the SNFEF can be summarized as follows:

The Street Network Files:

- contain addresses (real and imputed),
- contain information systematically updated by Statistics Canada before and after the 1996 Census, and
- are generally consistent with 1996 Digital Boundary/Digital Cartographic Files.

The NTDB files:

- contain no civic address information and no hydrographic feature names,
- may or may not contain more cartographic information than the SNF,
- features were not updated systematically, and
- contain features that are NOT coincident with 1996 Digital Boundary/Digital Cartographic Files.

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[1] The Census Agglomeration (CA) of Fredericton (New Brunswick) is not part of the census tract program, but has SNF coverage for three of it's twelve component CSDs. NTDB data were not added to the Fredericton SNF.

3.2 General Methodology

The 1996 Street Network File

The Geography Division of Statistics Canada maintains a Street Network internal data base to support data collection and dissemination of the Census of Population and Housing. Selected fields were selected from this data base to create the Street Network Files product. The Street Network data base is supported by ARC/INFO® which was used to create the Street Network Files.

Since 1991, the Street Network data base has undergone a series of updates to reflect new information gathered during the 1991 and 1996 census collection. The working units for these updates were the Federal Electoral Districts (1987 Representation Order). A total of 203 FEDs has full or partial digital coverage.

A large number of addresses are missing in the Street Network data base. Some of these unknown addresses were imputed to permit greater address geocoding. A field has been added to the Street Network Files to allow users to identify precisely which addresses are imputed.

Table 2 provides information on number of known addresses on the 1991 and 1996 SNFs and the number and percentage of imputed addresses on 1996 SNFs.

Table 2.   Addresses in the 1996 and 1991 Street Network Files (SNF):

SNF	Known addresses (prior to imputation)			Missing and imputed addresses (-1 and -2 only)[2] - 1996 SNFs		
	1991 SNF	1996 SNF	% change	Missing addresses (-1 and -2 only)	Imputed	% Imputed
Abbotsford	5.217	7.740	48	6.371	3.502	55
Belleville	2.998	3.088	3	1.925	1.164	60
Brantford	7.733	8.585	11	6.207	3.645	59
Calgary	42.004	44.772	7	52.363	24.017	46
Chicoutimi - Jonquière	11.125	12.766	15	9.345	5.448	58
Edmonton	42.649	43.912	3	35.760	9.703	27
Fredericton	4.625	4.414	-5	3.796	2.160	57
Guelph	6.389	6.840	7	6.023	2.935	49
Halifax	13.271	14.085	6	10.457	6.179	59
Hamilton	40.750	43.509	7	28.201	18.699	66
Kamloops	5.357	5.859	9	7.050	2.875	41
Kelowna	7.888	10.058	28	11.675	3.947	34
Kingston	6.198	6.823	10	4.725	2.773	59
Kitchener	21.206	23.818	12	18.785	9.899	53
Lethbridge	5.242	6.008	15	5.935	2.491	42
London	17.170	20.751	21	28.882	10.079	35
Moncton	7.968	8.950	12	12.395	4.331	35
Montréal	146.774	167.977	16	138.141	66.837	48
North Bay	4.308	4.721	10	5.987	1.944	32
Oshawa	14.719	17.395	18	15.625	7.325	47
Ottawa - Hull	52.053	61.937	19	67.545	29.410	44
Peterborough	5.190	5.519	6	4.049	2.947	73
Prince George	7.011	7.522	7	6.802	2.896	43
Québec	36.948	40.815	10	33.013	18.665	57
Red Deer	3.041	3.805	25	5.535	2.396	43
Regina	13.000	13.800	6	12.950	5.674	44
Saint John	6.631	7.446	12	6.680	3.090	46
Sarnia	6.565	7.218	10	6.790	3.667	54
Saskatoon	11.315	12.060	7	12.583	6.597	52
Sault Ste. Marie	6.970	7.283	4	5.501	3.170	58
Sherbrooke	5.546	5.822	5	3.895	2.289	59
St. Catharines - Niagara	41.819	43.424	4	30.835	17.208	56
St. John's	5.958	6.583	10	6.975	3.098	44
Stratford	2.471	2.621	6	1.831	1.111	61
Sudbury	6.893	7.177	4	4.805	3.069	64
Thunder Bay	8.686	9.346	8	8.688	4.596	53
Toronto	148.486	169.201	14	132.572	69.649	53
Trois-Rivières	8.351	9.043	8	8.556	3.892	45
Vancouver	120.396	130.976	9	77.002	38.780	50
Victoria (+3 CSDs)	26.027	28.244	9	19.622	10.659	54
Windsor	13.146	13.779	5	12.858	5.851	46
Winnipeg	34.641	36.222	5	47.880	20.385	43
Woodstock	2.832	2.966	5	2.050	1.466	72
CSDs outside CMA/CA	3,706	5,480	48	13,164	2,799	21
Total	991.273	1.100.360	11	941.829	453.317	48

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[2] Refer to section 4.1.3 for details on types of missing addresses.

The 1996 Street Network Feature Extension File

A modified version of the NTDB files (refer to Section 4.1 *Lineage*) were edge-matched to the 26 Street Network Files with partial coverage of CMA/CAs using ARCINFO®. No features from the SNFs were dropped during this process. All required edits were performed on the newly created SNFEFs to ensure that no topological errors remained. The modified NTDB files were also used to create a digital coverage for the three new tracted census agglomerations not covered by SNFs.

The MapInfo® for Windows® versions of the 1996 Street Network Files and Street Network and Feature Extension Files were created by converting the final ARCINFO® versions of the Street Network Files using ARCLINK, a supplementary module of MapInfo®.

3.3 Reference Date

The **geographic reference date** is a date determined by Statistics Canada to finalize the geographic framework for which census data will be collected, tabulated and reported. The geographic reference date of the 1996 Census is *January 1, 1996*. The reference date for the 1996 Street Network File is Census Day - May 14, 1996. The street and street names taken from the NTDB were updated in 1995 while the reference date for other features and attributes contained on NTDB files varies.

3.4 Comparisons to the 1991 Street Network File

The 1996 Street Network Files have the same look and feel as the 1991 product. The road network and address information reflect the information collected on Census Day - May 14, 1996, for all Street Network Files. The 1991 Street Network Files had reference dates that ranged from June 1986 to May 1991.

Addresses have been imputed where possible in order to assist users who may wish to do address geocoding. An address imputation flag has been added to allow users to identify which street or addresses have been imputed.

A water feature field has been added in the ARC/INFO version of the SNF and SNFEF, and separate water polygon files created for both MapInfo and ARC/INFO.

The 1996 Street Network Files are available in English and in French.

The 1996 Street Network Files do not include the two point coverages *(cover.cen* and *cover.pat)* found in the 1991 product.

The Street Network and Feature Extension Files are new for 1996.

3.5 Product Dissemination

Street Network Files are available from all Statistics Canada Regional Offices. The files are sold by CMA/CA or as a custom extraction. The AMF format, provided in earlier releases of the Street Network Files, are not available for the 1996 product.

3.6 Limitations

The major limitation in using these files is the small percentage of "true" addresses that are neither missing nor imputed. Imputed addresses are not meant to replace true addresses for any purpose other than address geocoding. Thus, if the files are to be used for computer-aided dispatch or similar purposes (that require an address to be matched to a block-face or street) it may be necessary to supplement the file with local knowledge, update existing true addresses and replace imputed addresses.

The SNF does not contain street information required for route optimization; data on one-way streets, dead-ends and other street obstacles are not included in the SNF. Absolute positional accuracy was not a priority in the creation of the Street Network Files. Consequently, these files are NOT recommended for engineering applications, emergency dispatching services, or legal applications.

The extended coverage included in SNFEFs is adequate for general mapping and display only. Contrary to what is the case with the SNFs, no block-face **representative points** are available for street features obtained from the NTDB. All households in NTDB areas are geocoded to the enumeration area, and not to a **block-face**. Consequently, the SNFEF do not increase the coverage of the **geocoding** service available from Statistics Canada for the creation of custom geography areas.

3.7 Recommended Applications

Recommended uses for the SNF include mapping, site location analysis and planning of service delivery. The recommended use for the NTDB portion of the SNFEF product is for general reference mapping and display.

4. *Data Quality*

The purpose of this data quality statement is to provide detailed information so that users may evaluate the suitability of the data for their use. Five fundamental components of a data quality statement are: lineage, positional accuracy, attribute accuracy, logical consistency and completeness. (See Statistics Canada, 1992.)

4.1 Lineage

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

4.1.1 SNF - The creation

The National Topographic Systems (NTS) 1:50,000 maps sheets produced by Natural Resources Canada and the Ontario Base Maps (OBM) were used as the basis for the initial creation of some SNFs. Other SNFs were created based on municipal and provincial data sources. Historically, municipalities have provided a variety of documents that may include street maps, printouts of digital street network files, development plans and manually drafted corrections entered on street network plots provided by Geography Division. While the scales of these source maps varied widely, most are within the ranges of 1:1,000 to 1:30,000. Scales of 1:5,000, 1:10,000 and 1:25,000 were most frequently used.

Historically, the emphasis in the updating process has been to have a complete picture of the street network with the placement of the streets correctly drawn relative to other streets and features. To do this, diverse sources of updates including maps and descriptive information from municipalities and maps and enumeration records from the census of population and housing were used.

The quality of source documents varied over time and sometimes lower quality input documents were used rather than omitting updates altogether. This is consistent with the emphasis of completeness over absolute positional accuracy.

4.1.2 SNF - Pre-Census updates

A systematic update process was adopted in order to meet the 1996 Census operational and product dissemination requirements. Source material used for the updates included internal and external sources. Updates and corrections were made to the internal street network data base by on-screen digitising and editing using ARC/INFO®. These updates and corrections were subject to an internal quality control process.

The 1996 SNF updating began with the loading the 1991 SNFs into the 1996 Street Network Data Base system (in-house). This was followed by the manual compilation of features and addresses from the 1991 enumeration area collection maps[3]. The reference date for the 1991 EA collection map is June 1991. Whenever possible, maps from various sources, including Chief Electoral Office Maps (1991), were also used. A quality control process based on sampling was used in monitoring the manual updates of feature names and feature location. Address information was not verified.

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[3] The 1991 SNF product was not updated with the 1991 EA collection maps.

Address information for businesses with more than 50 employees was obtained from Statistics Canada 1991 Place Of Work project. Within SNF covered areas, the project gathered information on the precise location of businesses with more than 50 employees. These locations were primarily found in industrial parks and required the addition of new streets, street names or updating existing SNF address ranges (approximately 4,400 addresses were added).

Prior to May 1996 census field personnel reviewed maps created from the SNFs to indicate new streets and changes to enumeration area boundaries. The modified maps were subsequently returned to the Geography Division and used for a new cycle of updates to the Street Network Data Base.

Changes to the Matsqui SNF were required following the annexation of the municipality of Abbotsford in late 1995. Data were obtained from an earlier in-house project for Abbotsford. This new SNF coverage was subsequently updated using information gathered during the 1996 Census (see section 4.1.2).

Two external requests for SNF updating and extensions were undertaken prior to May 1996:

- The Regional Municipality of St. Catharines - Niagara provided aerial photographs scaled to maps and other source documents to improve the quality of the SNF coverage for that area.

- The Regional Municipality of Peel provided Statistics Canada with an ARC/INFO® Export file covering the Town of Caledon for addition to the Toronto SNF. The original file was manipulated and changed to conform to SNF attribute and polygon structures and data standards; bodies of water and railway features were added. The resulting coverage was verified against an enumeration area polygon file to ensure it's integrity with 1996 Census Geography. This new Street Network coverage was edge-matched with the surrounding 4 FEDs and added to the Street Network Data Base system (in-house).

4.1.3 SNF - Post-Census updates

Two sources of data were used to update the SNF after the 1996 Census.

Address Register (AR): The Address Register contains residential addresses for all 1996 Census households in SNF areas. The AR was matched with the SNF and addresses from AR were transferred to the SNF following automated or interactive procedures. Approximately 90,000 addresses were updated.

1996 Enumeration area (EA) collection maps: Street features were updated based on the information contained on the EA collection map. Census Representatives were instructed to update street information for this purpose. Other map sources were used to validate EA map changes. The reference date for this source is May 14, 1996.

4.1.4 Address imputation

The SNFs contain incomplete residential addresses and few addresses in business or industrial areas. The quantity and the type of address information in the SNF are dependent on the following factors:

- the primary purpose of the SNF is to support the collection of the Census of Population and Housing and the retrieval of Census data for user-defined areas,

- in the past, the maintenance and updating activities have not emphasised addresses, and

- until recently, address data were obtained primarily from residential address information sources.

Four types of missing addresses are identified on SNFs by specific type codes:

0	⌈ Default for non-addressable features
-1	⌈ Default for unknown addresses in addressable features.
-2	⌈ An unknown address opposite a T-intersection on an addressable feature.
-4	⌈ Assigned to non-addressable arcs on addressable features, for example, parks.

For the first time in the 1996 SNFs, a method of address imputation was developed and implemented. The goal of address imputation was to provide a greater number of complete address ranges for the sole purpose of address geocoding.

The rules adopted for address imputation consisted of the following:

- no known address in the SNF was replaced by an imputed one;
- only -1 and -2 address codes were selected as candidates for imputation; and,
- 0 and -4 address codes were not imputed.

Three imputation types were done in the following sequence:

- adjacent estimation across intersections
- middle estimation between two intersections
- tail estimation (estimation beyond at least one set of consecutive addresses).

On average 50% of the unknown addresses (-1 and -2 address codes) were imputed. Users can identify the imputed addresses by using the address imputation flag field (see Section 5.4 for a description of the codes).

4.1.5 The Street Network and Feature Extension Files (SNFEF)

The 1996 SNFEFs consists of 1996 Street Network Files (SNFs) and portions of the digital National Topographic Data Base files (NTDB) produced by Natural Resources Canada. The road network and associated road names obtained from the NTDB were updated in 1995 as part of a joint project between Elections Canada and Statistics Canada. This updated digital road network was used in the production of the Large Urban Enumeration Area Reference Map series (Catalogue number 92F0090XPB). Other features taken from the NTDB to create the extended coverage were not updated and the reference date of the information varies considerably.

The modified NTDB feature coverage was edge-matched to the SNF (no SNF features were dropped in this process). Most NTDB road features were adjusted to adjacent SNF road features. Railway and power line features were not edge-matched.

There are no civic addresses in the NTDB extensions contained in the Street Network and Feature Extension Files (SNFEFs).

4.1.6 Adjusted Boundaries

Statistics Canada produces and distributes a series of products that depict boundaries of standard geography units: the Digital Boundary Files (DBFs) and Digital Cartographic Files (DCFs). Boundaries of standard geography units often follow visible features. The boundaries depicted in DBFs/DCFs are generally consistent with the features contained in SNFs. This is not necessarily the case with the extended portions of SNFEFs.

Modified boundaries for enumeration areas (EA), census tracts (CT) and census subdivisions (CSD) were created to allow mapping of census data with the SNFEFs. In areas with SNFs, the digital boundaries were derived directly from the final Street Network data base. In the NTDB extended portion of the SNFEFs, the Digital Boundary Files were overlaid on the NTDB data and boundaries were moved to match the corresponding features of the NTDB. Thus, the adjusted boundaries will correspond to the position of features as depicted in the SNF and the SNFEF, but they will not correspond to the DBF.

4.2 Positional Accuracy

Positional accuracy is the difference between the "true" position of a feature in the real world and the "estimated" position stored in the digital file or other product.

The difference between the "true" position and the "estimated" position of any of the features in the SNF and SNFEF has not been estimated. Users should remember that the main purpose of the SNF is to support Census data collection, and not any engineering or surveying applications. Given this primary purpose, the correct relative position of the features with respect to each other and the census boundaries was emphasised. Relative positional accuracy serves the need of enumerators to navigate with respect to physical features and census boundaries, allows for the production of reference maps that show census boundaries relative to physical features. It also allows the geocoding of population relative to physical features and/or census boundaries.

4.3 Attribute Accuracy

Attribute accuracy refers to the accuracy of the non-positional information attached to each feature such as feature name and code.

A limited number of tests were undertaken to ensure the accuracy of the non-positional data contained in the SNF. Street names were the primary focus. In preparation for the 1996 census, the 1991 enumeration maps were used as the primary source of updates for SNFs. When inconsistencies were found between the information contained in the SNF and the primary update source, an attempt was made to settle the differences by using other independent sources. After these updates were entered, automatic corrections were made to street names and types to ensure contiguity of these across arcs (where warranted). The SNF attributes were then improved with more up-to-date information from the 1996 Census.

All feature names in the SNF and the SNFEF areas are in capital letters without accents and are truncated to 20 characters. In areas covered by the NTDB in the SNFEF only the feature type or descriptive name such as 'power line', 'park', and 'airport' are provided (except for road names).

Only the numeric portion of addresses is found in the SNF address fields. For example an address of "35A" is shown as "35".

4.4 Logical Consistency

Logical consistency is the degree to which features are accurately represented in the data structure and fulfil all the internal requirements of the data structure. In other words, how well elements of the data structure follow the rules imposed on them. For example, all polygons must close properly and lines should intersect only where intended.

The 1996 SNF

A number of quality control measures were performed on the 1996 SNFs. Despite these efforts, the following inconsistencies persist in the SNFs and in the SNF portion of the SNFEFs.

- Approximately 900 known cases of duplicate ARC_ID,
- Approximately 4,000 duplicate POLY_ID (generally across SNFs, except for certain cases within the Montréal, Sault Ste. Marie and Prince George SNFs),
- Approximately 400 features representing unused 1991 EA boundaries (CLASS = CEA),
- Approximately 60 arcs representing unused Census Subdivision boundaries (CLASS = MMU),
- Approximately 25 arcs with a valid Street Type but no Street Name,
- Approximately 30 addressable arcs (CLASS = blank or "E") with addresses = 0.

While attempts were made to close the polygons that represent water bodies, water polygons may not all be closed. Users should consider this if they wish to shade water polygons or calculate net land area (exclusive of water).

The Street Network and Feature Extension File (SNFEF)

The NTDB extensions used in the SNFEFs were extracted from the digital coverage used for the creation of the Large Urban Enumeration Area Reference Maps. The NTDB data used to create the reference maps underwent several changes including a significant edge-matching operation where the NTDB was adjusted to the SNF (no SNF features were dropped in this process). Most NTDB road features were adjusted to adjacent SNF road features; railway and power line features were rarely matched. Other consistency concerns include:

- missing features between the SNF and NTDB areas - a feature on one coverage does not extend or continue in the other
- multiple-line features change to single line features between the SNF and NTDB areas - a feature that crosses into the other data source area changes from multiple to single and vice versa
- feature name inconsistencies exist
- names for what appears to be same streets do not continue in the NTDB extensions
- NTDB extension areas are not vertically compatible with any standard digital boundary products.

4.4.1   Consistency with Other Products

The 1996 SNFs are consistent with other geographic products such Reference Maps, the Skeletal Street Network Files, GeoRef, and the Block Face Data File.

The 1996 SNFs are generally consistent with the 1996 Digital Boundary and Digital Cartographic Files:

- relatively small amounts of shifting (less than three meters) occurred between the preliminary version of SNFs used to create the 1996 DCFs and DBFs and the final 1996 SNFs,
- a small number of SNF feature updates completed after the creation of the 1996 DCFs and DBFs resulted in discrepancies between the enumeration area boundaries depicted in DCF/DBF and the corresponding features in the SNF/SNFEF. Each of the known cases involves two adjacent enumeration areas as can be seen in Table 3.

Table 3. Enumeration areas showing a discrepancy between the boundaries depicted in the DBF/DCFs and the SNF/SNFEF

SNF Name	Enumeration areas		SNF Name	Enumeration areas	
Calgary	48006076	48006054	Hamilton	35030305	35030318
Calgary	48006076	48006077	North Bay	35053412	35053309
Edmonton	48014157	48014156	Québec	24016616	24016613
Vancouver	59001055	59001056	Québec	24038370	24038401
Hamilton	35030316	35030315	St. John's	10006606	10006656
Kitchener	35038002	35038271	Sudbury	35082212	35082262
Kamloops	59009602	59009573	Windsor	35094071	35094020
Kelowna	59017513	59017508	Toronto	35056251	35056255
Kelowna	59017551	59017516	Vancouver	59030121	59030154
Kitchener	35038213	35038271	Victoria	59024775	59024774
Toronto	35049364	35049368	Windsor	35094120	35094117
Montréal	24045002	24045001	Winnipeg	46008512	46005451
Toronto	35022056	35022057			

Water features on the CMA/CA/CT Reference Maps and the Digital Cartographic Files were taken from different sources and may not be consistent with that on the SNFs or SNFEFs.

In the NTDB portion of the SNFEF, only enumeration area representative points are available for custom area geocoding. Block-face representative points, available in SNF areas, were not created for the extended coverage. Users of the postal code conversion file should note that postal codes could only be linked to enumeration areas, and not to block-faces, in the NTDB portion of the SNFEFs.

The Adjusted Boundary Files are not consistent with the Digital Boundary Files or the Digital Cartographic Files. The census boundaries in the adjusted files were aligned to the NTDB features in the SNFEFs.

4.5 Completeness

Completeness expresses the degree to which the geographic entities (features) are captured according to the data capture specifications. It also contains information about selection criteria, definitions used and other relevant mapping rules.

Census subdivisions included in the Street Network coverage are generally completely covered. In 1996, there is one exception to that rule: the municipality of Pitt Meadows, B.C. (CSDuid 5915070). In 1995, Pitt Meadows annexed a portion of an adjacent CSD. This portion does not have SNF coverage.

While the Street Network Files contain many non-street features (for example, railways, hydrography, parks, cliffs), the complete representation of these secondary features was neither intended nor guaranteed. In general, these were included if they appeared in base maps and update materials and were deemed to be of importance to the Street Network File.

5. *Technical Specifications*

5.1 File specifications

All 1996 Street Network Files and Street Network and Feature Extension Files are available in two formats: ARC/INFO® EXPORT format and MapInfo® for Windows®. English and French versions are available.

> The coordinates are in latitude and longitude NAD 27.

> The file extension of the ARC/INFO® EXPORT files is E00. The file extensions for the MapInfo® files are TAB, DAT, ID and MAP.

Once imported the ARC/INFO® files include:

1. a street network line coverage with an AAT and PAT;
2. a water polygon coverage with a PAT.

The MapInfo® for Windows® version includes:

1. the street network with TAB, DAT, ID and MAP files;
2. water polygons with TAB, DAT, ID and MAP files.

> Note: Adjusted CSD, CT, and EA boundaries are available for users of the SNFEF. These boundaries (equivalent to Digital Boundary Files) are available in ARC/INFO® EXPORT and MapInfo® for Windows®.

5.2 Installation instructions

Both the ARC/INFO® and the MapInfo® are compressed into self-executable PKZIP® files (file extension EXE). Users can uncompress these files by executing them in DOS, or selecting them in Windows® and double clicking on the file icon, or executing them in the RUN dialog in Windows®. Uncompressed versions of the ARC/INFO® export files are available for those users who cannot use the self-executable compressed files.

5.3 Record layouts and item/field descriptions

5.3.1 SNF and SNFEF street network coverage

File name (SNF)	ARC/INFO®	gsnfNNNr.AAT, and gsnfNNNr.PAT
	MapInfo®	gsnfNNNr. TAB, DAT, ID and MAP
File name (SNFEF)	ARC/INFO®	gsnfNNNn.AAT, and gsnfNNNn.PAT
	MapInfo®	gsnfNNNn. TAB, DAT, ID and MAP

Where NNN is the three digit code uniquely identifying the CMA or CA or the first three letters of the CSD name in the case of the 7 individual CSDs covered by a Street Network File.

Record Layout

MapInfo file and the .AAT for ARC/INFO.

COLS (ARC/INFO®)	Item Name (ARC/INFO®)	Field Name (MapInfo®)	Width	Output (ARC/INFO®)	Type	N. Dec.
1	FNODE#	(not included in the MapInfo files)	4	5	B	
5	TNODE#	(not included in the MapInfo files)	4	5	B	
9	LPOLY#	(not included in the MapInfo files)	4	5	B	
13	RPOLY#	(not included in the MapInfo files)	4	5	B	
17	LENGTH	(not included in the MapInfo files)	4	12	F	3
21	*COVER#*	(not included in the MapInfo files)	4	5	B	
25	*COVER-ID*	(not included in the MapInfo files)	4	5	B	
29	NAME	name	20	20	C	
49	TYPE	type	2	2	C	
51	DIRECTION	direction	2	2	C	
53	ADDR_FM_LEFT	addr_fm_le	5	5	I	
58	ADDR_TO_LEFT	addr_to_le	5	5	I	
63	ADDR_FM_RGHT	addr_fm_rg	5	5	I	
68	ADDR_TO_RGHT	addr_to_rg	5	5	I	
73	ADD_IMPUTE	add_impute	2	2	C	
75	CLASS	class	3	3	C	
78	ARC_ID	arc_id	8	8	C	
86	SOURCE	source	1	1	C	
87	LENGTH_M	length_m	8	12	F	0

Short Item Description

ARC/INFO® Item Name	MapInfo® Field Name	Brief Description
FNODE#		maintained by ARC/INFO® (not included in the MapInfo files)
TNODE#		maintained by ARC/INFO® (not included in the MapInfo files)
LPOLY#		Identifier for polygon on left side of the arc (not included in the MapInfo files)
RPOLY#		Identifier for polygon on right side of the arc (not included in the MapInfo files)
LENGTH		maintained by ARC/INFO®
COVER#		maintained by ARC/INFO®
COVER-ID		maintained by ARC/INFO®
NAME	name	A twenty character field containing the given name of the feature
TYPE	type	A two character code used for street identification when the feature is a single or multiple lane addressable street
DIRECTION	direction	A two character code identifying the direction of the arc when the feature is a single or multiple lane addressable street
ADDR_FM_LEFT	addr_fm_le	The civic address found on the left-hand side of the arc at the FROM node
ADDR_TO_LEFT	addr_to_le	The civic address found on the left-hand side of the arc at the TO node
ADDR_FM_RGHT	addr_fm_rg	The civic address found on the right-hand side of the arc at the FROM node
ADDR_TO_RGHT	addr_to_rg	The civic address found on the right-hand side of the arc at the TO node
ADD_IMPUTE	add_impute	Code that identifies which address are imputed
CLASS	class	A three character code which identifies the different types of arcs
ARC_ID	arc_id	Identifies ARC
SOURCE	source	Data source: 1 = SNF, 2 = NTDB
LENGTH_M	length_m	Approximate calculation of ARC length in meters

Record Layout:

.PAT file (ARC/INFO® only)

COLS	Item Name (ARC/INFO®)	Width	Output (ARC/INFO®)	Type	N. Dec.	Brief Description
1	AREA	4	12	F	3	maintained by ARC/INFO®
5	PERIMETER	4	12	F	3	maintained by ARC/INFO®
9	*COVER#*	4	5	B		maintained by ARC/INFO®
13	*COVER-ID*	4	5	B		maintained by ARC/INFO®
17	POLY_ID	8	8	C		polygon identifier
25	CSDUID	7	7	C		CSD unique identifier
32	WATER	1	1	I		water identifier, water = 1
33	SOURCE	1	1	C		data source: 1 = SNF, 2 = NTDB

5.3.2 SNF and SNFEF - Water polygon coverage

File name (SNF):   ARC/INFO®   gsnfNNNs.PAT
                        MapInfo®   gsnfNNNs. TAB, DAT, ID and MAP

File name (SNFEF)   ARC/INFO®   gsnfNNNc.PAT
                        MapInfo®   gsnfNNNc. TAB, DAT, ID and MAP

where NNN is the three digit code uniquely identifying the CMA or CA or the first three letters of the CSD name in the case of the 7 individual CSDs covered by a Street Network File.

Record Layout

COLS	Item Name (ARC/INFO®)	Field Name (MapInfo®)	Width	Output (ARC/INFO®)	Type	N. Dec.
1	AREA	(not included in the MapInfo files)	4	12	F	3
5	PERIMETER	(not included in the MapInfo files)	4	12	F	3
9	*COVER#*	(not included in the MapInfo files)	4	5	B	
13	*COVER-ID*	(not included in the MapInfo files)	4	5	B	
17	WATER	water	1	1	I	
18	AREA_M2	area_m2	8	12	F	0
26	PERIMETR_M	perimetr_m	8	12	F	0
34	SOURCE	source	1	1	C	

Short Item Descriptions

Item Name (ARC/INFO®)	Field Name (MapInfo®)	Item Description
AREA	(not included in the MapInfo files)	maintained by ARC/INFO®
PERIMETER	(not included in the MapInfo files)	maintained by ARC/INFO®
COVER#	(not included in the MapInfo files)	maintained by ARC/INFO®
COVER-ID	(not included in the MapInfo files)	maintained by ARC/INFO®
WATER	water	water attribute indicator (1 = water)
AREA_M2	area_m2	approximate calculation of polygon area in square meters
PERIMETR_M	perimetr_m	approximate calculation of polygon perimeter length in meters
SOURCE	source	data source: 1 = SNF, 2 = NTDB

5.4 Data Clarification for some of the fields in the 1996 SNFs

<u>Name Field</u>

Feature Name	
Name information	**Specifications**
Format:	Alphanumeric characters allowed: The letters A to Z, Numerals 0 to 9, Can contain single quotation marks, periods, commas, hyphens and blanks, The 1st character is alphanumeric.
Length:	20 characters, Names were truncated and/or abbreviated.
Prefixes:	"DES, DE, LE, LA, LES, L', D', DE L', DU, DE LA, and THE" are coded after the name, separated by 1 space, "SAINT" and "SAINTE" are as coded as "ST" and "STE" respectively.
Suffixes:	Numeric streets are often coded without "TH" and "ND" suffixes.
Qualifiers:	If space permit qualifiers were coded in the name field, e.g. "DOW'S LAKE", "ACRES SIDEROAD". In Quebec qualifiers can precede the name, e.g. "LAC LEMAY". Direction qualifiers are contained in the direction-field. Exception: "MONTEE" and "COTE may appear in the name-field or the type-field.
Non-street features:	Are named according to the qualifier, if unnamed, e.g. "LAKE"
Private roads:	Are coded as "PRIV."
Proposed roads:	Coded as "PROP." outside of Quebec and "PROJ." within Quebec.
Railway yards:	Coded as "(name of railway) YARD", e.g. "CNR YARD".
Ramps:	The name attribute for arc-class 'FRA' are 'RAMP'.
Bridges or Tunnels:	When the CLASS field begins with "B", the official name, e.g. 'PEACE BRIDGE' is included in the NAME field. If the feature name is unknown 'BRIDGE', 'TUNNEL' or 'PONT' is used.
County roads and Regional roads:	Contain numeric value associated with the road name. "ROAD/RANG" is usually coded in the name-field, not the type-field.

Type Field

Code	Description	NTDB Only	Code	Description	NTDB Only	Code	Description	NTDB Only
blank	No type		ES	Esplanade	X	PM	Promenade	
AB	Abbey		ET	Estates		PR	Park	
AC	Acres	X	EX	Extension	X	PT	Point	
AL	Alley/Allée		GA	Gardens		PU	Plateau	
AU	Autoroute		GD	Grounds		PV	Private	
av	unknown	X	GL	Glade		PW	Pathway	
AV	Avenue		GN	Glen		PY	Parkway	
BA	Bay		GR	Green		QU	Quay	
BE	Bend		GT	Gate		RA	Range	X
BH	Beach		GV	Grove		rd	unknown	X
BL	unknown	X	HG	unknown	X	RD	Road	
BO	Bourg	X	HI	Highlands	X	RE	Ridge	
BP	By-Pass		HL	Hill		Rg	unknown	X
BV	Boulevard		HO	Hollow		RG	Rang	
BY	Byway	X	HR	unknown	X	RI	Rise	
C	unknown	X	HT	Heights		RL	Ruelle	
CA	Carré		HW	unknown	X	RN	Run	
CC	Circuit		HY	Highway		RO	Route	
CE	Centre	X	IM	Impasse		RT	unknown	X
CG	Crossing	X	IS	Island		RU	Rue	
ch	unknown	X	JA	Jardin		RW	Row	
CH	Chemin		JS	unknown	X	SE	Sentier	
CI	unknown	X	KE	Key		SQ	Square	
CL	Circle/Cercle		LA	Landing		SR	Side Road	
CN	Concession	X	LI	Line		ST	Street	
CO	Côte		LK	Link		TE	unknown	X
cr	unknown	X	LN	Lane		TK	unknown	X
CR	Crescent/Croissant		LO	Loop		TL	Trail	
CS	Close		LP	unknown	X	TR	Terrace/Terrasse	
CT	Court		LT	Lookout		TS	unknown	X
CU	Cour		MA	Manor		VI	Via	X
CV	Cove		ME	Mews		VL	Village	
CX	Chase		mo	unknown	X	VW	View	
CZ	Corners		MO	Montée		WA	unknown	X
DD	unknown	X	MU	Mount		wa	unknown	X
DI	Diversion		MW	Meadow		WD	Wynd	
DL	Dell		PA	Parade		WK	Walk	
DO	Downs		PH	Path		WO	Wood	
dr	unknown	X	PK	unknown	X	WY	Way	
DR	Drive		pl	unknown	X	XX	unknown	X
EN	End		PL	Place				

Direction (Street Direction)

The street direction is not to be confused with the geographic direction of a feature. It is the direction qualifier used within the feature's identification, e.g. "Somerset Street West".

Direction	Description
N	NORTH/NORD
S	SOUTH/SUD
E	EAST/EST
W	WEST
O	OUEST
NE	NORTH-EAST/NORD-EST
NW	NORTH-WEST
NO	NORD-OUEST
SE	SOUTH-EAST/SUD-EST
SW	SOUTH-WEST
SO	SUD-OUEST

Address Fields

No feature in the SNF has a null or blank in the address fields. Only addressable features (CLASS = "blank" or "E") have valid or real civic addresses. Addresses can have the following values:

Address Fields	
Values	**Specifications**
> 0	Numeric portion of a known address.
0	Default for non-addressable features (features the CLASS not equal to blank or "E".)
-1	Default for unknown addresses in addressable features.
-2	An unknown address opposite a T-intersection on an addressable feature.
-4	Assigned to non-addressable arcs on addressable features, e.g. parks.

Imputation Flag

The imputation flag (ADD_IMPUTE) consists of sixteen codes. Users can use these codes to identify which addresses have been imputed. There are four address fields:

ADDR_FM_LEFT	from left	The civic address found on the left-hand side of the arc at the FROM node
ADDR_TO_LEFT	to left	The civic address found on the left-hand side of the arc at the TO node
ADDR_FM_RGHT	from right	The civic address found on the right-hand side of the arc at the FROM node
ADDR_TO_RGHT	to right	The civic address found on the right-hand side of the arc at the TO node

Code	Address or addresses imputed	Code	Address or addresses imputed
0	no change	8	from left
1	to right	9	from left, to right
2	from right	10	from left, from right
3	from right, to right	11	from left, from right , to right
4	to left address	12	from left, to left
5	to right, to left	13	from left, to left, to right
6	from right, to left	14	from left, to left, from right
7	from right, to right, to left	15	all four addresses imputed

CLASS

Roadway, railway and associated features category

Class	Description	Class	Description
blank	Addressable Single street & public access lane	FWA	Walkway
B	Other Bridge or Tunnel	H	Other Highway
BMN	Bridge or Tunnel Addressable Single street	HMU	Highway multiple
BMU	Bridge or Tunnel - Multiple Highway	HPR	Highway proposed
BSI	Bridge or Tunnel - Single Highway or Addressable Multiple street	HSI	Highway single
E	Addressable Multiple street & public access lane	HUC	Highway under construction
F	Other Roadway Associated features	R	Other Railway features
FEX	Feature extension	RMU	Railway multiple track
FRA	Ramp	RSG	Railway siding or yard
FTR	Trail	RSI	Railway single track

Hydrography and associated features category

Class	Description	Class	Description
I	Other Associated features	SPO	Pond
IDA	Dam	SRE	Reservoir
IFA	Falls	SRI	River
S	Other Water body defined using shorelines	W	Other Water body defined using streamline
SAQ	Aqueduct	WAQ	Aqueduct
SCA	Canal	WCA	Canal
SCR	Creek - defined using shoreline	WCR	Creek - defined using streamline
SLA	Lake	WRI	River
SOC	Ocean		

Delimiter and associated features category

Class	Description	Class	Description
C	Other Geostatistical area boundaries	GHO	Hospital Boundary
CEA	Enumeration Area Boundary	GJA	Jail Boundary
G	Other Property boundaries	GPA	Park Boundary
GAI	Airport Boundary	GSC	School Boundary
GCH	Church Boundary	GSH	Shopping Centre Boundary
GCO	College Boundary	GUN	University Boundary
GGO	Golf Boundary	MMU	Municipal Boundary
GGT	Government Boundary	U	Other Urban-Rural boundaries

General features category

Class	Description	Class	Description
D	Alias features	Z	Other features
O	Other Topography features	ZFE	Fence
ODI	Ditch	ZHY	Hydro line (Major)
OFA	Cliff	ZPI	Pipeline
		ZTE	Telephone line (Major)

5.5 Adjusted boundary polygons for use with SNFEF

1) Adjusted CSD Boundaries

File name:	ARC/INFO®	gcsdNNNn.PAT
	MapInfo®	gcsdNNNn. TAB, DAT, ID and MAP

where NNN is the three digit code uniquely identifying the CMA or CA.

Record Layout

COLS	Item Name (ARC/INFO®)	Field Name (MapInfo®)	Width	Output (ARC/INFO®)	Type	N. Dec.
1	AREA	(not included in the MapInfo files)	4	12	F	3
5	PERIMETER	(not included in the MapInfo files)	4	12	F	3
9	*COVER#*	(not included in the MapInfo files)	4	5	B	
13	*COVER-ID*	(not included in the MapInfo files)	4	5	B	
17	CSDNAME	CSDname	57	57	C	
74	CSDTYPE	CSDtype	3	3	C	
77	CSDUID	CSDuid	7	7	C	
84	SOURCE	source	1	1	C	

Short Item Description

ARC/INFO® ITEM NAME	MapInfo® Field Name	Brief Description
CSDNAME	CSDname	official CSD name
CSDTYPE	CSDtype	legal status held by the CSD
CSDUID	CSDuid	CSD unique identifier
SOURCE	source	data source: 1 = SNF, 2 = NTDB

2) Adjusted CT Boundaries

File name: ARC/INFO®   gct_NNNn.PAT
               MapInfo®   gct_NNNn. TAB, DAT, ID and MAP

where NNN is the three digit code uniquely identifying the CMA or CA.

Record Layout

COLS	Item Name (ARC/INFO®)	Field Name (MapInfo®)	Width	Output (ARC/INFO®)	Type	N. Dec.
1	AREA	(not included in the MapInfo files)	4	12	F	3
5	PERIMETER	(not included in the MapInfo files)	4	12	F	3
9	*COVER#*	(not included in the MapInfo files)	4	5	B	
13	*COVER-ID*	(not included in the MapInfo files)	4	5	B	
17	CTNAME	CTname	7	7	C	
24	CTUID	CTuid	10	10	C	
34	SOURCE	source	1	1	C	

Item Description

ARC/INFO® ITEM NAME	MapInfo® Field Name	Brief Description
CTNAME	CTname	Census Tract Name
CTUID	CTid	Census Tract unique identifier
SOURCE	source	data source: 1 = SNF, 2 = NTDB

3) Adjusted EA Boundaries

File name: ARC/INFO®   gea_NNNn.PAT
               MapInfo®   gea_NNNn. TAB, DAT, ID and MAP

where NNN is the three digit code uniquely identifying the CMA or CA.

Record Layout

COLS	Item Name (ARC/INFO®)	Field Name (MapInfo®)	Width	Output (ARC/INFO®)	Type	N. Dec.
1	AREA	(not included in the MapInfo files)	4	12	F	3
5	PERIMETER	(not included in the MapInfo files)	4	12	F	3
9	*COVER#*	(not included in the MapInfo files)	4	5	B	
13	*COVER-ID*	(not included in the MapInfo files)	4	5	B	
17	EAUID	EAUID	8	8	C	
25	SOURCE	source	1	1	C	

Item Description

ARC/INFO® ITEM NAME	MapInfo® Field Name	Brief Description
EAUID	EAuid	Enumeration Area unique identifier
SOURCE	source	data source: 1 = SNF, 2 = NTDB

5.6 File sizes

1996 SNF sizes in bytes

File Name	MapInfo	ARC/INFO	File Name	MapInfo	ARC/INFO	File Name	MapInfo	ARC/INFO
gsnf001r	1,020,434	3,787,097	gsnf539r	4,396,556	14,965,766	gsnf825r	3,910,552	12,981,483
gsnf001s	216,744	878,662	gsnf539s	144,116	319,509	gsnf825s	65,782	124,195
gsnf205r	1,175,145	3,832,710	gsnf541r	1,906,267	6,224,068	gsnf830r	417,178	1,398,125
gsnf205s	61,224	188,575	gsnf541s	67,456	127,315	gsnf830s	41,718	74,738
gsnf305r	1,095,661	3,680,929	gsnf543r	659,966	2,237,352	gsnf835r	2,881,921	10,059,773
gsnf305s	45,788	89,188	gsnf543s	27,278	48,992	gsnf835s	14,296	41,754
gsnf310r	769,996	2,524,501	gsnf544r	288,619	997,829	gsnf915r	1,049,608	3,296,368
gsnf310s	107,434	244,116	gsnf544s	21,212	85,999	gsnf915s	43,418	102,945
gsnf320r	478,507	1,587,173	gsnf550r	556,416	1,894,753	gsnf925r	600,228	2,025,545
gsnf320s	35,748	71,549	gsnf550s	8,074	41,098	gsnf925s	34,628	194,526
gsnf408r	1,067,289	3,575,960	gsnf553r	178,335	658,136	gsnf932r	641,259	2,157,327
gsnf408s	64,158	157,901	gsnf553s	3,544	19,232	gsnf932s	31,244	118,386
gsnf421r	3,383,270	11,447,925	gsnf555r	2,284,776	7,871,847	gsnf933r	8,500,435	29,612,993
gsnf421s	94,254	194,052	gsnf555s	70,310	187,303	gsnf933s	329,416	607,156
gsnf433r	436,151	1,543,569	gsnf559r	910,092	3,569,303	gsnf935r	2,162,906	6,964,920
gsnf433s	6,026	49,737	gsnf559s	10,538	57,404	gsnf935s	127,220	294,029
gsnf442r	781,361	2,630,001	gsnf562r	620,374	2,183,105	gsnf970r	613,539	2,039,794
gsnf442s	11,250	32,914	gsnf562s	17,064	35,172	gsnf970s	20,414	48,347
gsnf462r	13,089,941	44,213,945	gsnf575r	588,355	1,939,065	gsnfbenr	10,234	43,511
gsnf462s	199,552	482,345	gsnf575s	43,722	118,472	gsnfbror	191,962	703,157
gsnf505r	6,118,017	20,193,785	gsnf580r	617,844	2,083,281	gsnfbros	46,144	77,754
gsnf505s	382,120	877,365	gsnf580s	45,336	140,810	gsnfferr	66,012	234,805
gsnf521r	530,234	1,731,934	gsnf590r	609,068	2,081,948	gsnffers	2,954	16,060
gsnf521s	13,836	43,285	gsnf590s	51,818	133,604	gsnfscur	196,781	707,585
gsnf522r	230,198	800,363	gsnf595r	801,136	2,797,242	gsnfscus	25,126	57,125
gsnf522s	5,514	37,066	gsnf595s	21,646	57,443	gsnfwelr	83,081	273,476
gsnf529r	386,896	1,381,618	gsnf602r	3,303,923	11,813,695	gsnfwels	5,132	24,986
gsnf529s	10,122	35,195	gsnf602s	39,670	128,698	gsnfwesr	438,448	1,697,914
gsnf532r	1,581,207	5,269,072	gsnf705r	1,019,389	3,626,960	gsnfwess	9,688	45,066
gsnf532s	32,562	95,950	gsnf705s	7,588	47,136	gsnfwilr	151,033	519,307
gsnf535r	13,344,026	43,538,006	gsnf725r	942,724	3,436,025	gsnfwils	33,856	57,641
gsnf535s	560,148	1,508,806	gsnf725s	3,978	36,766			
gsnf537r	3,535,647	11,824,839	gsnf810r	478,353	1,670,532			
gsnf537s	126,976	379,553	gsnf810s	7,128	31,889			

Note : File name ends with "r" for the network line coverage and with "s" for water polygons

1996 SNFEF size in bytes

File Name	MapInfo	ARC/INFO	File Name	MapInfo	ARC/INFO	File Name	MapInfo	ARC/INFO
gsnf001c	483,826	1,695,111	gsnf505c	484,300	1,073,989	gsnf602c	411,560	790,161
gsnf001n	2,191,449	7,488,057	gsnf505n	6,563,196	21,664,433	gsnf602n	3,725,678	13,506,382
gsnf205c	1,806,774	5,101,843	gsnf521c	1,287,558	2,820,581	gsnf705c	182,024	570,592
gsnf205n	5,453,715	18,610,477	gsnf521n	2,322,329	8,357,786	gsnf705n	1,882,197	6,527,587
gsnf305c	73,018	181,826	gsnf522c	385,626	,841,229	gsnf725c	1,933,440	5,529,293
gsnf305n	1,212,388	4,047,965	gsnf522n	1,784,897	5,689,316	gsnf725n	4,227,118	15,746,310
gsnf310c	1,033,758	2,958,096	gsnf529c	472,358	1,086,039	gsnf825c	340,424	975,854
gsnf310n	3,056,087	10,381,613	gsnf529n	1,651,234	5,433,279	gsnf825n	5,809,622	19,519,032
gsnf408c	635,754	1,603,252	gsnf535c	767,356	2,156,874	gsnf835c	440,298	1,319,919
gsnf408n	2,052,563	6,945,198	gsnf535n	14,311,887	46,570,042	gsnf835n	7,761,876	25,196,788
gsnf421c	726,706	1,931,677	gsnf559c	158,972	345,598	gsnf915c	152,052	500,440
gsnf421n	6,356,274	20,987,805	gsnf559n	1,965,399	7,092,357	gsnf915n	1,686,120	5,348,615
gsnf433c	259,528	743,145	gsnf568c	139,362	359,416	gsnf925c	630,398	2,036,140
gsnf433n	2,001,851	6,290,094	gsnf568n	1,468,797	4,573,408	gsnf925n	1,729,191	6,074,591
gsnf442c	200,824	362,557	gsnf575c	127,462	329,097	gsnf932c	100,544	295,019
gsnf442n	1,600,590	5,187,987	gsnf575n	754,050	2,535,510	gsnf932n	1,091,775	3,457,093
gsnf459c	37,804	89,899	gsnf580c	923,618	2,466,097	gsnf938c	346,800	836,657
gsnf459n	984,144	3,008,463	gsnf580n	2,592,736	9,002,302	gsnf938n	1,636,430	5,288,271
gsnf462c	508,718	1,293,009	gsnf595c	421,624	1,078,575			
gsnf462n	16,863,377	55,728,342	gsnf595n	1,585,726	5,579,044			

Note : File name ends with "n" for the network line coverage and with "c" for water polygons

Adjusted boundaries for use with SNFEF - File size in bytes

Census Subdivisions Boundaries (CSD)			Census Tracts Boundaries (CT)			Enumeration Areas Boundaries (EA)		
File Name	MapInfo	ARC/INFO	File Name	MapInfo	ARC/INFO	File Name	MapInfo	ARC/INFO
gcsd001n	262,955	461,233	gct_001n	162,027	583,303	gea_001n	252788	927,858
gcsd205n	95,824	228,165	gct_205n	177,657	390,995	gea_205n	367876	1,089,048
gcsd305n	26,923	58,512	gct_305n	29,540	81,601	gea_305n	76186	271,694
gcsd310n	63,932	123,493	gct_310n	89,927	193,623	gea_310n	179160	503,343
gcsd408n	30,800	88,326	gct_408n	47,713	145,031	gea_408n	116990	395,736
gcsd421n	77,899	203,676	gct_421n	115,940	383,772	gea_421n	365330	1,440,064
gcsd433n	39,942	100,249	gct_433n	29,724	119,371	gea_433n	105410	397,432
gcsd442n	14,928	51,646	gct_442n	26,186	89,471	gea_442n	112,326	354,970
gcsd459n	10,467	26,078	gct_459n	25,185	83,251	gea_459n	54,654	216,326
gcsd462n	179,631	453,531	gct_462n	333,395	1,231,148	gea_462n	1,249,754	5,368,961
gcsd505n	62,249	157,103	gct_505n	113,339	424,469	gea_505n	463,224	1,772,698
gcsd521n	20,633	61,196	gct_521n	44,129	102,394	gea_521n	130,224	417,864
gcsd522n	21,877	82,290	gct_522n	48,737	148,542	gea_522n	114,796	353,886
gcsd529n	23,120	77,749	gct_529n	26,957	87,684	gea_529n	98,686	289,487
gcsd535n	84,923	199,375	gct_535n	298,055	1,177,424	gea_535n	1,321,256	5,789,216
gcsd559n	22,681	84,960	gct_559n	39,561	153,836	gea_559n	121,734	487,067
gcsd568n	10,321	26,913	gct_568n	25,444	69,925	gea_568n	114,992	322,011
gcsd575n	13,027	64,792	gct_575n	22,303	92,016	gea_575n	46,870	199,569
gcsd580n	22,901	74,609	gct_580n	56,998	145,691	gea_580n	141,390	459,122
gcsd595n	34,311	115,838	gct_595n	38,917	144,412	gea_595n	100,796	342,556
gcsd602n	30,873	146,207	gct_602n	75,118	342,296	gea_602n	266,832	1,132,246
gcsd705n	57,935	128,630	gct_705n	39,331	166,392	gea_705n	98,900	417,696
gcsd725n	46,158	107,876	gct_725n	35,258	140,995	gea_725n	123,166	458,608
gcsd825n	29,703	99,050	gct_825n	95,483	338,705	gea_825n	349,486	1,383,046
gcsd835n	99,258	194,491	gct_835n	134,872	437,814	gea_835n	483,224	1,668,835
gcsd915n	22,974	76,229	gct_915n	61,865	129,173	gea_915n	117,986	389,252
gcsd925n	70,444	318,107	gct_925n	56,187	299,811	gea_925n	179,428	590,185
gcsd932n	8,931	84,209	gct_932n	30,167	147,566	gea_932n	79,958	339,547
gcsd938n	19,317	55,935	gct_938n	27,400	87,107	gea_938n	103,840	331,559

6. *Glossary*

Brief definitions of geographic terms and census concepts are presented here in summary form only. Users should refer to the 1996 Census Dictionary (Catalogue number 92-351-XPE) for the full definitions and additional remarks related to these concepts and definitions.

Block-face

A block-face is one side of a city street between two consecutive street intersections.

Block-faces are also formed when streets intersect other visible physical features (such as railroads, power transmission lines and rivers) and when streets intersect with *enumeration area* boundaries.

Census Consolidated Subdivision (CCS)

A census consolidated subdivision (CCS) is a grouping of *census subdivisions*. Generally these are 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 (CD)

Census division (CD) is the general term applied to areas established by provincial law which are intermediate geographic areas between the municipality (*census subdivision*) and the *province* level. Census divisions represent counties, regional districts, regional municipalities and other types of provincially legislated areas.

In Newfoundland, Manitoba, Saskatchewan and Alberta, provincial law does not provide for these administrative geographic areas. Therefore, census divisions have been created by Statistics Canada in cooperation with these provinces for the dissemination of statistical data. In the Yukon Territory, the census division is equivalent to the entire territory.

Census Metropolitan Area (CMA), Census Agglomeration (CA), Consolidated Census Metropolitan Area, Consolidated Census Agglomeration, Primary Census Metropolitan Area (PCMA), Primary Census Agglomeration (PCA)

The census metropolitan areas, census agglomerations, consolidated census metropolitan areas, consolidated census agglomerations, primary census metropolitan areas and primary census agglomerations are delineated using the same conceptual base. The overall concept for delineating these geographic areas is one of a large *urban area* together with adjacent urban and *rural areas* that have a high degree of social and economic integration with this urban area. **Metropolitan area** is a general term for all these areas. **Non-metropolitan area** is a term for all areas outside of the metropolitan area.

Census Metropolitan Area (CMA)

A census metropolitan area (CMA) is a very large *urban area* (known as the *urban core*) together with adjacent urban and rural areas (known as *urban* and *rural fringes*) that have a high degree of social and economic integration with the urban core. A CMA has an urban core population of at least 100,000, based on the previous census. Once an area becomes a CMA, it is retained as a CMA even if the population of its urban core declines below 100,000. All CMAs are subdivided into *census tracts*. A CMA may be consolidated with adjacent *census agglomerations* (CAs) if they are socially and economically integrated. This new grouping is known as a *consolidated CMA* and the component CMA and CA(s) are known as the *primary census metropolitan area (PCMA)* and *primary census agglomeration(s) [PCA(s)]*. A CMA may not be consolidated with another CMA.

Census Agglomeration (CA)

A census agglomeration (CA) is a large *urban area* (known as the *urban core*) together with adjacent urban and rural areas (known as *urban* and *rural fringes*) that have a high degree of social and economic integration with the urban core. A CA has an urban core population of at least 10,000, based on the previous census. However, if the population of the urban core of a CA declines below 10,000, the CA is retired. Once a CA attains an urban core population of at least 100,000, based on the previous census, it is eligible to become a CMA. CAs that have urban cores of at least 50,000, based on the previous census, are subdivided into *census tracts*. Census tracts are maintained for CAs even if the population of the urban cores subsequently fall below 50,000. A CA may be consolidated with adjacent CAs if they are socially and economically integrated. This new grouping is called a *consolidated CA* and the component CAs are called *primary census agglomerations (PCAs)*.

Consolidated Census Metropolitan Area (Consolidated CMA)

A consolidated census metropolitan area (consolidated CMA) is a grouping of one *census metropolitan area* (CMA) and adjacent *census agglomeration*(s) CA(s*)* that are socially and economically integrated. An adjacent CMA and CA can be consolidated into a single CMA (consolidated CMA) if the total commuting interchange between them is equal to at least 35% of the employed labour force living in the CA. Several CAs may be consolidated with a CMA; each CMA-CA combination is evaluated for inclusion. For example, the consolidated Toronto CMA is composed of the Toronto PCMA and the PCAs of Georgina, Milton, Halton Hills, Orangeville and Bradford West Gwillimbury.

Consolidated Census Agglomeration (Consolidated CA)

A consolidated census agglomeration (consolidated CA) is a grouping of adjacent *census agglomerations* (CAs) that are socially and economically integrated. Adjacent CAs are consolidated into a single CA (consolidated CA) if the total commuting interchange between two CAs is equal to at least 35% of the employed labour force living in the smaller CA. Several CAs may be consolidated with a larger CA; each pair of CAs is evaluated for inclusion. For example, the consolidated Chatham CA is composed of the Chatham PCA and the Wallaceburg PCA.

Primary Census Metropolitan Area (PCMA)

A *census metropolitan area* that is a component of a *consolidated census metropolitan area* is referred to as a primary census metropolitan area (PCMA).

Primary Census Agglomeration (PCA)

A *census agglomeration* that is a component of a *consolidated census metropolitan area* or *consolidated census agglomeration* is referred to as the primary census agglomeration (PCA).

Census Subdivision (CSD)

Census subdivision is the general term applying to municipalities (as determined by provincial legislation) or their equivalent (for example, Indian reserves, Indian settlements and unorganized territories).

In Newfoundland, Nova Scotia and British Columbia, the term also describes geographic areas that have been created by Statistics Canada in cooperation with the provinces as equivalents for municipalities for the dissemination of statistical data.

Census Tract (CT)

Census tracts (CTs) are small geographic units representing urban or rural neighbourhood-like communities created in *census metropolitan areas* and *census agglomerations* (with an *urban core* population of 50,000 or more at the previous census).

CTs are initially delineated by a committee of local specialists (for example, planners, health and social workers, educators) 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 of the CMA or CA subsequently declines below 50,000.

Coordinate System

A coordinate system is a mathematical method for specifying location. The coordinates can be spherical (latitude and longitude) or plane rectangular (such as Universal Transverse Mercator).

Digital Boundary Files (DBFs)

Digital boundary files (DBFs) are computer files that depict the official boundaries of standard census geographic areas. The boundaries sometimes extend beyond shorelines into water.

Digital Cartographic Files (DCFs)

Digital cartographic files (DCFs) are computer files that depict boundaries of standard census geographic areas which have been modified to follow shorelines and to include lakes.

Enumeration Area (EA)

An enumeration area (EA) is the geographic area canvassed by one census representative. It is the smallest standard geographic area for which census data are reported. All the territory of Canada is covered by EAs.

Federal Electoral District (FED)

A federal electoral district refers to any place or territorial area entitled to elect a representative member to serve in the House of Commons (source: *Canada Elections Act*, 1990). There are 295 FEDs in Canada according to the 1987 Representation Order and there are 301 FEDs in Canada according to 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. Statistics Canada's geocoding service links census households to small geographic units. This process makes it possible to produce census data tabulations for non-standard geographic areas such as provincial and municipal electoral districts, local planning areas and school districts.

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 1996 Census, the geographic reference date is **January 1, 1996**.

Map Projection

A map projection is both the process and result of transforming positions on the spherical surface of the earth onto a plane (flat) surface.

Province/Territory

Province and territory refer to the major political divisions of Canada. From a statistical point of view, they are a basic unit for which data are tabulated and cross-classified. The ten provinces combined with the two territories cover the complete country.

Reference Map

Census reference maps show the location of the geographic areas for which census data are tabulated and disseminated. The main information depicted includes the boundaries, names and codes of census geographic areas, and major physical and cultural features such as roads, railroads, coastlines, rivers and lakes.

Representative Point

A representative point is a single point that represents a linear feature (***block-face***) or an areal feature (***enumeration area***). The point's location generally indicates either dwelling concentrations or centrality.

Standard Geographical Classification (SGC)

The Standard Geographical Classification (SGC) is Statistics Canada's official classification of geographic areas in Canada. The SGC provides unique numeric identification (codes) for three types of geographic areas. These are ***provinces*** and ***territories***, ***census divisions (CDs)*** and ***census subdivisions (CSDs).*** The three geographic areas are hierarchically related.

Street Network Files (SNFs)

The street network files (SNFs) are digital files representing the street network for most large urban centres in Canada. The files also contain other visible physical and cultural features (such as hydrography, railroads, pipelines) and attribute information (for example, street and hydrographic names, and address ranges for streets with assigned addresses).

Appendix A. Hierarchy of National, Metropolitan and Postal Code Geographic Units, 1996

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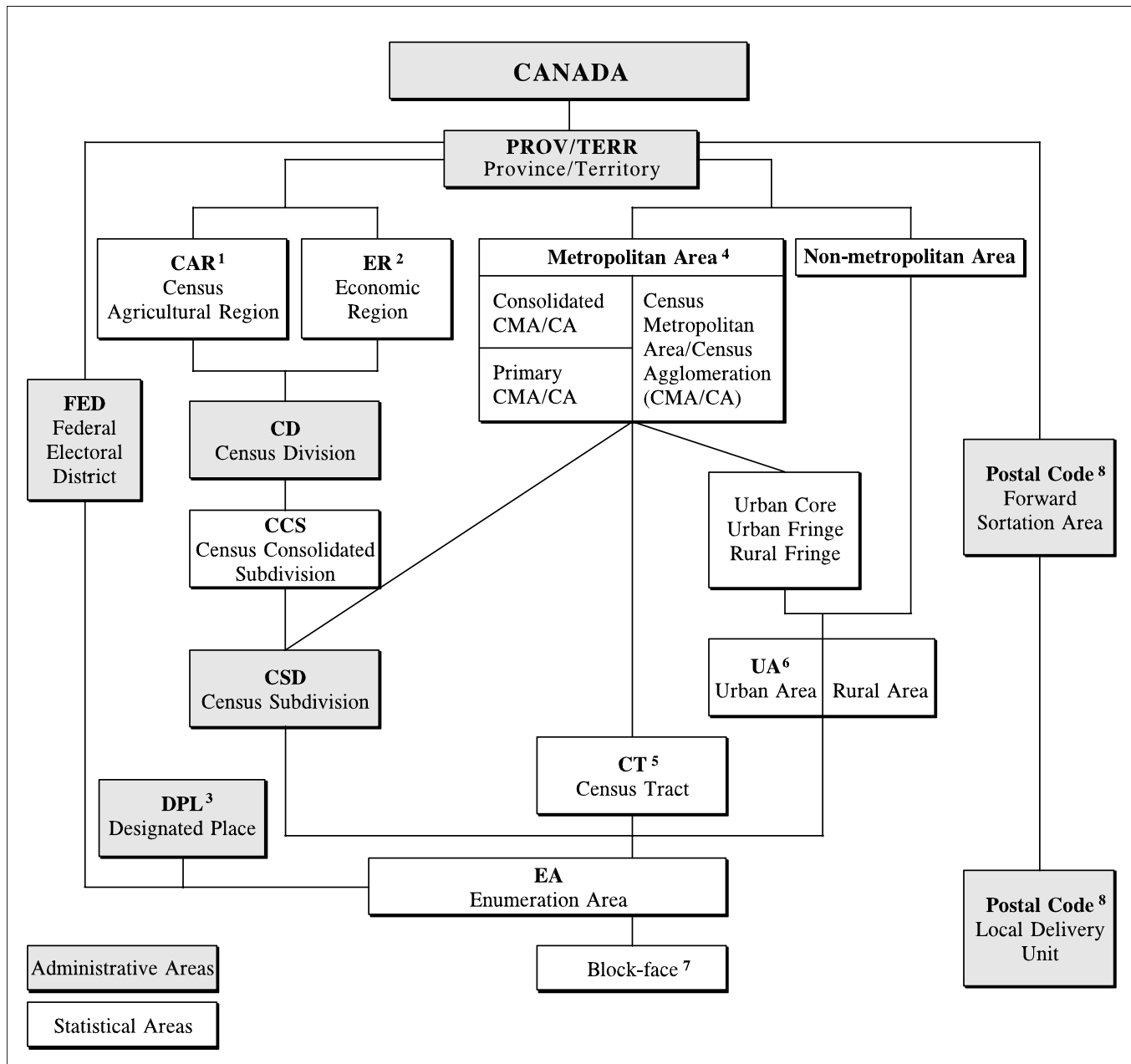
[1] Census agricultural regions in Saskatchewan are made up of census consolidated subdivisions.
[2] Economic regions in Ontario are made up of municipalities (census subdivisions).
[3] Currently there are no designated places in Prince Edward Island, Quebec, Yukon Territory and Northwest Territories.
[4] Five CMAs/CAs cross provincial boundaries.
[5] All CMAs and only CAs with urban core population of 50,000 or more at the previous census have census tracts.
[6] Five UAs cross provincial boundaries.
[7] Only in areas covered by street network files (SNFs).
[8] The postal code is captured as provided by the respondent on all the questionnaires for 1996. Although shown and treated as part of the geography hierarchy, strictly speaking, it is not a geographic unit and, therefore, there is no exact relationship between postal codes and enumeration areas.

Appendix B. Geographic Units by Province and Territory, 1996

Geographic unit	CANADA 1991	CANADA 1996	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.
Federal electoral district (1987 RO*)	295	295	7	4	11	10	75	99	14	14	26	32	1	2
Federal electoral district (1996 RO*)	N/A	301	7	4	11	10	75	103	14	14	26	34	1	2
Economic region	68	74	4	1	5	5	16	11	8	6	8	8	1	1
Census division	290	288	10	3	18	15	99	49	23	18	19	28	1	5
Census division	73	73	10	–	–	–	3	–	23	18	19	–	–	–
Communauté urbaine	3	3	–	–	–	–	3	–	–	–	–	–	–	–
County	60	60	–	3	18	15	–	24	–	–	–	–	–	–
District	10	10	–	–	–	–	–	10	–	–	–	–	–	–
District municipality	1	1	–	–	–	–	–	1	–	–	–	–	–	–
Metropolitan municipality	1	1	–	–	–	–	–	1	–	–	–	–	–	–
Municipalité régionale de comté	93	93	–	–	–	–	93	–	–	–	–	–	–	–
Region	7	6	–	–	–	–	–	–	–	–	–	1	–	5
Regional district	29	27	–	–	–	–	–	–	–	–	–	27	–	–
Regional municipality	10	10	–	–	–	–	–	10	–	–	–	–	–	–
United counties	3	3	–	–	–	–	–	3	–	–	–	–	–	–
Territory	N/A	1	–	–	–	–	–	–	–	–	–	–	1	–
Census consolidated subdivision	2,630	2,607	87	68	52	148	1,143	518	128	302	73	82	1	5
Census subdivision[4]	6,006	5,984	381	113	110	283	1,599	947	298	970	467	713	35	68
Designated place	N/A	828	77	–	59	172	–	38	52	166	252	12	–	–
Census agricultural region	77	78	3	–	5	4	13	5	12	20	8	8	–	–
Census metropolitan area	25	25	1	–	1	1	<u>6</u>	<u>10</u>	1	2	2	2	–	–
Census agglomeration	115	112	4	2	4	<u>5</u>	<u>27</u>	<u>32</u>	3	<u>7</u>	<u>9</u>	21	1	1
Primary census metropolitan area	12	11	1	–	–	–	<u>3</u>	<u>5</u>	–	–	2	1	–	–
Primary census agglomeration	21	22	1	–	–	–	6	11	–	–	3	1	–	–
Census tract	4,068	4,223	41	–	75	69	1,108	1,799	158	99	386	488	–	–
Urban area	893	929	44	7	38	<u>38</u>	<u>228</u>	<u>265</u>	<u>43</u>	<u>63</u>	<u>103</u>	97	2	6
Enumeration area	45,995	49,361	1,236	267	1,511	1,393	11,684	16,469	2,050	2,844	4,746	6,880	111	170
Street network file (number of CSDs)	342	344	2	–	3	16	114	113	10	5	4	77	–	–
Block-face[5]	763,626	817,734	5,068	–	9,707	17,110	187,563	330,658	35,024	21,375	79,954	131,275	–	–
Forward sortation area[6]	1,368	1,477	32	7	58	44	383	515	63	45	137	187	3	5
Postal code[6]	652,826	680,910	7,073	2,737	18,864	16,144	175,885	244,909	22,821	20,778	64,530	105,801	864	504

Note: Underlined numbers indicate that those CMAs, CAs, PCMAs and urban areas crossing provincial boundaries are counted in both provinces.

*   Representation Order

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[4]   For a list of census subdivision types, see Appendix C.
[5]   Preliminary numbers.
[6]   Counts derived from the December 1991 and from the July 1996 Postal Code Conversion File.

Appendix C. Census Subdivision Types by Province and Territory, 1996

		Total	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.
	Census subdivision type	5,984	381	113	110	283	1,599	947	298	970	467	713	35	68
BOR	Borough	1	–	–	–	–	–	1	–	–	–	–	–	–
C	City – Cité	145	3	2	2	7	2	51	5	13	15	43	1	1
CC	Chartered Community	2	–	–	–	–	–	–	–	–	–	–	–	2
CM	County (Municipality)	28	–	–	–	–	–	–	–	–	28	–	–	–
COM	Community	163	130	33	–	–	–	–	–	–	–	–	–	–
CT	Canton (Municipalité de)	88	–	–	–	–	88	–	–	–	–	–	–	–
CU	Cantons unis (Municipalité de)	8	–	–	–	–	8	–	–	–	–	–	–	–
DM	District Municipality	50	–	–	–	–	–	–	–	–	–	50	–	–
HAM	Hamlet	36	–	–	–	–	–	–	–	–	–	–	2	34
ID	Improvement District	10	–	–	–	–	–	2	–	–	8	–	–	–
IGD	Indian Government District	2	–	–	–	–	–	–	–	–	–	2	–	–
LGD	Local Government District	21	–	–	–	–	–	–	21	–	–	–	–	–
LOT	Township and Royalty	67	–	67	–	–	–	–	–	–	–	–	–	–
M	Municipalité	557	–	–	–	–	557	–	–	–	–	–	–	–
MD	Municipal District	49	–	–	12	–	–	–	–	–	37	–	–	–
NH	Northern Hamlet	12	–	–	–	–	–	–	–	12	–	–	–	–
NT	Northern Town	2	–	–	–	–	–	–	–	2	–	–	–	–
NV	Northern Village	13	–	–	–	–	–	–	–	13	–	–	–	–
P	Paroisse (Municipalité de)	344	–	–	–	–	344	–	–	–	–	–	–	–
PAR	Parish	152	–	–	–	152	–	–	–	–	–	–	–	–
R	Indian Reserve – Réserve indienne	996	1	4	24	19	30	140	77	120	88	487	4	2
RC	Rural Community	1	–	–	–	1	–	–	–	–	–	–	–	–
RGM	Regional Municipality	1	–	–	1	–	–	–	–	–	–	–	–	–
RM	Rural Municipality	404	–	–	–	–	–	–	106	298	–	–	–	–
RV	Resort Village	42	–	–	–	–	–	–	–	42	–	–	–	–
S-E	Indian Settlement – Établissement indien	33	–	–	–	–	5	10	4	1	4	3	6	–
SA	Special Area	3	–	–	–	–	–	–	–	–	3	–	–	–
SCM	Subdivision of County Municipality	38	–	–	38	–	–	–	–	–	–	–	–	–
SET	Settlement	31	–	–	–	–	–	–	–	–	–	–	13	18
SM	Specialized Municipality	2	–	–	–	–	–	–	–	–	2	–	–	–
SRD	Subdivision of Regional District	71	–	–	–	–	–	–	–	–	–	71	–	–
SUN	Subdivision of Unorganized	91	91	–	–	–	–	–	–	–	–	–	–	–
SV	Summer Village	54	–	–	–	–	–	–	–	–	54	–	–	–
T	Town	685	156	7	33	28	–	147	36	145	111	14	3	5
TI	Terre inuite	10	–	–	–	–	10	–	–	–	–	–	–	–
TP	Township	468	–	–	–	–	–	468	–	–	–	–	–	–
TR	Terres réservées	9	–	–	–	–	9	–	–	–	–	–	–	–
UNO	Unorganized – Non organisé	152	–	–	–	–	112	20	11	2	–	–	2	5
V	Ville	257	–	–	–	–	257	–	–	–	–	–	–	–
VC	Village cri	8	–	–	–	–	8	–	–	–	–	–	–	–
VK	Village naskapi	1	–	–	–	–	1	–	–	–	–	–	–	–
VL	Village	863	–	–	–	76	154	108	38	322	117	43	4	1
VN	Village nordique	14	–	–	–	–	14	–	–	–	–	–	–	–

Appendix D. SNF and SSNF coverage for CMA/CAs by census subdivisions

Abbotsford

Product/File availability: **SNF & SNFEF**

CSD Name	CSD Type	CSDUID	Data Source
Abbotsford	C	5909052	SNF
Fraser Valley, Subd. D	SRD	5909054	NTDB
Mission	DM	5909056	NTDB
Upper Sumas 6	R	5909877	SNF
Matsqui Main 2	R	5909878	SNF

Barrie

Product/File availability: **NTDB only**

CSD Name	CSD Type	CSDUID	Data Source
Springwater	TP	3543009	NTDB
Innisfil	T	3543017	NTDB
Barrie	C	3543042	NTDB

Belleville

Product/File availability: **SNF & SNFEF**

CSD Name	CSD Type	CSDUID	Data Source
Thurlow	TP	3512006	NTDB
Belleville	C	3512008	SNF
Sidney	TP	3512011	NTDB
Trenton	C	3512012	NTDB
Frankford	VL	3512014	NTDB
Ameliasburgh	TP	3513028	NTDB
Murray	TP	3514001	NTDB

Benito

Product/File availability: **Full SNF**

CSD Name	CSD Type	CSDUID	Data Source
Benito	VL	4620043	SNF

Brantford

Product/File availability: **Full SNF**

CSD Name	CSD Type	CSDUID	Data Source
Brantford	TP	3529004	SNF
Brantford	C	3529006	SNF
Paris	T	3529018	SNF

Brock

Product/File availability: **Full SNF**

CSD Name	CSD Type	CSDUID	Data Source
Brock	TP	3518039	SNF

Calgary

Product/File availability: **SNF & SNFEF**

CSD Name	CSD Type	CSDUID	Data Source
Rocky View No. 44	MD	4806014	NTDB
Calgary	C	4806016	SNF
Chestermere	T	4806017	NTDB
Cochrane	T	4806019	NTDB
Airdrie	C	4806021	NTDB
Irricana	VL	4806022	NTDB
Beiseker	VL	4806024	NTDB
Crossfield	T	4806026	NTDB
Sarcee 145	R	4806804	NTDB

Chicoutimi - Jonquière

Product/File availability: **SNF & SNFEF**

CSD Name	CSD Type	CSDUID	Data Source
Saint-Fulgence	M	2494035	NTDB
La Baie	V	2494040	SNF
Laterrière	V	2494045	NTDB
Chicoutimi	V	2494050	SNF
Tremblay	CT	2494055	NTDB
Saint-Honoré	M	2494060	NTDB
Shipshaw	M	2494065	NTDB
Jonquière	V	2494070	SNF
Lac-Kénogami	M	2494075	NTDB
Larouche	P	2494080	NTDB

Edmonton

Product/File availability: **SNF & SNFEF**

CSD Name	CSD Type	CSDUID	Data Source
Bruderheim	T	4810066	NTDB
Leduc County No. 25	CM	4811012	NTDB
Beaumont	T	4811013	NTDB
New Sarepta	VL	4811014	NTDB
Leduc	C	4811016	NTDB
Devon	T	4811018	NTDB
Calmar	T	4811019	NTDB
Sundance Beach	SV	4811020	NTDB
Thorsby	VL	4811021	NTDB
Itaska Beach	SV	4811022	NTDB
Golden Days	SV	4811023	NTDB

Appendix D. SNF and SSNF coverage for CMA/CAs by census subdivisions

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Warburg	VL	4811024	NTDB
Parkland County	CM	4811034	NTDB
Entwistle	VL	4811036	NTDB
Seba Beach	SV	4811038	NTDB
Betula Beach	SV	4811039	NTDB
Point Alison	SV	4811041	NTDB
Lakeview	SV	4811042	NTDB
Kapasiwin	SV	4811044	NTDB
Wabamun	VL	4811045	NTDB
Edmonton Beach	SV	4811046	NTDB
Stony Plain	T	4811048	NTDB
Spruce Grove	C	4811049	NTDB
Strathcona County	SM	4811052	NTDB
Fort Saskatchewan	C	4811056	NTDB
Sturgeon No. 90	MD	4811059	NTDB
Edmonton	C	4811061	SNF
St. Albert	C	4811062	NTDB
Gibbons	T	4811064	NTDB
Redwater	T	4811065	NTDB
Bon Accord	T	4811066	NTDB
Morinville	T	4811068	NTDB
Legal	VL	4811069	NTDB
Stony Plain 135	R	4811804	NTDB
Alexander 134	R	4811805	NTDB
Wabamun 133A	R	4811806	NTDB

Fergus

Product/File availability: **Full SNF**

CSD Name	CSD Type	CSDUID	Data Source
Fergus	T	3523026	SNF

Fredericton

Product/File availability: **Partial SNF (Not a tracted CA)**

CSD Name	**CSD Type**	**CSDUID**	**Data Source**
Fredericton	C	1310032	SNF
Devon 30	R	1310034	SNF
Saint Mary's 24	R	1310035	SNF

Guelph

Product/File availability: **Full SNF**

CSD Name	CSD Type	CSDUID	Data Source
Guelph	TP	3523006	SNF
Guelph	C	3523008	SNF
Eramosa	TP	3523011	SNF

Halifax

Product/File availability:　　　　**SNF & SNFEF**

CSD Name	CSD Type	CSDUID	Data Source
Halifax, Subd. B	SCM	1209001	NTDB
Halifax, Subd. A	SCM	1209008	NTDB
Halifax, Subd. C	SCM	1209012	NTDB
Halifax, Subd. D	SCM	1209018	NTDB
Cole Harbour 30	R	1209019	NTDB
Halifax	C	1209021	SNF
Dartmouth	C	1209022	SNF
Bedford	T	1209024	SNF
Halifax, Subd. E	SCM	1209026	NTDB
Shubenacadie 13	R	1209029	NTDB

Hamilton

Product/File availability:　　　　**Full SNF**

CSD Name	CSD Type	CSDUID	Data Source
Burlington	C	3524002	SNF
Stoney Creek	C	3525003	SNF
Glanbrook	TP	3525009	SNF
Ancaster	T	3525014	SNF
Hamilton	C	3525018	SNF
Dundas	T	3525026	SNF
Flamborough	T	3525030	SNF
Grimsby	T	3526065	SNF

Kamloops

Product/File availability:　　　　**SNF & SNFEF**

CSD Name	CSD Type	CSDUID	Data Source
Logan Lake	DM	5933035	NTDB
Thompson-Nicola, Subd. B	SRD	5933040	NTDB
Kamloops	C	5933042	SNF
Kamloops 1	R	5933880	SNF
Neskainlith 1	R	5933883	NTDB
Sahhaltkum 4	R	5933884	NTDB

Kelowna

Product/File availability:　　　　**SNF & SNFEF**

CSD Name	CSD Type	CSDUID	Data Source
Kelowna	C	5935010	SNF
Central Okanagan, Subd. A	SRD	5935013	NTDB
Lake Country	DM	5935016	NTDB
Peachland	DM	5935018	SNF
Central Okanagan, Subd. B	SRD	5935023	SNF
Duck Lake 7	R	5935801	SNF
Tsinstikeptum 9	R	5935802	SNF

Appendix D. SNF and SSNF coverage for CMA/CAs by census subdivisions

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Tsinstikeptum 10	R	5935803	SNF

Kingston

Product/File availability: **SNF & SNFEF**

CSD Name	CSD Type	CSDUID	Data Source
Wolfe Island	TP	3510001	NTDB
Howe Island	TP	3510004	NTDB
Pittsburgh	TP	3510006	NTDB
Kingston	TP	3510009	SNF
Kingston	C	3510011	SNF
Storrington	TP	3510014	NTDB
Loughborough	TP	3510018	NTDB
Portland	TP	3510022	NTDB
Amherst Island	TP	3511001	NTDB
Ernestown	TP	3511004	NTDB
Bath	VL	3511008	NTDB

Kitchener

Product/File availability: **Full SNF**

CSD Name	CSD Type	CSDUID	Data Source
North Dumfries	TP	3530004	SNF
Cambridge	C	3530010	SNF
Kitchener	C	3530013	SNF
Waterloo	C	3530016	SNF
Woolwich	TP	3530035	SNF

Lethbridge

Product/File availability: **Full SNF**

CSD Name	CSD Type	CSDUID	Data Source
Lethbridge	C	4802012	SNF

London

Product/File availability: **Full SNF**

CSD Name	CSD Type	CSDUID	Data Source
Belmont	VL	3534016	SNF
Yarmouth	TP	3534018	SNF
St. Thomas	C	3534021	SNF
Southwold	TP	3534024	SNF
Port Stanley	VL	3534026	SNF
Delaware	TP	3539019	SNF
North Dorchester	TP	3539026	SNF
West Nissouri	TP	3539031	SNF
London	TP	3539034	SNF
London	C	3539036	SNF
Lobo	TP	3539039	SNF

Moncton

Product/File availability: **SNF & SNFEF**

CSD Name	CSD Type	CSDUID	Data Source
Elgin	PAR	1306008	NTDB
Hillsborough	PAR	1306011	SNF
Coverdale	PAR	1306014	SNF
Riverview	T	1306020	SNF
Hillsborough	VL	1306025	SNF
Dorchester	PAR	1307011	SNF
Dorchester	VL	1307012	SNF
Memramcook	VL	1307013	SNF
Fort Folly 1	R	1307014	SNF
Moncton	PAR	1307019	SNF
Moncton	C	1307022	SNF
Salisbury	VL	1307028	SNF
Dieppe	T	1307045	SNF

Montréal

Product/File availability: **SNF & SNFEF**

CSD Name	CSD Type	CSDUID	Data Source
Lavaltrie	VL	2452005	NTDB
Saint-Antoine-de-Lavaltrie	P	2452010	NTDB
Richelieu	V	2455055	SNF
Notre-Dame-de-Bon-Secours	M	2455060	NTDB
Saint-Mathias-sur-Richelieu	M	2455065	NTDB
Chambly	V	2457005	SNF
Carignan	V	2457010	SNF
Saint-Bruno-de-Montarville	V	2457015	SNF
Saint-Basile-le-Grand	V	2457020	SNF
McMasterville	M	2457025	SNF
Otterburn Park	V	2457030	SNF
Mont-Saint-Hilaire	V	2457035	SNF
Beloeil	V	2457040	SNF
Saint-Mathieu-de-Beloeil	M	2457045	SNF
Brossard	V	2458005	SNF
Saint-Lambert	V	2458010	SNF
Greenfield Park	V	2458015	SNF
Saint-Hubert	V	2458020	SNF
LeMoyne	V	2458025	SNF
Longueuil	V	2458030	SNF
Boucherville	V	2459005	SNF
Sainte-Julie	V	2459010	SNF
Saint-Amable	M	2459015	SNF
Varennes	V	2459020	SNF
Charlemagne	V	2460005	SNF
Le Gardeur	V	2460010	SNF
Repentigny	V	2460015	SNF
Saint-Sulpice	P	2460020	NTDB
L'Assomption	V	2460027	NTDB
Saint-Gérard-Majella	P	2460045	NTDB
Lachenaie	V	2464005	SNF
Terrebonne	V	2464010	NTDB

Mascouche	V	2464015	SNF
La Plaine	V	2464020	NTDB
Laval	V	2465005	SNF
Montréal-Est	V	2466005	SNF
Anjou	V	2466010	SNF
Saint-Léonard	V	2466015	SNF
Montréal-Nord	V	2466020	SNF
Montréal	V	2466025	SNF
Westmount	V	2466030	SNF
Verdun	V	2466035	SNF
LaSalle	V	2466040	SNF
Montréal-Ouest	V	2466045	SNF
Saint-Pierre	V	2466050	SNF
Côte-Saint-Luc	C	2466055	SNF
Hampstead	V	2466060	SNF
Outremont	V	2466065	SNF
Mont-Royal	V	2466070	SNF
Saint-Laurent	V	2466075	SNF
Lachine	V	2466080	SNF
Dorval	C	2466085	SNF
L'Île-Dorval	V	2466090	SNF
Pointe-Claire	V	2466095	SNF
Kirkland	V	2466100	SNF
Beaconsfield	V	2466105	SNF
Baie-d'Urfé	V	2466110	SNF
Sainte-Anne-de-Bellevue	V	2466115	SNF
Senneville	VL	2466125	SNF
Pierrefonds	V	2466130	SNF
Sainte-Geneviève	V	2466135	SNF
Dollard-des-Ormeaux	V	2466140	SNF
Roxboro	V	2466145	SNF
L'Île-Bizard	V	2466150	SNF
Saint-Mathieu	M	2467005	NTDB
Saint-Philippe	P	2467010	NTDB
La Prairie	V	2467015	SNF
Candiac	V	2467020	SNF
Delson	V	2467025	NTDB
Sainte-Catherine	V	2467030	NTDB
Saint-Constant	V	2467035	NTDB
Saint-Isidore	P	2467040	NTDB
Mercier	V	2467045	NTDB
Châteauguay	V	2467050	SNF
Léry	V	2467055	SNF
Kahnawake 14	R	2467802	NTDB
Maple Grove	V	2470020	SNF
Beauharnois	V	2470025	SNF
Melocheville	VL	2470060	NTDB
Les Cèdres	M	2471050	NTDB
Pointe-des-Cascades	VL	2471055	NTDB
L'Île-Perrot	V	2471060	SNF
Notre-Dame-de-l'Île-Perrot	P	2471065	NTDB
Pincourt	V	2471070	SNF
Terrasse-Vaudreuil	M	2471075	SNF
Vaudreuil-Dorion	V	2471083	SNF
Vaudreuil-sur-le-Lac	VL	2471090	SNF

L'Île-Cadieux	V	2471095	SNF
Hudson	V	2471100	NTDB
Saint-Lazare	P	2471105	NTDB
Saint-Eustache	V	2472005	SNF
Deux-Montagnes	V	2472010	SNF
Sainte-Marthe-sur-le-Lac	V	2472015	SNF
Pointe-Calumet	VL	2472020	NTDB
Saint-Joseph-du-Lac	P	2472025	NTDB
Oka	M	2472030	NTDB
Oka	P	2472035	NTDB
Saint-Placide	M	2472043	NTDB
Kanesatake	R	2472802	NTDB
Boisbriand	V	2473005	SNF
Sainte-Thérèse	V	2473010	SNF
Blainville	V	2473015	SNF
Rosemère	V	2473020	SNF
Lorraine	V	2473025	SNF
Bois-des-Filion	V	2473030	SNF
Sainte-Anne-des-Plaines	V	2473035	NTDB
Mirabel	V	2474005	SNF
Saint-Colomban	P	2475005	NTDB
Bellefeuille	P	2475010	NTDB
Saint-Jérôme	V	2475015	SNF
Saint-Antoine	V	2475020	NTDB
Lafontaine	VL	2475035	NTDB
Gore	CT	2476025	NTDB

Nanaimo

Product/File availability: **NTDT only**

CSD Name	CSD Type	CSDUID	Data Source
Nanaimo	C	5921007	NTDB
Nanaimo, Subd. A	SRD	5921012	NTDB
Nanaimo River 3	R	5921801	NTDB
Nanaimo River 2	R	5921802	NTDB
Nanaimo River 4	R	5921803	NTDB
Nanaimo Town 1	R	5921804	NTDB
Nanoose	R	5921805	NTDB

North Bay

Product/File availability: **SNF & SNFEF**

CSD Name	CSD Type	CSDUID	Data Source
Bonfield	TP	3548027	NTDB
East Ferris	TP	3548034	SNF
North Bay	C	3548044	SNF
Nipissing 10	R	3548073	SNF
North Himsworth	TP	3549066	SNF

Oshawa

Product/File availability: **Full SNF**

Appendix D. SNF and SSNF coverage for CMA/CAs by census subdivisions

CSD Name	CSD Type	CSDUID	Data Source
Whitby	T	3518009	SNF
Oshawa	C	3518013	SNF
Clarington	T	3518017	SNF

Ottawa - Hull

Product/File availability: **SNF & SNFEF**

CSD Name	CSD Type	CSDUID	Data Source
Buckingham	V	2481005	SNF
Masson-Angers	V	2481010	SNF
Gatineau	V	2481015	SNF
Hull	V	2481020	SNF
Aylmer	V	2481025	SNF
Val-des-Monts	M	2482015	SNF
Cantley	M	2482020	SNF
Chelsea	M	2482025	SNF
Pontiac	M	2482030	SNF
La Pêche	M	2482035	SNF
Clarence	TP	3502037	SNF
Rockland	T	3502039	SNF
Cambridge	TP	3502042	NTDB
Casselman	VL	3502044	NTDB
Russell	TP	3502048	NTDB
Osgoode	TP	3506001	SNF
Cumberland	TP	3506004	SNF
Gloucester	C	3506006	SNF
Vanier	C	3506009	SNF
Rockcliffe Park	VL	3506011	SNF
Nepean	C	3506012	SNF
Ottawa	C	3506014	SNF
Rideau	TP	3506018	SNF
Goulbourn	TP	3506027	SNF
Kanata	C	3506030	SNF
West Carleton	TP	3506042	SNF
South Gower	TP	3507061	NTDB

Peterborough

Product/File availability: **SNF & SNFEF**

CSD Name	CSD Type	CSDUID	Data Source
Otonabee	TP	3515006	NTDB
Hiawatha First Nation 36	R	3515008	NTDB
North Monaghan	TP	3515011	NTDB
Peterborough	C	3515014	SNF
Ennismore	TP	3515016	NTDB
Smith	TP	3515018	NTDB
Curve Lake First Nation 35	R	3515019	NTDB
Douro	TP	3515022	NTDB
Lakefield	VL	3515024	NTDB
Dummer	TP	3515026	NTDB

Prince George

Product/File availability: **Full SNF**

CSD Name	CSD Type	CSDUID	Data Source
Prince George	C	5953023	SNF

Québec

Product/File availability: **SNF & SNFEF**

CSD Name	CSD Type	CSDUID	Data Source
Saint-Étienne-de-Beaumont	P	2419105	NTDB
Saint-François	P	2420005	NTDB
Sainte-Famille	P	2420010	NTDB
Saint-Jean	P	2420015	NTDB
Saint-Laurent	P	2420020	NTDB
Saint-Pierre	P	2420025	NTDB
Sainte-Pétronille	VL	2420030	NTDB
Château-Richer	V	2421035	NTDB
L'Ange-Gardien	P	2421040	NTDB
Boischatel	M	2421045	NTDB
Sainte-Catherine-de-la-Jacques-Cartier	M	2422005	NTDB
Fossambault-sur-le-Lac	V	2422010	NTDB
Lac-Saint-Joseph	V	2422015	NTDB
Shannon	M	2422020	NTDB
Saint-Gabriel-de-Valcartier	M	2422025	NTDB
Lac-Delage	V	2422030	NTDB
Stoneham-et-Tewkesbury	CU	2422035	NTDB
Lac-Beauport	M	2422040	NTDB
Sainte-Brigitte-de-Laval	M	2422045	NTDB
Beauport	V	2423005	SNF
Vanier	V	2423010	SNF
Notre-Dame-des-Anges	P	2423015	SNF
Sillery	V	2423020	SNF
Québec	V	2423025	SNF
Charlesbourg	V	2423030	SNF
Saint-Émile	V	2423035	NTDB
Lac-Saint-Charles	M	2423040	NTDB
Loretteville	V	2423045	SNF
Val-Bélair	V	2423050	NTDB
L'Ancienne-Lorette	V	2423055	SNF
Sainte-Foy	V	2423060	SNF
Cap-Rouge	V	2423065	SNF
Saint-Augustin-de-Desmaures	M	2423070	NTDB
Wendake	R	2423802	SNF
Pintendre	M	2424010	NTDB
Saint-Joseph-de-la-Pointe-de-LévisÎ	P	2424015	NTDB
Lévis	V	2424020	NTDB
Saint-Lambert-de-Lauzon	P	2425005	SNF
Saint-Étienne-de-Lauzon	M	2425010	SNF
Sainte-Hélène-de-Breakeyville	P	2425015	SNF
Saint-Jean-Chrysostome	V	2425020	SNF
Saint-Romuald	V	2425025	SNF
Charny	V	2425030	SNF

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Saint-Rédempteur	V	2425035	SNF
Bernières-Saint-Nicolas	V	2425043	SNF

Red Deer

Product/File availability:　　　**Full SNF**

CSD Name	CSD Type	CSDUID	Data Source
Red Deer	C	4808011	SNF

Regina

Product/File availability:　　　**SNF & SNFEF**

CSD Name	CSD Type	CSDUID	Data Source
Pense No. 160	RM	4706021	NTDB
Belle Plaine	VL	4706022	NTDB
Pense	VL	4706023	NTDB
Sherwood No. 159	RM	4706026	SNF
Regina	C	4706027	SNF
Grand Coulee	VL	4706028	SNF
Edenwold No. 158	RM	4706029	NTDB
White City	VL	4706030	NTDB
Pilot Butte	T	4706031	NTDB
Balgonie	T	4706032	NTDB
Edenwold	VL	4706033	NTDB
Lumsden No. 189	RM	4706053	NTDB
Disley	VL	4706054	NTDB
Buena Vista	VL	4706055	NTDB
Lumsden	T	4706056	SNF
Lumsden Beach	RV	4706057	NTDB
Regina Beach	T	4706058	NTDB

Saint-Jean-sur-Richelieu

Product/File availability:　　　**NTDB only**

CSD Name	CSD Type	CSDUID	Data Source
L'Acadie	M	2456070	NTDB
Saint-Luc	V	2456075	NTDB
Saint-Jean-sur-Richelieu	V	2456080	NTDB
Iberville	V	2456085	NTDB
Saint-Athanase	P	2456090	NTDB

Saint John

Product/File availability:　　　**SNF & SNFEF**

CSD Name	CSD Type	CSDUID	Data Source
Saint Martins	PAR	1301001	NTDB
St. Martins	VL	1301002	NTDB
Simonds	PAR	1301004	NTDB

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Saint John	C	1301006	SNF
Musquash	PAR	1301016	NTDB
Lepreau	PAR	1302008	NTDB
Petersville	PAR	1304001	NTDB
Upham	PAR	1305004	NTDB
Hampton	PAR	1305006	NTDB
Hampton	T	1305007	NTDB
Rothesay	PAR	1305008	NTDB
Rothesay	T	1305009	NTDB
Renforth	VL	1305010	NTDB
Westfield	PAR	1305011	NTDB
Grand Bay	T	1305012	NTDB
Westfield	VL	1305013	NTDB
Kingston	PAR	1305014	NTDB
Greenwich	PAR	1305038	NTDB
East Riverside-Kinghurst	VL	1305051	NTDB
Fairvale	VL	1305053	NTDB
Quispamsis	T	1305056	NTDB
Gondola Point	VL	1305058	NTDB

Sarnia

Product/File availability: **Full SNF**

CSD Name	CSD Type	CSDUID	Data Source
Moore	TP	3538023	SNF
Sarnia 45	R	3538025	SNF
Sarnia	C	3538030	SNF
Point Edward	VL	3538031	SNF

Saskatoon

Product/File availability: **SNF & SNFEF**

CSD Name	CSD Type	CSDUID	Data Source
Thode	RV	4711060	NTDB
Dundurn No. 314	RM	4711061	NTDB
Dundurn	T	4711063	NTDB
Shields	RV	4711064	NTDB
Corman Park No. 344	RM	4711065	NTDB
Saskatoon	C	4711066	SNF
Langham	T	4711067	NTDB
Warman	T	4711068	NTDB
Blucher No. 343	RM	4711069	NTDB
Martensville	T	4711070	NTDB
Bradwell	VL	4711071	NTDB
Allan	T	4711072	NTDB
Dalmeny	T	4711073	NTDB
Elstow	VL	4711074	NTDB
Osler	T	4711075	NTDB
Colonsay No. 342	RM	4711076	NTDB
Clavet	VL	4711077	NTDB

Appendix D. SNF and SSNF coverage for CMA/CAs by census subdivisions

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Meacham	VL	4711078	NTDB
Colonsay	T	4711079	NTDB
White Cap 94	R	4711828	NTDB
Vanscoy No. 345	RM	4712054	NTDB
Delisle	T	4712056	NTDB
Vanscoy	VL	4712058	NTDB
Asquith	T	4712059	NTDB

Sault Ste. Marie

Product/File availability: **Full SNF**

CSD Name	CSD Type	CSDUID	Data Source
Laird	TP	3557011	SNF
Macdonald, Meredith and Aberdeen	TP	3557051	SNF
Sault Ste. Marie	C	3557061	SNF
Prince	TP	3557066	SNF
Garden River 14	R	3557074	SNF
Rankin Location 15D	R	3557075	SNF

Scugog & Scugog 34, R

Product/File availability: **Full SNF**

CSD Name	CSD Type	CSDUID	Data Source
Scugog	TP	3518020	SNF
Scugog 34	R	3518022	SNF

Sherbrooke

Product/File availability: **SNF & SNFEF**

CSD Name	CSD Type	CSDUID	Data Source
Ascot Corner	M	2441055	NTDB
Stoke	M	2442005	NTDB
Bromptonville	V	2442010	NTDB
Brompton	CT	2442015	NTDB
Saint-Denis-de-Brompton	P	2442025	NTDB
Waterville	V	2443005	NTDB
Lennoxville	V	2443010	NTDB
Ascot	M	2443015	NTDB
Fleurimont	V	2443020	NTDB
Sherbrooke	V	2443025	SNF
Rock Forest	V	2443030	NTDB
Deauville	VL	2443035	NTDB
Saint-Élie-d'Orford	M	2443040	NTDB
Compton Station	M	2444075	NTDB
North Hatley	VL	2445050	NTDB
Hatley	CT	2445055	NTDB

St. Catharines - Niagara

Product/File availability: **Full SNF**

CSD Name	CSD Type	CSDUID	Data Source
Fort Erie	T	3526003	SNF
Port Colborne	C	3526011	SNF
Wainfleet	TP	3526014	SNF
Pelham	T	3526028	SNF
Welland	C	3526032	SNF
Thorold	C	3526037	SNF
Niagara Falls	C	3526043	SNF
Niagara-on-the-Lake	T	3526047	SNF
St. Catharines	C	3526053	SNF
Lincoln	T	3526057	SNF

St. John's

Product/File availability:　　　　**SNF & SNFEF**

CSD Name	CSD Type	CSDUID	Data Source
Conception Bay South	T	1001485	NTDB
Portugal Cove-St. Philip's	T	1001504	NTDB
Pouch Cove	T	1001505	NTDB
Flatrock	T	1001507	NTDB
Torbay	T	1001509	NTDB
Logy Bay-Middle Cove-Outer Cove	T	1001511	NTDB
Bauline	T	1001512	NTDB
Paradise	T	1001517	NTDB
St. John's	C	1001519	SNF
Mount Pearl	C	1001542	NTDB
Petty Harbour-Maddox Cove	T	1001551	SNF
Bay Bulls	T	1001557	NTDB
Witless Bay	T	1001559	NTDB

Stratford

Product/File availability:　　　　**Full SNF**

CSD Name	CSD Type	CSDUID	Data Source
Stratford	C	3531011	SNF

Sudbury

Product/File availability:　　　　**SNF & SNFEF**

CSD Name	CSD Type	CSDUID	Data Source
Whitefish Lake 6	R	3552051	NTDB
Nickel Centre	T	3553001	NTDB
Sudbury	C	3553007	SNF
Walden	T	3553012	NTDB
Onaping Falls	T	3553019	NTDB
Rayside-Balfour	T	3553024	NTDB
Valley East	T	3553028	NTDB

Thunder Bay

Appendix D. SNF and SSNF coverage for CMA/CAs by census subdivisions

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Product/File availability: **SNF & SNFEF**

CSD Name	CSD Type	CSDUID	Data Source
Neebing	TP	3558001	NTDB
Fort William 52	R	3558003	NTDB
Thunder Bay	C	3558004	SNF
Paipoonge	TP	3558008	NTDB
Gillies	TP	3558012	NTDB
O'Connor	TP	3558016	NTDB
Conmee	TP	3558019	NTDB
Oliver	TP	3558024	NTDB
Shuniah	TP	3558028	NTDB

Toronto

Product/File availability: **SNF & SNFEF**

CSD Name	CSD Type	CSDUID	Data Source
Pickering	T	3518001	SNF
Ajax	T	3518005	SNF
Uxbridge	TP	3518029	SNF
Vaughan	C	3519028	SNF
Markham	T	3519036	SNF
Richmond Hill	T	3519038	SNF
Whitchurch-Stouffville	T	3519044	SNF
Aurora	T	3519046	SNF
Newmarket	T	3519048	SNF
King	TP	3519049	SNF
East Gwillimbury	T	3519054	SNF
Georgina	T	3519070	SNF
Georgina Island 33	R	3519076	SNF
Scarborough	C	3520001	SNF
Toronto	C	3520004	SNF
East York	BOR	3520006	SNF
North York	C	3520008	SNF
York	C	3520014	SNF
Etobicoke	C	3520019	SNF
Mississauga	C	3521005	SNF
Brampton	C	3521010	SNF
Caledon	T	3521024	SNF
Mono	TP	3522012	NTDB
Orangeville	T	3522014	NTDB
Oakville	T	3524001	SNF
Milton	T	3524009	SNF
Halton Hills	T	3524015	SNF
New Tecumseth	T	3543007	NTDB
Bradford West Gwillimbury	T	3543014	NTDB

Trois-Rivières

Product/File availability: **SNF & SNFEF**

CSD Name	CSD Type	CSDUID	Data Source
Champlain	M	2437030	NTDB
Saint-Maurice	P	2437045	NTDB

Sainte-Marthe-du-Cap	M	2437050	NTDB
Cap-de-la-Madeleine	V	2437055	SNF
Saint-Louis-de-France	V	2437060	NTDB
Trois-Rivières	V	2437065	SNF
Trois-Rivières-Ouest	V	2437070	SNF
Pointe-du-Lac	M	2437075	NTDB
Bécancour	V	2438010	NTDB
Wôlinak 11	R	2438802	NTDB

Vancouver

Product/File availability: **Full SNF**

CSD Name	CSD Type	CSDUID	Data Source
Langley	DM	5915001	SNF
Langley	C	5915002	SNF
Surrey	C	5915004	SNF
White Rock	C	5915007	SNF
Delta	DM	5915011	SNF
Richmond	C	5915015	SNF
University Endowment Area	SRD	5915018	SNF
Vancouver	C	5915022	SNF
Burnaby	C	5915025	SNF
New Westminster	C	5915029	SNF
Coquitlam	C	5915034	SNF
Belcarra	VL	5915036	SNF
Anmore	VL	5915038	SNF
Port Coquitlam	C	5915039	SNF
Port Moody	C	5915043	SNF
North Vancouver	DM	5915046	SNF
North Vancouver	C	5915051	SNF
West Vancouver	DM	5915055	SNF
Greater Vancouver, Subd. A	SRD	5915063	SNF
Lions Bay	VL	5915065	SNF
Pitt Meadows	DM	5915070	SNF
Maple Ridge	DM	5915075	SNF
Semiahmoo	R	5915801	SNF
Tsawwassen	R	5915802	SNF
Musqueam 2	R	5915803	SNF
Coquitlam 2	R	5915804	SNF
Coquitlam 1	R	5915805	SNF
Burrard Inlet 3	R	5915806	SNF
Mission 1	R	5915807	SNF
Capilano 5	R	5915808	SNF
Barnston Island 3	R	5915809	SNF
Musqueam 4	R	5915810	SNF
Seymour Creek 2	R	5915811	SNF
Katzie 2	R	5915813	SNF
McMillan Island 6	R	5915816	SNF
Matsqui 4	R	5915825	SNF
Katzie 1	R	5915830	SNF
Langley 5	R	5915835	SNF
Whonnock 1	R	5915840	SNF

Victoria

Product/File availability: **Full SNF**

CSD Name	CSD Type	CSDUID	Data Source
North Saanich	DM	5917005	SNF
Sidney	T	5917010	SNF
Central Saanich	DM	5917015	SNF
Saanich	DM	5917021	SNF
Oak Bay	DM	5917030	SNF
Victoria	C	5917034	SNF
Esquimalt	DM	5917040	SNF
Colwood	C	5917041	SNF
Metchosin	DM	5917042	SNF
Langford	DM	5917044	SNF
Capital, Subd. B	SRD	5917045	SNF
View Royal	T	5917047	SNF
Highlands	DM	5917049	SNF
Capital, Subd. C	SRD	5917051	SNF
Cole Bay 3	R	5917801	SNF
Union Bay 4	R	5917802	SNF
East Saanich 2	R	5917803	SNF
South Saanich 1	R	5917804	SNF
Becher Bay 1	R	5917809	SNF
Esquimalt	R	5917811	SNF
New Songhees 1A	R	5917812	SNF
Sooke 1	R	5917817	SNF
Sooke 2	R	5917818	SNF
Capital, Subd. D	SRD	5917055	SNF - Not part of the Victoria CMA
Gordon River 2	R	5917815	SNF - Not part of the Victoria CMA
Pacheena 1	R	5917816	SNF - Not part of the Victoria CMA

Wellesley

Product/File availability: **Full SNF**

CSD Name	CSD Type	CSDUID	Data Source
Wellesley	TP	3530027	SNF

West Lincoln

Product/File availability: **Full SNF**

CSD Name	CSD Type	CSDUID	Data Source
West Lincoln	TP	3526021	SNF

Wilmot

Product/File availability: **Full SNF**

CSD Name	CSD Type	CSDUID	Data Source
Wilmot	TP	3530020	SNF

Windsor

Product/File availability:	**SNF & SNFEF**		
CSD Name	CSD Type	CSDUID	Data Source
Colchester North	TP	3537018	SNF
Anderdon	TP	3537031	NTDB
LaSalle	T	3537034	NTDB
Windsor	C	3537039	SNF
Tecumseh	T	3537044	NTDB
Sandwich South	TP	3537046	NTDB
Maidstone	TP	3537051	NTDB
St. Clair Beach	VL	3537052	NTDB
Essex	T	3537054	SNF
Rochester	TP	3537058	NTDB
Belle River	T	3537059	NTDB

Winnipeg

Product/File availability:	**SNF & SNFEF**		
CSD Name	CSD Type	CSDUID	Data Source
Taché	RM	4602069	SNF
Ritchot	RM	4602075	SNF
St. François Xavier	RM	4610052	SNF
Winnipeg	C	4611040	SNF
Headingley	RM	4611042	SNF
Springfield	RM	4612047	SNF
East St. Paul	RM	4613032	SNF
West St. Paul	RM	4613037	SNF
St. Clements	RM	4613056	NTDB
Brokenhead 4	R	4613062	NTDB
Rosser	RM	4614015	SNF

Woodstock

Product/File availability:	**Full SNF**		
CSD Name	CSD Type	CSDUID	Data Source
Woodstock	C	3532042	SNF

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Policy Manual, Policy on Informing Users of Data Quality and Methodology, Statistics Canada, April 7, 1992.

Statistics Canada, [1997]
1996 Census Dictionary. Ottawa: Industry Canada, 1997. 1996 Census of Canada. Catalogue number 92-351-XPE.

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Digital Boundary Files and Digital Cartographic Files, 1996 Census, Reference Guide. Catalogue number 92F0029XDE, 92F0030XDE and 92F0032XDE to 92F0040XDE.

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Geography Products and Services

This section provides brief descriptions of Geography products and services related to the 1996 Census. For additional details, contact the nearest Statistics Canada Regional Reference Centre.

General Reference Products

92F0085XCB   GeoRef

GeoRef is a powerful data retrieval and tabular output tool with software and data on a CD-ROM. GeoRef allows users to explore the links between all standard levels of geography and to determine geographic codes, names, and population and dwelling counts. In addition to the standard census areas, GeoRef provides EA correspondence data (for 1996 census EAs and 1991 EAs) and an EA reference map listing that facilitates identification of appropriate EA reference maps.

Reference Maps

Reference maps identify census geographic areas and assist users in locating boundaries, allowing them to relate census data to actual physical locations. Over 7,500 reference maps are available for geographic areas that range in size from enumeration areas (the census collection unit) to federal electoral districts (Members of Parliament's ridings), from census tracts (neighbourhoods) to census agglomerations and census metropolitan areas (large urban centres), and from census subdivisions (municipalities) to census divisions (counties). Reference maps are available individually or as sets.

92F0087XPB   Federal   Electoral   Districts/Enumeration   Areas   (FED/EA)   Reference   Maps   (1987 Representation Order)

These reference maps show 1996 Census enumeration areas by federal electoral district. The federal electoral district boundaries are based on the 1987 Representation Order which was in effect on Census Day (May 14, 1996). These FED/EA maps are designed for the general reference of EA boundaries. For more specific identification of enumeration areas, users should refer to the more detailed EA Reference Maps for Large Urban (92F0090XPB), Small Urban (92F0088XPB) and Rural (92F0091XPB) areas. The FED/EA maps are reproduced on demand.

92F0090XPB   Large Urban Enumeration Areas (EA) Reference Maps

These black and white EA reference maps cover all 25 census metropolitan areas (CMAs) and the 18 census agglomerations (CAs) that are in the Census Tract Programme. Approximately 4,200 maps - generally one map per census tract - show enumeration area (EA) boundaries and codes on a background of detailed street networks and other visible features. Also shown on the maps are census tract, census subdivision, federal electoral district and CMA or CA boundaries. These maps are reproduced on demand. Package prices are available when all Large Urban (92F0090XPB), Small Urban (92F0088XPB) and Rural (92F0089XPB) EA Reference Maps for Canada or Provinces and Territories are purchased together.

92F0088XPB   Small Urban Enumeration Areas (EA) Reference Maps

Approximately 870 reference maps cover smaller urban municipalities (census subdivisions) not in the Census Tract Programme. The maps depict enumeration area (EA) boundaries and codes. Federal electoral districts are also shown on these maps. The size and scale of the maps vary, depending on the area covered. These maps are reproduced on

demand. Package prices are available when all Large Urban (92F0090XPB), Small Urban (92F0088XPB) and Rural (92F0089XPB) EA Reference Maps for Canada or Provinces and Territories are purchased together.

92F0091XPB   Rural Enumeration Areas (EA) Reference Maps

Approximately 2,400 maps depict enumeration area boundaries and codes in rural areas of Canada. Also shown are boundaries for census subdivisions, census divisions, federal electoral districts, census metropolitan areas and tracted census agglomerations. The maps, based on Natural Resources Canada's national topographic series, are at a scale of 1:50,000 or 1:250,000 for the 10 provinces and at a scale of 1:1,000,000 for Yukon Territory and 1:4,000,000 for Northwest Territories. These maps are reproduced on demand. Package prices are available when all Large Urban (92F0090XPB), Small Urban (92F0088XPB) and Rural (92F0089XPB) EA Reference Maps for Canada or Provinces and Territories are purchased together.

92F0089XPB   Census Divisions and Census Subdivisions (CD/CSD) Reference Maps: Individual Maps

A total of 21 provincial maps showing the boundaries, names and codes for census divisions (areas such as counties and regional districts) and census subdivisions (such as cities, municipalities, towns, villages, other local municipal entities, townships and Indian reserves) are available for sale individually. The maps also show the boundaries for census metropolitan areas and census agglomerations. Each province is covered by one to four maps, with scales ranging from 1:375,000 to 1:6,000,000. The maps have the same general look as in 1991, although they have been produced using computer-assisted technology from digital geographic databases. The reference information, including water bodies, major roads and railroads, comes from the Digital Chart of the World (DCW).

Note: The entire set of provincial maps are available in the publication, Standard Geographical Classification. Volume II (Catalogue number. 12-572-XPB). Also included in the publication are three maps of Canada at 1:10,000,000 scale, one showing census divisions, one showing economic regions, and one showing point locations of census metropolitan areas and census agglomerations,

92-354-XPB   Census Metropolitan Areas, Census Agglomerations and Census Tracts (CMA/CA/CT) Reference Maps

This publication includes reference maps of all census metropolitan areas (55 maps covering 25 CMAs) and census agglomerations with census tracts (29 maps covering 18 CAs). The maps show boundaries and names of the census tracts, census subdivisions, primary census metropolitan areas and primary census agglomerations which make up the CMAs/CAs, as well as the urban core, urban fringe and rural fringe. Also shown are rivers, lakes, railroad tracks, provincial boundaries and other significant features. The map scales range from 1:25,000 to 1:2,000,000. The publication also includes a Canada map (1:10,000,000 scale) showing point locations of census metropolitan areas and census agglomerations in 1996.

92F0092XPB   Census Metropolitan Areas, Census Agglomerations and Census Tracts (CMA/CA/CT) Reference Maps - Individual Maps

Individual reference maps for census metropolitan areas (55 maps covering 25 CMAs) and census agglomerations with census tracts (29 maps covering 18 CAs) are available. The maps show boundaries and names of the census tracts, census subdivisions, primary census metropolitan areas and primary census agglomerations which make up the CMAs/CAs, as well as the urban core, urban fringe and rural fringe. Also shown are rivers, lakes, railroad tracks, provincial boundaries and other significant features. The map scales range from 1:25,000 to 1:2,000,000.

Note: The entire set of maps is available in the publication Census Metropolitan Areas, Census Agglomerations and Census Tracts. Reference Maps (Catalogue number 92-354-XPB).

Population and Dwelling Counts

Population and dwelling counts from the 1996 Census are available in a variety of formats and geographic breakdowns. In addition to the publication and CD-ROM described below, population and dwelling counts are available in GeoRef (92F0085XCB) and the Block-face Data File (92F0026XDB).

93-357-XPB   A National Overview. Population and Dwelling Counts

This publication provides population and dwelling counts established by the 1996 Census of Canada. The levels of geography covered are: provinces and territories, federal electoral districts (1987 Representation Order), census divisions, census subdivisions, designated places, census metropolitan areas and census agglomerations, urban and rural areas. The geographic boundaries of these areas are those that were in force on January 1, 1996 (geographic reference date for the 1996 Census of Canada). The publication also includes population and dwelling counts for forward sortation areas (first three characters of the postal code) as reported by census respondents on Census Day (May 14, 1996).

92F0086XCB   Postal Code Counts

Postal Codes Counts is a new product for 1996 that 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 - first three characters 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.

Digital Boundary Files and Digital Cartographic Files

Digital Boundary Files (DBFs) portray the official boundaries used for 1996 Census collection and, therefore, often extend as straight lines into bodies of water. In Digital Cartographic Files (DCFs), these boundaries were modified to follow the coastlines and shorelines on the perimeter of Canada's land mass, including major islands. The DCFs also include a separate map layer showing lakes and some rivers and estuaries. This "water" layer can be used for additional reference purposes when mapping or displaying the boundaries. DCFs provide a framework for thematic mapping and geographic analysis that are possible using commercially available geographic information systems (GIS) or other mapping software. DBFs may not be suitable for mapping or display where realistic shoreline is required. The DCFs are available by standard packages and prices; DBFs are available on request for the same price.

92F0029XDE   Provinces and Territories Digital Boundary File/Digital Cartographic File

The Provinces and Territories Digital Boundary File (DBF) and Digital Cartographic File (DCF) are two of a series of products that depict boundaries of standard geography levels. The boundaries of the provinces and territories were generalised to meet the requirements of most desk-top mapping packages. Consequently, this product is not consistent with others in the series. The Provinces and Territories DCF is available as a standard package for Canada.

92F0030XDE   **Federal Electoral Districts (1987 Representation Order) Digital Boundary File/Digital Cartographic File**

The Federal Electoral Districts (1987 Representation Order) Digital Boundary File and Digital Cartographic File were created by aggregating the component EA boundaries from the 1996 Census. They may differ slightly from the Digital Boundary File based on 1991 enumeration areas (92F0070XDB). The Federal Electoral Districts Digital Cartographic File is a new product and is available in two versions. The boundaries of the first version are consistent with all other levels of standard geography. A more generalised version is also available for small scale mapping of the country as a whole. The two versions of the FED DCF are available as a standard package for Canada.

92F0031XDE   **Federal Electoral Districts (1996 Representation Order) Digital Cartographic File**

The Federal Electoral Districts (1996 Representation Order) Digital Cartographic File depicts the boundaries of the Federal Electoral Districts (FEDs) according to the 1996 Representation Order. Since this is not a standard level of geography for the 1996 Census, the cartographic file was created with a different methodology and, therefore, is not entirely consistent with other files in the series. Users should be aware that the FED boundaries used for the taking of the 1996 Census were based on the 1987 Representation Order. The 1996 representation order was proclaimed on January 8, 1996 and is in force on the first dissolution of Parliament that occurs at least one year after its proclamation. The Federal Electoral Districts (1996 Representation Order) DCF is available as a standard package for Canada.

92F0032XDE   **Census Divisions Digital Boundary File/Digital Cartographic File**

The Census Divisions Digital Boundary File (DBF) and Digital Cartographic File (DCF) are two of a series of products that depict boundaries of standard geography levels. The Census Divisions DCF is available in two versions. The boundaries of the first version are consistent with all other levels of standard geography. A more generalised version is also available for small scale mapping of the country as a whole. The two versions of the Census Divisions DCFs are available as a standard package for Canada.

92F0033XDE   **Census Consolidated Subdivisions Digital Boundary File/Digital Cartographic File**

The Census Consolidated Subdivisions Digital Boundary (DBF) and Digital Cartographic File (DCF) are two of a series of products that depict boundaries of standard geography levels. Census Consolidated Subdivisions DCFs are available as standard packages for Canada and the provinces and territories.

92F0034XDE   **Census Subdivisions Digital Boundary File/Digital Cartographic File**

The Census Subdivisions Digital Boundary File (DBF) and Digital Cartographic File (DCF) are two of a series of products that depict boundaries of standard geography levels. The Census Subdivisions DCF is available as a standard package for Canada, provinces and territories, census metropolitan areas (CMAs) and census agglomerations (CAs) with census tracts.

92F0035XDE   **Census Metropolitan Areas/Census Agglomerations Digital Boundary File/Digital Cartographic File**

The 1996 Census Metropolitan Areas/Census Agglomerations Digital Boundary File (DBF) and Digital Cartographic File (DCF) are two of a series of products that depict boundaries of standard geography levels. The Census Metropolitan Areas/Census Agglomerations DCF is available as a standard package for Canada.

92F0036XDE   Census Tracts Digital Boundary File/Digital Cartographic File

Users of the 1991 Census Tracts Digital Cartographic File will notice a major difference between the 1991 and the 1996 product. In 1991, all bodies of water were integrated with the boundaries on a single map layer. The 1996 boundaries follow the coastlines and shorelines on the perimeter of Canada's land mass, including major islands. Users can see the remaining shorelines (in-land bodies of water) by overlaying the separate "water" layer. The 1996 Census Tracts DCFs are consistent with all other levels of standard geography. This was not case in 1991. The Census Tracts DCFs are available as standard packages for Canada, the provinces, census metropolitan areas and census agglomerations with census tracts.

92F0037XDE   Urban Areas Digital Boundary File/Digital Cartographic File

The Urban Areas Digital Boundary File (DBF) and Digital Cartographic File (DCF) are two of a series of products that depict boundaries of standard geography levels. The Urban Areas DCF is available as a standard package for Canada.

92F0038XDE   Designated Places Digital Boundary File/Digital Cartographic File

The Designated Places Digital Boundary File (DBF) and Digital Cartographic File (DCF) are two of a series of products that depict boundaries of standard geography levels. Designated places are a new standard geography level for 1996. The Designated Places DCF is available as a standard package for Canada.

92F0039XDE   1996 Census Forward Sortation Areas Digital Cartographic File

The 1996 Census Forward Sortation Areas (FSAs) Digital Cartographic File depicts FSA boundaries derived from postal codes captured from the 1996 Census questionnaires. By analysing 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 respect enumeration area boundaries. The 1996 Census Forward Sortation Areas DCF is available as a standard package for Canada.

92F0040XDE   Enumeration Areas (EA) Digital Boundary File/Digital Cartographic File

The Enumeration Areas Digital Cartographic File (DCF) is available for the first time. In 1991, only the Digital Boundary File was available. The EA DCFs are available as standard packages for Canada, the provinces and territories and Census Metropolitan Areas (CMA) and some Census Agglomerations (CA).

Digital Street Files

Geography Division maintains a street network database of Canada's large urban centres on an ongoing basis. While this database represents less than 1 % of Canada's land area, it accounts for 62% of Canada's population. Several products originate from this database including very detailed Street Network Files, less detailed Skeletal Street Network Files, and the Block-face Data File.

92F0024XDE   Street Network Files (SNF)

The Street Network Files (SNFs) are digital files representing the street network for most large urban centres in Canada. The files also contain other visible physical and cultural features (such as hydrography, railroads, pipelines) and attribute information (for example, street and hydrographic names and address ranges for streets with assigned

addresses). Streets and addresses are updated to reflect the information collected on Census Day - May 14, 1996. In combination with the user's appropriate software, the Street Network Files are useful for route planning, delivery services and mapping. The SNFs are available as standard packages for Canada, all provinces but Prince Edward Island, and for Census Metropolitan Areas (CMA) and some Census Agglomerations (CA).

92F0025XDE   Skeletal Street Network Files (SSNF)

The Skeletal Street Network Files (SSNF) are "thinned-out" Street Network Files consisting of cartographic reference features such as major streets (with street names but no address ranges) and some railway features used to define the census tract boundaries. The SSNFs are available as standard packages for Canada, Census Metropolitan Areas (CMA) and some Census Agglomerations (CA).

92F0100XDE - 92F0103XDE; 92F0105XDE - 92F0136XDE   Street Network and Feature Extension Files (SNFEF)

The Street Network and Extension Files (SNFEFs) are digital files that extend the coverage of the Street Network Files (SNFs) to the defined limits of the census metropolitan area / census agglomeration (CMA/CA). The SNFEFs contain all the features of the SNFs plus a road and feature network from the National Topographic Data Base (NTDB) extending from the SNF coverage to the CMA/CA limit. The NTDB based portion of the SNFEFs do not have address ranges.

SNFEFs cover a total of 29 centres: 26 CMAs and CAs that have partial SNF coverage, and 3 CAs with no SNF coverage.

Since standard boundary file products may not match the feature extensions in the SNFEF, adjusted boundary files are also available for clients wanting a complete CMA/CA package (see sections on Census Tracts DBF/DCF, Census Subdivisions DBF/DCF and Enumeration Areas DBF/DCF for specific information).

92F0026XDB   Block-Face Data File (BFDF)

The Block-Face Data File (BFDF) contains 1996 Census population and dwelling counts for block-faces in urban centres covered by the Street Network Files (92F0024XDE). A block-face is generally one side of a city street between two consecutive intersections; it is also the smallest geographical unit available from Statistics Canada. The BFDF also links the block-face to all other levels of standard geography (enumeration areas and above) through geographic codes. The file includes street names with address ranges as well as co-ordinates for a point representing the approximate centre of each block-face. The BFDFs are available as standard packages for Canada and for large urban centres.

Postal Code Products

The postal code products described below use postal codes that are obtained regularly from Canada Post Corporation. Two other products listed above, Postal Code Counts (92F0086XCB) and 1996 Census Forward Sortation Areas Digital Cartographic File (93F0038XDE), are based on postal codes provided by respondents on census questionnaires.

92F0027XDB   1996 Postal Code Conversion File (PCCF)

The Postal Code Conversion File (PCCF) provides a link between the six-character postal code and the standard 1996 Census geographic areas (such as enumeration areas, municipalities, census tracts, etc.). It also provides the x,y co-

ordinates 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, and for large urban centres.

92F0027UDB   1996 Postal Code Conversion File (PCCF) - Update

The Postal Code Conversion File (PCCF) provides a link between the six-character postal code and the standard 1996 Census geographic areas (such as enumeration areas, municipalities, census tracts, etc.). It also provides the x,y co-ordinates for a point representing the approximate location of the postal code to support mapping. The PCCF is updated on a semi-annual basis. Updates released in July provide new postal codes as of January of the release year. Updates released in January provide new postal codes as of July of the previous year. Clients must purchase the Postal Code Conversion File (92F0027XDB) at the initial cost; then subsequent updated files may be purchased at the update rate. An additional discount on updates is given to PCCF update subscribers. The subscription will require that they pay in advance for at least one updated file per year until the new PCCF for the 2001 Census is released. The PCCF updates are available as standard packages for Canada and provinces and territories.

92F0028XDB   Postal Codes by Federal Ridings (1996 Representation Order) File

The Postal Codes by Federal Ridings (1996 Representation Order) File (PCFRF) is a flat ASCII file which provides a link between the six character postal code and Canada's federal electoral districts (1996 Representation Order). A federal electoral district (FED) is any place or territorial area entitled to return a member of Parliament (MP) to serve in the House of Commons and is commonly referred to as a federal riding. The PCFRF is available as standard packages for Canada and for 5 regions - Atlantic Provinces, Quebec, Ontario, Prairie Provinces and Northwest Territories, and British Columbia and Yukon Territory.

92F0028UDB   Postal Codes by Federal Ridings (1996 Representation Order) File (PCFRF) - Update

The Postal Codes by Federal Ridings (1996 Representation Order) File (PCFRF) is a flat ASCII file which provides a link between the six character postal code and Canada's federal electoral districts (1996 Representation Order). A federal electoral district (FED) is any place or territorial area entitled to return a member of Parliament (MP) to serve in the House of Commons and is commonly referred to as a federal riding. The PCFRF is updated on a semi-annual basis. Updates released in July provide new postal codes as of January of the release year. Updates released in January provide new postal codes as of July of the previous year. Clients must purchase the PCFRF (92F0028XDB) at the initial cost; then subsequent updated files may be purchased at the update rate. The PCFRF updates are available for Canada and for 5 regions - Atlantic Provinces, Quebec, Ontario, Prairie Provinces and Northwest Territories, and British Columbia and the Yukon Territory.

Services

97C0005   Geocoding Service

The 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 an aggregation at the block-face level in large urban centres with Street Network File coverage, and at the enumeration level in small urban centres and rural areas. The user is thereby able to purchase census data for these custom areas. Cost estimates for this service will be provided based on the complexity of the request.

97C0006   Geography Custom Services

If the standard geography products do not satisfy a user's need, Geography Custom Services are available to produce non-standard geographic products by special request. Examples include alternative packaging of Digital Cartographic Files, special data retrievals, manipulations or merges using any of the geography computer files (postal codes, attribute files, boundary files and Street Network Files). Cost estimates for this service will be provided based on the nature and complexity of the request.

97C0007   Geography Custom Mapping

Thematic maps and other custom maps may be produced as a special request. Cost estimates for this service will be provided based on the complexity of the request.