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# 1.0 Introduction

The Household Internet Use Survey was conducted by the Special Surveys Division of Statistics Canada in October 1997 with the cooperation and support of the Science and Technology Redesign Project at Statistics Canada on contract from Industry Canada. This manual has been produced to facilitate the manipulation of the microdata file of the survey results.

Any questions about the data set or its use should be directed to:

Statistics Canada  
Marc Hamel  
Special Surveys Division, Statistics Canada  
Section D7  
5th floor, Jean Talon Building  
Tunney's Pasture  
Ottawa, Ontario K1A 0T6  
(613) 951-2495

Statistics Canada  
Dustin Chodorowicz  
Science and Technology Redesign Project  
Section F  
7th floor, R.H. Coats Building  
Tunney's Pasture  
Ottawa, Ontario K1A 0T6  
(613) 951-3497





## 2.0 Background

The Household Internet Use Survey (HIUS) was conducted by Statistics Canada on behalf of Industry Canada. The information from this survey will assist the Science and Technology Redesign Project at Statistics Canada fulfill a three year contractual agreement between them and the Telecommunications and Policy Branch of Industry Canada. The survey provides information on the use of computers for communication purposes, and households' access and use of the Internet from home.

The information collected will be used to update and expand upon previous studies done by Statistics Canada on the topic of the Information Highway.



## 3.0 Objectives

The main objectives of this survey were to :

- C            measure the demand for computer communication services by Canadian households ;
- C            identify the types of computer communication services that are used at home;
- C            determine the reasons why some households are not using computer communication, and;
- C            determine what factors would influence households to start using computer communication or to use it more.

In assessing the demand, we measured the frequency and intensity of use of what is commonly referred to as “the information highway” among other things. This was done by asking questions relating to the accessibility of the Internet to Canadian households both at home, the workplace and a number of other locations. Frequency and intensity questions were asked for the use from home.





# 4.0

## Concepts and Definitions

This chapter outlines concepts and definitions of interest to the users. Users are referred to Chapter 12 of this document for a copy of the actual survey questions used.

### Computer communications

Computer communications refers to the use of a computer connected to a communications network for things like electronic banking, E-mail, and going on the Internet.

### Information Highway

The “Information Highway” is a term used to describe the vast amount of information that is accessible to people through computers. This information is readily available by accessing the Internet.

### Internet

The Internet connects computers to the global network of networks for electronic mail services, file transfer, and information search and retrieval.

### Surfing - Browsing the Internet

Surfing or browsing the Internet is a commonly used phrase which refers to the activity of a computer user who enters into the global network with a modem to search for and/or retrieve information on various topics. For the purpose of this survey time spent “surfing the net” is considered computer communication.

### E-Mail

Electronic Mail is a service allowing the transmission of files or text messages between two or more computer stations.

### Typical month

Typical month refers to a month that is not out of the ordinary for the household. Typical month is always in relation to a certain period of time, usually in the past year. The period of time to be used for defining a typical month was left for the respondent to determine.



# 5.0 Survey Methodology

The HIUS was administered in October 1997 to a sub-sample of the dwellings in the Labour Force Survey (LFS) sample, and therefore its sample design is closely tied to that of the LFS. The LFS design is briefly described in Sections 5.1 to 5.4<sup>1</sup>. Sections 5.5 and 5.6 describe how the HIUS departed from the basic LFS design in October 1997.

## 5.1 Population Coverage

The LFS is a monthly household survey whose sample of individuals is representative of the civilian, non-institutionalized population 15 years of age or older in Canada's ten provinces. Specifically excluded from the survey's coverage are residents of the Yukon<sup>2</sup> and Northwest Territories, persons living on Indian Reserves, full-time members of the Canadian Armed Forces and inmates of institutions. These groups together represent an exclusion of approximately 2% of the population aged 15 or over.

## 5.2 Sample Design

The LFS has undergone an extensive redesign, culminating in the introduction of a new design at the end of 1994. The LFS sample is based upon a stratified, multi-stage design employing probability sampling at all stages of the design. The design principles are the same for each province. A diagram summarizing the design stages appears at the end of this section.

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<sup>1</sup> A detailed description of the previous LFS design is available in the Statistics Canada publication entitled **Methodology of the Canadian Labour Force Survey, 1984-1990** (catalogue #71-526).

<sup>2</sup> Since 1992, the LFS has been administered in the Yukon, using an alternative methodology that accommodates some of the operational difficulties inherent to remote locales. To improve reliability due to small sample size, estimates are available on a three month average basis only. These estimates are not included in national totals.

## 5.2.1 Primary Stratification

Provinces are divided into economic regions and employment insurance regions. Economic regions (ERs) are geographic areas of more or less homogeneous economic structure formed on the basis of federal provincial agreements. They are relatively stable over time. Employment insurance economic regions (EIERs) are also geographic areas, and are roughly the same size and number as ERs, but they do not share the same definitions. Labour force estimates are produced for the EIER regions for the use of Human Resources Development Canada.

The intersections of the two types of regions form the first level of stratification for the LFS. These ER/EIER intersections are treated as primary strata and further stratification is carried out within them (see section 5.2.3). Note that a third set of regions, Census Metropolitan Areas (CMAs), is also respected by stratification in the current LFS design, since each CMA is also an EIER.

## 5.2.2 Types of Areas

The primary strata (ER/EIER intersections) are further disaggregated into 3 types of areas: rural, urban, and remote areas. Urban and rural areas are loosely based on the Census definitions of urban and rural, with some exceptions to allow for the formation of strata in some areas. Urban areas include the largest CMAs down to the smallest villages categorized by the 1991 Census as urban (1000 people or more), while rural areas are made up of areas not designated as urban or remote.

All urban areas are further subdivided into two types: those using an apartment list frame and an area frame, as well as those using only an area frame.

Approximately 1% of the LFS population is found in remote areas of provinces which are less accessible to LFS interviewers than other areas. For administrative purposes, this portion of the population is sampled separately through the remote area frame. Some populations, not congregated in places of 25 or more people, are excluded from the sampling frame.

## 5.2.3 **Secondary Stratification**

In urban areas with sufficiently large numbers of apartment buildings, the strata are subdivided into apartment frames and area frames. The apartment list frame is a register which is based upon information supplied by CMHC and is maintained in the 18 largest cities across Canada. The purpose of this is to ensure better representation of apartment dwellers in the sample as well as to minimize the effect of growth in clusters, due to construction of new apartment buildings. In the major cities, the apartment strata are further stratified into low income strata and regular strata.

Where it is possible and/or necessary, the urban area frame is further stratified into regular strata, high income strata, and low population density strata. Most urban areas fall into the regular urban strata, which, in fact, cover the majority of Canada's population. High income strata are found in major urban areas, while low density urban strata consist of small towns that are geographically scattered.


In rural areas, the population density can vary greatly from relatively high population density areas to low population density areas, resulting in the formation of strata that reflect these variations. The different stratification strategies for rural areas were based not only on concentration of population, but also on cost-efficiency and interviewer constraints.

In each province, remote settlements are sampled proportional to the number of dwellings in the settlement, with no further stratification taking place. Dwellings are selected using systematic sampling in each of the places sampled.

## 5.2.4 **Cluster Delineation and Selection**

Households in final strata are not selected directly. Instead, each stratum is divided into clusters, and then a sample of clusters is selected within the stratum. Dwellings are then sampled from selected clusters. Different methods are used to define the clusters, depending on the type of stratum.

Within each urban stratum in the urban area frame, a number of geographically contiguous groups of dwellings, or clusters, are formed based upon 1991 Census counts. These clusters are generally a set of one or more city blocks or block faces. The selection of a sample of clusters (always 6 or a multiple of 6 clusters) from each of these secondary strata represents the first stage of sampling in most urban areas. In some other urban areas, Census Enumeration Areas (EAs) are used as clusters. In the low density urban strata, a three stage design is followed. Under this design, two towns within a stratum are sampled, and then six or 24 clusters within each town are sampled.



For urban apartment strata, instead of defining clusters, the apartment building is the primary sampling unit. Apartment buildings are sampled from the list frame with probability proportional to the number of units in each building.

Within each of the secondary strata in rural areas, where necessary, further stratification is carried out in order to reflect the differences among a number of socio-economic characteristics within each stratum. Within each rural stratum, six EAs or two or three groups of EAs are sampled as clusters.

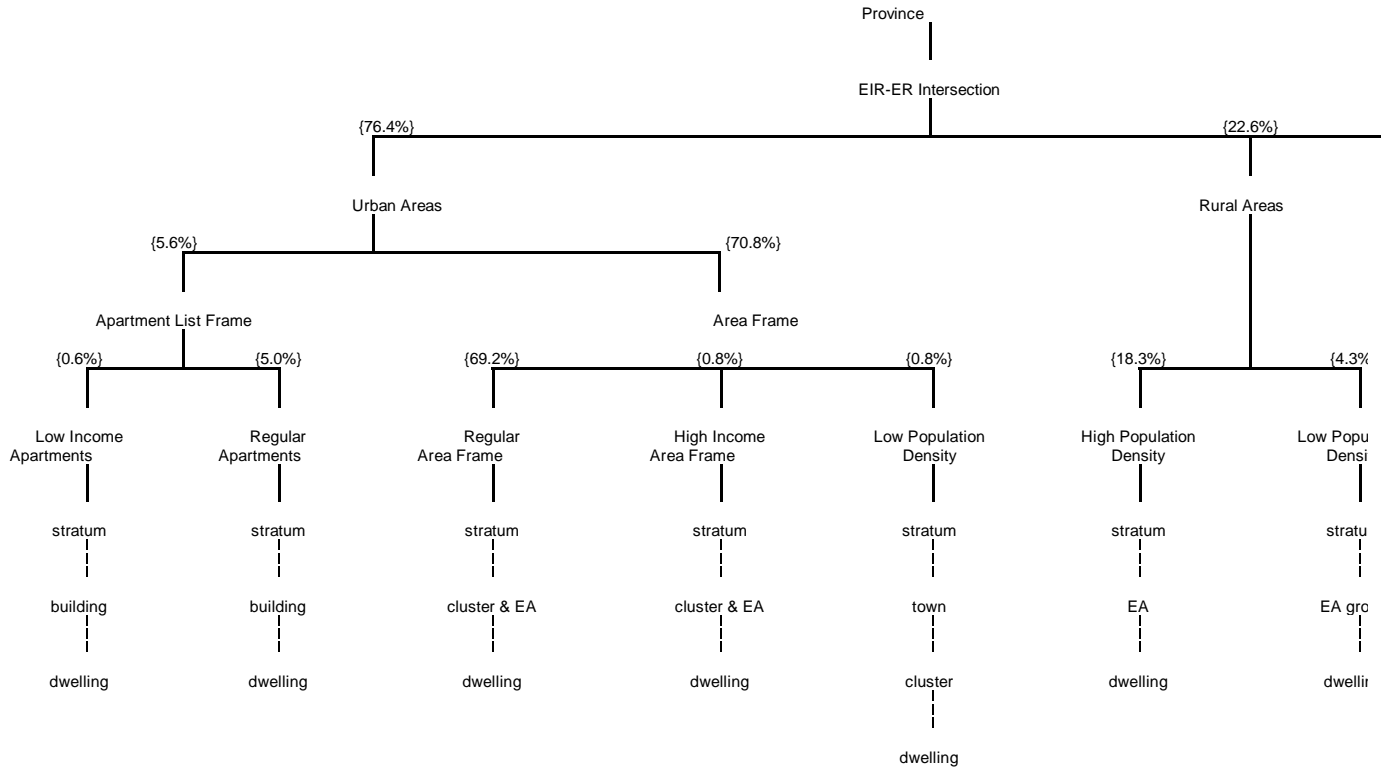
## **5.2.5** **Dwelling Selection**

In all three types of areas (urban, rural and remote areas) selected clusters are first visited by enumerators in the field and a listing of all private dwellings in the cluster is prepared. From the listing, a sample of dwellings is then selected. The sample yield depends on the type of stratum. For example, in the urban area frame, sample yields are either 6 or 8 dwellings, depending on the size of the city. In the urban apartment frame, each cluster yields 5 dwellings, while in the rural areas and EA parts of cities, each cluster yields 10 dwellings. In all clusters, dwellings are sampled systematically. This represents the final stage of sampling.

## **5.2.6** **Person Selection**

Demographic information is obtained for all persons for whom the selected dwelling is the usual place of residence. LFS information is obtained for all civilian household members 15 years of age or older. Response burden is minimized for the elderly (70 years of age or older) by carrying forward their responses for the initial interview to the subsequent five months in the survey.

# Labour Force Survey Sample Design - 1995+



| = level of stratification  
 | = stage of sampling

EIR - Employment Insurance Region  
 ER - Economic Region  
 (%) - percentage of total sample

EA - Census Enumeration Area  
 cluster - set of block faces







## 5.3 **Sample Size**

The sample size of eligible persons in the LFS is determined so as to meet the statistical precision requirements for various labour force characteristics at the provincial and sub-provincial level, and to meet the requirements of federal, provincial and municipal governments as well as a host of other data users.

The monthly LFS sample consists of approximately 59,000 dwellings. After excluding dwellings found to be vacant, dwellings demolished or converted to non-residential uses, dwellings containing only ineligible persons, dwellings under construction, and seasonal dwellings, about 52,350 dwellings remain which are occupied by one or more eligible persons. From these dwellings, LFS information is obtained for approximately 102,000 civilians aged 15 or over.

## 5.4 **Sample Rotation**

The LFS employs a panel design whereby the entire monthly sample of dwellings consists of 6 panels, or rotation groups, of approximately equal size. Each of these panels is, by itself, representative of the entire LFS population. All dwellings in a rotation group remain in the LFS sample for 6 consecutive months after which time they are replaced (rotated out of the sample) by a new panel of dwellings selected from the same or similar clusters.

This rotation pattern was adopted to minimize any problems of non-response or respondent burden that would occur if households were to remain in the sample for longer than 6 months. It also has the statistical advantage of providing a common sample base for short-term month-to-month comparisons of LFS characteristics, since five of the six rotation groups in the LFS sample are common from month to month.

Because of the rotation group feature, it is possible to readily conduct supplementary surveys using the LFS design but employing less than the full size sample.

## 5.5

### Modifications to the L.F.S design for the Supplement

The HIUS used five of the six rotation groups in the October 1997 LFS sample. For the HIUS, the coverage of the LFS was set at the household level. Unlike the LFS where information is collected for all eligible household members, the HIUS only collected information from one household member who reported the information at the household level.

## 5.6

### Sample size by Province for the Supplement

The following table shows the number of household in the LFS sampled rotations who were eligible for the HIUS supplement.

PROVINCE	SAMPLE SIZE
Newfoundland	1,530
Prince Edward Island	1,223
Nova Scotia	2,919
New Brunswick	2,648
Quebec	8,882
Ontario	13,294
Manitoba	3,095
Saskatchewan	2,782
Alberta	3,309
British Columbia	3,946
CANADA	43,628

# 6.0 Data Collection

Data collection for the LFS is carried out each month using the computer-assisted method during the week following the LFS reference week, usually the third week of the month.

## 6.1 Interviewing for the LFS

Statistics Canada interviewers, who are part-time employees hired and trained specifically to carry out the LFS, contact each of the sampled dwellings to obtain the required labour force information. Each interviewer contacts approximately 70 dwellings per month.

Dwellings new to the sample are contacted through a personal visit. The interviewer first obtains socio-demographic information for each household member and then obtains labour force information for all eligible members. All interviews are conducted using a notebook computer. Provided there is a telephone in the dwelling and permission has been granted, subsequent interviews are conducted by telephone. As a result, approximately 85% of all dwellings are interviewed by telephone. In these subsequent monthly interviews, as they are called, the interviewer confirms the socio-demographic information collected in the first month and collects the labour force information for the current month.

In all dwellings, information about all household members is obtained from a knowledgeable household member - usually the person at home when the interviewer calls. Such 'proxy' reporting, which accounts for approximately 55% of the information collected, is used to avoid the high cost and extended time requirements that would be involved in repeat visits or calls necessary to obtain information directly from each respondent.

At the conclusion of the LFS monthly interviews, interviewers introduce the supplementary survey, if any, to be administered to some or all household members that month.

If, during the course of the six months that a dwelling normally remains in the sample, an entire household moves out and is replaced by a new household, information is obtained about the new household for the remainder of the six-month period.



## **6.2** **Supervision and Control**

All LFS interviewers are under the supervision of a staff of senior interviewers who are responsible for ensuring that interviewers are familiar with the concepts and procedures of the LFS and its many supplementary surveys, and also for periodically monitoring their interviewers and reviewing their completed documents. The senior interviewers are, in turn, under the supervision of the LFS program managers, located in each of the six Statistics Canada regional offices.


## **6.3** **Non-Response to the LFS**

Interviewers are instructed to make all reasonable attempts to obtain LFS interviews with members of eligible households. For individuals who at first refuse to participate in the LFS, a letter is sent from the Regional Office to the dwelling address stressing the importance of the survey and the household's cooperation. This is followed by a second call (or visit) from the interviewer. For cases in which the timing of the interviewer's call (or visit) is inconvenient, an appointment is arranged to call back at a more convenient time. For cases in which there is no one home, numerous call backs are made. Under no circumstances are sampled dwellings replaced by other dwellings for reasons of non-response.

Each month, after all attempts to obtain interviews have been made, a small number of non-responding households remain. For households non-responding to the LFS and for which LFS information was obtained in the previous month, this information is brought forward and used as the current month's LFS information. No supplementary survey information is collected for these households.

## **6.4** **Data Collection Modifications for Household Internet Use Survey**

Information for the HIUS was obtained from a knowledgeable household member. Upon completion of the Labour Force Survey interview, the interviewer introduced the HIUS and proceeded with the interview with the respondent's permission.



The HIUS was programmed to appear on the list of surveys to be completed on the notebook computer after the demographic component for the LFS had been completed. Any HIUS component not completed at the time the LFS was transmitted to one of the Statistics Canada regional offices was left incomplete and transmitted with the LFS.

## **6.5**

### **Non-Response to the Household Internet Use Survey**

For households responding to the LFS, the next stage of data collection was to administer the HIUS. In total, 43,628 households were eligible for the supplementary survey; the HIUS interview was completed for 40,481 of these households for a response rate of 92.8%. More detailed information on response rates is presented in Chapter 8 (Data Quality).



# 7.0 Data Processing

The main output of the HIUS is a "clean" microdata file. This section presents a brief summary of the processing steps involved in producing this file.

## 7.1 Data Capture

Capture of survey data was done directly on notebook computers by interviewers at the time of collection. A partly edited version of the computer record was electronically transmitted to Ottawa for further processing. In total, 50,178 interviews were captured and transmitted for the survey.

## 7.2 Editing

The type of error treated involved a lack of information in questions which should have been answered. For this type of error, a non-response or "not-stated" code was assigned to the item.

## 7.3 Coding of Open-ended Questions

No data items on the questionnaire were recorded by interviewers in an open-ended format.

## 7.4 Creation of Derived Variables

A number of data items on the microdata file have been derived by combining items on the questionnaire in order to facilitate data analysis. CMA, for example, is actually a combination of Census Metropolitan Area (CMA) and Census Agglomeration(CA). The CAs have been recoded to 0, while the CMAs remain the same.

The income quartile variable was also constructed from income information collected during the interview and from information collected for the Survey

of Volunteering Giving and Caring and the Canadian Travel Survey conducted on the same sample. Imputation was used to create income for records that had that information missing (see section 8.2.4 on imputation of income for more details on the method that was used).

## 7.5 Weighting

The principle behind estimation in a probability sample such as the LFS is that each person in the sample "represents", besides himself or herself, several other persons not in the sample. For example, in a simple random 2% sample of the population, each person in the sample represents 50 persons in the population. The same principle also applies to households.

The weighting phase is a step which calculates, for each record, what this number is. This weight appears on the microdata file, and must be used to derive meaningful estimates from the survey. For example, if the number of households typically using computer communication from home is to be estimated, it is done by selecting the records referring to those households in the sample with that characteristic and summing the weights entered on those records.

Details of the method used to calculate these weights are presented in Chapter 11.

## 7.6 Suppression of Confidential Information

It should be noted that the 'Public Use' microdata files described above differ in a number of important respects from the survey 'master' files held by Statistics Canada. These differences are the result of actions taken to protect the anonymity of individual survey respondents. Users requiring access to information excluded from the microdata files may purchase custom tabulations. Estimates generated will be released to the user, subject to meeting the guidelines for analysis and release outlined in Section 9 of this document.

### **Province** - Suppression of Geographic Identifiers

The survey master data file includes explicit geographic identifiers for province, urban/rural and Census Metropolitan Area. The survey public-use microdata files usually do not contain any geographic identifiers below the provincial level. However, since the HIUS is a household based survey, the variables CMA and urban/rural will be on the microdata file.



# 8.0 Data Quality

## 8.1 Response Rates

The following table summarizes the response rates to the Labour Force Survey and to the HIUS in October 1997.

	Household response rate for full LFS (10, 97) (*1)	Household response rate for LFS rotations (1, 2, 3, 5, 6) (*1)	Household response rate to Household Internet Use Survey (*2)
Newfoundland	95.6%	96.0%	95.6%
Prince Edward Island	96.8%	97.3%	96.8%
Nova Scotia	95.0%	95.6%	95.9%
New Brunswick	95.5%	96.0%	94.9%
Quebec	95.8%	96.3%	94.4%
Ontario	96.1%	96.6%	92.4%
Manitoba	97.9%	98.2%	92.1%
Saskatchewan	97.6%	97.8%	91.1%
Alberta	96.9%	97.4%	90.7%
British Columbia	94.5%	97.4%	88.0%
CANADA	96.1%	96.6%	92.8%

**Note:**

- (\*1) Response rate is number of responding households as a percentage of number of eligible households.
- (\*2) Response rate is number of households responding to the Household Internet Use Survey as a percentage of number of households responding to LFS in rotations sampled.

## 8.2 Survey Errors

The estimates derived from this survey are based on a sample of households. Somewhat different figures might have been obtained if a complete census had been taken using the same questionnaire, interviewers, supervisors, processing methods, etc. as those actually used. The difference between the estimates obtained from the sample and the results from a complete count taken under similar conditions is called the sampling error of the estimate.

Errors which are not related to sampling may occur at almost every phase of a survey operation. Interviewers may misunderstand instructions, respondents may make errors in answering questions, the answers may be incorrectly entered on the questionnaire and errors may be introduced in the processing and tabulation of the data. These are all examples of non-sampling errors.

### 8.2.1 The Frame

Because the HIUS was a supplement to the LFS, the frame used was the LFS frame. Any non-response to the LFS had an impact on the HIUS frame. Because non-response to the LFS is quite low (usually less than 5%) this impact was minimal. The quality of the sampling variables in the frame was very high. The HIUS sample consisted of five rotation groups from the LFS. No records were dropped due to missing rotation group number or any other type of sampling variable.

Note that the LFS frame excludes about 2% of all households in the 10 provinces of Canada. Therefore, the HIUS frame also excludes the same proportion of households in the same geographical area. It is likely that this exclusion introduces little, if any, significant bias into the survey data.

All variables in the LFS frame are updated monthly.

Some variables on the sampling frame play a critical role with respect to software application used in the survey. For example, in the HIUS CAI application, each record must have accurate stratum, cluster and rotation group codes. These variables are always of very high quality each month in the LFS.

## 8.2.2

### Data Collection

Interviewer training consisted of reading the HIUS Procedures Manual, practising with the HIUS training cases on the laptop computer, and discussing any questions with senior interviewers before the start of the survey. A description of the background and objectives of the survey was provided, as well as a glossary of terms and a set of questions and answers. Interviewers collected HIUS information at the same time that LFS information was collected. The collection period ran from October 20 - 29, 1997.

## 8.2.3

### Data Processing

During processing of the data, 48 HIUS records did not match to corresponding records in the LFS. Thus they were coded as out-of-scope and were dropped from further processing. When supplementary survey records do not match to host survey records they must be dropped since a weight cannot be derived for them.


Conversely, 2871 records in the LFS were found that should have matched to an HIUS record but did not. These records were coded as in-scope, since they were eligible records from the frame which, for one reason or another, did not have corresponding HIUS records. These records were considered to be non-responding records, and were used in the weighting process to adjust for non-response.

Data processing of the HIUS was straightforward. Any record that contained a refusal or don't know in the first question (Q01) was coded as a non-response. Note that 1,722 records were treated this way. Since the data was collected using a CAI instrument, data quality before processing was very high. Very few changes were made to the data during editing.

## 8.2.4

### Imputation of income

In order to reduce response burden, the HIUS collected information on household income for only one of the five rotation groups (group 5); income information for the remaining four groups came from the National Survey of Giving, Volunteering and Participating (NSGVP), an LFS supplement conducted in November 1997. The NSGVP, like the HIUS, asked for a best numerical estimate of household income and, failing that, asked for the best categorical estimate among 11 possible categories



ranging from \$5,000 - to \$100,000 +. If an estimate was not given but personal income information was available, personal income was used as household income provided there was only one adult in the household and all children, if any, were under the age of 13; otherwise income was coded as missing. Income was also coded as missing if households in both October (HIUS) and November (NSGVP) samples had a complete change of membership (movers).

Households in the HIUS or NSGVP for which income was coded as missing were linked to the Canadian Travel Survey (CTS), an LFS supplement conducted in October 1997. The CTS asked for the best estimate of household income among five broad categories ranging from \$20,000 - to \$80,000 +. If an estimate was not given, income was coded as missing.

Overall, 56 % of the households reported income as numerical, 6 % as an HIUS/NSGVP category, and 15 % as a CTS category. Thus for 23 % of the households, income was coded as missing.


In order to produce income quartiles, categorical and missing values of income were converted to numerical values. The conversion involved a three-step imputation process in which (i) income for a given household reporting a categorical HIUS/NSGVP value was substituted by the income of a household which reported a numerical HIUS/NSGVP value and shared the most similar characteristics (e.g., hourly earnings, geographic region), provided the numerical value was consistent with the HIUS/NSGVP category; (ii) income for a given household reporting a categorical CTS value was substituted by the income of a household which reported a numerical HIUS/NSGVP value or whose income had been converted to a numerical value via step (i) and shared the most similar characteristics, provided the numerical value was consistent with the CTS category; and (iii) missing income for a given household was substituted by the income of a household which reported a numerical HIUS/NSGVP value or whose income had been converted to a numerical value via steps (i) or (ii) and shared the most similar characteristics.

## **8.2.5**

### **Non-response**



Over a large number of observations, randomly occurring errors will have little effect on estimates derived from the survey. However, errors occurring systematically will contribute to biases in the survey estimates. Considerable time and effort was made to reduce non-sampling errors in the survey. Quality assurance measures were implemented at each step of the data collection and processing cycle to monitor the quality of the



data. These measures included the use of highly skilled interviewers, extensive training of interviewers with respect to the survey procedures and questionnaire, observation of interviewers to detect problems of questionnaire design or misunderstanding of instructions, procedures to ensure that data capture errors were minimized and coding and edit quality checks to verify the processing logic.

A major source of non-sampling errors in surveys is the effect of non-response on the survey results. The extent of non-response varies from partial non-response (failure to answer just one or some questions) to total non-response. Total non-response occurred because the interviewer was either unable to contact the respondent, no member of the household was able to provide the information, or the respondent refused to participate in the survey. Total non-response was handled by adjusting the weight of households who responded to the survey to compensate for those who did not respond.


In most cases, partial non-response to the survey occurred when the respondent did not understand or misinterpreted a question, refused to answer a question, or could not recall the requested information.

Item non-response was very low for the HIUS. Most questions had non-response rates which were less than .01%.

Since it is an unavoidable fact that estimates from a sample survey are subject to sampling error, sound statistical practice calls for researchers to provide users with some indication of the magnitude of this sampling error. This section of the documentation outlines the measures of sampling error which Statistics Canada commonly uses and which it urges users producing estimates from this microdata file to use also.

The basis for measuring the potential size of sampling errors is the standard error of the estimates derived from survey results.

However, because of the large variety of estimates that can be produced from a survey, the standard error of an estimate is usually expressed relative to the estimate to which it pertains. This resulting measure, known as the coefficient of variation (CV) of an estimate, is obtained by dividing the standard error of the estimate by the estimate itself and is expressed as a percentage of the estimate.



For example, suppose that, based upon the survey results, one estimates that 61.6% of Canadian households had never used computer communications from home, work, school or any other location in October 1997, and this estimate is found to have a standard error of .00370. Then the coefficient of variation of the estimate is calculated as:

$$\left( \frac{.00370}{.616} \right) \times 100\% = 0.6\%$$

# 9.0 Guidelines for Tabulation, Analysis and Release

This section of the documentation outlines the guidelines to be adhered to by users tabulating, analysing, publishing or otherwise releasing any data derived from the survey microdata file. With the aid of these guidelines, users of microdata should be able to produce the same figures as those produced by Statistics Canada and, at the same time, will be able to develop currently unpublished figures in a manner consistent with these established guidelines.

## 9.1 Rounding Guidelines

In order that estimates for publication or other release derived from this microdata file correspond to those produced by Statistics Canada, users are urged to adhere to the following guidelines regarding the rounding of such estimates:

- a) Estimates in the main body of a statistical table are to be rounded to the nearest hundred units using the normal rounding technique. In normal rounding, if the first or only digit to be dropped is 0 to 4, the last digit to be retained is not changed. If the first or only digit to be dropped is 5 to 9, the last digit to be retained is raised by one. For example, in normal rounding to the nearest 100, if the last two digits are between 00 and 49, they are changed to 00 and the preceding digit (the hundreds digit) is left unchanged. If the last digits are between 50 and 99 they are changed to 00 and the preceding digit is incremented by 1.
- b) Marginal sub-totals and totals in statistical tables are to be derived from their corresponding unrounded components and then are to be rounded themselves to the nearest 100 units using normal rounding.
- c) Averages, proportions, rates and percentages are to be computed from unrounded components (i.e. numerators and/or denominators) and then are to be rounded themselves to one decimal using normal

rounding. In normal rounding to a single digit, if the final or only digit to be dropped is 0 to 4, the last digit to be retained is not changed. If the first or only digit to be dropped is 5 to 9, the last digit to be retained is increased by 1.

- d) Sums and differences of aggregates (or ratios) are to be derived from their corresponding unrounded components and then are to be rounded themselves to the nearest 100 units (or the nearest one decimal) using normal rounding.
- e) In instances where, due to technical or other limitations, a rounding technique other than normal rounding is used resulting in estimates to be published or otherwise released which differ from corresponding estimates published by Statistics Canada, users are urged to note the reason for such differences in the publication or release document(s).
- f) Under no circumstances are unrounded estimates to be published or otherwise released by users. Unrounded estimates imply greater precision than actually exists.

## 9.2

### Sample Weighting Guidelines for Tabulation

The sample design used for the HIUS was not self-weighting. When producing simple estimates, including the production of ordinary statistical tables, users must apply the proper sampling weight.


If proper weights are not used, the estimates derived from the microdata file cannot be considered to be representative of the survey population, and will not correspond to those produced by Statistics Canada.

Users should also note that some software packages may not allow the generation of estimates that exactly match those available from Statistics Canada, because of their treatment of the weight field.

#### 9.2.1

##### Definitions of types of estimates: Categorical vs. Quantitative





Before discussing how the HIUS data can be tabulated and analysed, it is useful to describe the two main types of point estimates of population characteristics which can be generated from the microdata file for the HIUS.

### Categorical Estimates

Categorical estimates are estimates of the number, or percentage of the surveyed population possessing certain characteristics or falling into some defined category. The number of households which have never used computer communications or the proportion of households for which one or more members have used a computer at home for E-mail are examples of such estimates. An estimate of the number of households possessing a certain characteristic may also be referred to as an estimate of an aggregate.

#### Examples of Categorical Questions:

- Q: How often do members of your household use computer communications at home in a typical month?
- R: At least 7 times per week, at least 4 times per month, etc.
- Q: In 1996, what was your total annual family income before taxes and deductions?
- R: Less than \$5,000, \$5,000 to \$10,000, and so on.

### Quantitative Estimates

Quantitative estimates are estimates of totals or of means, medians and other measures of central tendency of quantities based upon some or all of the members of the surveyed population. They also specifically involve estimates of the form  $X/\bar{Y}$  where  $X$  is an estimate of surveyed population quantity total and  $\bar{Y}$  is an estimate of the number of persons in the surveyed population contributing to that total quantity. Note that there were no true quantitative questions in the HIUS application.

An example of a quantitative estimate is the average number of weeks for which unemployment insurance was collected for absences due to illness (taken from an unemployment survey). The numerator is an estimate of the total number of weeks for which unemployment insurance was collected for all persons experiencing an absence due to illness, and its denominator is the number of persons reporting an absence due to illness.

#### Examples of Quantitative Questions :

- Q: How many consecutive weeks was this last absence?  
R: |\_|\_| Weeks
- Q: How many separate periods of 2 or more weeks were you unable to work due to your own illness, accident or pregnancy?  
R: |\_|\_| Periods

## 9.2.2 **Tabulation of Categorical Estimates**

Estimates of the number of people with a certain characteristic can be obtained from the microdata file by summing the final weights of all records possessing the characteristic(s) of interest. Proportions and ratios of the form  $X/Y$  are obtained by:

- (a) summing the final weights of records having the characteristic of interest for the numerator (X),
  - (b) summing the final weights of records having the characteristic of interest for the denominator (Y), then
- © dividing the numerator estimate by the denominator estimate.

## 9.2.3 **Tabulation of Quantitative Estimates**

Estimates of quantities can be obtained from the microdata file by multiplying the value of the variable of interest by the final weight for each record, then summing this quantity over all records of interest. For example, using an unemployment survey, to obtain an estimate of the total number of weeks of employment insurance received by people whose last absence was due to pregnancy, multiply the value reported for weeks received EI by the final weight for the record, then sum this value over all records which report last absence due to pregnancy.

To obtain a weighted average of the form  $X/Y$ , the numerator (X) is calculated as for a quantitative estimate and the denominator (Y) is calculated as for a categorical estimate. For example, to estimate the average number of weeks EI was received by people whose last absence was due to pregnancy,

- (a) estimate the total number of weeks as described above,
  - (b) estimate the number of people in this category by summing the final weights of all records which report last absence due to pregnancy, then
- © divide estimate (a) by estimate (b).

## 9.3

# Guidelines for Statistical Analysis

The HIUS is based upon a complex sample design, with stratification, multiple stages of selection, and unequal probabilities of selection of respondents. Using data from such complex surveys presents problems to analysts because the survey design and the selection probabilities affect the estimation and variance calculation procedures that should be used. In order for survey estimates and analyses to be free from bias, the survey weights must be used.

While many analysis procedures found in statistical packages allow weights to be used, the meaning or definition of the weight in these procedures differ from that which is appropriate in a sample survey framework, with the result that while in many cases the estimates produced by the packages are correct, the variances that are calculated are poor. Variances for simple estimates such as totals, proportions and ratios (for qualitative variables) are provided in the accompanying Sampling Variability Tables.

For other analysis techniques (for example linear regression, logistic regression and analysis of variance), a method exists which can make the variances calculated by the standard packages more meaningful, by incorporating the unequal probabilities of selection. The method rescales the weights so that there is an average weight of 1.

For example, suppose that analysis of all male respondents is required. The steps to rescale the weights are as follows:

- select all respondents from the file who reported SEX=male
- Calculate the AVERAGE weight for these records by summing the original person weights from the microdata file for these records and then dividing by the number of respondents who reported SEX=male
- for each of these respondents, calculate a RESCALED weight equal to the original person weight divided by the AVERAGE weight
- perform the analysis for these respondents using the RESCALED weight.

However, because the stratification and clustering of the sample's design are still not taken into account, the variance estimates calculated in this way are likely to be under-estimates.

The calculation of truly meaningful variance estimates requires detailed knowledge of the design of the survey. Such detail cannot be given in this microdata file because of confidentiality. Variances that take the complete

sample design into account can be calculated for many statistics by Statistics Canada on a cost recovery basis.

## 9.4 CV Release Guidelines

Before releasing and/or publishing any estimate from the Residential HIUS, users should first determine the quality level of the estimate. The quality levels are *acceptable*, *marginal* and *unacceptable*. Data quality is affected by both sampling and non-sampling errors as discussed in section 8. However for this purpose, the quality level of an estimate will be determined only on the basis of sampling error as reflected by the coefficient of variation as shown in the table below. Nonetheless, users should be sure to read section 8 to be more fully aware of the quality characteristics of these data.

First, the number of respondents who contribute to the calculation of the estimate should be determined. If this number is less than 30, the weighted estimate should be considered to be of unacceptable quality.

For weighted estimates based on sample sizes of 30 or more, users should determine the coefficient of variation of the estimate and follow the guidelines below. These quality level guidelines should be applied to weighted rounded estimates.

All estimates can be considered releasable. However, those of marginal or unacceptable quality level must be accompanied by a warning to caution subsequent users.

### Quality Level Guidelines

Quality Level of Estimate	Guidelines
---------------------------	------------

1. Acceptable	<p>Estimates have: a sample size of 30 or more, and low coefficients of variation in the range 0.0% - 16.5%</p> <p>No warning is required.</p>
2. Marginal	<p>Estimates have: a sample size of 30 or more, and high coefficients of variation in the range 16.6% - 33.3%.</p> <p>Estimates should be flagged with the letter M (or some similar identifier). They should be accompanied by a warning to caution subsequent users about the high levels of error, associated with the estimates.</p>
3. Unacceptable	<p>Estimates have: a sample size of less than 30, or very high coefficients of variation in excess of 33.3%.</p> <p>Statistics Canada recommends not to release estimates of unacceptable quality. However, if the user chooses to do so then estimates should be flagged with the letter U (or some similar identifier) and the following warning should accompany the estimates:</p> <p>"The user is advised that . . . (specify the data) . . . do not meet Statistics Canada's quality standards for this statistical program. Conclusions based on these data will be unreliable, and most likely invalid. These data and any consequent findings should not be published. If the user chooses to publish these data or findings, then this disclaimer must be published with the data."</p>



# 10.0 Approximate Sampling Variability Tables

In order to supply coefficients of variation which would be applicable to a wide variety of categorical estimates produced from this microdata file and which could be readily accessed by the user, a set of Approximate Sampling Variability Tables has been produced. These "look-up" tables allow the user to obtain an approximate coefficient of variation based on the size of the estimate calculated from the survey data.

The coefficients of variation (C.V.) are derived using the variance formula for simple random sampling and incorporating a factor which reflects the multi-stage, clustered nature of the sample design. This factor, known as the design effect, was determined by first calculating design effects for a wide range of characteristics and then choosing from among these a conservative value to be used in the look-up tables which would then apply to the entire set of characteristics.

The table below shows the design effects, sample sizes and population counts by province which were used to produce the Approximate Sampling Variability Tables.

PROVINCE	DESIGN EFFECT	SAMPLE SIZE	POPULATION
Newfoundland	1.73	1,462	198,120
Prince Edward Island	1.62	1,184	51,749
Nova Scotia	1.96	2,800	366,259
New Brunswick	1.50	2,514	292,598
Quebec	2.25	8,384	3,037,373
Ontario	2.17	12,279	4,299,675
Manitoba	2.12	2,849	433,896
Saskatchewan	1.82	2,534	395,612
Alberta	2.13	3,001	1,066,354
British Columbia	1.82	3,474	1,544,094
Atlantic Provinces	1.84	7,960	908,726
Prairies	2.60	8,384	1,895,862
Canada	2.32	40,481	11,685,730

All coefficients of variation in the Approximate Sampling Variability Tables are approximate and, therefore, unofficial. Estimates of actual variance for specific variables may be obtained from Statistics Canada on a cost-recovery basis. The use of actual variance estimates would allow users to release otherwise unreleaseable estimates, i.e., estimates with coefficients of variation in the 'confidential' range.

Remember: if the number of observations on which an estimate is based is less than 30, the weighted estimate should not be released regardless of the value of the coefficient of variation for this estimate. This is because the formulas used for estimating the variance do not hold true for small sample sizes.

## 10.1

### How to use the C.V. tables for Categorical Estimates

The following rules should enable the user to determine the approximate coefficients of variation from the Sampling Variability Tables for estimates of the number, proportion or percentage of the surveyed population possessing a certain characteristic and for ratios and differences between such estimates.

Rule 1: Estimates of Numbers Possessing a Characteristic  
(Aggregates)

The coefficient of variation depends only on the size of the estimate itself. On the Sampling Variability Table for the appropriate geographic area, locate the estimated number in the left-most column of the table (headed "Numerator of Percentage") and follow the asterisks (if any) across to the first figure encountered. This figure is the approximate coefficient of variation.

Rule 2: Estimates of Proportions or Percentages Possessing a Characteristic

The coefficient of variation of an estimated proportion or percentage depends on both the size of the proportion or percentage and the size of the total upon which the proportion or percentage is based. Estimated proportions or percentages are relatively more reliable than the corresponding estimates of the numerator of the proportion or percentage, when the proportion or percentage is based upon a sub-group of the population. For example, the proportion of "households which have never used computer communications" is more reliable than the estimated number of "households which have never used computer communications". (Note that in the tables the CV's decline in value reading from left to right).



When the proportion or percentage is based upon the total population of the geographic area covered by the table, the CV of the proportion or percentage is the same as the CV of the numerator of the proportion or percentage. In this case, Rule 1 can be used.

When the proportion or percentage is based upon a subset of the total population (e.g. those in a particular sex or age group), reference should be made to the proportion or percentage (across the top of the table) and to the numerator of the proportion or percentage (down the left side of the table). The intersection of the appropriate row and column gives the coefficient of variation.

**Rule 3: Estimates of Differences Between Aggregates or Percentages**

The standard error of a difference between two estimates is approximately equal to the square root of the sum of squares of each standard error considered separately. That is, the standard error of a difference ( $\bar{d} = X_1 - X_2$ ) is:

$$s_{\bar{d}} = \sqrt{(\hat{X}_1 a_1)^2 + (\hat{X}_2 a_2)^2}$$

where  $X_1$  is estimate 1,  $X_2$  is estimate 2, and  $a_1$  and  $a_2$  are the coefficients of variation of  $X_1$  and  $X_2$  respectively. The coefficient of variation of  $\bar{d}$  is given by  $s_{\bar{d}}/\bar{d}$ . This formula is accurate for the difference between separate and uncorrelated characteristics, but is only approximate otherwise.

**Rule 4: Estimates of Ratios**

In the case where the numerator is a subset of the denominator, the ratio should be converted to a percentage and Rule 2 applied. This would apply, for example, to the case where the denominator is the number of "households which have never used computer communications" and the numerator is the number of "households which have never used computer communications and have a computer at home".

In the case where the numerator is not a subset of the denominator, as for example, the ratio of the number of "households in Quebec which use a computer at home for electronic banking in a typical month" as compared to the number of "households in Ontario which use a computer at home for electronic banking in a typical month", the standard deviation of the ratio of the estimates is approximately equal to the square root of the sum of squares of each coefficient of variation considered separately multiplied by  $R$ . That is, the standard error of a ratio ( $R = X_1 / X_2$ ) is:

$$s_{\hat{R}} = \hat{R} \sqrt{a_1^2 + a_2^2}$$

where  $a_1$  and  $a_2$  are the coefficients of variation of  $X_1$  and  $X_2$  respectively. The coefficient of variation of  $R$  is given by  $s_R/R$ . The formula will tend to overstate the error, if  $X_1$  and  $X_2$  are positively correlated and understate the error if  $X_1$  and  $X_2$  are negatively correlated.

Rule 5: Estimates of Differences of Ratios

In this case, Rules 3 and 4 are combined. The CV's for the two ratios are first determined using Rule 4, and then the CV of their difference is found using Rule 3.

## 10.1.1

### Examples of using the C.V. tables for Categorical Estimates

The following 'real life' examples are included to assist users in applying the foregoing rules.

Example 1 : Estimates of Numbers Possessing a Characteristic (Aggregates)

Suppose that a user estimates that 7,200,437 households have never used computer communications. How does the user determine the coefficient of variation of this estimate?

- (1) Refer to the CV table for CANADA.
- (2) The estimated aggregate (7,200,437) does not appear in the left-hand column (the 'Numerator of Percentage' column), so it is necessary to use the figure closest to it, namely 7,000,000.
- (3) The coefficient of variation for an estimated aggregate is found by referring to the first non-asterisk entry on that row, namely, 0.5%.
- (4) So the approximate coefficient of variation of the estimate is 0.5%.

The finding that there are 7,200,437 households which have never used computer communications is publishable with no qualifications.

**Example 2 : Estimates of Proportions or Percentages Possessing a Characteristic**

Suppose that the user estimates that  $1,294,587/7,200,437=18.0\%$  of households which have never used computer communications reported that they have a computer at home. How does the user determine the coefficient of variation of this estimate?

- (1) Refer to the table for CANADA.
- (2) Because the estimate is a percentage which is based on a subset of the total population (i.e., households which have never used computer communications), it is necessary to use both the percentage (18.0%) and the numerator portion of the percentage (1,294,587) in determining the coefficient of variation.
- (3) The numerator, 1,294,587, does not appear in the left-hand column (the 'Numerator of Percentage' column) so it is necessary to use the figure closest to it, namely 1,500,000. Similarly, the percentage estimate does not appear as any of the column headings, so it is necessary to use the figure closest to it, 20.0%.
- (4) The figure at the intersection of the row and column used, namely 1.9% is the coefficient of variation to be used.
- (5) So the approximate coefficient of variation of the estimate is 1.9%. The finding that 18.0% of households which have never used computer communications have a computer at home can be published with no qualifications.

**Example 3 : Estimates of Differences Between Aggregates or Percentages**

Suppose that a user estimates that  $245,658/3,037,373=8.1\%$  of households in Quebec reported that one or more members of their household use computer at home for E-mail in a typical month, while  $697,621/4,299,675= 16.2\%$  of households in Ontario reported that one or more members of their household use computer at home for E-mail in a typical month. How does the user determine the coefficient of variation of the difference between these two estimates?

- (1) Using the QUEBEC and ONTARIO CV table in the same manner as described in example 1 gives the CV of the estimate for households in Quebec as 5.4%, and the CV of the estimate for households in Ontario as 2.8%.
- (2) Using rule 3, the standard error of a difference ( $\hat{d} = \hat{X}_1 - \hat{X}_2$ ) is:

$$s_{\hat{d}} = \sqrt{(\hat{X}_1 a_1)^2 + (\hat{X}_2 a_2)^2}$$

where  $\hat{X}_1$  is estimate 1,  $\hat{X}_2$  is estimate 2, and  $a_1$  and  $a_2$  are the coefficients of variation of  $\hat{X}_1$  and  $\hat{X}_2$  respectively.

That is, the standard error of the difference  $\hat{d} = |.081 - .162| = .081$  is:

$$\begin{aligned} s_{\hat{d}} &= \sqrt{[(.081)(.054)]^2 + [(.162)(.028)]^2} \\ &= \sqrt{(.0000191 + .0000205)} \\ &= .0063 \end{aligned}$$

- (3) The coefficient of variation of  $\hat{d}$  is given by  $s_{\hat{d}}/\hat{d} = .0063/.081 = .078$
- (4) So the approximate coefficient of variation of the difference between the estimates is 7.8%. This estimate is publishable with no qualifications.

#### Example 4 : Estimates of Ratios

Suppose that the user estimates that 245,658 households in Quebec reported that one or more members of their household use computer at home for E-mail in a typical month, while while 697,621 households in Ontario reported that one or more members of their household use computer at home for E-mail in a typical month. The user is interested in comparing the estimate of Quebec households versus that of Ontario households in the form of a ratio. How does the user determine the coefficient of variation of this estimate?

- (1) First of all, this estimate is a ratio estimate, where the numerator of the estimate ( $= \hat{X}_1$ ) is the number of households in Quebec which reported that one or more members of their household use computer at home for E-mail in a typical month. The denominator

of the estimate (=  $X_2$ ) is the number of households in Ontario which reported that one or more members of their household use computer at home for E-mail in a typical month.

- (2) Refer to the tables for QUEBEC and ONTARIO.
- (3) The numerator of this ratio estimate is 245,658. The figure closest to it is 250,000. The coefficient of variation for this estimate is found by referring to the first non-asterisk entry on that row in the QUEBEC table, namely, 5.4%.
- (4) The denominator of this ratio estimate is 697,621. The figure closest to it is 750,000. The coefficient of variation for this estimate is found by referring to the first non-asterisk entry on that row in the ONTARIO table, namely, 2.8%.
- (5) So the approximate coefficient of variation of the ratio estimate is given by rule 4, which is,

$$a_{\hat{R}} = \sqrt{a_1^2 + a_2^2}$$

where  $a_1$  and  $a_2$  are the coefficients of variation of  $X_1$  and  $X_2$  respectively.

That is ,

$$a_{\hat{R}} = \sqrt{(0.054)^2 + (0.028)^2}$$

$$= 0.061$$

The obtained ratio of Quebec versus Ontario households which reported that one or more members of their household use computer at home for E-mail in a typical month is 245,658/697,621 - which is 0.35:1. The coefficient of variation of this estimate is 6.1%, which is releasable with no qualifications.

## 10.2

# How to use the CV tables to obtain Confidence Limits

Although coefficients of variation are widely used, a more intuitively meaningful measure of sampling error is the confidence interval of an estimate. A confidence interval constitutes a statement on the level of confidence that the true value for the population lies within a specified range of values. For example a 95% confidence interval can be described as follows:

If sampling of the population is repeated indefinitely, each sample leading to a new confidence interval for an estimate, then in 95% of the samples the interval will cover the true population value.

Using the standard error of an estimate, confidence intervals for estimates may be obtained under the assumption that under repeated sampling of the population, the various estimates obtained for a population characteristic are normally distributed about the true population value. Under this assumption, the chances are about 68 out of 100 that the difference between a sample estimate and the true population value would be less than one standard error, about 95 out of 100 that the difference would be less than two standard errors, and about 99 out of 100 that the differences would be less than three standard errors. These different degrees of confidence are referred to as the confidence levels.

Confidence intervals for an estimate,  $\hat{X}$ , are generally expressed as two numbers, one below the estimate and one above the estimate, as  $(\hat{X}-k, \hat{X}+k)$  where k is determined depending upon the level of confidence desired and the sampling error of the estimate.

Confidence intervals for an estimate can be calculated directly from the Approximate Sampling Variability Tables by first determining from the appropriate table the coefficient of variation of the estimate  $\hat{X}$ , and then using the following formula to convert to a confidence interval CI:

$$CI_X = [\hat{X} - t \hat{X} a_{\hat{X}}, \hat{X} + t \hat{X} a_{\hat{X}}]$$

where  $a_{\hat{X}}$  is the determined coefficient of variation of  $\hat{X}$ , and

- t = 1 if a 68% confidence interval is desired
- t = 1.6 if a 90% confidence interval is desired
- t = 2 if a 95% confidence interval is desired
- t = 3 if a 99% confidence interval is desired.

Note: Release guidelines which apply to the estimate also apply to the confidence interval. For example, if the estimate is not releasable, then the confidence interval is not releasable either.

## 10.2.1 **Example of using the CV tables to obtain confidence limits**

A 95% confidence interval for the estimated proportion of households which have never used computer communications and have a computer at home (from Example 2, section 10.2) would be calculated as follows.

$$\hat{X} = 18.0\% \text{ (or expressed as a proportion} = .180)$$

$$t = 2$$

$a_x = 1.9\%$  (.019 expressed as a proportion) is the coefficient of variation of this estimate as determined from the tables.

$$CI_x = \{.180 - (2) (.180) (.019), .180 + (2) (.180) (.019)\}$$

$$CI_x = \{.180 - .007, .180 + .007\}$$

$$CI_x = \{.173, .187\}$$

With 95% confidence it can be said that between 17.3% and 18.7% of households which have never used computer communications reported that they have a computer at home.

## 10.3 **How to use the CV tables to do a t-test**

Standard errors may also be used to perform hypothesis testing, a procedure for distinguishing between population parameters using sample estimates. The sample estimates can be numbers, averages, percentages, ratios, etc. Tests may be performed at various levels of significance, where a level of significance is the probability of concluding that the characteristics are different when, in fact, they are identical.

Let  $X_1$  and  $X_2$  be sample estimates for 2 characteristics of interest. Let the standard error on the difference  $X_1 - X_2$  be  $s_{\hat{d}}$ .

If  $t = \frac{\hat{X}_1 - \hat{X}_2}{s_{\hat{d}}}$  is between -2 and 2, then no conclusion

about the difference between the characteristics is justified at the 5% level of significance. If however, this ratio is smaller than -2 or larger than +2, the observed difference is significant at the 0.05 level. That is to say that the characteristics are significant.

### 10.3.1

#### Example of using the CV tables to do a t-test

Let us suppose we wish to test, at a 5% level of significance, the hypothesis that there is no difference between the proportion of households in Quebec which reported that one or more members of their household use computer at home for E-mail in a typical month, and the proportion of households in Ontario which reported that one or more members of their household use computer at home for E-mail in a typical month. From example 3, section 10.2, the standard error of the difference between these two estimates was found to be = .0063. Hence,

$$t = \frac{\hat{X}_1 - \hat{X}_2}{s_{\hat{d}}} = \frac{.081 - .162}{.0063} = \frac{-.081}{.0063} = -12.9.$$

Since  $t = -12.9$  is less than -2, it must be concluded that there is a significant difference between the two estimates at the 0.05 level of significance.


### 10.4

#### Coefficients of Variation for Quantitative Estimates

For quantitative estimates, special tables would have to be produced to determine their sampling error. Since all of the variables for the HIUS are primarily categorical in nature, this has not been done.

As a general rule, however, the coefficient of variation of a quantitative total will be larger than the coefficient of variation of the corresponding category estimate (i.e., the estimate of the number of persons contributing to the quantitative estimate). If the corresponding category estimate is not





releasable, the quantitative estimate will not be either. For example, in an absence from work survey, the coefficient of variation of the total number of weeks absent from work would be greater than the coefficient of variation of the corresponding proportion of paid workers with an absence. Hence if the coefficient of variation of the proportion is not releasable, then the coefficient of variation of the corresponding quantitative estimate will also not be releasable.

Coefficients of variation of such estimates can be derived as required for a specific estimate using a technique known as pseudo replication. This involves dividing the records on the microdata files into subgroups (or replicates) and determining the variation in the estimate from replicate to replicate. Users wishing to derive coefficients of variation for quantitative estimates may contact Statistics Canada for advice on the allocation of records to appropriate replicates and the formulae to be used in these calculations.

## **10.5**

### **Release cut-offs for the Household Internet Use Survey**



The minimum size of the estimate at the provincial, regional and Canada levels are specified in the table below. Estimates smaller than the minimum size given in the "Not Releasable" column may not be released under any circumstances.

## HIUS Table of Release Cut-offs

Province	Unqualified	Qualified	Confidential	Not Releasable
Newfoundland	8,500 & +	3,500-8,400	2000-3,400	under 2,000
Prince Edward Island	2,500 & +	1,000-2,400	500-900	under 500
Nova Scotia	9,000 & +	4,000 - 8,900	2,000 - 3,900	under 2,000
New Brunswick	6,500 & +	3,000 - 6,400	1,500 - 2,900	under 1,500
Quebec	29,500 & +	13,000 - 29,400	7,500 - 12,900	under 7,500
Ontario	27,500 & +	12,000 - 27,400	7,000 - 11,900	under 7,000
Manitoba	11,500 & +	5,000 - 11,400	3,000 - 4,900	under 3,000
Saskatchewan	10,000 & +	4,500 - 9,900	2,500 - 4,400	under 2,500
Alberta	27,000 & +	12,000 - 26,900	6,500 - 11,900	under 6,500
British Columbia	29,000 & +	13,000 - 28,900	7,500 - 12,900	under 7,500
Atlantic Provinces	7,500 & +	3,500 - 7,400	2,000 - 3,400	under 2,000
Prairie Provinces	21,500 & +	9,500 - 21,400	5,500 - 9,400	under 5,500
CANADA	24,500 & +	10,500 - 24,400	6,000 - 10,400	under 6,000

# 10.6

## CV Tables

HOUSEHOLD INTERNET USE SURVEY - 1097

Approximate Sampling Variability Tables for NEWFOUNDLAND

NUMERATOR OF PERCENTAGE ('000)		ESTIMATED PERCENTAGE											
70.0%	90.0%	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%
26.4	1	*****	48.0	47.8	47.0	45.8	44.5	43.1	41.8	40.4	38.9	37.4	34.1
18.7	2	*****		33.8	33.2	32.4	31.4	30.5	29.5	28.5	27.5	26.4	24.1
15.3	3	*****		27.6	27.1	26.4	25.7	24.9	24.1	23.3	22.5	21.6	19.7
13.2	4	*****			23.5	22.9	22.2	21.6	20.9	20.2	19.4	18.7	17.1
11.8	5	*****			21.0	20.5	19.9	19.3	18.7	18.0	17.4	16.7	15.3
10.8	6	*****			19.2	18.7	18.2	17.6	17.1	16.5	15.9	15.3	13.9
10.0	7	*****			17.8	17.3	16.8	16.3	15.8	15.3	14.7	14.1	12.9
9.3	8	*****			16.6	16.2	15.7	15.3	14.8	14.3	13.8	13.2	12.1
8.8	9	*****			15.7	15.3	14.8	14.4	13.9	13.5	13.0	12.5	11.4
8.4	10	*****				14.5	14.1	13.6	13.2	12.8	12.3	11.8	10.8
8.0	11	*****				13.8	13.4	13.0	12.6	12.2	11.7	11.3	10.3
7.6	12	*****				13.2	12.8	12.5	12.1	11.7	11.2	10.8	9.8
7.3	13	*****				12.7	12.3	12.0	11.6	11.2	10.8	10.4	9.5
7.1	14	*****				12.2	11.9	11.5	11.2	10.8	10.4	10.0	9.1
6.8	15	*****				11.8	11.5	11.1	10.8	10.4	10.0	9.6	8.8
6.6	16	*****				11.4	11.1	10.8	10.4	10.1	9.7	9.3	8.5
6.4	17	*****				11.1	10.8	10.5	10.1	9.8	9.4	9.1	8.3
6.2	18	*****				10.8	10.5	10.2	9.8	9.5	9.2	8.8	8.0
6.1	19	*****				10.5	10.2	9.9	9.6	9.3	8.9	8.6	7.8
5.9	20	*****					9.9	9.6	9.3	9.0	8.7	8.4	7.6
5.8	21	*****					9.7	9.4	9.1	8.8	8.5	8.2	7.4
5.6	22	*****					9.5	9.2	8.9	8.6	8.3	8.0	7.3
5.5	23	*****					9.3	9.0	8.7	8.4	8.1	7.8	7.1



24	*****	9.1	8.8	8.5	8.2	7.9	7.6	7.0
5.4	3.1	*****	8.9	8.6	8.4	8.1	7.8	7.5
25	*****	8.9	8.6	8.4	8.1	7.8	7.5	6.8
5.3	3.1	*****	7.9	7.6	7.4	7.1	6.8	6.2
30	*****	7.9	7.6	7.4	7.1	6.8	6.2	6.2
4.8	2.8	*****	7.3	7.1	6.8	6.6	6.3	5.8
35	*****	7.3	7.1	6.8	6.6	6.3	5.8	5.8
4.5	2.6	*****	6.6	6.4	6.1	5.9	5.4	5.4
40	*****	6.6	6.4	6.1	5.9	5.4	5.4	5.4
4.2	2.4	*****	6.2	6.0	5.8	5.6	5.1	5.1
45	*****	6.2	6.0	5.8	5.6	5.1	5.1	5.1
3.9	2.3	*****	5.7	5.5	5.3	4.8	4.8	4.8
50	*****	5.7	5.5	5.3	4.8	4.8	4.8	4.8
3.7	2.2	*****	5.4	5.2	5.0	4.6	4.6	4.6
55	*****	5.4	5.2	5.0	4.6	4.6	4.6	4.6
3.6	2.1	*****	5.0	4.8	4.4	4.4	4.4	4.4
60	*****	5.0	4.8	4.4	4.4	4.4	4.4	4.4
3.4	2.0	*****	4.8	4.6	4.2	4.2	4.2	4.2
65	*****	4.8	4.6	4.2	4.2	4.2	4.2	4.2
3.3	1.9	*****	4.5	4.1	4.1	4.1	4.1	4.1
70	*****	4.5	4.1	4.1	4.1	4.1	4.1	4.1
3.2	1.8	*****	4.3	3.9	3.9	3.9	3.9	3.9
75	*****	4.3	3.9	3.9	3.9	3.9	3.9	3.9
3.1	1.8	*****	3.8	3.8	3.8	3.8	3.8	3.8
80	*****	3.8	3.8	3.8	3.8	3.8	3.8	3.8
3.0	1.7	*****	3.7	3.7	3.7	3.7	3.7	3.7
85	*****	3.7	3.7	3.7	3.7	3.7	3.7	3.7
2.9	1.7	*****	3.6	3.6	3.6	3.6	3.6	3.6
90	*****	3.6	3.6	3.6	3.6	3.6	3.6	3.6
2.8	1.6	*****	3.5	3.5	3.5	3.5	3.5	3.5
95	*****	3.5	3.5	3.5	3.5	3.5	3.5	3.5
2.7	1.6	*****	3.5	3.5	3.5	3.5	3.5	3.5
100	*****	3.5	3.5	3.5	3.5	3.5	3.5	3.5
2.6	1.5	*****	3.5	3.5	3.5	3.5	3.5	3.5
125	*****	3.5	3.5	3.5	3.5	3.5	3.5	3.5
2.4	1.4	*****	3.5	3.5	3.5	3.5	3.5	3.5
150	*****	3.5	3.5	3.5	3.5	3.5	3.5	3.5
*****	*****	*****	*****	*****	*****	*****	*****	*****

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO MICRODATA DOCUMENTATION

HOUSEHOLD INTERNET USE SURVEY - 1097

Approximate Sampling Variability Tables for PRINCE EDWARD ISLAND

NUMERATOR OF PERCENTAGE ('000)		ESTIMATED PERCENTAGE											
70.0%	90.0%	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%
14.4	1	*****	26.0	25.6	25.0	24.3	23.5	22.8	22.0	21.2	20.4	18.6	
10.2	2	*****	18.1	17.6	17.1	16.6	16.1	15.6	15.0	14.4	13.2		
8.3	3	*****	14.4	14.0	13.6	13.2	12.7	12.2	11.8	10.7			
7.2	4	*****	12.5	12.1	11.8	11.4	11.0	10.6	10.2	9.3			
6.4	5	*****	11.2	10.8	10.5	10.2	9.8	9.5	9.1	8.3			
5.9	6	*****	9.9	9.6	9.3	9.0	8.7	8.3	7.6				
5.4	7	*****	9.2	8.9	8.6	8.3	8.0	7.7	7.0				
5.1	8	*****	8.3	8.1	7.8	7.5	7.2	6.6					
4.8	9	*****	7.8	7.6	7.3	7.1	6.8	6.2					
4.6	10	*****	7.4	7.2	7.0	6.7	6.4	5.9					
4.3	11	*****	6.9	6.6	6.4	6.1	5.6						
4.2	12	*****	6.6	6.4	6.1	5.9	5.4						
4.0	13	*****	6.1	5.9	5.7	5.2							
3.9	14	*****	5.9	5.7	5.4	5.0							
3.7	15	*****	5.7	5.5	5.3	4.8							
3.6	16	*****	5.3	5.1	4.6								
3.5	17	*****	5.1	4.9	4.5								
3.4	18	*****	5.0	4.8	4.4								
3.3	19	*****	4.7	4.3									
3.2	20	*****	4.6	4.2									
3.1	21	*****	4.1										
3.1	22	*****	4.0										
3.0	23	*****	3.9										
2.9	24	*****	3.8										
2.9	25	*****	3.7										
2.6	30	*****											
2.4	35	*****											



40	*****	1.3
45	*****	1.2

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO MICRODATA DOCUMENTATION

HOUSEHOLD INTERNET USE SURVEY - 1097

Approximate Sampling Variability Tables for NOVA SCOTIA

NUMERATOR OF PERCENTAGE ('000)		ESTIMATED PERCENTAGE												
70.0%	90.0%	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%	
1	*****	50.2	49.9	49.2	47.9	46.5	45.1	43.7	42.2	40.7	39.1	35.7		
27.6	16.0	2	*****	35.5	35.3	34.8	33.8	32.9	31.9	30.9	29.8	28.8	27.6	25.2
19.5	11.3	3	*****	29.0	28.8	28.4	27.6	26.8	26.0	25.2	24.4	23.5	22.6	20.6
16.0	9.2	4	*****	25.0	24.6	23.9	23.3	22.6	21.8	21.1	20.3	19.5	17.8	
13.8	8.0	5	*****	22.3	22.0	21.4	20.8	20.2	19.5	18.9	18.2	17.5	16.0	
12.4	7.1	6	*****	20.4	20.1	19.5	19.0	18.4	17.8	17.2	16.6	16.0	14.6	
11.3	6.5	7	*****	18.9	18.6	18.1	17.6	17.1	16.5	16.0	15.4	14.8	13.5	
10.4	6.0	8	*****	17.4	16.9	16.4	16.0	15.4	14.9	14.4	13.8	12.6		
9.8	5.6	9	*****	16.4	16.0	15.5	15.0	14.6	14.1	13.6	13.0	11.9		
9.2	5.3	10	*****	15.5	15.1	14.7	14.3	13.8	13.3	12.9	12.4	11.3		
8.7	5.0	11	*****	14.8	14.4	14.0	13.6	13.2	12.7	12.3	11.8	10.8		
8.3	4.8	12	*****	14.2	13.8	13.4	13.0	12.6	12.2	11.7	11.3	10.3		
8.0	4.6	13	*****	13.6	13.3	12.9	12.5	12.1	11.7	11.3	10.8	9.9		
7.7	4.4	14	*****	13.1	12.8	12.4	12.1	11.7	11.3	10.9	10.4	9.5		
7.4	4.3	15	*****	12.7	12.4	12.0	11.6	11.3	10.9	10.5	10.1	9.2		
7.1	4.1	16	*****	12.3	12.0	11.6	11.3	10.9	10.6	10.2	9.8	8.9		
6.9	4.0	17	*****	11.9	11.6	11.3	10.9	10.6	10.2	9.9	9.5	8.7		
6.7	3.9	18	*****	11.6	11.3	11.0	10.6	10.3	9.9	9.6	9.2	8.4		
6.5	3.8	19	*****	11.0	10.7	10.4	10.0	9.7	9.3	9.0	8.2			
6.3	3.7	20	*****	10.7	10.4	10.1	9.8	9.4	9.1	8.7	8.0			
6.2	3.6	21	*****	10.4	10.1	9.8	9.5	9.2	8.9	8.5	7.8			
6.0	3.5	22	*****	10.2	9.9	9.6	9.3	9.0	8.7	8.3	7.6			
5.9	3.4	23	*****	10.0	9.7	9.4	9.1	8.8	8.5	8.1	7.4			
5.8	3.3	24	*****	9.8	9.5	9.2	8.9	8.6	8.3	8.0	7.3			
5.6	3.3	25	*****	9.6	9.3	9.0	8.7	8.4	8.1	7.8	7.1			
5.5	3.2	30	*****	8.7	8.5	8.2	8.0	7.7	7.4	7.1	6.5			
5.0	2.9	35	*****	8.1	7.9	7.6	7.4	7.1	6.9	6.6	6.0			
4.7	2.7													

40	*****	7.4	7.1	6.9	6.7	6.4	6.2	5.6
4.4	2.5							
45	*****	6.9	6.7	6.5	6.3	6.1	5.8	5.3
4.1	2.4							
50	*****	6.6	6.4	6.2	6.0	5.8	5.5	5.0
3.9	2.3							
55	*****	6.1	5.9	5.7	5.5	5.3	4.8	
3.7	2.2							
60	*****	5.8	5.6	5.4	5.2	5.0	4.6	
3.6	2.1							
65	*****	5.6	5.4	5.2	5.0	4.8	4.4	
3.4	2.0							
70	*****	5.4	5.2	5.0	4.9	4.7	4.3	
3.3	1.9							
75	*****		5.0	4.9	4.7	4.5	4.1	
3.2	1.8							
80	*****		4.9	4.7	4.5	4.4	4.0	
3.1	1.8							
85	*****		4.7	4.6	4.4	4.2	3.9	
3.0	1.7							
90	*****		4.6	4.4	4.3	4.1	3.8	
2.9	1.7							
95	*****			4.3	4.2	4.0	3.7	
2.8	1.6							
100	*****			4.2	4.1	3.9	3.6	
2.8	1.6							
125	*****				3.6	3.5	3.2	
2.5	1.4							
150	*****						2.9	
2.3	1.3							
200	*****							
2.0	1.1							
250	*****							
1.7	1.0							
300	*****							
*****								0.9

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO MICRODATA DOCUMENTATION



HOUSEHOLD INTERNET USE SURVEY - 1097

Approximate Sampling Variability Tables for NEW BRUNSWICK

NUMERATOR OF PERCENTAGE ('000)		ESTIMATED PERCENTAGE											
70.0%	90.0%	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%
1	*****	41.4	41.2	40.5	39.5	38.4	37.2	36.0	34.8	33.5	32.2	29.4	
22.8	13.2	*****	29.3	29.1	28.7	27.9	27.1	26.3	25.5	24.6	23.7	22.8	20.8
16.1	9.3	*****	*****	23.8	23.4	22.8	22.1	21.5	20.8	20.1	19.4	18.6	17.0
13.2	7.6	*****	*****	20.6	20.3	19.7	19.2	18.6	18.0	17.4	16.8	16.1	14.7
11.4	6.6	*****	*****	18.4	18.1	17.7	17.2	16.6	16.1	15.6	15.0	14.4	13.2
10.2	5.9	*****	*****	*****	16.6	16.1	15.7	15.2	14.7	14.2	13.7	13.2	12.0
9.3	5.4	*****	*****	*****	15.3	14.9	14.5	14.1	13.6	13.2	12.7	12.2	11.1
8.6	5.0	*****	*****	*****	14.3	14.0	13.6	13.2	12.7	12.3	11.9	11.4	10.4
8.1	4.7	*****	*****	*****	13.5	13.2	12.8	12.4	12.0	11.6	11.2	10.7	9.8
7.6	4.4	*****	*****	*****	12.8	12.5	12.1	11.8	11.4	11.0	10.6	10.2	9.3
7.2	4.2	*****	*****	*****	12.2	11.9	11.6	11.2	10.9	10.5	10.1	9.7	8.9
6.9	4.0	*****	*****	*****	11.7	11.4	11.1	10.7	10.4	10.0	9.7	9.3	8.5
6.6	3.8	*****	*****	*****	11.2	10.9	10.6	10.3	10.0	9.7	9.3	8.9	8.2
6.3	3.6	*****	*****	*****	10.8	10.5	10.3	9.9	9.6	9.3	9.0	8.6	7.9
6.1	3.5	*****	*****	*****	*****	10.2	9.9	9.6	9.3	9.0	8.7	8.3	7.6
5.9	3.4	*****	*****	*****	*****	9.9	9.6	9.3	9.0	8.7	8.4	8.1	7.4
5.7	3.3	*****	*****	*****	*****	9.6	9.3	9.0	8.7	8.4	8.1	7.8	7.1
5.5	3.2	*****	*****	*****	*****	9.3	9.0	8.8	8.5	8.2	7.9	7.6	6.9
5.4	3.1	*****	*****	*****	*****	9.1	8.8	8.5	8.3	8.0	7.7	7.4	6.7
5.2	3.0	*****	*****	*****	*****	8.8	8.6	8.3	8.1	7.8	7.5	7.2	6.6
5.1	2.9	*****	*****	*****	*****	8.6	8.4	8.1	7.9	7.6	7.3	7.0	6.4
5.0	2.9	*****	*****	*****	*****	8.4	8.2	7.9	7.7	7.4	7.2	6.9	6.3
4.9	2.8	*****	*****	*****	*****	8.2	8.0	7.8	7.5	7.3	7.0	6.7	6.1
4.8	2.7	*****	*****	*****	*****	8.1	7.8	7.6	7.4	7.1	6.8	6.6	6.0
4.7	2.7	*****	*****	*****	*****	7.9	7.7	7.4	7.2	7.0	6.7	6.4	5.9
4.6	2.6	*****	*****	*****	*****	*****	7.0	6.8	6.6	6.4	6.1	5.9	5.4
4.2	2.4	*****	*****	*****	*****	*****	6.5	6.3	6.1	5.9	5.7	5.4	5.0
3.9	2.2	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

40	*****	6.1	5.9	5.7	5.5	5.3	5.1	4.7
3.6	2.1	*****	5.5	5.4	5.2	5.0	4.8	4.4
45	*****	5.3	5.1	4.9	4.7	4.6	4.2	
3.4	2.0	*****	5.0	4.9	4.7	4.5	4.3	4.0
50	*****	4.7	4.5	4.3	4.2	3.8		
3.2	1.9	*****	4.5	4.3	4.2	4.0	3.6	
55	*****	4.3	4.2	4.0	3.9	3.5		
3.1	1.8	*****	4.0	3.9	3.7	3.4		
60	*****	3.9	3.8	3.6	3.3			
2.9	1.7	*****	3.8	3.6	3.5	3.2		
65	*****	3.5	3.4	3.1				
2.8	1.6	*****	3.4	3.3	3.0			
70	*****	3.4	3.2	2.9				
2.7	1.6	*****	3.4	3.2	2.9			
75	*****	3.4	3.3	3.0				
2.6	1.5	*****	3.4	3.3	3.0			
80	*****	3.4	3.3	3.0				
2.5	1.5	*****	3.4	3.3	3.0			
85	*****	3.4	3.3	3.0				
2.5	1.4	*****	3.4	3.3	3.0			
90	*****	3.4	3.3	3.0				
2.4	1.4	*****	3.4	3.3	3.0			
95	*****	3.4	3.3	3.0				
2.3	1.3	*****	3.4	3.3	3.0			
100	*****	3.4	3.3	3.0				
2.3	1.3	*****	3.4	3.3	3.0			
125	*****	3.4	3.3	3.0				
2.0	1.2	*****	3.4	3.3	3.0			
150	*****	3.4	3.3	3.0				
1.9	1.1	*****	3.4	3.3	3.0			
200	*****	3.4	3.3	3.0				
1.6	0.9	*****	3.4	3.3	3.0			
250	*****	3.4	3.3	3.0				
*****	*****	*****	*****	*****	*****	*****	*****	0.8

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO MICRODATA DOCUMENTATION

HOUSEHOLD INTERNET USE SURVEY - 1097

Approximate Sampling Variability Tables for QUEBEC

NUMERATOR OF PERCENTAGE (' 000)		ESTIMATED PERCENTAGE											
70.0%	90.0%	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%
1	90.1	89.7	89.3	87.9	85.5	83.1	80.6	78.1	75.4	72.7	69.8	63.8	
49.4	28.5												
2	63.7	63.4	63.1	62.1	60.5	58.8	57.0	55.2	53.3	51.4	49.4	45.1	
34.9	20.2												
3	52.0	51.8	51.5	50.7	49.4	48.0	46.6	45.1	43.6	42.0	40.3	36.8	
28.5	16.5												
4	*****	44.9	44.6	43.9	42.8	41.6	40.3	39.0	37.7	36.3	34.9	31.9	
24.7	14.3												
5	*****	40.1	39.9	39.3	38.3	37.2	36.1	34.9	33.7	32.5	31.2	28.5	
22.1	12.8												
6	*****	36.6	36.4	35.9	34.9	33.9	32.9	31.9	30.8	29.7	28.5	26.0	
20.2	11.6												
7	*****	33.9	33.7	33.2	32.3	31.4	30.5	29.5	28.5	27.5	26.4	24.1	
18.7	10.8												
8	*****	31.7	31.6	31.1	30.2	29.4	28.5	27.6	26.7	25.7	24.7	22.5	
17.5	10.1												
9	*****	29.9	29.8	29.3	28.5	27.7	26.9	26.0	25.1	24.2	23.3	21.3	
16.5	9.5												
10	*****	28.4	28.2	27.8	27.0	26.3	25.5	24.7	23.9	23.0	22.1	20.2	
15.6	9.0												
11	*****	27.0	26.9	26.5	25.8	25.1	24.3	23.5	22.7	21.9	21.1	19.2	
14.9	8.6												
12	*****	25.9	25.8	25.4	24.7	24.0	23.3	22.5	21.8	21.0	20.2	18.4	
14.3	8.2												
13	*****	24.9	24.8	24.4	23.7	23.1	22.4	21.7	20.9	20.2	19.4	17.7	
13.7	7.9												
14	*****	24.0	23.9	23.5	22.9	22.2	21.6	20.9	20.2	19.4	18.7	17.0	
13.2	7.6												
15	*****	23.2	23.0	22.7	22.1	21.5	20.8	20.2	19.5	18.8	18.0	16.5	
12.8	7.4												
16	*****	22.4	22.3	22.0	21.4	20.8	20.2	19.5	18.9	18.2	17.5	15.9	
12.3	7.1												
17	*****	21.8	21.6	21.3	20.7	20.2	19.6	18.9	18.3	17.6	16.9	15.5	
12.0	6.9												
18	*****	21.1	21.0	20.7	20.2	19.6	19.0	18.4	17.8	17.1	16.5	15.0	
11.6	6.7												
19	*****	20.6	20.5	20.2	19.6	19.1	18.5	17.9	17.3	16.7	16.0	14.6	
11.3	6.5												
20	*****	20.1	20.0	19.6	19.1	18.6	18.0	17.5	16.9	16.3	15.6	14.3	
11.0	6.4												
21	*****	19.6	19.5	19.2	18.7	18.1	17.6	17.0	16.5	15.9	15.2	13.9	
10.8	6.2												
22	*****	19.1	19.0	18.7	18.2	17.7	17.2	16.6	16.1	15.5	14.9	13.6	
10.5	6.1												
23	*****	18.7	18.6	18.3	17.8	17.3	16.8	16.3	15.7	15.2	14.6	13.3	
10.3	5.9												
24	*****	18.3	18.2	17.9	17.5	17.0	16.5	15.9	15.4	14.8	14.3	13.0	
10.1	5.8												
25	*****	17.9	17.9	17.6	17.1	16.6	16.1	15.6	15.1	14.5	14.0	12.8	
9.9	5.7												
30	*****	16.4	16.3	16.0	15.6	15.2	14.7	14.3	13.8	13.3	12.8	11.6	
9.0	5.2												
35	*****		15.1	14.9	14.5	14.1	13.6	13.2	12.8	12.3	11.8	10.8	
8.3	4.8												

40	*****	14.1	13.9	13.5	13.1	12.8	12.3	11.9	11.5	11.0	10.1
7.8	4.5	*****	13.3	13.1	12.8	12.4	12.0	11.6	11.2	10.8	9.5
7.4	4.3	*****	12.6	12.4	12.1	11.8	11.4	11.0	10.7	10.3	9.0
7.0	4.0	*****	12.0	11.8	11.5	11.2	10.9	10.5	10.2	9.8	8.6
6.7	3.8	*****	11.5	11.3	11.0	10.7	10.4	10.1	9.7	9.4	8.2
6.4	3.7	*****	10.9	10.6	10.3	10.0	9.7	9.4	9.0	8.7	7.9
6.1	3.5	*****	10.5	10.2	9.9	9.6	9.3	9.0	8.7	8.3	7.6
5.9	3.4	*****	10.1	9.9	9.6	9.3	9.0	8.7	8.4	8.1	7.4
5.7	3.3	*****	9.8	9.6	9.3	9.0	8.7	8.4	8.1	7.8	7.1
5.5	3.2	*****	9.5	9.3	9.0	8.7	8.5	8.2	7.9	7.6	6.9
5.4	3.1	*****	9.3	9.0	8.8	8.5	8.2	8.0	7.7	7.4	6.7
5.2	3.0	*****	9.0	8.8	8.5	8.3	8.0	7.7	7.5	7.2	6.5
5.1	2.9	*****	8.8	8.6	8.3	8.1	7.8	7.5	7.3	7.0	6.4
4.9	2.9	*****	7.9	7.7	7.4	7.2	7.0	6.7	6.5	6.2	5.7
4.4	2.6	*****	7.2	7.0	6.8	6.6	6.4	6.2	5.9	5.7	5.2
4.0	2.3	*****	6.0	5.9	5.7	5.5	5.3	5.1	4.9	4.5	4.5
3.5	2.0	*****	5.4	5.3	5.1	4.9	4.8	4.6	4.4	4.4	4.0
3.1	1.8	*****	4.9	4.8	4.7	4.5	4.4	4.2	4.0	4.0	3.7
2.9	1.6	*****	4.4	4.3	4.2	4.0	3.9	3.7	3.4	3.4	3.4
2.6	1.5	*****	4.2	4.0	3.9	3.8	3.6	3.5	3.5	3.2	3.2
2.5	1.4	*****	3.9	3.8	3.7	3.6	3.4	3.4	3.3	3.0	3.0
2.3	1.3	*****	3.6	3.5	3.4	3.3	3.3	3.1	3.1	2.9	2.9
2.2	1.3	*****	2.9	2.8	2.7	2.6	2.6	2.6	2.6	2.3	2.3
1.8	1.0	*****	2.3	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0
1.6	0.9	*****	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
1.3	0.7	*****	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
2000	0.6	*****	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO MICRODATA DOCUMENTATION

HOUSEHOLD INTERNET USE SURVEY - 1097

Approximate Sampling Variability Tables for ONTARIO

NUMERATOR OF PERCENTAGE (' 000)		ESTIMATED PERCENTAGE											
70.0%	90.0%	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%
1		87.0	86.6	86.2	84.8	82.6	80.3	77.9	75.4	72.8	70.2	67.4	61.6
47.7	27.5												
2		61.5	61.2	60.9	60.0	58.4	56.7	55.1	53.3	51.5	49.6	47.7	43.5
33.7	19.5												
3		50.2	50.0	49.8	49.0	47.7	46.3	44.9	43.5	42.0	40.5	38.9	35.5
27.5	15.9												
4		43.5	43.3	43.1	42.4	41.3	40.1	38.9	37.7	36.4	35.1	33.7	30.8
23.8	13.8												
5	*****	38.7	38.5	37.9	36.9	35.9	34.8	33.7	32.6	31.4	30.2	27.5	
21.3	12.3												
6	*****	35.4	35.2	34.6	33.7	32.8	31.8	30.8	29.7	28.7	27.5	25.1	
19.5	11.2												
7	*****	32.7	32.6	32.1	31.2	30.3	29.4	28.5	27.5	26.5	25.5	23.3	
18.0	10.4												
8	*****	30.6	30.5	30.0	29.2	28.4	27.5	26.7	25.7	24.8	23.8	21.8	
16.9	9.7												
9	*****	28.9	28.7	28.3	27.5	26.8	26.0	25.1	24.3	23.4	22.5	20.5	
15.9	9.2												
10	*****	27.4	27.2	26.8	26.1	25.4	24.6	23.8	23.0	22.2	21.3	19.5	
15.1	8.7												
11	*****	26.1	26.0	25.6	24.9	24.2	23.5	22.7	22.0	21.2	20.3	18.6	
14.4	8.3												
12	*****	25.0	24.9	24.5	23.8	23.2	22.5	21.8	21.0	20.3	19.5	17.8	
13.8	7.9												
13	*****	24.0	23.9	23.5	22.9	22.3	21.6	20.9	20.2	19.5	18.7	17.1	
13.2	7.6												
14	*****	23.1	23.0	22.7	22.1	21.4	20.8	20.1	19.5	18.8	18.0	16.5	
12.7	7.4												
15	*****	22.4	22.2	21.9	21.3	20.7	20.1	19.5	18.8	18.1	17.4	15.9	
12.3	7.1												
16	*****	21.7	21.5	21.2	20.6	20.1	19.5	18.8	18.2	17.5	16.9	15.4	
11.9	6.9												
17	*****	21.0	20.9	20.6	20.0	19.5	18.9	18.3	17.7	17.0	16.4	14.9	
11.6	6.7												
18	*****	20.4	20.3	20.0	19.5	18.9	18.4	17.8	17.2	16.5	15.9	14.5	
11.2	6.5												
19	*****	19.9	19.8	19.5	18.9	18.4	17.9	17.3	16.7	16.1	15.5	14.1	
10.9	6.3												
20	*****	19.4	19.3	19.0	18.5	17.9	17.4	16.9	16.3	15.7	15.1	13.8	
10.7	6.2												
21	*****	18.9	18.8	18.5	18.0	17.5	17.0	16.5	15.9	15.3	14.7	13.4	
10.4	6.0												
22	*****	18.5	18.4	18.1	17.6	17.1	16.6	16.1	15.5	15.0	14.4	13.1	
10.2	5.9												
23	*****	18.1	18.0	17.7	17.2	16.7	16.2	15.7	15.2	14.6	14.1	12.8	
9.9	5.7												
24	*****	17.7	17.6	17.3	16.9	16.4	15.9	15.4	14.9	14.3	13.8	12.6	
9.7	5.6												
25	*****	17.3	17.2	17.0	16.5	16.1	15.6	15.1	14.6	14.0	13.5	12.3	
9.5	5.5												
30	*****	15.8	15.7	15.5	15.1	14.7	14.2	13.8	13.3	12.8	12.3	11.2	
8.7	5.0												
35	*****	14.6	14.6	14.3	14.0	13.6	13.2	12.7	12.3	11.9	11.4	10.4	
8.1	4.7												

40	*****	13.7	13.6	13.4	13.1	12.7	12.3	11.9	11.5	11.1	10.7	9.7
7.5	4.4	*****	12.8	12.6	12.3	12.0	11.6	11.2	10.9	10.5	10.1	9.2
7.1	4.1	*****	12.2	12.0	11.7	11.3	11.0	10.7	10.3	9.9	9.5	8.7
6.7	3.9	*****	11.6	11.4	11.1	10.8	10.5	10.2	9.8	9.5	9.1	8.3
6.4	3.7	*****	11.1	11.0	10.7	10.4	10.1	9.7	9.4	9.1	8.7	7.9
6.2	3.6	*****	10.7	10.5	10.2	10.0	9.7	9.4	9.0	8.7	8.4	7.6
5.9	3.4	*****	10.3	10.1	9.9	9.6	9.3	9.0	8.7	8.4	8.1	7.4
5.7	3.3	*****	10.0	9.8	9.5	9.3	9.0	8.7	8.4	8.1	7.8	7.1
5.5	3.2	*****	9.6	9.5	9.2	9.0	8.7	8.4	8.1	7.8	7.5	6.9
5.3	3.1	*****	9.3	9.2	9.0	8.7	8.4	8.2	7.9	7.6	7.3	6.7
5.2	3.0	*****	8.9	8.7	8.5	8.2	7.9	7.7	7.4	7.1	6.5	
5.0	2.9	*****	8.7	8.5	8.2	8.0	7.7	7.5	7.2	6.9	6.3	
4.9	2.8	*****	8.5	8.3	8.0	7.8	7.5	7.3	7.0	6.7	6.2	
4.8	2.8	*****	7.6	7.4	7.2	7.0	6.7	6.5	6.3	6.0	5.5	
4.3	2.5	*****	6.9	6.7	6.6	6.4	6.2	5.9	5.7	5.5	5.0	
3.9	2.2	*****	6.0	5.8	5.7	5.5	5.3	5.1	5.0	4.8	4.4	
3.4	1.9	*****	5.2	5.1	4.9	4.8	4.6	4.4	4.4	4.3	3.9	
3.0	1.7	*****	4.8	4.6	4.5	4.4	4.2	4.1	3.9	3.9	3.6	
2.8	1.6	*****	4.4	4.3	4.2	4.0	3.9	3.8	3.8	3.6	3.3	
2.5	1.5	*****	4.1	4.0	3.9	3.8	3.6	3.5	3.5	3.4	3.1	
2.4	1.4	*****	3.8	3.7	3.6	3.4	3.4	3.3	3.3	3.2	2.9	
2.2	1.3	*****	3.6	3.5	3.4	3.3	3.3	3.1	3.1	3.0	2.8	
2.1	1.2	*****	2.8	2.8	2.7	2.6	2.6	2.5	2.5	2.5	2.2	
1.7	1.0	*****	2.4	2.3	2.2	2.1	2.1	2.1	2.1	2.1	1.9	
1.5	0.9	*****	1.8	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	
1.2	0.7	*****	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	
1.1	0.6	*****	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	
0.9	0.5	*****	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO MICRODATA DOCUMENTATION

HOUSEHOLD INTERNET USE SURVEY - 1097

Approximate Sampling Variability Tables for MANITOBA

NUMERATOR OF PERCENTAGE ('000)		ESTIMATED PERCENTAGE											
70.0%	90.0%	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%
1	*****	56.4	56.1	55.2	53.7	52.2	50.7	49.0	47.4	45.7	43.9	40.0	
31.0	17.9	*****	39.8	39.6	39.0	38.0	36.9	35.8	34.7	33.5	32.3	31.0	28.3
21.9	12.7	*****	32.5	32.4	31.9	31.0	30.1	29.2	28.3	27.4	26.4	25.3	23.1
17.9	10.3	*****	28.2	28.0	27.6	26.9	26.1	25.3	24.5	23.7	22.8	21.9	20.0
15.5	9.0	*****	25.1	24.7	24.0	23.4	22.7	21.9	21.2	20.4	19.6	17.9	
13.9	8.0	*****	22.9	22.5	21.9	21.3	20.7	20.0	19.3	18.6	17.9	16.3	
12.7	7.3	*****	21.2	20.9	20.3	19.7	19.1	18.5	17.9	17.3	16.6	15.1	
11.7	6.8	*****	19.8	19.5	19.0	18.5	17.9	17.3	16.8	16.1	15.5	14.2	
11.0	6.3	*****	18.4	17.9	17.4	16.9	16.3	15.8	15.2	14.6	13.3		
10.3	6.0	*****	17.5	17.0	16.5	16.0	15.5	15.0	14.4	13.9	12.7		
9.8	5.7	*****	16.6	16.2	15.7	15.3	14.8	14.3	13.8	13.2	12.1		
9.4	5.4	*****	15.9	15.5	15.1	14.6	14.2	13.7	13.2	12.7	11.6		
9.0	5.2	*****	15.3	14.9	14.5	14.0	13.6	13.1	12.7	12.2	11.1		
8.6	5.0	*****	14.8	14.4	14.0	13.5	13.1	12.7	12.2	11.7	10.7		
8.3	4.8	*****	14.3	13.9	13.5	13.1	12.7	12.2	11.8	11.3	10.3		
8.0	4.6	*****	13.8	13.4	13.1	12.7	12.3	11.8	11.4	11.0	10.0		
7.8	4.5	*****	13.4	13.0	12.7	12.3	11.9	11.5	11.1	10.6	9.7		
7.5	4.3	*****	13.0	12.7	12.3	11.9	11.6	11.2	10.8	10.3	9.4		
7.3	4.2	*****	12.7	12.3	12.0	11.6	11.3	10.9	10.5	10.1	9.2		
7.1	4.1	*****	12.3	12.0	11.7	11.3	11.0	10.6	10.2	9.8	9.0		
6.9	4.0	*****	12.0	11.7	11.4	11.1	10.7	10.3	10.0	9.6	8.7		
6.8	3.9	*****	11.5	11.1	10.8	10.5	10.1	9.7	9.4	8.5			
6.6	3.8	*****	11.2	10.9	10.6	10.2	9.9	9.5	9.1	8.4			
6.5	3.7	*****	11.0	10.7	10.3	10.0	9.7	9.3	9.0	8.2			
6.3	3.7	*****	10.7	10.4	10.1	9.8	9.5	9.1	8.8	8.0			
6.2	3.6	*****	9.8	9.5	9.2	9.0	8.7	8.3	8.0	7.3			
5.7	3.3	*****	9.1	8.8	8.6	8.3	8.0	7.7	7.4	6.8			
5.2	3.0	*****											

40		*****	8.5	8.3	8.0	7.8	7.5	7.2	6.9	6.3
4.9	2.8	*****		7.8	7.6	7.3	7.1	6.8	6.5	6.0
4.6	2.7	*****		7.4	7.2	6.9	6.7	6.5	6.2	5.7
4.4	2.5	*****		7.0	6.8	6.6	6.4	6.2	5.9	5.4
4.2	2.4	*****		6.7	6.5	6.3	6.1	5.9	5.7	5.2
4.0	2.3	*****		6.5	6.3	6.1	5.9	5.7	5.4	5.0
3.8	2.2	*****		6.1	5.9	5.7	5.5	5.2	4.8	
3.7	2.1	*****		5.8	5.7	5.5	5.3	5.1	4.6	
3.6	2.1	*****		5.7	5.5	5.3	5.1	4.9	4.5	
3.5	2.0	*****		5.5	5.3	5.1	5.0	4.8	4.3	
3.4	1.9	*****			5.2	5.0	4.8	4.6	4.2	
3.3	1.9	*****			5.0	4.9	4.7	4.5	4.1	
3.2	1.8	*****			4.9	4.7	4.6	4.4	4.0	
3.1	1.8	*****				4.2	4.1	3.9	3.6	
2.8	1.6	*****					3.7	3.6	3.3	
2.5	1.5	*****							2.8	
2.2	1.3	*****								
2.0	1.1	*****								
1.8	1.0	*****								
350		*****								1.0

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO MICRODATA DOCUMENTATION



HOUSEHOLD INTERNET USE SURVEY - 1097

Approximate Sampling Variability Tables for SASKATCHEWAN

NUMERATOR OF PERCENTAGE ('000)		ESTIMATED PERCENTAGE											
70.0%	90.0%	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%
29.1	1	*****	52.9	52.6	51.8	50.4	49.0	47.5	46.0	44.5	42.8	41.2	37.6
20.6	2	*****	37.4	37.2	36.6	35.6	34.6	33.6	32.5	31.4	30.3	29.1	26.6
16.8	3	*****	30.5	30.4	29.9	29.1	28.3	27.4	26.6	25.7	24.7	23.8	21.7
14.6	4	*****		26.3	25.9	25.2	24.5	23.8	23.0	22.2	21.4	20.6	18.8
13.0	5	*****		23.5	23.2	22.5	21.9	21.3	20.6	19.9	19.2	18.4	16.8
11.9	6	*****		21.5	21.1	20.6	20.0	19.4	18.8	18.1	17.5	16.8	15.3
11.0	7	*****		19.9	19.6	19.1	18.5	18.0	17.4	16.8	16.2	15.6	14.2
10.3	8	*****			18.3	17.8	17.3	16.8	16.3	15.7	15.1	14.6	13.3
9.7	9	*****			17.3	16.8	16.3	15.8	15.3	14.8	14.3	13.7	12.5
9.2	10	*****			16.4	15.9	15.5	15.0	14.6	14.1	13.5	13.0	11.9
8.8	11	*****			15.6	15.2	14.8	14.3	13.9	13.4	12.9	12.4	11.3
8.4	12	*****			15.0	14.6	14.1	13.7	13.3	12.8	12.4	11.9	10.8
8.1	13	*****			14.4	14.0	13.6	13.2	12.8	12.3	11.9	11.4	10.4
7.8	14	*****			13.8	13.5	13.1	12.7	12.3	11.9	11.4	11.0	10.0
7.5	15	*****			13.4	13.0	12.6	12.3	11.9	11.5	11.1	10.6	9.7
7.3	16	*****			12.9	12.6	12.2	11.9	11.5	11.1	10.7	10.3	9.4
7.1	17	*****			12.6	12.2	11.9	11.5	11.2	10.8	10.4	10.0	9.1
6.9	18	*****			12.2	11.9	11.5	11.2	10.8	10.5	10.1	9.7	8.9
6.7	19	*****			11.9	11.6	11.2	10.9	10.6	10.2	9.8	9.4	8.6
6.5	20	*****				11.3	11.0	10.6	10.3	9.9	9.6	9.2	8.4
6.4	21	*****				11.0	10.7	10.4	10.0	9.7	9.3	9.0	8.2
6.2	22	*****				10.7	10.4	10.1	9.8	9.5	9.1	8.8	8.0
6.1	23	*****				10.5	10.2	9.9	9.6	9.3	8.9	8.6	7.8
5.9	24	*****				10.3	10.0	9.7	9.4	9.1	8.7	8.4	7.7
5.8	25	*****				10.1	9.8	9.5	9.2	8.9	8.6	8.2	7.5
5.3	30	*****				9.2	8.9	8.7	8.4	8.1	7.8	7.5	6.9
4.9	35	*****				8.5	8.3	8.0	7.8	7.5	7.2	7.0	6.4

40		*****	7.7	7.5	7.3	7.0	6.8	6.5	5.9
4.6	2.7	*****							
45		*****	7.3	7.1	6.9	6.6	6.4	6.1	5.6
4.3	2.5	*****							
50		*****	6.9	6.7	6.5	6.3	6.1	5.8	5.3
4.1	2.4	*****							
55		*****	6.6	6.4	6.2	6.0	5.8	5.5	5.1
3.9	2.3	*****							
60		*****		6.1	5.9	5.7	5.5	5.3	4.9
3.8	2.2	*****							
65		*****		5.9	5.7	5.5	5.3	5.1	4.7
3.6	2.1	*****							
70		*****		5.7	5.5	5.3	5.1	4.9	4.5
3.5	2.0	*****							
75		*****		5.5	5.3	5.1	4.9	4.8	4.3
3.4	1.9	*****							
80		*****			5.1	5.0	4.8	4.6	4.2
3.3	1.9	*****							
85		*****			5.0	4.8	4.6	4.5	4.1
3.2	1.8	*****							
90		*****			4.9	4.7	4.5	4.3	4.0
3.1	1.8	*****							
95		*****			4.7	4.6	4.4	4.2	3.9
3.0	1.7	*****							
100		*****				4.4	4.3	4.1	3.8
2.9	1.7	*****							
125		*****					3.8	3.7	3.4
2.6	1.5	*****							
150		*****						3.4	3.1
2.4	1.4	*****							
200		*****							
2.1	1.2	*****							
250		*****							
1.8	1.1	*****							
300		*****							
*****		*****							1.0
350		*****							
*****		*****							0.9

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO MICRODATA DOCUMENTATION

HOUSEHOLD INTERNET USE SURVEY - 1097

Approximate Sampling Variability Tables for ALBERTA

NUMERATOR OF PERCENTAGE ('000)		ESTIMATED PERCENTAGE											
70.0%	90.0%	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%
1	86.8	86.4	86.0	84.7	82.4	80.1	77.7	75.2	72.7	70.0	67.3	61.4	
47.6	27.5	*****	61.1	60.8	59.9	58.3	56.6	54.9	53.2	51.4	49.5	47.6	43.4
33.6	19.4	*****	49.9	49.7	48.9	47.6	46.2	44.9	43.4	42.0	40.4	38.9	35.5
27.5	15.9	*****	43.2	43.0	42.3	41.2	40.0	38.9	37.6	36.3	35.0	33.6	30.7
23.8	13.7	*****	38.7	38.5	37.9	36.9	35.8	34.8	33.6	32.5	31.3	30.1	27.5
21.3	12.3	*****	35.3	35.1	34.6	33.6	32.7	31.7	30.7	29.7	28.6	27.5	25.1
19.4	11.2	*****	32.7	32.5	32.0	31.2	30.3	29.4	28.4	27.5	26.5	25.4	23.2
18.0	10.4	*****	30.6	30.4	29.9	29.1	28.3	27.5	26.6	25.7	24.8	23.8	21.7
16.8	9.7	*****	28.8	28.7	28.2	27.5	26.7	25.9	25.1	24.2	23.3	22.4	20.5
15.9	9.2	*****	27.3	27.2	26.8	26.1	25.3	24.6	23.8	23.0	22.1	21.3	19.4
15.0	8.7	*****		25.9	25.5	24.8	24.1	23.4	22.7	21.9	21.1	20.3	18.5
14.3	8.3	*****		24.8	24.4	23.8	23.1	22.4	21.7	21.0	20.2	19.4	17.7
13.7	7.9	*****		23.9	23.5	22.9	22.2	21.6	20.9	20.2	19.4	18.7	17.0
13.2	7.6	*****		23.0	22.6	22.0	21.4	20.8	20.1	19.4	18.7	18.0	16.4
12.7	7.3	*****		22.2	21.9	21.3	20.7	20.1	19.4	18.8	18.1	17.4	15.9
12.3	7.1	*****		21.5	21.2	20.6	20.0	19.4	18.8	18.2	17.5	16.8	15.4
11.9	6.9	*****		20.9	20.5	20.0	19.4	18.8	18.2	17.6	17.0	16.3	14.9
11.5	6.7	*****		20.3	20.0	19.4	18.9	18.3	17.7	17.1	16.5	15.9	14.5
11.2	6.5	*****		19.7	19.4	18.9	18.4	17.8	17.3	16.7	16.1	15.4	14.1
10.9	6.3	*****		19.2	18.9	18.4	17.9	17.4	16.8	16.3	15.7	15.0	13.7
10.6	6.1	*****		18.8	18.5	18.0	17.5	17.0	16.4	15.9	15.3	14.7	13.4
10.4	6.0	*****		18.1	17.6	17.1	16.6	16.0	15.5	14.9	14.3	13.1	
10.1	5.9	*****		17.7	17.2	16.7	16.2	15.7	15.2	14.6	14.0	12.8	
9.9	5.7	*****		17.3	16.8	16.3	15.9	15.4	14.8	14.3	13.7	12.5	
9.7	5.6	*****		16.9	16.5	16.0	15.5	15.0	14.5	14.0	13.5	12.3	
9.5	5.5	*****		15.5	15.0	14.6	14.2	13.7	13.3	12.8	12.3	11.2	
8.7	5.0	*****		14.3	13.9	13.5	13.1	12.7	12.3	11.8	11.4	10.4	
8.0	4.6												

40	*****	13.4	13.0	12.7	12.3	11.9	11.5	11.1	10.6	9.7
7.5	4.3	*****	12.6	12.3	11.9	11.6	11.2	10.8	10.4	9.2
7.1	4.1	*****	12.0	11.7	11.3	11.0	10.6	10.3	9.9	8.7
6.7	3.9	*****	11.1	10.8	10.5	10.1	9.8	9.4	9.1	8.3
6.4	3.7	*****	10.6	10.3	10.0	9.7	9.4	9.0	8.7	7.9
6.1	3.5	*****	10.2	9.9	9.6	9.3	9.0	8.7	8.3	7.6
5.9	3.4	*****	9.9	9.6	9.3	9.0	8.7	8.4	8.0	7.3
5.7	3.3	*****	9.5	9.2	9.0	8.7	8.4	8.1	7.8	7.1
5.5	3.2	*****	9.2	9.0	8.7	8.4	8.1	7.8	7.5	6.9
5.3	3.1	*****	8.9	8.7	8.4	8.2	7.9	7.6	7.3	6.7
5.2	3.0	*****	8.7	8.4	8.2	7.9	7.7	7.4	7.1	6.5
5.0	2.9	*****	8.5	8.2	8.0	7.7	7.5	7.2	6.9	6.3
4.9	2.8	*****	8.2	8.0	7.8	7.5	7.3	7.0	6.7	6.1
4.8	2.7	*****	7.2	7.0	6.7	6.5	6.3	6.0	5.5	
4.3	2.5	*****	6.5	6.3	6.1	5.9	5.7	5.5	5.0	
3.9	2.2	*****	5.5	5.3	5.1	5.0	4.8	4.3		
3.4	1.9	*****	4.8	4.6	4.4	4.3	3.9			
3.0	1.7	*****	4.2	4.0	3.9	3.5				
2.7	1.6	*****	3.7	3.6	3.3					
2.5	1.5	*****	3.4	3.1						
2.4	1.4	*****								
2.2	1.3	*****								
2.1	1.2	*****								
750		*****								

1.0

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO MICRODATA DOCUMENTATION

HOUSEHOLD INTERNET USE SURVEY - 1097

Approximate Sampling Variability Tables for BRITISH COLUMBIA

NUMERATOR OF PERCENTAGE (' 000)		ESTIMATED PERCENTAGE											
70.0%	90.0%	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%
1	89.8	89.4	88.9	87.6	85.2	82.8	80.4	77.8	75.2	72.4	69.6	63.5	
49.2	28.4	63.2	62.9	61.9	60.3	58.6	56.8	55.0	53.1	51.2	49.2	44.9	
34.8	20.1	51.6	51.3	50.6	49.2	47.8	46.4	44.9	43.4	41.8	40.2	36.7	
28.4	16.4	44.7	44.5	43.8	42.6	41.4	40.2	38.9	37.6	36.2	34.8	31.8	
24.6	14.2	40.0	39.8	39.2	38.1	37.0	35.9	34.8	33.6	32.4	31.1	28.4	
22.0	12.7	36.5	36.3	35.7	34.8	33.8	32.8	31.8	30.7	29.6	28.4	25.9	
20.1	11.6	33.8	33.6	33.1	32.2	31.3	30.4	29.4	28.4	27.4	26.3	24.0	
18.6	10.7	31.6	31.4	31.0	30.1	29.3	28.4	27.5	26.6	25.6	24.6	22.5	
17.4	10.0	29.8	29.6	29.2	28.4	27.6	26.8	25.9	25.1	24.1	23.2	21.2	
16.4	9.5	28.3	28.1	27.7	27.0	26.2	25.4	24.6	23.8	22.9	22.0	20.1	
15.6	9.0	27.0	26.8	26.4	25.7	25.0	24.2	23.5	22.7	21.8	21.0	19.2	
14.8	8.6	25.8	25.7	25.3	24.6	23.9	23.2	22.5	21.7	20.9	20.1	18.3	
14.2	8.2	24.8	24.7	24.3	23.6	23.0	22.3	21.6	20.8	20.1	19.3	17.6	
13.6	7.9	23.9	23.8	23.4	22.8	22.1	21.5	20.8	20.1	19.4	18.6	17.0	
13.2	7.6	23.1	23.0	22.6	22.0	21.4	20.7	20.1	19.4	18.7	18.0	16.4	
12.7	7.3		22.2	21.9	21.3	20.7	20.1	19.5	18.8	18.1	17.4	15.9	
12.3	7.1		21.6	21.2	20.7	20.1	19.5	18.9	18.2	17.6	16.9	15.4	
11.9	6.9		21.0	20.6	20.1	19.5	18.9	18.3	17.7	17.1	16.4	15.0	
11.6	6.7		20.4	20.1	19.6	19.0	18.4	17.8	17.2	16.6	16.0	14.6	
11.3	6.5		19.9	19.6	19.1	18.5	18.0	17.4	16.8	16.2	15.6	14.2	
11.0	6.4		19.4	19.1	18.6	18.1	17.5	17.0	16.4	15.8	15.2	13.9	
10.7	6.2		19.0	18.7	18.2	17.7	17.1	16.6	16.0	15.4	14.8	13.5	
10.5	6.1		18.5	18.3	17.8	17.3	16.8	16.2	15.7	15.1	14.5	13.2	
10.3	5.9		18.2	17.9	17.4	16.9	16.4	15.9	15.3	14.8	14.2	13.0	
10.0	5.8		17.8	17.5	17.0	16.6	16.1	15.6	15.0	14.5	13.9	12.7	
9.8	5.7		16.2	16.0	15.6	15.1	14.7	14.2	13.7	13.2	12.7	11.6	
9.0	5.2		14.8	14.4	14.0	13.6	13.2	12.7	12.2	11.8	11.8	10.7	
8.3	4.8												

40	*****	13.8	13.5	13.1	12.7	12.3	11.9	11.5	11.0	10.0
7.8	4.5	*****	13.1	12.7	12.3	12.0	11.6	11.2	10.8	10.4
7.3	4.2	*****	12.4	12.1	11.7	11.4	11.0	10.6	10.2	9.8
7.0	4.0	*****	11.8	11.5	11.2	10.8	10.5	10.1	9.8	9.4
6.6	3.8	*****	11.3	11.0	10.7	10.4	10.0	9.7	9.4	9.0
6.4	3.7	*****	10.9	10.6	10.3	10.0	9.7	9.3	9.0	8.6
6.1	3.5	*****	10.5	10.2	9.9	9.6	9.3	9.0	8.7	8.3
5.9	3.4	*****	10.1	9.8	9.6	9.3	9.0	8.7	8.4	8.0
5.7	3.3	*****	9.5	9.3	9.0	8.7	8.4	8.1	7.8	7.1
5.5	3.2	*****	9.2	9.0	8.7	8.4	8.2	7.9	7.5	6.9
5.3	3.1	*****	9.0	8.7	8.5	8.2	7.9	7.6	7.3	6.7
5.2	3.0	*****	8.7	8.5	8.2	8.0	7.7	7.4	7.1	6.5
5.0	2.9	*****	8.5	8.3	8.0	7.8	7.5	7.2	7.0	6.4
4.9	2.8	*****	7.6	7.4	7.2	7.0	6.7	6.5	6.2	5.7
4.4	2.5	*****	7.0	6.8	6.6	6.4	6.1	5.9	5.7	5.2
4.0	2.3	*****	5.9	5.7	5.5	5.3	5.1	4.9	4.5	4.5
3.5	2.0	*****	5.1	4.9	4.8	4.6	4.4	4.4	4.0	4.0
3.1	1.8	*****	4.6	4.5	4.3	4.2	4.0	4.0	3.7	3.7
2.8	1.6	*****	4.2	4.0	3.9	3.7	3.4	3.7	3.4	3.4
2.6	1.5	*****	3.8	3.6	3.5	3.2	3.2	3.1	2.8	2.8
2.5	1.4	*****	3.5	3.4	3.3	3.0	3.0	2.8	2.8	2.8
2.3	1.3	*****	3.2	3.1	2.8	2.8	2.8	2.8	2.8	2.8
2.2	1.3	*****	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
1.8	1.0	*****	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
1.6	0.9	*****	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO MICRODATA DOCUMENTATION

HOUSEHOLD INTERNET USE SURVEY - 1097

Approximate Sampling Variability Tables for ATLANTIC

NUMERATOR OF PERCENTAGE (' 000)		ESTIMATED PERCENTAGE											
70.0%	90.0%	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%
25.0	1	*****	45.4	45.2	44.5	43.3	42.1	40.8	39.5	38.2	36.8	35.3	32.3
17.7	2	*****	32.1	31.9	31.4	30.6	29.7	28.9	27.9	27.0	26.0	25.0	22.8
14.4	3	*****	26.2	26.1	25.7	25.0	24.3	23.6	22.8	22.0	21.2	20.4	18.6
12.5	4	*****	22.7	22.6	22.2	21.6	21.0	20.4	19.8	19.1	18.4	17.7	16.1
11.2	5	*****	20.3	20.2	19.9	19.4	18.8	18.3	17.7	17.1	16.5	15.8	14.4
10.2	6	*****	18.5	18.4	18.2	17.7	17.2	16.7	16.1	15.6	15.0	14.4	13.2
9.4	7	*****	17.2	17.1	16.8	16.4	15.9	15.4	14.9	14.4	13.9	13.4	12.2
8.8	8	*****	16.1	16.0	15.7	15.3	14.9	14.4	14.0	13.5	13.0	12.5	11.4
8.3	9	*****	15.1	15.1	14.8	14.4	14.0	13.6	13.2	12.7	12.3	11.8	10.8
7.9	10	*****	14.3	14.1	13.7	13.3	12.9	12.5	12.1	11.6	11.2	10.2	
7.5	11	*****	13.6	13.4	13.1	12.7	12.3	11.9	11.5	11.1	10.7	9.7	
7.2	12	*****	13.0	12.8	12.5	12.1	11.8	11.4	11.0	10.6	10.2	9.3	
6.9	13	*****	12.5	12.3	12.0	11.7	11.3	11.0	10.6	10.2	9.8	8.9	
6.7	14	*****	12.1	11.9	11.6	11.2	10.9	10.6	10.2	9.8	9.4	8.6	
6.5	15	*****	11.7	11.5	11.2	10.9	10.5	10.2	9.9	9.5	9.1	8.3	
6.2	16	*****	11.3	11.1	10.8	10.5	10.2	9.9	9.5	9.2	8.8	8.1	
6.1	17	*****	11.0	10.8	10.5	10.2	9.9	9.6	9.3	8.9	8.6	7.8	
5.9	18	*****	10.6	10.5	10.2	9.9	9.6	9.3	9.0	8.7	8.3	7.6	
5.7	19	*****	10.2	9.9	9.7	9.4	9.1	8.8	8.4	8.1	7.4		
5.6	20	*****	9.9	9.7	9.4	9.1	8.8	8.5	8.2	7.9	7.2		
5.5	21	*****	9.7	9.4	9.2	8.9	8.6	8.3	8.0	7.7	7.0		
5.3	22	*****	9.5	9.2	9.0	8.7	8.4	8.1	7.8	7.5	6.9		
5.2	23	*****	9.3	9.0	8.8	8.5	8.2	8.0	7.7	7.4	6.7		
5.1	24	*****	9.1	8.8	8.6	8.3	8.1	7.8	7.5	7.2	6.6		
5.0	25	*****	8.9	8.7	8.4	8.2	7.9	7.6	7.4	7.1	6.5		
4.6	30	*****	8.1	7.9	7.7	7.5	7.2	7.0	6.7	6.5	5.9		
4.2	35	*****	7.5	7.3	7.1	6.9	6.7	6.5	6.2	6.0	5.5		

4.0	40	*****	7.0	6.8	6.7	6.5	6.2	6.0	5.8	5.6	5.1
3.7	45	*****	6.6	6.5	6.3	6.1	5.9	5.7	5.5	5.3	4.8
3.5	50	*****		6.1	5.9	5.8	5.6	5.4	5.2	5.0	4.6
3.4	55	*****		5.8	5.7	5.5	5.3	5.1	5.0	4.8	4.4
3.2	60	*****		5.6	5.4	5.3	5.1	4.9	4.7	4.6	4.2
3.1	65	*****		5.4	5.2	5.1	4.9	4.7	4.6	4.4	4.0
3.0	70	*****		5.2	5.0	4.9	4.7	4.6	4.4	4.2	3.9
2.9	75	*****		5.0	4.9	4.7	4.6	4.4	4.2	4.1	3.7
2.8	80	*****		4.8	4.7	4.6	4.4	4.3	4.1	4.0	3.6
2.7	85	*****		4.7	4.6	4.4	4.3	4.1	4.0	3.8	3.5
2.6	90	*****		4.6	4.4	4.3	4.2	4.0	3.9	3.7	3.4
2.6	95	*****			4.3	4.2	4.1	3.9	3.8	3.6	3.3
2.5	100	*****			4.2	4.1	4.0	3.8	3.7	3.5	3.2
2.2	125	*****			3.8	3.7	3.5	3.4	3.3	3.2	2.9
2.0	150	*****				3.3	3.2	3.1	3.0	2.9	2.6
1.8	200	*****					2.8	2.7	2.6	2.5	2.3
1.6	250	*****						2.4	2.3	2.2	2.0
1.4	300	*****							2.1	2.0	1.9
1.3	350	*****								1.9	1.7
1.2	400	*****									1.6
1.2	450	*****									1.5
1.1	500	*****									
	750	*****									
		*****									0.5

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO MICRODATA DOCUMENTATION



HOUSEHOLD INTERNET USE SURVEY - 1097

Approximate Sampling Variability Tables for PRAIRIES

NUMERATOR OF PERCENTAGE (' 000)		ESTIMATED PERCENTAGE											
70.0%	90.0%	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%
41.9	1	76.5	76.1	75.7	74.6	72.6	70.5	68.4	66.3	64.0	61.7	59.3	54.1
29.6	2	*****	53.8	53.6	52.7	51.3	49.9	48.4	46.9	45.3	43.6	41.9	38.3
24.2	3	*****	44.0	43.7	43.1	41.9	40.7	39.5	38.3	37.0	35.6	34.2	31.2
21.0	4	*****	38.1	37.9	37.3	36.3	35.3	34.2	33.1	32.0	30.8	29.6	27.0
18.7	5	*****	34.0	33.9	33.3	32.5	31.5	30.6	29.6	28.6	27.6	26.5	24.2
17.1	6	*****	31.1	30.9	30.4	29.6	28.8	27.9	27.0	26.1	25.2	24.2	22.1
15.8	7	*****	28.8	28.6	28.2	27.4	26.7	25.9	25.0	24.2	23.3	22.4	20.4
14.8	8	*****	26.9	26.8	26.4	25.7	24.9	24.2	23.4	22.6	21.8	21.0	19.1
14.0	9	*****	25.4	25.2	24.9	24.2	23.5	22.8	22.1	21.3	20.6	19.8	18.0
13.3	10	*****	24.1	24.0	23.6	23.0	22.3	21.6	21.0	20.2	19.5	18.7	17.1
12.6	11	*****	23.0	22.8	22.5	21.9	21.3	20.6	20.0	19.3	18.6	17.9	16.3
12.1	12	*****	22.0	21.9	21.5	21.0	20.4	19.8	19.1	18.5	17.8	17.1	15.6
11.6	13	*****	21.1	21.0	20.7	20.1	19.6	19.0	18.4	17.8	17.1	16.4	15.0
11.2	14	*****	20.3	20.2	19.9	19.4	18.9	18.3	17.7	17.1	16.5	15.8	14.5
10.8	15	*****	19.7	19.6	19.3	18.7	18.2	17.7	17.1	16.5	15.9	15.3	14.0
10.5	16	*****	19.0	18.9	18.6	18.1	17.6	17.1	16.6	16.0	15.4	14.8	13.5
10.2	17	*****	18.5	18.4	18.1	17.6	17.1	16.6	16.1	15.5	15.0	14.4	13.1
9.9	18	*****	17.9	17.9	17.6	17.1	16.6	16.1	15.6	15.1	14.5	14.0	12.8
9.6	19	*****		17.4	17.1	16.7	16.2	15.7	15.2	14.7	14.2	13.6	12.4
9.4	20	*****		16.9	16.7	16.2	15.8	15.3	14.8	14.3	13.8	13.3	12.1
9.1	21	*****		16.5	16.3	15.8	15.4	14.9	14.5	14.0	13.5	12.9	11.8
8.9	22	*****		16.1	15.9	15.5	15.0	14.6	14.1	13.6	13.2	12.6	11.5
8.7	23	*****		15.8	15.5	15.1	14.7	14.3	13.8	13.3	12.9	12.4	11.3
8.6	24	*****		15.5	15.2	14.8	14.4	14.0	13.5	13.1	12.6	12.1	11.0
8.4	25	*****		15.1	14.9	14.5	14.1	13.7	13.3	12.8	12.3	11.9	10.8
7.7	30	*****		13.8	13.6	13.3	12.9	12.5	12.1	11.7	11.3	10.8	9.9
7.1	35	*****		12.8	12.6	12.3	11.9	11.6	11.2	10.8	10.4	10.0	9.1

40	*****	11.8	11.5	11.2	10.8	10.5	10.1	9.8	9.4	8.6	
6.6	3.8	*****	11.1	10.8	10.5	10.2	9.9	9.5	9.2	8.8	8.1
6.2	3.6	*****	10.5	10.3	10.0	9.7	9.4	9.1	8.7	8.4	7.7
5.9	3.4	*****	10.1	9.8	9.5	9.2	8.9	8.6	8.3	8.0	7.3
5.7	3.3	*****	9.6	9.4	9.1	8.8	8.6	8.3	8.0	7.7	7.0
5.4	3.1	*****	9.2	9.0	8.7	8.5	8.2	7.9	7.7	7.4	6.7
5.2	3.0	*****	8.9	8.7	8.4	8.2	7.9	7.7	7.4	7.1	6.5
5.0	2.9	*****	8.6	8.4	8.1	7.9	7.7	7.4	7.1	6.8	6.2
4.8	2.8	*****	8.3	8.1	7.9	7.7	7.4	7.2	6.9	6.6	6.0
4.7	2.7	*****	8.1	7.9	7.7	7.4	7.2	6.9	6.7	6.4	5.9
4.5	2.6	*****	7.9	7.7	7.4	7.2	7.0	6.7	6.5	6.2	5.7
4.4	2.6	*****	7.4	7.2	7.0	6.8	6.6	6.3	6.1	5.6	
4.3	2.5	*****	7.3	7.1	6.8	6.6	6.4	6.2	5.9	5.4	
4.2	2.4	*****	6.5	6.3	6.1	5.9	5.7	5.5	5.3	4.8	
3.7	2.2	*****	5.9	5.8	5.6	5.4	5.2	5.0	4.8	4.4	
3.4	2.0	*****	5.0	4.8	4.7	4.5	4.4	4.4	4.2	3.8	
3.0	1.7	*****	4.5	4.3	4.2	4.0	3.9	3.7	3.4	3.4	
2.7	1.5	*****	4.0	3.8	3.7	3.6	3.6	3.4	3.1	3.1	
2.4	1.4	*****	3.7	3.5	3.4	3.3	3.3	3.2	3.2	2.9	
2.2	1.3	*****	3.3	3.2	3.1	3.0	3.0	2.7	2.7	2.7	
2.1	1.2	*****	3.1	3.0	2.9	2.8	2.8	2.6	2.6	2.6	
2.0	1.1	*****	2.9	2.8	2.7	2.7	2.4	2.4	2.4	2.4	
1.9	1.1	*****	2.2	2.0							
1.5	0.9	*****									
1.3	0.8	*****									
1500		*****									

0.6

NOTE: FOR CORRECT USAGE OF THESE TABLES PLEASE REFER TO MICRODATA DOCUMENTATION

HOUSEHOLD INTERNET USE SURVEY - 1097

Approximate Sampling Variability Tables for CANADA

NUMERATOR OF PERCENTAGE ('000)		ESTIMATED PERCENTAGE											
		0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	25.0%	30.0%	35.0%	40.0%	50.0%
70.0%	90.0%												
1	25.8	81.7	81.3	80.9	79.6	77.5	75.3	73.1	70.7	68.4	65.9	63.3	57.8
2	18.3	57.7	57.5	57.2	56.3	54.8	53.3	51.7	50.0	48.3	46.6	44.7	40.8
3	14.9	47.1	46.9	46.7	46.0	44.7	43.5	42.2	40.8	39.5	38.0	36.5	33.4
4	12.9	40.8	40.6	40.4	39.8	38.8	37.7	36.5	35.4	34.2	32.9	31.6	28.9
5	11.6	36.5	36.4	36.2	35.6	34.7	33.7	32.7	31.6	30.6	29.5	28.3	25.8
6	10.5	33.3	33.2	33.0	32.5	31.6	30.7	29.8	28.9	27.9	26.9	25.8	23.6
7	9.8	30.9	30.7	30.6	30.1	29.3	28.5	27.6	26.7	25.8	24.9	23.9	21.8
8	9.1	28.9	28.7	28.6	28.2	27.4	26.6	25.8	25.0	24.2	23.3	22.4	20.4
9	8.6	27.2	27.1	27.0	26.5	25.8	25.1	24.4	23.6	22.8	22.0	21.1	19.3
10	8.2	25.8	25.7	25.6	25.2	24.5	23.8	23.1	22.4	21.6	20.8	20.0	18.3
11	7.8	24.6	24.5	24.4	24.0	23.4	22.7	22.0	21.3	20.6	19.9	19.1	17.4
12	7.5	*****	23.5	23.3	23.0	22.4	21.7	21.1	20.4	19.7	19.0	18.3	16.7
13	7.2	*****	22.5	22.4	22.1	21.5	20.9	20.3	19.6	19.0	18.3	17.6	16.0
14	6.9	*****	21.7	21.6	21.3	20.7	20.1	19.5	18.9	18.3	17.6	16.9	15.4
15	6.7	*****	21.0	20.9	20.6	20.0	19.4	18.9	18.3	17.6	17.0	16.3	14.9
16	6.5	*****	20.3	20.2	19.9	19.4	18.8	18.3	17.7	17.1	16.5	15.8	14.4
17	6.3	*****	19.7	19.6	19.3	18.8	18.3	17.7	17.2	16.6	16.0	15.3	14.0
18	6.1	*****	19.2	19.1	18.8	18.3	17.8	17.2	16.7	16.1	15.5	14.9	13.6
19	5.9	*****	18.6	18.6	18.3	17.8	17.3	16.8	16.2	15.7	15.1	14.5	13.3
20	5.8	*****	18.2	18.1	17.8	17.3	16.8	16.3	15.8	15.3	14.7	14.1	12.9
21	5.6	*****	17.7	17.6	17.4	16.9	16.4	15.9	15.4	14.9	14.4	13.8	12.6
22	5.5	*****	17.3	17.2	17.0	16.5	16.1	15.6	15.1	14.6	14.0	13.5	12.3
23	5.4	*****	16.9	16.9	16.6	16.2	15.7	15.2	14.8	14.3	13.7	13.2	12.0
24	5.3	*****	16.6	16.5	16.3	15.8	15.4	14.9	14.4	14.0	13.4	12.9	11.8
25	5.2	*****	16.3	16.2	15.9	15.5	15.1	14.6	14.1	13.7	13.2	12.7	11.6
30	4.7	*****	14.8	14.8	14.5	14.1	13.8	13.3	12.9	12.5	12.0	11.6	10.5
35	4.4	*****	13.7	13.7	13.5	13.1	12.7	12.4	12.0	11.6	11.1	10.7	9.8
40	4.1	*****	12.9	12.8	12.6	12.3	11.9	11.6	11.2	10.8	10.4	10.0	9.1

6.7	45	*****	12.1	12.1	11.9	11.6	11.2	10.9	10.5	10.2	9.8	9.4	8.6
6.3	50	*****	11.5	11.4	11.3	11.0	10.7	10.3	10.0	9.7	9.3	8.9	8.2
6.0	55	*****	11.0	10.9	10.7	10.5	10.2	9.9	9.5	9.2	8.9	8.5	7.8
5.8	60	*****	10.5	10.4	10.3	10.0	9.7	9.4	9.1	8.8	8.5	8.2	7.5
5.6	65	*****	10.1	10.0	9.9	9.6	9.3	9.1	8.8	8.5	8.2	7.8	7.2
5.3	70	*****	9.7	9.7	9.5	9.3	9.0	8.7	8.5	8.2	7.9	7.6	6.9
5.2	75	*****	9.4	9.3	9.2	8.9	8.7	8.4	8.2	7.9	7.6	7.3	6.7
5.0	80	*****	9.1	9.0	8.9	8.7	8.4	8.2	7.9	7.6	7.4	7.1	6.5
4.9	85	*****	8.8	8.8	8.6	8.4	8.2	7.9	7.7	7.4	7.1	6.9	6.3
4.7	90	*****	8.6	8.5	8.4	8.2	7.9	7.7	7.5	7.2	6.9	6.7	6.1
4.6	95	*****	8.3	8.3	8.2	8.0	7.7	7.5	7.3	7.0	6.8	6.5	5.9
4.5	100	*****	8.1	8.1	8.0	7.8	7.5	7.3	7.1	6.8	6.6	6.3	5.8
4.0	125	*****		7.2	7.1	6.9	6.7	6.5	6.3	6.1	5.9	5.7	5.2
3.7	150	*****		6.6	6.5	6.3	6.1	6.0	5.8	5.6	5.4	5.2	4.7
3.2	200	*****		5.7	5.6	5.5	5.3	5.2	5.0	4.8	4.7	4.5	4.1
2.8	250	*****			5.0	4.9	4.8	4.6	4.5	4.3	4.2	4.0	3.7
2.6	300	*****			4.6	4.5	4.3	4.2	4.1	3.9	3.8	3.7	3.3
2.4	350	*****			4.3	4.1	4.0	3.9	3.8	3.7	3.5	3.4	3.1
2.2	400	*****			4.0	3.9	3.8	3.7	3.5	3.4	3.3	3.2	2.9
2.1	450	*****			3.8	3.7	3.6	3.4	3.3	3.2	3.1	3.0	2.7
2.0	500	*****			3.6	3.5	3.4	3.3	3.2	3.1	2.9	2.8	2.6
1.6	750	*****				2.8	2.8	2.7	2.6	2.5	2.4	2.3	2.1
1.4	1000	*****				2.5	2.4	2.3	2.2	2.2	2.1	2.0	1.8
1.2	1500	*****					1.9	1.9	1.8	1.8	1.7	1.6	1.5
1.0	2000	*****						1.6	1.6	1.5	1.5	1.4	1.3
0.8	3000	*****								1.2	1.2	1.2	1.1
0.7	4000	*****									1.0	1.0	0.9
0.6	5000	*****											0.8
0.6	6000	*****											
0.5	7000	*****											
0.5	8000	*****											
0.5	9000	*****											
	10000	*****											0.3
		*****											0.3

## 11.0 Weighting

Since the HIUS used a sub-sample of the LFS sample, the derivation of weights for the survey records is clearly tied to the weighting procedure used for the LFS. The LFS weighting procedure is briefly described below.

### 11.1 Weighting Procedures for the LFS

In the LFS, the final weight attached to each record is the product of the following factors: the basic weight, the cluster sub-weight, the balancing factor for non-response, and the province-age-sex ratio adjustment factor. Each is described below.

#### Basic Weight

Quality standard (i.e. the targeted c.v.) could be relaxed a bit to reduce the size of the required sample.

### 11.2 Weighting Procedures for the Household Internet Use Survey

The principles behind the calculation of the weights for the HIUS are nearly identical to those for the LFS. However, this survey is a household-weighted survey, not a person-weighted survey. Also, further adjustments are made to the LFS weights in order to derive a final weight for the individual records on the HIUS microdata file.

- (1) An adjustment to account for the use of a five-sixths sub-sample, instead of the full LFS sample.
- (2) An adjustment to account for the additional non-response to the supplementary survey, i.e., non-response to the HIUS for individuals who did respond to the LFS or for which previous month's LFS data was brought forward.

- (3) A readjustment to account for independent province-stratum projections, after the above adjustments are made. These province-stratum totals are simply the final weighted province-stratum totals from the LFS. Note that a stratum roughly corresponds to an EIR-ER region (described in section 5.2.2).

Adjustments (1) and (2) are taken into account by multiplying the LFS sub-weight for each responding HIUS record by:

$$\frac{\text{sum of LFS subweights from each household responding to LFS}}{\text{sum of LFS subweights from each household responding to the RTSS}}$$

to obtain a non-response adjusted HIUS sub-weight (WEIGHT1).

Adjustment (3) is calculated by multiplying WEIGHT1 for each HIUS respondent by :

$$\frac{\text{population total for province\&stratum } i}{\text{sum of WEIGHT1 for survey respondents in province\&stratum } i}$$

to give the resulting weight (FINWT), which is the final weight which appears on the HIUS microdata file.

### Calibration Estimation Adjustments

The weights for each respondent were adjusted in Adjustment 3 by an iterative process using a calibrated estimation procedure. This procedure ensured that estimates produced for a province-stratum group would agree with the population totals for that province-stratum group. This adjustment was made by using a two-stage iterative weighting procedure, each time using the weight obtained from the previous step, until the set of estimates agreed with the LFS population totals (which were created using Census population projections). The final statistical weight can be found in the "WEIGHT" field on the microdata file. Note that this field has a decimal and should be read as (99999V9999) where V represents the location of the decimal place.

# 12.0 Questionnaires and Code Sheets

The HIUS questionnaire was used in October 1997 to collect the information for the supplementary survey.

## I01

This is a voluntary survey about the use of computers by members of your household to communicate with other computers. By communicate, I mean using a computer connected to a communications network for things like electronic banking, E-mail, and going on the Internet.

### Q01A

Has anyone in the household ever used computer communications (like electronic banking, E-mail, Internet) from home, work, school or any other location?

<-1> Don't know ..... go to Q12A  
<-2> Refused ..... go to Q12A  
<01> YES  
<02> NO ..... go to Q12A  
*Universe:* All

### Q01B

In a typical month, does anyone in the household use computer communications?

<-1> Don't know ..... go to Q12A  
<-2> Refused ..... go to Q12A  
<01> YES  
<02> NO ..... go to Q12A

*Note:* This question is intended to exclude those households in which someone may have used computer communications a few times (for example, at a friends house), but who can not really be describe as `users' in the normal sense of the word. It is also designed to include those who may not have used them recently (e.g. last month, perhaps because they were unemployed or on vacation from school or work), but who do so under normal circumstances. It is also intended to include people who have only recently started to use them - so the last month may not be typical of previous months, but likely will be typical of future months.

*Universe:* All answering `yes' to Q01A



**C02**

Determine age of household members from the LFS. If there are no household members under the age of 18, go to I03A. Otherwise go to Q02A.

**Q02A**

Do any of the household members aged 18 and over use computer communications in a typical month?

- <-1> Don't know
- <-2> Refused
- <01> YES
- <02> NO

*Universe:* All with children under 18 answering `yes' to Q01B

**Q02B**

Do any of the household members aged under 18 use computer communications in a typical month?

- <-1> Don't know
- <-2> Refused
- <01> YES
- <02> NO

*Universe:* All with children under 18 answering `yes` to Q01B

**C03**

If Q02A = 'yes' and Q02B is not equal to `yes', go to I03A. If Q02A = `yes' and Q02B = 'yes', go to I03B. If Q02A is not equal to `yes' and Q02B = `yes', go to I04. If both Q02A and Q02B are not equal to `yes', go to Q12A

**I03A**

Now I would like to ask you about the places from which members of your household use computer communications (e-mail, Internet, etc).

*Default Next Question:* **Q03A**

**I03B**

Now I would like to ask you about the places from which members of your household use computer communications (e-mail, Internet, etc). My first questions are about only the people aged 18 and over.





**Q03A**

In a typical month, do any members of your household (aged 18 and over) use computer communications at home?

- <-1> Don't know
- <-2> Refused
- <01> YES
- <02> NO

*Universe:* Those with positive responses in Q01B and/or Q02A

**Q03B**

In a typical month, do any members of your household (aged 18 and over) use computer communications at work?

- <-1> Don't know
- <-2> Refused
- <01> YES
- <02> NO

*Universe:* Those with positive responses in Q01B and/or Q02A

**Q03C**

In a typical month, do any members of your household (aged 18 and over) use computer communications at school, college or university where they are studying?

- <-1> Don't know
- <-2> Refused
- <01> YES
- <02> NO

*Universe:* Those with positive responses in Q01B and/or Q02A

**Q03D**

In a typical month, do any members of your household (aged 18 and over) use computer communications at a public library?

- <-1> Don't know
- <-2> Refused
- <01> YES
- <02> NO

*Universe:* Those with positive responses in Q01B and/or Q02A



**Q03E**

In a typical month, do any members of your household (aged 18 and over) use computer communications at a location that we have not yet mentioned?

- <-1> Don't know
- <-2> Refused
- <01> YES
- <02> NO

*Universe:* Those with positive responses in Q01B and/or Q02A

**C04**

If Q02B is not equal to 'yes', go to C05. Otherwise go to I04.

**I04**

Now I would like to ask you only about the household members under the age 18 that use computer communications.

**Q04A**

In a typical month, do any members of your household under the age of 18 use computer communications at home?

- <-1> Don't know
- <-2> Refused
- <01> YES
- <02> NO

*Universe:* Those with positive responses in Q02B

**Q04B**

In a typical month, do any members of your household under the age of 18 use computer communications at work?

- <-1> Don't know
- <-2> Refused
- <01> YES
- <02> NO

*Universe:* Those with positive responses in Q02B

  
**Q04C**

In a typical month, do any members of your household under the age of 18 use computer communications at a school where they are studying?

<-1> Don't know

<-2> Refused

<01> YES

<02> NO

*Universe:* Those with positive responses in Q02B

**Q04D**

In a typical month, do any members of your household under the age of 18 use computer communications at a public library?

<-1> Don't know

<-2> Refused

<01> YES

<02> NO

*Universe:* Those with positive responses in Q02B

**Q04E**

In a typical month, do any members of your household under the age of 18 use computer communications at a location we have not yet mentioned?

<-1> Don't know

<-2> Refused

<01> YES

<02> NO

*Universe:* Those with positive responses in Q02B

**C05**

If Q03A = `yes' and/or if Q04A = `yes', go to I05. Otherwise go to Q12A

**I05**

My remaining questions are only about using computer communications AT HOME, and they refer to all members of the household as a group.

## C05A

If Q02A is not equal to `yes' and Q02B = `yes', code Q05A as `3' and go to Q06. Otherwise go to Q05A .OR. If Q02B is not equal to `yes', do not display answer category `3' in Q05A.

## Q05A

In a typical month, which member of the household uses computer communications at home the most?

- <-1> Don't know
  - <-2> Refused
  - <01> You (the respondent)
  - <02> Someone else aged at least 18
  - <03> Someone under age 18
- Universe:* For <1> and <2>, those answering `yes' to Q03A. For <3>, those answering `yes' to Q04A.

## Q06

How often do members of your household use computer communications at home in a typical month?

- <-1> Don't know
  - <-2> Refused
  - <01> At least 7 times per week.
  - <02> At least 4 times per month.
  - <03> 1 to 3 times per month.
  - <04> Less than once per month
- Universe:* Those answering `yes' to Q03A and/or Q04A

## Q07

What is the total amount of time members of your household spend on computer communications at home in a typical month?

- <-1> Don't know
  - <-2> Refused
  - <01> Less than 1 hour.
  - <02> At least 1 hour but less than 5.
  - <03> At least 5 hours but less than 10.
  - <04> At least 10 hours but less than 20
  - <05> 20 hours or more.
- Universe:* Those answering `yes' to Q03A and/or Q04A

## Q08A

In a typical month, what share (percentage) of the household's total time spent using computer communications at home is for self-employed business? (INTERVIEWER: DON'T READ THE ANSWER CATEGORIES. USE THEM AS A GUIDE IF THE RESPONDENT NEEDS PROMPTING)

- <-1> Don't know
- <-2> Refused
- <01> None
- <02> Less than 10 %
- <03> At least 10% but less than 25%
- <04> At least 25% but less than 50%
- <05> At least 50% but less than 75%
- <06> At least 75% but less than 90%
- <07> At least 90% but less than 100%
- <08> 100%

*Universe:* Those answering 'yes' to Q03A and/or Q04A

## C08B

If Q08A = '8', go to Q09A

## Q08B

In a typical month, what share (percentage) of this time (spent using computer communications at home) is for employer related business? (INTERVIEWER: DON'T READ THE ANSWER CATEGORIES. USE THEM AS A GUIDE IF THE RESPONDENT NEEDS PROMPTING)

- <-1> Don't know
- <-2> Refused
- <01> None
- <02> Less than 10 %
- <03> At least 10% but less than 25%
- <04> At least 25% but less than 50%
- <05> At least 50% but less than 75%
- <06> At least 75% but less than 90%
- <07> At least 90% but less than 100%
- <08> 100%

*Universe:* Those answering 'yes' to Q03A and/or Q04A

## C08C

If Q08B = '8' go to Q09A.



**Q08C**

In a typical month, what share (percentage) of this time (spent using computer communications at home) is for personal (non-business) use? (INTERVIEWER: DON'T READ THE ANSWER CATEGORIES. USE THEM AS A GUIDE IF THE RESPONDENT NEEDS PROMPTING)

- <-1> Don't know
- <-2> Refused
- <01> None
- <02> Less than 10 %
- <03> At least 10% but less than 25%
- <04> At least 25% but less than 50%
- <05> At least 50% but less than 75%
- <06> At least 75% but less than 90%
- <07> At least 90% but less than 100%
- <08> 100%

*Universe:* Those answering `yes' tp Q03A and/or Q04A

**Q09A**

In a typical month does any member of your household use a computer at home for E-mail?

- <-1> Don't know
- <-2> Refused
- <01> YES
- <02> NO

*Universe:* Those answering `yes' to Q03A and/or Q04A.

**Q09B**

In a typical month does any member of your household use a computer at home for electronic banking?

- <-1> Don't know
- <-2> Refused
- <01> YES
- <02> NO

*Universe:* Those answering `yes' to Q03A and/or Q04A.

**Q09C**

In a typical month does any member of your household use a computer at home to purchase goods and services on the Internet?

- <-1> Don't know
  - <-2> Refused
  - <01> YES
  - <02> NO
  - <03> DO NOT HAVE INTERNET AT HOME . . . . . go to C10A
- Universe:* Those answering `yes' to Q03A and/or Q04A.

**Q09D**

In a typical month does any member of your household use a computer at home for general browsing on the Internet?

- <-1> Don't know
  - <-2> Refused
  - <01> YES
  - <02> NO
- Universe:* Those not answering `03' to Q09C.

**Q09E**

In a typical month does any member of your household use a computer at home to search for specific information on the Internet?

- <-1> Don't know
  - <-2> Refused
  - <01> YES
  - <02> NO
- Note:* 'Searching for specific information' includes going to known educational, business, government sites, and seeking any other information where the users know in advance what they are looking for. It does not include things like looking for `Jokes' (general browsing ) or playing games (other).
- Universe:* Those not answering `03' to Q09C.

**Q09F**

In a typical month does any member of your household use a computer at home to access any other Internet services that have not yet been mentioned ?

- <-1> Don't know
  - <-2> Refused
  - <01> YES
  - <02> NO
- Universe:* Those not answering `03' to Q09C

  
**C10A**

If Q09A = 'yes' and Q09B, Q09C, Q09D, Q09E and Q09F all = 'no', 'don't know' or 'refused', mark Q10A as '7' and go to I11. If Q09A = 'yes' and at least one of Q09B, Q09C, Q09D, Q09E and Q09F = 'yes', go to Q10A. Otherwise go to C10B.

**Q10A**

In a typical month, what share (percentage) of the total time using these facilities at home do members of your household use on E-mail? (INTERVIEWER: DON'T READ THE ANSWER CATEGORIES. USE THEM AS A GUIDE IF THE RESPONDENT NEEDS PROMPTING)

- <-1> Don't know
- <-2> Refused
- <01> Less than 10 %
- <02> At least 10% but less than 25%
- <03> At least 25% but less than 50%
- <04> At least 50% but less than 75%
- <05> At least 75% but less than 90%
- <06> At least 90% but less than 100%
- <07> 100%

*Universe:* Those answering 'yes' to Q09A

**C10B**

If Q09B = 'yes' and Q09A, Q09C, Q09D, Q09E and Q09F all = 'no', 'don't know' or 'refused', mark Q10B as '7' and go to I11. If Q09B = 'yes' and at least one of Q09A, Q09C, Q09D, Q09E and Q09F = 'yes', go to Q10B. Otherwise go to C10C.



## Q10B

In a typical month, what share (percentage) of the total time using these facilities at home do members of your household do electronic banking? (INTERVIEWER: DON'T READ THE ANSWER CATEGORIES. USE THEM AS A GUIDE IF THE RESPONDENT NEEDS PROMPTING)

- <-1> Don't know
- <-2> Refused
- <01> Less than 10 %
- <02> At least 10% but less than 25%
- <03> At least 25% but less than 50%
- <04> At least 50% but less than 75%
- <05> At least 75% but less than 90%
- <06> At least 90% but less than 100%
- <07> 100%

*Universe:* Those answering 'yes' to Q09B.

## C10C

If Q09C = 'yes' and Q09A, Q09B, Q09D, Q09E and Q09F all = 'no' , 'don't know' or 'refused', mark Q10C as '7' and go to I11. If Q09C = 'yes' and at least one of Q09A, Q09B, Q09D, Q09E and Q09F = 'yes', go to Q10C. Otherwise go to C10D.

## Q10C

In a typical month, what share (percentage) of the total time using these facilities at home do members of your household use to purchase goods and services on the Internet? (INTERVIEWER: DON'T READ THE ANSWER CATEGORIES. USE THEM AS A GUIDE IF THE RESPONDENT NEEDS PROMPTING)

- <-1> Don't know
- <-2> Refused
- <01> Less than 10 %
- <02> At least 10% but less than 25%
- <03> At least 25% but less than 50%
- <04> At least 50% but less than 75%
- <05> At least 75% but less than 90%
- <06> At least 90% but less than 100%
- <07> 100%

*Universe:* Those answering 'yes' to Q09C



**C10D**

If Q09D = 'yes' and Q09A, Q09B, Q09C, Q09E and Q09F all = 'no', 'don't know' or 'refused', mark Q10D as '7' and go to I11. If Q09D = 'yes' and at least one of Q09A, Q09B, Q09C, Q09E and Q09F = 'yes', go to Q10D. Otherwise go to C10E.

**Q10D**

In a typical month, what share (percentage) of the total time using these facilities at home do members of your household use to do general browsing on the Internet? (INTERVIEWER: DON'T READ THE ANSWER CATEGORIES. USE THEM AS A GUIDE IF THE RESPONDENT NEEDS PROMPTING)

- <-1> Don't know
- <-2> Refused
- <01> Less than 10 %
- <02> At least 10% but less than 25%
- <03> At least 25% but less than 50%
- <04> At least 50% but less than 75%
- <05> At least 75% but less than 90%
- <06> At least 90% but less than 100%
- <07> 100%

*Universe:* Those answering 'yes' to Q09D

**C10E**

If Q09E = 'yes' and Q09A, Q09B, Q09C, Q09D and Q09F all = 'no', 'don't know' or 'refused', mark Q10E as '7' and go to I11. If Q09E = 'yes' and at least one of Q09A, Q09B, Q09C, Q09D and Q09F = 'yes', go to Q10E. Otherwise go to C10F.

## Q10E

In a typical month, what share (percentage) of the total time using these facilities at home do members of your household use to search for specific information on the Internet? (INTERVIEWER: DON'T READ THE ANSWER CATEGORIES. USE THEM AS A GUIDE IF THE RESPONDENT NEEDS PROMPTING)

- <-1> Don't know
- <-2> Refused
- <01> Less than 10 %
- <02> At least 10% but less than 25%
- <03> At least 25% but less than 50%
- <04> At least 50% but less than 75%
- <05> At least 75% but less than 90%
- <06> At least 90% but less than 100%
- <07> 100%

*Universe:* Those answering 'yes' to Q09E

## C10F

If Q09F = 'yes' and Q09A, Q09B, Q09C, Q09D and Q09E all = 'no', 'don't know' or 'refused', mark Q10F as '7' and go to I11. If Q09F = 'yes' and at least one of Q09A, Q09B, Q09C, Q09D and Q09E = 'yes', go to Q10F. Otherwise go to I11.

## Q10F

In a typical month, what share (percentage) of the total time using these facilities at home do members of your household spend using the Internet for things we have not mentioned? (INTERVIEWER: DON'T READ THE ANSWER CATEGORIES. USE THEM AS A GUIDE IF THE RESPONDENT NEEDS PROMPTING)

- <-1> Don't know
- <-2> Refused
- <01> Less than 10 %
- <02> At least 10% but less than 25%
- <03> At least 25% but less than 50%
- <04> At least 50% but less than 75%
- <05> At least 75% but less than 90%
- <06> At least 90% but less than 100%
- <07> 100%

*Universe:* Those answering 'yes' to Q09F

## I11

Now I would like to ask you about things that might cause your household to increase its use of computer communications at home.



**Q11A**

How would your household's use of computer communications at home in a typical month increase if the cost were much lower? (READ CATEGORIES TO RESPONDENT)

- <-1> Don't know
  - <-2> Refused
  - <01> Substantially
  - <02> Noticeably
  - <03> Little or nothing
- Universe:* Those answering `yes' to Q03A and/or Q04A.

**Q11B**

How would your household's use of computer communications at home in a typical month increase if more and better services were available (e.g. for shopping, banking etc.)? (READ CATEGORIES TO RESPONDENT)

- <-1> Don't know
  - <-2> Refused
  - <01> Substantially
  - <02> Noticeably
  - <03> Little or nothing
- Note:* Questions Q12 and Q13 are for those who do NOT use computer communications at home, while Q14 is for those who do not typically use it at all.
- Universe:* Those answering `yes' to Q03A and/or Q04A.

**Q11C**

How would your household's use of computer communications at home in a typical month increase if access were easier? (AN EXAMPLE OF EASIER ACCESS COULD BE USING THE TV SCREEN AND REMOTE CONTROL - READ CATEGORIES TO RESPONDENT)

- <-1> Don't know . . . . . go to Q15A
  - <-2> Refused . . . . . go to Q15A
  - <01> Substantially . . . . . go to Q15A
  - <02> Noticeably . . . . . go to Q15A
  - <03> Little or nothing . . . . . go to Q15A
- Universe:* Those answering `yes' to Q03A and/or Q04A



**Q12A**

Do you have a computer at home?

- <-1> Don't know ..... go to Q14
- <-2> Refused ..... go to Q14
- <01> YES
- <02> NO ..... go to Q14
- Universe:* Those answering `no`, `don't know` or `refused` to Q01A or Q01B or to Q03A and/or Q04A (if applicable).

**Q12B**

Is your home computer capable of accessing the Internet?

- <-1> Don't know ..... go to Q13B
- <-2> Refused ..... go to Q13B
- <01> YES
- <02> NO ..... go to Q13B
- Note:* This question refers to whether the home computer has the speed and memory to access the Internet. It does not refer to whether they have a modem or the necessary software
- Universe:* Those answering `yes` to Q12A

**Q13A**

What are the main reasons why your household does not use your home computer for communication services? (INTERVIEWER: READ THE LIST AND MARK ALL THOSE THAT APPLY).

- <-1> Don't know
- <-2> Refused
- <01> it costs too much
- <02> it is too complex
- <03> you can use them at work or another location
- <04> it does not offer enough useful services
- <05> other reasons
- Universe:* Those answering `yes` to Q12B



**Q13B**

What would induce your household to start using computer communication services at home? (INTERVIEWER: READ THE LIST AND MARK ALL THOSE THAT APPLY)

- <-1> Don't know
  - <-2> Refused
  - <01> the cost was much lower
  - <02> they could be easily accessed through the television using a remote control
  - <03> more and better services were offered (more shopping, banking etc.)
  - <04> nothing would induce you
  - <05> other reasons
- Universe:* Those answering `yes' to Q12A

**Q14**

Would members of the household use computer communications from a public library or other public place if they were easily and cheaply available at those places?

- <-1> Don't know
  - <-2> Refused
  - <01> YES
  - <02> NO
- Universe:* Those answering Q12A

**Q15A**

In a typical month, is any of the household members aged 18 and over self-employed?

- <-1> Don't know
  - <-2> Refused
  - <01> YES
  - <02> NO
- Universe:* All

**Q15B**

In a typical month, is any of the household members aged 18 and over an employee?

- <-1> Don't know
  - <-2> Refused
  - <01> YES
  - <02> NO
- Universe:* All

**C16**

Go to Q16 only if rotation group = 5. All others go to Q20.

**Q16**

Thinking about your total household income, from which of the following sources did your household receive any income in the past twelve months?(INTERVIEWER: MARK ALL THAT APPLY.)

- <-1> Don't know ..... go to Q18
- <-2> Refused ..... go to Q18
- <01> Wages and salaries
- <02> Income from self-employment
- <03> Dividends and interest on bonds, savings,stocks,etc
- <04> Unemployment Insurance (Employment Insurance)
- <05> Workers Compensation
- <06> Benefits from Canada or Quebec Pension Plan
- <07> Retirement pensions, superannuation and annuities
- <08> Old Age Security and Guaranteed Income Supplement
- <09> Child Tax Benefit
- <10> Provincial or municipal social assistance or welfare
- <11> Child Support
- <12> Alimony
- <13> Other income (e.g., rental,scholarships,other govt income,etc)
- <14> None ..... go to Q20

**C17**

If more than one source of income is indicated in Q16 go to Q17 otherwise go to Q18. If `14-None' and no other response category answered go to Q20.



**Q17**

What was the main source of income for your household?

- <-1> Don't know
- <-2> Refused
- <01> Wages and salaries
- <02> Income from self-employment
- <03> Dividends and interest on bonds, savings, stocks, etc
- <04> Unemployment Insurance (Employment Insurance)
- <05> Workers Compensation
- <06> Benefits from Canada or Quebec Pension Plan
- <07> Retirement pensions, superannuation and annuities
- <08> Old Age Security and Guaranteed Income Supplement
- <09> Child Tax Benefit
- <10> Provincial or municipal social assistance or welfare
- <11> Child Support
- <12> Alimony
- <13> Other income (e.g., rental, scholarships, other govt income, etc)

**Q18**

What is your best estimate of the total income before taxes and deductions of all household members from all sources in the past 12 months?

- <-1> Don't know
  - <-2> Refused
- Note:* If amount is entered, go to Q20.

**Q19A**

Can you estimate in which of the following groups your total `household' income falls?

- <-1> Don't know ..... go to Q20
- <-2> Refused ..... go to Q20
- <01> Less than \$20,000
- <02> \$20,000 and more ..... go to Q19E

**Q19B**

CAN YOU ESTIMATE IN WHICH OF THE FOLLOWING GROUPS YOUR TOTAL `HOUSEHOLD' INCOME FALLS?

- <-1> Don't know ..... go to Q20
- <-2> Refused ..... go to Q20
- <01> Less than \$10,000
- <02> \$10,000 and more ..... go to Q19D





**Q19C**

CAN YOU ESTIMATE IN WHICH OF THE FOLLOWING GROUPS YOUR TOTAL `HOUSEHOLD' INCOME FALLS?

- <-1> Don't know
- <-2> Refused
- <01> Less than \$5,000
- <02> \$5,000 and more

*Default Next Question:*        **Q20**

**Q19D**

CAN YOU ESTIMATE IN WHICH OF THE FOLLOWING GROUPS YOUR TOTAL `HOUSEHOLD' INCOME FALLS?

- <-1> Don't know
- <-2> Refused
- <01> Less than \$15,000
- <02> \$15,000 and more

*Default Next Question:*        **Q20**

**Q19E**

CAN YOU ESTIMATE IN WHICH OF THE FOLLOWING GROUPS YOUR TOTAL `HOUSEHOLD' INCOME FALLS?

- <-1> Don't know ..... go to Q20
- <-2> Refused ..... go to Q20
- <01> Less than \$40,000
- <02> \$40,000 and more ..... go to Q19G

**Q19F**

CAN YOU ESTIMATE IN WHICH OF THE FOLLOWING GROUPS YOUR TOTAL `HOUSEHOLD' INCOME FALLS?

- <-1> Don't know
- <-2> Refused
- <01> Less than \$30,000
- <02> \$30,000 and more

*Default Next Question:*        **Q20**



**Q19G**

CAN YOU ESTIMATE IN WHICH OF THE FOLLOWING GROUPS  
YOUR TOTAL `HOUSEHOLD' INCOME FALLS?

- <-1> Don't know
- <-2> Refused
- <01> Less than \$50,00
- <02> \$50,000 to less than \$60,000
- <03> \$60,000 to less than \$80,000
- <04> \$80,000 to less than \$100,000
- <05> \$100,000 and more

**Q20**

Thank you for your cooperation.

**Q21**

WHO PROVIDED THE INFORMATION FOR THE INTERVIEW?

*Note:* Display the list of household members aged 18 or more. Same as for LFS.

# 13.0 Record Layout and Univariates

## Record Layout - Household Internet Use Survey (1097)

Variable: **SEQID** Position: 1 Length: 5

Record sequence id  
Allowed Min: 00001 Allowed Max: 40757

Variable: **FAMTYPE** Position: 6 Length: 1

Identifying multi-family households, one person households, single family households without unmarried children under the age of 18 and single family households with unmarried children under the age of 18

		FREQ	WTD
1	Single family hhld with unmarried children < 18	14,150	4,018,635
2	Single family household without unmarried children <18	15,222	4,313,183
3	One person households	9,545	2,822,094
4	Multi family households	1,564	531,818
		=====	=====
		40,481	11,685,730

Variable: **UNDER18** Position: 7 Length: 1

Does the household have members under the age of 18?

		FREQ	WTD
1	No children under the age of 18	26,017	7,569,797
2	Yes, children under the age of 18	14,464	4,115,933
		=====	=====
		40,481	11,685,730

Variable: **PROV** Position: 8 Length: 2

Province

		FREQ	WTD
10	Newfoundland	1,462	198,120
11	Prince Edward Island	1,184	51,749
12	Nova Scotia	2,800	366,259
13	New Brunswick	2,514	292,598
24	Québec	8,384	3,037,373
35	Ontario	12,279	4,299,675
46	Manitoba	2,849	433,896
47	Saskatchewan	2,534	395,612
48	Alberta	3,001	1,066,354
59	British Columbia, Yukon	3,474	1,544,094
		=====	=====
		40,481	11,685,730

Variable: **EFAMSIZE** Position: 10 Length: 2

Economic family size

Observed Min: 01 Observed Max: 05

		FREQ	WTD
01	Person	10,672	3,221,191
02	Persons	12,986	1,855,249
03	Persons	6,509	1,855,249
04	Persons	6,749	1,949,973
05	Five or more persons	3,565	1,023,492

Variable: **URURAL** Position: 12 Length: 1

Urban/Rural identifier

		FREQ	WTD
0	Urban	30,014	9,791,379
1	Rural	10,467	1,894,351
		=====	=====
		40,481	11,685,730

Variable: **CMATAB** Position: 13 Length: 2

This item indicates the Census Metropolitan Area (CMA) in which the surveyed unit is located. Population figures used to classify this variable were obtained from the 1991 Census and apply to the 1991 population covered by the Labour Force Survey within 1996 Census boundaries to conform with the sample design. Only selected CMAs are coded.

		FREQ	WTD
1	Halifax	612	141,199
2	Québec	592	305,661
3	Montréal	1,682	1,425,509
4	Ottawa (Ontario portion of Ottawa/Hull)	714	325,169
5	Toronto	2,150	1,629,369
6	Kitchener-Waterloo	667	149,203
7	Hamilton	550	250,335
8	St. Catherines-Niagara	577	148,081
9	London	636	170,188
00	Not applicable	27,336	5,171,159
10	Windsor	416	110,209
11	Winnipeg	1,458	287,745
12	Calgary	685	332,744
13	Edmonton	823	350,265
14	Vancouver	1,219	744,230
15	Victoria	364	144,664
		=====	=====
		40,481	11,685,730

Variable: **RUNDER18** Position: 15 Length: 1

Flag identifying whether the respondent was under the age of 18 or not

		FREQ	WTD
1	Respondent over 17 years of age	40,252	11,618,068
2	Respondent under 18 years of age	229	67,662
		=====	=====
		40,481	11,685,730

Variable: **HLFSSTAT** Position: 16 Length: 1

Labour force status identifier of head of household

		FREQ	WTD
	Blanks	179	43,074
1	Employed, paid worker	23,324	6,925,057
2	Employed, self employed	1,422	405,270
3	Unemployed	138	37,075
4	Not in the labour force	1,747	509,227
5	Unemployed, future start	40	12,480
6	Not in the Labour Force, able to work	11,985	3,335,215
7	Not in the Labour Force, permanently unable to work	1,646	418,333
9	Out of scope	0	0
		=====	=====
		40,481	11,685,731

Variable: **HAGE** Position: 17 Length: 1

Age of head of household

		FREQ	WTD
1	< 35 years	8,675	2,590,507
2	35 - 54 years	17,581	5,126,621
3	55 - 64 years	5,406	1,553,580
4	65+ years	8,819	2,415,021
		=====	=====
		40,481	11,685,729

Variable: **HSEX** Position: 18 Length: 1

		FREQ	WTD
1	Male	30,217	8,613,005
2	Female	10,264	3,072,725
		=====	=====
		40,481	11,685,730

Variable: **HMARSTAT** Position: 19 Length: 1

Marital status of head of household

		FREQ	WTD
1	Married	25,615	7,212,182
2	Single never married	6,071	1,940,573
3	Widow or widower	4,285	1,167,770
4	Separated or divorced	4,510	1,365,205
		=====	=====
		40,481	11,685,730

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Variable: **HEDUCL** Position: 20 Length: 1

Education of head of household

		FREQ	WTD
1	Less than high school	13,219	3,370,408
2	High school or college - no university degree	21,728	6,403,016
3	University Degree	5,534	1,912,306
		=====	=====
		40,481	11,685,730

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Variable: **Q01A** Position: 21 Length: 2

Has anyone in the household ever used computer communications (like electronic banking, E-mail, Internet) from home, work, school or any other location?

		FREQ	WTD
01	Yes	14,730	4,452,000
02	No	25,653	7,200,437
97	Don't know	82	28,911
98	Refused	16	4,382
99	Not stated	0	0
		=====	=====
		40,481	11,685,730



Variable: **Q01B**      Position: 23      Length: 2

In a typical month, does anyone in the household use computer communications?

		FREQ	WTD
01	Yes	11,095	3,429,200
02	No	3,604	1,011,957
96	Valid Skip	25,653	7,200,437
97	Don't know	8	2,567
98	Refused	2	359
99	Not Stated	119	41,211
		=====	=====
		40,481	11,685,731

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Variable: **Q02A**      Position: 25      Length: 2

Do any of the household members aged 18 and over use computer communications in a typical month?

		FREQ	WTD
01	Yes	4,812	1,422,097
02	No	621	151,099
96	Valid Skip	34,987	10,092,440
97	Don't know	2	347
98	Refused	0	0
99	Not Stated	59	19,746
		=====	=====
		40,481	11,685,729

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Variable: **Q02B** Position: 27 Length: 2

Do any of the household members aged under 18 use computer communications in a typical month?

		FREQ	WTD
01	Yes	3,010	834,560
02	No	2,415	736,399
96	Valid Skip	34,987	10,092,440
97	Don't know	8	1,815
98	Refused	0	0
99	Not Stated	61	20,516
		=====	=====
		40,481	11,685,730

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Variable: **Q03A** Position: 29 Length: 2

In a typical month, do any members of your household (aged 18 and over) use computer communications at home?

		FREQ	WTD
01	Yes	5,569	1,814,031
02	No	4,880	1,451,390
96	Valid Skip	29,877	8,363,309
97	Don't know	2	1,516
98	Refused	3	2,221
99	Not Stated	150	53,263
		=====	=====
		40,481	11,685,730

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Variable: **Q03B** Position: 31 Length: 2

In a typical month, do any members of your household (aged 18 and over) use computer communications at work?

		FREQ	WTD
01	Yes	7,217	2,320,331
02	No	3,217	938,973
96	Valid Skip	29,877	8,363,309
97	Don't know	13	7,023
98	Refused	0	0
99	Not Stated	157	56,094
		=====	=====
		40,481	11,685,730

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Variable: **Q03C** Position: 33 Length: 2

In a typical month, do any members of your household (aged 18 and over) use computer communications at school, college or university where they are studying?

		FREQ	WTD
01	Yes	2,417	725,791
02	No	8,009	2,532,667
96	Valid Skip	29,877	8,363,309
97	Don't know	15	5,072
98	Refused	1	205
99	Not stated	162	58,687
		=====	=====
		40,481	11,685,731



Variable: **Q03D** Position: 35 Length: 2

In a typical month, do any members of your household (aged 18 and over) use computer communications at a public library?

		FREQ	WTD
01	Yes	1,081	352,376
02	No	9,353	2,908,473
96	Valid Skip	29,877	8,363,309
97	Don't know	7	3,180
98	Refused	1	124
99	Not Stated	162	58,268
		=====	=====
		40,481	11,685,730

Variable: **Q03E** Position: 37 Length: 2

In a typical month, do any members of your household (aged 18 and over) use computer communications at a location that we have not yet mentioned?

		FREQ	WTD
01	Yes	921	271,178
02	No	9,516	2,991,684
96	Valid Skip	29,877	8,363,309
97	Don't know	4	1,176
98	Refused	0	0
99	Not Stated	163	58,382
		=====	=====
		40,481	11,685,729



Variable: **Q04A** Position: 39 Length: 2

In a typical month, do any members of your household under the age of 18 use computer communications at home?

		FREQ	WTD
01	Yes	1,719	519,924
02	No	1,285	311,849
96	Valid Skip	37,402	10,828,839
97	Don't know	0	0
98	Refused	1	746
99	Not Stated	74	24,372
		=====	=====
		40,481	11,685,730

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Variable: **Q04B** Position: 41 Length: 2

In a typical month, do any members of your household under the age of 18 use computer communications at work?

		FREQ	WTD
01	Yes	179	57,578
02	No	2,825	774,666
96	Valid Skip	37,402	10,828,839
97	Don't know	0	0
98	Refused	0	0
99	Not Stated	75	24,647
		=====	=====
		40,481	11,685,730



Variable: **Q04C** Position: 43 Length: 2

In a typical month, do any members of your household under the age of 18 use computer communications at a school where they are studying?

		FREQ	WTD
01	Yes	2,027	529,321
02	No	950	289,416
96	Valid Skip	37,402	10,828,839
97	Don't know	23	11,219
98	Refused	0	0
99	Not Stated	79	26,935
		=====	=====
		40,481	11,685,730

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Variable: **Q04D** Position: 45 Length: 2

In a typical month, do any members of your household under the age of 18 use computer communications at a public library?

		FREQ	WTD
01	Yes	449	133,584
02	No	2,543	693,391
96	Valid Skip	37,402	10,828,839
97	Don't know	9	3,813
98	Refused	0	0
99	Not Stated	78	26,103
		=====	=====
		40,481	11,685,730



Variable: **Q04E** Position: 47 Length: 2

In a typical month, do any members of your household under the age of 18 use computer communications at a location we have not yet mentioned?

		FREQ	WTD
01	Yes	311	82,373
02	No	2,688	747,857
96	Valid Skip	37,402	10,828,839
97	Don't know	2	558
98	Refused	0	0
99	Not Stated	78	26,103
		=====	=====
		40,481	11,685,730

Variable: **Q05A** Position: 49 Length: 2

In a typical month, which member of the household uses computer communications at home the most?

		FREQ	WTD
01	You (the respondent)	2,885	965,817
02	Someone else aged at least 18	2,188	708,329
03	Someone under age 18	638	186,997
96	Valid Skip	34,589	9,760,906
97	Don't know	10	4,322
98	Refused	0	0
99	Not Stated	171	59,359
		=====	=====
		40,481	11,685,730



Variable: **Q06** Position: 51 Length: 2

How often do members of your household use computer communications at home in a typical month?

		FREQ	WTD
01	At least 7 times per week.	3,485	1,140,260
02	At least 4 times per month.	1,930	628,336
03	1 to 3 times per month.	239	76,112
04	Less than once per month	44	12,834
96	Valid Skip	34,589	9,760,906
97	Don't know	8	2,881
98	Refused	2	406
99	Not Stated	184	63,995
		=====	=====
		40,481	11,685,730

Variable: **Q07** Position: 53 Length: 2

What is the total amount of time members of your household spend on computer communications at home in a typical month?

		FREQ	WTD
01	Less than 1 hour.	360	108,466
02	At least 1 hour but less than 5.	958	315,345
03	At least 5 hours but less than 10.	896	285,711
04	At least 10 hours but less than 20	1,117	360,721
05	20 hours or more.	2,350	782,420
96	Valid Skip	34,589	9,760,906
97	Don't know	16	4,736
98	Refused	0	0
99	Not Stated	195	67,425
		=====	=====
		40,481	11,685,730



Variable: **Q08A** Position: 55 Length: 2

In a typical month, what share (percentage) of the household's total time spent using computer communications at home is for self-employed business? (INTERVIEWER: DON'T READ THE ANSWER CATEGORIES. USE THEM AS A GUIDE IF THE RESPONDENT NEEDS PROMPTING)

		FREQ	WTD
01	None	4,463	1,449,183
02	Less than 10 %	342	104,776
03	At least 10% but less than 25%	196	62,632
04	At least 25% but less than 50%	156	50,366
05	At least 50% but less than 75%	196	60,592
06	At least 75% but less than 90%	122	42,222
07	At least 90% but less than 100%	106	45,074
08	100%	109	41,533
96	Valid Skip	34,589	9,760,906
97	Don't know	7	2,222
98	Refused	0	0
99	Not stated	195	66,225
		=====	=====
		40,481	11,685,731



Variable: **Q08B** Position: 57 Length: 2

In a typical month, what share (percentage) of this time (spent using computer communications at home) is for employer related business? (INTERVIEWER: DON'T READ THE ANSWER CATEGORIES. USE THEM AS A GUIDE IF THE RESPONDENT NEEDS PROMPTING)

		FREQ	WTD
01	None	3,809	1,222,195
02	Less than 10 %	606	195,957
03	At least 10% but less than 25%	360	120,344
04	At least 25% but less than 50%	221	77,013
05	At least 50% but less than 75%	256	86,073
06	At least 75% but less than 90%	141	47,573
07	At least 90% but less than 100%	145	54,010
08	100%	138	48,492
96	Valid Skip	34,589	9,760,906
97	Don't know	8	3,039
98	Refused	1	432
99	Not stated	207	69,696
		=====	=====
		40,481	11,685,730

Variable: **Q08C** Position: 59 Length: 2

In a typical month, what share (percentage) of this time (spent using computer communications at home) is for personal (non-business) use? (INTERVIEWER: DON'T READ THE ANSWER CATEGORIES. USE THEM AS A GUIDE IF THE RESPONDENT NEEDS PROMPTING)

		FREQ	WTD
01	None	371	128,361
02	Less than 10 %	436	156,307
03	At least 10% but less than 25%	431	145,272
04	At least 25% but less than 50%	424	132,729
05	At least 50% but less than 75%	561	180,357
06	At least 75% but less than 90%	470	158,336
07	At least 90% but less than 100%	802	251,915
08	100%	2,173	694,867
96	Valid Skip	34,589	9,760,906
97	Don't know	4	2,325
98	Refused	0	0
99	Not stated	220	74,356
		=====	=====
		40,481	11,685,731

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Variable: **Q09A** Position: 61 Length: 2

In a typical month does any member of your household use a computer at home for E-mail?

		FREQ	WTD
01	Yes	4,729	1,553,948
02	No	958	299,963
96	Valid Skip	34,589	9,760,906
97	Don't know	6	2,692
98	Refused	0	0
99	Not stated	199	68,221
		=====	=====
		40,481	11,685,730

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Variable: **Q09B** Position: 63 Length: 2

In a typical month does any member of your household use a computer at home for electronic banking?

		FREQ	WTD
01	Yes	1,060	366,693
02	No	4,625	1,485,074
96	Valid Skip	34,589	9,760,906
97	Don't know	4	2,593
98	Refused	0	0
99	Not stated	203	70,464
		=====	=====
		40,481	11,685,730

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Variable: **Q09C** Position: 65 Length: 2

In a typical month does any member of your household use a computer at home to purchase goods and services on the Internet?

		FREQ	WTD
01	Yes	562	171,326
02	No	4,966	1,639,159
03	Do not have internet at home	159	43,321
96	Valid Skip	34,589	9,760,906
97	Don't know	1	205
98	Refused	0	0
99	Not stated	204	70,813
		=====	=====
		40,481	11,685,730



Variable: **Q09D** Position: 67 Length: 2

In a typical month does any member of your household use a computer at home for general browsing on the Internet?

		FREQ	WTD
01	Yes	4,834	1,582,730
02	No	698	229,154
96	Valid Skip	34,748	9,804,227
97	Don't know	1	469
98	Refused	0	0
99	Not stated	200	69,151
		=====	=====
		40,481	11,685,731

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Variable: **Q09E** Position: 69 Length: 2

In a typical month does any member of your household use a computer at home to search for specific information on the Internet?

		FREQ	WTD
01	Yes	4,830	1,576,941
02	No	696	231,212
96	Valid Skip	34,748	9,804,227
97	Don't know	2	1,363
98	Refused	1	775
99	Not stated	204	71,212
		=====	=====
		40,481	11,685,730

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Variable: **Q09F** Position: 71 Length: 2

In a typical month does any member of your household use a computer at home to access any other Internet services that have not yet been mentioned ?

		FREQ	WTD
01	Yes	779	256,478
02	No	4,741	1,550,902
96	Valid Skip	34,748	9,804,227
97	Don't know	6	1,453
98	Refused	0	0
99	Not stated	207	72,671
		=====	=====
		40,481	11,685,731

Variable: **Q10A** Position: 73 Length: 2

In a typical month, what share (percentage) of the total time using these facilities at home do members of your household use on E-mail? (INTERVIEWER: DON'T READ THE ANSWER CATEGORIES. USE THEM AS A GUIDE IF THE RESPONDENT NEEDS PROMPTING)

		FREQ	WTD
01	Less than 10 %	1,914	618,012
02	At least 10% but less than 25%	1,160	376,458
03	At least 25% but less than 50%	664	219,040
04	At least 50% but less than 75%	405	135,839
05	At least 75% but less than 90%	183	64,994
06	At least 90% but less than 100%	119	38,117
07	100%	248	87,586
96	Valid Skip	35,547	10,060,869
97	Don't know	15	6,279
98	Refused	0	0
99	Not stated	226	78,536
		=====	=====
		40,481	11,685,730

Variable: **Q10B** Position: 75 Length: 2

In a typical month, what share (percentage) of the total time using these facilities at home do members of your household do electronic banking? (INTERVIEWER: DON'T READ THE ANSWER CATEGORIES. USE THEM AS A GUIDE IF THE RESPONDENT NEEDS PROMPTING)

		FREQ	WTD
01	Less than 10 %	692	241,818
02	At least 10% but less than 25%	187	68,840
03	At least 25% but less than 50%	53	17,341
04	At least 50% but less than 75%	28	9,824
05	At least 75% but less than 90%	4	1,154
06	At least 90% but less than 100%	5	1,254
07	100%	86	24,117
96	Valid Skip	39,214	11,245,980
97	Don't know	1	154
98	Refused	0	0
99	Not stated	211	75,247
		=====	=====
		40,481	11,685,729

Variable: **Q10C** Position: 77 Length: 2

In a typical month, what share (percentage) of the total time using these facilities at home do members of your household use to purchase goods and services on the Internet? (INTERVIEWER: DON'T READ THE ANSWER CATEGORIES. USE THEM AS A GUIDE IF THE RESPONDENT NEEDS PROMPTING)

		FREQ	WTD
01	Less than 10 %	492	150,871
02	At least 10% but less than 25%	42	12,470
03	At least 25% but less than 50%	18	5,081
04	At least 50% but less than 75%	4	1,360
05	At least 75% but less than 90%	0	0
06	At least 90% but less than 100%	2	367
07	100%	1	172
96	Valid Skip	39,714	11,443,386
97	Don't know	0	0
98	Refused	0	0
99	Not stated	208	72,023
		=====	=====
		40,481	11,685,730

Variable: **Q10D** Position: 79 Length: 2

In a typical month, what share (percentage) of the total time using these facilities at home do members of your household use to do general browsing on the Internet? (INTERVIEWER: DON'T READ THE ANSWER CATEGORIES. USE THEM AS A GUIDE IF THE RESPONDENT NEEDS PROMPTING)

		FREQ	WTD
01	Less than 10 %	778	251,242
02	At least 10% but less than 25%	1,003	333,721
03	At least 25% but less than 50%	1,183	390,866
04	At least 50% but less than 75%	942	307,244
05	At least 75% but less than 90%	503	161,426
06	At least 90% but less than 100%	294	93,159
07	100%	83	28,179
96	Valid Skip	35,446	10,033,381
97	Don't know	7	2,345
98	Refused	0	0
99	Not stated	242	84,168
		=====	=====
		40,481	11,685,731

Variable: **Q10E** Position: 81 Length: 2

In a typical month, what share (percentage) of the total time using these facilities at home do members of your household use to search for specific information on the Internet? (INTERVIEWER: DON'T READ THE ANSWER CATEGORIES. USE THEM AS A GUIDE IF THE RESPONDENT NEEDS PROMPTING)

		FREQ	WTD
01	Less than 10 %	1,046	334,711
02	At least 10% but less than 25%	1,281	417,934
03	At least 25% but less than 50%	1,242	399,658
04	At least 50% but less than 75%	718	238,143
05	At least 75% but less than 90%	290	101,504
06	At least 90% but less than 100%	138	47,272
07	100%	65	20,497
96	Valid Skip	35,444	10,035,439
97	Don't know	4	1,119
98	Refused	2	497
99	Not stated	251	88,955
		=====	=====
		40,481	11,685,729

Variable: **Q10F** Position: 83 Length: 2

In a typical month, what share (percentage) of the total time using these facilities at home do members of your household spend using the Internet for things we have not mentioned? (INTERVIEWER: DON'T READ THE ANSWER CATEGORIES. USE THEM AS A GUIDE IF THE RESPONDENT NEEDS PROMPTING)

		FREQ	WTD
01	Less than 10 %	509	169,503
02	At least 10% but less than 25%	123	42,743
03	At least 25% but less than 50%	69	19,747
04	At least 50% but less than 75%	41	13,061
05	At least 75% but less than 90%	15	3,322
06	At least 90% but less than 100%	5	1,482
07	100%	8	2,915
96	Valid Skip	39,489	11,355,128
97	Don't know	2	832
98	Refused	0	0
99	Not stated	220	76,995
		=====	=====
		40,481	11,685,728

Variable: **Q11A** Position: 85 Length: 2

How would your household's use of computer communications at home in a typical month increase if the cost were much lower? (READ CATEGORIES TO RESPONDENT)

		FREQ	WTD
01	Substantially	806	247,720
02	Noticeably	955	297,407
03	Little or nothing	3,897	1,297,770
96	Valid Skip	34,589	9,760,906
97	Don't know	14	5,549
98	Refused	0	0
99	Not stated	220	76,377
		=====	=====
		40,481	11,685,729



Variable: **Q11B** Position: 87 Length: 2

How would your household's use of computer communications at home in a typical month increase if more and better services were available (e.g. for shopping, banking etc.)? (READ CATEGORIES TO RESPONDENT)

		FREQ	WTD
01	Substantially	723	235,900
02	Noticeably	1,500	496,742
03	Little or nothing	3,429	1,109,109
96	Valid Skip	34,589	9,760,906
97	Don't know	13	2,432
98	Refused	0	0
99	Not stated	227	80,641
		=====	=====
		40,481	11,685,730

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Variable: **Q11C** Position: 89 Length: 2

How would your household's use of computer communications at home in a typical month increase if access were easier? (AN EXAMPLE OF EASIER ACCESS COULD BE USING THE TV SCREEN AND REMOTE CONTROL - READ CATEGORIES TO RESPONDENT)

		FREQ	WTD
01	Substantially	815	267,288
02	Noticeably	1,201	390,237
03	Little or nothing	3,636	1,183,602
96	Valid Skip	34,589	9,760,906
97	Don't know	8	2,459
98	Refused	1	435
99	Not stated	231	80,804
		=====	=====
		40,481	11,685,731

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Variable: **Q12A** Position: 91 Length: 2

Do you have a computer at home?

		FREQ	WTD
01	Yes	7,695	2,388,758
02	No	26,833	7,351,840
96	Valid Skip	5,892	1,924,824
97	Don't know	7	1,699
98	Refused	9	2,612
99	Not stated	45	15,997
		=====	=====
		40,481	11,685,730

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Variable: **Q12B** Position: 93 Length: 2

Is your home computer capable of accessing the Internet?

		FREQ	WTD
01	Yes	2,996	909,083
02	No	4,633	1,458,419
96	Valid Skip	32,725	9,276,664
97	Don't know	59	19,105
98	Refused	3	810
99	Not stated	65	21,650
		=====	=====
		40,481	11,685,731



Variable: **Q13AP1** Position: 95 Length: 2

What are the main reasons why your household does not use your home computer for communication services?  
 (INTERVIEWER: READ THE LIST AND MARK ALL THOSE THAT APPLY)....it costs too much

		FREQ	WTD
01	Yes	1,099	326,820
02	No	1,897	582,263
96	Valid Skip	37,358	10,735,083
97	Don't know	0	0
98	Refused	0	0
99	Not Stated	127	41,564
		=====	=====
		40,481	11,685,730

Variable: **Q13AP2** Position: 97 Length: 2

What are the main reasons why your household does not use your home computer for communication services?  
 (INTERVIEWER: READ THE LIST AND MARK ALL THOSE THAT APPLY)....it is too complex

		FREQ	WTD
01	Yes	282	87,715
02	No	2,714	821,368
96	Valid Skip	37,358	10,735,083
97	Don't know	0	0
98	Refused	0	0
99	Not Stated	127	41,564
		=====	=====
		40,481	11,685,731



Variable: **Q13AP3** Position: 99 Length: 2

What are the main reasons why your household does not use your home computer for communication services?  
 (INTERVIEWER: READ THE LIST AND MARK ALL THOSE THAT APPLY)....you can use them at work or another location

		FREQ	WTD
01	Yes	374	117,790
02	No	2,622	791,292
96	Valid Skip	37,358	10,735,083
97	Don't know	0	0
98	Refused	0	0
99	Not Stated	127	41,564
		=====	=====
		40,481	11,685,730

Variable: **Q13AP4** Position: 101 Length: 2

What are the main reasons why your household does not use your home computer for communication services?  
 (INTERVIEWER: READ THE LIST AND MARK ALL THOSE THAT APPLY)....it does not offer enough useful services

		FREQ	WTD
01	Yes	225	71,181
02	No	2,771	837,902
96	Valid Skip	37,358	10,735,083
97	Don't know	0	0
98	Refused	0	0
99	Not Stated	127	41,564
		=====	=====
		40,481	11,685,731



Variable: **Q13AP5** Position: 103 Length: 2

What are the main reasons why your household does not use your home computer for communication services?  
(INTERVIEWER: READ THE LIST AND MARK ALL THOSE THAT APPLY)....other reasons

		FREQ	WTD
01	Yes	1,525	461,627
02	No	1,471	447,456
96	Valid Skip	37,358	10,735,083
97	Don't know	0	0
98	Refused	0	0
99	Not Stated	127	41,564
		=====	=====
		40,481	11,685,731

Variable: **Q13BP1** Position: 105 Length: 2

What would induce your household to start using computer communication services at home? (INTERVIEWER: READ THE LIST AND MARK ALL THOSE THAT APPLY)...the cost was much lower

		FREQ	WTD
01	Yes	3,245	1,013,787
02	No	4,399	1,359,746
96	Valid Skip	32,725	9,276,664
97	Don't know	0	0
98	Refused	0	0
99	Not Stated	112	35,533
		=====	=====
		40,481	11,685,730



Variable: **Q13BP2** Position: 107 Length: 2

What would induce your household to start using computer communication services at home? (INTERVIEWER: READ THE LIST AND MARK ALL THOSE THAT APPLY)...they could be easily accessed through the television using a remote control

		FREQ	WTD
01	Yes	926	301,978
02	No	6,718	2,071,554
96	Valid Skip	32,725	9,276,664
97	Don't know	0	0
98	Refused	0	0
99	Not Stated	112	35,533
		=====	=====
		40,481	11,685,730

Variable: **Q13BP3** Position: 109 Length: 2

What would induce your household to start using computer communication services at home? (INTERVIEWER: READ THE LIST AND MARK ALL THOSE THAT APPLY)...more and better services were offered (more shopping, banking etc.)

		FREQ	WTD
01	Yes	714	230,490
02	No	6,930	2,143,043
96	Valid Skip	32,725	9,276,664
97	Don't know	0	0
98	Refused	0	0
99	Not Stated	112	35,533
		=====	=====
		40,481	11,685,730



Variable: **Q13BP4** Position: 111 Length: 2

What would induce your household to start using computer communication services at home? (INTERVIEWER: READ THE LIST AND MARK ALL THOSE THAT APPLY)...nothing would induce you

		FREQ	WTD
01	Yes	1,982	624,701
02	No	5,662	1,748,832
96	Valid Skip	32,725	9,276,664
97	Don't know	0	0
98	Refused	0	0
99	Not Stated	112	35,533
		=====	=====
		40,481	11,685,730

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Variable: **Q13BP5** Position: 113 Length: 2

What would induce your household to start using computer communication services at home? (INTERVIEWER: READ THE LIST AND MARK ALL THOSE THAT APPLY)...other reasons

		FREQ	WTD
01	Yes	2,309	700,749
02	No	5,335	1,672,783
96	Valid Skip	32,725	9,276,664
97	Don't know	0	0
98	Refused	0	0
99	Not Stated	112	35,533
		=====	=====
		40,481	11,685,729



Variable: **Q14** Position: 115 Length: 2

Would members of the household use computer communications from a public library or other public place if they were easily and cheaply available at those places?

		FREQ	WTD
01	Yes	10,206	2,803,211
02	No	24,041	6,854,992
96	Valid Skip	5,892	1,924,824
97	Don't know	232	61,473
98	Refused	4	1,038
99	Not stated	106	40,193
		=====	=====
		40,481	11,685,730

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Variable: **Q15A** Position: 117 Length: 2

In a typical month, is any of the household members aged 18 and over self- employed?

		FREQ	WTD
01	Yes	7,321	2,088,073
02	No	32,923	9,510,154
96	Valid Skip	0	0
97	Don't know	0	0
98	Refused	2	823
99	Not stated	235	86,680
		=====	=====
		40,481	11,685,730



Variable: **Q15B** Position: 119 Length: 2

In a typical month, is any of the household members aged 18 and over an employee?

		FREQ	WTD
01	Yes	24,513	7,213,630
02	No	15,729	4,384,014
96	Valid Skip	0	0
97	Don't know	1	725
98	Refused	2	317
99	Not stated	236	87,044
		=====	=====
		40,481	11,685,730

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Variable: **Q16P1** Position: 121 Length: 2

Thinking about your total household income, from which of the following sources did your household receive any income in the past twelve months?(INTERVIEWER: MARK ALL THAT APPLY.)...Wages and salaries

		FREQ	WTD
01	Yes	19,345	5,569,238
02	No	9,833	2,841,037
96	Valid Skip	0	0
97	Don't know	7	1,214
98	Refused	6	1,646
99	Not Stated	11,290	3,272,595
		=====	=====
		40,481	11,685,730

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Variable: **Q16P2** Position: 123 Length: 2

Thinking about your total household income, from which of the following sources did your household receive any income in the past twelve months?(INTERVIEWER: MARK ALL THAT APPLY.)...Income from self-employment

		FREQ	WTD
01	Yes	4,935	1,418,400
02	No	24,243	6,991,875
96	Valid Skip	0	0
97	Don't know	7	1,214
98	Refused	6	1,646
99	Not Stated	11,290	3,272,595
		=====	=====
		40,481	11,685,730

Variable: **Q16P3** Position: 125 Length: 2

Thinking about your total household income, from which of the following sources did your household receive any income in the past twelve months?(INTERVIEWER: MARK ALL THAT APPLY.)...Dividends and interest on bonds, savings,stocks,etc

		FREQ	WTD
01	Yes	4,996	1,544,930
02	No	24,182	6,865,345
96	Valid Skip	0	0
97	Don't know	7	1,214
98	Refused	6	1,646
99	Not Stated	11,290	3,272,595
		=====	=====
		40,481	11,685,730



Variable: **Q16P4** Position: 127 Length: 2

Thinking about your total household income, from which of the following sources did your household receive any income in the past twelve months?(INTERVIEWER: MARK ALL THAT APPLY.)...Unemployment Insurance (Employment Insurance)

		FREQ	WTD
01	Yes	4,540	1,362,860
02	No	24,638	7,047,415
96	Valid Skip	0	0
97	Don't know	7	1,214
98	Refused	6	1,646
99	Not Stated	11,290	3,272,595
		=====	=====
		40,481	11,685,730

Variable: **Q16P5** Position: 129 Length: 2

Thinking about your total household income, from which of the following sources did your household receive any income in the past twelve months?(INTERVIEWER: MARK ALL THAT APPLY.)...Workers Compensation

		FREQ	WTD
01	Yes	672	185,511
02	No	28,506	8,224,764
96	Valid Skip	0	0
97	Don't know	7	1,214
98	Refused	6	1,646
99	Not Stated	11,290	3,272,595
		=====	=====
		40,481	11,685,730



Variable: **Q16P6** Position: 131 Length: 2

Thinking about your total household income, from which of the following sources did your household receive any income in the past twelve months?(INTERVIEWER: MARK ALL THAT APPLY.)...Benefits from Canada or Quebec Pension Plan

		FREQ	WTD
01	Yes	6,219	1,786,414
02	No	22,959	6,623,860
96	Valid Skip	0	0
97	Don't know	7	1,214
98	Refused	6	1,646
99	Not Stated	11,290	3,272,595
		=====	=====
		40,481	11,685,729

Variable: **Q16P7** Position: 133 Length: 2

Thinking about your total household income, from which of the following sources did your household receive any income in the past twelve months?(INTERVIEWER: MARK ALL THAT APPLY.)...Retirement pensions, superannuation and annuities

		FREQ	WTD
01	Yes	4,774	1,416,950
02	No	24,404	6,993,325
96	Valid Skip	0	0
97	Don't know	7	1,214
98	Refused	6	1,646
99	Not Stated	11,290	3,272,595
		=====	=====
		40,481	11,685,730



Variable: **Q16P8** Position: 135 Length: 2

Thinking about your total household income, from which of the following sources did your household receive any income in the past twelve months?(INTERVIEWER: MARK ALL THAT APPLY.)...Old Age Security and Guaranteed Income Supplement

		FREQ	WTD
01	Yes	5,578	1,595,731
02	No	23,600	6,814,544
96	Valid Skip	0	0
97	Don't know	7	1,214
98	Refused	6	1,646
99	Not Stated	11,290	3,272,595
		=====	=====
		40,481	11,685,730

Variable: **Q16P9** Position: 137 Length: 2

Thinking about your total household income, from which of the following sources did your household receive any income in the past twelve months?(INTERVIEWER: MARK ALL THAT APPLY.)...Child Tax Benefit

		FREQ	WTD
01	Yes	4,686	1,278,141
02	No	24,492	7,132,134
96	Valid Skip	0	0
97	Don't know	7	1,214
98	Refused	6	1,646
99	Not Stated	11,290	3,272,595
		=====	=====
		40,481	11,685,730



Variable: **Q16P10** Position: 139 Length: 2

Thinking about your total household income, from which of the following sources did your household receive any income in the past twelve months?(INTERVIEWER: MARK ALL THAT APPLY.)...Provincial or municipal social assistance or welfare

		FREQ	WTD
01	Yes	2,252	643,747
02	No	26,926	7,766,528
96	Valid Skip	0	0
97	Don't know	7	1,214
98	Refused	6	1,646
99	Not Stated	11,290	3,272,595
		=====	=====
		40,481	11,685,730

Variable: **Q16P11** Position: 141 Length: 2

Thinking about your total household income, from which of the following sources did your household receive any income in the past twelve months?(INTERVIEWER: MARK ALL THAT APPLY.)...Child Support

		FREQ	WTD
01	Yes	571	166,601
02	No	28,607	8,243,674
96	Valid Skip	0	0
97	Don't know	7	1,214
98	Refused	6	1,646
99	Not Stated	11,290	3,272,595
		=====	=====
		40,481	11,685,730



Variable: **Q16P12** Position: 143 Length: 2

Thinking about your total household income, from which of the following sources did your household receive any income in the past twelve months?(INTERVIEWER: MARK ALL THAT APPLY.)...Alimony

		FREQ	WTD
01	Yes	87	26,827
02	No	29,091	8,383,448
96	Valid Skip	0	0
97	Don't know	7	1,214
98	Refused	6	1,646
99	Not Stated	11,290	3,272,595
		=====	=====
		40,481	11,685,730

Variable: **Q16P13** Position: 145 Length: 2

Thinking about your total household income, from which of the following sources did your household receive any income in the past twelve months?(INTERVIEWER: MARK ALL THAT APPLY.)...Other income (e.g., rental,scholarships,other govt income,etc)

		FREQ	WTD
01	Yes	1,573	438,128
02	No	27,605	7,972,146
96	Valid Skip	0	0
97	Don't know	7	1,214
98	Refused	6	1,646
99	Not Stated	11,290	3,272,595
		=====	=====
		40,481	11,685,729

Variable: **Q16P14** Position: 147 Length: 2

Thinking about your total household income, from which of the following sources did your household receive any income in the past twelve months?(INTERVIEWER: MARK ALL THAT APPLY.)...None

		FREQ	WTD
01	Yes	114	37,865
02	No	29,064	8,372,410
96	Valid Skip	0	0
97	Don't know	7	1,214
98	Refused	6	1,646
99	Not Stated	11,290	3,272,595
		=====	=====
		40,481	11,685,730

Variable: **Q17** Position: 149 Length: 2

What was the main source of income for your household?

		FREQ	WTD
01	Wages and salaries	8,394	2,342,474
02	Income from self-employment	1,782	508,939
03	Dividends and interest on bonds, savings, stocks, etc	238	84,324
04	Unemployment Insurance (Employment Insurance)	194	42,016
05	Workers Compensation	112	34,774
06	Benefits from Canada or Quebec Pension Plan	1,305	390,085
07	Retirement pensions, superannuation and annuities	2,278	700,008
08	Old Age Security and Guaranteed Income Supplement	1,758	448,124
09	Child Tax Benefit	7	1,701
10	Provincial or municipal social assistance or welfare	778	217,201
11	Child Support	40	13,150
12	Alimony	18	7,326
13	Other income (e.g., rental, scholarships, other govt income, etc)	284	77,268
96	Valid Skip	11,104	3,270,746
97	Don't know	122	34,347
98	Refused	39	12,393
99	Not Stated	12,028	3,500,853
		=====	=====
		40,481	11,685,729





*Variable:*     **QUART**       *Position:*     151       *Length:*       1

Income quartiles

			FREQ	WTD
1	Quartile one	- <\$19,000	10,649	2,915,725
2	Quartile two	- \$19,000 - \$31,999	10,572	2,925,624
3	Quartile three	- \$32,000 - \$54, 999	10,116	2,919,068
4	Quartile four	- \$55,000	9,144	2,925,313
			=====	=====
			40,481	11,685,731

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*Variable:*     **FINWT**       *Position:*     152       *Length:*       9

Record weight