

PART 2

SECTION A

FILE CONTENT

File CTD81B30

Table Title

CTD81B31 Employed labour force by sex (3) for place of residence (each CT and remainder) (location AA) by place of work (each CT, at home, no usual place of work, outside C(M)A, outside Canada and CT not stated) (location BB), 1981

Legends

LOCATION AA

1. CT within C(M)A (1)
2. Outside C(M)A

-
- (1) Each CT within the C(M)A will be included if there is resident population, unless:
- (a) the table shows industry or occupation and less than 50 persons were enumerated in a CT designated as drop-off area; or
 - (b) the table shows industry or occupation and less than 25 persons were enumerated in a CT designated as canvasser area.

LOCATION BB

1. Resident CT (including at home)
2. Another CT (in the C(M)A) (1)
3. Rest of C(M)A (2)
4. At home (3)
5. No usual place of work (within the C(M)A)
6. Outside C(M)A (including other no usual place of work) (3)
7. Outside Canada (3)
8. CT not stated

-
- (1) Each CT within the street-indexed portion of the C(M)A will be included, unless no one works in the CT or the table shows industry or occupation and less than 25 persons work in the CT. CTs are listed in name order.
- (2) Included in this category are all the CTs that are not covered by the Street Index for that C(M)A and so could not be coded as individual CTs of work.
- (3) Not applicable in Location AA x Location BB cross-reference when Location AA = "Outside C(M)A".

SEX (3)

1. Total
 2. Male
 3. Female
-

SECTION B

FILE SEQUENCE AND GEOGRAPHIC DEFINITIONS

(1) Sequence of 1981 Census User Summary Tape Files - Census Tracts (Basic Series)

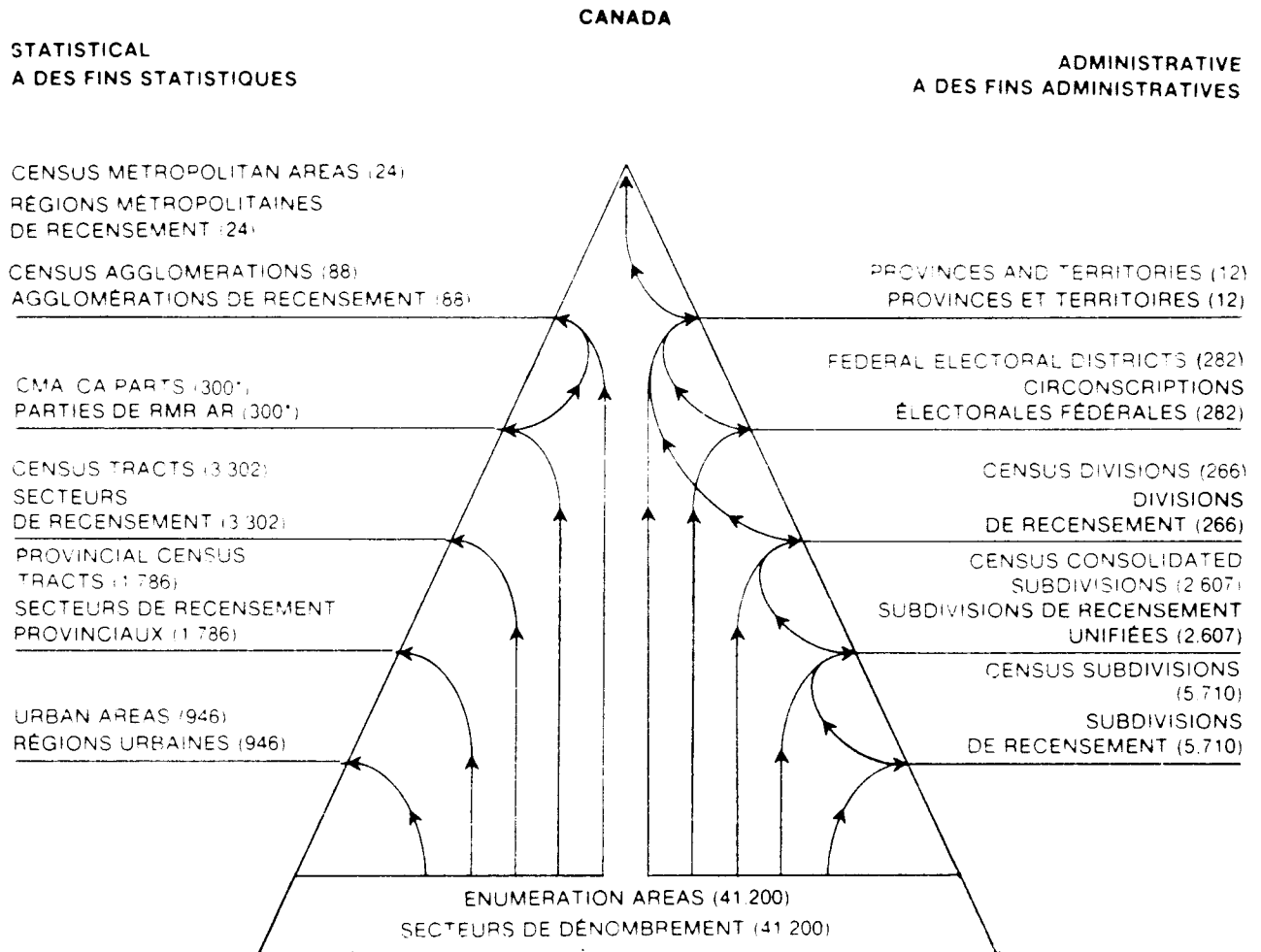
Census tract (CT) files are sorted in the following ascending numeric sequence:

<u>Keys</u>	<u>Position in record</u>	<u>Description</u>
Major	1-3	CMA/CA code
Intermediate 1	4-8	Location AA - CT name (place of residence)
Intermediate 2	14	Location BB - Record type (see record layout)
Minor	9-13	Location BB - CT name (place of work)

Description	Number of records	Geographic codes on each record	
		Position	Content
Census tract (CT) records	262,980	1-3	CMA/CA code
		4-8	Location AA - CT name (place of residence)
		9-13	Location BB - Record type
		14	Location BB - CT name (place of work)

Figure 1.

The 1981 Census Geographic Hierarchy
 Ordre hiérarchique des unités géographiques du recensement de 1981



The numbers in brackets represent the number of each type of area

Les chiffres entre parenthèses correspondent au nombre d'unités dans chaque catégorie

* Approximate number

* Chiffres approximatifs

Field: 1

Position: 1-3

Census Metropolitan Area/Census Agglomeration (CMA/CA)

This field presents geostatistical areas created by Statistics Canada.

Census Metropolitan Area (CMA)

Refers to the main labour market area of an urbanized core (or continuously built-up area) having 100,000 or more population. CMAs are created by Statistics Canada and are usually known by the name of the urban area forming their urbanized core. They contain whole municipalities (or census subdivisions). CMAs are comprised of (1) municipalities completely or partly inside the urbanized core; and (2) other municipalities if (a) at least 40% of the employed labour force living in the municipality works in the urbanized core, or (b) at least 25% of the employed labour force working in the municipality lives in the urbanized core.

Since a CMA must contain whole census subdivisions, its limits may fall within, or extend beyond, the actual labour market area. The differences may be significant in those parts of Canada where census subdivisions cover particularly large areas of land. Census metropolitan areas may also differ from Metropolitan Areas designated by local authorities for planning or other purposes.

Remark: CMAs remain unchanged from 1976 except for minor adjustments to respect new municipal limits. Trois-Rivières, Quebec, becomes Canada's 24th CMA as a result of recent growth in its urbanized core.

Census Agglomeration (CA)

Refers to the main labour market area of an urbanized core (or continuously built-up area) having between 10,000 and 99,999 population. CAs are created by Statistics Canada and are usually known by the name of the urban area forming their urbanized core. They contain whole municipalities (or census subdivisions). CAs are comprised of (1) municipalities completely or partly inside the urbanized core; and (2) other municipalities if (a) at least 40% of the employed labour force living in the municipality works in the urbanized core, or (b) at least 25% of the employed labour force working in the municipality lives in the urbanized core.

(2) Geographic Definitions

For place of work flow data tables:

Location AA = Place of residence
Location BB = Place of work

Since a CA must contain whole census subdivisions, its limits may fall within, or extend beyond, the actual labour market area. The differences may be significant in those parts of Canada where census subdivisions cover particularly large areas of land.

Remark: Census agglomerations are now delineated according to the same criteria as census metropolitan areas (CMAs) and differ only in the size of their urbanized cores (CMAs having 100,000 or more population). Twenty-four CAs have been added to the programme as a result of this change. At the same time, 23 CAs have been deleted from the programme as a result of raising the minimum urbanized core population from 2,000 to 10,000. One CA, Trois-Rivières, Quebec, has been transferred to the CMA programme as a result of recent growth in its urbanized core. The net effect of the above changes has been to maintain the total number of CAs at 88.

Note: If positions are zeros, the EA is not part of a CMA or a CA.

See list of census metropolitan areas and census agglomerations on the following pages.

CENSUS METROPOLITAN AREAS (CMAs) and CENSUS AGGLOMERATIONS (CAs)

SGC CODE	NAME
CENSUS METROPOLITAN AREA	
001	ST. JOHN'S
205	HALIFAX
310	SAINT JOHN
408	CHICOUTIMI - JONQUIÈRE
421	QUÉBEC
442	TROIS-RIVIÈRES
462	MONTRÉAL
505	OTTAWA - HULL
532	OSHAWA
535	TORONTO
537	HAMILTON
539	ST. CATHARINES - NIAGARA
541	KITCHENER
555	LONDON
559	WINDSOR
580	SUDBURY
595	THUNDER BAY
602	WINNIPEG
705	REGINA
725	SASKATOON
825	CALGARY
835	EDMONTON
933	VANCOUVER
935	VICTORIA
CENSUS AGGLOMERATION	
005	CARBONEAR
010	GRAND FALLS
015	CORNER BROOK
025	LABRADOR CITY
105	CHARLOTTETOWN
110	SUMMERSIDE
210	KENTVILLE
215	TRURO
220	NEW GLASGOW
225	SYDNEY
230	SYDNEY MINES
305*	MONCTON (1)
315	OROMOCTO
320	FREDERICTON
328	BATHURST

* Indicates those census agglomerations which were census tracted for the 1981 Census.

(1) Street Indexes were not available at the time of place of work coding for Moncton, North Bay, Kamloops, Kelowna and Prince George. Consequently, there is no place of work data available at the census tract level for these agglomerations.

CENSUS METROPOLITAN AREAS (CMAs) and CENSUS AGGLOMERATIONS (CAs)

SGC CODE	NAME
CENSUS AGGLOMERATION - Continued	
330	CAMPBELLTON
335	EDMUNDSTON
404	RIMOUSKI
405	RIVIÈRE-DU-LOUP
406	BAIE-COMEAU
411	DOLBEAU
412	SEPT-ÎLES
428	SAINT-GEORGES
430	THETFORD MINES
433*	SHERBROOKE
435	MAGOG
438	ASBESTOS
440	VICTORIAVILLE
444	SHAWINIGAN
446	LA TUQUE
447	DRUMMONDVILLE
450	GRANBY
452	SAINT-HYACINTHE
454	SOREL
456	JOLIETTE
459	SAINT-JEAN-SUR-RICHELIEU
465	SALABERRY-DE-VALLEYFIELD
468	LACHUTE
475	SAINT-JÉRÔME
480	VAL-D'OR
485	ROUYN
501	CORNWALL
502	HAWKESBURY
508	SMITHS FALLS
512	BROCKVILLE
515	PEMBROKE
517	PETAWAWA
521*	KINGSTON
522	BELLEVILLE
524	TRENTON
527	COBOURG
529*	PETERBOROUGH
530	LINDSAY
543*	BRANTFORD
550*	GUELPH
552	FERGUS
553	STRATFORD
556	CHATHAM
557	LEAMINGTON

* Indicates those census agglomerations which were census tracted for the 1981 Census.

(1) Street Indexes were not available at the time of place of work coding for Moncton, North Bay, Kamloops, Kelowna and Prince George. Consequently, there is no place of work data available at the census tract level for these agglomerations.

CENSUS METROPOLITAN AREAS (CMAs) and CENSUS AGGLOMERATIONS (CAs)

SGC CODE	NAME
CENSUS AGGLOMERATION - Concluded	
562*	SARNIA
566	OWEN SOUND
568	BARRIE
569	ORILLIA
571	MIDLAND
575*	NORTH BAY (1)
584	HAILEYBURY
590*	SAULT STE. MARIE
598	KENORA
607	PORTAGE LA PRAIRIE
625	FLIN FLON
640	THOMPSON
715	MOOSE JAW
720	SWIFT CURRENT
735	NORTH BATTLEFORD
745	PRINCE ALBERT
805	MEDICINE HAT
910	TRAIL
915*	KELOWNA (1)
918	VERNON
925*	KAMLOOPS (1)
930	CHILLIWACK
938	NANAIMO
940	PORT ALBERNI
943	COURTENAY
945	POWELL RIVER
955	PRINCE RUPERT
965	TERRACE
970*	PRINCE GEORGE (1)

* Indicates those census agglomerations which were census tracted for the 1981 Census.

(1) Street Indexes were not available at the time of place of work coding for Moncton, North Bay, Kamloops, Kelowna and Prince George. Consequently, there is no place of work data available at the census tract level for these agglomerations.

Field: 4

Position: 14

Record Type - Location BB

This field denotes the relationship of Location BB to Location AA. Listed below are the various values:

- 1 = Resident CT (including at home)
- 2 = Another CT (in the C(M)A) (1)
- 3 = Rest of C(M)A (2)
- 4 = At home (3)
- 5 = No usual place of work (within the C(M)A)
- 6 = Outside C(M)A (including other no usual place of work) (3)
- 7 = Outside Canada (3)
- 8 = CT not stated

-
- (1) Each CT within the street-indexed portion of the C(M)A will be included, unless no one works in the CT or the table shows industry or occupation and less than 25 persons work in the CT. CTs are listed in name order.
 - (2) Included in this category are all the CTs that are not covered by the Street Index for that C(M)A and so could not be coded as individual CTs of work.
 - (3) Not applicable in Location AA x Location BB cross-reference when Location AA = "Outside C(M)A".
-

Field: Location AA = 2
Location BB = 3

Position: Location AA = 4-8
Location BB = 9-13

Census Tract Name

This field provides the official number assigned by the census for each census tract.

Generally, census tracts are assigned a three-digit number in ascending sequence within a CMA or CA. Where a census tract is split into two or more parts, the three-digit number is followed by a decimal point and a further two digits identifying the splits,

e.g.: 309.01
309.02

However, for tables involving place of work, the CT name is five digits with no decimal place. This was necessitated by operational constraints during the coding of place of work.

Census Tract (CT)

Refers to a permanent small census geostatistical area established in large urban communities with the help of local specialists interested in urban and social science research. Census tracts are reviewed and approved by Statistics Canada according to the following criteria:

- (a) the boundaries must follow permanent and easily recognized lines on the ground;
- (b) the population must be between 2,500 and 8,000, with a preferred average of 4,000 persons, except for census tracts in the central business district, major industrial zones, or in peripheral rural or urban areas that may have either a lower or a higher population;
- (c) the area must be as homogeneous as possible in terms of economic status and social living conditions; and
- (d) the shape must be as compact as possible.

All census metropolitan areas, all census agglomerations with a city having a population of 50,000 or more, and all other cities of at least 50,000 population at the previous census are eligible for a census tract programme.

For a detailed listing of census tracts, see Enumeration Area Reference List (Catalogue No. 99-913).

For CT 832 in the census metropolitan area of Montréal, a significant portion of the data has been imputed. Consequently, this area has been suppressed as a place of residence.

Field: 5

Position: 15-20

Blank

Blank field.

Field: 6

Position: 21-52

This field contains the name of the geographic area.

SECTION C

GEOGRAPHIC ORGANIZATION

The organization of the User Summary Tape files and microfiche for the 1981 Census is as follows:

Census Tract (CT) Series

Tables include data for census tracts and various locations outside the C(M)A.

Information will be in the following order:

Geography

Census tracts (C(M)As)

User Summary Tapes

C(M)A codes are in numeric sequence; Location AA records are in numeric sequence within C(M)As; Location BB records are arranged in numeric sequence within record type within Location AA.

Geography

Census tracts (C(M)As)

Microfiche

Location AA records (place of residence) are in numeric sequence within C(M)As; Location BB records (place of work) are arranged in numeric sequence within record type within Location AA; the C(M)As are arranged in alphabetic sequence within Canada.

Each CT level tape record will contain the following geographic identification:

Census metropolitan area (CMA)/census agglomeration (CA) code - Standard Geographical Classification (SGC)

CT name - Location AA

CT name - Location BB

Record type (see record layout)

CMA/CA name

The actual census tract (CT) or census subdivision (CSD) suppressed due to the rule described is indicated in the appendix to each Series B bulletin affected. Basic population counts, land area (and other data collected on a 100% basis) for these "missing" or suppressed entities can be obtained from the corresponding Profile Series A of bulletins, or tape and fiche program. (See Products and Services of the 1981 Census of Canada.)

Further, for certain subject-matter areas in the National and Provincial Series bulletin - income and industry/occupation - users will note the suppression of distributions where less than 250 persons or units are involved. In this case, the total area concerned is not suppressed, and as in "area suppression", such suppressed information is included in higher aggregates.

Further slight variations may exist in certain other circumstances, and more complete details on suppression will be contained in the Summary Guide - Sample Population (Catalogue No. 99-903).

Counts of the Number of Geographic Records - 2A Tables (no suppression) versus 2B Tables (with suppression) for the User Summary Tape/Microfiche Series, 1981 Census

User Summary Tape/ Microfiche Series	Number of geographic records - 2A variables - 100% data (no suppression)	Number of geographic records - 2B variables - 20% sample data (excluding income)** (suppression based on less than 25/50 persons)	Number of geographic records - 2B variables - 20% sample data - Income distributions (suppression based on less than 250 persons)
ENUMERATION AREAS (EAs)			
Canada	1	1	...
Provinces	12	12	...
Federal Electoral Districts (1976 representation)	282	282	...
Enumeration Areas	41,197	38,233	...
Total	<u>41,492</u>	<u>38,528</u>	<u>...</u>
CENSUS SUBDIVISIONS (CSDs)			
Canada	1	1	1
Provinces	12	12	12
Census Divisions	266	266	266
Census Subdivisions	5,710	5,372	4,563
Total	<u>5,989</u>	<u>5,651</u>	<u>4,842</u>

** In the Enumeration Areas Series (EA), the 25/50 rule supersedes the 250 rule for suppression in income tables with no distributions.

* Data shown separately for Ottawa-Hull, Ontario part and Quebec part.

... Not applicable.

Note: For geographic record counts involving place of work, see Section B (1) Sequence of 1981 Census User Summary Tape Files.

SECTION D

SUPPLEMENTARY INFORMATION

CONFIDENTIALITY AND RANDOM ROUNDING

The Statistics Act states that no employee of Statistics Canada "... shall disclose or knowingly cause to be disclosed, by any means, any information obtained under this Act in such a manner that it is possible from any such disclosure to relate the particulars obtained from any individual return to any identifiable individual person, business or organization." (section 16 (1) (b), Statistics Act, 1970-71). The continuing development of new data storage systems and of flexible, generalized retrieval software, and the size of the 1981 Census tabulation and publication program make it difficult to use manual methods to ensure compliance with the Statistics Act. Thus, a technique known as "random rounding" is applied at the final stage of tabulations for all 1981 Census tabulations (including User Summary Tapes/Fiche). Under this method, all figures including totals are randomly rounded (either up or down) to a multiple of "5".

Although the tables subjected to random rounding appear similar to tables whose entries have been conventionally rounded, the process is different. In random rounding, the decision as to whether the last digit in a number will be rounded up or down (to a 0 or a 5) is determined by chance rather than by rules based on the value of the number. This aspect of the process generally introduces sufficient uncertainty into the last digit of the number to provide strong protection against direct, residual or negative disclosures without adding significant error to the census data. However, since totals are independently rounded they do not necessarily equal the sum of individual rounded figures in distributions. Minor differences can be expected for corresponding totals and cell values in various reports. Also, percentages, which are calculated on rounded figures, do not necessarily add to the total. Similarly, any total or cell value of a table which is an aggregation of other tables may differ from the sum of the corresponding rounded values contained in the component tables as these are all rounded independently.

Of concern to some users is that small cell counts may suffer a significant distortion as a result of random rounding and that this will be magnified when these same data cells are aggregated. This distortion is the protection against disclosure and individual data cells containing these small numbers may lose their precision as a result. Since the rounding is of a random nature, however, when data cells are re-aggregated by the user the rounding errors tend to cancel out. Thus aggregations can be used with confidence.

In addition to random rounding, for certain very small areas, to avoid publishing meaningless and potentially misleading data, and to absolutely avoid disclosure, a procedure referred to as "area suppression" has been adopted. Basically, the geographic area itself, as well as all data, is dropped completely from the tabulation in cases where there are fewer than 50 persons for self-enumeration areas and fewer than 25 persons for canvasser areas. For place of work flow data tables, there is no geographic suppression unless cross-classified with industry or occupation. In the latter case, in addition to the 25/50 rule of suppression based on place of residence, all geographic areas have been suppressed where the total place of work count of the population 15 years and over who worked since January 1, 1980 is less than 25 (2B non-inmate population). Suppressed data are, however, included in the appropriate higher aggregate subtotals and totals. "Area suppression" is applied only to the sample data file, affecting the Profile Series B of bulletins and all of the User Summary Tape/Fiche program. In the case of income distributions, data are deleted if the total non-inmate population concerned is less than 250. This applies only to the User Summary Tape/Fiche program, at the census tract and census subdivision levels, and within the Profile Series B.

SAMPLING AND WEIGHTING

The 1981 Census data were collected either on a 100% basis (i.e. from all households), or on a sample basis (i.e. from only a random sample of households) with data weighted to provide estimates of the entire population. The information contained in this User Summary Tape/Fiche package was collected on a 20% sample basis and then weighted up to compensate for sampling.

The weighting system used in the 1981 Census (as in the 1971 and 1976 Censuses) is the raking ratio estimation procedure. This is an iterative procedure designed to ensure that sample estimates for certain basic subgroups of the population agree with the corresponding population totals. This is intended to not only improve the consistency between 100% and sample data tabulations but to improve the reliability of estimates from the sample.

This procedure will ensure consistency between sample estimates and population values for the chosen subgroups and for combinations of these subgroups. However, although the procedure will tend to improve consistency for smaller subgroups it will not ensure consistency for these smaller groups, nor for groups with characteristics not used as controls. For any given geographic area, the weighted population total or subtotal may differ from that shown in reports containing data collected on a 100% basis.

With some minor exceptions, the population or universe (persons, households, dwellings or families) totals for Canada, the provinces and territories and census divisions, for sample and 100% data will coincide since such counts were used as controls in the weighting procedure.

DATA QUALITY

Introduction

Any census data will be subject to error. Some of the errors will tend to cancel out over a large number of cases (i.e. for larger cells) as errors will be made in both directions (i.e. random errors). In general the proportion or rate of net (i.e. uncanceled) random error increases as the population or cell size decreases. Thus, small data values should be used with some caution.

Other of the errors will tend not to cancel out as they will have a tendency to occur in one direction more than another (systematic errors, for example, question wording which invites errors in one direction more than in the other) and will result in a bias.

The data contained in this file are subject to coverage errors, response errors, processing errors and to sampling errors, in addition to any errors introduced by random rounding.

Counts of the Number of Geographic Records - 2A Tables (no suppression) versus 2B Tables (with suppression) for the User Summary Tape/Microfiche Series, 1981 Census -Concluded

User Summary Tape/ Microfiche Series	Number of geographic records - 2A variables - 100% data (no suppression)	Number of geographic records - 2B variables - 20% sample data (excluding income)** (suppression based on less than 25/50 persons)	Number of geographic records - 2B variables - 20% Sample Data - Income distributions (suppression based on less than 250 persons)
CENSUS TRACTS (CTs)/ PROVINCIAL CENSUS TRACTS (PCTs)			
Canada	1	1	1
Provinces	12	12	12
* Census Metropolitan Areas/ Census Agglomerations	37	37	37
Provincial Census Tract Subtotals	12	12	12
Census Tracts	3,302	3,277	3,247
Provincial Census Tracts	1,786	1,782	1,782
Total	<u>5,150</u>	<u>5,121</u>	<u>5,091</u>
CENSUS SUBDIVISIONS (COMPONENTS) FOR CMAs			
Canada	1	1	1
Provinces	12	12	12
* Census Metropolitan Areas Census Subdivisions	25	25	25
Residual by Province	365	351	337
Total	<u>12</u> <u>415</u>	<u>12</u> <u>401</u>	<u>12</u> <u>387</u>
CENSUS TRACTS FOR CMAs			
Canada	1	1	1
Provinces	12	12	12
* Census Metropolitan Areas Census Tracts	25	25	25
Residual by Province	3,032	3,008	2,983
Total	<u>12</u> <u>3,082</u>	<u>12</u> <u>3,058</u>	<u>12</u> <u>3,033</u>
CENSUS SUBDIVISIONS (CSDs) 5000+			
Canada	1	1	1
Provinces	12	12	12
Residual Total by Province for Census Subdivisions of less than 5,000 Population	12	12	12
Census Subdivisions 5,000+	653	652	652
Total	<u>678</u>	<u>677</u>	<u>677</u>

** In the Enumeration Areas Series (EA), the 25/50 rule supersedes the 250 rule for suppression in income tables with no distributions.

* Data shown separately for Ottawa-Hull, Ontario part and Quebec part.

... Not applicable.

Table 1: Response Rates for Selected Characteristics in the 1981 Census

Characteristic	Response rate (%)
Age	98.9
Age at first marriage	91.9
Bathrooms	99.0
Children ever born	95.8
Class of worker	95.4
Condition of dwelling	98.3
Full-time/part-time weeks worked	92.4
Highest degree, certificate or diploma	98.1
Highest grade of elementary or secondary	92.9
Hours worked in reference week	97.5
Household maintainer	98.5
Incorporation status	91.2
Industry	96.6
Labour force activity	94.1
Length of occupancy	99.3
Main type of heating equipment	97.3
Marital status	98.7
Mobility status	96.2
Mother tongue	98.9
Number of rooms	98.9
Occupation	95.8
Period of construction	97.6
Place of work (census subdivision level)	95.7
Place of work (census tract level)	91.3
Principal heating fuel	97.0
Principal water heating fuel	97.1
Province, CD, CSD of residence in 1976	95.2
Relationship to Person 1	99.2
School attendance	98.2
Sex	99.2
Structural type	99.6
Tenure	99.1
Tenure - Condominium	96.2
Total income	94.1
Weeks worked	94.7
When last worked	96.5
Years of other non-university education	95.9
Years of university	97.0

Coverage Error

A coverage error occurs in the census whenever a person or a household is missed completely or counted more than once. Since overcoverage is expected to be fairly rare in relation to undercoverage, the net effect of such errors is to introduce a downward bias in census figures, so that the published census estimates tend to underestimate the actual population.

A special study was undertaken in relation to the 1981 Census to measure the extent of the bias due to undercoverage. This study estimated the overall undercoverage rate to be of the order of 2% of the total population. It also indicated that undercoverage is higher in certain segments of the population, e.g., young male adults and recent immigrants. Similar trends were obtained in connection with the 1976 Census.

Response Error

A response error occurs when the response recorded is incorrect. Such errors may occur due to the respondent misinterpreting the question, inadvertently checking the wrong box, or even consciously checking the wrong box. Contributing to this error may be the questionnaire wording or organization, or the training and attitude of enumerators.

One indicator of the quality of the data is the "response rate". A response rate in this case is defined as the number of times the value for the characteristic was obtained from the respondent divided by the number of times it should have been obtained. This measure gives an indication of response quality, and in turn, of the extent of imputation required for non-response.

Table 1 on the following page presents the response rates obtained in the 1981 Census for the stated characteristics.

Processing Error

Processing errors can occur when write-in answers are coded, when responses on the questionnaire are transcribed to be read by the computer, and when imputations are done either for non-response or for edit rejects.

Sampling Error

Data based upon responses collected on a sample basis and then weighted are subject to error due to the fact that the distribution of characteristics within the sample will not usually be identical to the distribution of characteristics within the population from which the sample has been selected.

The potential error that sampling has introduced will vary according to the relative scarcity of the characteristics in the population. For large cell values the potential error due to sampling, as a proportion of the cell value, will be relatively small. For small cell values this potential error, as a proportion of the cell value, will be relatively large.

Table 2 provides approximate measures of the error due to sampling. These measures are intended as a general guide only.

Table 2: Approximate Standard Error Due to Sampling for 1981 Census Sample Data

Cell value	Total number of persons, households, dwellings or families in geographic area									
	500	1,000	5,000	10,000	20,000	50,000	100,000	250,000	1,000,000	5,000,000 or over
50	15	15	15	15	15	15	15	15	15	15
100	20	20	20	20	20	20	20	20	20	20
200	25	25	30	30	30	30	30	30	30	30
500	-	30	40	45	45	45	45	45	45	45
1,000	-	-	60	60	60	65	65	65	65	65
2,000	-	-	70	80	85	90	90	90	90	90
5,000	-	-	-	100	120	135	140	140	140	140
10,000	-	-	-	-	140	180	190	195	200	200
20,000	-	-	-	-	-	220	255	270	280	280
50,000	-	-	-	-	-	-	315	400	435	445
100,000	-	-	-	-	-	-	-	490	600	625
500,000 or over	-	-	-	-	-	-	-	-	1,000	1,340

Users wishing to determine the approximate error due to sampling for any given cell of data based upon the 20% sample should follow the following procedures:

- (a) A tabulation within this file will typically apply to a universe of persons, households, dwellings or families. It is first necessary to establish the total count for the particular geographic level - census tract, census subdivision, census division, province, etc. - to which the cell under consideration applies.

- (b) Choose the column in Table 2 whose heading is closest in value to the universe total count for the geographic area.
- (c) Choose the row within the column in Table 2 whose heading is closest to the value of the given cell in the census tabulation. The value within the column in this row will be the approximate standard error due to sampling for the cell under consideration.

The effect of the particular sample design and weighting procedure used in the 1981 Census will vary, however, from one characteristic to another. The standard error values in the above table may, therefore, understate or overstate the error due to sampling. The sample selected in the census is one of households rather than one of persons. In assessing the potential error due to sampling, for characteristics of persons, it is necessary to consider whether or not the response of all persons within the household will be similar. If they are not (uncorrelated), then the sampling error will tend to be lower. If they are (correlated) - e.g. migration - then the sampling error will tend to be higher.

For households, families, dwellings and uncorrelated person characteristics, when using these standard error values, the user can be reasonably certain that, for the enumerated population, the true value (discounting all forms of error other than sampling) lies within plus or minus twice the standard error (e.g., for a cell value of 1,000 for a geographic area with a population of 50,000 the range would be 1,000 + or- 2X65 or 1,000 + or- 130). For correlated person characteristics, the user can be reasonably certain that, similarly, the true value lies within plus or minus three times the standard error (e.g., for a cell value of 5,000 for a geographic area with a population of 100,000 the range would be 5,000 + or- 3X140 or 5,000 + or- 420).

Factors which can be applied as an adjustment to these standard error values for each individual variable may be obtained by contacting the nearest Statistics Canada reference centre.

These adjustment factors, additional information on the census methodology - in particular on sampling and weighting - and a more comprehensive assessment of the quality of the census data collected on a sample basis will be included in Data Quality - Sample Population (Catalogue No. 99-905).

GEOGRAPHIC REFERENCE PRODUCTS

1981 Census of Canada: Enumeration Area Reference Lists

- 99-909 Census Divisions and Subdivisions, Urban and Rural - Atlantic Provinces
- 99-910 Census Divisions and Subdivisions, Urban and Rural - Quebec
- 99-911 Census Divisions and Subdivisions, Urban and Rural - Ontario
- 99-912 Census Divisions and Subdivisions, Urban and Rural - Western Provinces and the Territories
- 99-913 Census Tracts
- 99-914 Provincial Census Tracts - Atlantic Provinces

Census tracts do not necessarily respect census subdivision (CSD) boundaries. On the data base, any record has only one CT and one CSD of work code. Accordingly, for records with place of work coded to one of those CTs crossing CSD boundaries, a single CSD has been assigned based on the list below. This list is made available here for the user who wishes to roll up the data on these tapes for the component CTs of CSDs.

Note: For the CT of work values, see Enumeration Area Reference List (Catalogue No. 99-913). The values used are the 5-digit census tract numbers with no decimal place.

C(M)A OF WORK	CT OF WORK	LOCATED IN CSDs	ASSIGNED TO CSD OF WORK
ST. JOHN'S: 001	00100 00400 01501 01502 01503 01600 10001 17000	1001515/1001519 1001515/1001519 1001515/1001519 1001515/1001519/1001526 1001515/1001519 1001515/1001519 1001515/1001519 1001515/1001519	1001519 1001519 1001519 1001519 1001519 1001519 1001519 1001519
SAINT JOHN: 310	02800	1301006/1305010	1301006
CHICOUTIMI-JONGUIÈRE: 408	11100	2494400/2494420/2494440	2494420
QUÉBEC: 421	02800 16002 16003 27302 30000	2420110/2420230 2420200/2420230/2420830 2420200/2420230 2420110/2420140 2420110/2420230	2420230 2420200 2420200 2420140 2420110
MONTREAL: 462	37000	2465380/2465440	2465380
OTTAWA-HULL: 505	51102	2478140/2479300	2479300
TORONTO: 535	52800 53102 53202 58600 80500 80600	3521005/3521010 3521005/3521010 3521005/3521010 3521010/3521024 3518001/3518005 3518001/3518005	3521005 3521005 3521005 3521010 3518001 3518001

A10 Problem: Incorrect census subdivision formation

Kitimat 1, R, B.C. (SGC 5949803)
should be deleted

A11 Problem: Incorrect enumeration area allocation

Montréal, CMA

(a) CT 382.01 (code 3122)	
- 1981 total population reads	3,513
should read	3,848
(b) CT 382.02 (code 3123)	
- 1981 total population reads	5,212
should read	4,877

Inmates

Users should note that while some of the foregoing definitions of variables for which data were collected on a sample basis may specifically indicate the exclusion of "inmates", in actual fact, due to processing requirements, this is true of all population based tables in this report, even those involving cross-classification with data collected on a 100% basis (such as mother tongue). Moreover, the total population base for sample data, which can be referred to as the non-inmate population, will not exactly agree with the corresponding 100% figure, again due to a special processing requirement which lowered the final sample count by some 5,700 persons. Further details on this and any other processing changes affecting data comparability should be contained in Summary Guide - Sample Population (Catalogue No. 99-903) and Data Quality - Sample Population (Catalogue No. 99-905).

Occupation

The data on Unit Groups 2791 "Community College and Vocational School Teachers" and 2793 "Post-secondary School Teachers, n.e.c." for Quebec must be combined to permit comparisons with the corresponding groups for other provinces or with 1971 data because the Standard Occupational Classification misclassifies CEGEP professors in Unit Group 2793 when they should be included in 2791.

Place of Work

Although the census agglomerations of Moncton, North Bay, Kelowna, Kamloops and Prince George are census tracted, they were not street indexed as of April 1982. For this reason, place of work data for individual census tracts do not exist for these areas. Consequently, these five CAs have not been included in the UST/Fiche program for place of work data at the CT level.

For the remaining C(M)As, certain portions are not covered by a street index; consequently, place of work data could not be coded to the census tract level for these areas. Those respondents who work within these portions are assigned a value of not codable. Therefore, it is not possible to provide data for the categories "Resident CT (including at home)" and "At home" for these CTs.

- 99-915 Provincial Census Tracts - Quebec
 - 99-916 Provincial Census Tracts - Ontario
 - 99-917 Provincial Census Tracts - Western Provinces and the Territories
 - 99-918 Census Metropolitan Areas and Census Agglomerations, Components
- Changes to Municipal Boundaries, Status and Names** (Catalogue No. 12-201, Annual)
- Standard Geographical Classification, 1981, Vol. I** (Catalogue No. 12-567, Occasional)
- Standard Geographical Classification, 1981, Vol. II** (Catalogue No. 12-568, Occasional)

REFERENCE PRODUCTS

The 1981 Census Dictionary (Catalogue No. 99-901) contains the complete range of definitions for all variables and terms used in the 1981 Census data products. Of general interest would be information contained in Summary Guide - Total Population (Catalogue No. 99-902) and Summary Guide - Sample Population (Catalogue No. 99-903) which include lists and indexes of tables appearing in the data publications, as well as reproductions of the census questionnaire forms and basic indicators of data quality. Further details on the data quality may be obtained from Data Quality - Total Population (Catalogue No. 99-904) and Data Quality - Sample Population (Catalogue No. 99-905).

A wide range of other analytical and reference products are available and described, along with information on data products and available services, in Products and Services of the 1981 Census of Canada.

Concluded

C(M)A OF WORK	CT OF WORK	LOCATED IN CSDs	ASSIGNED TO CSD OF WORK
GUELPH: 550	00400	3523006/3523008	3523008
	00901	3523006/3523008	3523008
	00902	3523006/3523008	3523008
	01302	3523006/3523008	3523008
	01400	3523006/3523008	3523008
LONDON: 555	00103	3539022/3539036	3539036
SARNIA: 562	00100	3538025/3538029	3538029
	00400	3538028/3538029	3538029
SAULT STE. MARIE: 590	00100	3557061/3557075	3557061
	10000	3557074/3557075	3557075
REGINA: 705	00201	4706026/4706027	4706027
	02700	4706026/4706027	4706027
	10000	4706026/4706027	4706027
VANCOUVER: 933	00800	5915022/5915803	5915022
	10200	5915051/5915807	5915051
	11101	5915046/5915806	5915046
	13002	5915055/5915808	5915055
	16004	5915011/5915802	5915011
	16101	5915011/5915802	5915011
	18101	5915004/5915801	5915004
	25000	5915036/5915063/5915065	5915063
	28000	5915034/5915805	5915034
	29001	5915039/5915804	5915039
	29002	5915039/5915804	5915039
	41000	5913018/5915063/5915809	5915063
	VICTORIA: 935	15000	5917045/5917811/5917812
15500		5917045/5917809/5917810	5917045
16002		5917015/5917803/5917804	5917015

Standard Geographical Classification Codes

Due to a Statistics Canada policy of standardizing geographical codes wherever possible, census codes are no longer available. To uniquely identify any geostatistical area in Canada, it is necessary to employ the Standard Geographical Classification codes. For example, in 1976, a 4-digit census code uniquely identified census subdivisions within provinces. In 1981, it is necessary to use a 2-digit census division code plus a 3-digit census subdivision code to uniquely identify those census subdivisions.

Zero Cells

In User Summary Tapes and microfiche, a cell containing a "zero" value may represent any one of the following:

- (1) nil or zero.
- (2) figures not appropriate or not applicable.
- (3) median could not be calculated as it occurred in one of the open-ended classes in the distribution.

Due to the method of production it was not possible to use the standard symbols normally used in publications.