Microdata User Guide Household Internet Use Survey 1998

Special Surveys Division

August 2002

Table of Contents

1.0	Introduction								
2.0	Background								
3.0	Objectives 5 Concepts and Definitions 7								
4.0									
5.0	Survey Methodology 9								
	5.1 5.2 5.3 5.4 5.5 5.6	5.2.1 5.2.2 5.2.3 5.2.4 5.2.5 5.2.6	Population Coverage Sample Design Primary Stratification Types of Areas Secondary Stratification Cluster Delineation and Selection Dwelling Selection Person Selection Sample Size Sample Rotation Modifications to the LFS design for the Supplement Sample size by Province for the Supplement	. 9 10 10 11 11 12 15 15 16					
6.0	Data Collection 17								
	6.1 6.2 6.3 6.4 6.5		Interviewing for the LFS	17 18 18 18 18					
7.0	Data Processing 21								
	7.1 7.2 7.3 7.4 7.5 7.6		Data CaptureEditingCoding of Open-ended QuestionsCreation of Derived VariablesWeightingSuppression of Confidential Information	21 21 21 21 22 22					

8.0	Data C			
	8.1 8.2	8.2.1 8.2.2 8.2.3 8.2.4 8.2.5	Response Rates23Survey Errors24The Frame24Data Collection25Data Processing25Imputation of Income25Non-response26	
9.0	Guidelines for Tabulation, Analysis and Release 2			
	9.1 9.2 9.3 9.4	9.2.1 9.2.2 9.2.3	Rounding Guidelines29Sample Weighting Guidelines for Tabulation30Definitions of types of estimates: Categoricalvs. Quantitative30Tabulation of Categorical Estimates32Tabulation of Quantitative Estimates32Guidelines for Statistical Analysis32CV Release Guidelines34	
10.0	Approximate Sampling Variability Tables			
	10.1 10.2	10.1.1	How to use the C.V. tables for Categorical Estimates38Examples of using the C.V. tables for Categorical Estimates40How to use the CV tables to obtain Confidence Limits43Example of using the CV tables to obtain43	
	10.3	10.3.1	How to use the CV tables to do a t-test	
	10.4 10.5		Coefficients of Variation for Quantitative Estimates 46 Release cut-off's for the Household Internet Use	
	10.6		CV Tables	
11.0	Weigh	iting		
	11.1 11.2		Weighting Procedures for the LFS	
12.0	Questionnaires and Code Sheets			
13.0	Record Layout and Univariates			



The Household Internet Use Survey was conducted for the second time by the Special Surveys Division of Statistics Canada in October 1998 for Science, Innovation and Electronic Information Division at Statistics 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 Jonathan Ellison Science, Innovation and Electronic Information Division 13th floor, Jean Talon Building Tunney's Pasture Ottawa, Ontario K1A 0T6 (613) 951-5882 Internet: jonathan.ellison@statcan.ca

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, Innovation and Electronic Information Division 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 household connectedness.



The main objectives of this survey were to :

- measure the demand for computer communication services by Canadian households ;
- identify the types of computer communication services that are used at home;
- determine the reasons why some households are not using computer communication, and;
- 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 by 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. This is also referred to as connectedness.

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.

<u>E-Mail</u>

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 1998 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 5.4¹. Sections 5.5 and 5.6 describe how the HIUS departed from the basic LFS design in October 1998.

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 Yukon² 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.

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

¹ 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).

² 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.

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.



= level of stratification

- EIR Employment Insurance Region
- ER Economic Region
- {%} percentage of total sample

EA - Census Enumeration Area cluster - set of block faces

= stage of sampling

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 1998 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 and Labrador	1,623	
Prince Edward Island	1,180	
Nova Scotia	2,877	
New Brunswick	2,525	
Quebec	8,520	
Ontario	12,976	
Manitoba	3,230	
Saskatchewan	3,349	
Alberta	3,362	
British Columbia	4,050	
CANADA	43,692	

6.0 Data Collection

Data collection for the LFS is carried out each month using the computerassisted 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 sixmonth 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 knowledgable 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, 43,692 households were eligible for the supplementary survey; the HIUS interview was completed for 38,030 of these households for a response rate of 87.0%. 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, 38,166 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 1998.

	Household response rate for full LFS (10, 98) (*1)	Household response rate for LFS rotations (1, 2, 3, 5, 6) (*1)	Household response rate to Household Internet Use Survey (*2)
Newfoundland and Labrador	95.8%	96.4%	91.4%
Prince Edward Island	95.8%	96.4%	90.9%
Nova Scotia	94.2%	94.9%	88.1%
New Brunswick	96.3%	96.8%	88.6%
Quebec	95.5%	96.1%	88.1%
Ontario	96.3%	96.8%	86.8%
Manitoba	97.2%	97.7%	85.5%
Saskatchewan	96.7%	97.1%	85.8%
Alberta	97.1%	97.5%	87.5%
British Columbia	95.1%	95.9%	85.2%
CANADA	96.0%	96.6%	86.6%

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 <u>sampling error</u> 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, 1998.

8.2.3 Data Processing

During processing of the data, 33 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, 559 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 (Q01A) was coded as a nonresponse. Note that 28 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.

If trying to follow paths of the questionnaire that have been established when processing the data, it is important to note that 90 records had answers of 'no' to both Q02A and Q02B (about members of the household 18 years old or older and less than 18 using computer communication). These were skipped to Q12 (do you have a computer?)

8.2.4 Imputation of income

In order to reduce response burden, the HIUS collected information on household income for all five rotation groups. 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.

Households in the HIUS for which income was coded as missing were linked to the Canadian Travel Survey (CTS), an LFS supplement conducted in October 1998. 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, 69 % of the households reported income as numerical, 20 % as an HIUS category, and 1 % as a CTS category. Thus for 10 % 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 threestep imputation process in which (i) income for a given household reporting a categorical HIUS value was substituted by the income of a household which reported a numerical HIUS value and shared the most similar characteristics (e.g., hourly earnings, geographic region), provided the numerical value was consistent with the HIUS 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 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 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 value or whose income had been converted to a numerical value via steps (i) or (ii) and shared the most similar characteristics, provided the 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 <u>non-response</u> 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 <u>measures of sampling error</u> 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 54.3% of Canadian households had never used computer communications from home, work, school or any other location in October 1998, and this estimate is found to have a standard error of .00380. Then the coefficient of variation of the estimate is calculated as:

$$\left(\frac{0.00380}{0.543}\right) \times 100\% = 0.7\%$$

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/\hat{Y} where X is an estimate of surveyed population quantity total and 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
- (c) 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 <u>total</u> number of weeks of employment insurance received by people whose last absence was due to pregnancy, multiply the value reported for weeks received El 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 <u>average</u> number of weeks El 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
- (c) 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	Estimates have: a sample size of 30 or more, and low coefficients of variation in the range 0.0% - 16.5%
	No warning is required.
2. Marginal	Estimates have: a sample size of 30 or more, and high coefficients of variation in the range 16.6% - 33.3%.
	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.
3. Unacceptable	Estimates have: a sample size of less than 30, or very high coefficients of variation in excess of 33.3%. 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:
	"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."

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 and Labrador	1.44	1,480	192,809		
Prince Edward Island	1.33	1,072	50,378		
Nova Scotia	1.57	2,531	356,720		
New Brunswick	1.40	2,232	282,453		
Quebec	2.03	7,490	2,959,571		
Ontario	1.85	11,228	4,231,569		
Manitoba	1.76	2,756	419,822		
Saskatchewan	1.21	2,868	382,341		
Alberta	1.45	2,934	1,066,488		
British Columbia	1.67	3,439	1,545,822		
Atlantic Provinces	1.55	7,315	882,360		
Prairies	1.82	8,558	1,868,651		
Canada	2.03	38,030	11,487,973		

All coefficients of variation in the Approximate Sampling Variability Tables are <u>approximate</u> 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.

<u>Remember</u>: 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 <u>proportion</u> of "households which have never used computer communications" is more reliable than the estimated <u>number</u> 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 $(\hat{d} = X_1 - X_2)$ is:

$$\sigma_{\hat{d}} = \sqrt{(\hat{X}_1 \alpha_1)^2 + (\hat{X}_2 \alpha_2)^2}$$

where X_1 is estimate 1, X_2 is estimate 2, and α_1 and α_2 are the coefficients of variation of X_1 and X_2 respectively. The coefficient of variation of $\hat{\sigma}$ is given by $\sigma_{\hat{\sigma}}/\hat{\sigma}$. 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:

$$\sigma_{\hat{R}} = \hat{R}\sqrt{\alpha_1^2 + \alpha_2^2}$$

where α_1 and α_2 are the coefficients of variation of X_1 and X_2 respectively. The coefficient of variation of R is given by σ_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 6,233,170 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 (6,233,170) 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 6,000,000.
- (3) The coefficient of variation for an estimated aggregate is found by referring to the first non-asterisk entry on that row, namely, 0.6%.
- (4) So the approximate coefficient of variation of the estimate is 0.6%.

The finding that there are 6,233,170 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 1,016,760/6,233,170=16.3% 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 (16.3%) and the numerator portion of the percentage (1,016,760) in determining the coefficient of variation.
(3)	The numerator, 1,016,760, does not appear in the left-hand column (the 'Numerator of Percentage' column) so it is necessary to use the figure closet to it, namely 1,000,000. Similarly, the percentage estimate does not appear as any of the column headings, so it is necessary to use the figure closest to it, 15.0%.
(4)	The figure at the intersection of the row and column used, namely 2.3% is the coefficient of variation to be used.
(5)	So the approximate coefficient of variation of the estimate is 2.3%. The finding that 16.3% 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 372,141/2,959,571=12.6% 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 910,323/4,231,569 = 21.5% 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 4.1%, and the CV of the estimate for households in Ontario as 2.3%.
- (2) Using rule 3, the standard error of a difference $(d = X_1 X_2)$ is:

$$\sigma_{\hat{d}} = \sqrt{(\hat{X}_1 \alpha_1)^2 + (\hat{X}_2 \alpha_2)^2}$$

where X_1 is estimate 1, X_2 is estimate 2, and α_1 and α_2 are the coefficients of variation of X_1 and X_2 respectively.

That is, the standard error of the difference $\hat{a} = |.126 - 0.215| = 0.089$ is:

$$\sigma_{\hat{d}} = \sqrt{[(0.126)(0.041)]^2 + [(0.215)(0.023)]^2}$$
$$= \sqrt{(0.0000280 + (0.0000245))}$$
$$= 0.0072$$

- (3) The coefficient of variation of $\hat{\sigma}$ is given by $\sigma_{\hat{\sigma}}/\hat{\sigma} = 0.0072/0.089 = 0.081$
- (4) So the approximate coefficient of variation of the difference between the estimates is 8.1%. This estimate is publishable with no qualifications.

Example 4 : Estimates of Ratios

Suppose that the user estimates that 372,141 households in Quebec reported that one or more members of their household use computer at home for E-mail in a typical month, while 910,323 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 (= 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 372,141. The figure closest to it is 400,000. 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, 4.1.
- (4) The denominator of this ratio estimate is 910,323. The figure closest to it is 1,000,000. 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, 2.3%.

So the approximate coefficient of variation of the ratio estimate is given by rule 4, which is,

$$\alpha_{\hat{R}} = \sqrt{\alpha_1^2 + \alpha_2^2}$$

where α_1 and α_2 are the coefficients of variation of X_1 and X_2 respectively.

That is,

$$\alpha_{\hat{R}} = \sqrt{(.041)^2 + (.023)^2} \\ = 0.047$$

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 372,141/910,323 - which is 0.41:1. The coefficient of variation of this estimate is 4.7%, 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 differences 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.

(5)

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:

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

where	$\alpha_{\hat{X}}$ 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.
<u>Note</u> :	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.

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 10.1.1) would be calculated as follows.

Х =	16.3% (or expressed as a proportion = 0.163)
t =	2
α _X =	2.3% (.023 expressed as a proportion) is the coefficient of variation of this estimate as determined from the tables.
CI _x =	{0.163 - (2) (0.163) (0.023), .163 + (2) (0.163) (0.023)}
CI _X =	{0.163 - 0.007, 0.163 + 0.007}
Cl _x =	{0.156, 0.170}

With 95% confidence it can be said that between 15.6% and 17% 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 $\sigma_{\hat{d}}$.

If
$$t = \frac{\hat{X}_1 - \hat{X}_2}{\sigma_{\hat{d}}}$$
 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.

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 10.1.1, the standard error of the difference between these two estimates was found to be = 0.0072. Hence,

$$t = \frac{\dot{X}_1 - \ddot{X}_2}{\sigma_d} = \frac{0.126 - 0.215}{0.0072} = -\frac{0.089}{0.0072} = -12.4.$$

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 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.

Province	Unqualified	Qualified	Confidential	Not Releasable
Newfoundland and Labrador	6,500 & +	3,000-6,400	1,500-2,900	under 1,500
Prince Edward Island	2,000 & +	1,000-1,900	500-900	under 500
Nova Scotia	8,000 & +	3,500 - 7,900	2,000 - 3,400	under 2,000
New Brunswick	6,500 & +	3,000 - 6,400	1,500 - 2,900	under 1,500
Quebec	29,000 & +	13,000 -28,900	7,000 - 12,900	under 7,000
Ontario	25,500 & +	11,000 -25,400	6,500 - 10,900	under 6,500
Manitoba	9,500 & +	4,000 - 9,400	2,500 - 3,900	under 2,500
Saskatchewan	6,000 & +	2,500 -5,900	1,500 - 2,400	under 1,500
Alberta	19,000 & +	8,500 - 18,900	4,500 - 8,400	under 4,500
British Columbia	27,000 & +	12,000 -26,900	6,500 - 11,900	under 6,500
Atlantic Provinces	7,000 & +	3,000 - 6,900	1,500 - 2,900	under 1,500
Prairie Provinces	14,500 & +	6,500 - 14,400	3,500 - 6,400	under 3,500
CANADA	22,500 & +	10,000 -22,400	5,500 - 9,900	under 5,500

HIUS Table of Release Cut-offs

10.6

CV Tables

HOUSEHOLD INTERNET USE SURVEY - 1098

Approximate Sampling Variability Tables for NEWFOUNDLAND AND LABRADOR

NUMERATOR OF PERCENTAGE	7				1	ESTIMATE	D PERCEN	TAGE						
('000)	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	******	42.9	42.7	42.1	40.9	39.8	38.6	37.4	36.1	34.8	33.4	30.5	23.6	13.6
2	*******	*****	30.2	29.7	28.9	28.1	27.3	26.4	25.5	24.6	23.6	21.6	16.7	9.6
3	*******	*****	24.7	24.3	23.6	23.0	22.3	21.6	20.8	20.1	19.3	17.6	13.6	7.9
4	*******	******	******	21.0	20.5	19.9	19.3	18.7	18.0	17.4	16.7	15.3	11.8	6.8
5	*******	******	******	18.8	18.3	17.8	17.3	16.7	16.1	15.6	14.9	13.6	10.6	6.1
6	********	******	******	17.2	16.7	16.2	15.8	15.3	14.7	14.2	13.6	12.5	9.6	5.6
7	********	******	******	15.9	15.5	15.0	14.6	14.1	13.6	13.1	12.6	11.5	8.9	5.2
8	*******	******	******	14.9	14.5	14.1	13.6	13.2	12.8	12.3	11.8	10.8	8.4	4.8
9	*******	******	******	14.0	13.6	13.3	12.9	12.5	12.0	11.6	11.1	10.2	7.9	4.5
10	*******	******	*******	*****	12.9	12.6	12.2	11.8	11.4	11.0	10.6	9.6	7.5	4.3
11	*******	******	******	*****	12.3	12.0	11.6	11.3	10.9	10.5	10.1	9.2	7.1	4.1
12	*******	******	******	*****	11.8	11.5	11.1	10.8	10.4	10.0	9.6	8.8	6.8	3.9
13	*******	******	*******	*****	11.4	11.0	10.7	10.4	10.0	9.6	9.3	8.5	6.6	3.8
14	*******	******	*******	*****	10.9	10.6	10.3	10.0	9.6	9.3	8.9	8.2	6.3	3.6
15	*******	******	*******	*****	10.6	10.3	10.0	9.6	9.3	9.0	8.6	7.9	6.1	3.5
16	*******	******	*******	*****	10.2	9.9	9.6	9.3	9.0	8.7	8.4	7.6	5.9	3.4
17	*******	******	*******	*****	9.9	9.6	9.4	9.1	8.8	8.4	8.1	7.4	5.7	3.3
18	*******	******	*******	*****	9.6	9.4	9.1	8.8	8.5	8.2	7.9	7.2	5.6	3.2
19	*******	******	*******	*****	9.4	9.1	8.9	8.6	8.3	8.0	7.7	7.0	5.4	3.1
20	*******	******	*******	******	******	8.9	8.6	8.4	8.1	7.8	7.5	6.8	5.3	3.1
21	*******	******	*******	******	******	8.7	8.4	8.2	7.9	7.6	7.3	6.7	5.2	3.0
22	*******	******	*******	******	******	8.5	8.2	8.0	7.7	7.4	7.1	6.5	5.0	2.9
23	*******	******	*******	******	******	8.3	8.0	7.8	7.5	7.3	7.0	6.4	4.9	2.8
24	*******	******	*******	******	******	8.1	7.9	7.6	7.4	7.1	6.8	6.2	4.8	2.8
25	*******	******	*******	******	******	8.0	7.7	7.5	7.2	7.0	6.7	6.1	4.7	2.7
30	*******	******	*******	******	*******	******	7.0	6.8	6.6	6.4	6.1	5.6	4.3	2.5
35	*******	******	*******	******	*******	******	6.5	6.3	6.1	5.9	5.6	5.2	4.0	2.3
40	*******	******	*******	******	*******	*******	******	5.9	5.7	5.5	5.3	4.8	3.7	2.2
45	*******	******	*******	******	*******	*******	******	5.6	5.4	5.2	5.0	4.5	3.5	2.0
50	*******	******	*******	******	*******	*******	******	******	5.1	4.9	4.7	4.3	3.3	1.9
55	*******	*******	*******	******	*******	*******	******	******	4.9	4.7	4.5	4.1	3.2	1.8
60	*******	*******	*******	******	*******	*******	******	******	* * * * * * *	4.5	4.3	3.9	3.1	1.8
65	********	*******	*******	******	*******	*******	*******	*******	******	4.3	4.1	3.8	2.9	1.7
70	********	*******	*******	******	*******	*******	*******	*******	*******	******	4.0	3.6	2.8	1.6
75	*******	*******	*******	******	*******	*******	******	******	******	******	3.9	3.5	2.7	1.6
80	********	*******	*******	******	*******	*******	*******	*******	*******	*******	******	3.4	2.6	1.5
85	********	*******	*******	******	*******	*******	*******	*******	*******	*******	******	3.3	2.6	1.5
90	*******	*******	*******	******	*******	*******	******	******	******	******	******	3.2	2.5	1.4
95	********	*******	********	******	*******	*******	********	*******	********	********	******	3.1	2.4	1.4
100	*******	*******	*******	******	*******	*******	******	******	******	******	*******	******	2.4	1.4
125	*******	******	*******	******	*******	*******	******	******	******	******	*******	******	2.1	1.2
150	*******	*******	*******	******	*******	*******	******	******	******	******	*******	******	******	1.1



Approximate Sampling Variability Tables for PRINCE EDWARD ISLAND

NUMERATOR OF	1					ESTIMATE	D PERCEN	TAGE						
PERCENTAGE														
('000)	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	*******	*****	24.5	24.1	23.5	22.8	22.1	21.4	20.7	19.9	19.2	17.5	13.5	7.8
2	* * * * * * * * * *	*******	* * * * * *	17.0	16.6	16.1	15.6	15.1	14.6	14.1	13.5	12.4	9.6	5.5
3	*******	*******	*******	*****	13.5	13.2	12.8	12.4	11.9	11.5	11.1	10.1	7.8	4.5
4	*******	*******	*******	*****	11.7	11.4	11.1	10.7	10.3	10.0	9.6	8.7	6.8	3.9
5	*******	*******	*******	*****	10.5	10.2	9.9	9.6	9.3	8.9	8.6	7.8	6.1	3.5
6	* * * * * * * * * *	*******	*******	******	******	9.3	9.0	8.7	8.4	8.1	7.8	7.1	5.5	3.2
7	* * * * * * * * * *	*******	*******	******	******	8.6	8.4	8.1	7.8	7.5	7.2	6.6	5.1	3.0
8	*******	*******	*******	******	*******	******	7.8	7.6	7.3	7.1	6.8	6.2	4.8	2.8
9	* * * * * * * * * *	*******	*******	******	*******	******	7.4	7.1	6.9	6.6	6.4	5.8	4.5	2.6
10	* * * * * * * * * *	*******	*******	******	*******	******	7.0	6.8	6.5	6.3	6.1	5.5	4.3	2.5
11	*******	*******	*******	******	*******	*******	******	6.5	6.2	6.0	5.8	5.3	4.1	2.4
12	*******	*******	*******	******	*******	*******	******	6.2	6.0	5.8	5.5	5.0	3.9	2.3
13	*******	*******	*******	******	*******	*******	*******	******	5.7	5.5	5.3	4.9	3.8	2.2
14	*******	*******	*******	******	*******	*******	*******	******	5.5	5.3	5.1	4.7	3.6	2.1
15	*******	*******	*******	******	*******	*******	*******	******	5.3	5.1	4.9	4.5	3.5	2.0
16	* * * * * * * * * *	*******	*******	******	*******	*******	*******	******	* * * * * * *	5.0	4.8	4.4	3.4	2.0
17	* * * * * * * * * *	*******	*******	******	*******	*******	*******	******	* * * * * * *	4.8	4.6	4.2	3.3	1.9
18	* * * * * * * * * *	*******	*******	******	*******	*******	*******	******	*******	******	4.5	4.1	3.2	1.8
19	*******	*******	*******	* * * * * * *	*******	*******	*******	******	******	******	4.4	4.0	3.1	1.8
20	* * * * * * * * * *	*******	*******	******	*******	*******	*******	******	*******	******	4.3	3.9	3.0	1.7
21	* * * * * * * * * *	*******	*******	******	*******	*******	*******	******	*******	*******	******	3.8	3.0	1.7
22	*******	*******	*******	******	*******	*******	*******	******	*******	*******	******	3.7	2.9	1.7
23	*******	*******	*******	******	*******	*******	*******	******	*******	*******	******	3.6	2.8	1.6
24	*******	*******	*******	******	*******	*******	*******	******	*******	*******	******	3.6	2.8	1.6
25	*******	*******	*******	******	*******	*******	*******	******	*******	*******	******	3.5	2.7	1.6
30	*******	*******	*******	******	*******	*******	*******	******	*******	*******	*******	******	2.5	1.4
35	*******	*******	*******	******	*******	*******	*******	******	*******	******	******	******	2.3	1.3
40	*******	*******	*******	*****	*******	*******	*******	*******	*******	*******	*******	*******	******	1.2
45	*******	******	*******	******	******	*******	******	******	******	******	******	*******	******	1.2

Approximate Sampling Variability Tables for NOVA SCOTIA

NUMERATOR O	F				1	ESTIMATE	D PERCEN	FAGE						
PERCENTAGE														
('000)	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	*******	46.6	46.4	45.7	44.5	43.2	41.9	40.6	39.2	37.8	36.3	33.1	25.7	14.8
2	*******	33.0	32.8	32.3	31.4	30.6	29.6	28.7	27.7	26.7	25.7	23.4	18.2	10.5
3	*******	26.9	26.8	26.4	25.7	24.9	24.2	23.4	22.6	21.8	21.0	19.1	14.8	8.6
4	********	******	23.2	22.8	22.2	21.6	21.0	20.3	19.6	18.9	18.2	16.6	12.8	7.4
5	********	******	20.8	20.4	19.9	19.3	18.7	18.2	17.5	16.9	16.2	14.8	11.5	6.6
6	********	*****	18 9	18 7	18 2	17 6	17 1	16 6	16 0	15 4	14 8	13 5	10 5	6 1
7	********	******	17.5	17.3	16.8	16.3	15.8	15.3	14.8	14.3	13.7	12.5	9.7	5.6
8	********	*******	******	16.2	15 7	15 3	14 8	14 4	13 9	13 4	12.8	11 7	9 1	5 2
9	********	*******	******	15 2	14 8	14 4	14 0	13 5	13 1	12 6	12 1	11 0	8.6	4 9
10	********	*******	*****	14 4	14 1	13 7	13 3	12.8	12.4	12.0	11 5	10 5	8 1	4 7
11	********	*******	*****	13.8	13 4	13 0	12 6	12.0	11 8	11 4	10 9	10.5	7 7	4.5
12	********	*******	*****	13.0	12.9	12 5	12.0	11 7	11 3	10 9	10.5	10.0	7.7	4.3
12	********	*******	******	12.2	12.0	12.5	11 6	11 2	10 9	10.5	10.5	9.0	7.4	4.5
14	********	*******	******	12.7	11 0	11 5	11 2	10 9	10.5	10.5	10.1	9.2	6 9	4.1
14	++++++++++	*******	******	11 0	11.9	11.5	10.0	10.0	10.5	10.1	9.7	0.9	6.9	4.0
15	****			11.0	11.5	11.2	10.0	10.5	10.1	9.0	9.4	0.0	0.0	3.0
16	*****	******		11.4	11.1	10.8	10.5	10.1	9.8	9.4	9.1	8.3	6.4	3.7
1/	*****	******		1.11	10.8	10.5	10.2	9.8	9.5	9.2	8.8	8.0	6.2	3.6
18	*********			******	10.5	10.2	9.9	9.6	9.2	8.9	8.6	7.8	6.1	3.5
19	*********	*******	********	******	10.2	9.9	9.6	9.3	9.0	8.7	8.3	7.6	5.9	3.4
20	********	*******	*******	*****	9.9	9.7	9.4	9.1	8.8	8.5	8.1	7.4	5.7	3.3
21	********	******	******	*****	9.7	9.4	9.1	8.9	8.6	8.2	7.9	7.2	5.6	3.2
22	********	*******	*******	*****	9.5	9.2	8.9	8.7	8.4	8.1	7.7	7.1	5.5	3.2
23	********	*******	*******	*****	9.3	9.0	8.7	8.5	8.2	7.9	7.6	6.9	5.4	3.1
24	********	*******	*******	*****	9.1	8.8	8.6	8.3	8.0	7.7	7.4	6.8	5.2	3.0
25	********	*******	*******	*****	8.9	8.6	8.4	8.1	7.8	7.6	7.3	6.6	5.1	3.0
30	********	*******	*******	*****	8.1	7.9	7.7	7.4	7.2	6.9	6.6	6.1	4.7	2.7
35	********	******	*******	*****	7.5	7.3	7.1	6.9	6.6	6.4	6.1	5.6	4.3	2.5
40	*******	******	*******	******	******	6.8	6.6	6.4	6.2	6.0	5.7	5.2	4.1	2.3
45	********	*******	*******	******	******	6.4	6.2	6.1	5.8	5.6	5.4	4.9	3.8	2.2
50	********	******	*******	******	******	6.1	5.9	5.7	5.5	5.3	5.1	4.7	3.6	2.1
55	********	*******	*******	******	*******	******	5.7	5.5	5.3	5.1	4.9	4.5	3.5	2.0
60	********	*******	*******	******	*******	******	5.4	5.2	5.1	4.9	4.7	4.3	3.3	1.9
65	********	******	*******	******	*******	******	5.2	5.0	4.9	4.7	4.5	4.1	3.2	1.8
70	********	******	*******	******	*******	******	5.0	4.9	4.7	4.5	4.3	4.0	3.1	1.8
75	********	******	*******	******	*******	*******	******	4.7	4.5	4.4	4.2	3.8	3.0	1.7
80	********	*******	*******	******	*******	*******	******	4.5	4.4	4.2	4.1	3.7	2.9	1.7
85	********	*******	*******	******	*******	*******	******	4.4	4.3	4.1	3.9	3.6	2.8	1.6
90	********	*******	*******	******	*******	*******	*******	******	4.1	4.0	3.8	3.5	2.7	1.6
95	********	*******	*******	******	*******	*******	*******	******	4.0	3.9	3.7	3.4	2.6	1.5
100	********	*******	*******	******	*******	*******	*******	******	3.9	3.8	3.6	3.3	2.6	1.5
125	********	*******	*******	******	*******	*******	*******	*******	*******	******	3.2	3.0	23	1 २
150	********	******	*******	******	*******	*******	*******	*******	******	*******	******	27	2.5	1 2
200	********	******	******	******	*******	*******	*******	*******	*******	*******	*******	ر / ******	1 8	1 0
250	*********	*******	*******	*******	********	*******	********	*******	*******	*******	*******	*******	⊥.0 ******	1.0
300	********	******	******	******	*******	*******	*******	*******	*******	*******	*******	*******	******	0.9

HOUSEHOLD INTERNET USE SURVEY - 1098

Approximate Sampling Variability Tables for NEW BRUNSWICK

NUMERATOR OF	F				:	ESTIMATE	D PERCEN	TAGE						
('000)	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	*******	41.7	41.5	40.9	39.8	38.7	37.5	36.3	35.1	33.8	32.5	29.6	23.0	13.3
2	******	29.5	29.3	28.9	28.1	27.3	26.5	25.7	24.8	23.9	23.0	21.0	16.2	9.4
3	********	*****	24.0	23.6	23.0	22.3	21.6	21.0	20.3	19.5	18.7	17.1	13.3	7.7
4	********	*****	20.8	20.4	19.9	19.3	18.7	18.2	17.5	16.9	16.2	14.8	11.5	6.6
5	********	*****	18.6	18.3	17.8	17.3	16.8	16.2	15.7	15.1	14.5	13.3	10.3	5.9
6	********	*******	******	16.7	16.2	15.8	15.3	14.8	14.3	13.8	13.3	12.1	9.4	5.4
7	********	*******	******	15.4	15.0	14.6	14.2	13.7	13.3	12.8	12.3	11.2	8.7	5.0
8	********	*******	******	14.4	14.1	13.7	13.3	12.8	12.4	12.0	11.5	10.5	8.1	4.7
9	********	*******	* * * * * * *	13.6	13.3	12.9	12.5	12.1	11.7	11.3	10.8	9.9	7.7	4.4
10	********	*******	* * * * * * *	12.9	12.6	12.2	11.9	11.5	11.1	10.7	10.3	9.4	7.3	4.2
11	********	*******	******	12.3	12.0	11.7	11.3	10.9	10.6	10.2	9.8	8.9	6.9	4.0
12	********	*******	* * * * * * *	11.8	11.5	11.2	10.8	10.5	10.1	9.8	9.4	8.6	6.6	3.8
13	********	*******	* * * * * * *	11.3	11.0	10.7	10.4	10.1	9.7	9.4	9.0	8.2	6.4	3.7
14	********	*******	******	10.9	10.6	10.3	10.0	9.7	9.4	9.0	8.7	7.9	6.1	3.5
15	********	*******	*******	******	10.3	10.0	9.7	9.4	9.1	8.7	8.4	7.7	5.9	3.4
16	********	*******	* * * * * * * * *	******	9.9	9.7	9.4	9.1	8.8	8.5	8.1	7.4	5.7	3.3
17	********	*******	* * * * * * * * *	******	9.6	9.4	9.1	8.8	8.5	8.2	7.9	7.2	5.6	3.2
18	********	*******	*******	******	9.4	9.1	8.8	8.6	8.3	8.0	7.7	7.0	5.4	3.1
19	********	*******	* * * * * * * * *	******	9.1	8.9	8.6	8.3	8.0	7.8	7.5	6.8	5.3	3.0
20	********	*******	* * * * * * * * *	******	8.9	8.6	8.4	8.1	7.8	7.6	7.3	6.6	5.1	3.0
21	********	*******	* * * * * * * * *	******	8.7	8.4	8.2	7.9	7.7	7.4	7.1	6.5	5.0	2.9
22	********	*******	* * * * * * * * *	******	8.5	8.2	8.0	7.7	7.5	7.2	6.9	6.3	4.9	2.8
23	********	*******	*******	******	8.3	8.1	7.8	7.6	7.3	7.0	6.8	6.2	4.8	2.8
24	********	*******	* * * * * * * * *	******	8.1	7.9	7.7	7.4	7.2	6.9	6.6	6.1	4.7	2.7
25	********	*******	* * * * * * * * *	******	8.0	7.7	7.5	7.3	7.0	6.8	6.5	5.9	4.6	2.7
30	********	*******	*******	******	******	7.1	6.8	6.6	6.4	6.2	5.9	5.4	4.2	2.4
35	********	*******	*******	******	******	6.5	6.3	6.1	5.9	5.7	5.5	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
45	********	*******	* * * * * * * * *	******	******	******	5.6	5.4	5.2	5.0	4.8	4.4	3.4	2.0
50	********	*******	*******	*******	*******	******	5.3	5.1	5.0	4.8	4.6	4.2	3.2	1.9
55	********	*******	*******	*******	*******	******	5.1	4.9	4.7	4.6	4.4	4.0	3.1	1.8
60	********	*******	*******	*******	*******	*******	******	4.7	4.5	4.4	4.2	3.8	3.0	1.7
65	********	*******	* * * * * * * * *	*******	*******	*******	******	4.5	4.4	4.2	4.0	3.7	2.8	1.6
70	********	*******	*******	*******	*******	*******	******	4.3	4.2	4.0	3.9	3.5	2.7	1.6
75	********	*******	*******	*******	*******	*******	*******	******	4.1	3.9	3.7	3.4	2.7	1.5
80	********	*******	* * * * * * * * *	*******	*******	*******	*******	******	3.9	3.8	3.6	3.3	2.6	1.5
85	********	*******	* * * * * * * * *	*******	*******	*******	*******	*******	******	3.7	3.5	3.2	2.5	1.4
90	********	*******	* * * * * * * * *	*******	*******	*******	*******	*******	******	3.6	3.4	3.1	2.4	1.4
95	********	*******	* * * * * * * * *	*******	*******	*******	*******	*******	******	3.5	3.3	3.0	2.4	1.4
100	********	******	*******	******	*******	*******	*******	*******	******	******	3.2	3.0	2.3	1.3
125	********	******	*******	*******	******	*******	*******	******	******	******	******	2.7	2.1	1.2
150	********	******	*******	******	******	*******	*******	******	*******	*******	******	******	1.9	1.1
200	********	******	*******	******	******	*******	*******	******	*******	*******	******	*******	******	0.9
250	*********	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	*******	******	0.8

Approximate Sampling Variability Tables for QUEBEC

NUMERATOR	OF			ESTIMATED PERCENTAGE										
PERCENTAG	L 0 1 %	1 0%	2 0%	E 0%	10 0%	15 0%	20 08	25 0%	20 08	25 0%	10 08	E0 0%	70 08	00 08
(*000)	0.1%	1.0%	2.0%	5.0%	10.0%	15.0%	20.0%	23.0%	30.0%	35.0%	40.0%	50.0%	70.0%	90.08
1	89.4	89 0	88 5	87.2	84 9	82 5	80.0	77 5	74 8	72 1	69 3	63 2	49 0	28.3
2	63 2	62 9	62 6	61 6	60 0	58 3	56 6	54 8	52 9	51 0	49.0	44 7	34 6	20.5
2	++++++++	52.J	51 1	E0 3	40.0	17 6	46.0	44 7	42.2	41 6	40.0	26 5	24.0	16.0
3	******	J1.4	44 2	42 6	49.0	47.0	40.2	24.7	43.2	41.0	40.0	21 6	20.5	14 1
4	********	44.5	44.5	43.6	42.4	41.2	40.0	30.7	37.4	30.1	34.0	31.0	24.5	14.1
5	*****	39.8	39.6	39.0	37.9	36.9	35.8	34.6	33.5	32.3	31.0	28.3	21.9	12.6
6	*******	36.3	36.2	35.6	34.6	33.7	32.7	31.6	30.6	29.4	28.3	25.8	20.0	11.5
.7	*******	33.6	33.5	33.0	32.1	31.2	30.2	29.3	28.3	27.3	26.2	23.9	18.5	10.7
8	*******	31.5	31.3	30.8	30.0	29.2	28.3	27.4	26.5	25.5	24.5	22.4	17.3	10.0
9	*******	29.7	29.5	29.1	28.3	27.5	26.7	25.8	24.9	24.0	23.1	21.1	16.3	9.4
10	*******	28.1	28.0	27.6	26.8	26.1	25.3	24.5	23.7	22.8	21.9	20.0	15.5	8.9
11	*******	26.8	26.7	26.3	25.6	24.9	24.1	23.4	22.6	21.7	20.9	19.1	14.8	8.5
12	*******	25.7	25.6	25.2	24.5	23.8	23.1	22.4	21.6	20.8	20.0	18.3	14.1	8.2
13	******	24.7	24.6	24.2	23.5	22.9	22.2	21.5	20.8	20.0	19.2	17.5	13.6	7.8
14	******	23.8	23.7	23.3	22.7	22.0	21.4	20.7	20.0	19.3	18.5	16.9	13.1	7.6
15	******	23.0	22.9	22.5	21.9	21.3	20.7	20.0	19.3	18.6	17.9	16.3	12.6	7.3
16	*******	22.2	22.1	21.8	21.2	20.6	20.0	19.4	18.7	18.0	17.3	15.8	12.2	7.1
17	******	21.6	21.5	21.1	20.6	20.0	19.4	18.8	18.2	17.5	16.8	15.3	11.9	6.9
18	******	21.0	20.9	20.5	20.0	19.4	18.9	18.3	17.6	17.0	16.3	14.9	11.5	6.7
19	*******	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
20	******	19.9	19.8	19.5	19.0	18.4	17.9	17.3	16.7	16.1	15.5	14.1	11.0	6.3
21	******	19.4	19.3	19.0	18.5	18.0	17.5	16.9	16.3	15.7	15.1	13.8	10.7	6.2
22	*******	19 0	18 9	18 6	18 1	17 6	17 1	16 5	16 0	15 4	14 8	13 5	10 4	6.0
22	******	18 6	18 5	18 2	17 7	17.2	16 7	16.2	15.6	15.0	14 4	13.2	10.1	5 9
23	******	18 2	18 1	17.8	17.3	16.8	16.3	15.8	15.3	14 7	14 1	12 9	10.2	5.9
24	******	17 0	17 7	17.0	17.0	16 5	16.0	15.0	15.5	14.7	12 0	12.5	10.0	5.0
20	******	1/.0	16.2	15 0	15 5	15.5	14.6	14 1	12.0	12 2	10 6	11 5	9.0	5.7
30	******	++++++	10.2	14 7	14 2	12.1	12 5	12.1	10.7	10.2	11 7	10.7	0.9	1.2
35		******	15.0	14.7	14.3	13.9	13.5	13.1	12.0	11 4	11.7	10.7	0.3	4.0
40	*******	****	14.0	13.8	13.4	13.0	12.6	12.2	11.8	11.4	11.0	10.0	/./	4.5
45	********	******	13.2	13.0	12.6	12.3	11.9	11.5	11.2	10.8	10.3	9.4	7.3	4.2
50	********	******	12.5	12.3	12.0	11./	11.3	11.0	10.6	10.2	9.8	8.9	6.9	4.0
55	*******	******	11.9	11.8	11.4	11.1	10.8	10.4	10.1	9.7	9.3	8.5	6.6	3.8
60	********	******	******	11.3	11.0	10.6	10.3	10.0	9.7	9.3	8.9	8.2	6.3	3.7
65	*******	******	*****	10.8	10.5	10.2	9.9	9.6	9.3	8.9	8.6	7.8	6.1	3.5
70	*******	******	******	10.4	10.1	9.9	9.6	9.3	8.9	8.6	8.3	7.6	5.9	3.4
75	********	*******	******	10.1	9.8	9.5	9.2	8.9	8.6	8.3	8.0	7.3	5.7	3.3
80	*******	*******	******	9.7	9.5	9.2	8.9	8.7	8.4	8.1	7.7	7.1	5.5	3.2
85	*******	*******	******	9.5	9.2	8.9	8.7	8.4	8.1	7.8	7.5	6.9	5.3	3.1
90	*******	******	*****	9.2	8.9	8.7	8.4	8.2	7.9	7.6	7.3	6.7	5.2	3.0
95	*******	******	******	8.9	8.7	8.5	8.2	7.9	7.7	7.4	7.1	6.5	5.0	2.9
100	*******	*******	*****	8.7	8.5	8.2	8.0	7.7	7.5	7.2	6.9	6.3	4.9	2.8
125	********	*******	*****	7.8	7.6	7.4	7.2	6.9	6.7	6.5	6.2	5.7	4.4	2.5
150	*******	******	*******	*****	6.9	6.7	6.5	6.3	6.1	5.9	5.7	5.2	4.0	2.3
200	*******	******	******	*****	6.0	5.8	5.7	5.5	5.3	5.1	4.9	4.5	3.5	2.0
250	*******	******	******	*****	5.4	5.2	5.1	4.9	4.7	4.6	4.4	4.0	3.1	1.8
300	*******	******	*******	******	******	4.8	4.6	4.5	4.3	4.2	4.0	3.7	2.8	1.6
350	********	******	*******	******	******	4.4	4.3	4.1	4.0	3.9	3.7	3.4	2.6	1.5
400	*******	******	*******	******	******	4.1	4.0	3.9	3.7	3.6	3.5	3.2	2.4	1.4
450	*******	******	*******	******	*******	******	3.8	3.7	3.5	3.4	3.3	3.0	2.3	1.3
500	*******	******	*******	******	*******	******	3.6	3.5	3.3	3.2	3.1	2.8	2.2	1.3
750	*******	******	*******	******	*******	*******	*******	******	2 7	2.6	2 5	2 3	1 8	1 0
1000	*******	******	*******	******	*******	*******	*******	******	******	2 3	2.2	2.0	1 5	0 9
1500	*******	******	*******	******	*******	*******	*******	******	*******	*******	*******	******	1 2	0.7
2000	*******	******	*******	******	*******	*******	*******	*******	******	*******	*******	******	1 1	0.6

Approximate Sampling Variability Tables for ONTARIO

NUMERATOR PERCENTAG	OF E				1	ESTIMATE) PERCEN	TAGE						
('000)	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	83.3	83.0	82.6	81.3	79.1	76.9	74.6	72.2	69.8	67.2	64.6	59.0	45.7	26.4
2	58.9	58.7	58.4	57.5	55.9	54.4	52.7	51.1	49.3	47.5	45.7	41.7	32.3	18.6
3	48 1	47 9	47 7	46 9	45 7	44 4	43 1	41 7	40 3	38.8	37 3	34 0	26 4	15 2
4	41 7	41 5	41 3	40.6	39.6	38 4	37 3	36 1	34 9	33.6	32 3	29 5	22.8	13 2
5	*******	37 1	36.9	36.3	35.4	34 4	33 4	32 3	31 2	30 1	28 9	26.4	20.4	11 8
6	******	33 9	33 7	33.2	32 3	31 4	30.4	29 5	28 5	27 4	26.4	24 1	18 6	10.8
7	******	31.4	31.2	30.7	29.9	29.1	28.2	27.3	26.4	25.4	24.4	22.3	17.3	10.0
8	******	29.3	29.2	28.7	28.0	27.2	26.4	25.5	24.7	23.8	22.8	20.8	16.1	9.3
9	******	27.7	27.5	27.1	26.4	25.6	24.9	24.1	23.3	22.4	21.5	19.7	15.2	8.8
10	******	26.2	26.1	25.7	25.0	24.3	23.6	22.8	22.1	21.3	20.4	18.6	14.4	8.3
11	******	25.0	24.9	24.5	23.9	23.2	22.5	21.8	21.0	20.3	19.5	17.8	13.8	8.0
12	******	24.0	23.8	23.5	22.8	22.2	21.5	20.8	20.1	19.4	18.6	17.0	13.2	7.6
13	******	23.0	22.9	22.5	21.9	21.3	20.7	20.0	19.4	18.6	17.9	16.4	12.7	7.3
14	******	22.2	22.1	21.7	21.1	20.5	19.9	19.3	18.6	18.0	17.3	15.8	12.2	7.0
15	******	21.4	21.3	21.0	20.4	19.9	19.3	18.6	18.0	17.4	16.7	15.2	11.8	6.8
16	******	20.7	20.6	20.3	19.8	19.2	18.6	18.1	17.4	16.8	16.1	14.7	11.4	6.6
17	******	20.1	20.0	19.7	19.2	18.6	18.1	17.5	16.9	16.3	15.7	14.3	11.1	6.4
18	******	19.6	19.5	19.2	18.6	18.1	17.6	17.0	16.4	15.8	15.2	13.9	10.8	6.2
19	******	19.0	18.9	18.6	18.1	17.6	17.1	16.6	16.0	15.4	14.8	13.5	10.5	6.0
20	******	18.6	18.5	18.2	17.7	17.2	16.7	16.1	15.6	15.0	14.4	13.2	10.2	5.9
21	******	18.1	18.0	17.7	17.3	16.8	16.3	15.8	15.2	14.7	14.1	12.9	10.0	5.8
22	******	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
23	******	17.3	17.2	16.9	16.5	16.0	15.6	15.1	14.5	14.0	13.5	12.3	9.5	5.5
24	******	16.9	16.9	16.6	16.1	15.7	15.2	14.7	14.2	13.7	13.2	12.0	9.3	5.4
25	******	16.6	16.5	16.3	15.8	15.4	14.9	14.4	14.0	13.4	12.9	11.8	9.1	5.3
30	******	15.1	15.1	14.8	14.4	14.0	13.6	13.2	12.7	12.3	11.8	10.8	8.3	4.8
35	******	14.0	14.0	13.7	13.4	13.0	12.6	12.2	11.8	11.4	10.9	10.0	7.7	4.5
40	******	13.1	13.1	12.9	12.5	12.2	11.8	11.4	11.0	10.6	10.2	9.3	7.2	4.2
45	*********	****	12.3	12.1	11.8	11.5	11.1	10.8	10.4	10.0	9.6	8.8	6.8	3.9
50	*********	****	11.7	11.5	11.2	10.9	10.5	10.2	9.9	9.5	9.1	8.3	6.5	3.7
55	*********	****	11.1	11.0	10.7	10.4	10.1	9.7	9.4	9.1	8.7	8.0	6.2	3.6
60	*********	*****	10.7	10.5	10.2	9.9	9.6	9.3	9.0	8.7	8.3	7.6	5.9	3.4
65	*********	*****	10.2	10.1	9.8	9.5	9.3	9.0	8.7	8.3	8.0	7.3	5.7	3.3
70	*********	*****	9.9	9.7	9.5	9.2	8.9	8.6	8.3	8.0	7.7	7.0	5.5	3.2
75	*********	*****	9.5	9.4	9.1	8.9	8.6	8.3	8.1	7.8	7.5	6.8	5.3	3.0
80	*********	*****	9.2	9.1	8.8	8.6	8.3	8.1	7.8	7.5	7.2	6.6	5.1	2.9
85	*********	******	*****	8.8	8.6	8.3	8.1	7.8	7.6	7.3	7.0	6.4	5.0	2.9
90	*********	******	*****	8.6	8.3	8.1	7.9	7.6	7.4	7.1	6.8	6.2	4.8	2.8
95	*********	******	*****	8.3	8.1	7.9	7.7	7.4	7.2	6.9	6.6	6.0	4.7	2.7
100	*********	******	*****	8.1	7.9	7.7	7.5	7.2	7.0	6.7	6.5	5.9	4.6	2.6
125	*********	******	*****	7.3	7.1	6.9	6.7	6.5	6.2	6.0	5.8	5.3	4.1	2.4
150	*********	******	*****	6.6	6.5	6.3	6.1	5.9	5.7	5.5	5.3	4.8	3.7	2.2
200	*********	******	*****	5.7	5.6	5.4	5.3	5.1	4.9	4.8	4.6	4.2	3.2	1.9
250	*********	******	*******	*****	5.0	4.9	4.7	4.6	4.4	4.3	4.1	3.7	2.9	1.7
300	*********	******	*******	*****	4.6	4.4	4.3	4.2	4.0	3.9	3.7	3.4	2.6	1.5
350	**********	******	*******	*****	4.2	4.1	4.0	3.9	3.7	3.6	3.5	3.2	2.4	1.4
400	**********	******	*******	*****	4.0	3.8	3.7	3.6	3.5	3.4	3.2	2.9	2.3	1.3
450	**********	******	********	******	******	3.6	3.5	3.4	3.3	3.2	3.0	2.8	2.2	1.2
500	**********	*******	********	******	******	3.4	3.3	3.2	3.1	3.0	2.9	2.6	2.0	1.2
750	*********	******	*******	******	* * * * * * * * *	******	2.7	2.6	2.5	2.5	2.4	2.2	1.7	1.0
1000	*********	******	*******	******	* * * * * * * * *	*******	******	2.3	2.2	2.1	2.0	1.9	1.4	0.8
1500	*********	******	*******	******	* * * * * * * * *	******	******	* * * * * * * * *	******	* * * * * * * *	1.7	1.5	1.2	0.7
2000	**********	******	********	******	*****	******	******	******	******	*****	******	1.3	1.0	0.6
3000	*********	******	*******	******	*******	*******	*******	*******	*******	*******	*******	*******	*****	0.5

Approximate Sampling Variability Tables for MANITOBA

NUMERATOR (OF E				:	ESTIMATE	D PERCEN	TAGE						
('000)	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	*******	51 3	51 1	50 3	49 0	47 6	46 2	44 7	43 2	41 6	40 0	36 5	28 3	16 3
2	*******	36.3	36 1	35.6	34 6	33 6	32 6	31 6	30 5	29 4	28 3	25.8	20.0	11 5
3	******	29.6	29 5	29.0	28.3	27 5	26 7	25.8	24 9	24 0	23.1	21.1	16.3	9.4
4	******	25.7	25.5	25.2	20.5	27.5	23.1	22.0	21.5	20.8	20.0	18 2	14 1	8 2
5	*******	******	22.8	22.5	21.5	21.3	20.6	20.0	19 3	18 6	17 9	16.3	12 6	73
5	*******	*****	22.0	20.5	20.0	19 /	18 8	18 2	17.6	17 0	16 3	14 9	11 5	67
7	*******	*****	19.3	19 0	18 5	18 0	17 4	16 9	16.3	15 7	15 1	13.8	10 7	6.2
8	*******	*****	18 1	17.8	17 3	16.8	16 3	15.8	15 3	14 7	14 1	12 9	10.7	5.8
0	++++++++++	******	10.1	16.0	16.3	15.0	10.3	14 0	14.4	12 0	12 2	12.9	10.0	5.8
10	+++++++++	*******	******	10.0	16.5	15.9	13.4	14.9	12.4	12.9	12.5	11 5	9.4	5.4
10	+++++++++	*******	******	15.9	14 0	14 2	12.0	12 5	12.7	10.2	12.0	11.5	0.9	5.2
12	+++++++++	*******	******	14 5	14.0	12 7	12.9	12.5	13.0	12.5	12.1	10 5	0.5	4.9
12	******	*******	******	14.5	14.1	13.7	13.3	12.9	12.5	12.0	11.5	10.5	8.2	4.7
13	*****			14.0	13.6	13.2	12.8	12.4	12.0	11.5	11.1	10.1	7.8	4.5
14	*****	*****		13.4	13.1	12.7	12.3	11.9	11.5	11.1	10.7	9.8	7.6	4.4
15	********	*******		13.0	12.6	12.3	11.9	11.5	11.1	10.7	10.3	9.4	/.3	4.2
16	********	*******	******	12.6	12.2	11.9	11.5	11.2	10.8	10.4	10.0	9.1	7.1	4.1
17	*******	******	******	12.2	11.9	11.5	11.2	10.8	10.5	10.1	9.7	8.9	6.9	4.0
18	*******	******	******	11.9	11.5	11.2	10.9	10.5	10.2	9.8	9.4	8.6	6.7	3.8
19	*******	******	******	11.5	11.2	10.9	10.6	10.3	9.9	9.5	9.2	8.4	6.5	3.7
20	*******	******	*****	11.2	10.9	10.6	10.3	10.0	9.7	9.3	8.9	8.2	6.3	3.6
21	*******	*******	*******	******	10.7	10.4	10.1	9.8	9.4	9.1	8.7	8.0	6.2	3.6
22	********	******	*******	******	10.4	10.1	9.8	9.5	9.2	8.9	8.5	7.8	6.0	3.5
23	********	******	*******	******	10.2	9.9	9.6	9.3	9.0	8.7	8.3	7.6	5.9	3.4
24	*******	******	*******	*****	10.0	9.7	9.4	9.1	8.8	8.5	8.2	7.4	5.8	3.3
25	*******	******	*******	*****	9.8	9.5	9.2	8.9	8.6	8.3	8.0	7.3	5.7	3.3
30	*******	******	*******	*****	8.9	8.7	8.4	8.2	7.9	7.6	7.3	6.7	5.2	3.0
35	*******	******	*******	*****	8.3	8.0	7.8	7.6	7.3	7.0	6.8	6.2	4.8	2.8
40	*******	******	*******	******	7.7	7.5	7.3	7.1	6.8	6.6	6.3	5.8	4.5	2.6
45	********	******	*******	******	******	7.1	6.9	6.7	6.4	6.2	6.0	5.4	4.2	2.4
50	********	******	*******	******	******	6.7	6.5	6.3	6.1	5.9	5.7	5.2	4.0	2.3
55	********	******	*******	*******	******	6.4	6.2	6.0	5.8	5.6	5.4	4.9	3.8	2.2
60	********	******	*******	******	******	6.1	6.0	5.8	5.6	5.4	5.2	4.7	3.6	2.1
65	*******	******	*******	******	*******	******	5.7	5.5	5.4	5.2	5.0	4.5	3.5	2.0
70	*******	******	*******	******	*******	******	5.5	5.3	5.2	5.0	4.8	4.4	3.4	2.0
75	*******	******	*******	*******	*******	******	5.3	5.2	5.0	4.8	4.6	4.2	3.3	1.9
80	********	******	*******	******	*******	******	5.2	5.0	4.8	4.7	4.5	4.1	3.2	1.8
85	********	******	*******	******	*******	*******	******	4.8	4.7	4.5	4.3	4.0	3.1	1.8
90	********	******	*******	******	*******	*******	******	4.7	4.6	4.4	4.2	3.8	3.0	1.7
95	*******	******	*******	******	*******	*******	******	4.6	4.4	4.3	4.1	3.7	2.9	1.7
100	*******	******	*******	******	*******	*******	******	4.5	4.3	4.2	4.0	3.6	2.8	1.6
125	*******	******	*******	******	******	*******	*******	******	3.9	3.7	3.6	3.3	2.5	1.5
150	*******	******	*******	******	******	*******	*******	******	*******	******	3.3	3.0	2.3	1.3
200	*******	******	*******	******	*******	*******	*******	******	*******	*******	******	2.6	2.0	1.2
250	*******	******	*******	******	*******	*******	*******	******	*******	*******	*******	******	1.8	1.0
300	*******	******	*******	******	*******	*******	*******	*******	*******	*******	*******	*******	******	0 9
350	*******	******	*******	******	*******	*******	*******	******	*******	*******	*******	*******	******	0.9

Approximate Sampling Variability Tables for SASKATCHEWAN

NUMERATOR	OF				1	ESTIMATE	D PERCEN	TAGE						
PERCENTAG	E o ao						~ ~ ~ ^ ^							
('000)	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	******	398	39 6	39 0	38 0	36 9	35.8	34 7	33 5	32.3	31 0	28 3	21 9	12 7
2	*******	28.2	28.0	27.6	26.8	26 1	25.3	24 5	23.7	22.5	21 9	20.5	15 5	8 9
2	*******	20.2	20.0	27.0	20.0	20.1	20.7	20.0	10.2	10 6	17 0	16 2	12.7	7 2
1	*******	******	10 0	10 5	10 0	10 /	17 0	17 2	16 7	16 1	15 5	14 1	11 0	6.2
	********	******	17 7	17.4	17.0	16 5	16 0	15 5	15.7	10.1	12 0	12 7	11.0	5.3
5	********	******	16 2	15 0	15 5	16.5	14 6	14 1	12 7	12 2	12.9	11 6	9.0	5.7
7	********	******	15.2	14 7	14 2	12 0	12 5	12 1	12 7	12.2	11 7	10 7	0.5	1 0
,	********	*******	10.0	12 0	12 /	12 0	12.5	12.1	11 0	11 1	11 0	10.7	0.3	4.0
0	+++++++++	******	******	12.0	10.4	12.0	11 0	11 6	11.0	10.9	10.2	10.0	7.7	4.5
9	**********			10.0	12.7	12.3	11.9	11.0	11.2	10.0	10.3	9.4	7.3	4.2
10	**********			12.3	12.0	11.7	10.0	10.4	10.0	10.2	9.0	0.9	6.9	4.0
11	**********			11.0	11.4	11.1	10.8	10.4	10.1	9.7	9.3	0.5	6.0	3.0
12	******		*******	11.3	11.0	10.6	10.3	10.0	9.7	9.3	8.9	8.2	6.3	3./
13	******		*******	10.8	10.5	10.2	9.9	9.6	9.3	8.9	8.6	7.8	6.1	3.5
14	****			10.4	10.1	9.9	9.6	9.3	8.9	8.6	8.3	7.6	5.9	3.4
15	********		******	10.1	9.8	9.5	9.2	8.9	8.6	8.3	8.0	7.3	5.7	3.3
16	********	*******	******	9.7	9.5	9.2	8.9	8.7	8.4	8.1	7.7	7.1	5.5	3.2
17	********	*******	******	9.5	9.2	8.9	8.7	8.4	8.1	7.8	7.5	6.9	5.3	3.1
18	********	*******	******	9.2	8.9	8.7	8.4	8.2	7.9	7.6	7.3	6.7	5.2	3.0
19	*******	*******	******	8.9	8.7	8.5	8.2	7.9	7.7	7.4	7.1	6.5	5.0	2.9
20	*******	*******	*******	******	8.5	8.2	8.0	7.7	7.5	7.2	6.9	6.3	4.9	2.8
21	*******	******	*******	*****	8.3	8.0	7.8	7.6	7.3	7.0	6.8	6.2	4.8	2.8
22	*******	*******	*******	******	8.1	7.9	7.6	7.4	7.1	6.9	6.6	6.0	4.7	2.7
23	*******	*******	*******	******	7.9	7.7	7.5	7.2	7.0	6.7	6.5	5.9	4.6	2.6
24	********	*******	*******	******	7.7	7.5	7.3	7.1	6.8	6.6	6.3	5.8	4.5	2.6
25	********	*******	*******	******	7.6	7.4	7.2	6.9	6.7	6.5	6.2	5.7	4.4	2.5
30	********	*******	*******	******	6.9	6.7	6.5	6.3	6.1	5.9	5.7	5.2	4.0	2.3
35	*******	*******	*******	******	6.4	6.2	6.0	5.9	5.7	5.5	5.2	4.8	3.7	2.1
40	********	*******	*******	******	******	5.8	5.7	5.5	5.3	5.1	4.9	4.5	3.5	2.0
45	********	*******	*******	******	******	5.5	5.3	5.2	5.0	4.8	4.6	4.2	3.3	1.9
50	********	*******	*******	******	******	5.2	5.1	4.9	4.7	4.6	4.4	4.0	3.1	1.8
55	********	*******	*******	******	******	5.0	4.8	4.7	4.5	4.3	4.2	3.8	3.0	1.7
60	********	*******	*******	******	*******	******	4.6	4.5	4.3	4.2	4.0	3.7	2.8	1.6
65	*******	*******	*******	******	*******	******	4.4	4.3	4.2	4.0	3.8	3.5	2.7	1.6
70	*******	******	*******	******	*******	******	4.3	4.1	4.0	3.9	3.7	3.4	2.6	1.5
75	*******	******	*******	******	*******	******	4.1	4.0	3.9	3.7	3.6	3.3	2.5	1.5
80	********	*******	*******	*******	*******	*******	******	3.9	3.7	3.6	3.5	3.2	2.5	1.4
85	*******	******	*******	******	*******	*******	******	3.8	3.6	3.5	3.4	3.1	2.4	1.4
90	********	******	*******	******	*******	*******	******	3.7	3.5	3.4	3.3	3.0	2.3	1.3
95	********	******	*******	******	*******	*******	******	3.6	3.4	3.3	3.2	2.9	2.2	1.3
100	*******	******	*******	******	*******	*******	*******	******	3.3	3.2	3.1	2.8	2.2	1.3
125	*******	******	******	******	*******	*******	*******	******	* * * * * * *	2.9	2.8	2.5	2.0	1.1
150	*******	*******	******	******	*******	*******	*******	******	* * * * * * * *	******	2.5	2.3	1.8	1.0
200	*******	******	******	******	*******	*******	*******	******	*******	*******	******	******	1.5	0.9
250	*******	******	******	******	*******	*******	*******	******	*******	*******	******	******	1.4	0.8
300	*******	*******	*******	******	*******	*******	*******	*******	*******	*******	*******	*******	******	07

Approximate Sampling Variability Tables for ALBERTA

NUMERATOR (PERCENTAGI	OF E				1	ESTIMATE	D PERCEN	FAGE						
('000)	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	72 5	72 1	71 8	70 7	68 8	66 8	64 8	62.8	60 7	58 5	56 2	513	397	22 9
2	*******	51 0	50 7	50.0	48 6	47 3	45 9	44 4	42.9	41 3	39.7	36.2	28 1	16 2
3	******	41 6	41 4	40.8	39 7	38 6	37 4	36.2	35 0	33 7	32.4	29.6	22 9	13 2
4	******	36 1	35.9	35 3	34 4	33 4	32.4	31 4	30 3	29 2	28 1	25.6	19 9	11 5
5	******	32 3	32 1	31 6	30.8	29 9	29 0	28 1	27 1	26 1	25 1	22.9	17.8	10 3
6	******	29.4	29.3	28.8	28.1	27.3	26.5	25.6	24.8	23.9	22.9	20.9	16.2	9.4
7	******	27.3	27.1	26.7	26.0	25.3	24.5	23.7	22.9	22.1	21.2	19.4	15.0	8.7
8	******	25.5	25.4	25.0	24.3	23.6	22.9	22.2	21.4	20.7	19.9	18.1	14.0	8.1
9	******	24.0	23.9	23.6	22.9	22.3	21.6	20.9	20.2	19.5	18.7	17.1	13.2	7.6
10	******	22.8	22.7	22.3	21.7	21.1	20.5	19.9	19.2	18.5	17.8	16.2	12.6	7.2
11	********	*****	21.6	21.3	20.7	20.2	19.6	18.9	18.3	17.6	16.9	15.5	12.0	6.9
12	*********	*****	20.7	20.4	19.9	19.3	18.7	18.1	17.5	16.9	16.2	14.8	11.5	6.6
13	********	*****	19.9	19.6	19.1	18.5	18.0	17.4	16.8	16.2	15.6	14.2	11.0	6.4
14	********	*****	19.2	18.9	18.4	17.9	17.3	16.8	16.2	15.6	15.0	13.7	10.6	6.1
15	********	*****	18.5	18.2	17.8	17.3	16.7	16.2	15.7	15.1	14.5	13.2	10.3	5.9
16	********	*****	17.9	17.7	17.2	16.7	16.2	15.7	15.2	14.6	14.0	12.8	9.9	5.7
17	********	*****	17.4	17.1	16.7	16.2	15.7	15.2	14.7	14.2	13.6	12.4	9.6	5.6
18	*********	*****	16.9	16.7	16.2	15.8	15.3	14.8	14.3	13.8	13.2	12.1	9.4	5.4
19	*********	*****	16.5	16.2	15.8	15.3	14.9	14.4	13.9	13.4	12.9	11.8	9.1	5.3
20	*********	*****	16.0	15.8	15.4	14.9	14.5	14.0	13.6	13.1	12.6	11.5	8.9	5.1
21	********	*****	15.7	15.4	15.0	14.6	14.2	13.7	13.2	12.8	12.3	11.2	8.7	5.0
22	*********	******	*****	15.1	14.7	14.3	13.8	13.4	12.9	12.5	12.0	10.9	8.5	4.9
23	********	******	*****	14.7	14.3	13.9	13.5	13.1	12.6	12.2	11.7	10.7	8.3	4.8
24	********	******	*****	14.4	14.0	13.6	13.2	12.8	12.4	11.9	11.5	10.5	8.1	4.7
25	********	******	*****	14.1	13.8	13.4	13.0	12.6	12.1	11.7	11.2	10.3	7.9	4.6
30	********	******	******	12.9	12.6	12.2	11.8	11.5	11.1	10.7	10.3	9.4	7.2	4.2
35	********	******	******	11.9	11.6	11.3	11.0	10.6	10.3	9.9	9.5	8.7	6.7	3.9
40	********	******	******	11.2	10.9	10.6	10.3	9.9	9.6	9.2	8.9	8.1	6.3	3.6
45	********	******	******	10.5	10.3	10.0	9.7	9.4	9.0	8.7	8.4	7.6	5.9	3.4
50	********	******	******	10.0	9.7	9.5	9.2	8.9	8.6	8.3	7.9	7.2	5.6	3.2
55	********	******	*******	*****	9.3	9.0	8.7	8.5	8.2	7.9	7.6	6.9	5.4	3.1
60	*********	******	*******	*****	8.9	8.6	8.4	8.1	7.8	7.5	7.2	6.6	5.1	3.0
65	*********	*******	*******	*****	8.5	8.3	8.0	7.8	7.5	7.2	7.0	6.4	4.9	2.8
70	*********	*******	*******	*****	8.2	8.0	7.8	7.5	7.2	7.0	6.7	6.1	4.7	2.7
75	*********	*******	*******	*****	7.9	7.7	7.5	7.2	7.0	6.7	6.5	5.9	4.6	2.6
80	********	*******	*******	*****	7.7	7.5	7.2	7.0	6.8	6.5	6.3	5.7	4.4	2.6
85	********	******	*******	*****	7.5	7.2	7.0	6.8	6.6	6.3	6.1	5.6	4.3	2.5
90	*********	******	*******	*****	7.2	7.0	6.8	6.6	6.4	6.2	5.9	5.4	4.2	2.4
95	*********	*******	********	*****	7.1	6.9	6.7	6.4	6.2	6.0	5.8	5.3	4.1	2.4
100	*********	******	*******	*****	6.9	6.7	6.5	6.3	6.1	5.8	5.6	5.1	4.0	2.3
125	*********	******	*******	******	******	6.0	5.8	5.6	5.4	5.2	5.0	4.6	3.6	2.1
150	**********	*******	********	******	******	5.5	5.3	5.1	5.0	4.8	4.6	4.2	3.2	1.9
200	*********	******	*******	******	*******	******	4.6	4.4	4.3	4.1	4.0	3.6	2.8	1.6
250	*********	******	*******	******	*********	*******	******	4.0	3.8	3.7	3.6	3.2	2.5	1.4
300	*********	· · · · · · · · · · · · · · · · · · ·	*******	*****	**********	*******	********	* * * * * * * * * * *	5.5	3.4	3.2	3.0	2.3	1.3
350	**********			*****	*********	*****		· · · · · · · · · · · · · · ·	~ ~ ~ ~ ~ ~ ~ ~ ~	3.1	3.0	2.7	2.1	1.2
400	*********	******	*******	******	*******	*******	******	******	*******	******	2.8	2.6	2.0	1.1
450	*********	· · · · · · · · · · · · · · · · · · ·	*******	******	*********	*********	*******	*******	*******	*******	******	2.4	1.9	1.1
500 750	**********	******	******	******	*******	*******	******	******	********	*******	******	2.3 *******	×*****	1.0 0.8

Approximate Sampling Variability Tables for BRITISH COLUMBIA

NUMERATOR	OF					ESTIMATE	D PERCEN	TAGE						
PERCENTAG	r臣 0 1を	1 0%	2 08	5 08	10 08	15 08	20 08	25 08	30 08	35 08	40 08	50 08	70 08	90 08
(000)	0.18	1.00	2.00	5.00	10.08	10.08	20.08	25.08	50.08	55.08	40.08	50.08	/0.08	20.08
1	86.5	86.1	85.7	84.4	82.1	79.8	77.4	74.9	72.4	69.8	67.0	61.2	47.4	27.4
2	******	60.9	60.6	59.6	58.1	56.4	54.7	53.0	51.2	49.3	47.4	43.3	33.5	19.4
3	******	49.7	49.5	48.7	47.4	46.1	44.7	43.3	41.8	40.3	38.7	35.3	27.4	15.8
4	******	43.1	42.8	42.2	41.1	39.9	38.7	37.5	36.2	34.9	33.5	30.6	23.7	13.7
5	******	38.5	38.3	37.7	36.7	35.7	34.6	33.5	32.4	31.2	30.0	27.4	21.2	12.2
6	******	35.2	35.0	34.4	33.5	32.6	31.6	30.6	29.6	28.5	27.4	25.0	19.4	11.2
7	******	32.5	32.4	31.9	31.0	30.2	29.3	28.3	27.4	26.4	25.3	23.1	17.9	10.3
8	*******	30.4	30.3	29.8	29.0	28.2	27.4	26.5	25.6	24.7	23.7	21.6	16.8	9.7
9	******	28.7	28.6	28.1	27.4	26.6	25.8	25.0	24.1	23.3	22.3	20.4	15.8	9.1
10	*******	27.2	27.1	26.7	26.0	25.2	24.5	23.7	22.9	22.1	21.2	19.4	15.0	8.7
11	*******	26.0	25.8	25.4	24.8	24.1	23.3	22.6	21.8	21.0	20.2	18.5	14.3	8.3
12	*******	24.9	24.7	24.4	23.7	23.0	22.3	21.6	20.9	20.1	19.4	17.7	13.7	7.9
13	*******	23.9	23.8	23.4	22.8	22.1	21.5	20.8	20.1	19.4	18.6	17.0	13.1	7.6
14	*******	23.0	22.9	22.5	21.9	21.3	20.7	20.0	19.4	18.6	17.9	16.4	12.7	7.3
15	*******	22.2	22.1	21.8	21.2	20.6	20.0	19.4	18.7	18.0	17.3	15.8	12.2	7.1
16	********	*****	21.4	21.1	20.5	19.9	19.4	18.7	18.1	17.4	16.8	15.3	11.9	6.8
17	********	******	20.8	20.5	19.9	19.4	18.8	18.2	17.6	16.9	16.3	14.8	11.5	6.6
18	********	******	20.2	19.9	19.4	18.8	18.2	17.7	17.1	16.4	15.8	14.4	11.2	6.5
19	********	******	19.7	19.4	18.8	18.3	17.8	17.2	16.6	16.0	15.4	14.0	10.9	6.3
20	********	******	19.2	18.9	18.4	17.8	17.3	16.8	16.2	15.6	15.0	13.7	10.6	6.1
21	********	******	18.7	18.4	17.9	17.4	16.9	16.4	15.8	15.2	14.6	13.4	10.3	6.0
22	********	*****	18.3	18.0	17.5	17.0	16.5	16.0	15.4	14.9	14.3	13.0	10.1	5.8
23	********	*****	17.9	17.6	17.1	16.6	16.1	15.6	15.1	14.5	14.0	12.8	9.9	5.7
24	********	*****	17.5	17.2	16.8	16.3	15.8	15.3	14.8	14.2	13.7	12.5	9.7	5.6
25	********	*****	17.1	16.9	16.4	16.0	15.5	15.0	14.5	14.0	13.4	12.2	9.5	5.5
30	********	*****	15.6	15.4	15.0	14.6	14.1	13.7	13.2	12.7	12.2	11.2	8.7	5.0
35	********	*******	*****	14.3	13.9	13.5	13.1	12.7	12.2	11.8	11.3	10.3	8.0	4.6
40	********	*******	* * * * * *	13.3	13.0	12.6	12.2	11.9	11.4	11.0	10.6	9.7	7.5	4.3
45	********	*******	*****	12.6	12.2	11.9	11.5	11.2	10.8	10.4	10.0	9.1	7.1	4.1
50	********	*******	*****	11.9	11.6	11.3	10.9	10.6	10.2	9.9	9.5	8.7	6.7	3.9
55	********	*******	*****	11.4	11.1	10.8	10.4	10.1	9.8	9.4	9.0	8.3	6.4	3.7
60	********	*******	*****	10.9	10.6	10.3	10.0	9.7	9.3	9.0	8.7	7.9	6.1	3.5
65	********	*******	*****	10.5	10.2	9.9	9.6	9.3	9.0	8.7	8.3	7.6	5.9	3.4
70	********	*******	*****	10.1	9.8	9.5	9.3	9.0	8.7	8.3	8.0	7.3	5.7	3.3
75	********	*******	*****	9.7	9.5	9.2	8.9	8.7	8.4	8.1	7.7	7.1	5.5	3.2
80	********	******	******	*****	9.2	8.9	8.7	8.4	8.1	7.8	7.5	6.8	5.3	3.1
85	********	******	******	*****	8.9	8.7	8.4	8.1	7.9	7.6	7.3	6.6	5.1	3.0
90	********	*******	* * * * * * * *	*****	8.7	8.4	8.2	7.9	7.6	7.4	7.1	6.5	5.0	2.9
95	********	*******	* * * * * * * *	*****	8.4	8.2	7.9	7.7	7.4	7.2	6.9	6.3	4.9	2.8
100	********	*******	* * * * * * * *	*****	8.2	8.0	7.7	7.5	7.2	7.0	6.7	6.1	4.7	2.7
125	********	******	******	*****	7.3	7.1	6.9	6.7	6.5	6.2	6.0	5.5	4.2	2.4
150	********	******	******	*****	6.7	6.5	6.3	6.1	5.9	5.7	5.5	5.0	3.9	2.2
200	********	******	******	******	******	5.6	5.5	5.3	5.1	4.9	4.7	4.3	3.4	1.9
250	********	******	******	******	******	******	4.9	4.7	4.6	4.4	4.2	3.9	3.0	1.7
300	********	******	******	******	******	******	4.5	4.3	4.2	4.0	3.9	3.5	2.7	1.6
350	********	******	******	******	******	*******	******	4.0	3.9	3.7	3.6	3.3	2.5	1.5
400	********	******	******	******	******	*******	******	******	3.6	3.5	3.4	3.1	2.4	1.4
450	********	******	******	******	******	*******	*******	* * * * * * *	3.4	3.3	3.2	2.9	2.2	1.3
500	********	******	******	******	******	*******	*******	******	******	3.1	3.0	2.7	2.1	1.2
750	********	******	******	******	******	*******	*******	******	*******	*******	******	2.2	1.7	1.0
1000	********	*******	*******	******	*******	*******	*******	* * * * * * * * *	* * * * * * * * *	* * * * * * * * *	*******	******	1.5	0.9

Approximate Sampling Variability Tables for ATLANTIC

NUMERATOR PERCENTAG	OF E				1	ESTIMATE) PERCEN	TAGE						
('000)	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	*******	42.8	42.6	42.0	40.9	39.7	38.5	37.3	36.0	34.7	33.4	30.4	23.6	13.6
2	*******	30.3	30.1	29.7	28.9	28.1	27.2	26.4	25.5	24.5	23.6	21.5	16.7	9.6
3	*******	24.7	24.6	24.2	23.6	22.9	22.2	21.5	20.8	20.0	19.3	17.6	13.6	7.9
4	*******	21.4	21.3	21.0	20.4	19.8	19.3	18.6	18.0	17.4	16.7	15.2	11.8	6.8
5	*******	19.2	19.1	18.8	18.3	17.8	17.2	16.7	16.1	15.5	14.9	13.6	10.5	6.1
6	*******	17.5	17.4	17.1	16.7	16.2	15.7	15.2	14.7	14.2	13.6	12.4	9.6	5.6
7	******	16.2	16.1	15.9	15.4	15.0	14.6	14.1	13.6	13.1	12.6	11.5	8.9	5.1
8	*******	15.1	15.1	14.8	14.4	14.0	13.6	13.2	12.7	12.3	11.8	10.8	8.3	4.8
9	*******	*****	14.2	14.0	13.6	13.2	12.8	12.4	12.0	11.6	11.1	10.1	7.9	4.5
10	*******	*****	13.5	13.3	12.9	12.6	12.2	11.8	11.4	11.0	10.5	9.6	7.5	4.3
11	*******	*****	12.9	12.7	12.3	12.0	11.6	11.2	10.9	10.5	10.1	9.2	7.1	4.1
12	********	*****	12.3	12.1	11.8	11.5	11.1	10.8	10.4	10.0	9.6	8.8	6.8	3.9
13	********	*****	11.8	11.6	11.3	11.0	10.7	10.3	10.0	9.6	9.3	8.4	6.5	3.8
14	********	*****	11.4	11.2	10.9	10.6	10.3	10.0	9.6	9.3	8.9	8.1	6.3	3.6
15	*******	*****	11.0	10.8	10.5	10.3	9.9	9.6	9.3	9.0	8.6	7.9	6.1	3.5
16	********	*****	10.7	10.5	10.2	9.9	9.6	9.3	9.0	8.7	8.3	7.6	5.9	3.4
17	********	*****	10.3	10.2	9.9	9.6	9.3	9.0	8.7	8.4	8.1	7.4	5.7	3.3
18	*******	******	*****	9.9	9.6	9.4	9.1	8.8	8.5	8.2	7.9	7.2	5.6	3.2
19	*******	******	*****	9.6	9.4	9.1	8.8	8.6	8.3	8.0	7.7	7.0	5.4	3.1
20	*******	******	*****	9.4	9.1	8.9	8.6	8.3	8.1	7.8	7.5	6.8	5.3	3.0
21	*******	******	******	9.2	8.9	8.7	8.4	8.1	7.9	7.6	7.3	6.6	5.1	3.0
22	*******	******	*****	8.9	8.7	8.5	8.2	8.0	7.7	7.4	7.1	6.5	5.0	2.9
23	*******	******	*****	8.8	8.5	8.3	8.0	7.8	7.5	7.2	7.0	6.3	4.9	2.8
24	*******	******	*****	8.6	8.3	8.1	7.9	7.6	7.4	7.1	6.8	6.2	4.8	2.8
25	*******	******	*****	8.4	8.2	7.9	7.7	7.5	7.2	6.9	6.7	6.1	4.7	2.7
30	*******	******	*****	7.7	7.5	7.2	7.0	6.8	6.6	6.3	6.1	5.6	4.3	2.5
35	*******	******	*****	7.1	6.9	6.7	6.5	6.3	6.1	5.9	5.6	5.1	4.0	2.3
40	*******	******	*****	6.6	6.5	6.3	6.1	5.9	5.7	5.5	5.3	4.8	3.7	2.2
45	*******	******	*******	*****	6.1	5.9	5.7	5.6	5.4	5.2	5.0	4.5	3.5	2.0
50	********	******	*******	*****	5.8	5.6	5.4	5.3	5.1	4.9	4.7	4.3	3.3	1.9
55	********	******	*******	*****	5.5	5.4	5.2	5.0	4.9	4.7	4.5	4.1	3.2	1.8
60	*******	******	*******	*****	5.3	5.1	5.0	4.8	4.7	4.5	4.3	3.9	3.0	1.8
65	*******	******	*******	*****	5.1	4.9	4.8	4.6	4.5	4.3	4.1	3.8	2.9	1.7
70	********	******	*******	*****	4.9	4.7	4.6	4.5	4.3	4.1	4.0	3.6	2.8	1.6
75	*******	******	*******	*****	4.7	4.6	4.4	4.3	4.2	4.0	3.9	3.5	2.7	1.6
80	*******	******	*******	*****	4.6	4.4	4.3	4.2	4.0	3.9	3.7	3.4	2.6	1.5
85	********	******	*******	*****	4.4	4.3	4.2	4.0	3.9	3.8	3.6	3.3	2.6	1.5
90	********	******	*******	******	******	4.2	4.1	3.9	3.8	3.7	3.5	3.2	2.5	1.4
95	********	******	*******	******	******	4.1	4.0	3.8	3.7	3.6	3.4	3.1	2.4	1.4
100	********	******	*******	******	******	4.0	3.9	3.7	3.6	3.5	3.3	3.0	2.4	1.4
125	*******	******	*******	******	******	3.6	3.4	3.3	3.2	3.1	3.0	2.7	2.1	1.2
150	********	******	*******	******	*******	******	3.1	3.0	2.9	2.8	2.7	2.5	1.9	1.1
200	********	*******	*******	******	*******	*******	******	2.6	2.5	2.5	2.4	2.2	1.7	1.0
250	********	******	*******	******	*******	******	******	******	2.3	2.2	2.1	1.9	1.5	0.9
300	********	*******	*******	******	*******	*******	*******	*******	******	2.0	1.9	1.8	1.4	0.8
350	********	*******	*******	******	*******	*******	*******	*******	*******	******	1.8	1.6	1.3	0.7
400	*******	******	*******	******	******	*******	******	******	*******	*******	******	1.5	1.2	0.7
450	*******	******	*******	******	******	*******	******	******	*******	*******	*******	******	1.1	0.6
500	*******	******	*******	******	******	*******	******	******	*******	*******	*******	******	1.1	0.6
750	*******	******	*******	******	******	******	******	* * * * * * * * *	* * * * * * * * *	******	*******	******	* * * * * * *	0.5

Approximate Sampling Variability Tables for PRAIRIES

NUMERATOR PERCENTAG	OF E				1	ESTIMATE	D PERCEN	TAGE						
('000)	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	62.9	62.6	62.3	61.3	59.7	58.0	56.3	54.5	52.6	50.7	48.7	44.5	34.4	19.9
2	******	44.3	44.0	43.3	42.2	41.0	39.8	38.5	37.2	35.9	34.4	31.4	24.4	14.1
3	******	36.1	35.9	35.4	34.4	33.5	32.5	31.4	30.4	29.3	28.1	25.7	19.9	11.5
4	******	31.3	31.1	30.7	29.8	29.0	28.1	27.2	26.3	25.4	24.4	22.2	17.2	9.9
5	******	28.0	27.8	27.4	26.7	25.9	25.2	24.4	23.5	22.7	21.8	19.9	15.4	8.9
6	******	25.5	25.4	25.0	24.4	23.7	23.0	22.2	21.5	20.7	19.9	18.2	14.1	8.1
7	******	23.7	23.5	23.2	22.6	21.9	21.3	20.6	19.9	19.2	18.4	16.8	13.0	7.5
8	******	22.1	22.0	21.7	21.1	20.5	19.9	19.3	18.6	17.9	17.2	15.7	12.2	7.0
9	******	20.9	20.8	20.4	19.9	19.3	18.8	18.2	17.5	16.9	16.2	14.8	11.5	6.6
10	******	19.8	19.7	19.4	18.9	18.3	17.8	17.2	16.6	16.0	15.4	14.1	10.9	6.3
11	******	18.9	18.8	18.5	18.0	17.5	17.0	16.4	15.9	15.3	14.7	13.4	10.4	6.0
12	******	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
13	******	17.4	17.3	17.0	16.5	16.1	15.6	15.1	14.6	14.1	13.5	12.3	9.6	5.5
14	******	16.7	16.6	16.4	15.9	15.5	15.0	14.6	14.1	13.6	13.0	11.9	9.2	5.3
15	******	16.2	16.1	15.8	15.4	15.0	14.5	14.1	13.6	13.1	12.6	11.5	8.9	5.1
16	******	15.6	15.6	15.3	14.9	14.5	14.1	13.6	13.2	12.7	12.2	11.1	8.6	5.0
17	******	15.2	15.1	14.9	14.5	14.1	13.6	13.2	12.8	12.3	11.8	10.8	8.4	4.8
18	******	14.8	14.7	14.4	14.1	13.7	13.3	12.8	12.4	12.0	11.5	10.5	8.1	4.7
19	*******	*****	14.3	14.1	13.7	13.3	12.9	12.5	12.1	11.6	11.2	10.2	7.9	4.6
20	*******	*****	13.9	13.7	13.3	13.0	12.6	12.2	11.8	11.3	10.9	9.9	7.7	4.4
21	********	*****	13.6	13.4	13.0	12.7	12.3	11.9	11.5	11.1	10.6	9.7	7.5	4.3
22	*******	*****	13.3	13.1	12.7	12.4	12.0	11.6	11.2	10.8	10.4	9.5	7.3	4.2
23	*******	*****	13.0	12.8	12.4	12.1	11.7	11.4	11.0	10.6	10.2	9.3	7.2	4.1
24	*******	*****	12.7	12.5	12.2	11.8	11.5	11.1	10.7	10.4	9.9	9.1	7.0	4.1
25	*******	*****	12.5	12.3	11.9	11.6	11.3	10.9	10.5	10.1	9.7	8.9	6.9	4.0
30	*******	*****	11.4	11.2	10.9	10.6	10.3	9.9	9.6	9.3	8.9	8.1	6.3	3.6
35	*******	*****	10.5	10.4	10.1	9.8	9.5	9.2	8.9	8.6	8.2	7.5	5.8	3.4
40	*******	*******	******	9.7	9.4	9.2	8.9	8.6	8.3	8.0	7.7	7.0	5.4	3.1
45	*******	*******	******	9.1	8.9	8.6	8.4	8.1	7.8	7.6	7.3	6.6	5.1	3.0
50	********	******	******	8.7	8.4	8.2	8.0	7.7	7.4	7.2	6.9	6.3	4.9	2.8
55	********	*******	******	8.3	8.0	7.8	7.6	7.3	7.1	6.8	6.6	6.0	4.6	2.7
60	********	*******	******	7.9	7.7	7.5	7.3	7.0	6.8	6.5	6.3	5.7	4.4	2.6
65	********	******	******	7.6	7.4	7.2	7.0	6.8	6.5	6.3	6.0	5.5	4.3	2.5
70	*******	*******	******	7.3	7.1	6.9	6.7	6.5	6.3	6.1	5.8	5.3	4.1	2.4
75	********	******	******	7.1	6.9	6.7	6.5	6.3	6.1	5.9	5.6	5.1	4.0	2.3
80	********	******	******	6.9	6.7	6.5	6.3	6.1	5.9	5.7	5.4	5.0	3.9	2.2
85	*******	******	******	6.6	6.5	6.3	6.1	5.9	5.7	5.5	5.3	4.8	3.7	2.2
90	*******	******	******	6.5	6.3	6.1	5.9	5.7	5.5	5.3	5.1	4.7	3.6	2.1
95	*******	******	*******	*****	6.1	5.9	5.8	5.6	5.4	5.2	5.0	4.6	3.5	2.0
100	*******	******	******	*****	6.0	5.8	5.6	5.4	5.3	5.1	4.9	4.4	3.4	2.0
125	*******	******	*******	*****	5.3	5.2	5.0	4.9	4.7	4.5	4.4	4.0	3.1	1.8
150	*******	******	******	*****	4.9	4.7	4.6	4.4	4.3	4.1	4.0	3.6	2.8	1.6
200	*******	******	******	******	******	4.1	4.0	3.9	3.7	3.6	3.4	3.1	2.4	1.4
250	*******	******	******	******	******	3.7	3.6	3.4	3.3	3.2	3.1	2.8	2.2	1.3
300	*******	******	******	******	* * * * * * * * *	******	3.2	3.1	3.0	2.9	2.8	2.6	2.0	1.1
350	*******	******	*******	******	* * * * * * * * *	******	3.0	2.9	2.8	2.7	2.6	2.4	1.8	1.1
400	*******	******	******	******	* * * * * * * * *	*******	******	2.7	2.6	2.5	2.4	2.2	1.7	1.0
450	*******	******	******	******	* * * * * * * * *	*******	******	2.6	2.5	2.4	2.3	2.1	1.6	0.9
500	*******	******	******	******	* * * * * * * * *	*******	******	******	2.4	2.3	2.2	2.0	1.5	0.9
750	*******	******	******	******	* * * * * * * * *	*******	******	******	* * * * * * * * *	* * * * * * * * *	******	1.6	1.3	0.7
1000	*******	******	******	******	******	******	******	* * * * * * * *	******	* * * * * * * *	******	*****	1.1	0.6
1500	*******	******	*******	******	* * * * * * * * *	******	******	******	******	*******	******	*******	******	0.5

HOUSEHOLD INTERNET USE SURVEY - 1098 Approximate Sampling Variability Tables for CANADA NUMERATOR OF PERCENTAGE

PERCENTAGE														
('000)	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%
-	FO 1					TO 1	<u> </u>		65.4	<i>c</i> 2 0	60 G	F F - 0	40.0	
1	/8.1	//.8	//.4	76.2	74.2	/2.1	69.9	67.7	65.4	63.0	60.6	55.3	42.8	24.7
2	55.3	55.0	54.7	53.9	52.4	51.0	49.4	47.9	46.3	44.6	42.8	39.1	30.3	17.5
3	45.1	44.9	44.7	44.0	42.8	41.6	40.4	39.1	37.8	36.4	35.0	31.9	24.7	14.3
4	39.1	38.9	38.7	38.1	37.1	36.0	35.0	33.9	32.7	31.5	30.3	27.6	21.4	12.4
5	34.9	34.8	34.6	34.1	33.2	32.2	31.3	30.3	29.3	28.2	27.1	24.7	19.1	11.1
6	31.9	31.8	31.6	31.1	30.3	29.4	28.5	27.6	26.7	25.7	24.7	22.6	17.5	10.1
7	29.5	29.4	29.3	28.8	28.0	27.2	26.4	25.6	24.7	23.8	22.9	20.9	16.2	9.3
8	27.6	27.5	27.4	26.9	26.2	25.5	24.7	23.9	23.1	22.3	21.4	19.5	15.1	8.7
9	26.0	25.9	25.8	25.4	24.7	24.0	23.3	22.6	21.8	21.0	20.2	18.4	14.3	8.2
10	24.7	24.6	24.5	24.1	23.5	22.8	22.1	21.4	20.7	19.9	19.1	17.5	13.5	7.8
11	23.6	23.5	23.3	23.0	22.4	21.7	21.1	20.4	19.7	19.0	18.3	16.7	12.9	7.5
12	*******	22.5	22.3	22.0	21.4	20.8	20.2	19.5	18.9	18.2	17.5	16.0	12.4	7.1
13	*******	21.6	21.5	21.1	20.6	20.0	19.4	18.8	18.1	17.5	16.8	15.3	11.9	6.9
14	*******	20.8	20.7	20.4	19.8	19.3	18.7	18.1	17.5	16.8	16.2	14.8	11.4	6.6
15	*******	20.1	20.0	19.7	19.1	18.6	18.1	17.5	16.9	16.3	15.6	14.3	11.1	6.4
16	*******	19.4	19.3	19.0	18.5	18.0	17.5	16.9	16.4	15.8	15.1	13.8	10.7	6.2
17	*******	18.9	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	*******	18.3	18.2	18.0	17.5	17.0	16.5	16.0	15.4	14.9	14.3	13.0	10.1	5.8
19	*******	17.8	17.8	17.5	17.0	16.5	16.0	15.5	15.0	14.5	13.9	12.7	9.8	5.7
20	******	17.4	17.3	17.0	16.6	16.1	15.6	15.1	14.6	14.1	13.5	12.4	9.6	5.5
21	******	17.0	16.9	16.6	16.2	15.7	15.3	14.8	14.3	13.8	13.2	12.1	9.3	5.4
22	******	16.6	16.5	16.2	15.8	15.4	14.9	14.4	13.9	13.4	12.9	11.8	9.1	5.3
23	******	16.2	16.1	15.9	15.5	15.0	14.6	14.1	13.6	13.1	12.6	11.5	8.9	5.2
24	******	15.9	15.8	15.6	15.1	14.7	14.3	13.8	13.4	12.9	12.4	11.3	8.7	5.0
25	******	15.6	15.5	15.2	14.8	14.4	14.0	13.5	13.1	12.6	12.1	11.1	8.6	4.9
30	*******	14.2	14.1	13.9	13.5	13.2	12.8	12.4	11.9	11.5	11.1	10.1	7.8	4.5
35	******	13.1	13.1	12.9	12.5	12.2	11.8	11.4	11.1	10.7	10.2	9.3	7.2	4.2
40	******	12.3	12.2	12.0	11.7	11.4	11.1	10.7	10.3	10.0	9.6	8.7	6.8	3.9
45	******	11.6	11.5	11.4	11.1	10.7	10.4	10.1	9.8	9.4	9.0	8.2	6.4	3.7
50	******	11.0	10.9	10.8	10.5	10.2	9.9	9.6	9.3	8.9	8.6	7.8	6.1	3.5
55	******	10.5	10.4	10.3	10.0	9.7	9.4	9.1	8.8	8.5	8.2	7.5	5.8	3.3
60	*******	10.0	10.0	9.8	9.6	9.3	9.0	8.7	8.4	8.1	7.8	7.1	5.5	3.2
65	*******	9.6	9.6	9.5	9.2	8.9	8.7	8.4	8.1	7.8	7.5	6.9	5.3	3.1
70	******	9.3	9.3	9.1	8.9	8.6	8.4	8.1	7.8	7.5	7.2	6.6	5.1	3.0
75	******	9.0	8.9	8.8	8.6	8.3	8.1	7.8	7.6	7.3	7.0	6.4	4.9	2.9
80	******	8.7	8.7	8.5	8.3	8.1	7.8	7.6	7.3	7.0	6.8	6.2	4.8	2.8
85	******	8.4	8.4	8.3	8.0	7.8	7.6	7.3	7.1	6.8	6.6	6.0	4.6	2.7
90	*******	8.2	8.2	8.0	7.8	7.6	7.4	7.1	6.9	6.6	6.4	5.8	4.5	2.6
95	*******	8.0	7.9	7.8	7.6	7.4	7.2	6.9	6.7	6.5	6.2	5.7	4.4	2.5
100	******	7.8	7.7	7.6	7.4	7.2	7.0	6.8	6.5	6.3	6.1	5.5	4.3	2.5
125	******	*****	6.9	6.8	6.6	6.4	6.3	6.1	5.9	5.6	5.4	4.9	3.8	2.2
150	******	*****	6.3	6.2	6.1	5.9	5.7	5.5	5.3	5.1	4.9	4.5	3.5	2.0
200	******	*****	5.5	5.4	5.2	5.1	4.9	4.8	4.6	4.5	4.3	3.9	3.0	1.7
250	******	******	*****	4.8	4.7	4.6	4.4	4.3	4.1	4.0	3.8	3.5	2.7	1.6
300	*******	*******	*****	4.4	4.3	4.2	4.0	3.9	3.8	3.6	3.5	3.2	2.5	1.4
350	*******	*******	*****	4.1	4.0	3.9	3.7	3.6	3.5	3.4	3.2	3.0	2.3	1.3
400	*******	*******	*****	3.8	3.7	3.6	3.5	3.4	3.3	3.2	3.0	2.8	2.1	1.2
450	*******	*******	*****	3.6	3.5	3.4	3.3	3.2	3.1	3.0	2.9	2.6	2.0	1.2
500	*******	*******	*****	3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.7	2.5	1.9	1.1
750	*******	*******	******	*****	2.7	2.6	2.6	2.5	2.4	2.3	2.2	2.0	1.6	0.9
1000	*******	******	******	*****	2.3	2.3	2.2	2.1	2.1	2.0	1.9	1.7	1.4	0.8
1500	*******	******	******	******	******	1.9	1.8	1.7	1.7	1.6	1.6	1.4	1.1	0.6
2000	*******	******	******	******	******	******	1.6	1.5	1.5	1.4	1.4	1.2	1.0	0.6
3000	*******	******	******	******	******	*******	*******	******	1.2	1.2	1.1	1.0	0.8	0.5
4000	*******	******	******	******	******	******	******	******	******	1.0	1.0	0.9	0.7	0.4
5000	*******	******	******	******	******	******	******	******	******	******	*****	0.8	0.6	0.3
6000	*******	******	******	******	******	*******	*******	*******	*******	*******	******	******	0.6	0.3
7000	*******	******	******	******	******	******	*******	******	*******	*******	*******	******	0.5	0.3
8000	*******	******	******	******	******	******	*******	******	*******	*******	*******	******	0.5	0.3
9000	*******	******	******	******	******	******	******	******	******	******	******	******	******	0.3
10000	*******	******	******	******	******	******	******	******	******	******	******	******	******	0.2

ESTIMATED PERCENTAGE



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 subweight for each responding HIUS record by:

sum of LFS subweights from each household responding to LFS 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 :

t

population total for province-stratum i sum of WEIGHT1 for survey respondents in province-stratum i

o 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 1998 to collect the information for the supplementary survey.

101A

This is a voluntary survey about the use of computers by members of your household to communicate with other computers.

Universe: All respondents

I01B

By communicate, I mean using a computer connected to a communications network for things like electronic banking, E-mail, and going on the Internet.

101C

INTERVIEWER: RECORD THE STATUS OF THE INTERVIEW. IF THE RESPONDENT REFUSES TO CONTINUE AFTER THE INTERVIEW HAS BEEN STARTED, PRESS F10 TO EXIT.

<01>	Proceed with interview	
<02>	Interview refused	go to Q19

Q01A

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

<01>	Yes
<02>	No go to Q12
<97>	Don't know go to Q12
<98>	Refused go to Q12
Universe:	Respondents who answered proceed with interview in the above question. E.g. I01C='01'

Q01B

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

< 01>	Yes
<02>	No go to Q12
<97>	Don't know go to Q12
<98>	Refused go to Q12
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 described 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 (ANYLT18='02'), go to I03. Otherwise go to Q02A.

Q02A

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

<01>	Yes
<02>	No
<97>	Don't know
<98>	Refused
Universe:	All with children under 18 answering `yes' to $\ensuremath{Q01B}$

Q02B

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

<01>	Yes
<02>	No
<97>	Don't know
<98>	Refused
Universe:	All with children under 18 answering `yes ` to $\ensuremath{Q01B}$

C03

If neither Q02A and Q02B are equal to `yes', go to Q12

103

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

Q03A

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

<01>	Yes
<02>	No
<97>	Don't know
<98>	Refused
Universe:	Those with positive responses in Q01B

Q03B

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

<01>	Yes
<02>	No
<97>	Don't know
<98>	Refused
Universe:	Those with positive responses in Q01B

Q03C

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

<01>	Yes
<02>	No
<97>	Don't know
<98>	Refused
Universe:	Those with positive responses in Q01B

Q03D

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

<01>	Yes
<02>	No
<97>	Don't know
<98>	Refused
Universe:	Those with positive responses in Q01B

Q03E

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

<01>	Yes
<02>	No
<97>	Don't know
<98>	Refused
Universe:	Those with positive responses in Q01B

C04

If Q03A = `yes', go to I04. Otherwise go to Q12

104

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

Q04

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

<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
<97>	Don't know
<98>	Refused
Universe:	Those answering `yes' to Q03A

Q05

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

<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
<97>	Don't know
<98>	Refused
Universe:	Those answering `yes' to Q03A

Q06A

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)

<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%
<97>	Don't know
<98>	Refused
Universe:	Those answering `yes' to Q03A

C06B

If Q06A = `8', go to Q07

Q06B

In a typical month, what share (percentage) of the household's total 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)

<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%
<97>	Don't know
<98>	Refused
Universe:	Those answering `yes' to Q03A

C06C

If Q06B = 8' go to Q07.

Q06C

In a typical month, what share (percentage) of the household's total 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)

None
Less than 10 %
At least 10% but less than 25%
At least 25% but less than 50%
At least 50% but less than 75%
At least 75% but less than 90%
At least 90% but less than 100%
100%
Don't know
Refused
Those answering `yes' to Q03A

Q07

In a typical month does any member of your household use the Internet from home, which includes E-Mail and other services on the world wide web?

<01>	Yes	go to Q09A
<02>	No	-
<97>	Don't know	
<98>	Refused	
Universe:	Those answering `yes' to Q03A	

Q08

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

<01>	Yes	go to C10B
<02>	No	-
<97>	Don't know	
<98>	Refused	
Default Next Question	on: I11	
Universe:	Those not answering `yes' to Q07	


Q09A

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

<01>	Yes
<02>	No
<97>	Don't know
<98>	Refused
Universe:	Those answering `yes' to Q07

Q09B

IN A TYPICAL MONTH DOES ANY MEMBER OF YOUR HOUSEHOLD USE A COMPUTER AT HOME for Electronic banking?

<01>	Yes
<02>	No
<97>	Don't know
<98>	Refused
Universe:	Those answering `yes' to Q07

Q09C

IN A TYPICAL MONTH DOES ANY MEMBER OF YOUR HOUSEHOLD USE A COMPUTER AT HOME to purchase goods and services on the Internet?

<01>	Yes
<02>	No
<97>	Don't know
<98>	Refused
Universe:	Those answering `yes' to Q07

Q09D

IN A TYPICAL MONTH DOES ANY MEMBER OF YOUR HOUSEHOLD USE A COMPUTER AT HOME to search for medical or health related information on the Internet?

<01>	Yes
<02>	No
<97>	Don't know
<98>	Refused
Universe:	Those answering `yes' to Q07

Q09E

IN A TYPICAL MONTH DOES ANY MEMBER OF YOUR HOUSEHOLD USE A COMPUTER AT HOME to access the Internet for formal education or training?

<01>	Yes
<02>	No
<97>	Don't know
<98>	Refused
Universe:	Those answering `yes' to Q07

Q09F

IN A TYPICAL MONTH DOES ANY MEMBER OF YOUR HOUSEHOLD USE A COMPUTER AT HOME to look for government information on the Internet?

<01>	Yes
<02>	No
<97>	Don't know
<98>	Refused
Universe:	Those answering `yes' to Q07

Q09G

IN A TYPICAL MONTH DOES ANY MEMBER OF YOUR HOUSEHOLD USE A COMPUTER AT HOME to look for other specific information on the Internet?

<01>	Yes
<02>	No
<97>	Don't know
<98>	Refused
Universe:	Those answering `yes' to Q07

Q09H

IN A TYPICAL MONTH DOES ANY MEMBER OF YOUR HOUSEHOLD USE A COMPUTER AT HOME for general browsing on the Internet?

Yes
No
Don't know
Refused
Those answering `yes' to Q07

Q091

IN A TYPICAL MONTH DOES ANY MEMBER OF YOUR HOUSEHOLD USE A COMPUTER AT HOME to play games on the Internet?

Yes
No
Don't know
Refused
Those answering `yes' to Q07

Q09J

IN A TYPICAL MONTH DOES ANY MEMBER OF YOUR HOUSEHOLD USE A COMPUTER AT HOME to participate in chat groups on the Internet?

<01>	Yes
<02>	No
<97>	Don't know
<98>	Refused
Universe:	Those answering `yes' to Q07

Q09K

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?

<01>	Yes
<02>	No
<97>	Don't know
<98>	Refused
Universe:	Those answering `yes' to Q07

C09L

If Q09E = `01', go to Q09L. Otherwise go to C10A

Q09LP

For what specific educational purposes do members or your household use the Internet? (INTERVEWER: READ THE LIST AND MARK ALL THAT APPLY)

<01>	Distance education, self directed learning or
	correspondance courses
<02>	To research information for project assignments or for
	solving academic related problems
<03>	To communicate with teachers and peers
<04>	For other reasons not mentioned
<97>	Don't know
<98>	Refused
Universe:	Those answering `01' to Q09E

C10A

If Q09A ='01 ' and Q09B to Q09K are not equal to `01', mark Q10A as `7' and go to I11. If Q09A ='01' and any from Q09B to Q09K = `01', go to Q10A. Otherwise go to C10B.

Q10A

In a typical month, what share (percentage) of the total time using computer communications 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)

<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%
<97>	Don't know
<98>	Refused
Universe:	Those answering `01' to Q08 or `01' to Q09A

C10B

If (Q08 = '01' or Q09B = '01') and Q09A or Q09C to Q09K are not equal to `01', mark Q10B as `7' and go to I11. If Q08 = '01' or Q09B = '01' and any of Q09A or Q09C to Q09K = `01', go to Q10B. Otherwise go to C10C.

Q10B

In a typical month, what share (percentage) of the total time using computer communications 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)

<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%
<97>	Don't know
<98>	Refused
Universe:	Those answering `01' to Q08 or `01' to Q09B.

C10C

If Q09C = `01' and Q09A to Q09B are not equal to `01' or Q09D to Q09K are not equal to `01', mark Q10C as `7' and go to I11. If Q09C ='01' and any from Q09A to Q09B = `01' or any from Q09D to Q09K = `01', go to Q10C. If Q08='01' go to I11. Otherwise go to C10D.

Q10C

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

<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%
<97>	Don't know
<98>	Refused
Universe:	Those answering `01' to Q09C

C10D

If Q09D = `01' and Q09A to Q09C are not equal to `01' or Q09E to Q09K are not equal to `01', mark Q10D as `7' and go to I11. If Q09D ='01' or any from Q09A to Q09C = `01' or any from Q09E to Q09K=`01', go to Q10D. Otherwise go to C10E.

Q10D

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

<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%
<97>	Don't know
<98>	Refused
Universe:	Those answering `01' to Q09D

C10E

If Q09E = `01' and answers in Q09A to Q09D are not equal to `01' or Q09F to Q09K are not equal to `01', mark Q10E as `7' and go to I11. If Q09E ='01' or any from Q09A to Q09D = `01' or any from Q09F to Q09K =`01', go to Q10E. Otherwise go to C10F.

Q10E

In a typical month, what share (percentage) of the total time using computer communications at home do members of your household use the Internet for formal education or training? (INTERVIEWER: DON'T READ THE ANSWER CATEGORIES. USE THEM AS A GUIDE IF THE RESPONDENT NEEDS PROMPTING)

<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%
<97>	Don't know
<98>	Refused
Universe:	Those answering `01' to Q09E

C10F

If Q09F = `01' and Q09A to Q09E are not equal to `01' or Q09G to Q09K are not equal to `01', mark Q10F as `7' and go to I11. If Q09F ='01' or any from Q09A to Q09E = `01' or any from Q09G to Q09K =`01', go to Q10F. Otherwise go to C10G.

Q10F

In a typical month, what share (percentage) of the total time using computer communications at home do members of your household spend looking for government information on the world wide web? (INTERVIEWER: DON'T READ THE ANSWER CATEGORIES. USE THEM AS A GUIDE IF THE RESPONDENT NEEDS PROMPTING)

<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%
<97>	Don't know
<98>	Refused
Universe:	Those answering `01' to Q09F

C10G

If Q09G = `01' and Q09A to Q09F are not equal to `01' or Q09H to Q09K are not equal to `01', mark Q10G as `7' and go to I11. If Q09G ='01' and any from Q09A to Q09F = `01' or any from Q09H to Q09K =`01', go to Q10G. Otherwise go to C10H.

Q10G

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

<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%
<97>	Don't know
<98>	Refused
Universe:	Those answering `01' to Q09G

C10H

If Q09H = `01' and Q09A to Q09G are not equal to `01' or Q09I to Q09K are not equal to `01', mark Q10H as `7' and go to I11. If Q09H ='01' and any from Q09A to Q09G = `01' or any from Q09I to Q09K =`01', go to Q10H. Otherwise go to C10I.

Q10H

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

<01> <02> <03> <04> <05> <06> <07> <97> <98>	Less than 10 % At least 10% but less than 25% At least 25% but less than 50% At least 50% but less than 75% At least 75% but less than 90% At least 90% but less than 100% 100% Don't know
<97>	Don't know
<98> Universe:	Retused Those answering `01' to Q09H

C10I

If Q09I = `01' and Q09A to Q09H are not equal to `01' or Q09J to Q09K are not equal to `01', mark Q10I as `7' and go to I11. If Q09I ='01' and any from Q09A to Q09H = `01' or any from Q09J to Q09K =`01', go to Q10I. Otherwise go to I10J.

Q10I

In a typical month, what share (percentage) of the total time using computer communications at home do members of your household spend playing games on the Internet? (INTERVIEWER: DON'T READ THE ANSWER CATEGORIES. USE THEM AS A GUIDE IF THE RESPONDENT NEEDS PROMPTING)

<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%
<97>	Don't know
<98>	Refused
Universe:	Those answering `01' to Q09I

C10J

If Q09J = `01' and Q09A to Q09I are not equal to `01' or Q09K is not equal to `01', mark Q10J as `7' and go to I11. If Q09J = '01' and any from Q09A to Q09I = `01' or Q09K = `01', go to Q10J. Otherwise go to C10K.

Q10J

In a typical month, what share (percentage) of the total time using computer communications at home do members of your household participate in chat groups on the Internet? (INTERVIEWER: DON'T READ THE ANSWER CATEGORIES. USE THEM AS A GUIDE IF THE RESPONDENT NEEDS PROMPTING)

<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% <97> Don't know <98> Refused Universe: Those answering `01' to Q09J	<01>	Less than 10%
<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%<97>Don't know<98>RefusedUniverse:Those answering `01' to Q09J	<02>	At least 10% but less than 25%
<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%<97>Don't know<98>RefusedUniverse:Those answering `01' to Q09J	<03>	At least 25% but less than 50%
<05> At least 75% but less than 90% <06> At least 90% but less than 100 <07> 100% <97> Don't know <98> Refused Universe: Those answering `01' to Q09J	<04>	At least 50% but less than 75%
<06> At least 90% but less than 100 <07> 100% <97> Don't know <98> Refused Universe: Those answering `01' to Q09J	<05>	At least 75% but less than 90%
<07> 100% <97> Don't know <98> Refused Universe: Those answering `01' to Q09J	<06>	At least 90% but less than 100%
<97>Don't know<98>RefusedUniverse:Those answering `01' to Q09J	<07>	100%
<98>RefusedUniverse:Those answering `01' to Q09J	<97>	Don't know
Universe: Those answering `01' to Q09J	<98>	Refused
	Universe:	Those answering `01' to Q09J

C10K

If Q09K = `01' and Q09A to Q09J are not equal to `01', mark Q10K as `7' and go to I11. If Q09K ='01' and any from Q09A to Q09J = `01', go to Q10K. Otherwise go to I11.

Q10K

In a typical month, what share (percentage) of the total time using computer communications 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)

Less than 10 %
At least 10% but less than 25%
At least 25% but less than 50%
At least 50% but less than 75%
At least 75% but less than 90%
At least 90% but less than 100%
100%
Don't know
Refused
Those answering `01' to Q09K

111

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



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)

<01>	Substantially
<02>	Noticeably
<03>	Little or nothing
<97>	Don't know
<98>	Refused
Universe:	Those answering `yes' to Q03A

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)

<01>	Substantially
<02>	Noticeably
<03>	Little or nothing
<97>	Don't know
<98>	Refused
Universe:	Those answering `yes' to Q03A

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)

<01>	Substantially
<02>	Noticeably
<03>	Little or nothing
<97>	Don't know
<98>	Refused
Default Next Questic	on: Q15
Universe:	Those answering `yes' to Q03A

Q12

Do you have a computer at home?

<01>	Yes
<02>	No go to Q13B
<97>	Don't know go to Q13B
<98>	Refused go to Q13B
Universe:	Those not answering `yes' to Q01A or Q01B or Q03A

Q13AP

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).

<01>	it costs too much	
<02>	it is too complex	
<03>	you do use them at work	
<04>	you do use them at another location	
<05>	it does not offer enough useful services	
<06>	other reasons	
<97>	Don't know	
<98>	Refused	
Default Next Question: Q14A		
Universe:	Those answering `yes' to Q12	

Q13BP

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

<01>	the cost was much lower
<02>	they could be easily accessed through the television using remote control
<03>	more and better services were offered (more shopping, banking etc.)
<04>	nothing would induce you
<05>	other reasons
<97>	Don't know
<98>	Refused
Universe:	Those answering `no', `don't know' or `refused' to Q12

Q14A

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?

<01>	Yes
<02>	No go to Q15
<97>	Don't know go to Q15
<98>	Refused
Universe:	Those answering `no' to Q01A or Q01B or Q03A

Q14B

In your opinion what is the most important factor that would prompt members of your household to use computer communications from a public library or other public place?

<01>	Cost
<02>	Ease of use
<03>	Both about the same
<97>	Don't know
<98>	Refused
Universe:	Those answering `yes' to Q014A

Q15P

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.

<01>	Wages and salaries
<02>	Income from self-employment
<03>	Dividends and interest on bonds, savings, stocks, etc
<04>	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 I18
<97>	Don't know
<98>	Refused
Universe:	all respondents

Q16

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? [Min: 1 Max: 999990]

<999997>	Don't know
<999998>	Refused
Note:	If amount is entered, go to I18.
Universe:	respondent who answered Q15P14='01' or (Q15 ne `14')



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

<01>	Less than \$20,000
<02>	\$20,000 and more go to Q17E
<97>	Don't know go to I18
<98>	Refused go to I18
Universe:	Those answering `Don't know' or `Refused' to Q16

Q17B

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

<01>	Less than \$10,000
<02>	\$10,000 and more go to Q17D
<97>	Don't know go to I18
<98>	Refused go to I18
Universe:	Those answering `01' to Q17A

Q17C

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

<01>	Less than \$5,000	
<02>	\$5,000 and more	
<97>	Don't know	
<98>	Refused	
Default Next Question: I18		
Universe:	Those answering `01' to Q17B	

Q17D

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

Less than \$15,000
\$15,000 and more
Don't know
Refused
on: I18
Those answering `02 to Q17B

Q17E

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

<01>	Less than \$40,000
<02>	\$40,000 & more go to Q17G
<97>	Don't know go to I18
<98>	Refused go to I18
Universe:	Those answering `02' to Q17A

Q17F

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

<01>	Less than \$30,000
<02>	\$30,000 & more
<97>	Don't know
<98>	Refused
Default Next Ques	stion: I18
Universe:	Those answering `01' to Q17E

Q17G

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

Less than \$50,00
\$50,000 to less than \$60,000
\$60,000 to less than \$80,000
\$80,000 to less than \$100,000
\$100,000 and more
Don't know
Refused 01
Those answering `02' to Q17E

118

Thank you for your cooperation.

Universe: All

Q19

INTERVIEWER: WHO PROVIDED THE INFORMATION FOR THE INTERVIEW?

<01>	Number 1 person in the hhld
<02>	Number 2 person in the hhld
<03>	Number 3 person in the hhld
<04>	Number 4 person in the hhld
<05>	Number 5 person in the hhld
<06>	Number 6 person in the hhld
<07>	Number 7 person in the hhld
<08>	Number 8 person in the hhld
<97>	Don't know
<98>	Refused
<99>	Not stated
Note:	Display the list of household members aged 18 or more. Same as
	for LFS.
Universe:	All

13.0 Record Layout and Univariates

Record Layout - Household Internet Use Survey (1098)

Variable:	SEQID	Position:	1			Length:	5
Record Sequ Allowed Min:	uence ID 00001	Allowed M	lax:			38030	
Coverage:	All respondents						
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 household with unmarried children under the age of 18

		FREQ	WTD
1	Single family hhld with unmarried children < 18	13,052	3,911,079
2	Single family hhld without unmarried children < 18	14,404	4,232,240
3	One person households	9,076	2,835,047
4	Multi family households	1,498	509,608
6	Valid skip	0	0
9	Not stated	0	0
		======	=========
		38,030	11,487,973

Note: Derived variable. It is derived from different variables from the LFS file, like FAMID, HHSIZE, ages of children and their marital status, and then merged with the HIUS file by realukey.

Variable [.]		Position [.]	7	Lenath [.]	1
vanabic.	UNDENTO		1	Lengui.	

Any children less than 18 in the household?

		====== 38,030	======================================
9	Not stated	0	0
6	Valid skip	0	0
2	Yes, children under the age of 18	13,336	4,001,377
1	No children under the age of 18	24,694	7,486,596
		FREQ	WTD

Coverage: All respondents *Note:* This variable is merged from the LFS file by Realukey.

Variable:	PROV	Position:	8	Length:	2			
Prov of the respondent								
10	Newfo	undland			FREQ	WTD		
11	Prince	Edward Island			1,100	50.378		
12	Nova S	Scotia			2,531	356,720		
13	New B	runswick			2,232	282,453		
24	Québe	C			7,490	2,959,571		
35	Ontario	C			11,228	4,231,569		
46	Manito	ba			2,756	419,822		
47	Saska	tchewan			2,868	382,341		
48	Alberta	a			2,934	1,066,488		
59	British	Columbia, Yuko	n		3,439	1,545,822		
96	Valid s	kip			0	0		
99	Not sta	ated			0	0		
					=======	=========		
					38,030	11,487,971		

Coverage: All respondents Note: Information picked up from the LFS file.

Variable [.]	FFAMSIZE	Position:	10	l enath:	2		
vanabio.			10	Longin.	2		
Economic fam Allowed Min:	nily size 01	Allowed Max:	99				
01 02 03 04 05 96 99	1 person 2 persons 3 persons 4 persons 5 or more Valid skip Not stated	persons			=:	FREQ 10,165 12,261 6,128 6,238 3,238 0 0	WTD 3,211,831 3,564,709 1,808,659 1,900,965 1,001,808 0 0
						38,030	11,487,972
Coverage: <u>Note: This is a v</u> Variable:	All respondents ariable merged fro URURAL	m the LFS file. (Ma Position:	atched with the	e respondent the Length:	<u>rough</u> 1	realukey and I	line number).
D							
Rural/Urban Id	dentification						
0 1 6 9	Urban Rural Valid skip Not stated				=:	FREQ 28,115 9,915 0 0	WTD 9,594,623 1,893,350 0 0
						38,030	11,487,973

Coverage: All respondents Note: Derived variable. This variable is derived from the FRAME variable of the LFS file, which was picked up by matching with the LFS file.

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 1996 Census and apply to the 1996 population covered by the Labour Force Survey within 1996 Census boundaries to conform with the sample design. Only selected CMA's are coded.

		FREQ	WTD
00	Not Applicable	25,577	5,003,161
01	Halifax	601	135,389
02	Québec	578	287,264
03	Montréal	1,501	1,425,427
04	Ottawa (Ontario portion of Ottawa/Hull)	680	310,700
05	Toronto	1,981	1,645,007
06	Kitchener-Waterloo	643	151,720
07	Hamilton	556	254,591
08	St. Catherines-Niagara	553	142,367
09	London	571	158,583
10	Windsor	464	117,438
11	Winnipeg	1,278	269,149
12	Calgary	667	341,639
13	Edmonton	784	340,435
14	Vancouver	1,163	776,208
15	Victoria	433	128,895
96	Valid skip	0	0
99	Not stated	0	0
		======	========
		38,030	11,487,973

Coverage: all respondents

Note: This variable is merged from the LFS file and is called CMATAB. (Matched with the respondent through realukey and line number).

1

Variable:	HLFSSTAT	Position:	15	Length:
-----------	----------	-----------	----	---------

What is the LFS status of the Head of Household

		FREQ	WTD
1	Employed at work	22,277	6,960,898
2	Employed, absent from work	1,353	386,041
3	Unemployed, temporary layoff	148	36,349
4	Unemployed, job searcher	1,504	459,449
5	Unemployed, future start	43	10,902
6	Not in the Labour force, able to work	11,120	3,228,551
7	Not in Labour force, permanently unable to work	1,434	372,626
9	Out of scope	151	33,155
		======	=========
		38,030	11,487,971

Coverage: All respondents

Note: This is a variable merged from the LFS head of the HHLD file. (Matched with the respondent through realukey and line number).

Variable:	HAGE	Position:	16	Length:	1

What is the age of Head of Household (in ranges)

		FREQ	WTD
1	< 35 years	8,060	2,517,013
2	35-54 years	16,584	5,083,711
3	55-64 years	5,248	1,553,526
4	65+ years	8,138	2,333,723
6	Valid skip	0	0
9	Not stated	0	0
		======	=========
		38,030	11,487,973

Coverage: All respondents

Note: Derived variable. The age of the Head of the HHLD is collapsed here. It is derived from the HAGE which was merged from the LFS head of the HHLD file.

HSEX	Position:	17	Length:	1		
f Household						
Male				FREQ 28.816	WTD 8.604.335	
Female				9,214	2,883,638	
Valid skip				0	0	
Not stated	t			0	0	
				=======	========	
				38,030	11,487,973	
	HSEX f Household Male Female Valid skip Not stated	HSEX Position: f Household Male Female Valid skip Not stated	HSEX Position: 17 If Household Male Female Valid skip Not stated	HSEX Position: 17 Length: f Household Male Female Valid skip Not stated	HSEX Position: 17 Length: 1 If Household Male Female Valid skip Not stated Female 38,030	HSEX Position: 17 Length: 1 If Household FREQ WTD Male 28,816 8,604,335 Female 9,214 2,883,638 Valid skip 0 0 Not stated 0 0 38,030 11,487,973

Coverage: All respondents
Note: This is a variable merged from the LFS Head of the HHLD file. (Matched with the respondent through realukey and line
number).

Variable:	HMARSTAT	Position:	18	Length:	1			
What is the m	Vhat is the marital status of the Head of Household							
1 2 3 4 9	Married Single, ne Widow or Seperated Not stated	ver married widower I or divorced			FREQ 23,913 5,862 3,916 4,339 0 ====== 38,030	WTD 7,046,267 1,948,214 1,107,907 1,385,585 0 ======== 11,487,973		

Coverage: All respondents

Note: This is a variable merged from the LFS head of the HHLD file. (Matched with the respondent through realukey and line number).

	Variable:	HEDUCL	Position:	19	Length:	1
--	-----------	--------	-----------	----	---------	---

What is the education level of the Head of Household

		FREQ	WTD
1	Less than High school	11,966	3,162,638
2	High school or college - no university degree	20,725	6,354,565
3	University degree	5,339	1,970,770
6	Valid skip	0	0
9	Not stated	0	0
		=======	==========
		38,030	11,487,973

Note: Derived variable. The education of the Head of the HHLD is collapsed here. It is derived from the HEDUCLEV which was merged from the LFS head of the HHLD file.

Variable:	Q01A	Position:	20	Length:	2
				_•g	_

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	16,449	5,244,480
02	No	21,553	6,233,171
96	Valid skip	0	0
97	Don't know	28	10,323
98	Refused	0	0
99	Not stated	0	0
		======	=========
		38,030	11,487,973

Coverage: All re	espondents
------------------	------------

Variable:	Q01B	Position:	22	Length:	2		

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

		FREQ	WTD
01	Yes	12,864	4,177,069
02	No	3,579	1,066,466
96	Valid skip	21,553	6,233,171
97	Don't know	5	770
98	Refused	1	176
99	Not stated	28	10,323
		=======	=========
		38.030	11.487.974

Coverage: All answering `yes' to Q01A

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 described 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.

Variable	0024	Position:	24	Longth:	2
variable.	QUZA	Position.	24	Lengin.	2

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

		FREQ	WTD
01	Yes	5,435	1,712,169
02	No	852	226,326
96	Valid skip	31,707	9,537,610
97	Don't know	1	153
98	Refused	0	0
99	Not stated	35	11,717
		======	=========
		38,030	11,487,974

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

Variable:	Q02B	Position:	26	Length:	2	

	001	oftho	hauaahald	mamhara	aaad	under 1	10	aamputar	aammuniaation	n in c	tuning	month?
DU		or the	nousenoia	members	aueu	unuer	lo use	computer	communication	5 11 1 2	IUVDICAL	monung
	J											

		FREQ	WTD
01	Yes	3,766	1,090,870
02	No	2,516	846,390
96	Valid skip	31,707	9,537,610
97	Don't know	6	1,387
98	Refused	0	0
99	Not stated	35	11,717
		=======	========
		38,030	11,487,973
Coverage:	All with children under 18 answering `yes ` to Q01B		

Variable:	Q03A	Position:	28	Length:	2
			-		

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

		FREQ	WTD
01	Yes	7,775	2,594,140
02	No	4,999	1,553,768
96	Valid skip	25,222	7,328,797
97	Don't know	0	0
98	Refused	0	0
99	Not stated	34	11,268
		======	========
		38,030	11,487,972

C				0040
Coverage:	i nose with	positive res	ponses in	QUIB

Variable:	Q03B	Position:	30	Length:	2
-----------	------	-----------	----	---------	---

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

		FREQ	WTD
01	Yes	7,936	2,671,751
02	No	4,825	1,471,272
96	Valid skip	25,222	7,328,797
97	Don't know	13	4,885
98	Refused	0	0
99	Not stated	34	11,268
		======	========
		38,030	11,487,973
Coverage:	Those with positive responses in Q01B		

Variable: Q03C Position: 32 Length: 2

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

		FREQ	WTD
01	Yes	4,664	1,385,121
02	No	8,070	2,748,844
96	Valid skip	25,222	7,328,797
97	Don't know	40	13,943
98	Refused	0	0
99	Not stated	34	11,268
		======	=========
		38,030	11,487,973

Coverage: Those with positive responses in Q01B

Variable:	Q03D	Position:	34	Length:	2
-----------	------	-----------	----	---------	---

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

Coverage:	Those with p	oositive responses in	Q01B		
				38,030	11,487,972
99	Not sta	ated		35 ======	11,780 =======
98	Refuse	ed		0	0
97	Don't l	know		9	4,010
96	Valid s	skip		25,222	7,328,797
02	No			11,293	3,645,395
01	Yes			FREQ 1,471	WTD 497,991

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

		FREQ	WTD
01	Yes	1,006	301,413
02	No	11,762	3,843,720
96	Valid skip	25,222	7,328,797
97	Don't know	4	1,865
98	Refused	0	0
99	Not stated	36	12,176
		======	========
		38,030	11,487,971

Coverage: Those with positive responses in Q01B

Variable:	Q04	Position:	38	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	4,914	1,613,347
02	At least 4 times per month	2,469	859,105
03	1 to 3 times per month	331	102,810
04	Less than once per month	51	15,669
96	Valid skip	30,221	8,882,565
97	Don't know	9	3,105
98	Refused	1	104
99	Not stated	34	11,268
		=======	=========
		38,030	11,487,972
Coverage:	Those answering `ves' to 0034		

covolugo.	THOSE anow	ching yee to doort				
Variable:	Q05	Position:	40	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	390	134,651
02	At least 1 hour but less than 5	1,249	405,567
03	At least 5 hours but less than 10	1,200	404,834
04	At least 10 hours but less than 20	1,505	498,151
05	20 hours or more	3,402	1,138,918
96	Valid skip	30,221	8,882,565
97	Don't know	28	10,910
98	Refused	1	1,108
99	Not stated	34	11,268
		=======	=========
		38,030	11,487,972

Coverage: Those answering `yes' to Q03A

Q06A	Position:	42	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	6,023	1,992,194
02	Less than 10 %	539	177,634
03	At least 10% but less than 25%	313	108,430
04	At least 25% but less than 50%	237	84,342
05	At least 50% but less than 75%	242	78,375
06	At least 75% but less than 90%	176	65,140
07	At least 90% but less than 100%	115	40,732
08	100%	114	39,877
96	Valid skip	30,221	8,882,565
97	Don't know	13	6,099
98	Refused	0	0
99	Not stated	37	12,586
		======	=========
		38,030	11,487,973

Coverage: Those answering `yes' to Q03A

Variable:

Q06B	Position:	44	Length:	2	

In a typical month, what share (percentage) of the household's total 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	5,373	1,760,824
02	Less than 10 %	985	320,228
03	At least 10% but less than 25%	508	173,953
04	At least 25% but less than 50%	294	105,383
05	At least 50% but less than 75%	246	82,801
06	At least 75% but less than 90%	144	55,952
07	At least 90% but less than 100%	114	48,764
08	100%	82	33,668
96	Valid skip	30,221	8,882,565
97	Don't know	24	9,939
98	Refused	1	1,108
99	Not stated	38	12,788
		======	=========
		38,030	11,487,973

Coverage: Those answering `yes' to Q03A

Variable:

Variable:	Q06C	Position:	46	Length:	2	

In a typical month, what share (percentage) of the household's total 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
None	316	114,411
Less than 10 %	570	201,650
At least 10% but less than 25%	692	242,029
At least 25% but less than 50%	589	213,303
At least 50% but less than 75%	710	251,981
At least 75% but less than 90%	673	212,953
At least 90% but less than 100%	1,225	400,865
100%	2,977	946,517
Valid skip	30,221	8,882,565
Don't know	17	7,491
Refused	1	1,108
Not stated	39	13,099
	=======	=========
	38,030	11,487,972
	None Less than 10 % At least 10% but less than 25% At least 25% but less than 50% At least 50% but less than 75% At least 75% but less than 90% At least 90% but less than 100% 100% Valid skip Don't know Refused Not stated	None 316 Less than 10 % 570 At least 10% but less than 25% 692 At least 25% but less than 50% 589 At least 50% but less than 75% 710 At least 75% but less than 90% 673 At least 90% but less than 100% 1,225 100% 2,977 Valid skip 30,221 Don't know 17 Refused 1 Not stated 39

Coverage:	Those answering `yes' to Q03A

Variable: **Q07** Position: 48 Length: 2

In a typical month does any member of your household use the Internet from home, which includes E-Mail and other services on the world wide web?

		FREQ	WTD
01	Yes	7,130	2,361,194
02	No	625	222,683
96	Valid skip	30,221	8,882,565
97	Don't know	14	8,165
98	Refused	0	0
99	Not stated	40	13,366
		======	=========
		38,030	11,487,973

Coverage: Those answering `yes' to Q03A

Variable:	Q08	Position:	50	Length:	2	
In a typical r	nonth does a	ny member of yo	our house	hold use a con	nputer at home	for electronic banking?
01 02 96 97 98 99	Yes No Valid s Don't k Refuse Not sta	skip know ed ated			FREQ 108 524 37,351 7 0 40 ====== 38,030	WTD 39,904 185,834 11,243,759 5,109 0 13,366 ======= 11,487,972
Coverage:	Those not ar	nswering `yes' to Q07	7			
Variable:	Q09A	Position:	52	Length:	2	

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

		FREQ	WTD
01	Yes	6,710	2,219,953
02	No	412	137,339
96	Valid skip	30,866	9,115,512
97	Don't know	7	3,049
98	Refused	0	0
99	Not stated	35	12,120
		======	=========
		38,030	11,487,972

Those answering `yes' to Q07

Coverage:

Variable:	Q09B	Position:	54	Length:	2
-----------	------	-----------	----	---------	---

IN A TYPICAL MONTH DOES ANY MEMBER OF YOUR HOUSEHOLD USE A COMPUTER AT HOME for Electronic banking?

Variable:	Q09C	Position:	56	Length:	2		
Coverage:	Those answe	ering `yes' to Q07					
					38,030	11,487,973	
					=======	========	
99	Not sta	ated			36	12,272	
98	Refuse	ed			0	0	
97	Don't k	know			13	5,385	
96	Valid s	skip			30,866	9,115,512	
02	No				5,399	1,760,060	
01	Yes				1,716	594,745	
					FREQ	WTD	

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
808	283,521
6,314	2,074,897
30,866	9,115,512
6	1,773
0	0
36	12,272
======	=========
38,030	11,487,973
	FREQ 808 6,314 30,866 6 0 36 ====== 38,030

Coverage: Those answering `yes' to Q07

_	_	_	_	_	_	
Position [.]	58	l enath:	2			

IN A TYPICAL MONTH DOES ANY MEMBER OF YOUR HOUSEHOLD USE A COMPUTER AT HOME to search for medical or health related information on the Internet?

Variable:	Q09E	Position:	60	Length:	2		
Coverage:	Those answe	ering `yes' to Q07					
					38,030	11,487,972	
					=======	========	
99	Not sta	ated			37	12,930	
98	Refuse	ed			1	263	
97	Don't l	now			13	4,307	
96	Valid s	skip			30,866	9,115,512	
02	No				3,587	1,252,548	
01	Yes				3,526	1,102,413	
					FREQ	WTD	

IN A TYPICAL MONTH DOES ANY MEMBER OF YOUR HOUSEHOLD USE A COMPUTER AT HOME to access the Internet for formal education or training?

		FREQ	WTD
01	Yes	2,275	776,014
02	No	4,849	1,582,313
96	Valid skip	30,866	9,115,512
97	Don't know	3	1,204
98	Refused	0	0
99	Not stated	37	12,930
		======	========
		38,030	11,487,973

Coverage: Those answering `yes' to Q07

Variable:

Variable: Q09F Position: 62 Length: 2

IN A TYPICAL MONTH DOES ANY MEMBER OF YOUR HOUSEHOLD USE A COMPUTER AT HOME to look for government information on the Internet?

Variable:	Q09G	Position:	64	Length:	2		
Coverage:	Those answe	ering `yes' to Q07					
						, ,	
					38.030	11.487.973	
99	NOT SIG	aleu			57 =======	12,930	
00	Not sta	ated			37	12 030	
98	Refuse	he			0	0	
97	Don't k	know			21	6.563	
96	Valid s	skip			30,866	9,115,512	
02	No				4,279	1,409,831	
01	Yes				2,827	943,138	
					FREQ	WTD	

IN A TYPICAL MONTH DOES ANY MEMBER OF YOUR HOUSEHOLD USE A COMPUTER AT HOME to look for other specific information on the Internet?

	FREQ	WTD
Yes	5,417	1,760,316
No	1,700	596,009
Valid skip	30,866	9,115,512
Don't know	9	2,902
Refused	0	0
Not stated	38	13,236
	======	========
	38,030	11,487,974
	Yes No Valid skip Don't know Refused Not stated	Yes 5,417 No 1,700 Valid skip 30,866 Don't know 9 Refused 0 Not stated 38 38,030

Coverage: Those answering `yes' to Q07

Variable:	Q09H	Position:	66	Length:	2
-----------	------	-----------	----	---------	---

Position:

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	6,159	2,024,875
02	No	957	330,012
96	Valid skip	30,866	9,115,512
97	Don't know	10	4,338
98	Refused	0	0
99	Not stated	38	13,236
		======	=========
		38,030	11,487,973
Coverage:	Those answering `yes' to Q07		

IN A TYPICAL MONTH DOES ANY MEMBER OF YOUR HOUSEHOLD USE A COMPUTER AT HOME

Length:

2

68

to play games on the Internet?

Q091

Variable:

WTD
890,685
464,789
115,512
3,646
0
13,341
======
487,972
-

Coverage: Those answering `yes' to Q07
1				

Variable: Q09J Position: 70 Length: 2

IN A TYPICAL MONTH DOES ANY MEMBER OF YOUR HOUSEHOLD USE A COMPUTER AT HOME to participate in chat groups on the Internet?

Variable:	Q09K	Position:	72	Length:	2		
Coverage:	Those answe	ering `yes' to Q07					
					,	, ,	
					38.030	11.487.973	
99	NOT ST	ated			40	14,173	
98	Refuse	ed			0	0	
97	Don't l	know			16	6,949	
96	Valid s	skip			30,866	9,115,512	
02	No				4,997	1,693,485	
01	Yes				2,111	657,854	
					FREQ	WTD	

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	942	302,000
02	No	6,171	2,052,568
96	Valid skip	30,866	9,115,512
97	Don't know	11	3,720
98	Refused	0	0
99	Not stated	40	14,173
		======	========
		38,030	11,487,973

Coverage: Those answering `yes' to Q07

Variable:	Q09LP01	Position:	74	Length:	1	

For what specific educational purposes do members or your household use the Internet? (INTERVEWER: READ THE LIST AND MARK ALL THAT APPLY)...Distance education, self directed learning or correspondance courses

		FREQ	WTD
1	Yes	502	167,915
2	No	1,770	606,909
6	Valid skip	35,715	10,697,825
7	Don't know	3	1,191
8	Refused	0	0
9	Not stated	40	14,134
		======	========
		38,030	11,487,973

Variable:	Q09LP02	Position:	75	Length:

Those answering `01' to Q09E

For what specific educational purposes do members or your household use the Internet? (INTERVEWER: READ THE LIST AND MARK ALL THAT APPLY)...To research information for project assignments or for solving academic related problems

1

		FREQ	WTD
1	Yes	1,885	644,974
2	No	387	129,849
6	Valid skip	35,715	10,697,825
7	Don't know	3	1,191
8	Refused	0	0
9	Not stated	40	14,134
		======	=========
		38,030	11,487,972

Coverage: Those answering `01' to Q09E

Coverage:

Variable: Q09LP03 Position: 76 Length: 1

For what specific educational purposes do members or your household use the Internet? (INTERVEWER: READ THE LIST AND MARK ALL THAT APPLY)...To communicate with teachers and peers

		FREQ	WTD
1	Yes	576	190,721
2	No	1,696	584,102
6	Valid skip	35,715	10,697,825
7	Don't know	3	1,191
8	Refused	0	0
9	Not stated	40	14,134
		======	=========
		38,030	11,487,973

Coverage:	Those answering `01' to Q09E

Variable: Q09LP04 Position: 77 Length: 1

For what specific educational purposes do members or your household use the Internet? (INTERVEWER: READ THE LIST AND MARK ALL THAT APPLY)...For other reasons not mentioned

		FREQ	WTD
1	Yes	377	119,952
2	No	1,895	654,871
6	Valid skip	35,715	10,697,825
7	Don't know	3	1,191
8	Refused	0	0
9	Not stated	40	14,134
		======	========
		38,030	11,487,972

Coverage:	Those answering	`01' to Q09E

Q10A	Position:	78	Length:	2		

In a typical month, what share (percentage) of the total time using computer communications 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 %	2,515	815,371
02	At least 10% but less than 25%	1,974	642,301
03	At least 25% but less than 50%	951	329,604
04	At least 50% but less than 75%	599	195,454
05	At least 75% but less than 90%	303	101,584
06	At least 90% but less than 100%	151	50,518
07	100%	165	66,972
96	Valid skip	31,278	9,252,850
97	Don't know	39	13,143
98	Refused	4	2,261
99	Not stated	51	17,911
		=======	=========
		38,030	11,487,971

Coverage: Those answering `01' to Q08 or `01' to Q09A

Q10B	Position:	80	Length:	2		

In a typical month, what share (percentage) of the total time using computer communications 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
Less than 10 %	1,213	425,470
At least 10% but less than 25%	347	114,362
At least 25% but less than 50%	88	31,113
At least 50% but less than 75%	30	12,098
At least 75% but less than 90%	13	4,233
At least 90% but less than 100%	9	3,553
100%	116	41,255
Valid skip	36,150	10,830,558
Don't know	5	1,582
Refused	1	473
Not stated	58	23,275
	=======	=========
	38,030	11,487,972
	Less than 10 % At least 10% but less than 25% At least 25% but less than 50% At least 50% but less than 75% At least 75% but less than 90% At least 90% but less than 100% 100% Valid skip Don't know Refused Not stated	Less than 10 % 1,213 At least 10% but less than 25% 347 At least 25% but less than 50% 88 At least 50% but less than 75% 30 At least 75% but less than 90% 13 At least 90% but less than 100% 9 100% 116 Valid skip 36,150 Don't know 5 Refused 1 Not stated 58

Coverage: Those answering `01' to Q08 or `01' to Q09B.

	_		_		_	
0100	Position:	82	l enath:	2		

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

		FREQ	WTD
01	Less than 10 %	733	259,980
02	At least 10% but less than 25%	59	18,481
03	At least 25% but less than 50%	9	3,148
04	At least 50% but less than 75%	3	413
05	At least 75% but less than 90%	2	1,129
06	At least 90% but less than 100%	0	0
07	100%	0	0
96	Valid skip	37,180	11,190,408
97	Don't know	2	371
98	Refused	0	0
99	Not stated	42	14,044
		======	=========
		38,030	11,487,974

Coverage: Those answering `01' to Q09C

Q10D	Position:	84	Length:	2		

In a typical month, what share (percentage) of the total time using computer communications at home do members of your household use to search for medical or health related 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 % 2,620 824,873 02 At least 10% but less than 25% 638 192,604 At least 25% but less than 50% 03 174 54,102 04 At least 50% but less than 75% 47 14,371 22 05 At least 75% but less than 90% 6,076 06 At least 90% but less than 100% 5 2,073 07 100% 3 1,661 96 Valid skip 34,453 10,368,060 97 Don't know 13 5,075 98 Refused 461 1 54 99 Not stated 18.616 ====== ========== 38,030 11,487,972

Coverage: Those answering `01' to Q09D

Variable: Q10E Position: 86 Length: 2

In a typical month, what share (percentage) of the total time using computer communications at home do members of your household use the Internet for formal education or training? (INTERVIEWER: DON'T READ THE ANSWER CATEGORIES. USE THEM AS A GUIDE IF THE RESPONDENT NEEDS PROMPTING)

		FREQ	WTD
01	Less than 10 %	749	250,547
02	At least 10% but less than 25%	666	223,117
03	At least 25% but less than 50%	416	146,799
04	At least 50% but less than 75%	274	96,712
05	At least 75% but less than 90%	112	38,841
06	At least 90% but less than 100%	30	9,228
07	100%	10	3,612
96	Valid skip	35,715	10,697,825
97	Don't know	14	5,436
98	Refused	0	0
99	Not stated	44	15,857
		=======	=========
		38,030	11,487,973

Coverage: Those answering `01' to Q09E

						-
Q10F	Position:	88	Lenath:	2		

In a typical month, what share (percentage) of the total time using computer communications at home do members of your household spend looking for government information on the world wide web? (INTERVIEWER: DON'T READ THE ANSWER CATEGORIES. USE THEM AS A GUIDE IF THE RESPONDENT NEEDS PROMPTING)

		FREQ	WTD
01	Less than 10 %	2,112	716,239
02	At least 10% but less than 25%	525	165,400
03	At least 25% but less than 50%	128	42,264
04	At least 50% but less than 75%	38	11,457
05	At least 75% but less than 90%	9	3,150
06	At least 90% but less than 100%	5	2,002
07	100%	2	943
96	Valid skip	35,145	10,525,342
97	Don't know	5	927
98	Refused	0	0
99	Not stated	61	20,247
		=======	=========
		38,030	11,487,973

Coverage: Those answering `01' to Q09F

						-
Q10G	Position:	90	Length:	2		

In a typical month, what share (percentage) of the total time using computer communications at home do members of your household spend searching for other 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 %	1,557	501,073
02	At least 10% but less than 25%	1,685	535,876
03	At least 25% but less than 50%	1,100	372,958
04	At least 50% but less than 75%	675	216,744
05	At least 75% but less than 90%	250	78,825
06	At least 90% but less than 100%	81	29,651
07	100%	20	6,764
96	Valid skip	32,566	9,711,521
97	Don't know	39	13,828
98	Refused	3	1,845
99	Not stated	54	18,890
		=======	=========
		38,030	11,487,974

Coverage: Those answering `01' to Q09G

Q10H	Position [.]	92	l enath:	2		

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

		FREQ	WTD
01	Less than 10 %	1,809	604,779
02	At least 10% but less than 25%	1,829	602,042
03	At least 25% but less than 50%	1,253	412,276
04	At least 50% but less than 75%	748	234,264
05	At least 75% but less than 90%	289	97,650
06	At least 90% but less than 100%	127	40,878
07	100%	49	15,161
96	Valid skip	31,823	9,445,524
97	Don't know	39	11,586
98	Refused	4	2,319
99	Not stated	60	21,497
		=======	=========
		38,030	11,487,975

Coverage: Those answering `01' to Q09H

Q10I	Position:	94	Length:	2		

In a typical month, what share (percentage) of the total time using computer communications at home do members of your household spend playing games 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 %	1,312	430,385
02	At least 10% but less than 25%	753	252,135
03	At least 25% but less than 50%	387	119,966
04	At least 50% but less than 75%	175	53,751
05	At least 75% but less than 90%	65	20,444
06	At least 90% but less than 100%	19	5,630
07	100%	8	1,872
96	Valid skip	35,236	10,580,300
97	Don't know	19	4,688
98	Refused	1	854
99	Not stated	55	17,947
		=======	=========
		38,030	11,487,973

Coverage: Those answering `01' to Q09I

Q10J	Position:	96	Length:	2		

In a typical month, what share (percentage) of the total time using computer communications at home do members of your household participate in chat groups 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%	1,108	345,386
02	At least 10% but less than 25%	504	155,986
03	At least 25% but less than 50%	246	80,668
04	At least 50% but less than 75%	125	38,072
05	At least 75% but less than 90%	69	22,036
06	At least 90% but less than 100%	27	7,878
07	100%	8	2,003
96	Valid skip	35,863	10,808,996
97	Don't know	22	5,454
98	Refused	0	0
99	Not stated	58	21,494
		=======	========
		38,030	11,487,972

Coverage: Those answering `01' to Q09J

		_		_	_	
010K	Position:	98	l enath:	2		

In a typical month, what share (percentage) of the total time using computer communications 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 %	674	216,752
02	At least 10% but less than 25%	170	54,635
03	At least 25% but less than 50%	60	20,124
04	At least 50% but less than 75%	25	7,737
05	At least 75% but less than 90%	6	1,202
06	At least 90% but less than 100%	1	222
07	100%	0	0
96	Valid skip	37,037	11,168,080
97	Don't know	5	1,191
98	Refused	0	0
99	Not stated	52	18,031
		=======	=========
		38,030	11,487,973

Coverage:	Those answe	ering `01' to Q09K				
Variable:	Q11A	Position:	100	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	874	287,782	
02	Noticeably	1,097	341,067	
03	Little or nothing	5,742	1,940,084	
96	Valid skip	30,221	8,882,565	
97	Don't know	24	10,433	
98	Refused	3	1,481	
99	Not stated	69	24,559	
		======	=========	
		38,030		
			11,48	37,97
			1	

Coverage: Those answering `yes' to Q03A

Variahle [.]	011B	Position [.]	102	l enath:	2
vanabic.	QIID	FUSILION.	102	Lengui.	~ ~

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	779	278,158
02	Noticeably	1,849	623,245
03	Little or nothing	5,067	1,663,847
96	Valid skip	30,221	8,882,565
97	Don't know	40	13,709
98	Refused	5	1,890
99	Not stated	69	24,559
		======	=========
		38,030	11,487,972

Coverage:	Those answe	ering `yes' to Q03A				
Variable:	Q11C	Position:	104	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	950	327,886
02	Noticeably	1,581	537,016
03	Little or nothing	5,181	1,702,153
96	Valid skip	30,221	8,882,565
97	Don't know	23	11,532
98	Refused	3	1,481
99	Not stated	71	25,340
		======	========
		38,030	11,487,973

Coverage: Those answering `yes' to Q03A

Variable:	Q12	Position:	106	Length:	2		
Do you have	a computer at	home?					
01 02 96 97 98 99	Yes No Valid ski Don't kno Refused Not state	p ow ed			=	FREQ 6,485 23,770 7,775 0 0 0 0 38,030	WTD 2,069,246 6,824,587 2,594,140 0 0 ================================
Coverage:	Those not answ	vering `yes' to Q0 [,]	1A or Q01B o	r Q03A			
Variable:	Q13AP01	Position:	108	Length:	1		
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							
1 2 6 7 8 9	Yes No Valid ski Don't kn Refused Not state	p ow ed				FREQ 2,261 4,215 31,545 9 0 0	WTD 715,122 1,351,278 9,418,727 2,846 0 0

9	2,846
0	0
0	0
======	=========
38,030	11,487,973

Those answering `yes' to Q12 Coverage:

Variable:	Q13AP02	Position:	109	Length:	1
-----------	---------	-----------	-----	---------	---

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
1	Yes	702	206,828
2	No	5,774	1,859,572
6	Valid skip	31,545	9,418,727
7	Don't know	9	2,846
8	Refused	0	0
9	Not stated	0	0
		======	=========
		38,030	11,487,972

Coverage:	Those answerir	ng `yes' to Q12					
Variable:	Q13AP03	Position:	110	Length:	1		

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 do use them at work

		FREQ	WTD
1	Yes	733	268,463
2	No	5,743	1,797,936
6	Valid skip	31,545	9,418,727
7	Don't know	9	2,846
8	Refused	0	0
9	Not stated	0	0
		======	=========
		38,030	11,487,972

Coverage:	Those a	answering `	yes' to	Q12
-----------	---------	-------------	---------	-----



Variable: Q13AP04 Position: 111 Length: 1

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 do use them at another location

		FREQ	WTD
1	Yes	380	114,918
2	No	6,096	1,951,482
6	Valid skip	31,545	9,418,727
7	Don't know	9	2,846
8	Refused	0	0
9	Not stated	0	0
		======	========
		38,030	11,487,972

Variable:	Q13AP05	Position:	112	Lenath:	1

Those answering `yes' to Q12

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
1	Yes	549	187,557
2	No	5,927	1,878,842
6	Valid skip	31,545	9,418,727
7	Don't know	9	2,846
8	Refused	0	0
9	Not stated	0	0
		======	========
		38,030	11,487,972

Coverage: Those answering `yes' to Q12

Coverage:

Variable:	Q13AP06	Position:	113	Length:	1
-----------	---------	-----------	-----	---------	---

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
1	Yes	3,381	1,051,870
2	No	3,095	1,014,530
6	Valid skip	31,545	9,418,727
7	Don't know	9	2,846
8	Refused	0	0
9	Not stated	0	0
		======	=========
		38,030	11,487,972

Coverage:	Those answering `yes' to Q12

Variable: Q13BP01 Position: 114 Length: 1

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
1	Yes	7,979	2,270,441
2	No	15,731	4,529,612
6	Valid skip	14,260	4,663,386
7	Don't know	53	22,208
8	Refused	7	2,327
9	Not stated	0	0
		======	=========
		38,030	11,487,973

Coverage: Those answering `no', `don't know' or `refused' to Q12

Variable: Q13BP02 Position: 115 Length: 1

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 remote control

		FREQ	WTD
1	Yes	2,493	733,810
2	No	21,217	6,066,242
6	Valid skip	14,260	4,663,386
7	Don't know	53	22,208
8	Refused	7	2,327
9	Not stated	0	0
		======	=========
		38,030	11,487,973

Coverage:	Those answering	`no',	`don't know' or	`refused' to Q12	
					-

Variable:	Q13BP03	Position:	116	Length:	1
-----------	---------	-----------	-----	---------	---

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
1	Yes	1,136	338,615
2	No	22,574	6,461,439
6	Valid skip	14,260	4,663,386
7	Don't know	53	22,208
8	Refused	7	2,327
9	Not stated	0	0
		======	========
		38,030	11,487,974

Coverage: Those answering `no', `don't know' or `refused' to Q12

Variable:	Q13BP04	Position:	117	Length:	1
-----------	---------	-----------	-----	---------	---

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
1	Yes	9,688	2,614,102
2	No	14,022	4,185,950
6	Valid skip	14,260	4,663,386
7	Don't know	53	22,208
8	Refused	7	2,327
9	Not stated	0	0
		======	=========
		38,030	11,487,973

coverage. Those answering no, dont know of refused to giz

Variable: Q13BP05 Position: 118 Length: 1

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
1	Yes	6,336	2,005,949
2	No	17,374	4,794,104
6	Valid skip	14,260	4,663,386
7	Don't know	53	22,208
8	Refused	7	2,327
9	Not stated	0	0
		======	=========
		38,030	11,487,974

Coverage: Those answering `no', `don't know' or `refused' to Q12

119

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?

Length:

2

		FREQ	WTD
01	Yes	7,933	2,304,484
02	No	22,131	6,526,268
96	Valid skip	7,775	2,594,140
97	Don't know	182	60,830
98	Refused	9	2,252
99	Not stated	0	0
		======	=========
		38,030	11,487,973

Coverage:	Those answering `no' to Q01A or Q01B or Q03A				
Variable:	Q14B	Position:	121	Length:	2

In your opinion what is the most important factor that would prompt members of your household to use computer communications from a public library or other public place?

		FREQ	WTD
01	Cost	1,205	347,592
02	Ease of use	1,446	442,616
03	Both about the same	5,242	1,500,682
96	Valid skip	29,906	9,120,407
97	Don't know	39	13,282
98	Refused	1	311
99	Not stated	191	63,083
		=======	========
		38,030	11,487,972

Coverage: Those answering `yes' to Q014A

Variable:

Q14A

Position:

Variable:	Q15P01	Position:	123	Length:	1

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

Coverage:	all respondents		
		38,030	11,487,973
		======	========
9	Not stated	36	13,158
8	Refused	575	167,230
7	Don't know	268	91,232
6	Valid skip	0	0
2	No	12,103	3,525,297
1	Yes	25,048	7,691,056
		FREQ	WTD

Variable: Q15P02 Position: 124 Length: 1

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
1	Yes	6,796	2,014,102
2	No	30,355	9,202,251
6	Valid skip	0	0
7	Don't know	268	91,232
8	Refused	575	167,230
9	Not stated	36	13,158
		======	========
		38,030	11,487,973

Variable: Q15P03 Position: 125 Length: 1

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
1	Yes	5,238	1,621,482
2	No	31,913	9,594,871
6	Valid skip	0	0
7	Don't know	268	91,232
8	Refused	575	167,230
9	Not stated	36	13,158
		======	=========
		38,030	11,487,973

	• · • • • • • •			
Variable:	Q15P04	Position:	126	Length:

all respondents

Coverage:

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....Employment Insurance

1

		FREQ	WTD
1	Yes	3,376	762,742
2	No	33,775	10,453,610
6	Valid skip	0	0
7	Don't know	268	91,232
8	Refused	575	167,230
9	Not stated	36	13,158
		======	========
		38,030	11,487,972

Variable: Q15P05 Position: 127 Length: 1

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
1	Yes	733	197,291
2	No	36,418	11,019,061
6	Valid skip	0	0
7	Don't know	268	91,232
8	Refused	575	167,230
9	Not stated	36	13,158
		======	========
		38,030	11,487,972
Coverage:	all respondents		

Variable: Q15P06 Position: 128 Length: 1

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
1	Yes	8,046	2,282,893
2	No	29,105	8,933,460
6	Valid skip	0	0
7	Don't know	268	91,232
8	Refused	575	167,230
9	Not stated	36	13,158
		======	=========
		38,030	11,487,973

Variable: Q15P07 Position: 129 Length: 1

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
1	Yes	6,196	1,825,992
2	No	30,955	9,390,361
6	Valid skip	0	0
7	Don't know	268	91,232
8	Refused	575	167,230
9	Not stated	36	13,158
		======	========
		38,030	11,487,973
Coverage:	all respondents		

Variable:	Q15P08	Position:	130	Length:	1
	-				

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
Yes	6,939	1,905,304
No	30,212	9,311,049
Valid skip	0	0
Don't know	268	91,232
Refused	575	167,230
Not stated	36	13,158
	======	=========
	38,030	11,487,973
	Yes No Valid skip Don't know Refused Not stated	Yes 6,939 No 30,212 Valid skip 0 Don't know 268 Refused 575 Not stated 36 38,030

Variable: Q15P09 Position: 131 Length:	1
--	---

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
1	Yes	5,848	1,527,652
2	No	31,303	9,688,700
6	Valid skip	0	0
7	Don't know	268	91,232
8	Refused	575	167,230
9	Not stated	36	13,158
		======	========
		38,030	11,487,972
Coverage:	all respondents		

Variable: Q15P10 Position: 132 Length: 1

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
2,748	814,660
34,403	10,401,693
0 O	0
ow 268	91,232
575	167,230
d 36	13,158
======	=========
38,030	11,487,973
	FREQ 2,748 34,403 p 0 ow 268 575 ed 36 ====== 38,030

Variable:	Q15P11	Position:	133	Length:	1
-----------	--------	-----------	-----	---------	---

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
1	Yes	698	192,767
2	No	36,453	11,023,586
6	Valid skip	0	0
7	Don't know	268	91,232
8	Refused	575	167,230
9	Not stated	36	13,158
		======	=========
		38,030	11,487,973
Coverage:	all respondents		

Variable: Q15P12 Position: 134 Length: 1

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
1	Yes	102	30,322
2	No	37,049	11,186,031
6	Valid skip	0	0
7	Don't know	268	91,232
8	Refused	575	167,230
9	Not stated	36	13,158
		======	=========
		38,030	11,487,973

Variable:	Q15P13	Position:	135	Length:	1
-----------	--------	-----------	-----	---------	---

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
1	Yes	1,914	557,364
2	No	35,237	10,658,989
6	Valid skip	0	0
7	Don't know	268	91,232
8	Refused	575	167,230
9	Not stated	36	13,158
		======	=========
		38,030	11,487,973
Coverage:	all respondents		

Variable:	Q15P14	Position:	136	Lenath:	1
vanabio.		1 0010011.	100	Longui.	

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
1	Yes	10	2,405
2	No	37,141	11,213,948
6	Valid skip	0	0
7	Don't know	268	91,232
8	Refused	575	167,230
9	Not stated	36	13,158
		======	=========
		38,030	11,487,973

Q16	Position:	137	Length:	6		

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? *Allowed Min:* 000001 *Allowed Max:* 999990

		FREQ	WTD
000000 : 900000		26,141	8,085,308
999996	Valid skip	10	2,405
999997	Don't know	8,975	2,515,481
999998	Refused	2,868	871,614
999999	Not stated	36	13,158
		======	=========
		38,030	11,487,965

Coverage:	respondent who answered Q15P14='01' or	(Q15 ne `14')
Note: If amount i	s entered, go to I18.	

Variable:	QUARTILE	Position:	143	Length:	1

Income Quartiles

Variable:

		FREQ	WTD
1	Quartile one - <= \$20,000	10,211	2,872,184
2	Quartile two - \$20,001 - \$35,999	9,891	2,871,478
3	Quartile two - \$36,000 - \$59,999	9,524	2,871,959
4	Quartile two - \$60,000+	8,404	2,872,352
6	Valid skip	0	0
9	Not stated	0	0
		=======	========
		38,030	11,487,974

Note: Derived Variable. The second quartile starts at \$20,001 because, there were more households with income 20,000 that belonged in the 1st Quartile than there were in the 2nd Quartile. Values at cut-off points are randomly distributed to the two adjacent quartiles (from the unweighted records) to form quartiles of the same size. This eliminates the bias in the selection process.

Variable: FINWT Position: 144 Length: 9.4 Record Weight