# 2011 National Household Survey Public Use Microdata File (PUMF)

# Hierarchical File

Documentation and User guide





# **Table of contents**

	Page
Introduction	3
Chapter 1 Universes	6
Chapter 2 Record layout	8
Chapter 3 Variable descriptions (codebook)	11
Geography	11
Households	12
Families and family composition	13
Demography	15
Place of birth, immigration and citizenship	16
Aboriginal population	22
Ethnic origin	26
Language	27
Education	34
Mobility	40
Journey to work	42
Labour market activity	46
Income	53
Dwellings: Housing and shelter costs	58
Religion	63
Weighting	64
Identifier	66
Chapter 4 Sampling method, estimation and data quality	67
Chapter 5 Other factors affecting data reliability	82
Appendix A: Countries and area of interest	97
Appendix B: Mother tongue and home language	103
Appendix C: Ethnic origins	110
Appendix D: Query examples	119

### Introduction

The 2011 National Household Survey (NHS) Public Use Microdata File (PUMF) on private households contains 133,192 private households with a total of 333,008 individual records, representing 1% of the population in private households in private occupied dwellings in Canada. These records were drawn from the population who responded to the 2011 NHS. The NHS is a voluntary, self-administered survey, introduced as a replacement for census Form 2B, more commonly known as the long-form census questionnaire. A random sample of 4.5 million households was invited to respond to the NHS in spring and summer 2011. (The reference date of the NHS is May 10, 2011, the date of the 2011 Census of Population.)

This user guide is divided into five chapters: Chapter 1 defines the universes that can be studied using the hierarchical file (PUMF). Chapter 2 contains the record layout, an indispensable tool for using the file. Chapter 3 defines and provides detailed information about the variables available for analysis in the PUMF dataset. Chapters 4 and 5 respectively deal with the sampling method and factors affecting data quality and reliability.

### NHS target population

The NHS covers all persons whose usual place of residence is a private dwelling in Canada. It includes persons who live on Indian reserves and in other Indian settlements, permanent residents, non-permanent residents such as refugee claimants, holders of work or study permits, and members of their families living with them.

Foreign residents such as representatives of a foreign government assigned to an embassy, high commission or other diplomatic mission in Canada, members of the armed forces of another country stationed in Canada, and residents of another country who are visiting Canada temporarily are not covered by the NHS.

The survey also excludes persons living in institutional collective dwellings such as hospitals, nursing homes and penitentiaries; Canadian citizens living in other countries; and, full-time members of the Canadian Armed Forces stationed outside Canada. Also excluded are persons living in non-institutional collective dwellings such as work camps, hotels and motels, and student residences.

Comparability between estimates from the 2006 Census long form and the 2011 National Household Survey estimates: When comparing estimates from the 2006 Census long form and estimates from the 2011 National Household Survey (NHS) users should take into account the fact that the two sources represent different populations. The target population for the 2006 Census long form includes usual residents in collective dwellings and persons living abroad whereas the target population for the NHS excludes them. Moreover, the NHS estimates are derived from a voluntary survey and are therefore subject to potentially higher non-response error than those derived from the 2006 Census long form.

### NHS reference products and materials

### 1. Response rates

http://www12.statcan.gc.ca/nhs-enm/2011/ref/about-apropos/nhs-enm r012.cfm?Lang=E

The final response rate for the NHS was 68.6%. This rate is similar to rates on other voluntary surveys conducted by Statistics Canada.

### 2. NHS Dictionary

http://www12.statcan.gc.ca/nhs-enm/2011/ref/dict/index-eng.cfm

The NHS Dictionary is a reference document which contains detailed definitions of concepts, universes, variables and geographic terms used in the NHS. By referring to the NHS Dictionary, both beginner and intermediate data users will gain a better understanding of the data.

### 3. Reference guides

The reference guides provide information that enables users to effectively use, apply and interpret data from the 2011 National Household Survey (NHS). Each guide contains definitions and explanations of concepts, classifications, data quality and comparability to other sources. Additional information is included for specific variables to help general users better understand the concepts and questions used in the NHS.

http://www12.statcan.gc.ca/nhs-enm/2011/ref/guides/index-eng.cfm

The variables of the 2011 PUMF pertaining to 'Demography' and 'Families and family composition' were collected as part of the 2011 Census of Population. The *Families Reference Guide* contains useful information about these variables.

http://www12.statcan.gc.ca/census-recensement/2011/ref/guides/index-eng.cfm

### 4. Other reference products and materials

For a complete list of reference products and materials regarding the 2011 NHS, please see the following: <a href="http://www12.statcan.gc.ca/nhs-enm/2011/ref/index-eng.cfm">http://www12.statcan.gc.ca/nhs-enm/2011/ref/index-eng.cfm</a>.

### **PUMF** considerations

### 1. Data confidentiality

It is important for Statistics Canada to protect the confidential information that it collects. Owing to the very nature of a microdata file, various actions are taken to fulfil this commitment.

#### 2. Reduced level of detail

The smallest geographic unit in the 2011 PUMF is the census metropolitan area (CMA). Data at the scale of geographic areas smaller than CMAs are not provided for this product. Also, the user will find that this product contains only information on five of the largest census metropolitan areas and the provinces. The Yukon, the Northwest Territories and Nunavut are grouped under the term 'Northern Canada.'

Furthermore, the data have been aggregated in such a way as to preserve confidentiality while, at the same time, providing as much detail as possible in order to maintain the analytical value of the file. For example, the data on mother tongue do not indicate 'Mandarin,' but rather the more general category 'Chinese languages.' This category also includes other mother tongue languages, such as 'Cantonese.'

#### 3. Data not available

For some records, the codes for certain variables were changed to indicate '**Not available**,' so as to guarantee data confidentiality. Users should be aware of the existence of this category when producing statistical tables.

### 4. Lower and upper limits

The PUMF contains lower and upper income limits. Thus, the data on total income and sources of income are adjusted proportionally. Lower and upper limits are also applied to certain dwelling variables such as 'value of dwelling.' See chapter 5.

### 5. Rounding

For all quantitative variables, the data within the lower and upper limits are randomly rounded to base 50, 100, 1,000 or 10,000. See chapter 5.

### 6. Content changes

The content of the 2011 PUMF is largely the same as that of the 2006 PUMF. However, there are various changes, resulting from content changes in the 2011 NHS, as well as the creation of new variables from existing questions or the use of updated classifications on existing questions.

### Changes include:

• the insertion of 15 new variables

o CFSTRUCT Census family structure, simple version

DURPOW: Commuting DurationEFDECILEIncome: Income decile group

EFDIMBM Income: Disposable income for MBM for all persons

DEAVE POW: Departure time in hours and minutes

LOC\_ST\_RES Education: Location of study compared with province or territory of residence

LOLICOA
 LOLICOB
 LOLIMA
 LOLIMB
 LOLIMB
 LOLIMMI
 LOLIMMI
 LOMBM
 LOMBM
 Income: Low income status based on LIM-AT Income: Low income status based on LIM-BT Income: Low income status based on LIM-MI Income: Low income status based on MBM

NOS Housing suitabilityOCC JTW: Vehicle occupancy

RELIGION Religion: Aggregated responses

SUBSIDY Subsidized housing

the removal of 4 old variables

MFS
 Major field of study (based on MFS classification)

UPHWRK
 UPKID
 UPSR
 Unpaid care of children
 Unpaid care of senior

• a change of universe to Mobility, Generation status and Place of birth of parents variables which are now asked of the entire population, regardless of the respondent's age. In 2006 and in previous censuses, only respondents aged 15 and over were required to answer these guestions.

Variables included in the 2011 PUMF with supporting information can be found in Chapter 3.

### Chapter 1 – Universes

### **Private Household:**

Refers to a person or a group of persons (other than foreign residents) who occupy the same private dwelling and do not have a usual place of residence elsewhere in Canada. Household members who are temporarily absent (e.g., temporarily residing elsewhere) on May 10, 2011, are considered as part of their usual household. Every person is a member of one and only one household.

### Private dwelling occupied by usual residents

Refers to a separate set of living quarters with a private entrance either from outside or from a common hall, lobby, vestibule or stairway inside the building in which a person or a group of persons is permanently residing. The entrance to the dwelling must be one that can be used without passing through the living quarters of someone else. Also included are private dwellings whose usual residents are temporarily absent on May 10, 2011.

The number of private dwellings occupied by usual residents is equal to the number of private households.

### **Economic family**

Refers to a group of two or more persons who live in the same dwelling and are related to each other by blood, marriage, common law, adoption or a foster relationship. A couple may be of opposite or same sex.

### **Census family**

Refers to a married couple (with or without children of either and/or both spouses), a common-law couple (with or without children of either and/or both partners) or a lone parent of any marital status, with at least one child. A couple may be of opposite sex or same sex.

For additional information regarding the universes above, please refer to the 2011 on-line NHS Dictionary, catalogue number 99-000-XWE.

### Basic counts of different units in hierarchical PUMF, 2011

Universe	Criteria	PUMF unweighted records count	PUMF weighted estimates	NHS weighted estimates
Persons in private households	All records	333,008	32,747,981	32,852,323
Private households	PRIHM = 1	133,192	13,317,308	13,319,251
Persons not in an economic family	EF_RP = 3	47,557	4,911,394	4,903,531
Persons in an economic family	EF_RP = 1 or EF_RP = 2	285,451	27,836,587	27,948,792
Economic families	EF_RP = 1	94,155	9,244,184	9,254,162
Persons not in a census family	CF_RP = 3	55,020	5,619,213	5,626,052
Persons in a census family	CF_RP = 1 or CF_RP = 2	277,988	27,128,768	27,226,271
Census families	CF_RP = 1	95,611	9,377,233	9,387,476

# **Chapter 2 Record Layout**

### Geography

Fie	eld	Size	Position	Type	Mnemonic	Title
	18	3	48-50	Num	CMA	Census metropolitan area of current residence (2011)
	33	2	161-162	Num	PR	Province or territory of current residence (2011)

### Households

	Field	Size	Position	Type	Mnemonic	Title
Γ	36	1	91	Num	HHMAINP	Person responsible for household payments
Γ	87	1	168	Num	PRIHM	Primary household maintainer

### **Families and Family Composition**

Field	Size	Position	Type	Mnemonic	Title
12	1	41	Num	CF_RP	Census family reference person
13	1	42	Num	CFSTAT	Household living arrangements, simple version
14	1	43	Num	CFSTRUCT	Census family structure, simple version
24	1	56	Num	EF_RP	Economic family reference person

### **Demography**

Field	Size	Position	Type	Mnemonic	Title
6	2	32-33	Num	AGEGRP	Age groups
64	1	128	Num	MARSTH	Marital status (de facto)
93	1	177	Num	SEX	Sex

### Place of Birth, Immigration and Citizenship

Field	Size	Position	Type	Mnemonic	Title
7	2	34-35	Num	AGEIMM	Immigration: Age at immigration
16	1	46	Num	CITIZEN	Citizenship: Citizenship status and type – Summary
17	1	47	Num	CITOTH	Citizenship (component): Other country of citizenship
32	1	79	Num	GENSTAT	Generation status: Detailed
44	1	101	Num	IMMSTAT	Immigration: Immigrant status
79	1	157	Num	POB	Place of birth: Detailed
80	1	158	Num	POBF	Place of birth of father: Detailed
81	1	159	Num	POBM	Place of birth of mother: Detailed
112	1	368	Num	YRIMM	Immigration: Year of immigration

### **Aboriginal Population**

Field	Size	Position	Type	Mnemonic	Title
5	1	31	Num	ABOID	Aboriginal: Aboriginal identity – Detailed
9	1	37	Num	BFNMEMB	Aboriginal: Membership in a First Nation or Indian band
89	1	171	Num	REGIND	Aboriginal: Registered or Treaty Indian status

### **Ethnic Origin**

Field	Size	Position	Type	Mnemonic	Title
28	2	72-73	Num	ETHDER	Ethnic origin: Derived single and selected multiple ethnic origins
100	1	202	Num	VISMIN	Visible minority: Detailed

### Language

Field	Size	Position	Type	Mnemonic	Title
30	1	77	Num	FOL	Language: First official language spoken
37	1	92	Num	HLAEN	Language: Home language (A) – English – component – Part A
38	1	93	Num	HLAFR	Language: Home language (A) – French – component – Part A
39	2	94-95	Num	HLANO	Language: Home language (A) – first write-in – component – Part A
40	1	96	Num	HLBEN	Language: Home language (B) – English – component – Part B
41	1	97	Num	HLBFR	Language: Home language (B) – French – component – Part B
42	1	98	Num	HLBNO	Language: Home language – first write-in – component – Part B
46	1	108	Num	KOL	Language: Official languages
58	1	122	Num	LWAEN	Language: Language of work (A) – English – component – Part A

59	1	123	Num	LWAFR	Language: Language of work (A) – French – component – Part A
60	1	124	Num	LWANO	Language: Language of work (A) – first write-in – component – Part A
61	1	125	Num	LWBEN	Language: Language of work (B) – English – component – Part B
62	1	126	Num	LWBFR	Language: Language of work (B) – French – component – Part B
63	1	127	Num	LWBNO	Language: Language of work (B) – first write-in – component – Part B
69	1	139	Num	MTNEN	Language: Mother tongue (English) – component
70	1	140	Num	MTNFR	Language: Mother tongue (French) – component
71	2	141-142	Num	MTNNO	Language: Mother Tongue – First write-in – component
75	2	149-150	Num	NOL	Language: Non-official language

Field	Size	Position	Type	Mnemonic	Title
8	1	36	Num	ATTSCH	Education: Attendance at school
15	2	44-45	Num	CIP2011	Education: Major field of study, primary groupings (based on CIP
					Canada 2011)
35	2	89-90	Num	HDGREE	Education: Highest certificate, diploma or degree
49	1	112	Num	LOC_ST_RES	Education: Location of study compared with province or territory of
					residence
50	2	113-114	Num	LOCSTUD	Education: Location of study
94	2	178-179	Num	SSGRAD	Education: Secondary (high) school diploma or equivalent

# Mobility

Field	Size	Position	Type	Mnemonic	Title		
65	1	129	Num	MOB1	Mobility 1: Mobility status – Place of residence 1 year ago (2010)		
66	1	130	Num	MOB5	Mobility 5: Mobility status – Place of residence 5 years ago (2006)		
84	2	163-164	Num	PR1	Mobility 1: Province or territory of residence 1 year ago (2010)		
85	2	165-166	Num	PR5	Mobility 5: Province or territory of residence 5 years ago (2006)		

# Journey to Work

Field	Size	Position	Type	Mnemonic	Title		
21	1	53	Num	DIST	JTW: POW Commuting distance capped maximum of 201 kilometres		
23	1	55	Num	DUR	POW: Commuting duration		
47	1	109	Num	LEAVE	POW: Departure time in hours and minutes		
67	1	131	Num	MODE	JTW: Mode of transportation to work		
77	1	152	Num	OCC	JTW: Vehicle occupancy		
82	1	160	Num	POWST	JTW: Place of work status		
88	2	169-170	Num	PWPR	JTW: Place of work province		

### **Labour Market Activities**

Field	Size	Position	Type	Mnemonic	Title		
20	1	52	Num	COW	Labour: Class of worker (derived)		
31	1	78	Num	FPTWK	Labour: Full-time or part-time weeks worked in 2010		
43	2	99-100	Num	HRSWRK	Labour: Hours worked for pay or in self-employment		
48	2	110-111	Num	LFTAG	Labour: Labour force status		
57	1	121	Num	LSTWRK	Labour: When last worked for pay or in self-employment		
72	2	143-144	Num	NAICS	Labour: Industry sectors (based on the NAICS 2007)		
73	2	145-146	Num	NOCEE	Labour: Occupation (based on the NOC 2011)		
74	2	147-148	Num	NOCS	Labour: Occupation broad categories (based on the NOC 2011)		
102	1	221	Num	WKSWRK	Labour: Weeks worked in 2010		
103	2	222-223	Num	WRKACT	Labour: Work activity in 2010		

### Income

Field	Size	Position	Type	Mnemonic	Title		
25	2	57-58	Num	EFDECILE	Income: Income decile group		
26	6	59-64	Num	EFDIMBM	Income: Disposable income for MBM for all persons		
27	7	65-71	Num	EMPIN	Income: Employment income		
34	5	84-88	Num	GTRFS	Income: Total government transfer payments		
45	6	102-107	Num	INCTAX	Income: Income tax paid		
51	1	115	Num	LOLICOA	Income: Low income status based on LICO-AT		
52	1	116	Num	LOLICOB	Income: Low income status based on LICO-BT		
53	1	117	Num	LOLIMA	Income: Low income status based on LIM-AT		

54	1	118	Num	LOLIMB	Income: Low income status based on LIM-BT	
55	1	119	Num	LOLIMMI	Income: Low income status based on LIM-MI	
56	1	120	Num	LOMBM	Income: Low income status based on MBM	
68	7	132-138	Num	MRKINC	Income: Market income	
97	7	182-188	Num	TOTINC	Income: Total income	
98	6	189-194	Num	TOTINC AT	Income: After-tax income	

# **Dwelling: Housing and shelter costs**

Field	Size	Position	Type	Mnemonic	Title
10	1	38	Num	BEDRM	Number of bedrooms
11	2	39-40	Num	BUILT	Period of construction
19	1	51	Num	CONDO	Tenure – Condominium
22	1	54	Num	DTYPE	Structural type of dwelling
29	3	74-76	Num	FCOND	Condominium fees
33	4	80-83	Num	GROSRT	Gross rent
76	1	151	Num	NOS	Housing suitability
78	4	153-156	Num	OMP	Owner's major payment
86	1	167	Num	PRESMORTG	Presence of mortgage
91	1	174	Num	REPAIR	Condition of dwelling
92	2	175-176	Num	ROOM	Rooms, number of
95	1	180	Num	SUBSIDY	Subsidized housing
96	1	181	Num	TENUR	Tenure
99	7	195-201	Num	VALUE	Value of dwelling

# Religion

Field	Size	Position	Type	Mnemonic	Title
90	2	172-173	Num	RELIGION	Religion: Aggregated responses

# Weighting

Field	Size	Position	Type	Mnemonic	Title
101	18	203-220	Num	WEIGHT	Individuals weighting factor
104	18	224-241	Num	WT1	Replicate PUMF weight
105	18	242-259	Num	WT2	Replicate PUMF weight
106	18	260-277	Num	WT3	Replicate PUMF weight
107	18	278-295	Num	WT4	Replicate PUMF weight
108	18	296-313	Num	WT5	Replicate PUMF weight
109	18	314-331	Num	WT6	Replicate PUMF weight
110	18	332-349	Num	WT7	Replicate PUMF weight
111	18	350-367	Num	WT8	Replicate PUMF weight

### Identifier

Field	Size	Position	Type	Mnemonic	Title	
3	8	14-21	Num	CF_ID	Key for census family table	
2	7	7-13	Num	EF_ID	Key for economic family table	
1	6	1-6	Num	HH_ID	Key for household table	
4	9	22-30	Num	PP_ID	Key for person table	

# **Chapter 3 Variable descriptions**

### Geography

CMA – Census metropolitan area of current residence (2011)

Field: 18 Size: 3 Position: 48-50 Type: num

Description: Refers to the census metropolitan area (CMA), census agglomeration (CA), or non-CMA/CA of current residence

(on May 10, 2011).

**Reported for:** Persons in private households

Code	Description	Unweighted	Weighted	Includes
462	Montréal	39,120	3,743,411	
535	Toronto	56,852	5,491,430	
825	Calgary	12,121	1,182,517	
835	Edmonton	11,637	1,135,193	
933	Vancouver	23,439	2,269,194	
999	Other census metropolitan areas, census agglomerations and other geographies	189,839	18,926,236	
	Total	333,008	32,852,323	

**PR** – Province or territory of current residence (2011)

Field: 83 Size: 2 Position: 161-162 Type: num

**Description:** Refers to the province or territory of current residence (on May 10, 2011).

Code	Description	Unweighted	Weighted	Includes
10	Newfoundland and Labrador	4,906	502,531	
11	Prince Edward Island	1,330	140,366	
12	Nova Scotia	8,793	888,104	
13	New Brunswick	7,166	728,904	
24	Quebec	79,580	7,692,259	
35	Ontario	128,533	12,663,694	
46	Manitoba	11,929	1,165,970	
47	Saskatchewan	9,882	998,163	
48	Alberta	35,693	3,535,454	
59	British Columbia	44,073	4,328,421	
63	Northern Canada	1,123	104,115	
	Total	333,008	32,852,323	

#### Households

**HHMAINP** – Person responsible for household payments

Field: 36 Size: 1 Position: 91 Type: num

**Description:** Refers to whether or not a person residing in the household is responsible for paying the rent, or the mortgage, or the taxes, or the electricity or other services or utilities.

Reported for: Persons in private households

Code	Description	Unweighted	Weighted	Includes
0	Person is not responsible for household payments	141,698	13,742,323	
1	Person is responsible for household payments	191,310	19,005,658	
	Total	333,008	32,852,323	

**PRIHM** – Primary household maintainer

Field: 87 Size: 1 Position: 168 Type: num

**Description:** The first person in the household identified as being a household maintainer.

The order of the persons in a household is determined by the order in which the respondent lists the persons on the questionnaire. The order does not necessarily correspond to the proportion of household payments made by the person.

Code	Description	Unweighted	Weighted	Includes
0	Person is not a primary household maintainer	199,816	19,430,673	
1	Person is a primary household maintainer	133,192	13,317,308	
	Total	333,008	32,852,323	

### Families and family composition

CF RP - Census family reference person

Field: 12 Size: 1 Position: 41 Type: num

**Description:** Census family reference person. There is one reference person per family. In a couple census family, with or without children, the spouse or partner who is listed first on the questionnaire is the reference person. In a lone-parent census family, the lone parent is the reference person.

Reported for: Persons in private households

Code	Description	Unweighted	Weighted	Includes
1	Census family reference person	95,611	9,377,233	
2	Other census family member	182,377	17,751,535	
3	Person not in a census family	55,020	5,619,213	
	Total	333,008	32,852,323	

**CFSTAT** – Household living arrangements, simple version

Field: 13 Size: 1 Position: 42 Type: num

**Description:** Household living arrangements, simple version. This is a collapsed version of the variable Household living arrangements.

Reported for: Persons in private households

Code	Description	Unweighted	Weighted	Includes
1	Married spouse or common-law partner without children	75,321	7,466,918	
2	Married spouse or common-law partner with children	85,559	8,266,738	
3	Lone parent	15,169	1,510,224	
4	Child of a couple	78,811	7,590,032	
5	Child of a lone parent	23,128	2,294,856	
6	Person living alone	34,996	3,662,533	
7	Person living with non-relatives only	12,561	1,248,861	
8	Person not in a census family but living with other relatives	7,463	707,819	
	Total	333,008	32,852,323	

**CFSTRUCT** – Census family structure, simple version

Field: 14 Size: 1 Position: 43 Type: num

**Description:** Census family structure, simple version. This is a collapsed version of the variable Census family structure.

Reported for: Persons in census families

Code	Description	Unweighted	Weighted	Includes
1	Couple without children	75,321	7,466,918	
2	Couple with children	164,370	15,856,770	
3	Lone-parent family	38,297	3,805,080	
9	Not applicable	55,020	5,619,213	Persons not in census families
	Total	333,008	32,852,323	

### Families and family composition

**EF\_RP** – Economic family reference person

Field: 24 Size: 1 Position: 56 Type: num

**Description:** Economic family reference person. There is one reference person per family. The economic family reference person is the person in an economic family who is listed first on the questionnaire, after re-ordering of persons in the household according to variable PERSNO. The re-ordering ensures that the first person in the household is not under 15 years of age nor the son or daughter or grandchild of someone else in the household. Prior to 2006, the economic family reference person was always the man in an opposite-sex couple; as of 2006, it is based on which spouse or partner is listed first.

Code	Description	Unweighted	Weighted	Includes
1	Economic family reference person	94,155	9,244,184	
2	Other economic family member	191,296	18,592,402	
3	Person not in an economic family	47,557	4,911,394	
	Total	333,008	32,852,323	

### Demography

**AGEGRP** – Age groups

Field: 6 Size: 2 Position: 32-33 Type: num

**Description:** Age groups

**Reported for:** Persons in private households

Code	Description	Unweighted	Weighted	Includes
1	0 to 9 years	35,300	3,437,657	
2	10 to 14 years	18,471	1,802,853	
3	15 to 19 years	20,996	2,037,446	
4	20 to 24 years	21,338	2,080,124	
5	25 to 29 years	21,079	2,067,198	
6	30 to 34 years	21,175	2,070,473	
7	35 to 39 years	21,284	2,086,310	
8	40 to 44 years	22,531	2,197,413	
9	45 to 49 years	26,309	2,591,315	
10	50 to 54 years	26,141	2,583,861	
11	55 to 64 years	42,752	4,238,277	
12	65 to 74 years	25,632	2,581,994	
13	75 years and over	18,414	1,876,397	
88	Not available	11,586	1,096,662	
	Total	333,008	32,852,323	

**MARSTH** – Marital status (de facto)

Field: 64 Size: 1 Position: 128 Type: num

**Description:** Marital status (de facto)

Reported for: Persons in private households

Code	Description	Unweighted	Weighted	Includes
1	Never legally married (and not living common law)	133,790	13,135,010	
2	Legally married (and not separated)	131,207	12,841,375	
3	Living common law	32,024	3,122,464	
4	Separated (and not living common law)	6,657	668,922	
5	Divorced (and not living common law)	16,100	1,642,167	
6	Widowed (and not living common law)	13,230	1,338,042	
	Total	333,008	32,852,323	

SEX - Sex

Field: 93 Size: 1 Position: 177 Type: num

**Description:** Sex

Code	Description	Unweighted	Weighted	Includes
1	Female	169,288	16,627,109	
2	Male	163,720	16,120,871	
	Total	333,008	32,852,323	

**AGEIMM** – Immigration: Age at immigration

Field: 7 Size: 2 Position: 34-35 Type: num

**Description:** The variable Age\_Imm (Immigration: Age at immigration) indicates the age at immigration. Age at immigration is derived from responses to the questions on date of birth (Question 3) and year of immigration (Question 12). Age at immigration refers to the age at which an immigrant first obtained landed immigrant/permanent resident status. Immigrant refers to a person who is or has ever been a landed immigrant/permanent resident. This person has been granted the right to live in Canada permanently by immigration authorities. Some immigrants have resided in Canada for a number of years, while others have arrived recently. Some immigrants are Canadian citizens, while others are not. Most immigrants are born outside Canada, but a small number are born in Canada. In the 2011 National Household Survey, 'Immigrants' includes immigrants who landed in Canada prior to May 10, 2011. To obtain an estimate (subtotal) for 'Immigrants,' sum all categories with age at immigration. Users should note that comparisons of data for specific ages of immigration over time or between surveys can be affected by a number of factors, for example emigration and mortality among the immigrant population, survey methodology and respondent reporting patterns. For additional information on the collection and dissemination of age at immigration data, refer to the Place of Birth, Generation Status, Citizenship and Immigration Reference Guide, National Household Survey, 2011.

CAUTION - The variable Age at immigration is derived from the variables Year of immigration and Year of birth. An anomaly in the calculation of the age at immigration introduced an inconsistency between the variables Age at immigration and Age for a small number of respondents. Few entries are showing an age at immigration of one year older than their age. These cases should have been assigned an age at immigration equal to their age. Given the small number of cases affected and the fact that there is a difference of only one year in the given value and the value that should have been assigned, the impact on data quality for statistics produced with the age at immigration is marginal.

Reported for: Persons in private households who are, or have ever been, landed immigrants

Code	Description	Unweighted	Weighted	Includes
1	0 to 4 years	6,401	611,698	
2	5 to 9 years	6,028	578,557	
3	10 to 14 years	5,603	536,019	
4	15 to 19 years	6,072	586,577	
5	20 to 24 years	8,863	859,731	
6	25 to 29 years	9,944	948,687	
7	30 to 34 years	8,138	776,670	
8	35 to 39 years	5,667	537,514	
9	40 to 44 years	3,683	348,833	
10	45 to 49 years	2,227	210,083	
11	50 to 54 years	1,311	124,818	
12	55 to 59 years	915	86,987	
13	60 years and over	1,403	133,181	
88	Not available	4,335	408,979	
99	Not applicable	262,418	25,999,648	Non-immigrants and non-permanent residents
	Total	333,008	32,852,323	

**CITIZEN** – Citizenship: Citizenship status and type – Summary

Field: 16 Size: 1 Position: 46 Type: num

Description: The variable Citizen (Citizenship: Citizenship status and type – Summary) provides a summary of citizenship status and type. It is derived from single and multiple responses to the citizenship question (Question 10). Citizenship refers to the legal citizenship status of a person. Citizenship can be by birth or naturalization. A person may have more than one citizenship. A person may be stateless, that is, they may have no citizenship. Category (1) Canada, by birth includes persons who acquired Canadian citizenship at birth under the provisions of Canadian law. It includes persons who are citizens of Canada only and persons who are citizens of Canada and at least one other country. Category (2) Canada, by naturalization includes persons who were not Canadian citizens at birth but acquired citizenship under the provisions of Canadian law. They are immigrants to Canada who acquired Canadian citizenship through the citizenship application process. It includes persons who are citizens of Canada only and persons who are citizens of Canada and at least one other country. Category (3) Not a Canadian citizen includes persons who do not hold Canadian citizenship. Those persons could hold the citizenship of another country or they could be stateless, that is, they may have no citizenship. To obtain an estimate (subtotal) for 'Canadian citizen,' sum the following categories: (1) Canada, by birth; (2) Canada, by naturalization. This category includes persons who are citizens of Canada only and persons who are citizens of Canada and at least one other country. To obtain a detailed list of 'other' countries of citizenship, use the variable CITOTH (Citizenship (component): Other country of citizenship). For additional information on the collection and dissemination of citizenship data, refer to the Place of Birth, Generation Status, Citizenship and Immigration Reference Guide, National Household Survey, 2011.

Code	Description	Unweighted	Weighted	Includes
1	Canada, by birth	257,571	25,531,868	Canada, by birth only; Canada, by birth and at least one other country
2	Canada, by naturalization	52,800	5,065,791	Canada, by naturalization only; Canada, by naturalization and at least one other country
3	Not a Canadian citizen	19,381	1,841,583	Citizen of other country(ies) only; persons who are stateless
8	Not available	3,256	308,738	
	Total	333,008	32,852,323	

CITOTH - Citizenship (component): Other country of citizenship

Field: 17 Size: 1 Position: 47 Type: num

**Description:** This variable refers to the write-in responses that a respondent may have provided in the write-in area for 'Other country – Specify' in the citizenship question (Question 10). Citizenship refers to the legal citizenship status of a person. Citizenship can be by birth or naturalization. A person may have more than one citizenship. A person may be stateless, that is, they may have no citizenship. In the citizenship question, respondents could have reported Canadian citizenship by checking one of the two following categories: 'Canada, by birth' or 'Canada, by naturalization.' Information on Canadian citizenship is not included in the variable CITOTH. To obtain estimates for Canadian citizenship, use the variable Citizen (Citizenship: Citizenship status and type – Summary). Respondents who indicated no country of citizenship other than Canada are included in the counts for 'No other country of citizenship.' Respondents who reported United States as their single other country of citizenship are included in the counts for that country. Respondents who reported a single other country of citizenship in Americas (with the exception of the United States), in Africa, in Oceania, respondents who are stateless and respondents who reported more than one other country of citizenship are included in the counts for 'Other single and multiple citizenships other than Canadian.' For additional information on the classification of countries for the 2011 NHS refer to Appendix A. For additional information and dissemination of citizenship data, refer to the Place of Birth, Generation Status, Citizenship and Immigration Reference Guide, National Household Survey, 2011.

Code	Description	Unweighted	Weighted	Includes
1	United States	2,016	195,086	Citizenship of the United States only; Citizenship of the United States and of Canada
2	Europe	7,969	765,093	Citizenship of a single country in Europe only; citizenship of a single country in Europe and of Canada
3	Asia	12,331	1,161,795	Citizenship of a single country in Asia only; citizenship of a single country in Asia and of Canada
4	Other single and multiple citizenships other than Canadian	6,111	577,838	Citizenship of a single country in Americas (with the exception of the United States), in Africa or in Oceania only; Citizenship of a single country in Americas (with the exception of the United States), in Africa or in Oceania and of Canada; persons who are stateless; persons who reported multiple citizenship other than Canada; persons who reported multiple citizenships other than Canada and Canada
5	No other country of citizenship	301,325	29,739,431	Canadian citizenship only
8	Not available	3,256	,	
	Total	333,008	32,852,323	

**GENSTAT** – Generation status: Detailed

Field: 32 Size: 1 Position: 79 Type: num

**Description:** Generation status refers to whether or not the person or the person's parents were born in Canada. It identifies persons as being first generation, second generation or third generation or more. This variable is derived from responses to questions concerning the person's place of birth (Question 9) and the place of birth of his or her parents (Question 25). 'First generation' includes persons who were born outside Canada. For the most part, these are people who are now, or once were, immigrants to Canada. 'Second generation' includes persons who were born in Canada and had at least one parent born outside Canada. For the most part, these are the children of immigrants. 'Third generation or more' includes persons who were born in Canada with both parents born in Canada. For additional information on the collection and dissemination of generation status data, refer to the Place of Birth, Generation Status, Citizenship and Immigration Reference Guide, National Household Survey, 2011.

Reported for: Persons in private households

Code	Description	Unweighted	Weighted	Includes
1	First generation, respondent born outside Canada	74,596	7,137,420	
2	Second generation, respondent born in Canada, both parents born outside Canada	31,921	3,104,691	
3	Second generation, respondent born in Canada, one parent born outside Canada	25,503	2,513,341	
4	Third generation or more, respondent born in Canada, both parents born in Canada	199,207	19,825,288	
8	Not available	1,781	167,240	
	Total	333,008	32,852,323	

**IMMSTAT** – Immigration: Immigrant status

Field: 44 Size: 1 Position: 101 Type: num

Description: This variable indicates whether the respondent is a non-immigrant, an immigrant or a non-permanent resident. Immigrant status is derived from the responses to the citizenship question (Question 10) and the landed immigrant status question (Question 11). Non-immigrant refers to a person who is a Canadian citizen by birth. Immigrant refers to a person who is or has ever been a landed immigrant/permanent resident. This person has been granted the right to live in Canada permanently by immigration authorities. Some immigrants have resided in Canada for a number of years, while others have arrived recently. Some immigrants are Canadian citizens, while others are not. Most immigrants are born outside Canada, but a small number are born in Canada. In the 2011 National Household Survey, 'Immigrants' includes immigrants who landed in Canada prior to May 10, 2011. Non-permanent resident refers to a person from another country who has a work or study permit or who is a refugee claimant, and any non-Canadian born family member living in Canada with them. For additional information on the collection and dissemination of immigrant status data, refer to the Place of Birth, Generation Status, Citizenship and Immigration Reference Guide, National Household Survey, 2011.

Code	Description	Unweighted	Weighted	Includes
1	Non-permanent residents	3,582	347,953	
2	Non-immigrants	258,836	25,651,695	
3	Immigrants	70,590	6,748,333	
	Total	333,008	32,852,323	

POB - Place of birth: Detailed

Field: 79 Size: 1 Position: 157 Type: num

**Description:** Place of birth refers to the name of the country in which the person was born. The geographic location is specified according to boundaries current at the time the data are collected, not the boundaries at the time of birth. To obtain an estimate of the population 'Born outside Canada,' sum the categories for each country and region outside Canada. For additional information on the classification of countries for the 2011 NHS, refer to Appendix A. For additional information on the collection and dissemination of place of birth data, refer to the Place of Birth, Generation Status, Citizenship and Immigration Reference Guide, National Household Survey, 2011.

Reported for: Persons in private households

Code	Description	Unweighted	Weighted	Includes
1	Canada	257,410	25,514,753	
2	United States	3,019	294,491	
3	Europe	22,576	2,208,401	See Appendix A: Europe
4	Asia	33,787	3,182,848	See Appendix A: Asia
5	Other	14,703	1,403,348	See Appendix A: Americas – excludes United States; Africa; Oceania; and other
8	Not available	1,513	144,139	
	Total	333,008	32,852,323	

POBF - Place of birth of father: Detailed

Field: 80 Size: 1 Position: 158 Type: num

**Description:** Place of birth of father refers to the name of the country in which the respondent's father was born. The geographic location is specified according to boundaries current at the time the data are collected, not the boundaries at the time of birth. To obtain an estimate of the population 'Born outside Canada,' sum the categories for each country and region outside Canada. For additional information on the classification of countries for the 2011 NHS, refer to Appendix A. For additional information on the collection and dissemination of place of birth of father data, refer to the Place of Birth, Generation Status, Citizenship and Immigration Reference Guide, National Household Survey, 2011.

Code	Description	Unweighted	Weighted	Includes
1	Canada	212,270	21,103,889	
2	United States	4,590	454,426	
3	Europe	47,732	4,696,709	See Appendix A: Europe
4	Asia	45,681	4,310,232	See Appendix A: Asia
5	Other	21,222	2,038,585	See Appendix A: Americas – excludes United States; Africa; Oceania; and other
8	Not available	1,513	144,139	
	Total	333,008	32,852,323	

POBM - Place of birth of mother: Detailed

Field: 81 Size: 1 Position: 159 Type: num

**Description:** Place of birth of mother refers to the name of the country in which the respondent's mother was born. The geographic location is specified according to boundaries current at the time the data are collected, not the boundaries at the time of birth. To obtain an estimate of the population 'Born outside Canada,' sum the categories for each country and region outside Canada. For additional information on the classification of countries for the 2011 NHS, refer to the Appendix A. For additional information on the collection and dissemination of place of birth of mother data, refer to the Place of Birth, Generation Status, Citizenship and Immigration Reference Guide, National Household Survey, 2011.

**Reported for:** Persons in private households

Code	Description	Unweighted	Weighted	Includes
1	Canada	216,505	21,529,014	
2	United States	4,523	446,605	
3	Europe	44,187	4,339,012	See Appendix A: Europe
4	Asia	45,602	4,302,247	See Appendix A: Asia
5	Other	20,678	1,986,963	See Appendix A: Americas – excludes United States; Africa; Oceania; and other
8	Not available	1,513	144,139	
	Total	333,008	32,852,323	

**YRIMM** – Immigration: Year of immigration

Field: 112 Size: 1 Position: 368 Type: num

**Description:** The variable YRIMM (Immigration: Year of immigration) indicates the year of immigration. It refers to the year in which the immigrant first obtained his or her landed immigrant/permanent resident status. To obtain an estimate (subtotal) for 'Immigrants,' sum all years of immigration. Immigrant refers to a person who is or has ever been a landed immigrant /permanent resident. This person has been granted the right to live in Canada permanently by immigration authorities. Some immigrants have resided in Canada for a number of years, while others have arrived recently. Some immigrants are Canadian citizens, while others are not. Most immigrants are born outside Canada, but a small number are born in Canada. In the 2011 National Household Survey, 'Immigrants' includes immigrants who landed in Canada prior to May 10, 2011. Users should note that comparisons of individual years of immigration over time or between surveys can be affected by a number of factors, for example, emigration and mortality among the immigrant population, survey methodology and respondent reporting patterns. For additional information on the collection and dissemination of year of immigration data, refer to the Place of Birth, Generation Status, Citizenship and Immigration Reference Guide, National Household Survey, 2011.

Reported for: Persons in private households who are, or have ever been, landed immigrants

Code	Description	Unweighted	Weighted	Includes
1	Before 1981	21,509	2,117,810	
2	1981 to 1990	9,630	913,145	
3	1991 to 2000	15,764	1,484,003	
4	2001 to 2005	10,387	980,452	
5	2006 to 2011	11,713	1,102,104	Includes the first four months of 2011
8	Not available	1,587	150,818	
9	Not applicable	262,418	25,999,648	Non-immigrants and non-permanent residents
	Total	333,008	32,852,323	

**ABOID** – Aboriginal: Aboriginal identity – Detailed

Field: 5 Size: 1 Position: 31 Type: num

**Description:** 'Aboriginal identity' refers to whether the person reported being an Aboriginal person, that is, First Nations (North American Indian), Métis or Inuk (Inuit) and/or being a Registered or Treaty Indian (that is, registered under the *Indian Act* of Canada) and/or being a member of a First Nation or Indian band.

Aboriginal identity is derived from data collected in three questions: Aboriginal group (Question 18); Registered or Treaty Indian status (Question 20); and membership in a First Nation or Indian band (Question 21).

Aboriginal peoples of Canada are defined in the *Constitution Act, 1982*, Section 35 (2) as including the Indian, Inuit and Métis peoples of Canada. A person may report being in more than one of those three specific groups in Question 18.

To obtain an estimate (total) for 'Aboriginal identity' either use the variable AbDerr (Aboriginal: Aboriginal identity – Summary) or sum the first five categories of this variable, AbIdent (Aboriginal: Aboriginal identity – Detailed): (1) 'First Nations (North American Indian) single identity'; (2) 'Métis single identity'; (3) 'Inuk (Inuit) single identity'; (4) 'Multiple Aboriginal identities'; and (5) 'Aboriginal identities not included elsewhere.'

To obtain an estimate (subtotal) for 'Aboriginal single identity,' sum the categories: (1) 'First Nations (North American Indian) single identity'; (2) 'Métis single identity'; and (3) 'Inuk (Inuit) single identity.' The 'Aboriginal single identity' category includes persons who reported being one and only one of First Nations (North American Indian), Métis or Inuk (Inuit).

'First Nations (North American Indian) single identity' includes persons who reported being First Nations (North American Indian). This category includes persons who reported the single response of First Nations (North American Indian) but did not report being Métis or Inuk (Inuit).

'Métis single identity' includes persons who reported being Métis. This category includes persons who reported the single response of Métis but did not report being First Nations (North American Indian) or Inuk (Inuit).

'Inuk (Inuit) single identity' includes persons who reported being Inuk (Inuit). This category includes persons who reported the single response of Inuk (Inuit) but did not report being First Nations (North American Indian) or Métis.

'Multiple Aboriginal identities' includes persons who reported being any two or all three of the following: First Nations (North American Indian). Métis or Inuk (Inuit).

'Aboriginal identities not included elsewhere' includes persons who did not report being First Nations (North American Indian), Métis or Inuk (Inuit) but who did report Registered or Treaty Indian status and/or membership in a First Nation or Indian band.

'Non-Aboriginal identity' includes persons who did not report being First Nations (North American Indian), Métis or Inuk (Inuit), and also did not report Registered or Treaty Indian status or membership in a First Nation or Indian band.

### INCOMPLETELY ENUMERATED INDIAN RESERVES AND INDIAN SETTLEMENTS

Users should be aware that the estimates associated with this variable are more affected than most by the incomplete enumeration of certain Indian reserves and Indian settlements in the National Household Survey (NHS). The extent of the impact will depend on the geographic area under study. By variable and/or group, the issue of incompletely enumerated reserves has the greatest impact on NHS estimates for the total Aboriginal identity population, the First Nations (North American Indian) identity population, the total Aboriginal ancestry population, the First Nations (North American Indian) ancestry population, the Registered or Treaty Indian population, the population who reported membership in a First Nation or Indian Band and the population living on Indian reserves and Indian settlements. Estimates associated with other variables related to Aboriginal peoples, such as language and band housing, may also be more affected by the incomplete enumeration of certain Indian reserves and Indian settlements in the NHS. This issue does not have a significant impact on the estimates for variables associated with the Inuit or Métis populations, as they are less likely to live on reserve.

In 2011, there were a total of 36 Indian reserves and Indian settlements that were 'incompletely enumerated' in the NHS. For these reserves or settlements, NHS enumeration was either not permitted or was interrupted before it could be completed, or was not possible because of natural events (specifically forest fires in Northern Ontario).

Any historical comparison of Aboriginal data must include adjustments for incompletely enumerated reserves and settlements and for other changes in the definition and geography of reserves. There are two different adjustments that may be necessary. The first adjustment (Adjusted base) is used for comparison of the same areas across different collection periods. Only the Indian reserves and Indian settlements that participated in all comparison years are included when comparing data. The second adjustment (Area of residence) is used when comparing the on- or off-reserve populations over time. If the on- or off-reserve

categories are not required for the historical comparison, then only the Adjusted base variables are used. For more information on required adjustments to tables, please refer to notes attached to the Adjusted base and Area of residence variables.

Data tables that do not involve historical comparisons should not use the adjustments. The estimates in adjusted tables used for historical comparison may differ from those based on unadjusted data.

For additional information on the collection and dissemination of Aboriginal data, please refer to the Aboriginal Peoples Reference Guide, National Household Survey, 2011, and the Aboriginal Peoples Technical Report, National Household Survey, 2011.

Code	Description	Unweighted	Weighted	Includes
1	North American Indian single response	7,848	763,706	
2	Métis single response	4,506	451,526	
3	Inuit single response	577	53,584	
4	Multiple Aboriginal identity responses	100	9,769	
5	Aboriginal responses not included elsewhere	243	26,379	
6	Non-Aboriginal identity population	315,648	31,048,383	
8	Not available	4,086	394,633	
	Total	333,008	32,852,323	

BFNMEMB - Aboriginal: Membership in a First Nation or Indian band

Field: 9 Size: 1 Position: 37 Type: num

**Description:** Membership in a First Nation or Indian band refers to whether a person reported membership in a First Nation or Indian band. An Indian band is defined as a body of Indians for whose collective use and benefit lands have been set apart or money is held by the Crown, or who have been declared to be a band for the purpose of the *Indian Act*. Many Indian bands have elected to call themselves a First Nation and have changed their band name to reflect this. With the 1985 amendment to the *Indian Act* of Canada (Bill C-31), many Indian bands exercised the right to establish their own membership code, whereby it was not always necessary for a band member to be a Registered Indian according to the *Indian Act*. 'Member of a First Nation or Indian band' includes persons who reported membership in a First Nation or Indian band in Question 21. 'Not a member of a First Nation or Indian band' includes persons who did not report membership in a First Nation or Indian band in Question 21.

#### INCOMPLETELY ENUMERATED INDIAN RESERVES AND INDIAN SETTLEMENTS

Users should be aware that the estimates associated with this variable are more affected than most by the incomplete enumeration of certain Indian reserves and Indian settlements in the National Household Survey (NHS). The extent of the impact will depend on the geographic area under study. By variable and/or group, the issue of incompletely enumerated reserves has the greatest impact on NHS estimates for the total Aboriginal identity population, the First Nations (North American Indian) identity population, the total Aboriginal ancestry population, the First Nations (North American Indian) ancestry population, the Registered or Treaty Indian population, the population who reported membership in a First Nation or Indian Band and the population living on Indian reserves and Indian settlements. Estimates associated with other variables related to Aboriginal peoples, such as language and band housing, may also be more affected by the incomplete enumeration of certain Indian reserves and Indian settlements in the NHS. This issue does not have a significant impact on the estimates for variables associated with the Inuit or Métis populations, as they are less likely to live on reserve.

In 2011, there were a total of 36 Indian reserves and Indian settlements that were 'incompletely enumerated' in the NHS. For these reserves or settlements, NHS enumeration was either not permitted or was interrupted before it could be completed, or was not possible because of natural events (specifically forest fires in Northern Ontario).

Any historical comparison of Aboriginal data must include adjustments for incompletely enumerated reserves and settlements and for other changes in the definition and geography of reserves. There are two different adjustments that may be necessary. The first adjustment (Adjusted base) is used for comparison of the same areas across different collection periods. Only the Indian reserves and Indian settlements that participated in all comparison years are included when comparing data. The second adjustment (Area of residence) is used when comparing the on- or off-reserve populations over time. If the on- or off-reserve categories are not required for the historical comparison, then only the Adjusted base variables are used. For more information on required adjustments to tables, please refer to notes attached to the Adjusted base and Area of residence variables.

Data tables that do not involve historical comparisons should not use the adjustments. The estimates in adjusted tables used for historical comparison may differ from those based on unadjusted data.

For additional information on the collection and dissemination of Aboriginal data, please refer to the Aboriginal Peoples Reference Guide, National Household Survey, 2011, and the Aboriginal Peoples Technical Report, National Household Survey, 2011.

Code	Description	Unweighted	Weighted	Includes
1	Not a member of a First Nation or Indian band	322,854	31,765,965	
2	Member of a First Nation or Indian band	6,068	587,382	
8	Not available	4,086	394,633	
	Total	333,008	32,852,323	

**REGIND** – Aboriginal: Registered or Treaty Indian status

Field: 89 Size: 1 Position: 171 Type: num

**Description:** Registered or Treaty Indian status refers to whether or not a person reported being a Registered or Treaty Indian. 'Registered or Treaty Indian' includes persons who reported being a Registered or Treaty Indian in Question 20. Registered Indians are persons who are registered under the *Indian Act* of Canada. Treaty Indians are persons who belong to a First Nation or Indian band that signed a treaty with the Crown. Registered or Treaty Indians are sometimes also called Status Indians. 'Not a Registered or Treaty Indian' includes persons who did not report being a Registered or Treaty Indian in Question 20.

### INCOMPLETELY ENUMERATED INDIAN RESERVES AND INDIAN SETTLEMENTS

Users should be aware that the estimates associated with this variable are more affected than most by the incomplete enumeration of certain Indian reserves and Indian settlements in the National Household Survey (NHS). The extent of the impact will depend on the geographic area under study. By variable and/or group, the issue of incompletely enumerated reserves has the greatest impact on NHS estimates for the total Aboriginal identity population, the First Nations (North American Indian) identity population, the total Aboriginal ancestry population, the First Nations (North American Indian) ancestry population, the Registered or Treaty Indian population, the population who reported membership in a First Nation or Indian Band and the population living on Indian reserves and Indian settlements. Estimates associated with other variables related to Aboriginal peoples, such as language and band housing, may also be more affected by the incomplete enumeration of certain Indian reserves and Indian settlements in the NHS. This issue does not have a significant impact on the estimates for variables associated with the Inuit or Métis populations, as they are less likely to live on reserve.

In 2011, there were a total of 36 Indian reserves and Indian settlements that were 'incompletely enumerated' in the NHS. For these reserves or settlements, NHS enumeration was either not permitted or was interrupted before it could be completed, or was not possible because of natural events (specifically forest fires in Northern Ontario).

Any historical comparison of Aboriginal data must include adjustments for incompletely enumerated reserves and settlements and for other changes in the definition and geography of reserves. There are two different adjustments that may be necessary. The first adjustment (Adjusted base) is used for comparison of the same areas across different collection periods. Only the Indian reserves and Indian settlements that participated in all comparison years are included when comparing data. The second adjustment (Area of residence) is used when comparing the on- or off-reserve populations over time. If the on- or off-reserve categories are not required for the historical comparison, then only the Adjusted base variables are used. For more information on required adjustments to tables, please refer to notes attached to the Adjusted base and Area of residence variables.

Data tables that do not involve historical comparisons should not use the adjustments. The estimates in adjusted tables used for historical comparison may differ from those based on unadjusted data.

For additional information on the collection and dissemination of Aboriginal data, please refer to the Aboriginal Peoples Reference Guide, National Household Survey, 2011, and the Aboriginal Peoples Technical Report, National Household Survey, 2011

Code	Description	Unweighted	Weighted	Includes
1	Not a Registered Indian	322,744	31,751,709	
2	Registered Indian	6,178	601,638	
8	Not available	4,086	394,633	
	Total	333,008	32,852,323	

### Ethnic origin

ETHDER – Ethnic origin: Derived single and selected multiple ethnic origins

Field: 28 Size: 2 Position: 72-73 Type: num

**Description:** Ethnic origin refers to the ethnic or cultural origins of the respondent's ancestors. Respondents were asked to specify as many origins as applicable. Four lines were provided for write-in responses and up to six ethnic origins were retained. This variable provides a distribution of the total population by single responses and selected multiple responses to the ethnic origin question (Question 17). Due to the increasingly high proportion of respondents who report multiple origins in the National Household Survey, it is recommended that this variable only be used for very specific purposes. For most analyses, the variable ETOResps (Ethnic origin: Detailed total responses) is recommended for use. The abbreviation 'n.i.e.' means 'not included elsewhere.' The abbreviation 'n.o.s.' means 'not otherwise specified.' For additional information on the collection and dissemination of ethnic origin data, refer to the Ethnic Origin Reference Guide, National Household Survey, 2011.

**Reported for:** Persons in private households

Code	Description	Unweighted	Weighted	Includes
1	British Isles origins	24,358	2,504,718	Includes single responses of British Isles origins (see Appendix C)
2	French origins	11,462	1,123,506	Includes single responses of French origins (see Appendix C)
3	North American Aboriginal origins	5,916	568,450	Includes single responses of First Nations (North American Indian), Inuit and Métis
4	Other North American origins	59,878	5,953,885	Includes single responses of Other North American origins (see Appendix C)
5	European origins (excluding British Isles and French origins)	35,373	3,505,129	Includes single responses of European origins (excluding British Isles and French origins) – (see Appendix C)
6	Asian origins	41,463	3,924,102	Includes single responses of Asian origins (see Appendix C)
7	Other single origins	11,516	1,109,094	Includes single responses of all other ethnic origin responses (see Appendix C)
8	Multiple origins	138,956	13,664,464	Includes all multiple responses
88	Not available	4,086	394,633	
	Total	333,008	32,852,323	

VISMIN - Visible minority: Detailed

Field: 100 Size: 1 Position: 202 Type: num

**Description:** 'Visible minority' refers to whether a person belongs to a visible minority group as defined by the *Employment Equity Act* and, if so, the visible minority group to which the person belongs. The *Employment Equity Act* defines visible minorities as 'persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour.' The visible minority population consists mainly of the following groups: South Asian, Chinese, Black, Filipino, Latin American, Arab, Southeast Asian, West Asian, Korean and Japanese. The Visible minority variable is derived from information collected in Question 19: Population group and Question 18: Aboriginal group. Respondents who reported being Aboriginal in Question 18 are included in the category 'Aboriginal self-reporting.' These respondents were not required to answer the population group question (Question 19). All other respondents are classified based on their mark-in and write-in response(s) to the population group question (Question 19). For additional information on the collection and dissemination of visible minority data, refer to the Visible Minority and Population Group Reference Guide, National Household Survey, 2011.

Code	Description	Unweighted	Weighted	Includes
1	Visible minority	65,010	6,168,826	
2	Not a visible minority	267,636	26,546,013	
8	Not available	362	33,142	
	Total	333,008	32,852,323	

FOL - Language: First official language spoken

Field: 30 Size: 1 Position: 77 Type: num

**Description:** Refers to a variable specified within the framework of the application of the *Official Languages Act*. For additional information on the collection and dissemination of language data, refer to the Languages Reference Guide, National Household Survey, 2011.

Reported for: Persons in private households

Code	Description	Unweighted	Weighted	Includes
1	English only	247,656	24,479,859	
2	French only	76,086	7,388,545	
3	Both English and French	3,697	350,802	
4	Neither English nor French	5,569	528,775	
	Total	333,008	32,852,323	

**HLAEN** – Language: Home language (A) – English – component – Part A

Field: 37 Size: 1 Position: 92 Type: num

**Description:** This variable represents one of three possible answers provided by a respondent. Refers to the language spoken most often at home by the individual at the time of the National Household Survey. If more than one language was spoken, the language spoken most often by the individual was to be reported (English). For additional information on the collection and dissemination of language data, refer to the Languages Reference Guide, National Household Survey, 2011.

Reported for: Persons in private households

Code	Description	Unweighted	Weighted	Includes
0	False – Respondent did not report English as the language spoken most often at home	109,039	10,527,582	
1	True – Respondent reported English as the language spoken most often at home	223,969	22,220,399	
	Total	333,008	32,852,323	

**HLAFR** – Language: Home language (A) – French – component – Part A

Field: 38 Size: 1 Position: 93 Type: num

**Description:** This variable represents one of three possible answers provided by a respondent. Refers to the language spoken most often at home by the individual at the time of the National Household Survey. If more than one language was spoken, the language spoken most often by the individual was to be reported (French). For additional information on the collection and dissemination of language data, refer to the Languages Reference Guide, National Household Survey, 2011.

Code	Description	Unweighted	Weighted	Includes
0	False – Respondent did not report French as the language spoken most often at home	261,681	25,817,306	
1	True – Respondent reported French as the language spoken most often at home	71,327	6,930,675	
	Total	333,008	32,852,323	

**HLANO** – Language: Home language (A) – first write-in – component – Part A

Field: 39 Size: 2 Position: 94-95 Type: num

**Description:** This variable represents one of three possible answers provided by a respondent. Refers to the language spoken most often at home by the individual at the time of the National Household Survey. If more than one language was spoken, the language spoken most often by the individual was to be reported (first write-in). For additional information on the collection and dissemination of language data, refer to the Languages Reference Guide, National Household Survey, 2011.

Reported for: Persons in private households

Code	Description	Unweighted	Weighted	Includes
1	No non-official language	282,661	27,972,923	
2	Chinese languages	9,304	874,196	Includes responses from Chinese languages (see Appendix B)
3	Spanish	3,184	300,263	
4	Italian	1,624	165,219	
5	German	947	97,933	
6	Arabic	2,652	251,722	
7	Panjabi (Punjabi)	3,971	377,633	
8	Tagalog (Pilipino, Filipino)	2,921	274,290	
9	Portuguese	1,133	109,557	
10	All other single languages	20,596	1,949,388	See Appendix B
88	Not available	4,015	374,857	
	Total	333,008	32,852,323	

**HLBEN** – Language: Home language (B) – English – component – Part B

Field: 40 Size: 1 Position: 96 Type: num

**Description:** This variable represents one of three possible answers provided by a respondent. Refers to the language spoken on a regular basis at home by the individual at the time of the National Household Survey. If more than one language was spoken, the language spoken most often by the individual was to be reported (English). For additional information on the collection and dissemination of language data, refer to the Languages Reference Guide, National Household Survey, 2011.

**Reported for:** Persons in private households

Code	Description	Unweighted	Weighted	Includes
0	False – Respondent did not report English as the language spoken at home on a regular basis	311,292	30,672,676	
1	True – Respondent reported English as the language spoken at home on a regular basis	21,716	2,075,305	
	Total	333,008	32,852,323	

**HLBFR** – Language: Home language (B) – French – component – Part B

Field: 41 Size: 1 Position: 97 Type: num

**Description:** This variable represents one of three possible answers provided by a respondent. Refers to the language spoken on a regular basis at home by the individual at the time of the National Household Survey. If more than one language was spoken, the language spoken most often by the individual was to be reported (French). For additional information on the collection and dissemination of language data, refer to the Languages Reference Guide, National Household Survey, 2011.

Code	Description	Unweighted	Weighted	Includes
0	False – Respondent did not report French as the language spoken at home on a regular basis	325,033	31,990,280	
1	True – Respondent reported French as the language spoken at home on a regular basis	7,975	757,700	
	Total	333,008	32,852,323	

**HLBNO** – Language: Home language – first write-in – component – Part B

Field: 42 Size: 1 Position: 98 Type: num

**Description:** This variable represents one of three possible answers provided by a respondent. Refers to the language spoken on a regular basis at home by the individual at the time of the National Household Survey. If more than one language was spoken, the language spoken most often by the individual was to be reported (first write-in). For additional information on the collection and dissemination of language data, refer to the Languages Reference Guide, National Household Survey, 2011.

Reported for: Persons in private households

Code	Description	Unweighted	Weighted	Includes
0	False – Respondent did not report a non-official language as the language spoken at home on a regular basis	312,247	30,775,870	
1	True – Respondent reported a non-official language as the language spoken at home on a regular basis	20,761	1,972,110	
	Total	333,008	32,852,323	

KOL - Language: Official languages

Field: 46 Size: 1 Position: 108 Type: num

**Description:** Refers to the ability to conduct a conversation in English only, in French only, in both English and French or in none of the official languages of Canada. For additional information on the collection and dissemination of language data, refer to the Languages Reference Guide, National Household Survey, 2011.

Reported for: Persons in private households

Code	Description	Unweighted	Weighted	Includes
1	English only	225,303	22,351,881	
2	French only	41,735	4,088,220	
3	Both English and French	60,234	5,763,819	
4	Neither English nor French	5,736	544,061	
	Total	333,008	32,852,323	

LWAEN - Language: Language of work (A) - English - component - Part A

Field: 58 Size: 1 Position: 122 Type: num

**Description:** This variable represents one of three possible answers provided by a respondent. Refers to the language used most often at work by the individual at the time of the National Household Survey. If more than one language was used, the language used most often by the individual was to be reported (English). For additional information on the collection and dissemination of language data, refer to the Languages Reference Guide, National Household Survey, 2011.

Reported for: Persons in private households aged 15 years and over, who worked since January 1, 2010

Code	Description	Unweighted	Weighted	Includes
0	False – Respondent did not report English as the language used most often at work	41,938	4,051,881	
1	True – Respondent reported English as the language used most often at work	153,555	15,071,780	
9	Not applicable	137,515	13,624,319	Persons who did not work since January 1, 2010 and persons aged less than 15 years
	Total	333,008	32,852,323	

**LWAFR** – Language: Language of work (A) – French – component – Part A

Field: 59 Size: 1 Position: 123 Type: num

**Description:** This variable represents one of three possible answers provided by a respondent. Refers to the language used most often at work by the individual at the time of the National Household Survey. If more than one language was used, the language used most often by the individual was to be reported (French). For additional information on the collection and dissemination of language data, refer to the Languages Reference Guide, National Household Survey, 2011.

Reported for: Persons in private households aged 15 years and over, who worked since January 1, 2010

Code	Description	Unweighted	Weighted	Includes
0	False – Respondent did not report French as the language used most often at work	152,492	14,971,192	
1	True – Respondent reported French as the language used most often at work	43,001	4,152,469	
9	Not applicable	137,515	13,624,319	Persons who did not work since January 1, 2010 and persons aged less than 15 years
	Total	333,008	32,852,323	

LWANO - Language: Language of work (A) - first write-in - component - Part A

Field: 60 Size: 1 Position: 124 Type: num

**Description:** This variable represents one of three possible answers provided by a respondent. Refers to the language used most often at work by the individual at the time of the National Household Survey. If more than one language was used, the language used most often by the individual was to be reported (first write-in). For additional information on the collection and dissemination of language data, refer to the Languages Reference Guide, National Household Survey, 2011.

Reported for: Persons in private households aged 15 years and over, who worked since January 1, 2010

Code	Description	Unweighted	Weighted	Includes
0	False – Respondent did not report a non-official language as the language used most often at work	191,791	18,772,871	
1	True – Respondent reported a non-official language as the language used most often at work	3,702	350,791	
9	Not applicable	137,515	13,624,319	Persons who did not work since January 1, 2010 and persons aged less than 15 years
	Total	333,008	32,852,323	

LWBEN - Language: Language of work (B) - English - component - Part B

Field: 61 Size: 1 Position: 125 Type: num

**Description:** This variable represents one of three possible answers provided by a respondent. Refers to the language used on a regular basis at work by the individual at the time of the National Household Survey. If more than one language was used, the language used most often by the individual was to be reported (English). For additional information on the collection and dissemination of language data, refer to the Languages Reference Guide, National Household Survey, 2011.

Reported for: Persons in private households aged 15 years and over, who worked since January 1, 2010

Code	Description	Unweighted	Weighted	Includes
0	False – Respondent did not report English as the language used on a regular basis at work	183,434	17,959,569	
1	True – Respondent reported English as the language used on a regular basis at work	12,059	1,164,093	
9	Not applicable	137,515	13,624,319	Persons who did not work since January 1, 2010 and persons aged less than 15 years
	Total	333,008	32,852,323	

LWBFR - Language: Language of work (B) - French - component - Part B

Field: 62 Size: 1 Position: 126 Type: num

**Description:** This variable represents one of three possible answers provided by a respondent. Refers to the language used on a regular basis at work by the individual at the time of the National Household Survey. If more than one language was used, the language used most often by the individual was to be reported (French). For additional information on the collection and dissemination of language data, refer to the Languages Reference Guide, National Household Survey, 2011.

Reported for: Persons in private households aged 15 years and over, who worked since January 1, 2010

Code	Description	Unweighted	Weighted	Includes
0	False – Respondent did not report French as the language used on a regular basis at work	188,538	18,454,914	
1	True – Respondent reported French as the language used on a regular basis at work	6,955	668,747	
9	Not applicable	137,515	13,624,319	Persons who did not work since January 1, 2010 and persons aged less than 15 years
	Total	333,008	32,852,323	

LWBNO - Language: Language of work (B) - first write-in - component - Part B

Field: 63 Size: 1 Position: 127 Type: num

**Description:** This variable represents one of three possible answers provided by a respondent. Refers to the language used on a regular basis at work by the individual at the time of the National Household Survey. If more than one language was used, the language used most often by the individual was to be reported (first write-in). For additional information on the collection and dissemination of language data, refer to the Languages Reference Guide, National Household Survey, 2011.

Reported for: Persons in private households aged 15 years and over, who worked since January 1, 2010

Code	Description	Unweighted	Weighted	Includes
0	False – Respondent did not report a non-official language as the language used on a regular basis at work	190,839	18,678,119	
1	True – Respondent reported a non-official language as the language used on a regular basis at work	4,654	445,543	
9	Not applicable	137,515	13,624,319	Persons who did not work since January 1, 2010 and persons aged less than 15 years
	Total	333,008	32,852,323	

MTNEN - Language: Mother tongue (English) - component

Field: 69 Size: 1 Position: 139 Type: num

**Description:** This variable represents one of three possible answers provided by a respondent. Refers to the language first learned in childhood and still understood by the individual at the time of the National Household Survey (English). For additional information on the collection and dissemination of language data, refer to the Languages Reference Guide, National Household Survey, 2011.

Code	Description	Unweighted	Weighted	Includes
0	False – Respondent did not report English as mother tongue	140,313	13,517,020	
1	True – Respondent reported English as mother tongue	192,695	19,230,960	
	Total	333,008	32,852,323	

MTNFR - Language: Mother tongue (French) - component

Field: 70 Size: 1 Position: 140 Type: num

**Description:** This variable represents one of three possible answers provided by a respondent. Refers to the language first learned in childhood and still understood by the individual at the time of the National Household Survey (French). For additional information on the collection and dissemination of language data, refer to the Languages Reference Guide, National Household Survey, 2011.

Reported for: Persons in private households

Code	Description	Unweighted	Weighted	Includes
0	False – Respondent did not report French as mother tongue	260,692	25,711,267	
1	True – Respondent reported French as mother tongue	72,316	7,036,714	
	Total	333,008	32,852,323	

MTNNO - Language: Mother Tongue - First write-in - component

Field: 71 Size: 2 Position: 141-142 Type: num

**Description:** This variable represents one of three possible answers provided by a respondent. Refers to the language first learned in childhood and still understood by the individual at the time of the National Household Survey (first write-in). For additional information on the collection and dissemination of language data, refer to the Languages Reference Guide, National Household Survey, 2011.

Code	Description	Unweighted	Weighted	Includes
1	No non-official language	257,900	25,602,731	
2	Chinese languages	11,442	1,074,960	Includes responses from Chinese languages (see Appendix B)
3	Spanish	4,391	415,500	
4	Italian	4,284	425,043	
5	German	3,727	370,486	
6	Arabic	3,768	360,000	
7	Panjabi (Punjabi)	4,673	443,868	
8	Tagalog (Pilipino, Filipino)	4,208	395,700	
9	Portuguese	2,164	207,114	
10	All other single languages	32,436	3,077,721	See Appendix B
88	Not available	4,015	374,857	
	Total	333,008	32,852,323	

NOL - Language: Non-official language

Field: 75 Size: 2 Position: 149-150 Type: num

**Description:** Refers to languages, other than English or French, in which the respondent can conduct a conversation. For additional information on the collection and dissemination of language data, refer to the Languages Reference Guide, National Household Survey, 2011.

Code	Description	Unweighted	Weighted	Includes
1	No non-official language	246,537	24,497,821	
2	Chinese languages	10,403	979,074	
3	Spanish	7,369	701,051	
4	Italian	5,244	524,821	
5	German	4,120	408,424	
6	Arabic	4,040	385,676	
7	Panjabi (Punjabi)	3,827	365,281	
8	Tagalog (Pilipino, Filipino)	4,302	404,903	
9	Portuguese	2,321	223,158	
10	All other single languages	30,249	2,883,109	
11	Respondents with multiple non-official languages	10,581	999,805	Includes two or more non-official languages
88	Not available	4,015	374,857	
	Total	333,008	32,852,323	

ATTSCH - Education: Attendance at school

Field: 8 Size: 1 Position: 36 Type: num

Description: 'Attendance at school' refers to attendance at school at any time during the nine-month period between September 2010 and May 10, 2011. This variable applies to the population aged 15 years and over in private households. An individual's attendance could be either full time or part time (day or evening), even if the individual dropped out after registration. Attendance was counted only for courses which could be used as credits towards a certificate, diploma or degree from a recognized educational institution (elementary, junior high or secondary school; registered apprenticeship program (in-class portion), trade school, business school, community college, technical institute or CEGEP; or university). Recognized education institutions also included seminaries, schools of nursing, private business schools, private or public trade schools, institutes of technology, vocational schools, or schools for people who are deaf or blind. Attendance at school was not counted for training received from an employer unless it could be used as credit towards a certificate, diploma or degree from a recognized educational institution.

Data quality note: Users are advised that certification analysis of results from the 2011 NHS 'Attendance at school' question showed variations with the Labour Force Survey. It is believed that a small proportion of respondents interpreted the NHS question as 'Has this person ever attended a school, college, CEGEP or university?' rather than the actual question 'At any time since September 2010, has this person attended a school, college, CEGEP or university?' As a result, the 2011 NHS could have overestimated categories with small proportions of school attendance, such as older age groups. We recommend that the data on school attendance be used with caution.

For any other comments on data quality for this variable, refer to the Education Reference Guide, National Household Survey, 2011.

Reported for: Persons in private households aged 15 years and over

Code	Description	Unweighted	Weighted	Includes
1	Did not attend school	227,511	22,527,846	
2	Attended school	48,863	4,709,206	
9	Not applicable	56,634	5,510,929	Persons aged less than 15 years
	Total	333,008	32,852,323	

CIP2011 - Education: Major field of study, primary groupings (based on CIP Canada 2011)

Field: 15 Size: 2 Position: 44-45 Type: num

Description: 'Major field of study' refers to the predominant discipline or area of learning or training of a person's highest postsecondary certificate, diploma or degree. This variable applies to the population aged 15 years and over in private households, with a postsecondary certificate, diploma or degree. It uses the new Classification of Instructional Programs (CIP) Canada 2011 'primary groupings.' Major field of study write-in responses were assigned codes using the updated and revised CIP Canada 2011, as well as the older CIP Canada 2000 to facilitate comparison with other data sources. At the most detailed level, the CIP Canada 2011 consists of 1,688 instructional program classes represented by six-digit codes. Related instructional program classes can be grouped into 387 sub-series (four-digit codes) which can be grouped again to form 49 series (two-digit codes). There is also a variant of CIP Canada 2011 that consists of 13 primary groupings, 12 of which are used for the 2011 National Household Survey (NHS). The category which includes courses in personal improvement and leisure is not used. IMPORTANT NOTE: Some series and their sub-components are not used in the NHS: series 21, 32 to 37 and 53. We recommend that users not make comparisons between categories of the two classification systems on the basis of their labels. Even though many entries in the two classifications are similar, direct comparison could be inappropriate, given the numerous changes made at the detailed level to update the classification. In addition to changes specified by the new CIP2011 classification system, users who select both CIP2000 and CIP2011 classifications in their tables may encounter small counts of CIP2000-CIP2011 pairings from dissimilar fields of study. Such pairings are due to: (a) differing coding interpretations of insufficiently specific write-ins or write-ins involving multiple fields of study, (b) the use of some data processing routines for CIP2000 and CIP2011 codes that operate independently, and (c) an acceptable level of coding error. Theoretical concordances showing the conceptual relationships between CIP Canada 2000 and CIP Canada 2011 based on instructional class definitions are available at: http://www.statcan.gc.ca/concepts/concordances-classifications-eng.htm. For more information on the CIP classifications, see the Classification of Instructional Programs, Canada, 2000, Catalogue no. 12-590-XPE and the Classification of Instructional Programs, Canada 2011, Catalogue no. 12-590-X available from: http://www.statcan.gc.ca/concepts/classification-eng.htm. For any comments on data quality for this variable, refer to the Education Reference Guide, National Household Survey, 2011.

Reported for: Persons in private households aged 15 years and over

Code	Description	Unweighted	Weighted	Includes
1	01 Education	10,958	1,059,588	
2	02 Visual and performing arts, and communications technologies	5,101	501,452	
3	03 Humanities	7,867	762,273	
4	04 Social and behavioural sciences and law	14,561	1,415,288	
5	05 Business, management and public administration	31,693	3,077,644	
6	06 Physical and life sciences and technologies	5,220	503,183	
7	07 Mathematics, computer and information sciences	5,953	568,634	
8	08 Architecture, engineering, and related technologies	31,328	3,079,418	
9	09 Agriculture, natural resources and conservation	3,081	305,034	
10	10 Health and related fields	20,092	1,965,056	
11	11 Personal, protective and transportation services	8,480	847,548	
12	12 Other	23	2,075	
13	No postsecondary certificate, diploma or degree	120,773	12,099,632	
88	Not available	11,244	1,050,229	
99	Not applicable	56,634	5,510,929	Persons aged less than 15 years
	Total	333,008	32,852,323	

**HDGREE** – Education: Highest certificate, diploma or degree

Field: 35 Size: 2 Position: 89-90 Type: num

Description: Detailed information indicating the person's most advanced certificate, diploma or degree. This is a derived variable obtained from the educational qualifications questions, which asked for all certificates, diplomas and degrees to be reported. The general hierarchy used in deriving this variable (high school graduation, trades, college, university) is loosely tied to the 'in-class' duration of the various types of education. At the detailed level, someone who has completed one type of certificate, diploma or degree will not necessarily have completed the credentials listed below it in the hierarchy. For example, a registered apprenticeship graduate may not have completed a high school certificate or diploma, nor does an individual with a master's degree necessarily have a 'university certificate or diploma above the bachelor's level.' Although the hierarchy may not fit all programs perfectly, it gives a general measure of educational attainment. This variable applies to the population aged 15 years and over in private households. Data quality note: Data users should note that some respondents may not have reported their educational credentials correctly. Analysis of the trades and college categories suggests that some respondents reported their trades certificates as college certificates, or reported them in both the trades and college questions. As well, respondents may not have consistently interpreted the time periods in the college question. Comparisons with other data sources suggest that the category 'University certificate or diploma below the bachelor's level' was over-reported in the NHS. This category likely includes some responses that are actually college certificates or diplomas, bachelor's degrees or other types of education (e.g., university transfer programs, bachelor's programs completed in other countries, incomplete bachelor's programs, non-university professional designations). We recommend users interpret the results for the 'University certificate or diploma below the bachelor's level' category with caution. For any other comments on data quality for this variable, refer to the Education Reference Guide, National Household Survey, 2011.

Reported for: Persons in private households aged 15 years and over

Code	Description	Unweighted	Weighted	Includes
1	No certificate, diploma or degree	51,813	5,234,836	
2	High school diploma or equivalent	67,671	6,740,714	
3	Trades certificate or diploma (other than apprenticeship)	16,402	1,631,026	
4	Registered Apprenticeship certificate	11,735	1,180,439	
5	College, CEGEP or other non-university certificate or diploma	49,183	4,843,824	
6	University certificate or diploma below bachelor level	11,972	1,151,601	
7	Bachelor's degree	36,645	3,524,878	
8	University certificate, diploma or degree above bachelor level	20,956	1,988,309	University certificate or diploma above bachelor level, Degree in medicine, dentistry, veterinary medicine or optometry, Master's degree and Earned doctorate degree
88	Not available	9,997	941,424	
99	Not applicable	56,634	5,510,929	Persons aged less than 15 years
	Total	333,008	32,852,323	

### Education

LOC ST RES - Education: Location of study compared with province or territory of residence

Field: 49 Size: 1 Position: 112 Type: num

**Description:** This is a summary variable that indicates whether the 'Location of study' of the person's highest certificate, diploma or degree was the same province or territory where the person lived in at the time of the 2011 National Household Survey, a different Canadian province or territory or outside Canada. This variable is derived from 'Location of study' and province or territory of current residence. It applies to the population aged 15 years and over in private households, with a postsecondary certificate, diploma or degree. Data quality note: Users should be aware that some respondents may have reported the physical location of study rather than the location of the certificate, diploma or degree-granting institution. This could affect the responses of those who obtained a certificate, diploma or degree through a joint program or by distance learning with credentials granted in another province or country. In particular, a number of persons reported a location of study for a university credential in one of the territories (Yukon, Northwest Territories, Nunavut), even though there were no educational institutions in the territories with the authority to grant university degrees. For any other comments on data quality for this variable or 'Location of study,' refer to the Education Reference Guide, National Household Survey, 2011.

Reported for: Persons in private households aged 15 years and over with a postsecondary certificate, diploma or degree

Code	Description	Unweighted	Weighted	Includes
1	Same as province or territory of residence	111,510	10,905,122	
2	Another province or territory	15,450	1,514,071	
3	Outside Canada	25,200	2,397,048	
9	Not applicable	180,848	17,931,740	Persons aged less than 15 years and persons aged 15 years and over with no postsecondary certificate, diploma or degree
	Total	333,008	32,852,323	

### Education

**LOCSTUD** – Education: Location of study

Field: 50 Size: 2 Position: 113-114 Type: num

**Description:** This variable indicates the province or territory (in Canada) or country (outside Canada) of the institution from which the highest postsecondary certificate, diploma or degree was obtained. It is only reported for individuals aged 15 years and over in private households, with a postsecondary certificate, diploma or degree. Countries outside Canada are classified according to the Standard Classification of Countries and Areas of Interest (SCCAI) 2010. Respondents were asked to report location of study based on the geographic boundaries in effect as of May 2011. For more information on the SCCAI 2010 Classification and notes related to specific country names refer to:

http://www.statcan.gc.ca/subjects-sujets/standard-norme/sccai-ctpzi/2010/sccai-ctpzi-eng.htm. Data quality note: Users should be aware that some respondents may have reported the physical location of study rather than the location of the certificate, diploma or degree-granting institution. This could affect the responses of those who obtained a certificate, diploma or degree through a joint program or by distance learning with credentials granted in another province or country. In particular, a number of persons reported a location of study for a university credential in one of the territories (Yukon, Northwest Territories, Nunavut), even though there were no educational institutions in the territories with the authority to grant university degrees. For any other comments on data quality for this variable, refer to the Education Reference Guide, National Household Survey, 2011.

Reported for: Persons in private households aged 15 years and over with a postsecondary certificate, diploma or degree

Code	Description	Unweighted	Weighted	Includes
1	Atlantic	10,205	1,023,832	Newfoundland and Labrador, Prince Edward Island, Nova Scotia and New Brunswick
2	Quebec	34,572	3,321,029	
3	Ontario	46,739	4,594,274	
4	Prairies	20,759	2,039,085	Manitoba, Saskatchewan and Alberta
5	British Columbia	13,446	1,324,375	
6	Territories	98	8,948	Yukon, Northwest Territories and Nunavut
7	United States	3,287	318,777	
8	Other Americas	1,646	156,380	See Appendix A: Americas – excludes United States
9	Europe	7,135	689,107	See Appendix A: Europe
10	Eastern Asia	3,014	285,162	See Appendix A: Eastern Asia
11	Southeast and Southern Asia	6,184	577,918	See Appendix A: Southeast Asia and Southern Asia
12	Other countries and regions	3,042	286,644	See Appendix A: Africa, West Central Asia and the Middle East, Oceania, and other
88	Not available	5,160	486,868	
99	Not applicable	177,721	17,635,582	Persons aged less than 15 years and persons aged 15 years and over with no postsecondary certificate, diploma or degree
	Total	333,008	32,852,323	

### Education

**SSGRAD** – Education: Secondary (high) school diploma or equivalent

Field: 94 Size: 2 Position: 178-179 Type: num

**Description:** This variable refers to whether or not persons aged 15 years and over in private households have completed a secondary school or high school diploma, graduation certificate or its equivalent. This variable also indicates whether other educational qualifications are held or not. Examples of high school equivalency certificates are General Educational Development (GED) and Adult Basic Education (ABE). Data quality note: Data users should note that some respondents may not have reported their educational credentials correctly. Analysis of the trades and college categories suggests that some respondents reported their trades certificates as college certificates, or reported them in both the trades and college questions. As well, respondents may not have consistently interpreted the time periods in the college question. Comparisons with other data sources suggest that the category 'University certificate or diploma below the bachelor's level' was over-reported in the NHS. This category likely includes some responses that are actually college certificates or diplomas, bachelor's degrees or other types of education (e.g., university transfer programs, bachelor's programs completed in other countries, incomplete bachelor's programs, non-university professional designations). We recommend users interpret the results for the 'University certificate or diploma below the bachelor's level' category with caution. For any other comments on data quality for this variable, refer to the Education Reference Guide, National Household Survey, 2011.

Reported for: Persons in private households aged 15 years and over

Code	Description	Unweighted	Weighted	Includes
1	No high school diploma or equivalency certificate, without further completed schooling	51,813	5,234,836	
2	No high school diploma or equivalency certificate, with registered apprenticeship or other trade certificate	5,665	572,032	
3	No high school diploma or equivalency certificate, with college, CEGEP or other non-university certificate	1,580	161,593	
4	With high school diploma or equivalency certificate, without further completed schooling	67,671	6,740,714	
5	With high school diploma or equivalency certificate, with registered apprenticeship or other trade certificate	22,472	2,239,433	
6	With high school diploma or equivalency certificate, with college, CEGEP or other non-university certificate	47,603	4,682,231	
7	With high school diploma or equivalency certificate, with university certificate below bachelor	11,972	1,151,601	
8	With high school diploma or equivalency certificate, with bachelor's degree	36,645	3,524,878	
9	With high school diploma or equivalency certificate, with university certificate, diploma or degree above bachelor level	20,956	1,988,309	'University certificate, diploma or degree above bachelor level' includes the categories 'University certificate or diploma above bachelor level,' 'Degree in medicine, dentistry, veterinary medicine or optometry,' 'Master's degree' and 'Earned doctorate.'
88	Not available	9,997	941,424	
99	Not applicable	56,634	5,510,929	Persons aged less than 15 years
	Total	333,008	32,852,323	

### **Mobility**

**MOB1** – Mobility 1: Mobility status – Place of residence 1 year ago (2010)

Field: 65 Size: 1 Position: 129 Type: num

**Description:** Refers to the status of a person with regard to the place of residence on the reference day, May 10, 2011, in relation to the place of residence on the same date one year earlier. Persons who have not moved are referred to as non-movers and persons who have moved from one residence to another are referred to as movers. Movers include non-migrants and migrants. Non-migrants are persons who did move but remained in the same city, town, township, village or Indian reserve. Migrants include internal migrants who moved to a different city, town, township, village or Indian reserve within Canada. External migrants include persons who lived outside Canada at the earlier reference date.

**Reported for:** Persons in private households aged 1 year and over

Code	Description	Unweighted	Weighted	Includes
1	Non-movers	287,286	28,260,944	
2	Non-migrants	23,641	2,327,122	
3	Different CSD, same census division	3,374	345,006	
4	Different CD, same province	7,399	730,640	
5	Interprovincial migrants	2,271	221,621	
6	External migrants	2,987	286,338	
8	Not available	2,368	222,923	
9	Not applicable	3,682	353,386	Persons less than 1 year of age
	Total	333,008	32,852,323	

**MOB5** – Mobility 5: Mobility status – Place of residence 5 years ago (2006)

Field: 66 Size: 1 Position: 130 Type: num

**Description:** Refers to the status of a person with regard to the place of residence on the reference day, May 10, 2011, in relation to the place of residence on the same date five years earlier. Persons who have not moved are referred to as non-movers and persons who have moved from one residence to another are referred to as movers. Movers include non-migrants and migrants. Non-migrants are persons who did move but remained in the same city, town, township, village or Indian reserve. Migrants include internal migrants who moved to a different city, town, township, village or Indian reserve within Canada. External migrants include persons who lived outside Canada at the earlier reference date.

Reported for: Persons in private households aged 5 years and over

Code	Description	Unweighted	Weighted	Includes
1	Non-movers	192,761	18,989,673	
2	Non-migrants	65,534	6,452,732	
3	Different CSD, same census division	10,558	1,053,010	
4	Different CD, same province	24,161	2,383,238	
5	Interprovincial migrants	8,466	837,093	
6	External migrants	12,547	1,188,015	
9	Not applicable	18,981	1,844,220	Persons less than 5 years of age
	Total	333,008	32,852,323	

## **Mobility**

PR1 – Mobility 1: Province or territory of residence 1 year ago (2010)

Field: 84 Size: 2 Position: 163-164 Type: num

**Description:** Refers to the person's usual province or territory of residence on May 10, 2010 one year prior to the reference day, May 10, 2011. This concept applies to the Mobility status (1 year ago) subuniverse only.

Reported for: Persons in private households aged 1 year and over

Code	Description	Unweighted	Weighted	Includes
10	Newfoundland and Labrador	4,759	488,635	
11	Prince Edward Island	1,289	135,339	
12	Nova Scotia	8,640	873,098	
13	New Brunswick	7,033	717,361	
24	Quebec	77,661	7,511,725	
35	Ontario	125,483	12,374,412	
46	Manitoba	11,423	1,117,429	
47	Saskatchewan	9,426	952,312	
48	Alberta	34,602	3,427,342	
59	British Columbia	42,707	4,199,060	
63	Northern Canada	950	88,801	
88	Not available	2,366	222,742	
99	Not applicable	6,669	639,724	Persons less than 1 year of age and external migrants
	Total	333,008	32,852,323	

PR5 – Mobility 5: Province or territory of residence 5 years ago (2006)

Field: 85 Size: 2 Position: 165-166 Type: num

**Description:** Refers to the person's usual province or territory of residence on May 10, 2006, five years prior to the reference day, May 10, 2011. This concept applies to the Mobility status (5 years ago) subuniverse only.

Reported for: Persons in private households aged 5 years and over

Code	Description	Unweighted	Weighted	Includes
10	Newfoundland and Labrador	4,581	470,114	
11	Prince Edward Island	1,217	129,119	
12	Nova Scotia	8,262	836,330	
13	New Brunswick	6,757	692,378	
24	Quebec	72,736	7,043,763	
35	Ontario	116,719	11,527,873	
46	Manitoba	10,681	1,048,307	
47	Saskatchewan	8,835	893,826	
48	Alberta	31,465	3,116,928	
59	British Columbia	39,246	3,865,778	
63	Northern Canada	981	91,331	
99	Not applicable	31,528	3,032,234	Persons less than 5 years of age and external migrants
	Total	333,008	32,852,323	

**DIST** – JTW: POW Commuting distance capped maximum of 201 kilometres

Field: 21 Size: 1 Position: 53 Type: num

**Description:** Refers to the distance, in kilometres, between the respondent's residence and his or her usual workplace location capped at 201 kilometres. The variable usually relates to the individual's job held in the week prior to enumeration. However, if the person did not work during that week but had worked at some time since January 1, 2010, the information relates to the job held longest during that period. Note: Respondents who declared 'Worked outside Canada' or declared having 'No fixed workplace address' (such as bus drivers or truck drivers) do not belong in this variable's universe. For respondents who declared 'Worked at home,' their commuting distance will be 0 and they are classified in the 'Not applicable.' Workplace locations are coded to a geographic point location. This geographic point location is either a block face, a block, a collection unit or a census subdivision representative point. Commuting distance is calculated as the straight line distance between the residential block representative point and the workplace location representative point. Respondents who worked outside of the CMAs and CAs were coded to the census subdivision level of geography. Consequently, the CSD representative block was assigned. Assigned blocks may not represent the true workplace location. Some respondents have very large commuting distances which can distort statistics calculated on commuting distances. For this reason published commuting distance data which exceed more than 201.0 kilometres have been reduced to a maximum of 201.0 kilometres.

**Reported for:** Persons in private households aged 15 years and over, who worked at some time since January 1, 2010 at a usual workplace address

Code	Description	Unweighted	Weighted	Includes
1	Less than 5 km	56,715	5,533,026	
2	5 to 9.9 km	34,200	3,315,318	
3	10 to 14.9 km	20,087	1,950,027	
4	15 to 19.9 km	12,722	1,241,922	
5	20 to 24.9 km	8,151	793,368	
6	25 to 29.9 km	5,226	515,160	
7	Greater or equal to 30 km	17,338	1,725,270	
8	Not available	4,274	401,303	
9	Not applicable	174,295	17,272,586	Persons aged less than 15 years, persons who worked before 2010 or never worked, persons who worked at home or outside Canada, persons with no fixed workplace
	Total	333,008	32,852,323	

**DUR** – POW: Commuting duration

Field: 23 Size: 1 Position: 55 Type: num

**Description:** Refers to the commuting time (in minute) from home to the place of work. Applies to persons aged 15 years and over, in private households who worked for pay or in self-employment. The variable usually relates to the individual's job held in the week prior to enumeration. However, if the person did not work during that week but had worked at some time since January 1, 2010, the information relates to the job held longest during that period. Note: Respondents who declared 'working outside Canada' or declared 'working at home' do not belong in this variable's universe.

**Reported for:** Persons in private households aged 15 years and over, who worked at some time since January 1, 2010 at a usual workplace address, or had no fixed workplace address.

Code	Description	Unweighted	Weighted	Includes
1	Less than 15 minutes	52,863	5,190,004	
2	15 to 29 minutes	58,103	5,687,764	
3	30 to 44 minutes	35,761	3,487,494	
4	45 to 59 minutes	14,800	1,439,917	
5	60 minutes and over	15,986	1,560,282	
8	Not available	4,274	401,303	
9	Not applicable	151,221	14,981,217	Persons aged less than 15 years, persons who worked before 2010 or never worked, persons who worked at home or outside Canada
	Total	333,008	32,852,323	

**LEAVE** – POW: Departure time in hours and minutes

Field: 47 Size: 1 Position: 109 Type: num

**Description:** Refers to the time at which a respondent usually leave to go to work in hours and minutes. Applies to persons aged 15 years and over, in private households who worked for pay or in self-employment. The variable usually relates to the individual's job held in the week prior to enumeration. However, if the person did not work during that week but had worked at some time since January 1, 2010, the information relates to the job held longest during that period. Note: Respondents who declared 'working outside Canada' or declared 'working at home' do not belong in this variable's universe.

Reported for: Persons in private households aged 15 years and over, who worked at some time since January 1, 2010 at a

usual workplace address, or had no fixed workplace address.

Code	Description	Unweighted	Weighted	Includes
1	Between 5:00 a.m. and 5:59 a.m.	10,834	1,087,962	
2	Between 6:00 a.m. and 6:59 a.m.	31,391	3,098,840	
3	Between 7:00 a.m. and 7:59 a.m.	50,833	4,949,258	
4	Between 8:00 a.m. and 8:59 a.m.	39,171	3,803,567	
5	Between 9:00 a.m. and 3:59 p.m.	28,989	2,821,105	
6	Between 4:00 p.m. and 4:59 a.m.	16,295	1,604,729	
8	Not available	4,274	401,303	
9	Not applicable	151,221	14,981,217	Persons aged less than 15 years, persons who worked before 2010 or never worked, persons who worked at home or outside Canada
	Total	333,008	32,852,323	

**MODE** – JTW: Mode of transportation to work

Field: 67 Size: 1 Position: 131 Type: num

**Description:** Refers to the mode of transportation to go to work. The variable usually relates to the individual's job held in the week prior to enumeration. However, if the person did not work during that week but had worked at some time since January 1, 2010, the information relates to the job held longest during that period. Note: Respondents who declared 'Worked outside Canada' or declared 'Worked at home' do not belong in this variable's universe. Persons who indicated in the place of work question that they either had no fixed workplace address, or specified a usual place of work address, were asked to identify the mode of transportation they most frequently used to commute between home and work. Persons who use more than one mode of transportation were asked to identify the single mode they used for most of the travel distance. As a result, the question provides data on the primary mode of transportation to work. It does not measure multiple modes of transportation, nor does it measure seasonal variation in mode of transportation or trips made for purposes other than the commute between home and work.

**Reported for:** Persons in private households aged 15 years and over, who worked at some time since January 1, 2010 at a usual workplace address, or had no fixed workplace address.

Code	Description	Unweighted	Weighted	Includes
1	Bicycle	2,481	244,709	
2	Car, truck, van as driver	128,277	12,587,564	
3	Motorcycle	292	28,077	
4	Other mode	2,201	214,170	
5	Car, truck, van as passenger	11,379	1,101,748	
6	Public transit	22,385	2,154,108	
7	Walked	10,498	1,035,084	
8	Not available	4,274	401,303	
9	Not applicable	151,221	14,981,217	Persons aged less than 15 years, persons who worked before 2010 or never worked, persons who worked at home or outside Canada
	Total	333,008	32,852,323	

OCC - JTW: Vehicle occupancy

Field: 77 Size: 1 Position: 152 Type: num

**Description:** Refers to the number of individuals in a vehicle used to go to work. Applies to persons aged 15 years and over, in private households who worked for pay or in self-employment. The variable usually relates to the individual's job held in the week prior to enumeration. However, if the person did not work during that week but had worked at some time since January 1, 2010, the information relates to the job held longest during that period. Note: Only respondents who declared having a usual place of work or no fixed address and who declared using a car, truck or van as a driver or as a passenger are part of this variable's universe. Respondents were asked to identify the mode of transportation they most frequently used to commute between home and work. Persons who use more than one mode of transportation were asked to identify the single mode they used for most of the travel distance. As a result, the question provides data on the primary mode of transportation to work. It does not measure multiple modes of transportation, nor does it measure seasonal variation in mode of transportation or trips made for purposes other than the commute between home and work.

**Reported for:** Persons in private households aged 15 years and over, who worked at some time since January 1, 2010 at a usual workplace address, or had no fixed workplace address and who declared using a car, truck or van as a driver or as a

passenger.

Code	Description	Unweighted	Weighted	Includes
1	One person	114,363	11,219,494	
2	Two persons	20,948	2,045,300	
3	Three or more persons	4,345	424,518	
8	Not available	4,274	401,303	
9	Not applicable	189,078	18,657,365	Persons aged less than 15 years, persons who worked before 2010 or never worked, persons who worked at home or outside Canada, persons who did not use a car, truck or van as a driver or as a passenger
•	Total	333,008	32,852,323	

POWST - JTW: Place of work status

Field: 82 Size: 1 Position: 160 Type: num

**Description:** Refers to the classification of respondents according to whether they worked at home, outside Canada, had no fixed workplace or worked at a specific address (usual place of work) and whether this address is in the same census subdivision, in a different subdivision, a different census division or in a different province when compared to the place of residence. The variable usually relates to the individual's job held in the week prior to enumeration. However, if the person did not work during that week but had worked at some time since January 1, 2010, the information relates to the job held longest during that period.

Code	Description	Unweighted	Weighted	Includes
1	Worked at home	12,728	1,261,883	
2	No fixed address	23,074	2,291,369	
3	Worked outside Canada	978	95,015	
4	Worked in census subdivision (municipality) of residence	91,472	8,897,082	
5	Worked in a different census subdivision (municipality) within the census division (county) of residence	31,358	3,098,353	
6	Worked in a different census division (county)	29,524	2,875,886	
7	Worked in a different province	2,085	202,772	
8	Not available	4,274	401,303	
9	Not applicable	137,515	13,624,319	Persons who did not work since January 1, 2010 and persons aged less than 15 years
	Total	333,008	32,852,323	-

**PWPR** – JTW: Place of work province

Field: 88 Size: 2 Position: 169-170 Type: num

**Description:** Refers to the Place of work province. The variable usually relates to the individual's job held in the week prior to enumeration. However, if the person did not work during that week but had worked at some time since January 1, 2010, the information relates to the job held longest during that period. For respondents who declared 'Worked at home,' their Place of work province corresponds to their Place of residence province.

Reported for: Persons in private households aged 15 years and over, who worked at some time since January 1, 2010 at a usual workplace address or at home

Code	Description	Unweighted	Weighted	Includes
10	Newfoundland and Labrador	2,215	223,905	
11	Prince Edward Island	652	66,732	
12	Nova Scotia	4,361	437,371	
13	New Brunswick	3,588	361,980	
24	Quebec	40,025	3,854,455	
35	Ontario	64,871	6,339,524	
46	Manitoba	6,025	584,504	
47	Saskatchewan	4,909	493,142	
48	Alberta	18,904	1,864,295	
59	British Columbia	21,153	2,066,854	
63	Northern Canada	488	45,436	
88	Not available	4,273	401,213	
99	Not applicable	161,544	16,008,572	Persons aged less than 15 years, persons who worked before 2010 or never worked, persons who worked outside Canada, persons with no fixed workplace
	Total	333,008	32,852,323	·

**COW** – Labour: Class of worker (derived)

Field: 20 Size: 1 Position: 52 Type: num

**Description:** Applies to persons aged 15 years and over, in private households, who worked at some point in time since January 1, 2010. Employee: This category includes persons who worked for others in the context of an employer-employee relationship. This includes persons who worked for wages, salaries, commissions, tips, piece-rates, or payments 'in kind' (payments in goods or services rather than money). Self-employed: This category includes persons whose job consisted mainly of operating a business, farm or professional practice, alone or in partnership. This includes: operating a farm, whether the land is rented or owned; working on a freelance or contract basis to do a job (e.g., architects, private duty nurses); operating a direct distributorship selling and delivering products such as cosmetics, newspapers, brushes and cleaning products; and fishing with own equipment or with equipment in which the person has a share. The business can be incorporated or unincorporated. Self-employed persons include those with and those without paid help. Unpaid family workers: They are persons who work without pay in a business, farm or professional practice owned and operated by another family member living in the same dwelling.

Reported for: Persons in private households aged 15 years and over, who worked at some time since January 1, 2010

Code	Description	Unweighted	Weighted	Includes
1	Employee	173,445	16,955,663	
2	Unpaid family worker	502	49,571	
3	Self-employed, without paid help, incorporated	3,191	315,212	
4	Self-employed, with paid help, incorporated	4,278	419,790	
5	Self-employed, without paid help, unincorporated	9,122	902,978	
6	Self-employed, with paid help, unincorporated	3,284	322,617	
8	Not available	1,671	157,831	
9	Not applicable	137,515	13,624,319	Persons who did not work since January 1, 2010 and persons aged less than 15 years
	Total	333,008	32,852,323	

**FPTWK** – Labour: Full-time or part-time weeks worked in 2010

Field: 31 Size: 1 Position: 78 Type: num

**Description:** Applies to persons aged 15 years and over, in private households, who worked for pay or in self-employment in 2010. These persons were asked to report whether the weeks they worked in 2010 were full-time weeks (30 hours or more per week) or not, on the basis of all jobs held. Persons with a part-time job (less than 30 hours per week) for part of the year and a full-time job for another part of the year were to report the information for the job at which they worked the most weeks.

Reported for: Persons in private households aged 15 years and over, who worked for pay or in self-employment in 2010

Code	Description	Unweighted	Weighted	Includes
1	Worked mainly full-time weeks in 2010	147,140	14,434,587	
2	Worked mainly part-time weeks in 2010	42,131	4,086,134	
9	Not applicable	143,737	14,227,259	Persons aged less than 15 years, persons who did not work for pay or in self-employment in 2010
	Total	333,008	32,852,323	

**HRSWRK** – Labour: Hours worked for pay or in self-employment

Field: 43 Size: 2 Position: 99-100 Type: num

**Description:** Refers to the actual number of hours that persons aged 15 years and over, in private households, worked for pay or in self-employment at all jobs held in the week of Sunday, May 1 to Saturday, May 7, 2011. This includes hours worked for wages, salaries, tips, commissions, piece-rate payments or payments 'in kind' (payments in goods or services rather than money). Hours worked in one's own business, farm or professional practice or hours worked without pay in a family business, farm or professional practice, owned or operated by a relative living in the same household are also included. Excluded are hours during which the respondent was absent, with or without pay, for part of the week because of illness, vacation or other reasons.

Reported for: Persons in private households aged 15 years and over

Code	Description	Unweighted	Weighted	Includes
0	No hours of work	114,843	11,422,849	
1	1 to 9 hours of work	5,341	510,140	
2	10 to 19 hours of work	9,944	957,842	
3	20 to 29 hours of work	13,837	1,350,119	
4	30 to 37 hours of work	29,420	2,850,800	
5	38 to 40 hours of work	71,132	7,004,882	
6	41 to 49 hours of work	12,007	1,175,975	
7	50 to 59 hours of work	10,712	1,053,650	
8	60 to 69 hours of work	5,264	519,043	
9	70 to 79 hours of work	1,837	185,101	
10	80 hours or more of work	2,037	206,651	
99	Not applicable	56,634	5,510,929	Persons aged less than 15 years
	Total	333,008	32,852,323	

LFTAG - Labour: Labour force status

Field: 48 Size: 2 Position: 110-111 Type: num

**Description:** Refers to the labour market activity of the population aged 15 years and over, in private households, in the week of Sunday, May 1 to Saturday, May 7, 2011. Respondents were classified as either 'Employed,' 'Unemployed,' or 'Not in the labour force.' The labour force includes the employed and the unemployed.

Reported for: Persons in private households aged 15 years and over

Code	Description	Unweighted	Weighted	Includes
1	Employed – Worked in reference week	161,531	15,814,203	
2	Employed – Absent in reference week	8,132	792,055	
3	Unemployed – Temporary layoff – Did not look for work	1,699	172,022	
4	Unemployed – Temporary layoff – Looked for full-time work	1,703	167,578	
5	Unemployed – Temporary layoff – Looked for part-time work	156	14,628	
6	Unemployed – New job – Did not look for work	1,041	102,293	
7	Unemployed – New job – Looked for full-time work	1,132	110,906	
8	Unemployed – New job – Looked for part-time work	374	35,480	
9	Unemployed – Looked for full-time work	5,547	544,441	
10	Unemployed – Looked for part-time work	2,513	241,183	
11	Not in the labour force – Last worked in 2011	6,987	683,341	
12	Not in the labour force – Last worked in 2010	8,755	846,728	
13	Not in the labour force – Last worked before 2010	55,365	5,618,125	
14	Not in the labour force – Never worked	21,439	2,094,068	
99	Not applicable	56,634	5,510,929	Persons aged less than 15 years
_	Total	333,008	32,852,323	

LSTWRK - Labour: When last worked for pay or in self-employment

Field: 57 Size: 1 Position: 121 Type: num

**Description:** Refers to the year or period in which persons last worked for pay or in self-employment, even if only for a few days.

Reported for: Persons in private households aged 15 years and over

Code	Description	Unweighted	Weighted	Includes
1	Last worked before 2010	58,318	5,911,152	
2	Last worked in 2010	16,968	1,640,429	
3	Last worked in 2011	178,525	17,483,232	
4	Never worked	22,563	2,202,238	
9	Not applicable	56,634	5,510,929	Persons aged less than 15 years
	Total	333,008	32,852,323	

NAICS – Labour: Industry sectors (based on the NAICS 2007)

Field: 72 Size: 2 Position: 143-144 Type: num

**Description:** Refers to the general nature of the business carried out in the establishment where the person worked. If the person did not have a job during the week of Sunday, May 1 to Saturday, May 7, 2011, the data relate to the job of longest duration since January 1, 2010. Persons with two or more jobs were required to report the information for the job at which they worked the most hours. The 2011 National Household Survey industry data are produced according to the NAICS 2007. The NAICS provides enhanced industry comparability among the three North American Free Trade Agreement (NAFTA) trading partners (Canada, United States and Mexico). This classification consists of a systematic and comprehensive arrangement of industries structured into 20 sectors, 102 subsectors and 324 industry groups. The criteria used to create these categories are similarity of input structures, labour skills or production processes used by the establishment.

Code	Description	Unweighted	Weighted	Includes
1	Agriculture and other resource-based industries	8,397	841,418	
2	Construction industries	12,216	1,232,585	
3	Manufacturing industries	16,526	1,626,022	
4	Wholesale trade	7,486	731,891	
5	Retail trade	21,477	2,103,333	
6	Finance and real estate	11,206	1,087,998	
7	Health care and social services	20,251	1,983,392	
8	Educational services	14,248	1,366,853	
9	Business services	34,555	3,375,048	
10	Public Administration	13,243	1,277,494	
11	Other services	24,698	2,443,240	
88	Not available	11,190	1,054,387	
99	Not applicable	137,515	13,624,319	Persons who did not work since January 1, 2010 and persons aged less than 15 years
	Total	333,008	32,852,323	

**NOCEE** – Labour: Occupation (based on the NOC 2011)

Field: 73 Size: 2 Position: 145-146 Type: num

**Description:** Applies to persons aged 15 years and over, in private households, who worked since January 1, 2010. Refers to the kind of work persons were doing, as determined by their kind of work and the description of the main activities in their job. If the person did not have a job during the week of Sunday, May 1 to Saturday, May 7, 2011, the data relate to the job of longest duration since January 1, 2010. Persons with two or more jobs were to report the information for the job at which they worked the most hours. The National Occupational Classification (NOC) 2011 is composed of four levels of aggregation. There are 10 broad occupational categories containing 40 major groups that are further subdivided into 140 minor groups. At the most detailed level, there are 500 occupation unit groups. Occupation unit groups are formed on the basis of the education, training, or skill level required to enter the job, as well as the kind of work performed, as determined by the tasks, duties and responsibilities of the occupation. Here, the occupational unit groups are aggregated in 12 groups based on the need of the Employment Equity program.

Code	Description	Unweighted	Weighted	Includes
1	Managers	20,244	1,988,145	
2	Professionals	33,626	3,225,402	
3	Semi-professionals and technicians	18,736	1,812,798	
4	Supervisors	5,144	511,818	
5	Administrative and senior clerical personnel	11,930	1,156,625	
6	Skilled sales and service personnel	7,663	757,191	
7	Skilled crafts and trades workers	14,230	1,420,468	
8	Clerical personnel	12,407	1,209,470	
9	Intermediate sales and service personnel	24,379	2,399,065	
10	Semi-skilled manual workers	15,478	1,550,269	
11	Other sales and service personnel	16,596	1,633,415	
12	Other manual workers	5,996	606,022	
88	Not available	9,064	852,975	
99	Not applicable	137,515	13,624,319	Persons who did not work since January 1, 2010 and persons aged less than 15 years
	Total	333,008	32,852,323	-

**NOCS** – Labour: Occupation broad categories (based on the NOC 2011)

Field: 74 Size: 2 Position: 147-148 Type: num

**Description:** Applies to persons aged 15 years and over, in private households, who worked since January 1, 2010. Refers to the kind of work persons were doing, as determined by their kind of work and the description of the main activities in their job. If the person did not have a job during the week of Sunday, May 1 to Saturday, May 7, 2011, the data relate to the job of longest duration since January 1, 2010. Persons with two or more jobs were to report the information for the job at which they worked the most hours.

The National Occupational Classification (NOC) 2011 is composed of four levels of aggregation. There are 10 broad occupational categories containing 40 major groups that are further subdivided into 140 minor groups. At the most detailed level, there are 500 occupation unit groups. Occupation unit groups are formed on the basis of the education, training, or skill level required to enter the job, as well as the kind of work performed, as determined by the tasks, duties and responsibilities of the occupation.

Reported for: Persons in private households aged 15 years and over, who worked at some time since January 1, 2010

Code	Description	Unweighted	Weighted	Includes
1	0 Management occupations	20,244	1,988,145	
2	1 Business, finance and administration occupations	31,050	3,011,565	
3	2 Natural and applied sciences and related occupations	12,969	1,234,386	
4	3 Health occupations	11,442	1,112,761	
5	4 Occupations in education, law and social, community and government services	22,270	2,152,375	
6	5 Occupations in art, culture, recreation and sport	5,655	551,006	
7	6 Sales and service occupations	44,443	4,375,414	
8	7 Trades, transport and equipment operators and related occupations	25,904	2,599,165	
9	8 Natural resources, agriculture and related production occupations	4,109	418,947	
10	9 Occupations in manufacturing and utilities	8,343	826,922	
88	Not available	9,064	852,975	
99	Not applicable	137,515	13,624,319	Persons who did not work since January 1, 2010 and persons aged less than 15 years
	Total	333,008	32,852,323	

WKSWRK - Labour: Weeks worked in 2010

Field: 102 Size: 1 Position: 221 Type: num

**Description:** Refers to the number of weeks in 2010 during which persons worked for pay or in self-employment at all jobs held, even if only for a few hours. It includes weeks of paid vacation, weeks on sick leave with pay and weeks in which training was paid for by the employer.

Code	Description	Unweighted	Weighted	Includes
0	None – worked in 2011 only	6,222	602,940	
1	1 to 9 weeks of work in 2010	8,391	809,827	
2	10 to 19 weeks of work in 2010	11,928	1,154,090	
3	20 to 29 weeks of work in 2010	13,205	1,288,934	
4	30 to 39 weeks of work in 2010	11,225	1,092,176	
5	40 to 48 weeks of work in 2010	29,840	2,892,018	
6	49 to 52 weeks of work in 2010	114,682	11,283,676	
9	Not applicable	137,515	13,624,319	Persons who did not work since January 1, 2010 and persons aged less than 15 years
	Total	333,008	32,852,323	

WRKACT - Labour: Work activity in 2010

Field: 103 Size: 2 Position: 222-223 Type: num

**Description:** Refers to the number of weeks in which a person worked for pay or in self-employment in 2010 at all jobs held, even if only for a few hours, and whether these weeks were mostly full time (30 hours or more per week) or mostly part time (less than 30 hours per week). The term 'full-year full-time workers' refers to persons aged 15 years and over who worked 49 to 52 weeks mostly full time in 2010 for pay or in self-employment.

Code	Description	Unweighted	Weighted	Includes
1	Worked before 2010 or never worked	80,881	8,113,390	
2	Didn't work in 2010, worked in 2011	6,222	602,940	
3	Worked 1 to 13 weeks full time	6,028	586,748	
4	Worked 1 to 13 weeks part time	8,198	787,934	
5	Worked 14 to 26 weeks full time	9,783	960,445	
6	Worked 14 to 26 weeks part time	7,939	765,793	
7	Worked 27 to 39 weeks full time	8,103	791,902	
8	Worked 27 to 39 weeks part time	4,698	452,205	
9	Worked 40 to 48 weeks full time	22,994	2,232,262	
10	Worked 40 to 48 weeks part time	6,846	659,756	
11	Worked 49 to 52 weeks full time	100,232	9,863,230	
12	Worked 49 to 52 weeks part time	14,450	1,420,446	
99	Not applicable	56,634	5,510,929	Persons aged less than 15 years
_	Total	333,008	32,852,323	

EFDECILE - Income: Income decile group

Field: 25 Size: 2 Position: 57-58 Type: num

**Description:** The income decile group provides a rough ranking of the economic situation of a person based on his or her relative position in the economic families adjusted after-tax income distribution. The population in private households is sorted according to its adjusted after-tax family income and then divided into 10 equal groups each containing 10% of the population. Code 1 is the lowest income decile and 10 is the highest.

Reported for: Persons in economic families and persons not in economic families in private households

Code	Description	Unweighted	Weighted	Includes
1	Lowest decile	31,988	3,203,391	
2	Second decile	31,667	3,204,138	
3	Third decile	32,189	3,229,165	
4	Fourth decile	32,988	3,276,200	
5	Fifth decile	32,636	3,215,751	
6	Sixth decile	33,325	3,265,120	
7	Seventh decile	33,569	3,290,283	
8	Eighth decile	33,334	3,236,882	
9	Ninth decile	33,750	3,252,307	
10	Highest decile	34,398	3,276,729	
88	Not available	3,164	298,015	
	Total	333,008	32,852,323	

**EFDIMBM** – Income: Disposable income for MBM for all persons

Field: 26 Size: 6 Position: 59-64 Type: num

**Description:** Disposable income for the market basket measure (MBM) was created by Human Resources and Skills Development Canada (HRSDC), now known as Employment and Social Development Canada (ESDC), to approximate the disposable income available to an economic family or person not in an economic family to purchase the elements in HRSDC's MBM at the time. It is the amount of income remaining after deducting from economic family total income, the sum of income tax paid and non-discretionary spending for the MBM for all members and, for units in households that own the dwelling without a mortgage, adding the mortgage-free homeowner's advantage (an amount to represent typical savings compared to rent or ownership with a mortgage).

Reported for: Persons in economic families and persons not in economic families in private households

The value 888,888 stands for not available. Otherwise, this variable could be positive, negative or zero and is a rounded value. Values that would have been rounded to zero have been replaced by 1 or -1. In some cases, high values have been top-coded and low values have been bottom coded in this file.

**EMPIN** – Income: Employment income

Field: 27 Size: 7 Position: 65-71 Type: num

**Description:** Refers to total income received by persons aged 15 years and over during 2010 as wages and salaries, net income from unincorporated non-farm business and/or professional practice and net farm self-employment income.

**Reported for:** Persons in private households aged 15 years and over

The value 8,888,888 stands for not available. The value 9,999,999 stands for not applicable and is applied to all persons aged less than 15 years. Otherwise, this variable could be positive, negative or zero and is a rounded value of the amount received by the individual in 2010. Values that would have been rounded to zero have been replaced by 1 or -1. In some cases, high values have been top-coded and low values have been bottom coded in this file.

GTRFS – Income: Total government transfer payments

Field: 34 Size: 5 Position: 84-88 Type: num

**Description:** Refers to the total income from all transfer payments received by an individual 15 years of age and over from federal, provincial, territorial or municipal governments in calendar year 2010. This variable is derived by summing the amounts for the following sources: – Old Age Security pensions and Guaranteed Income Supplements; – Canada or Quebec Pension Plan benefits; – employment insurance benefits; – child benefits; – other income from government sources.

Reported for: Persons in private households aged 15 years and over

The value 88,888 stands for not available. The value 99,999 stands for not applicable and is applied to all persons aged less than 15 years. Otherwise, this variable could be positive or zero and is a rounded value of the amount received by the individual in 2010. Values that would have been rounded to zero have been replaced by 1.

INCTAX - Income: Income tax paid

Field: 45 Size: 6 Position: 102-107 Type: num

**Description:** Refers to all federal, provincial and territorial taxes paid on 2010 income. Federal, provincial and territorial taxes paid refer to taxes on income, after taking into account exemptions, deductions, non-refundable tax credits and the Quebec abatement. These data are obtained from the income tax files for persons who allowed access to their income tax data.

Reported for: Persons in private households aged 15 years and over

The value 888,888 stands for not available. The value 999,999 stands for not applicable and is applied to all persons aged less than 15 years. Otherwise, this variable could be positive or zero and is a rounded value of the amount paid by the individual in 2010. Values that would have been rounded to zero have been replaced by 1. In some cases, high values have been top-coded in this file.

**LOLICOA** – Income: Low income status based on LICO-AT

Field: 51 Size: 1 Position: 115 Type: num

**Description:** The code values for this variable indicate the position of each member of an economic family and each person not in an economic family in relation to Statistics Canada's low income cut-offs (LICO-AT). This variable is suitable to obtain a count of persons or to classify the population. The prevalence of low income is usually expressed as the percentage of the applicable population in private households that are below the low income cut-offs.

**Reported for:** Persons in economic families and persons not in economic families aged 15 years and over in private households, excluding persons living in the Yukon, Northwest Territories and Nunavut

Code	Description	Unweighted	Weighted	Includes
1	Member of a non-low income economic family or non-low income person aged 15 years and over not in an economic family	292,823	28,757,432	
2	Member of a low income economic family or low income person aged 15 years and over not in an economic family	36,161	3,612,143	
8	Not available	2,901	274,290	
9	Not applicable	1,123	104,115	Persons living in the Yukon, Northwest Territories and Nunavut
	Total	333,008	32,852,323	

LOLICOB - Income: Low income status based on LICO-BT

Field: 52 Size: 1 Position: 116 Type: num

**Description:** The code values for this variable indicate the position of each member of an economic family and each person not in an economic family in relation to Statistics Canada's before-tax low income cut-offs (LICO-BT). This variable is suitable to obtain a count of persons or to classify the population. The prevalence of low income is usually expressed as the percentage of the applicable population in private households that are below the low income cut-offs.

Reported for: Persons in economic families and persons not in economic families aged 15 years and over in private

households, excluding persons living in the Yukon, Northwest Territories and Nunavut

Code	Description	Unweighted	Weighted	Includes
1	Member of a non-low income economic family or non-low income person aged 15 years and over not in an economic family	280,695	27,527,224	
2	Member of a low income economic family or low income person aged 15 years and over not in an economic family	48,289	4,842,351	
8	Not available	2,901	274,290	
9	Concept not applicable	1,123	104,115	Persons living in the Yukon, Northwest Territories and Nunavut
	Total	333.008	32.852.323	

LOLIMA - Income: Low income status based on LIM-AT

Field: 53 Size: 1 Position: 117 Type: num

**Description:** The code values for this variable indicate the position of each member of a household in relation to Statistics Canada's after-tax low-income measure (LIM-AT). This variable is suitable to obtain a count of persons or to classify the population. The prevalence of low income is usually expressed as the percentage of the applicable population in private households that are below the low-income line.

Reported for: Persons in private households, excluding persons living in the Yukon, Northwest Territories and Nunavut

Code	Description	Unweighted	Weighted	Includes
1	Member of a non-low income household	280,713	27,505,737	
2	Member of a low income household	48,271	4,863,838	
8	Not available	2,901	274,290	
9	Not applicable	1,123	104,115	Persons living in the Yukon, Northwest Territories and Nunavut
	Total	333,008	32,852,323	

LOLIMB - Income: Low income status based on LIM-BT

Field: 54 Size: 1 Position: 118 Type: num

**Description:** The code values for this variable indicate the position of each member of a household in relation to Statistics Canada's before-tax low-income measure (LIM-BT). This variable is suitable to obtain a count of persons or to classify the population. The prevalence of low income is usually expressed as the percentage of the applicable population in private households that are below the low-income line.

Reported for: Persons in private households, excluding persons living in the Yukon, Northwest Territories and Nunavut

Code	Description	Unweighted	Weighted	Includes
1	Member of a non-low income household	269,871	26,406,742	
2	Member of a low income household	59,113	5,962,833	
8	Not available	2,901	274,290	
9	Concept not applicable	1,123	104,115	Persons living in the Yukon, Northwest Territories and Nunavut
	Total	333,008	32,852,323	

**LOLIMMI** – Income: Low income status based on LIM-MI

Field: 55 Size: 1 Position: 119 Type: num

**Description:** The code values for this variable indicate the position of each member of a household in relation to Statistics Canada's market income low-income measure (LIM-MI). This variable is suitable to obtain a count of persons or to classify the population. The prevalence of low income is usually expressed as the percentage of the applicable population in private households that are below the low-income line.

Reported for: Persons in private households, excluding persons living in the Yukon, Northwest Territories and Nunavut

Code	Description	Unweighted	Weighted	Includes
1	Member of a non-low income household	243,892	23,761,500	
2	Member of a low income household	85,092	8,608,075	
8	Not available	2,901	274,290	
9	Concept not applicable	1,123	104,115	Persons living in the Yukon, Northwest Territories and Nunavut
	Total	333,008	32,852,323	

**LOMBM** – Income: Low income status based on MBM

Field: 56 Size: 1 Position: 120 Type: num

**Description:** The code values for this variable indicate the position of each member of an economic family and each person not in an economic family in relation to HRSDC's market basket measure low-income line (MBM). This variable is suitable to obtain a count of persons or to classify the population. The prevalence of low income is usually expressed as the percentage of the applicable population in private households that are below the low income line.

**Reported for:** Persons in economic families and persons not in economic families in private households, excluding persons living in the Yukon, Northwest Territories and Nunavut

Code	Description	Unweighted	Weighted	Includes
1	Member of a non-low income economic family or non-low income person aged 15 years and over not in an economic family	285,632	28,027,302	
2	Member of a low income economic family or low income person aged 15 years and over not in an economic family	43,352	4,342,273	
8	Not available	2,901	274,290	
9	Concept not applicable	1,123	104,115	Persons living in the Yukon, Northwest Territories and Nunavut
	Total	333,008	32,852,323	

MRKINC - Income: Market income

Field: 68 Size: 7 Position: 132-138 Type: num

**Description:** Refers to the sum of employment income (wages and salaries, net farm income and net income from a non-farm unincorporated business and/or professional practice), investment income, retirement pensions, superannuation and annuities (including those from Registered Retirement Savings Plans [RRSPs] and Registered Retirement Income Funds [RRIFs]) and other money income. It is equivalent to total income minus all government transfer payments, and is also referred to as income before transfers and taxes. This variable does not include net capital gains or losses.

Reported for: Persons in private households aged 15 years and over

The value 8,888,888 stands for not available. The value 9,999,999 stands for not applicable and is applied to all persons aged less than 15 years. Otherwise, this variable could be positive, negative or zero and is a rounded value of the amount received by the individual in 2010. Values that would have been rounded to zero have been replaced by 1 or -1. In some cases, high values have been top-coded and low values have been bottom coded in this file.

**TOTINC** – Income: Total income

Field: 97 Size: 7 Position: 182-188 Type: num

**Description:** Refers to the total money income received from the following sources during the calendar year 2010 by persons aged 15 years and over: wages and salaries (total); net farm self-employment income; net non-farm income from unincorporated business and/or professional practice; child benefits; Old Age Security pension and Guaranteed Income Supplement; benefits from Canada or Quebec Pension Plan; benefits from Employment Insurance; other income from government sources; dividends and interest on bonds, deposits, savings certificates and other investment income; retirement pensions, superannuation and annuities, including those from RRSPs and RRIFs; other money income. Net capital gains and losses are not included in this definition.

Reported for: Persons in private households aged 15 years and over

The value 8,888,888 stands for not available. The value 9,999,999 stands for not applicable and is applied to all persons aged less than 15 years. Otherwise, this variable could be positive, negative or zero and is a rounded value of the amount received by the individual in 2010. Values that would have been rounded to zero have been replaced by 1 or -1. In some cases, high values have been top-coded and low values have been bottom coded in this file.

**TOTINC AT** – Income: After-tax income

Field: 98 Size: 6 Position: 189-194 Type: num

**Description:** Refers to total income minus federal, provincial and territorial income taxes paid for calendar year 2010. Total income refers to income from all sources, including employment income, income from government programs, pension income, investment income and any other money income. Net capital gains and losses are not included in this definition. Federal, provincial and territorial taxes paid refer to taxes on income, after taking into account exemptions, deductions, non-refundable tax credits and the Quebec abatement.

Reported for: Persons in private households aged 15 years and over

The value 888,888 stands for not available. The value 999,999 stands for not applicable and is applied to all persons aged less than 15 years. Otherwise, this variable could be positive, negative or zero and is a rounded value of the amount received by the individual in 2010. Values that would have been rounded to zero have been replaced by 1 or -1. In some cases, high values have been top-coded and low values have been bottom coded in this file.

**BEDRM** – Number of bedrooms

Field: 10 Size: 1 Position: 38 Type: num

**Description:** Refers to all rooms in a private dwelling that are designed mainly for sleeping purposes even if they are now used for other purposes, such as guest rooms and television rooms. Also included are rooms used as bedrooms now, even if they were not originally built as bedrooms, such as bedrooms in a finished basement.

Bedrooms exclude rooms designed for another use during the day such as dining rooms and living rooms even if they may be used for sleeping purposes at night. By definition, one-room private dwellings such as studio apartments have zero bedrooms.

Data quality note – In the 2011 National Household Survey (NHS), a large proportion of records with 0 bedroom dwellings and 1 room dwellings was affected by respondent error (such as reporting more bedrooms than rooms). These errors were resolved during data processing and the results are consistent with other surveys. However, it is possible that in some instances or in small geographic areas the processed result is not consistent with the respondent's true situation. For more information, please consult the Housing Reference Guide, National Household Survey, 2011 Catalogue no. 99-014-X2011007.

Reported for: Persons in private households

Code	Description	Unweighted	Weighted	Includes
0	No bedrooms	1,922	196,721	
1	1 bedroom	25,156	2,562,930	
2	2 bedrooms	65,447	6,546,859	
3	3 bedrooms	126,741	12,438,061	
4	4 bedrooms	79,966	7,744,849	
5	5 bedrooms or more	31,913	3,073,361	
8	Not available	1,863	185,201	
	Total	333,008	32,852,323	

**BUILT** – Period of construction

Field: 11 Size: 2 Position: 39-40 Type: num

**Description:** Refers to the period in time during which the building or dwelling was originally constructed.

This refers to the period in which the building was originally built, not the time of any later remodelling, additions or conversions.

Respondents were asked to indicate the period of construction, to the best of their knowledge.

Code	Description	Unweighted	Weighted	Includes
1	1920 or before	18,156	1,828,260	
2	1921 to 1945	16,327	1,628,262	
3	1946 to 1960	40,009	3,966,272	
4	1961 to 1970	40,685	4,030,940	
5	1971 to 1980	58,450	5,758,435	
6	1981 to 1990	54,684	5,332,082	
7	1991 to 1995	23,804	2,320,161	
8	1996 to 2000	23,638	2,301,423	
9	2001 to 2005	29,461	2,868,762	
10	2006 to 2011	27,794	2,713,384	
	Total	333,008	32,852,323	

**CONDO** - Tenure - Condominium

Field: 19 Size: 1 Position: 51 Type: num

**Description:** Refers to whether or not the private dwelling is part of a condominium development. Dwellings that are in the process of becoming registered condominiums are included as condominiums.

A condominium is a residential complex in which dwellings are owned individually while land and common elements are held in joint ownership with others.

Reported for: Persons in private households

Code	Description	Unweighted	Weighted	Includes
0	Not part of a condominium development	299,118	29,430,993	
1	Part of a condominium development	32,027	3,131,787	
8	Not available	1,863	185,201	
	Total	333,008	32,852,323	

**DTYPE** – Structural type of dwelling

Field: 22 Size: 1 Position: 54 Type: num

**Description:** Refers to the structural characteristics and/or dwelling configuration, that is, whether the dwelling is a detached single house, an apartment in a high-rise building, a row house, a mobile home, etc.

Reported for: Persons in private households

Code	Description	Unweighted	Weighted	Includes
1	Single-detached house	206,852	20,250,833	
2	Semi-detached house	17,780	1,726,479	
3	Row house	20,872	2,039,918	
4	Apartment or flat in a duplex	17,582	1,723,729	
5	Apartment in a building that has five or more storeys	22,625	2,251,708	
6	Apartment in a building that has fewer than five storeys	42,831	4,300,885	
7	Other single-attached house	695	68,094	
8	Movable dwelling	3,771	386,334	
	Total	333,008	32,852,323	

**FCOND** – Condominium fees

Field: 29 Size: 3 Position: 74-76 Type: num

**Description:** Refers to monthly payments for maintenance and various condominium services.

Although the condominium status question is asked to owner and renter households, the condominium fee question is only asked to owners. Renters of condominiums are not usually responsible for the direct payment of condominium fees.

**Reported for:** Persons in private households in owner-occupied non-farm dwellings which form part of a condominium development.

The value 888 stands for not available. The value 999 stands for not applicable and is applied to persons in farm dwellings, tenant-occupied dwellings, owner-occupied dwellings not part of a condominium and band dwellings. Otherwise, this variable is always positive and is a rounded value of the monthly payments. In some cases, high values have been top-coded in this file.

**GROSRT** - Gross rent

Field: 33 Size: 4 Position: 80-83 Type: num

**Description:** Average monthly total of all shelter expenses paid by households that rent their dwelling. Gross rent includes, where applicable, the monthly rent and the costs of electricity, heat, water and other municipal services.

Reported for: Persons in private households in tenant-occupied non-farm dwellings

The value 8,888 stands for not available. The value 9,999 stands for not applicable and is applied to persons in farm dwellings, and owner-occupied dwellings. Otherwise, this variable could be positive or zero and is a rounded amount paid by tenant-occupied households. In some cases, high values have been top-coded in this file.

**NOS** – Housing suitability

Field: 76 Size: 1 Position: 151 Type: num

**Description:** Housing suitability refers to whether a private household is living in suitable accommodations according to the National Occupancy Standard (NOS); that is, whether the dwelling has enough bedrooms for the size and composition of the household. A household is deemed to be living in suitable accommodations if its dwelling has enough bedrooms, as calculated using the NOS.

Housing suitability and the National Occupancy Standard (NOS) were developed by Canada Mortgage and Housing Corporation (CMHC) through consultations with provincial housing agencies.

Reported for: Persons in private households

Code	Description	Unweighted	Weighted	Includes
1	Suitable	296,108	29,234,447	
2	Not suitable	35,037	3,328,333	
8	Not available	1,863	185,201	
	Total	333,008	32,852,323	

**OMP** – Owner's major payment

Field: 78 Size: 4 Position: 153-156 Type: num

**Description:** Refers to the total average monthly payments made by owner households to secure shelter. Owner's major payments include, where applicable, payments for electricity, oil, gas, coal, wood or other fuels, water and other municipal services, monthly mortgage payments, property taxes (municipal and school) and condominium fees.

Reported for: Persons in private households in owner-occupied non-farm dwellings

The value 8,888 stands for not available. The value 9,999 stands for not applicable and is applied to persons in farm dwellings, tenant-occupied dwellings and band housing. Otherwise, this variable could be positive or zero and is a rounded amount paid by owner households. In some cases, high values have been top-coded in this file.

**PRESMORTG** – Presence of mortgage

Field: 86 Size: 1 Position: 167 Type: num

**Description:** Refers to whether regular monthly mortgage or debt payments for the dwelling are made.

Reported for: Persons in private households in owner-occupied non-farm dwellings

Code	Description	Unweighted	Weighted	Includes
1	Without mortgage	85,602	8,398,411	
2	With mortgage	159,244	15,489,833	
8	Not available	1,863	185,201	
9	Not applicable	86,299	8,674,536	Farm dwellings, tenant-occupied dwellings and band housing
	Total	333,008	32,852,323	

**REPAIR** – Condition of dwelling

Field: 91 Size: 1 Position: 174 Type: num

**Description:** Refers to whether, in the judgement of the respondent, the dwelling is in need of repairs (excluding desirable remodelling or additions).

The 'regular maintenance needed' category includes dwellings where only regular maintenance such as painting or furnace cleaning is required.

The 'minor repairs needed' category includes dwellings needing only minor repairs such as dwellings with missing or loose floor tiles, bricks or shingles or defective steps, railing or siding.

The 'major repairs needed' category includes dwellings needing major repairs such as dwellings with defective plumbing or electrical wiring and dwellings needing structural repairs to walls, floors or ceilings.

Data quality note – The 2011 National Household Survey (NHS) estimate for the percentage of dwellings requiring major repair in Nunavut was higher than the comparable rate in the 2009/2010 Nunavut Housing Needs Survey. For provinces, other territories and Canada, the percentage of dwellings requiring major repairs in the NHS was not statistically different when compared to other surveys. For more information, please consult the Housing Reference Guide, National Household Survey, 2011 Catalogue no. 99-014-X2011007.

### Reported for: Persons in private households

Code	Description	Unweighted	Weighted	Includes
1	Regular maintenance needed	222,007	21,887,456	
2	Minor repairs needed	86,675	8,437,566	
3	Major repairs needed	24,326	2,422,959	
	Total	333.008	32,852,323	

ROOM - Rooms, number of

Field: 92 Size: 2 Position: 175-176 Type: num

**Description:** Refers to the number of rooms in a private dwelling. A room is an enclosed area within a private dwelling which is finished and suitable for year round living. The number of rooms of a private dwelling includes kitchens, bedrooms and finished rooms in the attic or basement.

The number of rooms of a private dwelling excludes bathrooms, halls, vestibules and rooms used solely for business purposes. Partially divided rooms are considered to be separate rooms if they are considered as such by the respondent (e.g., L-shaped dining room and living room arrangements).

Data quality note – In the 2011 National Household Survey (NHS), a large proportion of records with 0 bedroom dwellings and 1 room dwellings was affected by respondent error (such as reporting more bedrooms than rooms). These errors were resolved during data processing and the results are consistent with other surveys. However, it is possible that in some instances or in small geographic areas the processed result is not consistent with the respondent's true situation. For more information, please consult the Housing Reference Guide, National Household Survey, 2011 Catalogue no. 99-014-X2011007.

Code	Description	Unweighted	Weighted	Includes
1	One room	1,614	164,423	
2	Two rooms	5,584	563,784	
3	Three rooms	18,788	1,891,766	
4	Four rooms	36,658	3,681,253	
5	Five rooms	47,148	4,691,324	
6	Six rooms	48,458	4,760,379	
7	Seven rooms	47,718	4,682,269	
8	Eight rooms	45,275	4,413,334	
9	Nine rooms	29,792	2,882,667	
10	Ten rooms	25,500	2,471,648	
11	Eleven or more rooms	24,610	2,359,933	
88	Not available	1,863	185,201	
	Total	333,008	32,852,323	

**SUBSIDY** – Subsidized housing

Field: 95 Size: 1 Position: 180 Type: num

**Description:** Indicates that the dwelling is subsidized or not. Subsidized housing includes rent geared to income, social housing, public housing, government-assisted housing, non-profit housing, rent supplements and housing allowances.

Reported for: Persons in private households in tenant-occupied non-farm dwellings

Code	Description	Unweighted	Weighted	Includes
1	No, not a subsidized dwelling	72,103	7,227,671	Band housing
2	Yes, a subsidized dwelling	10,400	1,059,408	
8	Not available	1,863	185,201	
9	Not applicable	248,642	24,275,701	Farm dwellings and owner occupied dwellings
	Total	333,008	32,852,323	

**TENUR** - Tenure

Field: 96 Size: 1 Position: 181 Type: num

**Description:** Refers to whether some member of the household owns or rents the dwelling.

Data quality note – The 2011 National Household Survey (NHS) estimate for homeownership in Alberta was statistically higher than the comparable rate in the 2010 Survey of Labour Income Dynamics (SLID). The 2011 NHS estimate of the homeownership rate for other provinces and for Canada was not statistically different when compared to the 2010 SLID. For more information, please consult the Housing Reference Guide, National Household Survey, 2011 Catalogue no. 99-014-X2011007.

Reported for: Persons in private households

Code	Description	Unweighted	Weighted	Includes
1	Owned by a member of the household	248,463	24,257,308	
2	Rented or band housing	82,682	8,305,472	
8	Not available	1,863	185,201	
	Total	333,008	32,852,323	

VALUE - Value of dwelling

Field: 99 Size: 7 Position: 195-201 Type: num

**Description:** Refers to the dollar amount expected by the owner if the dwelling were to be sold.

'Value of dwelling' refers to the value of the entire dwelling, including the value of the land it is on and of any other structure, such as a garage, which is on the property. If the dwelling is located in a building which contains several dwellings, or a combination of residential and business premises, all of which the household owns, the value is estimated as a portion of the market value that applies only to the dwelling in which the household resides.

Reported for: Persons in private households in owner-occupied non-farm dwellings

The value 8,888,888 stands for not available. The value 9,999,999 stands for not applicable and is applied to persons in farm dwellings, tenant-occupied dwellings and band housing. Otherwise, this variable is always positive and is a rounded value of the amount expected by the owner if the dwelling were to be sold. In some cases, high values have been top-coded in this file.

### Religion

**RELIGION** – Religion: Aggregated responses

Field: 90 Size: 2 Position: 172-173 Type: num

**Description:** ReligDer is the aggregated version of the variable Relig (detailed responses). Religion (Question 22) refers to the person's self-identification as having a connection or affiliation with any religious denomination, group, body, sect, cult or other religiously defined community or system of belief. Religion is not limited to formal membership in a religious organization or group. For infants or children, religion refers to the specific religious group or denomination in which they are being raised, if any. Persons without a religious connection or affiliation can self-identify as atheist, agnostic or humanist, or can provide another applicable response. On the NHS questionnaire, respondents were asked to specify one denomination or religion only. They were also told to indicate a specific denomination or religion even if the respondent was not currently a practising member of that group. The NHS Guide instructed: A person who has no religious affiliation can either choose to mark the circle for 'No religion' or to print other responses, such as 'Atheist' (does not believe in the existence of God) or 'Agnostic' (believes nothing can be known about the existence of God) in the write-in box. For infants or children, report the denomination or religion in which they will be raised. For persons who are members of a specific group within a larger religion, report the particular name or term for the specific group. Respondents should indicate what they feel best describes their religious affiliation. The abbreviation 'n.i.e.' means 'not included elsewhere.' The abbreviation 'n.o.s.' means 'not otherwise specified.' For additional information on the collection and dissemination of religion data in the NHS, refer to the Religion Reference Guide, National Household Survey, 2011.

Code	Description	Unweighted	Weighted	Includes
1	Buddhist	3,520	332,387	
2	Catholic	126,262	12,404,207	
3	Other Christian	90,292	9,010,553	
4	Hindu	5,007	471,319	
5	Jewish	3,126	299,295	
6	Muslim	10,528	999,358	
7	Sikh	4,376	416,509	
8	Other religions	1,547	153,154	Includes Traditional (Aboriginal) spirituality
9	No religious affiliation	75,842	7,487,916	
88	Not available	12,508	1,173,284	
	Total	333,008	32,852,323	

Weighting

**WEIGHT** – Individuals weighting factor

Field: 101 Size: 18 Position: 203-220 Type: num

**Description:** Individuals weighting factor

Reported for: Persons in private households

**WT1** – Replicate PUMF weight

Field: 104 Size: 18 Position: 224-241 Type: num

**Description:** Weighting factor for replicates, for the purpose of estimating sampling variability.

Reported for: Persons in private households

**WT2** – Replicate PUMF weight

**Field:** 105 **Size:** 18 **Position:** 242-259 **Type:** num

Description: Weighting factor for replicates, for the purpose of estimating sampling variability.

Reported for: Persons in private households

**WT3** – Replicate PUMF weight

Field: 106 Size: 18 Position: 260-277 Type: num

**Description:** Weighting factor for replicates, for the purpose of estimating sampling variability.

Reported for: Persons in private households

WT4 - Replicate PUMF weight

**Field:** 107 **Size:** 18 **Position:** 278-295 **Type:** num

Description: Weighting factor for replicates, for the purpose of estimating sampling variability.

Reported for: Persons in private households

**WT5** – Replicate PUMF weight

**Field:** 108 **Size:** 18 **Position:** 296-313 **Type:** num

**Description:** Weighting factor for replicates, for the purpose of estimating sampling variability.

Reported for: Persons in private households

WT6 - Replicate PUMF weight

Field: 109 Size: 18 Position: 314-331 Type: num

**Description:** Weighting factor for replicates, for the purpose of estimating sampling variability.

Weighting

WT7 - Replicate PUMF weight

Field: 110 Size: 18 Position: 332-349 Type: num

**Description:** Weighting factor for replicates, for the purpose of estimating sampling variability.

Reported for: Persons in private households

**WT8** – Replicate PUMF weight

Field: 111 Size: 18 Position: 350-367 Type: num

**Description:** Weighting factor for replicates, for the purpose of estimating sampling variability.

Identifier

**CF\_ID** – Key for census family table

Field: 3 Size: 8 Position: 14-21 Type: num

**Description:** Key for census family table

**Reported for:** Persons in private households

**EF\_ID** – Key for economic family table

Field: 2 Size: 7 Position: 7-13 Type: num

**Description:** Key for economic family table

**Reported for:** Persons in private households

**HH\_ID** – Key for household table

Field: 1 Size: 6 Position: 1-6 Type: num

**Description:** Key for household table

Reported for: Persons in private households

**PP\_ID** – Key for person table

Field: 4 Size: 9 Position: 22-30 Type: num

**Description:** Key for person table

# Chapter 4 Sampling method, estimation and data quality

This chapter provides notes on sampling, estimation and quality of the data related to the hierarchical file. It includes the following sections:

- A. Sampling method
- B. Estimation
- C. Data reliability

In Section A, the target population is defined and the way in which the sample was selected is explained. Section B covers the concept of weighting and briefly describes the usual estimators. Finally, Section C explains how to estimate the sampling error and provides guidelines for disseminating estimates.

# A Sampling method

# A.1 Target population

The target population of the hierarchical file is the same as the NHS one. It represents the entire population who usually lived in Canada on the survey's reference date, in provinces as well as territories. The NHS reference date is May 10, 2011. This date matches the reference date of the 2011 Census of Population. The target population includes persons who live on Indian reserves and in other Indian settlements, permanent residents, non-permanent residents such as refugee claimants, holders of work or study permits, and members of their families living with them.

Excluded from the target population are residents of incompletely enumerated Indian reserves, persons living in collective dwellings, Canadian citizens living abroad and full-time members of the Canadian Forces stationed outside Canada. Also excluded are foreign residents such as representatives of a foreign government assigned to an embassy, high commission or other diplomatic corps in Canada, members of the armed forces of another country stationed in Canada and residents of another country who are visiting Canada temporarily.

# A.2 Sample design

The sample of households of the hierarchical file is selected using a two-phase sampling plan applied to the sample of NHS-responding households. For the first phase, the sample of NHS respondents was split into three parts representative of the country. Those parts are used as a survey frame to select the different NHS public use microdata files samples. The first frame was used to select the individuals file records. The second frame was used to select the hierarchical file records. The third frame was used to select records for a public use microdata file intended to do international comparisons. In the second phase, the selection of records for the hierarchical file was made from the second of the three frames. The hierarchical file sample size represents 1% of households of the target population, and is equal to 132,192 households.

# A.2.a Sampling starting point: NHS respondent households

The hierarchical file sample is drawn from households selected to participate to the NHS that are part of the target population and that responded to the survey. The NHS sample was selected in two phases. A sample of 30% of the population's households was selected in the first phase. After several weeks of collection, the initial sample was reduced by subsampling in the second phase one third of the remaining non-responding households. Non-response follow-up efforts were focused on this subsample.

Because the NHS is a voluntary survey, household non-response is higher than during a mandatory survey. The response rate of households selected in the first phase is 68.6%. This non-response was corrected by reweighting upward responding households.

Final NHS weights vary between 1 and 100 because of the survey design and variations in response rates from one population group to another. This weight indicates, for a given household, the number of Canadian households it represents. Likewise, this weight indicates, for a person in a given responding household, the number of Canadians he or she represents.

# A.2.b First phase of sampling of the hierarchical file

To select the first phase sample for the hierarchical file, the NHS-responding households were split into three parts. To do so, these households were first sorted by province or territory of residence, number of usual residents in the household, census division, census tract and dissemination area. After this sorting, the NHS sample was systematically split into three parts.

This is equivalent to selecting a systematic sample of NHS-responding households at the first phase of sampling of the hierarchical file. In order for selected households to represent the entire target population, their weight was recalculated by dividing the final NHS weight by the first phase sampling fraction.

# A.2.c Second phase of sampling of the hierarchical file

For the second phase of sampling, a sample of households was drawn from the first phase sample according to a systematic sampling design with probability-proportional-to-size (PPS), where the size is the weight resulting from the first phase of sampling. The goal was to obtain a self-weighted sample (meaning with identical weights) of which the size would correspond to 1% of the target universe. A self-weighted sample is desirable because it gives a uniform representation of the target population. However, it is not possible to select a self-weighted sample of 1% of the population's households from the first phase sample because some households have a weight higher than 1/1% after the first phase of sampling. The best way to draw a sample close to a self-weighted sample is then to select highest-weight households with certainty and select a PPS systematic sample from the remaining households. A self-weighted sample was consequently drawn from households with weights lower than 90.3, and the other households were selected with certainty.

To select the self-weighted sample of households with weights lower than 90.3, records are first sorted with respect to some variables to ensure a good representativeness of the sample. These variables are:

- 1. Province or territory of residence
- 2. Urban rural indicator
- 3. Number of persons in the household
- 4. Census Families structure and type in the household
- 5. Elderly person presence indicator in the household
- 6. Visible minority presence indicator in the household
- 7. Similar ethnic origins indicator in the household
- 8. At least one person in the labour force indicator in the household

The sample is systematically selected using a sampling interval of 90.3, and a random start between 0 and 90.3. The probability of selecting a record is proportional to its selection weighting factor determined during the first phase of sampling. More specifically, the weighting factor of the first household in the frame is added to the random start. The sum obtained is compared to the sampling interval; if it is larger than or equal to the interval, the household is selected; otherwise, we move on to the next household, adding its weighting factor to the previous sum. The result is again compared to the sampling interval. When a household is selected, we subtract the sampling interval from the cumulative total before selecting another household.

Once the complete sample is drawn, the final weight of the hierarchical file (the WEIGHT variable) is calculated for each household in the sample. It is equal to the household's first phase weight divided by the second phase selection probability. Persons in selected households inherit their household's respective weight. Households selected according to the self-weighted plan then have a design weight of 90.3 (or more specifically 90.20770959 on the file, due to a small adjustment so that the sum of selected individuals' weighting factors yields the published number of individuals of the target universe) and represents about 86% of the households in the file. The remaining households have a higher weight. The sample size is equal to 1% of households of the target population. The file contains 132,192 households

including a total of 333,008 individuals. Please note that some individuals were suppressed for confidentiality reasons and that the number of persons estimate produced using the PUMF will be slightly lower than the published count.

# **B** Estimation

# **B.1 Weighting**

The microdata file contains a record for each individual selected in the PUMF sample. Each record contains a certain number of characteristics or variables described in Chapter 3. Each of these individuals represents a number of others who are not included in the sample, but who are in the NHS target population. This is reflected in the estimation process by the use of the variable 'WEIGHT.' The value of WEIGHT is the weighting factor for each individual unit. It corresponds to the number of units in the population represented by the unit selected in the sample. The WEIGHT value may be the same or different from one selected unit to another, depending on the weight adjustments made to match the sampling strategy. Also, the WEIGHT variable is the same for all individuals in a given household. This variable is calculated at the household level (since sampling is done at this level), and all individuals inherit the weight of their household. Economic families and census families also inherit the weight of their household.

To produce estimates that describe the population, the weighting factor must be used in all estimation calculations. For example, to estimate the number of persons in Canada who speak Chinese at home, the WEIGHT values for all records having this characteristic on the file must be totalled. The weighting factor must be used to produce estimates, regardless of whether the unit of analysis is the individual, the census family, the economic family, the household or the dwelling. Results based on this strategy are called 'weighted estimation results,' or simply 'weighted results.'

**Note:** Users must refrain from publishing unweighted estimates and from conducting analyses based on unweighted data from the file, since the unweighted results do not represent the population. They must also make sure to exclude from their calculations all values that are not applicable or not available, since the statistical software may consider those values valid, though they are not. For example, values such as 9,999,999 or 8,888,888 for a numeric (or quantitative) variable would be interpreted as valid observed values, but they should be considered as nominal values indicating that they are not usable in estimation.

## **B.2 Usual estimators**

The microdata file contains two types of variables: numeric (or quantitative) variables, such as income, and nominal (or qualitative) variables, such as mother tongue. Several estimators are commonly used for these two types of variables. They are presented in the next sections.

# **B.2.a Nominal or qualitative variables**

## **B.2.a.1** Estimator of a total

At the sample level, a total is obtained by counting the records that have the characteristic(s) sought. This unweighted total can be used to study the characteristics of the sample, but not those of the population.

The total at the population level is estimated by summing the weight of all records that have the characteristics sought. This weighted sample total is a proper estimate of the population total.

## Example 1:

We want to estimate the total number of women aged 25 and over who are living in the Edmonton census metropolitan area (CMA) and whose highest level of schooling is a university certificate or diploma above the bachelor's level.

We must first find the number of records in the file that satisfy the conditions CMA = 835, SEX = 1, AGEGRP  $\geq$  5, AGEGRP  $\neq$  88 and HDGREE = 8. We obtain a total of 300 records that satisfy all these conditions. Second, we estimate the population total by summing the WEIGHT variable for these 300 records. The resulting estimate of the population total is 28,503.

### B.2.a.2 Estimator of a proportion

A proportion can be defined as a ratio of two qualitative variable totals, where the numerator is a total on a subset of the units targeted by the denominator.

A weighted estimate of this proportion is obtained by estimating both the numerator total and the denominator total and by calculating the ratio of these two quantities. Note that the denominator may represent either all the units in a geographic area or a subset of the units within a geographic area.

### Example 2:

We want to estimate the proportion of immigrants among individuals who live in the Montréal CMA. First, we identify the records in the file that satisfy the conditions IMMSTAT = 3 and CMA = 462, and those that satisfy the condition CMA = 462. Second, we calculate the two corresponding weighted totals. Finally, the ratio of the two totals is the estimated proportion of immigrants among the individuals living in the Montréal CMA.

The estimated proportion is 848,541/3,743,411 = 0.2267, which means that slightly less than 23% of the individuals in the Montréal CMA are immigrants. In this example, the denominator targets all individuals in a geographic area.

### Example 3:

We want to estimate, out of all males aged 20 to 44 living in the Vancouver CMA, the proportion whose *de facto* marital status is 'divorced (and not living common law).' In this case, the numerator is the weighted total of the records that satisfy the conditions CMA = 933, SEX = 2,  $4 \le AGEGRP \le 8$  and MARSTH = 5. The denominator is the weighted total of the records that satisfy CMA = 933, SEX = 2, and  $4 \le AGEGRP \le 8$ .

We obtain 7,227/388,171 = 0.0186, which means that approximately 1.9% of males aged 20 to 44 in Vancouver are divorced and are not living common law. In this example, the denominator targets a subset of records in a geographic area.

### B.2.a.3 Estimator of a ratio

In this section, we are interested in estimating the ratio of two quantities, which could be either two totals or two proportions. To estimate the ratio of two totals, simply obtain the estimated totals to appear respectively in the numerator and the denominator and divide one by the other. To estimate the ratio of two proportions, simply obtain the proportions to be used respectively in the numerator and the denominator and divide one by the other.

# **B.2.b Numeric or quantitative variables**

### **B.2.b.1 Estimator of a total**

At the sample level, a total of a numeric variable for a given area is obtained by summing the values of the variable for the records in the area of interest. At the population level, the estimated total is obtained by multiplying WEIGHT by the value of the variable of interest for each record in the area and by summing the result of the product. If we want to estimate a population total for a subset of units within an area, all calculations must be restricted to the records that are in this subset.

### B.2.b.2 Estimator of an average

To estimate the average of a variable in a given geographic area, WEIGHT is multiplied by the value of the variable for the sample records that belong to the area, the results are totalled, and the total is divided by the sum of the WEIGHT values for the same records. If estimation of the average of a variable for a subset of the units in a given area is sought, it is necessary to multiply WEIGHT and the value of the variable for the sample records that belong to the subset in question, total the results and divide this total by the sum of the WEIGHT values for the same records.

## Example 4:

We want to estimate the average total income of women aged 15 years and over living in Ontario who have an income. In the calculation of the numerator, WEIGHT must be multiplied by the value of the 'total income' variable for individuals with an income (those for whom TOTINC  $\neq$  8,888,888, TOTINC  $\neq$  9,999,999 and TOTINC  $\neq$  0) whose gender is female (SEX = 1) and who are aged 15 or over (AGEGRP  $\geq$  3 and AGEGRP  $\neq$  88) in the province of Ontario (PR = 35); the results are then totalled. To estimate the average, the numerator (or estimated total income) is divided by the sum of the WEIGHT values for individuals satisfying the same conditions on TOTINC, SEX, AGEGRP and PR.

The result obtained is \$174,575,754,107/5,013,454 = \$34,821, which means that the average total income of women aged 15 and over living in Ontario who have an income is around \$34,821.

### B.2.b.3 Estimator of a ratio

A ratio can be defined as the division of two amounts, which could be two totals or two averages. To estimate the ratio of two totals, simply obtain the estimated totals to appear respectively in the numerator and the denominator and divide one by the other. To estimate the ratio of two averages, obtain the estimated averages to be used respectively in the numerator and the denominator and divide one by the other.

# C Data reliability

Since the microdata file is a sample drawn from among respondents of the NHS sample, there is not necessarily perfect agreement between the estimates calculated from the file and the results that would be obtained if we were observing the population as a whole. Any observed difference is attributable to two types of errors: sampling error and non-sampling errors.

# C.1 Sampling error

The sampling error is the error attributable to the fact that only a sample of the population is used to produce the estimates. Different samples would have yielded different estimates. These differences are represented by the sampling variability. The procedure for estimating the sampling variability is described in the next section.

# C.2 Estimation of the sampling variability

The 'coefficient of variation' (CV) is a measure frequently used to determine the degree of sampling variability. It is simply the ratio of the standard error of an estimate and the estimate itself. In other words, it is the standard error expressed as a percentage of the targeted estimate.

The sample design must be taken into account in computing the sampling error. The microdata file does not contain all the necessary information on the design to estimate this sampling error. We propose to use instead an approximate method, called the 'nonindependent random groups method,' which is described in detail in Chapter 2 of the book *Introduction to Variance Estimation*. This method is easy to

<sup>1.</sup> Wolter, K. M., Introduction to Variance Estimation, Springer Series in Statistics, Springer-Verlag, New York, 1985.

apply, but one of its features is that it tends to overestimate the sampling error for small estimates, which results in a conservative procedure for testing significant differences.

The principle of the method is as follows. The PUMF sample was divided into eight nonindependent random groups (or nonoverlapping random groups). Each group is representative of the population but is about 8 times smaller than the full sample. These groups can be identified using the replicate weighting factors WT1, WT2, ..., WT8 on the microdata file. For example, the fourth group is the set of records for which WT4 is strictly greater than 0. A given replicate weighting factor is 0 if the record is not part of the corresponding group and is 8 times WEIGHT if it is part of the group. The multiplication by 8 compensates for the division of the sample into eight groups. Using each of the replicate weighting factors, we can compute an estimate for each group. The sampling error is estimated on the basis of these eight estimates.

The targeted estimate must first be obtained as in Section B.2 using all records in the sample and the WEIGHT variable. Then, the following calculations are required:

- (1) Calculate the same estimates based on each of the eight groups, i.e., using each of the eight replicate weighting factors instead of WEIGHT. The estimates are usually different but are all based on the same sampling design. Since the original sample was divided into eight groups, the number of records in each group is limited and some groups might be empty. In this case, use zero as the estimate for the group.
- (2) Calculate the average of the eight estimates.
- (3) Calculate the sum of the squared deviations between the group estimates obtained in (1) and the average obtained in (2).
- (4) Divide the number obtained in (3) by 56 and extract the square root of the result. The result is an estimate of the standard error of the targeted estimate.
- (5) Divide the number obtained in (4) by the targeted estimate. The result is the coefficient of variation.
- (6) One can calculate a confidence interval that would be accurate 19 times out of 20 by removing 1.96 times the standard error from the targeted estimate for the lower bound and by adding 1.96 times the standard error to the targeted estimate for the upper bound.

Table 1 Guidelines for releasing estimates

Category	Alphabetic code	Coefficient of variation (%)	Recommendation
Unrestricted	A B C D	0.0 - 1.0 $1.0 - 2.5$ $2.5 - 5.0$ $5.0 - 10.0$ $10.0 - 16.5$	The estimates can be included in a general release without restriction. The letter A indicates that the estimate is very reliable. The letter B indicates that the estimate is reliable, but less so than one from category A, and so on.
Restricted	F G	16.5 – 25.0 25.0 – 33.3	The estimates are sufficiently reliable for specific purposes, but must be used with caution. Whenever these estimates are used, it is preferable to point out that their sampling variability is higher.
Not to be released		Greater than 33.3	It is recommended that these estimates be removed from releases and statistical tables.

Table 1 gives the guidelines for releasing estimates based on the CVs. Examples 1 to 4 are revisited next to demonstrate the calculation of the CV. Note that the calculations in the following examples were made with maximum precision, but that the figures shown have been rounded.

#### Example 5:

We want to estimate the coefficient of variation of the estimate obtained in Example 1. We had already estimated that there were 28,503 women aged 25 and over living in Edmonton and whose highest level of schooling is a university certificate or diploma above the bachelor's level. The different estimates by group are:

Group 1	27,456
Group 2	24,710
Group 3	28,969
Group 4	31,227
Group 5	28,374
Group 6	24,553
Group 7	27,462
Group 8	35,212

The average of these eight estimates is 28,495.

The squared deviations are:

1,080,354
14,327,533
224,251
7,461,604
14,668
15,544,021
1,067,828
45,111,219

The sum of the squared deviations is 84,831,478. Dividing this number by 56 and extracting the square root gives us 1,231. Thus, this method yields an estimate of the standard error of 1,231, which gives a coefficient of variation of 4.32%. A confidence interval accurate 19 times out of 20 is estimated at (26,091, 30,916).

#### Example 6:

We want to estimate the coefficient of variation of the estimate obtained in Example 2. We found that 22.67% of the individuals in the Montréal CMA are immigrants. The different estimates by group are:

Group 1	22.21%
Group 2	23.63%
Group 3	22.95%
Group 4	23.99%
Group 5	21.06%
Group 6	23.15%
Group 7	22.22%
Group 8	22.10%

The average of these eight estimates is 22.66%.

The squared deviations are:

Group 1	0.0021%
Group 2	0.0094%
Group 3	0.0008%
Group 4	0.0176%

Group 5	0.0258%
Group 6	0.0024%
Group 7	0.0020%
Group 8	0.0031%

The sum of the squared deviations is 0.0631%. Dividing this number by 56 and extracting the square root gives us 0.34%. Thus, this method yields an estimate of the standard error of 0.34%, which gives a coefficient of variation of 1.48%. A confidence interval accurate 19 times out of 20 is estimated at (22.01%, 23.33%).

#### Example 7:

We want to estimate the coefficient of variation of the estimate obtained in Example 3. We found that 1.86% of males aged 20 to 44 in the Vancouver CMA are divorced (and not living common law). The different estimates per group are:

Group 1	1.27%
Group 2	2.25%
Group 3	0.84%
Group 4	1.87%
Group 5	2.83%
Group 6	1.98%
Group 7	1.70%
Group 8	2.20%

The average of these eight estimates is 1.87%.

The squared deviations are:

Group 1	0.0036%
Group 2	0.0015%
Group 3	0.0105%
Group 4	0.0000%
Group 5	0.0093%
Group 6	0.0001%
Group 7	0.0003%
Group 8	0.0011%

The sum of the squared deviations is 0.0265%. Dividing this number by 56 and extracting the square root gives us 0.22%. Thus, this method yields an estimate of the standard error of 0.22%, which gives a coefficient of variation of 11.68%. A confidence interval accurate 19 times out of 20 is estimated at (1.44%, 2.29%).

#### Example 8:

We want to estimate the coefficient of variation of the estimate obtained in Example 4. We found that among females aged 15 and over who live in Ontario and have an income, the average total income is around \$34,821. The different estimates by group are:

Group 1	35,169
Group 2	35,197
Group 3	34,000
Group 4	34,532
Group 5	35,447
Group 6	35,145
Group 7	35,079
Group 8	34,044

The average of these eight estimates is \$34,827.

The squared deviations are:

Group 1	117,357
Group 2	137,442
Group 3	683,773
Group 4	86,739
Group 5	384,708
Group 6	101,174
Group 7	63,750
Group 8	612,620

The sum of the squared deviations is 2,187,561. Dividing this number by 56 and extracting the square root gives us 198. Thus, this method yields an estimate of the standard error of 198, which gives a coefficient of variation of 0.57%. A confidence interval accurate 19 times out of 20 is estimated at (34,434, 35,209).

## C.3 Generic SAS code to produce coefficients of variation

We will give an example of SAS code for producing coefficients of variation.

Assume that you want to create a multidimensional data table of estimates for which you wish to obtain a coefficient of variation for the estimates found in each cell. For example, you want to have a table showing the average total income of persons who have an income, broken down by sex and *de facto* marital status.

Assume that you have read the microdata file and saved the variables SEX, MARSTH, TOTINC, WEIGHT, WT1, WT2, ..., WT8 in a SAS dataset called ORIGINAL. The ORIGINAL file should contain all 333,008 records.

To determine the averages, we must exclude records in which TOTINC is equal to 8888888, 9999999 or 0.

```
DATA TOTINC_VALID;

SET ORIGINAL;

IF TOTINC NOT IN(0,8888888,9999999);

RUN:
```

The file TOTINC\_VALID contains 260,524 records. To obtain the desired estimates, it is necessary to create nine weighted sums of total income from the records:

```
DATA WEIGHTED_SUM;
```

```
SET TOTINC_VALID;

weighted_INC = WEIGHT * TOTINC;

weighted_INC1 = WT1 * TOTINC;

weighted_INC2 = WT2 * TOTINC;

weighted_INC3 = WT3 * TOTINC;

weighted_INC4 = WT4 * TOTINC;

weighted_INC5 = WT5 * TOTINC;

weighted_INC6 = WT6 * TOTINC;

weighted_INC7 = WT7 * TOTINC;

weighted_INC8 = WT8 * TOTINC;
```

#### RUN:

The WEIGHTED\_SUM file has the same number of records as TOTINC\_VALID, namely 260,524 records. It is now necessary to sum all these variables in addition to the weighting factors, for each combination of MARSTH and SEX:

```
PROC MEANS NOPRINT DATA = WEIGHTED_SUM NWAY;

CLASS MARSTH SEX;

VAR weighted_INC WEIGHT weighted_INC1--weighted_INC8 WT1--WT8;

OUTPUT OUT = WEIGHTED_SUM_STATS SUM = T_INC T_WEIGHT T_INC1-T_INC8 T_WT1-T_WT8;

RUN:
```

The WEIGHTED\_SUM\_STATS file contains 12 records (one record per cross-tabulation of MARSTH and SEX). Now, we must calculate the point estimate, each of the group estimates, deviations from the mean, the variance and the coefficient of variation.

#### **DATA DISPERSION**;

```
SET WEIGHTED SUM STATS;
/* Targeted estimate */
EST T = 0:
IF T WEIGHT \= 0 THEN EST T = ROUND(T INC/T WEIGHT, 1);
/* Estimates used to calculate the coefficient of variation */
EST_T1 = 0;
EST T2 = 0;
EST T3 = 0;
EST_T4 = 0;
EST T5 = 0;
EST_{T6} = 0;
EST T7 = 0:
EST T8 = 0;
IF T WT1 ^{\sim} 0 THEN EST T1 = T INC1/T WT1;
IF T_WT2 \stackrel{\wedge}{=} 0 THEN EST_T2 = T_INC2 / T_WT2;
IF T_WT3 \stackrel{\wedge}{=} 0 THEN EST_T3 = T_INC3 / T_WT3;
IF T_WT4 \sim 0 THEN EST_T4 = T_INC4 / T_WT4;
IF T_WT5 \stackrel{\wedge}{=} 0 THEN EST_T5 = T_INC5 / T_WT5;
IF T WT6 \stackrel{\wedge}{=} 0 THEN EST T6 = T INC6 / T WT6;
IF T WT7 \stackrel{\wedge}{=} 0 THEN EST T7 = T INC7/T WT7;
IF T_WT8 \stackrel{\wedge}{=} 0 THEN EST_T8 = T_INC8 / T_WT8;
EST_T1_T8 = ( EST_T1 + EST_T2 + EST_T3 + EST_T4 + EST_T5 + EST_T6 + EST_T7
+ EST_T8)/8;
/* Calculation of the estimated variance */
DEV = ( (EST T1-EST T1 T8 )**2 + (EST T2-EST T1 T8 )**2 +
```

```
(EST_T3-EST_T1_T8)**2 + (EST_T4-EST_T1_T8)**2 +
(EST_T5-EST_T1_T8)**2 + (EST_T6-EST_T1_T8)**2 +
(EST_T7-EST_T1_T8)**2 + (EST_T8-EST_T1_T8)**2)/56;
/* Calculation of the coefficient of variation */
CV_T = 0;
IF EST_T ^= 0 THEN CV_T = SQRT( DEV ) / EST_T;
KEEP MARSTH SEX EST T CV T;
```

**RUN**:

The following PRINT procedure yields Table 2 when the MARSTH and SEX formats have been loaded into SAS beforehand:

```
PROC PRINT DATA=DISPERSION NOOBS LABEL;
      VAR MARSTH SEX EST T CV T;
      LABEL EST_T = "Estimate of the average total income ($)" CV_T = "CV (%)" MARSTH =
      "De facto marital status" SEX = "Sex":
      FORMAT MARSTH MARSTH. SEX SEX. EST T 8.0 CV T PERCENT8.2;
RUN:
```

Table 2 Estimated average total income of persons with an income, by de facto marital status and sex

De facto marital status	Sex	Estimated average total income (\$)	CV (%)
Never legally married (and not	Female	24,415	1.02
living common law)	Male	26,749	0.63
Legally married (and not	Female	36,100	0.29
separated)	Male	60,778	0.56
Living common low	Female	36,161	0.64
Living common law	Male	51,375	0.98
Separated (and not living common	Female	36,431	0.94
law)	Male	48,684	2.47
Divorced (and not living common	Female	37,977	0.67
law)	Male	47,001	1.54
Widowed (and not living common	Female	30,802	0.67
law)	Male	41,446	2.63

## C.4 Generic SUDAAN code for producing coefficients of variation

We will give an example of SUDAAN code for producing the same coefficients of variation as in the previous section, namely those in Table 2. Assume once again that the ORIGINAL file in the SAS example was created beforehand. The following SUDAAN procedure provides estimates of the mean, as well as the corresponding standard errors and confidence intervals. It also creates a SUDAAN\_OUTPUT dataset containing estimates of the mean and their standard errors.

```
PROC DESCRIPT DATA=ORIGINAL DESIGN=BRR DDF=1000000;

REPWGT WT1-WT8/ADJFAY=0.1428571;

WEIGHT WEIGHT;

CLASS MARSTH SEX;

TABLE MARSTH*SEX;

VAR TOTINC;

OUTPUT MEAN SEMEAN / FILENAME=SUDAAN_OUTPUT;

SUBPOPN TOTINC != 0 AND TOTINC != 8888888 AND TOTINC != 99999999;

RUN;
```

The option DESIGN=BRR tells SUDAAN to estimate the sampling variability with a variance formula that uses replicate weights similar (within a multiplicative factor) to the variance formula of the nonindependent random groups method. The option DDF=1000000 tells SUDAAN to subtract and add 1.96 times the standard error to the point estimate to produce confidence intervals. The instruction REPWGT WT1-WT8 tells SUDAAN which replicate weights to use. The option ADJFAY=0.1428571 is needed to obtain the appropriate standard error. It tells the software to divide the sum of the squared deviations by seven times the number of replicates (56 in our case) rather than by the default value. The default value is equal to the number of replicates, which is eight in our case. The instruction SUBPOPN specifies the subset of the population of interest. In general, to apply the nonindependent random groups method in any SUDAAN procedure, the same DESIGN, DDF, REPWGT and ADJFAY instructions must be used.

The SUDAAN\_OUTPUT file produced by the DESCRIPT procedure in this example contains 21 records. There is a record for each possible combination of gender and marital status, for a total of 12. The other records give estimates of the mean and the corresponding standard errors when genders are combined (the six records with SEX = 0 and MARSTH  $\neq$  0), when marital statuses are combined (the two records with MARSTH = 0 and SEX  $\neq$  0) or when both are combined (the record with SEX = 0 and MARSTH = 0).

The following code is used to calculate the coefficient of variation and isolate the 12 records in the SUDAAN OUTPUT file that represent the cross-tabulation of a gender and a marital status.

```
DATA CV;

SET SUDAAN_OUTPUT;

CV=SEMEAN/MEAN;

IF SEX NE 0 AND MARSTH NE 0;

RUN:
```

The PRINT procedure that follows prints Table 2 when the MARSTH and SEX formats have been loaded into SAS beforehand:

```
PROC PRINT DATA=CV NOOBS LABEL;

VAR MARSTH SEX MEAN CV;

LABEL EST_T = "Estimate of the average total income ($)" CV_T = "CV (%)" MARSTH = "De facto marital status" SEX = "Sex";

FORMAT MARSTH MARSTH. SEX SEX. MEAN 8.0 CV PERCENT8.2;

RUN;
```

## C.5 Generic Stata code for producing coefficients of variation

Below is a Stata code example that yields the same coefficients of variation as in Sections C.3 and C.4, provided in Table 2. More specifically, we want the table to show the average total income of persons who have an income, broken down according to *de facto* marital status and sex, as well as a coefficient of variation attached to each estimate. Note that this code was tested with STATA, version 11.

```
*Clear any STATA file from your computer memory;
       drop all
*Allocate appropriate memory to STATA;
       set memory 60m
*Read the original data file. "C:" must be replaced by the directory that contains your
"data_donnees.dat" file:
       infix MARSTH 128-128 WEIGHT 203-220 WT1 224-241 WT2 242-259 WT3 260-277
       WT4 278-295 WT5 296-313 WT6 314-331 WT7 332-349 WT8 350-367 SEX 177-177
       TOTINC 182-188 using "C:\data_donnees.dat", clear
* Only keep people who have an income;
       keep if TOTINC != 9999999 & TOTINC != 8888888 & TOTINC != 0
       describe, short
* Calculate the weighted total income for each record;
       generate T_INC = WEIGHT * TOTINC
       gen T_WT1 = WT1 * TOTINC
       gen T WT2 = WT2 * TOTINC
       gen T WT3 = WT3 * TOTINC
       gen T_WT4 = WT4 * TOTINC
       gen T WT5 = WT5 * TOTINC
       gen T_WT6 = WT6 * TOTINC
       gen T_WT7 = WT7 * TOTINC
       gen T WT8 = WT8 * TOTINC
* Sum the weighted total income by MARSTH and SEX;
       collapse (sum) WEIGHT WT1 WT2 WT3 WT4 WT5 WT6 WT7 WT8 T_INC T_WT1
       T WT2 T WT3 T WT4 T WT5 T WT6 T WT7 T WT8, by (MARSTH SEX)
       describe, short
* The file now contains only 12 records;
* Calculate the average total income for each group;
       generate EST_T = T_INC / WEIGHT if WEIGHT != 0
       generate EST_T1 = T_WT1 / WT1 if WT1 != 0
       generate EST_T2 = T_WT2 / WT2 if WT2 != 0
       generate EST_T3 = T_WT3 / WT3 if WT3 != 0
       generate EST T4 = T WT4 / WT4 if WT4 = 0
       generate EST T5 = T WT5 / WT5 if WT5 != 0
       generate EST_T6 = T_WT6 / WT6 if WT6 != 0
       generate EST_T7 = T_WT7 / WT7 if WT7 != 0
       generate EST_T8 = T_WT8 / WT8 if WT8 != 0
* Set the average to zero for groups with zero weights;
       replace EST_T = 0 if EST_T = ...
       replace EST T1 = 0 if EST T1 == .
       replace EST\_T2 = 0 if EST\_T2 = 0. replace EST\_T3 = 0 if EST\_T3 = 0.
       replace EST_T4 = 0 if EST_T4 == .
       replace EST T5 = 0 if EST T5 = ...
       replace EST_T6 = 0 if EST_T6 = 0.
       replace EST T7 = 0 if EST T7 == .
       replace EST_T8 = 0 if EST_T8 == .
* Compute the mean estimate;
```

```
gen EST_T1_T8 = (EST_T1 + EST_T2 + EST_T3 + EST_T4 + EST_T5 + EST_T6 + EST_T7 + EST_T8)/8

* and the variance;

gen DEV = ((EST_T1 - EST_T1_T8)^2 + (EST_T2 - EST_T1_T8)^2 + (EST_T3 - EST_T1_T8)^2 + (EST_T4 - EST_T1_T8)^2 + (EST_T5 - EST_T1_T8)^2 + (EST_T6 - EST_T1_T8)^2 + (EST_T7 - EST_T1_T8)^2 + (EST_T8 - EST_T1_T8)^2 )/56

* The coefficient of variation is;

gen CV_T = sqrt( DEV ) / EST_T

* Present the results;

list MARSTH SEX EST_T CV_T, clean noobs
```

## C.6 Non-sampling errors

Sampling error is only one of the components of a survey's total error. Non-sampling errors may also contribute to the total error. This type of error is introduced, for example, when a household selected in the NHS does not respond (non-response error), when there is a reporting error not corrected by imputation (response error), when a person is missed or counted more than once (coverage error), or at the time of coding or data capture (processing error). Finally, to comply with confidentiality criteria, it is necessary to change the codes of a few variables to 'Not available' for certain records, and this introduces non-sampling error similar to that which is produced by non-response to questions.

The measures of sampling variability examined in the preceding sections take into account the sampling error as well as variability caused by household non-response. They do not reflect inaccuracies present in the PUMF due to other non-sampling errors (response, coverage and processing errors) or to household non-response bias.

To help users identify the impact of recoding variables to 'Not available,' Table 3 gives the list of values of qualitative variables that underwent 5% recoding or more in the file as a whole. The higher the recoding rate for a given variable value, the greater the risk that estimates using this value will be biased. For example, assume that a given qualitative variable value has been recoded to 'Not available' for 6% of the records with this value. We can then expect the estimate of the total for this value to be underestimated by approximately 6%.

Table 3 Qualitative variable values for which the rate of recoding to 'Not available' is 5% or more

Variable	Value	Rate of recoding to 'Not available' (%)	Variable	Value	Rate of recoding to 'Not available' (%)
	1	9.7	LOCSTUD	6	39.9
ABOID	3	13.4 MOB1		5	7.6
ABOID	4	10.7		1	5.9
	5	7.3		2	6.2
AGEGRP	2	5.5			5.4
AGEGRP	3	5.3		4	6.4
	1	6.5	NAICS	5	6.2
	2	6.2	NAICS	6	5.9
	3	6.1		7	5.3
	4	6.6		8	5.3
	5	5.5		10	6.8
	6	5.2		11	6.6
AGEIMM	7	5.6		3	5.8
	8	5.6	NOCEE	10	5.5
	9	6.0	NOCEE	11	5.3
	10	6.2		12	7.7
	11	9.3		4	5.2
	12	10.8	NOCS	6	7.5
	13	11.4	NOCS	9	8.8
BFNMEMB	2	11.3		10	6.3
	1	5.1	POB	2	6.4
	2	7.0	DOWCT	3	10.5
	3	7.4	POWST	7	7.4
CIP2011	4	5.7	PR1	63	14.1
CIPZUTT	6	8.8	חאאס	11	7.0
	7	6.5	PWPR	63	21.6
	9	7.3	REGIND	2	11.3
	11	5.7		1	13.1
	1	12.2		4	6.9
CITOTH	2	5.9	DELIGION	5	9.9
	4	7.1	RELIGION	6	5.6
COW	2	18.4		7	5.8
ETHDER	3	10.0		8	23.3
HDGREE	6	5.6	SSGRAD	7	5.6

## Chapter 5 Other factors affecting data reliability

## A Adjustments to Geographic Areas

Users should be aware that the boundaries of census geographic areas are subject to change from one census to the next. Therefore, when using data from two or more censuses, users must be aware of, and take into consideration, any changes to the geographic boundaries and/or the conceptual definition of the areas being compared. Users wishing to obtain additional information in this regard should refer to the following electronic reference tool: *GeoSuite*, 2011 Census, Catalogue no. 92-150-XBB.

## B Population counts based on usual place of residence

The population counts shown here for a particular area represent the number of respondents whose usual place of residence is in that area, regardless of where they happened to be on May 10, 2011. Also included are any respondents staying in a dwelling in that area on May 10, 2011 and having no usual place of residence elsewhere in Canada, as well as persons considered as 'non-permanent residents' (see Section C below). In most areas, there is little difference between the number of usual residents and the number of people staying in the area on May 10, 2011. For certain places, however, such as tourist or vacation areas, or areas including large work camps, the number of people staying in the area at any particular time could significantly exceed the number of usual residents for that area.

## **C** Non-permanent residents

The 2011 National Household Survey (NHS) included information about non-permanent residents in Canada. Non-permanent residents are defined as persons from another country who, at the time of the survey, held a Work or Study Permit or who were refugee claimants, as well as non-Canadian-born family members living in Canada with them. The non-permanent resident population is identified from responses to the citizenship and landed immigrant status questions. Persons who are not Canadian citizens by birth and who answered 'No' to the landed immigrant status question are considered non permanent residents.

The inclusion of non-permanent residents in the NHS facilitates comparisons with provincial and territorial statistics (marriages, divorces, births and deaths) which include this population and provides information for planning of services, such as health care, education and employment programs. As well, the inclusion of non-permanent residents brings Canadian practice closer to the United Nations recommendation that long-term residents (persons living in a country for one year or longer) be enumerated.

Although every attempt has been made to enumerate non-permanent residents, factors such as language difficulties, the reluctance to complete a government form or to understand the need to participate may have affected the estimate of this population.

## D Comparability of data on self-reported Aboriginal population

In the 1991 Census and previous censuses, the Aboriginal population was determined using the ethnic origin question, based primarily on the ancestry dimension. Again in 1996, respondents could report their Aboriginal ethnic origin or ancestry. However, a new question was included in the questionnaire for the 1996 Census. That question, which concerned self-reporting of Aboriginal ancestry, enabled respondents who identified with at least one Aboriginal group (North American Indian, Métis or Inuit) to define themselves as 'Aboriginal.' The same question was asked in the 2001 and 2006 censuses and the 2011 NHS.

It is important to note that the 2001, 2006 and 2011 data on the self-reported Aboriginal population are **not** comparable with either the 1991, 1996, 2001, 2006 or 2011 ethnic origin or ancestry figures. The concepts underlying these figures are very different. For example, some persons who have Aboriginal ancestors do not see themselves as Aboriginal (and vice versa).

## **E** Housing

In order to protect the confidentiality of data in the 2011 Public Use Microdata File (PUMF), the 'Rented' and 'Band housing' categories have been combined as in the 2006 PUMF. Furthermore, gross rent data for individuals living in Band housing have been imputed to prevent inadvertent disclosure of individual information.

Users should use caution when using housing and shelter cost data for analyses focused entirely or largely on the Aboriginal population.

## F Labour market activity

#### F.1 Standard industrial classification, 2007

The 2011 NHS Industry data were coded to the North American Industry Classification System (NAICS) 2007 which is a revision of the NAICS 2002.

The 2011 industry data can be tabulated for a number of populations, among which the most frequently used are:

- (a) the employed;
- (b) the experienced labour force persons who were either employed or unemployed in the reference week but who had worked since January 1, 2010:
- (c) those who have worked since January 1, 2010, regardless of whether or not they were in the labour force in the reference week.

The remaining components of the labour force, unemployed persons who worked prior to January 1, 2010, or who never worked, are shown in the data under the category 'Industry - Not applicable.'

Coding of responses to the industry questions was done, where possible, using a pre-coded list of establishments to ensure uniformity with the NAICS codes assigned to the same establishments by other Statistics Canada surveys.

Comparable industry information based on NAICS 2007 is also available from the Labour Force Survey for certain geographic areas and for some level of detail for NAICS.

For more information on the NAICS 2007, see <u>North American Industry Classification System (NAICS)</u> 2007, Catalogue no. 12-501-XIE.

#### F.2 Occupation

The 2011 NHS occupation data were coded to the National Occupational Classification (NOC) 2011. The 2011 occupation data were subsequently recoded to the NOC-S 2006 for users wishing to compare occupation data based on that classification. As well, empirical NOC 2011-NOC-S 2006 concordance tables have been produced to allow for the conversion of occupation data from one classification to the other. For more information, please see Appendix 2.5 of the 2011 National Household Survey dictionary.

Users of NHS occupation data coded to NOC-S 2006 should note that some unit groups have been combined. For a list of combined unit groups, refer to <a href="Table 2.4">Table 2.4</a> of the 2011 National Household Survey dictionary. It should be further noted that where the combined occupations cross minor groups, the NHS occupation data will not be comparable at the minor group level with data from other sources coded to NOC-S 2006. For a list of affected minor groups, refer to <a href="Table 2.3">Table 2.3</a> of the 2011 National Household Survey dictionary.

It is recommended that users not make comparisons between the broad categories, major and minor groups of the NOC 2011 and NOC-S 2006 on the basis of their labels. Even though many of the labels in the two classifications are similar, they are not directly comparable given differences in the content and placement of some unit groups.

For more information on the relationship between the NOC-S 2006 and the NOC 2011, please see <a href="http://www.statcan.gc.ca/subjects-sujets/standard-norme/noc-cnp/2011/index-indexe-eng.htm">http://www.statcan.gc.ca/subjects-sujets/standard-norme/noc-cnp/2011/index-indexe-eng.htm</a>.

The 2011 NHS occupation data can be tabulated for a number of populations, among which the most frequently used are:

- (a) the employed
- (b) the experienced labour force persons who were either employed or unemployed in the reference week, but who had worked since January 1, 2010
- (c) those who have worked since January 1, 2010, regardless of whether or not they were in the labour force in the reference week.

The remaining components of the labour force, unemployed persons who worked prior to January 1, 2010, or who never worked, are shown in the data under the category 'Occupation – Not applicable.'

#### F.3 Self-employed workers in Sector 91 - Public administration

All individuals employed in Industry Sector 91- Public administration (Industry variable) should be classified as employee (Class of worker variable). However, data users will notice counts for self-employed individuals in the Industry sector 91 - Public administration due to a failure to edit a common respondent error. More specifically, some self-employed respondents report working for the 'government' to the Industry question - and therefore are classified in Public administration - when in fact, they have obtained contractual work in the public service. These self-employed respondents should have reported their own business or services to the Industry question since they are self-employed and consequently should have been classified based on the description of their business or services provided to the government. For example, if they were offering accounting or legal services to the government and would have had reported such services instead of reporting 'government,' they would have been classified in Industry 54 - Professional, scientific and technical Services. If they were offering a medical service such as self-employed physicians and would have had reported such services instead of government, they would have been classified in Industry 62 - Health care and social assistance.

#### F.4 Youth labour force status

Both the National Household Survey (NHS) and the Labour Force Survey (LFS) collect data on the labour force status of the Canadian population. However, there are a number of conceptual differences between the two surveys. For more information on the general comparability of the NHS and Labour Force Survey data refer to the National Household Survey Dictionary, Catalogue no. 99-000-X, Appendix 2.1.

In addition to the information provided in the appendix, data users should be aware that in May 2011, the reference periods between the two surveys had a gap of two weeks. The NHS reference period was from May 1 to May 7, 2011, whereas the reference period of the LFS was from May 15 to May 21, 2011.

This gap in reference periods occurred during a strategic time of the year for youth as the academic year ended in May; job searching and hiring for the summer began. Most noticeably, employment rates for individuals aged 15 to 24 showed a discrepancy between the two surveys for May 2011.

## **G** Place of Work and Mode of Transportation

The National Household Survey assumes that the commute to work originates from the usual place of residence, but this may not always be the case. In some cases, respondents may be on a business trip and may have reported their place of work or mode of transportation based on where they were working during the trip. Some persons maintain a residence close to work and commute to their home on weekends. Students often work after school at a location near their school. As a result, the data may show unusual commutes and an unusual mode of transportation.

#### H Income

#### H.1 Income data

The 2011 NHS collected income information from all individuals 15 years and over in private households. In order to reduce respondent burden and improve the quality of the income data, the 2011 NHS provided

Canadians with the option of granting permission to retrieve income information directly from their tax records. Those who did not select this option were requested to provide the income information on the paper form or via the Internet. With over 70% of the respondents giving permission to retrieve tax information and with the precision of the tax data, privacy protection measures must be applied to the PUMF. All users should be aware of the rounding and replacement of extreme values described in the following section.

NHS 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 the error. For this reason, published income data for areas below the provincial level, where the private household population was less than 250 or the number of households was less than 40, have been suppressed. The users of this microdata file are strongly advised to exercise caution in the interpretation of statistics based on relatively small totals.

When the user is interested in concepts that do not require the presence of all family or household members, the *Individuals File*, 2011 National Household Survey (Public Use Microdata Files) Catalogue no. 99M0001X may be a more appropriate tool. Its larger sample size permits greater statistical precision in estimates and more detail in the sources of income variables.

The majority of the income concepts covered by in the 2011 NHS can also be found in the long-form sample of the 2006 Census. Due to differences in survey methodologies, users should exercise caution when comparing income statistics between the 2011 NHS PUMF and the 2006 Census PUMF.

For more information about comparability and data quality of income data, please refer to the 2011 NHS Income Reference Guide Catalogue no. 99-014-XWE2011006

http://www12.statcan.gc.ca/nhs-enm/2011/ref/guides/99-014-x/99-014-x2011006-eng.cfm

For more information about the methodological differences between the voluntary NHS and the mandatory Census, please refer to the NHS User Guide Catalogue no. 99-001-x2011001

http://www12.statcan.gc.ca/nhs-enm/2011/ref/nhs-enm\_guide/index-eng.cfm

## H.2 Random rounding and adjustment of extreme values for income and shelter costs

In planning this microdata file, it was deemed essential that the procedures used to create the file make it impossible to identify an individual, family or household from its income or any other quantitative data. To accomplish this, incomes and shelter costs in the records selected to be part of this microdata file underwent the rounding and extreme value adjustment procedures described below. These procedures minimize the impact on quality. As well, they have been applied at the dwelling level for the shelter cost variables, at the economic family unit level for the EFDIMBM variable, and at the individual level for the other income variables.

First, since a very large portion of the incomes in the file are from tax files, all values for these variables required rounding. The GTRFS variable was rounded with a base of 100. The TOTINC, MRKINC, EMPIN, INCTAX, TOTINC\_AT and EFDIMBM variables were rounded with a base of 1,000. If the value of a variable was higher than 100,000, the rounding base used was increased to 10,000. If a value higher than 0 would have been rounded to 0 through the random procedure, the value 1 was assigned instead. Similarly, when a value below 0 would have been rounded to 0, the value -1 was assigned. This was done to maintain the applicability condition of the income sources and to preserve the same number of negative, null and positive values before and after random rounding. Since the random rounding was done independently by variable, some relations between income sources are no longer valid. However, this rounding technique maintains the statistical nature of the data. As for the shelter cost variables, the rounding base for the VALUE variable was set at 10,000. The rounding base for the OMP and GROSRT variables was set at 100 and that of the FCOND variable was set at 50.

Second, large incomes and shelter costs were top-coded to eliminate all possibility of disclosure. Values for shelter costs (VALUE, OMP, GROSRT and FCOND) were top-coded when they were higher than a

certain threshold. This threshold is the weighted 90th percentile for a dwelling's geographical region rounded down using the rounding bases given in the previous paragraph. The replacement value for the top-coded values was set at the weighted average of the top-coded values for the geographical region. The thresholds and replacement values were calculated from the set of all NHS respondents. Thus, calculating the weighted sum of all values of a particular variable in a given geographical region yields a sum comparable to the sum that would be produced if no top-coding had been done on the data.

For incomes other than the EFDIMBM variable, values higher than the rounded-down 99th weighted percentile for an individual's respective area and gender were top-coded. Some supplementary top-coding was necessary to eliminate the possibility of residual disclosure. The replacement value was set to the weighted average of all the records requiring top-coding for the given variable. As well, some negative values, that is, values below a threshold, were bottom-coded using the standard method. The replacement value was the threshold. This threshold was set to -30,000 for females and for males in the Atlantic Region and the territories. For other individuals, it was set to -50,000.

For the EFDIMBM variable, values greater than the rounded-down 98th weighted percentile were top-coded independently by region and according to whether it was an economic family or a person not in an economic family. The replacement value was the weighted average over the threshold. Some negative values were also bottom-coded using the threshold as the replacement value. The threshold was set to -30,000 for the Atlantic Region and the territories, and -50,000 in the rest of Canada. Since the top-coding was done independently by quantitative variable, some relations between income variables (in the form of amount, low income flag or decile) are no longer valid.

Tables 1A to 1H below show the thresholds and replacement values used in the top-coding of large values.

Tables 2 and 3 provide comparative assessments of estimates from the National Household Survey master file and the public use microdata file.

Table 2 compares the number of recipients and the median and average income received by source at the individual level. Table 3 provides total income and after-tax income distributional statistics with various levels of hierarchical aggregation (household, economic family and census family) for Canada-level estimates.

Table 1A Condominium fees (FCOND), gross rent (GROSRT), owner's major payments (OMP) and value of dwelling (VALUE)

	FCC	OND	GROSRT		OMP		VALUE	
Geography	Threshold	Replacement value						
Newfoundland and Labrador	300	415	1,000	1,301	1,500	1,914	350,000	537,978
Prince Edward Island	300	408	1,000	1,185	1,500	1,926	270,000	417,218
Nova Scotia	450	573	1,100	1,411	1,600	2,105	350,000	574,615
New Brunswick	300	510	900	1,144	1,400	1,866	260,000	387,179
Montréal (CMA)	350	545	1,100	1,454	1,900	2,488	500,000	820,690
Quebec (other)	300	521	900	1,223	1,400	1,823	300,000	459,390
Toronto (CMA)	700	812	1,600	2,016	2,500	3,221	780,000	1,205,546
Ontario (other)	500	636	1,200	1,529	2,000	2,546	450,000	692,840
Manitoba	450	615	1,000	1,297	1,600	2,094	380,000	538,591
Saskatchewan	350	462	1,300	1,696	1,700	2,195	450,000	668,470
Calgary (CMA)	450	571	1,700	2,070	2,400	3,051	700,000	1,141,021
Edmonton (CMA)	400	528	1,600	1,937	2,300	2,853	600,000	903,897
Alberta (other)	350	435	1,600	2,174	2,200	2,835	590,000	849,535
Vancouver (CMA)	400	529	1,600	2,075	2,700	3,576	1,200,000	1,978,811
British Columbia (other)	300	387	1,400	1,808	2,000	2,601	680,000	997,622
Yukon, Northwest Territories and Nunavut	550	681	1,700	2,062	2,500	3,094	500,000	740,294

Table 1B Total income (TOTINC)

	F	emale	Male		
Geography	Threshold	Replacement value	Threshold	Replacement value	
Newfoundland and Labrador	100,000	140,257	190,000	275,776	
Prince Edward Island	100,000	134,231	170,000	262,949	
Nova Scotia	110,000	152,330	170,000	272,645	
New Brunswick	100,000	139,201	170,000	266,500	
Montréal (CMA)	130,000	204,177	240,000	453,963	
Quebec (other)	100,000	146,969	160,000	257,373	
Toronto (CMA)	170,000	286,554	340,000	730,885	
Ontario (other)	130,000	186,981	210,000	358,958	
Manitoba	110,000	158,480	180,000	332,920	
Saskatchewan	120,000	189,349	200,000	361,042	
Calgary (CMA)	200,000	334,651	470,000	1,041,408	
Edmonton (CMA)	150,000	239,193	280,000	561,863	
Alberta (other)	140,000	187,950	260,000	471,592	
Vancouver (CMA)	140,000	219,436	270,000	560,096	
British Columbia (other)	110,000	166,081	180,000	311,686	
Yukon, Northwest Territories and Nunavut	160,000	209,542	200,000	287,703	

Tableau 1C Market income (MRKINC)

	Female		Male		
Geography	Threshold	Replacement value	Threshold	Replacement value	
Newfoundland and Labrador	110,000	138,919	200,000	275,277	
Prince Edward Island	100,000	132,113	170,000	261,627	
Nova Scotia	110,000	150,604	180,000	271,187	
New Brunswick	110,000	137,798	180,000	265,111	
Montréal (CMA)	140,000	202,695	250,000	452,685	
Quebec (other)	100,000	145,551	170,000	255,972	
Toronto (CMA)	180,000	286,040	370,000	730,525	
Ontario (other)	130,000	185,522	220,000	358,012	
Manitoba	120,000	157,352	190,000	332,780	
Saskatchewan	130,000	187,891	210,000	360,101	
Calgary (CMA)	200,000	336,443	490,000	1,041,730	
Edmonton (CMA)	150,000	237,886	290,000	561,072	
Alberta (other)	140,000	186,911	270,000	470,679	
Vancouver (CMA)	150,000	218,944	290,000	560,591	
British Columbia (other)	120,000	164,737	190,000	311,714	
Yukon, Northwest Territories and Nunavut	160,000	207,781	210,000	286,339	

Table 1D Employment income (EMPIN)

	Fe	emale	Male		
Geography	Threshold	Replacement value	Threshold	Replacement value	
Newfoundland and Labrador	110,000	159,017	200,000	306,965	
Prince Edward Island	100,000	146,476	140,000	188,283	
Nova Scotia	110,000	155,201	170,000	265,255	
New Brunswick	100,000	142,471	170,000	282,751	
Montréal (CMA)	140,000	219,152	240,000	463,074	
Quebec (other)	100,000	148,025	160,000	267,906	
Toronto (CMA)	180,000	321,261	350,000	775,777	
Ontario (other)	130,000	194,812	200,000	378,234	
Manitoba	110,000	157,873	180,000	342,801	
Saskatchewan	120,000	190,639	200,000	391,944	
Calgary (CMA)	190,000	320,595	440,000	1,046,295	
Edmonton (CMA)	140,000	223,355	260,000	544,389	
Alberta (other)	130,000	188,953	250,000	485,967	
Vancouver (CMA)	140,000	222,366	270,000	596,502	
British Columbia (other)	110,000	158,649	170,000	304,930	
Yukon, Northwest Territories and Nunavut	150,000	207,620	190,000	274,883	

Table 1E Total government transfers (GTRFS)

	Fer	nale	Male		
Geography	Threshold	Replacement value	Threshold	Replacement value	
Newfoundland and Labrador	27,000	32,434	31,000	40,384	
Prince Edward Island	25,700	29,655	27,300	35,582	
Nova Scotia	24,100	29,588	29,800	38,086	
New Brunswick	24,800	29,265	26,000	31,972	
Montréal (CMA)	28,500	34,113	24,400	32,876	
Quebec (other)	28,200	33,693	27,600	35,508	
Toronto (CMA)	26,200	32,588	25,100	33,515	
Ontario (other)	27,300	35,130	27,800	36,654	
Manitoba	25,900	32,977	22,600	30,447	
Saskatchewan	25,700	32,656	24,500	32,037	
Calgary (CMA)	23,700	28,963	24,700	31,366	
Edmonton (CMA)	24,700	31,629	25,700	35,140	
Alberta (other)	24,000	31,035	26,200	35,206	
Vancouver (CMA)	23,000	27,651	24,500	35,110	
British Columbia (other)	24,600	30,746	29,800	41,104	
Yukon, Northwest Territories and Nunavut	28,700	35,959	27,000	41,473	

Table 1F Income tax (INCTAX)

	Fe	male	Male		
Geography	Threshold	Replacement value	Threshold	Replacement value	
Newfoundland and Labrador	32,000	55,146	64,000	112,165	
Prince Edward Island	31,000	59,735	54,000	102,743	
Nova Scotia	34,000	59,978	61,000	132,549	
New Brunswick	29,000	48,758	58,000	110,158	
Montréal (CMA)	49,000	91,358	100,000	212,293	
Quebec (other)	32,000	58,616	59,000	116,357	
Toronto (CMA)	69,000	149,110	160,000	370,496	
Ontario (other)	40,000	73,723	78,000	165,655	
Manitoba	37,000	66,186	69,000	148,672	
Saskatchewan	40,000	80,072	73,000	163,743	
Calgary (CMA)	66,000	135,790	170,000	418,865	
Edmonton (CMA)	45,000	92,371	94,000	225,576	
Alberta (other)	41,000	71,208	89,000	201,799	
Vancouver (CMA)	49,000	100,617	110,000	271,118	
British Columbia (other)	32,000	64,976	62,000	128,997	
Yukon, Northwest Territories and Nunavut	47,000	72,000	65,000	101,032	

Table 1G After-tax income (TOTINC\_AT)

	F	emale	Male		
Geography	Threshold	Replacement value	Threshold	Replacement value	
Newfoundland and Labrador	84,000	104,375	140,000	199,401	
Prince Edward Island	78,000	101,040	120,000	196,410	
Nova Scotia	86,000	115,130	120,000	185,367	
New Brunswick	82,000	107,595	120,000	188,498	
Montréal (CMA)	99,000	143,732	160,000	305,134	
Quebec (other)	79,000	109,462	110,000	178,004	
Toronto (CMA)	120,000	197,570	220,000	473,760	
Ontario (other)	99,000	139,808	140,000	246,876	
Manitoba	90,000	117,069	130,000	229,529	
Saskatchewan	98,000	140,551	140,000	254,250	
Calgary (CMA)	140,000	252,384	320,000	745,809	
Edmonton (CMA)	110,000	181,692	200,000	407,199	
Alberta (other)	100,000	144,727	190,000	341,306	
Vancouver (CMA)	110,000	168,655	190,000	393,124	
British Columbia (other)	94,000	130,841	140,000	230,323	
Yukon, Northwest Territories and Nunavut	120,000	156,876	150,000	212,855	

Table 1H Disposable income for market basket measure (EFDIMBM)

Coography		s not in an mic family	Economic family		
Geography	Threshold	Replacement value	Threshold	Replacement value	
Newfoundland and Labrador	79,000	110,340	160,000	219,204	
Prince Edward Island	70,000	93,904	150,000	220,952	
Nova Scotia	69,000	97,902	160,000	230,188	
New Brunswick	67,000	92,580	150,000	217,430	
Montréal (CMA)	75,000	123,200	180,000	307,679	
Quebec (other)	65,000	97,002	140,000	205,932	
Toronto (CMA)	100,000	183,434	260,000	491,009	
Ontario (other)	82,000	127,174	180,000	275,256	
Manitoba	72,000	106,571	170,000	269,263	
Saskatchewan	82,000	126,698	180,000	289,073	
Calgary (CMA)	120,000	254,398	330,000	695,788	
Edmonton (CMA)	100,000	162,590	240,000	436,065	
Alberta (other)	110,000	169,588	220,000	350,638	
Vancouver (CMA)	96,000	162,669	230,000	414,826	
British Columbia (other)	81,000	126,577	170,000	256,605	
Yukon, Northwest Territories and Nunavut	100,000	128,093	220,000	288,350	

Table 2 Comparison of individual income statistics for persons in private households, NHS and Hierarchical PUMF

	Hierarchical PUMF estimates	NHS estimates	PUMF to NHS ratio
Persons in private households	32,747,981	32,852,325	99.7%
Count with total income	25,696,474	25,918,505	99.1%
Median total income	30,000	29,878	100.4%
Average total income	40,709	40,650	100.1%
Count with market income	22,320,561	22,498,990	99.2%
Median market income	30,000	29,936	100.2%
Average market income	41,053	41,024	100.1%
Count with employment income	18,664,311	18,820,315	99.2%
Median employment income	32,000	31,603	101.3%
Average employment income	41,899	41,795	100.2%
Count with total government transfer payments	18,906,242	19,070,830	99.1%
Median total government transfer payments	4,100	4,104	99.9%
Average total government transfer payments	6,863	6,848	100.2%
Count with income tax paid	17,256,288	17,352,675	99.4%
Median income tax paid	5,000	5,389	92.8%
Average income tax paid	9,951	9,942	100.1%
Count with after-tax income	25,692,441	25,914,885	99.1%
Median after-tax income	27,000	27,334	98.8%
Average after-tax income	34,065	33,998	100.2%

Table 3 Comparison of income statistics for various aggregate units in private households, NHS and Hierarchical PUMF

	Hierarchical PUMF estimates	NHS estimates	PUMF to NHS ratio
Private households	13,317,308	13,319,250	100.0%
Median household total income	61,000	61,072	99.9%
Average household total income	78,907	79,102	99.8%
Median after-tax income of households	54,000	54,089	99.8%
Average after-tax income of households	66,018	66,149	99.8%
Economic families	9,244,094	9,254,160	99.9%
Median economic family income	77,000	76,511	100.6%
Average economic family income	93,927	94,125	99.8%
Median after-tax income of economic families	67,000	67,044	99.9%
Average after-tax income of economic families	78,438	78,517	99.9%
Persons not in economic families aged 15 years or over	4,911,484	4,903,505	100.2%
Median total income for persons aged 15 years or over not in economic families	28,000	28,018	99.9%
Average total income for persons aged 15 years or over not in economic families	37,414	37,225	100.5%
Median after-tax income for persons aged 15 years or over not in economic families	26,000	25,761	100.9%
Average after-tax income for persons aged 15 years or over not in economic families	31,579	31,497	100.3%
Census families	9,372,632	9,387,475	99.8%
Median census family income	74,000	73,498	100.7%
Average census family income	90,962	90,926	100.0%
Median after-tax income of census families	65,000	64,543	100.7%
Average after-tax income of census families	75,871	75,756	100.2%
Persons not in census families aged 15 years and over	5,594,709	5,580,905	100.2%
Median census family income for persons aged 15 years and over not in census families	27,000	26,416	102.2%
Average census family income for persons aged 15 years and over not in census families	36,069	35,839	100.6%
Median after-tax income for persons aged 15 years and over not in census families	25,000	24,602	101.6%
Average after-tax income for persons aged 15 years and over not in census families	30,566	30,442	100.4%

## Appendix A Countries and area of interest disseminated in the 2011 National Household Survey

- In Canada
- Outside Canada
  - o Americas
    - North America
      - Saint Pierre and Miquelon
      - United States
    - Central America
      - Belize
      - Costa Rica
      - El Salvador
      - Guatemala
      - Honduras
      - Mexico
      - Nicaragua
      - Panama
    - Caribbean and Bermuda
      - Anguilla
      - Antigua and Barbuda
      - Aruba
      - Bahamas
      - Barbados
      - Bermuda
      - Cayman Islands
      - Cuba
      - Curaçao
      - Dominica
      - Dominican Republic
      - Grenada
      - Guadeloupe
      - Haiti
      - Jamaica
      - Martinique
      - Montserrat
      - Puerto Rico
      - Saint Kitts and Nevis
      - Saint Lucia
      - Saint Vincent and the Grenadines
      - Sint Maarten (Dutch part)
      - Trinidad and Tobago
      - Turks and Caicos Islands
      - Virgin Islands, British
      - Virgin Islands, United States
    - South America
      - Argentina
      - Bolivia <sup>1</sup>
      - Brazil
      - Chile

- Colombia
- Ecuador
- French Guiana
- Guyana
- Paraguay
- Peru
- Suriname
- Uruguay
- Venezuela<sup>2</sup>
- Americas, n.i.e. <sup>3</sup>
- o Europe
  - Western Europe
    - Austria
    - Belgium
    - France
    - Germany
    - Luxembourg
    - Monaco
    - Netherlands
    - Switzerland
  - Eastern Europe
    - Belarus
    - Bulgaria
    - Czech Republic
    - Estonia
    - Hungary
    - Latvia
    - Lithuania
    - Moldova <sup>4</sup>
    - Poland
    - Romania
    - Russian Federation
    - Slovakia
    - Ukraine
  - Northern Europe
    - Denmark
    - Faroe Islands
    - Finland
    - Guernsey
    - Iceland
    - Ireland, Republic of
    - Isle of Man
    - Jersey
    - Norway
    - Sweden
    - United Kingdom <sup>5</sup>
  - Southern Europe
    - Albania
    - Bosnia and Herzegovina
    - Croatia
    - Gibraltar
    - Greece
    - Italy

- Kosovo 6
- Macedonia, Republic of <sup>7</sup>
- Malta
- Montenegro
- Portugal
- Serbia
- Slovenia
- Spain Europe, n.i.e. 8

#### Africa

- Western Africa
  - Benin
  - Burkina Faso
  - Cape Verde
  - Côte d'Ivoire
  - Gambia
  - Ghana
  - Guinea
  - Guinea-Bissau
  - Liberia
  - Mali
  - Mauritania
  - Niger
  - Nigeria
  - Senegal
  - Sierra Leone
  - Togo
- Eastern Africa
  - Burundi
  - Comoros
  - Djibouti
  - Eritrea
  - Ethiopia
  - Kenya
  - Madagascar
  - Malawi
  - Mauritius
  - Mozambique
  - Réunion
  - Rwanda
  - Seychelles
  - Somalia
  - Tanzania 9
  - Uganda
  - Zambia
  - Zimbabwe
- Northern Africa
  - Algeria

  - Egypt Libya <sup>10</sup>
  - Morocco
  - Sudan
  - Tunisia

- Central Africa
  - Angola
  - Cameroon
  - Central African Republic
  - Chad
  - Congo, The Democratic Republic of the
  - Congo, Republic of the
  - Equatorial Guinea
  - Gabon
- Southern Africa
  - Botswana
  - Lesotho
  - Namibia
  - South Africa, Republic of
  - Swaziland
- Africa, n.i.e. <sup>11</sup>
- o Asia
- West Central Asia and the Middle East
  - Afghanistan
  - Armenia
  - Azerbaijan
  - Bahrain
  - Cyprus
  - Georgia
  - Iran <sup>12</sup>
  - Iraq
  - Israel
  - Jordan
  - Kazakhstan
  - Kuwait
  - Kyrgyzstan
  - Lebanon
  - Oman
  - Qatar
  - Saudi Arabia
  - Syria <sup>13</sup>
  - Tajikistan
  - Turkey
  - Turkmenistan
  - United Arab Emirates
  - Uzbekistan
  - West Bank and Gaza Strip (Palestine) <sup>14</sup>
  - Yemen
- Eastern Asia
  - China 15
  - Hong Kong Special Administrative Region
  - Japan
  - Korea, North <sup>16</sup>
  - Korea, South 17
  - Macao Special Administrative Region
  - Mongolia
  - Taiwan
- Southeast Asia

- Brunei Darussalam
- Burma (Myanmar)
- Cambodia
- Indonesia
- Laos <sup>18</sup>
- Malaysia
- Philippines
- Singapore
- Thailand
  - Viet Nam 19
- Southern Asia
  - Bangladesh
  - Bhutan
  - India
  - Nepal
  - Pakistan
  - Sri Lanka
- Asia, n.i.e. <sup>20</sup>
- o Oceania
  - Australia
  - Fiji
  - French Polynesia
  - New Caledonia
  - New Zealand
  - Papua New Guinea
  - Samoa
  - Tonga
  - Oceania, n.i.e. <sup>21</sup>
- Other

#### **Footnotes**

- 1. The official name of Bolivia is Plurinational State of Bolivia.
- 2. The official name of Venezuela is Bolivarian Republic of Venezuela.
- 3. Includes countries such as Bonaire, Saint Eustatius and Saba; Falkland Islands (Malvinas); Greenland; Saint Barthélemy; Saint Martin (French part); and South Georgia and the South Sandwich Islands.
- 4. The official name of Moldova is Republic of Moldova.
- 5. The official name of United Kingdom is United Kingdom of Great Britain and Northern Ireland. United Kingdom includes Scotland, Wales, England and Northern Ireland (excludes Isle of Man, the Channel Islands and British Overseas Territories).
- 6. The official name of Kosovo is Republic of Kosovo.
- 7. Known as Former Yugoslav Republic of Macedonia in the United Nations and other international bodies.
- 8. Includes countries such as Åland Islands; Andorra; Holy See (Vatican City State); Liechtenstein; San Marino; and Svalbard and Jan Mayen Island.
- 9. The official name of Tanzania is United Republic of Tanzania.
- 10. The official name of Libya is Libyan Arab Jamahiriya.
- 11. Includes countries such as Mayotte; Saint Helena; Sao Tome and Principe; and Western Sahara.
- 12. The official name of Iran is Islamic Republic of Iran.
- 13. The official name of Syria is Syrian Arab Republic.
- 14. West Bank and Gaza Strip are the territories referred to in the Declaration of Principles, signed by Israel and the Palestine Liberation Organization in 1993. Palestine refers to pre-1948 British mandate Palestine.

- 15. China excludes Hong Kong Special Administrative Region and Macao Special Administrative Region.
- 16. The official name of North Korea is Democratic People's Republic of Korea.
- 17. The official name of South Korea is Republic of Korea.
- 18. The official name of Laos is Lao People's Democratic Republic.
- 19. The official name of Viet Nam is Socialist Republic of Viet Nam.
- 20. Includes countries such as British Indian Ocean Territory; Maldives; and Timor-Leste.
- 21. Includes countries such as American Samoa; Christmas Island; Cocos (Keeling) Islands; Cook Islands; Guam; Kiribati; Marshall Islands; Micronesia, Federated States of; Nauru; Niue; Norfolk Island; Northern Mariana Islands; Palau; Pitcairn; Solomon Islands; Tokelau; Tuvalu; United States Minor Outlying Islands; Vanuatu; and Wallis and Futuna.

#### **Abbreviation**

n.i.e. = not included elsewhere

# Appendix B Mother tongue and home language: 2011 National Household Survey classification

Please note that in the second part of the question on home language, the respondent had the option of marking the 'No' circle to indicate that there was no other language spoken on a regular basis.

- English
- French
- Non-official languages

#### Aboriginal languages

- Algonquian languages
  - Algonquin
  - Atikamekw
  - Blackfoot
  - Cree languages
    - Cree, n.o.s.
    - Swampy Cree
    - Plains Cree
    - Woods Cree
    - Cree, n.i.e.
  - Malecite
  - Mi'kmaq
  - Innu/Montagnais
  - Naskapi
  - Ojibway
  - Oji-Cree
  - Algonquian languages, n.i.e.
- Michif
- Athapaskan languages
  - Carrier
  - Wetsuweten
  - Chilcotin
  - Dene
  - Tlicho (Dogrib)
  - Gwich'in
  - North Slavey (Hare)
  - South Slavey

- Slavey, n.o.s.
- Sarcee
- Beaver
- Sekani
- Kaska (Nahani)
- Tahltan
- Northern Tutchone
- Southern Tutchone
- Tutchone, n.o.s.
- Athapaskan languages, n.i.e.
- Haida
- Iroquoian languages
  - Mohawk
  - Cayuga
  - Oneida
  - Iroquoian languages, n.i.e.
- Kutenai
- Salish languages
  - Shuswap (Secwepemctsin)
  - Thompson (Ntlakapamux)
  - Halkomelem
  - Lillooet
  - Okanagan
  - Squamish
  - Straits
  - Salish languages, n.i.e.
- Siouan languages
  - Dakota
  - Stoney
  - Siouan languages, n.i.e.
- Tlingit
- Tsimshian languages
  - Gitksan
  - Nisga'a
  - Tsimshian
- Wakashan languages
  - Nootka (Nuu-chah-nulth)

- Haisla
- Heiltsuk
- Kwakiutl (Kwak'wala)
- Wakashan languages, n.i.e.
- Inuit languages
  - Inuktitut
  - Inuinnagtun
  - Inuvialuktun
  - Inuit languages, n.i.e.
- Aboriginal languages, n.i.e.

#### Romance languages

- Italian
- Portuguese
- Romanian
- Spanish
- Catalan
- Romance languages, n.i.e.

#### Germanic languages

- Dutch
- Flemish
- Frisian
- German
- Yiddish
- Scandinavian languages
  - Danish
  - Icelandic
  - Norwegian
  - Swedish
- Afrikaans
- Germanic languages, n.i.e.

#### Celtic languages

- Gaelic languages
- Welsh
- Celtic languages, n.i.e.

#### Slavic languages

- Belarusian (Byelorussian)
- Bosnian

- Bulgarian
- Croatian
- Czech
- Macedonian
- Polish
- Russian
- Serbian
- Serbo-Croatian
- Slovak
- Slovenian
- Ukrainian
- Slavic languages, n.i.e.

#### **Baltic languages**

- Latvian
- Lithuanian

## Finno-Ugric languages

- Estonian
- Finnish
- Hungarian

#### Greek

Armenian

Albanian

Georgian

#### Turkic languages

- Azerbaijani
- Turkish
- Turkic languages, n.i.e.

#### Mongolian

#### Afro-Asiatic languages

- Berber languages (Kabyle)
- Cushitic languages
  - Oromo
  - Somali
- Semitic languages
  - Amharic
  - Arabic
  - Hebrew

- Maltese
- Tigrigna
- Semitic languages, n.i.e.
- Afro-Asiatic languages, n.i.e.

#### Indo-Iranian languages

- Indo-Aryan languages
  - Bengali
  - Gujarati
  - Hindi
  - Konkani
  - Marathi
  - Panjabi (Punjabi)
  - Sindhi
  - Sinhala (Sinhalese)
  - Urdu
  - Nepali
- Iranian languages
  - Kurdish
  - Pashto
  - Persian (Farsi)
- Indo-Iranian languages, n.i.e.

#### Dravidian languages

- Kannada
- Malayalam
- Tamil
- Telugu
- Dravidian languages, n.i.e.

#### Japanese

#### Korean

#### Sino-Tibetan languages

- Chinese languages
  - Cantonese
  - Chaochow (Teochow)
  - Fukien
  - Hakka
  - Mandarin
  - Shanghainese

- Taiwanese
- Chinese, n.o.s. <sup>1</sup>
- Tibetan languages
- Burmese
- Sino-Tibetan languages, n.i.e.

#### Tai languages

- Lao
- Thai

#### Austro-Asiatic languages

- Khmer (Cambodian)
- Vietnamese

#### Malayo-Polynesian languages

- Bisayan languages
- Ilocano
- Malay
- Pampango
- Tagalog (Pilipino, Filipino)
- Bikol
- Malagasy
- Fijian
- Pangasinan
- Malayo-Polynesian languages, n.i.e.

#### Niger-Congo languages

- Akan (Twi)
- Bantu languages
  - Lingala
  - Rundi (Kirundi)
  - Rwanda (Kinyarwanda)
  - Shona
  - Swahili
  - Ganda
  - Bantu languages, n.i.e.
- Edo
- Igbo
- Wolof
- Bamanankan
- Ewe

- Ga
- Niger-Congo languages, n.i.e.

African languages, n.i.e.

Creoles

Non-verbal languages

- American Sign Language
- Quebec Sign Language
- Sign languages, n.i.e.

Other languages

# **Footnotes**

1. Anyone responding 'Chinese,' with no other precision, along with other dialects, n.o.s.

# **Abbreviation**

n.i.e. = not included elsewhere

n.o.s. = not otherwise specified

# **Appendix C Ethnic origins disseminated in the 2011 National Household Survey**

### 2011 NHS Classification

- North American Aboriginal origins
  - First Nations (North American Indian)
  - Inuit
  - Métis
- Other North American origins
  - Acadian
  - American
  - Canadian
  - New Brunswicker
  - Newfoundlander
  - Nova Scotian
  - Ontarian
  - Québécois
  - Other North American origins, n.i.e. <sup>1</sup>
- European origins

### **British Isles origins**

- Channel Islander
- Cornish
- English
- Irish
- Manx
- Scottish
- Welsh
- British Isles origins, n.i.e. <sup>2</sup>

### French origins

- Alsatian
- Breton
- French

### Western European origins (except French origins)

- Austrian
- Belgian

- Dutch
- Flemish
- Frisian
- German
- Luxembourger
- Swiss
- Western European origins, n.i.e. <sup>3</sup>

# Northern European origins (except British Isles origins)

- Danish
- Finnish
- Icelandic
- Norwegian
- Swedish
- Northern European origins, n.i.e. <sup>4</sup>

# Eastern European origins

- Bulgarian
- Byelorussian
- Czech
- Czechoslovakian, n.o.s.
- Estonian
- Hungarian
- Latvian
- Lithuanian
- Moldovan
- Polish
- Romanian
- Russian
- Slovak
- Ukrainian
- Eastern European origins, n.i.e.

# Southern European origins

- Albanian
- Bosnian
- Croatian
- Cypriot
- Greek
- Italian

- Kosovar
- Macedonian
- Maltese
- Montenegrin
- Portuguese
- Serbian
- Sicilian
- Slovenian
- Spanish
- Yugoslavian, n.o.s.
- Southern European origins, n.i.e. <sup>6</sup>

# Other European origins

- Basque
- Jewish
- Roma (Gypsy)
- Slavic, n.o.s.
- Other European origins, n.i.e.

### • Caribbean origins

- Antiguan
- Bahamian
- Barbadian
- Bermudan
- Carib
- Cuban
- Dominican
- Grenadian
- Haitian
- Jamaican
- Kittitian/Nevisian
- Martinican
- Montserratan
- Puerto Rican
- St. Lucian
- Trinidadian/Tobagonian
- Vincentian/Grenadinian
- West Indian, n.o.s.
- Caribbean origins, n.i.e.

# • Latin, Central and South American origins

- Aboriginal from Central/South America (except Maya)
- Argentinian
- Belizean
- Bolivian
- Brazilian
- Chilean
- Colombian
- Costa Rican
- Ecuadorian
- Guatemalan
- Guyanese
- Hispanic
- Honduran
- Maya
- Mexican
- Nicaraguan
- Panamanian
- Paraguayan
- Peruvian
- Salvadorean
- Uruguayan
- Venezuelan
- Latin, Central and South American origins, n.i.e. 9

# • African origins

### **Central and West African origins**

- Akan
- Angolan
- Ashanti
- Beninese
- Burkinabe
- Cameroonian
- Chadian
- Congolese
- Gabonese
- Gambian
- Ghanaian

- Guinean
- Ibo
- Ivorian
- Liberian
- Malian
- Nigerian
- Peulh
- Senegalese
- Sierra Leonean
- Togolese
- Yoruba
- Central and West African origins, n.i.e. <sup>10</sup>

# **North African origins**

- Algerian
- Berber
- Coptic
- Dinka
- Egyptian
- Libyan
- Maure
- Moroccan
- Sudanese
- Tunisian
- North African origins, n.i.e. <sup>11</sup>

# Southern and East African origins

- Afrikaner
- Amhara
- Bantu, n.o.s.
- Burundian
- Eritrean
- Ethiopian
- Harari
- Kenyan
- Malagasy
- Mauritian
- Oromo
- Rwandan

- Seychellois
- Somali
- South African
- Tanzanian
- Tigrian
- Ugandan
- Zambian
- Zimbabwean
- Zulu
- Southern and East African origins, n.i.e. <sup>12</sup>

# Other African origins

- Black, n.o.s. <sup>13</sup>
- Other African origins, n.i.e. <sup>14</sup>

# Asian origins

# West Central Asian and Middle Eastern origins

- Afghan
- Arab, n.o.s.
- Armenian
- Assyrian
- Azerbaijani
- Georgian
- Iranian
- Iraqi
- Israeli
- Jordanian
- Kazakh
- Kurd
- Kuwaiti
- Lebanese
- Palestinian
- Pashtun
- Saudi Arabian
- Syrian
- Tajik
- Tatar
- Turk
- Uighur

- Uzbek
- Yemeni
- West Central Asian and Middle Eastern origins, n.i.e. <sup>15</sup>

# **South Asian origins**

- Bangladeshi
- Bengali
- East Indian <sup>13</sup>
- Goan
- Gujarati
- Kashmiri
- Nepali
- Pakistani
- Punjabi
- Sinhalese
- Sri Lankan
- Tamil
- South Asian origins, n.i.e. <sup>16</sup>

# **East and Southeast Asian origins**

- Burmese
- Cambodian (Khmer)
- Chinese
- Filipino
- Hmong
- Indonesian
- Japanese
- Korean
- Laotian
- Malaysian
- Mongolian
- Singaporean
- Taiwanese
- Thai
- Tibetan
- Vietnamese
- East and Southeast Asian origins, n.i.e. <sup>17</sup>

### Other Asian origins

Other Asian origins, n.i.e. <sup>18</sup>

### Oceania origins

Australian

New Zealander

Pacific Islands origins

- Fijian
- Hawaiian
- Maori
- Polynesian, n.o.s.
- Samoan
- Pacific Islands origins, n.i.e. <sup>19</sup>

### **Footnotes**

- 1. Includes general responses indicating North American origins (e.g., 'North American') as well as more specific responses indicating North American origins that have not been included elsewhere (e.g., 'Maritimer,' 'Manitoban').
- 2. Includes general responses indicating British Isles origins (e.g., 'British,' 'United Kingdom') as well as more specific responses indicating British Isles origins that have not been included elsewhere (e.g., 'Celtic').
- 3. Includes general responses indicating Western European origins (e.g., 'Western European') as well as more specific responses indicating Western European origins that have not been included elsewhere (e.g., 'Liechtensteiner').
- 4. Includes general responses indicating Northern European origins (e.g., 'Northern European') as well as more specific responses indicating Northern European origins that have not been included elsewhere (e.g., 'Faroese,' 'Scandinavian').
- 5. Includes general responses indicating Eastern European origins (e.g., 'Eastern European') as well as more specific responses indicating Eastern European origins that have not been included elsewhere (e.g., 'Baltic').
- 6. Includes general responses indicating Southern European origins (e.g., 'Southern European') as well as more specific responses indicating Southern European origins that have not been included elsewhere (e.g., 'Gibraltarian').
- 7. Includes general responses indicating Other European origins (e.g., 'European') as well as more specific responses indicating European origins that have not been included elsewhere (e.g., 'Central European').
- 8. Includes general responses indicating Other European origins (e.g., 'European') as well as more specific responses indicating European origins that have not been included elsewhere (e.g., 'Central European').
- 9. Includes general responses indicating Latin, Central or South American origins (e.g., 'South American') as well as more specific responses indicating Latin, Central or South American origins that have not been included elsewhere (e.g., 'Surinamese').
- 10. Includes general responses indicating Central or West African origins (e.g., 'West African') as well as more specific responses indicating Central or West African origins that have not been included elsewhere (e.g., 'Ewe,' 'Wolof').
- 11. Includes general responses indicating North African origins (e.g., 'North African') as well as more specific responses indicating North African origins that have not been included elsewhere (e.g., 'Maghreb').
- 12. Includes general responses indicating Southern or East African origins (e.g., 'East African') as well as more specific responses indicating Southern or East African origins that have not been included elsewhere (e.g., 'Hutu,' 'Shona').

- 13. Some respondents may choose to provide very specific ethnic origins in the National Household Survey (NHS), while other respondents may choose to give more general responses. This means that two respondents with the same ethnic ancestry could have different response patterns and thus could be counted as having different ethnic origins. For example, one respondent may report 'East Indian' ethnic origin while another respondent, with a similar ancestral background, may report 'Punjabi' or 'South Asian' origins; one respondent may report 'Black' while another, similar respondent, may report 'Ghanaian' or 'African.' As a result, ethnic origin data are very fluid, and counts for certain origins, such as 'East Indian' and 'Black,' may seem lower than initially expected. Users who wish to obtain broader response counts may wish to combine data for one or more ethnic origins together or use counts for ethnic categories such as 'South Asian origins' or 'African origins.' (Please note, however, that 'African origins' should not be considered equivalent to the 'Black' population group or visible minority status, as there are persons reporting African origins who report a population group or visible minority status other than 'Black.' Conversely, many people report a population group or visible minority status of 'Black' and do not report having 'African' origins. For information on population group and visible minority population in the 2011 NHS, refer to the appropriate definitions in this publication.)
- 14. Includes general responses indicating Other African origins (e.g., 'African') as well as more specific responses indicating Other African origins that have not been included elsewhere (e.g., 'Saharan').
- 15. Includes general responses indicating West Asian, Central Asian and Middle Eastern origins (e.g., 'West Asian,' 'Middle Eastern') as well as more specific responses indicating West Asian, Central Asian and Middle Eastern origins that have not been included elsewhere (e.g., 'Baloch,' 'Circassian').
- 16. Includes general responses indicating South Asian origins (e.g., 'South Asian') as well as more specific responses indicating South Asian origins that have not been included elsewhere (e.g., 'Bhutanese').
- 17. Includes general responses indicating East and Southeast Asian origins (e.g., 'Southeast Asian') as well as more specific responses indicating East and Southeast Asian origins that have not been included elsewhere (e.g., 'Bruneian,' 'Karen').
- 18. Includes general responses indicating Other Asian origins (e.g., 'Asian') as well as more specific responses indicating Other Asian origins that have not been included elsewhere (e.g., 'Eurasian').
- 19. Includes general responses indicating Pacific Islands origins (e.g., 'Pacific Islander') as well as more specific responses indicating Pacific Islands origins that have not been included elsewhere (e.g., 'Tahitian').

# **Abbreviation**

n.i.e. = not included elsewhere

n.o.s. = not otherwise specified

Source: Statistics Canada, National Household Survey, 2011.

# **Appendix D Query examples**

The following examples assume the user has read the file into a SAS dataset: H\_PUMF from a library: PUMFHier.

```
Ex: Libname PUMFHier 'c:\PUMF\';
```

# **Census family**

### Number of census families

The following example depicts the selection of census families and the province in which the family resides. A data table named **CFExample1** is created in the **PUMFHier** library. Because all members of a same census family share a **Census family identifier** (CF\_ID), the condition WHERE CF\_RP = 1 is applied. This selection criteria is used because there is only one **Census family reference person** (CF\_RP = 1) per census family, thus ensuring the selection of the correct number of census families.

#### PROC SOL:

```
CREATE TABLE PUMFHIER.CFExample1 AS

SELECT PR,

(COUNT(CF_ID)) AS CensusFamily_count

FROM PUMFHIER.H_PUMF

WHERE CF_RP = 1

GROUP BY PR;
```

#### QUIT;

The following table shows the number of census families by province, as selected in table **CFExample1** (counts are unweighted):

Region	Number of census families
10	1,541
11	397
12	2,646
13	2,207
24	22,725
35	36,803
46	3,362
47	2,816
48	10,098
59	12,707
63	309

# Number of children less than 25 years of age per census family

The following example depicts the selection of census families and derives the number of children aged less than 25 years old per census family. For this example, a table named **CFExample2** is created in the **PUMFHier** library. It is populated by selecting the **Census family identifier** (CF\_ID) and counting the number of **Person identifiers** (PP\_ID) within the CF\_ID (group by CF\_ID) who correspond to the definition of a census family child under the age of 25. A census family child is defined as an individual with a **Detailed census family status and household living arrangements** value of 7, 8, 9 or 10 (see codebook for textual correspondence) and to meet the age criteria of the query, **Age groups** less than 5 (agegrp < 5) is utilized.

#### PROC SQL;

```
CREATE TABLE PUMFHIER.CFExample2 AS

SELECT CF_ID,

(COUNT(PP_ID)) AS Number_of_kids

FROM PUMFHIER.H_PUMF

WHERE (CFStat BETWEEN 4 AND 5) and agegrp < 5

GROUP BY CF_ID;
```

#### QUIT;

The following counts for number of children aged less than 25 years per census family can be produced

from table **CFExample2** (counts are unweighted):

Number of children aged < 25 in census family	Count of families
1	19,862
2	20,332
3	6,141
4	1,344
5	376
6	12

### **Economic families**

### Selection of economic families

The following example depicts the selection of economic families. A data table named **EFExample1** is created in the **PUMFHier** library. Because all members of a same economic family share an **Economic family identifier** (EF\_ID) the condition WHERE EF\_RP = 1 is applied. This selection criteria is used because there is only one **Economic family reference person** (EF\_RP = 1) per economic family, thus ensuring the selection of the correct number of economic families.

### PROC SQL;

```
CREATE TABLE PUMFHIER.EFExample1 AS SELECT EF ID
```

```
FROM PUMFHIER.H_PUMF
WHERE EF_RP = 1;
```

#### QUIT;

The preceding query will produce table **EFExample1** with the following number of economic families (count is unweighted).

Count of economic families: 94,155

# Total income per economic families

This example depicts the aggregation of a quantitative variable within an economic family. A table named **EFExample2** is created in the **PUMFHier** library. The total income of each member of the economic family is summed to create the economic family total income. This is achieved by applying the sum function to **Total income of individual** (SUM(TotInc)) and grouping the results by **Economic family identifier** (group by EF\_ID). Please note that when aggregating economic family data, one must restrict their selection to only include persons in an economic family, i.e., EF\_RP of 1 or 2 (EF\_RP in (1, 2)). Also, it is very important to exclude the 'not available' (in this case 8888888) and 'not applicable' (in this case 9999999) categories when applying arithmetic or statistics to quantitative income and housing variables.

### PROC SQL;

```
CREATE TABLE PUMFHIER.EFExample2 AS

SELECT EF_ID,

(SUM(Totinc)) AS SUM_of_Totinc

FROM PUMFHIER.H_PUMF

WHERE EF_RP in (1,2) AND Totinc NOT IN

(8888888, 9999999)

GROUP BY EF_ID;
```

### QUIT;

The following mean value for economic family total income can be obtained from table **EFExample2** (economic families' total income where the income is not available or not applicable for all family members is excluded from the calculation, statistic is unweighted).

Mean economic family total income = \$95,349

### Households

#### Selection of households

The following example depicts the selection of private households and their province. A data table named **HHExample1** is created in the **PUMFHier** library. Because all persons residing in the same household share the same **Household identifier** (HH\_ID), the condition WHERE PRIHM = 1 is applied. This selection criteria is used because there is only one primary household Maintainer (PRIHM = 1) per household and all households have a primary household maintainer.

#### PROC SQL;

```
CREATE TABLE PUMFHIER.HHExample1 AS
SELECT PR,

(COUNT(PRIHM)) AS Household_count
FROM PUMFHIER.H PUMF
```

```
WHERE PRIHM = 1

GROUP BY PR;
```

#### QUIT;

The following table shows the number of households by province, as selected in table HHExample1 (counts are unweighted):

Region	Household count
10	1,988
11	538
12	3,725
13	3,026
24	34,458
35	48,940
46	4,714
47	3,946
48	13,718
59	17,743
63	396

# Number of Persons responsible for household payments

The following example is a query which counts the number of persons responsible for household payments within a household. A data table named **HHExample2** is created in the **PUMFHier** library. The query selects the **Household identifier** (HH\_ID) and counts (count(HHMAINP)) all records where the variable **Persons responsible for household payments** is equal to 1 (HHMAINP = 1). The group by **Household identifier** clause (group by HH\_ID) ensures that the count is applied to each distinct household.

### PROC SQL;

```
CREATE TABLE PUMFHIER.HHExample2 AS
SELECT HH_ID,
    (COUNT(HHMAINP)) AS Num_Maintain
FROM PUMFHIER.H_PUMF
WHERE HHMAINP = 1
GROUP BY HH_ID;
```

### QUIT;

The following counts for number of persons responsible for household payments can be produced from table HHExample2 (counts are unweighted):

Number of persons responsible for household payments	Frequency
1	78,914
2	51,353
3	2,165
4	605
5	155



For data, reference material, maps and much more...

To fulfill your data needs or to receive help in accessing and ordering custom census or NHS products...

0-

Call: 1-800-263-1136



e-mail: infostats@statcan.gc.ca

Pour obtenir des données, des documents de référence, des cartes géographiques et beaucoup plus...

Afin de répondre à vos besoins en matière de données ou pour obtenir de l'aide pour accéder et commander des produits personnalisés du recensement ou de l'ENM...



Composez le 1-800-263-1136



Courriel: infostats@statcan.gc.ca