

# Chapter 7 Personal expenditure on consumer goods and services

## Introduction

7.1 Personal expenditure on consumer goods and services includes outlays of transactors of the persons and unincorporated business sector on durable, semi-durable and non-durable goods, and on services.

7.2 Transactors of the persons and unincorporated business sector include all households as well as associations of individuals serving households and certain collective investment schemes.<sup>1</sup> Associations of individuals include non-profit institutions serving households<sup>2</sup> (NPISHs) such as charitable institutions, labour unions, professional organizations and religious organizations, as well as fraternal organizations, credit unions and mutual life insurance companies. Collective investment schemes, such as trustee pension funds and mutual funds, are included since they act collectively for the benefit of individuals. Note that unincorporated businesses are also included in this sector because of difficulties in separating their income between the portion which is withdrawn for personal use and the portion which is retained in the business. However, for households owning an unincorporated business, only the expenditures for personal needs are included. The current expenses related to the business are excluded from personal expenditure and from final demand as they are treated as intermediate inputs, while their capital expenditures are classified as business gross fixed capital formation in the Canadian System of National Accounts (CSNA).

7.3 In the CSNA, personal expenditure on consumer goods and services presently covers the value of households' expenditure as well as the value of the expenditures incurred by NPISHs on individual consumption of goods and services provided to households as a social transfer in kind. A project is underway to decompose government consumption expenditure by function, according to the classification of the functions of government (COFOG). Once this project is completed, it will be possible to calculate household actual final consumption, which consists of the consumption of goods and services acquired by individual households, by expenditures or through social transfers in kind received from government units or NPISHs.

## Classification, measurement and concepts

7.4 The classification of personal expenditure on consumer goods and services is based on the international classification of individual consumption by purpose (COICOP). "Purpose" and "function" are used interchangeably and refer to the socio-economic objectives that economic agents aim to achieve through various kinds of outlays such as food, clothing, housing, health and education. COICOP also groups expenditures into four classes: durable goods, semi-durable goods, non-durable goods and services. Goods are tangible products<sup>3</sup> that can be stored or inventoried, while services are products that cannot be stored and are consumed at the place and time of their delivery. The distinction between non-durable goods and durable goods is based on whether the goods can be used only once or whether they can be used repeatedly or continuously over a period of considerably more than one year. Semi-durable goods, such as clothing and footwear, differ from durable goods in that their expected lifetime of use, though more than one year, is often significantly shorter.

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1. This document refers to the "persons" and unincorporated business sector instead of the "households" and unincorporated business sector because of the inclusion of associations of individuals and of certain collective investment schemes.
  2. NPISHs are not currently considered as a separate sector in the Canadian System of National Accounts, although Statistics Canada is in the process of developing it.
  3. Although durable goods are more typically viewed as an asset, the only way in which the repeated use of durables by households could be recognized would be to extend the production boundary by postulating that the durables are gradually used up in hypothetical production processes whose outputs consist of services. These services could then be recorded as being acquired by households over a succession of time periods (*System of National Accounts 1993*, paragraph 9.40). However, by SNA convention, household consumption is measured only by expenditures and acquisitions.

7.5 Most commodities can be easily assigned to one of the four classes mentioned previously, but some goods and services could be classified to more than one. Multi-purpose commodities are classified according to their predominant purpose. For example, sports shoes suitable for everyday or leisure wear would be classified as footwear and not as recreational equipment. Other commodities are mixed, such as meals consumed outside the home, which include non-durable goods (food and non-alcoholic beverages) and a service. In this case, the full value of the meals is shown as a service. The classification of personal expenditure on consumer goods and services used in the CSNA is presented in 7.6.

7.6 Expenditure on goods is recorded at the time the ownership changes whether paid with cash, cheques, credit cards or by redeeming a gift card. On the other hand, expenditure on a service is recorded when the delivery of the service is completed; for example, prepaid airline tickets will only be recorded when the trips are taken.

7.7 Expenditures are measured at market prices, i.e. they include the provincial and federal sales taxes. Note that they also include all taxes embedded in the price before sales taxes, such as excise taxes and environmental taxes. All gratuities paid for the delivery of a service are also included, but the expenditures are net of subsidies on products.

7.8 Personal expenditure includes spending by Canadian residents at home or when they are temporarily abroad, either as tourists (but not for business purposes), as members of the armed forces or as diplomats. All expenditures by foreign residents temporarily in Canada are excluded from personal expenditure but are included in exports of services.<sup>4</sup>

7.9 Not all outlays by transactors of the persons and unincorporated business sector are included in personal expenditure. As mentioned in paragraph 7.2, business expenditures of unincorporated businesses are excluded. Similarly, in the CSNA, non-profit institutions and other associations of individuals are treated as businesses with respect to their capital expenditure, but as households with respect to their current expenditure. Therefore, their spending on goods and services is measured by their current expenditure net of revenues from the sale of goods and services, which are mostly food, and alcoholic and non-alcoholic beverages.

7.10 The purchase of a house by a household is considered as an acquisition of an asset,<sup>5</sup> as if the purchaser were an unincorporated business. However, the distinction between personal expenditure and capital expenditure is often difficult to make for expenditures pertaining to a house. Improvements such as major renovations, reconstruction or enlargement, which bring about significant changes in some of the characteristics of an existing house and therefore extends the previously expected service life well beyond ordinary maintenance and repairs, are also considered as capital expenditure. On the other hand, ordinary repairs and maintenance that must be undertaken regularly in order to maintain a house in working order over its expected service life are considered as personal expenditure, for example, replacing defective parts with new parts of the same kind.

7.11 Hospital and medical care premiums and the purchase of marriage licenses, motor vehicle licenses and permits and other miscellaneous licenses and permits such as hunting and fishing permits, as well as various fines and penalties are treated as transfer payments to the government sector and therefore not personal expenditure. The above noted household payments are de facto taxes since no good or service is received in return.

7.12 Fees paid directly by households for certain services provided by government, mostly related to education and health, are included in personal expenditure. Current expenditure incurred by government units on individual consumption of goods and services provided to households as a social transfer in kind is included in household actual final consumption.

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4. Although many data sources underlying the estimates of personal expenditure series include expenditures in Canada by non-residents, these transactions are excluded in the aggregate by means of the travel receipts from non-residents, series J218 (see paragraph 7.26).

5. The full value of a new house and the ownership transfer costs associated with the purchase of an existing house are considered as capital expenditure.

7.13 For some services, the value of the purchases included in personal expenditure does not always equal the full value of the outlay, but rather an amount reflecting the value of the service consumed by households. For example, the value of the service “games of chance” purchased by households is assumed to be equal to the amounts wagered less the prizes awarded.

7.14 Similarly, the premiums paid for automobile, property, accident and sickness, and life insurance are not considered to be personal expenditure. Only the cost of the service provided is taken into account for personal expenditure. The cost of service is measured by the premiums earned plus the premium supplements<sup>6</sup> minus claims due. It is net of claims due in order to avoid double-counting of personal expenditure since expenditures reimbursed by insurance companies are accounted for separately in selected goods and services, such as automobile repair and electronic equipment. The automobile, property, accident and sickness, and life insurance net premiums<sup>7</sup> are treated as current transfers from corporations to households. See paragraphs 7.83 to 7.88 for the data sources and estimation methods of personal expenditure on automobile, on property, on accident and sickness, and on life insurance.

7.15 Personal expenditure is net of sales of used goods by households. Hence, interpersonal transactions of used goods, excluding sales taxes, cancel out. For transactions between households through the intermediation of a retailer, only the components which represent new production are included; that is, the cost of parts used to repair and/or refurbish the good plus the value added (profit margin and labour charges). However, the value of used goods purchased by households is included in its entirety if the previous owner belonged to corporations, government business enterprises, unincorporated businesses, governments or non-residents. Sales taxes are always included in full, regardless of the previous owner. The estimation method for used motor vehicles is outlined in paragraphs 7.57 to 7.67.

7.16 Selected non-market transactions are included in personal expenditure. Imputations are made to place a market value on some transactions in order to keep personal expenditure invariant to the way certain activities are carried out. Such is the case for rent of owner-occupied dwellings, for financial services indirectly measured when no explicit charges are recorded (such as the portion of bank interest and deposit charges that represent administration costs), for own-account production of food consumed by farmers and for the special treatment of financial leasing of motor vehicles.

7.17 As mentioned in paragraph 7.10, purchases of dwelling units are considered as investment in fixed capital. This capitalization of dwellings requires that personal expenditure include an imputed rent estimate for owner-occupied housing, representing the service yielded by the dwelling. The housing services produced are deemed to be equal in value to the rentals that would be paid on the market for accommodation of the same size, quality and type. Without this imputation, the measure of housing services and of gross domestic product (GDP) would not be invariant to shifts between the owner-occupied dwellings and the renting of residential dwellings. The estimation method for rents is outlined in paragraphs 7.75 to 7.82.

7.18 Financial services provided by banks and other financial institutions such as service charges for deposits and loans are paid for indirectly through variations in deposit and borrowing rates. A practical approach in imputing a value for these services is by taking the difference between the property income receipts of financial institutions and the property income paid by them, and adjusting the net interest received for the use of the financial institution’s own funds. Note that in the calculation of financial services indirectly measured (FSIM), property income includes only interest. Other financial services such as currency exchange and advice about investments are explicitly charged and can be measured directly. See paragraphs 7.89 to 7.95 for the data sources and estimation methods pertaining to personal expenditure on financial service indirectly measured.

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6. Premium supplements represent the income from investments of the insurance technical reserves. Technical reserves are defined as pre-paid premiums and reserves against outstanding claims, both being a form of credit extended by the policyholder to the insurer.

7. Net premiums (or claims) are equal to premiums paid minus the cost of service.

7.19 An imputation is also made to personal expenditure for the value of food grown, manufactured and consumed by farmers and the value of goods or services consumed out of income in kind provided to employees in lieu of wages and salaries.

7.20 Finally, rather than consider the periodic payments made for financial leasing of motor vehicles as the purchase of a service, the full value of the vehicle before sales taxes is recorded as personal expenditure on durable goods, as the vehicle is deemed to be purchased and owned by households. However, only the sales taxes applicable to the lease payments are included for the duration of the lease. See paragraphs 7.50 to 7.56 for more details.

## Presentation of estimates

7.21 Personal expenditure on consumer goods and services are estimated quarterly at the national level and annually at the provincial and territorial level. These estimates are available at both current and constant prices.

7.22 National estimates of personal expenditure, which become available approximately 60 days after the reference period, are presented in tables 2, 3 and 4 of the *National Income and Expenditure Accounts* (NIEA) for the four classes: durable goods, semi-durable goods, non-durable goods and services. Seasonally adjusted estimates are presented at current prices in Table 2, at constant prices in Table 3, and the contributions to percent change in real gross domestic product in Table 4. Seasonally adjusted estimates for aggregates of personal expenditure at current and constant prices and their contribution to percent change in real personal expenditure on consumer goods and services are shown in tables 16, 17 and 18, respectively. These aggregates—9 major groups (PSG), 38 groups (PS) and the four classes—are calculated from the 130 series (J) of personal expenditure, which are also available to the public on demand. Table 7.6 describes these 130 series of goods and services and presents them according to the groupings published in tables 16 to 18. It should be noted that tables 17 and 18 have been based on the chain Fisher volume indexes since the release of the NIEA for the first quarter of 2001. Prior to that release, the aggregates were derived by summing the individual personal expenditure series, reflecting a fixed-base Laspeyres measure. For more information, refer to the section on chain Fisher volume indexes presented in Chapter 2.

7.23 At the national level, the annual and quarterly series are available dating back to 1926 and 1947 respectively, but the statistics for the period prior to 1961 do not include the conceptual, methodological and statistical changes made at the time of the 1997 historical revision. Monthly national series have been available for personal expenditure on consumer goods since January 1986.

7.24 Provincial and territorial estimates of personal expenditure are based on the same classification of goods and services as at the national level. These expenditures, which are published in the *Provincial Economic Accounts* (PEA) approximately four months after the reference year, are grouped as consumer durables, semi-durables and non-durables goods and consumer services. In the PEA, the estimates at current prices are found in Table 2, at constant prices in Table 3, and their contribution to percent change in real gross domestic product, expenditure-based for the classes of personal expenditure in Table 4. It should be noted that tables 3 and 4 have been based on the chain Fisher volume indexes since the October 2002 release of the PEA covering the period up to 2001 (see Chapter 2 for more details). Although not published, most of the 130 series of goods and services and their groupings are available to the public.<sup>8</sup>

7.25 At the provincial and territorial level, series that incorporate the conceptual, methodological and statistical changes introduced in the 1997 historical revision are available back to 1981. However, unrevised data, covering the period 1961 to 1980, are accessible at current prices, as are statistics at constant prices for the period 1971 to 1980.

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8. For confidentiality reasons, some series are grouped at the provincial and territorial level.

7.26 As noted in paragraph 7.8, the aggregate personal expenditure on consumer goods and services represents all expenditures of Canadians, both within and outside Canada, while they exclude expenditures of non-residents in Canada. However, while this definition holds for total spending, it is not the case for the individual personal expenditure series. Most survey data that are used to estimate expenditures by commodity include purchases made by non-residents in Canada and exclude Canadians' expenditures outside Canada, thus reflecting the domestic concept. To obtain estimates of personal expenditure on a residence basis, that is, according to the national concept, it is necessary to add an estimate of the total expenditure of Canadian households abroad and to deduct all purchases of non-residents in Canada. The series J215, J216 and J218, described in Table 7.6, are therefore neither goods nor services as such but rather counterparts that enable the sum of the 127 other series to be brought into line with the national concept of personal expenditure. The purchases of Canadian households abroad are also included in imports of services, while the expenditures of non-residents are considered exports of services. Personal expenditure in the National Income and Expenditure Accounts (NIEA) and in the provincial and territorial economic accounts (PTEA), according to the domestic and national concepts, are illustrated in Table 7.1. The calculation of personal expenditure for the PTEA is similar to the one for the NIEA except for the fact that the notions of expenditures abroad and non-residents refer to the expenditures incurred by the residents of a province or territory outside their boundaries and to the non-residents of that province or territory.

**Table 7.1 Domestic and national concepts**

National Income and Expenditure Accounts		Provincial and territorial economic accounts	
Personal expenditure by Canadian residents in Canada  and  Personal and business expenditure by residents of other countries in Canada	$\sum_{j=001}^{214} J \quad \text{plus} \quad \sum_{j=219}^{226} J$	Personal expenditure by Canadian residents in their province / territory of residence  and  Personal and business expenditure by residents of other countries in the province / territory  and  Personal expenditure by residents of other provinces and territories in the province / territory	
<b>equals</b>			
<b>Personal expenditure on the domestic concept</b>			
Personal expenditure by Canadian residents abroad	plus J215	Personal expenditure by Canadian residents abroad  and  Personal expenditure by Canadian residents in other provinces and territories	
Expenditure by military personnel abroad	plus J216	Expenditure by military personnel abroad	
Personal and business expenditure by residents of other countries in Canada	minus J218	Personal and business expenditure by residents of other countries in the province / territory  and  Personal expenditure by residents of other provinces and territories in the province / territory	
<b>equals</b>			
<b>Personal expenditure on the national concept</b>			

## Data sources and estimation methods

### Overview

7.27 As noted in Chapter 2, the Canadian System of National Accounts (CSNA) is an integrated conceptual framework, presented in the form of economic accounts. In this framework, personal expenditure on consumer goods and services are integrated with other statistics from the Income and Expenditure Accounts, in addition to being harmonized with the various components of the CSNA, especially with the Input-Output Tables for the 130 series of goods and services.

7.28 It is important to note that like the other components of gross domestic product (GDP), the estimation of personal expenditure operates within a four-year revision cycle. This cycle ensures that any new information drawn from Statistics Canada surveys and data from administrative and other data sources are incorporated into the system. For the first two estimation years of the cycle, benchmark data or annual benchmarks at current prices, with and without sales tax, are derived by balancing supply and demand by commodity. These benchmarks are incorporated into the Input-Output Tables and the Income and Expenditure Accounts.

7.29 Since the Input-Output Tables cover only the first two of the four years annually subject to revision, the Income and Expenditure Accounts Division (IEAD) is responsible for producing national, provincial and territorial estimates of personal expenditure at current prices for the two most recent reference years. Also, the IEAD produces, for the four-year period, quarterly national estimates at current and constant prices as well as annual constant price estimates by province and territory. All these estimates require various operations or processes, which are described in the following paragraphs.

7.30 The first operation consists of projecting benchmark estimates at current prices without sales tax for the two most recent reference years. The operations that follow differ depending on whether they are carried out at the national or at the provincial/territorial level. In the case of national estimates, it is first necessary to distribute the annual series into quarterly series for the four years subject to revision and then to project them to obtain quarterly values for the current reference year.<sup>9</sup> In the case of projected provincial and territorial estimates, they must be adjusted by distributing any difference that might exist between their sum and the national estimate. One reason for this difference could be that the provincial and territorial series are estimated independently of each other (that is, without the prior constraint of additivity to the national estimate) and that the national estimate previously published was not calculated from provincial/territorial data. Another reason could be that revised or more up-to-date source data have since become available.

7.31 The three operations mentioned above, namely projection (annual or quarterly), quarterly distribution and provincial/territorial distribution, are carried out using data series that are called “estimators”. Projection consists of calculating the rate of change of the estimator observed from one period to the next and applying it to the estimation of personal expenditure for the previous period. Quarterly distribution consists of distributing annual values into quarterly values while trying to reflect the quarterly rates of change observed for the estimator, using quadratic minimization techniques. Lastly, the provincial/territorial distribution consists of allocating the difference between the sum of the provincial and territorial estimates and the national estimate, while minimizing the relative impact on the rate of change of each of the provincial and territorial series. The methods used to calculate the estimators for the national estimates at current prices are presented in paragraphs 7.49 to 7.100 while those for the provincial and territorial estimates at current prices are shown in paragraphs 7.101 to 7.108.

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9. This applies only when the estimates resulting from the annual revision cycle are published, that is, usually when the estimates for the first quarter of a reference year are published. When the estimates for the second, third and fourth quarters are published, the estimates for the periods preceding the current reference year are not revisable. Only the projection step is carried out for the quarters of the current reference year.

7.32 Once the estimates of personal expenditure at current prices without sales tax have been calculated, the federal and provincial sales taxes must be added to them to obtain the personal expenditure on consumer goods and services at market value. The federal Goods and Services Tax (GST) and provincial sales taxes are calculated for each expenditure series. For further details, see paragraphs 7.109 to 7.112. Table 7.2 presents the current price estimates of personal expenditure for the provinces, territories and Canada for the year 2000.

**Table 7.2 Personal expenditure on consumer goods and services, 2000**

	Durable goods	Semi-durable goods	Non-durable goods	Services	Total	Percentage
millions of dollars at current prices						
Newfoundland and Labrador	1,128	793	2,551	3,987	8,459	1.4
Prince Edward Island	289	218	658	1,133	2,298	0.4
Nova Scotia	2,148	1,392	4,702	8,393	16,635	2.8
New Brunswick	1,897	1,150	3,665	5,988	12,700	2.1
Quebec	18,898	11,811	35,174	65,304	131,187	22.0
Ontario	33,081	21,294	53,405	131,901	239,681	40.2
Manitoba	2,575	1,675	5,222	11,129	20,601	3.5
Saskatchewan	2,357	1,500	4,471	9,567	17,895	3.0
Alberta	9,341	5,669	14,512	33,752	63,274	10.6
British Columbia	10,034	6,442	18,378	46,356	81,210	13.6
Yukon	85	51	168	371	675	0.1
Northwest Territories	105	79	256	488	928	0.2
Nunavut	20	41	102	195	358	0.1
Outside Canada	..	..	..	108	108	0.0
<b>Canada</b>	<b>81,958</b>	<b>52,115</b>	<b>143,264</b>	<b>318,672</b>	<b>596,009</b>	<b>100.0</b>
Percentage	13.8	8.7	24.0	53.5	100.0	

7.33 Finally, after the estimates at market prices have been calculated, each expenditure series is deflated using consumer price indices or other related price series in order to derive estimates of personal expenditure at constant prices. The methods used to calculate the constant price estimates are presented in paragraphs 7.113 to 7.115. Table 7.3 presents the constant price estimates of personal expenditure for the provinces, territories and Canada for the year 2000.

**Table 7.3 Personal expenditure on consumer goods and services at constant prices, 2000**

	Durable goods	Semi-durable goods	Non-durable goods	Services	Total
millions of chained (1997) dollars					
Newfoundland and Labrador	1,159	777	2,381	3,781	8,094
Prince Edward Island	295	213	609	1,080	2,195
Nova Scotia	2,185	1,349	4,312	7,907	15,746
New Brunswick	1,918	1,118	3,362	5,710	12,100
Quebec	18,997	11,474	32,408	62,117	124,959
Ontario	33,231	20,528	49,107	124,472	227,244
Manitoba	2,580	1,614	4,898	10,538	19,629
Saskatchewan	2,415	1,477	4,227	8,893	17,008
Alberta	9,493	5,522	13,292	31,384	59,659
British Columbia	10,099	6,222	17,309	44,337	77,953
Yukon	87	50	158	353	648
Northwest Territories	109	78	243	472	900
Nunavut	20	40	99	189	348
Outside Canada	..	..	..	102	102
<b>Canada</b>	<b>82,492</b>	<b>50,476</b>	<b>132,473</b>	<b>301,367</b>	<b>566,664</b>

## Personal expenditure at current prices

7.34 The purpose of this guide is not so much to describe in detail the methodologies currently used as to give the reader an overview of them. This section, which deals with current price estimates, is divided in three parts: the first two parts present the data sources and methods of the national and provincial/territorial estimators using summary tables while the third discusses the sales tax estimates. The next section deals with personal expenditure at constant prices.

7.35 Estimates of personal expenditure at current prices are derived using national and provincial/territorial estimators, as described in paragraphs 7.30 and 7.31. The data sources and estimation methods usually used to calculate the estimators for the 130 series of goods and services are presented in paragraphs 7.49 to 7.108. We say “usually used” because the source data used for calculating some personal expenditure estimators are occasionally inconsistent, making it necessary to resort to alternative calculation methods. These statistical inconsistencies are identified in the analysis that is conducted in part to confront the different statistical signals available, in order to assess their quality.

7.36 It should be noted that it is difficult to systematically present the methods of calculating estimators for each of the 130 series of consumer goods and services in a unique and standardized format while avoiding duplication. Conversely, it is also difficult to group them into a limited set of identical methods that would each cover a large number of series. However, it is possible to define two general calculation approaches, which can themselves be divided into six methods. The first approach consists of calculating estimators for expenditure series on the basis of direct indicators, that is, indicators that are very closely related to the series to be estimated. By contrast, the second approach consists of using indirect indicators, which do not in themselves represent a purchase of consumer goods or services. By its nature, the second approach tends to produce estimates of lesser quality. The calculation methods for estimators resulting from these two approaches are as follows:

- The direct “current prices” method [M1] consists of using an estimator that is an expenditure on goods or services. This estimator could differ from the series to be estimated because, for example, it includes not only the expenditures of households but also those of businesses and governments. The estimator for spending on furniture, derived from the *Quarterly Retail Commodity Survey*, represents an example of this method.
- The direct “quantity times price” method [M2] applies to goods and services series for which there are direct indicators of quantities. Expenditure estimators are calculated based on a quantity indicator that is converted to nominal values using consumer prices. This method is used for personal expenditure estimators such as those for certain types of transportation as well as energy consumption.
- The indirect “current prices” method [M3] applies primarily to series for which there is no current information on households’ purchases, but which are nevertheless closely linked to a related series or a given industry through its revenues and/or its payroll. In particular, this method is used to calculate estimators for expenditure on shoe or clothing repair.
- The indirect “quantity times price” method [M4] is used when there is no direct or indirect source of information at current prices and no direct indicator of quantities. It consists of converting an indirect indicator of volume into an estimator of expenditures by applying a consumer price index to it. Quarterly estimators of expenditure on taxi services, among others, are calculated using this method.
- The “time trends” method [M5] is used as a last resort, when no reliable estimator is available. In such cases, the volume indicator will be based on recent or historical trends at constant prices, and a related price index will be applied to it. This method is used for quarterly estimators of expenditure on hairstyling services, among others.
- The specific methods [M6] are used for selected series which usually represent a major expenditure by households and require a complex or specific analysis. The complexity of these methods is due to the fact that they consist, in most cases, of using several types of indicators and/or a combination of the methods described above. This is the case, for example, with estimators of personal expenditure on new and used motor vehicles, on tobacco products, on paid rent, on imputed rent, on insurance services, on financial services indirectly measured and on travel expenditures.

7.37 The use of one method rather than another is based primarily on the availability of specific data when the estimators are being calculated. Since the calculation of a large number of estimators for consumer goods and services is based on two main data sources, namely the *Survey of Household Spending* and the *Quarterly Retail Commodity Survey*, the following paragraphs will provide an overview of these surveys and how they are used.

### Survey of Household Spending

7.38 The *Survey of Household Spending*<sup>10</sup> (SHS) is an annual survey conducted since 1997.<sup>11</sup> Its main purpose is to obtain detailed information on the spending habits of Canadian households for a variety of goods and services, extending from food to shelter and including expenditure on education and health care. Estimates derived from this survey are published for different aggregates, including those based on household type, household income and geographic region. The data reflect the value at market prices and are reported annually by province, whereas territorial statistics are available from 1997 to 1999 and every two years starting in 2001. The SHS covers all private households in Canada, although certain groups are excluded, such as persons living in residences for senior citizens or in long-term care facilities, members of the Canadian armed forces living in military camps, Canadian residents posted abroad and persons living on Indian reserves. The above-mentioned groups are, however, covered under personal expenditure.

7.39 Conceptually, household expenditures are very similar to personal expenditure on consumer goods and services, despite some differences between them. The SHS data also include various outlays such as personal income taxes, vehicle registration fees, premiums paid to a public health insurance plan and donations to non-profit organizations, which are excluded from personal expenditure because they are considered transfers. The SHS also includes the value of all purchases of second-hand goods, while personal expenditure represents the value of purchases less sales of used goods.<sup>12</sup> On the other hand, certain expenditures such as imputed rents of homeowners are part of personal expenditure but are either not captured by the SHS, or are treated differently by it.

7.40 The SHS is a primary data source used to project personal expenditure on selected commodities for the year following the last benchmark year. The SHS classification of expenditures is therefore adapted to the one used in the CSNA. For most personal expenditure series, a direct mapping exists, while for others, data from other surveys or from the Input-Output Tables are used to allocate various consumer expenditures from the SHS. No mapping is established when the concepts differ significantly.

7.41 Annual estimators for the following goods and services are derived from the SHS:

- J101 - Food and non-alcoholic beverages;
- J158 - Domestic services;
- J159 - Child care, in the home;
- J160 - Child care, outside home;
- J161 - Laundry and dry cleaning;
- J163 - Pet care;
- J178 - Interurban bus;
- J181 - Taxis;
- J183 - Telecommunications;
- J184 - Postal and courier services;
- J187 - Other recreational services;
- J189 - Fees for education and training, other than university;

10. For more information on the SHS, see the *User Guide for the Survey of Household Spending, 2005* (62F0026MIE), available on the Statistics Canada website.

11. Prior to 1997, an occasional annual survey, *Survey of Family Expenditures* (FAMEX) collected information on household spending.

12. For more information on used goods, refer to paragraph 7.15 and to paragraphs 7.57 to 7.67 which deal specifically with used motor vehicles.

- J191 - Hairstyling for men and women;
- J192 - Other personal care;
- J209 - Legal, accounting and other services;
- J211 - Miscellaneous household services;
- J219 - Cable television and pay television;
- J221 - Parking;
- J222 - Driving lessons and membership in automobile associations;
- J223 - Motor vehicle renting;
- J224 - Cinemas;
- J225 - Photographic services.

7.42 Depending on the personal expenditure series, either the value of the estimator, its rate of change, its trend or its provincial/territorial distribution is used. To project estimates for the second year following benchmark years and to distribute estimates on a quarterly basis, other data sources and/or methods of calculating estimators are used. These are described in Table 7.7 and Table 7.8.

### **Quarterly Retail Commodity Survey**

7.43 Estimators derived from the SHS are primarily used to project personal expenditure on services. However, they are also used for some goods, but only as a secondary indicator since they have certain deficiencies. For example, since purchases of durable goods are by definition infrequent, it is possible that the sample drawn might not be sufficiently representative and hence the estimates of expenditure on these goods may have a higher variance. This is one of the reasons why the estimators for approximately 40 series of personal expenditure on consumer goods are calculated using data from the *Quarterly Retail Commodity Survey* (QRCS). Moreover, business surveys have the advantage of covering a major portion of the consumer activities of a country or a given region with a limited sample. This is not generally possible with household surveys, due to respondent burden considerations and other constraints.

7.44 It should be noted that the use of QRCS results as estimators for personal expenditure on consumer goods also has some deficiencies. These commodity sales represent not only the purchases of individuals but also those of businesses (including other retailers) and governments. Moreover, retailers are not the only sources of supply for consumers. For example, consumers may also make purchases from wholesalers or buy goods via the Internet. Because of these deficiencies, the use of estimators derived from the QRCS implies that household purchases of specific goods grow at a rate similar to the retail sales of those goods. This assumption is acceptable for many goods, such as food and non-alcoholic beverages. However, for other commodities, such as hardware goods which are bought in larger proportions by businesses, this assumption may result in less reliable estimators.

7.45 Since the first quarter of 1998, the QRCS has collected information on the sales of approximately 120 detailed series of goods and services for 19 types of retail outlets (trade groups) in Canada.<sup>13</sup> The survey is conducted as a supplement to the *Monthly Retail Trade Survey* (MRTS), which collects data on total retail sales.

7.46 As a first step, the QRCS commodity classification is adapted to the one used in the CSNA. The concordance between the two classifications is often direct, but some QRCS commodities must nevertheless be distributed among several CSNA series of goods. When QRCS results are not available to calculate estimators for a given period,<sup>14</sup> the sales of each commodity from a previous period for a given trade group are then expressed in the form of a ratio representing them as a proportion of total sales. These ratios are then applied to the total of monthly retail sales from the MRTS for the same trade group for the period to be estimated. The estimators are then calculated by simply summing the sales of each good for all the trade groups. An example is provided in Appendix 7A.

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13. Previously, the distribution by commodity of sales by type of trade was based on the annual results of the retail commodity surveys of 1974 and 1989.

14. The data are usually available with a lag of one quarter.

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7.47 Quarterly and annual estimators for the following products are derived from the QRCS:

- J001 - Furniture;
- J002 - Floor coverings;
- J004 - Refrigerators and freezers;
- J005 - Washers and dryers;
- J006 - Stoves, ranges and microwave ovens;
- J007 - Other major appliances;
- J008 - Small electrical appliances;
- J010 - Garden tools and equipment for outdoor maintenance;
- J012 - Used motor vehicles;
- J014 - Road and off-road recreational vehicles;
- J015 - Motor vehicle maintenance and repairs;
- J016 - Motor vehicle parts and accessories;
- J017 - Radios, sound systems and accessories;
- J018 - TV sets, video equipment and accessories;
- J019 - Boats, aircraft and accessories;
- J020 - Photographic and optical equipment;
- J021 - Sporting and camping equipment;
- J023 - Musical instruments and supplies;
- J024 - Trailers;
- J026 - Recreation equipment rentals;
- J027 - Watches and jewellery;
- J051 - Men's and boys' clothing;
- J052 - Women's, girls' and infant's clothing;
- J053 - Thread, yarn and sewing accessories;
- J054 - Piece goods;
- J056 - Footwear;
- J058 - Luggage, leather goods and other personal effects;
- J059 - Toys, games and hobby supplies;
- J060 - Films and other photographic supplies;
- J061 - Household textiles and furnishings;
- J062 - China, glassware and kitchenware;
- J063 - Lamps, lighting equipment and accessories;
- J064 - Flatware;
- J065 - Hardware;
- J066 - Newspapers, books, magazines and stationery;
- J068 - Pets and supplies;
- J101 - Food and non-alcoholic beverages;<sup>15</sup>
- J103 - Pet food;
- J109 - Soaps and other cleaning supplies;
- J110 - Other household supplies;
- J111 - Pharmaceutical products and medical goods;
- J113 - Flowers, plants and other horticultural supplies;
- J114 - Cosmetics and toiletries.

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15. As noted in paragraph 7.43, the SHS is the main source used when available, while for other periods the QRCS is used.

## Other data sources

7.48 While the SHS and the QRCS are the main information sources for most personal expenditure series, several other data sources are also used to estimate selected series. These other sources include a great number of Statistics Canada surveys collecting information on the operating revenues of companies doing business in sectors as varied as transportation, accommodation, food services, recreational services and personal care. Other surveys, directly focusing on households, are also an extremely important source of information for measuring expenditure on other types of goods and services. These include the *International Travel Survey* and the *Travel Survey of Residents of Canada*. Information on prices, primarily drawn from the *Consumer Price Index*, is also used when the only data available are physical quantities. Lastly, a sizable number of statistics obtained from outside Statistics Canada, more specifically from administrative data sources and from various government agencies, provide valuable information.

## National estimates at current prices

7.49 Table 7.7 provides a summary of the data sources and estimation methods usually used to calculate each of the national estimators at current prices, on an annual as well as on a quarterly basis. The majority of the estimators of personal expenditure are calculated using one of the first five methods presented in paragraph 7.36. These methods are referred to in this table as M1 for the first method, M2 for the second, etc. The table presents, under three columns, the estimation methods and data sources of the annual estimators for the two most recent years as well as those for the quarterly estimators. Because the calculation methods for some estimators are more complex than others (method M6), special attention is given to most of them in the following paragraphs.

## New cars, vans and trucks

### Annual method<sup>16</sup>

7.50 Personal expenditure on new cars, vans and trucks<sup>17</sup> are estimated using monthly data from Statistics Canada's *New Motor Vehicle Sales Survey* (NMVSS) along with the monthly reports of the Canadian Vehicle Manufacturers' Association (CVMA). The survey presents the value and number of new motor vehicles sold by each manufacturer, while the reports provide the number of vehicles sold in Canada by model, in addition to identifying fleet sales. In the Canadian System of National Accounts (CSNA), the personal expenditures on new motor vehicles are expressed in terms of the full value of the vehicles that are purchased or leased by households; in other words, there is no consideration of trade-ins and of the tax savings resulting from trading used vehicles in the expenditure series on new motor vehicles.<sup>18</sup> It should be noted that financial leases are treated as sales,<sup>19</sup> although the applicable taxes are mostly distributed over the duration of the leasing contract on the basis of the lessee's periodic payments.

7.51 The data reported in the NMVSS are matched and confronted with those in the CVMA report. This reconciliation consists of applying the manufacturer's suggested retail price (MSRP) to the number of units of each model that are sold, after adjusting the MSRP to reflect rebates offered by dealers and manufacturers, transportation costs and the accessories commonly purchased as options.<sup>20</sup> The values thus obtained by model are then aggregated by manufacturer so that they can be confronted with the NMVSS data.

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16. This methodology is also used to derive the annual benchmark estimates.

17. Includes pickup trucks and sport-utility vehicles.

18. Trade-ins and their tax implications are reflected in the personal expenditure series on used motor vehicles (net value). See paragraphs 7.57 to 7.67 for more details.

19. This treatment is similar to the practice followed by manufacturers.

20. Data on prices by model and data on the cost of options are drawn from the *Canadian Red Book* (ISSN 0045-527X) and the *Guide d'évaluation Hebdo* (ISBN 1488-3821).

7.52 Once this reconciliation is carried out, the personal portion of new motor vehicle sales is calculated in two stages.<sup>21</sup> The first stage consists of classifying vehicles sold according to their main use, i.e., for personal or commercial use. Based on provincial and territorial vehicle registration data and CVMA statistics, this stage consists of subtracting from total sales of new vehicles all those clearly intended for commercial use, such as heavy-duty trucks and fleet sales, as well as all other new vehicles registered by businesses and governments. Although this stage serves to identify the purchases of individuals, it is not necessarily an estimator of personal expenditure, since some individuals, such as a number of self-employed workers, use their vehicle partly for commercial purposes. Conversely, some vehicles purchased by the business and government sectors are partially used for personal purposes. Since personal expenditure must represent the personal use that will be made of new motor vehicles purchased, the second stage will consist of subtracting from sales to individuals that portion representing the commercial use that will be made of the vehicles sold and adding a value reflecting the personal use that will be made of vehicles sold to businesses and governments. In practice, reflecting the personal use of all vehicle sales is a difficult task. Nevertheless, adjustments are derived on the basis of commercial use ratios drawn from the *Survey of Household Spending* (SHS) as well as data from the T4 Supplementary file of the Canada Revenue Agency, reflecting the personal use of purchases by businesses and governments. According to all of these calculations, personal expenditure generally accounts for approximately 70 percent of the value of new car sales and 50 percent of the value of new van and truck sales.

7.53 Apart from financial leases, where taxes are based on periodic payments, the calculation of federal and provincial sales taxes is based on the price of new vehicles, not accounting for trades that are made. The effect of these trades on taxes is discussed in paragraph 7.65.

#### Quarterly method

7.54 As in the case of the annual method, quarterly estimates of personal expenditure on new cars, vans and trucks are calculated using monthly *New Motor Vehicle Sales Survey* (NMVSS) data and the monthly Canadian Vehicle Manufacturers' Association (CVMA) reports. However, unlike with the annual method, the calculations use data by vehicle model aggregated into selected groupings.

7.55 The first operation in deriving the estimator of personal expenditure on new cars consists of calculating the proportion of car sales that are not fleet sales in relation to the total number of units sold and applying this proportion to the value of total sales (that is, without distinction as to the model or manufacturer) reported in the NMVSS. This estimated value of new cars purchased by individuals is then adjusted to reflect the personal use based on information derived from the annual methodology. The value representing the commercial use is included under business gross fixed capital formation on machinery and equipment.

7.56 The method of calculating the estimator of personal expenditure on new vans and trucks is similar to the annual method, except that sales by model are grouped into sales by vehicle category. Seven categories have been identified: light, standard, sport-utility, van, medium-duty, heavy-duty and bus. The first operation consists of applying average prices to the number of units sold, by category. A reconciliation between the values thus estimated and the official estimate from the NMVSS is then performed by manufacturer, and an adjustment is made to the average price per vehicle category for each manufacturer so that the difference can be allocated to them proportionally. The next operation is to subtract from the value of total sales of new vans and trucks all vehicles intended for commercial purposes, such as medium-duty trucks, heavy-duty trucks and buses as well as the value of fleet sales in the other four categories. This estimated value of new vans and trucks purchased by individuals is then adjusted to reflect the personal use based on information derived from the annual methodology. The value representing the commercial use is included under business gross fixed capital formation on machinery and equipment.

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21. The "non-personal" portion appears under gross fixed capital formation in machinery and equipment (see Chapter 9).

**Used motor vehicles (net value)****Annual method**

7.57 As in the case of other used goods purchased during a given period, only a portion of the value of used vehicle purchases is included in gross domestic product (GDP). For personal expenditure before taxes, this portion is equal to the value of purchases less sales of used motor vehicles made by households, hence the concept of net value of used motor vehicle purchases. Since the value of purchases and the value of sales for interpersonal transactions (i.e. no dealer involved) cancel each other out in the calculation, what is actually recorded is the net value of purchases made by households from other sectors of the economy.

7.58 Households have historically been, and still are, the main purchasers of used motor vehicles,<sup>22</sup> and with the exception of interpersonal transactions, most expenditures of this type are made at new and used motor vehicle dealerships. Since these dealers are actually intermediaries between economic transactors wishing to purchase or sell used vehicles, the treatment of transactions carried out by households with dealers will depend on the sector of origin or destination of the vehicles involved in those transactions. Specifically, the net value of personal expenditure on used vehicles will include the total retail value of the sales made by dealers of vehicles that formerly belonged to businesses, governments or non-residents. However, only a portion of the value of sales to households of vehicles that formerly belonged to other households will be included in the calculation, since the ownership of these vehicles does not change sector. The part or portion that is considered in the latter case is equal to the profits generated by dealers on the sales of the vehicles in question as well as the expenses that they incurred, such as vehicle reconditioning costs, salaries of salespersons, etc. Conversely, the value of used cars, vans and trucks sold by dealers to other sectors will be deducted from the net portion of personal expenditure, if the vehicles previously belonged to households, either owned or leased.

7.59 Table 7.4 presents an example of the calculation of the net value of personal expenditure on used motor vehicles. Accounting for the fact that certain components shown in that table could change considerably from one year to another, the purpose of this example is to show the calculation method and to present the relative importance of each component. This method consists in the first instance of estimating the total margin generated by motor vehicle dealers on their sales of used vehicles, i.e. the profits and the incurred expenses excluding the acquisition costs, regardless of who the previous owners of those vehicles were or to whom they have been sold. Second, the dealers' acquisition costs of vehicles which previously belonged to businesses, to governments and to non-residents are added in order to reflect the total retail value of those vehicles that were acquired by the household sector. Finally, the purchases by other businesses as well as the exports of vehicles that previously belonged to households are subtracted in order to obtain the personal expenditure on used motor vehicles.

**Table 7.4 Estimation of personal expenditure on used motor vehicles (net value) excluding taxes, fictive estimates**

	millions of dollars
Dealers' profits on the sales of used motor vehicles plus incurred expenses excluding acquisition costs	
New motor vehicle dealers	1,300
Used motor vehicle dealers	700
+ Dealers' acquisition costs of vehicles that previously belonged to businesses, governments and non-residents	2,900
- Business purchases of used motor vehicles	200
- Exports of vehicles that previously belonged to households	900
<b>= Personal expenditure (net value)</b>	<b>3,800</b>

22. However, a significant number of fleet returns and off-lease vehicles were exported to the United States in the early 2000s.

7.60 The main data sources used to estimate the sales of used vehicles by motor vehicle dealers are the *New Motor Vehicle Dealer Commodity Survey* (NMVDCS), the sales of the used and recreational motor vehicle and parts dealers reported in the *Quarterly Retail Commodity Survey* (QRCS), and the federal Goods and Services Tax (GST) file. Despite its name, the NMVDCS is in fact a census carried out among motor vehicle manufacturers who answer on behalf of all their dealers. For its part, the GST file is a databank that includes, among other items, statistics on the revenues of companies collecting the GST on behalf of the federal government. The NMVDCS is used to calculate used vehicle sales made by new vehicle dealers, while the used vehicle dealers' market is estimated with data from the GST file and the QRCS.

7.61 Households' purchases of used motor vehicles from dealers are estimated by deducting from the dealers' total used vehicle sales a notional adjustment reflecting the purchases made by the other sectors of the economy, mostly unincorporated businesses. Because vehicle purchases made by households are treated differently depending on whether or not the vehicles previously belonged to other households, domestic sales and exports must be distributed by sector of origin and destination. In making these distributions, data on new vehicle registrations are used and various assumptions are made regarding the average duration of vehicle use before resale.

7.62 Profit margins realized by dealers on used vehicle sales are mainly based on data reported in the *Guide d'évaluation Hebdo* or the *Canadian Red Book*, while expenditures related to vehicle reconditioning are drawn from the NMVDCS.

7.63 The following example illustrates how used motor vehicle transactions involving an auto dealer affect personal expenditure and gross domestic product (GDP), using typical scenarios.

#### **Example of used motor vehicle transactions**

Assume that a dealer, in order to sell a new car, van or truck to a given household, takes the household's used vehicle in trade. As part of the transaction, the dealer assigns a value of \$10,000 to the used vehicle, an amount that is deducted from the price of the new vehicle. The impact of this transaction on the net value of personal expenditure on used vehicles is -\$10,000. Note that the full value of the new vehicle purchase prior to the trade-in is recorded for the personal expenditure on new cars, vans or trucks.

Now assume that after taking possession of the used vehicle, the dealer makes various standard repairs on the vehicle (valued at \$500), before selling it to another household for the sum of \$11,500 before taxes. Since the purchaser is a household, \$11,500 must be added to the net value of personal expenditure on used vehicles. The final effect on used vehicle personal expenditure (and GDP) is +\$1,500 when both transactions are considered (-\$10,000 + \$11,500). This effect is equal to the dealer's costs of reconditioning and selling the used vehicle as well as his profit from these activities. In other words, we will include in personal expenditure on used vehicles only the impact of the dealer's activities on GDP. This is consistent with the fact that the residual value (\$10,000) of the vehicle before repair and resale contributes no added value to the economy as it was already recorded in GDP when the vehicle was sold the first time as a new car, van or truck.

It should be noted that the final effect on GDP would have been the same if the used vehicle had not been purchased by a household, or if it had not been a household that traded it to the dealer for a new vehicle. For example, assume that the original owner was a business that had leased the vehicle when it was new and returned it to the dealer when the leasing contract expired. This transaction will be reported in the Canadian System of National Accounts (CSNA) as a disinvestment in machinery and equipment (-\$10,000). Assuming now that the dealer then sells the vehicle to a household for an amount of \$11,500, then +\$11,500 will be attributed to the net value of personal expenditure on used vehicles. The final effect on GDP is +\$1,500 (-\$10,000 + \$11,500). However, in this case, personal expenditure increased \$11,500 compared to only \$1,500 in the previous case.

7.64 While this personal expenditure series records the net value of purchases made by households from other sectors of the economy, the taxes that are incorporated into those purchases are nevertheless calculated according to the gross value of used motor vehicle sales, including interpersonal sales.<sup>23</sup> In fact, in addition to the taxes applicable to the gross value of used vehicles that are sold during a given period, two other components of taxes are also part of the calculation of this series, namely:

- the tax differential on trade-ins, and
- taxes paid on lease returns when purchased by lessees.

7.65 The tax differential on trade-ins consists of the sales taxes that a household does not have to pay on the purchase of a new vehicle when they trade their vehicle to a dealer. For a given transaction, the amount of taxes that a household will not have to pay is equal to the federal and provincial sales taxes applicable to the value of the used vehicle that will be traded in for a new vehicle. In the CSNA, the sales taxes on purchased vehicles reported in the new cars, vans and trucks expenditure series are calculated according to their full value. Therefore, by convention, the tax differential on trade-ins will be deducted from the net value of expenditure on used motor vehicles, in order to not overestimate the total value of sales taxes that is reported in the system.

7.66 It was previously noted that financial leases are treated in the CSNA as purchases of new vehicles, except that the taxes are mostly distributed over the duration of the contract on the basis of the lessee's periodic payments. Should the lessee of a vehicle decide to purchase it at the end of the contract, that transaction will not be recorded in the CSNA as a used vehicle sale, since this would amount to saying that the individual involved had purchased the same vehicle twice. This being said, in light of the convention that applies to the treatment of taxes on financial leases, the taxes applicable to the residual value of the vehicle the individual will pay at the end of the contract in order to take legal possession of it must be recorded in this series.

### **Quarterly method**

7.67 The quarterly estimator of personal expenditure on used motor vehicles (net value) is calculated using the results of the *Quarterly Retail Commodity Survey* (QRCS) and the *Monthly Retail Trade Survey* (MRTS) as described in paragraph 7.43 and in Appendix 7A. This estimator represents the total retail value of used motor vehicle sales made by dealers, and its use assumes that its rate of growth is identical to that of personal expenditure on used vehicles.

### **Tobacco products**

#### **Annual method<sup>24</sup>**

7.68 Personal expenditure on tobacco products requires a specific calculation methodology, which consists of estimating the quantities consumed, to which consumer unit prices are applied. A specific method is used because several sources of information are available and because personal expenditure on cigarettes and other tobacco products include not only legal purchases (that is, purchases for which all taxes were collected by manufacturers, distributors and merchants and were remitted to the administrative authorities concerned), but also expenditures attributable to contraband activities, making the estimation of this series relatively more complex.

7.69 The estimation of personal expenditure on tobacco products on an annual basis results from a reconciliation exercise between several data sources from both the supply side and the demand side. Among the main sources on the demand side are the revenues from specific taxes imposed on the various tobacco products by administrative authorities. These figures are drawn from the federal, provincial and territorial public accounts, as well as corresponding tax rates legislated by governments. Also noteworthy are data from household surveys conducted to evaluate Canadians' consumption habits: the *Canadian Tobacco Use Monitoring Survey* (CTUMS)

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23. Although the federal Goods and Services Tax (GST) and provincial sales taxes apply to used vehicle sales made by dealers, interpersonal transactions, on the other hand, are only subject to the provincial sales taxes.

24. This methodology is also used to derive the annual benchmark estimates.

and the *Survey of Household Spending* (SHS). On the supply side, the main data source consists of the domestic sales reported by the *Production and Disposition of Tobacco Products* survey, supplemented by declared international imports, obtained from the International Trade Division.

7.70 The first step of the methodology is calculating the quantity or volume of cigarettes, cigars and fine cut tobacco for which specific taxes have been collected by the federal, provincial and territorial authorities. This volume, which is expressed in terms of cigarettes and is obtained by dividing tax revenues by the specific rates levied in each province and territory, is then compared to data from household surveys and to the domestic sales reported by manufacturers, supplemented by international imports. Respondents to household surveys tend to underestimate their tobacco consumption, generally resulting in a marked difference between the volumes calculated from surveys and those derived from tax data. However, it has been found that in some provinces, especially those where specific taxes are the highest, the quantities obtained from tax data are below the reported consumption, a situation generally attributed to contraband. This would suggest that many smokers are turning to the black market for their supply of cigarettes and fine cut tobacco. This would also explain the fact that domestic sales reported by manufacturers have declined more substantially than the trends reported in household surveys each time major increases in specific tobacco taxation rates have been imposed in Canada.

7.71 The total volume of tobacco consumed in Canada (including contraband tobacco products) is calculated annually based on trends observed in household survey data, on the level of prices and on the domestic sales reported by manufacturers. Up to the period 2001-2002, the domestic sales reported by the manufacturers were generally a good estimator of the total volume of tobacco consumed in Canada, since the products of contraband were to a great extent composed of cigarettes produced by major manufacturers and purchased by illegal wholesalers for resale on the black market. With the federal and provincial tobacco tax increases of 2001 and 2002, this scheme was partly replaced as the wholesale prices of tobacco sold by the major manufacturers increased in accordance with the taxes. Since the contraband of cigarettes produced in unlicensed manufactures of tobacco products and the imports of illegal cigarettes from other countries took a greater share of the market, the domestic sales reported by the legal manufacturers of tobacco could not be used as a reliable estimator of domestic consumption anymore. In order to determine the total volume of tobacco products consumed in the country, information from a number of data sources is now used, including the trends observed in data from household surveys as well as the price-elasticity of demand for tobacco products.

7.72 Once estimated, the total volume consumed in Canada is then distributed by province or territory, using data drawn from the CTUMS, conducted by Statistics Canada for Health Canada since 1999.<sup>25</sup> The consumption of contraband tobacco is then calculated residually for each province and territory by comparing, among other things, the total volume consumed to the quantity derived from tax sources on tobacco products.

7.73 Finally, consumer unit prices are applied to the volumes estimated by province and territory. The prices retained for the volumes sold on the legal market are drawn from the related consumer price index covering Canada's main population centres, while the prices paid for contraband tobacco are obtained from various sources, particularly media reports and press clippings.

#### **Quarterly method**

7.74 Since there is no sub-annual data source for the demand of tobacco products, the personal expenditure must be derived from the supply side. To approximate consumption, we use a moving average of the last four months of the volume of cigarettes sold in the country by Canadian manufacturers and by importers of tobacco products. The domestic sales of Canadian tobacco products are taken from the survey on the *Production and Disposition of Tobacco Products* by tobacco manufacturers with facilities in Canada. The import statistics are provided by the International Trade Division. Since taxes on tobacco products and prices vary from one province or territory to another, the national consumption of tobacco products must then be allocated among the provinces and territories using distributions from recent years as obtained by the annual method. Then, consumer unit prices are applied to

25. The provincial and territorial distribution of expenditures on tobacco products, derived from the CTUMS, yields results comparable to the data reported by the SHS.

the volumes estimated by province and territory. An adjustment is made to take expenditures on fine cut tobacco into account. Adjustments may also be made to reflect changing proportions sub-annually between consumption of legal and contraband products.

### **Paid and imputed rents**

7.75 The annual and quarterly estimates of personal expenditure on paid and imputed rents are both derived using the same methodology. Additional information on this method and the one used to calculate estimates of net rent is presented in Chapter 5.

7.76 The estimation of paid and imputed rents begins with the housing stock, as measured by the *Census of Population*. The housing stock is divided into single-family dwellings, multiple dwellings, mobile homes, cottages, garages and farms. The Census figures on these stocks are extrapolated annually by the Investment and Capital Stock Division, which uses the number of new dwellings completed plus conversions<sup>26</sup> less demolitions, from the survey of the Canada Mortgage and Housing Corporation (CMHC) and the *Building Permits Survey*. The housing stock is then divided between rented or owned dwellings and occupied or vacant dwellings.

7.77 The average rent is defined as the average price paid by renters for the use of a dwelling (single-family dwellings, multiple dwellings and mobile homes). This average rent is estimated using data drawn from part of the sample of respondents to the *Labour Force Survey* (LFS). The housing component of the *Consumer Price Index* (CPI) is also based on these same data.

7.78 The number of rented and occupied dwelling units (single-family dwellings, multiple dwellings and mobile homes) is multiplied by the average rent to obtain contract rent. The portion of contract rent that is not related to the dwelling space, that is, expenditures relating to facilities and services provided by landlords, is subtracted to obtain paid rent.<sup>27</sup> These expenditures include depreciation of furniture, stoves, refrigerators and washing machines as well as costs related to water, electricity, heating, parking and maintenance services. Since the average rent is not available for cottages and farms, stocks and estimates of paid rent for other types of dwellings are used in order to obtain an approximation.<sup>28</sup> For garages, the average rent comes from the *Survey of Household Spending* (SHS). For farms, data from the *Census of Agriculture* and from surveys conducted by Statistics Canada on farm operators are also used. Finally, an adjustment is made to eliminate the portion related to offices in the dwelling.

7.79 Several data sources are used to estimate expenditures relating to facilities and services provided by landlords, including the SHS, the personal expenditure on furniture and household appliances and on energy, and the *Survey of Employment, Payrolls and Hours* (SEPH) for maintenance services.

7.80 Data provided by Prices Division indicate that approximately 2% of workers use their dwelling as a workplace. The Income and Expenditure Accounts Division hypothesizes that 25% of rent should be attributed to the business portion. The adjustment for offices in the dwelling is calculated as follows:

$$\begin{aligned}
 & \text{Paid rent (before adjustment)} \\
 & \times \text{Ratio of rent used for office space (25\%)} \\
 & \times \text{Ratio of individuals using their dwelling as a workplace (2\%)} \\
 & = \text{Adjustment for offices in the dwelling.}
 \end{aligned}$$

7.81 Paid rent is the starting point for estimating rent imputed<sup>29</sup> to owner-occupants. By dividing paid rent by the rented and occupied housing stock, we obtain the average rent. This average rent is adjusted using a coefficient of quality, since a dwelling that is owned is generally larger and of better quality than a rented dwelling. The quality

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26. These are additional dwelling units created from formerly non-residential buildings or from other types of residential buildings.

27. Paid rent is often referred to as gross space paid rent or gross paid rent for space, emphasizing that this estimate measures only the cost of the space occupied.

28. Paid rent for cottages, garages and farms accounts for less than 3% of the total.

29. Imputed rent is often referred to as gross space imputed rent or gross imputed rent for space, emphasizing that this estimate measures only the cost of the space occupied.

coefficient is based on the average number of rooms in owned dwellings compared to that of rented dwellings, according to the *Census of Population*. Imputed rent is obtained by multiplying the number of dwelling units owned and occupied (single-family dwellings, multiple dwellings and mobile homes) by the average rent paid and by the quality coefficient. The calculation is as follows:

$$\begin{aligned}
 & \text{Paid rent (J154)} \\
 & \div \text{Rented and occupied housing stock} \\
 & = \text{Average rent paid} \\
 & \times \text{Coefficient of quality related to a dwelling that is owner-occupied} \\
 & \times \text{Owned and occupied housing stock} \\
 & = \text{Imputed rent (J153)}
 \end{aligned}$$

7.82 The imputed residential rent for garages, cottages and farms and the adjustment made for offices in the dwelling are derived similarly as those for rented and occupied dwellings.

### Insurance services

7.83 The output of life and non-life insurance corporations represents the value of the service provided in arranging payments of claims and benefits in exchange for the receipts of premiums and contributions. Four insurance services are measured in personal expenditure: property insurance (J162), accident and sickness insurance (J171), auto insurance (J175) and life insurance (J202).

7.84 Personal expenditure for the first three insurance series is derived using the following formula:

$$\begin{aligned}
 & (\text{Premiums earned} \\
 & - \text{Claims due} \\
 & + \text{Investment income on technical reserves}) \\
 & \times \text{Personal ratio}
 \end{aligned}$$

7.85 Premiums are earned by insurance companies on a continuous basis over a period, although it is common for a premium to be paid at the start of the period. Premiums collected from policyholders are invested in financial or other assets which are held to meet future claims arising from the occurrence of the events specified in the insurance policies. These pre-paid premiums are a form of credit extended by the policyholder to the insurer and are part of the technical reserves. Similarly, claims become due for payment by the insurance company when the contingency specified in the policy occurs, but they may not be payable until some time later, often because of negotiations regarding the settlement amounts. This is another form of credit described as reserves against outstanding claims and they are the other component of technical reserves. The investment income on these technical reserves accrues to policyholders and represents a premium supplement paid by policyholders to the insurer in the measurement of insurance output.

7.86 The measurement of life insurance output must also take into account the change in actuarial reserves. The actuarial reserves for life insurance are reserve requirements stipulated by the Superintendent of Financial Institutions and represent amounts set aside for payments of future claims and benefits which exceed the premiums and contributions received to the current date. For life insurance, the following calculation is made:

$$\begin{aligned}
 & (\text{Premiums/contributions earned} \\
 & - \text{Claims/benefits due} \\
 & + \text{Investment income on technical reserves} \\
 & - \text{Increases (+ decreases) in actuarial reserves}) \\
 & \times \text{Personal ratio}
 \end{aligned}$$

7.87 Data on premiums, claims and investment income for the provinces with a public automobile insurance plan<sup>30</sup> are obtained from the Public Institutions Division (PID). For the other provinces and territories, automobile insurance data are obtained from the Office of the Superintendent of Financial Institutions Canada (OSFI) and from the *Quarterly Survey of Financial Statistics for Enterprises* (QFS), compiled by the Industrial Organization and Finance Division (IOFD). For accident and sickness insurance and life insurance, data from the Canadian Life and Health Insurance (CLHI), OSFI and IOFD are used, while property and casualty insurance is calculated using information from IOFD and OSFI.

7.88 The personal proportions are based on historical data obtained from the OSFI. These ratios, used to determine the proportion of insurance output purchased by households, are as follows:

- Property and casualty insurance 70%
- Accident and sickness insurance 70%
- Auto insurance 70%
- Life insurance 95%

### **Financial services indirectly measured (FSIM)**

7.89 In addition to explicit charges for selected services they provide, financial institutions also derive income from the interest rate spread between loans and deposits. This spread represents an implicit charge to borrowers and depositors for services that are provided by financial institutions without explicit fees. The following four personal expenditure series for financial services indirectly measured (FSIM) are calculated:

- Financial intermediaries, implicit loan charges (J200);
- Credit unions, implicit deposit charges (J201);
- Financial intermediaries, implicit deposit charges (J204) and
- Credit unions, implicit loan charges (J207).

7.90 FSIM estimates are calculated as interest received minus interest paid plus adjustments for own funds for all financial institutions that offer lending and/or borrowing services to households, except for credit unions. The calculation for credit unions is slightly different because these institutions are considered to be associations of individuals. Therefore, their profits are not part of corporation profits but are treated as redistributions to the persons and unincorporated business sector. The estimate of FSIM for credit unions is calculated as interest received minus interest paid plus adjustments for own funds minus profits of credit unions.

7.91 The FSIM estimates are roughly equal to the interest received by the financial institutions net of interest paid by them. The term roughly is used because the net interest received needs to be adjusted for the use of their own funds in carrying the lending and borrowing activities. The purpose of this adjustment is to insure that the net interest received (i.e. FSIM) actually reflects the service level provided independently of the source of funds. For example, a client of a bank should receive the same amount of service when borrowing money whether it comes from the bank's own funds or from its deposits. Similarly, the level of service received by a depositor should not be reduced when the bank pays interest on bonds issued. Basically, the own funds' adjustment corresponds to interest paid for non-deposit interest minus interest received for other interest bearing assets excluding mortgage and non-mortgage loans.

7.92 The FSIM estimates are then distributed into a depositors' portion and a borrowers' portion representing the service provided to both types of transactors. This distribution is carried out by type of financial institution using their assets and liabilities. For example, if a financial institution has \$12 million in deposit liabilities and \$8 million in loan assets, then 60% (i.e.  $(12/(12+8))$ ) of the FSIM would be allocated to depositors while 40% would be allocated to borrowers.

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30. Quebec, Manitoba, Saskatchewan and British Columbia.

7.93 The depositors' portion and the borrowers' portion are further divided among persons, governments, non-residents and businesses (corporations, government business enterprises and unincorporated businesses). The depositors' portion is broken down using the assets of each sector (or liabilities from the financial institution's perspective). The borrowers' portion is broken down using the liabilities of each sector (or assets from the financial institution's perspective).

7.94 Estimates of FSIM provided to persons appear in personal expenditure under the four series mentioned above while those allocated to governments and to non-residents are also included on the expenditure side of the production account under government current expenditure on goods and services and exports of services, respectively. FSIM estimates allocated to corporations, government business enterprises and unincorporated businesses are treated as intermediate expenses.

7.95 Source data for the chartered banks are obtained from the OSFI while data for the other institutions of the personal and commercial banking industry, for consumer lending and sales financing, and for credit unions are obtained from the *Quarterly Survey of Financial Statistics for Enterprises* and from other administrative data sources.

### Net expenditure abroad

7.96 As noted in paragraphs 7.8 and 7.26, while personal expenditure on consumer goods and services is defined as spending by Canadian residents at home and when temporarily abroad, the individual series (J001 to J214 and J219 to J226) do not reflect this concept.<sup>31</sup> It is therefore necessary to add spending of Canadians abroad to personal expenditure and remove spending by non-residents (personal and business) in Canada from it. This is done through the aggregate net expenditure abroad, which adjusts the sum of the 127 individual series to reflect the total purchases of goods and services by Canadian residents wherever they were produced. Conceptually, travel payments abroad (J215)<sup>32</sup> and spending of military personnel abroad (J216) are personal expenditure, but they are not part of Canadian production. Offsetting entries are therefore made in imports in order to cancel these expenditures in the derivation of gross domestic product (GDP). Conversely, travel receipts from non-residents (J218) are subtracted in the aggregate from personal expenditure and are shown instead as exports, reflecting Canadian production.

7.97 The *International Travel Survey* (ITS) is the major data source for the calculation of net expenditure abroad. It provides data on travel spending and international transportation fares which are used to derive travel payments abroad and travel receipts from non-residents. Additional data on the education and health related travel spending is obtained from Culture, Tourism and the Centre of Education Statistics in order to adequately calculate J215, J218 and the personal expenditure aggregate.

7.98 The travel payments abroad series (J215) is the sum of two components. The first is derived by removing the travel spending of businesses as well as the spending of Canadians on education and health related travel from the total travel payments obtained from the ITS. The second component is the international transportation fares paid by households to foreign carriers which is calculated using a personal ratio of fares paid, derived from the ITS. The travel payments are recorded as imports of travel services, and the international fares as imports of transportation services.

7.99 Travel receipts from non-residents (J218) is also the sum of two components: the receipts for both personal and business travel spending from which the expenditures of non-residents on education and health related travel are removed, and the international transportation fares paid by non-residents to Canadian carriers. Those fares are

31. A notable exception is the education and health related travel spending. The individual personal expenditure series already include such expenditures by Canadians abroad and exclude those of non-residents in Canada. For example, the university fees of Canadians studying abroad are included with the series university fees (J188).

32. The term "travel" in the series travel payments abroad (J215) is not restricted to pleasure travelling, but refers to all non-business trips by Canadians outside Canada.

included in J218 since they are already part of the individual personal expenditure series such as air transport (J179). The travel receipts are recorded as exports of travel services, and the international fares as exports of transportation services, both reflecting Canadian production.

7.100 The spending of military personnel abroad series (J216) is calculated by multiplying the salaries and wages paid to members of the Canadian military abroad as reported by IEAD, with a ratio reflecting the spending of military personnel outside Canada.

### **Provincial and territorial estimates at current prices**

7.101 Provincial and territorial estimates of personal expenditure are only available annually and are based on the same classification of goods and services as are the national estimates (see ). Whenever possible, the same data sources and methods employed at the national level are used to calculate the provincial and territorial estimates. Interprovincial travel expenditure, which is discussed in paragraphs 7.105 to 7.108, represents a notable exception.

7.102 Generally, the provincial and territorial estimates are derived by distributing the national estimates by province and territory. However, for certain expenditure series, such as personal spending on electricity, on natural gas, on paid rent and on imputed rent, the quality and timeliness of the statistical information make it possible to calculate provincial and territorial estimates and summing them to obtain national estimates.

7.103 For most goods purchased at the retail level, the provincial and territorial estimates are obtained with the method outlined in Appendix 7A: a provincial/territorial retail commodity breakdown is applied to the provincial and territorial retail trade sales by trade group. The estimation of spending on services by province and territory relies on more varied data sources, such as the *Survey of Household Spending*, surveys on transportation, accommodation, food services, recreational services and personal care as well as on data from administrative data sources.

7.104 provides a summary of the data sources and estimation methods usually used to calculate each of the provincial/territorial estimators at current prices for the two most recent years. Series of personal expenditure without sales tax are derived with these estimators. Depending on the personal expenditure series and the data sources available, the estimators are used either to directly distribute the national benchmarks or to project the provincial and territorial benchmark data. In the latter case, the difference between the sum of the projected provincial and territorial estimates and the national estimate must be distributed by province and territory while minimizing the relative impact on the rate of change of each of the provincial and territorial series. As with the national estimators, the six methods presented in paragraph 7.36 are identified in the table.

### **Net expenditure abroad**

7.105 In the provincial and territorial economic accounts, the aggregate net expenditure abroad includes an international component and an interprovincial component. The first corresponds exactly to the net expenditure abroad outlined in paragraphs 7.96 to 7.100, with the difference that the travel payments abroad are distributed by province or territory of residence and the travel receipts from non-residents are allocated to the province or territory visited. The second component is an estimate of interprovincial travel expenditure of Canadian residents. For the country as a whole, the net interprovincial travel expenditure is equal to zero because the sum of interprovincial travel payments equals the sum of interprovincial travel receipts.

7.106 The international component of travel payments abroad (J215) and travel receipts from non-residents (J218) is calculated using the same data sources and methods as presented in paragraphs 7.96 to 7.100, that is mostly from the *International Travel Survey*. The interprovincial component is derived using payments by residents of a province or territory while travelling in another province or territory for pleasure and other personal reasons. Data for the latter component are obtained from the *Travel Survey of Residents of Canada* (TSRC). An adjustment is also made to reflect other expenditures not covered by the TSRC such as outlays by residents of a province or territory who work in another province or territory.

7.107 As is the case for the international component, spending on education and health related travel is not included with the interprovincial component of J215 and J218 since it is already included with the individual personal expenditure series. For example, the university fees of a resident of Yukon studying in British Columbia are included with the series university fees (J188) and not with the series J215 of Yukon. Note that those fees are included with imports of services for Yukon and with exports of services for British Columbia.

7.108 By international convention, Canadian diplomatic and military personnel posted abroad are considered residents of Canada and their personal expenditure is shown under a region called "Outside Canada".

### Estimates of sales taxes

7.109 The estimators, for which the data sources and estimation methods were presented in the paragraphs 7.49 to 7.108, are used to derive personal expenditure estimates at current prices excluding the federal and provincial sales taxes.<sup>33</sup> The federal Goods and Services Tax (GST) and the provincial sales taxes must be added to obtain personal expenditure at market prices.

7.110 When it replaced the manufacturers' sales tax in January 1991, the GST had been set at a rate of 7 percent and remained at that level until July 1, 2006, when it was reduced to 6 percent. It was further reduced to 5 percent on January 1, 2008. The GST is charged on most goods and services that are sold and is similar to the value added taxes (VAT) that exist in many industrialized countries. However, because most businesses are allowed to claim input tax credits or refunds for the GST paid on their intermediate expenses, it is to a large extent a tax on final consumption.

7.111 A general sales tax is also levied by all provincial governments except Alberta.<sup>34</sup> A general sales tax is defined as a tax which is legislated by a provincial act and which applies to most goods and selected services purchased. Historically, provincial sales taxes (PST) have been applicable mostly to the purchase of tangible goods, but the tax base has been expanded in many provinces in recent years. In 1992, the Quebec government harmonized most of its tax base to that of the GST. In 1997, the governments of Newfoundland and Labrador, Nova Scotia and New Brunswick adhered to the Harmonized Sales Tax (HST) Agreement.<sup>35</sup> More recently, other provincial governments have decided to apply the general sales tax to additional products.

7.112 In the Canadian System of National Accounts (CSNA), sales taxes are calculated by province and by territory for each personal expenditure series. The tax rate in effect and a taxable proportion are applied to each personal expenditure series at current prices without sales tax. For any series, the taxable proportion corresponds to the percentage of the personal spending for which the sales tax (GST or PST) is applicable. The use of taxable proportions is necessary because of various exemptions that apply to selected goods and services as well as to specific purchasers. The method used to calculate the GST and PST is identical, except in Prince Edward Island and Quebec where the provincial sales tax rate applies to the personal expenditure estimates including the GST. As in the case for the estimates of personal expenditure at current prices excluding sales tax, the sum of the sales tax estimates by province and territory must correspond to the national estimates. An example of the calculation of the sales taxes applicable to furniture for Ontario is presented in Table 7.5 .

33. A certain number of taxes are already incorporated into the personal expenditure series at current prices without sales tax, such as the federal excise duties on tobacco, the federal excise taxes applicable on the purchase of some new motor vehicles, the air travellers' security charge, and the excise taxes on gasoline, among others.

34. Although there is no general sales tax in Alberta or in the three territories, taxes are nevertheless levied on certain goods and services. For instance, the four governments levy tobacco taxes; there is a tax on accommodation services in Alberta; and the government of Yukon charges a tax on alcoholic beverages bought in stores.

35. In accordance with the HST Agreement, the federal government collects a 13 percent tax on the retail sales subject to the GST in each of the three participating provinces; between July 1st 2006 and January 1st 2008, the HST rate was set at 14 percent while it was set at 15 percent prior to July 1st 2006. From the amount collected, the federal government keeps the revenue attributed to the GST and redistributes the share corresponding to the 8 percent provincial tax to the participating provinces.

**Table 7.5 Calculation of sales taxes on furniture in Ontario**

	<b>GST calculation</b>	<b>PST calculation</b>
Expenditure on furniture (excluding sales tax)	\$3.075 billion	\$3.075 billion
x Taxable proportion	0.992	0.994
x Sales tax rate	0.05	0.08
= Sales tax on furniture	\$152.5 million	\$244.5 million

## Personal expenditure at constant prices

7.113 Personal expenditure on consumer goods and services at constant prices is available at the same level of detail as the national, provincial and territorial estimates at current prices, that is, for 130 series. They are mostly obtained by deflating the current price estimates using *Consumer Price Indexes* (CPIs) for Canada, the provinces and territories.<sup>36</sup> The CPI series, which are released monthly, are based on multiple weight bases through time, linked together to form continuous series, and so are effectively chain price indexes. When no single CPI corresponds to a given series, many indexes can be combined and weighted together, to obtain the required deflator. In certain cases, indexes not directly related to consumption, such as indexes derived from average weekly earnings from *Survey of Employment, Payrolls and Hours*, are used. In other cases, constant price estimates are derived by multiplying quantity data by the average price for the base year or by applying the rate of change of related volume series to the current price estimates of the base year. The price index is then calculated by dividing the estimate at current prices by the estimate at constant prices. To deflate travel payments abroad (J215) and spending of military personnel abroad (J216), the CPIs of other countries, mostly the United States, are used, after having been adjusted for exchange rates.

7.114 The methods used to calculate the 130 series of personal expenditure at constant prices for the provinces, territories and Canada are presented in . For most commodities, provincial/territorial price indexes consistent with the national price index are available and are used to derive provincial and territorial constant price estimates. Whenever they are not available, the national price index, other related price indexes or provincial/territorial volume projectors are used. For example, provincial and territorial estimates of spending on air transport, postal and courier services and selected financial services are deflated with national price indexes.

7.115 Since the release of the *National Income and Expenditure Accounts* for the first quarter of 2001 and of the *Provincial Economic Accounts* in October 2002 covering the period up to 2001, personal expenditure aggregates such as the 38 groups (PS), 9 major groups (PSG), durable goods, semi-durable goods, non-durable goods, services and total personal expenditure are calculated using the chain Fisher index formula, which is described in Chapter 2. Prior to those releases, the aggregates were derived by summing the individual components, reflecting a fixed-base Laspeyres measure.

36. It should be noted that the CPIs for provinces and territories are in fact specially constructed weighted aggregations of city price indexes which ignore non-urban areas.

**Table 7.6 Classification of personal expenditure on consumer goods and services, 2000**

Code and title	Millions of dollars	Description
PSG01 Food, beverages and tobacco	77,556	
PS01 Food and non-alcoholic beverages	56,547	
J101 Food and non-alcoholic beverages (N-D)	55,477	Bread and cereals; meat and poultry; fish and seafood; prepared meals; dairy products and eggs; oils and fats; fruits and vegetables; bakery products; sugar, jam, honey, chocolate and confectionery; salt, spices, sauces, condiments and seasonings; and frozen foods.
J102 Imputed food (N-D)	1,070	Value of food grown and/or manufactured and subsequently consumed by farmers; food paid in lieu of wages and salaries.
PS02 Alcoholic beverages bought in stores	11,659	
J104 Alcoholic beverages bought in stores (N-D)	11,659	Beer, wine and distilled alcoholic beverages bought in stores.
PS03 Tobacco products	9,350	
J105 Tobacco products (N-D)	9,350	Cigarettes and other tobacco products.
PSG02 Clothing and footwear	27,575	
PS04 Men's and boys' clothing	9,393	
J051 Men's and boys' clothing (S-D)	9,361	Men's and boys' clothing including accessories.
J069 Men's clothing repairs and alterations (S)	32	
PS05 Women's, girls' and infant's clothing	14,125	
J052 Women's, girls' and infants' clothing (S-D)	13,944	Women's, girls' and infants' clothing including accessories.
J067 Women's clothing repairs and alterations (S)	181	
PS06 Footwear	4,057	
J056 Footwear (S-D)	3,946	Footwear excluding sports specific footwear shown in J021.
J057 Footwear repairs (S)	111	
PSG03 Rent, fuel and power	135,618	

(D) Durable goods      (S-D) Semi-durable goods      (N-D) Non-durable goods      (S) Services

**Table 7.6 Classification of personal expenditure on consumer goods and services, 2000**

Code and title	Millions of dollars	Description
PS07 Imputed rent	82,586	
J153 Imputed rent (S)	82,586	Imputation for the cost of renting owner-occupied dwellings. It represents the rental value of space only, not including the cost of energy (J106, J107 and J108).
PS08 Paid rent	29,059	
J154 Paid rent (S)	28,011	Rent paid for houses, mobile homes, farms and cottages. It represents the rental value of space only, not including the cost of energy (J106, J107 and J108), furniture and appliance rentals (J164), janitorial services (J165) and parking (J221).
J164 Furniture and appliance rentals (S)	310	Imputed value of furniture and electric household appliances included in paid rent.
J165 Janitorial services (S)	738	Imputed value of janitorial services included in paid rent such as cleaning, lawn mowing and snow removal.
PS09 Other shelter expenses	4,666	
J151 Water, sewage and garbage charges (S)	2,579	
J155 Imputed lodging (S)	709	Value of accommodation provided to employees by employers in industries such as mining and logging.
J156 Paid lodging (excluding universities) (S)	114	Fees for recreational camps, hunting or fishing camps, and rooming and boarding houses.
J157 Lodging in universities (S)	266	
J162 Property insurance (S)	998	Only the cost of service is considered to be personal expenditure. The cost of service is measured by premiums earned plus premium supplements (investment income of pre-paid premiums and unpaid claims) minus claims due. Auto insurance is shown in J175.
PS10 Electricity	11,428	
J106 Electricity (N-D)	11,428	
PS11 Natural gas	5,034	
J107 Natural gas (N-D)	5,034	
PS12 Other fuels	2,845	

(D) Durable goods      (S-D) Semi-durable goods      (N-D) Non-durable goods      (S) Services

**Table 7.6 Classification of personal expenditure on consumer goods and services, 2000**

Code and title	Millions of dollars	Description
J108 Other fuels (N-D)	2,845	Fuels such as propane, light fuel oil, kerosene for heating and cooking purposes and firewood.
PSG04 Furniture, furnishings and household equipment and maintenance	48,476	
PS13 Furniture, carpets and other floor coverings	7,144	
J001 Furniture (D)	6,431	Indoor and outdoor furniture including mattresses.
J002 Floor coverings (D)	470	Excludes wall to wall carpets and wooden or ceramic floors as they are considered a capital expenditure.
J003 Upholstery and furniture repairs (S)	243	
PS14 Household appliances	8,081	
J004 Refrigerators and freezers (D)	1,243	
J005 Washers and dryers (D)	849	
J006 Stoves, ranges and microwave ovens (D)	1,476	Cooking appliances including barbecues.
J007 Other major appliances (D)	1,023	Dishwashers and other portable household appliances.
J008 Small electrical appliances (D)	1,775	Small household appliances such as fans, food mixers, steam irons and electric blankets; telephone and related equipment including facsimile.
J009 Household equipment repairs (S)	399	Repairs to appliances and equipment shown in PS14.
J010 Garden tools and equipment for outdoor maintenance (D)	1,316	Mowers, snow blowers, sprinklers and hand tools used in horticulture such as hedge shears; engines and parts for lawn and garden tractors.
PS15 Semi-durable household furnishings	14,256	
J053 Thread, yarn and sewing accessories (S-D)	515	
J054 Piece goods (S-D)	1,143	All types of fabrics including awnings and flags.
J061 Household textiles and furnishings (S-D)	4,575	Bedding, shades, blinds, art and decorative goods.
J062 China, glassware and kitchenware (S-D)	2,338	Kitchenware; metal, plastic and wooden kitchen utensils; ceramic and glass household products; mirrors.

(D) Durable goods      (S-D) Semi-durable goods      (N-D) Non-durable goods      (S) Services

**Table 7.6 Classification of personal expenditure on consumer goods and services, 2000**

Code and title	Millions of dollars	Description
J063 Lamps, lighting equipment and accessories (S-D)	1,259	Portable lighting fixtures; insulated wire and cable (excluding aluminium); wiring materials and electrical meters; electric light bulbs and tubes; electric lighting fixtures.
J064 Flatware (S-D)	266	Silver or metal plated table cutlery including knife sets.
J065 Hardware (S-D)	4,160	Lumber and other building materials; hand and power tools (excluding garden tools); hardware such as nails, fasteners, doorknobs and hinges; household batteries; metal and plastic containers and closures; iron and steel wire and cable; scales and balances.
PS16 Non-durable household supplies	10,278	
J103 Pet food (N-D)	1,626	
J109 Soaps and other cleaning supplies (N-D)	2,642	Bleach and fabric softeners; polish, cream and wax products; other cleaning products such as dishwashing detergent and oven cleaning preparations.
J110 Other household supplies (N-D)	3,854	Various household non durable products such as toilet paper, paper towel and tissue; diapers; plastic and paper bags; aluminium foil.
J113 Flowers, plants and other horticultural supplies (N-D)	2,156	Seeds (excluding oil seeds), nursery stock, peat moss, chemical fertilizers, insecticides and herbicides.
PS17 Domestic and child care services	5,121	
J158 Domestic services (S)	1,220	Domestic help such as cleaning services.
J159 Child care, in the home (S)	1,146	
J160 Child care, outside the home (S)	2,755	
PS18 Other household services	3,596	
J161 Laundry and dry cleaning (S)	1,427	
J163 Pet care (S)	968	Veterinary and other services for pets such as grooming, boarding and training.
J211 Miscellaneous household services (S)	1,201	Fees for plumbers, electricians, carpenters, painters and decorators; investigation and security services; machinery and equipment rental.
PSG05 Medical care and health services	28,986	
PS19 Medical care	13,456	

(D) Durable goods (S-D) Semi-durable goods (N-D) Non-durable goods (S) Services

**Table 7.6 Classification of personal expenditure on consumer goods and services, 2000**

Code and title	Millions of dollars	Description
J166 Medical care, dental care and the like (S)	8,116	Medical and dental fees; charges for various services such as physiotherapy, chiropractic medicine and acupuncture; fees for laboratory tests such as blood tests.
J167 Special care facilities (S)	3,120	Fees for residential health care facilities such as old age homes, nursing homes and psychiatric homes.
J168 Other health care (S)	2,220	Fees for ambulance services paid by individuals; operating expenses of non-profit family and housing services such as food banks, emergency and other relief services.
PS20 Hospital care and the like	1,388	
J169 Hospital care and the like (S)	1,388	Fees for hospital services such as private room option and rental of television in the room.
PS21 Other medical care expenses	4,137	
J171 Accident and sickness insurance (S)	4,137	Only the cost of service is considered to be personal expenditure. The cost of service is measured by premiums earned plus premium supplements (investment income of pre-paid premiums and unpaid claims) minus claims due.
PS22 Pharmaceutical products and medical goods	10,005	
J111 Pharmaceutical products and medical goods (N-D)	10,005	Pharmaceutical products including prescription and non-prescription drugs; ophthalmic goods; wheelchairs and orthopaedic appliances.
PSG06 Transportation and communications	100,169	
PS23 New and used (net value) motor vehicles	37,852	
J011 New automobiles (D)	16,666	Value representing the personal use of new automobiles purchased or leased. The value for leases reflect the full value of the vehicle and not the periodic payments.
J012 Used motor vehicles (net value) (D)	6,730	The value of purchases less sales of used motor vehicles made by households.
J013 New trucks and vans (D)	14,456	Value representing the personal use of new passenger vans, sport-utility vehicles and trucks purchased or leased. The value for leases reflect the full value of the vehicle and not the periodic payments.
PS24 Motor vehicle repairs and parts	11,704	
J015 Motor vehicle maintenance and repairs (S)	6,028	Includes labour costs only. Replacement motor vehicle parts and accessories are shown in J016.

(D) Durable goods      (S-D) Semi-durable goods      (N-D) Non-durable goods      (S) Services

**Table 7.6 Classification of personal expenditure on consumer goods and services, 2000**

Code and title	Millions of dollars	Description
J016 Motor vehicle parts and accessories (D)	5,676	Motor vehicle parts and accessories such as tires, engines, wheels, brakes and batteries. Labour costs are shown in J015.
PS25 Motor fuels and lubricants	20,284	
J112 Motor fuels and lubricants (N-D)	20,284	
PS26 Other auto related services	5,995	
J174 Bridges and highway tolls (S)	245	
J175 Auto insurance (S)	3,844	Only the cost of service is considered to be personal expenditure. The cost of service is measured by premiums earned plus premium supplements (investment income of pre-paid premiums and unpaid claims) minus claims due.
J221 Parking (S)	773	
J222 Driving lessons and membership in automobile associations (S)	410	
J223 Motor vehicle renting (S)	723	Rental service of passenger cars and trucks (including operating leases).
PS27 Purchased transportation	12,182	
J173 Commissions paid to tour operators (S)	696	Commission implicit in fees of travel agencies, tour operators and tourist guide services.
J176 Urban transit (S)	1,927	Spending on urban passenger transport services such as city or commuter buses and commuter trains.
J177 Railway transport (S)	193	
J178 Interurban bus (S)	694	Spending on interurban and rural bus transportation (scheduled or chartered) and scenic and sightseeing bus transportation.
J179 Air transport (S)	7,175	
J180 Water transport (S)	260	Spending on passenger water transport including sightseeing trips.
J181 Taxis (S)	524	Spending on taxis, limousines and shuttle services.
J182 Moving and storage (S)	713	Fees for moving household furniture and other goods and charges for storage and warehousing.
PS28 Communications	12,152	

(D) Durable goods      (S-D) Semi-durable goods      (N-D) Non-durable goods      (S) Services

**Table 7.6 Classification of personal expenditure on consumer goods and services, 2000**

Code and title	Millions of dollars	Description
J183 Telecommunications (S)	11,377	Wireline and wireless communication services; internet access services.
J184 Postal and courier services (S)	775	
PSG07 Recreation, entertainment, education and cultural services	66,269	
PS29 Recreation, sporting and camping equipment	23,040	
J014 Road and off-road recreational vehicles (D)	3,043	Recreational vehicles such as motor homes, motorcycles, bicycles and snowmobiles.
J017 Radios, sound systems and accessories (D)	4,568	
J018 TV sets, video equipment and accessories (D)	3,230	
J019 Boats, aircraft and accessories (D)	1,289	Includes motors.
J020 Photographic and optical equipment (D)	1,315	Includes photocopiers and microfilm equipment.
J021 Sporting and camping equipment (D)	2,993	Tents, sleeping bags, sails, firearms, recreational and sporting equipment such as golf and fishing equipment.
J022 Office machines, computers and equipment (D)	2,786	Includes pre-packaged software products and games for personal computers.
J023 Musical instruments and supplies (D)	878	
J024 Trailers (D)	959	
J025 Recreation equipment repairs (S)	524	Repair services for equipment shown in PS29.
J026 Recreation equipment rentals (S)	1,455	Rental services for equipment shown in PS29 including the rental of electronic games and videos.
PS30 Reading and entertainment supplies	10,118	
J059 Toys, games and hobby supplies (S-D)	3,551	Includes video games.
J060 Films and other photographic supplies (S-D)	549	
J066 Newspapers, books, magazines and stationery (S-D)	5,734	Includes paper stationery, greeting cards, post cards and artists' supplies.
J068 Pets and supplies (S-D)	284	
PS31 Recreational services	25,405	

(D) Durable goods (S-D) Semi-durable goods (N-D) Non-durable goods (S) Services

**Table 7.6 Classification of personal expenditure on consumer goods and services, 2000**

Code and title	Millions of dollars	Description
J185 Games of chance (S)	10,357	Wagers net of payouts for government-controlled slot machines, lotteries, casinos, video lottery terminals and bingos.
J186 Pari-mutuel (S)	420	Wagers net of payouts on horse racing.
J187 Other recreational services (S)	9,024	Spending on live performing arts, sports and recreational events; operating expenditures of non-profit organizations offering sports and recreation services such as ice rinks and community swimming pools, net of sales of selected goods and services.
J219 Cable television and pay television (S)	3,879	Subscription fees for cablevision and satellite services; rental fees for satellite dishes and TV converters.
J224 Cinemas (S)	810	
J225 Photographic services (S)	915	Spending on photographic processing, extra prints and passport pictures; portrait taking, restoration, copying and retouching services.
PS32 Education and cultural services	7,706	
J188 University fees (S)	3,216	Tuition and other fees.
J189 Fees for education and training, other than university (S)	3,738	Tuition fees for private schools, colleges, post secondary vocational and technical schools paid for by individuals; other educational fees such as ballet, music or business schools.
J190 Other educational and cultural services (S)	752	Operating expenditures of non-profit organizations offering educational and cultural services minus educational fees paid by households to non-profit organizations shown in J189.
PSG08 Miscellaneous goods and services	113,176	
PS33 Personal effects n.e.c.	3,414	
J027 Watches and jewellery (D)	2,786	Includes clocks and precious articles such as silverware (excluding flatware).
J028 Watches and jewellery repairs (S)	138	
J058 Luggage, leather goods and other personal effects (S-D)	490	Includes briefcases and smokers' supplies; excludes leather clothing accessories and footwear shown in J051, J052 and J056.
PS34 Personal care	12,001	
J114 Cosmetics and toiletries (N-D)	5,834	Oral care, skin care and hair care products.

(D) Durable goods (S-D) Semi-durable goods (N-D) Non-durable goods (S) Services

**Table 7.6 Classification of personal expenditure on consumer goods and services, 2000**

Code and title	Millions of dollars	Description
J191 Hairstyling for men and women (S)	3,895	
J192 Other personal care (S)	1,022	Spending on personal services such as massages and cosmetic treatments.
J210 Undertaking and other funeral services (S)	1,250	Includes caskets.
PS35 Restaurants and accommodation services	43,286	
J193 Meals outside the home (S)	30,679	Meals provided by restaurants, cafés and catering services (including tips).
J194 Alcoholic beverages consumed in licensed establishments (S)	7,393	Beer, wine and distilled alcoholic beverages consumed in licensed premises (including tips).
J195 Accommodation services (S)	5,094	Includes hotels, bed and breakfast and camping grounds (including tips).
J196 Board paid (S)	120	
PS36 Financial and legal services	41,769	
J199 Stock and bond commissions (S)	2,494	Commissions paid by households to licensed securities brokers and dealers for transactions in all stocks and bonds. Excludes commissions paid by trustee pension plans (J206) and those related to mutual funds (J208).
J200 Financial intermediaries, implicit loan charges (S)	7,059	Imputed service charges on non-mortgage loans to households by banks and other deposit accepting companies (except credit unions), and by other consumer lending institutions.
J201 Credit unions, implicit deposit charges (S)	1,149	Imputed service charges on households' deposits by credit unions.
J202 Life insurance (S)	8,071	Only the cost of service is considered to be personal expenditure. The cost of service is measured by the actual premiums earned plus the premium supplements (investment income of pre-paid premiums and unpaid claims) from which we subtract claims due and increases in actuarial reserves.
J203 Financial intermediaries, explicit charges (S)	3,723	Service charges explicitly collected from households by financial institutions (except credit unions) for deposit accounts, guarantees, letters of credit and safety deposit boxes; annual credit card fees.
J204 Financial intermediaries, implicit deposit charges (S)	5,510	Imputed service charges on households' deposits by banks and other deposit accepting companies (except credit unions).

(D) Durable goods      (S-D) Semi-durable goods      (N-D) Non-durable goods      (S) Services

**Table 7.6 Classification of personal expenditure on consumer goods and services, 2000**

Code and title	Millions of dollars	Description
J205 Credit unions, explicit charges (S)	731	Service charges explicitly collected from households by credit unions for deposit accounts, guarantees, letters of credit and safety deposit boxes; annual credit card fees.
J206 Trusteed pension funds (S)	1,388	Operating expenses associated with managing trustee pension funds.
J207 Credit unions, implicit loan charges (S)	435	Imputed service charges on non-mortgage loans to households by credit unions.
J208 Mutual funds (S)	8,527	Operating expenses associated with managing mutual funds and commissions paid by households related to the purchase or sale of funds.
J209 Legal, accounting and other services (S)	2,682	Fees for legal and representation services; payments for newspaper notices and advertisements in all media; services provided only by government such as the granting of visas and passports.
PS37 Operating expenses of non-profit organizations	12,706	
J212 Welfare and charitable organizations (S)	4,906	Operating expenditures of welfare and charitable organizations net of sales of selected goods and services.
J213 Religious organizations (S)	4,046	Operating expenditures of religious organizations net of sales of selected goods and services.
J214 Trade unions (S)	2,322	Operating expenditures of membership organization unions net of sales of selected goods and services.
J220 Political parties (S)	150	Operating expenditures of political parties net of sales of selected goods and services.
J226 Indian bands and Inuit (S)	1,282	Spending on wages, salaries and supplementary labour income of Indian bands and Inuit.
PSG09 Net expenditure abroad	-1,816	
PS38 Net expenditure abroad	-1,816	
J215 Travel payments abroad (S)	16,462	Personal spending outside the country by Canadians. Provincial and territorial estimates also include personal spending by Canadians outside their province or territory.
J216 Spending of military personnel abroad (S)	61	
J218 Travel receipts from non-residents (S)	-18,339	Business and personal spending by foreigners travelling in Canada. Provincial and territorial estimates also include personal spending of Canadians from other provinces and territories.

(D) Durable goods      (S-D) Semi-durable goods      (N-D) Non-durable goods      (S) Services

**Table 7.6 Classification of personal expenditure on consumer goods and services, 2000**

Code and title	Millions of dollars	Description
Personal expenditure on consumer goods and services	596,009	
Durable goods (D)	81,958	
Semi-durable goods (S-D)	52,115	
Non-durable goods (N-D)	143,264	
Services (S)	318,672	

(D) Durable goods      (S-D) Semi-durable goods      (N-D) Non-durable goods      (S) Services

**Table 7.7 Sources and methods for national estimates of personal expenditure at current prices<sup>1</sup>**

Series	Description	Benchmark year + 1	Benchmark year + 2	Quarters
J001	Furniture	Receipts from the <i>Annual Retail Trade Survey (ARTS)</i> , survey nos. 2422, 2433 and 2447, or from the <i>Monthly Retail Trade Survey (MRTS)</i> , survey nos. 2406 and 2408, broken down into commodities according to the <i>Quarterly Retail Commodity Survey (QRCS)</i> , survey no. 2008 [M1]. See Appendix 7A for further details.		
J002	Floor coverings	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J003	Upholstery and furniture repairs	Moving average of personal expenditure on furniture (J001) for t-6 to t-3, where t is the estimation year [M3].		Personal expenditure on furniture (J001) [M3].
J004	Refrigerators and freezers	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J005	Washers and dryers	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J006	Stoves, ranges and microwave ovens	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J007	Other major appliances	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J008	Small electrical appliances	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J009	Household equipment repairs	Moving average of personal expenditure on refrigerators and freezers (J004), washers and dryers (J005), stoves, ranges and microwave ovens (J006), other major appliances (J007), small electrical appliances (J008) and garden tools and equipment for outdoor maintenance (J010) for t-4 to t-1, where t is the estimation year [M3].		Personal expenditure on refrigerators and freezers (J004), washers and dryers (J005), stoves, ranges and microwave ovens (J006), other major appliances (J007), small electrical appliances (J008) and garden tools and equipment for outdoor maintenance (J010) [M3].
J010	Garden tools and equipment for outdoor maintenance	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J011	New automobiles	Value of sales of new automobiles as reported by the <i>New Motor Vehicle Sales Survey (NMVSS)</i> , survey no. 2402, from which the portion representing the commercial use that will be made of the vehicles sold is subtracted. The commercial use of new automobile purchases is derived with data from the Canadian Vehicle Manufacturers' Association (CVMA), from the <i>Survey of Household Spending (SHS)</i> , survey no. 3508, from the T4 Supplementary file of the Canada Revenue Agency (CRA) and from provincial and territorial motor vehicle registration files [M6]. See section on new cars, vans and trucks (paragraphs 7.50 to 7.56) for further details.		

1. For more information on the methodologies M1 through M6, see paragraph 7.36.

**Table 7.7 Sources and methods for national estimates of personal expenditure at current prices<sup>1</sup>**

Series	Description	Benchmark year + 1	Benchmark year + 2	Quarters
J012	Used motor vehicles (net value)	Purchases minus sales of used motor vehicles by households, derived using data from the <i>New Motor Vehicle Dealer Commodity Survey</i> (survey no. 2008), from the QRCS and from the federal Goods and Services Tax (GST) file of the CRA [M6]. See section on used motor vehicles (paragraphs 7.57 to 7.66) for further details.	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M3]. See paragraph 7.67 for further details.
J013	New trucks and vans	Value of sales of new trucks and vans as reported by the NMVSS from which the portion representing the commercial use that will be made of the vehicles sold is deducted. The commercial use of new trucks and vans is derived with data from the CVMA, from the SHS, from the T4 Supplementary file of the CRA and from provincial and territorial motor vehicle registration files [M6]. See section on new cars, vans and trucks (paragraphs 7.50 to 7.56) for further details.	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	
J014	Road and off-road recreational vehicles	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J015	Motor vehicle maintenance and repairs	Expenditures on motor vehicle maintenance and repairs according to the SHS [M1], confronted with the indicators for the benchmark year + 2.	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1], confronted with revenues for automotive repair and maintenance services (NAICS 8111) obtained from the GST file of the CRA [M1].
J016	Motor vehicle parts and accessories	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J017	Radios, sound systems and accessories	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J018	TV sets, video equipment and accessories	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J019	Boats, aircraft and accessories	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J020	Photographic and optical equipment	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J021	Sporting and camping equipment	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J022	Office machines, computers and equipment	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1], confronted with expenditures on computers according to the SHS [M1] and with the residual value between the supply (production and imports) and the disposition to businesses, governments and non-residents [M6], based on data from the Industry Accounts Division (IAD) and from the International Trade Division.		
J023	Musical instruments and supplies	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		

1. For more information on the methodologies M1 through M6, see paragraph 7.36.

**Table 7.7 Sources and methods for national estimates of personal expenditure at current prices<sup>1</sup>**

Series	Description	Benchmark year + 1	Benchmark year + 2	Quarters
J024	Trailers	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J025	Recreation equipment repairs	Moving average of personal expenditure on road and off-road recreational vehicles (J014), radios, sound systems and accessories (J017), TV sets, video equipment and accessories (J018), boats, aircraft and accessories (J019), photographic and optical equipment (J020), sporting and camping equipment (J021) and office machines, computers and equipment (J022) for t-4 to t-1, where t is the estimation year [M3].		
J026	Recreation equipment rentals	Expenditures on recreation equipment rentals according to the SHS [M1], confronted with revenue from the industry as reported by the <i>Annual Survey of Consumer Goods Rental</i> (survey no. 2434) [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Personal expenditure on road and off-road recreational vehicles (J014), radios, sound systems and accessories (J017), TV sets, video equipment and accessories (J018), boats, aircraft and accessories (J019), photographic and optical equipment (J020), sporting and camping equipment (J021) and office machines, computers and equipment (J022) [M3].
J027	Watches and jewellery	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J028	Watches and jewellery repairs	Moving average of personal expenditure on watches and jewellery (J027) for t-4 to t-1, where t is the estimation year [M3].		
J051	Men's and boys' clothing	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J052	Women's, girls' and infants' clothing	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J053	Thread, yarn and sewing accessories	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J054	Piece goods	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J056	Footwear	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J057	Footwear repairs	Moving average of personal expenditure on footwear (J056) for t-1 to t, where t is the estimation year [M3].		
J058	Luggage, leather goods and other personal effects	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		

1. For more information on the methodologies M1 through M6, see paragraph 7.36.

**Table 7.7 Sources and methods for national estimates of personal expenditure at current prices<sup>1</sup>**

Series	Description	Benchmark year + 1	Benchmark year + 2	Quarters
J059	Toys, games and hobby supplies	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J060	Films and other photographic supplies	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J061	Household textiles and furnishings	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J062	China, glassware and kitchen ware	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J063	Lamps, lighting equipment and accessories	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J064	Flatware	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J065	Hardware	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J066	Newspapers, books, magazines and stationery	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J067	Women's clothing repairs and alterations	Moving average of personal expenditure on women's, girls' and infants' clothing (J052) for t-1 to t, where t is the estimation year [M3].		Personal expenditure on women's, girls' and infants' clothing (J052) [M3].
J068	Pets and supplies	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J069	Men's clothing repairs and alterations	Moving average of personal expenditure on men's and boys' clothing (J051) for t-1 to t, where t is the estimation year [M3].		Personal expenditure on men's and boys' clothing (J051) [M3].
J101	Food and non-alcoholic beverages	Expenditures on food and non-alcoholic beverages according to the SHS [M1], confronted with receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	
J102	Imputed food	The first component is the farmers' income in kind obtained from the Agriculture Division. The second component represents the value of food and non-alcoholic beverages provided to employees of selected industries in lieu of wages and salaries, projected according to the trend in total labour income as reported by the IEAD [M6].		Personal expenditure on food and non-alcoholic beverages (J101) [M3].
J103	Pet food	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		

1. For more information on the methodologies M1 through M6, see paragraph 7.36.

**Table 7.7 Sources and methods for national estimates of personal expenditure at current prices<sup>1</sup>**

Series	Description	Benchmark year + 1	Benchmark year + 2	Quarters
J104	Alcoholic beverages bought in stores	Sales to final consumers according to the <i>Control and Sale of Alcoholic Beverages in Canada</i> (survey no. 1726) [M1] and to the annual reports of liquor authorities [M1], confronted with the volume of beer distributed, obtained from the Brewers Association of Canada, multiplied by the related <i>Consumer Price Index (CPI)</i> , survey no. 2301 [M2].	Receipts from the sale of alcoholic beverages in beer, wine and liquor stores from the ARTS or the MRTS [M1]. For Newfoundland and Labrador and for Quebec, the volume of beer distributed, obtained from the Brewers Association of Canada, multiplied by a unit price, is added to the receipts [M2].	
J105	Tobacco products	Volume of tobacco products consumed in each province and territory, to which consumer prices mostly originating from the Prices Division are applied. The volume is obtained from a reconciliation of supply and demand. The demand is based on tobacco tax data reported in the federal, provincial and territorial public accounts, as well as on historical trends reported by surveys on tobacco consumption, such as the <i>Canadian Tobacco Use Monitoring Survey</i> (survey no. 4440) and the SHS. The domestic sales reported by Canadian manufacturers and the declared international imports are used on the supply side [M6]. See section on tobacco products (paragraphs 7.68 to 7.73) for further details.	Volume of tobacco products consumed in each province and territory, to which consumer prices mostly originating from a reconciliation of supply and demand in the federal, provincial and territorial public accounts, such as the <i>Canadian Tobacco Use Monitoring Survey</i> (survey no. 4440) and the SHS. The domestic sales reported by Canadian manufacturers and the declared international imports are used on the supply side [M6]. See section on tobacco products (paragraphs 7.68 to 7.73) for further details.	Moving average of the last four months of the volume of cigarettes sold in the country by the Canadian manufacturers and the importers of tobacco products, multiplied by unit prices from the CPI. An adjustment is also made to include the expenditures on fine cut tobacco and contraband products [M6]. See paragraph 7.74 for further details.
J106	Electricity	Revenue of electric power utilities from electricity sales to the residential sector [M1], confronted with the residential sector multiplied by the related CPI [M2] and with expenditures on electricity according to the SHS [M1], by province and territory. The revenue and the quantities are obtained from the survey on <i>Electricity Supply and Disposition</i> (survey no. 2194).		
J107	Natural gas	Revenue of natural gas distribution utilities from sales to the residential sector [M1], confronted with the residential sector multiplied by the related CPI [M2] and with expenditures on natural gas according to the SHS [M1], by province and territory. The revenue and the quantities are obtained from the monthly survey on <i>Natural Gas Distribution</i> (survey no. 2149).		
J108	Other fuels	Quantities of light fuel oil, heavy fuel oil, kerosene and stove oil, natural gas liquids (NGL's) and coal sold to households multiplied by related unit prices [M2] plus the value of firewood projected according to a linear trend [M5], confronted with expenditures on other fuels according to the SHS [M1], by province and territory. The quantity of coal is obtained from the survey <i>Coal Monthly</i> (survey no. 2147) while the other quantities are obtained from the survey on the <i>End Use of Refined Petroleum Products</i> (survey no. 2168).	Quantity of light fuel oil sold to households from the survey on the <i>End Use of Refined Petroleum Products</i> (survey no. 2168) multiplied by a unit price from the CPI, by province and territory [M2].	
J109	Soaps and other cleaning supplies	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J110	Other household supplies	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J111	Pharmaceutical products and medical goods	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1], confronted with expenditures on pharmaceutical products and medical goods according to the SHS [M1] and with expenditures on drugs obtained from Canadian Institute for Health Information (CIHI) [M1].		

1. For more information on the methodologies M1 through M6, see paragraph 7.36.

**Table 7.7 Sources and methods for national estimates of personal expenditure at current prices<sup>1</sup>**

Series	Description	Benchmark year + 1	Benchmark year + 2	Quarters
J112	Motor fuels and lubricants	Number of litres of gasoline delivered to retailers from the survey on <i>Monthly Refined Petroleum Products</i> (survey no. 2150) multiplied by an average weighted price per litre from the CPI, by province and territory [M2], confronted with expenditures on gasoline according to the SHS [M1] and to receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J113	Flowers, plants and other horticultural supplies	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J114	Cosmetics and toiletries	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].		
J151	Water, sewage and garbage charges	Revenue from local government for water, garbage collection and sewer services obtained from the Public Institutions Division (PID) [M1].		Personal expenditure on imputed rent (J153) and on paid rent (J154) at constant prices, multiplied by the related CPI [M4].
J153	Imputed rent	Inventory of owned and occupied dwellings multiplied by the average rent adjusted by a quality factor [M6]. See section on paid and imputed rents (paragraphs 7.75 to 7.82) for further details.		
J154	Paid rent	Inventory of rented and occupied dwellings multiplied by the average rent, from which the portion of paid rent not related to the dwelling space is subtracted [M6]. See section on paid and imputed rents (paragraphs 7.75 to 7.82) for further details.		
J155	Imputed lodging	Labour income and current transfers by governments to the persons and unincorporated businesses sector as reported by the IEAD, deflated by the all-items CPI. The result is then multiplied by the implicit price index for paid rent (J154) [M4].		
J156	Paid lodging (excluding universities)	Personal expenditure at constant prices projected according to their trends in recent years, multiplied by the implicit price index for paid rent (J154) [M5].		
J157	Lodging in universities	Number of places in university residences, obtained from the Directory of Canadian Universities, multiplied by the related price index [M2]. This price index is derived from data on living costs in university residences obtained from Culture, Tourism and the Centre for Education Statistics (CTCES).		Personal expenditure at constant prices projected according to their trend in recent years, multiplied by the related price index [M5]. This price index is derived from data on living costs in university residences obtained from the CTCES.
J158	Domestic services	Expenditures on domestic help according to the SHS [M1], confronted with the indicators for the benchmark year + 2.	Personal expenditure at constant prices projected according to their trend in recent years, confronted with certain indicators from the <i>Labour Force Survey</i> (LFS), survey no. 3701, such as the number of families in which both parents work and the number of lone-parent families in which the parent works. The result is then multiplied by the related CPI [M5].	
J159	Child care, in the home	Expenditures on child care inside the home according to the SHS [M1], confronted with the indicators for the benchmark year + 2.	Personal expenditure at constant prices projected according to their trend in recent years, confronted with certain indicators from the LFS, such as the number of women who have children and are working full time. The result is then multiplied by the related CPI [M5].	

1. For more information on the methodologies M1 through M6, see paragraph 7.36.

**Table 7.7 Sources and methods for national estimates of personal expenditure at current prices<sup>1</sup>**

Series	Description	Benchmark year + 1	Benchmark year + 2	Quarters
J160	Child care, outside home	Expenditures on child care outside the home according to the SHS [M1], confronted with the indicators for the benchmark year + 2.	Personal expenditure at constant prices projected according to their trend in recent years, confronted with certain indicators from the LFS, such as the number of women who have children and are working full time. The result is then multiplied by the related CPI [M5].	
J161	Laundry and dry cleaning	Expenditures on cleaning services according to the SHS [M1], confronted with industry revenues reported by the <i>Annual Survey of Personal Services</i> (survey no. 2424) [M1].	GDP at constant prices for dry cleaning and laundry services (NAICS 8123) as measured on a monthly basis by the IAD, combined with the related CPI [M4].	
J162	Property insurance	Premiums earned minus claims due plus investment income on technical reserves [M6]. The source data are obtained from the <i>Quarterly Survey of Financial Statements of Property and Casualty Insurers</i> , compiled by the Industrial Organization and Finance Division (IOFD), and from statistics of the Office of the Superintendent of Financial Institutions Canada (OSFI). See section on insurance services (paragraphs 7.83 to 7.88) for further details.		
J163	Pet care	Expenditures for veterinary care and boarding, grooming and other pet-related services according to the SHS [M1], confronted with the indicators for the benchmark year + 2.	Personal expenditure at constant prices projected according to their trend in recent years multiplied by the related CPI [M5], confronted with revenues for veterinary services (NAICS 54194) and pet care services (NAICS 81291) obtained from the GST file of the CRA [M1], and with the salaries and wages for those two industries as reported by the IEAD [M3].	
J164	Furniture and appliance rentals	Personal expenditure on furniture (J001), refrigerators and freezers (J004), washers and dryers (J005) and stoves and microwave ovens (J006) [M3], confronted with the quarterly indicators.	Personal expenditure on paid rent (J154) at constant prices, combined with the related CPI [M4].	
J165	Janitorial services	Inventory of rented and occupied dwellings combined with the related CPI [M4].		
J166	Medical care, dental care and the like	Private sector health expenditures for physicians and other health professionals from the CIHI [M1].		Personal expenditure at constant prices projected according to their trend in recent years, multiplied by the related CPI [M5].
J167	Special care facilities	Personal expenditure at constant prices projected according to their trend in recent years, multiplied by the related price index [M5]. This result as well as the implied volume are confronted with the growth of compensation [M3] and of the number of employees [M4] reported by the SEPH for nursing and residential care facilities (NAICS 623). An indicator derived by the IAD from data on private sector health expenditures, obtained from the CIHI, is also used when available [M1].		
J168	Other health care	Personal expenditure at constant prices projected according to their trend in recent years, multiplied by the related CPI [M5]. This result as well as the implied volume are confronted with the growth of compensation [M3] and of the number of employees [M4] reported by the SEPH for social assistance (NAICS 624). An indicator derived by the IAD from data on private sector health expenditures, obtained from the CIHI, is also used when available [M1].		

1. For more information on the methodologies M1 through M6, see paragraph 7.36.

**Table 7.7 Sources and methods for national estimates of personal expenditure at current prices<sup>1</sup>**

Series	Description	Benchmark year + 1	Benchmark year + 2	Quarters
J169	Hospital care and the like	Personal expenditure at constant prices projected according to their trend in recent years, multiplied by the related price index [M5]. This result as well as the implied volume are confronted with the growth of compensation [M3] and of the number of employees [M4] reported by the SEPH for hospitals (NAICS 622). An indicator derived by the IAD from data on private sector health expenditures, obtained from the CIHI, is also used when available [M1].		
J171	Accident and sickness insurance	Premiums earned less claims due plus investment income on technical reserves [M6]. The source data are obtained from the <i>Quarterly Survey of Financial Statements of Property and Casualty Insurers</i> , compiled by the IOFD, as well as from statistics of the OSFI and of the Canada Life and Health Insurance Association. See section on insurance services (paragraphs 7.83 to 7.88) for further details.		
J173	Commissions paid to tour operators	Operating revenues of travel agencies (NAICS 56151) from the <i>Annual Survey of Travel Arrangement Services</i> (survey no. 2423) [M1].	Revenues for travel agencies (NAICS 56151) obtained from the GST file of the CRA [M1].	
J174	Bridge and highway tolls	The component related to toll bridges is projected by the number of vehicles crossing each toll bridge or tunnel. Revenues obtained from each toll highway are used for the second component [M6].		
J175	Auto insurance	Premiums earned less claims due plus investment income on technical reserves [M6]. The source data are obtained from the <i>Quarterly Survey of Financial Statements of Property and Casualty Insurers</i> compiled by the IOFD, from reports of the PID for provinces with a public auto insurance plan, and from statistics of the OSFI. See section on insurance services (paragraphs 7.83 to 7.88) for further details.		
J176	Urban transit	Revenues for urban transit and commuter services from the <i>Canadian Passenger Bus and Urban Transit Industries</i> (survey no. 2798) [M1]. Annual data on operating revenues [M1] and on the number of passengers [M2] from the Canadian Urban Transit Association are also used as a secondary indicator.	Revenues for urban transit from the <i>Large Urban Transit Survey - Monthly</i> (survey no. 2745) [M1].	
J177	Railway transport	Revenues derived from passenger transit obtained from the <i>Railway Transport Survey - Annual</i> (survey no. 2734) [M1].		Revenues from passenger fares reported by rail carriers [M1].
J178	Inter-urban bus	Revenues for regular inter-city transportation, transport by chartered passenger bus or school bus, paratransit services and express parcel transport by bus from the <i>Canadian Passenger Bus and Urban Transit Industries</i> (survey no. 2798) [M1], confronted with the expenditures for intercity and rural bus according to the SHS [M1].	Revenues for inter-city transportation from the <i>Large Urban Transit Survey - Monthly</i> (survey no. 2745) [M1].	

1. For more information on the methodologies M1 through M6, see paragraph 7.36.

**Table 7.7 Sources and methods for national estimates of personal expenditure at current prices<sup>1</sup>**

Series	Description	Benchmark year + 1	Benchmark year + 2	Quarters
J179	Air transport	For each type of service, regular and charter, the total number of passenger-kilometers travelled monthly is first multiplied by a factor that reflects the personal use of air transportation for each type. The personal portion of passenger-kilometers is then multiplied by the price index for air transportation [M2]. The number of passenger-kilometers comes from the monthly operating reports of the major Canadian air carriers as provided by the Transportation Division. When monthly reports are not available, passenger-kilometer data from the financial reports of the major Canadian carriers are used. As well, <i>Aircraft Movements Statistics</i> (survey no. 2715) are used for data confrontation purposes.		
J180	Water transport	Provincial estimators for t-1, where t is the estimation period, multiplied by the change in the number of passengers and in the related CPI, by province and territory. The number of passengers, according to the routes travelled, is obtained from selected water carriers operating in the Atlantic provinces and in British Columbia. For the other provinces and territories, it is assumed that the number of passengers remains constant from one period to the next. The national estimator is obtained by aggregating the provincial and territorial estimators [M6]. Estimates are confronted with the financial reports for selected water carriers.		
J181	Taxis	Expenditures for taxi travel according to the SHS [M1], confronted with operating revenues from the <i>Survey of the Taxi and Limousine Services Industry</i> (survey no. 4707) [M1].	Labour income and current transfers by governments to the persons and unincorporated businesses sector as reported by the IEAD, deflated by the all-items CPI. The result is then multiplied by the related CPI [M4].	
J182	Moving and storage	Expenditures for moving, storage and delivery services according to the SHS [M1], confronted with the indicator for benchmark year + 2.	Number of residential units sold through the Multiple Listing Service (MLS) reported by the Canadian Real Estate Association and lagged by 2 months, combined with the related CPI [M4]. Transfer costs for residential properties are also used as an indicator [M3].	
J183	Telecommunications	Telecommunications expenditures according to the SHS [M1]. Such expenditures include charges for wireline and wireless telecommunications, Internet service and other items such as cabling and installation.	Telecommunications operating revenues from the <i>Quarterly Survey of Telecommunications</i> (survey no. 2721) [M1].	
J184	Postal and courier services	Expenditures for postage stamps and other postal services, such as messenger services, according to the SHS [M1].	Personal expenditure at constant prices projected according to their trend in recent years, multiplied by the related CPI [M5].	
J185	Games of chance	Sales of lottery tickets, net of prizes awarded, plus net revenues of casinos, video lotteries and slot machines [M1]. These data, obtained from each lottery and gaming corporation, are confronted with their annual reports.		
J186	Pari-mutuel	Amount bet minus amount won, obtained monthly from the Canadian Pari-Mutuel Agency [M1].		
J187	Other recreational services	Expenditures related to recreation services according to the SHS [M1], confronted with industry revenues as reported by the <i>Annual Survey of Service Industries : Amusement and Recreation</i> (survey no. 2425) [M1].	GDP at constant prices for performing arts, spectator sports and related industries (NAICS 711), amusement parks and arcades (NAICS 7131) and other amusement and recreation industries (NAICS 7199) as measured monthly by the IAD, combined with the related CPIs [M4].	

1. For more information on the methodologies M1 through M6, see paragraph 7.36.

**Table 7.7 Sources and methods for national estimates of personal expenditure at current prices<sup>1</sup>**

Series	Description	Benchmark year + 1	Benchmark year + 2	Quarters
J188	University fees	Tuition and other fees received by university according to the <i>Financial Information of Universities and Colleges Survey</i> (survey no. 3121), aggregated by province and calculated on a calendar year basis with specific factors for each province [M1].	Number of university students as reported by the LFS multiplied by the related CPI [M2].	
J189	Fees for education and training, other than university	Personal expenditure at constant prices projected according to their trend in recent years multiplied by the related CPI [M5], confronted with expenditures for post secondary education according to the SHS [M1].		
J190	Other educational and cultural services	Personal expenditure at constant prices projected according to their trend in recent years, multiplied by the related CPI [M5].		
J191	Hairstyling for men and women	Expenditures for hairdressing services according to the SHS [M1].	Personal expenditure at constant prices projected according to their trend in recent years, multiplied by the related CPI [M5].	
J192	Other personal care	Expenditures for personal care services other than hairdressing according to the SHS [M1].	Personal expenditure at constant prices projected according to their trend in recent years, multiplied by the related CPI [M5].	
J193	Meals outside the home	Revenues from the <i>Monthly Survey of Food Services and Drinking Places</i> (survey no. 2419) [M1] or operating revenues from the <i>Annual Survey of Service Industries: Food Services and Drinking Places</i> (survey no. 4704) [M1], confronted with expenditures for food purchased from restaurants according to the SHS [M1] and with revenues from the food services industries (NAICS 7221 to 7223) obtained from the GST file of the CRA [M1]. Sales of alcoholic beverages are excluded.		
J194	Alcoholic beverages consumed in licensed establishments	Sales to licensed establishments according to the survey on the <i>Control and Sale of Alcoholic Beverages in Canada</i> (survey no. 1726) [M1] and to the annual reports of liquor authorities [M1], confronted with the volume of beer distributed, obtained from the Brewers Association of Canada, multiplied by the related CPI [M2].	Sales to licensed establishments for resale from the <i>Survey of Sales and Inventory of Alcoholic Beverages</i> (survey no. 2406) [M1], confronted with the volume of beer distributed, obtained from the Brewers Association of Canada, multiplied by the related CPI [M2].	
J195	Accommodation services	Operating revenues from the <i>Annual Survey of Traveller Accommodation</i> (survey no. 2418) [M1], confronted with expenditures for temporary accommodation according to the SHS [M1] as well as with the indicators for the benchmark year + 2.	Revenues obtained from the GST file of the CRA for accommodation services (NAICS 721) [M1], confronted with two external sources providing information on occupancy rates, on the number of rooms available and on average prices: <i>Canadian Lodging Outlook</i> , published by Smith Travel Research, and reports produced by Pannell Kerr Forster Consulting Inc. [M2].	
J196	Board paid	Personal expenditure at constant prices projected according to their trend in recent years, multiplied by the related CPI [M5].		
J199	Stock and bond commissions	Total commissions paid to investment dealers less commissions paid by trustee pension funds and those related to mutual funds since they are covered in J206 and J208 respectively. The remaining commissions on stocks and bonds are distributed by major activities and a ratio is applied to each activity to calculate personal spending [M1]. The source data are obtained from the quarterly reports of the <i>Securities Industry Performance</i> provided by the Investment Industry Association of Canada.		

1. For more information on the methodologies M1 through M6, see paragraph 7.36.

**Table 7.7 Sources and methods for national estimates of personal expenditure at current prices<sup>1</sup>**

Series	Description	Benchmark year + 1	Benchmark year + 2	Quarters
J200	Financial intermediaries, implicit loan charges	The value of services provided to borrowers is calculated first by multiplying the net interest received by the financial intermediaries, adjusted for the use of own funds, by the ratio of loan assets to total deposit liabilities and loan assets. Secondly, the household's share of the financial intermediaries' loan assets is applied to the borrowers' portion, calculated in the first step, to derive the implicit loan charges paid by households [M6]. Source data for chartered banks are obtained from the OSFI while the data for the other institutions of the personal and commercial banking industry (NAICS 522111), for consumer lending (NAICS 522291) and for sales financing (NAICS 52222) are obtained from the <i>Quarterly Survey of Financial Statistics for Enterprises</i> (QFS), survey no. 2501. See section on financial services indirectly measured (paragraphs 7.89 to 7.95) for further details.		
J201	Credit unions, implicit deposit charges	The value of services provided to depositors is calculated first by multiplying the net interest received by the credit unions, adjusted for their profits and the use of own funds, by the ratio of deposit liabilities to total deposit liabilities and loan assets. Secondly, the household's share of the credit unions' deposit liabilities is applied to the depositors' portion, calculated in the first step, to derive the implicit deposit charges paid by households [M6]. Source data are obtained from the QFS. See section on financial services indirectly measured (paragraphs 7.89 to 7.95) for further details.		
J202	Life insurance	Premiums earned less claims due plus investment income on technical reserves minus increases (plus decreases) in actuarial reserves [M6]. The source data are obtained from the <i>Quarterly Survey of Financial Statements of Life Insurers</i> compiled by the IOFD, from the OSFI and from the Canada Life and Health Insurance Association. See section on insurance services (paragraphs 7.83 to 7.88) for further details.		
J203	Financial intermediaries, explicit charges	The explicit charges paid by households to the personal and commercial banking industry (NAICS 522111), to consumer lending (NAICS 522291) and to sales financing (NAICS 52222) include all non-interest fees such as charges on deposit accounts, other payment services, guarantees and letters of credit and credit card fees. The charges paid to banks are calculated by applying a personal ratio to each selected non-interest revenue items identified from the OSFI's financial reports. For the other financial intermediaries, a fixed ratio is applied to the other revenue reported by the QFS in order to reflect personal spending on those services [M1].		
J204	Financial intermediaries, implicit deposit charges	The value of services provided to depositors is calculated first by multiplying the net interest received by the financial intermediaries, adjusted for the use of own funds, by the ratio of deposit liabilities to total deposit liabilities and loan assets. Secondly, the household's share of the financial intermediaries' deposit liabilities is applied to the depositors' portion, calculated in the first step, to derive the implicit deposit charges paid by households [M6]. Source data for chartered banks are obtained from the OSFI while the data for the other institutions of the personal and commercial banking industry (NAICS 522111), for consumer lending (NAICS 522291) and for sales financing (NAICS 52222) are obtained from the QFS. See section on financial services indirectly measured (paragraphs 7.89 to 7.95) for further details.		
J205	Credit unions, explicit charges	All non-interest fees such as charges on deposit accounts, other payment services, guarantees and letters of credit and credit card fees reported by the QFS, multiplied by a fixed ratio in order to reflect personal spending on those services [M1].		
J206	Trusteed pension funds	Administrative expenses of managing the funds, obtained from the <i>Quarterly Estimates of Trusteed Pension Funds</i> (survey no. 2607) [M1]. In the absence of survey data, the estimates are projected using historical trends and are also adjusted for the impact of recent developments in financial markets.		
J207	Credit unions, implicit loan charges	The value of services provided to borrowers is calculated first by multiplying the net interest received by the credit unions, adjusted for their profits and the use of own funds, by the ratio of loan assets to total deposit liabilities and loan assets. Secondly, the household's share of the credit unions' loan assets is applied to the borrowers' portion, calculated in the first step, to derive the implicit loan charges paid by households [M6]. Source data are obtained from the QFS. See section on financial services indirectly measured (paragraphs 7.89 to 7.95) for further details.		

1. For more information on the methodologies M1 through M6, see paragraph 7.36.

**Table 7.7 Sources and methods for national estimates of personal expenditure at current prices<sup>1</sup>**

Series	Description	Benchmark year + 1	Benchmark year + 2	Quarters
J208	Mutual funds	Operating expenses of mutual funds and commissions/redemption fees paid by individuals are used to measure personal expenditure on these funds. Management fees, which represent about 85% of operating expenses, are based on a percentage of the market value of the assets. Commissions or redemption fees are applicable to selected purchases or sales of mutual fund units, such as front-end load and back-end load funds. The operating expenses are obtained from the financial statements of the mutual funds while the commission/redemption data are obtained from the Investment Industry Association of Canada (IIAC). In the absence of data from the IIAC and of operating expenses of the funds, the asset value of the funds and the new sales and redemptions, provided by the Investment Funds of Canada, are used to project operating expenses and commissions, respectively [M6].		
J209	Legal, accounting and other services	Expenditures for notary and lawyer fees, accounting and financial planning services, and advertising services according to the SHS [M1], confronted with the indicator for the benchmark year + 2.	GDP at constant prices for legal services and accounting, tax preparation and bookkeeping services (NAICS 5411 and 5412) as measured monthly by the IAD, combined with the related CPI [M4].	
J210	Undertaking and other funeral services	Number of deaths multiplied by the related price index [M2], confronted with revenues for funeral services (NAICS 8122) obtained from the GST file of the CRA [M1] and with operating revenues for the industry [M1], obtained from the <i>Annual Survey of Personal Services</i> (survey no. 2424). The number of deaths is obtained from the Demography Division.		
J211	Miscellaneous household services	Expenditures for miscellaneous household services according to the SHS [M1].	Personal expenditure at constant prices projected according to their trend in recent years, multiplied by the related CPI [M5].	
J212	Welfare and charitable organizations	Salaries and wages paid by non-profit organizations in the social assistance industry (NAICS 624), as reported by the IEAD [M3].	Labour income and current transfers by governments to the persons and unincorporated businesses sector as reported by the IEAD [M3].	
J213	Religious organizations	Salaries and wages paid by religious organizations (NAICS 8131), as reported by the IEAD [M3].	Personal expenditure at constant prices projected according to their trend in recent years, multiplied by the all-items CPI [M5].	
J214	Trade unions	Number of employees under union coverage, obtained through the LFS, combined with the all-items CPI [M4].		
J215	Travel payments abroad	Personal spending by Canadians abroad on international travel from the <i>International Travel Survey</i> (ITS), survey no. 3152 [M1]. See section on net expenditure abroad (paragraphs 7.96 to 7.100) for further details.		
J216	Spending of military personnel abroad	Salaries and wages paid to members of the Canadian military abroad [M3]. See section on net expenditure abroad (paragraphs 7.96 to 7.100) for further details.		
J218	Travel receipts from non-residents	Receipts from international travel from the ITS [M1]. See section on net expenditure abroad (paragraphs 7.96 to 7.100) for further details.		
J219	Cable television and pay television	Expenditures for cable television and satellite services according to the SHS [M1]. The number of subscribers [M2] and operating revenues [M1], obtained from the <i>Annual Cable Television Survey</i> (survey no. 2728), are used as secondary indicators.	GDP at constant prices for Pay TV, Speciality TV and Program Distribution (NAICS 5132) as measured monthly by the IAD, combined with the related CPI [M4].	

1. For more information on the methodologies M1 through M6, see paragraph 7.36.

**Table 7.7 Sources and methods for national estimates of personal expenditure at current prices<sup>1</sup>**

Series	Description	Benchmark year + 1	Benchmark year + 2	Quarters
J220	Political parties	Expenditures reported in the annual reports of political parties and in the election expense reports of the parties and their candidates [M1]. Imputations based on historical values are made until the reports become available.		
J221	Parking	Expenditures for parking fees and garage rentals according to the SHS [M1].	Personal expenditure at constant prices projected according to their trend in recent years, multiplied by the related CPI [M5].	
J222	Driving lessons and membership in automobile associations	The estimator is based on two components estimated separately. First, the expenditures for driving courses are obtained from the SHS. A projection of such expenditures according to their trend in recent years is performed for the benchmark year + 2 since the SHS data are not yet available. Second, expenditures for membership in automobile associations are derived from the number of members of the Canadian Automobile Association, as posted on the Internet by a number of provincial associations, as well as the number of licensed vehicles, multiplied by a related price [M6].	Personal expenditure at constant prices projected according to their trend in recent years is multiplied by the related CPI [M5].	
J223	Motor vehicle renting	Expenditures for vehicle rental according to the SHS [M1], confronted with revenues from the <i>Annual Survey of Automotive Equipment Rental and Leasing</i> (survey no. 2442) [M1].	Revenues from the GST file of the CRA for passenger car rental (NAICS 532111) [M1].	
J224	Cinemas	Expenditures for movies according to the SHS [M1], confronted with the indicators for the benchmark year + 2.	Revenues from the GST file of the CRA for motion picture and video exhibition (NAICS 51213) [M1], confronted with admission revenues published in certain annual and quarterly financial statements [M1] and with monthly statistics on revenues [M1] and attendance [M2] at cinemas and drive-ins in Quebec as published by the Institut de la statistique du Québec.	
J225	Photographic services	Expenditures for photographic services according to the SHS [M1].	Labour income and current transfers by governments to the persons and unincorporated businesses sector as reported by the IEAD, deflated by the all-items CPI. The result is then multiplied by the related CPI [M4].	
J226	Indian bands and Inuit	Salaries and wages paid by aboriginal public administration (NAICS 914) as reported by the IEAD [M3].	Labour income and current transfers by local governments to the persons and unincorporated businesses sector as reported by the IEAD [M3].	

1. For more information on the methodologies M1 through M6, see paragraph 7.36.

**Table 7.8 Sources and methods for provincial and territorial estimates of personal expenditure at current prices<sup>1</sup>**

<b>Series</b>	<b>Description</b>	<b>Benchmark year + 1</b>	<b>Benchmark year + 2</b>
J001	Furniture	Receipts from the <i>Annual Retail Trade Survey</i> (ARTS), survey nos. 2422, 2433 and 2447, or from the <i>Monthly Retail Trade Survey</i> (MRTS), survey nos. 2406 and 2408, broken down into commodities according to the <i>Quarterly Retail Commodity Survey</i> (QRCS), survey no. 2008 [M1]. See Appendix 7A for further details.	
J002	Floor coverings	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	
J003	Upholstery and furniture repairs	Moving average of personal expenditure on furniture (J001) for t-6 to t-3, where t is the estimation year [M3].	
J004	Refrigerators and freezers	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	
J005	Washers and dryers	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	
J006	Stoves, ranges and microwave ovens	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	
J007	Other major appliances	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	
J008	Small electrical appliances	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	
J009	Household equipment repairs	Moving average of personal expenditure on refrigerators and freezers (J004), washers and dryers (J005), stoves, ranges and microwave ovens (J006), other major appliances (J007), small electrical appliances (J008) and garden tools and equipment for outdoor maintenance (J010) for t-4 to t-1, where t is the estimation year [M3].	
J010	Garden tools and equipment for outdoor maintenance	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	
J011	New automobiles	Value of sales of new automobiles as reported by the <i>New Motor Vehicle Sales Survey</i> (NMVSS), survey no. 2402 [M1].	
J012	Used motor vehicles (net value)	Purchases minus sales of used motor vehicles by households, derived using data from the NMVSS, from the <i>New Motor Vehicle Dealer Commodity Survey</i> (survey no. 2008) and from the federal Goods and Services Tax (GST) file of the CRA [M6], confronted with receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M3]. The method retained for the provincial and territorial estimates is comparable to the national annual method presented in the section on used motor vehicles (paragraphs 7.57 to 7.66).	
J013	New trucks and vans	Value of sales of new trucks and vans as reported by the NMVSS from which the portion representing the commercial use that will be made of the vehicles sold is deducted [M6]. The method retained for the provincial and territorial estimates is comparable to the national annual method presented in the section on new cars, vans and trucks (paragraphs 7.50 to 7.53).	
J014	Road and off-road recreational vehicles	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	

1. For more information on the methodologies M1 through M6, see paragraph 7.36.

**Table 7.8 Sources and methods for provincial and territorial estimates of personal expenditure at current prices<sup>1</sup>**

<b>Series</b>	<b>Description</b>	<b>Benchmark year + 1</b>	<b>Benchmark year + 2</b>
J015	Motor vehicle maintenance and repairs	Expenditures on motor vehicle maintenance and repairs according to the SHS [M1], confronted with the indicators for the benchmark year + 2.	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1], confronted with revenues for automotive repair and maintenance services (NAICS 8111) obtained from the GST file of the CRA [M1].
J016	Motor vehicle parts and accessories	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J017	Radios, sound systems and accessories	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J018	TV sets, video equipment and accessories	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J019	Boats, aircraft and accessories	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J020	Photographic and optical equipment	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J021	Sporting and camping equipment	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J022	Office machines, computers and equipment	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J023	Musical instruments and supplies	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J024	Trailers	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J025	Recreation equipment repairs	Moving average of personal expenditure on road and off-road recreational vehicles (J014), radios, sound systems and accessories (J017), TV sets, video equipment and accessories (J018), boats, aircraft and accessories (J019), photographic and optical equipment (J020), sporting and camping equipment (J021) and office machines, computers and equipment (J022) for t-4 to t-1, where t is the estimation year [M3].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J026	Recreation equipment rentals	Expenditures on recreation equipment rentals according to the SHS [M1], confronted with revenue from the industry as reported by the <i>Annual Survey of Consumer Goods Rental</i> (survey no. 2434) [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J027	Watches and jewellery	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J028	Watches and jewellery repairs	Moving average of personal expenditure on watches and jewellery (J027) for t-4 to t-1, where t is the estimation year [M3].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J051	Men's and boys' clothing	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J052	Women's, girls' and infants' clothing	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].

1. For more information on the methodologies M1 through M6, see paragraph 7.36.

**Table 7.8 Sources and methods for provincial and territorial estimates of personal expenditure at current prices<sup>1</sup>**

<b>Series</b>	<b>Description</b>	<b>Benchmark year + 1</b>	<b>Benchmark year + 2</b>
J053	Thread, yarn and sewing accessories	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J054	Piece goods	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J056	Footwear	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J057	Footwear repairs	Moving average of personal expenditure on footwear (J056) for t-1 to t, where t is the estimation year [M3].	Moving average of personal expenditure on footwear (J056) for t-1 to t, where t is the estimation year [M3].
J058	Luggage, leather goods and other personal effects	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J059	Toys, games and hobby supplies	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J060	Films and other photographic supplies	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J061	Household textiles and furnishings	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J062	China, glassware and kitchen ware	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J063	Lamps, lighting equipment and accessories	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J064	Flatware	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J065	Hardware	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J066	Newspapers, books, magazines and stationery	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J067	Women's clothing repairs and alterations	Moving average of personal expenditure on women's, girls' and infants' clothing (J052) for t-1 to t, where t is the estimation year [M3].	Moving average of personal expenditure on women's, girls' and infants' clothing (J052) for t-1 to t, where t is the estimation year [M3].
J068	Pets and supplies	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].
J069	Men's clothing repairs and alterations	Moving average of personal expenditure on men's and boys' clothing (J051) for t-1 to t, where t is the estimation year [M3].	Moving average of personal expenditure on men's and boys' clothing (J051) for t-1 to t, where t is the estimation year [M3].
J101	Food and non-alcoholic beverages	Expenditures on food and non-alcoholic beverages according to the SHS [M1], confronted with receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].

1. For more information on the methodologies M1 through M6, see paragraph 7.36.

**Table 7.8 Sources and methods for provincial and territorial estimates of personal expenditure at current prices<sup>1</sup>**

Series	Description	Benchmark year + 1	Benchmark year + 2
J102	Imputed food	The first component is the farmers' income in kind obtained from the Agriculture Division. The second component represents the value of food and non-alcoholic beverages provided to employees of selected industries in lieu of wages and salaries, projected according to the trend in wages and salaries for those industries as reported by the IEAD [M6].	
J103	Pet food	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	
J104	Alcoholic beverages bought in stores	Sales to final consumers according to the <i>Control and Sale of Alcoholic Beverages in Canada</i> (survey no. 1726) [M1] and to the annual reports of liquor authorities [M1], confronted with the volume of beer distributed, obtained from the Brewers Association of Canada, multiplied by the related <i>Consumer Price Index</i> (CPI), survey no. 2301 [M2].	Receipts from the sale of alcoholic beverages in beer, wine and liquor stores from the ARTS or the MRTS [M1]. For Newfoundland and Labrador and for Quebec, the volume of beer distributed, obtained from the Brewers Association of Canada, multiplied by a unit price, is added to the receipts [M2].
J105	Tobacco products	Volume of tobacco products consumed, to which consumer unit prices mostly originating from the Prices Division are applied. The volume is obtained from a reconciliation of supply and demand. The demand is based on tobacco tax data reported in the federal, provincial and territorial public accounts, as well as on historical trends reported by surveys on tobacco consumption, such as the <i>Canadian Tobacco Use Monitoring Survey</i> (survey no. 4440) and the SHS. The domestic sales reported by Canadian manufacturers and the declared international imports are used on the supply side [M6]. See section on tobacco products (paragraphs 7.68 to 7.73) for further details.	
J106	Electricity	Revenue from electricity sales to the residential sector [M1], confronted with the quantity of electricity sold to the residential sector multiplied by the related CPI [M2] and with expenditures on electricity according to the SHS [M1]. The revenue and the quantities are obtained from the survey on <i>Electricity Supply and Disposition</i> (survey no. 2194).	
J107	Natural gas	Revenue from natural gas sales to the residential sector [M1], confronted with the quantity of natural gas sold to the residential sector multiplied by the related CPI [M2] and with expenditures on natural gas according to the SHS [M1]. The revenue and the quantities are obtained from the survey <i>Natural Gas Distribution Monthly</i> (survey no. 2149).	
J108	Other fuels	Quantities of light fuel oil, heavy fuel oil, kerosene and stove oil, natural gas liquids (NGL's) and coal sold to households multiplied by related unit prices [M2] plus the value of firewood projected according to a linear trend [M5], confronted with expenditures on other fuels according to the SHS [M1]. The quantity of coal is obtained from the survey <i>Coal Monthly</i> (survey no. 2147) while the other quantities are obtained from the survey on the <i>End Use of Refined Petroleum Products</i> (survey no. 2168).	
J109	Soaps and other cleaning supplies	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	
J110	Other household supplies	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	
J111	Pharmaceutical products and medical goods	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1], confronted with expenditures on pharmaceutical products and medical goods according to the SHS [M1] and with expenditures on drugs obtained from Canadian Institute for Health Information (CIHI) [M1].	

1. For more information on the methodologies M1 through M6, see paragraph 7.36.

**Table 7.8 Sources and methods for provincial and territorial estimates of personal expenditure at current prices<sup>1</sup>**

Series	Description	Benchmark year + 1	Benchmark year + 2
J112	Motor fuels and lubricants	Number of litres of gasoline delivered to retailers from the survey on <i>Monthly Refined Petroleum Products</i> (survey no. 2150) multiplied by an average weighted price per litre from the CPI [M2], confronted with expenditures on gasoline according to the SHS [M1] and with receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	
J113	Flowers, plants and other horticultural supplies	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	
J114	Cosmetics and toiletries	Receipts from the ARTS or the MRTS broken down into commodities according to the QRCS [M1].	
J151	Water, sewage and garbage charges	Revenue from local government for water, garbage collection and sewer services obtained from the Public Institutions Division (PID) [M1].	
J153	Imputed rent	Inventory of owned and occupied dwellings multiplied by the average rent adjusted by a quality factor [M6]. See section on paid and imputed rents (paragraphs 7.75 to 7.82) for further details.	
J154	Paid rent	Inventory of rented and occupied dwellings multiplied by average rent, from which the portion of paid rent not related to the dwelling space is subtracted [M6]. See section on paid and imputed rents (paragraphs 7.75 to 7.82) for further details.	
J155	Imputed lodging	Salaries and wages paid by the agriculture, forestry, mining, construction, utilities, and transportation and warehousing industries as reported by the IEAD [M3].	
J156	Paid lodging (excluding universities)	Net income of non-farm unincorporated business for the accommodation industry as reported by the IEAD [M3].	
J157	Lodging in universities	Number of places in university residences, obtained from the Directory of Canadian Universities, multiplied by the related price index [M2]. This price index is derived from data on living costs in university residences obtained from Culture, Tourism and the Centre for Education Statistics (CTCES).	
J158	Domestic services	Expenditures on domestic help according to the SHS [M1], confronted with the indicators for the benchmark year + 2.	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4]. The volume of this service is confronted with indicators from the <i>Labour Force Survey</i> (LFS), survey no. 3701, such as the number of families in which both parents work and the number of lone-parent families in which the parent works [M4].
J159	Child care, in the home	Expenditures on child care inside the home according to the SHS [M1], confronted with the indicators for the benchmark year + 2.	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population (0 to 14 years) and in the related CPI [M4]. The volume of this service is confronted with indicators from the LFS such as the number of women who have children and are working full time [M4].

1. For more information on the methodologies M1 through M6, see paragraph 7.36.

**Table 7.8 Sources and methods for provincial and territorial estimates of personal expenditure at current prices<sup>1</sup>**

Series	Description	Benchmark year + 1	Benchmark year + 2
J160	Child care, outside home	Expenditures on child care outside the home according to the SHS [M1], confronted with the indicators for the benchmark year + 2.	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population (0 to 14 years) and in the related CPI [M4]. The volume of this service is confronted with indicators from the LFS such as the number of women who have children and are working full time [M4].
J161	Laundry and dry cleaning	Expenditures on cleaning services according to the SHS [M1], confronted with industry revenues reported by the <i>Annual Survey of Personal Services</i> (survey no. 2424) [M1].	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4].
J162	Property insurance	Premiums earned minus claims due, obtained from the Office of the Superintendent of Financial Institutions Canada (OSFI) and the provincial and territorial reports of the Superintendent of Insurance [M6].	
J163	Pet care	Expenditures for veterinary care and boarding, grooming and other pet-related services according to the SHS [M1].	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4].
J164	Furniture and appliance rentals	Personal expenditure on paid rent (J154) at constant prices, multiplied by the related CPI [M4].	
J165	Janitorial services	Personal expenditure on paid rent (J154) at constant prices, multiplied by the related CPI [M4].	
J166	Medical care, dental care and the like	Private sector health expenditures for physicians and other health professionals from the CIHI [M1].	
J167	Special care facilities	Salaries and wages of nursing and residential care facilities (NAICS 623) as reported by the IEAD [M3].	Salaries and wages of health care and social assistance institutions as reported by the IEAD [M3].
J168	Other health care	Salaries and wages of social assistance institutions (NAICS 624) as reported by the IEAD [M3].	Salaries and wages of health care and social assistance institutions as reported by the IEAD [M3].
J169	Hospital care and the like	Salaries and wages of hospitals (NAICS 622) as reported by the IEAD [M3].	Salaries and wages of health care and social assistance institutions as reported by the IEAD [M3].
J171	Accident and sickness insurance	Premiums earned minus claims due, obtained from the OSFI, from provincial and territorial reports of the Superintendent of Insurance and from the Canada Life and Health Insurance Association [M6].	
J173	Commissions paid to tour operators	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4].	
J174	Bridge and highway tolls	The component related to toll bridges is projected by the number of vehicles crossing each toll bridge or tunnel, obtained through the CTCES, multiplied by an average toll per bridge or tunnel. Revenues obtained from each toll highway are used for the second component [M6].	
J175	Auto insurance	Premiums earned minus claims due, obtained from the OSFI and from reports of the PID for provinces with public auto insurance plan [M6].	

1. For more information on the methodologies M1 through M6, see paragraph 7.36.

**Table 7.8 Sources and methods for provincial and territorial estimates of personal expenditure at current prices<sup>1</sup>**

Series	Description	Benchmark year + 1	Benchmark year + 2
J176	Urban transit	Revenues for urban transit and commuter services from the <i>Canadian Passenger Bus and Urban Transit Industries</i> (survey no. 2798) [M1].	Revenues for urban transit from the <i>Large Urban Transit Survey - Monthly</i> (survey no. 2745) [M1].
J177	Railway transport	Revenues derived from passenger transit obtained from the <i>Railway Transport Survey - Annual</i> (survey no. 2734) [M1].	Revenues from passenger fares reported by rail carriers [M1].
J178	Inter-urban bus	Revenues for regular inter-city transportation, transport by chartered passenger bus or school bus, paratransit services and express parcel transport by bus from the <i>Canadian Passenger Bus and Urban Transit Industries</i> (survey no. 2798) [M1], confronted with the expenditures for intercity and rural bus according to the SHS [M1].	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4].
J179	Air transport	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4]. <i>Aircraft Movements Statistics</i> (survey no. 2715) are used for data confrontation purposes.	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4]. <i>Aircraft</i>
J180	Water transport	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in the number of passengers and in the related CPI. The number of passengers, according to the routes travelled, is obtained from selected water carriers operating in the Atlantic provinces and in British Columbia. For the other provinces and territories, it is assumed that the number of passengers remains constant from one period to the next [M6]. Estimates are confronted with the financial reports of selected water carriers.	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4].
J181	Taxis	Expenditures for taxi travel according to the SHS [M1], confronted with operating revenues from the <i>Survey of the Taxi and Limousine Services Industry</i> (survey no. 4707) [M1].	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4].
J182	Moving and storage	Expenditures for moving, storage and delivery services according to the SHS [M1], confronted with the indicator for benchmark year + 2.	Number of residential units sold through the Multiple Listing Service (MLS), reported by the Canadian Real Estate Association, combined with the related CPI [M4].
J183	Telecommunications	Telecommunications expenditures according to the SHS [M1]. Such expenditures include charges for wireline and wireless telecommunications, Internet service and other items such as cabling and installation.	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4].
J184	Postal and courier services	Expenditures for postage stamps and other postal services, such as messenger services, according to the SHS [M1].	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4].
J185	Games of chance	Sales of lottery tickets net of prizes awarded, plus net revenues of casinos, video lotteries and slot machines [M1]. These data, obtained from each lottery and gaming corporation, are confronted with their annual reports.	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4].

1. For more information on the methodologies M1 through M6, see paragraph 7.36.

**Table 7.8 Sources and methods for provincial and territorial estimates of personal expenditure at current prices<sup>1</sup>**

Series	Description	Benchmark year + 1	Benchmark year + 2
J186	Pari-mutuel	Amount bet minus amount won, obtained monthly from the Canadian Pari-Mutuel Agency [M1].	
J187	Other recreational services	Expenditures related to recreation services according to the SHS [M1], confronted with industry revenues as reported by the <i>Annual Survey of Service Industries : Amusement and Recreation</i> (survey no. 2425) [M1].	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4].
J188	University fees	Tuition and other fees received by university according to the <i>Financial Information of Universities and Colleges Survey</i> (survey no. 3121), aggregated by province and calculated on a calendar year with specific factors for each province [M1]. For the territories, the indicator for the benchmark year + 2 is used.	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4].
J189	Fees for education and training, other than university	Expenditures for post secondary education according to the SHS [M1].	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4].
J190	Other educational and cultural services	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4].	
J191	Hairstyling for men and women	Expenditures for hairdressing services according to the SHS [M1].	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4].
J192	Other personal care	Expenditures for personal care services other than hairdressing according to the SHS [M1].	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4].
J193	Meals outside the home	Revenues from the <i>Monthly Survey of Food Services and Drinking Places</i> (survey no. 2419) [M1] or operating revenues from the <i>Annual Survey of Service Industries: Food Services and Drinking Places</i> (survey no. 4704) [M1], confronted with expenditures for food purchased from restaurants according to the SHS [M1] and with revenues from the food services industries (NAICS 7221 to 7223) obtained from the GST file of the CRA [M1]. Sales of alcoholic beverages are excluded.	
J194	Alcoholic beverages consumed in licensed establishments	Sales to licensed establishments according to the survey on the <i>Control and Sale of Alcoholic Beverages in Canada</i> (survey no. 1726) [M1] and to the annual reports of liquor authorities [M1], confronted with the volume of beer distributed, obtained from the Brewers Association of Canada, multiplied by the related CPI [M2].	Sales to licensed establishments for resale from the <i>Survey of Sales and Inventory of Alcoholic Beverages</i> (survey no. 2406) [M1], confronted with the volume of beer distributed, obtained from the Brewers Association of Canada, multiplied by the related CPI [M2].

1. For more information on the methodologies M1 through M6, see paragraph 7.36.

**Table 7.8 Sources and methods for provincial and territorial estimates of personal expenditure at current prices<sup>1</sup>**

<b>Series</b>	<b>Description</b>	<b>Benchmark year + 1</b>	<b>Benchmark year + 2</b>
J195	Accommodation services	Operating revenues from the <i>Annual Survey of Traveller Accommodation</i> (survey no. 2418) [M1], confronted with expenditures for temporary accommodation according to the SHS [M1] as well as with the indicators for the benchmark year + 2.	Revenues obtained from the GST file of the CRA for accommodation services (NAICS 721) [M1]. Two external sources provide information on occupancy rates, on the number of rooms available and on average prices: <i>Canadian Lodging Outlook</i> , published by Smith Travel Research, and reports produced by Pannell Kerr Forster Consulting Inc. [M2].
J196	Board paid	Net income of non-farm unincorporated business for the restaurant and accommodation industries as reported by the IEAD [M3].	
J199	Stock and bond commissions	Investment and dividend income as reported on the income tax returns (T1) from the CRA [M3].	
J200	Financial intermediaries, implicit loan charges	Non-mortgage loan liabilities of households held by the personal and commercial banking industry (NAICS 522111) and by the Alberta Treasury [M3]. The data are obtained from the <i>Bank of Canada Review</i> , from the <i>Quarterly Survey of Financial Statements of Trust and Mortgage Companies</i> , compiled by the Industrial Organization and Finance Division (IOFD), and from administrative data sources.	
J201	Credit unions, implicit deposit charges	Deposit assets of households held by credit unions, obtained from the <i>Quarterly Survey of Financial Statements of Local and Central Credit Unions</i> , compiled by the IOFD [M3].	
J202	Life insurance	Value of life insurance policies provided by the Canada Life and Health Insurance Association [M3].	
J203	Financial intermediaries, explicit charges	Household deposit liabilities of the personal and commercial banking industry (NAICS 522111), obtained from the <i>Bank of Canada Review</i> and from the <i>Quarterly Survey of Financial Statements of Trust and Mortgage Companies</i> , compiled by the IOFD [M3].	
J204	Financial intermediaries, implicit deposit charges	Deposit assets of households held by the personal and commercial banking industry (NAICS 522111) and by the Alberta Treasury [M3]. The data are obtained from the <i>Bank of Canada Review</i> , from the <i>Quarterly Survey of Financial Statements of Trust and Mortgage Companies</i> , compiled by the IOFD, and from administrative data sources.	
J205	Credit unions, explicit charges	Household deposit liabilities of credit unions, obtained from the <i>Quarterly Survey of Financial Statements of Local and Central Credit Unions</i> compiled by the IOFD [M3].	
J206	Trusteed pension funds	Wages and salaries as reported by the IEAD [M3].	
J207	Credit unions, implicit loan charges	Non-mortgage loan liabilities of households held by credit unions, as reported in the <i>Quarterly Survey of Financial Statements of Local and Central Credit Unions</i> , compiled by IOFD [M3].	
J208	Mutual funds	Investment and dividend income as reported on the income tax returns (T1) from the CRA [M3].	
J209	Legal, accounting and other services	Net income of non-farm unincorporated business for the legal and accounting industries, as reported by the IEAD [M3].	Estimator for t-1, where t is the estimation period, multiplied by the rate of change in population (age group 15 years and over) and in the related CPI [M4].

1. For more information on the methodologies M1 through M6, see paragraph 7.36.

**Table 7.8 Sources and methods for provincial and territorial estimates of personal expenditure at current prices<sup>1</sup>**

Series	Description	Benchmark year + 1	Benchmark year + 2
J210	Undertaking and other funeral services	Number of deaths multiplied by the related price index [M2], confronted with revenues obtained from the GST file of the CRA [M1] and with operating revenues for the industry, obtained from the <i>Annual Survey of Personal Services</i> (survey no. 2424) [M1]. The number of deaths is obtained from Demography Division.	
J211	Miscellaneous household services	Expenditures for miscellaneous household services according to the SHS [M1].	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4].
J212	Welfare and charitable organizations	Salaries and wages paid by non-profit organizations in the social assistance industry (NAICS 624), as reported by the IEAD [M3].	Compensation paid by social assistance (NAICS 624), as reported by the <i>Survey of Employment, Payrolls and Hours</i> (SEPH), survey no. 2612 [M3].
J213	Religious organizations	Salaries and wages paid by religious organizations (NAICS 8131), as reported by the IEAD [M3].	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4].
J214	Trade unions	Number of employees under union coverage, obtained through the LFS, combined with the all-items CPI [M4].	
J215	Travel payments abroad	Personal spending by Canadians on international travel from the <i>International Travel Survey</i> (ITS), survey no. 3152, as well as on travel in other provinces and territories from the <i>Travel Survey of Residents of Canada</i> (TSRC), survey no. 3810 [M1]. See section on net expenditure abroad (paragraphs 7.105 to 7.108) for further details.	
J216	Spending of military personnel abroad	Salaries and wages paid to members of the Canadian military abroad [M3].	
J218	Travel receipts from non-residents	Receipts from non-residents for personal and business trips, obtained from the ITS, plus the travel receipts from residents of other provinces and territories for all non-business trips, obtained from the TSRC [M1]. See the section on net expenditure abroad (paragraphs 7.105 to 7.108) for further details.	
J219	Cable television and pay television	Expenditures for cable television and satellite services, according to the SHS [M1], confronted with the indicators for the benchmark year + 2.	Estimator for t-1, where t is the estimation period, multiplied by the rate of change in population (age group 15 years and over) and in the related CPI [M4]. The number of subscribers [M2] as well as the operating revenues [M1], obtained from the <i>Annual Cable Television Survey</i> (survey no. 2728), are used as secondary indicators.
J220	Political parties	Expenditures reported in the annual reports of political parties and in the election expense reports of the parties and their candidates [M1]. An imputation, based on historical values, is made until the reports become available.	
J221	Parking	Expenditures for parking fees and garage rentals according to the SHS [M1].	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4].

1. For more information on the methodologies M1 through M6, see paragraph 7.36.

**Table 7.8 Sources and methods for provincial and territorial estimates of personal expenditure at current prices<sup>1</sup>**

Series	Description	Benchmark year + 1	Benchmark year + 2
J222	Driving lessons and membership in automobile associations	Expenditures for driving courses are obtained from the SHS. A projection of such expenditures according to their trend in recent years is performed for the benchmark year + 2 since the SHS data are not yet available. Expenditures for the second component, membership in automobile associations, are derived from the number of members of the Canadian Automobile Association, as posted on the Internet by a number of provincial associations, as well as the number of licensed vehicles, multiplied by a related price [M6].	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4].
J223	Motor vehicle renting	Expenditures for vehicle rental according to the SHS [M1], confronted with revenues from the <i>Annual Survey of Automotive Equipment Rental and Leasing</i> (survey no. 2442) [M1] as well as indicators for the benchmark year + 2.	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4].
J224	Cinemas	Expenditures for movies according to the SHS [M1], confronted with box office receipts according to the Annual Survey of Service Industries : <i>Motion Picture Theatres</i> (survey no. 2416) [M1] as well as indicators for the benchmark year + 2.	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4]. For Québec, revenues [M1] and attendance [M2] at cinemas and drive-ins, as published by the Institut de la statistique du Québec, are also used.
J225	Photographic services	Expenditures for photographic services according to the SHS [M1].	Estimator for t-1, where t is the estimation year, multiplied by the rate of change in population and in the related CPI [M4].
J226	Indian bands and Inuit	Salaries and wages paid by aboriginal public administration (NAICS 914) as reported by the IEAD [M3].	Compensation paid by aboriginal public administration (NAICS 914) as reported by the SEPH [M3].

1. For more information on the methodologies M1 through M6, see paragraph 7.36.

**Table 7.9 Sources and methods of personal expenditure estimates at constant prices**

Series	Title	Price index for deflation or volume projector of base-year value <sup>1</sup>
J001	Furniture	CPI for furniture.
J002	Floor coverings	CPI for area rugs and mats.
J003	Upholstery and furniture repairs	CPI for services related to household furnishings and equipment.
J004	Refrigerators and freezers	CPI for refrigeration and air conditioning appliances.
J005	Washers and dryers	CPI for laundry and dishwashing appliances.
J006	Stoves, ranges and microwave ovens	CPI for cooking appliances.
J007	Other major appliances	CPI for refrigeration and air conditioning appliances (25%). CPI for laundry and dishwashing appliances (16%). CPI for other household appliances (59%).
J008	Small electrical appliances	CPI for electric hairstyling and personal care appliances (84%). CPI for all other household appliances (16%).
J009	Household equipment repairs	CPI for maintenance and repair and other services - household furnishings and equipment.
J010	Garden tools and equipment for outdoor maintenance	CPI for household tools (including lawn, garden and snow removal equipment).
J011	New automobiles	CPI for purchases of automobiles.
J012	Used motor vehicles (net value)	Price index derived using the CPI for purchases of motor vehicles, the average price of used motor vehicle sales obtained from <i>New Motor Vehicle Dealer Commodity Survey</i> (survey no. 2008) and the average auction price of used cars reported by industry sources.
J013	New trucks and vans	CPI for purchases of trucks (including vans and sport utility vehicles).
J014	Road and off-road recreational vehicles	CPI for bicycles, parts and accessories (22%). CPI for snowmobiles and outboard motors (16%). CPI for motor homes and truck campers (13%). CPI for other purchase of recreational vehicles (49%).
J015	Motor vehicle maintenance and repairs	CPI for passenger vehicle maintenance and repair services.
J016	Motor vehicle parts and accessories	CPI for passenger vehicle parts and supplies.

1. The numbers in parenthesis represent the weight assigned to each component for Canada. These weights are based mostly on data from the 2002 *Survey of Household Spending*.

**Table 7.9 Sources and methods of personal expenditure estimates at constant prices**

Series	Title	Price index for deflation or volume projector of base-year value <sup>1</sup>
J017	Radios, sound systems and accessories	CPI for audio equipment (63%).
J018	TV sets, video equipment and accessories	CPI for purchase of pre-recorded audio and video media (37%). CPI for video equipment (93%).
J019	Boats, aircraft and accessories	CPI for purchase of blank audio and video recording media (7%).
J020	Photographic and optical equipment	CPI for purchase of recreational vehicles.
J021	Sporting and camping equipment	CPI for digital cameras (70%). CPI for 35-millimeter cameras (30%).
J022	Office machines, computers and equipment	CPI for sporting equipment (84%). CPI for camping and picnic equipment, excluding barbecues (16%).
J023	Musical instruments and supplies	CPI for computer equipment and supplies.
J024	Trailers	CPI for musical instruments, accessories and parts.
J025	Recreation equipment repairs	CPI for purchase of recreational vehicles.
J026	Recreation equipment rentals	CPI for other recreational equipment and services.
J027	Watches and jewellery	CPI for rental of DVDs and videogames (88%). CPI for other recreational equipment and services (10%).
J028	Watches and jewellery repairs	CPI for other home entertainment equipment, parts and services (2%).
J051	Men's and boys' clothing	CPI for jewellery, excluding watches (74%). CPI for watches (26%).
J052	Women's, girls' and infants' clothing	CPI for other clothing services.
J053	Thread, yarn and sewing accessories	CPI for men's clothing (90%). CPI for children's clothing, including infants (10%). CPI for women's clothing (88%). CPI for children's clothing, including infants (12%).

1. The numbers in parenthesis represent the weight assigned to each component for Canada. These weights are based mostly on data from the 2002 Survey of Household Spending.

**Table 7.9 Sources and methods of personal expenditure estimates at constant prices**

Series	Title	Price index for deflation or volume projector of base-year value <sup>1</sup>
J054	Piece goods	CPI for clothing material and notions.
J056	Footwear	CPI for footwear.
J057	Footwear repairs	CPI for shoe repairs.
J058	Luggage, leather goods and other personal effects	CPI for other household equipment (45%). CPI for other accessories (40%). CPI for other tobacco products and smokers' supplies (15%).
J059	Toys, games and hobby supplies	CPI for toys, non-video games and hobby supplies.
J060	Films and other photographic supplies	CPI for other photographic equipment and supplies.
J061	Household textiles and furnishings	CPI for household textiles (65%). CPI for other furniture (35%).
J062	China, glassware and kitchenware	CPI for non-electric kitchen utensils and tableware.
J063	Lamps, lighting equipment and accessories	CPI for homeowners' maintenance and repairs (8%). CPI for other furniture (79%). CPI for other household supplies (13%).
J064	Flatware	CPI for metal tableware and flatware.
J065	Hardware	CPI for homeowners' material costs (85%). CPI for hand tools, excluding lawn and garden (10%). CPI for tenants' maintenance, repairs and other expenses (5%).
J066	Newspapers, books, magazines and stationery	CPI for reading material and other printed material, excluding textbooks (56%). CPI for school textbooks and supplies (28%). CPI for paper supplies (16%).
J067	Women's clothing repairs and alterations	CPI for other clothing services.
J068	Pets and supplies	CPI for pet food and supplies.
J069	Men's clothing repairs and alterations	CPI for other clothing services.

1. The numbers in parenthesis represent the weight assigned to each component for Canada. These weights are based mostly on data from the 2002 Survey of Household Spending.

**Table 7.9 Sources and methods of personal expenditure estimates at constant prices**

Series	Title	Price index for deflation or volume projector of base-year value <sup>1</sup>
J101	Food and non-alcoholic beverages	CPI for food purchased from stores.
J102	Imputed food	CPI for food purchased from stores.
J103	Pet food	CPI for pet food and supplies.
J104	Alcoholic beverages bought in stores	CPI for alcoholic beverages purchased from stores.
J105	Tobacco products	CPI for cigarettes combined with the price index for contraband tobacco calculated by the Income and Expenditure Accounts Division (IEAD).
J106	Electricity	CPI for electricity. The constant price estimates are confronted with those calculated with the volume projector of electricity sold to households.
J107	Natural gas	CPI for natural gas. The constant price estimates are confronted with those calculated with the volume projector of natural gas sold to households.
J108	Other fuels	CPI for fuel oil and other fuels confronted with the weighted price of light oil, heavy fuel oil, kerosene and stove oil, natural gas liquids, coal and firewood.
J109	Soaps and other cleaning supplies	CPI for detergent and soap, other than for personal care (54%).
J110	Other household supplies	CPI for other household chemical products (46%).
J111	Pharmaceutical products and medical goods	CPI for paper, plastic and foil supplies (30%).
J112	Motor fuels and lubricants	CPI for other household supplies (10%).
J113	Flowers, plants and other horticultural supplies	CPI for other personal care supplies and equipment (60%).
J114	Cosmetics and toiletries	CPI for medicinal and pharmaceutical products (75%).
J115	Water, sewage and garbage charges	CPI for optical goods (25%).
J153	Imputed rent	CPI for gasoline (97%).
		CPI for passenger vehicle maintenance and repair services (3%).
		CPI for seeds, plants and other horticultural supplies (83%).
		CPI for other horticultural goods (17%).
		CPI for personal care supplies and equipment.
		CPI for water.
		Quarterly value of owner-occupied housing stocks at constant prices by province and territory, derived using data from the Investment and Capital Stock Division (ICSD). The Canada estimate is obtained by summing the provincial and territorial estimates.

1. The numbers in parenthesis represent the weight assigned to each component for Canada. These weights are based mostly on data from the 2002 *Survey of Household Spending*.

**Table 7.9 Sources and methods of personal expenditure estimates at constant prices**

Series	Title	Price index for deflation or volume projector of base-year value <sup>1</sup>
J154	Paid rent	Quarterly value of rented and occupied housing stocks at constant prices by province and territory, derived using data from the ICSD. The Canada estimate is obtained by summing the provincial and territorial estimates.
J155	Imputed lodging	Implicit price index (IPI) of paid rent (J154), calculated by dividing the current price estimates by the constant price estimates.
J156	Paid lodging (excluding universities)	IPI of paid rent (J154), calculated by dividing the current price estimates by the constant price estimates.
J157	Lodging in universities	Price index calculated from the living accommodation cost at residences according to Culture, Tourism and the Centre for Education Statistics (CTCES), weighted with the number of places in residence obtained from the Directory of Canadian Universities, by university.
J158	Domestic services	CPI for domestic services.
J159	Child care, in the home	CPI for child care in the home.
J160	Child care, outside home	CPI for day-care centres, nurseries and other child care outside the home.
J161	Laundry and dry cleaning	CPI for laundry services (41%). CPI for dry cleaning services (59%).
J162	Property insurance	Volume projector for the national estimates is the sum of net premiums (premiums minus claims) and investment income at constant prices. The constant price net premiums are calculated by projecting the base year net premiums paid by households with total premiums deflated by CPI for tenants (10%) and homeowners (90%) insurance premiums, multiplied by the current year's personal ratio of net premiums. The constant price investment income is calculated by projecting the base year investment income with interest bearing assets deflated by the all-items CPI. The national IPI, calculated by dividing the current price estimates by the constant price estimates, is used to calculate the provincial and territorial estimates. The constant price estimates by province and territory are confronted with those derived with volume projectors based on the value of housing stocks at constant prices, obtained from ICSD, and on personal expenditure on selected durable goods.
J163	Pet care	CPI for pet related services (including veterinarian services).
J164	Furniture and appliance rentals	CPI for cooking appliances (41%). CPI for refrigeration and air conditioning appliances (34%). CPI for furniture (17%). CPI for laundry and dishwashing appliances (8%).
J165	Janitorial services	CPI for domestic services.
J166	Medical care, dental care and the like	CPI for health care services.
J167	Special care facilities	National price index calculated by dividing the current price estimates of labour income for hospitals, residential care and other health care facilities by the constant price estimates of labour income for those institutions. The latter are derived in the calculation of government current expenditure on goods and services at constant prices (see Deflation - Estimates in real terms in Chapter 8). The national IPI is used to derive the provincial and territorial estimates.

1. The numbers in parenthesis represent the weight assigned to each component for Canada. These weights are based mostly on data from the 2002 *Survey of Household Spending*.

**Table 7.9 Sources and methods of personal expenditure estimates at constant prices**

Series	Title	Price index for deflation or volume projector of base-year value <sup>1</sup>
J168	Other health care	CPI for health care services.
J169	Hospital care and the like	National price index calculated by dividing the current price estimates of labour income for hospitals, residential care and other health care facilities by the constant price estimates of labour income for those institutions. The latter are derived in the calculation of government current expenditure on goods and services at constant prices (see Deflation - Estimates in real terms in Chapter 8). The national IPI is used to derive the provincial and territorial estimates.
J171	Accident and sickness insurance	Volume projector for the national estimates is the sum of net premiums (premiums minus claims) and investment income at constant prices. The constant price net premiums are constructed by projecting the base year net premiums paid by households with total premiums deflated by the all-items CPI, multiplied by the current year's personal ratio of net premiums. The constant price investment income is calculated by projecting the base year investment income with interest bearing assets deflated by the all-items CPI. The national IPI, calculated by dividing the current price estimates by the constant price estimates, is used to calculate the provincial and territorial estimates. The constant price estimates by province and territory are confronted with those derived with a volume projector based on the number of individuals covered by various types of accident and sickness insurance, obtained from the Canadian Life and Health Insurance.
J173	Commissions paid to tour operators	CPI for services.
J174	Bridge and highway tolls	Price index calculated from tolls for selected bridges and highways, weighted by the personal expenditure for each of the selected bridges and highways.
J175	Auto insurance	Volume projector for the national estimates is the sum of net premiums (premiums minus claims) and investment income at constant prices. The constant price net premiums are constructed by projecting the base year net premiums paid by households with total premiums deflated by the CPI for passenger vehicle insurance premiums, multiplied by the current year's personal ratio of net premiums. The constant price investment income is calculated by projecting the base year investment income with interest bearing assets deflated by the all-items CPI. The national IPI, calculated by dividing the current price estimates by the constant price estimates, is used to calculate the provincial and territorial estimates. The constant price estimates by province and territory are confronted with those derived with a volume projector based on the number of vehicles registered obtained from the Transportation Division.
J176	Urban transit	CPI for city bus and subway transportation.
J177	Railway transport	CPI for rail transportation.
J178	Interurban bus	CPI for highway bus and inter-city transportation.
J179	Air transport	National CPI for air transportation, confronted with the price index calculated by dividing the passenger revenue by the number of passenger-kilometers, obtained from the monthly operating reports of the major Canadian air carriers. The national IPI is used to deflate the provincial and territorial estimates.
J180	Water transport	CPI for other inter-city transportation - ferry fares.
J181	Taxis	CPI for taxi and other local and commuter transportation.
J182	Moving and storage	CPI for services related to household furnishings and equipment.
J183	Telecommunications	CPI for telephone services.

1. The numbers in parenthesis represent the weight assigned to each component for Canada. These weights are based mostly on data from the 2002 *Survey of Household Spending*.

**Table 7.9 Sources and methods of personal expenditure estimates at constant prices**

Series	Title	Price index for deflation or volume projector of base-year value <sup>1</sup>
J184	Postal and courier services	CPI for postal services and other communication services.
J185	Games of chance	Personal expenditure on lotteries is deflated with the price index calculated using the ratio of sales to prizes, combined with the all-items CPI. Sales and prizes of lottery tickets are obtained from each lottery and gaming corporation. Personal expenditure on casinos, VLTs and slot machines at racetracks is deflated using the all-items CPI.
J186	Pari-mutuel	All-items CPI.
J187	Other recreational services	CPI for use of recreational facilities and services (62%).
J188	University fees	CPI for spectator entertainment, excluding cablevision (38%).
J189	Fees for education and training, other than university	CPI for university tuition fees.
J190	Other educational and cultural services	CPI for college tuition fees (70%).
J191	Hairstyling for men and women	CPI for other lessons, courses and education services (30%).
J192	Other personal care	CPI for other lessons, courses and education services.
J193	Meals outside the home	CPI for personal care services.
J194	Alcoholic beverages consumed in licensed establishments	CPI for personal care services.
J195	Accommodation services	CPI for food purchased from restaurants.
J196	Board paid	CPI for alcoholic beverages served in licensed establishments.
J199	Stock and bond commissions	CPI for traveller accommodation, confronted with average prices reported by Smith Travel Research and Pannell Kerr Forster Consulting Inc. The constant price estimates are confronted with those calculated using a volume projector derived from occupancy rates and the number of rooms available, obtained from the two sources listed above.
J200	Financial intermediaries, implicit loan charges	CPI for food purchased from stores.
J201	Credit unions, implicit deposit charges	Number of shares traded on all Canadian markets, obtained from the TMX Group Inc., is used to project the national base year current price estimate. The national IPI, calculated by dividing the current price estimates by the constant price estimates, is used to calculate the provincial and territorial estimates. National volume projector calculated by deflating the institutions' consumer loan assets with the all-items CPI. The consumer loan assets are obtained from the Office of the Superintendent of Financial Institutions (OSFI). The national IPI, calculated by dividing the current price estimates by the constant price estimates, is used to calculate the provincial and territorial estimates. National volume projector calculated by deflating the credit unions' deposit liabilities with the all-items CPI. The deposit liabilities are obtained from the <i>Quarterly Survey of Enterprises (QES)</i> , survey no. 2501. The national IPI, calculated by dividing the current price estimates by the constant price estimates, is used to calculate the provincial and territorial estimates.

1. The numbers in parenthesis represent the weight assigned to each component for Canada. These weights are based mostly on data from the 2002 *Survey of Household Spending*.

**Table 7.9 Sources and methods of personal expenditure estimates at constant prices**

Series	Title	Price index for deflation or volume projector of base-year value <sup>1</sup>
J202	Life insurance	National volume projector based on the number of "insurance policies in force", obtained from the OSFI. The national IPI, calculated by dividing the current price estimates by the constant price estimates, is used to calculate the provincial and territorial estimates.
J203	Financial intermediaries, explicit charges	National price index calculated using the average weekly earnings for financial institutions, obtained from the <i>Survey of Employment, Payrolls and Hours</i> (SEPH), survey no. 2612. The national IPI is used to calculate the provincial and territorial estimates.
J204	Financial intermediaries, implicit deposit charges	National volume projector calculated by deflating the institutions' deposit liabilities with the all-items CPI. The deposit liabilities are obtained from the OSFI. The national IPI, calculated by dividing the current price estimates by the constant price estimates, is used to calculate the provincial and territorial estimates.
J205	Credit unions, explicit charges	National price index calculated using the average weekly earnings for financial institutions, obtained from the SEPH. The national IPI is used to calculate the provincial and territorial estimates.
J206	Trusteed pension funds	National price index calculated using the average weekly earnings for financial institutions, obtained from the SEPH. The national IPI is used to calculate the provincial and territorial estimates.
J207	Credit unions, implicit loan charges	National volume projector calculated by deflating the credit unions' consumer loan assets with the all-items CPI. The consumer loan assets are obtained from the QFS. The national IPI, calculated by dividing the current price estimates by the constant price estimates, is used to calculate the provincial and territorial estimates.
J208	Mutual funds	Volume projector for the national estimates is the sum of operating expenses and commissions at constant prices. The constant price operating expenses are calculated by projecting the base year operating expenses with the asset value deflated by the all-items CPI. The constant price commissions are calculated by projecting the base year commissions with the sales of mutual fund units deflated by the all-items CPI. The national IPI, calculated by dividing the current price estimates by the constant price estimates, is used to calculate the provincial and territorial estimates. Data on operating expenses, investment income and asset value are obtained from financial statements of the mutual funds, commission data are obtained from the Investment Dealers Association while the Investment Funds of Canada provide data on the sales of mutual funds.
J209	Legal, accounting and other services	National price index derived from the average weekly earnings for legal services (NAICS 5411), obtained from the SEPH. The national IPI is used to deflate the provincial and territorial estimates.
J210	Undertaking and other funeral services	National price index calculated by weighting the average weekly earnings for funeral services (NAICS 8122), obtained from the SEPH (91.4%) and the CPI for operation of passenger vehicles (8.6%). The national constant price estimates are confronted with those derived from the volume projector of the number of deaths obtained from the Demography Division. The number of deaths is the volume projector used to calculate provincial and territorial estimates.
J211	Miscellaneous household services	CPI for homeowners' maintenance and repairs (50%). CPI for services related to household furnishings and equipment (50%).
J212	Welfare and charitable organizations	All-items CPI.
J213	Religious organizations	All-items CPI.
J214	Trade unions	All-items CPI.

1. The numbers in parenthesis represent the weight assigned to each component for Canada. These weights are based mostly on data from the 2002 *Survey of Household Spending*.

**Table 7.9 Sources and methods of personal expenditure estimates at constant prices**

Series	Title	Price index for deflation or volume projector of base-year value <sup>1</sup>
J215	Travel payments abroad	In the National Income and Expenditure Accounts (NIEA), a composite price index is calculated using CPIs of the United States for travel related expenditures such as air transport, accommodation and restaurants, adjusted for the exchange rate. An adjustment is also made to take into account travel spending in countries other than the US. In the Provincial and Territorial Economic Accounts (PTEA), the international component of travel payments abroad by province or territory is deflated using the same price index calculated for the NIEA. For the interprovincial component, a composite price index is calculated by province and territory of residence of the traveller using CPIs of the provinces and territories visited for travel related expenditures. The spending in each province and territory visited is deflated with the corresponding composite price index. The constant price estimates for interprovincial travel payments of a province/territory are then obtained by summing all the deflated expenditures made in the provinces and territories visited.
J216	Spending of military personnel abroad	Composite price index calculated from the all-items CPI of the United States and from the cost of living index of selected countries, adjusted for exchange rates.
J218	Travel receipts from non-residents	In the NIEA, a composite price index is calculated using CPIs for travel related expenditures of non-residents in Canada. In the PTEA, the international component of travel receipts of non-residents by province or territory is deflated using the same price index calculated for the NIEA. For the interprovincial component, the receipts of a province or territory from travel spending of residents of other provinces and territories are deflated with a composite price index calculated using CPIs of that province or territory for travel related expenditures.
J219	Cable television and pay television	CPI for cablevision and satellite services (including pay television).
J220	Political parties	CPI for services excluding shelter services.
J221	Parking	CPI for parking fees.
J222	Driving lessons and membership in automobile associations	CPI for all other passenger vehicle operating expenses.
J223	Motor vehicle renting	CPI for rental of passenger vehicles.
J224	Cinemas	CPI for motion picture showings.
J225	Photographic services	CPI for photographic services.
J226	Indian bands and Inuit	All-items CPI.

1. The numbers in parenthesis represent the weight assigned to each component for Canada. These weights are based mostly on data from the 2002 *Survey of Household Spending*.

## Appendix 7A Principal methodology<sup>1</sup> for computing estimators of personal expenditure on consumer goods

7A.1 In this appendix, a fictitious example is used to illustrate the steps in the methodology required for computing approximately 40 seasonally unadjusted<sup>2</sup> estimators of personal expenditure on consumer goods (excluding sales tax) with data from the *Quarterly Retail Commodity Survey*<sup>3</sup> (QRCS) and the *Monthly Retail Trade Survey* (MRTS).

7A.2 The purpose of this example is not to portray the two surveys faithfully but to describe how their data are used. Hence, a simplified scenario involving only a limited number of trade groups and commodities<sup>4</sup> was used (see Table 7A.1).

**Table 7A.1 Trade groups and commodities**

Trade groups	Commodities
TG001 Furniture stores	C0001 Furniture
TG002 Household appliance stores	C0002 Carpets and other floor coverings
TG003 Motor vehicle dealers	C0003 Household appliances
TG004 Clothing, shoes and accessories stores	C0004 New cars
TG005 Renovation centres and hardware stores	C0005 Used motor vehicles
TG006 Supermarkets	C0006 New trucks
TG007 Pharmacies	C0007 Clothing and footwear
TG008 Gas stations	C0008 Hardware and building materials
TG009 Department stores	C0009 Meat and fish
	C0010 Fruits and vegetables
	C0011 Dairy products and pastries
	C0012 Non-alcoholic beverages
	C0013 Other food
	C0014 Drugs
	C0015 Gasoline, motor oil and additives

7A.3 The example covers the estimation process for the two most recent periods t-1 and t. The results of both surveys are available in t-1, while only the MRTS results are available for the most recent period t.<sup>5</sup>

7A.4 The QRCS data are the cornerstone of the methodology. The data for period t-1 are given in Table 7A.2, and the MRTS results also appear implicitly in the "Total" portion of the table, since the total sales are benchmarked from one survey to the other at the trade group level.

1. See paragraph 7.47 for a list of estimators computed with this methodology. Alternative methodologies have been developed to compute the remaining estimators of personal expenditure on consumer goods which are not included in the list.
2. None of the data used are adjusted for seasonal variation. Only the estimators computed in the last step are seasonally adjusted.
3. While the QRCS results are officially published only on a quarterly basis for Canada, they are nevertheless benchmarked to the MRTS results at the trade group level on a monthly basis. These national monthly series by trade group are provided to the Income and Expenditure Accounts Division (IEAD) by the Distributive Trades Division (DTD). The DTD also produces annual provincial and territorial estimates of commodity sales from these surveys for the IEAD.
4. The retail trade surveys include results for 19 trade groups based on special aggregations of the 2002 North American Industry Classification System (NAICS). The QRCS collects information on the sales of nearly 120 commodities.
5. QRCS data are usually available about two months after MRTS data.

**Table 7A.2 Source data (QRCS and MRTS), period t-1**

Commodities	Trade groups								
	TG001	TG002	TG003	TG004	TG005	TG006	TG007	TG008	TG009
	thousands of dollars								
C0001	37,900	200			200	900			3,700
C0002	500				5,500				500
C0003	8,100	10,600			1,400				7,500
C0004			158,200						
C0005			150,700						
C0006			162,500						
C0007				128,400		1,800			48,200
C0008					72,900				3,500
C0009						61,900			
C0010						48,700		100	
C0011						64,500		1,800	300
C0012						16,600	2,300	3,800	2,200
C0013						147,800	6,500	6,600	5,600
C0014						14,400	110,000		8,200
C0015					200	1,900		172,700	700
<b>Total</b>	<b>46,500</b>	<b>10,800</b>	<b>471,400</b>	<b>128,400</b>	<b>80,200</b>	<b>358,500</b>	<b>118,800</b>	<b>185,000</b>	<b>80,400</b>

**Step 1: Convert the classification**

7A.5 Step 1 involves mapping commodity sales based on the QRCS classification into the J series according to the classification of personal expenditure.<sup>6</sup> This operation is carried out with a concordance table similar to Table 7A.3. The mapping between a commodity and a J series is the same no matter what the trade group is.

**Table 7A.3 Concordance between QRCS commodities and personal expenditure series**

QRCS commodities			Personal expenditure series		
Code	Description	Proportion	Code	Description	
C0001	Furniture	1.00	J001	Furniture	
C0002	Carpets and other floor coverings	0.40	J002	Floor coverings	
C0002	Carpets and other floor coverings	0.60	Jxxx	(dummy)	
C0003	Household appliances	0.30	J004	Refrigerators and freezers	
C0003	Household appliances	0.20	J005	Washers and dryers	
C0003	Household appliances	0.35	J006	Stoves, ranges and microwave ovens	
C0003	Household appliances	0.15	J007	Other major appliances	
C0004	New cars	1.00	J011	New automobiles	
C0005	Used motor vehicles	1.00	J012	Used motor vehicles (net value)	
C0006	New trucks	1.00	J013	New trucks and vans	
C0007	Clothing and footwear	0.28	J051	Men's and boys' clothing	
C0007	Clothing and footwear	0.55	J052	Women's, girls' and infant's clothing	
C0007	Clothing and footwear	0.17	J056	Footwear	
C0008	Hardware and building materials	0.90	J065	Hardware	
C0008	Hardware and building materials	0.10	Jxxx	(dummy)	
C0009	Meat and fish	1.00	J101	Food and non-alcoholic beverages	
C0010	Fruits and vegetables	1.00	J101	Food and non-alcoholic beverages	
C0011	Dairy products and pastries	1.00	J101	Food and non-alcoholic beverages	
C0012	Non-alcoholic beverages	1.00	J101	Food and non-alcoholic beverages	
C0013	Other food	1.00	J101	Food and non-alcoholic beverages	
C0014	Drugs	1.00	J111	Pharmaceutical products and medical goods	
C0015	Gasoline, motor oil and additives	1.00	J112	Motor fuels and lubricants	

6. See for a complete list of personal expenditure series on consumer goods and services.

7A.6 It is often a direct mapping, as in the case of calculation example 1 for commodity C0001, which maps exactly to series J001, and for commodities C0009 to C0013, which all map to series J101.

### Calculation example 1

Cell J001_TG001 from Table 7A.4	= Cell C0001_TG001 from Table 7A.2 × Proportion C0001_J001 from Table 7A.3	= 37,900 × 1.00	= 37,900
Cell J101_TG006 from Table 7A.4	= (Cell C0009_TG006 from Table 7A.2 × Proportion C0009_J101 from Table 7A.3) + (Cell C0010_TG006 from Table 7A.2 × Proportion C0010_J101 from Table 7A.3) + (Cell C0011_TG006 from Table 7A.2 × Proportion C0011_J101 from Table 7A.3) + (Cell C0012_TG006 from Table 7A.2 × Proportion C0012_J101 from Table 7A.3) + (Cell C0013_TG006 from Table 7A.2 × Proportion C0013_J101 from Table 7A.3)	= (61,900 × 1.00) + (48,700 × 1.00) + (64,500 × 1.00) + (16,600 × 1.00) + (147,800 × 1.00)	= 339,500

7A.7 However, some commodities map to more than one J series of personal expenditure. When a breakdown is required, it is based on more detailed data from the Input-Output Tables or from the *Survey of Household Spending* (SHS), or on the analyst's judgement. This is the case in calculation example 2 for commodity C0003, which must be distributed across series J004, J005, J006 and J007.

### Calculation example 2

Cell J004_TG002 from Table 7A.4	= Cell C0003_TG002 from Table 7A.2 × Proportion C0003_J004 from Table 7A.3	= 10,600 × 0.30	= 3,180
Cell J005_TG002 from Table 7A.4	= Cell C0003_TG002 from Table 7A.2 × Proportion C0003_J005 from Table 7A.3	= 10,600 × 0.20	= 2,120
Cell J006_TG002 from Table 7A.4	= Cell C0003_TG002 from Table 7A.2 × Proportion C0003_J006 from Table 7A.3	= 10,600 × 0.35	= 3,710
Cell J007_TG002 from Table 7A.4	= Cell C0003_TG002 from Table 7A.2 × Proportion C0003_J007 from Table 7A.3	= 10,600 × 0.15	= 1,590

7A.8 Finally, it is important to note that the purchase of certain commodities sold by retailers constitutes gross fixed capital formation rather than personal expenditure, such as hardwood flooring, which would appear under C0002, or renovation materials, which would appear under C0008. As shown in calculation example 3, such commodities are assigned to a dummy series (identified as Jxxx), which ensures that the totals remain unchanged following the process of converting the classification. This is reflected in the "Total" heading in Table 7A.4, which is identical to the "Total" heading in Table 7A.2.

### Calculation example 3

Cell Jxxx_TG005 from Table 7A.4	= (Cell C0002_TG005 from Table 7A.2 × Proportion C0002_Jxxx from Table 7A.3) + (Cell C0008_TG005 from Table 7A.2 × Proportion C0008_Jxxx from Table 7A.3)	= (5,500 × 0.60) + (72,900 × 0.10)	= 10,590
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7A.9 The results of all the computations in the conversion of classification are in Table 7A.4.

**Table 7A.4 Converted source data, period t-1**

J series	Trade groups								
	TG001	TG002	TG003	TG004	TG005	TG006	TG007	TG008	TG009
	thousands of dollars								
J001	37,900	200			200	900			3,700
J002	200				2,200				200
J004	2,430	3,180			420				2,250
J005	1,620	2,120			280				1,500
J006	2,835	3,710			490				2,625
J007	1,215	1,590			210				1,125
J011			158,200						
J012			150,700						
J013			162,500						
J051				35,952		504			13,496
J052				70,620		990			26,510
J056				21,828		306			8,194
J065					65,610				3,150
J101						339,500	8,800	12,300	8,100
J111						14,400	110,000		8,200
J112					200	1,900		172,700	700
Jxxx	300				10,590				650
<b>Total</b>	<b>46,500</b>	<b>10,800</b>	<b>471,400</b>	<b>128,400</b>	<b>80,200</b>	<b>358,500</b>	<b>118,800</b>	<b>185,000</b>	<b>80,400</b>

**Step 2: Convert sales into proportions**

7A.10 In step 2, the proportion of each J series' sales relative to total sales is computed for each trade group, as shown in calculation example 4.

**Calculation example 4**

Cell J001_TG001 from Table 7A.4	=	Cell J001_TG001 from Table 7A.4	=	37,900	
	÷	Cell Total_TG001 from Table 7A.4	÷	46,500	= 0.815

7A.11 The results of all the computations of the conversion of sales into proportions are in Table 7A.5.

**Table 7A.5 Source data converted into proportions, period t-1**

J series	Trade groups								
	TG001	TG002	TG003	TG004	TG005	TG006	TG007	TG008	TG009
J001	0.815	0.019			0.002	0.003			0.046
J002	0.004				0.027				0.002
J004	0.052	0.294			0.005				0.028
J005	0.035	0.196			0.003				0.019
J006	0.061	0.344			0.006				0.033
J007	0.026	0.147			0.003				0.014
J011			0.336						
J012			0.320						
J013			0.345						
J051				0.280		0.001			0.168
J052				0.550		0.003			0.330
J056				0.170		0.001			0.102
J065					0.818				0.039
J101						0.947	0.074	0.066	0.101
J111						0.040	0.926		0.102
J112					0.002	0.005		0.934	0.009
Jxxx	0.006				0.132				0.008
<b>Total</b>	<b>1.000</b>	<b>1.000</b>	<b>1.000</b>	<b>1.000</b>	<b>1.000</b>	<b>1.000</b>	<b>1.000</b>	<b>1.000</b>	<b>1.000</b>

7A.12 There are a number of advantages in converting sales into proportions. First, it is much easier to analyze their movements (i.e., their stability or volatility). Second, it allows total sales to be decomposed when MRTS results are available for a given period while QRCS results are not, as is the case for the most recent estimation period t.

### Step 3: Decompose total sales

7A.13 In step 3, the proportions from a previous period computed in step 2 are applied to the MRTS total sales for period t. The previous period is selected on the basis of seasonality; that is, the proportions for the same period of a previous year are generally used. It is important to note that the analyst may, when judged appropriate, adjust the proportions borrowed from a previous period to reflect recent trends in the retail trade sector.

7A.14 As shown in calculation example 5, the proportions for period t-1 from Table 7A.5 are applied to the MRTS total retail sales for period t from Table 7A.6.

**Table 7A.6 Total retail sales from MRTS, thousands of dollars, period t**

Trade groups								
TG001	TG002	TG003	TG004	TG005	TG006	TG007	TG008	TG009
47,500	10,100	477,700	121,200	80,500	360,700	123,600	183,200	78,800

### Calculation example 5

Cell J001_TG001 from Table 7A.7	= Cell TG001 from Table 7A.6	= 47,500	
	× Cell J001_TG001 from Table 7A.5	× 0.815	= 38,715

7A.15 The results of all the computations in the decomposition of total sales are in Table 7A.7.

**Table 7A.7 Estimated data, period t**

J series	Trade groups								
	TG001	TG002	TG003	TG004	TG005	TG006	TG007	TG008	TG009
	thousands of dollars								
J001	38,715	187			201	906			3,626
J002	204				2,208				196
J004	2,482	2,974			422				2,205
J005	1,655	1,983			281				1,470
J006	2,896	3,470			492				2,573
J007	1,241	1,487			211				1,103
J011			160,314						
J012			152,714						
J013			164,672						
J051				33,936		507			13,227
J052				66,660		996			25,982
J056				20,604		308			8,031
J065					65,855				3,087
J101						341,583	9,156	12,180	7,939
J111						14,488	114,444		8,037
J112					201	1,912		171,020	686
Jxxx	306				10,630				637
<b>Total</b>	<b>47,500</b>	<b>10,100</b>	<b>477,700</b>	<b>121,200</b>	<b>80,500</b>	<b>360,700</b>	<b>123,600</b>	<b>183,200</b>	<b>78,800</b>

**Step 4: Compute the estimators**

7A.16 The estimators for the J series of personal expenditure excluding sales tax are computed by adding up the commodity sales for all trade groups. Calculation example 6 shows this process for the personal expenditure series J001 and J002.

**Calculation example 6**

Cell J001[t-1] from Table 7A.8	= Cell J001_TG001 from Table 7A.4	= 37,900	
	+ Cell J001_TG002 from Table 7A.4	+ 200	
	+ Cell J001_TG003 from Table 7A.4	+ 0	
	+ Cell J001_TG004 from Table 7A.4	+ 0	
	+ Cell J001_TG005 from Table 7A.4	+ 200	
	+ Cell J001_TG006 from Table 7A.4	+ 900	
	+ Cell J001_TG007 from Table 7A.4	+ 0	
	+ Cell J001_TG008 from Table 7A.4	+ 0	
	+ Cell J001_TG009 from Table 7A.4	+ 3,700	= 42,900

Cell J002[t] from Table 7A.8	= Cell J002_TG001 from Table 7A.7	= 204	
	+ Cell J002_TG002 from Table 7A.7	+ 0	
	+ Cell J002_TG003 from Table 7A.7	+ 0	
	+ Cell J002_TG004 from Table 7A.7	+ 0	
	+ Cell J002_TG005 from Table 7A.7	+ 2,208	
	+ Cell J002_TG006 from Table 7A.7	+ 0	
	+ Cell J002_TG007 from Table 7A.7	+ 0	
	+ Cell J002_TG008 from Table 7A.7	+ 0	
	+ Cell J002_TG009 from Table 7A.7	+ 196	= 2,608

7A.17 The results of all the estimator computations are in Table 7A.8.

**Table 7A.8 Estimators<sup>7</sup>**

J series	Period t-1	Period t
	thousands of dollars	
J001	42,900	43,635
J002	2,600	2,608
J004	8,280	8,083
J005	5,520	5,389
J006	9,660	9,431
J007	4,140	4,042
J011	158,200	160,314
J012	150,700	152,714
J013	162,500	164,672
J051	49,952	47,670
J052	98,120	93,638
J056	30,328	28,943
J065	68,760	68,942
J101	368,700	370,858
J111	132,600	136,969
J112	175,500	173,819

7. As alluded to in footnote 1, the estimators for the series J011, J012, J013 and J112 that are produced by the methodology described in this annex and which appear in this table are used only as indicators. Alternative methodologies have been developed to compute the estimators for these personal expenditure series; they are described in Table 7.7.