

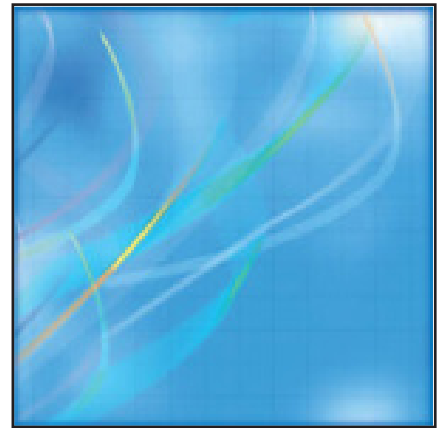
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## Household Expenditures Research Paper Series

# User Guide for the Survey of Household Spending, 2014

Income Statistics Division

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- . not available for any reference period
- .. not available for a specific reference period
- ... not applicable
- 0 true zero or a value rounded to zero
- 0<sup>s</sup> value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
- <sup>P</sup> preliminary
- <sup>r</sup> revised
- X suppressed to meet the confidentiality requirements of the *Statistics Act*
- <sup>E</sup> use with caution
- F too unreliable to be published
- \* significantly different from reference category ( $p < 0.05$ )

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## 1.0 Introduction

This guide presents information of interest to users of data from the 2014 Survey of Household Spending (SHS). It includes descriptions of the survey methodology and data quality, and definitions of survey terms and variables. There is also a section describing various statistics that can be drawn from the survey data.

The SHS is conducted annually. Information is collected from households using a questionnaire (administered using a computer-assisted personal interview) and an expenditure diary. The questionnaire is used to collect information on expenditures with recall periods based on the type of expenditure (last month, last three months, last 12 months, or last payment). The expenditure diary is completed for two weeks following the interview by selected households. Starting in 2012, the sample size for the expenditure diary is 50% of the total sample.

Data collection is continuous throughout the year. The 2014 SHS was conducted from January to December 2014 using a sample of 17,109 households in the 10 provinces. Detailed spending information was collected, as well as some information on dwelling characteristics and household equipment.

Household expenditure estimates are available at the national and provincial levels and by household tenure, age of reference person, size of area of residence, type of household and household income quintile. Detailed estimates of food expenditures are also available.

For custom tabulations or more information on the SHS, please contact Client Services, Income Statistics Division (613-951-7355, 1-888-297-7355 or [STATCAN.income-revenu.STATCAN@canada.ca](mailto:STATCAN.income-revenu.STATCAN@canada.ca)).

## 2.0 Survey methodology

### 2.1 The target population

The target population of the 2014 SHS is the population of Canada's 10 provinces, excluding residents of institutions, members of the Canadian Forces living in military camps and people living on Indian reserves. These exclusions account for about 2% of the population of the 10 provinces.

For operational reasons, people living in certain remote areas where the rate of vacant dwellings is very high and where the collection cost would be exorbitant are excluded from collection. Also excluded are people living in other types of collective dwellings such as:

- people living in residences for dependent seniors;
- people living permanently in school residences, work camps, etc.; and
- members of religious and other communal colonies.

Collection exclusions represent less than 0.5% of the target population. However, these people are included in the population estimates to which the SHS estimates are adjusted (see Section 2.6).

### 2.2 The survey content and reference periods

The SHS primarily collects detailed information on household expenditures. It also collects information on household demographic characteristics and certain dwelling characteristics (e.g., type, age and tenure), as well as some information on household equipment (e.g., electronics and communications equipment). In addition, income information from personal income tax data is combined with the survey data.

For expenditure information collected through the questionnaire, the length of the reference period depends on the recall period specified in the question (e.g., the past month, the past three months, or the past 12 months). The reference period also varies with the collection month (e.g., for households in the January 2014 sample, "the past 12 months" signifies the period from January 2013 to December 2013, while for households in the December 2014 sample, it refers to the months between December 2013 and November 2014). Expenditures collected in the expenditure diary are reported for a period of two weeks.

In general, longer recall periods are used to collect expenditures for goods and services that are more expensive or purchased infrequently or irregularly. In contrast, shorter recall periods are used for goods and services that are of less value or that are purchased frequently or at regular intervals.

For demographic characteristics, dwelling characteristics and household equipment, the reference period is the interview date. The reference period for income is the calendar year preceding the survey year (i.e. 2013 for the 2014 SHS).

### 2.3 The sample design

The sample of the 2014 Survey of Household Spending consists of 17,109 households throughout the 10 provinces. A stratified, multi-stage sampling design was used to select the sample. It is essentially a two-stage design, of which the first stage is a sample of geographic areas (referred to as clusters). Next, a list of all the dwellings in the selected clusters is prepared and a sample of dwellings is selected. The selected dwellings that are inhabited by members of the target population constitute the survey's sample of households. The SHS uses a number of components of the Labour Force Survey's (LFS) sample design to minimize operating costs, though the dwellings selected for the SHS are different than those selected for the LFS.

Fifty percent of sampled households are selected to also complete an expenditure diary. Thus, in each selected cluster, a subsample of the previously chosen dwellings is selected in order to identify the dwellings for which the households will be asked to fill out a diary.

The national sample is first divided among the provinces on the basis of the variability of total household expenditures and, to a lesser extent, the number of households in each province. The goal is to obtain provincial estimates of similar quality as the national estimates. Provincial sample sizes are shown in Table 1 of Section 3. The sample is

then divided into strata by grouping clusters with similar characteristics based on a number of socio-demographic variables. Some strata were defined to target specific subpopulations such as high-income households. To improve the quality of the estimates, the high-income household strata are allocated a larger share of the sample than the allocation proportional to stratum size that is used in other strata.

Since data are collected monthly, the sample is divided into 12 subsamples of similar size.

Users should note that the geographic concepts used for the 2014 SHS sample are those of the 2011 Census.

## 2.4 Data collection

The SHS is a voluntary survey. The data are mostly obtained directly from the respondent through two collection modes: a personal interview conducted by an interviewer using a questionnaire on a laptop, and a diary in which the household is required to report its daily expenditures over a two-week period. The data for the 2014 SHS were collected on a continuous basis from January to December 2014 from a sample of households spread over 12 monthly collection cycles.

Firstly, households in the sample are asked to respond to a questionnaire (administered using a computer-assisted personal interview) that mainly collects regular expenditures (such as rent and electricity) and less frequent expenditures (such as furniture and dwelling repairs) for a recall period that varies in length depending on the type of expenditure. For regular expenditures, the amount of the last payment and the period it covered are typically collected. For the other types of expenditures collected in the interview, recall periods of one month, three months or twelve months are used. The recall periods are defined in terms of months preceding the month of the interview. For example, for a household in the June 2014 sample, “the past three months” corresponds to the period from March 1 to May 31, 2014. Demographic characteristics, dwelling characteristics and household equipment information, which are also collected in the interview, refer to the household’s situation at the time of the interview. Starting in 2013, respondents are informed that the survey data will be combined with tax data to obtain selected variables related to personal income for household members aged 16 and over on December 31 of the calendar year preceding the survey year. The reference period for personal income tax data is the calendar year prior to the survey year.

Fifty percent of sampled households are selected to also complete an expenditure diary. Following the interview, respondents of this subsample are asked to record the expenditures of all household members in an expenditure diary for a period of two weeks starting the day after the interview. Households are required to include all of their spending, except for a few types of expenditures, such as rent, regular utilities payments, and real estate and vehicle purchases. Households have the option of providing receipts of their purchases made during the two-week period in order to reduce the amount of information manually recorded in the diary. However, they are asked to write out additional information on the receipt if the description of the item appearing on the receipt is incomplete.

A telephone follow-up is carried out a few days after the interview to address any questions the respondent may have about the diary and to reiterate important information about how to complete it. At the end of the two-week period, the interviewer returns to the respondent’s residence to pick up the diary and ask a few additional questions to help the respondent report expenditures that he or she might have forgotten.

The diaries and all receipts supplied by respondents are scanned and captured at Statistics Canada’s head office. An expenditure classification code is assigned to each item from a list of over 650 different codes.

## 2.5 Data processing and quality control

The electronic questionnaire contains many features designed to maximize the quality of the data collected. Many controls are built into the questionnaire to identify unusual values and detect logical inconsistencies in the reported data. When a response is rejected by the control, the interviewer is prompted to correct the information (with the respondent’s help, if necessary). Once the data are transmitted to the head office, a detailed verification of each questionnaire is undertaken through a comprehensive series of processing steps. Invalid responses are corrected or flagged for imputation.

A number of verification steps are also carried out on the diary data when the diaries are received at the head office as well as throughout the capture and coding steps. For example, checks are carried out to ensure that the start and end dates of the reference period of the diary are indicated, that the reported expenditures were made during the

specified reference period, and that there are no items that appear in both the data written in the diary and on the receipts provided by the respondent. After validation, capture and coding, quality control procedures are applied. A sample of diaries is selected and completely verified once more to ensure that the diaries were captured and coded as specified in the procedures.

Next, a series of detailed verifications is performed on all diaries, and invalid responses are corrected or flagged for imputation. The final step is to assess whether the information reported in the diaries is of sufficient quality using parameters which are based on households' characteristics. The reported expenditures and number of items are compared with minimum thresholds estimated for each geographic area (Atlantic Provinces, Quebec, Ontario, Prairie Provinces and British Columbia), household income class and household size. Diaries that satisfy the conditions are deemed usable. The remaining diaries are examined, and deemed usable if they include notes providing justification for their low expenditures or their small number of reported items (for example, a person living alone who had few expenses to report because he or she was on a business trip during the diary recording period). Diaries that do not meet the usability criteria are treated as non-response diaries; they are excluded from the estimates. It should be noted that some of the usable diaries are incomplete and may have non-responded days.

To solve problems of missing or invalid information in interview questions, donor imputation using the nearest neighbour method is generally applied. That is, data from another respondent with similar characteristics (the donor) are used to impute. The imputation is done on one group of variables at a time, with the groups formed on the basis of the relationships among the variables. The characteristics used to identify the donor are selected such that they are correlated with the variables to be imputed. Household income, dwelling type, and the number of adults and children are commonly-used characteristics.

Donor imputation is also used when information is missing from the expenditure diary. For instance, a respondent may have reported a particular expenditure item without its cost or given the total amount spent (for example, on groceries) without listing the individual items. Imputation is also used to enhance the level of detail in the coding of the items reported. For example, the information provided by the respondent may simply indicate that a bakery product was purchased, but a more detailed code is required to meet the survey's needs. In this case, donor imputation is used to impute the type of bakery product (bread, crackers, cookies, cakes and other pastries, etc.). Diary imputation is carried out at the reported item level, and the characteristics most often used to identify the donor are cost, available partial code, household income and household size. Imputation is done by province and quarter to control for provincial differences and seasonality of expenditures.

Starting in 2012, the imputation method was refined to use supplementary information on the type of store where the purchases were made in order to produce detailed expenditures when a respondent has only provided a total amount in their diary. This method takes into account the increasing amount of grocery products sold in large chain stores that do not specialize in groceries.

For personal income tax data, missing or invalid data are generally donor-imputed.

Income and expenditure imputation is performed primarily with Statistics Canada's Canadian Census Edit and Imputation System (CANCEIS).

After imputation, taxes are added to the diary items that are reported with taxes excluded. In order to reduce the burden on respondents, instructions are provided to respondents indicating when to include or exclude taxes from reported expenses. Thus, the Goods and Services Tax (GST), the Provincial Sales Tax (PST), and the Harmonized Sales Tax (HST) are added to the diary items according to the appropriate federal and provincial taxation rates.

## 2.6 Estimation

The estimation of population characteristics from a sample survey is based on the premise that each sampled household represents a certain number of other households in the target population in addition to itself. This number is referred to as the survey weight. There are a number of steps involved in the process of computing the weight assigned to each household.

First, each household in the sample is given an initial weight equal to the inverse of its probability of being selected from the target population. Since only 50% of the households in the sample are selected to complete a diary,

different weights are computed for the interview questionnaire and for the diary. A few adjustments are later applied to the interview weights and to the diary weights.

The interview weights are first adjusted to take into account the households that did not respond to the questionnaire. They are then adjusted so that selected survey estimates are coherent with aggregates or estimates from auxiliary sources; this process is called weight calibration. Three data sources are used for weight calibration.

Firstly, the weights are adjusted according to the number of persons by age group and the number of households by household size from population estimates produced by Statistics Canada's Demography Division. These estimates are derived from 2011 Census data. Annual estimates of the number of persons in nine age groups (0 to 6, 7 to 17, 18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 to 74, and 75+) are used at the provincial level, and estimates for two age groups (0 to 17 years and 18 years and over) are used at the census metropolitan area level. For the number of households, the weights are adjusted to total the annual provincial estimates for three household size categories (one, two, and three or more persons). An adjustment is also made to ensure that each quarter is adequately represented in terms of the total number of households.

The second source used for weight calibration is the Statement of Remuneration Paid (T4) from the Canada Revenue Agency (CRA). The T4 data are used to ensure that the survey's weighted distribution of income (on the basis of wages and salaries) is consistent with the income distribution of the Canadian population. Interview weights are calibrated to total the T4 accounts of the number of persons per province in six categories of wages and salaries on the basis of provincial percentiles (0th to 25th, 25th to 50th, 50th to 65th, 65th to 75th, 75th to 95th and 95th to 100th).

Starting with SHS 2012, a third source for adjusting the weights is provided by the personal income tax data (T1) from the CRA. The interview weights are adjusted to reflect the number of persons in each of the three highest personal income classes (based on the 95.5th, 97th, and 98.5th percentiles) for each province, except Prince Edward Island where one income class is used. This adjustment aims to compensate for the under-representation of these groups among the survey respondents.

The diary weights are also subject to a series of adjustments. A factor adjusts for the non-response to the questionnaire, while another factor compensates for households that respond to the questionnaire but refuse to complete the diary. The weights are also adjusted to total demographic estimates in a manner similar to that used for the interview weights. The demographic estimates of the number of persons at the provincial level are the same for the diary as for the interview, with the exception of Prince Edward Island. Seven age groups are used for Prince Edward Island due to its smaller sample size (0 to 17, 18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, and 65+). At the census metropolitan area level, the distinction between the two age groups (0 to 17 years and 18 years and over) is retained only for Montreal, Toronto and Vancouver. Like the interview weights, the diary weights are adjusted to total the annual provincial estimates for the three household size categories; however, no quarterly adjustments are made.

The diary weights are also adjusted according to income. Instead of adjusting on wages and salaries (T4), the weights are adjusted to the estimated number of households by income group and by province calculated from the interview data. Specifically, the estimated number of households for each provincial quintile of total household income is used. The adjustment to the interview estimates ensures that the weighted income distribution of diary-respondent households is consistent with the weighted income distribution of interview-respondent households. The diary weights are also adjusted for the number of high-income individuals according to personal income tax data, using a single income class based on the 95.5th percentile. This personal income diary adjustment is not applied to Prince Edward Island.

All expenditure amounts collected from the interview and diary are converted to annual amounts (annualized) by multiplying them by a factor based on the recall period. Some expenditure data are also corrected by an adjustment factor when influential (extreme) values are identified. For the diary, another adjustment factor is produced to compensate for non-responded days.

The estimates for a given expenditure category collected from the interview therefore correspond to the weighted sums (using interview weights) of the annualized and adjusted amounts. The estimates of an expenditure category derived from diary data are calculated in a similar manner using diary weights and the appropriate annualization and adjustment factors. Lastly, summary expenditure category estimates that include components from both collection methods are produced by taking the sum of the estimates from both the diary and the interview components.



## 2.7 Historical revisions

The 2014 SHS estimates were computed with weights adjusted to 2014 population estimates. These population estimates were based on 2011 Census data as well as more recent information from administrative sources such as birth, death and migration registers.

In order to make SHS estimates comparable over time, the 2013 SHS estimates have been revised using the population projections based on the 2011 Census. Estimates for 2013 were previously based on 2006 Census population projections. Estimates for 2010, 2011 and 2012 will be reweighted in the near future.

The historical revisions based on 2011 Census data also take into account improvements to the calibration methods used for the interview and diary weights which were introduced with the 2014 SHS. The calibration strategy used for the 2014 SHS estimates is described in Section 2.6. The changes introduced in 2014 are as follows:

- For the calibration of the interview weights at the provincial level, as well as for the calibration of the diary weights in all provinces except Prince Edward Island, there are nine age groups instead of the eight age groups used previously. The age group for persons aged 65 years and over was split into two groups (65 to 74 and 75+).
- For the calibration of the diary weights for Prince Edward Island, seven age groups are used instead of the eight age groups used previously. One group is used for persons aged 0 to 17 instead of both the 0 to 6 and 7 to 17 groups.

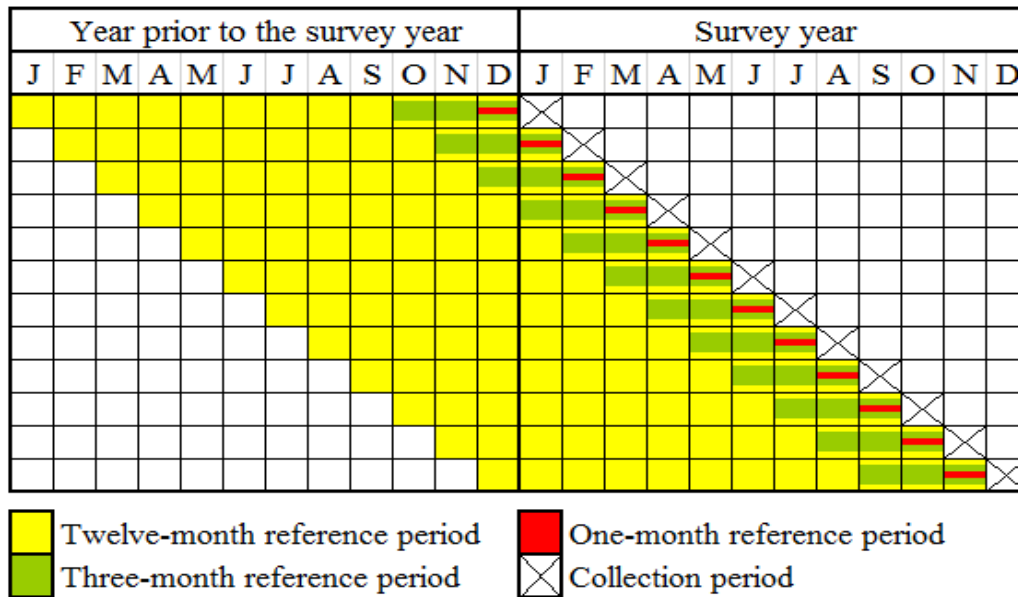
The same demographic controls used to calibrate the weights for the 2014 SHS estimates were used for the historical revisions of the 2012 and 2013 SHS estimates. For the historical revisions of the 2010 and 2011 estimates, the nine age groups were used to calibrate both the interview and diary weights for all provinces. In addition to the weight calibration, the other steps of the weighting process used to produce the revised estimates based on the 2011 Census data were also modified to account for the methods used for the 2014 SHS. The entire weighting process is thus standardized for the years 2010 to 2014.

SHS estimates prior to 2010 (2001-2009) are based on weights calibrated to population estimates produced using data from the 2001 Census. There is no plan to revise these estimates (using 2006 or 2011 Census data) due to the break in the data series starting with the 2010 SHS (see Section 2.9).

## 2.8 Reference period of the estimates

With continuous monthly collection, the reference period of the collected data differs from one month to the other, as illustrated in Figure 1. For example, for an expenditure item with a three-month reference period, the data from the July sample include expenditures made between April 1<sup>st</sup> and June 30<sup>th</sup>, whereas the data from the December sample include expenditures made between September 1<sup>st</sup> and November 30<sup>th</sup>.

**Figure 1**  
**Monthly sample reference periods of three different lengths**



Collected expenditures with a reference period of less than 12 months are annualized so that all expenditure amounts cover a period of 12 months. SHS estimates are produced by combining the data from the 12 monthly samples.

When combining the annualized data from the 12 monthly samples to generate annual expenditure estimates, for expenditures with a recall period of three months or less, most of the expenditures were made during the survey year. This is also true for all expenditure data collected with the diary.

For expenditure items with a 12-month recall period, the collected expenses occurred between January of the year before the survey year and November of the survey year, depending on the collection month. For example, expenses collected in January cover the period from January to December of the year before the survey year, while expenses collected in December occurred between December of the year before the survey year and November of the survey year. For the estimates produced to represent a single 12-month period when the data from 12 monthly samples are combined, it must be assumed that expenditures made during the survey year are similar to those made during the previous year. This must be considered when making comparisons between estimates based on a 12-month recall period and those based on shorter periods.

The limits of the collection model in producing expenditure estimates covering the same period (or the same year) are known, since the majority of countries use this methodology. Despite these limitations, continuous collection with reference periods adapted to the respondent's ability to provide information is considered preferable in order to obtain data that reflects households' true expenditures.

## 2.9 Comparability over time

The SHS has been conducted annually since 1997. This survey includes most of the content of its predecessors, the periodic Family Expenditure Survey and the Household Facilities and Equipment Survey. Prior to 2010, the SHS was primarily based on an interview during the first quarter of the year in which households reported expenditures incurred in the preceding calendar year, although some changes to the methodology and definitions were made between 1997 and 2009.

A new methodology, which combines a questionnaire and a diary to collect household expenditures, was introduced for the 2010 survey. The recall periods have been shortened for many expenditure items and collection is continuous throughout the year. Although the expenditure data collected since 2010 are similar to those of previous years, the changes to data collection, processing and estimation methods have created a break in the data series. As a result, users are advised not to compare SHS data from 2010 onward with data prior to 2010, unless otherwise noted.

Since 2010, the SHS incorporates a significant amount of content that was previously collected through the Food Expenditure Survey (FES), last conducted in 2001. Although there are some differences between the SHS and FES methodologies, food expenditure data in both surveys have been collected using an expenditure diary that households are asked to fill in for a period of two weeks. The content of the SHS diary is slightly less detailed than that of the FES diary (e.g., the weight and quantity of food items are not collected) in order to limit the SHS respondent's burden.

The content of the SHS was also reviewed in 2010 to reduce the time required for the interview. A number of components regarding household equipment and dwelling characteristics as well as most of the questions regarding changes in household assets and liabilities have been dropped. Some definitions have also changed. As well, starting with the 2010 survey, the data related to household income and income tax come mainly from personal income tax data.

Finally, the estimates for 2013 and 2014 are based on weights calibrated to population estimates produced using data from the 2011 Census. Estimates for 2010 to 2012 will be reweighted in the near future. Estimates for previous years (2001 to 2009) are based on weights calibrated to population estimates produced using data from the 2001 Census.

## 3.0 Data quality

Like all surveys, the SHS is subject to error, despite all the precautions taken in each step of the survey to prevent error or reduce its impact. There are two types of error: sampling and non-sampling.

### 3.1 Sampling errors

Sampling errors occur because inferences about the entire population are based on information obtained from only a sample of the population. The sample design, estimation method, sample size and data variability determine the size of the sampling error. The data variability for an expenditure item refers to the differences between members of the population in spending on that item. In general, the greater the differences between households, the larger the sampling error will be.

A common measure of sampling error is the standard error (SE). The SE is the degree of variation in the estimates which results from selecting one particular sample over another. The SE expressed as a percentage of the estimate is called the coefficient of variation (CV). The CV is used to indicate the degree of uncertainty associated with an estimate. For example, if the estimated number of households with a given dwelling characteristic is 10,000 with a CV of 5%, then the actual number is between 9,500 and 10,500 households 68% of the time, and between 9,000 and 11,000 households 95% of the time.

The standard errors for the SHS are estimated using the bootstrap method (see reference [1] in Section 7). CVs are available for the national and provincial estimates as well as for the estimates by household type, age of reference person, household income quintile, household tenure and size of area of residence.

### 3.2 Data suppression

To ensure accuracy, estimates with a CV greater than or equal to 35% have been suppressed.

Data for suppressed items do contribute to summary-level estimates. For example, if the expenditure estimate for a particular item of clothing were suppressed, this amount would still be included in the total estimate for clothing expenditure.

### 3.3 Non-sampling errors

Non-sampling errors occur because certain factors make it difficult to obtain accurate responses and to ensure that these responses retain their accuracy throughout processing. Unlike sampling errors, non-sampling errors are not easily quantified. Four sources of non-sampling error can be identified: coverage error, response error, non-response error and processing error.

#### 3.3.1 Coverage error

Coverage error arises when sampling frame units do not adequately represent the target population. This error may occur during sample design or selection, or during data collection or processing.

#### 3.3.2 Response error

Response error occurs when respondents provide inaccurate information. This error may be due to many factors, including flawed design of the questionnaire, misinterpretation of questions by interviewers or respondents, or faulty reporting by respondents.

Response error is the most difficult aspect of data quality to measure. In general, the accuracy of SHS data depends largely on respondents' ability to remember (recall) household expenditures and their willingness to consult records.

#### 3.3.3 Non-response error

Errors due to non-response occur when potential respondents do not provide the required information or when the information they provide is unusable. The main impact of non-response on data quality is that it can cause a bias in the estimates if the characteristics of non-respondents differ from those of respondents in a way that impacts the expenditures studied. While non-response rates can be calculated, they provide only an indication of data quality,

since they do not measure the degree of bias present in the estimates. The magnitude of non-response can be considered a simple indicator of the risks of bias in the estimates.

For the 2014 SHS, the interview response rate is 66.7%, and provincial response rates are shown in Table 1. The table also shows the number of non-responding households by reason for non-response. Reasons include the inability to contact the household, the household's refusal to participate in the survey and the inability to conduct an interview because of special circumstances (e.g., the respondent speaks neither official language or has a physical condition that precludes an interview). Respondents in the latter category are referred to as residual non-respondents.

**Table 1**  
**Interview response rates, Canada and provinces, 2014**

	Eligible sampled households	No contacts	Refusals	Residual non-respondents	Respondents	Response rate <sup>1</sup>
	number					percentage
Canada	17,109	1,232	3,918	546	11,413	66.7
Atlantic provinces	5,364	286	1,221	196	3,661	68.3
Newfoundland and Labrador	1,529	96	313	37	1,083	70.8
Prince Edward Island	769	31	171	37	530	68.9
Nova Scotia	1,567	48	396	61	1,062	67.8
New Brunswick	1,499	111	341	61	986	65.8
Quebec	2,226	112	521	57	1,536	69.0
Ontario	2,407	205	594	118	1,490	61.9
Prairie provinces	4,981	474	1,072	122	3,313	66.5
Manitoba	1,682	171	335	57	1,119	66.5
Saskatchewan	1,495	154	341	38	962	64.3
Alberta	1,804	149	396	27	1,232	68.3
British Columbia	2,131	155	510	53	1,413	66.3

1. (Respondent households/Eligible sampled households) x 100.

Some of the households selected to fill out a diary did not complete it or provided a diary that was considered unusable under the criteria outlined in section 2.5. For the 2014 SHS, the diary response rate among the interview-respondent households who were selected to fill out a diary is 66.1%. Provincial rates are provided in Appendix A. The final diary response rate (defined as the percentage of usable diaries relative to the number of households selected to fill out the diary) is 43.6% at the national level, and provincial rates are shown in Table 2.

**Table 2**  
**Diary response rates, Canada and provinces, 2014**

	Eligible sampled households <sup>1</sup>	Interview non-respondents <sup>2</sup>	Diaries <sup>3</sup>			Response rate <sup>5</sup>
			Refusal <sup>4</sup>	Unusable	Usable	
			number			percentage
Canada	8,625	2,943	1,789	135	3,758	43.6
Atlantic provinces	2,711	870	543	50	1,248	46.0
Newfoundland and Labrador	760	221	147	17	375	49.3
Prince Edward Island	390	105	97	6	182	46.7
Nova Scotia	805	267	182	15	341	42.4
New Brunswick	756	277	117	12	350	46.3
Quebec	1,122	357	237	13	515	45.9
Ontario	1,214	479	267	14	454	37.4
Prairie provinces	2,508	863	504	43	1,098	43.8
Manitoba	843	294	169	10	370	43.9
Saskatchewan	758	270	135	10	343	45.3
Alberta	907	299	200	23	385	42.4
British Columbia	1,070	374	238	15	443	41.4

1. The eligible sampled households are those selected to fill out the diary.

2. Includes interview "No contacts", "Refusals" and "Residual non-respondents" from households selected to fill out the diary.

3. The definition of usable and unusable diaries is given in the "Data processing and quality control" section.

4. Includes diary "No contacts", "Refusals" and "Residual non-respondents" from interview respondents selected to fill out the diary.

5. (Usable diaries/Eligible sampled households)x100.

The response rates vary from month to month. Monthly response rates for the interview and diary can be found in Appendix B. Interview and diary response rates by size of area of residence and dwelling type are shown in Appendix C.

The diary response rate of interview respondents can be found in Appendix D, broken down by various household characteristics, including household type, household tenure, age of the reference person, and before-tax income quintile.

Cases for which the respondent fails to answer some of the questions are referred to as partial non-response. Imputing missing values compensates for this partial non-response. Imputation rates are described in Section 3.3.5.

There are also cases in which a household fails to complete the diary for all 14 days as required, leaving days with no data. Adjustment factors were thus calculated to take into consideration these days with no data.

### 3.3.4 Processing error

Processing errors may occur in any of the data processing stages, including data entry, coding, editing, imputation of partial non-response, weighting and tabulation. Steps taken to reduce processing error are described in Section 2.5.

### 3.3.5 Imputation of partial non-response

The residual bias remaining after the imputation of partial non-response is difficult to measure. Its magnitude depends on the imputation method's ability to produce unbiased estimates. The imputation rates provide an indication of the magnitude of partial non-response.

Partial interview non-response may result from a lack of information or from an invalid response to a question. The national and provincial percentages of households for which certain expenditure categories had to be imputed due to partial interview non-response shown in Table 3. These percentages are presented by number of imputed expenditure variables per household (out of all consumer expenditure data collected during the interview). The table contains two series of results, one including and the other excluding expenditures on communication services (telephone, cell phone and Internet), television services (via cable, a satellite dish or a phone line), satellite radio services, and home security services. This distinction has been made because these services are increasingly being purchased as a package. Households are often billed for bundled services, making it difficult or impossible for them to provide separate expenditure amounts for each service. Therefore, the total amount paid for the package is allocated to individual services through imputation, which significantly increases the number of households for which expenditures must be imputed.

**Table 3**  
**Percentage of households requiring imputation for consumer expenses collected during the interview, Canada and provinces, 2014**

	Number of variables imputed <sup>1</sup> (out of 188)				Number of variables imputed <sup>2</sup> (out of 193)			
	1	2 to 9	10 or more	Total	1	2 to 9	10 or more	Total
	percentage							
Canada	18.9	34.3	2.9	56.1	8.8	66.0	4.9	79.7
Newfoundland and Labrador	17.3	33.1	1.8	52.3	4.3	75.1	4.2	83.7
Prince Edward Island	21.5	33.4	2.1	57.0	7.5	73.0	4.3	84.9
Nova Scotia	18.4	34.2	1.2	53.8	6.4	75.0	2.4	83.8
New Brunswick	19.5	29.8	2.0	51.3	8.1	69.4	3.8	81.2
Quebec	17.5	32.3	2.8	52.6	7.5	67.4	4.8	79.6
Ontario	19.3	32.1	2.9	54.3	11.5	58.3	4.2	74.0
Manitoba	17.6	44.7	6.0	68.3	11.9	58.7	9.4	80.0
Saskatchewan	19.6	34.4	2.8	56.9	11.9	60.3	5.1	77.2
Alberta	17.2	35.4	3.2	55.8	9.3	60.1	5.2	74.6
British Columbia <sup>3</sup>	21.9	34.3	3.3	59.6	8.8	68.4	5.2	82.3

1. Excluding expenditures related to communication, television, satellite radio and home security services.

2. Including expenditures related to communication, television, satellite radio and home security services.

3. Expenditures for registration fees for automobiles, vans and trucks and public and private insurance premiums have been combined for the provinces of Manitoba (starting in 2010), Saskatchewan and British Columbia (starting in 2013). In these provinces, it can be difficult to make a clear distinction between registration fees and public and private insurance premiums. Starting in 2014, these two expenses are combined before the imputation. This change resulted in a lower imputation rate in 2014 for British Columbia.

Users of expenditure estimates relating to communication, television, satellite radio or home security services should therefore take into account the high level of imputation of the expenditure data when examining these individual services. A measure of the impact of imputation on each individual service has been produced and is discussed in Appendix E. This measure represents the proportion of the total value of the estimate obtained from imputed data.

The percentages of households that responded to the interview and for which dwelling characteristics or household equipment had to be imputed can be found in Appendix F.

The imputation rates for all expenditures reported in the diary are shown in Tables 4 and 5. Table 4 deals with expenditures on goods and services including food from stores, which are reported in the first section of the diary. Table 5 shows the imputation rates for restaurant expenditures, which are reported in the second section of the diary.

For expenditure data from the diaries, imputation is used primarily to assign a value when the amount of a reported expenditure is missing, to assign a list of expenditure items (with individual costs) when only the total cost is provided (e.g., to assign grocery items and their individual costs when the respondent has provided only the total amount of the grocery bill), or to assign an expenditure code that is more detailed than the one that could be assigned using the information from the respondent (e.g., the type of bakery product). The imputation rate for each of these three types of imputation is shown in Table 4. Each rate represents the proportion of imputed items relative to all expenditure items from the diaries.

**Table 4**  
**Imputation rates by type of imputation for the section of the diary on goods and services including food from stores, Canada, 2014**

Type of imputation	Imputation rate percentage
<b>Imputation of a missing cost for a reported expense</b>	
Food from stores	1.1
Other goods and services	2.3
All expenditures	1.5
<b>Imputation of expenditure items (and their individual cost) from a total expense</b>	
Food from stores	20.1
Other goods and services	12.4
All expenditures	17.6
<b>Imputation of detailed expenditure code</b>	
Food from stores	5.8
Other goods and services	5.5
All expenditures	5.7

The risks of bias associated with the imputed data depend largely on the level of detail at which the SHS data are used. For example, food expenditure data in the SHS are produced at a high level of detail to meet the needs of the Food Expenditure Survey users (last conducted in 2001). Food expenditures are categorized using a hierarchical system of more than 200 expenditure codes. For some reported expenditure items, the food product may have been known (e.g., dairy products or even milk), but the level of detail required (e.g., skim milk, 1% milk or 2% milk) had to be imputed. This type of imputation creates a risk of bias only in expenditure estimates at a very detailed level. In other cases, however, almost no information on the type of expenditure was available before imputation (e.g., it was known only that the expenditure was for a good). When so little information is available, the risks of bias in the estimates of the expenditure categories are more significant.

Restaurant expenditures are reported using a slightly different format in the second section of the diary. Imputation is used primarily to assign a value when the total amount of the restaurant expenditure or the cost of alcoholic beverages is missing, or when the type of meal (breakfast, lunch, dinner or snack and beverage) has not been specified. The imputation rate for each of these three types of imputation is shown in Table 5.

**Table 5**  
**Imputation rates by type of imputation for the section of the diary on snacks, beverages and meals purchased from restaurants or fast-food outlets, Canada, 2014**

Type of imputation	Imputation rate percentage
Imputation of total cost	1.01
Imputation of costs for alcoholic beverages	4.28
Imputation of meal type (breakfast, lunch, dinner, or snacks and beverages)	8.07

Lastly, households have the option of either providing receipts or recording their expenditure information in the diary. Table 6 shows the percentage of expenditures reported using each method for food expenditures, restaurant expenditures, and expenditures for other goods and services.

**Table 6**  
**Methods for recording expenses in the diary, Canada, 2014**

Expenditure category	Transcriptions percentage	Receipts
Food	21.3	78.7
Restaurant	83.5	16.5
Other goods and services	45.2	54.8

Imputation rates vary depending on the expenditure reporting method. The rates in Tables 4 and 5 are presented by the expenditure reporting method in Appendix G.



### **3.4 The effect of large values**

For any sample, estimates of totals, averages and standard errors can be affected by the presence or absence of large values in the sample. Large values are more likely to arise from positively skewed populations. Such values are found in the SHS and are taken into account when the final estimates are generated.

## **4.0 Definitions**

### **4.1 General concepts**

#### **4.1.1 Reference year of the survey**

Corresponds to the data collection year, from January 1st to December 31st, 2014.

#### **4.1.2 Household**

A person or group of persons occupying one dwelling unit is defined as a “household”. The number of households, therefore, equals the number of occupied dwellings.

#### **4.1.3 Household member**

A person usually residing in the dwelling unit at the time of the interview.

#### **4.1.4 Reference person**

The household member being interviewed chooses which household member should be listed as the reference person after hearing the following definition: “The household reference person is the member of the household mainly responsible for its financial maintenance (e.g., pays the rent, mortgage, property taxes, and electricity). When members of the household share the responsibility equally, choose one of these members to be shown as the reference person”. This person must be a member of the household at the time of the interview.

#### **4.1.5 Expenditures**

The net cost of all goods and services received for private use within a given period (for example, 1, 3 or 12 months), whether or not the goods or services were paid for during that period, and regardless of whether these expenditures were made in Canada or abroad. Business expenditures are excluded.

#### **4.1.6 Taxes included**

All expenditures include, when applicable: the Harmonized Sales Tax, the Goods and Services Tax, provincial retail sales taxes, tips, customs, duties, and any other additional charges or taxes.

#### **4.1.7 Gifts**

Any expenditure may include gifts given to persons outside the household. Only the value of gifts of clothing is reported separately.

#### **4.1.8 Insurance settlements**

Where an insurance settlement was used to repair or replace property, the survey includes only the deductible amount paid for an item.

#### **4.1.9 Trade-ins**

Where a trade-in is used to lower the price of an item, most commonly a vehicle, the expenditure amount is the total cost after the trade-in. Real estate transactions are excepted.

### **4.2 Household characteristics**

#### **4.2.1 Number of households in sample**

Corresponds to the number of eligible sample households minus households that interviewers were unable to contact, households that refused to participate and households whose interview questionnaire were rejected for lacking sufficient information.

#### **4.2.2 Estimated number of households**

Estimation of the average number of households during the reference year.

### **4.2.3 Household size**

Number of persons in the household at the time of the interview.

### **4.2.4 Age of reference person**

Corresponds to the age of the reference person at the time of the interview.

### **4.2.5 Household income before tax**

Corresponds to the total income before tax received by the household the year prior to the reference year of the survey. It refers to income from all sources including government transfers: scholarships, bursaries and fellowships, wages and salaries before deductions, farm self-employment net income, non-farm self-employment net income, Universal Child Care Benefit, Old Age Security pension, CPP and QPP benefits, Employment Insurance benefits, social assistance, workers' compensation benefits, Federal GST/HST Credit, provincial tax credits, other government transfers, private retirement pensions, support payments received, other taxable income and income from a RDSP and investment income.

### **4.2.6 Homeowner**

Household living in a dwelling owned (with or without a mortgage) by a member of the household at the time of the interview.

## **4.3 Selected household expenditures**

### **4.3.1 Total expenditure**

The sum of total current consumption, income taxes, personal insurance payments and pension contributions, and gifts of money, alimony and contributions to charity.

### **4.3.2 Total current consumption**

Sum of the expenditures for food, shelter, household operations, household furnishings and equipment, clothing and accessories, transportation, health care, personal care, recreation, education, reading materials and other printed matter, tobacco products and alcoholic beverages, games of chance, and miscellaneous expenditures.

### **4.3.3 Food purchased from stores**

"Stores" includes all establishments where food can be bought, such as grocery stores, specialty food stores, department stores, warehouse-type stores and convenience stores, as well as frozen food suppliers, outdoor farmers' markets and stands, and all other non service establishments. The expenditures are net of cash premium vouchers or rebates at the cash register and include deposits paid for at the time of purchase. These deposits are excluded from the expenditures when reimbursed and are shown as negative expenditures (flow of money in) in the "Miscellaneous expenditures" section.

### **4.3.4 Food purchased from restaurants**

"Restaurants" includes full service restaurants, fast-food outlets and cafeterias, as well as refreshments stands, snack bars, vending machines, mobile canteens, caterers and chip wagons. These expenditures include tips and do not include expenditures for alcoholic beverages.

### **4.3.5 Shelter**

Principal accommodation (either owned or rented) and other accommodation (such as vacation homes or accommodation while travelling).

### **4.3.6 Rent**

Net rent, excluding rent paid for business or rooms rented out. Includes additional amounts paid to landlord.

### **4.3.7 Tenants'/Homeowners' insurance premiums**

Premiums paid for fire and comprehensive policies.

#### **4.3.8 Repairs and maintenance (owned living quarters)**

Covers expenditures for labour and materials for all types of repairs and maintenance, including expenditures to repair and maintain built-in equipment, appliances and fixtures. Expenditures related to alterations and improvements are excluded as they are considered as an increase in assets (investment) rather than an expense.

#### **4.3.9 Water, fuel and electricity (for principal accommodation)**

Expenditures for services related to water and sewage, electricity, and natural gas and other fuel for the principal accommodation, whether rented or owned.

#### **4.3.10 Property and school taxes, water and sewage charges for owned vacation homes and other secondary residences**

Refers to the amount billed, excluding any rebates. Special service charges (e.g., garbage, sewage), local improvements, school taxes, and water charges are included if these are part of the property tax bill.

#### **4.3.11 Accommodation away from home**

Includes all expenses for accommodation while travelling. Excludes expenditures for accommodation that were part of a package trip.

#### **4.3.12 Household appliances**

Refers to the net purchase price after deducting trade-in allowance and any discount. Excludes appliances included in the purchase of a home.

#### **4.3.13 Purchase of automobiles, vans and trucks**

Refers to the net purchase price, including extra equipment, accessories, and warranties bought when the vehicle was purchased, after deducting any trade-in allowance or separate sales. Separate sales occur when a vehicle is sold independently by the owner (e.g., not traded in when purchasing or leasing another vehicle).

#### **4.3.14 Health care**

Includes direct (out-of-pocket) costs to the household net of the expenditures reimbursed, as well as private health insurance premiums.

#### **4.3.15 Package trips**

Includes at least two components such as transportation and accommodation, or accommodation with food and beverages.

#### **4.3.16 Tobacco products and smokers' supplies**

Includes cigarettes, tobacco, cigars, matches, pipes, lighters, ashtrays, cigarette papers and tubes, and other smokers' supplies.

#### **4.3.17 Alcoholic beverages**

Includes alcoholic beverages purchased from stores and restaurants. Expenditures on supplies and fees for self-made beer, wine or liquor are also included.

#### **4.3.18 Games of chance**

Expenditures on all types of games of chance. The expenditures are not net of the winnings from these games.

#### **4.3.19 Discounts and refunds**

Presented in the data tables as "negative expenditures" since they represent a flow of money into the household instead of out of it.

### 4.3.20 Income taxes

The sum of federal and provincial income taxes payable for the taxation year prior to the reference year of the survey. Income taxes include taxes on income, capital gains and RRSP withdrawals, after taking into account exemptions, deductions, non-refundable tax credits, and the refundable Quebec abatement. Income taxes also include provincial health insurance premiums.

## 4.4 Dwelling characteristics

### 4.4.1 Type of dwelling

Type of dwelling in which the household resided at the time of interview. A dwelling is a structurally separate set of living premises with a private entrance from outside the building or from a common hall or stairway.

- A **single detached** dwelling contains only one dwelling unit and is completely separated by open space on all sides from any other structure, except its own garage or shed.
- A **single attached** dwelling is a double or semi-detached unit (side-by-side) or a row or terrace unit.
- **Apartment** includes duplexes (two dwellings, situated one above the other), triplexes, quadruplexes and apartment buildings.
- **Other** dwellings include mobile homes, motor homes, tents, railroad cars or houseboats, which are used as permanent residences and are capable of being moved on short notice.

### 4.4.2 Repairs needed

Indicates the respondent's perception of the repairs the dwelling needed at the time of the interview to restore it to its original condition. Remodeling, additions, conversions, or energy improvements that would upgrade the dwelling over and above its original condition are not included.

- **Major repairs** include serious deficiencies in the structural condition of the dwelling, as well as the plumbing, electrical and heating systems. Examples include corroded pipes, damaged electrical wiring, sagging floors, bulging walls, damp walls and ceilings, and crumbling foundation.
- **Minor repairs** include deficiencies in the surface or covering materials of the dwelling and less serious deficiencies in the plumbing, electrical and heating systems. Examples include small cracks in interior walls and ceilings, broken light fixtures and switches, cracked or broken panes, leaking sinks, missing shingles or siding, and peeling paint.

### 4.4.3 Tenure

Housing status of the household at the time of the interview.

- **Owned with mortgage** indicates that the dwelling was owned by a household member and that there was a mortgage at the time of the interview.
- **Owned without mortgage** indicates that the dwelling was owned by a household member and that there was no mortgage at the time of the interview.
- **Rented** indicates that the dwelling was rented by the household or occupied rent-free at the time of the interview.

### 4.4.4 Number of bathrooms (for dwelling occupied at the time of the interview)

Number of rooms in the dwelling with an installed bathtub and/or shower.

## 4.5 Household equipment

### 4.5.1 Landline telephone service

Includes landline telephone services used for business if the business is conducted in the dwelling.

### 4.5.2 Cellular telephone

Includes cellular telephones and handheld text messaging devices with cell phone capability.

### 4.5.3 Home computer

Excludes computers used exclusively for business purposes.

### 4.5.4 Internet use from home

Indicates whether the household has access to the Internet at home.

### 4.5.5 Owned vehicles

Number of vehicles (automobiles, vans and trucks) owned by members of the household at the end of the month prior to the time of the interview.

## 4.6 Classification categories

### 4.6.1 Canada

Canada-level data for 2014 include the 10 provinces only.

### 4.6.2 Province/territory

Data for the territories are not available for 2014.

### 4.6.3 Before-tax household income quintile (national)

Income groupings are obtained by ranking the households who responded to the interview in ascending order by total household income before tax, then partitioning the households into five groups of similar size. The estimated number of households in each group should be the same in principle, but differences may occur due to the weight of the household at the boundary of two quintiles, since this household must lie in either one or the other of these quintiles. Moreover, the specific methodology of the survey (with a set of weights for the interview and another for the diary) implies that the estimated number of households will be the same for the interview as for the diary only if the quintiles are defined at the provincial level. For the national quintiles, the estimated number of households may differ between the interview weights and the diary weights (see Section 5).

### 4.6.4 Housing tenure

Whether a household member owned or rented the dwelling in which the household lived at the time of the interview.

- **Owners** refers to all households living in a dwelling owned (with or without mortgage) by a household member at the time of the interview.
- **Owners with mortgage** owned the dwelling with a mortgage at the time of the interview.
- **Owners without mortgage** owned the dwelling without a mortgage at the time of the interview.
- **Renters** rented a dwelling at the time of the interview (as a regular tenant, rent free, or with reduced rent).

### 4.6.5 Household type

Households are divided according to the following types:

- **One person households** are the households where the dwelling is occupied by only one person at the time of the interview.
- **Couple households** are households where the married or common law spouse of the reference person is a member of the household at the time of the interview. This household type may be further broken down into couple households without children (without additional persons), with children (without additional persons), and with additional persons. “Children” are never-married sons, daughters, or foster children of the reference person and may be any age. “Additional persons” include sons, daughters and foster children whose marital status is other than “single, never-married”, other relatives by birth or marriage, and unrelated persons.
- **Lone-parent households** are households where the reference person has no spouse at the time of the interview and there is at least one child (never-married son, daughter, or foster child of the reference person). The lone-parent households for which data are presented do not include any additional persons.

- **Other households** are households composed of relatives only or households having at least one household member who is unrelated to the reference person (e.g., lodger, roommate, employee). Relatives may include:
  - ▶ son, daughter, or foster child of the reference person whose marital status is other than “single, never-married”;
  - ▶ relatives of the reference person by birth or marriage (not spouse, son, daughter or foster child).

#### 4.6.6 Size of area of residence

Sampled dwellings are assigned to the following groups depending on the area in which they are located according to the 2011 Census boundaries and population size.

- Population centres:
  - ▶ 1,000,000 and over
  - ▶ 500,000 to 999,999
  - ▶ 250,000 to 499,999
  - ▶ 100,000 to 249,999
  - ▶ 30,000 to 99,999
  - ▶ 1,000 to 29,999
- Rural area

#### 4.6.7 Population centre

Area with a population of at least 1,000 or more and a density of 400 or more people per square kilometre. Population centres are classified as either small, medium, or large as defined below:

- Small population centre: 1,000 to 29,999
- Medium population centre: 30,000 to 99,999
- Large urban population centre: 100,000 and over

#### 4.6.8 Rural area

All areas outside population centres are considered rural. Together, population centres and rural areas cover all of Canada.

#### 4.6.9 Age of reference person

Households are grouped according to the age of the reference person as follows:

- Less than 30 years
- 30 to 39 years
- 40 to 54 years
- 55 to 64 years
- 65 years and over

## 5.0 Derivation of data tables

This section shows how the SHS data tables have been derived. It then explains the calculations used most frequently to manipulate the data. Users are advised to refer to this section before undertaking their data analysis.

As stated previously, only a subsample of the households is selected to fill out the diary. Therefore, different weights are calculated for the interview questionnaire and for the diary.

### 5.1 Estimates of number of households

Estimates are generated using two sets of weights; one for the interview and the other for the diary. Adjustments made during weighting ensure that the estimated number of households at the provincial level is the same for both sets of weights for the following domains:

- household sizes of one, two, or three or more persons
- household income groups defined according to provincial quintiles

By default, the estimate of the number of households for any aggregation of these domains is also the same for both sets of weights.

For any other domain, an estimate of the number of households may differ somewhat between the two sets of weights, depending on the reliability of these estimates. The estimated number of households in the SHS tables has been produced using interview weights, as opposed to diary weights. The average household size is also estimated using the interview weights.

The estimated number of households and the average household size of the various domains for which expenditure estimates are produced in CANSIM tables are available in Appendix H.

### 5.2 Estimates of average expenditure per household

Estimates using both interview and diary expenditure data are produced in two steps: estimates are produced separately from the interview and the diary, and are then added together.

For average expenditure per household, the interview average expenditure per household is calculated using the weighted sum of expenditure data obtained from the interview divided by the sum of the interview weights. Similarly, the diary average expenditure per household is estimated using the weighted sum of expenditure data obtained from the diary divided by the sum of the diary weights. The two components are then added to obtain the average expenditure per household. With this approach, for domains in which the interview and diary estimates do not match, the combined interview and diary average expenditure per household does not exactly match the combined interview and diary weighted sum of expenditure divided by the estimated number of households (produced using the interview weights). Nevertheless, the approach ensures that the sum of the average expenditure per household for all categories equals the total average expenditure per household.

### 5.3 Examples of expenditure estimates

The tables in this section contain examples of expenditure estimates derived using data from either the interview or the diary, as well as an example of expenditure estimates produced using a combination of interview and diary data.

#### 5.3.1 Examples of expenditure estimates obtained from interview data

The CANSIM tables include estimates of average expenditure per household. The estimated number of households and the average household size are also available at the national, regional and provincial levels. The estimated number of households and the average household size for other domains are not included in these tables but are provided in Appendix H. In this document, we present an example of the estimated number of households in Table 7 associated with estimates of average expenditure per household from Table 8 in order to help in the understanding of the examples in Section 5.4. The estimates in Tables 7 to 12 are based on 2011 data.



**Table 7**  
**Estimated number of households based on interview weights, by household tenure**

	All households	Owner with mortgage	Owner without mortgage	Renter
	number			
Estimated number of households	13,514,009	4,812,813	4,219,949	4,481,247

**Table 8**  
**Average household expenditures obtained from interview data, by household tenure**

	All households	Owner with mortgage	Owner without mortgage	Renter
	dollars			
Shelter	15,210	23,712	9,643	11,320
Household furnishings and equipment	2,027	2,699	2,235	1,115
Clothing and accessories	3,360	4,289	3,268	2,448
Transportation	11,229	14,505	12,389	6,638

### 5.3.2 Examples of expenditure estimates obtained from diary data

**Table 9**  
**Estimated number of households based on diary weights, by household tenure**

	All households	Owner with mortgage	Owner without mortgage	Renter
	number			
Estimated number of households	13,514,009	4,785,857	4,214,778	4,513,374

**Table 10**  
**Average household expenditures obtained from diary data, by household tenure**

	All households	Owner with mortgage	Owner without mortgage	Renter
	dollars			
Food expenditures	7,795	9,234	8,465	5,642
Food purchased from stores	5,588	6,583	6,053	4,098
Food purchased from restaurants	2,207	2,652	2,412	1,544

### 5.3.3 Examples of estimates obtained from both interview and diary expenditure data

Table 11 shows the estimated number of households and the average household size by household tenure as provided in Appendix H (not available in CANSIM tables), while Table 12 represents a typical example of an average household expenditures table available to users through the SHS CANSIM tables.

**Table 11**  
**Estimated number of households and average household size based on interview weights, by household tenure**

	All households	Owner with mortgage	Owner without mortgage	Renter
	number			
Estimated number of households	13,514,009	4,812,813	4,219,949	4,481,247
Average household size	2.48	3.03	2.30	2.05

**Table 12**  
**Average household expenditures obtained from interview and diary data, by household tenure**

	All households	Owner with mortgage	Owner without mortgage	Renter
	dollars			
Total expenditure <sup>1</sup>	39,621	54,439	36,000	27,163
Food expenditures	7,795	9,234	8,465	5,642
Food purchased from stores	5,588	6,583	6,053	4,098
Food purchased from restaurants	2,207	2,652	2,412	1,544
Shelter	15,210	23,712	9,643	11,320
Household furnishings and equipment	2,027	2,699	2,235	1,115
Clothing and accessories	3,360	4,289	3,268	2,448
Transportation	11,229	14,505	12,389	6,638

1. Total of expenditure for the categories used in this example.

Tables 7 to 10 above are not available to users; however, the following section provides examples on how to produce other estimates using tables such as Tables 11 and 12 above.

## 5.4 Calculating various estimates using the tables

The following section explains some of the calculation methods most commonly used to manipulate SHS expenditure estimates.

### 5.4.1 How to calculate average expenditure per person

To calculate average expenditure per person for a given category, divide the average expenditure per household for that category (Table 12) by the average household size (found on the second line of Table 11).

For example, the average food expenditure per person for renter households is calculated as follows:

Average food expenditure per person for renter households =

$$\frac{\text{Average food expenditure per renter household}}{\text{Average size of renter households}}$$

$$\text{Example : } \frac{\$5,642}{2.05} = \$2,752$$

When analyzing estimates of average expenditure per person, note that household composition (number of children and adults) is a significant factor in many expenditure patterns.

### 5.4.2 How to calculate percentages of total average household expenditure (budget shares)

To calculate the budget share of an individual expenditure category as a percentage of total average household expenditure, divide the average expenditure per household for that expenditure category by the total average expenditure per household, and then multiply by 100.

For example, using the Table 12, the percentage of total average expenditure per household represented by the average expenditure on food per household, for renter households, is calculated as follows:

Percentage of total average expenditure per household represented by the average expenditures on food per household, for renter households =

$$\frac{\text{Average expenditure on food per renter household}}{\text{Total average expenditure per renter household}} \times 100$$

$$\text{Example : } \frac{\$5,642}{\$27,163} \times 100 = 20.77\%$$

### 5.4.3 Combining expenditure categories into your own groupings

The average expenditure per household for different expenditure categories can be added together to create new subtotals.

For example, the average expenditure on shelter and transportation per renter household is calculated as follows:

Average expenditure on shelter per renter household + Average expenditure on transportation per renter household

Example: \$11,320 + \$6,638 = \$17,958

### 5.4.4 Calculating aggregate expenditures

To calculate aggregate expenditures, multiply the average expenditure per household from one column for an expenditure category (Table 12) by the estimated number of households from the same column in Table 11.

For example, the aggregate expenditure on food for renter households is calculated as follows:

Average expenditure on food per renter household x Estimated number of renter households

Example: \$5,642 x 4,481,247 = \$25,283,195,574

**Note:** Since the average expenditure variable comes from diary data and the estimated number of households in the domains used differs slightly depending on whether it is calculated using interview weights or diary weights, the estimate of aggregate expenditure only approximates the value that would have been obtained using the weighted sum of expenditures. Indeed, if we use the estimated number of households based on the diary weights from Table 9 (which are not available in the CANSIM tables), we could derive the weighted sum of expenditures. We then get:

Average expenditure on food per renter household x Estimated number of renter households

Example: \$5,642 x 4,513,374 = \$25,464,456,108

The estimates of aggregate expenditure are exact for all domains for which the sum of the interview weights and the sum of the diary weights are the same (see Section 5.1), as well as for all variables derived from the interview questionnaire.

### 5.4.5 Calculating aggregate expenditures by combining data columns

To calculate aggregate expenditures for a given expenditure category for multiple columns, calculate the aggregate expenditure for this category for each of the columns and then add them together.

For example, aggregate expenditure on food by owner households (with or without a mortgage) are calculated as follows:

(Average expenditure on food per owner household with a mortgage x Estimated number of owner households with mortgage) + (Average expenditure on food per mortgage-free owner household x Estimated number of mortgage-free owner households)

Example: (\$9,234 x 4,812,813) + (\$8,465 x 4,219,949) = \$80,163,383,527

### 5.4.6 How to calculate average expenditures per household by combining data columns

To calculate the average expenditure for a given expenditure category for multiple columns, calculate the aggregate expenditure for this category for each of the columns, add them together, and then divide the total by the sum of the estimated number of households in those columns (Table 11).

For example, the average expenditure on food per owner household (with or without a mortgage) is calculated as follows:

$$\begin{aligned} &\text{Average expenditure on food per owner household (with or without a mortgage) =} \\ &\frac{(\text{Average expenditure on food per owner household with a mortgage} \times \text{Estimated number of owner} \\ &\quad \text{households with mortgage}) + (\text{Average expenditure on food per mortgage-free owner household} \times \text{Estimated number of mortgage-free} \\ &\quad \text{owner households})}{\text{Estimated number of owner households with a mortgage} + \text{Estimated number of mortgage-free owner households}} \end{aligned}$$

$$\text{Example : } \frac{(\$9,234 \times 4,812,813) + (\$8,465 \times 4,219,949)}{4,812,813 + 4,219,949} = \$8,875$$

### 5.4.7 Calculating the expenditure share of a subgroup among all households

An expenditure share is the percentage of the aggregate expenditures for a given expenditure category that belongs to a particular subgroup of households (e.g., the percentage of all food expenditures made by renter households).

It is calculated by deriving the household subgroup's aggregate expenditures for the expenditure category and dividing it by the aggregate expenditure for the expenditure category for all households. The result is then multiplied by 100.

For example, the percentage of food expenditures made by renter households is calculated as follows:

$$\begin{aligned} &\text{Percentage of food expenditures made by renter households =} \\ &\frac{\text{Average expenditure on food per renter household} \times \text{Estimated number of renter} \\ &\quad \text{households}}{\text{Average expenditure on food per household for all households} \times \text{Estimated total} \\ &\quad \text{number of households}} \times 100 \end{aligned}$$

$$\text{Example : } \frac{\$5,642 \times 4,481,247}{\$7,795 \times 13,514,009} \times 100 = 24.00\%$$

## **6.0 Related products and services**

### **6.1 CANSIM**

CANSIM (the Canadian Socio-Economic Information Management System) is a database consisting of multi-dimensional cross-sectional tables.

Eight tables presenting annual information from the Survey of Household Spending are available. Table 203-0021 presents detailed level household expenditure estimates, while Tables 203-0022 to 203-0026 present data according to household income quintile, household type, household tenure, size of area of residence and age of the reference person, respectively. Table 203-0027 presents information on dwelling characteristics and household equipment. Finally, Table 203-0028 provides detailed food expenditure estimates.

### **6.2 Household Expenditures Research Paper Series**

This series provides detailed documentation on issues, concepts, methodology, data quality and other relevant research related to household expenditures from the Survey of Household Spending.

### **6.3 Custom tabulations**

For clients with more specialized data needs, custom tabulations can be produced to their specifications on a cost-recovery basis under the terms of a contract (subject to confidentiality restrictions). Aggregate data at the detailed expenditure level are also available on a custom basis.

## 7.0 References

[1] Charlebois, J. and Dubreuil, G. 2011. Variance Estimation for the Redesigned Survey of Household Spending. Proceedings of the Survey Methods Section, Statistical Society of Canada Annual Meeting, June 2011.

## Appendix A

### Diary response rates among interview respondents

Table A1

#### Diary response rates among interview respondents, Canada and provinces, 2014

	Interview respondents <sup>1</sup>	Diaries <sup>2</sup>			Response rate <sup>4</sup>
		Refusal <sup>3</sup>	Unusable	Usable	
	number				percentage
Canada	5,682	1,789	135	3,758	66.1
Atlantic provinces	1,841	543	50	1,248	67.8
Newfoundland and Labrador	539	147	17	375	69.6
Prince Edward Island	285	97	6	182	63.9
Nova Scotia	538	182	15	341	63.4
New Brunswick	479	117	12	350	73.1
Quebec	765	237	13	515	67.3
Ontario	735	267	14	454	61.8
Prairie provinces	1,645	504	43	1,098	66.7
Manitoba	549	169	10	370	67.4
Saskatchewan	488	135	10	343	70.3
Alberta	608	200	23	385	63.3
British Columbia	696	238	15	443	63.6

1. Interview respondents from households selected to fill out the diary.

2. The definition of usable and unusable diaries is given in the "Data processing and quality control" section.

3. Includes diary "No contacts", "Refusals" and "Residual non-respondents" from interview respondents selected to fill out the diary.

4. (Usable diaries/Interview respondents selected for the diary)x100.

## Appendix B

### Response rates by collection month

**Table B1**  
**Interview response rates by collection month, Canada, 2014**

	Eligible sampled households	No contacts	Refusals	Residual non-respondents	Respondents	Response rate <sup>1</sup>
						number
All months	17,109	1,232	3,918	546	11,413	66.7
January	1,496	113	311	49	1,023	68.4
February	1,433	139	318	52	924	64.5
March	1,409	111	329	31	938	66.6
April	1,400	85	307	43	965	68.9
May	1,431	91	341	38	961	67.2
June	1,390	100	320	45	925	66.5
July	1,478	105	327	48	998	67.5
August	1,414	98	335	45	936	66.2
September	1,420	86	349	49	936	65.9
October	1,417	91	304	49	973	68.7
November	1,423	103	321	37	962	67.6
December	1,398	110	356	60	872	62.4

1. (Respondent households/Eligible sampled households)x100.

**Table B2**  
**Diary response rates by collection month, Canada, 2014**

	Eligible sampled households <sup>1</sup>	Interview non-respondents <sup>2</sup>	Diaries <sup>3</sup>			Response rate <sup>5</sup>
			Refusal <sup>4</sup>	Unusable	Usable	
			number			percentage
All months	8,625	2,943	1,789	135	3,758	43.6
January	746	238	148	11	349	46.8
February	724	254	143	11	316	43.6
March	710	240	138	23	309	43.5
April	705	217	150	9	329	46.7
May	727	246	143	10	328	45.1
June	704	242	156	14	292	41.5
July	741	254	149	13	325	43.9
August	714	247	146	7	314	44.0
September	711	253	157	10	291	40.9
October	717	232	151	9	325	45.3
November	723	238	161	7	317	43.8
December	703	282	147	11	263	37.4

1. The eligible sampled households are those selected to fill out the diary.

2. Includes interview "No contacts", "Refusals" and "Residual non-respondents" from households selected to fill out the diary.

3. The definition of usable and unusable diaries is given in the "Data processing and quality control" section.

4. Includes diary "No contacts", "Refusals" and "Residual non-respondents" from interview respondents selected to fill out the diary.

5. (Usable diaries/Eligible sampled households)x100.



## Appendix C

### Response rates by size of area of residence and by dwelling type

**Table C1**  
**Interview response rates by size of area of residence, Canada, 2014**

	Eligible sampled households	No contacts	Refusals	Residual non-respondents	Respondents	Response rate <sup>1</sup>
						number
All population centres and rural area	17,109	1,232	3,918	546	11,413	66.7
Population centre 1,000,000 and over	4,693	352	1,095	139	3,107	66.2
Population centre 500,000 to 999,999	1,527	169	340	44	974	63.8
Population centre 250,000 to 499,999	1,775	108	492	66	1,109	62.5
Population centre 100,000 to 249,999	2,501	212	595	83	1,611	64.4
Population centre 30,000 to 99,999	1,972	115	474	75	1,308	66.3
Population centre 1,000 to 29,999	2,006	125	404	41	1,436	71.6
Rural area	2,635	151	518	98	1,868	70.9

1. (Respondent households/Eligible sampled households)x100.

**Table C2**  
**Diary response rates by size of area of residence, Canada, 2014**

	Eligible sampled households <sup>1</sup>	Interview non-respondents <sup>2</sup>	Diaries <sup>3</sup>			Response rate <sup>5</sup>
			Refusal <sup>4</sup>	Unusable	Usable	percentage
number						
All population centres and rural area	8,625	2,943	1,789	135	3,758	43.6
Population centre 1,000,000 and over	2,395	837	536	32	990	41.3
Population centre 500,000 to 999,999	778	298	164	6	310	39.8
Population centre 250,000 to 499,999	916	368	199	10	339	37.0
Population centre 100,000 to 249,999	1,289	463	244	20	562	43.6
Population centre 30,000 to 99,999	990	328	220	19	423	42.7
Population centre 1,000 to 29,999	997	281	196	22	498	49.9
Rural area	1,260	368	230	26	636	50.5

1. The eligible sampled households are those selected to fill out the diary.

2. Includes interview "No contacts", "Refusals" and "Residual non-respondents" from households selected to fill out the diary.

3. The definition of usable and unusable diaries is given in the "Data processing and quality control" section.

4. Includes diary "No contacts", "Refusals" and "Residual non-respondents" from interview respondents selected to fill out the diary.

5. (Usable diaries/Eligible sampled households)x100.

**Table C3**  
**Interview response rates by dwelling type, Canada, 2014**

	Eligible sampled households	No contacts	Refusals	Residual non-respondents	Respondents	Response rate <sup>1</sup>
						number
All dwelling types	17,109	1,232	3,918	546	11,413	66.7
Single detached	10,888	700	2,638	317	7,233	66.4
Double or row/terrace	1,595	117	331	45	1,102	69.1
Duplex, low-rise or high-rise apartment	4,145	370	821	147	2,807	67.7
Other	423	37	97	18	271	64.1
Not available	58	8	31	19	0	0.0

1. (Respondent households/Eligible sampled households)x100.

**Table C4**  
**Diary response rates by dwelling type, Canada, 2014**

	Eligible sampled households <sup>1</sup>	Interview non-respondents <sup>2</sup>	Diaries <sup>3</sup>			Response rate <sup>5</sup>
			Refusal <sup>4</sup>	Unusable	Usable	
			number			percentage
All dwelling types	8,625	2,943	1,789	135	3,758	43.6
Single detached	5,451	1,871	1,060	75	2,445	44.9
Double or row/terrace	827	268	194	21	344	41.6
Duplex, low-rise or high-rise apartment	2,102	700	487	35	880	41.9
Other	218	77	48	4	89	40.8
Not available	27	27	0	0	0	0.0

1. The eligible sampled households are those selected to fill out the diary.

2. Includes interview "No contacts", "Refusals" and "Residual non-respondents" from households selected to fill out the diary.

3. The definition of usable and unusable diaries is given in the "Data processing and quality control" section.

4. Includes diary "No contacts", "Refusals" and "Residual non-respondents" from interview respondents selected to fill out the diary.

5. (Usable diaries/Eligible sampled households)x100.

## Appendix D

### Diary response rates among the interview respondents, by various household characteristics

**Table D1**  
**Diary response rates among interview respondents, by household type, Canada, 2014**

	Interview respondents <sup>1</sup>	Diaries <sup>2</sup>			Response rate <sup>4</sup>
		Refusal <sup>3</sup>	Unusable	Usable	
		number			
All household types	5,682	1,789	135	3,758	66.1
One person household	1,522	556	49	917	60.2
Couple without children	1,727	450	32	1,245	72.1
Couple with children	1,477	470	25	982	66.5
Couple with other related or unrelated persons	201	58	3	140	69.7
Lone-parent household with no additional persons	389	129	11	249	64.0
Other household with related or unrelated persons	366	126	15	225	61.5

1. Interview respondents from households selected to fill out the diary.

2. The definition of usable and unusable diaries is given in the "Data processing and quality control" section.

3. Includes diary "No contacts", "Refusals" and "Residual non-respondents" from interview respondents selected to fill out the diary.

4. (Usable diaries/Interview respondents selected for the diary)x100.

**Table D2**  
**Diary response rates among interview respondents, by household tenure, Canada, 2014**

	Interview respondents <sup>1</sup>	Diaries <sup>2</sup>			Response rate <sup>4</sup>
		Refusal <sup>3</sup>	Unusable	Usable	
		number			
All household tenures	5,682	1,789	135	3,758	66.1
Owner without mortgage	2,035	573	34	1,428	70.2
Owner with mortgage	1,965	628	42	1,295	65.9
Renter (with or without rent paid)	1,682	588	59	1,035	61.5

1. Interview respondents from households selected to fill out the diary.

2. The definition of usable and unusable diaries is given in the "Data processing and quality control" section.

3. Includes diary "No contacts", "Refusals" and "Residual non-respondents" from interview respondents selected to fill out the diary.

4. (Usable diaries/Interview respondents selected for the diary)x100.

**Table D3**  
**Diary response rates among interview respondents, by age of the reference person, Canada, 2014**

	Interview respondents <sup>1</sup>	Diaries <sup>2</sup>			Response rate <sup>4</sup>
		Refusal <sup>3</sup>	Unusable	Usable	
		number			
Reference person of all ages	5,682	1,789	135	3,758	66.1
Less than 30 years	542	200	21	321	59.2
30 to 39 years	851	277	28	546	64.2
40 to 54 years	1,636	544	38	1,054	64.4
55 to 64 years	1,179	343	19	817	69.3
65 years and over	1,474	425	29	1,020	69.2

1. Interview respondents from households selected to fill out the diary.

2. The definition of usable and unusable diaries is given in the "Data processing and quality control" section.

3. Includes diary "No contacts", "Refusals" and "Residual non-respondents" from interview respondents selected to fill out the diary.

4. (Usable diaries/Interview respondents selected for the diary)x100.

**Table D4**  
**Diary response rates among interview respondents, by before-tax income quintile, Canada, 2014**

	Interview respondents <sup>1</sup>	Diaries <sup>2</sup>			Response rate <sup>4</sup>
		Refusal <sup>3</sup>	Unusable	Usable	
	number				percentage
Total of all income quintiles	5,682	1,789	135	3,758	66.1
Lowest quintile	1,079	388	45	646	59.9
Second quintile	1,128	358	28	742	65.8
Third quintile	1,187	322	23	842	70.9
Fourth quintile	1,119	330	23	766	68.5
Highest quintile	1,169	391	16	762	65.2

1. Interview respondents from households selected to fill out the diary.

2. The definition of usable and unusable diaries is given in the "Data processing and quality control" section.

3. Includes diary "No contacts", "Refusals" and "Residual non-respondents" from interview respondents selected to fill out the diary.

4. (Usable diaries/Interview respondents selected for the diary)x100.

## Appendix E

### Impact of expenditure imputation on communication, television, satellite radio and home security services

Table E1

#### Impact of expenditure imputation on communication, television, satellite radio and home security services, Canada, 2014

	Impact of imputation <sup>1</sup>
	percentage
Landline telephone services	51.2
Cell phone and pager	13.2
Television and satellite radio services	52.5
Internet access services	55.2
Home security services	7.6

1. The impact of imputation is the proportion of the total value of the estimate that is obtained from imputed data.

## Appendix F

### Imputation of dwelling characteristics and household equipment

**Table F1**  
**Percentage of households requiring imputation of dwelling characteristics or household equipment, Canada and provinces, 2014**

	Number of variables imputed (out of 22)			Total
	1	2	3 or more	
	percentage			
Canada	4.6	0.2	1.0	5.9
Newfoundland and Labrador	5.6	0.1	1.9	7.7
Prince Edward Island	7.2	0.2	2.5	9.8
Nova Scotia	5.3	0.5	0.6	6.3
New Brunswick	3.5	0.1	0.8	4.5
Quebec	7.6	0.1	0.7	8.3
Ontario	3.1	0.2	0.9	4.2
Manitoba	5.9	0.2	1.6	7.7
Saskatchewan	3.2	0.3	0.6	4.2
Alberta	2.8	0.2	0.4	3.5
British Columbia	3.3	0.4	1.3	5.0

## Appendix G

### Imputation rates by method for recording expenses in the diary

Table G1

#### Imputation rates for goods and services including food from stores, by type of imputation and recording method, Canada, 2014

Type of imputation	Transcribed items	Items from a receipt	All items
	percentage		
<b>Imputation of a missing cost for a reported expense</b>			
Food from stores	2.8	0.2	1.1
Other goods and services	4.3	0.2	2.3
All expenditures	3.5	0.2	1.5
<b>Imputation of expenditure items (and their individual cost) from a total expense</b>			
Food from stores	55.4	1.6	20.1
Other goods and services	22.7	1.6	12.4
All expenditures	41.6	1.6	17.6
<b>Imputation of detailed expenditure code</b>			
Food from stores	4.5	6.5	5.8
Other goods and services	5.3	5.7	5.5
All expenditures	4.8	6.3	5.7

Table G2

#### Imputation rates for snacks, beverages and meals purchased from restaurants or fast-food outlets, by type of imputation and recording method, Canada, 2014

Type of imputation	Transcribed items	Items from a receipt	All items
	percentage		
Imputation of total cost	1.12	0.43	1.01
Imputation of costs for alcoholic beverages	3.91	6.13	4.28
Imputation of meal type (breakfast, lunch, dinner, or snacks and beverages)	8.06	8.09	8.07

## Appendix H

### Estimated number of households and average household size by domain

Table H1

Estimated number of households and average household size by domain defined at the national level, Canada, 2014

Domain	Estimated number of households	Average household size
<b>Canada</b>		
All classes	13,949,883	2.48
<b>Region</b>		
Atlantic Region	987,472	2.33
Quebec	3,513,304	2.29
Ontario	5,196,041	2.59
Prairie Region	2,409,807	2.59
British Columbia	1,843,259	2.44
<b>Province</b>		
Newfoundland and Labrador	216,075	2.40
Prince Edward Island	58,594	2.45
Nova Scotia	397,699	2.29
New Brunswick	315,104	2.32
Quebec	3,513,304	2.29
Ontario	5,196,041	2.59
Manitoba	473,288	2.52
Saskatchewan	423,085	2.46
Alberta	1,513,433	2.65
British Columbia	1,843,259	2.44
<b>Before-tax household income quintile (national)</b>		
Lowest quintile	2,789,304	1.47
Second quintile	2,790,535	2.07
Third quintile	2,789,880	2.52
Fourth quintile	2,788,237	2.91
Highest quintile	2,791,927	3.41
<b>Household type</b>		
One person households	3,937,667	1.00
Couples without children	3,808,109	2.00
Couples with children	3,752,593	3.94
Couples with other related or unrelated persons	685,165	4.99
Lone-parent households with no additional persons	796,377	2.63
Other households with related or unrelated persons	969,972	2.76
<b>Household tenure</b>		
Owner	9,282,281	2.68
Owner with mortgage	5,057,634	3.02
Owner without mortgage	4,224,646	2.26
Renter	4,667,602	2.08
<b>Size of area of residence</b>		
Population centre 1,000,000 and over	6,238,913	2.63
Population centre 500,000 to 999,999	934,685	2.26
Population centre 250,000 to 499,999	1,283,660	2.47
Population centre 100,000 to 249,999	1,299,354	2.38
Population centre 30,000 to 99,999	1,286,548	2.18
Population centre 1,000 to 29,999	1,221,079	2.27
Rural	1,685,644	2.48
<b>Age of reference person</b>		
Less than 30 years	1,457,098	2.20
30 to 39 years	2,436,243	2.89
40 to 54 years	4,102,893	3.03
55 to 64 years	2,698,462	2.29
65 years and over	3,255,188	1.75

Note: Subtotals may not add up to the total due to rounding.



**Table H2**  
**Estimated number of households and average household size by domain defined at the provincial level, Canada, 2014**

Domain	Estimated number of households	Average household size
<b>Newfoundland and Labrador</b>		
All classes	216,075	2.40
Lowest quintile	42,569	1.48
Second quintile	43,777	1.99
Third quintile	43,265	2.51
Fourth quintile	43,236	2.66
Highest quintile	43,228	3.35
<b>Prince Edward Island</b>		
All classes	58,594	2.45
Lowest quintile	11,704	1.45
Second quintile	11,697	1.77
Third quintile	11,735	2.62
Fourth quintile	11,343	2.94
Highest quintile	12,115	3.45
<b>Nova Scotia</b>		
All classes	397,699	2.29
Lowest quintile	79,441	1.48
Second quintile	79,327	1.86
Third quintile	79,593	2.31
Fourth quintile	79,671	2.76
Highest quintile	79,666	3.05
<b>New Brunswick</b>		
All classes	315,104	2.32
Lowest quintile	62,860	1.47
Second quintile	62,977	1.88
Third quintile	63,066	2.33
Fourth quintile	63,036	2.77
Highest quintile	63,164	3.13
<b>Quebec</b>		
All classes	3,513,304	2.29
Lowest quintile	699,944	1.31
Second quintile	704,794	1.75
Third quintile	702,471	2.34
Fourth quintile	701,349	2.68
Highest quintile	704,746	3.37
<b>Ontario</b>		
All classes	5,196,041	2.59
Lowest quintile	1,033,683	1.54
Second quintile	1,041,419	2.17
Third quintile	1,041,427	2.70
Fourth quintile	1,037,422	3.03
Highest quintile	1,042,090	3.48
<b>Manitoba</b>		
All classes	473,288	2.52
Lowest quintile	94,635	1.58
Second quintile	94,422	2.13
Third quintile	94,517	2.60
Fourth quintile	94,716	2.98
Highest quintile	94,998	3.30
<b>Saskatchewan</b>		
All classes	423,085	2.46
Lowest quintile	84,527	1.63
Second quintile	84,250	2.41
Third quintile	84,978	2.45
Fourth quintile	84,570	2.78
Highest quintile	84,760	3.02

**Table H2**  
**Estimated number of households and average household size by domain defined at the provincial level, Canada, 2014 (concluded)**

Domain	Estimated number of households	Average household size
<b>Alberta</b>		
All classes	1,513,433	2.65
Lowest quintile	301,792	1.79
Second quintile	300,360	2.37
Third quintile	305,767	2.59
Fourth quintile	301,634	3.12
Highest quintile	303,881	3.39
<b>British Columbia</b>		
All classes	1,843,259	2.44
Lowest quintile	367,906	1.45
Second quintile	365,290	2.03
Third quintile	372,447	2.31
Fourth quintile	368,471	2.91
Highest quintile	369,144	3.47

**Note:** Subtotals may not add up to the total due to rounding.