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Canadian Tourism Satellite Account Handbook

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Canadian Tourism Satellite Account Handbook

The Canadian Tourism Satellite Account Handbook is intended as a guide to how the Canadian Tourism Satellite Account (CTSA) is compiled. The Tourism Satellite Account (TSA) has become the internationally recognized framework and an important tool by which to measure tourism activity in an economy. The goal of this handbook is to make the CTSA and its inner workings as transparent as possible. By sharing the Canadian practical experiences in development of the TSA, it should benefit other countries and other interested practitioners in the process of developing and understanding TSAs.

This handbook covers information on the relevant tourism and national accounting concepts and definitions related to the CTSA. The various survey data sources and the methods used to move this data into the TSA framework are discussed. The Canadian Tourism Satellite Account Handbook was funded through a partnership agreement between the Canadian Tourism Commission and Statistics Canada.

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List of abbreviations

AES	Air Exit Survey of Overseas Visitors
BOP	Balance of Payments
CIF	Cost, Insurance, Freight
CPC	Common Product Classification
CSNEA	Canadian System of National Economic Accounts
CTC	Canadian Tourism Commission
CTS	Canadian Travel Survey
CTSA	Canadian Tourism Satellite Account
FOB	Free-on-Board
GDP	Gross domestic product
GST	Goods and Services Tax
HRM	Human resource module of the Canadian Tourism Satellite Account
I-O	Input-output
ISIC	International Standard Industrial Classification
ITS	International Travel Survey
LFS	Labour Force Survey
NAICS	North American Industrial Classification System
NTI	National Tourism Indicators
PE	Personal expenditure on consumer goods and services
PST	Provincial Sales Tax
PTSA	Provincial and Territorial Tourism Satellite Account
SHS	Survey of Household Spending
SLI	Supplementary Labour Income
SNA	System of National Accounts
TSA	Tourism Satellite Account
TSA:RMF	Tourism Satellite Account: Recommended Methodological Framework
TSRC	Travel Survey of Residents of Canada
WTO	World Tourism Organization

Symbols

The following standard symbols are used in Statistics Canada publications:

. not available for any reference period
.. not available for a specific reference period
... not applicable
0 true zero or a value rounded to zero
0^{s} value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
^{p} preliminary
^{r} revised
x suppressed to meet the confidentiality requirements of the *Statistics Act*
^{E} use with caution
F too unreliable to be published

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1 Introduction

The Tourism Satellite Account (TSA) has become the internationally recognized framework by which to measure tourism activity in an economy. This handbook is intended to help readers better understand how tourism data are compiled in this framework. It does this in the context of the Canadian Tourism Satellite Account (CTSA), which provides Statistics Canada's official measures of tourism's contribution to the economy and jobs in Canada.

1.1 Role of the Tourism Satellite Account

The CTSA serves a number of purposes. First and foremost, it provides a coherent framework within which to integrate, reconcile, organize and analyse the variety of economic statistics relevant to tourism, both on the supply (i.e., industry) side and on the demand (i.e., tourist) side. This is important because tourism is not an explicitly identified industry within the statistical system as it cross-cuts several industries. The CTSA serves to pull tourism's various components together and, as such, it explicitly defines the tourism industry within the statistical system.

Second, being rooted in the Canadian System of National Economic Accounts (CSNEA), the CTSA provides an economic measure of the importance of tourism in terms of expenditures, Gross Domestic Product (GDP) and employment which are comparable with similar measures for the overall economy. As such, it permits a comparison with other industries in terms of output, employment and so on.

The CTSA also serves as the foundation for a variety of related statistical products including (i) the National Tourism Indicators, which provide timely quarterly macroeconomic information on the state of tourism in Canada, (ii) the Tourism Human Resource Module which provides detailed annual information on jobs in the tourism industries, and (iii) studies on the government revenue that can be attributed to tourism, for instance.

Last, but not least, the CTSA has served to define what are considered to be the tourism commodities and the tourism industries, and has consequently helped and continues to help to shape the development of tourism statistics in Canada. Moreover, it has been influential in the shaping of the international TSA standard, as the Canadian example was one of the first anywhere in the world.

1.2 Aim of the handbook

This handbook is intended as a guide to how the CTSA is compiled. The goal is to articulate the Account as far as possible by describing its concepts and definitions, and especially its sources and methods. At the same time, the handbook serves as a supplement to the CTSA for the year 2002, as the description of sources and methods relates to the compilation of the Account for that year.

It is important to note at the outset that a redesigned domestic travel survey was initiated in 2005, the Travel Survey of Residents of Canada (TSRC), which included a refined operational definition of tourism. However, this will not require any fundamental change in the methodology of the CTSA as described here. Consequently, the handbook will remain relevant even after the integration of the new TSRC results in the CTSA.

Coming just over a decade after the release of the first TSA for Canada, this handbook is one of the first guides to compilation of a TSA anywhere in the world. It is hoped that sharing Canada's practical experience in this area can benefit other countries and interested practitioners in developing and understanding TSAs.

1.3 Outline of the handbook

To outline the rest of the handbook, Chapter 2 covers information on the relevant tourism and national accounting concepts and definitions. Chapter 3 outlines the various survey data sources. This is followed in chapter 4 with explanations of how these data are assembled in the Input-Output (I-O) tables, the main source of data on production of tourism commodities. The methodology of the CTSA is examined in chapter 5. This chapter describes how the tourism components in the I-O tables are identified, separated and further refined, using the CTSA 2002[1] as an example. The provincial/territorial dimensions of the CTSA, as well as issues of data quality and reliability are also covered. Chapter 6 explains the tables of the CTSA and compares them with the international standard. The concluding chapter outlines areas for improving the Account.

1. See Canadian Tourism Satellite Account, 2002, catalogue no.13-604 no. 58, Statistics Canada, October 2007.

2 Framework of the Canadian Tourism Satellite Account

This chapter outlines how the TSA relates to the System of National Accounts and discusses several important concepts common to the two frameworks. It goes on to elaborate the key tourism-related definitions and highlights some differences between the CTSA and the international standard. First, however, some background on the development of the TSA is provided.

2.1 Background

Statistics Canada first released TSA results for the Canadian economy in 1994. This work was prompted by a National Task Force on tourism that recommended the development of a TSA. The Task Force consisted of representatives from the federal, provincial and territorial governments, along with institutions and industry groups who were interested in tourism. Among other things, they drew up a list of the commodities and industries that were important to tourism.[2] Based on this initial work, and with funding from the Canadian Tourism Commission, Statistics Canada has undertaken five updates of the TSA, two of which were extended to the provincial/territorial dimension.

An important step in the creation of TSAs occurred at an international conference in Ottawa in 1991. This was the first international conference to discuss the issue of how to measure the TSA. In March 2000, after several years of work involving a number of national statistical agencies and international organizations, the United Nations Statistical Commission adopted a set of international guidelines on tourism satellite accounts. In 2001, the Tourism Satellite Account: Recommended Methodological Framework (TSA:RMF) was published.[3] These guidelines established internationally accepted concepts and definitions for tourism statistics that were at the same time consistent with the System of National Accounts framework for economic statistics. The CTSA, having pre-dated the TSA:RMF, served as a practical example that was influential in shaping the international guidelines.

2.2 Relation to the System of National Accounts

The **System of National Accounts (SNA)** is an internationally recognized economic accounting system.[4] It provides a set of interrelated accounts and a set of concepts, definitions, classifications and accounting rules for compiling and integrating economic data to give a comprehensive picture of the economy and how it works. It can be used to analyse the production and the use of goods and services by industry, the income generated in production, and the demand for goods and services from households and governments, for instance, at a point in time or to analyse movements or trends in these macroeconomic variables over time, among other things.

The **Tourism Satellite Account** on the other hand is an extension to the SNA. As such, it highlights the economic transactions that are recorded (explicitly or implicitly) in the SNA, but which are related specifically to tourism. In particular, the TSA identifies and emphasizes the transactions between tourists (or visitors) in an economy and the businesses or industries that serve them (through the sale of accommodation services or transportation services, and so on).

Satellite accounts, such as the TSA, have the structure and principles of the national accounts but are developed as an extension to the core national accounts system – hence the name "satellite". The subject matter of the satellite account usually cannot be explicitly found in the core accounts and thus a special calculation is required. Satellite accounts tend to focus on specific aspects, be it social or economic, such as tourism, transportation, or environment.

Their presentation and adherence to national accounting principles allows an analyst to compare the satellite account (or area of interest) with the entire economy. With the TSA, one can therefore answer the question, how important is tourism in Canada. The ability to measure tourism against the rest of the economy is a very important reason for working within the structure of the SNA.

2. These lists are available in National Task Force on Tourism Data, Final Report, Statistics Canada, March 1989.

3. See Tourism Satellite Account – Recommended Methodological Framework. Organisation for Economic Co-operation and Development, Statistical Office of the European Communities, the United Nations and World Tourism Organisation, May 2001.

4. System of National Accounts 1993. Commission of the European Communities, International Monetary Fund, Organisation for Economic Cooperation and Development, United Nations, World Bank, 1993.

There are two general types of satellite accounts: (1) those that basically expand and/or reorganize the detail in the core accounts and (2) those that go outside of the core altogether by expanding the definition of production. The TSA is an example of the first type. An example of the second would be accounts on the value of unpaid or volunteer work.

2.3 Key concepts of the SNA and the TSA

Several key concepts underlying the SNA and the TSA will be covered in this section. These include the notions of production, domestic production, place or country of residence, goods versus services and exports versus imports, as well as market versus basic prices.

2.3.1 Production

The SNA portrays the industrial structure of the economy and shows the contribution of each industry to overall economic production. As such, production is a central concept in the Accounts. In general, **production** is the process of combining labour, capital, energy, material and service inputs to produce goods and services sold on the market. In the CSNEA, several adjustments are made that broaden the definition of production beyond transactions that involve the exchange of money. Some of these include the implicit rent associated with an owner living in his own dwelling, farm produce consumed on farms, payment of food or lodging in lieu of wages and implicit charges made by financial institutions.

The CTSA follows the concepts of production used in the CSNEA, however it covers only the production of goods and services that are sold. The own-account production of tourism goods or services (e.g., the implicit rent associated with owning a cottage or chalet) and the delivery free of charge of services by governments (e.g., tourist information booths), for instance, are outside the scope of the CTSA.

The concept of domestic production is important for the SNA and also for the tourism accounts. **Domestic production** occurs within the economic territory of a country. This becomes important in the case of tourism because of the international nature of this activity. In the CTSA, if a Canadian tourist purchases a ticket in Canada for air travel to a destination outside of Canada on a Canadian airline, this exchange is included since the production would be in Canada. This same transaction, undertaken by a Canadian but using a non-Canadian airline, would be considered an import, and therefore outside the scope of domestic production. By the same token, if a non-resident purchases a ticket to travel to Canada on a Canadian carrier, this transaction would be included as domestic production. If the carrier were a foreign airline, on the other hand, the transaction would be out of scope.

2.3.2 Residency and travellers

The concept of residency is important in the SNA and the Balance of Payments (BOP) accounts. For the individual, **country of residence** is determined by that of the household to which he or she belongs which, in turn, is determined by the location of the dwelling considered by the household as its principal residence. Generally, being present in a country or having the intention to remain there for one year is sufficient to establish country of residence. Province or place of residence are similarly determined on the basis of the location of the principal residence.

For both the SNA and BOP, the notion of residency has been used to define a traveller, in the international context, as someone travelling outside his or her country of residence. This is similar to the TSA where the concept of “usual environment” is used to determine whether someone is a “visitor” to a place or not. Indeed, for the purposes of statistics on tourism, visitors are considered to be a subset of all persons who travel (see section 2.4.1).

2.3.3 Goods and services, exports and imports

The distinction between goods and services is also important. A **good** is a tangible product that can be stocked or placed in inventory. An example of a good is motor vehicle fuel. A **service**, on the other hand, is generally consumed at the place and time it is bought. A meal at a restaurant is an example of a service. Most of the emphasis in the TSA is on services, because the bulk of tourism spending is on services, however spending on goods is also included.

Tour packages are a special type of commodity that represent a combination of one or many tourism services such as transportation, accommodation, food and beverages, entertainment, etc., sold as one unit. A person can buy a package from a travel agent or tour operator, or they can buy the components individually. In the CTSA (and in the CSNEA), spending on tour packages is “unbundled”, that is, it is split among the constituent services in order to articulate supply and demand on a commodity basis.

Exports generally refer to goods and services that are produced in one country (or region) and then shipped or delivered to another where they are consumed or used in further economic processes. In the case of the CTSA, exports refer to goods or services that are purchased by non-resident visitors to Canada. These purchases, in this case, are actually in Canada. For example, an American visitor’s purchases in Canada are tourism exports. More emphasis is put on tourism exports in the TSA because these contribute to domestic production and jobs.

Tourism **imports** to Canada reflect a Canadian tourist’s expenditures in another country, which contributes to production and jobs abroad. It should be noted that a significant component of the trip spending of Canadians who travel abroad is not counted as imports, but as domestic production, insofar as the transportation is with Canadian carriers.

2.3.4 Valuation and pricing

The price used in the valuation of a good or service depends on whether one takes the producer’s perspective (basic prices) or the purchaser’s perspective (market prices). In the CTSA, the valuation of goods and services sold is at basic prices, while tourism spending is valued at purchaser’s or market prices.

The **basic price** for a good or service, in the CSNEA, is its selling price at the factory gate (i.e., its price before wholesale, retail and transportation margins and before product taxes like the Goods and Services Tax (GST)). This price better reflects the revenues received by producers from the sale of goods and services.[5] The **market price** for a good or service, on the other hand, is the price actually paid by the purchaser, that is, after all wholesale, retail and transportation margins as well as all applicable taxes and subsidies.

When comparing estimates of supply and demand for goods and/or services, it is important to ensure that the basis of valuation is the same on both sides (this is demonstrated later in Chapter 5). Since the majority of tourism commodities are services, where there are no retail, wholesale, or transportation margins, the only difference between basic price and purchaser price is taxes on products (e.g., sales taxes like GST or Provincial Sales Taxes (PST)).

The valuation used in the CTSA is always at **current prices**, that is, the prices in effect during the reference period (i.e., the year for which the measurement or estimate is made). This is in contrast to valuation at **constant prices**, where values are fixed at the prices of some base period. The purpose of such a valuation is to facilitate the analysis of period-to-period movements of variables expressed in monetary terms (i.e., spending on airfares), by eliminating the effect of price change (or inflation). The National Tourism Indicators, for example, provides estimates that are valued at both current and constant prices.

2.3.5 Regional accounts

The CTSA and Canada’s regional TSA, the Provincial and Territorial Tourism Satellite Account (PTSA), follow identical accounting principles coming from the CSNEA. The PTSA is essentially a number of small TSAs which, when summed together, total to the national TSA. All industry classifications, commodity details and definitions are the same in either case. The two Accounts also broadly follow the international guidelines on tourism satellite accounting found in the TSA:RMF. There are nonetheless some differences (see section 2.5).

5. In the CSNEA, a "modified basic price", which is just the basic price (as defined above) unadjusted for subsidies, has been implemented (see Lal 2003) to value gross outputs of goods and services. This price is used also in the CTSA to value commodity outputs. It might be noted that in early versions of the CTSA, the valuation of tourism GDP was at factor cost (i.e., at the cost of labour and capital inputs). However, starting with the 1998 PTSA, valuation of GDP has been at basic prices. This change resulted after the CSNEA adopted valuation at basic prices in order to follow the international SNA guidelines. The difference between the two is that the “basic price” is a valuation of output in terms of its factor cost plus taxes minus subsidies on production.

2.4 Key definitions of the Tourism Satellite Account

This section describes some of the key concepts and definitions that are specific to the TSA including the basic notions of tourism, usual environment and visitors. The definitions of tourism demand and supply, tourism commodities and industries, as well as tourism GDP and employment are also discussed.

2.4.1 Tourism, usual environment and visitors

At the core of the TSA is the definition of **tourism**, which is defined internationally as: "the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes not related to the exercise of an activity remunerated from within the place visited".[6] The concept of tourism here is broader than the notion of "leisure travel". It includes travel for business, leisure and other personal reasons, such as visiting friends and relatives, religious purposes, or medical treatment.

The concept of **usual environment** relates to the place where the individual lives and works or studies and includes any other places frequented. This notion is not precisely defined in the international standard, thereby allowing a country to apply the tourism concept to its own specifications.[7] For operational purposes, Canada has defined the concept of "outside the usual environment" as greater than 80 kilometers one way from home.[8] Crossing an international border, however, is considered tourism no matter the distance travelled. It might be noted that this convention is not followed in the PTSA with respect to crossing provincial/territorial borders. For example, if an Ontario resident visits a town in Quebec, within 80 km of home, this would be considered to be within the usual environment and outside the scope of tourism.

By definition, not all travel is tourism. Since they are not considered as travel outside the "usual environment", commuting to work or school, travel for education or new employment, travel involving a change of residence, travel by armed forces and diplomats, and by operating crew members (airlines, bus, ship etc.) are excluded from tourism. Border workers (e.g., people who live in Detroit and work in Windsor and vice versa) and seasonal workers (e.g., Mexicans who pick grapes in southern Ontario) should not be included in tourism as indicated by the "not related to the exercise of an activity remunerated from within the place visited" criterion. While border workers are excluded from the CTSA, seasonal workers and other persons who travel to a place in order to work temporarily are included at present as they are not identifiable on the surveys of travellers.

In the TSA:RMF, people who are engaged in tourism are called **visitors**. Those who stay one or more nights away from home are called tourists, while those who spend no nights away from home are called same-day visitors. In the CTSA and in this handbook, the term **tourist** is used to denote all visitors, whether they are same-day or overnight visitors (see section 2.5.1).

2.4.2 Tourism commodities and tourism demand

A **tourism commodity** is a good or service for which a significant part[9] of its total demand in Canada comes from visitors. Thus, air passenger transportation would be a tourism commodity, while groceries, although occasionally bought by tourists, are considered a non-tourism commodity. As another example, meals from restaurants are deemed to be tourism commodities because a significant part of the demand comes from tourists, even though restaurants primarily serve local residents. In Canada, tourism commodities also include goods bought solely for the purpose of travel (e.g., motor homes, tent trailers and luggage). These so-called "pre-trip" expenses are included because the vast majority of spending on these items is in anticipation of taking tourism trips. These items may of course be used for non-tourism purposes as well, but these other uses are considered to be minimal.

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6. See TSA:RMF, para. 2.1, p. 13. In the 2008 update to the TSA:RMF, the exclusion from tourism of trips related to "the exercise of an activity remunerated from within the place visited" will be narrowed to the activity of working as an employee of a resident entity in the place visited. In practice, this will have no effect in Canada as this exclusion is not made in the domestic travel survey, while in the international travel survey border workers will continue to be excluded.
7. Some countries define trips outside the usual environment in terms of how long it takes to get to the destination. Distinctions are also made by whether a trip is made outside a given region within a country (i.e., municipality, county).
8. The operational definition of tourism has changed since the reference year 2002 on which this report is based. See section 3.1.1.
9. What constitutes "a significant part" is not precisely defined in the CTSA, however, this is more or less in the range of 15%.

In principle, given their definition, the types of tourism commodities could change from one region to another if, for instance, there were marked differences in tourist spending patterns. However, in practice, they are kept the same in the PTSA so that comparisons can be made across the provinces and the territories and with the national TSA. Also, in order to facilitate comparisons over time, changes to the list of tourism commodities have been kept to a minimum.[10] The list needs to be kept in step however with changes in the classification of commodities and the definition of what constitutes tourism. See Appendix C for the list of tourism commodities in the CTSA.

Tourism demand is defined as total spending by tourists on domestically produced commodities. This includes all spending by same-day and overnight visitors, Canadian and non-resident. The resulting consumption has to be directly by the tourist. For example, if an ocean liner stops at a Canadian port to purchase fuel, this spending would not be included in tourism demand because the fuel is not directly used or consumed by a tourist in Canada. As another example, if a tourist purchases a package trip from a travel agent, this spending, both for the commissions to the agent and the other services included in the package (e.g., transportation, accommodation, food and beverages), is included in tourism demand as the tourist directly consumes both the travel agent service and the components of the package.

Tourism demand can be split into several components including domestic demand, international demand and inter-provincial demand. **Tourism domestic demand** includes the expenditures associated with tourism activity in Canada by its residents. International demand, also called **tourism exports**, consists of the expenditures by non-residents in Canada on tourism. In the PTSA, inter-provincial demand is also calculated. This includes the expenditures associated with tourism activity in a given region by residents of another province or territory in Canada.

The CTSA and PTSA also calculate tourism import spending, both internationally and in other provinces and territories. While international tourism imports (Canadian tourism spending abroad) are reported in the CTSA, the detail available is far less than in the case of exports. In the PTSA, expenditures by visitors outside their province of residence are defined as imports to the province of residence (or origin) and exports of the province visited (or province of destination). It is interesting that in the PTSA the balance of inter-provincial tourism trade (inter-provincial exports minus imports) in any given province or territory may be positive or negative, but the sum of these trade balances must be zero. In other words, one province's or territory's inter-provincial tourism exports is another's imports. This is an important identity (i.e., constraint) that is enforced in the PTSA.

2.4.3 Tourism industries and tourism domestic supply

In the CSNEA, industries are defined by the 2002 North American Industry Classification System (NAICS). An **industry** is defined as a group of establishments that engages in the same or a similar kind of economic activity.[11] However, tourism is not an industry in this sense. Rather, tourism cuts across industries identified in NAICS because it is dependent on the consumer's purchases as a visitor or tourist. Moreover, because tourists purchase goods and services from many different industries, the CTSA must identify and separate out the tourism components from each of them.

In the CTSA, a **tourism industry** is defined as one that would cease or continue to exist only at a significantly reduced level of activity as a direct result of an absence of tourism. See Appendix B for the list of tourism industries. Some industries are included as tourism even though the majority of their output can be attributed to non-tourism. The food and beverage services and recreation and entertainment industries are examples. Such industries are included because without tourism, their level of activity would be significantly reduced.

10. In the first CTSA (1988), urban transit and parking services were considered to be tourism commodities. With the CTSA for 1992, these two services were dropped from the list of tourism commodities because the spending involved was small and the estimates were not very reliable. The spending on these services is of course still included in tourism spending, as this covers outlays on both tourism and non-tourism commodities.

11. It might be noted that NAICS is principally a classification system for establishments (i.e., the smallest unit of production for which a business maintains records). It can be used however to classify a company or an enterprise that engages in economic activity across several industries by assigning it to the industry of the establishment or group of establishments generating the largest proportion of its value added.

Another important definition is that of **tourism domestic supply**. This is the total production of the tourism commodities bought by tourists and non-tourists in Canada. Canadians also buy goods and services outside of Canada, but these are not included in tourism supply. In contrast to the SNA, where the supply of a commodity always equals its demand, the supply of a tourism commodity usually exceeds tourism demand as defined in the CTSA. This is because tourism supply includes the total production of a tourism commodity whether it is purchased by a tourist or not.

2.4.4 Tourism ratios

Three important ratios are calculated in the CTSA: the tourism commodity, the tourism industry and the tourism GDP ratios. These are each described below. Details on how these ratios are actually calculated and used in the CTSA are provided later in Chapter 5.

The **tourism commodity ratio** is the ratio of demand to supply for a given tourism commodity. It measures the proportion of a tourism commodity that is actually purchased by tourists (e.g., in the CTSA 2002, 95% of the spending on passenger air transportation commodity is due to the purchases of tourists). It also provides the means to convert data classified by commodity into data classified by industry. The ratio is also useful in the data validation process especially in the reconciliation of tourism demand and supply.

The **tourism industry ratio** is the ratio of the tourism demand for all tourism commodities produced by a given industry to its output of those commodities. This ratio is used for internal calculations in the compilation of the CTSA at the detailed (unpublished) level. It is used specifically in the calculation, by industry, of GDP and employment that is attributable to tourism.

Last, the **tourism GDP ratio** measures how much of the production of a certain industry (at the published level) is attributable to tourism. It is calculated by taking the tourism GDP and comparing it to the total GDP (i.e., tourism GDP + non-tourism GDP) of the industry. In the CTSA 2002, 79% of the air transportation industry's GDP was attributable to tourism. This share is lower than for the passenger air transportation commodity because the industry also produces freight transportation services, which have no tourism content.

2.4.5 Tourism GDP and employment

One of the key measures of the economic importance of tourism in the TSA is the **tourism gross domestic product**. Tourism GDP can be defined as the unduplicated value of production, within the boundaries of a region (i.e., province, territory, country), of goods and services (including tourism and non-tourism commodities) purchased by tourists. In the CTSA, tourism GDP is valued at basic prices, the same method of valuation as in the I-O tables of the CSNEA.

It should be noted that the amount of GDP generated in the production of a given commodity depends on the costs and technical characteristics of production, and not on the characteristics of the purchaser *per se* (e.g., visitor or non-visitor, business or non-business purchaser). In other words, if a restaurant meal sells for $30, and this involves the generation of $18 of GDP, it does not matter if the meal is sold to a visitor or non-visitor, resident or non-resident, it will still generate $18 of GDP.

Tourism GDP is estimated using the sum of incomes (i.e., the returns to labour and capital from production) attributable to tourism. GDP in the CTSA is calculated only at current prices (see section 5.5.2 for an explanation and example of this calculation).[12] Only direct GDP, as opposed to indirect GDP, is measured. Indirect GDP refers to the upstream effects of economic activity (e.g., the manufacture of linens used in hotels). Although these indirect effects are important, they are beyond the scope of the CTSA which focuses on the GDP generated by the production of goods or services consumed directly by tourists. Indirect effects can however be calculated in economic impact models based on the TSA.

Tourism employment is a measure of the number of jobs in tourism and non-tourism industries held by the self-employed, employees and unpaid family workers. Tourism employment includes only jobs directly attributable to tourism. Thus, in the food and beverage services industry, only those jobs that are directly associated with

12. The National Tourism Indicators calculate GDP at both current and constant (i.e., adjusted for inflation) prices.

tourism (17.3%) are counted in the CTSA as jobs generated by, or attributable to, tourism. On the other hand, jobs generated in agriculture to support production in the food and beverage services industry (i.e., indirect employment) are not included.

It might be noted that the human resource dimension of the CTSA is limited as it focuses mainly on monetary aggregates associated with tourism supply and demand and the measurement of GDP. Thus, only the number of jobs and labour income directly attributable to tourism can be found in the CTSA. The human resource aspects of tourism are however articulated in the Tourism Human Resource Module (HRM). The HRM contains details on the number of jobs, number of full-time equivalents, hours worked, and income earned by gender, age group, immigrant status and occupation.[13] These details are available for all jobs as well as those that are directly attributable to tourism. See section 4.4, for more on the data sources for employment, and section 5.5.3 for more on the tourism employment calculations in the CTSA.

2.4.6 Tourism supporting services

The TSA:RMF suggests that supporting services to tourism should be included in tourism spending (and as a consequence in tourism GDP) only if purchased directly by the tourist. This guideline is followed in the CTSA. Thus, supporting services such as baggage handling, when not directly purchased by tourists, are not included. In the case of domestic demand, this treatment seems reasonable as the cost of the supporting services is covered, or included, in the price of the airline ticket. Consequently, the production of baggage handling services has been covered, and to include it explicitly would involve counting it twice.

In the case of exports, the support services, or baggage handling in this example, are purchased as an intermediate input to the airline industry of another country. Although exported support services contribute to the GDP and employment in Canada, they do not contribute to tourism GDP or tourism employment in the CTSA, because they are not directly bought by tourists. In the case of tourists directly purchasing support services, for example support services for private planes, this expenditure is included in the CTSA, but is not explicitly identified.

Because tourism support services are generally not purchased directly by tourists, that is, because tourism spending does not directly account for a significant part of their demand, they are not considered as tourism commodities in the CTSA. By the same logic, industries that principally produce support services, such as Airport Operations, Ship Piloting Services or Food Service Contractors are not considered as tourism industries either. These industries do not cater directly to tourists and, as a consequence, would not be directly affected by an absence of tourism. They would of course be affected indirectly through reduced intermediate use of their services by airlines, cruise ships, etc.

2.5 Comparison of the Canadian TSA to the international standard

A recent study by Kemp and Nijhowne (2004) indicated that the CTSA closely conforms to the international standard as presented in TSA:RMF. The definition of tourism is the same in both, and both follow SNA accounting principles. However, several differences can be found in terminology, classification, coverage and valuation.

2.5.1 Differences in terminology

The TSA:RMF uses the term “tourist” to describe persons travelling outside their usual environment, who spend one or more nights in the place visited. Same-day visitors on the other hand are described as those who do not spend any nights at the place visited. In the CTSA, in contrast, the term tourist is used to denote both same-day and overnight visitors. This is largely a semantic difference, with no implication for the resulting estimates.

Secondly, the TSA:RMF uses the term **tourism-specific products**, which are further split into “tourism-characteristic” and “tourism-connected” products. **Tourism characteristic products** are those which “in the absence of visitors, in most countries would probably cease to exist in meaningful quantity or for which the level of consumption would be significantly reduced.”[14] These commodities are recommended to be treated as “tourism commodities” across all countries for the sake of international comparison. Tourism-characteristic products are similar to the “tourism commodities” as defined in the CTSA.

13. See Human Resource Module of the Tourism Satellite Account, Update to 2005, catalogue no. 13-604 no. 55, March 2007 for more details.
14. TSA:RMF, page 38.

The TSA:RMF also refers to **tourism-connected products**, which are products that may be important in given countries but are not specified among the commodities listed for international comparison. Canada does not make use of this notion in its TSA, that is, there are no “tourism connected products” in the CTSA, only tourism characteristic products.

2.5.2 Differences in classification

The Canadian list of tourism commodities does not exactly match the TSA:RMF tourism-characteristic products. This stems from different classification systems and the fact that the CTSA was developed before the international standard came into effect. The CTSA uses a commodity listing specific to the Canadian I-O tables, while the TSA:RMF is based on the Central Product Classification, of the United Nations. Differences also arise in the comparison of industries, for the same reasons. The CTSA uses the North American Industry Classification System (NAICS), while the TSA:RMF is based on the International Standard Industrial Classification.

Some differences in the allocation of commodities arise. For example, the TSA:RMF suggests that accommodation provided while travelling (e.g., on trains or boats) should be classified as accommodation. In the CTSA, this type of accommodation is included under transportation because the source data captures only the tourist’s spending on transportation (accommodation included) and the transporter’s revenues from the sale of a ticket (accommodation included). This difference affects the commodity-distribution in supply and demand between the CTSA and the TSA:RMF, but leaves the totals unchanged.

2.5.3 Differences in coverage

The TSA:RMF includes certain pre-trip expenditures in tourism consumption. For example, travel insurance and other financial services purchased prior to a trip are included. In the CTSA, five tourism single-purpose consumer durable goods used chiefly for travel (motor homes, travel and tent trailers, luggage and travel sets, tents and camping equipment and sleeping bags) are included as pre-trip expenditures, irrespective of when they are bought.

The TSA:RMF suggests that multi-purpose consumer durables, such as cameras, cars or boats, if purchased while on a trip, should be included in tourism spending.[15] In the CTSA, motor vehicles such as motor homes and tent trailers are included as “pre-trip expenses” irrespective of when they are purchased on the grounds that they are used almost exclusively for purposes of tourism. All other types of motor vehicles bought on a trip for personal use, such as cars, motorcycles and trucks, are excluded in practice. To include them would distort the statistics on tourism demand by introducing extremely high values that occur sporadically in the survey-sampling context.

More generally, the TSA:RMF also recommends including spending related to second homes or vacation cottages, capital formation (for example, the investment in a new hotel), and collective consumption, which is the spending by a collective group like government on tourism (e.g., a tourism information booth). At present, the CTSA includes none of these types of spending on tourism owing to lack of data.

2.5.4 Other differences

One recommendation of the TSA:RMF, relating to net valuation, is only partially followed in Canada. **Net valuation** has been proposed as a way to highlight the importance of travel agencies in tourism. With this method of valuation, commissions of travel agents (and tour operators) should be netted out of the industry revenues from commodities sold to tourists (such as air transportation) and treated instead as a commission that would be sold directly to visitors. In order to do this, tour packages have to be separated into their components (e.g., air transportation, accommodation) and recorded as if they too are bought directly by visitors, net of commissions. In addition, the commissions need to be removed from sales of non-packaged commodities and treated as being sold, instead, to travellers.

15. Some work has been done (in the US) to include a portion of these consumer durables, see Okubo, Sumiye, Fraumeni, Barabara and Fahim-Nader, Mahnaz, “Expanded U.S. Travel and Tourism Satellite Accounts: Extension to Include Imputed Services of Motor Vehicles and Vacation Homes,” paper presented at International Conference on Tourism Satellite Accounts, Vancouver BC, Canada, 8-10 May 2001.

The Canadian I-O tables have partially adopted this approach and consequently the CTSA as well. In the Canadian system, the services of travel agencies and tour operators are measured as commissions earned. Tour packages are broken out by component, and the revenues from the individual commodities recorded. However revenues of the producing industries from the sale of these commodities are not always recorded net of commissions.

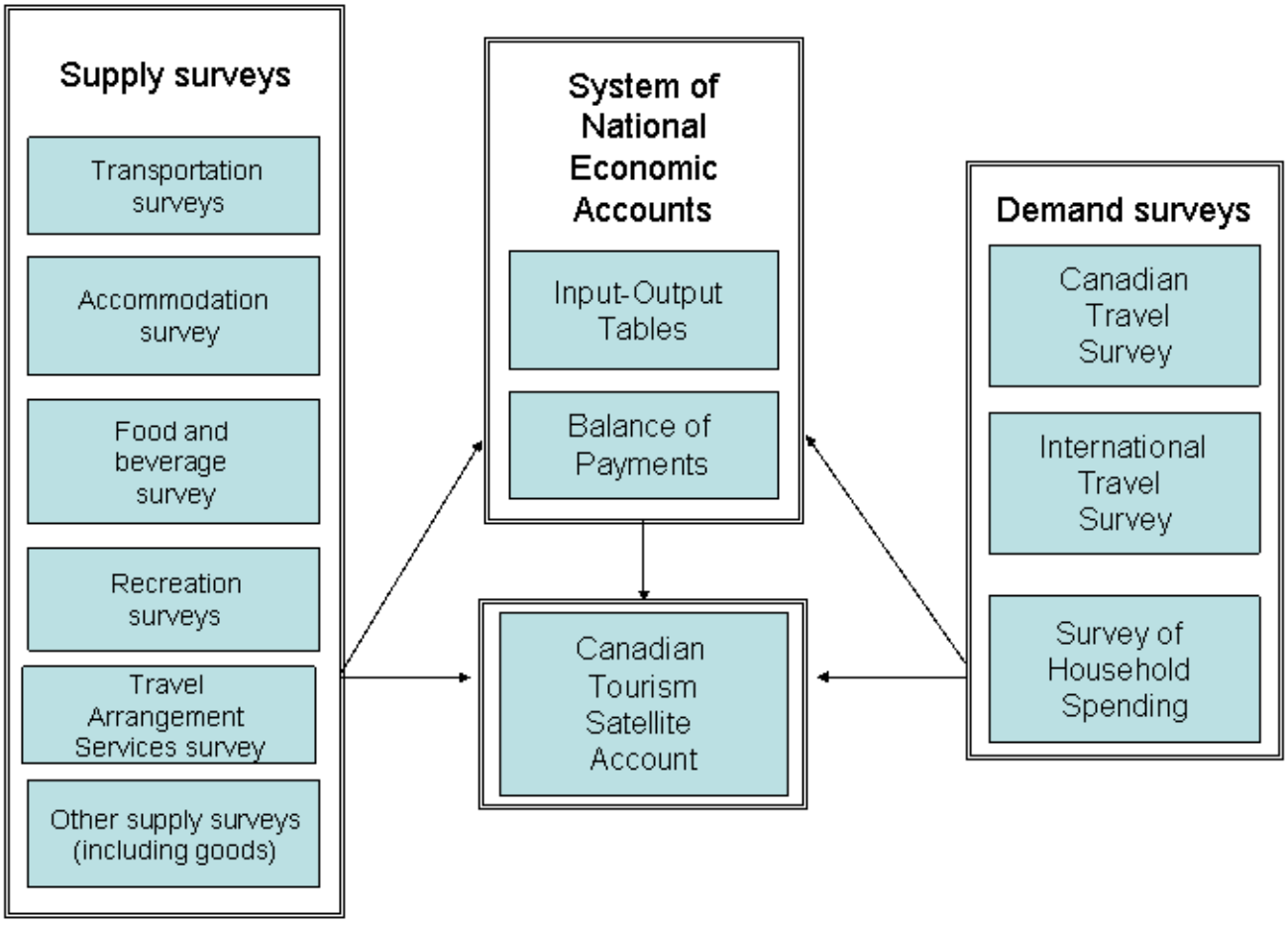
3 Survey sources of data for the Canadian TSA[16]

In addition to providing a framework for the economic measurement of tourism, the TSA also provides a tool for integrating and reconciling statistical information on both the demand-side and supply-side of tourism. The TSA in Canada is thus primarily based on two sets of data, one for tourism demand, the other for tourism supply.

The figure below depicts the data flows for the CTSA. On the right are the surveys that measure tourists' spending that are used in the estimates of tourism demand. These include the Canadian Travel Survey (CTS) and the International Travel Survey (ITS). The Survey of Household Spending (SHS) is used in the calculation of tourism domestic demand for the territories.

On the left are the different supply surveys relevant to tourism, including surveys of the transportation, accommodation, food and beverages industries, etc. The I-O tables of the CSNEA draw on all these surveys, as well as a large number of other industry and household surveys, tax, customs and other administrative records, to build up detailed supply-side estimates for the economy overall. The CTSA, in turn, uses the I-O tables for supply-side data on tourism industries and also uses the surveys directly when more detailed information is required.

Figure 1 Canadian Tourism Satellite Account data sources



16. This chapter is based on information from survey descriptions, questionnaires and reporting guides available on Statistics Canada's website www.statcan.ca. See Appendix A on how to access this information.

The next sections review the surveys associated with the CTSA for the reference year 2002. First the surveys that cover different components of tourism demand are described. Following is an outline of several surveys of key tourism industries. The intent here is simply to summarize the surveys, as more complete documentation is available at Statistics Canada's website (see Appendix A). Data obtained from the CSNEA are described later in Chapter 4.

3.1 Demand surveys relevant to tourism

There are two main surveys relevant to the estimation of tourism spending. The Canadian Travel Survey captures the tourism expenditures of Canadians travelling in Canada on both intra- and inter-provincial trips. The International Travel Survey on the other hand captures tourism expenditures by visitors to Canada as well as the international travel spending of Canadian residents. A third survey, the Survey of Household Spending, is used to estimate tourism spending by northern residents, which is not covered in the Canadian Travel Survey. Each of these surveys is briefly described below.

Table 1 Selected information on demand surveys used in the Canadian Tourism Satellite Account, 2002

Title of survey	Target population	Key variables	Sample size	Response rate
Canadian Travel Survey	Civilian, non-institutionalized population, aged15+ in Canada's 10 provinces, excluding persons living on Indian reserves, full-time members of the Canadian Armed Forces, and persons living in institutions.	Spending on trips 80km or more one way from home that lasted less than one year and ended in the reference month on transportation, accommodation, food and beverages, etc. Characteristics of trips including purpose, origin, destination, duration, modes of transport, types of accommodation.	15,000 households per month	90%
International Travel Survey	All Canadian residents who return to Canada and all visitors entering Canada except for crews, diplomats and their dependants, refugees, landed immigrants, military and former Canadian residents (Canadian citizens returning to Canada to re-establish permanent residence after residing outside Canada for more than one year)	Spending on trips abroad by Canadians and visits to Canada by non-residents that lasted less than one year on transportation, accommodation, food and beverages, etc. Characteristics of trips including purpose, origin and destination, duration, modes of transport to enter/leave Canada.	47,000 returning Canadians 53,000 non-residents	n/a (1)
Survey of Household Spending	Private households in Canada, excluding persons residing in Indian reserves, communes, residences for senior citizens, foreign diplomats, military bases, institutions.	Spending inside and outside the province/territory of residence on transportation, accommodation, food and beverages, etc.	21,000 households	71%

1. The ITS consists of several components with response rates ranging from 5% (mail-back questionnaires) to 98% (air-exit survey).

3.1.1 Canadian Travel Survey

The Canadian Travel Survey (CTS) is a monthly survey conducted in cooperation with the Canadian Tourism Commission (CTC), ten provincial governments and two other federal government departments as a supplement to the Canadian Labour Force Survey (LFS), one of Statistics Canada's largest household surveys.

The CTS is administered to a sub-sample of the LFS. It is a voluntary survey with data collected directly from approximately 15,000 households per month. The CTS covers all household members over 15 years of age, and has a response rate of 90%. The LFS excludes residents of the territories (Yukon, Northwest Territories and Nunavut), Canadian armed forces, and persons living in institutions and on Indian reserves. As a result, these persons are also not included in the CTS, although calculations are made to cover residents of the territories (see section 5.3.5) in the CTSA.

The CTS uses three criteria to define "travel" to ensure that information collected is based on the definition of tourism. These criteria are: (i) the length of stay must be less than 365 days, (ii) the distance travelled one-way from home to the destination must be more than or equal to 80 kilometers for all Canadian residents[17] and (iii) the travel must have been completed during the reference month. This allows for the capture of data on trips that are less than one year, outside the usual environment, and in the reference month of interest.

The definition of "travel" on the CTS excludes commutes to and from work or school; moves to a new residence; trips by crews of bus, plane, train etc.; ambulance rides to hospitals or clinics; trips originating outside Canada and trips of more than 365 days. Commuting to work or school, trips by crews and ambulance rides are not travel outside the "usual environment" and thus are not tourism. Trips originating outside Canada are outside the scope of the CTS and in fact are covered in the International Travel Survey. Trips over 365 days are excluded as these are not defined as tourism.[18]

The CTS has both a national and a regional dimension. Travel expenditures are obtained for Canada as a whole and also by province visited. The survey collects data on various trip characteristics and links can be made to other variables from the LFS such as age, sex, marital status, level of education, and broad occupation groups. Other details can also be obtained such as whether the trip was same-day or overnight, the origin and destination of the trip; the places visited; the number of nights away; the type of accommodation used and how many nights in each (e.g., nights spent in hotel, camping or in the homes of friends and relatives).

Expenditure details are available as well, including: total spending; amount spent on car rental; commercial transportation such as air, bus, train or boat; accommodation; and food and beverages, etc.[19] The CTS asks for spending on travel packages, and details about their components. During survey processing, spending on packages is reallocated across component parts. Section 5.3.1 provides details on how the CTS expenditure data are used in the CTSA.

3.1.2 International Travel Survey

The International Travel Survey (ITS) estimates the expenditures associated with non-residents travelling in Canada and Canadians travelling abroad. The target population is all international travellers entering Canada by air, land and sea, including:

a) Canadians returning from the U.S.

b) Canadians returning from overseas

c) U.S. residents entering Canada

17. The survey also calculates tourism estimates for Ontario based on 40 kilometers although this information is not used in the CTSA.

18. Beginning in 2005, the CTS was replaced by the Travel Survey of Residents of Canada (TSRC). A major difference is in the operational definition of tourism. In the TSRC, tourism is defined as same-day trips that are "out of town" and forty kilometers or more one-way from home and all overnight trips that are "out of town". Exceptions concerning travel to work for education, for military purposes and migration remain. Routine trips (i.e., those that are made at least once a month) are now excluded from tourism, in order to better reflect the notion of usual environment. A more detailed explanation of the differences between the CTS and the TSRC is available in the documentation for the TSRC available at Statistics Canada's website. See Appendix A.

19. In the data processing stage, extremely high value expenditures (as can be associated with purchases of big ticket consumer durables such as yachts) are excluded to avoid distorting the statistics on travel spending over time.

d) Overseas residents entering Canada

This survey excludes crews, diplomats, military personnel, migrants and former residents (Canadian citizens returning to Canada to re-establish permanent residence after residing outside Canada for more than one year) who are considered out of scope for the CTSA. The ITS has three distinct components: (1) frontier counts of the numbers of travellers by country of origin, (2) mail-back questionnaire, and (3) Air Exit Surveys (AES) of overseas visitors.

The frontier counts come from forms filled out at border crossings, distributed or completed by the Canada Border Services Agency and Citizenship and Immigration Canada authorities. The information collected includes the number of travellers, port of entry, the number of vehicles and the type of transportation. Depending on the mode of entry into Canada, frontier counts may correspond to a complete census or a sample (e.g., the custom declaration cards of air travellers are sampled).

The counts come from the E-62 Entry Tally Form (which records the number of travellers and vehicles arriving by land and by ferry at points of entry on the United States-Canada border), the E-63 Commercial and Private Craft/Passenger and Crew Arrivals Form (used to record travellers entering Canada by private plane or boat) and the E-311 Customs Declaration Card (used to record all travellers entering Canada by commercial plane).

There are five different mail-back questionnaires distributed each quarter to travellers coming into Canada. The questionnaire varies depending on the type of traveller (i.e., from the US, from other countries or Canadian residents returning from abroad). This is a voluntary, sample survey with data collected directly from respondents. It targets international travellers using popular modes of transportation to enter Canada, including automobile, commercial planes, commercial buses, and commercial boats (Vancouver seaport only). Responses are weighted using frontier counts to represent the whole travelling population. Questionnaires provide quarterly information on trip expenses and characteristics of international travellers.

The final component of the ITS, the Air Exit Survey of Overseas Visitors (AES), was launched in 2000 to improve the quality of estimates on overseas travellers to Canada (i.e., resident of countries other than the US). The survey focuses on the countries from which Canada attracts the most visitors. For a period of three to five days each month, personal interviews are conducted at the departure lounges of five major international airports (Vancouver, Calgary, Toronto, Montreal and Halifax). Every attempt is made to have the interviews conducted in the native language of the traveller and the questionnaires are available in 10 languages. The countries targeted by the survey account for 80% of the total of overseas travellers flying directly to Canada.[20] Since 2000, the AES has achieved a response rate of over 90%.

Data collected from the ITS are at both the Canada and the regional level. The information obtained includes total spending and five component spending categories —accommodation, transportation in Canada, food and beverages, recreation and entertainment and other (souvenirs, shopping, etc.). Other information such as mode of transportation used to enter and exit Canada, type of entry, duration of trip or visit, origin or residence of traveller, area of destination, and purpose of trip are also available. As with the CTS, the ITS asks for information on travel packages. During survey processing, spending is reallocated across component parts of the package. For more on how the ITS spending estimates are used in the CTSA, see section 5.3.2.

3.1.3 Survey of Household Spending

Residents of the Yukon, the Northwest Territories and Nunavut are not covered by the CTS. Consequently, another source, the Survey of Household Spending (SHS), is used in the CTSA to estimate tourism domestic demand in these regions. This survey is conducted in the ten provinces and has information on the territories for 1997, 1998, 1999 and then every second year starting with 2001.[21] The target population is all private households in Canada. The SHS is a voluntary survey with data collected from personal interviews and questionnaires. It has a response rate of about 70%.

20. This is not to say that everyone surveyed is a resident of one of the targeted countries, as residents of other countries may be flying to these countries to get direct flights to Canada.

21. The SHS sample is selected from the LFS sampling frame, which includes the territories.

The SHS includes total purchases in and outside the province/territory of residence for spending categories such as rented accommodation, food purchased from restaurants, alcoholic beverages purchased from restaurants, food bought while on trips overnight or longer, board paid while on trips overnight or longer, hotels and motels, fees for rental cars, gas expenses on rented cars, city and commuter bus, various modes of transportation and recreation and entertainment activities. Section 5.3.5 discusses how the SHS expenditure estimates are used in the CTSA.

3.2 Supply surveys related to tourism

The surveys of several key tourism industries are described in this section. Again, the discussion relates to the surveys for the year 2002, for which the most recent CTSA was compiled. As mentioned above, the intent here is to briefly summarize the key surveys relevant to tourism. More in-depth information on survey reference and collection periods, target population, sampling strategies, edit and imputation, data accuracy and quality evaluation, can be found at Statistics Canada's website (see Appendix A).

In general, all surveys of businesses at Statistics Canada are mandatory. They are based either on a **census,** that is, a survey of all establishments in an industry, or a **sample**, that is, a survey of some fraction of establishments in an industry. All the surveys of the transportation industries shown in the table below are based on censuses, for example.

All the non-transportation surveys shown in Table 2, however, are sample surveys of establishments. In sample surveys, large establishments are always surveyed, medium-sized businesses are sampled, while the smallest establishments are excluded. Size thresholds are determined on the basis of revenue and vary by industry. Typically, the excluded establishments represent a large proportion of the establishments in an industry. For example, six out of ten establishments in the Traveller Accommodation industry are below the revenue threshold, and excluded.

The exclusion of these small establishments, however, has little impact on overall industry estimates for two main reasons. First, while they are numerous, their contribution to overall industry revenue is considerably less than their numbers would indicate. For instance, in the survey of Traveller Accommodation they contribute only one-tenth of overall industry revenue. Second, survey results are supplemented with estimates for non-surveyed establishments made on the basis of administrative data including tax returns, GST remittances, payroll deductions, and so on. These sources provide high quality information on items such as total revenue, expenses, depreciation, and wages, salaries and benefits.

3.2.1 Air transportation

The Aviation Statistics Centre of Statistics Canada, in cooperation with the Canadian Transportation Agency, conducts several surveys of the air transportation industry (as defined by NAICS 481). These surveys gather financial and operating statistics as well as other statistics on the activities of Canadian air carriers, the movement of aircraft, passengers and cargo by air, as well as fare and fare type information. While the transportation of goods is included in this industry, it is separated out for the purposes of the CTSA.

For the CTSA, the surveys of interest are mainly the civil aviation financial and operations surveys. These comprise the Major Carriers Key Financial and Operating Statistics Monthly Survey, the Air Carrier Operations in Canada Quarterly Survey, and the Canadian Civil Aviation Annual Report.

The universe for these surveys is all Canadian carriers licensed to perform commercial and charter transportation of passengers and goods. All such carriers must have a valid license issued by the Canadian Transportation Agency. This universe is grouped into six levels (Levels I - VI) based on passenger revenues or tons of goods transported. These levels reflect the reporting requirements of the carriers with each group and are reviewed annually. An airline may move from one level to the next based on its performance.

The survey is a census of all carriers. It is a mandatory survey that collects financial and operating data directly from respondents using mail-out/mail-back questionnaires. The data filed depends on the reporting level of the carrier, the smaller the carrier the less detail required and the less frequently the report is filed.

Each licensed operator must complete these forms. The data from each are compared to each other, and go through various edit and imputation procedures - and inconsistencies are examined. If questionable data are found, the company is contacted. If there is a complete non-response, estimates are made based on previous performance by the carrier or one with similar operations.

Table 2 Selected information on key business surveys used in the Canadian Tourism Satellite Account, 2002

NAICS title and code	Title of survey	Key variables	Response rate
481 Air transportation	Civil aviation (several surveys)	Financial data Market share Affiliate carriers Employment Commercial activity - Other financial data Income statements	
482 Rail transportation	Railway Transport Survey	Railway financial- Operating and traffic Equipment and fuel - Employment	
483 Water transportation	Financial Survey of Canadian Water Carriers	Employment and salaries Financial statement Fuel consumption and cost	
485110 Urban transit systems 485210 Interurban and rural bus transportation 485410 School and employee bus transportation 485510 Charter bus industry 485990 Other transit and ground passenger transportation 487110 Scenic and sightseeing transportation, land	Canadian passenger bus and urban transit industries	Revenue Expenses Operating statistics Employment Passengers carried	
5321 Automotive equipment rental and leasing	Annual Survey of Automotive Equipment Rental and Leasing	Financial and operating data Revenue by source (i.e., revenue from rental and leasing of passenger automobiles, truck, vans, RVs, etc.)	56%
5615 Travel arrangement and reservation services	Annual Survey of Travel Arrangement Services	Detailed characteristics (i.e., client base (%foreign /domestic) Revenue by type of service Expenses Employment	61%
71 Arts, entertainment and recreation	Annual Survey of Arts, Entertainment and Recreation	Revenue Expenses Operating statistics Employment	66%
721 Accommodation services	Annual Survey of Traveller Accommodation	Revenue by source (i.e., room rental, meals, service revenue, facility rental, etc.) Client base (%foreign / domestic) Operating expenses Facilities available (i.e., restaurant, bars, pool, convention centre, skiing facilities, etc.).	67%
722 Food services and drinking places	Annual Survey of Service Industries: Food Services and Drinking Places	Revenues Expenses Employment	69%

3.2.2 Rail transportation

The Railway Transport Survey is an annual survey which collects annual financial, operating and employment data from railways operating in Canada. This survey covers establishments in NAICS 482 that provide both passenger and freight services. While freight is included in this industry, it is separated out for the purposes of the CTSA.

Excluded from the survey are companies that provide rail support services (bridge and terminal service, etc.), sightseeing tours, and private railways that transport goods solely for parent companies and do not operate on a "for-hire" basis. Sightseeing tours by rail are covered in scenic and sightseeing transportation, land (NAICS 4871).

This survey is a census with cross-sectional design. It is mandatory with data collected directly from survey respondents using various mail-out forms and schedules required by Transport Canada. Companies under federal jurisdiction report directly to Transport Canada and the data are then obtained by Statistics Canada. All others report directly to Statistics Canada.

All data are edited for consistency and reliability through comparisons to previously reported data using computerized edits. Invalid records are corrected and missing or incorrect values are imputed.

3.2.3 Water transportation

The water transportation industry (NAICS 483) is covered by the Financial Survey of Canadian Water Carriers. This industry includes "for-hire" government and own-account carriers whose vessels may be registered in Canada or abroad and their activities may or may not take place in Canadian ports.

Excluded from the survey are companies that operate private pleasure craft, fishing boats, defence vessels, tour boats and bareboat charters (the charter of a boat without the services of a captain). Tour boats and bareboat charters are included elsewhere in scenic and sightseeing transportation, water (NAICS 487210), while pleasure boat rentals are found in other consumer goods rental (NAICS 532290).

This mandatory survey, which collects financial and operating data directly from respondents by mail-out/mail-back questionnaire, is a census that targets Canadian domiciled water carriers with reported operating revenues or expenses of $500,000 or more.

3.2.4 Bus transportation

The bus transportation industry in Canada includes urban transit (NAICS 485110), interurban and rural bus transportation (NAICS 485210), school bus transportation (NAICS 485410), charter bus services (NAICS 485510), shuttle services (NAICS 485990) and scenic and sightseeing transportation by bus (NAICS 487110). The industry is covered by the Canadian Passenger Bus and Urban Transit Industries Survey, a survey conducted by the Transportation Division.

This is a mandatory sample survey which collects financial, operating, and employment data directly from respondents.

3.2.5 Taxi transportation

The Survey of the Taxi and Limousine Services Industry (NAICS 4853) covers establishments primarily engaged in providing passenger transportation by taxi and limousine, not operated on regular schedules or routes. Taxicab fleet owners and organizations that provide dispatch services are included, regardless of whether drivers are hired, rent their cabs or are otherwise compensated. Owner-operated taxicabs (self-employed drivers) are also included.

This is a mandatory sample survey. Financial data are collected both from respondents and extracted from administrative records. Administrative (taxation) data are used for units below the threshold of annual gross business revenue of $30,000.

3.2.6 Rental of passenger and recreational vehicles

The Annual Survey of Automotive Equipment Rental and Leasing covers all establishments (in NAICS 5321) primarily engaged in renting or leasing vehicles, such as passenger cars, passenger vans, trucks, truck tractors, buses, semi-trailers, utility trailers and recreational vehicles (RV), without drivers. This mandatory sample survey collects financial and operating data. Data are collected through mail-back questionnaire directly from respondents and from administrative files.

This survey is used directly in the CTSA to calculate the supply of the commodity “rental vehicles”. This is done using details of revenue by source (i.e., revenue from rental and leasing of passenger automobiles, truck, vans, RV, etc.), which are not explicitly available in the I-O tables due to aggregation.

3.2.7 Accommodation

The Annual Survey of Traveller Accommodation collects financial and operating information directly from the accommodation service industry (NAICS 721). This covers hotels, motels, resorts, casino hotels, bed and breakfasts, outfitters, camping grounds, and other establishments providing accommodation for travellers. The survey results are supplemented with administrative (taxation) data. Data are verified for errors, inconsistencies and missing information. Missing or erroneous information may be imputed or supplemented by administrative data.

Detailed information from this survey is used directly in the CTSA to identify the non-tourism portion of the industry (i.e., rooming and boarding houses, NAICS 7213) and to calculate the supply of the commodity “accommodation” at a more detailed level (hotel, motel, camping and other accommodation) than available in the I-O tables.

3.2.8 Food and beverage services

The Annual Survey of Service Industries: Food Services and Drinking Places (NAICS 722) collects financial and operating data from establishments such as restaurants, bars, coffee shops, nightclubs, etc., as well as food services from “leased” facilities in hotels, and shopping malls. However, excluded are food service activities in hotels,[22] social associations, amusement and recreation parks, and theatres.[23]

This is a mandatory sample survey which collects financial and operating data directly from respondents by way of a mail-out/mail-back questionnaire. Survey results are supplemented with administrative data.

The survey data are used directly in the CTSA to isolate the non-tourism portion of the industry (special foods services – NAICS 7223) which is not identifiable in the I-O tables. This detail is also used to determine the supply of “meals” and “alcoholic beverages” from accommodation, restaurants and other industries.

3.2.9 Motion picture theatres—Motion picture exhibition

The Motion Picture Theatres Survey[24], covering NAICS 512130, collects employment and financial data from motion picture and drive-in theatres in Canada. This includes IMAX theatres, outdoor theatres and film festivals.

This mandatory survey is a census with data collected directly from survey respondents using a mail-out/mail-back questionnaire.

3.2.10 Recreation and entertainment

The Annual Survey of Arts, Entertainment and Recreation[25] covers all establishments classified to NAICS 71. This includes performing arts companies such as theatres, dinner theatres, and opera; zoos and botanical gardens, historic and heritage sites, amusement and theme parks, golf courses, skiing facilities, hunting and fishing tourist guide services, etc.

22. Room service and hotel dining rooms are not included. If however a hotel dining room is a separate establishment, i.e., “leases” its facilities, then it would be included here.

23. Dinner theatres are included in the recreation and entertainment industry.

24. With the 2005 reference year, this survey was changed to Annual Survey of Service Industries: Motion Picture Theatres.

25. In 2006, this survey was changed to Survey of Service Industries: Amusement and Recreation.

Excluded are facilities that provide both accommodation and recreation such as casinos, resorts and hunting and fishing camps. These are covered under the accommodation industry survey.

This is a mandatory sample survey that uses mail-out/mail-back questionnaires to elicit financial and operating data. Information is collected directly from respondents and extracted from administrative (taxation) files.

3.2.11 Travel arrangement services

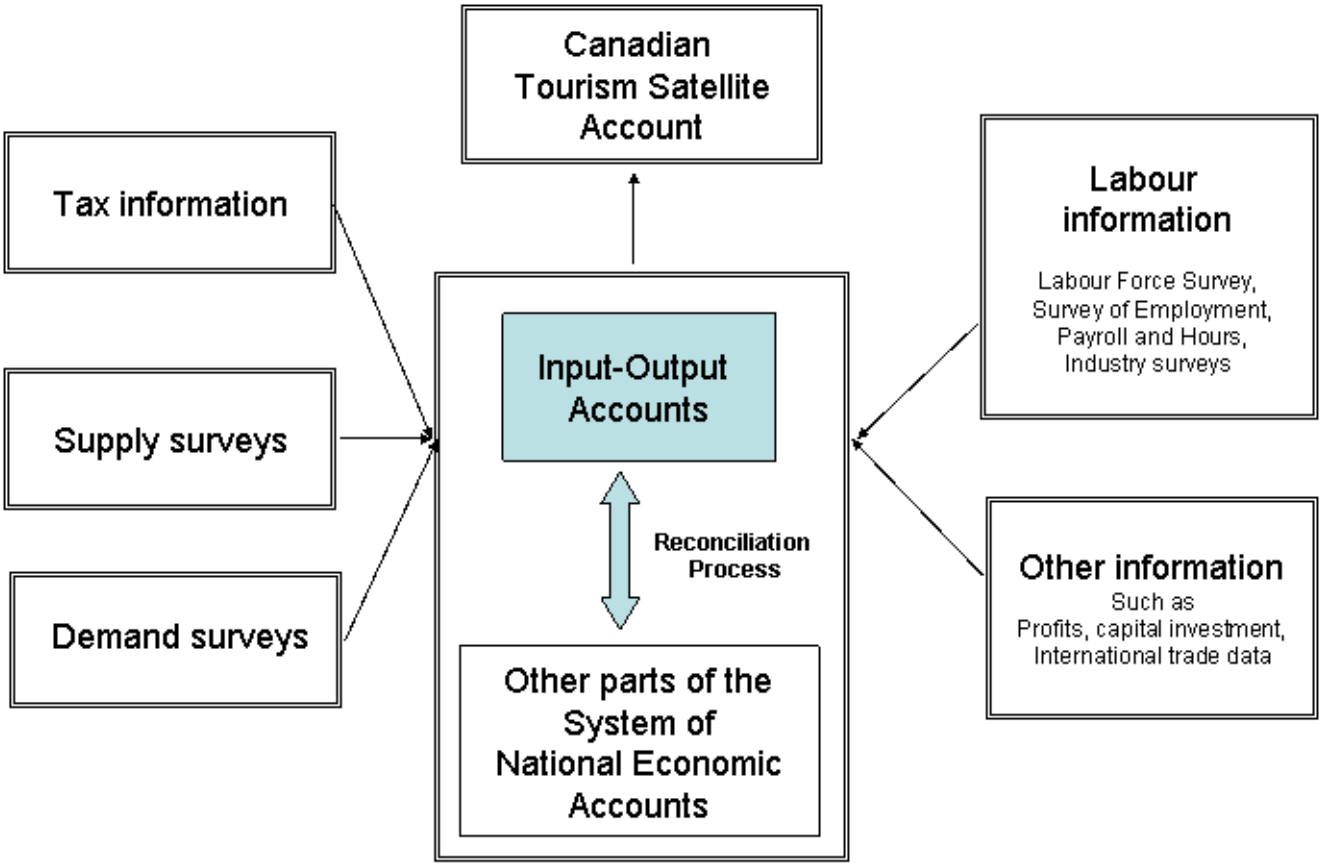
The Annual Survey of Travel Arrangement Services targets all establishments classified to NAICS 5615. This includes travel agencies; tour operators and wholesale operators; convention and visitors' bureaus; airline, bus, railroad and steamship ticket offices; sports and theatrical ticket offices; airline, hotel and restaurant reservation offices. Excluded from the survey are hunting and fishing tourist guide services, which are included under recreation and entertainment.

This is a mandatory sample survey that collects data directly from respondents through a mail-out/mail-back questionnaire. This survey collects detailed characteristics such as client base, revenue by type of service, detailed expense items and employment data from retail travel agencies, tour operators, wholesaler operators, and other miscellaneous service industries. Survey results are supplemented with administrative data.

4 System of National Economic Accounts data for the Canadian Tourism Satellite Account

The CTSA relies heavily on the I-O tables of the Canadian System of National Economic Accounts. These tables provide the most comprehensive and detailed economic data by commodity and by industry in the CSNEA. The compilation of the I-O tables involves the integration and the reconciliation of massive amounts of economic information from a wide array of survey and administrative data sources. The diagram below summarizes the different sources.

Figure 2 System of National Economic Accounts data used in the Canadian Tourism Satellite Account



The I-O tables are especially important to the CTSA for several reasons. First, the estimates of the supply of tourism and of non-tourism commodities by tourism and non-tourism industries are taken from these tables. Second, tourism GDP by industry is derived from estimates of GDP by industry in the I-O tables. Third, since the I-O data have gone through a rigorous integration and reconciliation process their quality is considered very good. This turns out to be an important consideration when reconciling supply with demand for tourism commodities. Finally, they provide the classifications that help define the structure of the CTSA in terms of its industry and commodity details. The following sections thus briefly discuss this key source of data.

4.1 Input-output tables

The I-O tables are presented in three main tables, namely, the Output, Input, and the Final Demand tables. Taken together, these tables show the production of goods and services, the generation of income from the production process and the flows of goods and services through the economic system between producers and consumers.

The **Output table**, also known as the Make Matrix, is where the values of production of goods and services are recorded for each industry in the economy. In most cases, domestic production or output of an industry is simply its sales or shipments, measured at (modified) basic prices, or the prices received by producers. Estimates of the supply of tourism commodities in the CTSA come from this table (see section 5.2).

The **Input table**, also known as the Intermediate Use Matrix, is where purchases of the various commodity inputs to production are presented for each industry in the economy. This table also shows the costs of "primary inputs" to production, including labour income, income of unincorporated businesses, other operating surplus and net indirect taxes. The estimates of GDP attributable to tourism are based on the data reported in this table (see section 5.5.2).

Last, the **Final Demand table** shows expenditures on goods and services that are for final use (i.e., consumed, used as capital investment, or exported). While all purchases by households (persons) are considered final consumption in the SNA, businesses and governments make purchases both as intermediate and as final expenditure. This table provides details on consumer spending that are used, along with other indicators, to split out more aggregated data obtained from the travel spending surveys (see sections 5.3.1 and 5.3.2).

Two broad classifications are used in the I-O tables to specify both commodities and industries. At the most detailed level over 700 commodities are specified, including some 23 that are defined as tourism commodities in the CTSA. In addition, there are over 300 industries, 18 of which are identified as "tourism industries" in the CTSA.

4.2 Balancing industry and commodity accounts in the I-O tables

One of the most important accounting identities (or constraints) found in the I-O tables is that supply must equal demand for each commodity. In other words, the sum of the expenditures on a particular commodity must equal the revenues generated from sales (taking into account exports and imports). Similarly, there is an additional constraint that each industry's total output (revenues) must equal its total inputs (costs).

In practice, these identities are not satisfied as a result of limitations of the statistical system. For instance, data obtained from surveys or administrative sources provide different estimates for the same phenomenon, have different levels of quality, may contain reporting errors, and may not provide complete coverage, and so on. Ensuring that the data jointly satisfy both of these accounting identities through an iterative process referred to as the balancing of industry and commodity accounts is an integral part of compiling the I-O tables.

Certain rules of consistency are followed during this process. For example, in the balancing of the industry account, the ratios of GDP, surplus, mixed and labour income, indirect taxes and material, energy and service inputs to gross output are all checked for consistency for each industry. Balancing the commodity account entails a similar set of consistency checks. The balancing process overall is a rigorous test for coherency across all the data that goes into the I-O tables. With each iteration, data inconsistencies are revealed, the reasons for them are identified, and corrective steps are taken to reconcile the data.

4.3 International and inter-provincial trade in goods and services

Data for international trade in goods and services are integrated and reconciled along with other data on supply and demand by commodity in the I-O tables. In the case of tourism commodities, information from the CTS is used to distribute the domestic demand for tourism goods and services across the provinces and territories. Similarly, the ITS data are used to estimate international trade in tourism goods and services. These surveys are also drawn upon in the balancing process to ensure consistency with the rest of the economy.

Data from the ITS in particular form the basis of the International Travel Account which records the receipts from travel to Canada and the payments associated with Canadian travel abroad which in turn is part of BOP. It might be noted that the BOP travel estimate includes spending by airline crews and spending related to travel for health and education purposes which are excluded by definition from tourism in the CTSA.

Inter-provincial trade estimates also go through a reconciliation process in the I-O tables. Data sources vary depending on the commodity. For example, manufacturing data use destination of shipments information from the Survey of Manufacturers. Travel spending data use origin/destination of trip information from the Canadian Travel Survey. Like other data in the I-O tables, the inter-provincial trade data are reconciled by province/territory and by commodity to ensure that supply and demand are equal.

4.4 Value added and employment

In the I-O tables, value added or GDP, is measured at current prices (not adjusted for inflation) and at basic prices. It can be calculated in three ways, however, for the purposes of the CTSA, the method of summing the cost of the primary inputs of each industry is most relevant.[26] These inputs are the returns to labour and capital for the services supplied in the production process. They include wages and salaries, supplementary labour income (SLI), mixed income and other primary costs.

Wages and salaries and SLI are the returns to labour from production. **Wages and salaries** are recorded on a gross basis, that is, inclusive of taxes and other payroll deductions for employee contributions to pension plans and social insurance. **Supplementary labour income** is the contributions made by employers on behalf of employees to pension plans and social insurance. Labour income data by industry are compiled from several sources including tax data and industry survey data on business operating expenses.[27]

Mixed income is the net income of unincorporated businesses. Since owners of these businesses generally provide labour and capital to the business, their income is a mix of returns to both labour (wages) and capital (profits and other operating surplus).

Other primary costs include (i) other operating surplus, which includes profits and depreciation or capital consumption allowances as well as net interest paid (ii) other taxes on production (e.g., payroll and property taxes) and (iii) other subsidies on production (e.g., workforce training subsidies).

The CTSA employment data come from the Canadian Productivity Accounts of the CSNEA. These accounts provide information on employment following SNA principles and using I-O industries. At the aggregate level, the number of jobs in this database is benchmarked to the Labour Force Survey (LFS). The industry distribution of these jobs, however, is primarily based on information from the Survey of Employment, Payrolls and Hours, although other industry survey and administrative sources are used as well.

The measure of employment here is of the number of jobs held by the self-employed, employees and unpaid family workers. This includes the second jobs of multiple job holders (i.e., the second jobs of persons who hold two or more jobs are counted).[28] Additions are made for employment not covered by the LFS (e.g., regular military, employed persons in the territories or living on indian reserves and civil servants working in embassies abroad) to reflect the total economy. Deductions are made to exclude those absent from work without pay during the reference

26. GDP can be calculated as (i) the sum of primary incomes or (ii) the sum of final expenditures or (iii) the sum of value added (production less the cost of intermediate inputs).

27. It might be noted that adjustments for selected tips that go unreported are made to the wage and salary benchmarks for several tourism industries, including performing arts and spectator sports and related industries (NAICS 711), amusement and recreation industries (NAICS 713), accommodation services (NAICS 721) and food services and drinking places (NAICS 722). The adjustments are made on the basis of industry sales of alcoholic beverages, full service restaurant meals (i.e., no tips are assumed on fast food), and accommodation. To give some idea of the magnitude of these adjustments, in 2000, the imputations amounted to $2.2 billion. There are additional, smaller imputations for tips in personal care services (barbershops and beauty salons, etc.) and railway transportation (for luggage porters) industries. Imputations are not presently made for all unreported tips (e.g., taxi drivers, luggage porters at airports) however. Corresponding adjustments are made to the industry sales as well.

28. While third and fourth jobs are not counted, all hours worked at these jobs are attributed to the second job, and counted as hours worked at that job.

week. The estimates of jobs are not on a full-time equivalent basis,[29] that is, a job in which someone works 10 hours a week counts for as much as a job in which someone works 50 hours a week. Last, jobs are counted on an "annualized basis" that is, a job that exists for nine months in the year counts as 3/4 of a job.

29. While not in the CTSA, estimates of the number of full-time equivalent jobs directly attributable to tourism are available in the Tourism Human Resource Module.

5 Methods used in the Canadian TSA

As mentioned earlier, tourism is not an industry explicitly identified in the CSNEA as it cuts across several industries. Compilation of the CTSA thus requires the identification of tourism industries and splitting them into their tourism and non-tourism components. It also requires the derivation of tourism supply, the estimation of demand, the confrontation and reconciliation of supply and demand, and the calculation of tourism GDP and employment. This chapter outlines the various steps in this process, using the CTSA 2002 as an example.

5.1 Selection of tourism commodities and industries

As mentioned in section 2.1, the work and findings of the National Task Force on Tourism Data during the mid- to late 1980s provided the basis for determining which commodities and industries to include in the CTSA. The Task Force recommended both the definition of tourism commodities and industries that are essentially used today. It also proposed lists of tourism commodities and industries that underlie those currently included in the Account.

The first step was to identify the tourism commodities, that is, those for which tourism spending is a significant part of the demand. The commodities recommended by the Task Force, with a few exceptions (caleches, government tourism services, telephone communications, terminal and duty free goods), are currently identified in the CTSA. Some commodities, notably convention fees and tourism single-purpose consumer durable goods, have been added. The current list is shown in Appendix C, along with the mapping to commodities of the I-O tables. Some 23 tourism and four non-tourism commodities purchased by tourists are identified in the CTSA.

The next step was to identify the industries that supply tourism commodities, that is, those that would cease or continue to exist only at a significantly reduced level of activity as a direct result of the absence of tourism. Again the industries proposed by the Task Force are largely covered in the CTSA with the exception of government tourism services and telephone communications. Some 18 industries in the I-O tables are identified as being tourism industries or at least having a tourism element. These in turn are aggregated from 77 even more detailed industries at the 6-digit level of NAICS. Appendix D lists these industries, showing which ones are identified as a tourism industry or not based on application of the definition (see section 2.4.3).

5.2 Derivation of tourism domestic supply

Tourism domestic supply is the total production (or gross output) of tourism commodities in Canada. Its calculation in the CTSA starts with the I-O output table which shows the total output of commodities by industry. The methods used in the PTSA are the same, except that the data come from the provincial/territorial I-O tables.

Table 3 Output of the food services and drinking places industry, by commodity

Code	Commodity	millions of dollars
1162	Distilled alcoholic beverages, licenced premises	1,200
1192	Beer, including coolers, licenced premises	1,600
1202	Wine, including coolers, licenced premises	900
5531	*Retailing margins*	440
5554	*Royalties and licence fees*	380
5594	*Non-residential rent*	40
5653	Other amusement and recreation services	40
56902	Other accommodation services	30
57001	Meals (outside home)	13,200
5725	Other personal services	40
5792	*Rental, other machinery and equipment*	80
	Gross output at basic prices	**17,950**

Note: Fictive estimates for example only. Non-tourism commodities in italics.

These tables do not provide enough detail in some instances. For example, they display estimates only for the total food services and drinking places industry (I-O NAICS 722000). Table 3 shows the output of all commodities (tourism and non-tourism) as might be found in the output table for this industry. As can be seen, most of the $18 billion of output is attributable to the tourism commodities, meals ($13.2 billion) and beverages ($3.7 billion), while a much smaller part is attributable to non-tourism commodities, like royalties and rent.

Table 4 shows the same data from Table 3 above, but splitting out the industry details for the CTSA. This is done using information from detailed I-O worksheets. One of the industries, special food services (NAICS 7223), which includes caterers and food service contractors, is considered a non-tourism industry. This industry would not be significantly affected, at least not directly, in the absence of tourism.[30] It is put aside (along with the non-tourism industries) while the other three, which are considered as tourism industries, are retained for further calculations.

Table 4 Output of the food services and drinking places industry, by sub-industry and commodity

Code	Commodity	Food services and drinking places	Full-service restaurants	Limited-service eating places	Special food services	Drinking places (alcoholic beverages)
		millions of dollars				
1162	Distilled alcoholic beverages, licenced premises	1,200	800	0	0	400
1192	Beer, including coolers, licenced premises	1,600	1,000	0	0	600
1202	Wine, including coolers, licenced premises	900	500	0	0	400
5531	*Retailing margins*	440	50	40	300	50
5554	*Royalties and licence fees*	380	50	30	300	0
5594	*Non-residential rent*	40	10	10	10	10
5653	Other amusement and recreation services	40	10	12	10	8
56902	Other accommodation services	30	10	10	0	10
57001	Meals (outside home)	13,200	6,000	4,000	3,000	200
5725	Other personal services	40	10	10	10	10
5792	*Rental, other machinery and equipment*	80	20	20	20	20
	Gross output at basic prices	**17,950**	**8,460**	**4,132**	**3,650**	**1,708**

Note: Fictive estimates for example only. Non-tourism commodities in italics.

Several of the outputs (retailing margins, royalties and license fees, non-residential rent, and rental, other machinery and equipment) are considered non-tourism commodities because tourism is not a significant source of their demand. These are put aside as well in order that only tourism commodities remain in the calculation of tourism domestic supply. More generally, only the tourism commodities produced by the tourism industries are retained in calculations relating to tourism domestic supply.

Table 5 shows the details for the tourism industries and tourism commodities from Table 4 that would be included in the CTSA. The tourism domestic supply from food services and drinking places is $13.99 billion, 78% of the industry's total output in the I-O tables.

30. Because the catering industry includes establishments supplying meals to the airlines and other transportation industries, it would be indirectly affected by an absence of tourism.

Table 5 Output of tourism commodities by tourism sub-industries of food services and drinking places

Code	Commodity	Food services and drinking places (CTSA)	Full-service restaurants	Limited-service eating places	Drinking places (alcoholic beverages)
		millions of dollars			
1162	Distilled alcoholic beverages, licenced premises	1,200	800	0	400
1192	Beer, including coolers, licenced premises	1,600	1,000	0	600
1202	Wine, including coolers, licenced premises	900	500	0	400
5653	Other amusement and recreation services	30	10	12	8
56902	Other accommodation services	30	10	10	10
57001	Meals (outside home)	10,200	6,000	4,000	200
5725	Other personal services	30	10	10	10
	Tourism domestic supply	**13,990**	**8,330**	**4,032**	**1,628**

Note: Fictive estimates for example only.

Some tourism commodities are not produced by tourism industries (vehicle fuel, vehicle repairs and parts and tourism single-purpose consumer durable goods). In the case of vehicle fuel and repairs and parts, the gross output of these commodities is used as tourism domestic supply. For example, if the Canadian economy produces $20 billion of vehicle fuel, as shown in the I-O output tables, this is taken as tourism domestic supply of vehicle fuel. This is available for tourists and non-tourists alike (as well as for export).

In the case of the tourism single-purpose consumer durable goods, however, tourism domestic supply is simply made equal to tourism spending. So if spending on tent trailers is $300 million, the tourism domestic supply for this commodity would be $300 million. Tourism spending in turn is estimated using a supply-disposition method with data not available in the I-O tables (see section 5.3.6).

In addition, some non-tourism commodities produced by non-tourism industries (groceries, beer, wine and liquor from stores, urban transit and parking and miscellaneous commodities) are occasionally purchased by tourists and included in the CTSA. Domestic supply estimates for these commodities are just the domestic output as shown in the I-O tables. For miscellaneous commodities, the domestic supply is calculated residually as total economy-wide output less the tourism domestic supply.

The CTSA estimates of tourism domestic supply and the domestic supply of non-tourism commodities, at market prices, are shown in Appendix Table E (in the fourth column). In 2002, total domestic output (supply) was $2,222 billion at market prices, consisting of $128 billion of tourism commodities and $2,094 billion of non-tourism commodities.

5.3 Derivation of tourism demand

Tourism demand consists of domestic and international demand. Domestic demand includes the expenditures associated with tourism activity in Canada by residents. International demand consists of the expenditures by non-residents in Canada on tourism.

Table 6 Calculation of tourism demand in the Canadian Tourism Satellite Account, 2002

	millions of dollars
Survey data	
Domestic demand (CTS)	30,926
International demand (ITS)	17,812
	48,738
Additions	
Domestic portion of international trips	365
Canadian fares on international trips	5,151
Domestic demand (territories)	124
Pre-trip expenditures (tourism single-purpose consumer durables)	2,015
Travel agent commissions	974
Total of additions	**8,628**
Demand-to-supply reconciliation	-806
Tourism demand	**56,560**

The calculation for tourism demand in the CTSA begins with data from the CTS and the ITS. Tourism spending as published in these surveys amounted to $48.7 billion in 2002. In the CTSA, another $8.6 billion was added to reflect several items that are either collected by the surveys, but not included in published results, or not collected at all. Last, $800 million was removed because estimates of tourism domestic supply indicated lower spending than reported on the demand-side surveys. Table 6 summarizes the various steps, and then each is discussed separately below.

5.3.1 Tourism expenditures from the Canadian Travel Survey

The Canadian Travel Survey collects information on expenditures and trip characteristics of Canadians while travelling in the country. Table 7 shows the CTS 2002 estimates by detailed expenditure category.

Table 7 Tourism spending by Canadians in Canada, 2002

Canadian Travel Survey expenditure categories	millions of dollars
Transportation fares	4,872
Local transportation	267
Vehicle rental	769
Vehicle operation	5,738
Accommodation	5,152
Food and beverages from restaurants and bars	5,556
Food and beverages in stores	1,875
Recreation and entertainment	2,118
Clothing	2,822
Other costs	1,758
Tourism domestic demand	**30,926**

Table 8 shows how the spending categories from the CTS are matched to the more detailed commodities of the CTSA and how the associated dollar amounts are distributed. It is important to note that this process does not alter the total expenditures as recorded on the CTS.

Table 8 Allocation of Canadian Travel Survey spending to the commodities of the Canadian Tourism Satellite Account

Canadian Travel Survey spending categories	Allocation method	Canadian Tourism Satellite Account commodities
Transportation fares	Use CTS mode of transportation (air, rail, water, bus)	Passenger air Passenger rail Passenger water Interurban and other bus
Local transportation	Personal expenditure share of local transportation used for taxis, with remainder allocated to urban transit and parking	Taxis Urban transit Parking
Vehicle rental	No reallocation required	Vehicle rental
Vehicle operations	Personal expenditure and I-O splits of vehicle operations	Vehicle repair and parts Vehicle fuel
Accommodation	Number of nights stayed and average price in each type of accommodation from CTS	Hotels Motels Camping Other accommodation
Food and beverages from restaurants and bars	Personal expenditure used to split spending on meals versus alcohol	Meals from accommodation Meals from restaurants
	Industry output is then used to split spending across industries: accommodation, restaurants and other	Alcohol from accommodation Alcohol from restaurants
		Meals and alcohol from other tourism industries
Food and beverages bought in stores	Personal expenditure ratios for food versus alcohol from stores	Groceries Alcohol bought in stores
Recreation and entertainment	No reallocation required	Recreation and entertainment
Clothing, other costs	No reallocation required	Other commodities

The transportation fare reported for each trip, in the CTS micro-data file, is split into spending on four tourism commodities in the CTSA (passenger air, rail, water and bus) using the reported mode of transportation. In this case “mode of transportation” means the mode used to travel the greatest distance. This is not necessarily the mode that is used the most or on which spending is the greatest. For example, consider a trip where air is used to cross the country (the greatest distance) but train and bus are used to return home. Following the CTSA methodology, the transportation fare would be entirely assigned to air. Consequently, in some cases this procedure introduces discrepancies at the micro-level. However, these are subsequently resolved when air transportation demand is reconciled at the macro-level with the supply.

Spending on local transportation is split into taxis and urban transit and parking using I-O data. For example, if the I-O final demand tables show that 53% of consumer spending on local transportation is on taxis with the remainder on urban transit and parking, and the CTS reports that tourists spend $267 million on local transportation, this amount is split 53% to taxis and 47% to urban transit and parking in the CTSA. Spending on “vehicle operations” is similarly split into two commodities, vehicle repair and vehicle fuel. In this case, data on consumer and business spending from I-O are used to split out the detail.

Accommodation spending from the CTS is split into four commodities (hotels, motels, camping, other accommodation). This is done using the "number of nights stayed" in each type of accommodation available from the CTS micro data file and an average price.[31] While the procedure introduces discrepancies at the micro-level, these are resolved when the demand estimates are compared at the macro-level and reconciled with the supply.

Details from I-O on consumer spending are used to split "Food and Beverages from Restaurants and Bars" first into a meals part and an alcohol part. Then I-O details on industry output are used to split spending on meals by industry (i.e., accommodation, restaurants, and other) and spending on alcohol by industry. In using the consumer spending and industry output data in this way, two implicit assumptions are made. First, the spending patterns of tourists and non-tourists are deemed to be the same or at least, not too different from each other. Second, demand is assumed to have the same distribution across industries as supply. In other words, if 10% of the meals are produced by the accommodation industry, 70% by restaurants, and 20% by other industries, then tourism spending on meals is assumed to be distributed in the same proportions. Further refinements are then made during the reconciliation at the macro-level with the supply-side.

Last, several categories of spending have a one-to-one correspondence with commodities of the CTSA. This is the case with recreation and entertainment, vehicle rental, clothing and other costs.

5.3.2 Tourism expenditures from the International Travel Survey

The International Travel Survey provides estimates of travel spending in Canada by non-residents as well as Canadian travel spending abroad. Table 9 shows the eleven categories of expenditure and associated spending by non-residents available on this survey for the reference year 2002.[32]

Table 9 Non-resident tourism spending[1] in Canada, 2002

International Travel Survey expenditure categories	millions of dollars
International fares	2,947
Transportation in Canada	2,015
of which:	
a. air transportation	64
b. other commercial transportation	575
c. rented car	612
d. private transportation	432
e. unknown transportation	332
Accommodation	4,629
Food and beverages	3,564
Recreation and entertainment	2,048
Other	2,609
Tourism international demand	**17,812**

1. Excludes travel spending by commuters, in–transit travellers and foreign students, so spending differs from amounts shown in the International Travel Survey.

31. With the CTS micro-data it is straightforward to assign accommodation spending to type of accommodation when the trip involves only one type of accommodation. The difficulty arises when the trip involves more than one type, because the CTS only collects spending on accommodation in total. To give an example of how the procedure works, first, an average price (per night) is estimated for each type of accommodation from the sample of trips with only one type. Suppose the price estimated for one night in a hotel is $150, while that for a motel is $100. Now, consider a respondent who reports two nights in a hotel and one night at a motel. At the average prices estimated in the first step, two nights in a hotel would cost $300, while one night in a motel would cost $100, for a total of $400. This provides shares (75% hotel and 25% motel) that can be used to split the actual total spending. Thus, if the respondent reports spending $500 for two nights at a hotel and one night at a motel, 75% (or $375) is allocated to hotels, and the remainder (25%, or $125) to motels.

32. It might be noted that the ITS only captures a total for transportation fares. The details shown in Table 9 come from the "ITS provincial harmonized survey results" which are obtained during survey processing by using related information from the questionnaires, for example, on the different reported modes of transportation used within Canada.

As is the case with the CTS, the commodity details available on the ITS do not match those of the CTSA. As a result, several procedures are used to break out the details. Table 10 below shows the concordance between the ITS and the CTSA commodity categories and describes the method used to convert to the latter.

Table 10 Allocation of International Travel Survey spending to the commodities of the Canadian Tourism Satellite Account

International Travel Survey spending categories	Allocation method	Canadian Tourism Satellite Account commodities
International fares	Percent of trips using air, rail, water or bus as mode of transport to enter and to leave Canada	Passenger air Passenger rail Passenger water Interurban and other bus
Transportation in Canada		
Air transportation	No reallocation required	Passenger air
Other commercial	Percent of trips using rail, water or bus (from ITS)	Passenger rail Passenger water Interurban and other bus
Rented car	No reallocation required	Vehicle rental
Private transportation	Personal expenditure and I-O splits of fuel, vehicle repair and parts	Vehicle repair and parts Vehicle fuel
Unknown transport	I-O output distribution of local transportation Personal expenditure and I-O splits for taxi, urban transit, parking	Taxis Urban transit Parking
Accommodation	Number of nights stayed and average price in type of accommodation	Hotels Motels Camping Other accommodation
Food and beverages	Use personal expenditure ratios to split spending into: (a) Food and alcohol bought from stores (b) Food and alcohol from other	Food bought from stores (groceries) Alcohol bought from stores
	Then, use personal expenditure ratios to split (a) and (b) further into food versus alcohol	Meals from accommodation Meals from restaurants
	For (a), no further split required	Alcohol from accommodation Alcohol from restaurants
	For (b) (both the food and alcohol portions), industry output is used to split spending across industries: accommodation, restaurants and other	Meals and alcohol from other tourism industries
Recreation and entertainment	No reallocation required	Recreation and entertainment
Other	No reallocation required	Other commodities

International transportation fares are allocated to four tourism commodities in the CTSA (passenger air, rail, water and bus) using the mode of commercial transportation used to enter and leave Canada available on the ITS micro-data file.

"Transportation in Canada", made up of five modes (air, other commercial, rented car, private and Other/unknown transportation), corresponds to spending on transportation while travelling in Canada. "Air transportation" and "rented car" carry over to the CTSA without change. "Other commercial transportation" is allocated to three commodities (passenger rail, water and bus) using the proportion of spending on each mode observed for domestic tourism on the CTS.[33] Private transportation is split into two commodities (vehicle repair and parts, and vehicle fuels) with I-O data on consumer and business spending. Other or "unknown transportation" is assigned to taxis, urban transit and parking using consumer spending on these commodities.

Accommodation spending from the ITS is split into four commodities (hotels, motels, camping, other accommodation). As with the CTS, this is done using the "number of nights stayed" in each type of accommodation and an average price.

The ITS spending category "Food and Beverages" is split into several commodities. First, details on consumer spending are used to split out spending at stores versus at restaurants and bars and spending on food versus alcohol. Then I-O details on industry output are used to further split out food and beverages from restaurants and bars by industry (i.e., accommodation, restaurants, other).

Spending on "Recreation and Entertainment" and "Other" are carried over to the CTSA without further transformation.

5.3.3 Domestic portion of international trips

The domestic portion of an international trip is the non-fare spending by Canadians on the Canadian leg of a trip destined outside the country. For example, in the case of a Canadian flying to New York from Winnipeg through Toronto, the non-fare spending (e.g., on meals or other purchases in Canadian airports) associated with the Winnipeg to Toronto portion of the trip is considered as the domestic portion of an international trip. This adjustment amounted to $365 million, a relatively small 1% of tourism demand in 2002. Nonetheless, this is included in the CTSA, because it involves economic production in Canada. It might be noted that these data come from the CTS, which collects them, but does not include them in published results.

5.3.4 Canadian fares on international trips

An additional calculation is made to include the fares paid by Canadians on international trips made using Canadian carriers. This is a significant addition, which amounted to $5.2 billion or 9% of tourism demand in 2002. These fares must be included because the service is part of domestic production, despite the fact that the trip destination is outside of Canada. The data for this adjustment come from the ITS. The ITS does not publish these data, however, because they do not reflect exports of a service but rather transactions between residents of Canada. In the PTSA, these expenditures are allocated to the province of residence of the traveller.

5.3.5 Domestic demand for the territories

Another calculation is made to include the domestic tourism spending of territorial residents who are excluded from the CTS. Supply (revenue) data are available for all the tourism commodities in the territorial I-O accounts. International demand is derived from the ITS and inter-provincial demand (i.e., spending by residents of the ten provinces who visit the territories) is derived from the CTS.

Domestic demand for the territories is calculated using data from the SHS, which provides estimates of spending on tourism commodities such as accommodation and food and beverages.[34] The results are compared and reconciled with total demand estimated using the national average for each tourism commodity ratio and

33. In the absence of better information with which to impute details that are not available from the surveys, patterns of overall consumer and business spending are typically used in the CTSA. However, in this case, proportions determined from spending patterns on types of commercial transportation of Canadian tourists are available from the CTS. These are considered to be better suited to impute the missing detail on non-residents' purchases than the spending patterns of consumers and business in general. This procedure does not affect the total spending from the ITS on commercial transportation.

multiplying it by the total supply for each tourism commodity in the territories. This is a relatively small addition, amounting to only $124 million in 2002, or 0.2% of tourism demand. However, It represents a substantial adjustment to the estimates for the territories in the PTSA.

5.3.6 Pre-trip expenditures

Spending made by a traveller for the sole purpose of travelling is another important addition in the CTSA. These “pre-trip” expenditures include spending on five items: motor homes, travel and tent trailers, luggage and travel sets, tents and camping equipment and sleeping bags. This tourism spending is not captured in the travel surveys as it typically occurs outside the context of trips. An additional $2.0 billion is included in the CTSA as an estimate of Canadians’ tourism spending on these items.

This estimate is calculated at the national level using a supply-disposition method. For each good, total exports are subtracted from total supply (including imports and items manufactured) to obtain the total disposition in Canada.[35] The resulting value is then multiplied by the I-O mark-up price, associated with each, to obtain the total revenue from sales, at purchaser prices.

For the PTSA, the supply-disposition calculation is not done because the inter-provincial trade data for these commodities are not considered reliable enough to get accurate results. Instead, the Canadian totals are distributed by province and territory using shares for these commodities from consumer spending in the I-O tables.

5.3.7 Tips

Prior to 2000, tips were not explicitly captured in the travel surveys, consequently, in the CTSA, tips were added to the domestic demand, specifically for accommodation and restaurants. Starting with the CTSA 2000, this adjustment was no longer necessary as tips were covered in the domestic and international travel surveys for that year. Tips continue to be added to the supply estimates in the I-O tables however (see section 4.4).

5.3.8 Travel agency commissions

In the CTSA, the demand for travel agency services is equated to the supply, as this commodity is used almost exclusively by tourists. The supply is just the commissions on travel arrangements and tour packages, which in I-O serve as the measure of output of the travel arrangements industry.

A special calculation is required in this case because travel agency commissions are not specifically identifiable in the travel surveys. This entails first removing a fraction of the domestic spending on various tourism commodities (e.g., airfares and hotel bills) and reallocating it to domestic demand for services of travel agents.

An additional amount is added to balance tourism domestic demand with the supply (net of exports). This addition, which amounted to $974 million in 2002, reflects mostly the commissions earned by travel agents and tour operators for arranging travel abroad by Canadians (e.g., flights on non-resident carriers and stays in hotels abroad).

5.4 Demand-to-supply reconciliation in the CTSA

The demand-to-supply reconciliation is an important step in the final derivation of estimates. There is a fundamental difference between the CTSA and the I-O tables in this respect however. Unlike the I-O tables where the supply of each commodity equals its demand, in the CTSA there is no identity between the domestic supply of tourism commodities and their tourism demand. Indeed, the supply of tourism commodities always exceeds the spending of tourists, sometimes significantly. This is because a portion of the demand for tourism commodities comes from non-tourists (e.g., restaurant meals which are a tourism commodity are primarily purchased by local residents).

34. As mentioned in section 3.1.3, the SHS is carried out in the territories every second year. However, this does not coincide with years in which the CTSA is compiled. Consequently, estimates from the SHS for the year prior to the TSA, in this case 2001, are projected forward using indicators from the I-O tables.

35. This does not take into account any changes in inventories of these items, which are implicitly assumed to be zero.

In the absence of these accounting identities, the tourism commodity ratios have become an important indicator used in the demand-to-supply reconciliation process. In several TSAs and PTSAs now, these ratios have been found to fall in a certain range, depending upon the commodity, and have been found to be quite stable over time and across regions. A ratio that falls outside the expected range indicates a problem in reconciling demand and supply that needs to be investigated and corrected.

When a discrepancy is found, and on further investigation there is no obvious reason for the difference, the demand-side estimates are generally adjusted to reconcile with supply and the tourism commodity ratio. This is because the supply-side data are considered to be more reliable. They are drawn from business/industry surveys where often (as in the case of air transportation) it takes only a small sample to cover a large portion of an industry's total revenue. Moreover, they are based on business accounting records and, as discussed in Chapter 4, they go through the rigorous consistency and coherency checks in I-O.

The demand-side data on travel spending on the other hand are derived from surveys that are generally based on relatively small samples of total travellers and cover only a small portion of the total spending. In addition, they are more likely to be based on recall of events as opposed to actual records of them and do not go through the demanding process of data confrontation and integration. The main strength of the demand-side surveys is that they specifically cover travel expenditures, and thus very nearly match the TSA conceptual requirements for data on tourism spending. The I-O based supply-side data in contrast cover the sales to tourists and non-tourists. Thus, while the travel survey information is not as good quality, it still provides an invaluable source of information concerning the amount and pattern of spending by tourists.

Two numerical examples are given in sections 5.4.2 and 5.4.3 to illustrate the steps in the demand-to-supply reconciliation process. The first is for passenger air transportation, the second for accommodation. A similar demand-to-supply reconciliation is done for all commodities in the CTSA and for each province and territory in the PTSA. The calculation of the tourism commodity ratio, which is used in this exercise, is briefly explained first.

5.4.1 Calculation of the tourism commodity ratio

Table 11 shows how the tourism commodity ratio is calculated. In this example, the total "meals (outside home)" for all tourism industries is $10.2 billion. Taxes are added to convert from basic prices to purchaser prices, thereby matching the valuation used for demand.[36] Thus, at purchaser prices, tourism domestic supply of "meals (outside home)" is $11.2 billion, while tourism spending on meals is $3.3 billion. The tourism commodity ratio, the ratio of the demand to the supply can be calculated. In this example, the ratio is 29%, meaning that nearly one-third of all spending on meals is by tourists.

Table 11 Tourism commodity ratio for "meals outside home"

Steps in the calculation		
1.	Tourism domestic supply at basic prices (millions of dollars)	10,200
2.	Tax rate (%)	10%
3. (= 1+(1 x 2))	Tourism domestic supply at purchaser prices (millions of dollars)	11,220
4.	Tourism demand at purchaser prices (millions of dollars)	3,300
5. (= 4 / 3)	Tourism commodity ratio	29%

Note: Fictive estimates for example only.

5.4.2 Reconciling supply and demand - example for passenger air transportation

Table 12 shows the steps in the reconciliation of supply and demand data for passenger air transportation. In the CTSA, the demand-to-supply reconciliation is done at purchaser prices, so taxes need to be added to estimates of tourism domestic supply which are at basic prices. This step is not shown in the table below.

36. As is the case with most tourism commodities (services), the only difference here between the basic price and the purchaser price is the taxes on products.

Table 12 Demand-to-supply reconciliation for passenger air transportation, 2002

	millions of dollars
Domestic demand (from CTS)	4,078
International demand (from ITS)	2,797
Tourism demand (from survey data)	**6,875**
Adjustments	
Canadian fares on international trips	5,043
Domestic demand (territories) and travel agents' commissions	-1,157
Tourism demand (with adjustments above)	**10,761**
Before reconciliation	
Tourism demand	10,761
Tourism domestic supply	11,290
Tourism commodity ratio (demand /supply)	95.3%
Reconciliation adjustment	**0**
After reconciliation (published in CTSA 2002)	
Tourism demand	10,761
Tourism domestic supply	11,290
Tourism commodity ratio (demand /supply)	95.3%

The demand for air passenger transportation obtained from the travel surveys is $6.9 billion. The next step is to adjust for any conceptual differences between the CTS or ITS and the CTSA. In the case of air passenger transportation, the largest adjustment is to include fares paid to Canadian carriers on outbound trips, $5.0 billion.

Two smaller adjustments are made to include the tourism domestic demand for the territories and to remove travel agent commissions. Commissions are not explicitly identified in the travel surveys, but are deemed to be included in reported fares. In order to reconcile supply of travel agency services in the CTSA with tourism demand, 2% of total personal domestic expenditure and 3% of total business domestic expenditure is removed from passenger air fares. This amount is treated as commissions paid directly to travel agents by tourists.

With these adjustments, total tourism demand for passenger air transportation amounts to $10.8 billion, or 95.3% of the tourism domestic supply of (or airline revenues from) passenger air transportation of $11.3 billion. The tourism commodity ratio in this case is within the range expected, the confrontation of demand with supply reveals no major discrepancy, and no further adjustment is made.

5.4.3 Reconciling supply and demand - example for accommodation

Table 13 illustrates the reconciliation process for accommodation. Again, the calculation begins with data from the CTS and ITS, which together yield a total tourism demand for accommodation of $9.5 billion.

Table 13 Demand-to-supply reconciliation for accommodation, 2002

	millions of dollars
Domestic demand (from CTS)	5,152
International demand (from ITS)	4,324
Tourism demand (from survey data)	**9,476**
Adjustments	
Domestic portion of international trips	61
Domestic demand (territories), travel agents' commissions, and accommodation spending associated with nights spent in homes of friends and relatives	-374
Tourism demand (with adjustments above)	**9,163**
Before reconciliation	
Tourism demand	9,163
Tourism domestic supply	9,802
Tourism commodity ratio (demand /supply)	93.5%
Reconciliation adjustment	**-165**
After reconciliation (published in CTSA 2002)	
Tourism demand	8,998
Tourism domestic supply	9,802
Tourism commodity ratio (demand /supply)	91.8%

The next step is to adjust for conceptual differences between the travel surveys and the CTSA. In this case, estimates are adjusted to include $61 million of spending in Canada on accommodation for trips with destination outside of Canada (i.e., domestic portion of international trips). A small adjustment is also made to include tourism domestic demand for the territories.

As in the case of passenger air fares, travel agents’ commissions are removed from reported spending on accommodation. Again, 2% of total personal domestic expenditure and 3% of total business domestic expenditure is deducted. This amount is reallocated to tourism demand for travel agency services.

In the CTSA, accommodation expenditures associated with staying at “Home of friend or relatives” are removed and assigned to spending on groceries and beer, wine and liquor bought from stores. This is done because it is thought that respondents are not spending on accommodation per se, but rather on helping with their host’s expenses during their stay.

After these adjustments, the estimate of spending on accommodation is $9.2 billion compared to a tourism domestic supply (at purchaser prices) of $9.8 billion, giving a tourism commodity ratio of 93.5%. From the experience of past CTSAs, this ratio was judged “too high”. In other words, the confrontation of demand with supply in this case indicated a discrepancy.

As a result, and as is generally the practice in the CTSA, the demand-side data were adjusted. Accommodation spending was reduced by $165 million to attain a tourism commodity ratio of 91.8% which is closer to the range of experience.

5.4.4 Summary of demand-to-supply reconciliation in the CTSA

Table 14 summarizes the demand-to-supply reconciliation adjustments made in the CTSA. The reconciliation resulted in an $806 million reduction of tourism demand, or 1.4% of the total. The largest deductions were for other transportation (i.e., excluding air), and accommodation. Demand for other transportation was adjusted down by 4.9% ($434 million), and accommodation by 1.8% (or $165 million) of demand.

Table 14 Demand-to-supply reconciliation adjustments by main commodity aggregate, Canadian Tourism Satellite Account, 2002

Commodity	Reconciliation adjustment	Tourism demand	Reconciliation adjustment as percentage of tourism demand
	millions of dollars		%
Air transport	0	10,761	0.0
All other transport	-434	8,792	-4.9
Accommodation	-165	8,998	-1.8
Food and beverages	-112	8,550	-1.3
Recreation and entertainment	0	4,275	0.0
All other tourism and non-tourism commodities purchased by tourists	-95	15,184	-0.6
Total	**-806**	**56,560**	**-1.4**

5.5 Tourism GDP and employment

After reconciling the demand and supply for tourism commodities, tourism GDP and tourism employment are calculated. This section briefly describes the steps taken.

5.5.1 Assigning commodity spending to industries

In order to calculate the GDP and employment attributable to tourism, a calculation that is done by industry, it is necessary to assign the tourism spending to each industry. This information is not available from the demand surveys or any other source for that matter. Consequently, an assumption is made that the tourism spending on a given commodity is in proportion to its supply across industries.

Thus, after the tourism industries and tourism commodities have been identified (as in Table 5 in section 5.2), supply shares are calculated. These shares are equal to an industry's portion of the total output of a commodity across all tourism industries. Table 15 shows how these shares are calculated. In the case of "meals (outside home)" the tourism domestic supply is $10.2 billion. Full-service restaurants supply $6.0 billion or 59% of the total, limited service eating places supply $4.0 billion, or 39%, while Drinking Places supply the remaining 2%.

Table 15 Calculation of industry shares of tourism domestic supply, by commodity

		Tourism domestic supply			
		Food services and drinking places (CTSA)	Full-service restaurants	Limited-service eating places	Drinking places (alcoholic beverages)
Code	Tourism commodity	millions of dollars			
1162	Distilled alcoholic beverages, licenced premises	1,200	800	0	400
1192	Beer, including coolers, licenced premises	1,600	1,000	0	600
1202	Wine, including coolers, licenced premises	900	500	0	400
5653	Other amusement and recreation services	30	10	12	8
56902	Other accommodation services	30	10	10	10
57001	Meals (outside home)	10,200	6,000	4,000	200
5725	Other personal services	30	10	10	10
	Tourism domestic supply (from Table 5)	**13,990**	**8,330**	**4,032**	**1,628**
		Share of tourism domestic supply			
		percentage			
1162	Distilled alcoholic beverages, licenced premises	100	67	0	33
1192	Beer, including coolers, licenced premises	100	63	0	38
1202	Wine, including coolers, licenced premises	100	56	0	44
5653	Other amusement and recreation services	100	33	40	27
56902	Other accommodation services	100	33	33	33
57001	Meals (outside home)	100	59	39	2
5725	Other personal services	100	33	33	33

Note: Fictive estimates for example only.

Table 16 shows how tourism demand (spending) is distributed across tourism industries according to these shares (or the distribution of supply). Taxes are deducted from tourism spending estimates to convert from purchaser to producer prices, thereby matching the pricing used for the supply data from the I-O tables.

Table 16 Allocation of tourism demand across tourism sub-industries, by commodity

Code	Tourism commodity	Food services and drinking places (CTSA)	Full-service restaurants	Limited-service eating places	Drinking places (alcoholic beverages)
		millions of dollars			
1162	Distilled alcoholic beverages, licenced premises	200	133	0	67
1192	Beer, including coolers, licenced premises	300	188	0	113
1202	Wine, including coolers, licenced premises	200	111	0	89
5653	Other amusement and recreation services	20	7	8	5
56902	Other accommodation services	0	0	0	0
57001	Meals (outside home)	3,000	1,765	1,176	59
5725	Other personal services	0	0	0	0
	Tourism demand	3,720	2,203	1,184	332
	Tourism domestic supply (from Table 5)	13,990	8,330	4,032	1,628
	Tourism industry ratio	27%	26%	29%	20%

Note: Fictive estimates for example only.

In Table 16, total tourism spending for “Meals (outside home)” is $3.0 billion.[37] Using the distribution of supply, as calculated in the previous table, 59% of tourism spending is assigned to Full-service restaurants ($1,765 million), 39% or $1,176 million to Limited service eating places and 2% ($59 million) to Drinking places.

After repeating this calculation for all commodities, tourism demand for each industry is obtained as the sum of the tourism spending on all tourism commodities produced by each one. Tourism demand for the tourism commodities produced by Full-service restaurants is thus $2,203 million, Limited service eating places, $1,184 million and Drinking places, $332 million.

Now the tourism industry ratio may be calculated. This is the ratio of the tourism demand for the tourism commodities produced by a given industry over its tourism supply. The tourism industry ratio for Full-service restaurants is 26%, Limited service eating places, 29% and Drinking places, 20%. These ratios are then used to obtain tourism GDP and tourism employment at the detailed industry level.

5.5.2 Tourism GDP

Tourism GDP and its components are calculated using data from the input table of the I-O tables and the tourism industry ratios as described above. Tourism GDP is calculated for each tourism industry (see Table 17) in several steps. First, following with the example of Food Services and Drinking Places, the GDP at basic prices ($14,753 million) is obtained from the I-O input table. Second, the industry gross output attributable to the production of tourism commodities (as listed in Table 5) is determined. This ratio (78%) is used next to split the

37. There is another step to this calculation which has been omitted in order to simplify the example. It is necessary to account for tourist purchases of food and beverage services from other industries, notably accommodation and recreation and entertainment. An identical calculation is done to first allocate total tourism spending on meals (outside home) across the tourism industries (food and beverage services, accommodation, etc.) according to their share of the total tourism domestic supply of meals. Thus, in the example here, the $3.0 billion reflects the portion of tourism spending on meals that gets allocated to the food services and drinking places industry.

GDP generated in Food Services and Drinking Places into a part that is attributed to the production of tourism commodities ($11,498 million) and a remainder ($3,255 million) that is attributed to the production of all other commodities.

Table 17 Calculation of tourism GDP at basic prices: example for food services and drinking places

Step 1: Obtain GDP for food services and drinking places

GDP (cost of primary inputs in millions of dollars)	14,753

Step 2: Calculate GDP attributable to the production of tourism commodities for food services and drinking places

a. Tourism domestic supply from Table 5 (millions of dollars)	13,990
b. I-O gross output from Table 3 (millions of dollars)	17,950
c. Percentage of gross output attributable to production of tourism commodities by tourism sub-industries	(a / b) = 78%

Step 3: Allocate GDP to production of tourism commodities and non-tourism commodities

	Food services and drinking places	Production of tourism commodities	Production of non-tourism commodities
		78%	22%
GDP (cost of primary inputs in millions of dollars)	14,753	11,498	3,255

Step 4: Calculate GDP attributable to production of tourism commodities by tourism industry[1]

	Food services and drinking places (CTSA)	Full-service restaurants	Limited-service eating places	Drinking places (alcoholic beverages)
GDP for production of tourism commodities (millions of dollars)	11,498	6,922	3,536	1,041

Step 5: Calculate GDP attributable to tourism demand by industry

	Food services and drinking places (CTSA)	Full-service restaurants	Limited-service eating places	Drinking places (alcoholic beverages)
Tourism industry ratio from Table 16		26%	29%	20%
Tourism GDP (millions of dollars)	3,033	1,800	1,025	208

1. Distribution of GDP across sub-industries is based on the distribution of tourism domestic supply in Table 5.

Note: Fictive estimates for example only.

In a fourth step, the GDP attributable to the production of tourism commodities in Food Services and Drinking Places is allocated across tourism sub-industries according to their share of the industry's total tourism supply (as determined from Table 5). In the fifth step, the tourism industry ratios (as calculated in Table 16) are applied to the GDP attributable to production of tourism commodities to obtain the tourism GDP (i.e., the GDP attributable to the tourism spending on the tourism commodities produced by the industry).

Thus the tourism GDP for Full-service restaurants is $1,800 million ($6,922 x 26%). For Limited service eating places and Drinking places tourism GDP is $1,025 million and $208 million, respectively. Tourism GDP for Food Services and Drinking Places is $3,033 million. This method is also used to calculate the labour income, mixed income and operating surplus attributed to tourism.

As a final step in the calculation of tourism GDP, it is necessary to take into account the tourism GDP generated in non-tourism industries. Some goods and services (see Table 18), which are purchased by tourists, and included in the CTSA, are produced by non-tourism industries. In this case, I-O data on consumer spending are used to distribute the balance of tourism spending across these commodities.

Table 18 List of commodities included in "other commodities", by category of final demand

Clothing and footwear for men, women and children	Semi-durable household furnishings	Drugs and pharmaceutical products	Recreation, sporting and camping equipment	Tobacco products, reading and entertainment supplies	Jewelry and watches
Waterproof footwear	Bedding	Textile medical products	Recorded media (including music and movies)	Cigarettes	Watches, clocks, etc.
Footwear, excluding waterproof	Other textile products	Pharmaceuticals	Musical instruments and artists' supplies	Other tobacco products	Jewelry, silverware, flatware, etc.
Leather gloves	Art and decorative goods, misc. end products	Other alcohols and derivatives		Paper stationery	
Handbags, wallets, etc.	Jewelry, silverware, flatware, etc.	Medical and dental equipment and supplies		Other stationery supplies	
Hosiery		Opthalmic goods		Newspapers	
Men's & boys' knitted clothing		Personal medical goods		Magazines and periodicals	
Sweaters				Books	
Women's knitted clothing				Greeting and post cards, maps, etc.	
Children's knitted clothing				Recorded media (including music and movies)	
Men's and boys' clothing				Musical instruments and artists' supplies	
Women's underwear and sleepwear					
Other women's clothing					
Children's wear					
Other clothing and accessories					
Fur apparel					

Next, the spending is converted to basic prices, by removing the tax, retail and other margins, in the case of goods. It is then converted from a commodity basis to an industry basis, using industry shares of output for these commodities (similar to the procedure discussed earlier in section 5.5.1). The GDP attributable to tourism spending for each non-tourism industry can then be derived as its total GDP multiplied by the ratio of the tourism spending on commodities produced by the industry and its gross output.

Table 19 Calculation of tourism industry ratio (food services and drinking places)

Tourism GDP (millions of dollars)	3,033
Total GDP (millions of dollars)	14,753
Tourism GDP ratio (= Tourism GDP / Total GDP)	21%

Note: Fictive estimates for example only.

After calculating tourism GDP by industry, the tourism GDP ratio can be determined. This is the ratio of tourism GDP to total GDP for the industry of interest. In Table 19 the Tourism GDP for Food Services and Drinking Places is $3,033 million. Total GDP for Food Services and Drinking Places is $14,753 million. This includes the GDP due to the production of both tourism and non-tourism commodities by both its tourism and non-tourism sub-industries. The tourism GDP ratio for Food Services and Drinking Places is 21%. This means that tourism accounts for 21% of the total GDP of this industry.

5.5.3 Tourism employment

Like GDP, employment is calculated by industry. Exactly the same ratios (derived in Table 16) and procedures used to calculate GDP attributable to tourism are used to calculate the employment due to tourism. However, in this case, the employment data are available only at an industry level too aggregated for the CTSA. Wages and salaries, for which more detailed data are available, are used to allocate employment across the sub-industries before doing the calculations.

Table 20 Calculation of tourism employment

	Food services and drinking places	Full service restaurants	Limited-service eating places	Drinking places (alcoholic beverages)
Total jobs (thousands)	685			
Share due to production of tourism commodities (Table 17, step 2)	78%			
Jobs due to production of tourism commodities	534			
Distribution of wages and salaries		58%	39%	3%
Jobs due to production of tourism commodities		310	208	32
Tourism industry ratio (Table 16)		26%	29%	20%
Tourism employment (thousands of jobs)	144	81	60	3

Note: Fictive estimates for example only.

Table 20 continues with the example of food services and drinking places. Starting from 685 thousand jobs, the total employment for the industry, it is necessary first to determine the fraction that can be attributed to production of tourism commodities. This is done using the same ratio of the industry's output of tourism commodities to its total gross output as in the GDP calculation (see Table 17, step 2). The resulting employment (jobs) attributable to production of tourism commodities is 534 thousand jobs.

As mentioned above, detailed information on wages and salaries from I-O worksheets is used to distribute these jobs across the sub-industries. In this example, 58% of wages and salaries are paid by Full-service restaurants, so 310 thousand jobs (58%) are allocated to this sub-industry, 39% is paid by Limited-service eating places, so 208 thousand jobs (39%) are attributed to this industry, and the remainder goes to Drinking Places.[38] Last, the tourism industry ratios, as calculated in Table 16, are used to estimate the fraction of these jobs that can be directly attributed to tourism spending. Overall, 144 thousand jobs are attributed to tourism, or 21% of total employment for the industry.

38. This procedure entails an implicit assumption that the average annual wage and salary is the same across the three industries.

5.6 Methodology for provincial and territorial TSA

The methodologies for calculating provincial and national TSAs in Canada are essentially the same. Since full I-O tables and the CTS and ITS are also available by province and territory, the same methodology can be used in the PTSA. The adjustment for the lack of domestic travel data for the territories, using the Survey of Household Spending, is made in the territorial TSAs.

Unlike at the national level, the PTSA has the added feature of having domestic tourism, inter-provincial and international tourism. The I-O tables provide information on inter-provincial trade flows which helps elaborate the regional dimension of the PTSA.

Finally, considerably less commodity and industry detail is published in the PTSA than in the national one. This stems largely from concerns with confidentiality (see section 5.8), and does not mean that the calculations done in the PTSA are done at a higher level. On the contrary, the calculations are done at the same level of detail.

5.7 Quality and reliability – national and provincial

Unlike statistical surveys, where the reliability or quality of estimates can be qualified with margins of error, or coefficients of variation, there are no direct statistical quality measures for CSNEA products, including the CTSA. This is because they draw on literally hundreds of data sources which are reconciled and integrated within the accounts framework, and standard survey measures of quality are simply incalculable. A subjective method is used instead, whereby analysts, subject matter specialists or statisticians rate the quality of the estimates based on their knowledge of data sources, the methods used, and consistency between concepts and definition, as well as judgement.[39]

Table 21 Quality ratings of input-output estimates by selected industry, 2002

Industry	IO - NAICS code	Outputs	GDP
Air transportation	4810	B	B
Rail transportation	4820	C	C
Water transportation	4830	C	C
Transit and ground passenger transportation	4850	A	A
Scenic and sightseeing transportation and support activities for transportation	48B0	C	C
Motion picture and sound recording industries (including movie theatres)	5120	A	A
Rental and leasing services (including car rental)	5A05	B	B
Administrative and support services (including travel agency services)	5610	B	B
Arts, entertainment and recreation	7100	B	B
Accommodation and food services	7200	B	B

Source: The Input-Output Structure of the Canadian Economy 2002-2003, Statistics Canada, Catalogue 15-201-XIE.

Table 21 shows subjective quality ratings for the gross output (supply) and GDP estimates in the I-O tables that are relevant to the tourism industries of the CTSA. These ratings are meant to indicate relative statistical reliability of the national data for the 2002 reference year. Data that are considered the most reliable are given an ‘A’ rating, reliable data are given a ‘B’, and less reliable but acceptable data are given a ‘C’ rating. In general, the highest rating is assigned to an estimate that is based on a survey or administrative source with the largest sample size and smallest undercoverage that requires no imputation of missing details. A reliable, or ‘B’ rating, is assigned to estimates based on source data with some but not all of the above attributes. Last, a ‘C’ rating is given to estimates

39. For examples of subjective assessments see Section 1.6 of “Guide to the National Tourism Indictors: Sources and Methods”, Statistics Canada, Catalogue 13-594, August 1996. For a quality rating of the 2002-2003 Input-Output estimates by industry, see Data Accuracy Measures in The Input-Output Structure of the Canadian Economy, 2002-2003. Statistics Canada, Catalogue 15-201, April 2007.

that involve significant imputation techniques or rely on surveys with small samples, undercoverage, or both. The ratings apply to the industry overall, and not the industry by commodity details. For instance, the rating of 'B' for outputs of the accommodation and food services industry applies to the total output of the industry.

The estimates for the main tourism industries are based for the most part on data that are considered overall reliable. Nonetheless, some of the data entering the CTSA from the I-O tables are considered relatively weak (rail, water and scenic and sightseeing transportation). These industries however account for a relatively small proportion of overall tourism GDP.

5.8 Confidentiality of CTSA detailed data

In the case of the CTSA, data are determined to be confidential based on whether they have been published by I-O. If so, the CTSA tables can show them. If not, they cannot be published in the CTSA.

Generally, data are considered not publishable for one of three reasons. First, if an industry comprises only a handful of establishments, the data are deemed confidential since information on specific establishments may be able to be identified. Second, if one industry is marked as confidential, another industry will also have to be treated as confidential in order to avoid "residual disclosure". Last, data may also be suppressed if their quality is considered to be too low.

In order to minimize data suppression (for confidentiality), a calculation is done in I-O to ensure that as much data are published as possible. It is not surprising that suppression of data is more of an issue in the PTSA than the national TSA, and even more so in the case of the smaller provinces/territories. This is why the PTSA generally shows less commodity and industry detail in published results than the CTSA.

6 Canadian TSA tables and results for 2002

This chapter discusses the results found in the two main CTSA tables showing (i) tourism expenditure in Canada by commodity and (ii) GDP and employment for tourism and non-tourism industries in 2002. In addition, the Canadian portrayal of TSA results is compared and contrasted to that recommended in the TSA:RMF.

6.1 Tourism expenditure by commodity

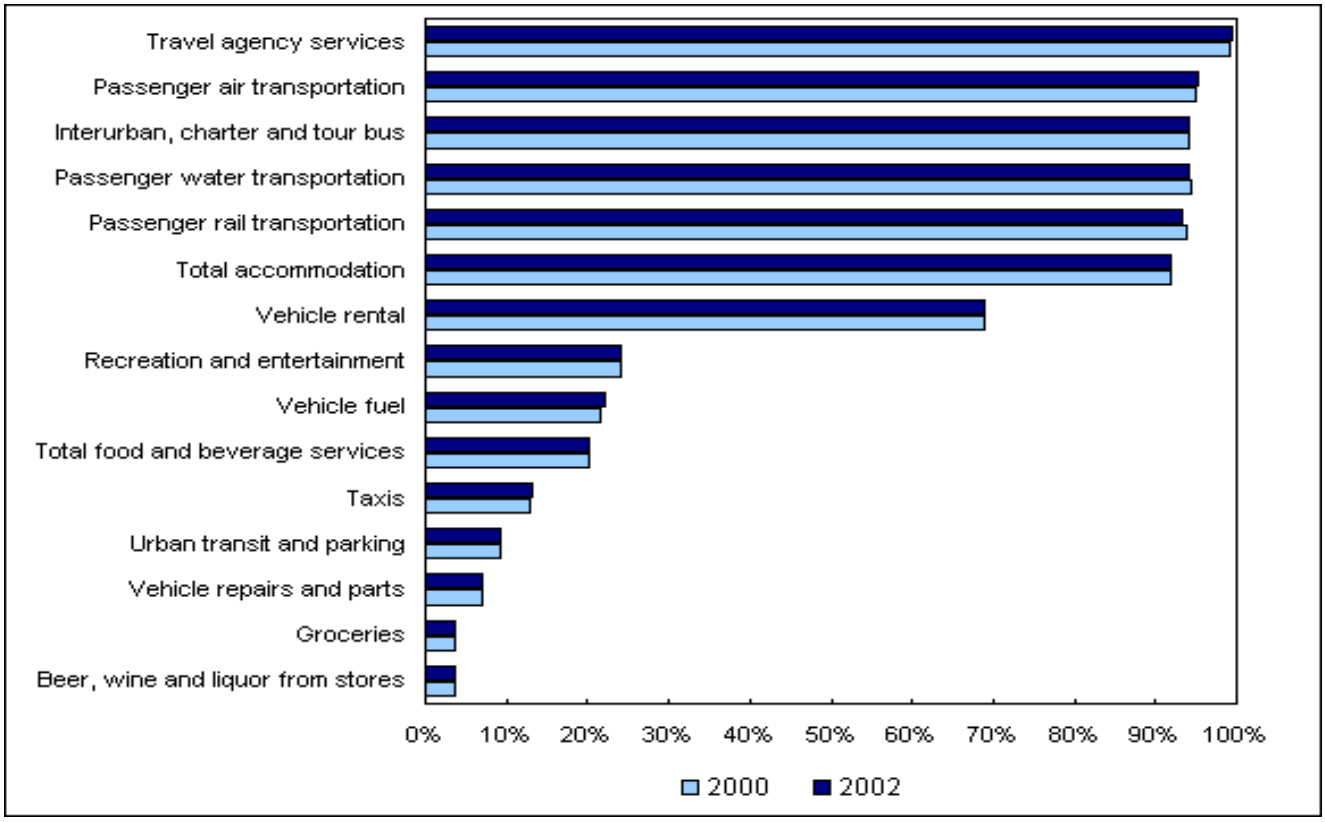
Tourism expenditures by commodity are presented in Appendix Table E. This table shows an estimate for "Total Demand" (total tourism demand) disaggregated into its two components domestic demand (tourism spending by Canadians in Canada) and international demand (tourism spending of non-residents in Canada). Total domestic supply (column 4) shows the amount that is supplied by domestic producers for each tourism commodity. The tourism commodity ratio (ratio of tourism demand to total domestic supply) illustrates how much of each commodity is bought by tourists.

To give an example of how to interpret this table, consider the first row for passenger air transportation. According to the CTSA 2002, total spending by tourists on air transportation was $10.8 billion (total demand), of which $8.0 billion was by Canadians (domestic demand) and $2.8 by non-residents (international demand). The total domestic supply was $11.3 billion. The tourism commodity ratio for air transportation is 95%. This means that 95% of the air transportation commodity was purchased by tourists. The remaining supply was purchased by "non-tourists", such as diplomats, migrants and other travellers. This ratio shows that tourism spending constitutes a significant portion of total demand for this commodity.

As another example, consider the commodity "meals from restaurants". With $5.8 billion of total tourist spending, its tourism commodity ratio is 19%, in other words "tourists" accounted for $1 out of every $5 spent on meals in restaurants. The remaining supply ($30.1 billion less $5.8 billion) was bought by local residents and other non-tourists.

Figure 3 shows the tourism commodity ratio for the main commodities in the CTSA for 2000 and 2002. It also reveals the variability in this ratio across different commodities. Several commodities have ratios over 90%, indicating a high dependence on tourism. Others, such as food and beverage services, recreation and entertainment and taxis have ratios between 10% and 30%. These commodities are less affected by the level of tourism spending. The non-tourism commodities such as groceries, parking, or urban transit that are bought by tourists all have ratios of 10% or less. In these cases, only a fraction of the demand comes from tourists. It is interesting to note that these ratios have remained relatively stable over time. For instance, although tourism spending on passenger air transportation was notably lower in 2002 compared to 2000, the tourism commodity ratio barely changed because supply fell by a similar amount.

Figure 3 Tourism commodity ratio by main commodity, 2000 and 2002

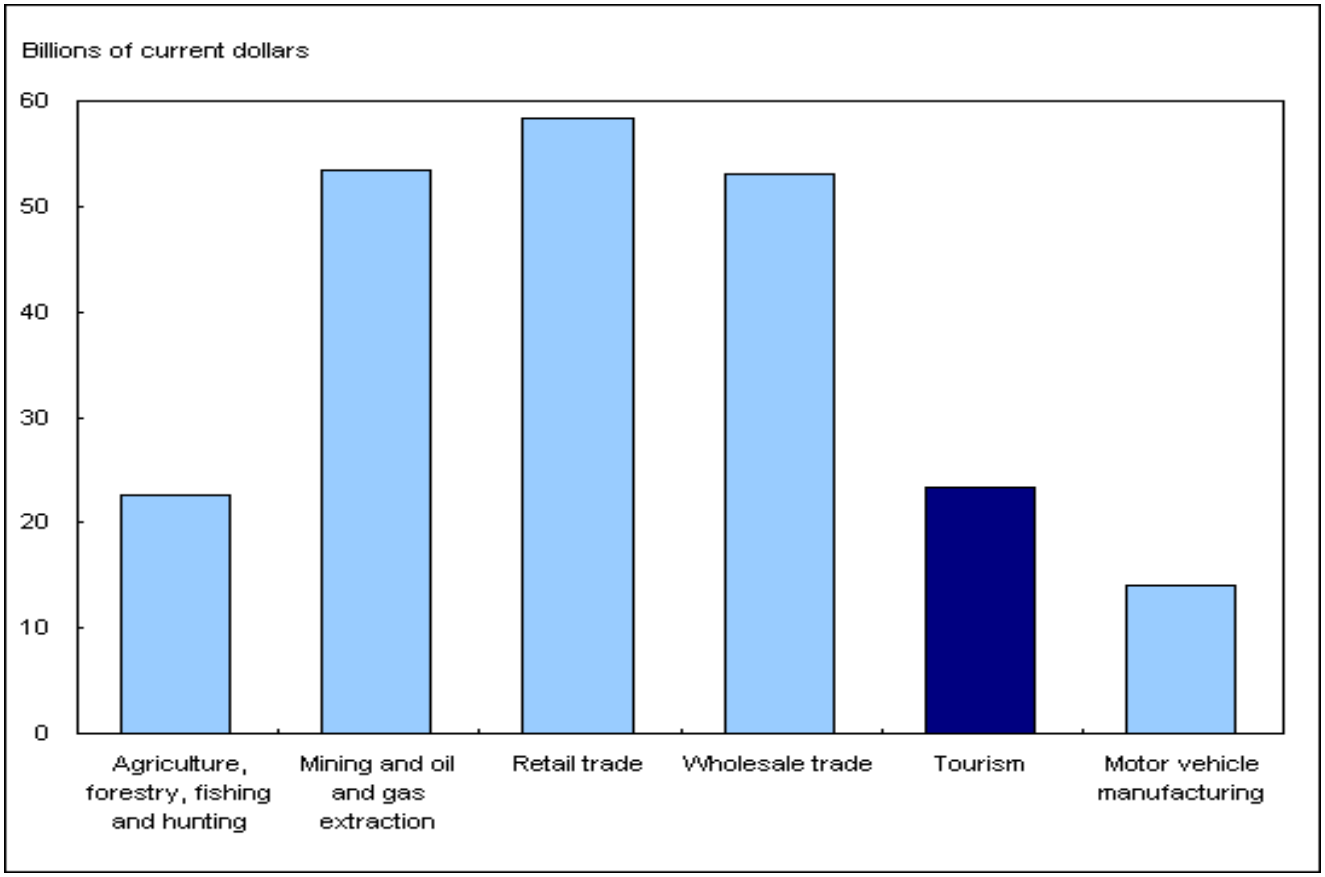


6.2 Gross domestic product and employment

The results for tourism activity in the Canadian economy in terms of GDP and employment for tourism and non-tourism industries are shown in Appendix Table F. GDP is measured at basic prices and in current dollars. For each industry, the components of GDP as well as the number of jobs, the labour compensation per job and GDP per job are shown. Another statistic is the tourism GDP ratio or tourism's share of the total industry's GDP, which shows how much of each industry's value added is attributable to tourism.

One of the goals of the CTSA is to articulate the economic contribution of tourism as a whole. In Figure 4, the GDP of various industries is compared to the GDP attributable to tourism using the results from Appendix Table F. In order to do this comparison, in the CTSA, the tourism contribution to the GDP of each industry is removed thus eliminating any double counting.

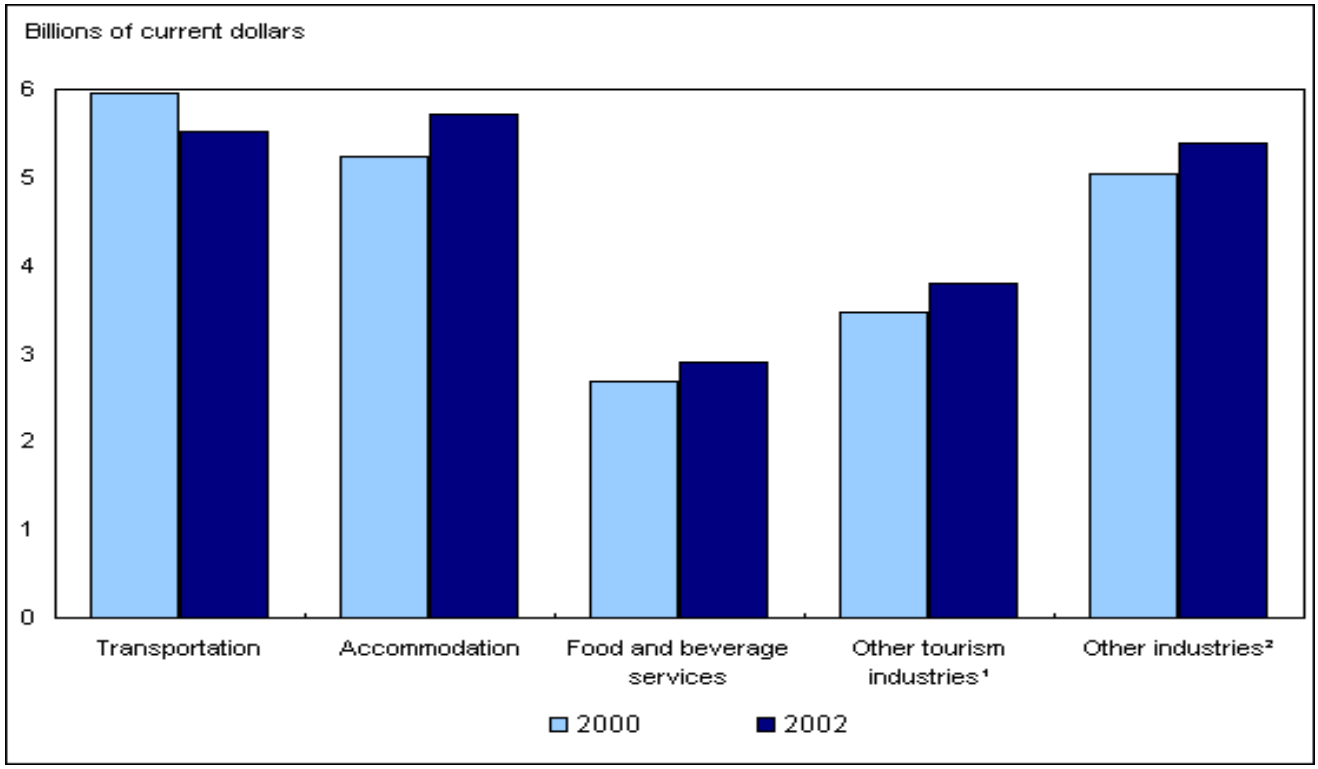
Figure 4 Gross domestic product at basic prices, selected industries, Canada 2002



Note: The GDP of non-tourism industries is net of tourism's contribution

According to the CTSA, tourism GDP at basic prices reached $23.3 billion in 2002. Tourism's contribution to overall GDP (2.2%) matched the combined contribution of agriculture, fishing, forestry and hunting. In fact, tourism contributed more to the Canadian economy than the motor vehicle manufacturing industry which accounted for 1.3% of GDP.

Figure 5 Tourism gross domestic product at basic prices, by industry, 2000 and 2002



1. Includes recreation and entertainment services and travel agency services industries.
2. Includes non-tourism industries that produce some commodities bought by tourists including groceries, alcoholic beverages from stores, motor vehicle parts and repair, motor vehicle fuel, toiletries, etc.

Figure 5 shows the tourism GDP of the main industries of the CTSA 2002. The transportation and accommodation industries accounted for almost half of tourism GDP ($5.5 billion and $5.7 billion respectively) in 2002. The third largest contribution, with $5.4 billion of tourism GDP, came from the non-tourism industries, reflecting the fact that various industries produce goods and services that are purchased by tourists.

The air transportation industry was hit hard between 2000 and 2002. Already facing increasing demand for low-cost travel and declining demand for premium business travel, the September 11 terrorist attacks further eroded the demand for international air travel and the industry's performance. The introduction of the Air Travellers' Security Charge in 2002, and increased security and insurance costs in the aftermath of 9/11, all affected the industry's bottom line. Tourism GDP for air transportation, at $3.1 billion, tumbled 16% from its level in 2000. This led, in turn, to a 7.2% drop in tourism GDP for the transportation industry overall.

Figure 6 shows how air transportation fared against total transportation in terms of tourism expenditure, GDP and jobs over the period 2000 to 2002. Its share of tourism GDP in transportation shrank almost six percentage points to 56%, while its share of tourism jobs fell four percentage points to 65%. At the same time, the share of tourism spending on passenger air transportation dropped three percentage points to 55% of the total for transportation.

Figure 6 Share of air transportation in total transportation, 2000 and 2002

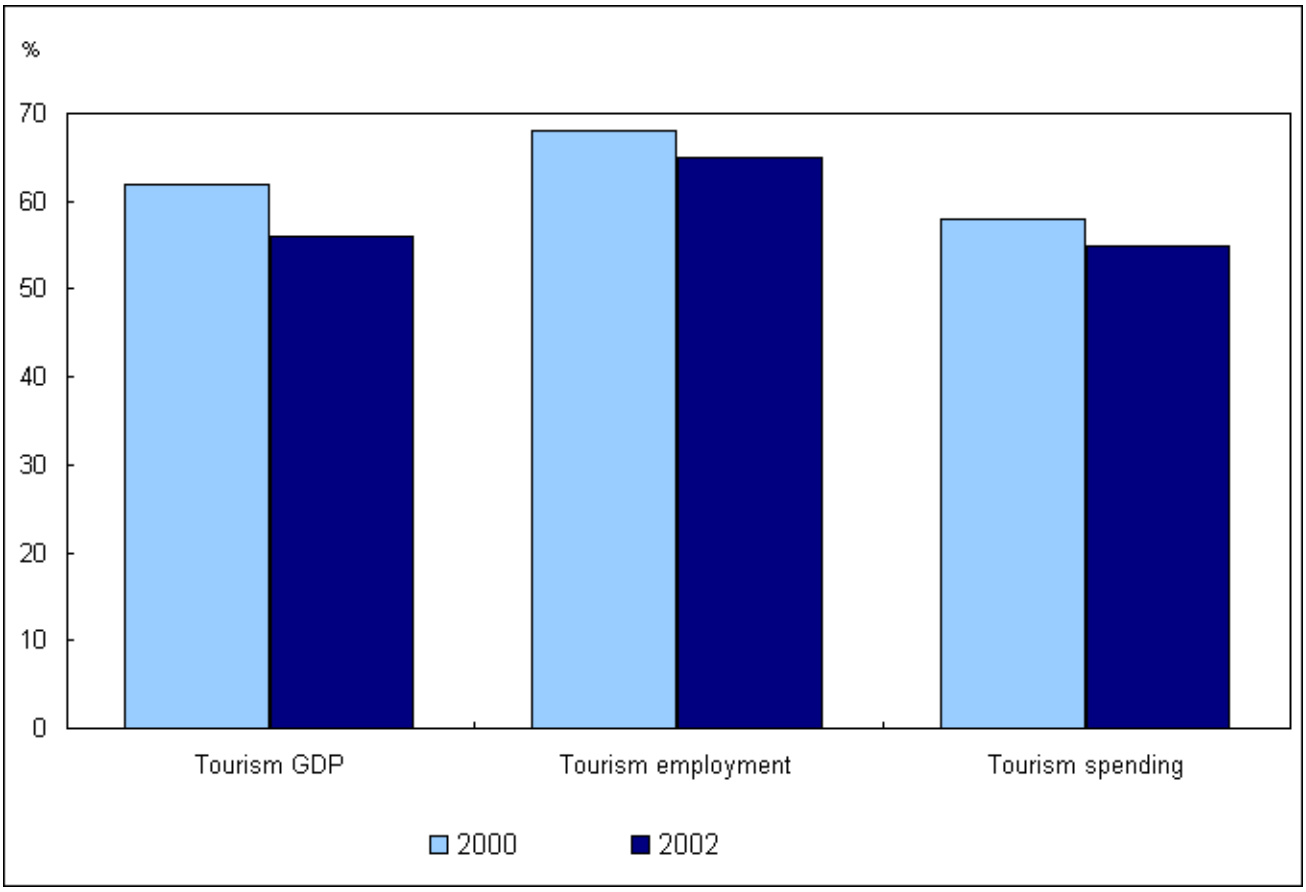
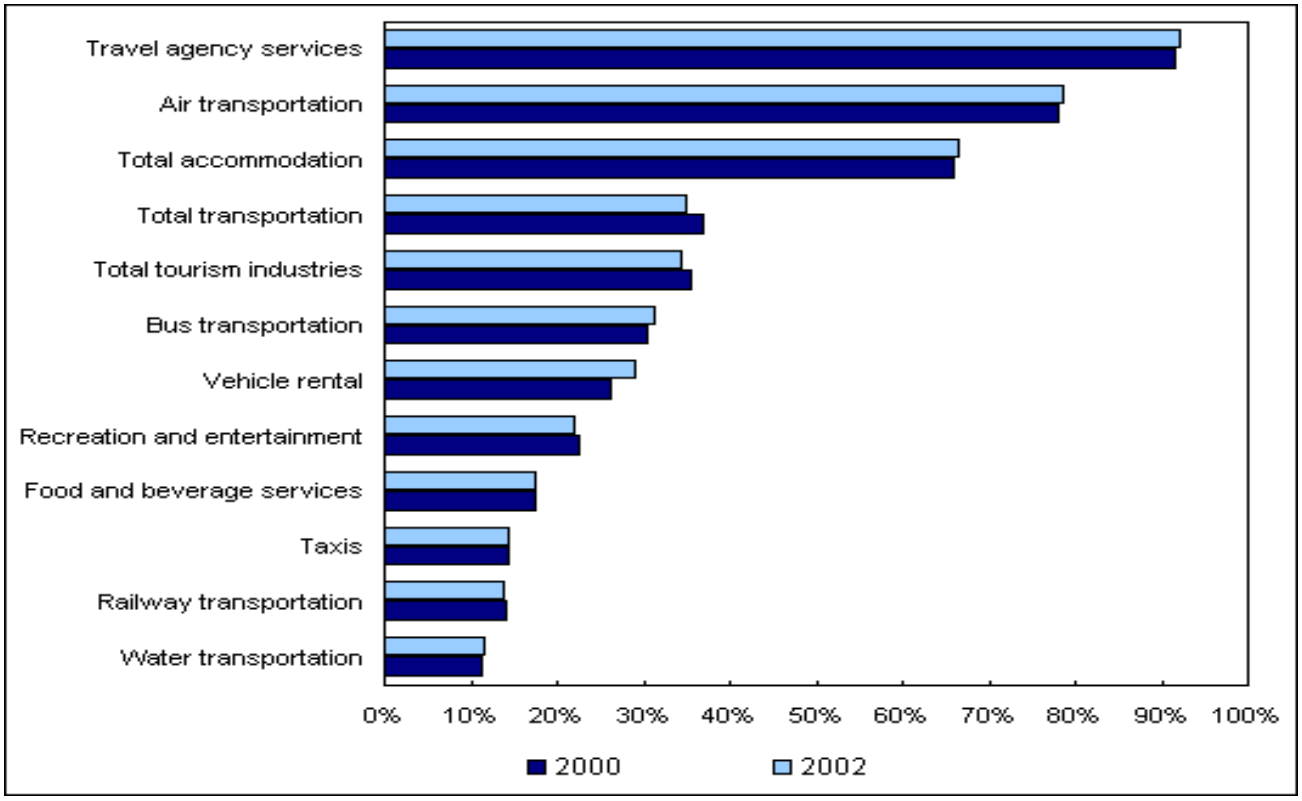


Figure 7 shows the tourism GDP ratio of each of the main industries of the CTSA. This ratio measures how much of the production of an industry (at the published level) is attributable to tourism. It is calculated by taking the tourism GDP and comparing it to the total GDP of the industry. It provides a measure of the economic importance of tourism to an industry.

Travel agency services are the most reliant on tourism, with 92% of this industry's GDP coming from tourism. For air transportation, 79% of the industry's GDP was attributable to tourism. This share is lower than for the passenger air transportation commodity because the industry also produces freight transportation services, which have no tourism content. Tourism accounted for 66% of the GDP in the accommodation industry. This industry also produces restaurant and recreation services that have lower tourism commodity ratios than the accommodation commodity chiefly produced by this industry. The water and rail transportation industries have low tourism GDP ratios, (14% and 12% respectively), reflecting the importance of cargo and freight.

Figure 7 Tourism gross domestic product ratio by main tourism industry, 2000 and 2002

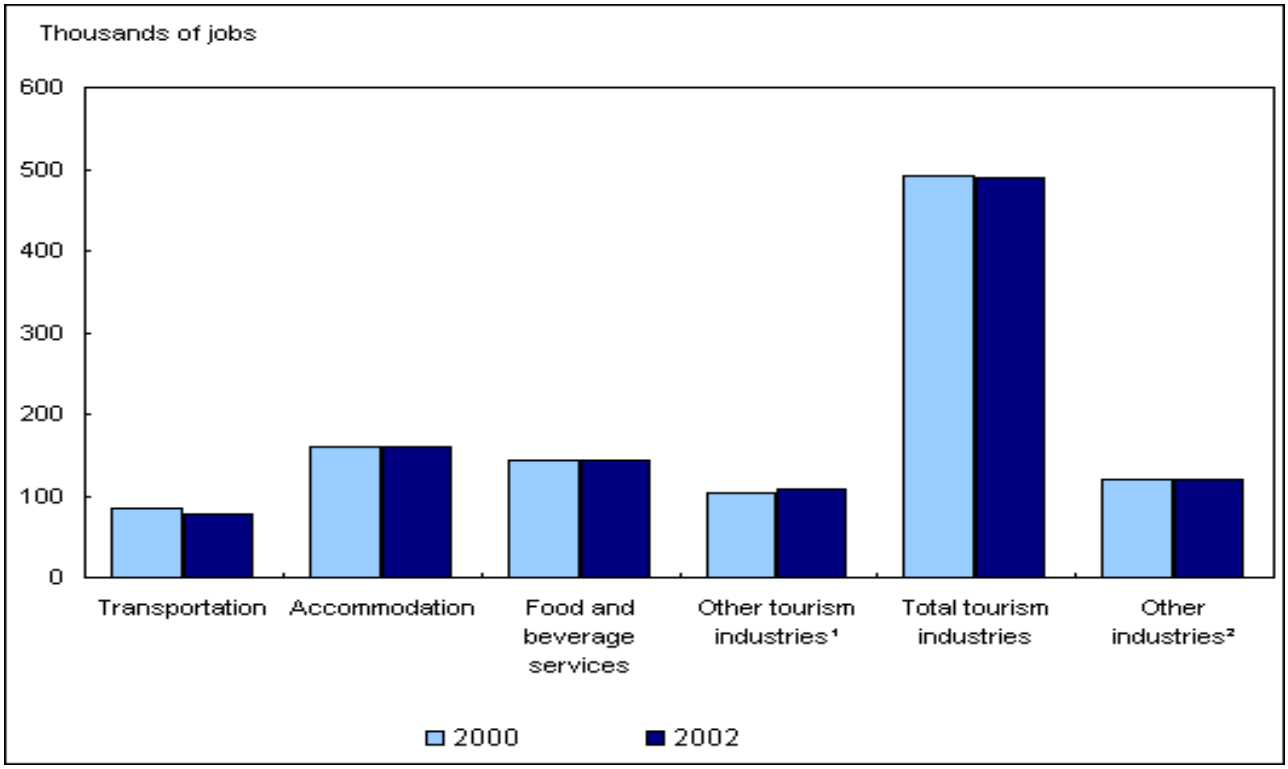


Several other labour-related variables can also be found in Appendix Table F.[40] Labour compensation per job is simply the total labour income of an industry divided by the number of jobs. This measure provides information on the income levels of workers in a given industry. The GDP per job statistic provides a measure of labour productivity.[41]

40. The human resource dimension of the CTSA focuses mainly on monetary aggregates associated with tourism supply and demand and the measurement of GDP. Thus, only the number of jobs and labour income directly attributable to tourism can be found in the CTSA. The human resource aspects of tourism are more fully articulated in the Tourism Human Resource Module (HRM). See *Human Resource Module of the Tourism Satellite Account, Update to 2005,* catalogue no. 13-604 no. 55, March 2007 for more details.

41. The Tourism Human Resource Module includes a measure of GDP per hour worked, which is a more accurate indicator of labour productivity than the one available in the CTSA.

Figure 8 Tourism employment by main industry, 2000 and 2002



1. Includes recreation and entertainment services and travel agency services industries.
2. Includes non-tourism industries that produce some commodities bought by tourists including groceries, alcoholic beverages from stores, motor vehicle parts and repair, motor vehicle fuel, toiletries, etc.

Tourism contributed 3.9% of all jobs in Canada in 2002, accounting for 611,100 jobs. This was up marginally (+0.1%) from 2000. Figure 8 shows tourism employment (i.e., the jobs that are directly attributable to tourist spending) by industry. Tourism provided the most jobs to the accommodation industry (160,500) with the food and beverage services industry a close second (144,700). About 20% of tourism jobs were in non-tourism industries, mostly in manufacturing, wholesale trade, and local public transportation. Between 2000 and 2002 tourism employment in transportation fell 8.9% to 77,900 jobs, as a result of job losses in the airline industry.

Tourism generated 490,300 jobs within the tourism industries with annual average wages of $26,200. The highest annual average wages were earned in the transportation industries. Jobs in air transportation earned the most ($55,900) with those in water transportation a close second ($52,700). The lowest annual average wages were found in the other accommodation industries ($14,700) which includes various recreational, vacation and hunting and fishing camps. Annual average wages in the food and beverage services industry were the second lowest at $17,000.

Tourism not only benefits “tourism industries”, such as transportation or accommodation, but also various industries that produce goods and services that are purchased by tourists such as groceries, souvenirs and other retail goods. Tourists spent $10.0 billion buying such goods and services in 2002, more than they spent on accommodation. The industries that produce these goods and services are referred to as “other industries”. These “other industries” accounted for 23% of tourism GDP. Tourism generated 120,800 jobs in these industries with annual average wages of $30,200.

6.3 Comparison of the CTSA tables with the TSA: RMF

The aim in this section is to illustrate the correspondence between the estimates found in the CTSA tables and those in the TSA:RMF tables. To this end, results from the CTSA 2002 are presented according to the format of the international standard in Appendix G. The international standard presents TSA results in ten separate tables, showing more detail than in the CTSA tables discussed above. The comparison here focuses however on the main tables. In addition, while the CTSA does not normally publish all the details recommended in the TSA:RMF, they can for the most part be made available.

Tables 1 to 3 of the TSA:RMF provide details on tourism demand, showing inbound, domestic and outbound tourism consumption expenditures in cash. In the CTSA these are just export, domestic and import spending on tourism by business and non-business visitors. Table 1 of the TSA:RMF focuses on the inbound tourism consumption of visitors to Canada. It shows, $4.3 billion of spending on accommodation services by international visitors (see column 3). This same amount is recorded as international demand for total accommodation in the CTSA, Appendix Table E (column 2). The domestic tourism consumption of Canadians travelling in Canada, including the fares paid to Canadian carriers and the domestic portion of non-fare spending on international trips, is shown in TSA:RMF Table 2. Domestic tourism consumption of passenger transportation services by all resident visitors is $14.7 billion (column 9), for instance. This is registered in the CTSA as domestic demand for total transportation (Appendix Table E, column 1). The outbound tourism spending of Canadians ($20.6 billion in total) is reported in TSA:RMF Table 3. This is shown in the CTSA as tourism spending abroad (Appendix Table E, column 6).

In Table 4, the TSA:RMF provides a summary of internal tourism consumption - that is, the sum of domestic and inbound tourism consumption expenditure (or domestic plus international demand in the CTSA). The Table also brings in all types of “in-kind” consumption (e.g., the use of one’s own cottage, tourism information booths, etc.). The total column in this table is just total tourism spending in the CTSA (domestic plus international, same-day plus overnight, business plus non-business visitor spending), as mentioned earlier, the in-kind consumption items are not included in the CTSA. For example, internal tourism consumption in cash for food and beverage serving services is $8.5 billion, composed of $3.0 billion of inbound tourism consumption and $5.5 of domestic tourism consumption. In the CTSA, these figures are recorded as the total demand, international and domestic demand, respectively, in the row for total food and beverage services.

Table 5 is the core, production or supply table of the TSA:RMF. It provides details on the supply of commodities by industry, emphasizing the tourism commodities and industries. Columns 1 and 8 of this table record $10.7 billion of total output at basic prices by domestic producers of passenger transport services for air. The CTSA reports $11.3 billion of total domestic supply at purchaser prices for passenger air transportation (Appendix Table E, column 4). The difference between the two reflects taxes that are added to convert from basic to purchaser prices.

Table 6 of the TSA:RMF brings together the supply-side (Table 5) and the demand-side of the Account (Table 4). In this table, the tourism commodity ratios, the tourism industry ratios, and the tourism GDP are shown. For presentation purposes, only the portions of industry supply and inputs attributable to tourism are shown. The tourism ratios can be derived easily from Table 5 and Table 6. The tourism ratio on supply (in column 9 of Table 6) is equivalent to that presented in the CTSA (Appendix Table E, column 5). The ratio for passenger transport services in both presentations is 37.4% for instance. The compensation of employees in the bottom panel of Table 6 corresponds to the labour income shown in the first column of CTSA Appendix Table F. So, for instance, the $3.7 billion of compensation of employees for transportation in Table 6 matches the amount shown for the labour income attributable to tourism demand for total transportation in Appendix Table F. Similarly, the rows reporting gross mixed income and gross operating surplus in the bottom panel of Table 6 correspond to the columns showing net income of unincorporated business and other income in the second and third columns of CTSA Appendix Table F. Last, the key aggregate of the TSA can be found in the bottom panel of Table 6 in the row reporting total gross value added of activities at basic prices. This is just the tourism GDP as displayed in the fourth column of the CTSA Appendix Table F (i.e., tourism GDP for total transportation is $5.5 billion).

7 Conclusion

The Canadian Tourism Satellite Account measures the impact of tourism in the Canadian economy. It shows that tourism is an important part of the Canadian economy both in terms of output (GDP) and employment. Its economic contribution in 2002 surpassed other important industries such as motor vehicle manufacturing. Tourism also benefited other "non-tourism" industries, such as retail trade.

The CTSA also provides the detailed industry and commodity benchmarks that are incorporated now on a regular, biennial basis in the National Tourism Indicators (NTI). In addition, it provides the detailed tourism commodity and industry ratios that are applied in the Human Resource Module (HRM) as well as in the module on the government revenue attributable to tourism.

The CTSA is not a static statistical/analytical construct. Just as tourism is an ever-evolving phenomenon, tourism satellite accounting is constantly evolving. The underlying concepts and definitions are periodically reviewed and refined, the data sources are constantly expanded and improved, and the classifications are occasionally adapted to new, and emerging industries and commodities.

To conclude, several areas in which improvements can be made to the CTSA are outlined. Considerable work has been done in reviewing current Canadian tourism statistics[42] resulting in several recommendations for the TSA in Canada. These include an updating or realigning of concepts and definitions with the TSA:RMF and addressing certain data gaps.

The study by Kemp and Nijhowne (2005) recommends that some concepts be refined or modified in accordance with the TSA:RMF, especially concerning tourism "in-kind" consumption expenditure, net valuation and basic prices. In these cases, differences between the CTSA and the international standard actually stem from differences between the CSNEA and the international SNA guidelines.

This presents a dilemma however: should the links between the CTSA and the CSNEA be broken in order to follow the international TSA guidelines, or, on the other hand, should they be maintained? It would seem that the first course of action would go against one of the fundamental tenets of satellite accounting (which is to be rooted in the SNA). In Canada, the practice with the CTSA has been to follow the CSNEA.

There are some differences in the lists of tourism commodities and tourism industries between the CTSA and the TSA:RMF. As mentioned earlier, these stem in part from differences in the Canadian and international classification systems, as well as the fact that the Canadian lists of tourism industries and commodities pre-date by well over a decade the lists proposed in the TSA:RMF. However, the Canadian lists have essentially remained the same since they were developed.

Last, as discussed earlier, there are several data gaps in the CTSA related to the use of second (holiday) homes, tourism collective consumption and tourism capital formation, all of which are recommended for inclusion in the TSA:RMF. In the next few years the CTSA and its related products, like the NTI and the HRM, will be adapted to the new operational definition of tourism in Canada. This will provide an occasion to reconsider the definition of both tourism industries and tourism commodities, review modifications to the existing lists, and to close some of the data gaps.

At the same time, the international guidelines concerning the system of tourism statistics and the Tourism Satellite Account itself are undergoing revision and update (scheduled for March 2008). Similarly, the international recommendations on national accounting and Balance of payments, both of which guide the framework and principles of the Canadian System of National Economic Accounts on which the CTSA is founded, are undergoing revision (also scheduled for March 2008).

Future work on the CTSA will no doubt be driven in part by the evolving frameworks and principles for tourism satellite accounting as well as new and/or improved data sources. Consideration of both the benefits and the costs of enhancing this integrating, analytical framework for tourism statistics, as well as resource and time constraints will also play a key role.

42. Kemp and Nijhowne (2004) and Kemp and Nijhowne (2005).

Appendix A Questionnaires for key sources for the Canadian Tourism Satellite Account, 2002

All surveys described in this handbook can be accessed on Statistics Canada's website by using the URL below. This will take you to Statistics Canada's list of surveys. By clicking on the survey of interest you can obtain the most current information about survey description, questionnaires and reporting guides. For the year 2002 or other reference periods, after the link, click on "Other reference periods" on the left.

http://www.statcan.ca/english/sdds/indexa.htm

Record number	List of surveys
2712	Air Carrier Operations in Canada Quarterly Survey
2705	Air Charter Statistics
2702	Air Passenger Origin and Destination - Domestic Journeys
2703	Air Passenger Origin and Destination, Canada-U.S.A.
2715	Aircraft Movement Statistics
2701	Airport Activity Survey
2442	Annual Survey of Automotive Equipment Rental and Leasing
4704	Annual Survey of Service Industries - Food Services and Drinking Places
2416	Annual Survey of Service Industries: Motion Picture Theatres
2423	Annual Survey of Travel Arrangement Services
2418	Annual Survey of Traveller Accommodation
2713	Canadian Civil Aviation - Annual Report
2798	Canadian Passenger Bus and Urban Transit Industries
2704	Coupon Passenger Origin and Destination Report - Other Unit Toll Services
2708	Fare Basis Survey
2753	Financial Survey of Canadian Water Carriers
5005	International Travel Survey - Frontier Counts
3152	International Travel Survey - Mail-back Questionnaires and Air Exit Survey of Overseas Travellers
3701	Labour Force Survey
2734	Railway Transport Survey - Annual
2612	Survey of Employment, Payrolls and Hours
3508	Survey of Household Spending
2425	Survey of Service Industries: Amusement and Recreation
4707	Survey of the Taxi and Limousine Services Industry
3810	Travel Survey of Residents of Canada

Appendix B Tourism industries of the Canadian Tourism Satellite Account

CTSA industry aggregation	NAICS 2002 code	Title
Air transportation	481110	Scheduled air transportation
	481214	Non-scheduled chartered air transportation
	481215	Non-scheduled specialty flying services
Rail transportation	482114	Passenger rail transportation
Water transportation	483115	Deep sea, coastal and Great Lakes water transportation (except by ferries)
	483116	Deep sea, coastal and Great Lakes water transportation by ferries
	483213	Inland water transportation (except by ferries)
	483214	Inland water transportation by ferries
Bus transportation	485110	Urban transit systems
	485210	Interurban and rural bus transportation
	485410	School and employee bus transportation
	485510	Charter bus industry
	485990	Other transit and ground passenger transportation
Scenic and sightseeing transportation	487110	Scenic and sightseeing transportation, land
	487210	Scenic and sightseeing transportation, water
	487990	Scenic and sightseeing transportation, other
Taxis and limousine service	485310	Taxi service
	485320	Limousine service
Vehicle rental and leasing	532111	Passenger car rental
	532120	Truck, utility trailer and RV (recreational vehicle) rental and leasing
Hotels	721111	Hotels
	721112	Motor hotels
	721113	Resorts
	721120	Casino hotels
Motels	721114	Motels
Camping	721211	RV (recreational vehicle) parks and campgrounds
	721213	Recreational (except hunting and fishing) and vacation camps
Other accommodation	721191	Bed and breakfast
	721192	Housekeeping cottages and cabins
	721198	All other traveller accommodation
	721212	Hunting and fishing camps
Food and beverage services	722110	Full-service restaurants
	722210	Limited-service eating places
	722410	Drinking places (alcoholic beverages)

Appendix B Tourism industries of the Canadian Tourism Satellite Account – concluded

CTSA industry aggregation	NAICS 2002 code	Title
Recreation and entertainment	512130	Motion picture and video exhibition
	711111	Theatre (except musical) companies
	711112	Musical theatre and opera companies
	711120	Dance companies
	711130	Musical groups and artists
	711190	Other performing arts companies
	711211	Sports teams and clubs
	711213	Horse race tracks
	711218	Other spectator sports
	711510	Independent artists, writers and performers
	712111	Non-commercial art museums and galleries
	712119	Museums (except art museums and galleries)
	712120	Historic and heritage sites
	712130	Zoos and botanical gardens
	712190	Other heritage institutions
	713110	Amusement and theme parks
	713120	Amusement arcades
	713210	Casinos (except casino hotels)
	713291	Lotteries
	713299	All other gambling industries
	713910	Golf courses and country clubs
	713920	Skiing facilities
	713930	Marinas
	713950	Bowling centres
	713990	All other amusement and recreation industries
Travel arrangement and reservation services	561510	Travel agencies
	561520	Tour operators
	561590	Other travel arrangement and reservation services

Appendix C Tourism commodities of the Canadian Tourism Satellite Account

CTSA commodity aggregations	IO worksheet level (W) commodities (from which supply is obtained)	
Transportation		
Passenger air transportation	5301	Air transport, passenger from NAICS 481000
Passenger rail transportation	5351	Rail transport, passenger from NAICS 482000
Passenger water transportation	5331	Water transport, passenger from NAICS 483000, 487000
Interurban, charter and tour bus	53111	Scenic and sightseeing transportation, bus from NAICS 485100, 485200, 485700
	53112	School bus and other transportation from NAICS 485A00, portion for bus charters
	5371	Bus transport, intercity passenger from NAICS 485100, 485200, 485A00, 485700
Taxi transportation	5390	Taxicab transportation from NAICS 485300, 487000
Vehicle rental	5770	Rental of automobiles and trucks from NAICS 5A0510, portion for automobile rental
	5770	Rental of automobiles and trucks from NAICS 5A0510, portion for RV rental
Vehicle repairs and parts	Various commodities from Final Demand category PE029 Motor vehicles parts and accessories, PE030 Motor vehicle repairs, and PE031 Motor fuels and lubricants	
Vehicle fuel	Various commodities from Final Demand category PE029 Motor vehicles parts and accessories, PE030 Motor vehicle repairs, and PE031 Motor fuels and lubricants	
Accommodation		
Hotels	56901	Hotel and motel accommodation services from NAICS 721100, portion for hotels
	5680	Laundry and dry cleaning from NAICS 721100, portion for hotels
	5725	Other personal care services from NAICS 721100, portion for hotels
Motels	56901	Hotel and motel accommodation services from NAICS 721100, portion for motels
	5680	Laundry and dry cleaning from NAICS 721100, portion for motels
	5725	Other personal care services from NAICS 721100, portion for motels
Camping	56902	Other accommodation services from NAICS 721A00, portion for camping
	5680	Laundry and dry cleaning from NAICS 721A00, portion for camping
	5725	Other personal care services from NAICS 721A00, portion for camping
Outfitters	56902	Other accommodation services from NAICS 721A00, portion for outfitters
	5680	Laundry and dry cleaning from NAICS 721A00, portion for outfitters
	5725	Other personal care services from NAICS 721A00, portion for outfitters
Other accommodation	56901	Hotel and motel accommodation services from NAICS 721100, portion for other accommodation
	56902	Other accommodation services from NAICS 711000, 713A00, 722000
	5680	Laundry and dry cleaning from NAICS 721100, portion for other accommodation
	5725	Other personal care services from NAICS 721100, 711000, 713A00, 722000
Food and beverage		
Meals from:		
Accommodation services	57001	Meals (outside home) from NAICS 721100, 721A00
Food and beverage services	57001	Meals (outside home) from NAICS 722000
Other tourism industries	57001	Meals (outside home) from NAICS 482000, 483000, 485100, 487000, 512130, 711000, 713A00, 713200, 712000

Appendix C Tourism commodities of the Canadian Tourism Satellite Account (concluded)

CTSA commodity aggregations	IO worksheet level (W) commodities (from which supply is obtained)	
Alcoholic beverages from:		
Accommodation services	1162	Distilled alcoholic beverages, consumed on licensed premises, from NAICS 721100, 721A00
	1192	Beer, including coolers, consumed on licensed premises, from NAICS 721100, 721A00
	1202	Wine. including coolers, consumed on licensed premises, from NAICS 721100, 721A00
Food and beverage services	1162	Distilled alcoholic beverages, consumed on licensed premises, from NAICS 722000
	1192	Beer, including coolers, consumed on licensed premises, from NAICS 722000
	1202	Wine. including coolers, consumed on licensed premises, from NAICS 722000
Other tourism industries	1162	Distilled alcoholic beverages, consumed on licensed premises, from NAICS 482000, 483000, 485100, 487000, 512130, 711000, 713A00, 713200, 712000
	1192	Beer, including coolers, consumed on licensed premises, from NAICS 482000, 483000, 485100, 487000, 512130, 711000, 713A00, 713200, 712000
	1202	Wine. including coolers, consumed on licensed premises, from NAICS 482000, 483000, 485100, 487000, 512130, 711000, 713A00, 713200, 712000
Other tourism commodities		
Recreation and entertainment	5642	Motion picture exhibition from NAICS 512130
	5651	Lottery and other gambling from NAICS 713200
	5652	Race track services from NAICS 711000
	5653	Other amusement and recreation services, from NAICS 487000, 721100, 721A00, 722000, 711000, 713A00, 712000, 561500
Travel agency services	5321	Travel agents, tour wholesaler and operator services from NAICS 561500
Convention fees	5594	Non-residential rent from NAICS 721100, portion for hotels and motels
Pre-trip expenditures	Total value of shipments and imports less exports of:	
	1430	Luggage, briefcases, etc.
	1730	Tents, sleeping bags, sails etc.
	3373	Motor homes, motorcycles and all-terrain vehicles (ATVs)
	3391	Non-commercial trailers
Non-tourism commodities purchased by tourists		
Groceries	Various commodities from Final Demand category PE001 Food and non-alcoholic beverages, PE021 Non-durable household supplies, and PE043 Toilet articles and cosmetics	
Alcohol bought from stores	Various commodities from Final Demand category PE002 Alcoholic beverages bought in stores	
Urban transit and parking	5380	Urban transit from NAICS 485100, 485200, 485A00
	5322	Parking services from all NAICS
Miscellaneous commodities	Various commodities from the Final Demand Table (see Table 18 in text)	

Appendix D Industries of Input-Output used in the Canadian Tourism Satellite Account showing tourism and non-tourism sub-industries

I-O worksheet (W) level Industry	I-O NAICS	Tourism and non-tourism sub-industries
209	481000	Air transportation
		of which:
		Tourism sub-industries
		481110 Scheduled air transportation
		481214 Non-scheduled chartered air transportation
		481215 Non-scheduled specialty flying services
		Non-tourism sub-industries
		None
210	482000	Rail transportation
		of which:
		Tourism sub-industries
		482114 Passenger rail transportation
		Non-tourism sub-industries
		482112 Short-haul freight rail transportation
		482113 Mainline freight rail transportation
211	483000	Water transportation
		of which:
		Tourism sub-industries
		483115 Deep sea, coastal and Great Lakes water transportation (except by ferries)
		483116 Deep sea, coastal and Great Lakes water transportation by ferries
		483213 Inland water transportation (except by ferries)
		483214 Inland water transportation by ferries
		Non-tourism sub-industries
		None
213	485100	Urban transit systems
		of which:
		Tourism sub-industries
		485110 Urban transit systems
		Non-tourism sub-industries
		None
214	485200	Interurban and rural bus transportation
		of which:
		Tourism sub-industries
		485210 Interurban and rural bus transportation
		Non-tourism sub-industries
		None
215	485300	Taxi and limousine service
		of which:
		Tourism sub-industries
		485310 Taxi service
		485320 Limousine service
		Non-tourism sub-industries
		None

Appendix D Industries of Input-Output used in the Canadian Tourism Satellite Account showing tourism and non-tourism sub-industries (continued)

I-O worksheet (W) level Industry	I-O NAICS	Tourism and non-tourism sub-industries
216	485A00	All other transit and ground passenger transportation
		of which:
		Tourism sub-industries
		485410 School and employee bus transportation
		485510 Charter bus industry
		485990 Other transit and ground passenger transportation
		Non-tourism sub-industries
		None
219	487000	Scenic and sightseeing transportation
		of which
		Tourism sub-industries
		487110 Scenic and sightseeing transportation, land
		487210 Scenic and sightseeing transportation, water
		487990 Scenic and sightseeing transportation, other
		Non-tourism sub-industries
		None
228	512130	Motion picture and video exhibition
		of which:
		Tourism sub-industries
		512130 Motion picture and video exhibition
		Non-tourism sub-industries
		None
250	5A0510	Automotive equipment rental and leasing
		of which:
		Tourism sub-industries
		532111 Passenger car rental
		532120 Truck, utility trailer and RV (recreational vehicle) rental and leasing
		Non-tourism sub-industries
		532112 Passenger car leasing
262	561500	Travel arrangement and reservation services
		of which:
		Tourism sub-industries
		561510 Travel agencies
		561520 Tour operators
		561590 Other travel arrangement and reservation services
		Non-tourism sub-industries
		None
273	711000	Performing arts, spectator sports and related industries
		of which:
		Tourism sub-industries
		711111 Theatre (except musical) companies
		711112 Musical theatre and opera companies
		711120 Dance companies
		711130 Musical groups and artists

Appendix D Industries of Input-Output used in the Canadian Tourism Satellite Account showing tourism and non-tourism sub-industries (continued)

I-O worksheet (W) level Industry	I-O NAICS	Tourism and non-tourism sub-industries
		711190 Other performing arts companies
		711211 Sports teams and clubs
		711213 Horse race tracks
		711218 Other spectator sports
		711510 Independent artists, writers and performers
		Non-tourism sub-industries
		711311 Live theatres and other performing arts presenters with facilities
		711319 Sports stadiums and other presenters with facilities
		711321 Performing arts promoters (presenters) without facilities
		711322 Festivals without facilities
		711329 Sports presenters and other presenters without facilities
		711410 Agents and managers for artists, athletes, entertainers and other public figures
274	712000	Heritage institutions
		of which:
		Tourism sub-industries
		712111 Non-commercial art museums and galleries
		712119 Museums (except art museums and galleries)
		712120 Historic and heritage sites
		712130 Zoos and botanical gardens
		712190 Other heritage institutions
		Non-tourism sub-industries
		None
275	713200	Gambling industries
		of which:
		Tourism sub-industries
		713210 Casinos (except casino hotels)
		713291 Lotteries
		713299 All other gambling industries
		Non-tourism sub-industries
		None
276	713A00	Amusement and recreation industries
		of which:
		Tourism sub-industries
		713110 Amusement and theme parks
		713120 Amusement arcades
		713910 Golf courses and country clubs
		713920 Skiing facilities
		713930 Marinas
		713950 Bowling centres
		713990 All other amusement and recreation industries
		Non-tourism sub-industries
		713940 Fitness and recreational sports centres
277	721100	Traveller accommodation
		of which:

Appendix D Industries of Input-Output used in the Canadian Tourism Satellite Account showing tourism and non-tourism sub-industries (concluded)

I-O worksheet (W) level Industry	I-O NAICS	Tourism and non-tourism sub-industries
		Tourism sub-industries
		721111 Hotels
		721112 Motor hotels
		721113 Resorts
		721114 Motels
		721120 Casino hotels
		721191 Bed and breakfast
		721192 Housekeeping cottages and cabins
		721198 All other traveller accommodation
		Non-tourism sub-industries
		None
278	721A00	RV (recreational vehicle) parks, recreational camps, and rooming and boarding houses
		of which:
		Tourism sub-industries
		721211 RV (recreational vehicle) parks and campgrounds
		721212 Hunting and fishing camps
		721213 Recreational (except hunting and fishing) and vacation camps
		Non-tourism sub-industries
		721310 Rooming and boarding houses
279	722000	Food services and drinking places
		of which:
		Tourism sub-industries
		722110 Full-service restaurants
		722210 Limited-service eating places
		722410 Drinking places (alcoholic beverages)
		Non-tourism sub-industries
		722310 Food service contractors
		722320 Caterers
		722330 Mobile food services

Appendix E Tourism expenditure by commodity, Canada, 2002

Commodities	Domestic demand	International demand (exports)	Total demand	Total domestic supply	Tourism commodity ratio	Tourism spending abroad (imports)
	(1)	(2)	(3)=(1)+(2)	(4)	(5)=(3)/(4)	(6)
	millions of dollars				percentage	millions of dollars
Passenger air	7,964	2,797	10,761	11,290	95.3	...
Passenger rail	143	139	282	303	93.1	...
Passenger water	113	204	317	337	94.1	...
Interurban, charter and tour bus	459	363	822	872	94.2	...
Taxis	131	78	209	1,597	13.1	...
Vehicle rental	870	552	1,421	2,063	68.9	...
Vehicle repairs and parts	885	99	983	14,208	6.9	...
Vehicle fuel	4,165	592	4,757	21,617	22.0	...
Total transportation	**14,729**	**4,824**	**19,553**	**52,287**	**37.4**	**6,408**
Hotels	3,354	2,975	6,329	6,923	91.4	...
Motels	522	707	1,229	1,297	94.7	...
Camping	341	139	479	510	94.1	...
Other accommodation	457	503	960	1,071	89.6	...
Total accommodation	**4,674**	**4,324**	**8,998**	**9,802**	**91.8**	**5,906**
Meals from accommodation	524	305	829	2,498	33.2	...
Meals from restaurants	3,873	1,945	5,818	30,088	19.3	...
Alcoholic beverages from accommodation	252	150	403	1,691	23.8	...
Alcoholic beverages from restaurants	647	487	1,133	6,212	18.2	...
Meals and alcoholic beverages from other tourism industries	248	119	367	1,876	19.6	...
Total food and beverage services	**5,544**	**3,006**	**8,550**	**42,364**	**20.2**	**3,989**
Recreation and entertainment	2,145	2,131	4,275	17,829	24.0	1,984
Travel agency services	2,727	229	2,956	2,972	99.5	...
Convention fees	130	58	188	205	91.8	...
Pre-trip expenses	2,015	0	2,015	2,015	100.0	...
Total other tourism commodities	**7,016**	**2,418**	**9,434**	**23,020**	**41.0**	**1,984**
Groceries	1,561	779	2,340	62,325	3.8	...
Beer, wine and liquor from stores	336	155	491	13,316	3.7	...
Urban transit and parking	124	77	201	2,143	9.4	...
Miscellaneous commodities	4,461	2,533	6,994	2,016,247	0.3	...
Total other commodities purchased by tourists	**6,481**	**3,544**	**10,025**	**2,094,031**	**0.5**	**2,340**
Total tourism expenditures	**38,444**	**18,116**	**56,560**	**2,221,504**	**2.5**	**20,627**

Appendix F Gross domestic product and employment for tourism and non-tourism industries, Canada, 2002

Industry	Labour income	Net income of unincorporated business	Other[1]	GDP at basic prices	Number of jobs	Labour compensation per job	GDP per job	Tourism GDP ratio[2]
	millions of dollars				thousands	dollars		percentage
Tourism activities								
Total transportation	3,691	41	1,794	5,526	77.9	47,900	71,000	34.8
Air transportation	2,824	0	264	3,088	50.6	55,900	61,100	78.7
Railway transportation	121	0	587	707	2.9	41,100	240,400	13.9
Water transportation	97	0	39	136	1.9	52,700	73,600	11.5
Bus transportation	312	6	138	456	9.8	32,600	46,700	31.2
Taxicabs	43	34	25	102	4.2	18,200	24,100	14.5
Vehicle rental	293	1	743	1,037	8.5	34,600	121,800	29.0
Total accommodation	3,603	197	1,908	5,708	160.5	23,700	35,600	66.4
Hotels	2,699	155	1,469	4,322	107.3	26,600	40,300	66.3
Motels	382	26	203	610	19.2	21,300	31,900	70.3
Camping	222	9	100	331	13.0	17,800	25,500	79.2
Other accommodation	301	7	136	445	21.0	14,700	21,200	54.0
Food and beverage services	2,362	97	439	2,898	144.7	17,000	20,100	17.3
Recreation and entertainment	1,414	115	524	2,052	65.5	23,400	31,400	22.1
Travel agencies	1,280	30	424	1,734	41.8	31,400	41,600	92.2
Total tourism industries	12,349	481	5,090	17,919	490.3	26,200	36,600	34.3
Other industries	3,473	169	1,758	5,400	120.8	30,200	44,800	...
Total tourism activities	15,822	650	6,848	23,319	611.1	27,000	38,200	...
Non-tourism activities								
Agriculture, forestry, fishing and hunting	7, 813	2,263	12,475	22,550	417	24,200	54,100	...
Mining and oil and gas extraction	11,475	158	41,840	53,474	153	76,200	350,100	...
Utilities	6,458	11	20,826	27,295	93	69,400	292,700	...
Construction	40,472	6,649	10,654	57,775	910	51,800	63,500	...
Manufacturing	98,198	425	81,923	180,546	1,951	50,600	92,600	...
Wholesale trade	35,925	802	16,327	53,054	812	45,300	65,400	...
Retail trade	41,219	3,750	13,467	58,437	1,849	24,400	31,700	...
Transportation and warehousing	25,778	2,400	13,408	41,587	628	44,900	66,300	...
Information and cultural industries	17,984	181	17,998	36,163	374	48,700	96,800	...
Finance, insurance, real estate and leasing	52,201	33,391	114,666	200,258	982	87,300	204,100	...
Professional, scientific and technical services	34,103	6,941	7,127	48,172	874	47,000	55,100	...
Administrative and support, waste management and remediation services	16,395	2,000	4,652	23,047	636	29,000	36,300	...
Educational services	1,349	801	158	2,308	88	24,500	26,200	...
Health care and social assistance	11,750	12,169	3,264	27,183	551	43,500	49,400	...
Other industries[3]	176,365	2,802	34,431	213,597	4,654	38,500	45,900	...
Total non-tourism activities	577,485	74,744	393,217	1,045,445	14,972	43,600	69,900	...
Total economy	**593,307**	**75,393**	**400,065**	**1,068,765**	**15,583**	**43,000**	**68,600**	**...**
of which: Business sector	**447,042**	**75,393**	**374,161**	**896,596**	**12,677**	**41,300**	**70,800**	**...**

1. Includes other operating surplus, other taxes on production (excluding taxes on products) and other subsidies on production.
2. Tourism's share of total industry's Gross Domestic Product (GDP). Percentage of an industry's GDP that comes from satisfying tourism demand. "Total industry's GDP" is a broad variable as it also includes freight activities.
3. Including government and non-profit institutions.

Appendix G Tourism Satellite Account: Recommended Methodological Framework Table 1

Inbound tourism consumption, by product and categories of visitors, Canada, 2002 - Visitor final consumption expenditure in cash, net valuation

	Same-day visitors	Tourists	Total visitors
	Millions of dollars		
Products			
A Specific products	1,337	13,234	14,571
Characteristic products	1,337	13,234	14,571
Accommodation services	…	4,324	4,324
Hotels	…	2,975	2,975
Second home services on own account or for free[1]	…	…	…
Food and beverage serving services	475	2,531	3,006
Passenger transport services	447	4,377	4,824
Interurban railway	19	120	139
Road	241	793	1,033
Water	26	179	204
Air	78	2,719	2,797
Supporting services[1]	…	…	…
Transport equipment rental	55	497	552
Maintenance and repair services	29	70	99
Travel agency, tour operator and tourist guide services[2]	22	207	229
Cultural services[3]	.	.	.
Recreation and other entertainment services	386	1,745	2,131
Miscellaneous tourism services	8	50	58
Connected products[1]	…	…	…
B Non-specific products	476	3,068	3,544
Total	1,813	16,302	18,115

1. Not included in the CTSA.
2. Corresponds to the commissions of the travel agencies and tour operators.
3. Included with recreation and other entertainment services.

Appendix G Tourism Satellite Account: Recommended Methodological Framework Table 2
Total domestic tourism consumption, by products and ad hoc sets or resident visitors, Canada, 2002 – Visitor final consumption expenditure in cash, net valuation

	Resident visitors travelling only within Canada			Resident visitors travelling outside Canada			All resident visitors		
	Same-day visitors	Tourists	Total visitors	Same-day visitors	Tourists	Total visitors	Same-day visitors	Tourists	Total visitors
	Millions of dollars								
Products									
A Specific products	3,959	22,515	26,474	494	4,995	5,489	4,453	27,510	31,963
Characteristic products	3,959	22,515	26,474	494	4,995	5,489	4,453	27,510	31,963
Accommodation services	…	4,617	4,617	…	57	57	…	4,674	4,674
Hotels	…	3,316	3,316	…	38	38	…	3,354	3,354
Second home services on own account or for free[1]	…	…	…	…	…	…	…	…	…
Food and beverage serving services	1,202	4,293	5,495	11	38	49	1,213	4,331	5,544
Passenger transport services	1,721	8,055	9,776	386	4,567	4,953	2,107	12,622	14,729
Interurban railway	25	111	136	1	6	7	26	117	143
Road	1,025	3,571	4,595	30	129	160	1,055	3,700	4,755
Water	21	54	75	10	27	38	31	81	113
Air	351	2,962	3,313	329	4,321	4,651	681	7,283	7,964
Supporting services[1]	…	…	…	…	…	…	…	…	…
Transport equipment rental	105	686	791	11	69	79	115	755	870
Maintenance and repair services	195	671	866	4	14	19	199	686	885
Travel agency, tour operator and tourist guide services[2]	522	1,798	2,321	92	315	407	614	2,114	2,727
Cultural services[3]	…	…	…	…	…	…	…	…	…
Recreation and other entertainment services	478	1,644	2,122	5	18	23	483	1,662	2,145
Miscellaneous tourism services	36	2,108	2,144	0	0	0	36	2,108	2,144
Connected products[1]	.	.	.	.	.	.	.	.	.
B Non-specific products	2,180	4,272	6,452	9	20	29	2,189	4,292	6,481
Total	6,139	26,787	32,926	503	5,015	5,518	6,642	31,802	38,444

1. Not included in the CTSA.
2. Corresponds to the commissions of the travel agencies and tour operators.
3. Included with recreation and other entertainment services.

Appendix G Tourism Satellite Account: Recommended Methodological Framework Table 3
Outbound tourism consumption, by product and categories of visitors, Canada, 2002 - Visitor final consumption expenditure in cash, net valuation

	Same-day visitors[4]	Tourists[4]	Total visitors[4]
	Millions of dollars		
Products			
A Specific products	.	.	18,287
Characteristic products	.	.	18,287
Accommodation services	…	.	5,906
Hotels	…	.	.
Second home services on own account or for free[1]	…	…	…
Food and beverage serving services	.	.	3,989
Passenger transport services	.	.	6,408
Interurban railway	.	.	.
Road	.	.	.
Water	.	.	.
Air	.	.	.
Supporting services[1]	…	…	…
Transport equipment rental	.	.	.
Maintenance and repair services	.	.	.
Travel agency, tour operator and tourist guide services[2]	.	.	.
Cultural services[3]	…	…	…
Recreation and other entertainment services	.	.	1,984
Miscellaneous tourism services	.	.	.
Connected products[1]	…	…	…
B Non-specific products	.	.	2,340
Total	.	.	20,627

1. Not included in the CTSA.
2. Corresponds to the commissions of the travel agencies and tour operators.
3. Included with Recreation and other entertainment services.
4. Detailed calculations not done in CTSA for outbound tourism consumption.

Appendix G Tourism Satellite Account: Recommended Methodological Framework Table 4
Internal tourism consumption, by products and types of tourism, Canada, 2002 - Net valuation

	Visitors final consumption expenditure in cash			Other components of visitor consumption	Internal tourism consumption in cash
	Inbound tourism consumption	Domestic tourism consumption	Internal tourism consumption		
	Millions of dollars				
Products					
A Specific products	14,571	31,963	46,534	...	46,534
Characteristic products	14,571	31,963	46,534	...	46,534
Accommodation services	4,324	4,674	8,998	...	8,998
Hotels	2,975	3,354	6,329	...	6,329
Second home services on own account or for free[1]	…	…	…	...	…
Food and beverage serving services	3,006	5,544	8,550	...	8,550
Passenger transport services	4,824	14,729	19,553	...	19,553
Interurban railway	139	143	282	...	282
Road	1,033	4,755	5,788	...	5,788
Water	204	113	317	...	317
Air	2,797	7,964	10,761	...	10,761
Supporting services[1]	…	…	…	...	…
Transport equipment rental	552	870	1,421	...	1,421
Maintenance and repair services	99	885	983	...	983
Travel agency, tour operator and tourist guide services[2]	229	2,727	2,956	...	2,956
Cultural services[3]	.	.	.	...	.
Recreation and other entertainment services	2,131	2,145	4,275	...	4,275
Miscellaneous tourism services	58	2,144	2,202	...	2,202
Connected products[1]	…	…	…	...	…
B Non specific products	3,544	6,481	10,025	...	10,025
				...	
Total	18,115	38,444	56,559	...	56,559

1. Not included in the CTSA.
2. Corresponds to the commissions of the travel agencies and tour operators.
3. Included with recreation and other entertainment services.

Appendix G Tourism Satellite Account: Recommended Methodological Framework Table 5

Production accounts of tourism industries and other industries, Canada, 2002 - Net valuation

	Tourism industries					Total tourism industries	Total non-tourism industries	Total output of domestic producers (at basic prices)
	Transportation	Accommodation	Food and beverage services	Travel services	Recreation, and entertainment			
	Millions of dollars							
Products								
A Specific products	15,874	12,808	33,489	2,832	15,490	80,492	15,121	95,613
Characteristic products	15,874	12,808	33,489	2,832	15,490	80,492	15,121	95,613
Accommodation services	0	8,926	154	0	97	9,177	2,985	12,162
Hotels	0	6,483	0	0	0	6,483	0	6,483
Second home services on own account or for free[1]	…	…	…	…	…	…	…	…
Food and beverage serving services	192	3,814	33,165	0	1,517	38,687	5,276	43,964
Passenger transport services	15,609	0	0	0	0	15,609	4,108	19,717
Interurban railway	291	0	0	0	0	291	64	355
Road	2,367	0	0	0	0	2,367	1,331	3,698
Water	322	0	0	0	0	322	3	325
Air	10,715	0	0	0	0	10,715	0	10,715
Supporting services[1]	…	…	…	…	…	…	…	…
Transport equipment rental	1,914	0	0	0	0	1,914	2,710	4,624
Maintenance and repair services	0	0	0	0	0	0	0	0
Travel agency, tour operator and tourist guide services[2]	0	0	0	2,827	0	2,827	0	2,827
Cultural services[3]	.	.	.	.	.	.	.	.
Recreation and other entertainment services	72	68	170	4	13,877	14,192	2,751	16,943
Miscellaneous tourism services	0	0	0	0	0	0	0	0
Connected products[1]	…	…	…	…	…	…	…	…
B Non-specific products distribution margins	18,965	1,046	4,479	277	2,060	26,827	2,099,064	2,125,891
Total	34,839	13,854	37,968	3,108	17,550	107,319	2,114,185	2,221,504
Total output, at basic prices	34,839	13,854	37,968	3,108	17,550	107,319	2,114,185	2,221,504
Total intermediate consumption, at purchaser prices[4]	16,280	5,368	21,239	1,228	8,842	52,957	1,099,782	1,152,739
Total gross value added of activities, at basic prices	18,558	8,486	16,729	1,880	8,708	54,362	1,014,403	1,068,765
Compensation of employees	11,800	5,298	13,633	1,388	5,797	37,916	555,390	593,307
less subsidies on production	676	498	428	31	292	1,925	51,991	53,916
Gross mixed income	270	304	561	33	608	1,775	73,619	75,393
Gross operating surplus	5,813	2,386	2,106	429	2,011	12,746	333,403	346,149
Total input, at basic prices	34,839	13,854	37,968	3,108	17,550	107,319	2,114,185	2,221,504

1. Not included in the CTSA.
2. Corresponds to the commissions of the travel agencies and tour operators.
3. Included with recreation and other entertainment services.
4. Details not calculated in the CTSA.

Appendix G Tourism Satellite Account: Recommended Methodological Framework Table 6

Domestic supply and internal tourism consumption, by products, Canada, 2002 - Net valuation

	Tourism industries					Total tourism industries	Total non-tourism industries	Total all industries	Tourism ratio on supply (at purchaser prices)
	Transportation	Accommodation	Food and beverage services	Travel services	Recreation and entertainment				
	Tourism demand at basic prices, millions of dollars								percentage
Products									
A Specific products	13,132	9,129	6,562	2,814	3,748	35,385	6,651	42,036	36.5
Characteristic products	13,132	9,129	6,562	2,814	3,748	35,385	6,651	42,036	36.5
Accommodation services	0	7,990	170	0	120	8,280	144	8,423	91.8
Hotels	0	5,936	0	0	0	5,936	0	5,936	91.4
Second home services on own account or for free[1]	…	…	…	…	…	…	…	…	…
Food and beverage serving services	33	1,123	6,352	0	301	7,808	0	7,808	20.2
Passenger transport services	13,081	0	0	0	0	13,081	5,126	18,207	37.4
Interurban railway	271	0	0	0	0	271	0	271	93.2
Road	976	0	0	0	0	976	4,248	5,224	24.0
Water	303	0	0	0	0	303	0	303	94.2
Air	10,213	0	0	0	0	10,213	0	10,213	95.3
Supporting services[1]	…	…	…	…	…	…	…	…	…
Transport equipment rental	1,319	0	0	0	0	1,319	0	1,319	68.9
Maintenance and repair services	0	0	0	0	0	0	878	878	6.9
Travel agency, tour operator and tourist guide services[2]	0	0	0	2,813	0	2,813	0	2,813	99.5
Cultural services[3]	…	…	…	…	…	…	…	…	…
Recreation and other entertainment services	17	16	41	1	3,328	3,403	0	3,403	24.0
Miscellaneous tourism services	0	0	0	0	0	0	1,382	1,382	99.3
Connected products[1]	…	…	…	…	…	…	…	…	…
B Non-specific products distribution margins	193	0	0	0	6	199	10,023	10,222	0.5
Total	13,324	9,129	6,562	2,814	3,754	35,583	16,674	52,258	2.5
Total output, at basic prices	13,324	9,129	6,562	2,814	3,754	35,583	16,674	52,258	
Total intermediate consumption, at purchaser prices[4]	7,798	3,420	3,664	1,080	1,702	17,664	11,275	28,938	
Total gross value added of activities, at basic prices	5,526	5,708	2,898	1,734	2,052	17,919	5,400	23,319	
Compensation of employees	3,691	3,603	2,362	1,280	1,414	12,349	3,473	15,822	
less subsidies on production									
Gross mixed income	41	197	97	30	115	481	169	650	
Gross operating surplus[5]	1,794	1,908	439	424	524	5,090	1,758	6,848	
Total input, at basic prices	13,324	9,129	6,562	2,814	3,754	35,583	16,674	52,258	

1. Not included in the CTSA.
2. Corresponds to the commissions of the travel agencies and tour operators.
3. Included with recreation and other entertainment services.
4. Details not calculated in the CTSA.
5. Includes taxes and subsidies on production.

Glossary of terms

Basic price: A basic price valuation includes the costs of production factors (labour and capital) and taxes and subsidies on production factors.

Benchmark: Values which are obtained from higher quality observations and serve as standards for gauging values that are obtained from less reliable sources. For example, annual GDP values derived from comprehensive annual surveys or censuses within the balanced framework of the input-output accounts are benchmarks for the monthly GDP indicators which are typically based on observations collected by sample monthly surveys.

Census: A census refers to the collection of information about characteristics of interest from all units in a population.

Commodity: See products.

Disposition: The disposition of a good or service is the sum of its intermediate use (by all sectors) and its final use as personal expenditure, fixed capital formation (by all sectors), current government expenditure, exports and net additions to inventories. When valued at basic prices, total disposition or demand is equal to supply.

Economic production: Economic production is an activity carried out under the control and responsibility of an institutional unit that uses inputs of labour, capital, and goods and services to produce outputs of goods or services.

Economic territory: The economic territory of a country encompasses the geographic territory, plus the air space, territorial waters and continental shelf, as well as its territorial enclaves abroad (embassies, consulates, military bases, etc.).

Employment: Employment is the number of all employee and self-employment (includes unpaid family workers) jobs in an industry. It should be noted that a job that exists for only part of the year (for example 4 months) counts as only a fraction of a job (1/3 of a job) for the year. It should also be noted that a part-time job at 10 hours a week counts as much as a full-time job at 50 hours a week; each is one job.

Establishment: An establishment is the most homogeneous unit of production for which the business maintains accounting records from which it is possible to assemble all the data elements required to compile the full structure of the gross value of production (total sales or shipments, and inventories), the cost of materials and services, and labour and capital used in production.

Exports (interprovincial and international): Exports are receipts from other provinces and territories or from abroad for sales of merchandise or services.

Factor cost: A valuation reflecting the cost of production factors (labour and capital). It corresponds to the value remaining after the deduction from market prices of all applicable taxes and subsidies.

Final domestic demand: The sum of personal expenditure on consumer goods and services, net government current expenditure on goods and services, government gross fixed capital formation and business gross fixed capital formation.

Gross domestic product (GDP): The total unduplicated value of the goods and services produced in the economic territory of a country or region during a given period. GDP can be measured three ways: as total incomes earned in current production (income approach), as total final sales of current production (expenditure approach), or as total net values added in current production (value added approach). It can be valued either at basic prices or at market prices.

GDP - expenditure based: Expenditure based GDP is total final sales of current production or final expenditures at purchasers' prices (including the FOB value of exports of goods and services less the FOB value of imports of goods and services).

GDP - income based: Income based GDP is compensation of employees, plus taxes less subsidies on products and imports, plus gross mixed income, plus gross operating surplus.

GDP at basic prices: GDP at basic prices is GDP at market prices minus taxes less subsidies on products. GDP at basic prices is also equal to the traditional value at factor cost plus taxes less subsidies on the factors of production (labour and capital).

GDP at factor cost: An industry's GDP at factor cost equals the sum of its factor incomes, i.e., the sum of wages and salaries, supplementary labour income, mixed income and other operating surplus.

GDP at market prices: GDP at market prices equals GDP at basic prices plus taxes less subsidies on products. It is also equal to expenditure-based GDP.

GDP by industry: GDP of an industry (also referred to as value added) equals output by the industry minus the value of intermediate inputs that are purchased from other industries, domestic or foreign. Value added is a measure of how much an industry has contributed to the value of its output over and above the value of intermediate inputs. GDP by industry for the economy as a whole is the sum of values added by all industries resident in Canada.

GDP by industry at basic prices: When evaluated at basic prices, an industry's GDP is the sum of its factor incomes (wages and salaries, supplementary labour income, mixed income and other operating surplus) plus taxes on production less subsidies on production.

GDP by industry at market prices: An industry's GDP at market prices equals its GDP at basic prices plus taxes on products less subsidies on products.

Gross fixed capital formation: Gross fixed capital formation is the value of a producer's acquisitions, less disposals, of fixed assets during the accounting period plus certain additions to the value of non-produced assets (such as subsoil assets or major improvements in the quantity, quality or productivity of land) realized by the productive activity of institutional units.

I-O accounts: See input-output accounts.

Imports (interprovincial and international): Imports are payments for goods and services originating from abroad or from other provinces or territories. Imports are valued C.I.F. (cost, insurance and freight included) including customs duties at the border of the exporting country or province or territory.

Industry: An industry is a group of establishments engaged in the same or a similar kind of economic activity.

Input-output accounts: The Input-output (I-O) accounts are made up of several parts: the input-output tables (consisting of input, output and final demand tables) for the national economy as well as provinces and territories, the interprovincial trade flow tables, the impact tables, and a number of supplementary tables for margins such as retail trade margins, wholesale trade margins, transport and tax margins.

Input-output tables: Input-output tables are part of the production accounts of the CSNEA. They show the production of goods and services, the generation of income from the production process and the flows of goods and services through the economic system between producers and consumers. The transactors involved in the production process are individuals (persons or households), establishments (production units of businesses and governments), non-business entities such as non-profit institutions, and governments.

Intermediate consumption: Intermediate consumption consists of the value of the goods and services consumed as inputs by a process of production, excluding fixed assets whose consumption is recorded as consumption of fixed capital; the goods or services may be either transformed or used up by the production process.

International traveller: The term "international traveller" applies to all persons arriving in Canada who are cleared through Customs points of entry, whether travelling for business, pleasure or other reasons. "International travellers" is divided into three groups: non-resident travellers, resident travellers and other travellers.

Labour Force Survey (LFS): Monthly household survey of individuals which provides demographic data on the employed and the unemployed, such as age, sex, family relationship, marital status, occupation and industry as well as data on the characteristics and past work experience of those not currently in the labour force. Compare with Survey of Employment, Payroll and Hours (SEPH).

Labour income: Total earnings of employees, consisting of wages and salaries as well as supplementary labour income (such as employer's contributions to pension funds, employee welfare funds, the Employment Insurance Fund and Worker's Compensation Funds).

Margins: The additional cost elements that make up the difference between modified basic prices and purchasers' prices are called margins. Seven margins are distinguished in the input-output accounts: retail margins, wholesale margins, tax margins, transport margins, gas margins, storage margins, and pipeline margins.

Market prices: A valuation expressed in terms of the prices actually paid by the purchaser, that is, after all applicable taxes and subsidies. See factor cost.

Mixed income: Mixed income is a balancing item in the industry accounts of input-output accounts representing the return to both self-employed labour and capital of the unincorporated business. Mixed Income consists of earnings of proprietors of unincorporated businesses (sole proprietorships and partnerships) such as retailers and consultants, earnings of independent professional practitioners such as lawyers and dentists, net (after expenses) rental income of owners of real property and the accrued net farm income of farm operators.

Modified basic price: The modified basic price for a good or service is its selling price at the boundary of the producing establishment excluding sales and excise taxes levied after the final stage of production. This price includes subsidies, in the sense that it is not adjusted for subsidies received by the producer. Modified basic price is the most easily observable transaction price. It equals the purchaser price less transport, trade and tax margins involved in delivering the product to the purchaser. Industry production (output) and intermediate consumption (inputs) are measured in modified basic price in Canadian input-output accounts. This contrasts with valuation at basic prices recommended by SNA 1993 which requires that the sale price described above is adjusted for subsidies.

North American Industry Classification System (NAICS): The North American Industry Classification System (NAICS) is an industrial classification system used to group producers into industries on the basis of similarities in their production processes. Developed jointly by Canada, Mexico and the United States in 1997, NAICS provides a common framework of classification which places industrial statistics compiled by the three countries on a comparable basis.

Operating surplus: Operating surplus is a balancing item in the industry accounts of input-output accounts. For business industries, it represents the return to capital of incorporated business. It consists of gross profits (including bad debts and charitable contributions) of corporations and government business enterprises (GBE's) before income taxes, including capital consumption allowances (corporate and unincorporated sectors), miscellaneous investment income, dividend paid net of dividend received, interest paid net of interest received, and inventory valuation adjustment (an adjustment for changes in the value of non-farm inventories due to price changes). Holding gains and losses, such as realized capital gains on asset sales, are excluded from operating surplus.

Output: Output consists of those goods and services that are produced within an establishment that become available for use outside that establishment, plus any goods and services produced for own final use.

Person-trip: A Person-trip for non-residents begins each time a non-resident traveller enters Canada. The person-trip concludes when the traveller leaves Canada. For residents, each time a person departs from their usual environment or place of residence, a person-trip begins. It ends when the traveller returns home.

Personal expenditure on consumer goods and services: Household spending on new consumer goods and on consumer services, plus any mark-up on used goods. Operating expenses of associations of individuals serving households are also included, under consumer services.

Pre-trip expenditures: See Tourism single-purpose consumer durables.

Producer price: A valuation of goods and services that includes the price received by the producer for delivery at the boundary of the establishment (if domestically produced) or cost-insurance-and-freight (CIF, if imported from abroad) at the Canadian border excluding margins such as transport, trade, or applicable taxes or fees, but including import duties.

Production boundary: The boundary of production includes (a) the production of all individual or collective goods or services that are supplied to units other than their producers, or intended to be supplied, including the production of goods or services used up in the process of producing such goods or services, (b) the own-account production of all goods that are retained by their producers for their own final consumption or capital formation, and (c) the own-account production of housing services by owner-occupiers and of domestic and personal services produced by paid domestic staff, and (d) the own-account production of software.

Production factors: In general, there are two production factors: labour and capital. Their use, when combined, result in economic production.

Products: Products, also called goods and services, are the result of production. They are exchanged and used for various purposes: as inputs in the production of other goods and services, as final consumption or for investment.

Purchaser's price: The purchaser's price is the amount paid by the purchaser, excluding any deductible value added tax (VAT) or similar deductible tax, in order to take delivery of a unit of a good or service at the time and the place required by the purchaser. The purchaser's price of a good includes any transport charges paid separately by the purchaser to take delivery at the required time and place.

Satellite Account: An accounting system that follows the basic principles of the System of National Economic Accounts but also expands the analytical capacity for selected areas of economic or social concern, without overburdening or disrupting the central system. Satellite accounts are linked with the central framework of the national accounts and through them to the main body of integrated economic statistics

Subsidies on production: Subsidies are current payments to enterprises made by governments (domestic or foreign) without reciprocation. Subsidies on production are paid to enterprises for engaging in prescribed activities. Examples include work-force subsidies paid on the basis of employment or training of certain persons, or on the basis of pollution abatement.

Supplementary labour income: Supplementary Labour Income is expenditures by employers on their labour account which are regarded as compensation of employees. It includes contributions to employment insurance, private and public pension plan contributions, and (beginning in 1990) retirement allowances.

Supply: The supply of a good or service is the sum of the values of its domestic output (from all sectors), plus imports, plus net withdrawals from inventories during an accounting period. When measured in modified basic prices, the supply of a good or service is by definition equal to its demand or disposition (in modified basic prices) during the same accounting period.

Survey of Employment, Payrolls and Hours (SEPH): A monthly establishment based sample survey, designed to measure the levels and month-to-month changes of payroll employment (number of employees), paid hours and earnings. These measures are compiled by industry and are classified by geographic location. Compare with Labour Force Survey.

System of National Economic Accounts (SNEA): The System of National Economic Accounts (SNEA) consists of a coherent, consistent and integrated set of macroeconomic accounts, balance sheets and tables based on a set of internationally agreed concepts, definitions, classifications and accounting rules. In its broad outline, the Canadian System of National Economic Accounts (CSNEA) bears a close relationship to the international standard as described in the United Nations publication: System of National Accounts 1993.

Tax margin: A tax margin is the total of taxes on products applicable to the intermediate or final use of a particular good or service. A tax margin is estimated for each good and service used by each industry and by each category of final demand, showing the total amount of taxes on products paid on the purchase of the good or service. The total tax margin for an industry, or for a final demand category, is the total of such margins paid on all goods and services consumed.

Taxes on production: These are taxes that are paid by business and non-business entities, including persons, that are not linked to any productive activity. Taxes on production are levied by all three levels of government. Examples of federal taxes include capital taxes levied against corporate entities, Canada Deposit Insurance

Corporation premiums, and Canadian Dairy Commission levies. Provincial taxes include (personal and commercial) motor vehicle license fees, land transfer taxes, and capital taxes. Local taxes include real property taxes, developers lot levies, and deed transfer taxes.

Taxes on products: This is the sum of taxes levied on goods and services beyond the producers' price valuation level. They are paid by business and non-business industries on their current purchases and by final users such as households on all their expenditures. Examples include the Goods and Services Tax (GST), the Harmonized Sales Tax (HST), provincial sales taxes, federal excise taxes, import duties, and fuel taxes.

Unlike taxes on production, these taxes are levied on quantities or values of goods and services produced or purchased in the economy. These taxes are part of tax margins in input-output accounts. Together with trade and transport margins, these taxes account for the difference between producers' prices and purchasers' prices valuations of goods and services.

Total economy: The total economy consists of all resident institutional units in the economic territory of Canada. Alternatively, it consists of all transactors in all resident sectors, namely the business sector, the government sector, and the personal sector.

Tourism: The definition of tourism adapted from the World Tourism Organization and the United Nations Statistical Commission is: “the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes.”

Tourism commodity: Tourism commodity is one for which a significant part of its total demand in Canada comes from visitors.

Tourism commodity ratio: The ratio of demand to supply for a given tourism commodity. It measures the proportion of a tourism commodity that is actually purchased by tourists. It also provides the means to convert data classified by commodity into data classified by industry.

Tourism demand: Tourism demand is defined as the spending of Canadian and non-resident visitors on domestically produced commodities. It is the sum of tourism domestic demand and tourism exports.

Tourism domestic demand: Tourism domestic demand is the spending in Canada by Canadian visitors on domestically produced commodities.

Tourism domestic supply: Domestic supply of tourism commodities is defined as the total production in Canada of the tourism commodities which are mainly produced by tourism industries. Not all of domestic supply is purchased by visitors, so that supply exceeds tourism demand. For example, visitors purchase only a small proportion of food and beverage services, with most going to local consumption. Also, supply does not include imports. For example the sale of a ticket on a non-Canadian airline is excluded from supply.

Tourism employment: Tourism employment is a measure of employment in tourism and non-tourism industries. It is based on an estimate of jobs rather than “hours of work”. Thus, someone who works 10 hours a week counts for as much, by this measure, as someone who works 50 hours a week.

Tourism exports: Tourism exports is spending by foreign visitors on Canadian-produced goods and services. It includes spending that may take place outside of Canada, for instance, the purchase of an airline ticket from a Canadian international carrier, to travel to Canada.

Tourism GDP: The total unduplicated value of production, within the boundaries of a region, of goods and services purchased by tourists. In the CTSA, GDP is calculated at basic prices and includes only direct GDP. GDP is also generated indirectly in the upstream production chain of a good or service. Although these indirect effects can be linked to tourism, they are not included in GDP

Tourism GDP ratio: This ratio is calculated by taking the tourism GDP and comparing it to the total GDP of the industry (i.e., Tourism GDP + Non-tourism GDP). It measures how much of the production of a certain industry is attributable to tourism.

Tourism imports: Tourism Imports is spending on foreign-produced goods and services by Canadian tourists while travelling outside Canada.

Tourism industry: An industry which as a direct result of the absence of tourism would cease or continue to exist only at significantly reduced levels of activity. Some industries may be affected by the absence of tourism but not directly, for example the absence of tourism would greatly affect the air transportation industry and thus indirectly the catering industry.

Tourism industry ratio: The ratio of the tourism demand for all tourism commodities produced by a given industry to its output of those commodities. This ratio is used for internal calculations in the compilation of the CTSA at the detailed (unpublished) level. It is used specifically in the calculation, by industry, of GDP and employment that is attributable to tourism.

Tourism Satellite Account: Tourism Satellite Account is an accounting framework, based on the System of National Accounts, that serves to define tourism and is used to compile and integrate statistics on tourism, to measure its importance to the economy, and to facilitate its comparison with other industries within the economy.

Tourism single purpose consumer durables (pre-trip expenditures): In the CTSA, five single-purpose consumer durable goods used chiefly for travel (motor homes, travel and tent trailers, luggage and travel sets, tents and camping equipment and sleeping bags) are included, irrespective of when they are bought.

Usual environment: The definition of usual environment of the World Tourism Organization and the United Nations Statistical Commission: “corresponds to the geographical boundaries within which an individual displaces himself/herself within his/her regular routine of life.” For operational purposes, before reference year 2005, Canada defined this concept of “usual environment” as within 80 kilometers one way from home. However, crossing an international border is considered going outside the usual environment, no matter the distance travelled.

Visitors: Visitors are persons who undertake tourism as defined above. They are referred to as either tourists (those who stay overnight or longer in the place visited), or same-day visitors. In Canada, “tourist” is used to denote all visitors, whether they are same-day or overnight visitors.

Wages and salaries: Wages and salaries consist of monetary compensation and payments-in-kind (e.g., board and lodging), to wage earners and salaried persons employed in private, public and non-profit institutions in Canada including domestic servants and baby-sitters. Other forms of compensation included here are commissions, bonuses, tips, directors' fees, taxable allowances, and the values of stock options of corporations. Bonuses, commissions and retroactive wages are recorded in the period paid rather than earned. Wages and salaries are recorded on a gross basis, before deductions for taxes, employees' contributions to employment insurance, and private and public pension plans.

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