

FILE EAY81B20

ZONED / NON - CONDENSEE

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INTRODUCTION

DOCUMENTATION FOR CENSUS DATA ON MAGNETIC TAPE

This documentation is divided into two parts.

Part 1 is available for any tape file produced from the census micro-data base using the STATPAK retrieval system.

Part 2 is available only with census User Summary Tape files and special requests on tape produced by the Customer Services Section.

Part 1

Introduction

In the following documentation each tabulation is referred to as a data matrix. Each characteristic or variable such as age, sex, etc., is referred to as a dimension or subscript. Each dimension is associated with multiple entries; for example, the dimension sex could be associated with entries male, female, total.

Part 1 consists of four sections

Section 1 shows:

- that each data matrix has a title associated with a matrix name. The latter is a mnemonic code up to eight characters long. The documentation usually refers to a tabulation by its mnemonic code;
- the total number of data cells in a matrix;
- the largest absolute value of any cell in the matrix which may be used for data validation and programming purposes.

Please Note:

The cells contain either integer or decimal digits with decimal point which is implied.

If overflows are encountered, the overflow messages appear in the first section and when the program interrupts, the other sections may be either partially or not at all printed.

Section 2 shows:

- the general file information enabling computer usage of the file.

Where necessary a matrix may be written out on more than one logical record. In that case, the dimension(s) (variable(s)) on which the matrix is split is (are) identified as well as the order in which the matrix is actually written out on magnetic tape.

Section 3 contains:

- a PL/1 declaration statement - this statement should be of special interest to users who wish to understand how a multi-dimension matrix (e.g., age by sex by marital status is a three dimensional matrix) is laid out as a linear sequential record on magnetic tape.

Each logical record starts with a 52-character geographic identification (see Section B). In the case of a matrix that is split and thus written over multiple records on tape, it is followed by sub-matrix identification(s), matrix name and matrix size. Then come the entries for each dimension (subscript) of the matrix.

Section 4 contains:

- a detailed record layout of the file;
- the identification part which is the same as on the PL/1 declaration statement (see Section 3);
- the content of each cell or field associated with the matrix name to which it belongs, the format, the first and last positions of each field in the record, the number of bytes (1 byte = 8 bits = 1 or 2 digits or 1 character depending on the format), the precision or number of digits stored and the scale where applicable, which gives the number of decimal places. (Note: The decimal point is implied - not written on tape.)

Part 2

Section A contains:

- the table titles;
- the legends (entries or class intervals associated with each variable, e.g., sex (3): male, female, total).

Note: This section is available only with the census User Summary Tape documentation.

Section B contains:

- the file sequence and the complete definitions of the geographic area codes which exist on the file.

Section C contains:

- the geographic organization of the User Summary Tape files and microfiche for each series produced for the 1981 Census.

Section D contains:

- a brief description of the statistical and confidentiality methodology used during the process of retrieval of data from the census micro-data base;
- a list of reference manuals which provide more detailed information on some of the topics briefly described in this documentation.

For further information, please contact:

CANSIM DIVISION
Statistics Canada
Ottawa, K1A 0Z8
Tel.: (613) 995-0097
995-7406

Special Note: Positive or negative sign

If the character mode is packed, the last four (4) bits of the last byte of a data cell contain the sign.

If the character mode is numeric (external), the complete first byte of a data cell contains the sign.

Section E contains:

- information on any peculiarities related to geography or variables that are essential to the interpretation of data.

SECTION 1

FIGURES INFORMATION

File Name: EAY81B20

Largest Absolute Value: 169,187,680

SECTION 2

GENERAL FILE INFORMATION

Format: ZONED

The File Name is: EAY81B20

The Data Control Block is:

The Record Format	=	<u>FB</u>
Logical Record Length	=	<u>172</u>
Geographical Identification	=	<u>52</u>
Data Cells Length	=	<u>120</u>
The Blocksize	=	<u>11,868</u>
Number of Cells for Each Record	=	<u>12</u>
Total Number of Records Written Out	=	<u>38,528</u>

* SUMMARY FILE CREATED *
* PLI RECORD DESCRIPTION *

DCL 1 EAY81B20

5 R	CHAR(1)	.
5 P	CHAR(1)	.
5 FED	CHAR(3)	.
5 EA	CHAR(3)	.
5 CD	CHAR(2)	.
5 CSDGC	CHAR(3)	.
5 CSDS	CHAR(1)	.
5 CSDTN	CHAR(3)	.
5 CSDT	CHAR(2)	.
5 CCSGC	CHAR(3)	.
5 CA	CHAR(3)	.
5 CAP	CHAR(1)	.
5 CASL	CHAR(1)	.
5 CASZ	CHAR(1)	.
5 CTPN	CHAR(7)	.
5 CT	CHAR(4)	.
5 SPR	CHAR(2)	.
5 UAC	CHAR(4)	.
5 URS	CHAR(1)	.
5 FILL1	CHAR(6)	.
5 EAY81B21 (3)	PICTURE 'S(9)9V(O)9'.	.

/* DEFINITION FOR ENTRIES IN SUBSCRIPT# 1

ENTRY# DESCRIPTION

1 NUMBER

2 AGGREGATE INCOME

 * SUMMARY FILE CREATED *
 * TABLE(S) DESCRIPTION *

TABLE TITLE: EAY81B22 - NUMBER AGGREGATE INCOME AND AVERAGE INCOME(3) OF
 NON-FAMILY PERSONS 15 YEARS AND OVER IN PRIVATE HOUSEHOLDS
 BY SEX(3) - 1981

TABLE NAME	FORMAT	#INTEGERS	#DECIMALS	SIGN	BYTES/CELL
EAY81B22	NUMERIC	9	0	WHOLE BYTE ON LEFT	10
FIELD#	START POS#	END POS#	DESCRIPTION		
TOTAL					
27	83	92	NUMBER		
28	93	102	AGGREGATE INCOME		
29	103	112	AVERAGE INCOME		
MALES					
30	113	122	NUMBER		
31	123	132	AGGREGATE INCOME		
32	133	142	AVERAGE INCOME		
FEMALES					
33	143	152	NUMBER		
34	153	162	AGGREGATE INCOME		
35	163	172	AVERAGE INCOME		

* SUMMARY FILE CREATED *
* TABLE(S) DESCRIPTION *

TABLE TITLE: EAY81B21 - NUMBER AGGREGATE INCOME AND AVERAGE INCOME(3) OF
CENSUS FAMILIES IN PRIVATE HOUSEHOLDS - 1981

TABLE NAME	FORMAT	# INTEGERS	# DECIMALS	SIGN	BYTES/CELL
EAY81B21	NUMERIC	9	0	WHOLE BYTE ON LEFT	10

FIELD# START POS# END POS# DESCRIPTION

24	53	62	NUMBER	
25	63	72	AGGREGATE INCOME	
26	73	82	AVERAGE INCOME	

 * SUMMARY FILE CREATED *
 * GEOGRAPHICAL IDENTIFICATION *

FIELD#	START POS#	END POS#	DESCRIPTION
1	1	1	R REGION
2	1	2	RP REGION/PROVINCE
3	1	5	RFED REGION/PROVINCE/FED
4	1	8	REA REGION/PROVINCE/FED/EA
5	2	2	P PROVINCE
6	3	5	FED FEDERAL ELECTORAL DISTRICT - 1981
7	3	8	FEDEA FED/EA
8	6	8	EA ENUMERATION AREA
9	9	10	CD CENSUS DIVISION
10	11	13	CSDGC CSD GEOGRAPHICAL CLASSIFICATION
11	14	14	CSDS CSD SIZE
12	15	17	CSDTN CSD TYPE NAME FOR 81 CENSUS
13	18	19	CSDT CSD TYPE
14	20	22	CCSGC CCS GEOGRAPHICAL CLASSIFICATION
15	23	25	CA CENSUS METROP. AREA/CENSUS AGGLOMERATION
16	26	26	CAP CMACA PART
17	27	27	CASL CMACA SELECTOR
18	28	28	CASZ CMACA SIZE
19	29	35	CTPN CT/PCT NUMBER
20	36	39	CT CENSUS TRACT/PROVINCIAL CENSUS TRACT
21	40	41	SPR SUB PROVINCIAL REGION
22	42	45	UAC URBAN AREA CODE
23	46	46	URS URBAN RURAL SIZE

* SUMMARY FILE CREATED *
* PLI RECORD DESCRIPTION *

3 AVERAGE INCOME

*/

5 EAY81B22 (3, 3) PICTURE 'S(9)9V(O)9':

/* DEFINITION FOR ENTRIES IN SUBSCRIPT# 1

ENTRY# DESCRIPTION

1 TOTAL

2 MALES

3 FEMALES

DEFINITION FOR ENTRIES IN SUBSCRIPT# 2

ENTRY# DESCRIPTION

1 NUMBER

2 AGGREGATE INCOME

3 AVERAGE INCOME

*/

*** NORMAL END ***

PART 2

SECTION A

FILE CONTENT

File EAY81B20

Table Titles

EAY81B21 Number, aggregate income and average income of census families in private households, 1981

EAY81B22 Number, aggregate income and average income of non-family persons 15 years and over in private households by sex (3), 1981

Legends

NUMBER, AGGREGATE INCOME AND AVERAGE INCOME (3)

1. Number
2. Aggregate income \$'000
3. Average income

SEX (3)

1. Total
2. Male
3. Female

SECTION B

FILE SEQUENCE AND GEOGRAPHIC DEFINITIONS

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

Enumeration area (EA) files are sorted in the following ascending numeric sequence:

<u>Keys</u>	<u>Position in record</u>	<u>Description</u>
Major	51-52	Record type
Intermediate 1	1-2	Region and province code
Intermediate 2	3-5	Federal electoral district code
Minor	6-8	Enumeration area code

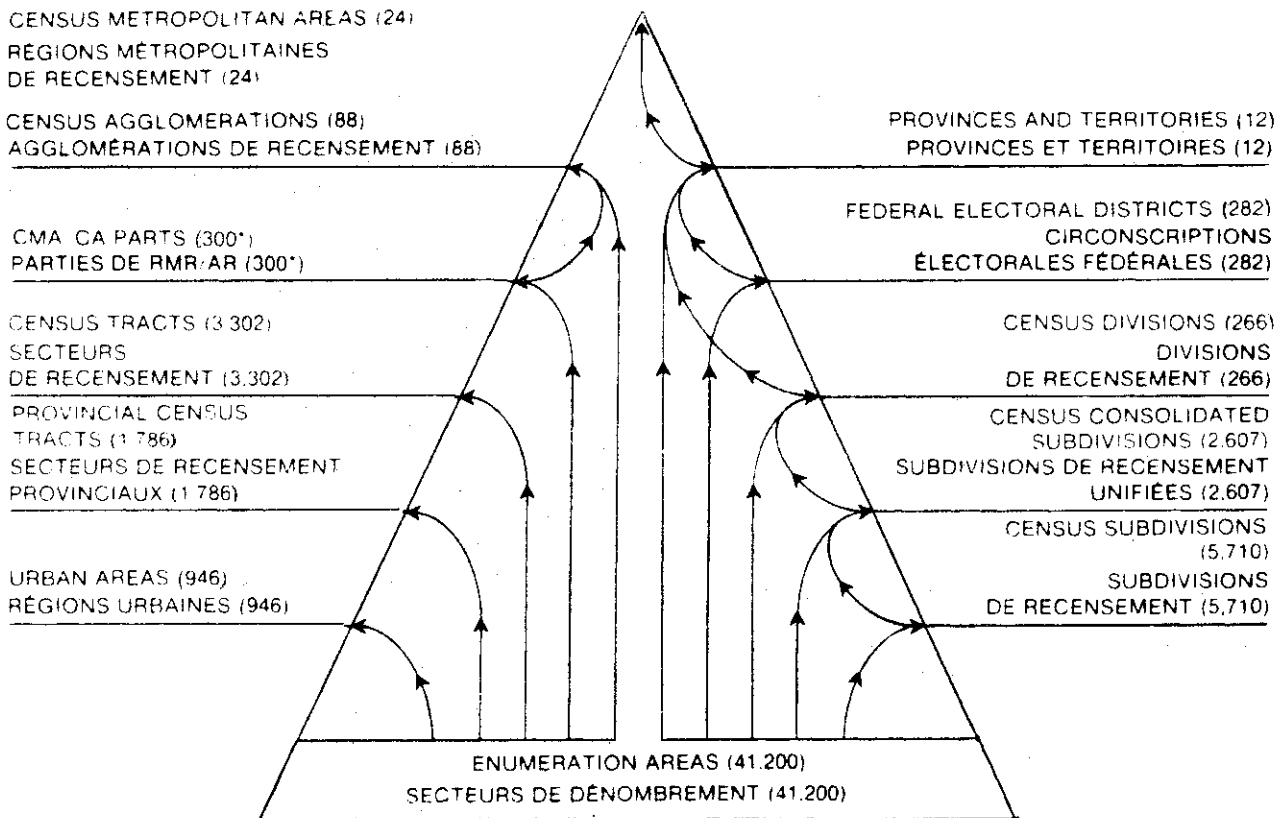
Figure 1.

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

CANADA

STATISTICAL
A DES FINS STATISTIQUES

ADMINISTRATIVE
A DES FINS ADMINISTRATIVES



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

Geographic codes on each record

Record type	Description	Number of records	Position	Content
01	Canada total record	1	1-46	Zeroes
			47-49	Blanks
			50	Indian Reserve - High imputation area indicator
			51-52	Record type
02	Provincial total records in ascending numeric sequence	12	1-2	Region and province code
			3-46	Zeroes
			47-49	Blanks
			50	Indian Reserve - High imputation area indicator
			51-52	Record type
18	Federal electoral district (FED) records in ascending numeric sequence within province	282	1-2	Region and province code
			3-5	FED code
			6-46	Zeroes
			47-49	Blanks
			50	Indian Reserve - High imputation area indicator
			51-52	Record type

Record type	Description	Number of records	Geographic codes on each record	
			Position	Content
19	Enumeration area (EA) records in ascending numeric sequence within FED and province	38,233	1-2	Region and province code
			3-5	FED code
			6-8	EA code
			9-46	See tape documentation
			47-49	Blanks
			50	Indian Reserve - High imputation area indicator
			51-52	Record type

Note: There are 38,528 records on the enumeration area summary tape files covering all of Canada.

2) Geographic Definitions

Standard Geographical Classification (SGC)

The Standard Geographical Classification provides systematic identification for three types of geographic areas. These are:

- (1) provinces and territories;
- (2) census divisions (counties, regional municipalities, and regional districts, for example); and
- (3) census subdivisions (usually municipalities).

The three area systems are hierarchically related. Census subdivisions (CSDs) aggregate to census divisions (CDs), which in turn aggregate to a province or a territory (PR). This relationship is reflected in the seven-digit SGC code:

PR	CD	CSD	
XX	XX	XXX	(X denotes one digit)

Census Subdivision

Census Division

Province or Territory

Remarks: For the 1981 Census, the Standard Geographical Classification is the sole official geographical classification system for dissemination purposes.

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.

Field: 1

Position: 1-2

Region and Province Code

This field presents the major political division of Canada. There are ten provinces and two territories coded as below. The first digit represents the geographic region of Canada to which the province belongs. Code notation is the Standard Geographical Classification (SGC) code and is assigned geographically from east to west. In census tabulations, provincial tables include the Yukon and Northwest Territories.

Code Assignment

<u>Region</u>	<u>Province</u>	<u>Code</u>
Canada	Total	00
Atlantic	Nfld.	10
	P.E.I.	11
	N.S.	12
	N.B.	13
	Que.	24
Quebec	Que.	24
Ontario	Ont.	35
Prairies	Man.	46
	Sask.	47
	Alta.	48
	B.C.	59
British Columbia	B.C.	59
Territories	Yukon	60
	N.W.T.	61

Field: 2

Position: 3-5

Federal Electoral District (FED)
(1976 Representation Order)

This field presents the territorial unit, established by the Canadian Parliament, entitled to return a member to serve in the House of Commons. There are 282 FEDs in Canada based on the 1976 Representation Order.

See list of federal electoral district names and codes on the following pages.

Their boundaries may cut across all geostatistical areas, except provinces and enumeration areas (EAs). Federal electoral districts differ from provincial electoral districts.

The FED code is used to identify uniquely within each province the smallest unit of data collection. This unit is the enumeration area (EA) and is numbered uniquely within each FED.

The 1976 and 1971 Censuses were taken according to the 1966 Representation Order containing 264 federal electoral districts.

FEDERAL ELECTORAL DISTRICTS (FED)

SGC		FEDERAL ELECTORAL DISTRICT
PR	FED	
NEWFOUNDLAND		
10	001	BONAVISTA-TRINITY-CONCEPTION
10	002	BURIN-ST.GEORGE'S (SAINT-GEORGES)
10	003	GANDER-TWILLINGATE
10	004	GRAND FALLS-WHITE BAY-LABRADOR
10	005	HUMBER-PORT AU PORT-ST. BARBE (SAINTE-BARBE)
10	006	ST.JOHN'S EAST (SAINT-JEAN-EST)
10	007	ST.JOHN'S WEST (SAINT-JEAN-OUEST)
PRINCE EDWARD ISLAND		
11	001	CARDIGAN
11	002	EGMONT
11	003	HILLSBOROUGH
11	004	MALPEQUE
NOVA SCOTIA		
12	001	ANNAPOLIS VALLEY-HANTS
12	002	CAPE BRETON-EAST RICHMOND (EST)
12	003	CAPE BRETON HIGHLANDS-CANSO
12	004	CAPE BRETON-THE SYDNEYS
12	005	CENTRAL NOVA
12	006	CUMBERLAND-COLCHESTER
12	007	DARTMOUTH-HALIFAX EAST (EST)
12	008	HALIFAX
12	009	HALIFAX WEST (OUEST)
12	010	SOUTH SHORE
12	011	SOUTH WEST NOVA
NEW BRUNSWICK		
13	001	CARLETON-CHARLOTTE
13	002	FUNDY-ROYAL
13	003	GLOUCESTER
13	004	MADAWASKA-VICTORIA
13	005	MONCTON
13	006	NORTHUMBERLAND-MIRAMICHI
13	007	RESTIGOUCHE
13	008	SAINT JOHN (SAINT-JEAN)
13	009	WESTMORLAND-KENT
13	010	YORK-SUNBURY

FEDERAL ELECTORAL DISTRICTS (FED)

SGC		FEDERAL ELECTORAL DISTRICT
PR	FED	
QUEBEC		
24	001	ABITIBI
24	002	ARGENTEUIL-PAPINEAU
24	003	BEAUCE
24	004	BEAUHARNOIS-SALABERRY
24	005	BELLECHASSE
24	006	BERTHIER-MASKINONGE-LANAUDIÈRE
24	007	BONAVENTURE-ÎLES-DE-LA-MADELEINE
24	008	BOURASSA
24	009	CHAMBLY
24	010	CHAMPLAIN
24	011	CHARLESBOURG
24	012	CHARLEVOIX
24	013	CHATEAUGUAY
24	014	CHICOUTIMI
24	015	MEGANTIC-COMPTON-STANSTEAD
24	016	BLAINVILLE-DEUX-MONTAGNES
24	017	DOLLARD
24	018	DRUMMOND
24	019	DUVERNAY
24	020	FRONTENAC
24	021	GAMELIN
24	022	GASPE
24	023	GATINEAU
24	024	MONTREAL-SAINT-MARIE
24	025	HULL
24	026	JOLIETTE
24	027	JONQUIÈRE
24	028	KAMOURASKA-RIVIÈRE-DU-LOUP
24	029	LABELLE
24	030	LACHINE
24	031	LAC-SAINT-JEAN
24	032	LANGELIER
24	033	LA PRAIRIE
24	034	LASALLE
24	035	LAURIER
24	036	LAVAL-DES-RAPIDES
24	037	LEVIS
24	038	LONGUEUIL
24	039	LOTBINIÈRE
24	040	LOUIS-HEBERT
24	041	HOCHÉLAGA-MAISONNEUVE
24	042	MANICOUAGAN
24	043	MATAPEDIA-MATANE

FEDERAL ELECTORAL DISTRICTS (FED)

SGC		FEDERAL ELECTORAL DISTRICT
PR	FED	

QUEBEC (Concluded)

24	044	MONTREAL-MERCIER
24	045	LAVAL
24	046	MISSISQUOI
24	047	MONTMORENCY-ORLEANS
24	048	MOUNT ROYAL
24	049	NOTRE-DAME-DE-GRACE-LACHINE-EST (EAST)
24	050	OUTREMONT
24	051	PAPINEAU
24	052	PONTIAC-GATINEAU-LABELLE
24	053	PORTNEUF
24	054	QUEBEC-EST
24	055	RICHELIEU
24	056	RICHMOND-WOLFE
24	057	RIMOUSKI-TEMISCOUATA
24	058	ROBERVAL
24	059	ROSEMONT
24	060	SAINT-DENIS
24	061	SAINT-JACQUES
24	062	SAINT-HYACINTHE-BAGOT
24	063	SAINT-JEAN
24	064	SAINT-LEONARD-ANJOU
24	065	SAINT-MAURICE
24	066	SAINT-MICHEL
24	067	SHEFFORD
24	068	SHERBROOKE
24	069	TEMISCAMINGUE
24	070	TERREBONNE
24	071	TROIS-RIVIERES
24	072	VAUDREUIL
24	073	VERCHERES
24	074	VERDUN-SAINT-PAUL
24	075	SAINT-HENRI-WESTMOUNT

ONTARIO

35	001	ALGOMA
35	002	BEACHES
35	003	BRAMPTON-GEORGETOWN
35	004	BRANT
35	005	BROADVIEW-GREENWOOD
35	006	BRUCE-GREY
35	007	BURLINGTON
35	008	CAMBRIDGE

FEDERAL ELECTORAL DISTRICTS (FED)

SGC		FEDERAL ELECTORAL DISTRICT
PR	FED	
ONTARIO (Continued)		
35	009	COCHRANE-SUPERIOR (SUPERIEUR)
35	010	DAVENPORT
35	011	DON VALLEY EAST (EST)
35	012	DON VALLEY WEST (OUEST)
35	013	WELLINGTON-DUFFERIN-SIMCOE
35	014	DURHAM-NORTHUMBERLAND
35	015	EGLINTON-LAWRENCE
35	016	ELGIN
35	017	ERIE
35	018	ESSEX-KENT
35	019	ESSEX-WINDSOR
35	020	ETOBICOKE CENTRE
35	021	ETOBICOKE-LAKESHORE
35	022	ETOBICOKE NORTH (NORD)
35	023	GLENGARRY-PRESCOTT-RUSSELL
35	024	GREY-SIMCOE
35	025	GUELPH
35	026	HALDIMAND-NORFOLK
35	027	HALTON
35	028	HAMILTON EAST (EST)
35	029	HAMILTON MOUNTAIN
35	030	HAMILTON-WENTWORTH
35	031	HAMILTON WEST (OUEST)
35	032	HASTINGS-FRONTENAC-LENNOX AND (ET) ADDINGTON
35	033	HURON-BRUCE
35	034	KENORA-RAINY RIVER
35	035	KENT
35	036	KINGSTON AND THE ISLANDS (ET LES ILES)
35	037	KITCHENER
35	038	LAMBTON-MIDDLESEX
35	039	LANARK-RENFREW-CARLETON
35	040	LEEDS-GRENVILLE
35	041	LINCOLN
35	042	LONDON EAST (EST)
35	043	LONDON WEST (OUEST)
35	044	LONDON-MIDDLESEX
35	045	MISSISSAUGA NORTH (NORD)
35	046	MISSISSAUGA SOUTH (SUD)
35	047	NEPEAN-CARLETON
35	048	NIAGARA FALLS
35	049	NICKEL BELT

FEDERAL ELECTORAL DISTRICTS (FED)

SGC		FEDERAL ELECTORAL DISTRICT
PR	FED	
ONTARIO (Continued)		
35	050	NIPISSING
35	051	NORTHUMBERLAND
35	052	ONTARIO
35	053	OSHAWA
35	054	OTTAWA-CARLETON
35	055	OTTAWA CENTRE
35	056	OTTAWA-VANIER
35	057	OTTAWA WEST (OUEST)
35	058	OXFORD
35	059	PARKDALE-HIGH PARK
35	060	PARRY SOUND-MUSKOKA
35	061	PERTH
35	062	PETERBOROUGH
35	063	PRINCE EDWARD-HASTINGS
35	064	RENFREW-NIPISSING-PEMBROKE
35	065	ROSEDALE
35	066	ST. CATHARINES
35	067	ST. PAUL'S
35	068	SARNIA-LAMBTON
35	069	SAULT STE. MARIE
35	070	SCARBOROUGH CENTRE
35	071	SCARBOROUGH EAST (EST)
35	072	SCARBOROUGH WEST (OUEST)
35	073	SIMCOE NORTH (NORD)
35	074	SIMCOE SOUTH (SUD)
35	075	SPADINA
35	076	STORMONT-DUNDAS
35	077	SUDBURY
35	078	THUNDER BAY-ATIKOKAN
35	079	THUNDER BAY-NIPIGON
35	080	TIMISKAMING
35	081	TIMMINS-CHAPLEAU
35	082	TRINITY
35	083	VICTORIA-HALIBURTON
35	084	WATERLOO
35	085	WELLAND
35	086	WILLOWDALE
35	087	WINDSOR-WALKERVILLE
35	088	WINDSOR WEST (OUEST)
35	089	YORK CENTRE

FEDERAL ELECTORAL DISTRICTS (FED)

SGC		FEDERAL ELECTORAL DISTRICT
PR	FED	
ONTARIO (Concluded)		
35	090	YORK EAST (EST)
35	091	YORK NORTH (NORD)
35	092	YORK-PEEL
35	093	YORK-SCARBOROUGH
35	094	YORK SOUTH (SUD)-WESTON
35	095	YORK WEST (OUEST)
MANITOBA		
46	001	BRANDON-SOURIS
46	002	CHURCHILL
46	003	DAUPHIN
46	004	LISGAR
46	005	PORTAGE-MARQUETTE
46	006	PROVENCHER
46	007	SELKIRK-INTERLAKE
46	008	ST. BONIFACE
46	009	WINNIPEG-ASSINIBOINE
46	010	WINNIPEG-BIRDS HILL
46	011	WINNIPEG-FORT GARRY
46	012	WINNIPEG NORTH (NORD)
46	013	WINNIPEG NORTH CENTRE (NORD-CENTRE)
46	014	WINNIPEG-ST. JAMES
SASKATCHEWAN		
47	001	ASSINIBOIA
47	002	HUMBOLDT-LAKE CENTRE
47	003	KINDERSLEY-LLOYDMINSTER
47	004	MACKENZIE
47	005	MOOSE JAW
47	006	PRINCE ALBERT
47	007	QU'APPELLE-MOOSE MOUNTAIN
47	008	REGINA EAST (EST)
47	009	REGINA WEST (OUEST)
47	010	SASKATOON EAST (EST)
47	011	SASKATOON WEST (OUEST)
47	012	SWIFT CURRENT-MAPLE CREEK
47	013	THE BATTLEFORDS-MEADOW LAKE
47	014	YORKTON-MELVILLE

FEDERAL ELECTORAL DISTRICTS (FED)

SGC		FEDERAL ELECTORAL DISTRICT
PR	FED	
ALBERTA		
48	001	ATHABASCA
48	002	BOW RIVER
48	003	CALGARY CENTRE
48	004	CALGARY EAST (EST)
48	005	CALGARY NORTH (NORD)
48	006	CALGARY SOUTH (SUD)
48	007	CALGARY WEST (OUEST)
48	008	CROWFOOT
48	009	EDMONTON EAST (EST)
48	010	EDMONTON NORTH (NORD)
48	011	EDMONTON SOUTH (SUD)
48	012	EDMONTON-STRATHCONA
48	013	EDMONTON WEST (OUEST)
48	014	LETHBRIDGE-FOOTHILLS
48	015	MEDICINE HAT
48	016	PEACE RIVER
48	017	PEMBINA
48	018	RED DEER
48	019	VEGREVILLE
48	020	WETASKIWIN
48	021	YELLOWHEAD
BRITISH COLUMBIA		
59	001	BURNABY
59	002	CAPILANO
59	003	CARIBOO-CHILCOTIN
59	004	COMOX-POWELL RIVER
59	005	COWICHAN-MALAHAT-THE ISLANDS (LES ILES)
59	006	ESQUIMALT-SAANICH
59	007	PRINCE GEORGE-PEACE RIVER
59	008	FRASER VALLEY EAST (EST)
59	009	FRASER VALLEY WEST (OUEST)
59	010	KAMLOOPS-SHUSWAP
59	011	KOOTENAY EAST (EST)-REVELSTOKE
59	012	KOOTENAY WEST (OUEST)
59	013	MISSION-PORT MOODY
59	014	NANAIMO-ALBERNI
59	015	NEW WESTMINSTER-COQUITLAM
59	016	NORTH VANCOUVER-BURNABY
59	017	OKANAGAN NORTH (NORD)
59	018	OKANAGAN-SIMILKAMEEN

FEDERAL ELECTORAL DISTRICTS (FED)

SGC		FEDERAL ELECTORAL DISTRICT
PR	FED	
BRITISH COLUMBIA (Concluded)		
59	019	PRINCE GEORGE-BULKLEY VALLEY
59	020	RICHMOND-SOUTH DELTA (SUD)
59	021	SKEENA
59	022	SURREY-WHITE ROCK-NORTH DELTA (NORD)
59	023	VANCOUVER CENTRE
59	024	VANCOUVER EAST (EST)
59	025	VANCOUVER KINGSWAY
59	026	VANCOUVER QUADRA
59	027	VANCOUVER SOUTH (SUD)
59	028	VICTORIA
YUKON		
60	001	YUKON
NORTHWEST TERRITORIES		
61	001	WESTERN ARCTIC
61	002	NUNATSIAQ

Field: 3

Position: 6-8

Enumeration Area (EA)

The enumeration area is the smallest standard census geographic unit and is the building block of the geostatistical areas in this coding system. The EA is the basic census data collection unit. It is identified uniquely within each FED and province.

The enumeration area is a spatial unit usually canvassed by one Census Representative. It is defined according to the following criteria: (1) Population - the number of households in an enumeration area varies between a maximum of 375 households in large urban areas to a minimum of 125 in rural areas; (2) Limits - an enumeration area, being the building block of all geostatistical areas, never cuts across any geographic area recognized by the census. Moreover, enumeration area boundaries are such that the Census Representative will be able to locate them without difficulty as, for example, streets, roads, railways, rivers and lakes.

An enumeration area is uniquely and completely identified by the codes of the province and the FED, to which is added the three-digit EA code: i.e., 24/021/015 where

24 = province

021 = FED

015 = individual EA number

Note: There were 41,197 EAs delineated in Canada for the 1981 Census compared to 35,154 EAs for the 1976 Census.

EAs within each standard census geostatistical area are indicated in the Enumeration Area Reference Lists (Catalogue Nos. 99-909 to 99-918).

Field: 4

Position: 9-10

Census Division (CD)

This field presents census divisions, the general term applying to counties, regional districts, regional municipalities and five other types of geographic areas made up of groups of census subdivisions. In Newfoundland, Manitoba, Saskatchewan and Alberta, the term describes areas that have been created by Statistics Canada in cooperation with the provinces as an equivalent for counties.

Remarks: In the 1981 Census there are five census divisions in the Northwest Territories; this increase of one census division for the Northwest Territories results from the creation of the Central Arctic Region that, in 1976, was a part of the Fort Smith Region.

Major redelineation of census divisions occurred in Manitoba in 1976 and 1961 and in British Columbia in 1971.

The creation of Regional Municipalities in Ontario between 1969 and 1975 required the redefinition of some census divisions in Ontario.

See list of census division names and codes on the following pages.

CENSUS DIVISIONS (CD)

SGC		CENSUS DIVISION
PR	CD	
NEWFOUNDLAND		
10	01	DIVISION NO. 1
10	02	DIVISION NO. 2
10	03	DIVISION NO. 3
10	04	DIVISION NO. 4
10	05	DIVISION NO. 5
10	06	DIVISION NO. 6
10	07	DIVISION NO. 7
10	08	DIVISION NO. 8
10	09	DIVISION NO. 9
10	10	DIVISION NO. 10
PRINCE EDWARD ISLAND		
11	01	KINGS COUNTY
11	02	QUEENS COUNTY
11	03	PRINCE COUNTY
NOVA SCOTIA		
12	01	SHELBURNE COUNTY
12	02	YARMOUTH COUNTY
12	03	DIGBY COUNTY
12	04	QUEENS COUNTY
12	05	ANNAPOLIS COUNTY
12	06	LUNENBURG COUNTY
12	07	KINGS COUNTY
12	08	HANTS COUNTY
12	09	HALIFAX COUNTY
12	10	COLCHESTER COUNTY
12	11	CUMBERLAND COUNTY
12	12	PICTOU COUNTY
12	13	GUYSBOROUGH COUNTY
12	14	ANTIGONISH COUNTY
12	15	INVERNESS COUNTY
12	16	RICHMOND COUNTY
12	17	CAPE BRETON COUNTY
12	18	VICTORIA COUNTY

CENSUS DIVISIONS (CD)

SGC		CENSUS DIVISION
PR	CD	
NEW BRUNSWICK		
13	01	SAINT JOHN COUNTY
13	02	CHARLOTTE COUNTY
13	03	SUNBURY COUNTY
13	04	QUEENS COUNTY
13	05	KINGS COUNTY
13	06	ALBERT COUNTY
13	07	WESTMORLAND COUNTY
13	08	KENT COUNTY
13	09	NORTHUMBERLAND COUNTY
13	10	YORK COUNTY
13	11	CARLETON COUNTY
13	12	VICTORIA COUNTY
13	13	MADAWASKA COUNTY
13	14	RESTIGOUCHE COUNTY
13	15	GLOUCESTER COUNTY
QUEBEC		
24	01	ILES-DE-LA-MADELEINE
24	02	GASPE-EST
24	03	GASPE-OUEST
24	04	BONAVENTURE
24	05	MATAPEDIA
24	06	MATANE
24	07	RIMOUSKI
24	08	RIVIERE-DU-LOUP
24	09	TEMISCOUATA
24	10	KAMOURASKA
24	11	CHARLEVOIX-EST
24	12	CHARLEVOIX-OUEST
24	13	L'ISLET
24	14	MONTMAGNY
24	15	BELLECHASSE
24	16	MONTMORENCY NO. 2
24	17	MONTMORENCY NO. 1
24	20	QUEBEC
24	21	LEVIS
24	22	DORCHESTER
24	23	BEAUCE
24	24	FRONTENAC
24	25	COMPTON
24	26	WOLFE

CENSUS DIVISIONS (CD)

SGC		CENSUS DIVISION
PR	CD	
QUEBEC (Continued)		
24	27	MEGANTIC
24	28	LOTBINIERE
24	29	PORTNEUF
24	32	CHAMPLAIN
24	33	NICOLET
24	34	ARTHABASKA
24	35	RICHMOND
24	36	SHERBROOKE
24	37	STANSTEAD
24	38	BROME
24	39	SHEFFORD
24	40	BAGOT
24	41	DRUMMOND
24	42	YAMASKA
24	43	SAINT-MAURICE
24	47	MASKINONGE
24	49	BERTHIER
24	50	RICHELIEU
24	51	SAINT-HYACINTHE
24	52	ROUVILLE
24	53	IBERVILLE
24	54	MISSISQUOI
24	55	SAINT-JEAN
24	56	CHAMBLY
24	57	VERCHERES
24	58	JOLIETTE
24	61	MONTCALM
24	62	L'ASSOMPTION
24	63	TERREBONNE
24	64	ILE-JESUS
24	65	ILE-DE-MONTREAL
24	66	LAPRAIRIE
24	67	NAPIERVILLE
24	68	HUNTINGDON
24	69	CHATEAUGUAY
24	70	BEAUHARNOIS
24	71	SOULANGES
24	72	VAUDREUIL
24	73	DEUX-MONTAGNES
24	74	ARGENTEUIL
24	75	PAPINEAU
24	76	LABELLE
24	78	GATINEAU

CENSUS DIVISIONS (CD)

SGC		CENSUS DIVISION
PR	CD	
QUEBEC (Concluded)		
24	79	HULL
24	80	PONTIAC
24	83	TEMISCAMINGUE
24	84	ABITIBI
24	90	LAC-SAINT-JEAN-OUEST
24	93	LAC-SAINT-JEAN-EST
24	94	CHICOUTIMI
24	97	SAGUENAY
24	98	TERRITOIRE-DU-NOUVEAU-QUEBEC
ONTARIO		
35	01	GLENGARRY COUNTY
35	02	PRESCOTT COUNTY
35	03	RUSSELL COUNTY
35	04	STORMONT COUNTY
35	05	DUNDAS COUNTY
35	06	OTTAWA-CARLETON REGIONAL MUNICIPALITY
35	07	GRENVILLE COUNTY
35	08	LEEDS COUNTY
35	09	LANARK COUNTY
35	10	FRONTENAC COUNTY
35	11	LENNOX AND ADDINGTON COUNTY
35	12	HASTINGS COUNTY
35	13	PRINCE EDWARD COUNTY
35	14	NORTHUMBERLAND COUNTY
35	15	PETERBOROUGH COUNTY
35	16	VICTORIA COUNTY
35	18	DURHAM REGIONAL MUNICIPALITY
35	19	YORK REGIONAL MUNICIPALITY
35	20	TORONTO METROPOLITAN MUNICIPALITY
35	21	PEEL REGIONAL MUNICIPALITY
35	22	DUFFERIN COUNTY
35	23	WELLINGTON COUNTY
35	24	HALTON REGIONAL MUNICIPALITY
35	25	HAMILTON-WENTWORTH REGIONAL MUNICIPALITY
35	26	NIAGARA REGIONAL MUNICIPALITY
35	28	HALDIMAND-NORFOLK REGIONAL MUNICIPALITY
35	29	BRANT COUNTY
35	30	WATERLOO REGIONAL MUNICIPALITY
35	31	PERTH COUNTY
35	32	OXFORD COUNTY

CENSUS DIVISIONS (CD)

SGC		CENSUS DIVISION
PR	CD	

ONTARIO (Concluded)

35	34	ELGIN COUNTY
35	36	KENT COUNTY
35	37	ESSEX COUNTY
35	38	LAMBTON COUNTY
35	39	MIDDLESEX COUNTY
35	40	HURON COUNTY
35	41	BRUCE COUNTY
35	42	GREY COUNTY
35	43	SIMCOE COUNTY
35	44	MUSKOKA DISTRICT MUNICIPALITY
35	46	HALIBURTON COUNTY
35	47	RENFREW COUNTY
35	48	NIPISSING DISTRICT
35	49	PARRY SOUND DISTRICT
35	51	MANITOULIN DISTRICT
35	52	SUDBURY DISTRICT
35	53	SUDBURY REGIONAL MUNICIPALITY
35	54	TIMISKAMING DISTRICT
35	56	COCHRANE DISTRICT
35	57	ALGOMA DISTRICT
35	58	THUNDER BAY DISTRICT
35	59	RAINY RIVER DISTRICT
35	60	KENORA DISTRICT

MANITOBA

46	01	DIVISION NO. 1
46	02	DIVISION NO. 2
46	03	DIVISION NO. 3
46	04	DIVISION NO. 4
46	05	DIVISION NO. 5
46	06	DIVISION NO. 6
46	07	DIVISION NO. 7
46	08	DIVISION NO. 8
46	09	DIVISION NO. 9
46	10	DIVISION NO. 10
46	11	DIVISION NO. 11
46	12	DIVISION NO. 12
46	13	DIVISION NO. 13
46	14	DIVISION NO. 14
46	15	DIVISION NO. 15
46	16	DIVISION NO. 16

CENSUS DIVISIONS (CD)

SGC		CENSUS DIVISION
PR	CD	
MANITOBA (Concluded)		
46	17	DIVISION NO. 17
46	18	DIVISION NO. 18
46	19	DIVISION NO. 19
46	20	DIVISION NO. 20
46	21	DIVISION NO. 21
46	22	DIVISION NO. 22
46	23	DIVISION NO. 23
SASKATCHEWAN		
47	01	DIVISION NO. 1
47	02	DIVISION NO. 2
47	03	DIVISION NO. 3
47	04	DIVISION NO. 4
47	05	DIVISION NO. 5
47	06	DIVISION NO. 6
47	07	DIVISION NO. 7
47	08	DIVISION NO. 8
47	09	DIVISION NO. 9
47	10	DIVISION NO. 10
47	11	DIVISION NO. 11
47	12	DIVISION NO. 12
47	13	DIVISION NO. 13
47	14	DIVISION NO. 14
47	15	DIVISION NO. 15
47	16	DIVISION NO. 16
47	17	DIVISION NO. 17
47	18	DIVISION NO. 18
ALBERTA		
48	01	DIVISION NO. 1
48	02	DIVISION NO. 2
48	03	DIVISION NO. 3
48	04	DIVISION NO. 4
48	05	DIVISION NO. 5
48	06	DIVISION NO. 6
48	07	DIVISION NO. 7
48	08	DIVISION NO. 8
48	09	DIVISION NO. 9
48	10	DIVISION NO. 10

CENSUS DIVISIONS (CD)

SGC		CENSUS DIVISION
PR	CD	

ALBERTA (Concluded)		
48	11	DIVISION NO. 11
48	12	DIVISION NO. 12
48	13	DIVISION NO. 13
48	14	DIVISION NO. 14
48	15	DIVISION NO. 15
BRITISH COLUMBIA		
59	01	EAST KOOTENAY REGIONAL DISTRICT
59	03	CENTRAL KOOTENAY REGIONAL DISTRICT
59	05	KOOTENAY BOUNDARY REGIONAL DISTRICT
59	07	OKANAGAN-SIMILKAMEEN REGIONAL DISTRICT
59	09	FRASER-CHEAM REGIONAL DISTRICT
59	11	CENTRAL FRASER VALLEY REGIONAL DISTRICT
59	13	DEWDNEY-ALOUETTE REGIONAL DISTRICT
59	15	GREATER VANCOUVER REGIONAL DISTRICT
59	17	CAPITAL REGIONAL DISTRICT
59	19	COWICHAN VALLEY REGIONAL DISTRICT
59	21	NANAIMO REGIONAL DISTRICT
59	23	ALBERNI-CLAYOQUOT REGIONAL DISTRICT
59	25	COMOX-STRATHCONA REGIONAL DISTRICT
59	27	POWELL RIVER REGIONAL DISTRICT
59	29	SUNSHINE COAST REGIONAL DISTRICT
59	31	SQUAMISH-LILLOOET REGIONAL DISTRICT
59	33	THOMPSON-NICOLA REGIONAL DISTRICT
59	35	CENTRAL OKANAGAN REGIONAL DISTRICT
59	37	NORTH OKANAGAN REGIONAL DISTRICT
59	39	COLUMBIA-SHUSWAP REGIONAL DISTRICT
59	41	CARIBOO REGIONAL DISTRICT
59	43	MOUNT WADDINGTON REGIONAL DISTRICT
59	45	CENTRAL COAST REGIONAL DISTRICT
59	47	SKEENA-QUEEN CHARLOTTE REGIONAL DISTRICT
59	49	KITIMAT-STIKINE REGIONAL DISTRICT
59	51	BULKLEY-NECHAKO REGIONAL DISTRICT
59	53	FRASER-FORT GEORGE REGIONAL DISTRICT
59	55	PEACE RIVER-LIARD REGIONAL DISTRICT
59	57	STIKINE REGION

CENSUS DIVISIONS (CD)

SGC		CENSUS DIVISION
PR	CD	
YUKON		
60	01	YUKON
NORTHWEST TERRITORIES		
61	04	BAFFIN REGION
61	05	KEEWATIN REGION
61	06	FORT SMITH REGION
61	07	INUVIK REGION
61	08	CENTRAL ARCTIC REGION

Field: 5

Position: 11-13

Census Subdivision (CSD)

This field presents the Standard Geographical Classification code for each CSD.

Census subdivision refers to the general term applying to municipalities, Indian Reserves, Indian Settlements and unorganized territories.

In Newfoundland, Nova Scotia and British Columbia, the term also describes geostatistical areas that have been created by Statistics Canada in cooperation with the provinces as an equivalent for municipalities.

Remarks: The 1981 Census was taken according to the municipal boundaries in effect on January 1, 1981.

It should be noted that the parts of Flin Flon located in Manitoba and Saskatchewan and the parts of Lloydminster located in Saskatchewan and Alberta are treated as separate CSDs.

In 1981, for the first time, each Indian Reserve and unorganized territory is reported separately in those census tabulations reporting data by census subdivision.

Summaries of CSD changes are available in the form of two bulletins:

- (1) Changes to Municipal Boundaries, Status and Names (Catalogue No. 12-201, Annual); and
- (2) Standard Geographical Classification, 1981, Vol. I (Catalogue No. 12-567, Occasional).

For a detailed listing of census subdivisions, see Enumeration Area Reference Lists (Catalogue Nos. 99-909 to 99-912) or the Standard Geographical Classification, 1981, Vol. II (Catalogue No. 12-568, Occasional).

Field: 6

Position: 14

CSD Population Size Group

This field is a population size descriptor. It is used to classify all CSDs into predetermined population size groups, as follows:

<u>Population</u>	<u>Size code</u>
0 - 999	8
1,000 - 2,499	7
2,500 - 4,999	6
5,000 - 9,999	5
10,000 - 29,999	4
30,000 - 99,999	3
100,000 - 499,999	2
500,000 and over	1

Field: 7

Position: 15-17

Census Subdivision Type Name

Census subdivisions are classified into various types, according to official designations adopted by provincial or federal authorities. With the exception of unorganized territories and Indian Reserves, the type indicates the municipal status of a CSD. The following list indicates the abbreviations used for the most common CSD types:

BOR	Borough
C	City - Cité
CM	County (Municipality)
COM	Community
CT	Canton (Municipalité de)
CU	Cantons unis (Municipalité de)
DM	District (Municipality)
HAM	Hamlet
ID	Improvement District
LGD	Local Government District
LID	Local Improvement District
LOT	Township and Royalty
MC	Municipal Corporation
MD	Municipal District
PAR	Parish
P	Paroisse (Municipalité de)
R	Indian Reserve - Réserve indienne
RM	Rural Municipality
RV	Resort Village
SA	Special Area
SCM	Subdivision of County Municipality
SD	Sans désignation (Municipalité)
S-E	Indian Settlement - Établissement indien
SET	Settlement
SRD	Subdivision of Regional District
SUN	Subdivision of Unorganized
SV	Summer Village
T	Town
TP	Township
UNO	Unorganized - Non organisé
V	Ville
VL	Village

Remarks: For the 1981 Census, all Newfoundland CSDs called Local Government Community (LGC) in 1976 have been changed to Community (COM). In Quebec, all CSDs typed Municipality -Municipalité (MUN) in 1976 have been changed to Cantons unis (CU), Canton (CT), Paroisse (P) or Sans désignation (SD) for 1981. In the Northwest Territories one new CSD type has been added for the 1981 Census; i.e., Settlement (SET).

Field: 8

Position: 18-19

Census Subdivision Type Code

This field classifies all census subdivisions according to the official designations adopted by the federal and provincial authorities.

Census subdivision names and types depend on the definition assigned by the provincial authorities; as a result, many of them may differ from region to region.

In the 1976 Census, codes were assigned in two groups. The first group contained 22 designations considered to have a local government and identifiable by the general term of municipality; among other things, this group included incorporated cities, towns and villages, boroughs, hamlets and all types of municipalities.

The second group included nine designations for territories governed by provincial or federal agencies, including Regional District Subdivisions, National Parks, Unorganized Territories, Indian Reserves and Settlements.

For the 1981 Census, this census subdivision type code structure has been modified. The distinction between entities with a local government and those governed by provincial or federal agencies is no longer a criterion in the assignment of codes. The 1976 codes used to denote a particular type were retained in the 1981 Census provided this type had not been affected by any major changes.

One major change in the 1981 Census is the unilingualism of census subdivision types by province of origin. Only those types federally created or found in all provinces are bilingual.

The following list shows the census subdivision types, the provinces or territories in which they are located, and the 1976 and 1981 codes. The changes are identified by footnotes.

LIST OF CENSUS SUBDIVISION TYPES

1976 Code	Designation	1981 Code	Abbreviation	Location (province)
01	City - Cité	01	C	NFLD.,P.E.I.,N.S.,N.B., QUE.,ONT.,MAN.,SASK., ALTA.,B.C.,YUK.,N.W.T.
02	Town (1)	02	T	NFLD.,P.E.I.,N.S.,N.B., ONT.,MAN.,SASK.,ALTA., B.C.,YUK.,N.W.T.
03	Village	03	VL	P.E.I.,N.B.,QUE.,ONT., MAN.,SASK.,ALTA.,B.C., N.W.T.
04	Summer Village	04	SV	ALTA. (2)
05	Borough	05	BOR	ONT.
06	Hamlet	06	HAM	N.W.T.
07	Ville (3)	07	V	QUE.
	Paroisse (Municipalité de) (4)	08	P	QUE.
	Sans désignation (Municipalité) (5)	09	SD	QUE.
	Cantons unis (Municipalité de) (6)	10	CU	QUE.
11	Municipalité (7)		MUN	QUE.
12	County (Municipality)	12	CM	ALTA.
13	Subdivision of County Municipality	13	SCM	N.S.
14	District (Municipality)	14	DM	B.C.
15	Rural Municipality	15	RM	MAN.,SASK.
16	Township	16	TP(8)	ONT.
	Canton (Municipalité de) (9)	17	CT	QUE.
	Resort Village (10)	20	RV	SASK.
	Municipal Corporation (11)	21	MC	SASK.
31	Municipal District	31	MD	N.S.,ALTA.
32	Rural District (12)		RD	NFLD.
33	Improvement District	33	ID	ONT.,ALTA.
34(13)	Improvement District		ID	ALTA.
35	Local Improvement District	35	LID	YUK.(14)
36	Local Government District	36	LGD	MAN.
39	Subdivision of Regional District	39	SRD	B.C.
51	Community (15)	51	COM	NFLD.
52	Special Area	52	SA(16)	ALTA.
53(17)	Saskatchewan Hospital Area			SASK.
	Uranium City and District			SASK.
	University Endowment Area			B.C.
61(18)	National Park			SASK.,ALTA.
62	Parish	62	PAR	N.B.(19)
63	Township and Royalty	63	LOT(20)	P.E.I.
81	Unorganized - Non organisé	81	UNO(21)	QUE.,ONT.,MAN.,SASK., YUK.,N.W.T.
82	Subdivision of Unorganized	82	SUN(22)	NFLD.
91	Indian Reserve - Réserve indienne	91	R(23)	P.E.I.,N.S.,N.B.,QUE., ONT.,MAN.,SASK.,ALTA., B.C.
92	Indian Settlement - Établissement indien	92	S-E(24)	QUE.,ONT.,MAN.
93	Non Reserve (25)			QUE.,ONT.
	Settlement (26)	93	SET	N.W.T.

- (1) In the 1976 Census these were designated Town - Ville, in all provinces. In the 1981 Census the designation "Town" was used in all provinces except Quebec.
- (2) Summer Village no longer exists in Saskatchewan.
- (3) The designation "Ville" was added for the province of Quebec.
- (4),(5),(6),(7),(9) The designation "Municipalité" (generic term) used for 1976 was replaced by four types of municipalities: "Canton", "Cantons unis", "Paroisse" and "Sans désignation".
- (8) TP replaces TM as the abbreviation for Township.
- (10) Resort Village is new for 1981.
- (11) Municipal Corporation is new for 1981.
- (12) The designation "Rural District" was changed to Town in 1981.
- (13) Codes 33 and 34 were combined for the 1981 Census.
- (14) Local Improvement District is exclusive to the Yukon; the 1976 LIDs in Newfoundland became Town, those in Saskatchewan became Rural Municipality.
- (15) Local Government Community became Community.
- (16) The abbreviation SA is new for 1981.
- (17) CSD type code 53 no longer exists in 1981.
- (18) The designation National Park no longer exists in 1981; Prince Albert National Park (Saskatchewan) becomes Unorganized - Non organisé and the National Parks in Alberta become Improvement District.
- (19) Parish no longer exists in Quebec and Prince Edward Island for 1981.
- (20) The abbreviation LOT is new for 1981.
- (21) UNO becomes the new abbreviation for Unorganized Territory.
- (22) SUN becomes the new abbreviation for Unorganized Territory in Newfoundland.
- (23) R remains as the abbreviation for the designation Indian Reserve.
- (24) S-E becomes the new abbreviation for the designation Indian Settlement.
- (25) The designation Non Reserve no longer exists in 1981.
- (26) Code 93 is used for the new designation Settlement.

Field: 9

Position: 20-22

Census Consolidated Subdivision (CCS)

This field identifies a geostatistical area created by Statistics Canada.

A census consolidated subdivision is a geographically contiguous group of census subdivisions.

Two rules are applied in delineating census consolidated subdivisions:

- (1) all census subdivisions smaller than 25 square kilometres are grouped with a larger subdivision; and
- (2) if a census subdivision greater than 25 square kilometres is surrounded on more than half its perimeter by another subdivision, it is included as part of the CCS formed by the other subdivision; if not, the census subdivision forms a CCS on its own.

Those wishing to use this field should consult the Enumeration Area Reference Lists (Catalogue Nos. 99-909 to 99-912).

Field: 10

Position: 23-25

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.

Remarks: 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.

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.

Remarks: 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 (CMA) and CENSUS AGGLOMERATIONS (CA)

SGC CODE	NAME
CENSUS METROPOLITAN AREA	
001	ST. JOHN'S
205	HALIFAX
310	SAINT JOHN
408	CHICOUTIMI - JONQUIÈRE
421	QUEBEC
442	TROIS-RIVIERES
462	MONTREAL
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	CARBONAR
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
315	OROMOCTO
320	FREDERICTON
328	BATHURST

CENSUS METROPOLITAN AREAS (CMA) and CENSUS AGGLOMERATIONS (CA)

SGC CODE	NAME
CENSUS AGGLOMERATION (Continued)	
330	CAMPBELLTON
335	EDMUNDSTON
404	RIMOUSKI
405	RIVIERE-DU-LOUP
406	BAIE-COMEAU
411	DOLBEAU
412	SEPT-ILES
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-JEROME
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

CENSUS METROPOLITAN AREAS (CMA) and CENSUS AGGLOMERATIONS (CA)

SGC CODE	NAME
-------------	------

CENSUS AGGLOMERATION (Concluded)

562	SARNIA
566	OWEN SOUND
568	BARRIE
569	ORILLIA
571	MIDLAND
575	NORTH BAY
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
918	VERNON
925	KAMLOOPS
930	CHILLIWACK
938	NANAIMO
940	PORT ALBERNI
943	COURTENAY
945	POWELL RIVER
955	PRINCE RUPERT
965	TERRACE
970	PRINCE GEORGE

Field: 11

Position: 26

CMA/CA Part

This field identifies EAs, within CMAs and CAs, as belonging to a CMA/CA part.

Census metropolitan areas (CMAs) and census agglomerations (CAs) are divided into three parts: urbanized core, urban fringe and rural fringe. The parts are always made up of complete enumeration areas, but often comprise only parts of municipalities (or census subdivisions). Not all three parts will necessarily be found in each CMA or CA.

Urbanized core: Continuous built-up area around which a CMA or a CA is delineated. To be considered as continuous, the built-up area must not have a discontinuity exceeding two kilometres. Usually its name is used as the name of the CMA or CA.

Fringe: Parts of a CMA or a CA outside the urbanized core. The fringe consists of urban parts and rural parts.

Code assignment is as follows:

Urbanized core	1
Urban fringe	2
Rural fringe	3

Field: 12

Position: 27

CMA/CA Selector

This field identifies a given EA as belonging to a CMA or a CA as follows:

<u>Code</u>	<u>Description</u>
1	CMA
2	CA
0	not a CMA/CA

Field: 13

Position: 28

CMA/CA Population Size Group

This field is a population size descriptor. It distributes all the census agglomerations and census metropolitan areas in population size groups.

<u>Population</u>	<u>Size code</u>
10,000 - 24,999	7
25,000 - 49,999	6
50,000 - 99,999	5
100,000 - 249,999	4
250,000 - 499,999	3
500,000 - 999,999	2
1,000,000 and over	1
(not a CMA/CA)	0

Field: 14

Position: 29-35

Census Tract/Provincial Census Tract Name

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

Provincial census tracts are assigned a four-digit number in ascending sequence within a province. Where a PCT is split into two or more parts, the four-digit number is followed by a decimal point and a further two digits identifying the splits. Gaps exist in the numbering. These gaps are a result of two factors. Initially PCTs included CTs; however, the decision was made to restrict PCTs to those areas not included in the Census Tract Programme. Furthermore PCTs are retired as the census tract coverage area is expanded.

<u>Provincial census tract name</u>	<u>Province name</u>	<u>Province code</u>
0001 -0101.04	Newfoundland	10
0200 -0220	Prince Edward Island	11
0300 -0451	Nova Scotia	12
0717 -0826	New Brunswick	13
1000 -2232	Quebec	24
3000 -4481	Ontario	35
5000 -5194	Manitoba	46
6000 -6193.02	Saskatchewan	47
7000.01 -7315	Alberta	48
8000 -8403	British Columbia	59
9000 -9003	Yukon	60
9100 -9105	Northwest Territories	61

Not all PCTs in each range are currently used.

Field: 15

Position: 36-39

Census Tract/Provincial Census Tract Code

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.

Remarks: For the 1981 Census, four urban centres have been added to the Census Tract Programme. They are North Bay, Ontario; and Kamloops, Kelowna, and Prince George, British Columbia.

Provincial Census Tract (PCT)

Refers to a permanent small census geostatistical area of rural and/or urban type. PCTs exist in the areas not included in the Census Tract Programme. Populations of PCTs generally vary between 3,000 and 8,000 with a preferred average of 5,000. Boundaries, as much as possible, follow permanent physical features and/or geographic units suggested by the provinces.

CODE: The four-digit numeric code assigned to each CT/PCT allows identification of each type of census tract.

<u>Description</u>	<u>Code</u>
Census tract code	0001-6999
Provincial census tract code	7000-9999

For a detailed listing of census tracts and provincial census tracts, see Enumeration Area Reference Lists (Catalogue Nos. 99-913 to 99-917).

Field: 16

Position: 40-41

Subprovincial Region

A subprovincial region is a geographical unit intermediate in size between a census division and a province. In eight provinces subprovincial regions are made up of one or more census divisions. In Quebec, subprovincial regions are the administrative regions, and are made up of census subdivisions. Prince Edward Island constitutes one region.

Subprovincial regions are usually created by Statistics Canada at the request of a province. They can be economic, administrative, planning, or some other type of region which a province may designate in the future.

See list of census divisions and/or census division parts and their corresponding subprovincial region on the following pages.

For further information on subprovincial region codes, please contact Standards Division, Statistics Canada.

1981 Groupings of Census Divisions and/or Census Division Parts by Subprovincial Region

Province	Subprovincial region code	Census division code ⁽¹⁾
Newfoundland	00	01
	01	02, 03
	02	06, 07, 08
	03	04, 05, 09, 10
Prince Edward Island	10	01, 02, 03
Nova Scotia	20	15, 16, 17, 18
	21	10, 11, 12, 13, 14
	22	05, 07, 08
	23	01, 02, 03, 04, 06
	24	09
New Brunswick	30	09, 14, 15
	31	06, 07, 08
	32	01, 02, 05
	33	03, 04, 10
	34	11, 12, 13
Québec	40	01, 02, 03, 04, 05, 06, 07*
	41	90, 93, 94
	42	07*, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 20*, 21, 22, 23, 24*, 26*, 27*, 28*, 29*, 97*
	43	20*, 27*, 28*, 29*, 32, 33, 34*, 41, 42*, 43, 47*
	44	24*, 25, 26*, 34*, 35, 36, 37
	45	38, 39, 40, 42*, 47*, 49*, 50, 51, 52, 53, 54, 55, 56, 57, 58*, 61*, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75*, 76*
	46	47*, 49*, 58*, 61*, 75*, 76*, 78, 79, 80
	47	83, 84
	48	97*
	49	98
Ontario	50	01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 47, 48*
	51	14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 28, 29, 30, 43, 44, 46

* Denotes part of a census division.

BLANK - Not applicable.

(1) According to the Standard Geographical Classification.

1981 Groupings of Census Divisions and/or Census Division Parts by Subprovincial Region - Concluded

Province	Subprovincial region code	Census division code(1)
Ontario - Concluded	52	31, 32, 34, 36, 37, 38, 39, 40, 41, 42
	53	48*, 49, 51, 52, 53, 54, 56, 57
	54	58, 59, 60
Manitoba	60	01, 02, 12
	61	03, 04
	62	05, 06, 07, 15
	63	08, 09, 10
	64	11
	65	13, 14, 18
	66	16, 17, 20
	67	19, 21, 22, 23
Saskatchewan	70	01, 02, 06
	71	03, 04, 07, 08
	72	11, 12, 13
	73	05, 09, 10
	74	14, 15, 16, 17
	75	18
Alberta	80	01, 04
	81	02, 03
	82	05, 06
	83	09, 14
	84	07, 08
	85	10, 11
	86	15
	87	12, 13
British Columbia	90	01
	91	03, 39
	92	05, 07, 35, 37
	93	31, 33
	94	09, 11, 13, 15, 27, 29
	95	17, 19, 21, 23, 25, 43
	96	41, 51, 53
	97	55
	98	45, 47, 49, 57
Yukon	BLANK	01
Northwest Territories	BLANK	04, 05, 06, 07, 08

* Denotes part of a census division.

BLANK - Not applicable.

(1) According to the Standard Geographical Classification.

Field: 17

Position: 42-45

Urban Area Code/Rural Indicator

This field permits the identification of "urban" areas, or indicates that the EA is in a rural area. Urban areas are those areas having a population concentration of 1,000 or more and a population density of 400 or more per square kilometre.

Rural areas comprise all territory outside urban areas and are indicated by 0000.

For a detailed listing of urban areas, see Enumeration Area Reference Lists (Catalogue Nos. 99-909 to 99-912).

Field: 18

Position: 46

Urban Area Population Size Group

This field identifies the urban population size group to which each EA belongs.

<u>Population</u>	<u>Size code</u>
1 - 2,499	7
2,500 - 4,999	6
5,000 - 9,999	5
10,000 - 29,999	4
30,000 - 99,999	3
100,000 - 499,999	2
500,000 and over	1
Rural	0

Field: 19

Position: 47-49

Blank

Blank field.

Field: 20

Position: 50

**Indian Reserve - High Imputation
Area Indicator**

Indian Reserves KAHNAWAKE 14, WEBIQUI, WUNNUMIN 2, KINGFISHER 1, PEIGAN 147,
COWICHAN 1, THEIK 2, COWICHAN 9

For the geographic areas above, a significant portion of the data has been imputed. Consequently, these areas have been suppressed. However, the data have been included in all higher geographic subtotals and totals. For an assessment of the impact on data quality for these areas, the user is advised to refer to Data Quality - Total Population (Catalogue No. 99-904) and Data Quality - Sample Population (Catalogue No. 99-905).

In this field:

1 = Includes Indian Reserve(s) or part(s) of Indian Reserve(s) identified as high imputation area(s).

Blank = Does not include Indian Reserves or parts of Indian Reserves identified as high imputation areas.

The table on the following page indicates all the geographic areas in question.

1981 Census - Indian Reserves - High Imputation Areas

Recensement de 1981 - Réserves indiennes - Régions à fort taux d'imputation

Census subdivision(s) (CSD)	Census division(s) (CD)	Census division(s) (CD) code	Census subdivision(s) (CSD) code	Enumeration area(s) (EA)	Federal electoral district (FED)	Region, province and federal electoral district (FED) code	Census tract(s) (CT)/provincial census tract(s) (PCT) name	Census metropolitan area(s) (CMA)/ census agglomeration(s) (CA)
Subdivision(s) de recensement (SDR)	Division(s) de recensement (DR)	Code de division(s) de recensement (DR)	Code de subdivision(s) de recensement (SDR)	Secteur(s) de dénombrement (SD)	Circonscription électorale fédérale (CEF)	Code de région, province et circonscription électorale fédérale (CEF)	Nom de secteur(s) de recensement(SR)/ secteur(s) de recensement provincial (SRP)	Région(s) métropolitaine de recensement (RMR)/ agglomération(s) de recensement(AR)
Kahnawake 14*	Laprairie	2466	2466820*	110-120*	Châteauguay	24013	CT 832*	Montréal
Webique*	Kenora District	3560	3560079*	411*	Kenora-Rainy River	35034	PCT 4429*	...
Wunnumin 2*	Kenora District	3560	3560072*	412*	Kenora-Rainy River	35034	PCT 4429*	...
Kingfisher 1*	Kenora District	3560	3560098*	420*	Kenora-Rainy River	35034	PCT 4429*	...
Peigan 147*	Division No. 3	4803	4803801*	363,364*	Lethbridge- Foothills	48014	PCT 7011*	...
Cowichan 1*	Cowichan Valley Regional District	5919	5919807*	219,223,224,226*	Cowichan-Malahat- The Islands (Les Îles)	59005	PCT 8249*	...
Theik 2*	Cowichan Valley Regional District	5919	5919818*	221*	Cowichan-Malahat- The Islands (Les Îles)	59005	PCT 8249*	...
Cowichan 9*	Cowichan Valley Regional District	5919	5919806*	222*	Cowichan-Malahat- The Islands (Les Îles)	59005	PCT 8249*	...

... Not applicable. - N'ayant pas lieu de figurer.

* Indicates area suppression due to high non-response. - Indique les régions supprimées en raison du taux élevé de non-réponse.

Field: 21

Position: 51-52

Record Type

<u>Record type</u>	<u>Code</u>
Canada	01
Provinces	02
Remainder- Residual total by province for census subdivisions of less than 5,000 population	03
Remainder- Non-census metropolitan areas (residual total by province of census subdivisions outside census metropolitan areas)	03
Remainder- Non-census metropolitan areas (residual total by province of census tracts and provincial census tracts outside census metropolitan areas)	03
Census metropolitan areas and census agglomerations	10
Provincial census tract subtotals	12
Census tracts (census metropolitan areas and census agglomerations)	13
Provincial census tracts	15
Census divisions	16
Census subdivisions	17
Federal electoral districts	18
Enumeration areas	19

SECTION C

GEOGRAPHIC ORGANIZATION

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

Enumeration Area (EA) Series

- Tables include data for enumeration areas, federal electoral districts (based on 1976 Representation Order), provinces and Canada.
- The beginning of the User Summary Tapes and microfiche include all total records, i.e. Canada, provinces and federal electoral districts.

Information will be in the following order:

Geography

Canada

Provinces

Federal electoral districts

Enumeration areas

User Summary Tapes

Numeric sequence (east to west)

Numeric sequence within province

Numeric sequence within federal electoral district and province

Geography

Canada

Provinces

Federal electoral districts

Enumeration areas

Microfiche

Numeric sequence (east to west)

Alphabetic sequence within province

Numeric sequence within federal electoral district and province

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

Region and province code

Federal electoral district (1976 redistribution) code

Enumeration area (EA) code

Census division (CD) - Standard Geographical Classification (SGC)

Census subdivision (CSD) - Standard Geographical Classification (SGC)

CSD population size group

CSD type name

CSD type code

Census consolidated subdivision (CCS) code - Standard Geographical Classification (SGC)

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

CMA/CA part code

CMA/CA selector

CMA/CA population size group

CT/PCT name

Census tract (CT)/provincial census tract (PCT) code

Subprovincial Region

Urban area code/rural indicator

Urban area population size group

Blank

Indian Reserve - High imputation area

Record type

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. 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.

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 bulletin series - 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	41,492	38,528	...
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	5,989	5,651	4,842
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	5,150	5,121	5,091

** 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.

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
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**CENSUS SUBDIVISIONS
(COMPONENTS) FOR CMAs**

Canada	1	1	1
Provinces	12	12	12
* Census Metropolitan Areas	25	25	25
Census Subdivisions	365	351	337
Residual by Province	12	12	12
Total	<u>415</u>	<u>401</u>	<u>387</u>

CENSUS TRACTS FOR CMAs

Canada	1	1	1
Provinces	12	12	12
* Census Metropolitan Areas	25	25	25
Census Tracts	3,032	3,008	2,983
Residual by Province	12	12	12
Total	<u>3,082</u>	<u>3,058</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.

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.

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 below presents the response rates obtained in the 1981 Census for the stated characteristics.

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
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
Weeks Worked	94.7
When Last Worked	96.5
Years of Other Non-University Education	95.9
Years of University	97.0

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									5,000,000 or over
	500	1,000	5,000	10,000	20,000	50,000	100,000	250,000	1,000,000	
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	-	-	-	-	-	-	-	-	1,000	1,340
or over										

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

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.

SECTION E

SPECIAL NOTES

Census Family Type Data

In previous censuses, the primary family was defined as the family of the head of the household. In 1981, the criterion for determining family type was changed. A new question was added to the census questionnaire to determine a person responsible for paying the rent, or mortgage, or taxes, or electricity, and is used to identify primary and secondary families.

Due to improvements in the method of determining Census Family Type implemented for the 1981 Census, caution should be used in comparing the distribution of primary and secondary families with data from previous censuses. For example, census families in private households where the person responsible for household payments is residing elsewhere are automatically classified as secondary families in 1981. In previous censuses, first, the identification of these cases was not possible and second, some of these families were classified as primary families.

Further explanation of these changes is included in the Summary Guide - Total Population (Catalogue No. 99-902).

Geography Correction Notices

A1 Problem: Incorrect enumeration area allocation

- (a) Alexander, LGD, Man. (SGC 4601071)
 - 1981 total population reads 2,793
 - should read 1,908
- (b) Division No. 1, Unorganized, UNO, Man. (SGC 4601094)
 - 1981 total population reads 675
 - should read 1,560

A2 Problem: Incorrect census subdivision limits

- (a) Meductic, VL, N.B. (SGC 1310013)
 - 1981 total population reads 234
 - should read 197
- (b) Canterbury, PAR, N.B. (SGC 1310011)
 - 1981 total population reads 649
 - should read 686

A3 Problem: Incorrect census subdivision limits

- (a) Hillsborough Park, VL, P.E.I. (SGC 1102017)
 - 1981 total population reads 1,227
 - should read 1,036

(b) East Royalty, VL, P.E.I. (SGC 1102020)	
- 1981 total population reads	1,696
should read	1,863

(c) Sherwood, VL, P.E.I. (SGC 1102019)	
- 1981 total population reads	5,681
should read	5,705

A4 Problem: Incorrect enumeration area allocation

(a) Chicken 224, R, Sask. (SGC 4718828)	
- 1976 total population reads	-A
should read	528

(b) Chicken 225, R, Sask. (SGC 4718823)	
- 1976 total population reads	528
should read	-
- 1981 total population reads	236
should read	26

(c) Division No. 18, Unorganized, UNO, Sask. (SGC 4718090)	
- 1981 total population reads	11,991
should read	12,201

A5 Problem: Incorrect census subdivision formation

(a) Fond du Lac 229, R, Sask. (SGC 4718824)	
should be <u>deleted</u>	

(b) Fond du Lac 227, R, Sask. (SGC code not yet assigned) - should be <u>created</u>	
- 1976 total population should read	452
- 1981 total population should read	494

A6 Problem: Incorrect census consolidated subdivision codes

(a) Alert Bay 1, R, B.C. (SGC 5943801)	
- CCS code reads	5943029
should read	5943035

(b) Alert Bay 1A, R, B.C. (SGC 5943802)	
- CCS code reads	5943029
should read	5943035

A7 Problem: Incorrect census subdivision limits

(a) Jacquet River, VL, N.B. (SGC 1314002)	
- 1981 total population reads	778
should read	887

(b) Durham, PAR, N.B. (SGC 1314001)	
- 1981 total population reads	2,656
should read	2,547

A8 Problem: Incorrect census subdivision limits

- (a) Norway House 17, R, Man. (SGC 4622058)
 - 1981 total population reads 1,812
 - should read 1,976
- (b) Division No. 22, Unorganized, UNO, Man. (SGC 4622046)
 - 1981 total population reads 2,703
 - should read 2,539

A9 Problem: Incorrect census subdivision limits

- (a) Regina, C, Sask. (SGC 4706027)
 - 1981 total population reads 162,613
 - should read 162,984
- (b) Sherwood No. 159, RM, Sask. (SGC 4706026)
 - 1981 total population reads 1,700
 - should read 1,329

A10 Problem: Incorrect census subdivision formation

- (a) 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).

Mother Tongue

Comparability of the 1981 and 1976 Census mother tongue data is affected by a number of factors:

- (a) There has been a decrease in the non-response rate from 1.9% in 1976 to 1.1% in 1981. As a result, an unknown portion of the change in any given mother tongue is due to a better enumeration of the population.
- (b) In the 1976 Census the 1.9% of the population who did not respond to the mother tongue question had their language coded as Not Stated. In the 1981 Census the 1.1% of the population who did not respond to the question were assigned a specific language (see table below).
- (c) Procedures for the removal of multiple responses, provided by 2.4% of the 1981 population, have changed for the 1981 Census. In 1976, an arbitrary and deterministic processing edit blanked the multiple responses, leaving only one valid response for each individual. In the 1981 Census, multiple languages were assigned a single response using probabilistic computer algorithms (see table below for the redistribution of combinations of English, French and Other).
- (d) The category "Indian, n.o.s." includes persons who are of aboriginal ancestry and those of Asian Indian ancestry. In 1976, these persons were all coded to "Native Indian" as mother tongue.

Mother Tongue Information as Reported by Assigned Mother Tongue, Canada, 1981

1981 mother tongue assigned as			
Mother tongue as reported in 1981	English	French	Other
English only	14,518,400
French only	...	6,077,695	...
Other only ^{1,2}	...	2,495	2,897,730
English and French ³	103,595	104,650	...
English and other ^{2,4}	122,655	235	202,640
French and other ⁵	...	9,305	12,945
English, French and other ³	7,845	7,375	14,250
Non-response	165,970	47,340	48,060
Total	14,918,460	6,249,095	3,175,625

Totals may not equal the sum of components due to rounding.

1 "Other" includes all non-official languages.

2 A number of write-in languages were potentially changed to French by computer edit (e.g., "Belgian" could be either "French" or "Flemish").

3 In 1976, a random choice was made between "English and French".

4 In 1976, all records with "English and other" were assigned to "English".

5 In 1976, all records with "French and other" were assigned to "French".

Users of these data should be aware that there is some impact on the comparability of the 1981 with 1976 Census data due to changes in processing procedures. However, problem-free information was provided by 96.5% of the population. Furthermore, for 98.0% of the population, the same data would have been published for 1981, whether the 1976 or the 1981 processing methodology had been used. For a more detailed explanation, users are referred to Data Quality -Total Population (Catalogue No. 99-904).

Number of Weeks Worked

The data on the number of weeks worked for the categories 40 to 48 weeks and 49 to 52 weeks should be used with caution. It appears that some respondents had a tendency to not include their weeks of paid leave for vacation or for other reasons in their total number of weeks worked, although instructed to do so. The 49 to 52 weeks category may therefore be underestimated.

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.

Ottawa-Hull Census Metropolitan Area

Due to the method of production used for the Basic Series of User Summary Tapes and microfiche, it was not feasible to produce a census metropolitan area total for areas crossing provincial boundaries. Consequently, for the census metropolitan area of Ottawa-Hull it is necessary to add together data for Ottawa-Hull from both the Ontario and Quebec parts in order to obtain a total. A total for the complete census metropolitan area of Ottawa-Hull is shown in the Profile Series as a different method of production was used.

Residual Totals

In the Special Series, where remainder or residual totals are shown, the total may be equal to the province or territory total. The problem arises in Prince Edward Island, the Yukon and Northwest Territories where there are no census metropolitan areas. Consequently, some repetition of data is unavoidable. A similar situation exists for census tracts in the Basic Series, where the provincial census tract subtotal is equal to the province or territory total for the above-mentioned areas.

Schooling Data

Comparisons of the 1981 Census schooling data with past censuses or with other sources should generally be restricted to uniform characteristics, and to similar temporal and population components.¹ General comparisons that are made should take note of the fact that the 1981 schooling data, in contrast to that for previous census years, exclude inmates of institutions, and are reported only for the population 15 years and over, in contrast with 1971 and earlier censuses which reported schooling figures for the population 5 years and over. More specifically, there is one main aspect of the 1981 schooling data which distinguish it from other sources.

The main aspect of the 1981 Census schooling data where comparability is affected is in the "other non-university education" category. The other non-university education concept differs from previous censuses and from other measures of the so-called post-secondary non-university concept in two respects. First, in contrast to the 1976 Census, this question now relates to all university transfer courses of community colleges, and the CEGEP general of Quebec; therefore, a shift in the data from university to non-university can be expected and does indeed occur between 1976 and 1981 (especially for the CEGEP population). Second, the 1981 question has been broadly conceptualized to encompass all non-university schooling beyond elementary or secondary, regardless of secondary school graduation. The 1981 other non-university education concept covers a broad spectrum of schooling that includes the conventional post-secondary areas as well as other training in the trades and vocational areas.

¹ Users interested in historically comparable census education data for years 1971, 1976 and 1981 are referred to Special Bulletin, Catalogue No. 13-579: Historical Tables for Census Education Data: 1971, 1976 and 1981, to be released at a later date.

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.

Structural Type Data

The reporting of Structural Type of dwelling in any census or survey can be expected to be subject to potentially significant response error. This is perhaps due in part to the variety of sometimes complex structures, regional differences in terminology, and local real estate advertising. The level and nature of this error have been shown to vary according to the methodology used to collect the data. For the 1976 Census, the Structural Type was determined by the Census Representative. For the 1981 Census the Structural Type was determined by the respondent.

Analysis has shown that the 1976 data contained substantially fewer errors than the 1981 data for this variable. Comparisons between 1976 and 1981 Census data for Structural Type will therefore reveal certain inconsistencies. (Note: The count of dwellings is not in question, only how the total number of dwellings is broken down into Structural Type.) These inconsistencies will vary in degree from one geographic area to another and from one Structural Type to another.

Geographically the degree of error in dwelling classification is highest in the core areas of larger cities; those areas with older and converted or complex structures for which proper classification by respondents would be more difficult. The degree of error decreases as one moves outward from the core areas. Indeed there do not appear to be data quality problems in this regard for rural areas.

From the structural perspective the counts for Apartments in buildings with five or more storeys are believed to be relatively accurate. Counts for other types of dwellings in multiple unit structures (e.g., Apartments in buildings of less than five storeys and Row Houses), on the other hand, may contain varying degrees of error. For these dwellings there have been two types of misclassification. First, there are misclassifications among various types of the multiple unit structures. For example, Apartments in buildings of less than five storeys have frequently been classified as Row Houses, Semi-detached, etc. Second, there are some misclassifications between multiple and single structures. For example, a Duplex may have been misclassified as a Single Detached.

A substantial amount of the Structural Type error is misclassification among multiple unit structures. For this reason the user is advised to use the 1981 Census Structural Type data, whenever possible, by collapsing into four categories: Single Detached, Apartment in a building with five or more storeys, Movable (i.e. Mobile and Other Movable), and All Other. The error in the aggregated data will be reduced but it will not be eliminated. The misclassification of dwellings in multiple unit structures can be expected, where it occurs, to result in an underreporting for the "All Other" category and a compensating overreporting for Single Detached. The significance of this error (as a percentage) in the count of Single Detached can be expected to decrease as the proportion of true Single Detached in the geographic area increases.

The question is: "How can one determine the level of error in any given tabulation of Structural Type and is it possible to compensate or adjust for this error?". The answer will depend upon the tabulation and the specific use of the data.

For Enumeration Area level tabulations, for example, only the above general statements can be applied to the data. If the Enumeration Area is in a rural area, the data can be used with the same confidence as other data, with comparable cell sizes, for the Enumeration Area. On the other hand, if the Enumeration Area is in an urban core area with 50% of the reported dwellings in multiple unit structures, then the data on Structural Type would not be usable for any but the most general purposes, particularly for the full range of Structural Types.

For Census Tract, Census Subdivision, Census Division, Census Metropolitan Area, Province level tabulations, as examples, it is possible (with some cross-reference to other 1981 Census information and to 1976 Structural Type data) to determine whether for the particular tabulation there is a data quality problem for Structural Type, the degree of this problem, and most probably how the data have been misclassified.

The procedure is based upon Period of Construction data. These data, which were collected on a sample basis in the 1981 Census, permit the identification of new construction - i.e. of occupied dwellings constructed in the period 1976-1980 plus those constructed in the first five months of 1981. To the extent that dwelling stock is stable (ideally no conversions and no demolitions) over a five-year period, then adding the new construction - obtained from the 1981 Census data - to the 1976 Census Structural Type counts should yield values close to those for the 1981 Census. The degree to which these adjusted counts do not agree with 1981 counts by Structural Type should give a clear indication of the quality of the data - both 1981 and 1976.

Three basic steps are involved in making this assessment of the quality of the data:

- (1) **Ascertain the 1976 Census geographic area corresponding to the 1981 Census geographic area for which Structural Type data are being tabulated.**

For many tabulations the 1976 and 1981 Censuses will correspond exactly in geography. To assist in this determination the user may refer to a variety of bulletins.

(i) Census Divisions and Census Subdivisions

1976: 92-802 to 92-805; 92-911 (Reference Maps)

1981: 93-901 to 93-912, Table 4; 99-907 (Reference Maps -CDs/CSDs)

The magnitude of the area affected by a boundary change can be determined by comparing the 1976 and 1981 Reference Maps or by consulting the SGC manual Volume 1 (Appendix 2) Catalogue No. 12-567.

The magnitude of the population affected by a boundary change can be determined by comparing the adjusted 1976 population figure (i.e. based on 1981 area) reported in the 1981 bulletin with the final 1976 population figure reported in the 1976 bulletin.

(ii) Census Metropolitan Areas

1976: 92-809; 92-811 (Reference Maps)

1981: 95-903; 99-906 (Reference Maps - CMAs/CAs)

The magnitude of the area affected by a boundary change can be determined by comparing the 1976 and 1981 Reference Maps.

The magnitude of the population affected by a boundary change can be determined by comparing the adjusted 1976 population figure (i.e. based on 1981 area) reported in the 1981 bulletin with the final 1976 population figure reported in the 1976 bulletin.

(iii) Census Agglomerations

1976: 92-809; 92-811 (Reference Maps)

1981: 95-903; 99-906 (Reference Maps - CMAs/CAs)

Same as (ii) above except users should note that CAs experienced a change of definitional criteria between 1976 and 1981 that can greatly affect the CAs. These changes are over and above any changes to the boundaries of component CSDs.

(iv) **Census Tracts**

1976: 95-800 to 95-831 (Maps included)

1981: 95-905 to 95-940 (Maps included)

The magnitude of the area affected by a boundary change can be determined by comparing the 1976 and 1981 Reference Maps.

The magnitude of the population affected by a boundary change can be determined by comparing the adjusted 1976 population figure (i.e. based on 1981 area) reported in the 1981 bulletin with the final 1976 population figure reported in the 1976 bulletin.

(v) **Federal Electoral Districts**

The Federal Electoral District level data cannot easily be assessed for the reason that 1976 data follow the 1966 Representation Order, and 1981 data are according to the 1976 Representation Order, except for 1976 bulletin 92-808, which does present basic structural type information according to the 1976 Representation Order. The corresponding bulletin in 1981 is Catalogue No. 95-901.

Minor differences in geographic boundaries which cannot be isolated should not invalidate the assessment. Substantial differences, however, would preclude proper assessment. (e.g., the Enumeration Area level data cannot be assessed for the reason that Enumeration Area boundaries differ greatly between 1976 and 1981.)

- (2) **Bring together, for the given geographic area (or areas), the 1976 and 1981 Structural Type data with the 1981 data cross-tabulated by Period of Construction (sample data) and produce "adjusted" 1981 counts.**

For all Structural Types the newer construction (that with Period of Construction 1976-1981 or 1976-1980 plus 1981) reported in the 1981 Census must be added to the total for each Structural Type (or for some collapsed version) reported in 1976 to produce "adjusted" 1981 counts. Period of Construction data cross-tabulated with Structural Type are being specially prepared for use in carrying out this procedure. These tabulations will be available in March of 1983. Users of tape/fiche data should note that cross-tabulations of Period of Construction by Structural Type are planned at the Census Tract level (CTW81B22) and Census Subdivisions of 5,000 population and over (SPW81B13).

It should be noted that if there is no significant amount of new construction for the geographic area of interest (in which case the counts of total occupied private dwellings in 1981 and 1976 should be approximately equal) then Period of Construction data are not needed and this part of the procedure need not be applied.

(3) Compare the 1981 Census counts by Structural Type with the adjusted 1981 Census counts by Structural Type and assess differences.

If the geographic areas being compared are identical, then the 1981 counts and the adjusted 1981 counts should be similar. (For this comparison the two 1981 Apartment categories must be added to be comparable to the 1976 count of Apartments.) There will be many cases for which there will be differences - some small and some large. What must be done is to make some judgement of the possible reasons for a discrepancy.

Possible Reasons for Differences

- (a) Dwellings constructed in the period January - May 1976 cannot be isolated in the 1981 data. Since occupied dwellings constructed in that period are included in the 1976 Census counts the adjusted 1981 counts will be higher than the published 1981 estimates.

If, in proportional terms, for any Structural Type there is a significant number of dwellings with Period of Construction of 1976-1981, then it may be necessary to readjust the counts to "correct" for the January - May 1976 construction. Without additional information, 5/60th of the 1976-1980 count or 5/65th of the 1976-1981 count should be subtracted from the earlier adjusted 1981 count. It should be remembered, however, that for small geographic areas such an adjustment may tend to be unreliable.

- (b) It must be remembered that the Period of Construction data are based upon a sample and as such are subject to sampling error. A discussion of the impact of sampling error will be given with any 1981 Census Bulletins which include tabulations of sample data (e.g. Period of Construction) and in the publication Data Quality - Sample Population (Catalogue No. 99-905). The sampling error for most tabulations should not be sufficient to invalidate the assessment procedure but will explain some amount of any differences.
- (c) The Period of Construction data are also subject to response error. The significance of such error for any given tabulations will depend upon the proportion of reported newer construction.
- (d) Since tabulations being checked will be for occupied dwellings, differing vacancy rates for the 1976 and 1981 Censuses would result in a corresponding difference in occupied dwelling stock counts.
- (e) Demolitions between the two censuses will cause the adjusted 1981 Census counts to be higher than the corresponding 1981 Census counts.
- (f) Conversions (e.g., converting a Single Detached to Apartments) may legitimately result in a decrease in the count for one dwelling type and an increase in the count for another. Generally such conversions should not have been reported among the new construction.

All of items (a) to (f), with the possible exception of sampling errors, should individually manifest themselves by way of a difference in the estimated total occupied dwelling stock for the area (comparing the 1981 total with the adjusted 1981 total). Collectively there may be a cancelling effect (e.g., demolitions and conversions). These will also cause changes in the counts for particular Structural Types.

As a possible source of differences, response error will manifest itself not by a difference in estimated total occupied dwelling stock but by a shift in the count of dwellings between two or more Structural Types. If there is a major response error the shift will be obvious. The following hypothetical example will serve as an illustration.

Comparison of 1981 and Adjusted 1981 on Occupied Dwellings by Structural Type

Area	Apartments (000's)		Other Multiple (000's)		Single Detached (000's)	
	1981	Adj. 1981	1981	Adj. 1981	1981	Adj. 1981
A	260	361	130	30	20	19
B	385	400	53	40	10	8
C	150	155	36	35	40	41
D	78	78	24	24	56	56

For area A there is a significant response error which has manifested itself by a shift from Apartment (in 1976) to other types of dwellings in multiple unit structures, and, to a lesser degree, to Single Detached. It is reasonable to conclude that, for this area, the 1981 classification by Structural Type contains, as a minimum, the degree of error implied by the differences in the counts and that the adjusted 1981 counts more accurately reflect the Structural Type distribution for the area. At the same time it is also reasonable to conclude that classification problems were present in the 1976 Census as well. While the 1976 counts - based upon evaluation of 1976 and 1981 data - can be expected to be very much more accurate than the 1981 counts, in this case they may still contain non-negligible error. The largest proportion of such error will be among the multiple unit structures (Apartments plus Other Multiple in this example).

For area B there is likely also a response error with the same direction of misclassification as for area A. The adjusted 1981 counts can be expected to contain some amount of error, but because the data are much less inconsistent (than those for area A) the data can be used with much greater confidence.

For area C there are discrepancies, but these may be caused by a combination of problems. For this area the 1981 count of total occupied dwelling stock is 226. The adjusted 1981 count of total occupied dwelling stock is 231. Thus the majority of the apparent differences must be due to reasons other than response error. The most plausible source of the differences will be the Period of Construction data (see (a), (b) and (c) under Possible Reasons for Differences), although the conformity of the 1976 and 1981 geography should be verified.

For area D there are no differences and the data can be used with confidence.

It should be noted that collapsing of Structural Types, as in the illustration, should be done whenever possible as it is easier to assess the cause of differences for large cells. It should also be noted that shifts in the counts for Movable dwellings are very difficult to assess. These dwellings may have a higher than average demolition rate, they can be moved out of or into an area, and they can be converted perhaps more readily than other types of dwellings.

As part of the investigations which have resulted in this cautionary note, the above procedure was carried out for a sample of geographic areas. The results for a sample of Census Metropolitan Areas, as an example, showed that significant response error was isolated to specific municipalities, that for the majority of municipalities there was no identifiable data quality problem, and that where response errors apparently did occur, the shifts by Structural Type were immediately evident.

Further information on the quality of the Structural Type data will be included in Data Quality - Total Population (Catalogue No. 99-904).

Type of Household Data

Due to a change in the method of determining family type, implemented for the 1981 Census, caution should be used in comparing the distribution of primary and secondary families with data from previous censuses. Since the delineation of type of household is dependent upon family type, the same caution should be exercised in comparing the 1981 data for secondary family households with the corresponding figures in previous censuses.

An explanation of these changes, and if applicable, the impact of such changes on the data for household type in general, will be included in the Summary Guide - Total Population (Catalogue No. 99-902).

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.

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

Income

Users are advised to consult the 1981 Census Dictionary, Catalogue No. 99-901, for a broad definition and derivation of total, average and median incomes, standard error of average income, major source of income and incidence of low income (income status). It should be noted that in the case of total income, employment income and wages and salaries, for the population (individuals 15 years and over), averages, medians and standard errors are calculated for individuals with income only. For all other universes, these statistics refer to all units, whether or not they reported any income. Aggregate income is the product of rounded count and unrounded average. The product is then rounded to the nearest thousand. However, the percentage distributions of aggregate income have been calculated prior to the rounding to thousands.

For the purposes of low income statistics, economic families and unattached individuals resident in the Yukon and Northwest Territories and on Indian Reserves are excluded from the estimates.

For a more comprehensive definition of (a) the components of total income and exclusions from the income concept, (b) the calculation of average income and median income and the interpretation of the standard error of average income, (c) the major source of income for the various universes, and (d) concept, coverage and derivation of low income statistics, see the relevant text in the following publications:

Catalogue No. 92-928 - Population, Total Income

Catalogue No. 92-934 - Private Households, Income

Catalogue No. 92-936 - Census Families in Private Households, Income

Catalogue No. 92-937 - Economic Families in Private Households, Income and Selected Characteristics

For information on the sources of income and their historical comparability, see Catalogue No. 99-903, Summary Guide - Sample Population.

For information on the quality aspects of income data, the user is referred to Catalogue No. 99-905, Data Quality - Sample Population.

Census income statistics are subject to sampling variability. Although such sampling variability may be quite small for large population groups, its effects cannot be ignored in the case of very small subgroups of population in an area or in a particular category. This is because, all other things being equal, the larger the sample size, the smaller is the error. For this reason income data on areas, other than enumeration areas, where the population was below 250, have been suppressed. The suppression criterion for enumeration areas is reduced to 25 or 50 persons. Where statistics are not suppressed but are still based on relatively small totals, the users are strongly advised to exercise caution in the use and interpretation of these statistics.